Contents

0.1 Alphabetical Index 2
1.1 Maintenance 34
1.2 USA Warranty 64
2.1 Safety First 104
3.1 Controls and Operating Equipment 165
3.2 Telematics by OnStar 285
3.4 Sound System Premium CD Monsoon 330
3.4 Tips and Advice 360
3.5 Technical Data 452
Supplements 465

Volkswagen

Owner's Manual

0.1 2004 Passat Sedan

Alphabetical Index

Dear User

Enclosed you'll find an extensive and comprehensive alphabetical index of all manuals supplied with your vehicle. This index will help you to find information quickly by using key words. The index also contains references to Booklet 4.1 (OWNER INFORMATION) which is provided with vehicles sold in the U.S.A. but not with those sold in Canada.

The title of each booklet provided by Volkswagen is highlighted with capital letters, for example WARRANTY.

Key words	Booklet	Page
A		
ABS (Anti–Lock Brakes)	3.2	8
Accessories,		
– What should I do if I want to add an accessory to my vehicle?	3.2	51
Adding		
– Brake fluid	3.2	44
– Engine coolant	3.2	42
– Engine oil	3.2	38
– Windshield washer fluid	3.2	50
Additional accessories	3.2	51
Adjustable Steering Column	3.1	68
Adjustable steering column	3.1	68
Adjusting		
– Climate controls	3.1	80
– Head restraints	2.1	49
– Mirrors	3.1	50
– Seats	2.1	50
– Seats	3.1	57
– Washer jets	3.2	50
Adjustments		
– Head Restraints	3.1	56
– Mirror	3.1	50
Air bag system	2.1	17
– Head airbags	2.1	28
– Importance of proper seating position	2.1	19
Air circulation, – luggage compartment	3.1	72
Air conditioning	3.1	80
– Air recirculation	3.1	81
– ECON cooling	3.1	85
– Fan switch	3.1	80
– Maintenance	3.1	86
– Vents	3.1	82
Air outlets	3.1	82
Air recirculation		
– Air conditioning	3.1	81
– Climatronic	3.1	89
Air vents		
– Air conditioning	3.1	82
– Climatronic	3.1	91

Key words	*Booklet*	*Page*
Airbag	2.1	17
– Child safety	3.1	34
– Indicator light	3.1	16
– Seating position	3.1	57, 58
– System components	2.1	18
Airbag indicator light	3.1	16
Airbag system		
– Care, service and disposal	2.1	29
– Front airbags	2.1	23
– How many airbags does my vehicle have?	2.1	17
– How the Airbag system works	2.1	24
– Side airbags	2.1	25
– What happens when the airbags deploy?	2.1	19
– When must the system be inspected?	2.1	18
– Where are my airbags located?	2.1	17
Alarm system	3.1	30
Alarms		
– Anti–theft system	3.1	30
– Operation	3.1	30
– Setting	3.1	28
All Wheel Drive	3.2	10
Alloy wheels, – Cleaning	3.2	26
Alternator	3.1	19
Alternator/Generator	3.1	19
Anchors for a child restraint system	2.1	39
Anti–Lock Brake System	3.2	8
Anti–Lock Brakes		
– How they work	3.2	8
– Warning light	3.2	8
– What does it mean when I feel a slight vibration on the pedal?	3.2	8
Anti–Lock Brakes (ABS)	3.2	8
Anti–lock braking system (ABS)	3.1	17
Anti–Slip Regulation		
– Indicator light	3.1	23
– When would I switch it off?	3.2	11
Anti–Slip Regulation (ASR)	3.2	11
Anti–Slip regulation (ASR), – Control switch	3.1	44
Anti–Slip–Regulation	3.1	44
Anti–theft alarm system	3.1	30
see also Alarms		
Anti–theft wheel bolts	3.2	72

Key words	Booklet	Page
Armrest	3.1	66
– Front	3.1	66
– Rear	3.1	66
– Storage bin	3.1	66, 75
Ashtray, – Rear	3.1	78
Ashtrays	3.1	78
– Front	3.1	78
ASR (Anti–Slip Regulation)	3.1	11, 23
Assist handles	3.1	52
Auto Safety Hotline	2.1	21
Automatic car wash		
– Precautions when taking your vehicle to the car wash	3.2	23
– Should I remove the roof antenna?	3.2	23
Automatic locking. *see* **Locks**		
Automatic transmission		
– Kick–Down	3.1	97
– Tiptronic	3.1	94
– Towing	3.1	98
Automatic transmission (5–speed)	3.1	93
– Back–up lights	3.1	96
– Ignition key safety interlock	3.1	93
Average driving speed indicator	3.1	11
Average fuel consumption indicator	3.1	11

B

Back–up lights	3.1	96
– Automatic transmission (5–speed)	3.1	96
– Manual transmission	3.1	99
Backrest	3.1	69
– Folding	3.1	69
– Lockable	3.1	69
– Raising	3.1	70
Backward adjustment of seats	3.1	59
Battery	3.2	45
– Battery acid level, checking	3.2	47
– Charging	3.2	48
– Slow charging	3.2	48
– Connecting charger cables	3.2	48
– Disconnecting		
– Important information before you disconnect your battery!	3.2	49
– What you must do after you reconnect the battery!	3.2	49

Key words	Booklet	Page
– Location	3.2	46
– Precaution	3.2	45
– Removing	3.2	49
– Replacing, – How often should I replace my battery?	3.2	49
– Winter operation	3.2	46
Battery replacement, remote key	3.1	25
Battery, vehicle. *see* **Booklet 3.2**		
Belt tensioner	2.1	13
– What happens when the belt tensioner is activated?	2.1	13
Beverage holder	3.1	74
Body cavity sealing	3.2	26
Booster seats	2.1	33
Brake, – Warning light	3.1	18
Brake booster	3.2	7
Brake fluid	3.2	43
– How often should the brake fluid be changed?	3.2	44
– What is the correct brake fluid level?	3.2	43
– What kind of brake fluid should I use?	3.2	44
– What should I do if the brake warning light comes on?	3.2	43
Brake fluid reservoir	3.2	43
Brakes		
– Fluid. *see* **Booklet 3.2**		
– How does the moisture or road salt affect the brakes?	3.2	6
– Overheating	3.2	7
– Pads	3.1	16
– Warning light	3.1	18
– Wear indicator	3.1	16
– What does it mean when I feel a slight vibration on the pedal?	3.2	8
Braking	3.2	6
Break–in period	3.2	12
Buzzer	3.1	21
see also **Chime**		

Key words	Booklet	Page
C		
Capacities		
– Fuel tank	3.2	2
– Windshield washer fluid container	3.2	50
Car seat, Child. *see* **Booklet 2.1**		
Care of		
– exterior	3.2	23
– interior	3.2	27
Cargo Net, – Tie–down hooks	3.1	72
Catalytic converter	3.2	17
CB radios	3.2	75
Center safety belt on the rear seat	2.1	14
Central locking system	3.1	31
– Rear lid	3.1	35
Central locking systems	3.1	33
Changing a wheel	3.2	66
Changing engine oil	3.2	38
Checking		
– Battery acid level	3.2	47
– Brake fluid level	3.2	43
– Engine coolant level	3.2	41
– Engine oil level	3.2	37
– Windshield washer fluid level	3.2	50
Checking oil level, – Engine	3.2	37
Child restraint (CR) Anchors	2.1	39
Child restraint anchorages	2.1	43
Child restraints		
– Important information about child restraints and the front seat	2.1	22
– Securing on the rear seat using the center safety belt	2.1	38
Child Safety, – Child Car Seat	3.1	58
Child safety	2.1	30
– Safety lock, rear doors	3.1	34
Child safety lock for rear doors	3.1	34
Child seat, – Installing a rear facing child seat	2.1	22
Chime	3.1	25,42,102
– Door	3.1	25
– Ignition	3.1	102
– Oil	3.1	21
– Safety belt	3.1	19
Chrome parts, Taking care of chrome parts	3.2	27

Key words	Booklet	Page
Cigarette lighter	3.1	76
Cild seats, – Older children	2.1	35
Cleaning		
– Engine compartment	3.2	29
– Glass	3.2	27
– Inside of vehicle	3.2	27
– Leather upholstery	3.2	28
– Outside of vehicle	3.2	23
– Safety belts	3.2	28
Cleaning and protection	3.2	22
Climate controls	3.1	80
see also **Air conditioning; Climatronic**		
Climatronic	3.1	87
– air recirculation	3.1	89
– Air vents	3.1	87
– Automatic control	3.1	87
– Maintenance	3.1	92
– Manual control	3.1	87
– Operating controls	3.1	88
Clock	3.1	10
– Setting	3.1	10
Coat hooks	3.1	52
Comfort clips	2.1	8
Controls		
see also **Climate controls**		
– Climate	3.1	80
– Interior light	3.1	49
– Locks	3.1	31
– Remote	3.1	27
– Unlocking window	3.1	36
Convertible child seats	2.1	32
Convertible locking feature	2.1	9
Convertible locking retractor	2.1	36
– Activating	2.1	37
– Deactivating	2.1	37
Coolant losses	3.2	41
Coolant temperature gauge	3.1	9
Coolant temperature guage, engine	3.1	9
Cooling system	3.2	40
– Engine. *see* **Booklet 3.2**		
– Expansion tank	3.2	41
– Interior. *see* **Climate controls**		
CR (Child Restraint)	2.1	39

Key words	*Booklet*	*Page*
Cruise control	3.1	105
– Activating	3.1	105
– Turning off, completely	3.1	107
– Turning off, temporarily	3.1	106
Cup–holder	3.1	74

D

Dashboard	3.1	3
Data Link Connector (DLC)	3.1	23
Day–Night mirror	3.1	50
Daytime running lights	3.1	42
Defogging		
– Side windows	3.1	83
– Windshield	3.1	83
– Windshield and side windows	3.1	83
Defrosting		
– Rear window	3.1	43
– Windshield and side windows	3.1	82, 89
Differential lock	3.2	9
Difficult operating conditions	3.2	14
Digital clock	3.1	10
Dimmer switch, – Dashboard lights	3.1	42
Dirty safety belts	2.1	9
Displays. *see* Multi–Function Indicator		
Distance driven indicator	3.1	13
DLC	3.1	23
Do–it–yourself service	3.2	52
Doors	3.1	31
– Automatic locking	3.1	34
– Child safety lock, rear	3.1	34
– Closing	3.1	31
– Locking with key	3.1	31
– Opening	3.1	31
– Power locks	3.1	31
– Unlocking with key	3.1	31
– Unlocking with remote	3.1	28
Driver position	3.1	57

Key words	Booklet	Page
Driver's Seat		
– Adjustments, – Manual		
– Forward & Backward	3.1	59
– Height	3.1	59
– Lumbar Support	3.1	59
– Seatback	3.1	59
– Adjustments		
– Electrical, Forward & Backward	3.1	61
– Electrical		
– Headrest	3.1	56
– Memory	3.1	62
– Proper position	2.1	51
Driver's seat–memory	3.1	62
Driving economically	3.2	15
Driving in foreign countries	3.2	81
Driving under difficult conditions	3.2	14
Duplicate key	3.1	26

E

ECON cooling	3.1	85
Electrical / Electronic		
– Heated driver's seat	3.1	43
– Heated passenger seat	3.1	44
– Power locks	3.1	31
Electrical/Electronic, Seat Adjustment	3.1	60
Electrically heated driver's seat	3.1	43
Electrically heated passenger seat	3.1	44
Electronic differential lock	3.1	44
Electronic differential lock	3.2	9
Electronic differential lock (EDL)	3.1	17
Electronic immobilizer	3.1	17, 102
Electronic power control (EPC)	3.1	19
Emergency		
– Closing sunroof	3.1	41
– Flasher	3.1	43
– Off (Seat Memory)	3.1	65
– Starting	3.2	75
– Towing	3.2	78
Emergency brake	3.1	100
Emergency triangle	3.2	52
Emission control system	3.2	17
– Malfunction indicator	3.1	22
– Malfunction indicator light	3.1	22

Key words	Booklet	Page
Engine		
– Compartment	3.1	104
– Compartment	3.2	34
– Coolant temperature	3.1	9
– Cooling	3.2	40
– Fuel specifications. *see* **Booklet 3.2**		
– fuel specs. *see* **Booklet 3.2**		
– Hood	3.2	33
– Oil	3.2	36
– Oil pressure	3.1	21
– Oil specifications. *see* **Booklet 3.2**		
– Oil specs. *see* **Booklet 3.2**		
– Specifications. *see* **Booklet 3.2**		
– Windshild washer container. *see* **Booklet 3.2 + 3.3**		
Engine compartment		
– Precautions you should take before cleaning the engine compartment	3.2	29
– Precautions you should take when working inside the engine compartment	3.2	34
Engine coolant		
– Additives	3.2	40
– Can I add plain water to the engine coolant?	3.2	40
– Coolant losses	3.2	41
Engine oil		
– Adding	3.2	38
– Additives	3.2	38
– Changing	3.2	38
– Checking	3.2	37
– Grades	3.2	36
Engine oil level		
– When shoul I check the engine oil level?	3.2	37
– Where is the oil dipstick?	3.2	37
Environment		
– Brake fluid	*3.2*	*44*
– Cleaning and protection	*3.2*	*22*
– Coolant	*3.2*	*42*
– Driving to minimize pollution and noise	*3.2*	*15*
– Engine oil	*3.2*	*39*
– Fuel	*3.2*	*3*
– Maintenance	*3.2*	*31*
– Starting procedures	*3.1*	*102*
– Tire pressure	*3.2*	*57*
– Unleaded fuel	*3.2*	*4*
– Washing	*3.2*	*23*
Environment considerations. see *Booklet 3.2*		

Key words	Booklet	Page
Exhaust system	3.2	17
Expansion tank	3.2	41
Extenders for the safety belt	2.1	15

F

Fahrenheit to Centrigrade, setting	3.1	89
Fan		
– Climatronic	3.1	87
– Radiator. *see* Booklet 3.2		
–Air conditioning	3.1	80
Fan switch, – Air conditioning	3.1	80
Fastening and unfastening		
– Booster seats	2.1	33
– Center safety belt on the rear seat	2.1	9, 14
– Child seat on the center position on the rear seat	2.1	38
– Child seats on the outer rear seat position	2.1	36
– Convertible child seats	2.1	32
– Infant seats	2.1	31
– LATCH system	2.1	39
– Safety belt extender	2.1	16
– Safety belts	2.1	10, 13
Fastening Cargo Net	3.1	72
Fastening your safety belt	2.1	10
Filler cap	3.2	3
Filling, – portable fuel container	3.2	3
Flasher, emergency	3.1	43
Floor jack	3.2	79
Floor Mats	3.1	67
Fluid		
– Brake	3.2	43
– Coolant	3.2	40
– Windshield washer tank	3.2	50
Fog lights, – Front	3.1	42
Folding outside mirrors	3.1	52
Forward adjustment of seats	3.1	59
Forward facing child seat, – Precautions	2.1	22
Fresh air	3.1	85
Front, – Seats. *see* Booklet 2.1		
Front airbags	2.1	23
Front armrest	3.1	66
Front door panel light	3.1	49
Front doors	3.1	31
Front fog lights	3.1	42

Key words	Booklet	Page
Front interior light	3.1	49
Front map lights	3.1	49
Front passenger position	3.1	58
Front passenger's seat	3.1	58
– Proper position	2.1	52
Front seats	2.1	50
Front seats	3.1	57
– How to adjust	2.1	50
Fuel		
– Consumption indicator	3.1	11
– Lock fuel tank	3.2	2
– Momentary consumption, – Average consumption	3.1	13
– Tank capacity	3.2	2
Fuel economy	3.2	15
Fuel filler flap release	3.1	44
Fuel gauge	3.1	10
Fuel supply	3.2	4
Fuel tank	3.2	2
– Refuelling	3.2	3
Fuses	3.2	73
see also **Booklet 3.2**		

G

Garage door opener, – Homelink	3.1	53
Gasoline		
– Additves	3.2	4
– Blends	3.2	4
– What would happen if I put leaded gasoline in my car?	3.2	4
Gasoline engine, – starting	3.1	103
Gauge		
– Coolant temperature	3.1	9
– Engine coolant temperature	3.1	9
– Fuel	3.1	10
– Odometer	3.1	10
– Speedometer	3.1	10
– Tachometer	3.1	8
Gearshift lever	3.1	99
General illustration	3.1	3
Generator	3.1	19
Glove box light	3.1	49
Glove Box/Compartment	3.1	79
Glove Box/Compartment, Air Vent	3.1	79
Glove compartment / box, – Light	3.1	49
Guide fixtures	2.1	46

Key words	Booklet	Page
H		
Handbrake	3.1	100
Hat shelf	3.1	71
Sun shade	3.1	71
Head airbags	2.1	28
Head Restraints	3.1	56
Height Adjustment	3.1	56
Installing	3.1	56
Removing	3.1	56
Head restraints	2.1	49
see also Booklet 2.1		
– Proper position for maximum protection	2.1	49
– Removing and Installing	2.1	49
Headlight		
– Dimmer switch	3.1	45
– Flasher	3.1	45
Headlight dimmer switch lever	3.1	45
Headlight flasher	3.1	45
Heated		
– Driver's seat	3.1	43
– Passenger's seat	3.1	44
– Window	3.1	43
Heated driver's seat	3.1	43
Heated outside mirrors	3.1	51
Heated passenger seat	3.1	44
Heating	3.1	80
Heating interior quickly	3.1	83
Heating system. *see* Climate controls		
Heavy clothing and safety belts	2.1	8
Height adjustment of seats	3.1	59
Height adjustors	2.1	11
High beam	3.1	16
High beam lever	3.1	45
Homelink	3.1	53
Hood release	3.2	33
Hood, opening. *see* Booklet 3.2		
Hooks, Tie–Down, Cargo Net	3.1	72
Horn		
see also Booklet 2.1		
– see also Booklet 2.1	3.1	3
How can I adjust the height of my safety belt?	2.1	11
How can I tell when the safety belt is securely locked?	2.1	10
How many airbags does my vehicle have?	2.1	17

Key words	Booklet	Page
How to attach the tether strap on the Sedan model?	2.1	42
How to attach the tether strap on the Wagon model?	2.1	42
How to fasten the rear center safety belt?	2.1	9
How to use the air conditioning more economically	3.1	85
How to wear safety belts properly?	2.1	8
Hydroplaning	3.2	14
Ignition	3.1	101
– Key safety interlock	3.1	93
Ignition key safety interlock	3.1	93
Immobilizer	3.1	17, 102
Increasing size of luggage compartment	3.1	71
Indicator, – Multifunction (MFA)	3.1	11
Indicator light		
– Air bag system	2.1	18
– What should I do if the airbag indicator light comes on and stays on?	2.1	18
Indicator lights	3.1	15
– Airbag system	3.1	16
– Anti–Lock brake system	3.1	17
– Anti–Slip Regulation	3.1	23
– Brake	3.1	18
– Door open	3.1	22
– Electronic power control / Glow Plug	3.1	19
– Engine coolant temperature level	3.1	19
– Engine oil pressure	3.1	21
– Front brake pads worn	3.1	16
– Fuel level too low	3.1	22
– Generator	3.1	19
– High beam	3.1	16
– Malfunction indicator lamp	3.1	22
– Safety belts	3.1	19
– Trunk / Rear lid	3.1	22
– Turn signals	3.1	16
– Windshield washer	3.1	22
– Windshield washer fluid level too low	3.1	22
Infant seats	2.1	31
Inside day–night mirror	3.1	50

Key words	Booklet	Page
Installing		
– Booster seats	2.1	33
– Child seat on the outer rear seat position	2.1	36
– Child seat to LATCH system	2.1	48
– Child seat to lower anchorage point	2.1	43
– Child seat using the LATCH system	2.1	39
– Convertible child seats	2.1	32
– Infant seats	2.1	31
– Tether strap to anchorage point on the Sedan model	2.1	42
– Tether strap to anchorage point on the Wagon model	2.1	42
Installing a child restraint	2.1	48
Installing a radio	3.2	74
Installing wiper blades	3.1	48
Instrument cluster	3.1	8
Instrument illumination	3.1	42
Instrument panel	3.1	3
– Digital clock	3.1	10
– Display, Multifunctioin indicator	3.1	11
– Engine coolant temperature gauge	3.1	9
– Fuel gauge	3.1	10
– Odometer	3.1	10
– Speedometer	3.1	10
Instrument panel, cleaning	3.2	27
Interior light control	3.1	49
Interior lights	3.1	49

J

Jack	3.2	69
Jack and tools	3.2	53
Jack support positions	3.2	69
Jump starting. *see* Booklet 3.2		
Jumper cables	3.2	75

Key words	Booklet	Page
K		
Keep this manual with your vehicle	2.1	2
Keeping interior comfortable	3.1	83
Key		
– Coding	3.1	28
– Duplicate	3.1	26
– Ignition, Safety Interlock	3.1	93
– Master with remote	3.1	25
– Remote release	3.1	25
– Replacement	3.1	26
– Tag	3.1	26
– Valet	3.1	26
Key for remote release	3.1	25
Keys	3.1	25
Kick–down	3.1	97
Plastic parts, cleaning	3.2	27
L		
Lane changer	3.1	45
Lap–shoulder belt	2.1	9
LATCH (Lower Anchor and Tether for Children)	2.1	39
LATCH System, – Seat markings	2.1	45
LATCH system	2.1	48
– Attaching a child restraint to the LATCH system	2.1	48
Leather, – How to clean	3.2	28
Lifting		
– Floor jack	3.2	79
– Jack	3.2	66
– Workshop hoist	3.2	79
Lifting point		
– front	3.2	80
– rear	3.2	80
Lifting vehicle	3.2	79
Light bulbs	3.2	74
Light switch	3.1	42
Lighter	3.1	76

Key words	Booklet	Page
Lights	3.1	42
– Backup	3.1	96
– Brake warning	3.1	18
– Daytime running	3.1	42
– Door open	3.1	22
– Fog, front	3.1	42
– Front door panel	3.1	49
– Hazard	3.1	43
– Indicator	3.1	6, 15
– Interior control	3.1	49
– Interior front	3.1	49
– Luggage compartment	3.1	49
– Map	3.1	49
– Storage compartment	3.1	49
– Trunk / Rear lid	3.1	22
Loading a Roof Rack	3.1	73
Lock positions of trunk lock cylinder	3.1	35
Lockable Backrest	3.1	69
Locking retractor	2.1	36
Locking the vehicle	3.1	31
Locks		
– Doors	3.1	31
– Fuel tank	3.2	2
– Rear lid	3.1	35
– Truck / Rear lid	3.1	35
Locks,, Glove Box/Compartment	3.1	79
Lower Anchor and Tether for Children (LATCH)	2.1	39
Lower anchorages	2.1	43
– Guide fixtures	2.1	46
– Seat markings	2.1	45
Lubricants	3.2	36
Luggage compartment	3.1	71
Luggage compartment light	3.1	49
Luggage Compartment Socket	3.1	77

M

Maintenance	3.2	31
– Vehicle. *see* **Booklet 1.2 & 3.2**		
Malfunction indicator lamp	3.1	22
Manual air conditioning	3.1	80
Manual transmission	3.1	99
– Back–up lights	3.1	99
Master key, – With remote	3.1	25
Mats, Floor	3.1	67

Key words	Booklet	Page
Maximum cooling	3.1	84
Memory		
Retrieving		
Driving Forward	3.1	64
Driving in Reverse	3.1	64
Setting		
Driving Forward	3.1	62
Driving in Reverse	3.1	62
Memory for driver's seat and outside mirrors	3.1	62
Memory for outside mirrors	3.1	51
Memory Functions		
Driver's Seat	3.1	62
Initializing	3.1	65
Outside Mirrors	3.1	62
Memory functions, – Multi–Function Indicator (MFA)	3.1	11
memory Functions, Emergency Off, Seat	3.1	65
MFA. *see* **Multi–Function Indicator**		
Miles per gallon (liter)	3.1	13
Miles per gallon / Liters per 100 km	3.1	13
Miles per hour / Kilometers per hour	3.1	13
Mirrors	3.1	50
– power "fold flat" function	3.1	52
Outside, Memory	3.1	62
Retrieval		
Driving Forward	3.1	64
Driving in Reverse	3.1	64
Tilt Position, Backing Up	3.1	62
Mirrors with power "fold flat" function	3.1	52
Mobile telephones	3.2	75
Modifications	3.2	51
Momentary fuel consumption indicator	3.1	13
Multi function steering wheel	3.1	24
Multi-function steering wheel	3.1	24
Multi–Function Indicator		
– Average driving speed	3.1	13
– Average fuel consumption	3.1	13
– Erasing the settings	3.1	12
– Outside temperature	3.1	12
Multi–function indicator	3.1	11
Multi–Function Indicator (MFA)		
– Momentary fuel consumption	3.1	13
– Time driven	3.1	13

Key words	*Booklet*	*Page*
Multi–function steering wheel	3.1	24
– Lighting	3.1	24
– Radio system	3.1	24
Multifunction steering wheel, – Cruise control	3.1	24

N

Noozle, – Fuel pump	3.2	3
Normal cooling	3.1	84
Number of seats	2.1	9

O

OBD II	3.1	23
Octane rating	3.2	4
Odometer	3.1	10, 14
Oil		
– Additives	3.2	38
– Change	3.2	38
– Specification	3.2	36
Oil dip stick	3.2	37
Oil for your engine	3.2	36
Oil pressure	3.1	21
Oil specification. *see* Booklet 3.2		
On Board Diagnostic System	3.1	23
One–touch down feature	3.1	36
One–touch up feature	3.1	36
Opening the hood. *see* Booklet 3.2		
Opening the vehicle	3.1	31
Operating controls		
– Air conditioning	3.1	80
– Climatronic	3.1	88
Outlets, – Air	3.1	82
Outside mirrors	3.1	50
Outside mirrors–memory	3.1	62
Outside temperature indicator	3.1	12

Key words	Booklet	Page
P		
Panic button / switch	3.1	28
Parking	3.1	98
Parking brake	3.1	100
Parts replacement	3.2	51
Passenger's seat, – Proper position	2.1	52
Pedals	3.1	67
Pinch protection, – Windows	3.1	38
Portable fuel container	3.2	3
Power		
– Steering	3.1	99
– Steering	3.2	11
– Windows	3.1	36
Power controls		
– Locking switch	3.1	33
– Locks	3.1	31
– Outside mirrors	3.1	51
– Roof	3.1	40
Power locking switch	3.1	33
Power locks	3.1	31
Power outside mirrors	3.1	51
Power roof	3.1	40
– Closing	3.1	40
– Convenience closing	3.1	41
– Emergency closing	3.1	41
– Opening	3.1	40
Power Window	3.1	36
Power windows, – Pinch protection	3.1	38
Pregnant women, – Special considerations when wearing a safety belt	2.1	12
R		
Radiator. *see* Booklet 3.2		
Radiator fan	3.2	42
Radio	3.2	74
see also Booklet 3.4		
Rain sensor	3.1	47

Key words	Booklet	Page
Rear		
– View mirror	3.1	50
– Window defroster	3.1	43
Seat	3.1	69
Locking	3.1	69
Rear / Trunk lid		
– Closing	3.1	35
– Inside release (Sedan)	3.1	35
– Locks	3.1	35
– Opening	3.1	35
Rear center safety belt	2.1	14
– How to fasten	2.1	9
– Making sure the rear seatback is securely latched	2.1	9
– Precautions	2.1	14
Rear lid	3.1	35
Rear Socket	3.1	76
Rear view mirror	3.1	50
Rear window defogger	3.1	43
Rear window washer container	3.2	50
Rear–facing child seat, – Precautions	2.1	22
Recirculation air	3.1	81
Refuelling the vehicle	3.2	3
Release button on the buckle	2.1	13
Releases		
– Hood. *see* **Booklet 3.2**		
– Trunk / Rear lid	3.1	35
Remote control	3.1	25, 27
– Battery replacement	3.1	25
Remote controls,		
– Locking, – Release, – Resetting, – Unlocking	3.1	28
Remote locking / unlocking	3.1	27
Remote Transmitter	3.1	53
Removing the Roof Rack	3.1	74
Repair manuals, – Ordering on the Web	3.2	82
Replacement of keys	3.1	26
Replacing		
– Batteries, remote control	3.1	25
– Bulbs. *see* **Booklet 3.2**		
– Keys	3.1	26
Replacing a fuse	3.2	73
Replacing a radio	3.2	74
Replacing batteries		
– Remote control	3.1	25
– Vehicle battery	3.2	49
Replacing wiper blades	3.1	48
Reporting safety defects	3.2	81

Key words	Booklet	Page
Restraint System, Head Restraint	3.1	56
Restraint systems. *see* Booklet 2.1		
Retractors	2.1	9
Reverse		
– Automatic transmission (5–speed)	3.1	96
– Manual transmission	3.1	99
Road salt, – Removing from wheels	3.2	26
Roof	3.1	40
Rack		
Installing	3.1	74
Loading	3.1	73
Removing	3.1	74
Roof Rack	3.1	73

S

Safe driving tips	3.2	13
Safety belt, – Lap–shoulder belt	2.1	9
Safety belt extenders	2.1	15
– Fastening	2.1	16
– Precautions your should take when using	2.1	15
– Use with a child restraint	2.1	15
Safety belt height adjustors	2.1	11
Safety belt warning light	2.1	7
Safety belt warning light	3.1	19
Safety belts	2.1	3
Safety belts	3.2	13
– Cleaning	3.2	28
– Extender	2.1	15
– How can I adjust the height of my safety belt?	2.1	11
– How can I tell when the belt is securely locked?	2.1	10
– How to fasten	2.1	10
– How to wear properly	2.1	8
– Making sure all passengers are correctly restrained	2.1	9
– Older children	2.1	35
– Precautions	2.1	8
– Retractors – how they work	2.1	9
– Special considerations for pregnant women	2.1	12
– Torn or frayed	2.1	8
– Unfastening	2.1	13
– Warning system	2.1	7
– What can happen if you do not wear your safety belt?	2.1	4

Key words	Booklet	Page
– What happens if you wear your safety belt too loose?	2.1	12
– When must safety belts be replaced?	2.1	9
– When would a safety belt lock up?	2.1	9
– Why safety belts protect?	2.1	6
Safety defects, – Reporting	3.2	81
Safety first	2.1	2
Seat		
Electrical Adjustment, Backrest	3.1	61
Rear	3.1	69
Seat belts	2.1	3
see also **Booklet 2.1**		
Seat markings for lower anchorages	2.1	45
Seatback adjustment	3.1	59
Seating capacity of your vehicle	2.1	9
Seating position		
– Distance between the driver and the steering wheel	2.1	21
– Driver	3.1	57
– Front passenger	3.1	58
Seats		
– Belts. *see* **Booklet 2.1**		
– Child seats. *see* **Booklet 2.1**		
– front	3.1	57
Manual Adjustment		
Folding	3.1	69
Head Restraint	3.1	56
–Foreward and backward adjustment	3.1	59
–Height adjustment	3.1	59
–manual adjustment	3.1	59
–Seatback adjustment	3.1	59
Child Car Seat	3.1	58
Electrical Adjustment	3.1	60
Forward & Backward	3.1	61
Height	3.1	61
Raising & Lowering	3.1	61
Memory	3.1	62
Secondary key	3.1	26
Securing a child seat	2.1	36, 38
Securing Luggage	3.1	72
Selector lever display	3.1	95
Selector lever position display	3.1	14
Self–dimming mirror	3.1	50
Sensor, rain	3.1	47
Service kit	3.2	52

Key words	*Booklet*	*Page*
Settings		
– Clock	3.1	10
– Odometer	3.1	10
Outside Mirrors	3.1	62
Seat Memory	3.1	62
Side airbags	2.1	17, 25, 28
Side Curtain Protection	2.1	17, 28
Signals, Turn	3.1	16, 45
Snow chains	3.2	65
Socket	3.1	76, 77
Spare wheel	3.2	53, 54
Specifications, vehicle. *see* **Booklet 3.3**		
Speed range	3.2	12
Speedometer	3.1	10
Starter switch	3.1	101
Starting, – Gasoline engine	3.1	103
Starting procedures	3.1	102
Starting with jumper cables	3.2	75
Steel wheels, – Cleaning	3.2	26
Steering		
– Wheel, Multi–function	3.1	24
– Wheel, Multi–functioni, – Sound System	3.1	24
– Wheel, Multi–functions, –Lighting	3.1	24
Steering lock	3.1	101
Steering wheel	3.1	68
– Distance between the driver and steering wheel	2.1	21
Stopping engine	3.1	103
Stopping the engine	3.1	103
Storage		
– Light	3.1	49
Box/Compartment	3.1	79
Storage compartment light	3.1	49
Summer tires	3.2	61
Sun roof. *see* **Power, roof**		
Sun shade	3.1	71
Sun visors	3.1	53
Switches	3.1	42
– Anti–Slip Regulation (ASR)	3.1	44
– Daytime running lights	3.1	42
– Emergency flasher	3.1	43
– Fog lights, front	3.1	42
– Heated seat, driver's	3.1	43
– Heated seat, passenger's	3.1	44
– Instrument illumination	3.1	42

Key words	Booklet	Page
– Light switch	3.1	42
– Panic button switch	3.1	28
– Power locking switch	3.1	33
– Rear window defogger	3.1	43
Synchronised mirror adjustment	3.1	51

T

Tachometer	3.1	8
Tag, – Key	3.1	26
Temperature control		
– Air conditioning	3.1	80
– Climatronic	3.1	87
Temperature indicator, outside	3.1	12
Tensioner for the safety belt, – Function	2.1	13
Tether anchors	2.1	40
Tether strap	2.1	41
– How to attach on the Wagon model	2.1	42
Theft protection, – Alarm system	3.1	30
Tie–Down Hooks, Cargo Net	3.1	72
Tilt and Telescopic Steering Wheel	3.1	68
Tilt and telescopic steering wheel	3.1	68
Time driven indicator	3.1	13
tiptronic	3.1	94
– Top speed	3.1	96
Tire		
– Pressure	3.2	57
– Replacement	3.2	59
– Rotation	3.2	59
– Specification	3.2	61
– Wear	3.2	58
tire designation code	3.2	61
Tire quality grading	3.2	62
Tires	3.2	56
Tires/Wheels		
– How often should I check the condition of my tires?	3.2	56
– How often should I check the tire pressure?	3.2	57
– M+S tires	3.2	64
– New tires, breaking in	3.2	56
– Snow chains	3.2	65
– Spare tire	3.2	54
– Uniform tire quality grading	3.2	62
All season tires	3.2	64
Changing a wheel	3.2	66
Changing a wheel, precautions	3.2	66

Key words	Booklet	Page
Tools	3.2	53
Top speed	3.1	96
Torn safety belts	2.1	8
Towing	3.1	98
Towing	3.2	78
– Distance	3.2	78
– Speed	3.2	78
– With a commercial tow truck	3.2	78
Trailer towing	3.2	18
– Driving instructions	3.2	20
– Technical requirements	3.2	18
– Tips	3.2	21
– Tire pressure	3.2	19
– Tongue load	3.2	19
– Trailer brakes	3.2	19
Transmission. *see* **Automatic transmission; Manual transmission**		
Transporting heavy objects	3.1	71
Trip odometer	3.1	14
Trunk, – Light	3.1	49
Turn signals	3.1	16, 45
– Indicators	3.1	16
– Operation	3.1	45

U

Undercoating	3.2	17, 26
Unfastening your safety belt	2.1	13
Uniform tire quality grading	3.2	62
Universal Transmitter	3.1	53
Unleaded fuel	3.2	4
Unlocking the vehicle	3.1	31
Upholstery, – Cleaning	3.2	28

V

Valet key	3.1	26
Valve extenders	3.2	57
Vehicle battery	3.2	46
see also **Booklet 3.2**		
Vehicle care		
– Exterior	3.2	23
– Instrument panel	3.2	27
– Interior	3.2	27
– Windows	3.2	25

Key words	Booklet	Page
Vehicle Identification Number. *see* Booklet 3.3		
Vehicle jack	3.2	53
Vehicle specifications. *see* Booklet 3.3		
Ventilation	3.1	80, 85, 90
Volkswagen Service Manuals, – Ordering	3.2	82

W

Warning / Indicator lights		
– Airbag system	3.1	16
– Alternator / Generator	3.1	19
– Anti–Lock brake system	3.1	17
– Anti–Slip Regulation	3.1	23
– Brake	3.1	18
– Door open	3.1	22
– Electronic power control	3.1	19
– Engine coolant level, – Engine coolant temperature	3.1	19
– Engine oil pressure	3.1	21
– Front brake pads worn	3.1	16
– Generator	3.1	19
– High beam	3.1	16
– Safety belts	3.1	19
– Trunk / Rear lid	3.1	22
– Turn signals	3.1	45
– Washer fluid	3.1	22
Warning light in the instrument cluster	2.1	7
Warning lights	3.1	15
Warning system	2.1	7
Warning triangle	3.2	52
Warning/indicator light		
– Air bag system	3.1	16
– Anti–lock brake system	3.1	17
– Anti–Slip Regulation	3.1	23
Warning/indicator lights		
– Air bag system	3.1	16
– Alternator	3.1	19
– Brake	3.1	18
– Coolant level	3.1	19
– Coolant temperature	3.1	19
– Door open	3.1	22
– Engine oil pressure	3.1	21
– Front brake pads	3.1	16
– Fuel level	3.1	22
– High beam	3.1	16
– Malfunction indicator light	3.1	22

Key words	Booklet	Page
– Rear lid	3.1	22
– Safety belts	3.1	19
– Turn signals	3.1	16
– Washer fluid	3.1	22
Warranty	3.2	18, 31
Warranty Booklet	3.2	18
Warranty coverages	3.2	18
Washer fluid	3.1	22
see also Booklet 3.2		
Washer reservoir	3.2	50
Washer system	3.1	46
Waxing your vehicle		
– How often should I wax my vehicle?	3.2	23
– Where not to use wax	3.2	24
What can happen if you do not wear your safety belt?	2.1	4
What happens if you wear your safety belt too loose?	2.1	12
What happens when the airbags deploy?	2.1	19
What happens when the belt tensioner is activated?	2.1	13
What should I do if the airbag indicator light comes on and stays on?	2.1	18
Wheel bolts	3.2	58
– Removing anti–theft wheel bolts	3.2	72
Wheels	3.2	56
– valve extenders	3.2	57
Wheels replacement	3.2	59
When must safety belts be replaced?	2.1	9
When would a safety belt lock up?	2.1	9
Where are my airbags located?	2.1	17
Why safety belts protect?	2.1	6
Window / Windshield		
– Pinch protection	3.1	36
– Rear defogger	3.1	43
– Wiper blades	3.1	48
Windows	3.1	36
Windows	3.2	25
– Defogging	3.1	83
– Defrosting	3.1	82, 89
– Ignition off	3.1	39
– Ignition on	3.1	39
– Pinch protection	3.1	38
Windshield washer container	3.2	50
Windshield wiper	3.1	46
Winter operation		
– Battery	3.2	46

Key words	*Booklet*	*Page*
– Cooling system	3.2	40
– Snow chains	3.2	65
– Tires	3.2	64
– Vehicle care	3.2	23
– Windows	3.2	25
– Windshield washer system	3.2	50
Winter tires	3.2	64
Wiper	3.1	46
Wiper / Washer system		
– Blades	3.1	48
– Rain sensor	3.1	47
– Windshield	3.1	46
Wiper blades	3.1	48
Wiper/Washer system		
– Container capacity. *see* **Booklet 3.3**		
– Fluid. *see* **Booklet 3.2**		
Workshop hoist	3.2	79

© 2002 VOLKSWAGEN AG
All rights reserved
May not be reproduced or translated in whole or in part without consent of VOLKSWAGEN of America.
Specifications subject to change without notice.
Printed in Germany

1.1 2004 Volkswagen

Maintenance

Warranty Voucher

for the new Volkswagen automobile.
Present this voucher to an authorized dealer if warranty service is required.

Warranty begins on the month of first use of the vehicle or its delivery to the first retail purchaser, namely on:

_____

_____
Month Day Year

(to be filled in by authorized Volkswagen Dealer)

Stamp of authorized Volkswagen Dealer

1.

2.

3.

4.

Vehicle Identification Label

1. Vehicle Identification No. / Engine Code

2. Type / Engine / Transmission

3. Transmission Code / Paint No. / Interior / Engine / Engine Code

4. Optional Equipment

Air Conditioner
Warranty Registration Certificate
(except factory installation)

Attach here
(for dealer use only)

Federal Law requires that a label be affixed to the left door frame when the replacement odometer does not indicate the actual vehicle mileage (kilometers) after repair or replacement.

Genuine Volkswagen replacement odometers are supplied with a label

Odometer Replacement

Month Day Year

(to be filled in by authorized Volkswagen Dealer)

At mileage / km

Stamp of authorized Volkswagen Dealer

TABLE OF CONTENTS

Warranty Voucher / Vehicle Identification Label ..... previous pages

Service Information

Dealer Service 3
Do-It-Yourself Service 3
Emission Control Maintenance 4
Why Service? 4

When do I bring my car in for service?

1.8L Turbo or 2.8L V6 Gasoline Engines

If your car has a 1.8L Turbo or 2.8L V6 Gasoline engine, then this is your Service Schedule 5

2.0L, 2.8L VR 6 , 4.0 L W8, 3.2L VR6 and 4.2L V8 Gasoline Engines or 1.9L TDI Diesel Engines

If your car has a 2.0L, 2.8L VR6, **4.0L W8,** 3.2L VR6 and 4.2L V8 Gasoline engine or a 1.9L TDI Diesel engine, then this is your Service Schedule 6

If you are not sure when to bring your car in for service, ask your authorized Volkswagen Service Advisor.

Service Schedule

Delivery Inspection 7
Service Schedule ..... 7 – 24

Brake Fluid Replacement Record

Brake Fluid Replacement Record 25

Dealer Service

There are nearly 800 authorized Volkswagen dealers in North America. They have Volkswagen trained technicians, proper workshop equipment and parts to give you expert service.

Volkswagen dealers are committed to quality service.

- Your authorized Volkswagen dealer offers many services for your convenience, such as extended service hours, early bird service, body repairs, to name just a few. Ask about them.
- Arrange your service with your dealer when it is convenient for you.
- Ask your Service Advisor about the service you need and discuss the cost involved.
- Leave word where you can be reached during the day and when you would like to pick your car up.
- Keep all receipts of maintenance and repairs performed. Your service record is important when making use of your warranty.
- Maintenance services performed by your authorized dealer at the intervals specified, will also be documented in this booklet.
- Automobile technology changes continuously. Your authorized Volkswagen dealer always has the most current Service and Maintenance information for your Volkswagen model. It is possible that this information may differ from the check points listed in this booklet. Your Volkswagen Service Advisor can answer any questions you may have.

Do-It-Yourself Service

Your Owner's Manual contains many helpful hints on what you can service yourself.

- You can check tires for wear or damage and correct tire pressure, including the spare.
- You can check the windshield washer container.
- You can check your car's interior and exterior lighting system for correct functioning.
- You can check the engine oil level with every fuel filling.
- You can perform these simple checks once a week.

They save time, trouble and expense later.

Your technician will not check the above mentioned items in each case during regular service and maintenance visits.

Emission Control Maintenance

1 - A clean environment is of concern to all of us. Volkswagen has built into your vehicle an efficient emission control system, using genuine Volkswagen parts, in conformance with the Federal Clean Air Act in the United States and Canadian Emission Standards, respectively. To help keep our air clean, you can do your part by providing regular maintenance for the emission control system in your vehicle.

2 - **Maintenance, repair or replacement of emission control components may be performed by any qualified automotive service and repair establishment or individual without affecting the Emission Control System Warranty, provided that such repairs are performed to manufacturer's specifications, and that replacement parts are at least equivalent to genuine Volkswagen parts in emission performance and durability. Warranty repairs and replacements, however, must be performed by an authorized Volkswagen dealer.**

3 - If other than genuine Volkswagen replacement parts are used, the owner should make sure that such parts are warranted by their manufacturer and that they are at least equivalent to genuine Volkswagen replacement parts in emission performance and durability.

To be certain that the emission control system functions as designed, regular maintenance is necessary for all components of the vehicle which influence exhaust emissions.

Why Service?

- An untuned engine wastes fuel.
- An un–serviced emission control system can increase pollution.
- A minor adjustment now may prevent a repair later.
- Follow the recommended maintenance schedule and make in–between checks. This way you help keep your car dependable and safe.
- The intervals shown in the table on the following pages are based on vehicles operating under normal conditions. In the case of severe conditions, such as extremely low temperatures, excessive dust etc., it is necessary for certain operations to be carried out in between the given intervals. This applies particularly to engine oil changes and the cleaning or replacing of the air cleaner filter element.
- If you have questions about how to maintain your vehicle or about your Maintenance Services, ask your authorized Volkswagen dealer.

Authorized VOLKSWAGEN dealers are ready to serve you and are committed to quality service and customer care.

If your vehicle has one of these engines, then this is your Service Interval Schedule.

– 1.8L Turbo Gasoline Engine (Golf, Jetta, New Beetle, Passat)

– 2.8L V6 Gasoline Engine (Passat),

If you are not sure when to bring your car in for service, ask your authorized Volkswagen Service Advisor.

5,000 miles (8,000 km)	**Oil Change Service**
10,000 miles (16,000 km)	**Oil Change & Maintenance Service**
15,000 miles (24,000 km)	**Oil Change Service**
20,000 miles (32,000 km)	**Oil Change & Maintenance Service**
25,000 miles (40,000 km)	**Oil Change Service**
30,000 miles (48,000 km)	**Oil Change & Maintenance Service**
35,000 miles (56,000 km)	**Oil Change Service**
40,000 miles (64,000 km)	**Oil Change & Maintenance Service**
45,000 miles (72,000 km)	**Oil Change Service**
50,000 miles (80,000 km)	**Oil Change & Maintenance Service**
55,000 miles (88,000 km)	**Oil Change Service**
60,000 miles (96,000 km)	**Oil Change & Maintenance Service**

Services should be performed at the scheduled mileage (kilometre) intervals, or 12 months after the last Service, whichever occurs first.

Your Service advisor will fill in the necessary information and stamp your Maintenance booklet each time you bring in your vehicle for Service.

At this time, the Service advisor will also inform you when the next Service is due. Therefore, it is important that you follow the Service schedule.

The brake fluid must be replaced every 2 years regardless of mileage (kilometres).

If you vehicle has one of these engines, then this is your Service Interval Schedule.

- 2.0 L Gasoline Engine (Golf, Jetta, New Beetle, Passat)

- 2.8L VR6 Gasoline Engine (Golf, Jetta)

- VR6 4-valve Gasoline Engine (Jetta)

- 4.0L W8 Gasoline Engine (Passat)

- 1.9L TDI Diesel Engine (Golf, Jetta, New Beetle),

- 3.2L VR6 or 4.2L V8 Gasoline Engine (Touareg)

If you are not sure when to bring your car in for service, ask your authorized Volkswagen Service Advisor.

5,000 miles (8,000 km)	**Oil Change Service**
10,000 miles (16,000 km)	**Oil Change & Maintenance Service**
20,000 miles (32,000 km)	**Oil Change & Maintenance Service**
30,000 miles (48,000 km)	**Oil Change & Maintenance Service**
40,000 miles (64,000 km)	**Oil Change & Maintenance Service**
50,000 miles (80,000 km)	**Oil Change & Maintenance Service**
60,000 miles (96,000 km)	**Oil Change & Maintenance Service**
70,000 miles (112,000 km)	**Oil Change & Maintenance Service**
80,000 miles (128,000 km)	**Oil Change & Maintenance Service**

Services should be performed at the scheduled mileage (kilometre) intervals, or 12 months after the last Service, whichever occurs first.

Your Service Advisor will fill in the necessary information and stamp your Maintenance booklet each time you bring in your vehicle for Service.

At this time, the Service Advisor will also inform you when the next Service is due. Therefore, it is important that you follow the Service schedule.

The brake fluid must be replaced every 2 years regardless of mileage (kilometres).

Delivery Inspection

- Your authorized Volkswagen dealer will fill out the necessary information and stamp your Maintenance book to confirm that the necessary services have been performed.
- Automobile technology changes continuously. Your authorized Volkswagen dealer always has the most current Service and Maintenance information for your Volkswagen model. It is possible that this information may differ from the check points listed in this booklet. Your Volkswagen Service Advisor can answer any questions you may have.
- **If you are not sure when to bring your car in for service, ask your authorized Volkswagen Service Advisor.**

Delivery Inspection

Before your vehicle is delivered to you, it is inspected according to factory guidelines.

The Delivery Inspection was performed on: _____

Next Service:	
Date:	
Miles / km:	
whichever occurs first	Today's date and Volkswagen Dealer stamp

First Service at 5,000 miles (8,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Water separator: Drain water (***TDI engine only***)

Next Service:	
Date:	
Miles / km:	
whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 10,000 miles (16,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Water separator: Drain water (***TDI engine only***)
- Windshield washer: Check fluid level, add if necessary
- Automatic shift lock: Check operation including park/neutral position switch
- Brake system: Check for damage/leaks, brake pad thickness, brake fluid level
- Wheels: Rotate from front to rear
- Rear spoiler: Lubricate (***New Beetle only***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- 12V starter and auxiliary battery: check (***where applicable***)

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Service at 15,000 miles (24,000 km) – Models with a 1.8T or V6 engine ONLY.

- Engine: Change oil and oil filter

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Service at 20,000 miles (32,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Engine: Check for leaks
- Exhaust system: Check for damage and leaks
- Water separator: Drain water (***TDI engine only***)
- Fuel filter: Replace (***TDI engine only***)
- Battery: Check electrolyte level (***Passat***)
- Battery: Check (***Golf, Jetta, New Beetle***)
- Door check straps: Lubricate
- Dust and pollen filter (where applicable): Replace
- Cooling system: Check coolant level; add if necessary
- Windshield washer: Check fluid level; add if necessary
- Automatic shift lock: Check operation including park/neutral/safety switch
- Automatic transmission: Check for leaks
- Manual transmission: Check oil level; add if necessary; check for leaks
- Wheels: Rotate from front to rear
- Tires/spare wheel: Check condition and pressure
- Brake system: Check for damage/leaks, brake pad thickness and brake fluid level
- Drive shafts: Check boots
- On–Board diagnostic system: Check fault memory; purge if necessary
- Roof frame: Clean and lubricate
- Front axle: Check dust seals on ball joints and tie rod ends; check tie rods
- Headlights: Adjust
- Rear spoiler: Lubricate (***New Beetle only***)
- 12V starter and auxiliary battery: check (***where applicable***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- Road test: Check kickdown, braking, steering, heating and ventilation, air conditioning, power accessories and electrical systems

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Service at 25,000 miles (40,000 km) – Models with a 1.8T or V6 engine ONLY.

- Engine: Change oil and oil filter

Next Service:	
Date:	
Miles / km:	
whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 30,000 miles (48,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Water separator: Drain water (***TDI engine only***)
- Windshield washer: Check fluid level, add if necessary
- Automatic shift lock: Check operation including park/neutral position switch
- Brake system: Check for damage/leaks, brake pad thickness, brake fluid level
- Wheels: Rotate from front to rear
- Rear spoiler: Lubricate (***New Beetle only***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- 12V starter and auxiliary battery: check (***where applicable***)

Next Service:	
Date:	
Miles / km:	
whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 35,000 miles (56,000 km) – Models with a 1.8T or V6 engine ONLY.

1 Engine: Change oil and oil filter

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Service at 40,000 miles (64,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Engine: Check for leaks
- Exhaust system: Check for damage and leaks
- Fuel filter: Replace (***TDI engine only***)
- Water separator: Drain (***TDI engine only***)
- Battery: Check electrolyte level (***Passat)***
- Battery: Check (***Golf, Jetta, New Beetle***)
- Door check straps: Lubricate
- V–belt: Check tension and condition; adjust if necessary
- Windshield washer: Check fluid level; add if necessary
- Automatic transmission: Check for leaks
- Manual transmission: Check oil level; add if necessary; check for leaks
- Automatic shift lock: Check operation including park/neutral/safety switch
- Automatic transmission final drive oil: Check level and for leaks; add if necessary
- Wheels: Rotate from front to rear
- Headlights: Adjust
- Tires/spare wheel: Check condition and pressure
- Brake system: Check for damage/leaks, brake pad thickness, brake fluid level
- Brake fluid: Replace every 2 years regardless of mileage (kilometres)
- Spark plugs: Replace (***except Touareg V8***)
- Interior and exterior lights: check function
- Air suspension: check for damage/leaks (***Touareg***)
- Underbody: check for damage (***Touareg***)

Continued on next page

Service at 40,000 miles (64,000 km) – continued

- Air cleaner: Replace filter element
- Cooling system: Check coolant level; add if necessary
- Dust and pollen filter (where applicable): Replace
- Ribbed belt: Check condition
- Power Steering: Check fluid level
- Drive shafts: Check boots
- Front axle: Check dust seals on ball joints, tie rod ends; check tie rods
- On–Board diagnostic system: Check fault memory; purge if necessary
- Roof frame: Clean and lubricate
- Automatic transmission: Check ATF
- Rear spoiler: Lubricate (***New Beetle only***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- Road test: Check kickdown, braking, steering, heating and ventilation, air conditioning, power accessories and electrical systems
- 12V starter and auxiliary battery: check (***where applicable***)
- Convertible top: Check function and check roll–over protection with convertible top open (***New Beetle Convertible only***)

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Service at 45,000 miles (72,000 km) – Models with a 1.8T or V6 engine ONLY.

- Engine: Change oil and oil filter

Next Service:	
Date:	
Miles / km:	
whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 50,000 miles (80,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Water separator: Drain water (***TDI engine only***)
- Windshield washer: Check fluid level, add if necessary
- Automatic shift lock: Check operation including park/neutral position switch
- Brake system: Check for damage/leaks, brake pad thickness, brake fluid level
- Wheels: Rotate from front to rear
- Rear spoiler: Lubricate (***New Beetle only***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- 12V starter and auxiliary battery: check (***where applicable***)

Next Service:	
Date:	
Miles / km:	
whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 55,000 miles (88,000 km) – Models with a 1.8T or V6 engine ONLY.

1 Engine: Change oil and oil filter	
Next Service: Date: ..... Miles / km: ..... whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 60,000 miles (96,000 km) - ALL MODELS

- Engine: Change oil and oil filter
- Engine: Check for leaks
- Exhaust system: Check for damage and leaks
- Water separator: Drain water (***TDI engine only***)
- Fuel filter: Replace (***TDI engine only***)
- Battery: Check electrolyte level (***Passat)***
- Battery: Check (***Golf, Jetta, New Beetle***)
- Door check straps: Lubricate
- Dust and pollen filter (where applicable): Replace
- Cooling system: Check coolant level; add if necessary
- Windshield washer: Check fluid level; add if necessary
- Automatic shift lock: Check operation including park/neutral/safety switch
- Automatic transmission: Check for leaks
- Manual transmission: Check oil level; add if necessary; check for leaks
- Timing belt: Check condition (***4 cylinder gasoline engine only***)
- Automatic transmission final drive: Check fluid level and for leaks
- Wheels: Rotate from front to rear
- Tires/spare wheel: Check condition and pressure
- Brake system: Check for damage/leaks, brake pad thickness and brake fluid level
- Drive shafts: Check boots
- On–Board diagnostic system: Check fault memory; purge if necessary
- Roof frame: Clean and lubricate
- Front axle: Check dust seal on ball joints and tie rods; check tie rods
- Headlights: Adjust
- Rear spoiler: Lubricate (***New Beetle only***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- Road test: Check kickdown, braking, steering, heating and ventilation, air conditioning, power accessories and electrical systems
- 12V starter and auxiliary battery: check (***where applicable***)
- Spark plugs: replace (***Touareg V8 only***)

Continued on next page

Service at 60,000 miles (96,000 km) – continued

Next Service: Date: ..... Miles / km: ..... whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 65,000 miles (104,000 km) – Models with a 1.8T or V6 engine ONLY.

1 Engine: Change oil and oil filter	
Next Service: Date: ..... Miles / km: ..... whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 70,000 miles (112,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Water separator: Drain water (***TDI engine only***)
- Windshield washer: Check fluid level, add if necessary
- Automatic shift lock: Check operation including park/neutral position switch
- Brake system: Check for damage/leaks, brake pad thickness, brake fluid level
- Wheels: Rotate from front to rear
- Rear spoiler: Lubricate (***New Beetle only***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- 12V starter and auxiliary battery: check (***where applicable***)

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Service at 75,000 miles (120,000 km) – Models with a 1.8T or V6 engine ONLY.

- Engine: Change oil and oil filter

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Service at 80,000 miles (128,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Engine: Check for leaks
- Exhaust system: Check for damage and leaks
- Fuel filter: Replace (***TDI engine only***)
- Water separator: Drain (***TDI engine only***)
- Battery: Check electrolyte level (***Passat)***
- Battery: Check (***Golf, Jetta, New Beetle***)
- Door check straps: Lubricate
- Spark plugs: Replace (***except Touareg V8***)
- Air cleaner: Replace filter element
- Cooling system: Check coolant level; add if necessary
- Dust and pollen filter (where applicable): Replace
- Timing belt: Check condition (***4 cylinder gasoline engine only***)
- V–belt: Check tension and condition; adjust if necessary
- Ribbed belt: Check condition
- Timing belt: change (***Touareg V8 only***)
- Windshield washer: Check fluid level; add if necessary
- Automatic shift lock: Check operation including park/neutral/safety switch
- Automatic transmission: Check for leaks
- Manual transmission: Check oil level; add if necessary; check for leaks

Continued on next page

Service at 80,000 miles (128,000 km) – continued

- Automatic transmission final drive oil: Check level and for leaks; add if necessary
- Wheels: Rotate from front to rear
- Headlights: Adjust
- Tires/spare wheel: Check condition and pressure
- Brake system: Check for damage/leaks, brake pad thickness, brake fluid level
- Power steering: Check fluid level
- Brake fluid: Replace every 2 years regardless of mileage (kilometres)
- Drive shafts: Check boots
- Front axle: Check dust seals on ball joints, tie rod ends; check tie rods
- On–Board diagnostic system: Check fault memory; purge if necessary
- Roof frame: Clean and lubricate
- Automatic transmission: Check ATF
- Rear spoiler: Lubricate (***New Beetle only***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- Road test: Check kickdown, braking, steering, heating and ventilation, air conditioning, power accessories and electrical systems
- 12V starter and auxiliary battery: check (***where applicable***)
- Convertible top: Check function and check roll–over protection with convertible top open (***New Beetle Convertible only***)

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Service at 85,000 miles (136,000 km) – Models with a 1.8T or V6 engine ONLY.

- Engine: Change oil and oil filter

Next Service:	
Date:	
Miles / km:	
whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 90,000 miles (144,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Water separator: Drain water (***TDI engine only***)
- Windshield washer: Check fluid level, add if necessary
- Automatic shift lock: Check operation including park/neutral position switch
- Brake system: Check for damage/leaks, brake pad thickness, brake fluid level
- Wheels: Rotate from front to rear
- Rear spoiler: Lubricate (***New Beetle only***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- 12V starter and auxiliary battery: check (***where applicable***)
- Timing belt: Replace (***TDI engine only***)

Next Service:	
Date:	
Miles / km:	
whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 95,000 miles (152,000 km) – Models with a 1.8T or V6 engine ONLY.

1 Engine: Change oil and oil filter	
Next Service: Date: ..... Miles / km: ..... whichever occurs first	Today's date and Volkswagen Dealer stamp

Service at 100,000 miles (160,000 km) – ALL MODELS

- Engine: Change oil and oil filter
- Engine: Check for leaks
- Exhaust system: Check for damage and leaks
- Water separator: Drain water (***TDI engine only***)
- Fuel filter: Replace (***TDI engine only***)
- Battery: Check electrolyte level (***Passat)***
- Battery: Check (***Golf, Jetta, New Beetle***)
- Door check straps: Lubricate
- Dust and pollen filter (where applicable): Replace
- Cooling system: Check coolant level; add if necessary
- Windshield washer: Check fluid level; add if necessary
- Automatic shift lock: Check operation including park/neutral/safety switch
- Automatic transmission: Check for leaks
- Manual transmission: Check oil level; add if necessary; check for leaks
- Wheels: Rotate from front to rear
- Tires/spare wheel: Check condition and pressure
- Brake system: Check for damage/leaks, brake pad thickness and brake fluid level
- Drive shafts: Check boots
- On–Board diagnostic system: Check fault memory; purge if necessary
- Roof frame: Clean and lubricate
- Front axle: Check dust seals on ball joints and tie rod ends; check tie rods

Continued on next page

Service at 100,000 miles (160,000 km) – continued

- Headlights: Adjust
- Rear spoiler: Lubricate (***New Beetle only***)
- Airbag system: Visual check every 12 months regardless of mileage (kilometres)
- Road test: Check kickdown, braking, steering, heating and ventilation, air conditioning, power accessories and electrical systems
- Timing belt: Replace (***TDI engine only***)
- 12V starter and auxiliary battery: check (***where applicable***)

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Service at 105,000 miles (168,000 km) – Models with a 1.8T or V6 engine ONLY.

- Engine: Change oil and oil filter
- Timing belt and timing belt tensioning roller: Replace (***Passat 2.8L V6 5-valve engines only***)
- Timing belt and timing belt tensioning roller: Replace (***Passat, Golf, Jetta, New Beetle 1.8 T engine only***)

Next Service:

Date: .....

Miles / km: .....

whichever occurs first

Today's date and
Volkswagen Dealer stamp

Brake fluid replacement record

The brake fluid must be replaced every 2 years regardless of mileage (kilometres).

1 The first brake fluid replacement was performed on _____

Next Brake Fluid Replacement:

Date: .....

Today's date and
Volkswagen Dealer stamp

1 A brake fluid replacement was performed on _____

Next Brake Fluid Replacement:

Date: .....

Today's date and
Volkswagen Dealer stamp

1 A brake fluid replacement was performed on _____

Next Brake Fluid Replacement:

Date: .....

Today's date and
Volkswagen Dealer stamp

Brake fluid replacement record

The brake fluid must be replaced every 2 years regardless of mileage (kilometres).

ı The first brake fluid replacement was performed on _____
Next Brake Fluid Replacement: Date: .....
Today's date and Volkswagen Dealer stamp

ı A brake fluid replacement was performed on _____
Next Brake Fluid Replacement: Date: .....
Today's date and Volkswagen Dealer stamp

ı A brake fluid replacement was performed on _____
Next Brake Fluid Replacement: Date: .....
Today's date and Volkswagen Dealer stamp

© 2003 VOLKSWAGEN of America, Inc.
All rights reserved
May not be reproduced or translated in whole or in part without consent of VOLKSWAGEN of America, Inc.
Specifications subject to change without notice.
Printed in Germany

1.1 Volkswagen | Maintenance | Art.-Nr.: 241.554.MAI.21 | ·
Redaktionsschluß: 05.2003 | Ausgabe: 05.2003

1.2 2004 Volkswagen Passat, Jetta, Golf and New Beetle Models

USA Warranty

Dear owner,

This booklet contains the warranties applicable to your new Volkswagen. Please read these warranties carefully to determine your warranty rights and obligations.

Your Limited New Vehicle Warranty includes virtually bumper to bumper coverage for 4 years or 50,000 miles, whichever occurs first and limited powertrain coverage for 5 years or 60,000 miles, whichever occurs first. Your vehicle is also warranted against corrosion perforation for a period of 12 years irrespective of mileage.

In addition, your vehicle is covered by emissions warranties mandated by Federal Law. If you are a resident of California and have purchased a California specification vehicle, you may also have rights under California emissions warranties. Please consult these warranties whenever a repair to your emission control system is required to determine whether it is covered by warranty. Your satisfaction in understanding the warranties that apply to your Volkswagen is important to us. Any questions concerning warranty coverage should be directed to:

Volkswagen Customer CARE Center
3499 West Hamlin Road
Rochester Hills, MI 48309
Tel.: 1 (800) 822-8987

If you have a concern or you are not satisfied with the service that you receive from your dealer, we suggest that you discuss it with the Service Manager at your dealership. If it is not resolved through your dealership, you may call or write to the Volkswagen Customer CARE Center.

Volkswagen of America, Inc., provides a mediation and arbitration service for the resolution of disputes arising under this Limited New Vehicle Warranty. This service is called BBB AUTO LINE and is conducted through local offices of the Better Business Bureau. If you wish to use this service, call the following toll-free number:

Tel.: 1 (800) 955-5100

Council of Better Business Bureaus, Inc.
4200 Wilson Boulevard
Arlington, VA 22203-1804

Notice of Address Change
Notice of Used Car Purchase

The "National Traffic & Motor Vehicle Safety Act of 1966" requires manufacturers to be in a position to contact vehicle owners if a correction of a product defect becomes necessary. If you change your address or buy a used Volkswagen, complete one of the postcards in the middle of this booklet. You need not use this card if you purchased your Volkswagen through an authorized Volkswagen dealer.

Table of contents

Limited New Vehicle Warranty 2
What is covered 2
What is not covered 4

Limited Powertrain Warranty . 7
What is covered 7
What is not covered 8

Limited Warranty Against Corrosion Perforation 10
What is covered 10
What is not covered 11

24 Hour Roadside Assistance 13
The Volkswagen 24 Hour Roadside Assistance program 13

Federal Emissions Warranties 14
General 14
Emissions Control System Warranty .. 14
Emissions Performance Warranty 16
Additional Information 19

California Emissions Warranties 20
California law requires us to provide you with the following Emissions Warranty Statement 20
CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT 20
Emissions Performance Warranty 24

Customer CARE 28
Dealer assistance 28
When to notify the manufacturer 28
Repairs not covered by warranty 29

BBB AUTO LINE 30
BBB AUTO LINE dispute settlement services 30

Service Publications 31
Product service publications 31

Tire Manufacturers 32
List of tire manufacturers for new Volkswagen vehicles 32

Limited New Vehicle Warranty

What is covered

Warranty period

The New Vehicle Warranty period is **4 years or 50,000 miles**, whichever occurs first.

Any implied warranty, including any implied warranty of merchantability or warranty of fitness for a particular purpose, is limited in duration to the period of this written warranty. Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you. ◀

Coverage

This warranty covers any repair to correct a manufacturer's defect in material or workmanship except wheel alignment, tire balance, and the repair or replacement of tires. The repair or replacement of wear and tear items, **such as** manual transmission clutch friction material, brake pads worn below manufacturer specifications, light bulbs (excluding Halogen headlights, instrument panel bulbs, and Xenon headlights, unless damaged by outside influences), seat covers, carpeting and replacement of rubber wiper blade inserts, replaced for wear and tear, are covered up to one year or 12,000 miles, whichever occurs first.

Batteries are covered 100% parts and labor for 4 years or 50,000 miles, whichever occurs first, for defects in material or workmanship.

Mechanical adjustment not associated with a defect in material and workmanship, are not covered after the first year or 12,000 miles, whichever occurs first (i.e. headlight adjustment). ◀

Where to go for warranty service

This warranty will be honored by any authorized Volkswagen dealer in the United States, including its territories, or Canada.

If your Volkswagen is brought to an authorized Volkswagen dealer outside the United States, including its territories, or Canada, this warranty will not apply. Defects in material or workmanship will be corrected under the terms of the warranty for new Volkswagen vehicles in effect in that country. ◀

When the warranty period begins

The warranty period begins on the date the vehicle is delivered to either the original purchaser or the original lessee; or if the vehicle is first placed in service as a "demonstrator" or "company" car, on the date such vehicle is first placed in service.

This Limited New Vehicle Warranty is automatically transferred without cost if the ownership of the vehicle changes within the Warranty period. ◀

Free-of-charge repair

Repairs under this warranty are free of charge. Your authorized Volkswagen dealer will repair the defective part or replace it with **a new or remanufactured** genuine Volkswagen part. ◀

Emergency repairs

If an emergency repair was performed by a non-Volkswagen service facility, keep all receipts, repair orders, and parts removed from your Volkswagen.

You will be reimbursed if the repair work was needed and correctly performed and it was impossible or unreasonable under the circumstances to tow or drive your Volkswagen to the nearest authorized Volkswagen dealer.

A statement of the circumstances that prevented you from getting to an authorized Volkswagen dealer, together with the paid receipts, repair orders, and replaced parts must be submitted to your authorized Volkswagen dealer in order to be considered for reimbursement. ◀

BBB AUTO LINE dispute settlement services

If you are not satisfied with the warranty service you receive, you may wish to follow the steps set forth ⇒ page 30.

Volkswagen of America, Inc., provides a **mediation** and **arbitration** service for the resolution of warranty and other product related disputes. This service is called BBB AUTO LINE and is conducted through local offices of the Better Business Bureau. If you wish to use this service, you may call the following toll-free number:

Tel.: **1 (800) 955-5100**

We encourage you to use BBB AUTO LINE before you decide to seek remedies in a court of law

In some states you may be required to use BBB AUTO LINE before you can assert your rights in a court of law.

The BBB AUTO LINE service is free of charge and permits you to present your case without an attorney. Additional information on BBB AUTO LINE can be found ⇒ page 30. ◀

What is not covered

Tires

Tires are not covered by this warranty, but are separately warranted by the tire manufacturer. To assist you in obtaining related Warranty information, a list of tire manufacturers and addresses is provided at the end of this booklet. Verify with the tire manufacturer what is covered under their warranty. ◀

Maintenance services and mechanical adjustments

This warranty does not cover the cost of parts and labor involved in any scheduled maintenance service.

This warranty does not cover the replacement of filters, oil, lubricants, fluids, or air conditioner refrigerant charge, unless their replacement is a necessary part of warranty service on a covered component.

Mechanical adjustments not associated with a defect in material or workmanship are not covered after the first year or 12,000 miles, whichever occurs first (i.e. headlight adjustment). This warranty does not cover wheel alignment or tire balancing. ◀

Damage or malfunction due to misuse, negligence, alteration, accident or fire

This warranty does not cover:

- damage or malfunctions which are the result of improper repair of the vehicle, installation of any non Genuine Volkswagen parts that will alter the vehicle performance specifications from those set by the vehicle manufacturer, modifications to the vehicle (including the engine management system), accessories such as alarm systems, remote starters, roof racks or communications equipment, defects or failures resulting from the use of new parts not sold or approved by Volkswagen, or used parts, or the resultant damage to associated parts or systems; or;
- damage or malfunctions which were caused by the alteration of the vehicle, in particular any major or structural alterations such as the conversion of the vehicle to a convertible or the modification of the roof to accommodate a glass roof structure or other similar structural alterations; or
- damage or malfunctions caused by intentional or unintentional misfueling, collision or modifications of the vehicle, including, but not limited to the installation of engine management components not approved by Volkswagen; or
- damage or malfunctions resulting from the use of the vehicle in competitive events or caused by accident or fire; or
- damage or malfunctions resulting from continued operation of the vehicle after a warning light, gauge reading or other warnings indicate a mechanical or operational problem; or
- damage or malfunctions due to suspension modifications, such as the installation of ▶

aftermarket springs, shock absorbers, or lowering kits.

This warranty does not cover vehicles severely damaged and / or declared to be a total loss by an insurer or vehicles substantially reassembled from or repaired with parts obtained from another used vehicle. ◀

Damage or malfunctions due to lack of maintenance

This warranty does not cover damage or malfunctions due to failure to follow recommended maintenance and use requirements as set forth in the Volkswagen Owner's Manual and the Maintenance Booklet.

Your dealer will deny warranty coverage unless you present to the dealer proof in the form of Service or Repair Orders that all scheduled maintenance was performed in a timely manner. ◀

Damage caused by the environment

This warranty does not cover damage caused by airborne industrial pollutants (e.g. acid rain), bird droppings, stones, floodwater, windstorms, tree sap or other similar occurrences. ◀

Glass

This warranty does not cover glass breakage, unless due to a defect in manufacturer's material or workmanship. ◀

Odometer tampering

These warranties do not cover repairs on an Volkswagen on which the odometer has been altered or on which the actual mileage cannot readily be determined.

If the speedometer unit is replaced, a "Speedometer Replacement Record" must be filled out by an authorized Volkswagen dealer. ◀

Other terms:

This warranty is issued by Volkswagen of America, Inc. (VWoA). This warranty does not apply to Volkswagen vehicles or parts and accessories not imported or distributed by Volkswagen.

This warranty, the Limited Warranty Against Corrosion Perforation, and the Emissions Warranties are the only express warranties made in connection with the sale of this Volkswagen. Any implied warranty, including any warranty of merchantability or warranty of fitness for a particular purpose, is limited in duration to the stated period of these written warranties.

Volkswagen of America, Inc. reserves the right to make improvements or change the design of any Volkswagen model at anytime with no obligation to make similar changes on vehicles previously sold.

Neither Volkswagen nor the manufacturer assumes, or authorizes any person to assume, any other obligation or liability on its behalf. ◀

Other expenses:

This warranty does not cover any incidental or consequential damage, including loss of value of the vehicle, lost profits or earnings, and out-of-pocket expenses for substitute transportation or lodging[1]**.**

This warranty gives you specific legal rights and you may also have other rights, which vary from state to state. ◀

[1] Some states do not allow the exclusion or limitation of incidental or consequential damage, so this limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

Limited Powertrain Warranty

What is covered

Warranty period

The coverage under this warranty lasts for **5 years or 60,000 miles** whichever occurs first, from the date the vehicle was first placed in service.

This warranty does not apply to vehicles used for commercial purposes such as taxi, limousine and rental vehicles.

If a commercial vehicle is sold to a subsequent retail owner, this warranty still does not apply.

Any implied warranty, including any implied warranty of merchantability or warranty of fitness for a particular purpose, is limited in duration to the period of this written warranty. Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you. ◀

Coverage

The Limited Powertrain Warranty covers any repair to correct a manufacturer's defect in material or workmanship for the following Volkswagen parts and components:

Engine

Cylinder block and all internal parts, cylinder head and all internal parts, valve train, spur belt, flywheel, oil pump, water pump, manifolds, all related seals and gaskets.

Transmission

Case and all internal parts, torque converter, all related seals and gaskets.

Drivetrain

Differential and all internal parts, drive shafts and constant velocity (CV) joints. ◀

Where to go for warranty service

This warranty will be honored by any authorized Volkswagen dealer in the United States, including its territories, or Canada.

If your Volkswagen is brought to an authorized Volkswagen dealer outside the United States, including its territories, or Canada, this warranty will not apply. Defects in material or workmanship will be corrected only under the terms of the warranty for new Volkswagen vehicles in effect in that country. ◀

When the warranty period begins

The warranty period begins on the date the vehicle is delivered to either the original purchaser or the original lessee; or if the vehicle is first placed in service as a "demonstrator" or "company car", on the date such vehicle is first placed in service.

The Limited Powertrain Warranty is automatically transferred without cost if the ownership of the vehicle changes within the Warranty period. ◀

Free-of-charge repair

Repairs under this warranty are made free of charge. Your authorized Volkswagen dealer will repair the defective part or replace it with a **new or remanufactured** genuine Volkswagen part. ◀

What is not covered

Maintenance Services

This warranty does not cover the cost of parts and labor involved in any scheduled maintenance service. Scheduled maintenance services are described in your Volkswagen Maintenance Booklet.

This warranty does not cover the replacement of filters, oil, lubricants or fluids unless their replacement is a necessary part of warranty service on a covered component. ◀

Damage or malfunction due to misuse, negligence, alteration, accident or fire

This warranty does not cover:

- damage or malfunctions which are the result of improper repair of the vehicle, installation of any non Genuine Volkswagen parts that will alter the vehicle performance specifications from those set by the vehicle manufacturer, modifications to the vehicle (including the engine management system), accessories such as alarm systems, remote starters, roof racks or communications equipment, defects or failures resulting from the use of new parts not sold or approved by Volkswagen, or used parts, or the resultant damage to associated parts or systems;
- damage or malfunctions which were caused by the alteration of the vehicle, in particular any major or structural alterations such as the conversion of the vehicle to a convertible or the modification of the roof to accommodate a glass roof structure or other similar structural alterations;
- damage or malfunctions caused by intentional or unintentional misfueling, collision or modifications of the vehicle, including, ▶

but not limited to the installation of engine management components not approved by Volkswagen;

- damage or malfunctions resulting from the use of the vehicle in competitive events or caused by accident or fire; or
- damage or malfunctions resulting from continued operation of the vehicle after a warning light, gauge reading or other warnings indicate a mechanical or operational problem; or
- damage or malfunctions due to suspension modifications, such as the installation of aftermarket springs, shock absorbers, or lowering kits.

This warranty does not cover vehicles severely damaged and / or declared to be a total loss by an insurer or vehicles substantially reassembled from or repaired with parts obtained from another used vehicle. ◀

Wear and tear items

This warranty does not cover the replacement of any powertrain components that wear as a result of normal use or deterioration. ◀

Damage or malfunctions due to lack of maintenance

This warranty does not cover damage or malfunctions which are due to failure to follow recommended maintenance requirements as set forth in the Volkswagen Owner's Manual and the Maintenance Booklet. Your dealer will deny warranty coverage unless you present to the dealer proof in the form of service or repair orders that all scheduled maintenance was performed in a timely manner. ◀

Damage caused by the environment

This warranty does not cover damage caused by airborne industrial pollutants (e.g. acid rain), bird droppings, tree sap, stones, flood water, windstorm or other similar occurrences. ◀

Other expenses

This warranty does not cover any incidental or consequential damage, including loss of value of the vehicle, lost profits or earnings, or out-of-pocket expenses for substitute transportation or lodging[2)].

The "Other Terms" Presented in The Limited New Vehicle Warranty Also Apply to This Warranty. ◀

[2)] Some states do not allow the exclusion or limitation of incidental or consequential damage, so this limitation or exclusion may not apply to you.

Limited Warranty Against Corrosion Perforation

What is covered

Warranty period

The coverage under this warranty lasts for **12 years without mileage limitation.**

Any implied warranty, including any implied warranty of merchantability or warranty of fitness for a particular purpose, is limited in duration to the period of this written warranty. Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you.

Neither Volkswagen nor the manufacturer assumes, or authorizes any person to assume, any other obligation or liability on its behalf. ◀

Coverage

This warranty covers any repair or replacement of body sheet metal panels that have been **perforated** by rust. ◀

Where to go for warranty service

This warranty will be honored by any authorized Volkswagen dealer in the United States, including its territories, or Canada.

If your Volkswagen is brought to an authorized Volkswagen dealer outside the United States, including its territories, or Canada, this warranty will not apply. Defects in material or workmanship will be corrected under the terms of the warranty for new Volkswagen vehicles in effect in that country. ◀

When the warranty period begins

The warranty period begins on the date the vehicle is delivered to either the original purchaser or the original lessee; or if the vehicle is first placed in service as a "demonstrator" or "company" car, on the date such vehicle is first placed in service.

This Limited Warranty Against Corrosion Perforation is automatically transferred without cost if the ownership of the vehicle changes within the warranty period. ◀

Free-of-charge repair

Repairs under this warranty are made free of charge. The authorized Volkswagen dealer will repair the defective part or replace it with a **new or remanufactured** genuine Volkswagen part.

Note

Your Volkswagen is corrosion protected at the factory. You do not need to purchase rustproofing when you buy your Volkswagen in order to keep this warranty in effect. ◀

What is not covered

Surface corrosion without perforation

Repairs are covered under this warranty only if there is rust-through condition in the body sheet metal not caused by outside influences. ◀

Perforation of sheet metal due to accident, lack of care, or failure to repair or modifications to the paint/painted surface

This warranty does not cover corrosion perforation resulting from the failure to promptly repair paint damage, damaged undercoating, or surface corrosion.

It does not cover damage due to failure to wash or otherwise regularly care for the vehicle as described in the Volkswagen Owner's Manual.

This warranty does not cover corrosion perforation resulting from unrepaired collision damage or improper collision repair. ◀

Special exclusion for any aluminum portions that may be part of your Volkswagen vehicle

This warranty does not cover corrosion perforation due to failure to perform body repairs in accordance with Volkswagen's specified repair procedures, including use of **non-aluminum alloy parts.**

It does not cover corrosion perforation resulting from the use of any inferior rustproofing agent or method.

Your authorized Volkswagen dealership will do its best to match your vehicles original finish, but this warranty does not cover the cost of painting the entire vehicle solely for paint matching. ◀

Environmental damage

This warranty does not cover damage caused by airborne industrial pollutants (e.g. acid rain), bird droppings, stones, flood water, wind storms, tree sap or other similar occurrences ◀

Corrosion perforation because of failure to rustproof when collision damage is repaired

Body parts that have been repaired or newly installed after a collision must be treated with a rustproofing agent that is compatible with Volkswagen's own factory corrosion protection. If you fail to have your vehicle treated in this way after a collision, Volkswagen will not be responsible for the repair of any resulting rust-through.

Note

The "Other Terms" presented in the Limited New Vehicle Warranty also apply to this warranty. ◀

24 Hour Roadside Assistance

The Volkswagen 24 Hour Roadside Assistance program

The Volkswagen 24 Hour Roadside Assistance program is your assurance that help will be there should your **model year 2004** Volkswagen have a mechanical breakdown under normal driving conditions. Whether this happens thousands of miles from home (anywhere in the U.S. or Canada), or in your own driveway, you only have to call one toll-free number and help will be on the way:

Tel.: 1 (800) 411–6688

To identify yourself as a member, simply quote your Vehicle Identification Number (VIN). This number can be found on your 24 Hour Roadside Assistance membership card, or you can find it on the driver's side of the dashboard visible through the windshield. 24 Hour Roadside Assistance is available to you for the **first four years of your new vehicle ownership or 50,000 miles,** whichever occurs first.

The Volkswagen 24 Hour Roadside Assistance Program includes the following emergency roadside services: emergency towing, battery jump start, flat tire change, emergency fuel service, lock-out service and extrication/winch service.

Other services and benefits include: trip routing services and trip interruption benefits throughout the U.S. and Canada.

Please refer to your 24 Hour Roadside Assistance Owner's Guide for specific details on the services provided. ◀

Federal Emissions Warranties

General

The Emissions Warranties set out on the following pages are warranties which the manufacturer is required by law to furnish to you at the time you take delivery of your new vehicle.

The warranties required by federal laws are applicable to all new Volkswagen vehicles imported and distributed by Volkswagen of America, Inc. ("Volkswagen") for sale in the United States, including California. The warranties required by California law are applicable to all new Volkswagen vehicles imported and distributed by Volkswagen for sale and registration in the State of California.

The Commonwealth of Massachusetts and the States of Vermont and Maine have adopted warranty requirements that are identical to the California warranties.

The owner of a vehicle certified for sale and registered in California, Massachusetts, Vermont and Maine may, therefore, have warranty rights under both Federal and State mandated emissions warranties.

The owner of a new Volkswagen vehicle imported and distributed by Volkswagen for sale in states other than California, Massachusetts, Vermont or Maine has rights only under the Federal Emissions Warranty.

Please read these warranties carefully. If you have any questions concerning the applicability of each warranty to your vehicle or want to know whether a particular repair will be performed free of charge pursuant to these warranties, please write to or telephone:

Volkswagen Customer CARE Center
Volkswagen of America, Inc.
3499 West Hamlin Road
Rochester Hills, MI 48309
Tel.: 1 (800) 822-8987

Emissions Control System Warranty

For 2 years or 24,000 miles

Emissions Control System Warranty[3)]

Volkswagen of America, Inc. ("Volkswagen"), the authorized United States importer of Volkswagen vehicles, warrants to the original retail purchaser and any subsequent purchaser that every **model year 2004** Volkswagen vehicle imported by Volkswagen:

- was designed, built and equipped so as to conform at the time of sale with all applicable regulations of the United States Environmental Protection Agency ("EPA"), and
- is free from defects in material and workmanship which causes the vehicle to fail to conform with EPA regulations for 2 years after the date of first use or delivery of the ve- ▶

[3)] These coverages are also included in the Volkswagen 4 years / 50,000 miles Limited New Vehicle Warranty.

hicle to the original retail customer or until the vehicle has been driven 24,000 miles, whichever comes first. The following parts listed, if defective, could cause the vehicle to fail to conform with EPA regulations:

- EVAP Canister
- Mass Air Flow Sensor Assembly
- Three-Way Catalytic Converter
- Engine Electronic Control Module and Power Supply Relay
- Electronic Feedback Controls, Sensors, Switches and Valves
- EVAP Canister Purge Valve
- Exhaust Manifold and Gaskets
- Exhaust Pipe Up to Catalytic Converter
- Fuel Filler Neck Restrictor
- Fuel Filler Cap and Gasket
- Fuel Injectors, Fuel Injector Lines and Gaskets and Pressure Regulator
- Fuel Tank
- Gravity Check Valve
- Knock Sensor
- Malfunction Indicator Lamp (MIL)
- OBD System
- Camshaft Adjuster
- OBD Data Link Connector
- Oxygen Sensor
- PCV Valve
- EVAP Leak Detection Pump
- Secondary Air Injection Pump and Associated Controls
- Emission-Related Hoses, Gaskets, Clamps and other accessories used with the above components

The obligation of Volkswagen under this warranty is limited, however, to the following: If within this period a defect in material or workmanship causes the vehicle to fail to conform with EPA regulations and the vehicle is brought to the workshop of any authorized Volkswagen dealer in the continental United States, Alaska, Hawaii or Canada, the dealer will make repairs as may be required by these regulations free of charge. ◀

For 8 years or 80,000 miles

If the vehicle has been in use for more than 24 months or 24,000 miles, but less than 8 years or 80,000 miles, whichever occurs first, your Volkswagen dealer will repair or replace free-of-charge the following major emission control components only:

- Catalytic Converter
- Engine Electronic Control Module
- On Board Diagnostic Device ◀

Emissions Performance Warranty

For 2 years or 24,000 miles and 8 years or 80,000 miles

Emissions Performance Warranty[4]

Volkswagen of America, Inc., ("Volkswagen") warrants to the original retail purchaser of a **model year 2004** Volkswagen vehicle and any subsequent purchaser of the vehicle that if the following conditions are met, any authorized Volkswagen dealer in the continental United States, Alaska, Hawaii or Canada will remedy any nonconformity, as determined below, free-of-charge, under the following conditions:

- the vehicle fails to conform at any time during 24 months or 24,000 miles, whichever occurs first, to applicable emission inspection standards as determined by an EPA Approved State Inspection and Maintenance Test ("I/M Test"), or
- if the vehicle has been in use for more than 24 months or 24,000 miles, but less than 8 years or 80,000 miles, whichever occurs first, the vehicle fails an I/M Test resulting from a malfunction of a catalytic converter, engine electronic control module or on-board diagnostic device (OBD), and
- the failure of the I/M Test requires the vehicle owner to bear any penalty or other sanction, including the denial of the right to use the vehicle under local, state or federal law, and
- the vehicle has been maintained and operated in accordance with Volkswagen's instructions for proper maintenance and use. ◀

Instructions for proper maintenance and use

Instructions for proper maintenance are contained in your Volkswagen Maintenance Booklet. Time and mileage intervals at which maintenance is to be performed, may vary from model to model. Instructions for proper use of the vehicle are contained in your Volkswagen Owner's Manual. ◀

Use of EPA certified replacement parts

Volkswagen may deny an emission performance warranty claim on the basis that a non-EPA certified replacement part was used in the maintenance or repair of the vehicle if Volkswagen can prove that the non-certified part is either defective in materials or workmanship, or not equivalent from an emission standpoint to the original part, and you are not able to offer information that the part is either not defective or equivalent to the original part with respect to its emission performance. ◀

[4] These coverages may also be included in the Volkswagen 4 years / 50,000 miles Limited New Vehicle Warranty.

The "National Traffic & Motor Vehicle Safety Act of 1966" required manufactures to be in a position to contact vehicle owners if a correction of a product defect becomes necessary.

Please complete one the attached postcards if you change your address or purchase a used Volkswagen.

You need not use this card if you purchased your car through an authorized Volkswagen dealer.

Quote the complete Vehicle Identification Number (VIN) or your Volkswagen. Do not use an abbreviated number.

Locations of the vehicle Identification Number (VIN) are illustrated and explained in the Owner's Manual.

Additional cards can be obtained from any authorized Volkswagen dealer.

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS MAIL PERMIT 107 PONTIAC, MI

POSTAGE WILL BE PAID BY ADDRESSEE

VOLKSWAGEN OF AMERICA, INC.
ATTENTION: RECALL
P.O. BOX 217022
AUBURN HILLS, MI 48321-7022

Volkswagen Product Service Publications

If you send us the attached Order Form, we will mail to you free of charge, the current quarterly index. For an explanation of Product Service Publications, please see information in this booklet.

Toll-free Telephone Number

Instead of mailing the order form, you may want to call us toll-free at 1-800-544-8021. Listen for the recording and leave your name, address, and vehicle make.

NOTICE OF ADDRESS CHANGE/USED CAR PURCHASE

Complete Vehicle Identification Number

Last Name | First Name | Initial

Number | Street | Apt. No.

City | State

Zip Code

Please **PRINT** and give complete information

ADDR CHG VWUS

The "National Traffic & Motor Vehicle Safety Act of 1966" required manufactures to be in a position to contact vehicle owners if a correction of a product defect becomes necessary.

Please complete one the attached postcards if you change your address or purchase a used Volkswagen.

You need not use this card if you purchased your car through an authorized Volkswagen dealer.

Quote the complete Vehicle Identification Number (VIN) or your Volkswagen. Do not use an abbreviated number.

Locations of the vehicle Identification Number (VIN) are illustrated and explained in the Owner's Manual.

Additional cards can be obtained from any authorized Volkswagen dealer.

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS MAIL PERMIT 107 PONTIAC, MI

POSTAGE WILL BE PAID BY ADDRESSEE

VOLKSWAGEN OF AMERICA, INC.
ATTENTION: RECALL
P.O. BOX 217022
AUBURN HILLS, MI 48321-7022

Volkswagen Product Service Publications

If you send us the attached Order Form, we will mail to you free of charge, the current quarterly index. For an explanation of Product Service Publications, please see information in this booklet.

Toll-free Telephone Number

Instead of mailing the order form, you may want to call us toll-free at 1-800-544-8021. Listen for the recording and leave your name, address, and vehicle make.

NOTICE OF ADDRESS CHANGE/USED CAR PURCHASE

Complete Vehicle Identification Number

Last Name | First Name | Initial

Number | Street | Apt. No.

City | State

Zip Code

Please **PRINT** and give complete information

ADDR CHG VWUS

Warranty coverage for parts not scheduled for replacement

Any part which is not required to be replaced at maintenance intervals specified in the Volkswagen Maintenance Booklet is covered by this warranty for the full warranty period. ◀

When to claim

You may raise a claim under this warranty immediately after your vehicle has failed an I/M Test if, as a result of that failure, you are required by law to repair the vehicle to avoid imposition of a penalty or cancellation of your right to use the vehicle. You need not actually suffer the loss or lose the right to use your vehicle or pay for the repair before presenting your claim. ◀

Acceptance or denial of claim within 30 days

Claims may be presented only by bringing your vehicle to any authorized Volkswagen dealer in the United States, its territories or Canada. The dealer will honor or deny your claim within a reasonable time, not to exceed thirty (30) days, from the time at which your vehicle is presented for repair or within any time period specified by local, state or federal law, whichever is shorter, except when a delay is caused by events not attributable to Volkswagen or the dealer. If the dealer denies your claim, you will be notified in writing of the reasons for rejecting the claim. If you do not receive notice of denial of your claim within the above time period, Volkswagen is required by law to honor the claim. ◀

Denial of claim for failure to comply with instructions for scheduled maintenance or proper use

Under certain circumstances, your claim may be denied because you have failed to comply with instructions for scheduled maintenance contained in your Volkswagen Maintenance booklet. In determining whether you have complied with the instructions for scheduled maintenance and proper use, Volkswagen may require you to furnish proof of compliance only with those maintenance instructions which Volkswagen has reason to believe were not performed and which could be the cause of the I/M Test failure. ◀

Record of scheduled maintenance

Volkswagen recommends that you keep a record of scheduled maintenance by making sure that the Maintenance Record contained in your Volkswagen Maintenance booklet is validated at the approximate time or mileage intervals by the authorized Volkswagen dealer or other service facility which performed the maintenance, or by furnishing proof upon request that you have performed the maintenance yourself at the approximate time or mileage intervals, that you have used proper parts, and that you were able to perform the maintenance properly yourself. ◀

Additional Information

Denial of warranty claim for other reasons

Additional information about the Federal Emissions Control Systems and the Federal Emissions Performance warranties

Volkswagen may deny a claim on the basis that:

- the vehicle was abused, or
- the vehicle was maintained or used in a manner which included the improper installation of a component or the adjustment of parameters substantially outside the manufacturer's specifications for proper maintenance, or
- unscheduled maintenance was performed on your vehicle and in the course of such maintenance, components affecting your vehicle's emissions were removed or rendered inoperative, or
- contaminated fuel or fuel not meeting the specifications set forth in your Owner's Manual was used.

Volkswagen will not deny a claim relating to:

- warranty work or pre-delivery service performed by an authorized Volkswagen dealer, or
- work performed in an emergency to rectify an unsafe condition attributable to Volkswagen, provided you have taken steps in a timely manner to put the vehicle back into a conforming condition, or
- the use of an uncertified part or to noncompliance with the instructions for proper maintenance and use which is not related to the I/M Test failure.

Note

Maintenance, Repair or Replacement of Emission Control Devices and Systems may be Performed by any Automotive Service and Repair Establishment or Qualified Individual Using any Part Certified by the Environment Protection Agency (EPA).

- **Any implied warranty, including any warranty of merchantability or warranty of fitness for a particular purpose, is limited in duration to the stated period of these written warranties.**
- Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.
- **These warranties do not cover any incidental or consequential damages, including loss of resale value, lost profits or earnings, and out-of-pocket expenses for substitute transportation or lodging.**
- Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.
- You may obtain further information regarding the Emissions Performance Warranty or report violation of the terms of the Emissions Performance Warranty by contacting: Manager, Certification and Compliance Division (6405J), Warranty Claims, Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue NW, Washington, DC 20460 ◀

California Emissions Warranties

California law requires us to provide you with the following Emissions Warranty Statement

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT

Your warranty rights and obligations:

The California Air Resources Board is pleased to explain the emission control system warranty on your **model year 2004** vehicle. In California, new motor vehicles must be designed, built and equipped to meet the State's stringent anti-smog standards. Volkswagen must warrant the emission control system on your vehicle for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your vehicle.

Your emission control system may include parts such as the fuel-injection system, the ignition system, catalytic converter, and engine computer. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exits, Volkswagen will repair your vehicle at no cost to you including diagnosis, parts and labor.

Manufacturer's warranty coverage:

For 3 years or 50,000 miles, whichever occurs first.[5)]

If your vehicle fails a Smog Check inspection, all necessary repairs and adjustments will be made by Volkswagen to ensure that your vehicle passes the inspection. This is your Emission Control System PERFORMANCE WARRANTY.

If any emission-related part on your vehicle is defective, the part will be repaired or replaced by Volkswagen. This is your short-term Emission Control System DEFECTS WARRANTY.

For 7 years or 70,000 miles, whichever occurs first.

If an emission-related part listed in this warranty booklet specially noted with coverage for 7 years or 70,000 miles is defective, the part will be repaired or replaced by Volkswagen. This is your long-term Emission Control System DEFECTS WARRANTY.

For 15 years or 150,000 miles, whichever occurs first.

5) These coverages may also be included in the Volkswagen 4 years / 50,000 miles Limited New Vehicle Warranty

Some Volkswagen Jetta Sedan models with 2.0L engines distributed for sale in California may be specially equipped to meet California **Partial Zero Emission Vehicle (P-ZEV)** requirements. For these vehicles, if your vehicle fails a SMOG Check inspection, OR if any emission-related part is found to be defective, the part will be repaired or replaced by Volkswagen for 15 years or 150,000 miles, whichever first occurs, from the time of retail delivery of your vehicle. This represents your Emission Control System PERFORMANCE WARRANTY and DEFECTS WARRANTY.

Owner's warranty responsibilities:

As the vehicle owner, you are responsible for the performance of the required maintenance listed in your owner's Maintenance booklet. Volkswagen recommends that you retain all receipts covering maintenance on your vehicle, but Volkswagen cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

You are responsible for presenting your vehicle to a Volkswagen dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

As the vehicle owner, you should also be aware that Volkswagen may deny you warranty coverage if your vehicle or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

IF YOU HAVE ANY QUESTIONS REGARDING YOUR WARRANTY RIGHTS AND RESPONSIBILITIES, YOU SHOULD CONTACT VOLKSWAGEN OF AMERICA, INC., CUSTOMER CARE CENTER AT 1 (800) 822-8987 OR THE CALIFORNIA AIR RESOURCES BOARD AT P.O. BOX 8001, EL MONTE, CA 91734–2302.

Emissions Control System Defects Warranty:

Warranty for 3 years / 50,000 miles

Volkswagen of America, Inc., ("Volkswagen") warrants to the original retail purchaser and any subsequent purchaser that every **model year 2004** Volkswagen vehicle imported by Volkswagen and certified for sale and registered in California:

- was designed, built and equipped so as to conform with all applicable requirements of the California Air Resources Board ("CARB") and
- is free from defects in material and workmanship which cause the vehicle to fail to conform with CARB requirements, including any defect which would cause the vehicle's on-board malfunction indicator to illuminate, for 3 years or 50,000 miles, whichever comes first.

A warranted part is any part installed on a motor vehicle or motor vehicle engine by the vehicle or engine manufacturer, or installed in a warranty repair, which affects any regulated emission from a motor vehicle or engine which is subject to California emission standards.

Warranty for 7 years / 70,000 miles Covering Certain Emission System Parts

The following emissions control system parts marked with "yes" are covered for 7 years or 70,000 miles, whichever comes first.

Those marked with "no" are covered for 3 years or 50,000 miles, whichever occurs first.

	Passat 1.8L	Passat 2.8L V6	Passat 4.0L W8	Passat TDI
Camshaft adjuster	yes	yes	yes	no
Fuel tank	yes	yes	yes	yes
Turbo charger	yes	no	no	yes
Charge air cooler	no	no	no	no
Fuel injection pump	no	no	no	yes
Fuel injector with lift sensor	no	no	no	no
Power train control module (Diesel engine)	no	no	no	yes
Throttle body	yes	yes	yes	no
Air mass sensor	no	no	no	yes
Intake manifold	no	yes	yes	no
Front oxygen sensor	no	no	yes	no
Powertrain control module (gasoline engine)	yes	yes	yes	no
Rear oxygen sensor	no	no	yes	no
Exhaust manifold	yes	yes	yes	no
Front exhaust pipe	no	no	no	no
Secondary air injection pump	no	no	yes	no
Catalytic converter	yes	yes	yes	yes
Powertrain control module (transmission)	yes	yes	yes	yes

Warranty for 7 years / 70,000 miles Covering Certain Emission System Parts (continued)

	Golf, Jetta, New Beetle 2.0L	Golf, Jetta, New Beetle 1.8L	Jetta, GTI VR6 2.8L	Golf, Jetta, New Beetle TDI
Camshaft adjuster	no	yes	yes	no
Fuel tank	yes	yes	yes	yes
Turbo charger	no	yes	no	yes
Charge air cooler	no	no	no	no
Fuel injection pump	no	no	no	yes
Fuel injector with lift sensor	no	no	no	no
Power train control module (Diesel engine)	no	no	no	yes
Throttle body	no	yes	no	no
Air mass sensor	no	no	no	yes
Intake manifold	yes	no	yes	no
Front oxygen sensor	no	no	no	no
Powertrain control module (gasoline engine)	yes	yes	yes	no
Rear oxygen sensor	no	no	no	no
Exhaust manifold	yes	yes	yes	no
Front exhaust pipe	no	no	no	no
Secondary air injection pump	no	no	no	no
Catalytic converter	yes	yes	yes	yes
Powertrain control module (transmission)	yes (New Beetle Convertible only)	yes	yes	yes

Emissions Performance Warranty

General

California maintains a mandatory emissions inspection and maintenance program (Smog Check) requiring motor vehicles to be smog tested at regular intervals. If your vehicle fails to pass a smog test performed by a Licensed Smog Check station pursuant to the California Inspection and Maintenance Program within 3 years or 50,000 miles, whichever comes first, any authorized Volkswagen dealer in the continental United States, Alaska, Hawaii or Canada, will perform free of charge any repairs necessary for the vehicle to pass the smog test. These repairs include diagnosis, replacement, repair, and adjustments. After the 3 year / 50,000 miles performance warranty has expired, a Smog Check test failure due to a defect in a part which is warranted for 7 years / 70,000 miles is covered.

For 15 years or 150,000 miles, whichever occurs first.

Some Volkswagen Jetta Sedan models with 2.0L engines distributed for sale in California may be specially equipped to meet California **Partial Zero Emission Vehicle (P-ZEV)** requirements. For these vehicles, if your vehicle fails a SMOG Check inspection, OR if any emission-related part is found to be defective, the part will be repaired or replaced by Volkswagen for 15 years or 150,000 miles, whichever first occurs, from the time of retail delivery of your vehicle. This represents your Emission Control System PERFORMANCE WARRANTY and DEFECTS WARRANTY. ◀

Additional information about the California Emissions Control System and the California Emissions Performance Warranties

When the warranty period begins

The warranty period begins on the date the vehicle is delivered to the original purchaser or the original lessee, if the vehicle is first placed in service as a "demonstrator" or "company" car prior to delivery, on the date it is first placed in service. ◀

Maintaining your vehicle

Volkswagen recommends that you use and maintain your vehicle in accordance with the instructions set forth in the Volkswagen Owner's Manual and Volkswagen Maintenance booklet and that you keep a record of your maintenance. Failure to maintain your vehicle according to the required maintenance schedule may cause the vehicle to exceed applicable emissions standards and could result in denial of warranty coverage. However, Volkswagen will not deny a warranty claim solely on the basis of your failure to maintain the vehicle in accordance with these instructions or your failure to keep a record of your maintenance of the vehicle. We also recommend that you provide your maintenance records to the new owner whenever you sell your vehicle. ◀

Warranty coverage for diagnostic services

Repair and diagnostic services related to any repair covered by this warranty will be performed free of charge, if the vehicle is delivered to any authorized Volkswagen dealer in the continental United States, Alaska, Hawaii or Canada. ◀

Use of Genuine Volkswagen parts

Volkswagen recommends that Genuine Volkswagen parts be used as replacement parts for the maintenance, repair or replacement of emission control systems. Use of replacement parts which are not equivalent to Genuine Volkswagen parts in emission performance and durability may impair the effectiveness of emission control systems. Although use of parts other than Genuine Volkswagen parts does not invalidate these warranties, Volkswagen assumes no liability under these warranties for failure of such parts and damage to other parts caused by such failure. ◀

Warranty coverage for parts not scheduled for inspection or replacement

Any warranted part which is not scheduled for inspection or replacement is covered for the warranty period. Any such parts repaired or replaced under warranty are warranted for the remaining warranty period. ◀

Warranty coverage of parts scheduled for replacement

A part which is installed in accordance with Volkswagen's instructions or required scheduled maintenance is warranted until the next scheduled replacement interval or until the vehicle has been driven 3 years or 50,000 miles, whichever occurs first. ◀

Warranty coverage for parts scheduled for inspection

A part which is scheduled only for inspection in accordance with Volkswagen's instructions for scheduled maintenance of the vehicle is covered for the duration of these warranties. ◀

Maintenance and repairs performed by independent service shops

Without invalidating these warranties, you may choose to have maintenance, repair or replacement of emission control components performed by any automotive service establishment or individual qualified to perform such services. However, the cost of such services is not covered by these warranties except in emergencies. If the independent service establishment finds a warrantable defect, you may deliver the vehicle to an authorized Volkswagen dealer and have the defect corrected free of charge. Volkswagen will not be liable for any expenses which you have incurred at the independent service establishment, except for emergency repairs. ◀

Emergency repairs

In an emergency when an authorized Volkswagen dealer is not reasonably available to perform a warranty repair, the repair may be performed at any available service establishment, or by the owner, using any replacement part. Volkswagen will reimburse the owner for expenses including diagnosis not to exceed Volkswagen's suggested retail price for the warranted part and a labor charge based upon Volkswagen's recommended time allowance for the warranty repair multiplied by the labor rate per hour appropriate for the area where the warranty repair was performed. In order to receive reimbursement of such expenses, you must keep all replaced parts and receipts and present them to any authorized Volkswagen dealer in support of your claim. These emergency warranty service procedures also apply in the event the servicing Volkswagen dealer does not have replacement parts available within a reasonable time not to exceed 30 days, in order to perform the warranty repair or, if the servicing Volkswagen dealer is unable to complete the repairs within 30 days from the time you present the vehicle for repairs. ◀

Coverage of non-warranty parts

If failure of a warranted part causes damage to a part not covered by warranty, the non-warranted part will also be replaced free of charge. ◀

Damage caused by tampering, use of improper fuel, abuse, neglect and improper maintenance are not covered

These warranties do not cover any damage to the vehicle caused by tampering with emission controls, use of fuel containing lead, or fuel not meeting the specifications set forth in the Owner's Manual, and abuse, neglect or improper maintenance of the vehicle. Diagnosis and repair of such damage are at the expense of the owner. ◀

Notice of denial of warranty claim

If you are not notified within 30 days that a performance warranty claim is not valid, then Volkswagen is required to repair the vehicle free of charge. ◀

Implied warranties

Any implied warranty, including any warranty of merchantability or warranty of fitness for a particular purpose, is limited in duration to the stated period of these written warranties.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. ◀

Incidental and consequential damages

These warranties do not cover any incidental or consequential damages, such as loss of resale value, lost profits or earnings, and out-of-pocket expenses for substitute transportation or lodging.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.

In the event you have not received the services promised in these warranties, please follow the procedures described in this brochure under the title "Customer CARE". ◀

Customer CARE

Dealer assistance

If you have questions about the service you have received, we suggest that you first discuss them with the service personnel at your authorized Volkswagen dealer. You may want to speak to the Service Manager or directly to the owner of the dealership.

It is their business to be concerned about your satisfaction and goodwill. Since they are closest to the situation, they are in the best position to quickly resolve any concerns you may have. ◀

When to notify the manufacturer

Your satisfaction with our product is very important to us, and we would like to make certain that we have had the opportunity to work with you and your dealer to resolve your concerns.

If your concerns are not resolved to your satisfaction by the dealer, please contact Volkswagen of America, Inc., immediately by calling our toll-free number:

Tel.: 1 (800) 822-8987

If you prefer to write, please use the following address:

Volkswagen Customer CARE Center
3499 West Hamlin Road
Rochester Hills, MI 48309

You can also contact us using our Internet address:

www.vw.com.

Simply click on "Contact Us".

When you call or write, please provide the following information:

- **Your name, address and telephone number**
- **Vehicle Identification Number (VIN)**
- **Vehicle delivery date and mileage**
- **Dealer's name and location**
- **Nature of complaint or problem**
- **Original repair order (retain a copy for your records) or pertinent documents if you are writing to us**

A Customer CARE Representative will gather and carefully review all facts relating to your request for assistance. After this review is completed, the Customer CARE Representative will inform you of any assistance that the company will be able to provide.

Please note that as part of our continuing effort to maintain the highest quality of service to our Customers, supervisors will occasionally monitor the quality of telephone calls between our Customers and representatives. We hope you understand our interest in providing the best possible service. ◀

Repairs not covered by warranty

In some circumstances, Volkswagen of America, Inc. may offer financial assistance toward repairs or expenses not covered by Volkswagen of America, Inc.'s Limited New Vehicle Warranties.

In certain instances, Volkswagen of America, Inc. may pay for such repairs in accordance with the terms of service action campaigns it will conduct from time to time. In the event of a service action, Volkswagen of America, Inc. will notify you by mail and request that you bring your vehicle to your nearest dealer for repair free of charge.

If you have not recently changed your address and Volkswagen United States has your current address on file, you will receive notification automatically. If you are concerned that you may not have received notice concerning a particular service action, please check with your dealer to determine whether your vehicle is eligible for any repair free of charge.

In other instances, Volkswagen of America, Inc. may offer assistance with a repair beyond warranty on a case-by-case basis. If you believe that your vehicle needs a repair not covered by warranty which Volkswagen of America, Inc. should pay for in part or in whole, please discuss the request with your dealer. If you are not satisfied with your dealer's decision, please contact Volkswagen of America, Inc. Customer CARE by telephone or in writing. Your request should provide the vehicle identification number, the mileage, maintenance history and an explanation of why you believe that the repair should be performed free of charge. Your request should be accompanied by all available maintenance and repair records which you have retained. A Customer CARE Representative will review your request and advise you of our decision. ◀

BBB AUTO LINE

BBB AUTO LINE dispute settlement services

If your dealer or Customer CARE Representative does not resolve your product concern to your satisfaction or if you do not wish to present your concern to either of them, you may take advantage of the mediation and arbitration services of the Better Business Bureau. This program is called BBB AUTO LINE and is available to you free of charge, on a nationwide basis as long as your vehicle has been driven less than 24,000 miles and has not been in use for more than 2 years. Not every claim is eligible; there are some age and mileage limitations, so please check with your local Better Business Bureau ("BBB") regarding your claim.

The BBB AUTO LINE program has two parts. The first part is mediation. Mediation means that the BBB staff will facilitate negotiations between the parties in an effort to bring your claim to a mutually acceptable resolution. You do not have to participate in mediation if you would rather proceed immediately to arbitration. Arbitration is the other part of BBB AUTO LINE. Arbitration is a process by which an impartial person makes a decision on your claim. The arbitrators are not connected with the automobile industry and serve on a voluntary basis.

If you do not agree with the mediated resolution and/or have opted to arbitrate, an arbitration hearing will be scheduled. You may attend the hearing in person, be represented by an attorney, bring witnesses, and give supporting evidence. Instead of appearing personally, you may request a written or even a telephone arbitration hearing.

If you wish to use BBB AUTO LINE, please call the following toll-free number:

Tel.: 1 (800) 955-5100

When you call the local office of the "BBB", its staff will need the following information:

- **Your name, address and telephone number**
- **Make, model and Vehicle Identification Number of your vehicle (VIN)**
- **Delivery date and current mileage**
- **Nature of complaint or problem**

The "BBB" will follow-up on your complaint; and if it cannot be mediated, they will arrange an arbitration hearing.

A decision will be made by the arbitrator within 3 days of the hearing (typically a decision is made 40 days from the date you filed your claim with "BBB").

You then have the opportunity to accept or reject the decision. If you accept the decision, Volkswagen of America, Inc. will be bound by the decision and fulfill its obligation within the time specified by the arbitrator.

If you reject the decision:

1 - You are free to pursue other legal remedies available under state and federal law.

2 - The manufacturer will not have to comply with any part of the decision.

California residents

Additional information relating to your rights to arbitrate warranty claims under the BBB AUTO LINE Arbitration Program is provided in the Owner Information about Consumer Protection Laws booklet which is presented to you by your dealer when you take delivery of your new vehicle. ◀

Service Publications

Product service publications

Updated service information you can obtain

Volkswagen monitors product performance in the field and regularly sends dealers the latest service information about Volkswagen vehicles. Now you too, can get these bulletins.

Bulletins cover a wide variety of subjects: the proper use and care of your car, costly repairs, inexpensive repairs or adjustments which, if done early, may avoid costly future repairs. Some bulletins describe repairs about new or unexpected conditions. Others describe improved repair procedures or parts improvements. All of this information can also help a qualified technician better service your vehicle.

Most bulletins apply to conditions affecting a small number of vehicles. Your dealer or a qualified technician may have to determine if a specific bulletin applies to your vehicle. You can order Volkswagen bulletins, Volkswagen repair information and Volkswagen Owner's Literature 24 hours / 7 days a week on the Internet from our literature distribution service at:

www.vw.ddsltd.com

Or if you prefer, you can contact our literature distribution service at:

Telephone: 1 (800) 544-8021
Fax: 1 (800) 572–1438

What you will also find on the website

- A list of Volkswagen bulletins for 1985 and later model years, covering all North American specification Volkswagen models.
- Ordering and pricing information on how to buy specific bulletins.
- Ordering and price information for Volkswagen Repair Manuals on paper format or CD ROM.
- Ordering and price information for Volkswagen Electrical Wiring Diagrams.
- Ordering and price information for current and past model year Owner's Literature including:
  - Owner's Manuals
  - Maintenance Booklets
  - Warranty Manuals
  - Sound System Manuals

⚠ WARNING

These bulletins are intended for qualified technicians. They are not meant for the CASUAL do-it-yourselfer. Qualified technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. Improperly performed repairs or maintenance can adversely affect the safety of your vehicle, possibly leading to accident or injury. They may also impair the economy, durability or reliability of your vehicle and may void the warranty of your car. If you are not sure that you can perform a job properly and safely, you should not risk trying to do so.

Tire Manufacturers

List of tire manufacturers for new Volkswagen vehicles

The Magnuson-Moss Warranty Federal Trade Commission Improvement Act of 1975 and regulations issued pursuant to the act require that a tire warranty pamphlet be placed in every new vehicle prior to sale.

To assist you in obtaining the related warranty information, the following list of tire manufacturers and addresses is being provided.

Manufacturer and Addresses and Phone Numbers

Dunlop Tire Corp.
1144 East Market Street
Akron, OH 44316
Tel.: 1 (800) 548–4714

Bridgestone/Firestone Inc.
1 Bridgestone Park
Nashville, TN 37214
Tel.: 1 (800) 356-4644

Goodyear Tire & Rubber Co.
1144 East Market Street
Akron, OH 44316
Tel.: 1 (800) 321-2136

Continental General
1800 Continental Blvd.
Charlotte, NC 28273 .
Tel.: 1 (800) 847–3349

Michelin Tire Corp.
P.O. Box 19001
Greenville, SC 29602-9001
Tel.: 1 (800) 887–0662

Pirelli Tires North America
300 George Street, 5th Floor
New Haven, CT 06511
Tel.: 1 (800) 747-3554

Uniroyal Goodrich Tire Co.
P.O. Box 19001
Greenville, SC 29602-9001
Tel.: 1 (800) 521-9796

It has always been Volkswagen's policy to continuously improve its products. Volkswagen, therefore, reserves the right to make changes in design and specifications, and to make additions or improvements to its products without incurring any obligation to install them on products previously manufactured.

All rights reserved.

May not be reproduced or translated in whole or in part without the written consent of Volkswagen of America, Inc. Specifications are subject to change without notice.

Text and specifications in this manual are based on information and knowledge available at the time of printing.

May not be reproduced or translated in whole or in part without consent of Volkswagen AG.

Printed in Germany

© 2003 Volkswagen AG

For the sake of the environment

Printed on environmentally friendly paper (bleached without chlorine, recyclable).

1.2 Passat, Jetta, Golf, New Beetle | USA Warranty | Art.-Nr.: 241.555.WAR/.23
Print status: 03.2003 | Ausgabe: Amerikanisch 05.2003

2.1 2004 Passat

Safety first
Important Information about the
- Safety belts
- Airbags
- Seats
- Child safety

Please read this important information before reading your booklet.

Vehicle Equipment

This manual describes all the equipment intended to be offered at the time of printing. Some of the equipment may be available at a later date or not at all.

* Please note that items marked with an asterisk may be standard on certain models, optional on others or not available on your model.

Illustrations

Each illustration in the manual shows a feature and / or equipment which your vehicle may or may not have, depending on the model. The illustrations are simply to show you how a feature looks and its function.

Indication of directions

Whenever a direction is specified (for example: left, right, forward, backward, etc.), you should imagine yourself as sitting in the vehicle facing in the driving direction. If something is explained which is different from this position, it will be clearly identified.

Table of Contents

On the following page, you will find the Table of Contents which describes all the features of your vehicle in the order they appear in this manual.

WARNINGS

⚠ WARNINGS

concern safety and are highlighted like this throughout this manual.

Texts printed in bold type refer to possible damage to your vehicle, or to other important information.

TABLE OF CONTENTS

Welcome 2
Safety first 2
Safety belts 3
Airbag system 17
Child safety 30
Head restraints 49
Front seats 50
Alphabetical Index 53

Welcome

Dear Volkswagen Owner,

This booklet contains important information, tips and suggestions on occupant safety.

We've prepared this booklet in order to summarize what you need to know about such topics as safety belts, airbags, seats for children and infants, child safety and head restraints.

Please make certain that you follow the suggestions and WARNINGS in this booklet – it's in your own interest and in the interest of all your passengers.

However, please note, that important safety information regarding your vehicle and its operation will also be found in all other booklets.

Please be sure that this manual always remains with your VOLKSWAGEN whenever you lend your vehicle to another person or if you sell it so that this and other important information will always be available to the driver and passengers.

Remember – safety first!

Safety first

Your safety and the safety of your passengers shouldn't be left to chance. Advances in technology have made a variety of features available to help reduce the risk of injury in an accident. The following is a listing of just a few of the safety features in your Volkswagen:

- sophisticated safety belts with tensioners
- optimized safety belt geometry through safety belt anchorages on front seats
- safety belt height adjustors
- front airbags
- side airbags in the front seats
- Side Curtain Protection™*
- special seat pan structure
- adjustable steering column.

These individual safety features, can work together as a system to help protect you and your passengers in a wide range of accidents. These features can't work as a system if they are not always properly adjusted and properly used!

The following sections provide important information about why these features are important, how they work to help protect you and your passengers and how they must be adjusted and used to get the greatest benefit and reduce the likelihood of injury.

The sections also contain important **WARNINGS** which you and your passengers must always heed in order to reduce the risk of personal injury.

Safety is everybody's responsibility!

Safety belts

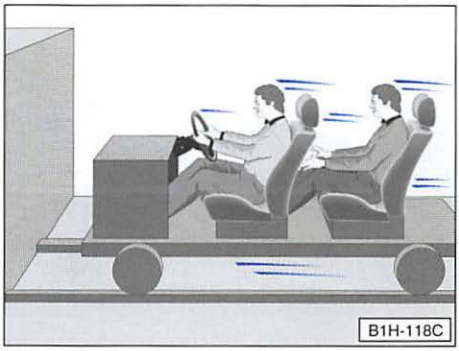
Always wear your safety belts!

⚠ WARNING

- **Safety belts are the single most effective means available to reduce the potential for serious injury and death in automobile accidents. For your protection and that of your passengers, always properly wear safety belts when the vehicle is moving.**
- **Pregnant women, injured, or physically impaired persons should also use safety belts. Like all vehicle occupants, they are more likely to be seriously injured if they do not wear safety belts. The best way to protect a fetus is to protect the mother – throughout the entire pregnancy.**

This section explains why safety belts are necessary, how they work and how to adjust and wear them properly.
Please read all the information given, and always observe the following instructions and WARNINGS.

For information on child safety see page 30.



Why safety belts work

Safety belts can't work unless they are worn and worn properly.

The illustration above shows the passengers on a "vehicle" headed for a brick wall. They're not using safety belts.

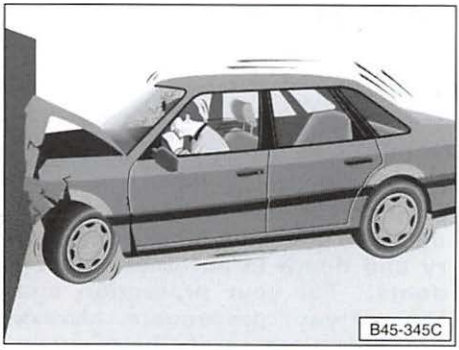
The physical principles are simple. Both the vehicle and the passengers possess energy which varies with vehicle speed and body weight. Engineers call this energy "kinetic energy."

The higher the speed of the vehicle and the greater the vehicles' weight, the more energy there is to be "absorbed" in an accident.

For details see next pages.

Vehicle speed is the most significant factor. If the speed doubles from 15 to 30 mph (25 to 50 km/h), the energy increases 4 times!

Because these passengers are not using safety belts, they will keep moving at the same speed the vehicle was moving just before the crash, until something stops them – here, the wall.



The same principles apply to people sitting in a vehicle that is involved in a frontal collision.

Even at city speeds of 20 to 30 mph (30 to 50 km/h), the forces acting on the body can reach one ton (2000 lbs, or 1000 kg) or more. At greater speeds, these forces are even higher.

People who do not use safety belts are also not attached to their vehicle. In a frontal collision they will also continue to move forward at the speed their vehicle was travelling just before the impact.

Unbelted occupants are not able to resist the tremendous forces of impact by holding tight or bracing themselves. Without the benefit of safety restraint systems, the unrestrained occupant will slam violently into the steering wheel, dashboard, windshield, or whatever else is in the way. Their impact with the vehicle interior has all the energy they had just before the collision.

Don't rely on airbags alone for protection. Even when they deploy, airbags provide only supplemental protection. Airbags are not supposed to deploy in all kinds of accidents. Although your Volkswagen is equipped with airbags for the driver and front seat passenger, all vehicle occupants, including the driver, still have to wear safety belts – regardless of whether their seating position has an airbag.

Remember too, that airbags will deploy only once and that your safety belts are always there to offer protection in those accidents in which airbags are not supposed to deploy or when they have already deployed.

Unbelted occupants can also be thrown out of the vehicle where even more severe or fatal injuries can occur.

Unbelted passengers in the rear seats endanger not only themselves but also other passengers. In a frontal collision they will be thrown forward violently, where they can hit and injure the driver or front seat passenger.

Safety belts protect

Safety belts used properly can make a big difference. Safety belts help to keep passengers in their seats, gradually reduce energy levels applied to the body in an accident, and help prevent the uncontrolled movement that can cause serious injuries. In addition, safety belts reduce the danger of being thrown out of the vehicle.

Safety belts attach passengers to the car and give them the benefit of being slowed down more gently or "softly" through the "give" in the safety belts, crumple zones and other safety features engineered into today's vehicles. By "absorbing" the kinetic energy over a longer period of time, the forces on the body become more "tolerable" and less likely to cause injury.

Although these examples are based on a frontal collision, safety belts can also substantially reduce the risk of injury in other types of accidents. So, whether you are on a long trip or just going to the corner store, always buckle up and make sure others do, too.

Accident statistics show that vehicle occupants properly wearing safety belts have a lower risk of being injured and a much better chance of surviving an accident. Properly using safety belts also greatly increases the ability of the supplemental airbags to do their job in an accident. For this reason, wearing a safety belt is legally required in most countries including much of the United States and Canada.

The following pages provide important instructions to enable you to use safety belts properly. **Be sure to read and follow the instructions carefully. Heed all WARNINGS.**

To further increase the safety for the front passengers, the vehicle is equipped with a supplemental airbag system. See page 17.

The safety belts provided must nevertheless be worn because the front airbags are activated only in some frontal collisions. The front airbags are not activated by minor frontal collisions, side and rear collisions, in roll overs or in some cases where there is not enough deceleration through impact to the front of the vehicle.

Belt warning system

Your vehicle has a warning light for the driver to remind you to wear the safety belt.

After the ignition is switched on, the warning light in the instrument cluster will come on for about 6 seconds along with a warning tone. As soon as the driver has fastened the safety belt the warning tone will stop. The warning light, however, will stay on for about 6 seconds.

Fasten your safety belt now and make sure that your passengers also properly put on their safety belts.

How to wear safety belts properly

Safety belts must always be properly positioned across the strongest bones of your body.

⚠ WARNING

Always fasten your safety belts before driving off. Always make sure your passengers are properly restrained – even those sitting in the rear.

Safety belts can work only when used properly. Never wear safety belts in any other way than illustrated and described in this section. Always observe the following precautions:

- **Never wear belts twisted.**
- **Never strap more than one person, including small children, into any belt. It is especially dangerous to place a safety belt over a child sitting on your lap.**
- **Never place your feet on the instrument panel or on the seat. Always keep both feet on the floor in front of the seat.**
- **Never wear belts over rigid or breakable objects in or on your clothing, such as eye glasses, pens, keys, etc., as these may cause injury.**

⚠ WARNING continued

- **Do not wear the shoulder part of the belt under your arm or otherwise out of position.**
- **Several layers of heavy clothing may interfere with proper positioning of belts and reduce the overall effectiveness of the system.**
- **Never allow safety belts to become damaged by being caught in door or seat hardware. Always keep belt buckles free of any obstruction that may prevent secure locking.**
- **Never use comfort clips or devices that create slack in the shoulder belt portion. However, clips may be required for the proper use of some child restraint systems.**
- **Torn or frayed safety belts can tear and damaged belt hardware can break in an accident. Inspect belts periodically. If belts show damage to webbing, bindings, buckles, or retractors, have them replaced.**

⚠ WARNING continued

- **Keep the belts clean.**
Dirty belts may not work properly – see also *"Cleaning and protection", Booklet 3.2.*
- **Safety belts that have been worn and loaded in an accident must be replaced with the correct replacement safety belt by an authorized VOLKSWAGEN dealer. Replacement may be necessary even if damage cannot be clearly seen.**
- **Safety belt anchorages that have been loaded in an accident must be inspected by a qualified workshop or an authorized VOLKSWAGEN dealer.**
- **Never modify, disassemble, or try to repair your safety belts.**

Seating capacity

Your Passat has 5 seating positions, 2 in the front and 3 in the rear. Each seating position has a safety belt.

Never let more people ride in the vehicle than there are seat belts available. Be sure everyone riding in the vehicle is correctly restrained with a separate seat belt.

Lap-shoulder belt

The front and rear seats have three-point safety belts which have a convertible locking feature in addition to the emergency locking feature. The convertible locking feature is used when a child seat* is installed, see page 36.

The retractors in the combination lap-shoulder belts allow the system to adjust to your size and movements as long as the pull on the belt is slow.

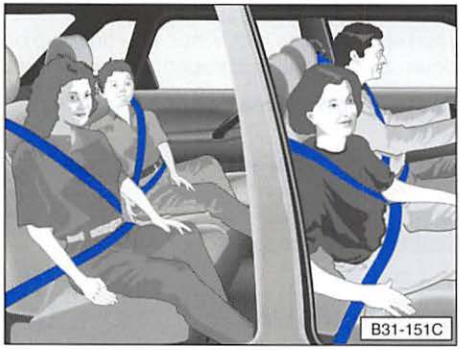
Hard braking or a collision locks the belt. The belt may also lock when you drive up or down a steep hill or through a sharp curve.

Fastening the rear center safety belt

Make sure the seat back of the rear seat bench is in upright position and securely latched in place before using the belt as described in this chapter.

⚠ WARNING

- **The rear center three-point safety belt cannot protect a passenger if the seat backrest to which it is attached is not securely latched. The passenger would not be properly restrained and would move forward during sudden braking, in a sudden maneuver and especially in an accident.**
A passenger who is not properly restrained can be seriously injured by striking the interior of the passenger compartment or by the safety belt itself which can be displaced from stronger parts of the body into sensitive areas like the abdomen. See page 11.
- **Always make sure that the rear seat backrest to which the center rear safety belt is attached is securely latched whenever the rear center safety belt is being used, *Booklet 3.1*, chapter *"Rear seat".***



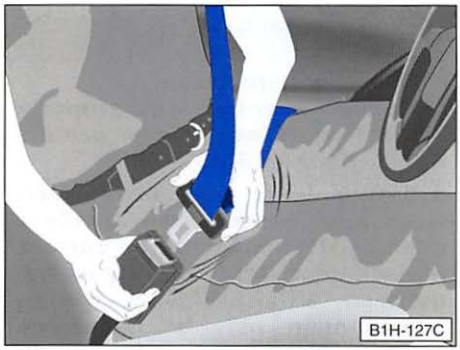
Fastening the safety belt

- **Adjust your seat before fastening the safety belt. See page 50.**

⚠ WARNING

Safety belts offer optimum protection only when the seat back is upright and belts are properly positioned on the body. Improperly positioned safety belts can cause serious personal injury in an accident.

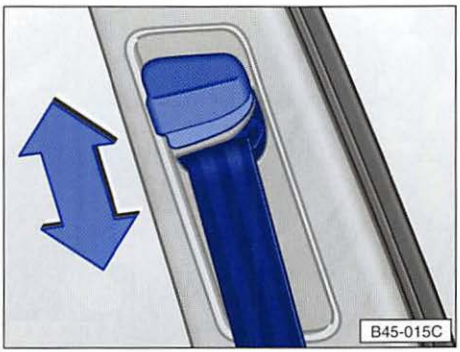
- To fasten, grasp belt tongue and pull the belt in a continuous slow motion across your chest and lap.



- Insert the belt tongue into the buckle on the inboard side of the seat. Push down until it is securely locked with an audible click. **Pull belt to check!**

⚠ WARNING

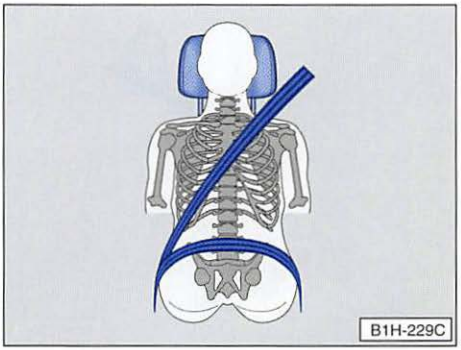
- **Always make sure the safety belt tongue is inserted into the buckle for the same seating position.**
- **Attaching the safety belt to the buckle for another seat could reduce safety belt effectiveness and cause injury.**



Safety belt height adjustors for the front seats and the rear outer seating positions* can be used to adjust the height of the shoulder portion of the safety belt. This feature will help you properly position the shoulder portion of the safety belt across your shoulder.

- To adjust the height of the safety belt, press the upper part of the handle in the direction of the arrow, hold it in this position and then slide the height adjuster up or down until the shoulder portion of the safety belt is positioned directly over the center of your shoulder – **it must never rest against the neck** (see right illustration).
- Pull on the shoulder belt to check whether the belt anchor is securely locked in place.

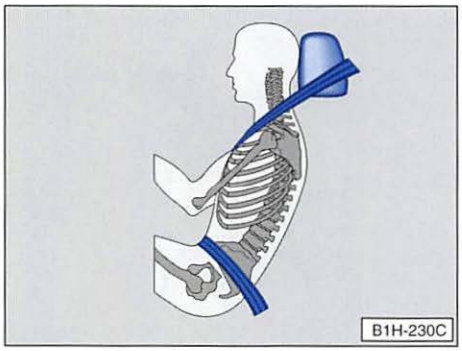
Wearing your safety belt properly – see page 8.



The shoulder belt must be positioned over the shoulder. It must never rest against the neck and must fit against your body. The lap belt must be worn low and tight across the pelvis. See illustration above. Pull belt tight.

The lap belt portion must never pass over the stomach or abdomen.

Always read and heed all WARNINGS on next page.



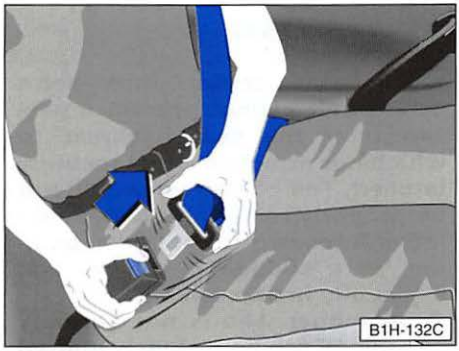
⚠ WARNING

- **Always position your safety belt properly over your body for maximum safety. An improperly positioned safety belt can cause serious injury in an accident.**
- **Safety belts worn too loose will let your body move too far forward in a collision.**

A loose belt can also shift its position on your body from the strong bones to more vulnerable soft tissue and cause serious injury.

⚠ WARNING

Pregnant women should especially make sure to wear the lap portion of the safety belt as low as possible across the pelvis and below the rounding of the abdomen. The best way to protect the fetus is to protect the mother – throughout the entire pregnancy.



Unfastening the safety belt

- Push the orange release button on the buckle. The belt tongue will spring out of the buckle.
- Let the belt to wind up on the retractor as you guide belt tongue to its stowed position.

Belt tensioner

The retractors for the front three–point safety belts and for the rear outboard three–point safety belts are equipped with belt tensioners.

Sensors activate the belt tensioners in frontal collisions when deceleration is high enough. This tightens the belt and takes up belt slack. Taking up the slack helps to reduce forward occupant movement during a collision.

The belt tensioner can only be activated once. The belt tensioner will not be activated if the safety belt is not in use.

Never let the belt remain over a rear seat back that has been folded forward. The rear belt tensioner will be activated unnecessarily in an accident and then have to be replaced.

The belt tensioner will not activate in a light frontal collision insufficient to actuate the tensioner or in any side, rollover, or rear-end collision.

⚠ WARNING

- **Safety belt systems including belt tensioners cannot be repaired. Special procedures are required for removal and installation of this system. Therefore, any work on the safety belt system must be performed only by an authorized VOLKSWAGEN dealer.**
- **The belt tensioner system works for one accident only. If belt tensioners have been activated, the system must be replaced.**

Notes

- When the safety belt tensioner is activated, a fine dust is released. This is normal and is not caused by a fire in the vehicle.
- Observe all safety regulations if the vehicle or individual parts of the system, particularly the safety belt or airbag, are to be scrapped. Your authorized VOLKSWAGEN dealers are familiar with these regulations and can perform this service for you.

Rear center safety belt

The center seating position in the rear is equipped with a three-point safety belt.

Fastening the rear center safety belt

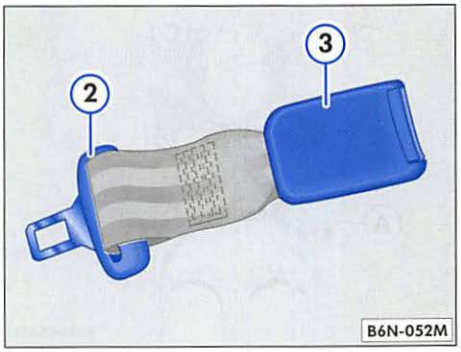
Make sure the seat back of the rear seat bench is in upright position and securely latched in place before using the belt as described in this chapter.

⚠ WARNING

• The rear center three-point safety belt cannot protect a passenger if the seat backrest to which it is attached is not securely latched. The passenger would not be properly restrained and would move forward during sudden braking, in a sudden maneuver and especially in an accident.
A passenger who is not properly restrained can be seriously injured by striking the interior of the passenger compartment or by the safety belt itself which can be displaced from stronger parts of the body into sensitive areas like the abdomen. See page 11.

• Always make sure that the rear seat backrest to which the center rear safety belt is attached is securely latched whenever the rear center safety belt is being used, *Booklet 3.1*, chapter *"Rear seat"*.

Safety Belt Extender



Always Wear Your Safety Belts!

If a safety belt is **too short** because of body size or driving position, even when the three point safety belt is fully extended and when the adjustable upper shoulder belt anchorage (if so equipped) is in the lowest position, you can use a seat belt extender. This extender can be used only if existing belt is not long enough. The extender adds approximately 8 inches (200 mm) of length.

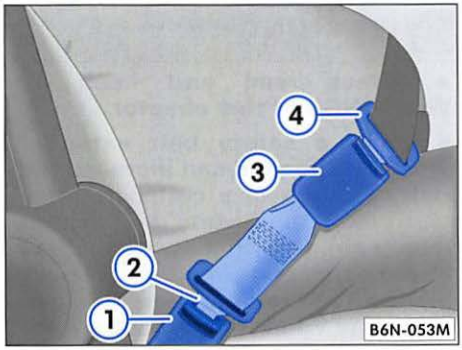
The **vehicle safety belt buckle** for the driver and front seat passenger have switches that tell the airbag control module if the safety belt is being used or not. If the safety belt is being used, the front airbag will deploy at a slightly higher rate of deceleration than if the belt is not being used. Therefore, in a particular collision, it is possible that an airbag will not deploy at a seating position where the safety belt is being used but will inflate at the position where the safety belt is not being used, see page 17 for details.

For that reason, always remove the safety belt extender when it is not needed and stow it safely.

See your VOLKSWAGEN dealer for assistance if the extender is required.

⚠ WARNING

- **Always read and heed all WARNINGS in this chapter.**
- **Using a safety belt extender when not needed can increase the risk of injury in a collision. Only use when the safety belt is not long enough when its worn low and snug, and in the recommended seating position. Remove and stow when not needed.**
- **Never use the safety belt extender if you can fasten the safety belt without it.**
- **Safety belts can work only when used properly. Never wear safety belts in any other way than illustrated and described in this chapter.**
- **A driver or passenger who is not properly restrained can be seriously injured by striking the interior of the passenger compartment or by the safety belt itself which can be displaced from stronger parts of the body into sensitive areas like the abdomen.**
- **Never use more than one extender with a safety belt. The use of more than one extender can change the way the safety belt passes over the body and can cause serious injury.**
- **Never use the safety belt extender to secure a child restraint.**
- **Never leave the safety belt extender attached to the vehicle safety belt latch when it is not needed and being used because the airbag control module will not receive the correct signal from the safety belt latch.**



Fastening the safety belt extender

• Adjust your seat and head restraint before fastening the safety belt. See pages 49 and 50.

⚠ WARNING

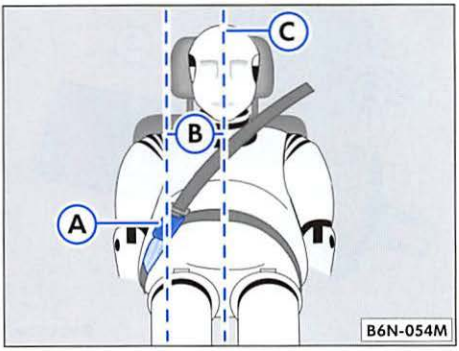
Safety belts offer optimum protection only when the seat back is upright and belts are properly positioned on the body. Improperly positioned safety belts can cause serious personal injury in an accident.

• To use the safety belt extender, insert the metal tongue of the extender (**2**) (latch plate) into the respective safety belt buckle (**1**).

• Then, grasp belt tongue of the safety belt (**4**) and pull the belt in a continuous slow motion across your chest and lap.

• Insert the safety belt tongue (**4**) into the buckle of the extender (**3**). Push down until it is securely locked with an audible click. Make sure the safety belt or the extender is not twisted.

Pull belt to check!



A – Front edge of buckle

B – Distance of buckle and bodycenterline, (less than 6 inches (15 cm)

C – Bodycenterline

⚠ WARNING

• Never use the extender unless it is physically required in order to wear the vehicles safety belt.

• Never use the extender if the distance (B) between the front edge of the extender buckle (A) and the occupant's body centerline (C) to be less than 6 inches (15 cm) – see illustration!

• Always make sure the safety belt tongue is inserted into the buckle for the same seating position.

• Attaching the safety belt to the buckle for another seat could reduce safety belt effectiveness and cause injury.

Airbag system

Your vehicle has **two front and two side airbags,** one front and one side airbag for each front seat occupant.

Additionally your vehicle is equipped with **two Side Curtain Protection's™*.** The Side Curtain Protection™* covers the window area on the front and rear doors on both sides of the vehicle.

⚠ WARNING

- **To reduce the risk of injury when the airbags inflate, the driver and passengers should always sit in an upright position, should not lean against or place any part of their body too close to the area where the airbags are located.**
- **See "Importance of proper seating position" in this section at pages 19 and 26 and heed all WARNINGS.**
- **Occupants who are unbelted, out of position or too close to the airbag can be seriously injured by an airbag as it unfolds with great force in the blink of an eye. For seat adjustment, see page 50 .**

The safety belt buckle for the driver and front seat passenger have switches that tell the airbag control module if the safety belt is being used or not. If the safety belt is being used, the front airbag will deploy at a slightly higher rate of deceleration than if the belt is not being used. Therefore, in a particular collision, it is possible that an airbag will not deploy at a seating position where the safety belt is being used but will inflate at the position where the safety belt is not being used.

For that reason, always remove the safety belt extender when it is not needed and stow it safely, see page 15.

Remember too, airbags will deploy only once and only in certain kinds of accidents – your safety belts are always there to offer protection in those accidents in which airbags are not supposed to deploy or when they have already deployed.

An airbag is not a substitute for the safety belt. It is part of the overall vehicle safety system. The airbag system works most effectively when used with the safety belts. Therefore, always wear your safety belts. See pages 3 to 13.

It is important to remember that while the supplemental airbag system is designed to reduce the likelihood of serious injuries, it can cause swelling, bruising, and minor abrasions.

⚠ WARNING

- **Objects between you and the airbag can increase the risk of injury in an accident by interfering with the way the airbag unfolds or by being pushed into you as the airbag inflates.**
- **Never hold things in your hands or on your lap when the vehicle is in use.**
- **Never place or attach accessories or other objects (such as cup holders, telephone brackets or even large and bulky objects) on the doors, over or near the area marked "Airbag" on the steering wheel, instrument panel, seat backrests or between those areas and yourself. These objects could cause injury in a crash especially when the airbags inflate.**

⚠ Always read and heed all WARNINGS and more details on next page.

⚠ WARNING continued

- **Never transport items on or in the area of the front passenger seat. Objects could move into the area of the front airbags during braking or other sudden maneuver and become dangerous projectiles that can cause serious personal injury if the airbags inflate.**
- **Never recline the front passenger's seat to transport objects. Items can also move into the area of the side airbags or the front airbag during braking or sudden maneuver. Objects near the airbags can become projectiles and cause injury particularly when the seat is reclined.**

System components

The airbag system consists of the following:

- electronic control module,
- an inflatable airbag with gas generator inside the steering wheel,
- an inflatable airbag with gas generator inside the instrument panel for the front passenger,
- supplemental side airbags in the backrest padding of the front seats,
- supplemental Side Curtain Protection™* above the side windows,
- an indicator light in the instrument cluster, *"Warning / Indicator lights"*, ***Booklet 3.1***.

The indicator light in the instrument cluster (readiness light) will light up for a few seconds each time the ignition is switched on.

The light monitors the electronic control module, sensor circuits, and system wiring.

The system must be inspected if the indicator light:

- does not come on when the ignition is switched on,
- does not go out after a few seconds after the ignition is switched on, or
- comes on while driving.

In the event of a system malfunction, the indicator light will first start flashing to catch the driver's attention and then stay on continuously to serve as a constant reminder to have the system inspected.

⚠ WARNING

If any of these conditions occur, have the system inspected immediately by your VOLKSWAGEN dealer. Otherwise, the airbag may not work properly in case of a frontal impact.

Some other important points to know

Because airbags inflate in the blink of an eye with great force, things you have on your lap or have placed on the seat could become dangerous projectiles and be pushed into you if the airbag inflates.

When the system is activated, fine dust is released. This is normal and is not caused by a fire in the vehicle. This dust is made up mostly of a powder used to lubricate the airbags as they deploy. It could irritate skin.

⚠ WARNING

- **The fine dust created when airbags deploy can cause breathing problems for people with a history of asthma or other breathing conditions.**
- **To reduce the risk of breathing problems, those with asthma or other respiratory conditions should get fresh air right away by getting out of the vehicle or opening windows or doors.**
- **If you are in an accident in which airbags deploy, wash your hands and face with mild soap and water before eating.**
- **Be careful not to get the dust into your eyes or into any cuts or scratches.**
- **If the residue should get into your eyes, flush them with water.**

Importance of proper seating position

In a collision airbags must inflate within a blink of an eye and with considerable force. The supplemental airbags could injure you if you are not seated properly. Therefore in order to help the airbag to do its job, it is important, both as a driver and as a passenger to sit properly at all times. By keeping room between your body and the front of the passenger compartment, the airbag can inflate fully and completely and provide supplemental protection in certain frontal collisions. See page 50 for information on the adjustment of the front seats and also *"Front seats"*, ***Booklet 3.1,*** for details on the operation of the seat adjustment controls. It's especially important that children be properly restrained. See chapter *"Child safety"*, page 30.

⚠ WARNING

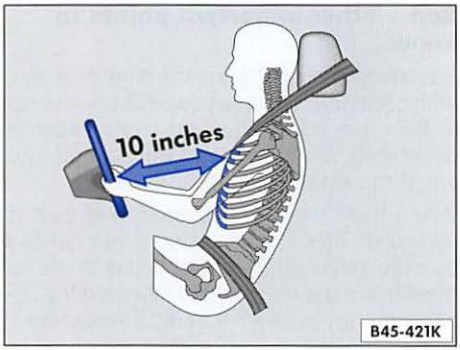
- **Sitting too close to the steering wheel or instrument panel will decrease the effectiveness of the airbags and will increase the risk of personal injury in an accident.**
- **If you are unrestrained, leaning forward, sitting sideways or out of position in any way, your risk of injury is much higher. You will also receive serious or fatal injuries from the airbag if you are up against it or too close to it when it inflates.**

⚠ Always read and heed all WARNINGS on next pages.

WARNING continued

- **To reduce the risk of injury when an airbag inflates, always wear safety belts properly. See *"How to wear the safety belts properly"* in this Booklet.**
- **Children age 12 or younger should always ride in the rear seat. If children are not properly restrained, they may be severely injured or killed when an airbag inflates. Never let children ride unrestrained or improperly restrained in the vehicle.**
- **Adjust the front seats properly.**
- **Never ride with the backrest reclined.**
- **Always sit as far as possible from the steering wheel or the instrument panel.**
- **Always sit upright with your back against the backrest of your seat.**
- **Never place your feet on the instrument panel or on the seat. Always keep both feet on the floor in front of the seat to help prevent serious injuries to the legs and hips if the airbag inflates.**

There is a lot that you and your passengers can do to help the individual safety features installed in your Volkswagen work together as a system.



Adjusting the driver's seat

For detailed steps for adjusting the driver's seat please see "Front Seats" on page 50.

We recommend that you adjust the driver's seat as follows:

- adjust the seat in fore and aft direction so that you can easily push the pedals all the way while keeping your knee slightly bent.
- adjust the seatback so that when you sit with your back against the seatback, you can still grasp the top of the steering wheel.
- adjust the steering wheel – see below and chapter *"Adjustable steering column"*, ***Booklet 3.1***.
- the distance from the center of your breastbone to the center of the airbag cover on the steering wheel must be **at least** 10 inches (25 cm) or more. See illustration above.

Always read and heed all WARNINGS on next pages.

⚠ WARNING

• Never sit closer than 10 inches (25 cm) to the steering wheel.

• If you cannot sit more than 10 inches (25 cm) from the steering wheel, we recommend that you investigate whether adaptive equipment may be available to help you reach the pedals and increase your seating distance from the steering wheel.

• If it is impossible for you to sit at least 10 inches (25 cm) or more from the steering wheel, the National Highway Traffic Safety Administration (NHTSA) may permit you to have an on/off switch for the airbag installed. For address and telephone number of NHTSA – see below:

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at:

1-800-424-9393

(or 366-0123 in Washington, D.C. area)

or write to:

NHTSA,
U.S. Department of Transportation,
Washington, D.C. 20590.

Adjusting the steering wheel

For detailed steps for adjusting the steering wheel please see *"Adjustable steering column"*, ***Booklet 3.1***.

Adjust the steering wheel so that the steering wheel and airbag cover points at your chest and not at your face. The steering wheel should be adjusted so that you can hold the outer rim of the steering wheel comfortably with your hands at the 3 o'clock and 9 o'clock positions.

⚠ WARNING

• Pointing the steering wheel toward your face decreases the ability of the supplemental driver's airbag to protect you in an accident.

• Holding the steering wheel the wrong way can cause serious injuries to the hands, arms and head if the driver's airbag inflates.

• Never hold the steering wheel at the 12 o'clock position or with your hands at other positions inside the steering wheel rim or on the steering wheel hub.

Adjusting the passenger's seat

For detailed steps for adjusting the passenger's seat please see *"Front Seats"* on page 50.

We recommend that you adjust the passenger's seat as follows:

- backrest upright (**never** reclined)
- place your feet on the floor in front of the passenger's seat
- adjust the passenger's seat as far as possible to the rear of the fore and aft adjustment range.

⚠ WARNING

• Always keep both feet on the floor in front of the seat.

• Never place your feet on the instrument panel or on the seat. If the airbag inflates and your feet are on the instrument panel or on the seat, your could receive serious personal injuries.

Child restraints on the front seat – important things to know

All children, especially 12 years and younger should always ride in the back seat properly restrained for their age and size. The airbag on the passenger side makes the front seat a potentially dangerous place for a child to ride. The front seat is not the safest place for a child in a forward–facing child seat. It is a very dangerous place for an infant or a larger child in a rearward–facing seat.

⚠ WARNING

- **Never install rear–facing child seats or infant carriers on the front passenger seat. A child will be seriously injured and can be killed when the passenger airbag inflates.**
- **The inflating airbag will hit the child seat or infant carrier with great force and will smash the child seat and child against the backrest, center arm rest, or door.**
- **Always install rear–facing child seats or infant carriers on the rear seat.**

A child seat or infant carrier installed on the front seat may be struck and knocked out of position by the rapidly inflating passenger's airbag in a frontal collision. The airbag could greatly reduce the effectiveness of the child restraint and even seriously injure the child during inflation.

For this reason, and because children are generally better protected – when properly restrained according to their age and size – in a rear seating position, we strongly recommend that children always sit in the back seat. See *"Child Safety"* on page 30.

⚠ WARNING

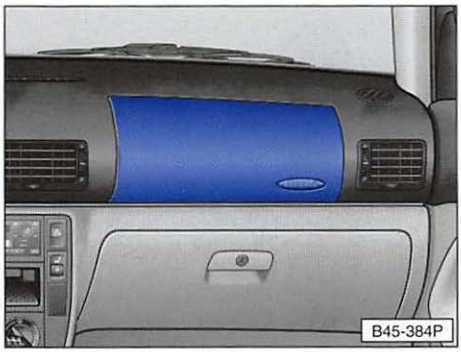
Forward–facing child seats installed on the front passenger's seat may interfere with the deployment of the airbag and cause serious injury to the child.
Install forward–facing child seats on the rear seat.

If exceptional circumstances require the use of a forward-facing child seat on the front seat, the child's safety and well-being require that the following special precautions be taken:

⚠ WARNING

If, in exceptional circumstances, you must install a *forward–facing* child restraint on the front passenger's seat:

- **make sure the forward–facing seat has been designed and certified by its manufacturer for use on a front seat with a passenger front and side airbag.**
- **Always follow the manufacturer's instructions provided with the child seat or carrier.**
- **Always move the passenger seat into its rearmost position, as far away from the airbag as possible before installing the child restraint. The backrest must be adjusted to an upright position.**
- **For more important information on the use of child restraints in your VOLKSWAGEN, see *"child seats"*, page 30, in this Booklet.**



Front airbags

The airbag for the driver is located in the steering wheel hub and is marked "AIRBAG." The airbag for the front passenger's seat is located in the instrument panel above the glove compartment and is also marked with "AIRBAG." See illustration.

It is very important to remember that **front airbags** only supplement the three point safety belts in some frontal accidents in which the vehicle deceleration is high enough to activate the airbags.

Front airbags are not activated...

- if the ignition is switched off
- in side collisions
- in rear–end collisions
- in rollovers.

Front airbags may not inflate in certain frontal collisions. Vehicle damage, repair costs or even the lack of vehicle damage is not necessarily an indication of proper airbag operation.

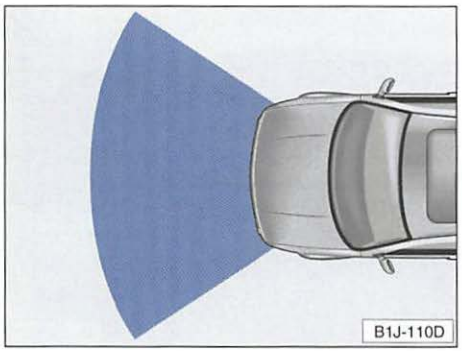
The front airbags can only provide additional protection for the chest and face of the driver and the front seat passenger when...

- safety belts are worn properly,
- the seats have been positioned so that the occupant is properly seated as far as possible from the airbag
- and the head restraints have been properly adjusted.

Airbags do not protect the lower part of the body.

Safety belts are important to help keep front seat occupants in the proper seated position so that airbags can unfold properly and provide added protection as intended.

For more details see next pages.



How the front airbag system works

Both front airbags inflate only in some frontal collisions occurring within the approximate area indicated in the illustration. The front airbags will not inflate in frontal collisions in which vehicle deceleration is not high enough, or in side or rear collisions, or in rollovers.

It is not possible to define an airbag triggering range that will cover every possible angle of impact, since the circumstances will vary considerably between one accident and another.

Important factors include, for example, the nature (hard or soft) of the object which the car hits, the angle of impact, vehicle speed, and etc.

The triggering of the airbag system depends on the vehicle deceleration rate caused by the collision and registered by the control unit. If this rate is below the reference value programmed into the control unit, the airbags will not be triggered, even though the car may be badly damaged as a result of the accident.

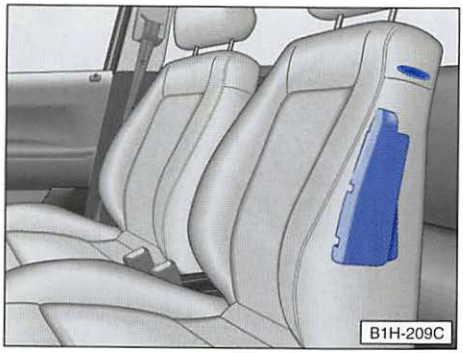
When the system is activated, the airbags fill with a propellant gas, break open the padded covers, and inflate between the steering wheel and the driver and between the instrument panel and the front passenger.

All this takes place within the blink of an eye, so fast that many people don't even realize that the airbags have deployed. The airbags also inflate with a great deal or force and nothing should be in their way when they deploy.

Fully inflated airbags in combination with properly worn safety belts slow down and limit the occupant's forward movement and help to reduce the risk of injury to the head and upper torso.

The airbags will deflate immediately after the deployment so that the front occupants can see through the windshield again.

When the system is activated, fine dust is released. This is normal and is not caused by a fire in the vehicle. This dust is made up mostly of a powder used to lubricate the airbags as they deploy. It could irritate skin.



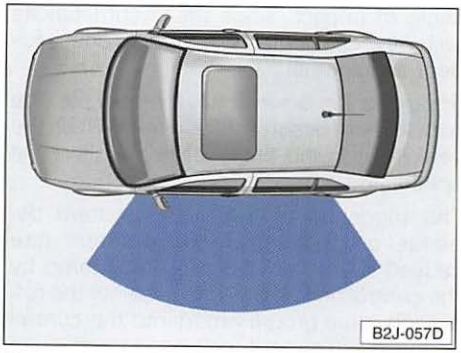
Side airbags

The **side airbags** are in the backrest padding for the front seats (see illustration) and can help to reduce the risk of injury to the upper torso on that side of the vehicle that is struck in a side collision. The outboard side of each front backrest is marked with the word "AIRBAG."

⚠ WARNING

To be sure the side airbags can deploy in a side impact:

- **Never place protective seat covers or replacement upholstery over the front seatbacks that have not been specifically approved by VOLKSWAGEN. Since the side airbags deploy out of the side of the seatback, they would not be able to deploy and protect properly. See *Booklet 3.1* for more details.**
- **Do not use additional seat cushions that cover or interfere with the areas where the side airbags inflate.**
- **Damage to the original seat covers or to the seam in the area of the side airbag module must be repaired immediately by an authorized VOLKSWAGEN dealer.**



The side airbags inflate only in some side collisions occurring within the approximate area indicated in the illustration.

The side airbags will not inflate...

- if the ignition is switched off
- in frontal collisions
- in side collisions in which vehicle deceleration is not high enough
- in rear collisions
- in rollovers.

Vehicle damage, repair costs or even the lack of vehicle damage is not necessarily an indication of proper airbag operation.

Under some accident conditions, both front and side airbags may inflate.

Remember too, airbags will deploy only once and only in certain kinds of accidents – your safety belts are always there to offer protection in those accidents in which airbags are not supposed to deploy or when they have already deployed.

How the supplemental side airbag system works

In a side collision the supplemental side airbags can help to reduce the risk of injury to the upper part of the body on the side of the car that is struck in a side collision.

In order to assure this additional protection, the side airbag must inflate within the blink of an eye during a collision.

It is not possible to define an airbag triggering range that will cover every possible

angle of impact, since the circumstances will vary considerably between one accident and another.

Important factors include, for example, the nature (hard or soft) of the object which the vehicle hits, the angle of impact, vehicle speed, and etc.

The triggering of the airbag system depends on the vehicle deceleration rate caused by the collision and registered by the control unit. If this rate is below the reference value programmed into the control unit, the airbags will not be triggered, even though the vehicle may be badly damaged as a result of the accident.

When the supplemental side airbag is activated, it breaks through a seam on the side of the seatback identified by the AIRBAG label. It inflates between the side trim panel and the passenger within the blink of an eye at very high speed and with great force. The supplemental side airbag could injure you if your seating position is not proper or upright or if items are located in the area where the supplemental side airbag inflates. This applies especially to children. See also *"Child safety"*, on page 30 in this Booklet.

⚠ WARNING

To reduce the risk of injury when the supplemental side airbag inflates,

- **always sit in an upright position and do not lean against the area where the supplemental side airbag is located.**
- **always make sure that safety belts are worn properly,**

⚠ WARNING continued

- **a child must never rest his/her head against the side trim panel in the area where the supplemental side airbag inflates. An inflating airbag can cause serious or fatal injury.**
- **see "Importance of proper seating position" in this section at pages 19 and 26 and heed all WARNINGS.**

Importance of proper seating position

In a collision supplemental side airbags must inflate within a fraction of a second and with considerable force. In order to help the airbag to do its job, it is important, both as a driver and as a passenger to sit properly at all times. By keeping room between your body and the side of the passenger compartment, the airbag can inflate fully and completely and provide supplemental protection in certain side collisions.

⚠ Always read and heed all WARNINGS on next pages.

⚠ WARNING

Failure to maintain an upright and proper seating position will increase the risk of personal injury when the supplemental side airbag inflates. To reduce the risk of injury that can be caused by an inflating supplemental side airbag:

- **Never lean against the door and over the area where the side airbag is located.**
- **Never let anyone to place their hand, leg or face near the supplemental side airbag.**
- **Do not let anyone sitting in the front seat put their hand out of the window or lean against the door.**
- **Never let anyone sitting in the rear seat hold onto the sides of the front seat backrest.**

Some other important points to know

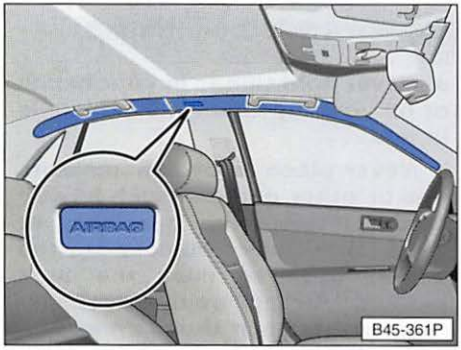
Because airbags inflate in the blink of an eye with great force, things you have on your lap or have placed on the seat could become dangerous projectiles and be pushed into you if the airbag inflates.

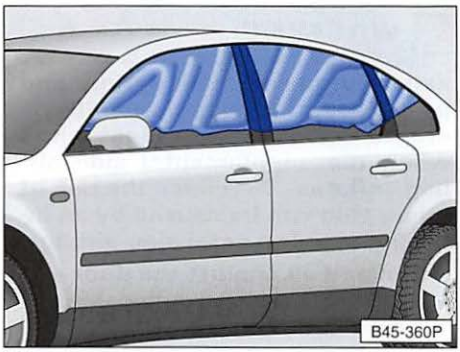
⚠ WARNING

- **Objects between you and the airbag can increase the risk of injury in an accident by interfering with the way the airbag unfolds or by being pushed into you as the airbag inflates.**

⚠ WARNING continued

- **Never hold things in your hands or on your lap when the vehicle is in use.**
- **Never place or attach accessories or other objects (such as cup holders, telephone brackets, or even large, bulky objects) on the doors, over or near the area marked "Airbag" on the seat backrests or between those areas and yourself (an umbrella, bag, etc.). Such objects can become dangerous projectiles and cause injury if the supplemental side airbag inflates.**
- **Always prevent heavy objects from knocking against or hitting the sides of the seatbacks. This could damage the side airbag systems and they would not deploy in case of an accident!**
- **Use the built-in coat hooks only for lightweight clothing. Do not leave any heavy or sharp-edged objects in the pockets which may interfere with side airbag deployment and can cause personal injury in an accident.**
- **Never recline the front passenger's seat to transport objects. Items can also move into the area of the side airbags during braking or sudden maneuvers. Objects near the supplemental side airbag can become projectiles and cause injury particularly when the seat is reclined.**





Side Curtain Protection™*

The **Side Curtain Protection™*** is located on the right and left sides above the doors and behind the headliner and behind the front door column trim. They are identified by the word "AIRBAG" in the upper portion of the center door column.

The bag will expand to cover the side windows and door column and thus help protect both front and rear occupants.

The inflated airbag will cushion the lateral movement of vehicle occupants by means of the controlled discharge of propellant under load. This will help reduce the risk of upper torso and head injuries on the side where the airbag deploys.

When the side airbag deploys, the Side Curtain Protection™* on the same side will deploy automatically.

Please refer to page 18 of this Booklet for information on functional reliability and potential system malfunctions.

The area into which the airbag expands must be kept clear to ensure that the Side Curtain Protection™* can provide this additional protection.

Please observe the following WARNINGS in order to make certain that you are optimally protected by the Side Curtain Protection™*:

⚠ WARNING

- **Do not hang any items other than lightweight clothing from the clothes hooks in the vehicle. Clothing pockets must never contain any heavy, sharp-cornered objects. Never use hangers to hang clothing from the hooks.**
- **Never allow any persons, animals or objects to be positioned between vehicle occupants and the area into which the Side Curtain Protection™ inflate. Occupants must never place any parts of their bodies in the area from which the Side Curtain Protection ™ emerges. Nor must any objects be allowed to obstruct this area. Keeping this area clear will allow the Side Curtain Protection™ to deploy freely.**

For the same reason, only factory-installed sun shades or, in the case of shades installed after the vehicle leaves the factory, only genuine Volkswagen sun shades can be used.

- **The airbag system will only help protect occupants for a single accident. The system must be replaced if it has deployed.**

Care, Service and Disposal of Airbags

Parts of the airbag system have been installed at different places on your Volkswagen. Servicing or repairing in an area of the vehicle could impair airbag performance.

Some general requirements for airbags must be observed to make sure the effectiveness of the system will not be impaired and that discarded components do not cause injury or pollute the environment.

⚠ WARNING

A damaged airbag system may not work properly in an accident. Incorrect service procedures could cause an airbag to deploy unexpectedly during service, injuring someone. To avoid damaging the airbag system, possibly causing malfunction leading to injury in an accident or during repair:

- **Do not cover, obstruct, or change the steering wheel horn pad or airbag cover or the instrument panel, particularly in the area of the passenger side airbag module.**
- **For cleaning the horn pad or instrument panel, use only a soft, dry cloth or one moistened with plain water. Solvents or cleaners could damage the airbag cover. Do not make any repairs, adjustments, or modifications to any parts of the the airbag system.**
- **Do not modify the front bumper or vehicle body structure.**

⚠ WARNING continued

- **Never place protective seat covers or replacement upholstery over the front seatbacks that have not been specifically approved by VOLKSWAGEN. Since the side airbags deploy out of the side of the seatback, it would not be able to deploy and protect properly.**
- **Do not use additional seat cushions that cover or interfere with the areas where the side airbags inflate.**
- **Damage to the original seat covers or to the seam in the area of the side airbag module must be repaired immediately by an authorized VOLKSWAGEN dealer.**
- **Any work on the airbag system, such as removing/installing, repairing, or any work on the steering wheel, instrument panel, front seats or electrical system (including the installation of audio equipment, mobile telephones and CB radios, etc.) must be performed by a qualified technician who has the training and special equipment necessary. Improper handling may result in injury.**
- **For any work on the airbag system, we strongly recommend that you see your VOLKSWAGEN dealer.**
- **The airbag system can be activated only once. After an airbag has inflated, it must be replaced.**

Child safety

The physical principles of what happens when your car is in a crash, illustrated on pages 3 – 6, apply also to children. But unlike adults and teenagers, their muscles and bones are not fully developed. In many respects children are at greater risk of serious injury in crashes than are adults.

Because children's bodies are not fully developed, they require restraint systems especially designed for their size, weight, and body structure. Many countries and all states of the United States and provinces of Canada have laws requiring the use of approved child restraint systems for infants and small children.

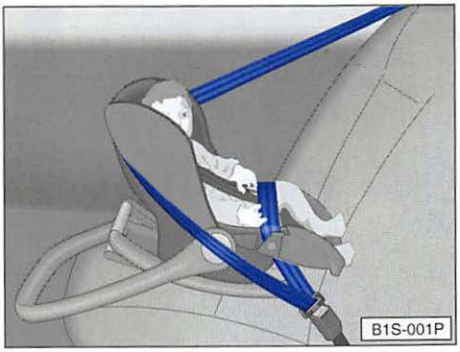
Child restraints, like adult safety belts, must be used properly to be effective. Used improperly, they can increase the risk of serious injury in a crash.

Please be sure to read and heed the important information and WARNINGS about child safety and the installation of child restraints in your Volkswagen.

⚠ WARNING

- **Accident statistics have shown that children are generally safer in the rear seat area than in the front seating position. Always restrain any child age 12 and under in the rear.**
- **All vehicle occupants and especially children must be restrained properly whenever riding in a vehicle. An unrestrained or improperly restrained child could be injured by striking the interior or by being ejected from the vehicle during a sudden maneuver or impact. An unrestrained or improperly restrained child is also at greater risk of injury or death through contact with an inflating airbag. A suitable child restraint properly installed and used at one of the rear seating positions provides the highest degree of protection for infants and small children in most crashes.**

Consult the child seat manufacturer's instructions to be sure the seat is right for your child's size.



Infant seats

Infants up to about 9 months old (22 lbs. or 10 kg) receive the best protection in special infant carriers and child seats designed for their age group. Many experts believe that infants and small children should ride only in special restraints in which the child's back faces the driving direction. These child seats can be used safely only on the rear seat of your VOLKSWAGEN.

Using a rear-facing child seat on the front seat of a vehicle equipped with an airbag will seriously injure and can even kill a child when the airbag inflates in a crash.

⚠ WARNING

- **Never install rear-facing child seats or infant carriers on the front passenger seat. A child will be seriously injured and can be killed when the passenger airbag inflates.**
- **The inflating airbag will hit the child seat or infant carrier with great force and will smash the child seat and child against the backrest, center arm rest, or door.**
- **Always install rear-facing child seats or infant carriers on the rear seat.**
- **Never install a rear-facing child restraint in the forward-facing direction. Rear-facing restraints are designed for the special needs of infants and very small children and cannot protect them properly if turned forward-facing.**

Child restraints on the front seat – important things to know

The airbag on the passenger side makes the front seat a potentially dangerous place for a child to ride. The front seat is not the safest place for a child in a forward-facing child seat. It is a very dangerous place for an infant or a larger child in a rearward-facing seat.

⚠ WARNING

Babies and older children must never ride in a vehicle sitting on the lap of an adult. Holding a child in your arms is never a substitute for a child restraint system. The strongest adult could not hold onto the child under the forces exerted in a crash. The child would strike the interior of the vehicle and could also be struck by the adult's body moving forward. The child and the adult could injure each another.

In a frontal crash at a speed of 20–35 mph (30–56 km/h) the forces acting on a 13–pound (6 kg) infant would be more than 20 times the weight of the child. This means the weight of the child would suddenly be more than 260 pounds (120 kg). Under these conditions, only an appropriate child restraint properly used can reduce the risk of serious injury.

Convertible seats

A child too large for an infant restraint up to 4 years old (40 lbs. or 18 kg) should be restrained in a child seat certified for their weight.

The airbag on the passenger side makes the front seat a potentially dangerous place for a child to ride. The front seat is not the safest place for a child in a forward–facing child seat. It is a very dangerous place for an infant or a larger child in a rearward–facing seat.

⚠ WARNING

Forward–facing child seats installed on the front passenger's seat may interfere with the deployment of the airbag and cause serious injury to the child. Install forward–facing child seats on the rear seat.

⚠ Always read and heed all WARNINGS on next pages.

If exceptional circumstances require the use of a forward-facing child seat on the front seat, the child's safety and well-being require that the following special precautions be taken:

⚠ WARNING

If, in exceptional circumstances, you must install a *forward-facing* child restraint on the front passenger's seat:

- **make sure the forward-facing seat has been designed and certified by its manufacturer for use on a front seat with a passenger front and side airbag.**
- **Always follow the manufacturer's instructions provided with the child seat or carrier.**
- **Always move the passenger seat into its rearmost position, as far away from the airbag as possible before installing the child restraint. The backrest must be adjusted to an upright position.**

Booster seats

Children up to 8 years old (80 lbs, or 36 kg) are best protected in child safety seats designed for their age and weight. Experts say that the skeletal structure, particularly the pelvis, of these children is not fully developed, and they should not use the vehicle safety belts.

Children of average size of about 4 years and older may use available three point combination lap and shoulder belts. It is usually best to put these children in appropriate booster seats. Be sure the booster seat meets all applicable safety standards.

Booster seats raise the seating position of the child and reposition both the lap and shoulder parts of the safety belt so that they pass across the child's body in the right places.

The routing of the belt over the child's body is very important for the child's protection, whether or not a booster seat is used.

Children age 12 and under should always ride in the rear seat.

⚠ Always read and heed all WARNINGS on next pages.

⚠ WARNING

Always position the shoulder portion of the three-point belt midway over the shoulder of the child. The shoulder portion must never rest against or across the neck. It should never contact or remain in front of the face, chin, or throat. The lap belt portion of the three point belt as well as any lap belt alone must always pass as low as possible across the pelvis, never over the abdomen. Failure to properly route safety belts over a child's body will cause severe injuries in a crash.

In a collision, airbags must inflate within a blink of an eye and with considerable force. In order to do its job, the airbag needs room to inflate so that it will be there to protect the occupant as the occupant moves forward into the airbag.

A vehicle occupant who is out of position and too close to the airbag gets in the way of an inflating airbag. When an occupant is too close, he or she will be struck violently and will receive serious or possibly even fatal injury.

In order for the airbag to offer protection, it is important that all vehicle occupants, especially any children, who must be in the front seat due to exceptional circumstance, be properly restrained and as far away from the airbag as possible. By keeping room between your body and the front of the passenger compartment, the airbag can inflate fully and completely and provide supplemental protection in certain frontal collisions.

⚠ WARNING

Never let a child stand or kneel on any seat, particularly the front seat. Never let a child ride in the cargo area of your car. If a child is leaning forward, sitting sideways or out of position in any way, the child is more likely to be injured in a crash and will receive serious or fatal injuries if the child comes into contact with an airbag as it inflates.

Seatbelts and older children

Children of average size of about 7 years of age and older may use the lap belt in exceptional circumstances if the proper use of three point belts is not possible. Always remember that children do not have the pronounced pelvic structure required for the proper function of lap belts. The child's safety absolutely requires that a lap belt be fastened snugly and as low as possible around the pelvis. Never let a lap belt pass over the child's stomach or abdomen.

⚠ WARNING

Failure to properly route safety belts over a childs body will cause severe injuries in a crash.
The lap belt portion of the three point belt as well as any lap belt alone must always pass as low as possible across the pelvis, never over the stomach or abdomen.

Younger children should use a lap belt only in very exceptional situations and only if no child restraint system for the child's size and weight or safer alternative means of transportation of the child is available. In these exceptional situations, the use of a lap belt is better than permitting the child to remain totally unrestrained. But remember: a lap belt cannot provide the same level of protection as a proper child restraint. Also, using a lap belt for younger children, who should be using a child restraint, may violate laws in your state or province.

⚠ WARNING

- **An improperly worn safety belt will not provide the best protection in a crash and may cause serious personal injury. Always make sure that children and other vehicle occupants properly wear available restraint systems. Carefully follow the instructions provided by the manufacturers of child restraints.**
- **Commercially available child seats are required to comply with U. S. Federal Motor Vehicle Safety Standard (FMVSS) 213 (in Canada CMVSS 213).**
- **These standards include installation requirements for using a lap belt or the lap portion of a combination lap-shoulder belt such as those installed in your vehicle.**

⚠ Always read and heed all WARNINGS on next pages.

⚠ WARNING continued

- **When buying a child restraint, select one that fits your child and vehicle.**
- **Only use child restraint systems that fully contact the flat portion of the seat cushion. The child seat must not tip or lean to either side. VOLKSWAGEN does not recommend using child seats that rest on legs or tube-like frames. They do not provide adequate contact with the seat.**
- **Improperly or inadequately installed child restraint systems can increase the risk of injury to children in crashes. Therefore, always carefully read and follow all instructions on installation and use that come with the system.**

Securing a child seat in the rear seats

Convertible Locking Retractor

The retractors for the rear seat three-point safety belts and the front passenger three-point safety belt have a convertible locking feature in addition to the emergency locking feature.

If you need to install a child seat at an outer seating position, you must first activate the convertible locking feature. Then secure the child seat by using the seat belt.

⚠ WARNING

- **Never install rear-facing child seats or infant carriers on the front passenger seat. A child will be seriously injured and can be killed when the passenger airbag inflates.**
- **The inflating airbag will hit the child seat or infant carrier with great force and will smash the child seat and child against the backrest, center arm rest, or door.**
- **Always install rear-facing child seats or infant carriers on the rear seat.**
- **Forward-facing child seats or infant carriers installed on the front passenger's seat may interfere with the deployment of the airbag and cause serious injury to the child. Allow a child to travel on the front passenger's seat only in a forward-facing child restraint system specifically designed and approved by the child restraint manufacturer for use in the front with airbags. Make sure the passenger seat is in the rearmost position. It is always safer to install a child seat in the rear.**

Activating the convertible locking retractor

- Slowly pull the belt all the way out and route it around or through the child restraint belt path.
- Insert the belt tongue into the buckle for that seating position. Make sure that the orange release button is facing away so that the child safety belt can be unbuckled quickly if necessary.
- **Pull on the belt to make sure the safety belt is properly fastened.**
- Guide the remaining portion of the belt back in place with your hand. While doing so, you should hear a continuous clicking noise from the retractor. That means that the convertible locking feature has been activated.
- Push and pull the child seat back and forth at the belt path to make sure that it is correctly and securely installed and does not move more than one inch side to side.

⚠ WARNING

Always buckle the child seat firmly in place even if your child is not sitting in it. A loose child seat can fly around during a sudden stop or in a collision.

Deactivating the convertible locking retractor

The convertible locking retractor is deactivated by unfastening the safety belt (see page 13). Allow the safety belt to retract completely to its stowed position. The safety belt can now be used as an ordinary three-point safety belt without the additional locking feature.

If the convertible locking feature should be activated inadvertently, the safety belt must be unfastened to deactivate this feature. If the convertible locking feature is not deactivated, the safety belt will gradually become tighter and uncomfortable to wear. The convertible locking feature must be deactivated to restore normal belt operation and greater occupant comfort

⚠ WARNING

Never unfasten the safety belt to deactivate the convertible locking retractor while the vehicle is in motion. You would not be protected at all and could suffer serious injury in a collision.

Securing a child seat with the center rear seat

Securing a child seat with the rear center safety belt

- First make sure the seat backrest of the rear seat bench is in upright position and securely latched in place, ***Booklet 3.1,*** **chapter** *"Rear seat"*.
- Then secure the child seat as described in this chapter *"Child safety"*.

Be sure to follow the instructions provided by the manufacturer of the child restraint you are using.

⚠ WARNING

When transporting children on the rear seat bench, or if you are going to install a child restraint system on the rear seat bench, please remember:

- **The rear center three point safety belt cannot help to protect an infant or a child in a child restraint if the seat backrest to which it is attached is not securely latched. The child restraint would not be securely held in place and would move forward during sudden braking, in a sudden maneuver and especially in a collision. An infant or a child would be thrown forward together with the seat and would strike parts of the car's interior and could be seriously injured.** **See page 30 .**
- **Always make sure that the rear seat backrest to which the rear center safety belt is attached is in upright position and securely latched into place so that it cannot fold forward whenever a child restraint is installed and especially when it is being used, *Booklet 3.1,* chapter *"Rear seat".***

What Types of CR Anchors are Available and How are They Related to Child Safety?

For years, CRs have been installed using the safety belts already present in every vehicle.

Since September 1, 1999, CR manufacturers have been providing tether straps that attach the top of the CR to the vehicles structure, on most of their forward-facing systems in order to comply with U.S. Federal regulations for CR performance in a crash. Vehicle manufacturers were required to phase-in tether anchorages for attachment of the tether strap in their U.S. vehicles beginning September 1, 1999.

The combination of the tether anchorages and the lower anchorages is now generally called the **LATCH** system for "**L**ower **A**nchor and **T**ether for **Ch**ildren".

(The term "ISOFIX" regarding lower anchorages had been used by Volkswagen and other manufacturers in the past, but LATCH is now the standard name for the new child restraint anchorage system.)

Some CR manufacturers have been providing tether straps on certain models of their CRs, either as standard equipment or as a retrofit, for several years. Check with the manufacturer of the CR for tether strap availability.

To provide a simpler and more practicable way to attach the CR on the vehicle seat, U.S. Federal regulations require the phase-in of lower anchorages in vehicles and devices on new CRs to attach to the vehicle anchorages.

CR manufacturers will probably offer two kinds of lower anchorages on their child seats:

They could come with...

- ...hooks or other latches attached to adjustable straps

or

- ...rigid latches on bars that extend out the back of the CR and are released with release buttons at the bottom of the CR.

Where Can I Get Additional Information About CR Application and Usage?

There are a number of sources of additional information about CR selection, installation and usage:

NHTSA advises that the best child safety seat is the one that fits your child and fits in your vehicle, and that you will use correctly and consistently.

Try before you buy!

National Highway Traffic Safety Administration
(888) DASH-2-DOT
www.nhtsa.dot.gov

Center for Injury Prevention
(800) 344-7580
www.cipsafe.org
www.childsafety.org

National SAFE KIDS Campaign
(202) 662-0600
www.safekids.org

Safety BeltSafe U.S.A
(800) 745-SAFE (English)
(800) 747-SANO (Spanish)
www.carseat.org

Volkswagen Customer Relations
(800) 822-8987

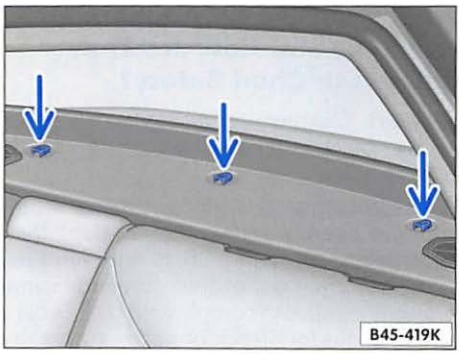
Tether Anchors

⚠ WARNING

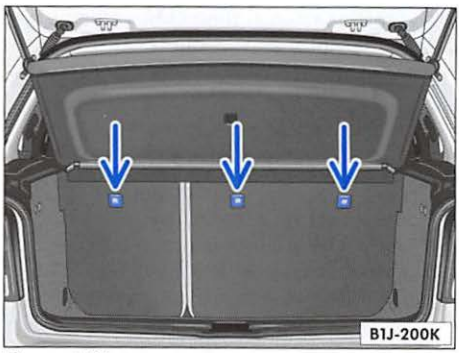
Improper installation of child restraints will increase the risk of injury in a crash.

- **Improper use of child restraint anchors (tether anchors) could lead to injury in a collision. The anchors are designed to withstand only those loads imposed by correctly fitted child restraints.**
- **Never mount two child restraint seats on one anchor point.**
- **Always follow the instructions provided by the manufacturer of the child restraint that you intend to install in your VOLKSWAGEN.**
- **Never use child restraint tether anchorages to secure safety belts or other kinds of occupant restraints.**
- **Never attach a tether strap to a tie-down hook in the luggage compartment**
- **Never secure or attach any luggage or other items to the LATCH lower anchorages or to the tether anchors.**

Beginning with model year 2000, Volkswagen vehicles have tether anchors as standard equipment in the following locations:



Passat Sedan



Passat Wagon

The illustrations show the tether anchors for the rear seating positions:

- *Sedan*:
  Tether anchors for the three rear seating positions are located on the rear hat shelf (arrows).
- *Wagon*:
  Tether anchors for the three rear seating positions are located on the rear side of the rear seat back rest (arrows).

Tether Strap

A tether is a straight or V-shaped strap that attaches the top part of a CR to special anchorage points in the vehicle – see illustration on next page.

The purpose of the tether is to reduce the forward movement of the CR in a crash, in order to help reduce the risk of head injury that could be caused by striking the vehicle interior.

Forward facing CRs manufactured after September 1, 1999, are required by U.S. federal regulations to comply with new head movement performance requirements.

These new performance requirements make a tether necessary on most new child seats.

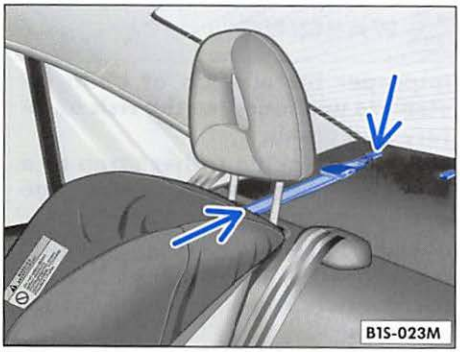
⚠ WARNING

Improper installation of child restraints will increase the risk of injury in a crash.

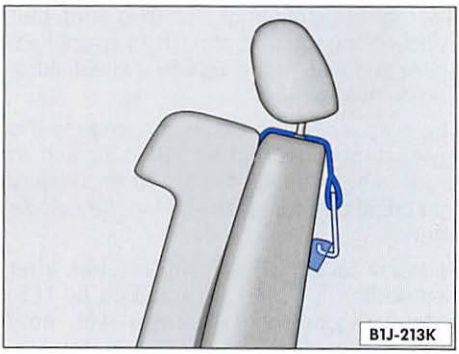
- **Never attach a tether strap to a tie-down hook in the luggage compartment**
- **Never secure or attach any luggage or other items to the LATCH lower anchorages or to the tether anchors.**

Using Tethers on Rear Facing CRs

Currently, very few rear-facing CRs come with a tether. Please read and heed the CR manufacturer's instructions carefully to determine how to properly install the tether.



The illustration shows a tether strap mounted in a Passat Sedan model



The illustration shows a tether strap mounted in a Passat Wagon model

How to install the upper tether strap to the anchorage point Sedan only

Sedan only

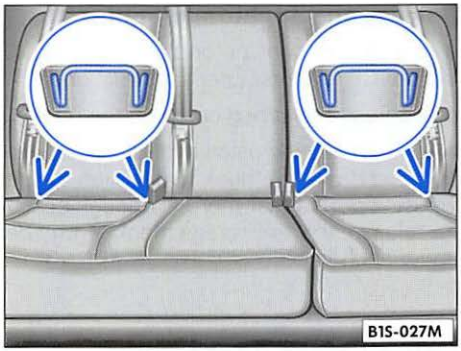
- Release or deploy the tether strap on the child restraint according to the child restraint manufacturer's usage instructions.
- Guide the upper tether strap **under** the rear head restraint (raise the head restraint if necessary).
- Attach the tether strap anchorage hook into the opening of the tether anchorage.
- Tighten the tether strap firmly following the child restraint manufacturer's instructions.
- To release the tether strap, loosen the tension following the child restraint manufacturer's instructions. Depress the spring catch on the hook and release it from the anchorage.

How to install the upper tether strap to the anchorage point Wagon only

Wagon only

- Release or deploy the tether strap on the child restraint according to the child restraint manufacturer's usage instructions.
- Guide the upper tether strap **under** the rear head restraint (raise the head restraint if necessary).
- Guide the tether strap between the rear seat back and the luggage compartment cover (remove the luggage compartment cover if necessary, see *"Luggage compartment cover"*, ***Booklet 3.1***).
- Attach the tether strap anchorage hook into the opening of the tether anchorage.
- Tighten the tether strap firmly following the child restraint manufacturer's instructions.
- To release the tether strap, loosen the tension following the child restraint manufacturer's instructions. Depress the spring catch on the hook and release it from the anchorage.

Lower Anchorages



The lower anchorage attachment points are located between the rear seatback and rear seat cushion – see illustration.

The lower anchorages for the rear outboard seating positions can be installed by your VOLKSWAGEN dealer.

Lower anchorages secure the CR in the seat without using the vehicle's safety belts. Anchorages provide a secure and easy-to-use attachment and minimize the possibility of improper CR installation.

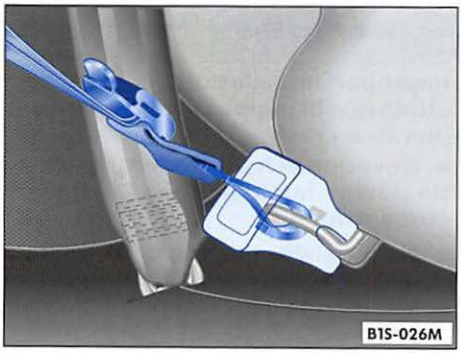
All CRs manufactured after September 1, 2002, must have lower anchorage attachments for the LATCH system.
However, CR manufacturers have begun to provide such lower anchorages for the latch system in 2000 even before the required date.

⚠ WARNING

Improper installation of child restraints will increase the risk of injury in a crash.

- **Never attach a tether strap to a tie-down hook in the luggage compartment**
- **Never secure or attach any luggage or other items to the LATCH lower anchorages or to the tether anchors.**

Please remember that the lower anchorage points are only intended for installation and attachment of CRs specifically certified for use with LATCH lower anchorages.
CRs that are not equipped with the lower anchorage attachments can still be installed according to the CR manufacturer's instructions using vehicle safety belts.



Mounting the anchorage hook

- Install the guidance fixtures as explained on page 46.
- Guide the anchorage hook into the guide fixture.
- Press the anchorage hook with the spring catch release onto the lower anchorage so that the anchorage hook locks into place.
Pull on the anchorage hook to make sure that it is properly attached to the lower anchorage – see illustration.
- Tighten the strap following the CR manufacturer's instructions.

Release the anchorage hook

- Loosen the tension on the strap following the CR manufacturer's instructions.
- Depress the spring catch on the hook.
- Hold the spring catch in depressed position and move the hook in direction of the vehicle floor so that there is enough space to release the anchorage hook from the lower anchorage.

Using Lower Anchorages or Safety Belts

⚠ WARNING

- **Improper installation of child restraints will increase the risk of injuries in a crash.**
- **Always refer to the CRs manufacturer's instructions for proper installation of the CR and correct use of tether straps as well as the lower anchorages or safety belts in your vehicle.**

Seat Markings for Lower Anchorages

Fig. 1 The illustration above shows the location of the circular seat markings for the lower anchorages for the outboard rear seating positions.

The circular markings on the seat help you to locate the lower anchorages for the two rear outboard seating positions, see illustration.

⚠ WARNING

For installation of a child restraint in your Volkswagen, always refer to the instructions provided by the manufacturer of your child restraint.

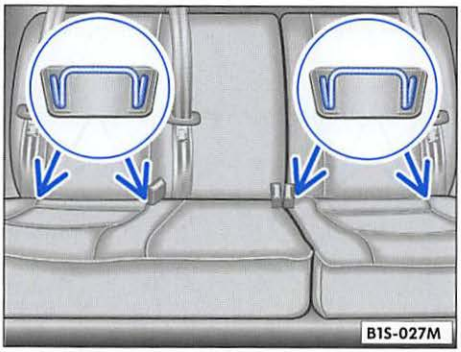


Fig. 2 The illustration above shows the location of lower anchorages.

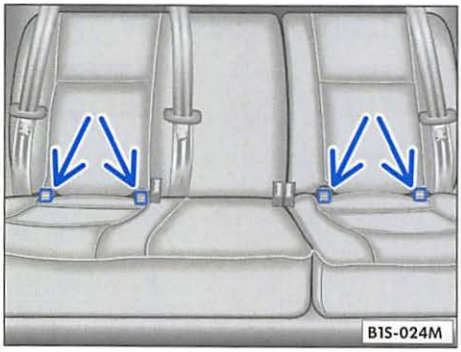
The lower anchorages are located between the rear seatback and the rear seat cushion – see Fig. 2.

⚠ WARNING

Improper installation of child restraints will increase the risk of injury in a crash.

- **Always follow the CRs manufacturer's instructions for proper installation of the CR and correct use of tether straps as well as the lower anchorages or safety belts in your vehicle.**
- **Please be sure to read and heed the important information and WARNINGS about child safety and the installation of CRs in this Booklet.**

Guidance Fixtures for Lower Anchorages

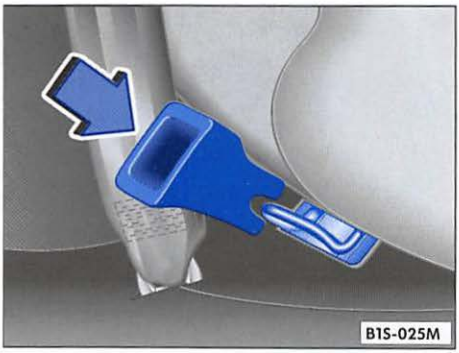


Special guidance fixtures increase the convenience of the lower anchorages and help protect the seat material from possible damage when installing child restraints that have rigid lower anchorages and not straps with hooks. These guidance fixtures are either supplied with your Volkswagen as standard equipment, or your authorized Volkswagen dealer can supply them.

Attach the guidance fixtures to the lower anchorages as shown in illustrations on pages 44 and 46.

Note

You may find it easier to install CRs equipped with hooks attached to straps without the guidance fixtures in place. If this is the case, remove the guidance fixtures by pulling them off the anchorages. However, the guidance fixtures help you to locate the anchorages positions.



Installing the guidance fixtures

First push the seat cushion down so that the lower anchorages are visible.

Hold the guide fixture with the part number facing downward and push it in direction of arrow onto the anchorage – see upper illustration.

The groove in the guidance fixtures must snap into place over the lower anchorages installed in your Volkswagen.

Removing the guidance fixtures

- Remove the CR according the CR manufacturer's instructions.
- Push the seat cushion down so that the lower anchorages are visible.
- Pull the guidance fixtures off of the lower anchorages and keep the guidance fixtures in a safe place.

Notes

- **On vehicles with folding rear backrests, the guidance fixtures must be removed before folding the backrests to prevent damaging the seat cushion.**
- **Please keep the guidance fixtures in a safe place with the vehicle when not in use.**
- **If you leave the guidance fixtures installed for several days, this could leave a mark on the upholstery on the seat cushion and backrest in the area that the guidance fixtures were installed. The upholstery would also be permanently stretched around the guidance fixtures.**
This applies especially to leather seats.
- **Always remove the guidance fixtures when not in use.**

⚠ WARNING

Improper use of tether anchorages or lower anchorages can cause serious personal injury in a crash.

- **Always follow the CR manufacturer's instructions for proper installation and use of child restraint systems.**

⚠ WARNING continued

- **Never use the LATCH or tether anchorages to attach safety belts or other kinds of occupant restraints.**
- **CR tether anchorages and the lower anchorages are only designed to secure a CR that has been equipped to use these anchorages.**
- **Tether anchorages and the lower anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances can they be used safely for adult or child seat belts or harnesses.**
- **Never mount more than one CR to a single tether or to a lower anchorage point. Attaching two child restraints to a single anchorage point can cause the anchorage to fail and cause serious personal injury in a crash.**
- **Never use the tether anchorages and lower anchorages to install three child restraints in your Volkswagen. If you must install three child restraints on the rear seat of a Volkswagen with three seating positions in the rear, you must use the vehicle safety belt to install the child restraint in the center seating position.**

Installing a Child restraint using the LATCH system

Make sure the seat back of the rear seat bench is in the upright position and securely latched in place.

There are two possibilities to attach a LATCH-CR to the the lower anchorages for the outboard seating position:

Rigid latches on bars that extend on the back of the CR:

- Install the guidance fixtures, see pages 46 and 47.
- Insert the latches into the lower anchorages. Make sure you hear the CR click securely into place.

Pull on the CR once you've mounted it to make sure it's secure!

Connecting the attachments to adjustable straps:

- Both attaching straps with anchorage hooks on the CR must be securely attached to the lower anchorages and then pulled tight according to the CR manufacturer's instructions, – see also page 44.
- Release or deploy the tether strap and the child restraint according the CR manufacturer's instructions.
- Guide the upper tether strap **under** the rear head restraint (raise the head restraint if necessary) and attach the tether strap anchorage hook into the opening of the tether anchorage.

To locate the tether anchorages on your vehicle, see page 40.

- Pull on the anchorage hooks to make sure that they are firmly attached to the anchorage by the spring catch of the hook.
- Tighten the tether strap firmly following the CR manufacturer's instructions.

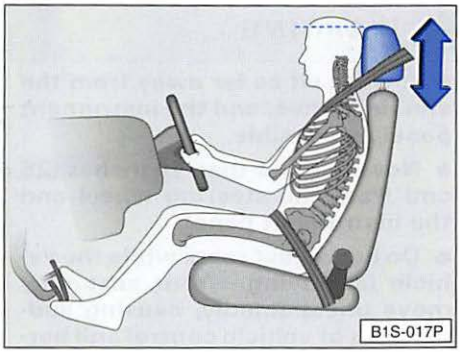
Pull on the CR once you've mounted it to make sure it's secure!

⚠ WARNING

Improper installation of child restraints will increase the risk of injury in a crash.

- **Always follow the CRs manufacturer's instructions for proper installation of the CR and correct use of tether straps as well as the lower anchorages or safety belts in your vehicle.**
- **Please be sure to read and heed the important information and WARNINGS about child safety and the installation of CRs in this Booklet.**

Head restraints



The padded head restraints are adjustable.

Position the head restraints according to the occupant's height. Properly positioned head restraints, with the use of safety belts, help to offer effective protection in most accident situations.

For maximum protection, the upper edge should be at least at eye level or higher – see left illustration.

⚠ WARNING

Head restraints are designed to help reduce injuries in an accident. Do not drive the vehicle without the head restraints in place and properly adjusted.

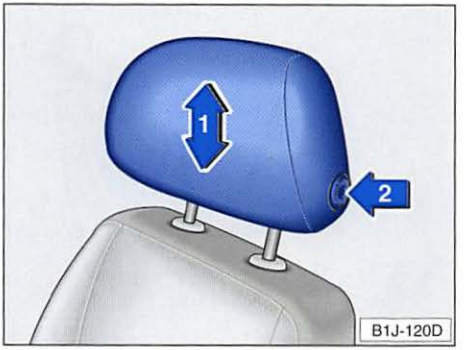
Height adjustment (arrow 1)

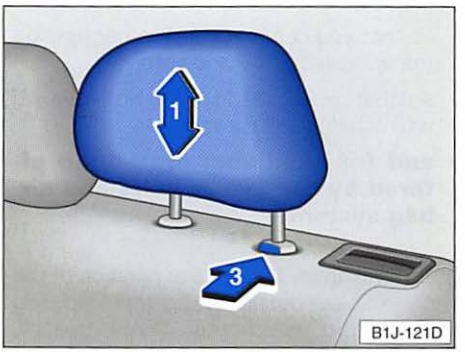
For height adjustment, grasp firmly with both hands and pull up or down. To push the front head restraints down, press the button (arrow **2**).

Removal

Front head restraints

To **remove** the head restraints, pull the head restraint upward until it stops. Then press the button (arrow **2**). While doing this, pull the head restraint upward and remove.





Rear head restraints

To **remove** the head restraints, fold the rear backrest slightly forward and pull the head restraint upward until it stops. Then press the button (arrow **3**) on the rod. While doing this, pull the head restraint upwards and remove.

Installation

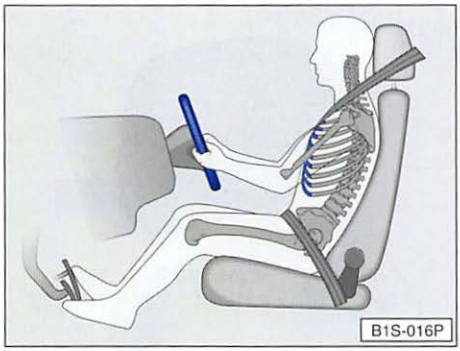
Front head restraints

To **reinstall**, guide the two rods of the headrest into the guides, press the button (arrow **2**) at the same time and push the headrest down into place.

Rear head restraints

To **reinstall**, push the two rods of the headrest into the guides and push the headrest down into place.

Front seats



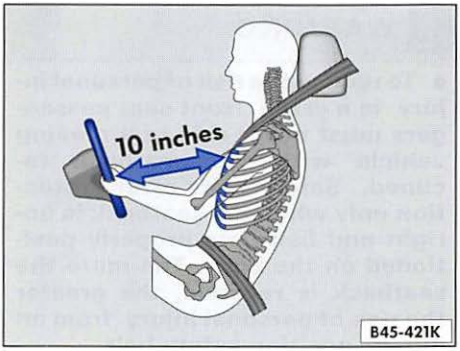
The correct positioning of the seats is important:

- so that you can reach all the controls on the vehicle quickly and safely;
- so that you can drive or ride relaxed which helps reduce fatigue
- **and for maximum protection offered by the safety belts and airbag system.**

Therefore, always adjust the position of the front seats as described on the following pages and in the chapter *"Front seats"*, ***Booklet 3.1***.
Remember to adjust the seats before fastening the safety belts and before driving off. Always be sure to follow these general guidelines:

⚠ WARNING

- **Always sit as far away from the steering wheel and the instrument panel as possible.**
- **Never sit less than 10 inches (25 cm) from the steering wheel and the instrument panel.**
- **Do not adjust seats while the vehicle is moving. Your seat may move unexpectedly, causing sudden loss of vehicle control and personal injury.**
- **Passengers must always keep their feet on the floor whenever the vehicle is moving. Never place feet on the dashboard or on top of the seats. In a crash, serious personal injury can result from an improper seating position.**



Driver's seat

To avoid contact with the airbag while it is unfolding, the driver must not sit any closer to the steering wheel than necessary and always properly wear the three point safety belt provided.

We recommend that you adjust the driver's seat as follows:

- adjust the seat in fore and aft direction so that you can easily push the pedals all the way while keeping your knee slightly bent.
- adjust the seatback so that when you sit with your back against the seatback, you can still grasp the top of the steering wheel.
- adjust the steering wheel so that the distance from the center of your breastbone to the center of the airbag cover on the steering wheel must be **at least** 10 inches (25 cm) or more.
  See illustration above and chapter *"Front seats"*, ***Booklet 3.1***.

⚠ WARNING

- **Never sit closer than 10 inches (25 cm) to the steering wheel.**
- **If you cannot sit more than 10 inches (25 cm) from the steering wheel, we recommend that you investigate whether adaptive equipment may be available to help you reach the pedals and increase your seating distance from the steering wheel.**
- **If it is impossible for you to sit at least 10 inches (25 cm) or more from the steering wheel, the National Highway Traffic Safety Administration (NHTSA) may permit you to have an on/off switch for the airbag installed. For address and telephone number of NHTSA – see below:**

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at:

1-800-424-9393

(or 366-0123 in Washington, D.C. area)

or write to:

NHTSA,
U.S. Department of Transportation,
Washington, D.C. 20590.

Front passenger's seat

To avoid contact with the airbag while it is unfolding, the adult front seat passenger must not sit any closer to the instrument panel than necessary and always properly wear available three point belts.

We recommend that you adjust the passenger's seat as follows:

- backrest upright (**never** reclined)
- place your feet on the floor in front of the passenger's seat
- adjust the passenger's seat as far as possible to the rear of the fore and aft adjustment range.

For safety information on transporting children on the front passenger seat – see page 30.

⚠ WARNING

• Always keep both feet on the floor in front of the seat.

• Never place your feet on the instrument panel or on the seat. If the airbag inflates and your feet are on the instrument panel or on the seat, your could receive serious personal injuries.

⚠ WARNING

• To reduce the risk of personal injury in a crash, front seat passengers must never ride in a moving vehicle with the seatback reclined. Safety belts offer protection only when the seatback is upright and belts are properly positioned on the body. The more the seatback is reclined, the greater the risk of personal injury from an out-of-position safety belt.

• For driver's and passenger's protection, make sure front seats and seatbacks are securely locked in place.

• Never store items under the seats. Loose objects can interfere with the seat latching mechanism and can also cause personal injury in a crash.

ALPHABETICAL INDEX

A

Adjusting
- Head restraints 49
- Seats 50

Air bag system 17
- Care, service and disposal 29
- Front airbags 23
- Head airbags 28
- How many airbags does my vehicle have? 17
- How the Airbag system works? 24
- Importance of proper seating position 19
- Side airbags 25
- System components 18
- What happens when the airbags deploy? 19
- When must the system be inspected? 18
- Where are my airbags located? 17

Anchors for a child restraint system 39

Auto Safety Hotline 21

B

Belt tensioner 13
- What happens when the belt tensioner is activated? ... 13

Booster seats 33

C

Center safety belt on the rear seat 14

Child restraint (CR) Anchors 39

Child restraint anchorages 43

Child restraints
- Important information about child restraints and the front seat 22
- Securing on the rear seat using the center safety belt 38

Child safety 30

Child seat – Installing a rear facing child seat 22

Child seats – Older children 35

Comfort clips 8

Convertible child seats 32

Convertible locking feature 9

Convertible locking retractor 36
- Activating 37
- Deactivating 37

CR (Child Restraint) 39

D

Dirty safety belts 9

Driver's seat
- Adjusting 20
- Proper position 51

ALPHABETICAL INDEX

E

Extenders for the safety belt 15

F

Fastening and unfastening
- Booster seats 33
- Center safety belt on the rear seat 9, 14
- Child seat on the center position on the rear seat 38
- Child seats on the outer rear seat position 36
- Convertible child seats 32
- Infant seats 31
- LATCH system 39
- Safety belt extender 16
- Safety belts 10, 13

Fastening your safety belt 10
Forward facing child seat,
- Precautions 22

Front airbags 23
Front passenger's seat,
- Proper position 52

Front seats 50
- How to adjust? 50

G

Guide fixtures 46

H

Head airbags 28
Head restraints 49
- Proper position for maximum protection 49
- Removing and Installing 49

Heavy clothing and safety belts ... 8
Height adjustors 11
How can I adjust the height of my safety belt? 11
How can I tell when the safety belt is securely locked? 10
How many airbags does my vehicle have? 17
How to attach the tether strap on the Sedan model? 42
How to attach the tether strap on the Wagon model? 42
How to fasten the rear center safety belt? 9
How to use this Manual? 2
How to wear safety belts properly? 8

ALPHABETICAL INDEX

I

Important information about this Manual 2
Indicator light
- Air bag system 18
- What should I do if the airbag indicator light comes on and stays on? 18

Infant seats 31
Installing
- Booster seats 33
- Child seat on the outer rear seat position 36
- Child seat to LATCH system .. 48
- Child seat to lower anchorage point 43
- Child seat using the LATCH system 39
- Convertible child seats 32
- Infant seats 31
- Tether strap to anchorage point on the Sedan model 42
- Tether strap to anchorage point on the Wagon model ... 42

Installing a child restraint 48

K

Keep this manual with your vehicle 2

L

Lap–shoulder belt 9
LATCH (Lower Anchor and Tether for Children) 39
LATCH system 48
- Attaching a child restraint to the LATCH system 48
- Seat markings 45

Locking retractor 36
Lower Anchor and Tether for Children (LATCH) 39
Lower anchorages 43
- Guide fixtures 46
- Seat markings 45

N

Number of seats 9

P

Passenger's seat,
- Proper position 52

Pregnant women,
- Special considerations when wearing a safety belt 12

ALPHABETICAL INDEX

R

Rear center safety belt 14
- How to fasten? 9
- Making sure the rear seatback is securely latched ... 9
- Precautions 14

Rear–facing child seat,
- Precautions 22

Release button on the buckle 13
Retractors 9

S

Safety belt, – Lap–shoulder belt ... 9
Safety belt extenders 15
- Fastening 16
- Precautions your should take when using 15
- Use with a child restraint 15

Safety belt height adjustors 11
Safety belt warning light 7
Safety belts 3
- Extender 15
- How can I adjust the height of my safety belt? 11
- How can I tell when the belt is securely locked? 10
- How to fasten? 10
- How to wear properly? 8
- Making sure all passengers are correctly restrained 9
- Older children 35
- Precautions 8
- Retractors – how they work ... 9
- Special considerations for pregnant women 12
- Torn or frayed 8
- Unfastening 13
- Warning system 7
- What can happen if you do not wear your safety belt? 4
- What happens if you wear your safety belt too loose? 12
- When must safety belts be replaced? 9
- When would a safety belt lock up? 9
- Why safety belts protect? 6

Safety first 2
Seat belts 3
Seating capacity of your vehicle ... 9
Seating position
- Distance between the driver and the steering wheel 21

Seat markings for lower anchorages 45
Securing a child seat 36, 38
Side airbags 17, 25, 28
Side Curtain Protection 17, 28
Steering wheel
- Distance between the driver and steering wheel 21

ALPHABETICAL INDEX

T

Tensioner for the safety belt
– Function 13
Tether anchors 40
Tether strap 41
– How to attach on the Sedan model 42
– How to attach on the Wagon model 42
Torn safety belts 8

U

Unfastening your safety belt 13

W

Warning light in the instrument cluster 7
Warning system 7
What can happen if you do not wear your safety belt? 4
What happens if you wear your safety belt too loose? 12
What happens when the airbags deploy? 19
What happens when the belt tensioner is activated? 13
What should I do if the airbag indicator light comes on and stays on? 18
When must safety belts be replaced? 9
When would a safety belt lock up? 9
Where are my airbags located? .. 17
Why safety belts protect? 6

It has always been VOLKSWAGEN's policy to continuously improve its products. VOLKSWAGEN, therefore, reserves the right to make changes in design and specifications, and to make additions or improvements to its products without incurring any obligation to install them on products previously manufactured.

Text, illustrations and specifications in this manual are based on information and knowledge available at the time of printing.

All rights reserved. May not be reproduced or translated in whole or in part without the written consent of VOLKSWAGEN AG. Specifications are subject to change without notice

Printed on environmentally friendly paper (bleached without chlorine, recyclable). Printed in Germany

© 2002 VOLKSWAGEN AG

3.1 2004 Passat Sedan

Controls and Operating Equipment

Please read this important information before reading your booklet.

Vehicle Equipment

This manual describes all the equipment intended to be offered at the time of printing. Some of the equipment may be available at a later date or not at all.

Please note that items marked with an asterisk may be standard on certain models, optional on others or not available on your model.

Notes about Environment

Texts identified by this symbol and written in italics are important notes regarding the environment and how you can help protect it.

Illustrations

Each illustration in the manual shows a feature and / or equipment which your vehicle may or may not have, depending on the model. The illustrations are simply to show you how a feature looks and its function.

Alphabetical Index

At the back of this book, you will find an extensive Alphabetical Index. This will help you to find information quickly by using key words.

Table of Contents

On the following page, you will find the Table of Contents which describes all the features of your vehicle in the order they appear in this manual.

Indication of Directions

Whenever a direction is specified (for example: left, right, forward, backward, etc.), you should imagine yourself as sitting in the vehicle facing in the driving direction. If something is explained which is different from this position, it will be clearly identified.

WARNINGS

⚠ WARNINGS

concern safety and are highlighted like this throughout this manual.

Texts printed in bold type refer to possible damage to your vehicle, or to other important information.

If one of the Warning and indicator lights marked with a STOP-sign illuminates while you are driving, move a safe distance off the road, turn off the engine, turn on the emergency flasher and use other warning devices to alert other motorists. Go to listed page in your booklet for explanations.

TABLE OF CONTENTS

INSTRUMENT PANEL AND CONTROLS

General illustration 3
Warning and indicator lights 6
Instrument cluster 8
Warning / Indicator lights 15
Multi-function steering wheel 24

OPENING AND CLOSING

Keys 25
Remote control 27
Anti–theft alarm system 30
Doors, Power locks 31
Trunk / Rear lid 35
Power windows 36
Power roof 40

CLEAR VISION

Switches 42
Turn signals / High beam lever ... 45
Wiper and washer system 46
Wiper blades 48
Interior lights 49
Mirrors 50
Coat hooks / Assist handles 52
Sun visors 53

SEATS AND STORAGE

Head restraints 56
Front seats 57
Armrest 66
Pedals 67
Adjustable steering column 68
Rear seat 69
Hat shelf 71
Luggage compartment 71
Roof rack 73
Cup holders 74
Cigarette lighter / Socket 76
Ashtrays 78
Glove compartment 79

HEATING, VENTILATION AND AIR CONDITIONING

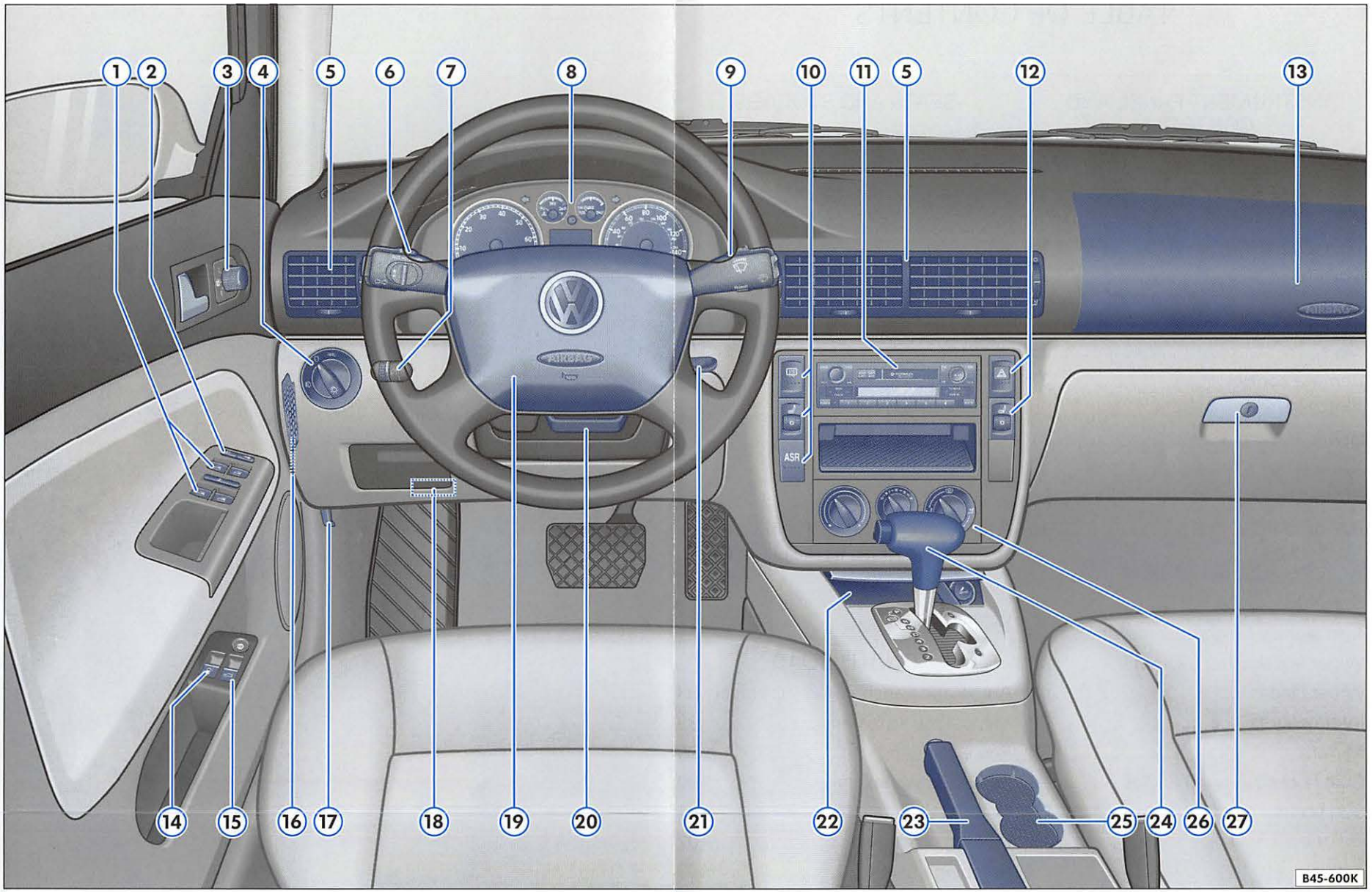
Air conditioning 80
Climatronic 87

ON THE ROAD

Automatic transmission (Tiptronic) 93
Manual transmission 99
Power steering 99
Parking brake lever 100
Ignition switch 101
Starting procedures 102
Stopping engine 103
Engine compartment 104
Cruise control 105

CONTROLS AND EQUIPMENT

General illustration



Pos.		Page
1 -	Power window switches	36
2 -	Power locking switch	33
3 -	Outside mirrors adjuster	50
4 -	Switch for lights	42
5 -	Air vents	82, 91
6 -	Turn signals / High beam lever with knobs for cruise control	45 105
7 -	Instrument cluster illumination	42
8 -	Instrument cluster: Instruments Warning and Indicator lights	 8 15
9 -	Windshield wiper / washer lever with knobs for multi-function indicator	46 11
10 -	Switches for ... ... rear window defogger ... heated driver's seat ... anti-slip-regulation*	 43 43 23
11 -	Radio[1)]	
12 -	Switches for ... ... emergency flasher ... heated front passenger's seat	 43 43
13 -	Front passenger's airbag	***Booklet 2.1***
14 -	Fuel filler flap release switch	44
15 -	Switch and lock for rear lid	35
16 -	Fuse panel	***Booklet 3.2***
17 -	Release lever for engine hood	***Booklet 3.2***
18 -	Data Link Connector (DLC) for On Board Diagnostics (OBD)	22
19 -	Horn (works only when the ignition is switched on) Driver's airbag	 ***Booklet 2.1***
20 -	Lever for adjustable steering wheel	68
21 -	Steering lock / ignition / starter switch	101
22 -	Ashtray Cigarette lighter	78 76
23 -	Parking brake lever	100
24 -	Selector lever (automatic transmission) Gearshift lever (manual transmission)	93 99
25 -	Cup holder	74
26 -	Climate controls for ... ... air conditioning ... climatronic	 80 87
27 -	Glove compartment Glove compartment air vent	79 79

Notes

- **Some features mentioned are standard equipment on some models only and options on others.**
- **For technical reasons, the arrangement of the switches and indicator/warning lights may differ. The governing factor is the symbol on the switch itself.**

[1)] A separate instructions brochure is provided for your factory-installed radio.
If you replace your radio, please be sure to read the notes in the chapter "Do-it-yourself Service", ***Booklet 3.2***.

Warning and indicator lights

Symbol	Symbol Color	Name	Page
	Yellow	Airbag system	16
	Green	Turn signals	16
	Red	Engine oil pressure	21
	Red	Generator	19
BRAKE	Red	Brake (US models)	18
	Red	Brake (Canada models)	18
	Blue	High beam	16
	Red	Safety belt	19
	Red	Engine coolant level, temperature	19
	Yellow	Malfunction Indicator Lamp (MIL)	22
ABS	Yellow	Anti-Lock Brake System (US models)	17
	Yellow	Anti-Lock Brake System (Canada models)	17
CRUISE	Green	Cruise Control (US models)	16
	Green	Cruise Control (Canada models)	16

Symbol	Symbol color	Name	See page
	Yellow	Windshield washer fluid level too low	22
	Yellow	Fuel level too low	22
	Red	Door / rear lid open	22
	Red	Emergency flasher	43
	Yellow	Rear window defogger	43
	Yellow	Anti-Slip Regulation*	23
EPC	Yellow	Electronic Power Control*	19
	Yellow	Front brake pads worn*	16
	Green	Automatic Shift Lock (ASL)	16
	Yellow	Electronic immobilizer	17

Notes

If one of the lights marked with STOP illuminates while you are driving, move a safe distance off the road. Turn off the engine, turn on the emergency flasher and use other warning devices to alert other motorists. Go to listed page in your booklet for explanations.

Some of the lights mentioned are on certain models only and may be options on other models.

Instrument cluster

The arrangement of the instruments in the cluster may vary depending on model and engine version.

The illustration shows the arrangement of the instrument cluster in a U.S. vehicle.

Pos.		Page
1 -	Tachometer	8
2 -	Engine coolant temperature gauge	9
3 -	Fuel gauge	10
4 -	Speedometer / odometer	10
5 -	Digital clock	10
6 -	Display	
	– Multi-Function Indicator	11
	– Selector lever position (only vehicles with automatic transmission)	14
7 -	Odometer / trip odometer	14

Warning / indicator lights 15

1 – Tachometer

The red area at the end of the scale indicates maximum permissible engine RPM (revolutions per minute) for all gears after the break–in period. Before reaching this area, select the next higher gear or selector lever position "**D**," or ease your foot off the accelerator pedal.

Upshifting early saves fuel and reduces engine noise.

Shift to the next lower gear when engine RPM drops below 1,500 RPMs.

2 – Engine coolant temperature gauge

The needle in the coolant temperature gauge will indicate the temperature of the coolant shortly after the ignition is switched on.

When the ignition is switched on, the warning light (**c**) illuminates for a few seconds as a functional check.

A – Engine cold

Avoid high engine speeds and heavy throttle when the needle is at the lower end of the dial.

B – Normal temperature

During normal running, the needle will stay somewhere in the middle of the dial. If the engine is working hard at high outside temperatures, the needle may also go farther upwards. **This is no cause for concern as long as the coolant temperature warning light does not start illuminating.**

If the coolant gauge needle approaches the right end of the scale and the engine appears to be overheating, turn off the air conditioner.

C – Warning light

If the light illuminates when driving, first check the coolant temperature gauge.

If the needle is in the normal range, add coolant at the next opportunity.

If the needle is in the warning range, the coolant temperature is too high.

Move the vehicle a safe distance off the road, stop the engine and depress the emergency flasher switch.

Notes

- **Do not install accessories (fog lights or insect screens, for etc.) underneath or on top of the front bumper. They may restrict engine cooling and cause engine damage.**
- **The front spoiler also functions as a duct for cooling air. If the spoiler is damaged or torn off (driving over a curb), this could cause engine overheating. Contact the nearest authorized VOLKSWAGEN dealer for assistance.**

3 – Fuel gauge

When the ignition is on, the needle on the fuel gauge will display the fuel level in the tank.

The fuel tank capacity is approximately 16.4 gallons (62 liters).

When the needle reaches the red area (arrow), the warning light **D** will illuminate, (see illustration).
When the warning light illuminates, there is approximately 2.1 U.S. gallons (8 liters) of fuel left in the tank. **Time to refuel.**

4 – Speedometer / odometer

Refer to "Break-In Period" before driving off, ***Booklet 3.2.***

The **speedometer** indicates the speed of the vehicle.

- On U.S. models, the outer row of numbers (large numbers) indicates the vehicle speed in miles per hour (mph).
- The inner row (small numbers) indicates the vehicle speed in kilometres per hour (km/h).

5 – Digital clock

To set the time on the digital clock, use the knob next to the tachometer.

- To set the hours, turn the knob counter-clockwise and hold (arrow **1**). If you turn the knob quickly and then release, you can set the individual hour.
- To set the minutes, turn the knob clockwise and hold (arrow **2**). If you turn the knob quickly and then release, you can set the individual minute.

You can set the clock time exactly to the second using the minute button:

- Turn the knob to the right until it is just one minute before the actual correct time.
- Then turn the knob to the next full minute when, for example, you hear the time signal in the radio.

6 – Multi–Function Indicator*

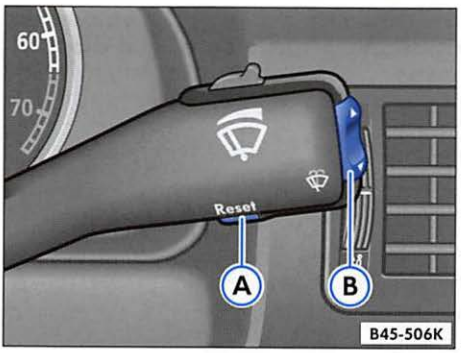
The MFA (**M**ulti–**F**unktions–**A**nzeige) or Multi–Function Indicator shows the following useful information:

- Outside temperature
- Momentary fuel consumption
- Average fuel consumption
- Distance driven
- Average driving speed
- Time driven
- Miles or kilometres to empty

With the exception of time, the symbol for the function shown appears at the upper edge of the display. The illustration shows the average fuel consumption.

Note

If a Warning / Indicator light comes on, an additional text will be shown in the Multi-Function , Indicator* display to provide you with further information. The previous MFA-Information will return after approximately 10 seconds.



By repeatedly depressing button **B** in the windshield wiper lever with the ignition switched on, the additional information is displayed.

If you depress the **upper** part of button **B**, each individual function will be shown in sequence.

If you depress the **bottom** part of button **B**, each individual function will be shown in reverse sequence.

The memories

The system is equipped with two automatic memories:

The **single trip** memory* **("1" shown on the upper right side of the display** – see left illustration**)** accumulates and stores the following data from the time you switch on the ignition until you switch it off: driving time, distance driven and the amount of fuel used.

When the ignition is turned on again, accumulation and computations continue. However, if the ignition remains off for **two hours or longer**, stored information is automatically deleted.

The **total trip** memory **("2" shown on the upper right side of the display)** stores accumulated data covering any number of successive trips, regardless of how long the ignition is off between trips. Storage capacity of the **total trip** memory is:

Driving time – 100 hours

Distance driven – 9,999 miles (9 999 km)

Fuel consumed – 999 gallons (999 liters).

To recall information, slide switch knob **A** on the windshield wiper lever to the desired position.

1 - Single trip memory

2 - Total trip memory

The following data can be recalled for display:

- Average fuel consumption
- Distance driven
- Average driving speed.
- Driving time

If one of the stored values is exceeded, then the total trip memory will be erased and recalculated once again. Unlike the single trip memory, the total trip memory won't be erased if you have stopped for more than two hours.

Erasing the memories

With the ignition on, you can erase each memory separately. Press button **A** and hold for longer than two seconds selected function will be erased.

If you disconnect the battery, all stored information will be erased.

The displays

When the ignition is switched on, "1" or "2" will appear in the display according to which memory is switched on.

Press the rocker switch **B** on the windshield wiper lever to return to the previously displayed function.

All displayed temperatures are momentary. They are not stored in memory.

After you switch off the ignition, the last temperature displayed will remain in the memory for up to 45 minutes. If you switch on the ignition after this period, or if you drive the vehicle faster than about 20 mph or 30 km/h within the 45 minute period, the new actual outside temperature will be displayed.

Outside temperature °F (C)

Displayed temperature will range between –40°F and +136°F (–40°C and +58°C).

When the vehicle is not moving, or when you are driving at very low speeds, the temperature displayed may be slightly higher than the outside temperature. This is caused by heat radiated from the engine.

At outside temperatures between +21°F and +39°F (–7°C and +4°C), an ice crystal symbol also appears in the display (icy road warning).

This symbol first flashes for about 5 seconds, then stays on until the outside temperature climbs above +39°F (+4°C) or drops below +21°F (–7°C).

If an icy road warning occurs, the multi-function display will switch from the currently displayed function to the outside temperature display (icy road warning).

⚠ WARNING

If you are going to use the outside temperature display to determine frost conditions, remember that roads can even ice over at temperatures above 39° F (+4° C).

MPG (l/100 km) –
Momentary fuel consumption

The fuel consumption at the moment will be indicated in mpg (l/100 km).

The consumption is calculated about every 30 yards (metres). If you stop your vehicle, the last value calculated will stay in the display. You can use this information to adapt your driving to match the fuel consumption you want.

If you display fuel consumption just after starting the engine, then the average consumption for the first 30 – 40 yards (metres) will be shown.

Ø MPG (l/100 km) –
Average fuel consumption

This mode displays average fuel consumption not momentary fuel consumption. When the ignition has been switched on or the existing memory erased, the average fuel consumption is indicated, after about 10 of seconds of driving and a distance of 30 yards (metres). Up to this point, a dash appears instead of a number. During the trip, the indicated value is updated every 5 seconds.

In position 1 ("1" shown in the display) the average consumption for the current trip is indicated – see page 11 "Single trip memory".

In position 2 ("2" shown in the display) the average consumption indicated is for all trips since the last time the memory was erased – see also "Total trip memory" on page 11.

Note

The amount of fuel consumed will not be displayed.

mi (km) –
Distance covered

In position 1 ("1" shown in the display), the distance covered from the time you switched on the ignition until you switch it off is displayed – see "single trip."

In position 2 ("2" shown in the display), the distance covered for all single trips is displayed – see "single trip."

Maximum distance covered: 9,999 miles (9,999 km). If you exceed this, the display will go back to zero.

Ø MPH (km / h) –
Average speed

The information under "average fuel consumption" also applies to "average speed."

min –
Driving time

Maximum driving time display: 99 hours and 59 minutes. When you exceed this, the display will go back to zero.

mi (km) –
Miles or kilometres to empty

The displayed information (indicated in stages of 5 miles or 10 kilometres) is based on the average fuel consumption computed during the last 20 miles or 30 kilometers.

This feature informs the driver how many miles or kilometres of normal and smooth driving can be covered with whatever amount of fuel remains in the tank. Fuel economy is the result of good driving habits.

6 – Selector lever position display*

Vehicles with Automatic transmission only

When the ignition is switched on, the engaged selector lever position will appear bright against a dark background while the other positions appear just the opposite.

If all the positions appear bright against a dark background at the same time, there may be a malfunction in the electronic system. See page 95 for more information on the display.

7 – Odometer / Trip odometer

The **odometer** indicates distances.

USA models: ..... miles
Canada models: ..... Kilometres

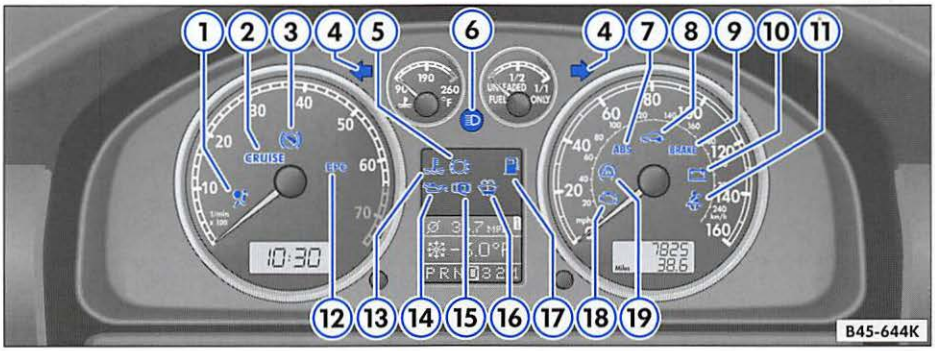
The upper odometer indicates the total distance driven. The lower odometer indicates the distance driven since the last time the trip odometer was reset. You can use the trip odometer to record the distance covered on a single trip.

On the **trip odometer**, the last digit in indicates either $^{1}/_{10}$ of a mile or 100 metres.

You can set the trip odometer back to zero by pressing the reset knob next to the speedometer.

To record a distance, reset the trip odometer to zero by pressing and holding the button for longer than 1 second.

Warning / Indicator lights



Your vehicle is equipped with several important warning and indicator lights to help you monitor the continued reliable operation of your vehicle. Please be sure to get to know these lights so if one should come on you know what to do.

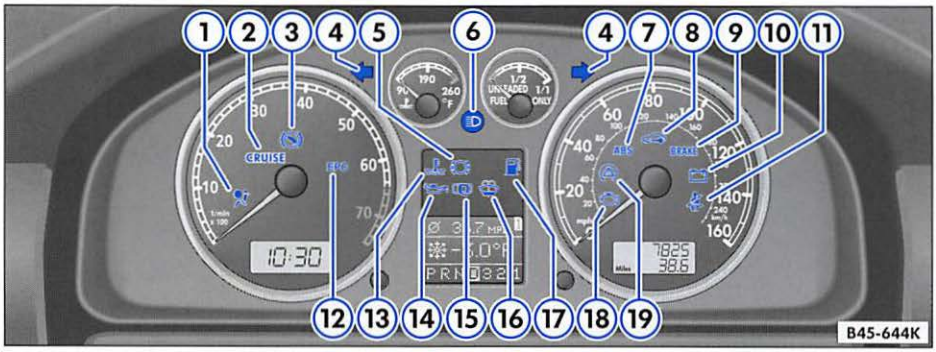
⚠ WARNING

- **Failure to heed warning lights and other important vehicle information may result in serious personal injury or vehicle damage.**
- **Whenever stalled or stopped for repair, move the vehicle a safe distance off the road, stop the engine, and turn on the emergency flasher – see page 43.**
- **The engine compartment of any motor vehicle is a potentially hazardous area. Before you check anything in the engine compartment, stop the engine and let it cool down. Always exercise extreme caution when working under the engine hood. Always heed all WARNINGS on page 104, chapter "Engine compartment" in *this booklet* and chapter *"CHECKING AND FILLING" Booklet 3.2.***

Pos.		Page
1 -	Airbag-System	16
2 -	Cruise control*	16
3 -	Anti Shift Lock (ASL)	16
4 -	Turn signals	16
5 -	Front brake pads worn	16
6 -	High beam	16
7 -	Anti-lock brake system	17
8 -	Electronic immobilizer	17
9 -	Brakes	18
10 -	Generator	19
11 -	Safety belts	19
12 -	Electronic power control	19
13 -	Engine coolant temperature / level	19
14 -	Engine oil pressure	21
15 -	Door / Rear lid open	22
16 -	Windshield washer	22
17 -	Fuel level too low	22
18 -	Malfunction indicator lamp	22
19 -	Anti-Slip Regulation*	23

Note

If a Warning / Indicator light comes on, an additional text will be shown in the Multi-Function Indicator* display to provide you with further information. The previous MFA-Information will return after approximately 10 seconds.



1 – Airbag system

The indicator light must come on when the ignition is switched on and go out after a few seconds. If the light doesn't go out, or if it comes on while you're driving, there is a fault in the airbag system.

If the indicator light does not come on when the ignition is switched on, this also indicates a system malfunction. If any of these conditions occur, have the airbag system inspected immediately by your authorized VOLKSWAGEN dealer. See chapter *"AIR-BAG-SYSTEM"*, ***Booklet 2.1***. for details.

2 – Cruise control CRUISE

The indicator light comes on when the cruise control system is switched on and goes out whenn the system is switched off.

3 – Automatic Shift Lock (ASL)

Your VOLKSWAGEN is equipped with an automatic Shift Lock (ASL). The ASL is an electromechanical device that locks the selector lever in the **P** (**Park**) and **N** (**Neutral**) positions when the ignition is on.

You must press the brake pedal before the selector lever can be moved out of either position. See page 95 for details.

4 – Turn signals

See "Turn signals / High beam lever" on page 45 for details.

5 – Front brake pads worn

Have the front brake pads inspected by a VOLKSWAGEN workshop. We recommend that you have the rear brake pads or linings inspected at the same time.

6 – High beam

The indicator lamp lights up when the high beams are switched on or when the headlight flasher is used.

See "Turn signals / Headlight dimmer switch lever" on page 45 for details.

7 – Anti-lock brake system[1)] ABS

This warning light monitors the **ABS** and **EDL (Electronic Differential Lock)*** systems. The light will come on for a few seconds when the ignition is switched on. The light will go out after an automatic check sequence.

⚠ WARNING

If the ABS warning light does not go out, or if it comes on while driving, the ABS system is not working properly. The vehicle can then be stopped only with the standard brakes (without ABS). You won't have the protection ABS provides. Contact your VOLKSWAGEN dealer as soon as possible.

For additional information on the ABS system, see chapter ***"OPTIMAL TECHNOLOGY", Booklet 3.2.***

If an ABS problem exists:

- **The ABS warning light illuminates. The vehicle can still be braked, however, the ABS will not work. Go to your authorized VOLKSWAGEN dealer as soon as possible.**
- **The ABS warning light and the brake warning light illuminate together. The ABS will not work and you will notice a change in braking characteristics and performance.**

1) On Canada vehicles, this warning light will indicate a malfunction in the ABS system. (ABS)

Electronic differential lock (EDL)*

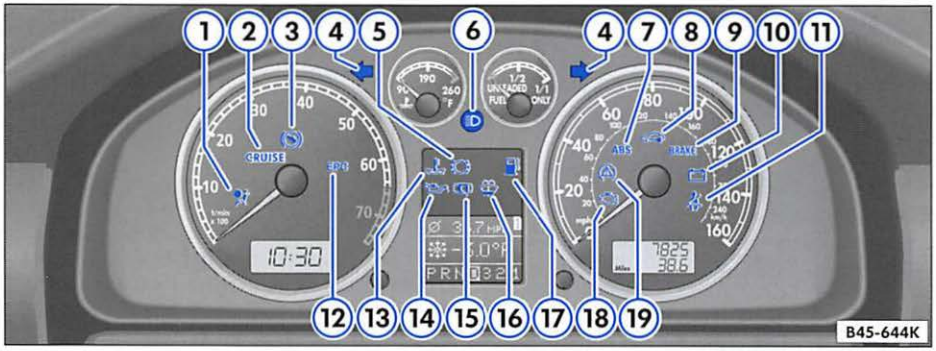
The EDL system works together with the ABS. The ABS warning light will come on if there is a malfunction in the EDL system. See your authorized VOLKSWAGEN dealer as soon as possible.

⚠ WARNING

- **If both warning lights (ABS and BRAKE warning light) come on at the same time, the rear wheels could lock up first under hard braking. Rear wheel brake lock-up can cause loss of vehicle control and an accident. Have your vehicle repaired immediately by your authorized VOLKSWAGEN dealer or a qualified workshop. Drive slowly and avoid sudden, hard brake application.**

8 – Electronic immobilizer

When the igntion is switched on an automatic key data test takes place. This data test is confirmed when the warning light comes on and then goes out after about 2 seconds. If a non-authorized key is used the warning light will blink continously . The engine will not start. See also page 102.



9 – Brake[1)] BRAKE

The light illuminates when the ignition is turned on and turns off after a few seconds, when the parking brake is fully released. This indicates that the brake warning light is functioning properly.

Note

Please remember:
The daytime running lights work only when the parking brake lever is fully released.

If the brake warning light does not illuminate when the ignition is turned on, a malfunction may exist in the electrical system. Contact the nearest authorized VOLKSWAGEN dealer for assistance.

WARNING

- **If both warning lights (ABS and BRAKE warning light) come on at the same time, the rear wheels could lock up first under hard braking. Rear wheel brake lock-up can cause loss of vehicle control and an accident. Have your vehicle repaired immediately by your authorized VOLKSWAGEN dealer or a qualified workshop. Drive slowly and avoid sudden, hard brake application.**

WARNING continued

- **If the brake warning light does not go out after a few seconds and the parking brake released, or lights up while you are driving, the fluid level in the brake fluid reservoir is too low. If you believe that it is safe to do so, proceed immediately at low speed to the nearest authorized VOLKSWAGEN dealer or qualified workshop and have the brake system inspected.**
- **Please be very careful and be sure to remember that after several brake applications, you will need greater pressure on the brake pedal to stop your vehicle. Consequently, you must allow for increased braking distances. Trying to brake as quickly as usual could lead to an accident.**

[1)] On Canada vehicles, this warning light will indicate a malfunction in the ABS system.

10 –Generator

This light comes on when the ignition is turned on and goes out after the engine is started. If the light does not go out after starting and revving up the engine momentarily or lights up while driving, there may be a malfunction in the electrical system, or the belts driving the alternator may be loose or broken.

If the warning light comes on while driving, stop the vehicle and turn off the engine. Inspect the belts.

Always heed all WARNINGS on page 104, chapter "Engine compartment" in this booklet and chapter *"CHECKING AND FILLING", Booklet 3.2.*

If the belt for the generator is broken or loose, you can still drive to the nearest authorized VOLKSWAGEN dealer, since the engine coolant pump is driven by a separate belt. However, since the battery will start to discharge, you should switch off all unnecessary electrical equipment.

11 –Safety belts

Your vehicle has a warning light to remind you to wear your safety belt and to make sure that others do too.

After switching on the ignition, the warning light in the instrument cluster will come on for about 6 seconds along with a warning tone. As soon as you fasten your safety belt, the warning tone will stop.

The warning light, however, will be on for the entire 6 seconds.

Fasten your safety belt now and make sure that your passengers also properly put on their safety belts.

Please be sure to read the chapter "Safety belts", *Booklet 2.1.*

12 –Electronic power control EPC

If a malfunction in the engine electronics should occur, the EPC will blink. The engine control automatically switches to a back–up program. You will notice, however, a reduction in engine power. Please contact an authorized VOLKSWAGEN dealer as soon as possible.

13 –Engine coolant temperature / level

This light comes on for a few seconds just as a functional check when you switch on the ignition.

If the light does not go off afterwards, or starts to blink while you are driving, either the coolant temperature is too high, or the coolant level is too low.

Move the vehicle a safe distance off the road, stop the engine, depress the emergency flasher switch, turn off the engine and let it cool down.

Check coolant level. Top up as necessary (see "Cooling system," chapter *"CHECKING AND FILLING", **Booklet 3.2.***).

Always heed all WARNINGS on next page.

⚠ WARNING

• The engine compartment of any motor vehicle is a potentially hazardous area. Before you check anything in the engine compartment, stop the engine and let it cool down. Always exercise extreme caution when working under the engine hood. Heed all of the WARNINGS on page 104, chapter "Engine compartment" in *this booklet* and chapter *"CHECKING AND FILLING", Booklet 3.2.*

• To reduce the risk of being burned, never open the hood if you see or hear steam or coolant escaping from the engine compartment. Wait until no steam or coolant can be seen or heard before carefully opening the hood.

• Never touch the radiator fan. It is temperature controlled and can switch on suddenly – even when the ignition is off and the key is removed.

• Reduce the risk of scalding from hot coolant by following these steps:

– If the coolant reservoir cap must be removed, wait until the engine has cooled down.

– Protect face, hands, and arms from escaping fluid and steam by covering the cap with a large, thick rag.

– Turn the cap slowly and very carefully in a counter-clockwise direction while applying light, downward pressure on the top of the cap.

⚠ WARNING continued

– To help avoid being burned, do not spill antifreeze or coolant on the exhaust system or hot engine parts. Under some conditions, the ethylene glycol in engine coolant can catch fire.

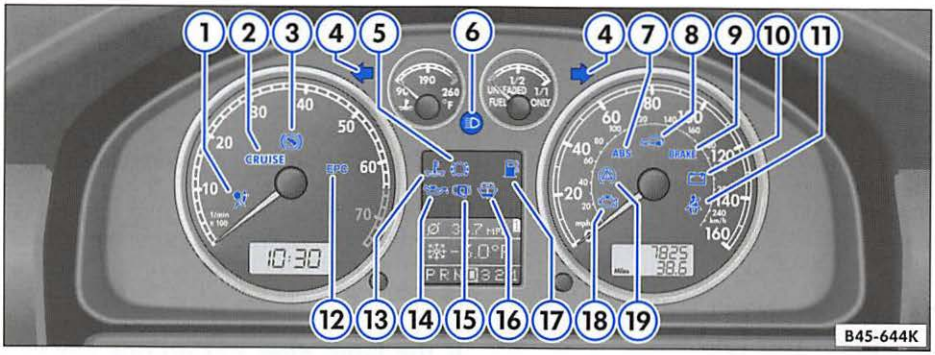
⚠ Always heed all WARNINGS on page 104, chapter "Engine compartment" in *this booklet* and chapter *"CHECKING AND FILLING", Booklet 3.2.*

• If the coolant level is normal, check the fuse for the radiator fan. Replace the fuse if necessary – see "Fuses," chapter *"WHAT DO I DO NOW", **Booklet 3.2.***

STOP If the fuse is not blown, the belt driving the water pump is not broken and the warning light still does not go out, do not continue driving because serious engine damage can occur. See your VOLKSWAGEN dealer.

• If the coolant level and the V-belt are normal, the fuse is not blown and the warning light has gone out, the malfunction may be in the radiator fan. You can continue driving to the nearest authorized VOLKSWAGEN dealer. The wind from the moving vehicle will be enough to keep the engine cool. However, avoid idling for a long time or driving very slowly.

Refer to "Coolant temperature gauge" on page 9 for details.



Notes

- **Do not install accessories (fog lights or insect screens, for example) underneath or on top of the front bumper. They may restrict engine cooling and cause engine damage.**

- **The front spoiler also serves as a duct for cooling air. If the spoiler should be damaged or even torn off (for example when driving over a curb), this could cause engine overheating. Contact your authorized VOLKSWAGEN dealer.**

14 –Engine oil pressure

When the ignition is turned on, the oil pressure warning light comes on for a few seconds for a bulb check.

If the warning light does not turn off or flashes while driving (above 1500 engine rpm) a buzzer will sound. This indicates that the oil pressure is too low. Immediately stop the engine, check the engine oil level and add oil if necessary.

If the engine oil level is normal but the light continues to flash, do not continue operating the vehicle. Engine damage may occur.

Turn off the engine and contact the nearest authorized VOLKSWAGEN dealer for assistance.

The oil pressure light is not an indicator for low engine oil level. To check the oil level, always use the dipstick – see "Engine oil", chapter *"CHECKING AND FILLING", Booklet 3.2.*

Make it a habit to have the engine oil level checked with every fuel filling.

Always heed all WARNINGS on page 104, chapter "Engine compartment" in *this booklet* and chapter *"CHECKING AND FILLING", Booklet 3.2.*

15 –Door / Rear lid open

The warning light comes on when the ignition is on and a door or the rear lid is open. Additionally a warning tone will sound and a warning text is shown in the display of the instrument cluster. This is to remind you to close the door or the rear lid.
The light should go out when the door or the rear lid is closed properly.

16 –Windshield washer fluid level too low

The warning light will come on when the windshield washer fluid level gets too low. Additionally a warning tone will sound and a text is shown in the display of the instrument cluster. This is to remind you to fill up the fluid container.

Refill the windshield washer fluid container – see "Windshield / headlight washer container," chapter *"CHECKING AND FILLING"*, ***Booklet 3.2.***

17 –Fuel level too low

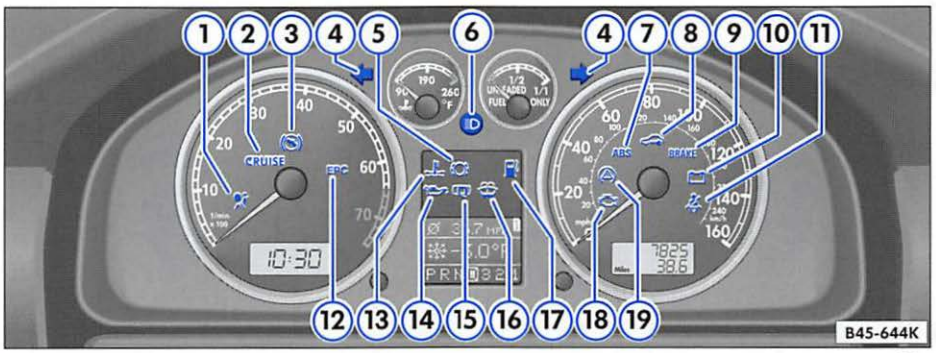
The warning light will come on when the fuel level gets too low. **Time to refuel.** Additionally a warning tone will sound and a text is shown in the display of the instrument cluster. This is to remind you to fill up the tank.

See "Fuel tank," chapter *"FILLING YOUR TANK"*, ***Booklet 3.2.***

18 –Malfunction Indicator Lamp (MIL)

The Malfunction Indicator Lamp (MIL) is part of the On Board Diagnostic system (OBD). The MIL is a required indicator to alert the driver of an emission related malfunction.
The light comes on when the ignition is switched on and will go out after the engine is started and the idle has stabilized. This is to assure you that the MIL is working properly.

If the lamp does not go out after the engine is started, or if it comes on while you're driving, there is a malfunction in the engine system.
If the lamp starts blinking, the catalytic converter could be damaged.
Continue driving **with reduced power** and have the cause corrected right away by an authorized VOLKSWAGEN dealer or a qualified workshop.



Data Link Connector (DLC) for On Board Diagnostic System (OBD)

The On Board Diagnostics in your vehicle monitors the various components of your emission control system. Each controlled component in your engine system has been coded. In case of a malfunction the respective component in question will be identified and the fault stored in the form of a code in the control module's memory.

The stored data can only be displayed with special testing equipment (generic scan tool for OBD) to assure an accurate diagnosis.

To connect the special testing equipment, push the plug into the Data Link Connector (DLC) located to the right of the release lever for engine hood.

Your authorized VOLKSWAGEN dealer or a qualified workshop can interpret the code and make the necessary correction.

19 –Anti-Slip Regulation*

The warning light comes on when the ignition is switched on and goes out again after about 2 seconds.

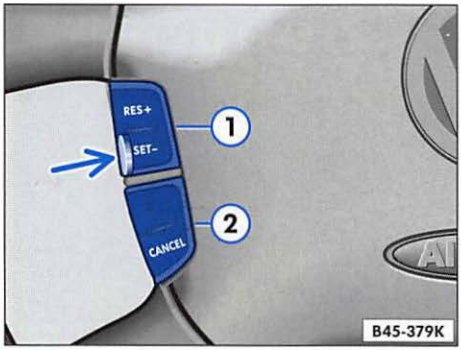
The light will start flashing when the vehicle is moving if the Anti–Slip Regulation (ASR) is activated.

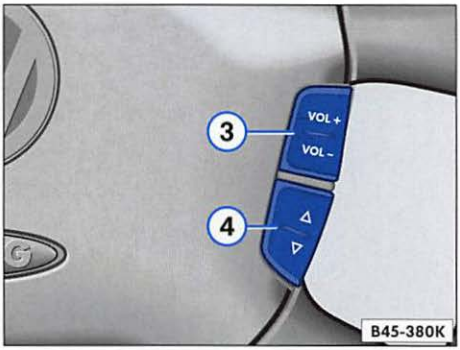
The warning light will light up continuously if the system is switched off manually, or if a malfunction should occur.

Since the ASR operates together with the Anti–lock Brake System (ABS), the ASR warning light will also come on if a fault should occur in the ABS.

See chapter *"OPTIMAL TECHNOLOGY"*, ***Booklet 3.2.*** for more information.

Multi-function steering wheel*





Cruise control system*

To switch On or Off the cruise control system completely, please refer to page 105. However vehicles with the multifunction steering wheel do not come with the button **B** on the turn signal lever.

Rocker switch 1

Lower half of the switch **SET –** :

Press once – the current speed will be stored.

Press twice – slow down.

The speed will be reduced as long as you hold the switch down. The speed at the moment you release the switch will be stored.

Upper half of the switch **RES +** :

Press once – resume stored speed.

Press twice – accelerate.

The speed will increase as long as you hold the switch down. The speed at the moment you release the switc will be stored.

Rocker switch 2

Lower half of the switch **CANCEL** :

Press once – the cruise control system* is switched off temporarily. The speed to be maintained is stored. Press **RES +** once in order to resume the stored speed.

Further notes on page 105.

Radio system*

Rocker switch 3

Press the upper half of the switch **VOL +** – to increase the volume

Press the lower lhalf of the switch **VOL –** – to decrease the volume

Rocker switch 4

△ Press upper surface:

- Station seek up (Radio)
- Fast forward (Cassette operation*)
- Track search forwards (CD operation*)

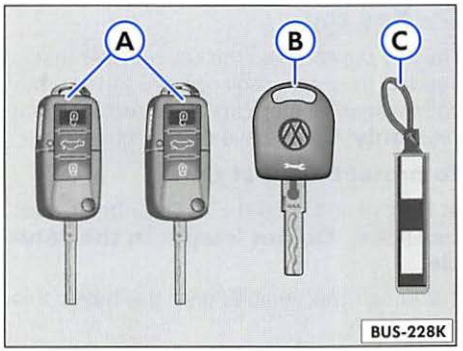
▽ Press lower surface:

- Station seek down (Radio)
- Fast rewind (Cassette operation*)
- Track search backwards (CD operation*)

Lighting

There is a button on the left hand side (see arrow) to switch the button lighting of the multi-function steering wheel on and off.

Keys



Three keys and a key tag are provided with your VOLKSWAGEN:

A – Two folding master keys with remote control

B – One valet key

C – One tag

⚠ WARNING

Do not leave your vehicle unattended with the key in the ignition lock. Entry by unauthorized persons could endanger you or harm the vehicle. Always lock all doors and take the key.

Note

If you open the driver's door with the key left in the ignition lock, **a chime** will sound. This is your reminder to remove the key and lock the door.

A – Master key with Remote Control

This key fits all locks on the vehicle. This key allows you to open/close your vehicle and to set the anti-theft alarm system.To fold the key out, press the release button.

To fold the key back into place, press the release button again.

Push the red button to activate the panic function The horn sounds and the turn signals will flash for approximately 30 seconds.

For more information see page 27.

⚠ WARNING

Do not leave children unattended in the vehicle especially with access to the remote control. The remote control could be used to lock the doors delaying access to the children in an emergency.

To replace batteries of the remote control:

Your authorized VOLKSWAGEN dealer can change the batteries for you.

B – Valet key

This key is for the driver's door and the steering / ignition lock only.

The lockable glove compartment (located underneath the passenger airbag) and the rear lid cannot be opened with this key.

You also cannot unlock the rear seat backrest with this key (Sedan only).

If you have to leave a key with somebody else, it may be advisable to give them this key only.

⚠ WARNING

- **Do not leave children unattended in the vehicle, especially with access to vehicle keys. Unsupervised use of the keys can result in starting of the engine or use of vehicle systems such as the power windows*, etc. which could result in serious injury.**
- **Do not remove key from steering lock while you are driving or as the vehicle is rolling to a stop. The steering column will lock up and you will not be able to steer the vehicle.**

C – Key tag

The key tag contains the key number that is needed to obtain replacement keys. Your Volkswagen dealer can order replacement keys **only** if they have this number.

To protect against theft:

- Record and keep the key number in a secure place. **Do not keep it in the vehicle.**

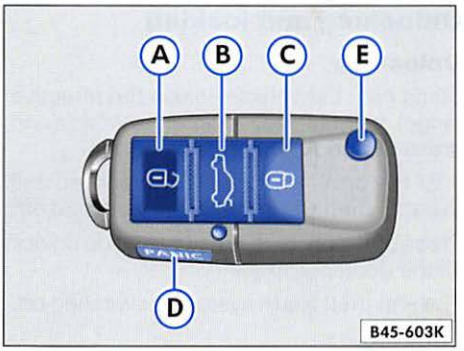
If you sell the vehicle, give the buyer this key tag.

Key replacement

For security reasons , replacement keys are only available from Volkswagen dealers.

If you need a duplicate key, provide the key number to your VOLKSWAGEN dealer.

Remote control



General description

The remote control allows you to do the following without having to use your key:

- Lock or unlock your vehicle via the power locking system (at the same time, activating or deactivating the anti–theft alarm system)
- Use the selective unlock feature (open the driver's door only)
- Switch on the interior lights
- Unlock the rear lid
- Activating the "panic function"

The remote transmitter and the batteries are located in the key. The receiver for the signal is inside the passenger compartment. Your authorized VOLKSWAGEN dealer can change the batteries for you.

The **operating range** (blue) for the remote control is shown in the illustration. Maximum range of effectiveness depends on several things. If the batteries are weak, the range will decrease.

Note

In exceptional cases, the remote control could be activated unintentionally, even if you are out of the operating range. Please use the remote control only if you attempt to use one of the functions.

⚠ WARNING

Do not leave children unattended in the vehicle especially with access to the remote control. The remote control could be used to lock the doors delaying access to the children in an emergency.

How the remote control works

Button **A** unlocks the vehicle. After unlocking the vehicle, you have 30 seconds to open a door. If you wait longer than 30 seconds, the vehicle will automatically lock itself once again. This prevents you from unintentionally unlocking the vehicle while you are standing within the range of effectiveness of the remote control.
The anti–theft alarm system is turned off for these 30 seconds. If the vehicle locks itself again, the alarm system will be reactivated.

Unfolding / folding the master key (remote control)

If you want to lock or unlock your vehicle using your key, you have to unfold your key first by pushing button **E**. To fold the key back into place, press the button again.

Unlocking and locking

Unlocking

Stand near the vehicle (inside the effective range), point the key toward the vehicle and press button **A one time:**

Just the driver's door will be unlocked and the anti–theft alarm system is switched off.

Press button **A two times** and you unlock all the doors.

The anti-theft alarm system is switched off.

Locking

To lock, press button **C.**

Switching on / off the anti–theft alarm system

The alarm system is switched on automatically whenever you lock the vehicle and all doors are closed. This will be confirmed with **one** beep and **one** flash of all turn signals as well as the indicator lights of the turn signals in the instrument cluster.

The system switches off when you unlock the vehicle. This will be confirmed with **two** flashes of all turn signals as well as the indicator lights of the turn signals in the instrument cluster.

Remote rear lid release

To unlock, stand near the vehicle (inside the effective range), point the key toward the vehicle, press and hold button **B for about three seconds.**

This will be confirmed with **two** flashes of all turn signals as well as the indicator lights of the turn signals in the instrument cluster.

PANIC switch (button D)

By pushing the red button **D** you will engage the "panic function." The horn sounds and the turn signals will flash for approximately 30 seconds.

Press button **D** again to switch off the "panic function."

Remember – the panic function can be seen and heard by other motorists and / or persons near your vehicle. Do not use it unnecessarily.

Use the panic function only if you are in an emergency situation.

Resetting the remote control

If your vehicle will not unlock using the remote control, it could be that the code for the control unit and key needs to be reset. This can occur if you frequently use the remote control while standing outside of the effective range.

If this happens, then you need to reset (synchronize) the remote control.

Resetting the key

Note

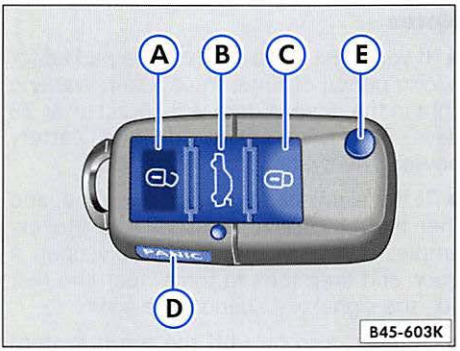
You have only 1 minute to reset the remote control.

1 - Press button **A** or button **C one time** for one second. The vehicle remains locked. The control unit recognizes only one key code via the master key.

2 - Lock or unlock the vehicle with the **master key.**

The resetting procedure is now complete.

The key code is part of the master key. When you insert the master key, a new code is created between the control unit and the key.



Manually programming the remote control

If you need an additional remote control for your vehicle, then your authorized VOLKSWAGEN dealer must program it for you.

It is possible to have a maximum of four remote controls for your vehicle.

The key must be programmed in order to fully use the remote control feature.

Contact the nearest authorized VOLKSWAGEN dealer for more information.

Programming the remote control

1 - Insert the master key into the ignition lock and switch on the ignition (don't start the engine!)

2 - Lock the vehicle from the outside manually using the second master key or valet key.

3 - Press button **A** or button **C** on the remote control **one time** and then **wait at least 2 seconds**.

4 - Press either button once again **one time**.

5 - Turn off the ignition and remove the key from the ignition lock.

The manual programming procedure is complete. The remote control is functional again.

Notes

- **You have only 30 seconds to perform steps 2 through 4.**
- Each new key must also be programmed as described here.

Anti-theft alarm system

The anti-theft alarm system makes it difficult for someone to break into your vehicle. The system triggers an audible alarm and switches on the emergency flasher if it senses unauthorized interference with the vehicle.

You can turn on the system using either your key or the remote control.

When you lock the vehicle, you turn on the alarm system automatically. Simply turn the key to the lock position or use the remote control.

The alarm sounds when (on a locked vehicle)

- a door,
- the engine hood, or
- the rear lid is forced open,
- or when the ignition is switched on.

The horn will sound and the emergency flashers will blink for about 30 seconds.

Notes

- If you must leave your vehicle parked for a long period of time, the system warning light in the driver's door will go out after 28 days. This is meant to conserve battery power. The system is still operating.
- If the alarm has sounded one time, and then the vehicle is forced open again (for example, someone tries to forcibly open a door, and then tries to force open the rear lid), the signal will sound once again.
- You can turn on / off the alarm system using your remote control. For more details, see "Remote Control" on page 27.

Doors, Power locks

The power locking system simultaneously locks or unlocks the doors.

- To lock and unlock the vehicle from the **outside**, turn the key in the lock of the driver's door.
- To lock and unlock the vehicle from the **inside**, press the power locking switch in the front doors. See page 33.
- You can also lock and unlock the vehicle using the **remote control.** See page 27.
- The anti-theft alarm system switches on or off whenever you lock or unlock the vehicle with the key or remote control.

Unlocking with key

1 - Insert the key into the lock of driver's door.

2 - Turn the key **one time only**:
Just the driver's door is unlocked (selective unlock feature).
The anti–theft alarm system is turned off and the interior lights will come on for about 20 seconds (see page 49).

3 - Turn the key **two times:**
All the vehicle doors are unlocked and the anti–theft alarm system is turned **off** immediately.

If your power locking system should not work, you can still open your vehicle manually using the key. The locks themselves are still functional.

To open all windows (vehicles equipped with power windows):

1 - Insert the key into the lock in the driver's door.

2 - Turn clockwise and hold the key in the open position.

Locking with key

1 - Insert the key into the lock in the driver's door.

2 - Turn the key clockwise **once**.

When you lock the vehicle:

- all doors are locked, (locking knobs lower),
- the anti–theft alarm system is **immediately** activated,
- the vehicle interior lights turn off, and
- the anti–theft alarm system* readiness light near the driver's door locking knob will start to blink.

⚠ WARNING

When you lock your vehicle from the outside, nobody – especially children – should remain inside the vehicle. Remember, when you lock the vehicle from the outside the windows cannot be opened from the inside (in vehicles with power windows) – see page 37.

For more details see next page.

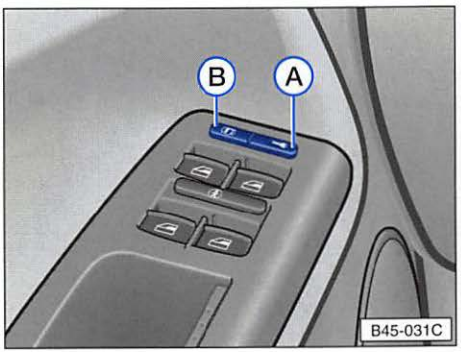
If your vehicle is equipped with power windows and / or a power sunroof*, you can also close any open windows and / or the sunroof when you lock your vehicle. Insert the key into the driver's lock, turn it to the lock position and hold until the windows and sunroof are completely closed.

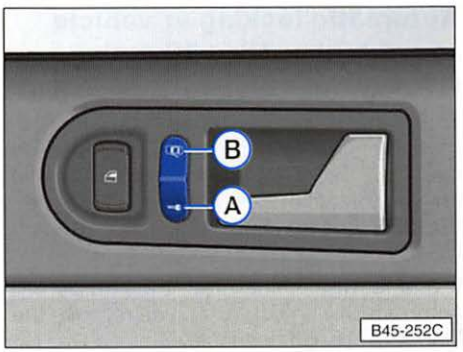
By **depressing the locking knobs** in the doors, you can also lock the vehicle, however the anti-theft alarm system will not be turned on.

If the driver's door is open, or not closed properly, you will not be able to lock the vehicle.

Notes

If you have locked your vehicle you can still unlock each door from the inside individually: On the front doors, pull the handle once; on the rear doors, pull the handle twice.





Power locking switch

The entire vehicle can be locked / unlocked from the inside by using the power locking switch in the driver's or in the front passenger's door.

The switches also work when the ignition is off.

- To **lock all doors** simultaneously, press part **A** of power locking switch (the left illustration shows the switch in the driver's door on vehicles with power windows and the right illustration shows the passenger's door).

If the driver's door is open, it will not lock. This prevents you from locking yourself out of your vehicle.

If you use the power locking switch, the anti–theft alarm system is **not** activated.

- To **unlock all doors** at the same time, press part **B** of the switch.

Note

If you have locked your vehicle you can still unlock each door from the inside individually: On the front doors, pull the handle once; on the rear doors, pull the handle twice.

⚠ WARNING

- **If you use the power locking switch, remember that all the vehicle doors will lock.**

Locking doors from the inside can help prevent inadvertent door opening during an accident and can also prevent unwanted entry from the outside. Locked doors can, however, delay assistance to vehicle occupants and rescue from the outside in an accident or other emergency.

- **Do not leave children inside the vehicle unsupervised. If the locking knobs of all doors are depressed, the vehicle will be locked. In an emergency it would be impossible to open the doors from the outside without the key.**

Automatic locking at vehicle speed higher than 10 mph (15 km/h)

The power locking system can be programmed by your authorized VOLKSWAGEN dealer so that all the doors and the rear lid on your vehicle lock automatically when the vehicle is moving faster than 10 mph (15 km / h).

If this feature is activated, the vehicle will automatically unlock when you remove the key from the ignition lock.

⚠ WARNING

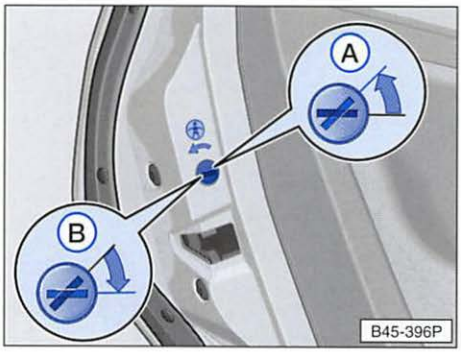
Do not remove key from steering lock while you are driving or as the vehicle is rolling to a stop. The steering column will lock up, and you will not be able to steer the vehicle.

Of course you can always open the vehicle using the power locking switch or by pulling the front door handle once and the rear door handle twice.

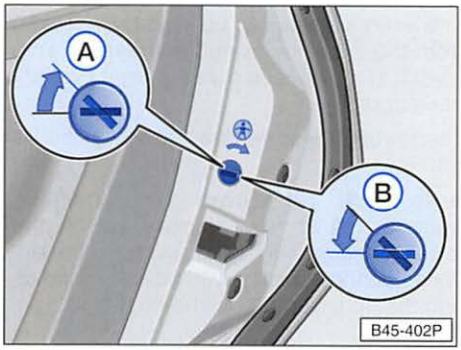
Contact the nearest authorized VOLKSWAGEN dealer for more information.

Child safety lock, Rear doors

To prevent children in the back seat from accidentally opening the rear doors, a safety mechanism is provided on each rear door.



Driver' s side rear door



Passenger' s side rear door

Using the child safety lock

Using a key from your vehicle, move the slot of the lock in the direction of the arrow – refer to **A**. The inside door opening handle is blocked and door can only be opened from the outside. Make sure the door locking knob is in the up position.

Deactivating the child safety lock

Again, using a key or other suitable object, move the slot of the lock in the opposite way – refer to **B**. You can now open the door from the inside. Remember that the locking knob must be in the up position.

Trunk / Rear lid

The lock is located above the licence plate holder – see arrow.

Lock positions:

Position A:

The rear lid can be unlocked by:

- using the remote control, see page 28
- using the switch on the driver's door panel, see page 44. The switch also works with the ignition switched off.

Position B:

If a fault should appear in the locking system, or if the vehicle's battery is discharged, it is still possible to open the rear lid manually using your vehicle key:

Turn key to the left all the way (counterclockwise). The rear lid will pop open.

Locking the switch on the driver's door panel for the rear lid release

It is possible to turn off the switch by inserting the master key into the lock and turning it clockwise. You can turn on the switch again by turning the key counterclockwise.

⚠ WARNING

• After closing the rear lid, always pull up on it to make sure that it is properly closed. Otherwise it could open suddenly when the vehicle is moving, even though the key has been turned to the locked position.

• To help prevent poisonous exhaust gas from being drawn into the vehicle, always keep the rear lid closed while driving. Never transport objects larger than those fitting completely into the luggage area, because the rear lid cannot be fully closed.

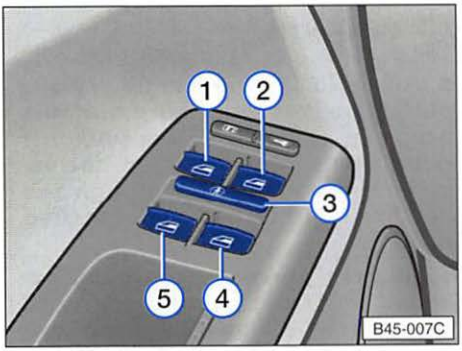
• Never leave your vehicle unattended especially with the rear lid left open. A child could crawl into the vehicle through the luggage compartment and pull the lid shut becoming trapped and unable to get out. To reduce the risk of personal injury, never let children play in or around your vehicle. Always keep the rear lid, as well the vehicle doors, closed when not in use.

For further information see "Luggage compartment" on page 71.

Note

A warning light illuminates when the ignition is on and the rear lid is open, see page 22. Additionally a warning tone will sound and a warning text is displayed on the instrument cluster. This is a reminder to close the trunk/rear lid. The light turns off when the trunk/rear lid is closed properly.

Power windows*



The switches are located in the driver's door. Also, the front passenger's door and each rear door has its own power window switch.

Following switches are located in the driver's door (see illustration):

1 – Driver's door

2 – Front passenger's door

3 – Safety switch

4 – Right rear door

5 – Left rear door.

The switches **1** and **2** in the armrest on the driver's door are **"dual function"** switches.

If the respective switch is pushed or pulled to the **first detent**, the front window will open or close only as long as you push / pull the switch.

If the respective switch is pushed up or down **all the way** briefly, the window will open or close **automatically (one-touch up feature, one-touch down feature).**

All windows are equipped with **pinch protection**.

This means that if something should block the window while it is closing, it will stop automatically and then immediately open again.

Please note that when closing the windows from the outside, using the key, the function of the "Pinch protection" is switched off. The window will close regardless of any obstacles.

⚠ WARNING

Be careful when closing the windows. Check to see that no one is in the way, or serious injury could result.

The safety switch (**3**) in the armrest on the driver's door can turn off the rear power windows. This feature has been provided for the safety of small children riding in the rear of the vehicle.

Safety switch in **"unlatched (up) position":**

...the switches in the rear doors are on and the power windows work.

Safety switch in **"latched (depressed) position":**

...the switches in the rear doors are switched off, the rear power windows cannot be raised or lowered with the rear switches.

⚠ Always heed all WARNINGS on next page.

⚠ WARNING

- **Do not leave children unattended in the vehicle, especially with access to vehicle keys. Unsupervised use of the keys can result in starting of the engine and use of vehicle systems such as power windows, power sunroof, etc. which could result in serious injury.**
- **Remember also that the power windows will continue to operate until the ignition key has been removed and one of the front doors has been opened.**
- **Be careful when closing the windows. Check to see that no one is in the way, or serious injury could result!**
- **Switch off the power to the rear windows – if necessary – using the safety switch 3 (see illustration on page 36).**
- **Always remove the ignition key whenever you leave your vehicle.**
- **If you lock your vehicle from the outside, no one especially children should remain in the vehicle. The windows will not open in case of an emergency.**
- **Do not stick anything on the windows or the windshield that may interfere with the driver's vision.**

Using power windows, ignition ON

Opening

Switches in the armrest on the driver's door

– Front windows

– Press switch on upper edge down to **first detent**. The window will open as long as the switch is pressed down.
Press switch down **all the way** briefly. The window will open automatically (**one-touch down feature**). If you press the switch while the window is opening, the window will stop where it is.

– Rear windows

– Press switch on upper edge down. The window will open as long as the switch is pressed down.

Switch in the passenger's door

– Press lower edge of rocker switch. The window will open as long as the switch is pressed.

Switches in the rear doors

– Press lower edge of rocker switch. The respective window will open as long as the switch is pressed.

Closing

⚠ WARNING

- **Be careful when closing the windows.**
- **Check to see that no one is in the way, or serious injury could result.**

Switches in the driver's door

- Front windows :

– Pull switch on upper edge up to **first detent.** The window will close as long as you pull the switch.
Pull switch on upper edge up **all the way** briefly, (**one-touch up feature**). The window will close automatically. If you press the switch while the window is opening, the window will stop where it is.

- Rear windows:

– Pull switch on upper edge. The window will close as long as you pull the switch.

Switch in the passenger door

– Push switch on upper edge. The window will close as long as you push the switch.

Switches in the rear doors

– Push switch on upper edge. The window will close as long as you push the switch.

"Pinch Protection"

1 - If something interferes with a power window while it is closing, it will stop and then immediately open again.

2 - After the window has opened, you have to lift the switch within 10 seconds to try to close it again. The window will now move upwards with greater force. If the window is still prevented from closing, it will stay open.

3 - If the window stays open, you have to lift the switch again within 5 seconds in order to close the window. **The pinch protection is now switched off. The window will now close with maximum force.**

Note

If you wait longer than 10 respectively 5 seconds between the steps described above, the window will open completely when you press the switch again.

⚠ WARNING

- **Be careful when closing the windows while overriding the pinch protection!**
- **Check to see that no one is in the way, or serious injury could result.**

Using power windows, ignition OFF

You can still use the power windows for about 10 minutes after the ignition is switched off even if the ignition key has been removed as long as the driver's door or passenger's door are not opened.

The automatic closing feature (one–touch–up) does not work once the ignition has been switched off. The window can only be closed as long as the switch is activated.

If the driver's or the front passenger's windows are hard to close because of stiffness or are obstructed by an object when closing (pinch protection) the window will open immediately.

In this case the window can be closed again only when the ignition is switched on.

The windows can also be closed or opened from the outside. To do this, the key must be held in the close or open position in the lock on the driver's door.

The window closes without pinch protection.

Notes

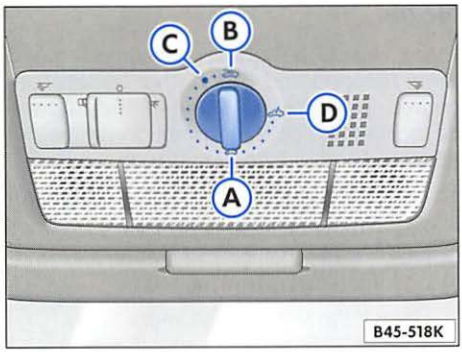
If the vehicle battery is disconnected and then reconnected, or, if the battery becomes completely discharged, the automatic closing and opening function will be deactivated and will no longer work.

To reactivate this feature, do the following:

- Lock the vehicle via the driver's door. Make sure that all the doors and windows are completely closed.
- Unlock the vehicle one more time.
- Turn the key to the lock position a second time and hold the key in the lock position for at least 1 second.

Automatic closing / opening is now reactivated.

Power roof*



The power roof is opened and closed with the ignition on by turning the rotary switch.

You can still open or close the roof for approximately 10 minutes after switching off the ignition – even if the key has been removed – as long as the driver's door or front passenger's door hasn't been opened.

Always close the roof completely if you are going to park your vehicle and leave.

⚠ WARNING

• Be careful when closing the sunroof/tilt roof. Not paying attention could cause you or others to be caught and injured as the roof closes. To help avoid injuries caused by closing the roof, always take your key whenever you leave your vehicle.

Opening

Turn the rotary switch clockwise until to the desired position. In position **C**, the roof opens to the "**Comfort**" position.

If you want to open the roof all the way, turn the switch until it reaches position **B.** However, wind noise may occur at this position.

Closing:

Turn the switch to position **A.**

The power roof also has the "**pinch protection feature**". If something interferes with a power roof while it is closing, it will stop and then immediately open again.

To re-close the power roof **push** and **hold** the switch until the roof completely closes. **The pinch protection is now switched off. The power roof will now close with maximum force.**

⚠ WARNING

• Be careful when closing the power roof while overriding the pinch protection!

• Check to see that no one is in the way, or serious injury could result.

Note

If the battery has been disconnected and then reconnected again, the power roof may not close properly. Press the switch at the front edge for longer than 10 seconds.

Roof, Raising

Turn the switch to position **D**.

Closing

Turn the switch to position **A.**
The power roof closes, however **the pinch protection is off**.

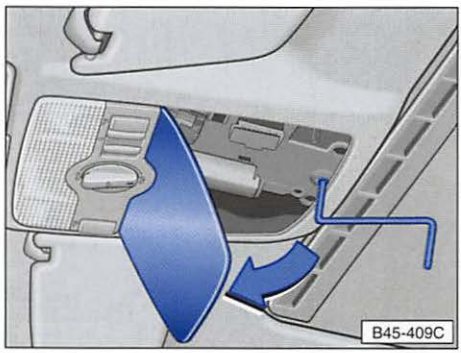
Notes

- The rotary switch can be set to any intermediate position.
- When the glass roof opens, the sun visor used to keep out strong sunlight is also opened automatically. If desired, the visor can be slid shut manually when the power roof is closed.

Convenience closing

You can also close the sunroof from the outside when locking your vehicle:

Hold the key in the close position in the driver's door.



Emergency closing

If you cannot close the roof with the electric switch, you can still close the roof manually.

- Remove the plastic cover from the rear side (arrow) using a screwdriver.
- Remove the crank from the holder, insert it into the hole until it seats (overcoming the spring force) and turn the crank to close the roof.
- Put the crank back in the holder and reinstall the cover.

Note

If you are unable to close the roof manually, contact your authorized VOLKSWAGEN dealer for assistance.

Switches

⚠ WARNING

Accidents can happen when you cannot see the road ahead and when you cannot be seen by other motorists.

- **Never use daytime running lights to see where you're going. They are not bright enough and won't let you see for enough ahead for safety, especially at dusk or when it's dark.**
- **Rear tail lights do not light up when daytime running lights are on. A vehicle without rear tail lights turned on cannot be seen by others in bad weather at dusk or when its dark.**
- **Always turn on the headlights so that you can see ahead and so that others can see your vehicle from the back.**

1 – Lights

⊡ – Daytime running lights

When the ignition is switched on and the hand brake is not pulled up, the headlights (low beam with reduced brightness) will automatically come on. No other lights on the outside of your vehicle will be on and the instrument lights will also be off.

≡D – Low and high beam

The headlights work only when the ignition is switched on.
Information on high beam, low beam and headlight flasher, see page 45.

If the headlight switch is left on and the ignition key is removed a chime will sound when the driver's door is opened. This is your reminder to switch off the lights before leaving the vehicle.

Front fog lights*

With the light switch turned to the low / high beam position, pull the switch out to the detent point.

The indicator light next to the fog light symbol comes on.

2 – Instrument illumination

With the lights switched on, turn the thumb wheel to adjust the brightness of the instruments.

3 – Rear window defogger

The rear window defogger works only with the ignition on.

Press the switch to turn on the rear window defogger.

The control light in the switch will light up to remind you that the defogger is switched on.

Switch off the defogger when the rear window is clear. When you save electricity, you use less fuel. See "Operate you vehicle economically and minimize pollution," chapter "DRIVING AND PROTECTING OUR ENVIRONMENT" Booklet 3.2.

Note

The rear window defogger switches itself off automatically after 10 minutes. The control light in the switch will also go out.

The rear window defogger is not designed to melt snow. Therefore, always remove heavy snow and ice accumulations before driving off.

4 – Emergency flasher

The emergency flasher works when the ignition is off or on.

If your vehicle is disabled or parked under emergency conditions, depress the switch to make all turn signals flash at the same time. The warning light in the switch and the indicator lights in the instrument cluster flash too.

WARNING

To avoid being struck by another vehicle, move your vehicle a safe distance off the road when stalled or stopped for repairs. Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other material that can cause fire.

5 – Electrically heated driver seat,

With the ignition on, the seat cushion and backrest of the driver's seat can be heated.

The heating elements in the seats can be turned on and regulated with the thumbwheel switch.

To switch off the seat heating, turn the thumbwheel switch to the detent position.

6 – Electrically heated passenger seat

With the ignition on, the seat cushion and backrest of the passenger's seat can be heated.

The heating elements in the seats can be turned on and regulated with the thumb wheel switch.

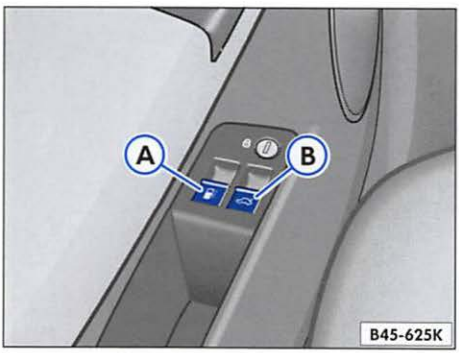
To switch off the seat heating, turn the thumbwheel switch to the detent position.

7 – Anti-Slip Regulation (ASR)* with Electronic Differential Lock (EDL)

The **ASR** with **EDL** is switched on automatically when the engine is started. If required, it can also be switched on and off manually by briefly pressing the switch.

When the system is switched off, the warning light comes on. See page 23.

See "Electronic Differential Lock (EDL)," and "Anti-Slip Regulation (ASR)" chapter *"OPTIMAL TECHNOLOGY"*, ***Booklet 3.2.)*** for further details.



Switches in the driver's door panel

A – Fuel filler flap release

Pull up the switch to unlock the fuel filler flap. The switch works also with the ignition off.

B – Rear lid release

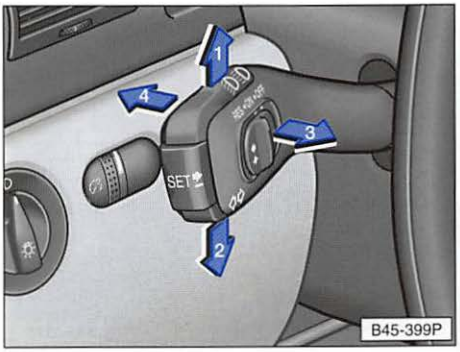
Pull up the switch to unlock the rear lid. The switch works also with the ignition off.

A warning light comes on when the ignition is on and the rear lid is open. Additionally a warning tone will sound and a warning text is shown in the display of the instrument cluster. This is to remind you to close the rear lid. The light should go out when the rear lid is closed properly.

Locking the switch for the rear lid release

It is possible to turn off the switch by inserting the master key into the lock and turning it clockwise. You can turn on the switch again by turning the key counterclockwise.

Turn signals / High beam lever



Turn signals

The turn signal indicator light flashes when you operate the lever (ignition on).

Lever up (**1**) – right turn signal

Lever down (**2**) – left turn signal.

The turn signals are cancelled automatically when you have completed a turn (for example, when turning a corner), and the steering wheel returns to the straight ahead position.

If a turn signal fails, the indicator light flashes about twice as fast as usual. A light bulb may have to be replaced.

Lane changer

Move the lever up (**1**) or down (**2**) just to the point of resistance – the indicator light must also flash at the same time. The lever will return to its normal position when released.

High beam On/Off

The headlights work only when the ignition is switched on.

Switching on:

With the headlights on, push the lever forward (**4**).
The blue indicator light in the instrument cluster will come on.

The headlights still stay on when you switch on the high beam.

Switching off:

Pull the lever (**3**) towards you.

Headlight flasher

You can signal with your high beams by pulling the lever toward the steering wheel (position **3**).
When flashing the high beams, the blue indicator light in the instrument cluster will come on.

Wiper and washer system

The wiper and washer system works only when the ignition is on.

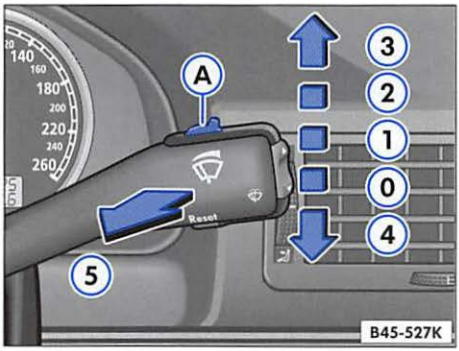
The **heated* washer jets** do not have a separate switch. Depending on the outside temperature, the heated washer jets will operate when the ignition is on.

To prevent damage to the wiping system, always loosen blades frozen to glass before operating wipers.

Notes

- Filling washer container, see "Windshield washer container", chapter *"CHECKING AND FILLING"*, ***Booklet 3.2.*** for further details.
- Replacing wiper blades, see next page.

> **⚠ WARNING**
>
> **Always heed WARNINGS on page 47.**



- **Wiper off:**

Lever in position **0**

- **Intermittent wiping:**

Lever in position **1**

You can adjust to wiping intervals to four different settings using the small lever **A.**

Turn the small lever **A**
to the right – shorter intervals

Turn the small lever **A**
to the left – longer intervals

In each setting, the intervals are also controlled by the speed of the vehicle.

- **Low wiper speed:**

Lever in position **2**

- **High wiper speed:**

Lever in position **3**

- **One-tap wiping:**

Lever in position **4**

- **Automatic wiper / washer**

Pull lever toward steering wheel and hold – wipers and washer work (position **5**).

Release lever – washer stops and the wipers keep going for about four seconds.

Rain sensor*

The rain sensor is part of the intermittent wiping function. When you have the intermittent wiping function switched on, the rain sensor automatically either shortens or lengthens the pause between wipes depending on how hard it's raining.

Use **switch A** on the wiper lever to adjust the sensitivity level of the rain sensor.

Intermittent wiping and rain sensor functions are deactivated when the ignition is turned off, and reactivated when the intermittent wiping switch is turned on again.

⚠ WARNING

- **Worn or dirty wiper blades will reduce visibility, making driving hazardous. Clean blades regularly to remove road film and car wash wax buildup. Use an alcohol base cleaning solution, a lint free cloth and wipe along the blade.**
- **Clean all inside and outside window glass regularly. Use an alcohol base cleaning solution and wipe dry with a lint free or a chamois.**
- **Do not use the wiper/washer in freezing weather without first warming the windshield with the defrosters. The washer solution may freeze on the windshield and reduce visibility.**
- **To prevent scratching the glass, avoid running the wiper blades over a dry windshield. A scratched windshield will reduce visibility and increase glare at night.**

Wiper blades

Wiper blades must be in good condition so that you can see clearly through the windshield.

Clean your wiper blades regularly with a windshield washer solution to prevent streaking. If the blades are very dirty, for example with insects, carefully clean the blades with a sponge or a soft brush.

If the wiper blades begin to streak the windshield, this could be caused by residue left on the windshield by automatic car washes.

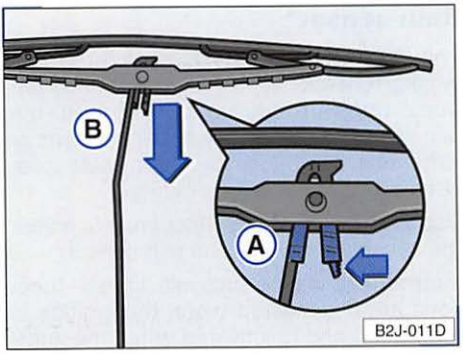
Fill the windshield washer container with a special solution available at your VOLKSWAGEN dealer to remove the residue.

To prevent damage to the wiping system, always loosen blades frozen to glass before operating wipers.

Be sure to inspect the condition of your wiper blades regularly. For safety reasons, replace your wiper blades once or twice a year if necessary. See your VOLKSWAGEN dealer for replacement blades.

Notes

- **Commercial hot waxes applied by automatic car washes affect the cleanability of the windshield.**
- **To prevent damage to wiper blades, do not use gasoline, kerosene, paint thinner, or other solvents on or near the wiper blades.**
- **To prevent damage to the wiper arms or other components, do not attempt to move the wipers by hand.**



Replacing windshield wiper blades

- Fold the wiper arm away from the windshield and pivot the wiper blade mount away from the wiper arm.
- Remove the wiper blade from the mount by pulling it in the direction of the arrow.

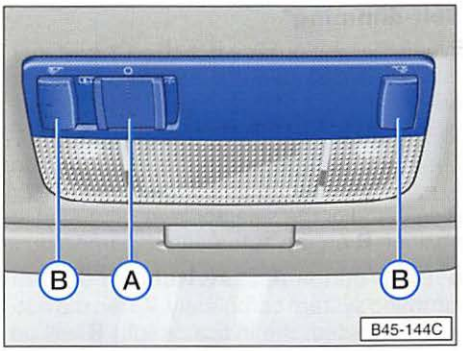
Installing new windshield wiper blades

- Install the new wiper blade by pushing in the opposite direction of the arrow.
- Pivot the wiper blade mount back and lower the wiper arm back on to the windshield.

Note

Always install the longer wiper blade to the driver side.

Interior lights



A – Front interior light

Switch positions:

- Off **O**
- To right – a light illuminates when a door opens
- To left – light stays on

Lights with delayed turn–off will stay on for approximately 30 seconds after you've closed the doors.

B – Front map light

- Press switch **B** to turn light on or off.

Glove compartment light

The light in the glove compartment only illuminates when the glove box is open.

That's why it's always important to make sure the glove compartment is **always properly closed**, otherwise you could drain the battery.

Luggage compartment light

The light illuminates when you open the trunk/rear lid, even when the ignition is off. Ensure that the trunk/rear lid is **always properly closed**, otherwise you could drain the battery.

Rear interior light

Switch positions:

- Off **O**
- Center position – light illuminates when a door opens
- The light stays on

Interior light control

The interior light illuminates...

- whenever you unlock the vehicle, or
- open a door, or
- remove the ignition key

as long as the switch on either of the interior lights is in position

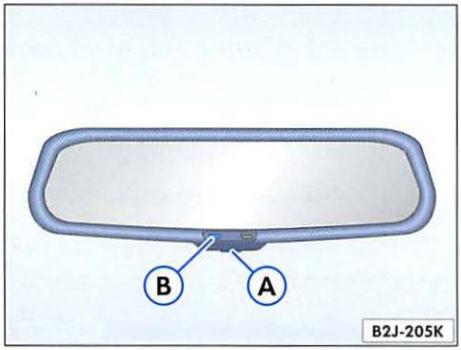
The light goes off as soon as you lock the vehicle or switch on the ignition.

The light will stay on for about 10 minutes if you leave a door open.

Front door panel light

The light in the front door panel comes on only whenever the doors are open.

Mirrors



Adjust the outside and inside mirrors before driving and after adjusting your seat to the proper driving position. It's important for safe driving that you have good vision to the rear.

Inside day–night mirror

Manual adjustment

You can adjust the day–night mirror from clear daylight visibility to non–glare visibility at night by moving the lever at the bottom of the mirror.

To ensure the best possible anti–glare effect, the lever on the lower edge of the mirror should be pointing forwards before the basic setting is made.

Daylight driving – lever to front

Night driving – lever to rear.

Self-dimming*

When the ignition is switched on the interior mirror will darken automatically depending on the amount of light shining into the vehicle from the rear (e. g. headlights).

The mirror will return to the original state (i. e. not anti-dazzle) when the reverse gear is selected or the selector lever is moved to position **R** on the automatic transmission.

- Press button **A** to **switch off** the self dimming system completely. When the button is pressed, the indicator light **B** will go out.
- Press the button again to switch the system on. The indicator light **B** comes on.

Outside mirrors

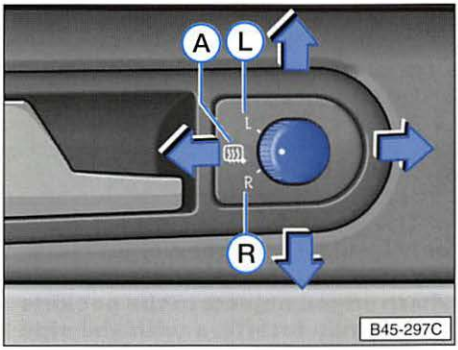
The outside mirrors are hinged and yield when pushed from either direction.

Adjust the outside mirrors so that you can barely see the side of your own vehicle. This setting ensures the best possible field of view and enables you check the mirror setting at a glance.

⚠ WARNING

- The right hand outside mirror has a convex (curved) surface. Remember that vehicles or other objects seen in a convex mirror will appear smaller and farther away than when seen in a flat mirror. If you use this mirror to estimate distances of following vehicles when changing lanes, you could estimate incorrectly and cause an accident.

- Whenever possible, use the inside mirror to determine the actual distance and size of vehicles or other objects seen in the convex mirror.



Power outside mirrors

You can change the setting of both outside mirrors using the "joystick."

L – Outside mirror on the driver's side

R – Outside mirror on the passenger's side

A – Mirror heating

The mirror surface will move in the same direction as you move the joystick.

If the electrical adjustment of the mirror doesn't respond, adjust the mirror by hand by pushing lightly on the edge of the mirror glass.

If you move the joystick to position **A**, the mirrors will be electrically heated.

Synchronized mirror adjustment

- If you adjust the driver's outside mirror (**L**) using the "joystick", the passenger's mirror will automatically adjust at the same time. Separate adjustment of the passenger's mirror is not necessarily required. If this should be necessary, just move the joystick to position (**R**) to switch over to the passenger's mirror – the mirror can now be adjusted.
- If the electrical adjustment of the mirror doesn't respond, adjust the mirror by hand by pushing lightly on the edge of the mirror glass.

Memory for outside mirrors*

Vehicles equipped with **memory driver's seat*** also have a "memory" for the outside mirrors.

The position of the outside mirrors will automatically be "memorized" whenever a driver's seat position is memorized – see page 62.

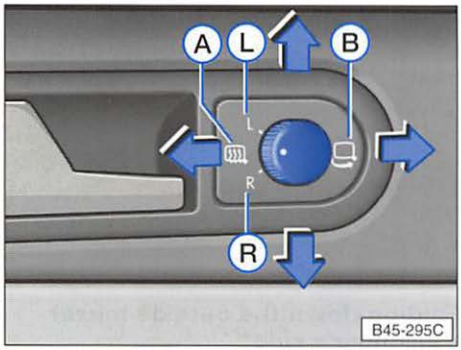
First adjust the driver's seat position. Then adjust the outside mirrors.

Folding down the outside mirror passenger's side*

When you move the gearshift or selector lever of your automatic transmission into "**R**" (Reverse), the outside mirror on the passenger's side will tilt slightly downwards provided that you have moved the "joystick" into position **R,** see illustration.

This makes it possible to see the edge of the curb when parking your vehicle. The mirror will return to its original position as soon as you move the gearshift or selector lever of your automatic transmission out of "**R**" (Reverse) or if you move the "joystick" of the outside mirrors out of position **R**.

You can adjust the position of the right outside mirror according to individual needs – see page KEIN MERKER.



Folding outside mirrors

Towards the vehicle

It is possible to fold the outside mirror all the way against the vehicle. Pull the mirror housing towards the vehicle.

For example, before going through an automatic car wash, pull the mirror housing backwards against the vehicle.

⚠ WARNING

When folding a mirror backwards, make sure you do not get your fingers caught between the mirror and the mirror base.

Mirrors with power "fold flat" function*

You can also use the joystick to "fold flat" the power mirrors.

In addition to the other power mirror features, you can:

B – "fold flat"* both outside mirrors

If you want to "unfold" both outside mirrors again, simply move the "joystick" to any other position than **B.**

Note

If the mirror is moved out of place (for example if the mirror hits something while parking your vehicle) you must fold the mirror flat **using the power feature**. Do not readjust the mirror by hand.

Coat hooks / Assist handles

The coat hooks are integrated into the rear assist handles and are located above the doors for the rear passengers. They are intended for your convenience.

⚠ WARNING

- **The built-in coat hooks must only be used for light weight clothing. Do not leave any heavy or sharp edged objects in the pockets which may interfere with the side airbag deployment and can cause personal injury in an accident. Always heed all WARNINGS in chapter *"AIRBAG SYSTEM" Booklet 2.1.***
- **Do not hang heavy objects on the coat hooks, as they could cause personal injury in a sudden stop.**
- **Hang clothes in such a way that they do not impair the driver's vision.**

Sun visors

You can lift the visors out of the center mounting and move them toward the door windows to protect against side glare.

In certain models there is a little sun visor under the interior light. You can fold it down.

Vanity mirrors may have a sliding cover*.

On the illuminated* mirrors, the mirror lights can be turned on and off with the sliding cover. The lighting is also automatically switched off or on when you raise or lower the sun visor.

HomeLink® Universal Transmitter*

The HomeLink® Universal Transmitter is located on the driver's side sun visor.

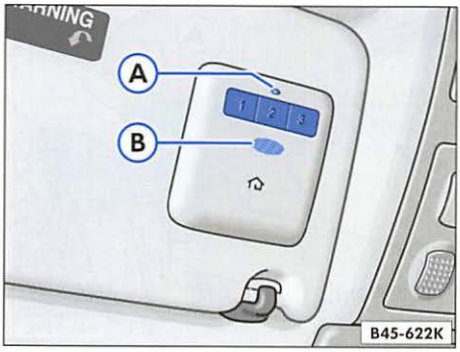
This innovative feature will learn the radio frequency codes of most current transmitters used to activate garage doors, entry door locks, estate gates, security systems, and home or office lighting.

The HomeLink® Universal Transmitter is capable of operating up to three separately controlled devices.

The HomeLink® operates off the vehicles battery and charging system and has non-volatile memory. If the battery dies or is disconnected, HomeLink® will retain all programming.

⚠ WARNING

When programming the HomeLink® Universal Transmitter, you may be operating a garage door or estate gate. Make sure that people and objects are out of the way to prevent potential harm or damage.



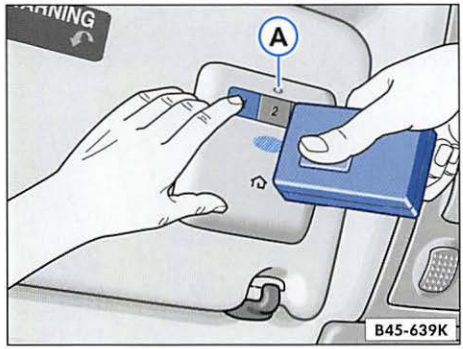
1 - Channel 1
2 - Channel 2
3 - Channel 3
A – Indicator Light
B – Optimal placement of hand-held transmitter during training.

Note

Do not use this HomeLink® Universal Transmitter with any garage door opener that lacks the safety stop and reverse feature as required by federal safety standards. This includes any garage door opener model manufactured before April 1, 1982.

A garage door opener which cannot detect an object, signaling the door to stop and reverse does not meet current federal safety standards. Using a garage door opener without these features increases risk of serious injury or death.

For more information, call toll-free: 1 (800) 355-3515.



Initial Programming of the HomeLink® Universal Transmitter

1 - Turn the ignition switch on.

2 - Simultaneously press and hold channels 1 and 3 – releasing only when the indicator light (**A**) begins to flash after 20 seconds.

3 - Hold the end of the hand-held transmitter of the device you wish to train approximately 2 inches away from the surface of the HomeLink® channels – keeping the indicator light in view.

4 - Using both hands, simultaneously push the hand-held transmitter button and one of the HomeLink® channels. Do not release until step 5 has been completed.

5 - The HomeLink® indicator light will flash first slowly, and then rapidly. When the indicator light flashes rapidly, both the button and channel may be released.

If you wish, repeat procedures 3 through 5 to program the remaining channels.

If a garage door opener has been programmed but does not activate with HomeLink®, proceed to the following section: "Training a Garage Door Equipped with Rolling Code".

Training a Garage Door Equipped with Rolling Code

To train your rolling code garage door opener to operate from your HomeLink® Universal Transmitter, follow these steps **after completing the "Programming"** portion of this text (the aid of a second person may make the training quicker and easier):

1 - Locate and **press and release** the training (or "learning") button on the garage door opener motor head unit. (Exact location and color of the button may vary by garage door opener brand.) If there is difficulty locating the training button, reference the garage door opener owner's manual or call toll free: 1-800-355-3515.

2 - Return to the vehicle and press and release the programmed HomeLink® channel. Press and release the HomeLink® channel a second time to complete the programming process. (Some garage door openers may require you to do this procedure a third time.)

The garage door opener should now recognize the HomeLink® Universal Transmitter. You may use either the hand-held transmitter or the HomeLink® Universal Transmitter to activate the garage door.

Operating the HomeLink® Universal Transmitter

1 - Turn the ignition switch on.

2 - Select and firmly press and release the appropriate channel (**1**, **2**, or **3**) to activate the trained device (e.g. garage door, estate gate, home security system, entry door lock, or home or office lighting).

Erasing the HomeLink® Universal Transmitter's Programming

1 - Turn the ignition switch on.

2 - Simultaneously press and hold channels **1** and **3** until the indicator light begins to flash after 20 seconds.

3 - Release both buttons.

This process will erase the trained codes of the three channels or erase the factory set default codes.

The HomeLink® Universal Transmitter is now in the train (or programming) mode and can be programmed at any time following steps 3 through 5 in the "Programming" portion of this text.

Reprogramming a Single HomeLink® Universal Transmitter Channel

If a HomeLink® channel has been programmed to activate a device, and it has been decided to program another device using the same HomeLink® channel, follow these steps:

1 - Press and hold the desired HomeLink® button for approximately 20 seconds. Do **not** release until step 3 has been completed.

2 - When the indicator light begins to flash slowly, position the hand-held transmitter approximately 2 inches away from the HomeLink® surface. Press and hold the hand-held transmitter button.

3 - The indicator light will flash, first slowly, and then rapidly. When the indicator light begins to flash rapidly, release both the button and channel.

The previous device has now been erased and the new device has been programmed into HomeLink®. This procedure will not affect any other programmed HomeLink® channels.

Accessories

Accessories for the HomeLink® Universal Transmitter are available through various sources.

If you would like additional information on HomeLink®, where to purchase the HomeLink® compatible products, or would like to purchase the HomeLink® Home Lighting Package, please call toll-free: 1-800-355-3515.

Notes

This device complies with FCC rules part 15. Operation is subject to following conditions:

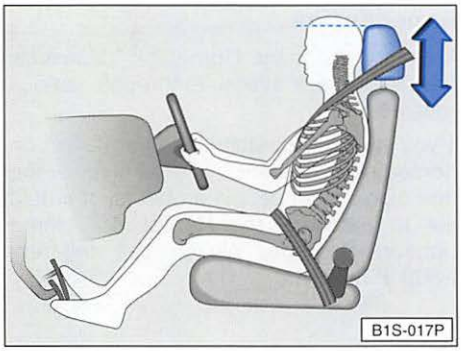
1 - This device may not cause any harmful interference and

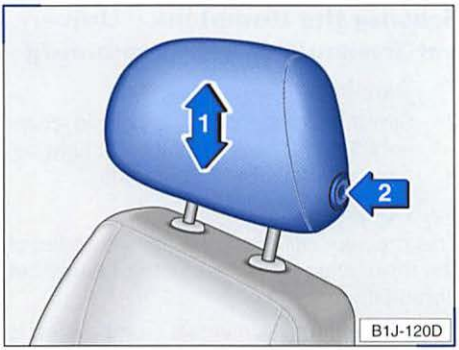
2 - This device must accept any interference that may be received including interference that may cause undesired operation.

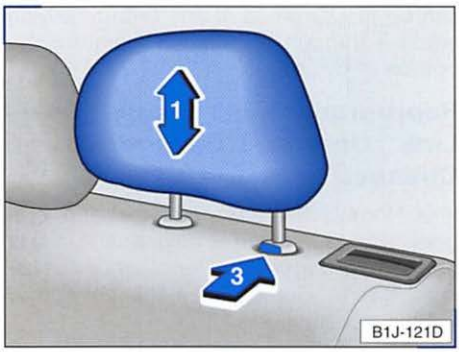
The transmitter has been tested and complies with FCC and DOC/MDC rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

DOC: ISTC 1763 102 264
Prince MODEL/FCC ID: CB2 V94800

Head restraints







The padded head restraints are adjustable.

Position the head restraints according to the occupant's height. Properly positioned head restraints, with the use of safety belts, help to offer effective protection in most accident situations.

For maximum protection, the upper edge should be at least at eye level or higher – see upper illustration.

⚠ WARNING

Head restraints are designed to help reduce injuries in an accident. Do not drive the vehicle without the head restraints in place and properly adjusted.

Height adjustment (arrow 1)

For height adjustment, grasp firmly with both hands and pull up or down. To push the front head restraints down, press the button (arrow **2**).

Removal

Front head restraints

To **remove** the head restraints, pull the head restraint upward until it stops. Then press the button (arrow **2**). While doing this, pull the head restraint upward and remove.

Rear head restraints

To **remove** the head restraints, fold the rear backrest slightly forward and pull the head restraint upward until it stops. Then press the button (arrow **3**) on the rod. While doing this, pull the head restraint upwards and remove.

Installation

Front head restraints

To **reinstall**, guide the two rods of the headrest into the guides, press the button (arrow **2**) at the same time and push the headrest down into place.

Rear head restraints

To **reinstall**, push the two rods of the headrest into the guides and push the headrest down into place.

Front seats

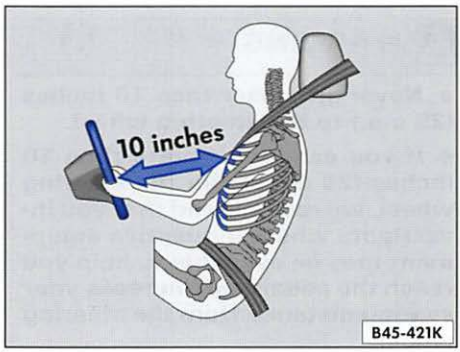
The correct positioning of the seats is important:

- so that you can reach all the controls on the vehicle quickly and safely;
- so that you can drive or ride relaxed which helps reduce fatigue;
- **and for maximum protection offered by the safety belts and airbag system.**

Therefore, always adjust the position of the seat as described on the following pages. Remember to adjust the seats before fastening the safety belts and before driving off. Always be sure to follow these general guidelines:

⚠ WARNING

- **Always sit as far away from the steering wheel and the instrument panel as possible.**
- **Never sit less than 10 inches (25 cm.) from the steering wheel and the instrument panel.**
- **Do not adjust seats while the vehicle is moving. Your seat may move unexpectedly, causing sudden loss of vehicle control and personal injury.**
- **Passengers must always keep their feet on the floor whenever the vehicle is moving. Never place feet on the dashboard or on top of the seats. In an accident, serious personal injury can result from an improper seating position.**



Driver's seat

To avoid contact with the airbag while it is unfolding, the driver must not sit any closer to the steering wheel than necessary and always properly wear the three point safety belt provided.

We recommend that you adjust the driver's seat as follows:

- adjust the seat in fore and aft direction so that you can easily push the pedals all the way while keeping your knee slightly bent.
- adjust the seatback so that when you sit with your back against the seatback, you can still grasp the top of the steering wheel.
- adjust the steering wheel so that the distance from the center of your breastbone to the center of the airbag cover on the steering wheel must be **at least** 10 inches (25 cm.) or more. (See illustration above.

⚠ Always heed all WARNINGS on next page.

⚠ WARNING

- **Never sit closer than 10 inches (25 cm.) to the steering wheel.**
- **If you cannot sit more than 10 inches (25 cm.) from the steering wheel, we recommend that you investigate whether adaptive equipment may be available to help you reach the pedals and increase your seating distance from the steering wheel.**

Front passenger's seat

To avoid contact with the airbag while it is unfolding, the adult front seat passenger must not sit any closer to the instrument panel than necessary and always properly wear available three point belts.

We recommend that you adjust the passenger's seat in the following manner:

- Adjust the backrest to the upright position. **Do not** recline.
- Place your feet on the floor in front of the passenger's seat.
- Adjust the passenger's seat to the rear of the fore and aft adjustment range.

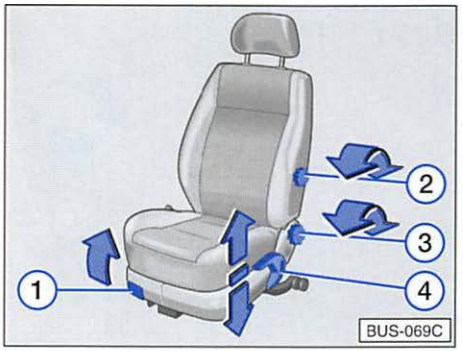
⚠ WARNING

- **Always keep both feet on the floor in front of the seat.**
- **Never place your feet on the instrument panel or on the seat. If the airbag inflates and your feet are on the instrument panel or on the seat, your could receive serious personal injuries.**

For safety information on transporting children on the front passenger seat be sure to read all the information on"Infant seats, Convertible seats and Booster seats," see chapter *"CHILD SAFETY"*, ***Booklet 2.1.***

⚠ WARNING

- **To reduce the risk of personal injury in an accident, front seat passengers must never ride in a moving vehicle with the seatback reclined. Safety belts offer protection only when the seatback is upright and belts are properly positioned on the body. The more the seatback is reclined, the greater the risk of personal injury from an out-of-position safety belt.**
- **For driver's and passenger's protection, make sure front seats and seat backs are securely locked in place.**
- **Never store items under the seats. Loose objects can interfere with the seat latching mechanism and can also cause personal injury in an accident.**



Manually adjustable driver and front passenger seats

1 - Forward and backward adjustment

- Pull handle.
- Slide seat into position.
- Release the handle and move the seat slightly back or forth to make sure it is securely locked into position.

2 - Lumbar support*

Adjust the backrest support by turning the adjuster wheel. This give more support to the natural curvature of your spine and will help reduce fatigue especially during longer trips.

3 - Seatback adjustment

With your body weight taken off the seatback, turn wheel on the outboard side of the seat cushion.

4 - Height adjustment

By "pumping" the lever on the outside of the seat, you can raise or lower the seat.

- **Raising:** Pull the handle upward in a "pumping" motion to raise the seat.
- **Lowering:** Press the handle downward in a "pumping" motion to lower the seat.

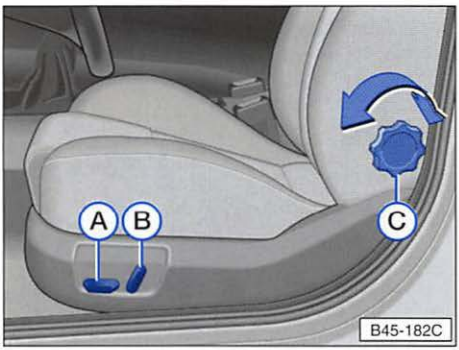
Electrically adjustable driver and front passenger seat*

Before adjusting your seat there are some important considerations to keep in mind.

- To prevent interference with the seat adjustment, never store anything under the seats.
- The front seats should be adjusted before fastening the safety belts.

⚠ WARNING

Because the seats can be electrically adjusted with the ignition key removed, never leave children unattended in the vehicle. Unsupervised use of the electric seat adjustments may cause serious injury.

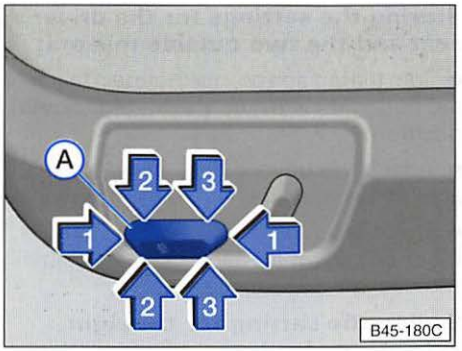


Seat adjustment

The front seat adjustment control switches **A** and **B** are located on the outboard side of each seat. The controls also work with the ignition off.

The adjuster wheel **C** can be used to adjust the **lumbar support** mechanically:

Adjust the backrest support by turning the adjuster wheel in the backrest. This will give you more or less support for the natural curve of your lower back to minimize fatigue, especially during long trips.



Switch A

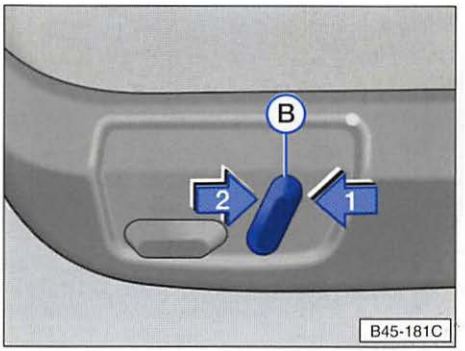
Press the switch as indicated by the arrows to move the seat.

1 - moves seat back / forward

2 - raises / lowers seat at the front

3 - raises / lowers seat at the rear

2 and 3 together – raises / lowers whole seat



Switch B

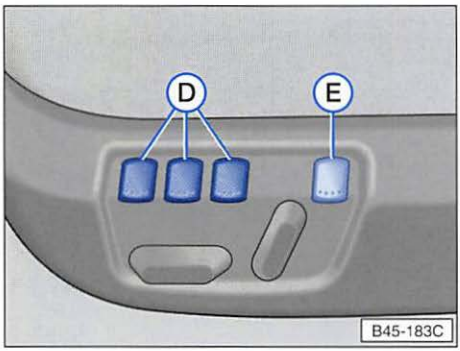
Press the switch as indicated by the arrows to adjust the backrest.

1 – forward: backrest further upright

2 – to the rear: backrest further reclined

⚠ WARNING

The backrest must not be inclined too far to the back when the vehicle is in motion, otherwise, this would hamper the effectiveness of the safety belts.



Memory for driver's seat and outside mirrors*

The memory for the driver's seat and the two outside mirrors allows you to memorize your seat and outside mirror positions.

Three different persons can save their individual settings, each using one of the three memory buttons (D1, D2, D3).

When one of these three drivers wishes to use the vehicle, all he or she needs to do is to press the appropriate button and the driver's seat and outside mirrors will automatically move to the driver's memorized positions.

Storing the settings for the driver's seat and the two outside mirrors:

- Turn the ignition on; make certain that the red button (E) is in the pushed-in (down) position.
- Adjust the driver's seat (see page 60) and the two outside mirrors (see page 50).
- Hold the button that you wish to use (D1, D2 or D3) down for about 3 (seconds until you hear the confirmation tone).

Saving the setting for the right side mirror for travel in reverse

The mirror can be adjusted so that you can see the right rear wheel, for example.

- Turn the ignition on.
- Rotate the outside mirror selector switch to position R (see page 51).
- Adjust the mirror until you can see the right rear wheel.
- Put the vehicle into reverse gear.
- Hold down the button that you wish to use for your settings (D1, D2, D3) for about 3 seconds (until you hear the confirmation tone).

Recalling the seat and outside mirror setting

Quick-touch memory (before the driver sits down)

- Ignition off, door open.
- Briefly press the button for the given driver (D1, D2, D3).

The driver's seat and the outside mirrors will automatically travel to the preset position.

Memory travel (driver seated in vehicle)

- Ignition off, door open or closed.
- Press the appropriate button for the given driver (D1, D2, D3), holding it down until the driver's seat and outside mirror positions are reached (adjustment stops when you release the button).

The driver's seat and the outside mirrors will automatically travel to the memorized position.

Recalling the memory position for the right side mirror for backing up

- Place the mirror selector switch on the right-side mirror.
- Shift into reverse gear.

The right side mirror will automatically move to the memorized position.

Use the E (red) button to turn off the memory function (off = button up). To automatically stop movements that are in progress, simply press this button (also functions as EMERGENCY STOP).

How to coordinate the remote control to a memory button*?

You can use the remote control to recall an individual seating position stored in memory.

We recommend that you coordinate the left memory button to the master key of your vehicle supplied by the factory, and the center button the other ones.

You can obtain up to four additional master keys for your vehicle from your authorized Volkswagen dealer.

Assigning a seat and mirror setting to a memory button using the remote control:

After you have adjusted your seat and the inside mirror, you have **10 seconds** to assign this setting to a memory button via the remote control.

- Remove the key from the ignition lock.
- Press the "open" button on the remote control (see page 27), and hold it until you hear an acoustic signal to let you know that the seat and mirror positions have been assigned to a memory button.

Notes

- If you have assigned a seat and mirror setting to a memory button using the master key, and then reassign a new setting using a different key, the "old" setting will be erased and the new one will be memorized in its place.
- The assignment of a master key to a memory button is maintained even if you store new seat and mirror adjustments to this button.
- If the vehicle battery is disconnected, all assignments between the remote control and memory buttons are erased.

Emergency Off

Use the E (red) button to turn off the memory function (off = button up). To automatically stop movements that are in progress, simply press this button (also functions as EMERGENCY STOP).

Notes on using the locking switch E

After pressing the locking switch **E**, the memory system is permanently switched off. You can then only adjust the seat and the outside mirrors manually. By pressing the locking switch **E** again, you can switch the memory system back on. However, any retrieval procedure that has been interrupted will **not** be continued.

We recommend you switch the memory off with locking switch **E** if the vehicle will be used only temporarily by a driver whose seat and mirror adjustments do not need to be stored.

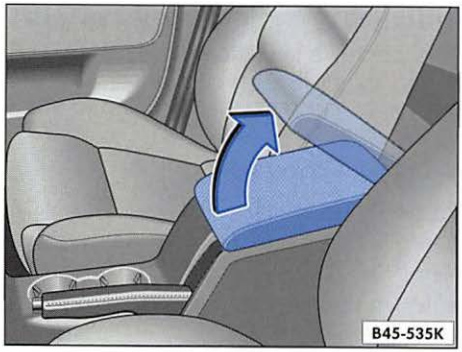
Initializing the memory system*

After disconnecting the vehicle battery, you must "reinitialize" the memory system, otherwise is it no longer possible to store things in memory.

- Open the driver's door.
- Switch the ignition on.
- Move the seat to the front and top stops (see page 61).
- Move the backrest forward to the stop (see page 61).

The memory system is now reinitialized and thus again fully functional.

Armrest*

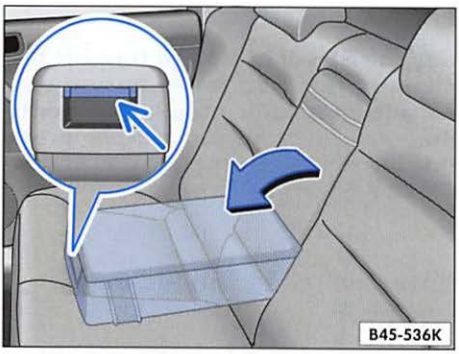


Front

The armrests for the driver and front passenger can be adjusted for your comfort:

- Lift the armrest slowly and slide it for- or backwards until it is in a comfortable position.

The **storage bin** beneath the armrest can be opened by lifting up the armrest as far as it will go.



Rear

The armrest in the center of the rear seat can be folded down for increased comfort.

The **storage bin** in the armrest can be opened by pulling the release catch (see left arrow).

Pedals

The movement of the pedals must never be obstructed by a floor mat or any other object.

- If one of the two brake circuits fails, increased brake pedal travel is required to bring the vehicle to a full stop.
- You should always be able to depress the accelerator and the clutch pedals all the way down to the floor.
- All pedals must be able to return to their original position unhindered.

Only use floor mats which leave the pedal area free and can be secured with floor mat fasteners.

⚠ WARNING

Never place any objects in the area of the pedals. In case of sudden braking or an accident, an object could interfere with pedal function. You would not be able to brake, depress the clutch, or accelerate.

Floor mats*

Only use floor mats which leave the pedals free and unobstructed.

Floor mat fasteners are installed in the footwells of the front seats.

Floor mats used in your vehicle must be attached to these fasteners. This will prevent the floor mats from sliding into positions that could interfere with the safe operation of your vehicle.

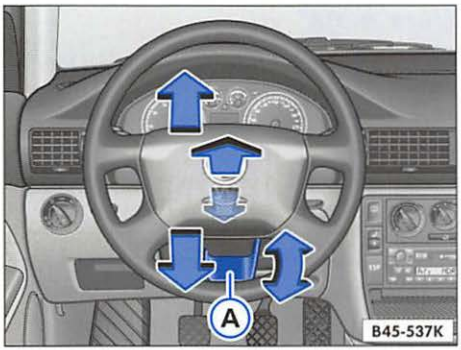
When reinstalling the floor mat, make sure that the fastener is properly secured. Otherwise there is a risk that the mat could slip forward and obstruct the pedals.

Suitable VOLKSWAGEN floor mats can be obtained from a VOLKSWAGEN dealer.

⚠ WARNING

Do not install additional floor mats on top of existing floor mats because you will not be able to fasten them down.
If you remove the floor mats for cleaning, be sure to fasten them again securely when reinstalling.

Adjustable steering column (tilt and telescopic)

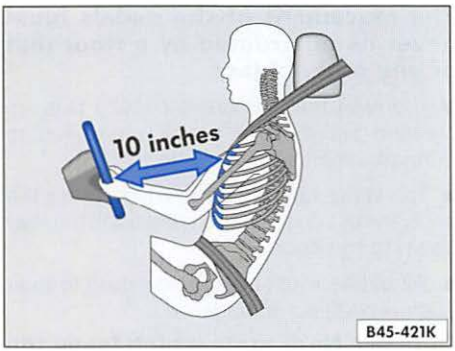


The height and reach of the steering wheel can be adjusted to increase your comfort.

- Push down on the lever **A** below the steering column as far as it will go (see left illustration).
- Adjust the steering wheel so that the distance from the center of your breastbone to the center of the airbag cover on the steering wheel must be **at least 10 inches (25 cm)** or more (see right illustration).
- Pull the lever **A** back up as far as it will go and push it against the steering column to lock.

⚠ WARNING

- **After adjusting the steering wheel, push the steering wheel adjustment lever back up as far as it will go. This ensures the position of the steering wheel cannot be altered unintentionally when the vehicle is moving.**
- **To help prevent loss of vehicle control and an accident, adjust the steering wheel only when the vehicle is not moving.**
- **Holding the steering wheel the wrong way can cause serious injuries to the hands, arms and head if the driver's airbag inflates.**



⚠ WARNING continued

- **The front seats must not be pushed too close to the steering wheel or to the instrument panel. Never sit closer than 10 inches (25 cm.) to the steering wheel.**
- **If you cannot sit more than 10 inches (25 cm.) from the steering wheel, we recommend that you investigate whether adaptive equipment may be available to help you reach the pedals and increase your seating distance from the steering wheel.**
- **Pointing the steering wheel toward your face decreases the ability of the supplemental driver's airbag to protect you in an accident.**
- **Always hold the steering wheel on the outside of the steering wheel rim with your hands at the 9 o'clock and 3 o'clock positions to help reduce the risk of personal injury if the driver's airbag inflates. Never hold the steering wheel at the 12 o'clock position or with your hands at other positions inside the steering wheel rim or on the steering wheel hub.**

Rear seat

General hints

You can increase the loading surface in the rear by folding down the rear backrest to form a deck.

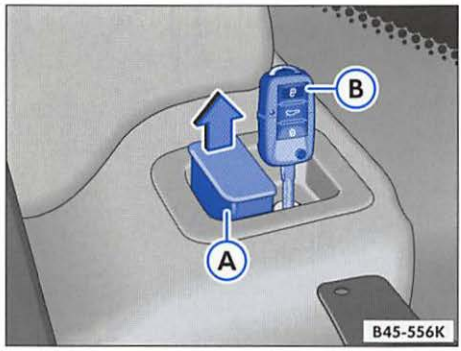
The rear backrest is divided into two sections – one third/two thirds. You can fold down either or both parts of the backrest.

⚠ WARNING

- **Do not allow passengers to occupy the rear load surface while the vehicle is in motion. Vehicle occupants must always be properly restrained.**
- **Do not let anyone ride in the vehicle without the head restraints provided. Head restraints help reduce injuries.**
- **Loose items inside the passenger compartment, can fly forward in an accident or sudden maneuver and injure occupants. Always store articles in the luggage compartment and use the tie-down hooks, especially when the rear backrests have been folded down.**

Note

To prevent damage, before the rear backrest is folded forward make sure the front seats are moved forward so that the rear backrest does not come in contact with them.



Folding the backrest forward

Pull the release handle **A** and fold the backrest forward. When you do this, you will see a red mark on the handle.

You don't need to remove the headrests, if the front seats far enough forward so that the two don't touch.,

Lockable backrest

If you are not able to pull up the release handle **A,** then you must unlock the backrest using the key **B**.

Do not let the safety belt lie over the backrest when it is folded forward, otherwise the belt tensioner may activate in the case of an accident.

⚠ Always heed all WARNINGS on next page.

Raising the backrest

Pull the backrest up until it latches securely into place. When it is latched, you will not be able to see the red mark on the button **A**.

When folding the backrest back into place, make sure the safety belt doesn't get caught, otherwise you could damage it.

⚠ WARNING

- **The backrest must always be securely latched so that the safety belts can work properly to help protect all back seat passengers.**
- **Objects stored in the luggage compartment will not fly forward during sudden braking.**
- **Never allow safety belts to become damaged by being caught in door or seat hardware.**
- **Torn or frayed safety belts can tear and damaged belt hardware can break in an accident. Inspect belts periodically.**
  If belts show damage to webbing, bindings, buckles, or retractors, have them replaced.

Hat shelf

You can place light articles of clothing on the hat shelf behind the seatback.

Remember, though, that placing articles of clothing on the hat shelf can block the driver's vision through the rear view mirror.

Since the passenger compartment is ventilated by means of vent slots between the hat shelf and rear window, be sure not to block the vent slot with any items you may place on the hat shelf.

⚠ WARNING

Whenever you're driving, do not place any hard objects on the hat self, or allow your pet to sit on it. These could become a hazard for vehicle occupants in the event of sudden braking or a traffic accident!

In addition, you can damage the rear window defroster wires if you place objects on the shelf.

Sun Shade*

The sun shade can be used to cut glare through the rear window.

Pull out the shade from the hat shelf and engage it in the hooks on the upper part of the window frame.

Luggage compartment

Increasing size of the luggage compartment

You can fold the backrest forward to increase the size of the luggage compartment.

Transporting heavy objects

Transporting heavy objects can change the way your vehicle behaves. For best handling under these conditions, distribute loads evenly.

Always place heavy cargo as far forward as possible in the luggage compartment.
When transporting heavy objects, drive slowly and avoid sudden maneuvers.

Stale air escapes to the outside through slots in the trim panels on the side of the luggage compartment. Be sure to keep these slots free and open.

⚠ WARNING

- **Never exceed the Gross Axle Weight Rating or the Gross Vehicle Weight Rating specified on the safety compliance sticker on the left door jamb. Exceeding permissible weight ratings can change the way the vehicle handles and could result in accidents, personal injury, and vehicle damage.**
- **Do not allow passengers to occupy the rear load surface while the vehicle is in motion. Vehicle occupants must always be properly restrained.**

⚠ WARNING continued

- **Loose items inside the passenger compartment, can fly forward in an accident or sudden maneuver and injure occupants. Always store articles in the luggage compartment and use the tie-down hooks, especially when the rear seat backs have been folded down.**
- **To help prevent poisonous exhaust gas from being drawn into the vehicle, always keep the rear lid closed while driving. Never transport objects larger than those fitting completely into the luggage area, because the rear lid cannot be fully closed.**
- **Never leave your vehicle unattended especially with the rear lid left open. A child could crawl into the vehicle through the luggage compartment and pull the lid shut becoming trapped and unable to get out. To reduce the risk of personal injury, never let children play in or around your vehicle. Always keep the rear lid, as well the vehicle doors, closed when not in use.**
- **If you must drive with the rear lid open under exceptional circumstances always take the following precautions to help reduce the risk of deadly carbon monoxide (CO) from the exhaust system from being drawn into the passengers compartment:**
  - **open all of the windows**
  - **turn off the air recirculation switch**
  - **turn on the fan to the highest speed**

Tie-down hooks

There are four tie-down hooks in the luggage compartment (arrows). Use these hooks to secure objects.

Air circulation

Air circulation helps to reduce window fogging. Stale air escapes to the outside through slots in the trim panels on the side of the luggage compartment. Be sure to keep these slots free and open.

Roof rack*

If a roof rack or similar luggage carrying equipment is to be installed, please note the following:

- To enhance the vehicle's streamlined design, rain gutters have been molded into the roof. Therefore, it is not possible to use normal roof racks. Only install a roof rack specifically designed for this vehicle. Please ask your VOLKSWAGEN dealer about approved modular roof racks for your vehicle.

- These approved roof racks are the basis for a complete roof rack system. Additional attachments for the basic roof rack are necessary to safely transport luggage, bicycles, surf boards, skis or small boats.

- All necessary hardware for these systems is available from your VOLKSWAGEN dealer.

Note

- **Any damage to the vehicle caused by using roof racks or other types of cross bars that have not been approved by VOLKSWAGEN for your vehicle or incorrect roof rack installation is not covered by the Warranty.**

⚠ WARNING

- **Use of an unapproved roof rack or incorrect mounting of an approved roof rack can cause the roof rack or the items carried on it to fall off the roof onto the road.**
- **Objects falling from the roof of a vehicle can cause an accident and personal injury.**
- **Only mount the system between the markings shown in the illustration on next page.**
- **The roof rack system must be installed exactly according to the instructions provided.**

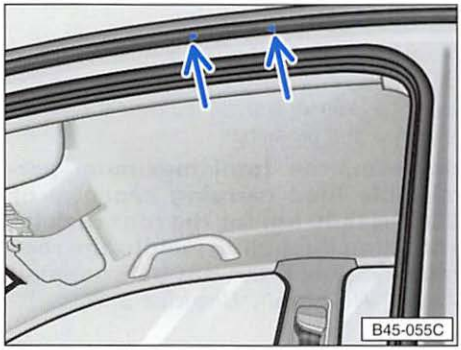
Loading a roof rack

Always distribute the loads evenly. Each cross bar can carry 100 lbs (50 kg) when the weight is evenly distributed over the entire length of the cross bar.

However, the total maximum permissible load carrying capacity of 220 lbs (100 kg) for the roof rack installation (including weight the roof rack system) must not be exceeded – see "Weights", *Booklet 3.3.*

⚠ WARNING

- **Improper use of a roof rack can cause accidents and personal injuries.**
- **The use of a roof rack can negatively affect the way a vehicle handles.**
- **Cargo that is large, heavy, bulky, long or flat will have a greater negative influence on the vehicle's aerodynamics, center of gravity and overall handling.**
- **Never exceed the maximum permissible load carrying capacity of the roof of your vehicle.**
- **Always drive slowly, avoid sudden braking and maneuvers when transporting cargo on the roof of your vehicle.**



Roof rack Installing

The roof rack system must be installed exactly according to the instructions provided.

You can mount the system only between the markings shown in the illustration. Each marking is located in the door frame (see arrows).

Ensure that the rear hatch does not touch the load being carried on the roof.

When to remove the roof rack

If you have installed a roof rack on your vehicle, it is best to ask the car wash operator if it should be removed before going through an automatic car wash.

When not in use, remove the roof rack to reduce wind noise, improve handling, fuel consumption and guard against theft.

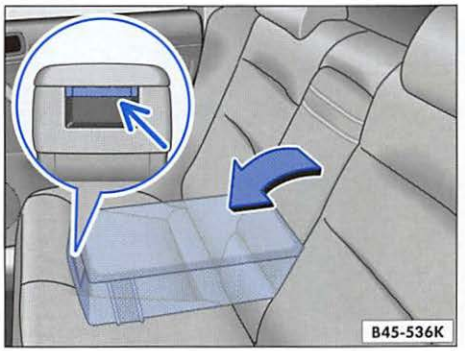
Cup holders

Front cup holder

The above illustration shows the front cup holder next to the parking brake lever.

⚠ WARNING

Never carry any beverage containers with hot liquids, such as hot coffee or hot tea, in the vehicle while it is moving. In case of an accident, sudden braking or other vehicle movement, hot liquid could spill, causing scalding burns. Spilled hot liquid can also cause an accident and personal injury.



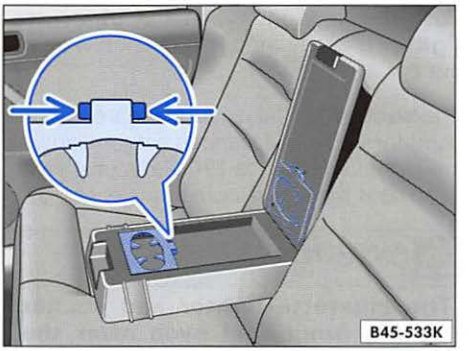
Rear cup holder

The **storage bin** is located in the armrest and has a removable cup holder. Pull the release catch (see left arrow) to open the storage bin.

See next page for removal and installation of the rear cup holder.

⚠ WARNING

Never carry any beverage containers with hot liquids, such as hot coffee or hot tea, in the vehicle while it is moving. In case of an accident, sudden braking or other vehicle movement, hot liquid could spill, causing scalding burns. Spilled hot liquid can also cause an accident and personal injury.



Removing rear cup holder:

Press and hold the two buttons (see arrows) and remove the beverage holder. You can store the cup holder by placing it in the inside of the armrest cover.

Installing rear cup holder:

Press the two buttons and insert the beverage holder. You will hear a "click" when the beverage holder is securely locked in place.

Make sure that the beverage holder is correctly and securely installed before you use it. A loose beverage holder can fall apart and possibly spill the liquid. Pull to check!

Cigarette lighter* / Socket

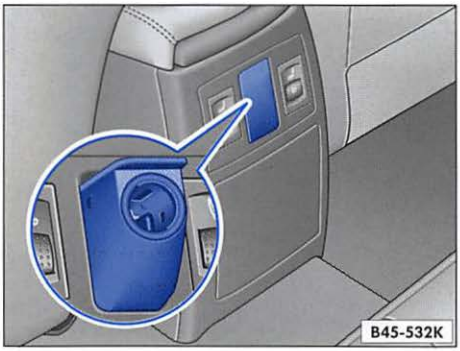
Push the knob in. When the **cigarette lighter** is ready for use, the knob will pop out again.

The **socket** for the cigarette lighter can be used for 12 volt appliances with maximum consumption of up to 120 watts, such as a hand spot light, small vacuum cleaner, etc.

⚠ WARNING

The cigarette lighter and socket remain functional even after the ignition key is removed.
Therefore, to avoid injury, never leave children inside the vehicle without supervision.

Remember, you can discharge the battery if the engine is not running and power is used to run an appliance connected to the socket. For more information, see "Additional accessories, Modifications and Parts replacement," chapter *"KEEPING YOUR VEHICLE IN GOOD WORKING CONDITION"*, ***Booklet 3.2.***).



Rear Socket*

There is a socket locaded on the backside of the centre console.

To open or close you have to push the lower part of the surface.

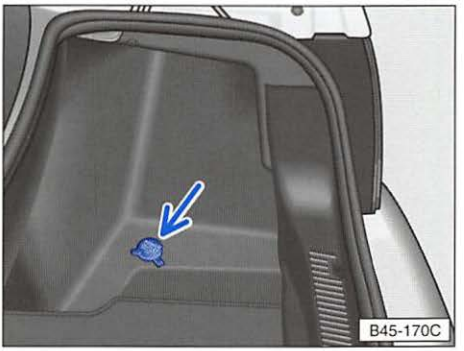
This socket may be used for 12 volt appliances with maximum consumption of up to 120 watts, such as hand spot light, small vacuum cleaner, etc.

⚠ WARNING

The socket remain functional even after the ignition key is removed.

Therefore, to avoid injury, never leave children inside the vehicle without supervision.

Remember, you can discharge the battery if the engine is not running and power is used to run an appliance connected to the socket. For more information, see "Additional accessories, Modifications and Parts replacement," chapter *"KEEPING YOUR VEHICLE IN GOOD WORKING CONDITION"*, ***Booklet 3.2.***).



Socket in luggage compartment

There is a socket in the right trim panel in the luggage compartment.

This socket may be used for 12 volt appliances with maximum consumption of up to 120 watts, such as hand spot light, small vacuum cleaner, etc.

⚠ WARNING

The socket remain functional even after the ignition key is removed.

Therefore, to avoid injury, never leave children inside the vehicle without supervision.

Remember, you can discharge the battery if the engine is not running and power is used to run an appliance connected to the socket. For more information, see "Additional accessories, Modifications and Parts replacement," chapter ***"KEEPING YOUR VEHICLE IN GOOD WORKING CONDITION", Booklet 3.2.***).

Ashtrays

WARNING

Using ashtrays as waste paper receptacles is a fire hazard.

Front

To open you have to push the cover of the panel to the front.

Removing:

Open the ashtray and pull to remove.

Inserting:

Place the ashtray into the guides and push it in.

Rear

To open you have to push the upper part of the sureface.

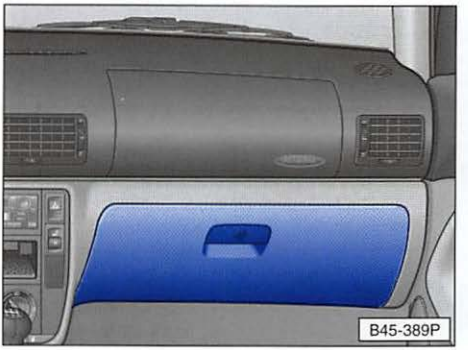
Removing:

Open the ashtray and pull to remove.

Inserting:

Place the ashtray into the guides and push it in.

Glove compartment



Your VOLKSWAGEN has a lockable glove compartment. Only the master keys will lock or unlock the glove compartment. To open the lockable glove compartment, lift the handle.

⚠ WARNING

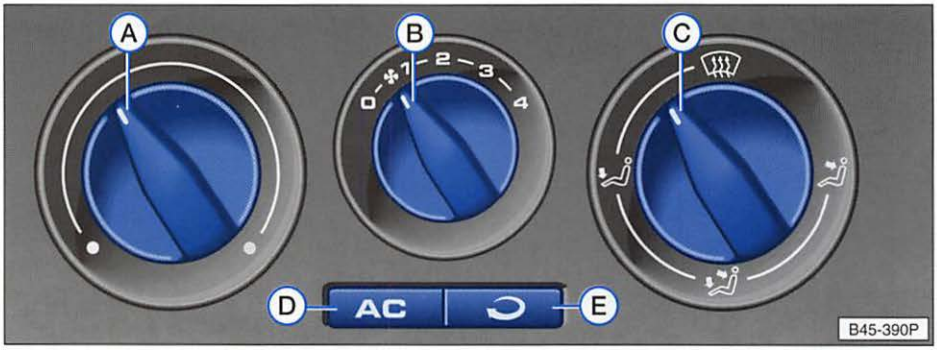
To reduce the risk of personal injury in an accident or sudden stop, always keep the glove compartment closed while driving.

Cooled air* in the glove compartment

Vehicles equipped with air conditioning or Climatronic, have a vent opening in the glove box. Whenever the air conditioner is switched on, cooled air will also flow into the glove box.

You can adjust the air flow direction by turning the vent opening in either direction.

Air conditioning



The air conditioning system combines both heating and cooling for maximum comfort.

The air conditioning system works only with the engine running and when the outside temperature is higher than +40 °F (+5 °C), and with the fan switch **B** turned to one of positions 1 to 4.

When you switch on the air conditioner, both the temperature and the humidity in the vehicle are reduced. This will help make passengers feel more comfortable and will prevent the windows from fogging up on days when the humidity is very high.

⚠ WARNING

• For clear visibility and safe driving, it is extremely important that you follow the operating instructions on the proper use and function of the ventilation/heating, defogging/defrosting and air conditioning system in this manual. If in doubt, consult your VOLKSWAGEN dealer.

• Good visibility comes with clean windows free of fog, condensation and frost.

⚠ WARNING continued

• Maximum heating output and fast defrosting will occur only after the engine has reached operating temperature. Wait until you have good visibility before moving your vehicle.

Operating control

A – Temperature control switch
B – Fan switch for ventilation
C – Airflow distribution switch
D – Air conditioner ON / OFF button
E – Air recirculation button

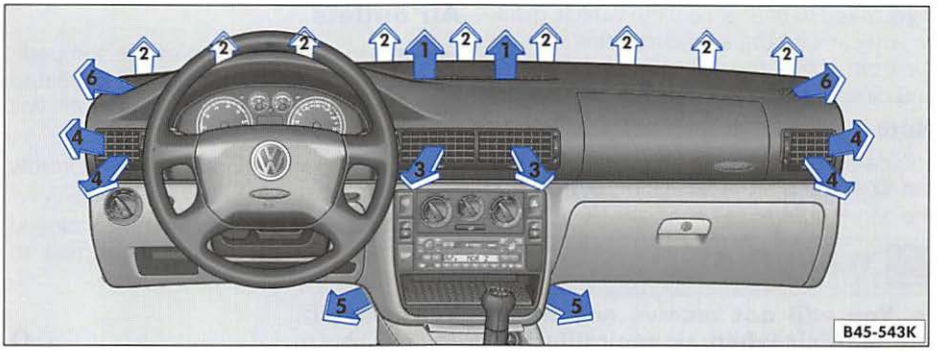
Switch A – Temperature control

– Turn the switch clockwise for warmer air.
– Turn the switch counterclockwise for cooler air.

Switch B – Fan switch

The air flow volume can be set to four different speeds.

In position 0 of the fan switch the fan and the air conditioning are turned off.



Turn knob to symbol...	Air is directed...	Air comes out of vents...	Small amounts of air from vents...
	...to the windshield	1, 2, 6	4
	...into the footwells	5	1, 2, 4, 6
	...into the passenger compartment and footwells	3, 4, 5	1, 2, 6
	...into the passenger compartment	3, 4	—

To prevent the windows from fogging up, always set the fan to a low speed when driving slowly.

The dust and pollen filter* traps air contaminants regardless of which speed you set the fan switch **B**.

Switch C – Airflow distribution

The airflow distribution switch **C** controls the outlets.

Button D – Air conditioning ON/ OFF button

Press this button to switch on the air conditioning. When the button is pressed, the "AC" symbol lights up.

Press the button again to switch the system off. The "AC" symbol goes out.

Button E – Air recirculation

The air recirculation feature helps to prevent fumes (for example, when driving through a tunnel or standing in a traffic jam) and dust from entering the vehicle interior.

To switch **on** the air recirculation, press button **E.** When you press this button, the symbol lights up.

To switch **off** the air recirculation, press button **E** again. The symbol light will go out.

The control light in the switch is your reminder that the air recirculation switch is switched on.

Always heed all WARNINGS on next page.

If you need to heat or cool the vehicle quickly, you can use the air recirculation feature. Air from inside the vehicle will be heated and directed back into the vehicle interior.

Note

You can press both the air conditioner button **D** and the air recirculation button **E** at the same time.

⚠ WARNING

- **You will not receive any fresh outside air when air recirculation is on. Do not use this setting over long periods of time because stale air contributes to fatigue and reduced driver alertness.**
- **If the windows fog up, press the air recirculation switch again to switch off the air recirculation function.**

Note

Do not smoke when you select air recirculation. Smoke drawn into the ventilation system will leave smelly deposits on the evaporator, resulting in permanent odors whenever you switch on the air conditioner. These odors can be eliminated only by exchanging the evaporator which is time consuming and expensive.

For safety reasons, **it is not possible to use the air recirculation feature**, when you have switch **C** turned to : .....

In addition, the air recirculation feature switches itself off whenever you turn switch **C** from the "footwell" setting to the "defrost" setting.

Air outlets

Depending on the setting of the temperature control **A** and buttons **D** and **E**, heated or unheated outside air or cooled air will come out of all vents.

The airflow distribution switch **C** controls the outlets.

Outlets 3 and 4 can be opened or closed separately with the thumbwheel next to each outlet.

Vent closed:
Thumbwheel to ..... **O**

Vent open:
Thumbwheel to .....

By turning the large thumbwheel of vents 3 and 4 in either direction the air flow can be directed up and down.

When the small thumbwheel below the grille is rotated to the left or right, the air flow direction is changed sideways.

The rear footwells are heated and cooled at the same time when you select outlets 5.

Defrosting windshield and side windows

- Turn the temperature control switch **A** all the way to the right
- Turn the fan switch **B** to position 3.
- Turn the airflow distribution switch **C** to .....
- Close vents 3.
- Additional warm air can also be directed to the side windows via vents 4.

Defogging windshield and side windows

If high humidity causes your windows to fog up (for example on a rainy day), set the controls as follows:

- Turn the temperature control switch **A**, into the heat range if necessary.
- Turn the fan switch **B** to position 2 or 3.
- Turn the airflow distribution switch **C** to .....
- Press the air conditioner button **D** to switch on the air conditioning.
- Close vents 3.
- Additional warm air can also be directed to the side windows via vents 4.

Heating interior quickly

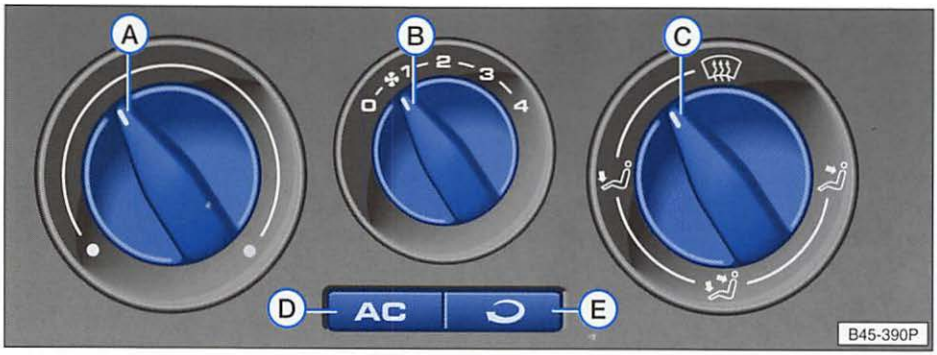
- Turn temperature control switch **A** all the way to the right.
- Turn the fan switch **B** to position 3.
- Turn the airflow distribution switch **C** to .....
- If the windshield fogs up, turn the switch **C** to .....
- Open vents 3 and 4 partially or all the way and adjust as desired.
- Press the air recirculation button **E**.

Always heed all WARNINGS and the instructions for using the air recirculation feature on page 81.

Keeping interior comfortable

After the windows have been defogged, we recommend the following settings:

- Turn the temperature switch **A** to the desired position.
- Turn the fan switch **B** to the desired position.
- Turn the air flow distribution switch **C** between .....
and .....
- If the windshield is fogging up, turn the switch **C** to .....
- Open vents 3 and 4 partially or all the way and adjust as desired.



Normal cooling

- Turn the temperature control switch **A** to the desired temperature (you can also set it for heating).
- Turn the fan switch **B** to the desired position.
- Turn the airflow distribution switch **C** to the desired position.

If the airflow distribution switch is in this position, then at least one vent must always be open, otherwise the air conditioner can ice up.

- Press the air conditioning button **D** to switch on the air conditioning.
- Adjust vents 3 and 4 as desired.

Outside air will be drawn in and cooled.

Maximum cooling

- Close all windows and the sunroof*.
- Turn the temperature control switch **A** all the way to the left.
- Turn the fan switch **B** to position 4.
- Turn the airflow distribution switch **C** to .....

If the airflow distribution switch is in this position, then at least one vent must always be open, otherwise the air conditioner can ice up.

- Press the air conditioner button **D** to switch on the air conditioning.
- Press the air recirculation button **E** to switch on the air recirculation.

Always heed all WARNINGS and the instructions for using the air recirculation feature on page 81.

- Adjust vents 3 and 4 as desired.

One vent must always be open, otherwise the air conditioner can ice up.

Ventilation (fresh air)

Unheated outside air will flow from vents 3 and 4 when you set the control switches as follows:

- Turn the temperature control switch **A** all the way to the left.
- Turn the fan switch **B** to the desired position.
- Turn the airflow distribution switch **C** to . . . . .
- If the windshield fogs up, turn the switch **C** to . . . . .
- Press the air conditioner button **D** to switch off the air conditioning.
- Open vents 3 and 4.

How to use the air conditioning more economically

When using the air conditioning, the air conditioner compressor decreases engine power and increases fuel consumption. To keep air conditioner use to a minimum, please keep the following in mind:

- If your vehicle has been standing outside in the hot sun, first open a window or door to let the hot air escape before driving off.
- Do not use the air conditioning if the windows or sunroof* are open.
- If the desired temperature can be reached without having to switch on the air conditioner, then use fresh air operation.

General hints

- To prevent the windows from fogging up, always set the fan switch **B** to a low speed when driving slowly and turn switch **C** to position . . . . .
- The controls **A** and **C** can also be set to any intermediate position.
- If the windows still fog up, this may be caused by reduced airflow through the dust and pollen filter – see "Dust and pollen filter," chapter ***"KEEPING YOUR VEHICLE IN GOOD WORKING CONDITION", Booklet 3.2.***).
- Keep the air intake slot in front of the windshield free of ice, snow and leaves in order to maintain the proper functioning of the heating and ventilation systems.
- If you have not used the air conditioner for a long time, you may notice some odors when you switch it on. To prevent this, switch on the air conditioner even in the winter at least once a month on the highest fan speed. When you do this, open the windows for a short time.
- Air escape through vents under the rear window. When placing items of clothing on the luggage compartment cover, therefore, please ensure that the openings are not covered.
- Vehicle heating depends upon the temperature of the engine coolant. Therefore, your vehicle interior will warm up faster when the engine has reached its operating temperature.

If the airflow is not cool...

- Outside temperature is below+42°F (+5 °C).
- Check the air conditioning fuse on the fuse panel – see "Fuses", ***Booklet 3.2.*** Have it replaced, if necessary.

Should you suspect that your air conditioning system is damaged and the fuse is not blown, switch off the air conditioning by pressing the button **D** and see your VOLKSWAGEN dealer for assistance.

If water drips under the vehicle...

When the outside temperature is high and the air very humid, condensed water from the air conditioner can drip under the vehicle. This is normal and does not indicate a leak.

Maintenance

The condenser should be checked from time to time by your VOLKSWAGEN dealer to make sure it's clean. If clogged with dirt or insects, the condenser should be washed down with water.

After the winter months and before extended summer use, the air conditioning should be checked and, if necessary, serviced by your VOLKSWAGEN dealer.

Climatronic*

The air conditioner is fully automatic, and is designed to maintain a comfortable and uniform climate inside the vehicle.

The temperature of the air supplied to the interior, the fan speed, air distribution and volume of air delivery are regulated automatically.

This automatic climate control program can also be adjusted manually by the driver and the front passenger.

⚠ WARNING

• For clear visibility and safe driving, it is extremely important that you follow the operating instructions on the proper use and function of the ventilation/heating, defogging/defrosting and air conditioning system in this manual. If in doubt, consult your VOLKSWAGEN dealer.

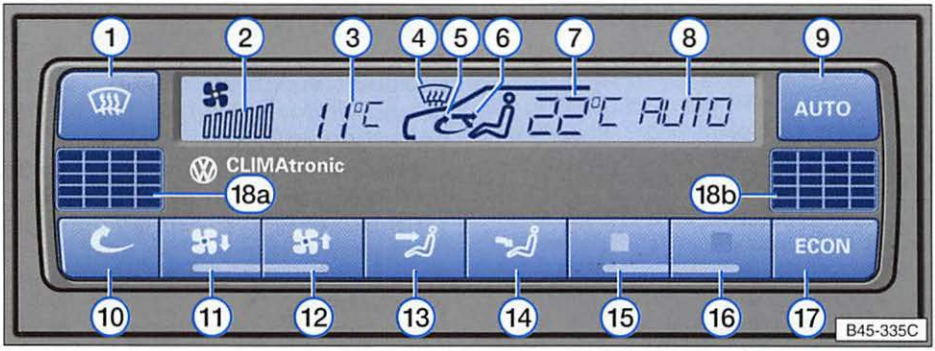
⚠ WARNING continued

• Good visibility comes with clean windows free of fog, condensation and frost.

• Maximum heating output and fast defrosting will occur only after the engine has reached operating temperature. Wait until you have good visibility before moving your vehicle.

Note

Do not smoke when you have the air conditioner switched on. With the Climatronic system, the air recirculation feature is on whenever you switch on the air conditioner. Smoke drawn into the ventilation system will leave smelly deposits on the evaporator, resulting in permanent odors whenever you switch on the air conditioner. These odors can be eliminated only by exchanging the evaporator which is time consuming and expensive.



Operating controls

1 - Button – windshield defrosting
2 - Display – fan speed / OFF (system off)
3 - Display – outside temperature
4 - Display – windshield defrosting
5 - Display – air recirculation
6 - Display – airflow distribution
7 - Display – selected inside temperature
8 - Display – AUTO (automatic setting) or ECON (compressor off)
9 - Button – automatic operation
10 - Button – air recirculation
11 - Button to decrease fan speed and air conditioner "OFF" button
12 - Button – increase fan speed
13 - Button – air flow into the vehicle
14 - Button – air flow into the foot wells
15 - Button – "COOLER"
16 - Button – "WARMER"
17 - Button – "ECON" (compressor off)
18 - Passenger compartment temperature sensor (18a and 18b)

Using the system

Recommended standard setting for all-year operation:

Select a temperature of 71 °F (22 °C) and press AUTO button.

With this setting, you attain maximum comfort in the least amount of time.

You only need to change this setting to meet your personal needs.

Air outlets – see page 91.

With the ignition switched on, the system normally works in the "AUTO" mode. Displays **2**, **3**, **7** and **8** will appear, (see list in left column).

The Climatronic* automatically maintains the selected interior temperature.

In addition, the air temperature, fan speed and air flow distribution are maintained.

The system also adjusts the inside temperature even if the vehicle has been left standing in the sun. You do not need to adjust the system manually and then switch it back to "AUTO."

After you switch off the ignition:

- your settings will remain stored.
- if "air recirculation" was **on**, the setting will be erased about 20 minutes after the ignition is switched off.

Switching between Fahrenheit and Centigrade

First, press and hold button **17,** then press button **9**.

Notes for using "AUTO"

- You can adjust the inside temperature by using button **15** and **16**. Your setting will be stored in memory until you choose a different temperature.
- You can set the inside temperature between 64 °F and 86 °F (+18 °C and+29 °C). Within this range, the temperature will be automatically maintained.
- If you select a temperature below 64 °F (+18 °C), "LO" will appear in the display. If you select a temperature above 86 °F (+29 °C), "HI" will appear in the display.

In both these settings ("HI"/"LO"), the system will run continuously at maximum heating or cooling.

- AUTO stays on even if you change the fan speed up or down for one stage.
- Under certain conditions, the system will automatically adjust itself for your optimum comfort. For example, after you start your vehicle when it is cold, air will be directed into the footwells. This is to prevent the windows from fogging up if it is humid at the time.

Manual operation of the Climatronic* system

AUTO offers the most comfortable setting for you and passengers all year round under most circumstances.

There may be times when you want to override the AUTO operation and change some of the AUTO settings to operate the Climatronic* system manually.

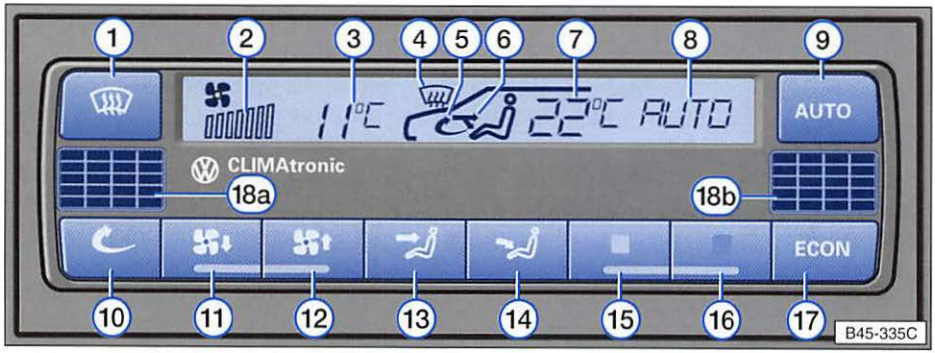
- Press buttons **15** and **16** to adjust the inside temperature.
- Use buttons **11** and **12** to increase or decrease the fan speed and/or air flow distribution. The number of bars in position **2** of the display will increase or decrease accordingly.
- Press button **1** to:

- switch off ECON
- switch off air recirculation
- defrost the windshield or to keep it from steaming up (point outlets 4 towards the side windows)
- defrost the windshield or to keep it from steaming up (point outlets 4 towards the side windows) if, for example, someone gets into the vehicle and is wearing wet clothing.

- Press button **10** to switch on **air recirculation**. Symbol **5** appears in the display.

Press button **1** and the air recirculation switches off. To switch it on again, simply press button **10.**

The air recirculation feature helps to prevent fumes (for example, when driving through a tunnel or standing in a traffic jam) and dust from entering into the vehicle interior.



Avoid smoking when you select air recirculation. Smoke drawn in will leave deposits on the evaporator, resulting in permanent odors whenever you switch on the air conditioner. This can be eliminated only by exchanging the evaporator which is time consuming and expensive.

- If you need to warm up or cool down the vehicle interior quickly, use the air recirculation feature. Air from inside the vehicle will be heated or cooled and then redirected back into the vehicle.

The symbol 5 will appear to remind you that the air recirculation is switched on.

⚠ WARNING

- **You will not receive any fresh outside air when air recirculation is on. Do not use this setting over long periods of time because stale air contributes to fatigue and reduced driver alertness.**
- **If the windows fog up, press the air recirculation switch again to switch off the air recirculation function.**

- You can direct the air flow into the footwells or into the vehicle compartment by pressing buttons **13** and **14**. You can press buttons **1**, **13** and **14** in different combinations.

When you use ECON–button **17**, **the compressor will be shut off**. Using ECON reaches and maintains the desired inside temperature automatically and as quick as possible.

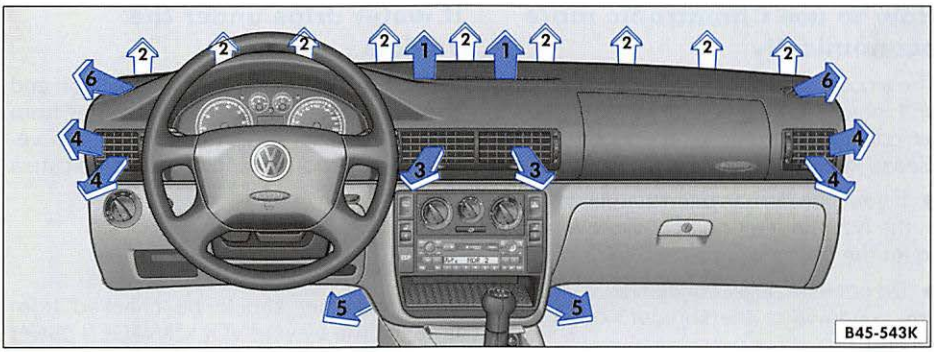
Remember that when you use ECON, you cannot select an inside temperature lower than the temperature outside. Whenever you press button **1**, ECON switches off automatically. To switch ECON on again, press **17**.

To use ECON and the air recirculation at the same time, first press button **10** and then the ECON button **17**. Pressing buttons **1**, **9** or **10** switches off ECON.

Pressing button **11** switches off the system completely. Press the button until "OFF" appears in the display. Use this function only in special cases, for example if there is a defect in the heating and ventilation system.

Note

If you no longer require any special setting, press button **9** (AUTO) once again.



Air vents

Heated air, outside air (ECON) or cooled air (AUTO) will come out of all the vents after you have pressed the appropriate button.

Buttons **1**, **13** and **14** control the air vents.

Outlets 3 and 4 can be opened or closed separately with the respective thumbwheel next to the outlets.

Vent closed:
Thumbwheel to ..... **O**

Vent open:
Thumbwheel to .....

By turning the large thumbwheel of vents 3 and 4 in either direction the air flow can be directed up and down.

When the small thumbwheel below the grille is rotated to the left or right, the air flow direction is changed sideways.

The rear footwells are heated and cooled at the same time when you select outlets 5.

General Notes

- Make sure that the temperature sensors next to the display (position **18a** and **18b**) are not covered.
- Keeping the air intake slots in front of the windshield free from ice, snow and debris helps to make sure that the Climatronic* will work properly.
- Vehicle heating depends upon the temperature of the engine coolant – therefore, your vehicle interior will warm up only when the engine has reached its operating temperature.
- If you have not used AUTO for a long time, you may detect some odors when you switch it on.
To prevent this, you should switch on air conditioner – even in the winter – at least once a month and run it at the highest speed. Open the windows for a short time when doing this.
- Air escape through vents under the rear window. When placing items of clothing on the luggage compartment cover, therefore, please ensure that the openings are not covered.

How to use Climatronic more economically

The air conditioner decreases engine output and increases fuel consumption. Use the air conditioning only when necessary and please keep the following in mind:

- If your vehicle has been standing outside in the hot sun, first open a window or door to let the hot air escape before driving off.
- Do not use the air conditioner if you have any windows or the sunroof* open when driving.
- Use ECON whenever you can to make the vehicle interior comfortable without having to use the air conditioning.

If the airflow is not cool...

- Outside temperature is below+42°F (+5 °C).
- Check the air conditioning fuse on the fuse panel – see "Fuses", ***Booklet 3.2.*** Have it replaced, if necessary.

Should you suspect that your air conditioning system is damaged and the fuse is not blown, switch off the air conditioning by pressing the button **17** and see your VOLKSWAGEN dealer for assistance.

If water drips under the vehicle...

When the outside temperature is high and the air very humid, condensed water from the air conditioner can drip under the vehicle. This is normal and does not indicate a leak.

Maintenance

The condenser should be checked from time to time by your VOLKSWAGEN dealer to make sure it is clean. If clogged with dirt or insects, the condenser should be washed down with water.

After the winter months and before extended summer use, the air conditioning should be checked and, if necessary, serviced by your VOLKSWAGEN dealer.

Automatic transmission (Tiptronic®)*

Your vehicle is equipped with an electronically controlled automatic transmission, upshifting and downshifting automatically take place depending on which shift program is chosen. You can also manually select a shift program (Tiptronic®).

Ignition key safety interlock

After switching off the ignition, you can remove the ignition key only when the selector lever is in the **P** (**Park**) position. When the ignition key is removed, the selector lever will be locked in the **P** (**Park**) position.

Shift programs

The transmission is "self adapting" and will **automatically** select the most appropriate shift program suited to the driving conditions and driving style.

The transmission will select one of the **economy** programs when you drive at a steady speed or at gradually changing speeds without heavy acceleration. This gives best fuel efficiency, with early upshifting and delayed downshifting.

The transmission will automatically select the **sporty** shift programs when you drive at higher speeds, or with heavy acceleration and frequently changing speeds. Upshifts are then delayed to make full use of engine power, and downshifting takes place at higher engine speeds than in the economy programs.

The selection of the most suitable shift program is a continuous automatic process. Regardless of this, the driver can also make the transmission switch to a sporty program by pressing down the gas pedal **quickly**.

This causes the transmission to shift down into a lower gear and makes quick acceleration possible (for example to pass another vehicle). You do not need to depress the gas pedal into the kick-down range. After the transmission has upshifted again, the original program is selected according to your driving style.

An additional shift program allows the automatic transmission to select the right gear for uphill and downhill gradients.

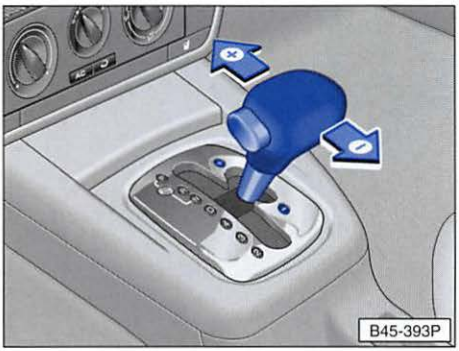
This prevents the transmission from shifting up and down unnecessarily on hills. The transmission will shift down to a lower gear when the driver presses the brake pedal on a downhill gradient. This makes use of the braking effect of the engine without the need to manually shift down.

With this function the transmission will only shift down as far as 2nd gear.

Tiptronic®

By using the "Tiptronic®," you can manually select gears.

To use "Tiptronic®", with the selector lever in the "**D**" position, push the lever to the right. You can do this while the vehicle is moving or when the vehicle is at a standstill. The display will show "**5**", "**4**", "**3**", "**2**" and "**1**" as soon as the selector lever is switched over. The gear you select will also be highlighted. See illustration.



To upshift, push the selector lever forward to the "**+**" plus position. To downshift, pull the lever to the "**–**" minus position.

When accelerating, the transmission will automatically shift into gears "**1**", "**2**", "**3**" or "**4**" before it reaches the maximum rpm's.

When you shift into the next lower gear, the engine will downshift only when there is no possibility of overrevving.

When the kickdown is activated, the transmission will shift down to the next lowest gear regardless of the vehicle and engine speeds.

Automatic Shift Lock (ASL)

Your VOLKSWAGEN is equipped with an automatic Shift Lock (ASL). The ASL is an electromechanical device that locks the selector lever in the **P** (**Park**) and **N** (**Neutral**) positions when the ignition is on.

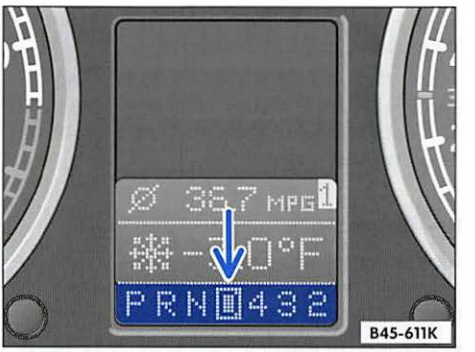
You must press the brake pedal before the selector lever can be moved out of either position. This prevents the selector lever from being unintentionally moved into a driving position, resulting in unwanted vehicle movement.

In selector lever positions **P (Park)** and **N (Neutral),** the following instruction* appears in the instrument cluster as a reminder for the driver:

"When Stationary Apply Footbrake While Selecting Gear"

A time delay element prevents the selector lever from locking when it is moved through the "**N**" (**Neutral**) position (for example, shifting from "**R**" to "**D**"). The locking element only locks the selector lever if it is left in the "**N**" (**Neutral**) position for more than approx. one second without the brake pedal being depressed.

In the **N** (**Neutral**) position, the selector lever will not lock when the vehicle is moving faster than 3 mph (5 km/h).



Display

When the ignition is switched on, the position of the selector lever is indicated by the display in the instrument cluster. The illustration shows selector position **D** engaged.

The engaged selector lever position will appear bright against a dark background while the other positions appear just the opposite.

Selector lever positions

P – Park

Engage **P** (**Park**) only when the vehicle is stationary. Therefore, when parking your vehicle, apply the parking brake first, and then move the selector lever completely to position P. **To do this depress the button in the handle of the selector lever and push it through R to P.** The transmission is then mechanically locked.

To move the selector lever out of the **P (Park)** position you must first insert the ignition key into the ignition lock and turn the key.

Before you move the selector lever from the P (Park) position to R (Reverse) or any other position, you must always apply the brake pedal before and while depressing the button in the handle of the selector lever.

Shift out of the **P (Park)** position before releasing the parking brake.

When the vehicle is parked on a steep hill, shifting out of **P (Park)** may be a little harder. This is due to the vehicle's weight exerted on the transmission.

R – Reverse

Reverse should be selected only when the vehicle has come to a full stop and the engine is running at idle speed.

Before you move the selector lever to R (Reverse), press the button in the handle of the selector lever.

When the ignition is switched on, the back-up lights come on when the selector lever is moved into the "**R**" position.

N – Neutral

Shift to this position for standing with brakes applied.

Before you move the selector lever from N (Neutral) to R position you have to depress the button in the handle of the selector lever.

When the vehicle is stationary or at speeds below 3 mph (5 km/h), you must always apply the foot-brake before and while moving the lever out of N-Neutral.

Do not use N (Neutral) for coasting downhill. Coasting downhill with the transmission in Neutral and the engine not operating will result in damage to the automatic transmission.

D – Normal driving position

Position **D** is for normal city and highway driving. It ranges from zero to top speed and all five gears shift automatically, depending on engine load, driving speed and automatically selected shift programs.

Before you move the selector lever to position 4 you have to depress the button in the handle of the selector lever.

In some circumstances it may be advisable to temporarily engage one of the following selector positions.

4 – Position for hilly stretches

This selector lever position is recommended in situations where the transmission shifts frequently between fourth and fifth gears in position **D**. Also, in position **4** the engine's braking effect is greater than in **D**.

In position **4**, the first, second, third and fourth gears will engage automatically.

Top speed

Please note that the top speed of the vehicle can only be reached in 4th gear.

3 – Position for mountainous regions

This position is to be used for mountain driving with long uphill and downhill gradients or slow driving, and also when you want to make use of the engine braking, which is more effective than in **4**. In **3**, only the first, second and third gears will engage automatically.

Before you move the selector lever to position 2 you have to depress the button in the handle of the selector lever.

2 – Position for steep hills

This position is to be used for extremely steep uphill and downhill gradients or slow driving. It also provides for maximum engine braking effect. **To engage this gear, depress the button in the handle of the selector lever first**. In **2** the transmission will start in the first gear and only upshift to the second gear.

When manually downshifting, the selector lever will move into the lower gear position, however the automatic transmission itself will not downshift until there is no possibility of overrevving.

Kick-down device

The kick-down device gives maximum acceleration when the accelerator pedal is pressed down past the full throttle position. Depending on road speed and engine speed, the upshift is either delayed (forced throttle) or the transmission changes down into the next lower gear.

⚠ WARNING

• Be careful when using the kick-down on slippery roads. Rapid acceleration may cause skidding.

Driving the automatic transmission

Starting the engine

The selector lever must be in **N** (**Neutral**) or **P** (**Park**). If one of the driving positions is engaged a safety switch will prevent the engine from being started.

Selecting a driving position

⚠ WARNING

• When the selector lever is in a driving position, the vehicle may creep even at idle speed. Therefore, do not release the parking brake or foot brake until you are ready to move, because power is transmitted to the wheels as soon as a driving position is engaged.

• If the engine must be running, never have any driving position engaged when checking under the hood. Make sure the selector lever is securely locked into the P position with the parking brake firmly set. Otherwise, any increase in engine speed may set the vehicle in motion, even with the parking brake applied.

• Do not accelerate while selecting a driving position. At this time the engine must run at idle speed so that no undue stress will be placed on the automatic clutches in the transmission.

• If the selector lever is unintentionally moved into N (Neutral) while you are driving, take your foot off the accelerator pedal and wait until the engine speed has dropped to idle speed before selecting a driving position.

• Never shift into R (Reverse) or P (Park) when the vehicle is in motion.

Starting off

Select a gear. **Wait for the transmission to engage the gear** (a slight movement can be felt). Then press the accelerator pedal.

Maneuvering

When alternating between forward (**D**) and reverse (**R**) – for instance, while maneuvering the vehicle into a tight parking space – shift only when the vehicle has come to a full stop and the engine is running at idle speed.

Parking

Engage **P** (**Park**) only when the vehicle is not moving. When parking your vehicle, apply the parking brake first, and then move the selector lever completely to position **P**. **To do this, depress the button in the handle of the selector lever and push it through R to P.** The transmission is then mechanically locked.

To move the selector lever out of the **P (Park)** position you must first insert the ignition key into the ignition lock and turn.

Before you move the selector lever from the P (Park) position, you must always apply the brake pedal before and while depressing the button in the handle of the selector lever.

Shift out of the **P** (**Park**) position before releasing the parking brake.

When the vehicle is parked on a steep hill, shifting out of **P** (**Park**) may be a little harder. This is due to the vehicle's weight exerted on the transmission.

Always heed all WARNINGS on page 100.

Stopping

- When stopping briefly, at a traffic light for example, it is not necessary to move the selector lever to **N** (**Neutral**). Simply apply the foot brakes.
- The driving positions must never be used for holding the vehicle on a hill. Always use your foot brakes when stopped on inclines.

WARNING

- **Never get out of the driver's seat when the engine is running.**
- **If you must get out of the vehicle, move the selector lever securely into the P (Park) position and apply parking brake firmly.**

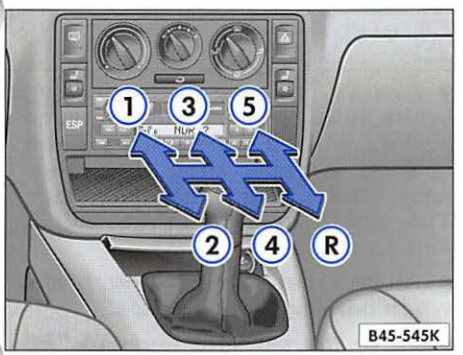
Emergency starting

Your VOLKSWAGEN with automatic transmission **cannot be started by pushing or towing.** If engine does not start because of discharged battery, the vehicle can be started with jumper cables. Refer to "Emergency starting with jumper cables", see ***Booklet 3.2***. Should the engine fail to start, consult your nearest VOLKSWAGEN dealer.

Towing

To tow the vehicle,
see "Emergency towing", ***Booklet 3.2***.

Manual transmission



Gearshift lever

Your VOLKSWAGEN with manual transmission is equipped with an "interlock-feature". **You must depress the clutch pedal all the way before you can start the engine.**

Always depress the clutch pedal fully when changing gears. Do not hold the vehicle on a hill with the clutch pedal partially depressed. This may cause premature clutch wear or damage.

Resting your hand on the gearshift lever knob while driving will cause premature wear in the transmission.

Drive in 5th gear for optimum fuel economy when cruising. However, if more acceleration is required (when passing, for example), shift down.

Gearshift pattern

Shift into R (Reverse) only when the vehicle is not moving.

To engage R (Reverse), move lever to right and pull backward.
Especially after driving forward, stop the vehicle completely, shift and rest briefly into **Neutral** before shifting into Reverse.

The back–up lights go on when you shift into **Reverse** with the ignition on

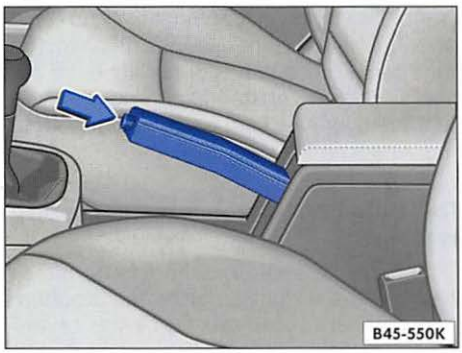
Power steering

When the engine is running, never hold the steering wheel turned all the way to the right or to the left for longer than 15 seconds. The power steering pump will overheat the hydraulic fluid if you hold the steering wheel all the way turned.

This will damage the power steering system!

Each time the steering wheel is turned all the way to the right or left when stopped, you will hear noises caused by the severe stress placed on the power steering pump. At the same time, engine idle speed drops.

Parking brake lever



The parking brake lever is between the front seats.

Setting the Parking Brake:

Pull up the lever until strong resistance is felt.

The parking brake must be pulled up all the way to ensure that the vehicle cannot move. When the ignition is on, the brake warning light will illuminate.

Releasing the Parking Brake:

1 - Press and hold the brake pedal while releasing the parking brake.

2 - Slightly pull up the lever.

3 - Press the release button (arrow).

4 - Push the lever all the way down.

When the parking brake is fully released, the brake warning light will turn off.

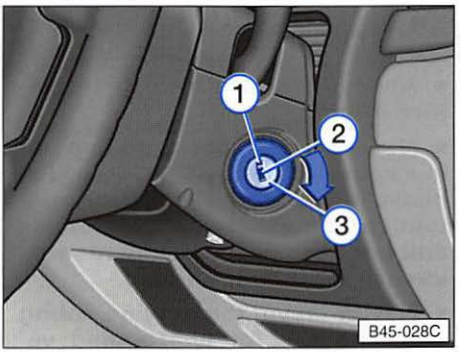
Notes

- If you should drive faster than 4 mph (6 km/h) with the parking brake still engaged, you will hear a warning chime in addition to the warning light.
- When the ignition is switched on and the hand brake is not fully released, the daytime running lights (low beam with reduced brightness) will not light up!

⚠ WARNING

- **Always release the parking brake fully. A partially engaged brake will overheat the rear brakes, reduce their effectiveness, and cause excessive wear. This could lead to brake failure and an accident.**
- **Always set the parking brake when parking your vehicle.**
- **Move the selector lever to "P" (automatic transmission) or move the gearshift lever to "R" or "1" (manual transmission).**
- **When parking on hills, also turn the wheels so that the front wheels will first run into the curb if the vehicle starts to roll.**
  - **parking headed downhill, always turn the front wheels toward the curb.**
  - **parking headed uphill, always turn the front wheels away from the curb.**
- **Do not leave children unattended in the vehicle. A child could release the parking brake and / or move the selector / gearshift lever and allow the vehicle to move causing an accident and personal injury.**

Ignition switch



Your VOLKSWAGEN has an ignition switch with an anti–theft steering column lock.

Switch positions

1 - Ignition off / engine off – steering wheel can be locked.

Note

Whenever you leave the vehicle unattended, pull out the key, turn the steering wheel to the left or right until it locks and make sure that the vehicle is closed and locked.

⚠ WARNING

Do not leave children unattended in the vehicle. Unsupervised use of vehicle controls can cause serious personal injuries.

Ignition key safety interlock

On vehicles with automatic transmission you can remove the ignition key only when the selector lever is in the **P (Park)** position. When the key is removed, the selector lever will be locked in "**P**."

⚠ WARNING

For vehicles with manual transmission:

- **To prevent sudden and unintended vehicle movement, always firmly set the parking brake when you remove the ignition key. Removing the ignition key will not lock the gearshift lever. The vehicle can move if the lever is moved out of gear.**
- **Never remove the key from steering lock or turn the key off (ignition off) while the vehicle is moving. The steering wheel will lock, causing loss of control.**

2 - Ignition on / steering unlocked. If it is difficult to turn the key from position **1** to **2**, move the steering wheel until the key turns freely.

3 - Starter engages. Key returns to position **2** as soon as it is released. For "Starting procedures", see following pages.

In position **3**, the power supply to the headlights, windshield wipers, blower motor and rear window defogger is temporarily interrupted to conserve battery power.

Before the starter can be operated again the key must be turned back to position **1.**

The non–repeat lock in the ignition switch prevents the starter from being operated when engine is running (this could damage the starter).

In positions **2** and **3** several warning / indicator lights will come on. Refer to "Warning / indicator lights" for details.

Chime

If you leave the key in the ignition/steering lock, a chime will sound when the driver's door is opened. This reminders you to remove the key and lock the doors.

Electronic immobilizer

The immobilizer prevents unauthorized persons using your vehicle.

A micro-chip is located in the head of the key which automatically deactivates the immobilizer when the key is inserted in the ignition lock.

The system is automatically activated when the ignition is switched off.

Note

The engine can thus only be started with a correctly coded genuine Volkswagen key.

Trouble free operation of your vehicle can only be guaranteed when using genuine keys.

Starting procedures

⚠ WARNING

- **Always fasten safety belts before driving.**
- **Never start or let the engine run in a confined or enclosed area. Exhaust fumes from the engine contain carbon monoxide, a colorless and odorless gas. Carbon monoxide can be fatal if inhaled.**
- **Never leave the engine idling unattended. An unattended vehicle with a running engine poses a danger of personal injury or theft.**

❀ ***To avoid unnecessary engine wear and to reduce exhaust emissions, do not let your vehicle stand and warm up. Be ready to drive off immediately after starting your vehicle. Maintain moderate speed until the engine is completely warm. Remember, the engine performs best at operating temperature.***

Manual transmission

Your VOLKSWAGEN with manual transmission is equipped with an "interlock-feature". **You must depress the clutch pedal all the way before you can start the engine.**

Automatic transmission*

The engine will start only with the selector lever in **N** (**Neutral**) or **P** (**Park**).

Starting engine

Never depress or even touch the gas pedal while starting the engine regardless of any outside or engine temperature. That applies especially to extrem low temperatures.

- As soon as the engine starts, release the ignition key.
- If the engine does not start the first time, or stalls, turn off the ignition and restart.
- Do not operate the starter for more than 10 seconds.
- Allow approximately 30 seconds between each starting attempt.
- When starting a very hot engine, it may be necessary to slightly depress the gas pedal after starting the engine.
- If the engine still does not start, the fuse for the electric fuel pump may be blown – see "Fuses," chapter *"WHAT DO I DO NOW?"*, ***Booklet 3.2.***

Note

- **On a vehicle with manual transmission, do not start the engine by pushing or towing the vehicle for a distance of more than 50 yards (50 meters). Fuel could get into the catalytic converter and cause damage.**
- **Your VOLKSWAGEN with automatic transmission cannot be started by pushing or towing.**
- **Before you try to start the engine by pushing, you should try jump starting the engine using the battery from another vehicle – see "Emergency starting," chapter *"WHAT DO I DO NOW?"*, *Booklet 3.2.*).**

Stopping engine

Do not stop the engine immediately after hard or extended driving. Keep engine running for about two minutes to prevent excessive heat build-up.

⚠ WARNING

- **Before you check anything in the engine compartment, stop the engine and let it cool down. Hot components can burn skin on contact.**
- **Never touch the radiator fan, it is temperature controlled and can switch on suddenly – even when the ignition is off.**
- **Always heed all WARNINGS on page 104.**

Note

The ignition should not be switched off as long as the vehicle is still moving with a gear engaged. Otherwise fuel could get into the catalytic converter and cause damage.

Engine compartment

WARNING

Before you check anything under the hood:

- **Switch off engine – remove ignition key.**
- **Always fully set the parking brake, move selector lever to P (Park) (automatic transmission) or gearshift lever to Neutral (manual transmission).**
- **Always let the engine cool down. Hot components will burn skin on contact.**
- **Never spill fluids on hot engine components. These fluids can cause a fire.**
- **Never touch the radiator fan, it is temperature controlled and can switch on suddenly – even when the ignition is off.**
- **If work on the fuel system or the electrical system is necessary:**
  - **Always disconnect the battery.**
  - **Never smoke or work near heaters or open flames.**
  - **Always keep an approved fire extinguisher immediately available.**

WARNING continued

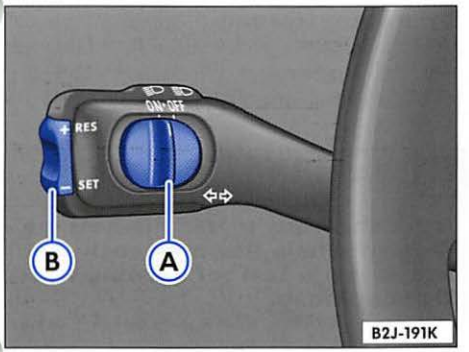
- **To avoid electrical shock and personal injury while the engine is running or being started, never touch:**
  - **Ignition cables**
  - **Other components of the high voltage electronic ignition system.**
- **Be especially careful if the engine must be running.**
  - **Always fully set the parking brake and move the selector lever to P (Park) (automatic transmission) or Neutral (manual transmission).**
  - **Always exercise extreme caution to prevent neckties, jewelry, long hair or loose clothing from getting caught in the radiator fan, V-belts or other moving parts.**

Note

When adding fluids, ensure that they are poured into the proper container or filler opening. Otherwise, serious damage to vehicle systems will occur.

For early leak detection, regularly inspect the vehicle floor panel from underneath the vehicle. If you see spots from oil or other vehicle fluids, have your vehicle inspected by a service center.

Cruise control*



For your driving comfort the cruise control system can be used to keep the vehicle speed constant beginning at about 20 mph (30 km/h).

When driving down a slope, the cruise control may not be able to keep the vehicle speed constant. The weight of the vehicle will cause the vehicle to go faster than you may want. Use the foot brake to slow down.

⚠ WARNING

- **To help keep the vehicle under control, do not use the cruise control when driving on winding or slippery roads, or in heavy or varying traffic.**
- **Only use cruise control when traffic and weather conditions allow you to drive at a steady speed.**
- **To prevent unintended operation of cruise control, turn it off when it is not being used.**
- **It is dangerous to use the Resume feature when the previously set speed is too fast for existing traffic conditions.**

The system is operated with switch **A** and button **B** located on the turn signal lever.

Note

Vehicle with the **multi-function steering wheel** do not come with the button **B** on the turn signal lever – see page 24.

Switching the system on

Slide switch **A** to **ON.**

Setting the speed

When the vehicle reaches the speed to be maintained, depress the **bottom** part of button **B** (**SET**). Now you can take your foot off the gas pedal.

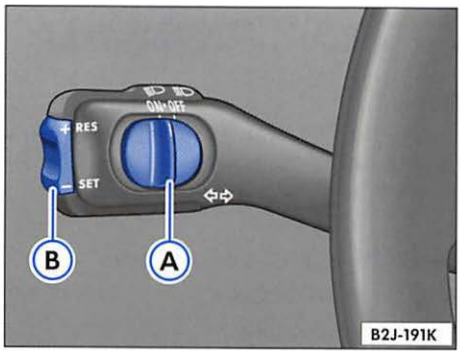
- Increase the speed using the accelerator pedal. When the pedal is released, the system continues to control the vehicle at the speed previously set.
- This will not occur if the set speed is exceeded by the vehicle speed for more than 5 minutes and more than 6 mph (10 km/h). The speed will have to be set again.

Changing the speed

Decelerate / Set

Press the **bottom** part of button **B** (**–**) to reduce the speed.

- By briefly pressing the **bottom** part of button **B** (**–**), you reduce the speed in stages. If you hold down the button, the speed automatically decreases.
- When you release button **B**, the speed of the vehicle at that time is the new speed that is stored.
- If the button is released below approximately 22 mph (30 km/h), the memory is erased. The speed must be reset using the **bottom** part of button **B** (**–**) after the vehicle accelerates above 22 mph (30 km/h).



Accelerate / Set

You can increase speed by preesig the **upper** part of button **B** (**+**) without having to press the gas pedal.

- By pressing the **upper** part of button **B** (**+**) briefly, you can increase the speed in stages. If you press and hold the button in place, the speed increases steadily.
- When you release the button **B**, the speed of the vehicle at that time is the new speed that is stored.

Cruise Control, Turning Off Temporarily

Vehicles with automatic transmission:

The system is temporarily switched off by stepping on the brake pedal, or by sliding switch **A** towards **OFF**.

The speed of the vehicle is stored at this time and can be retrieved.

The speed you are going at the time you temporarily switched off the system is stored and can be retrieved.

To retrieve and **resume** the speed that was previously stored, slide switch **A** to **ON** and press the **upper** part of button **B** (**RES**) after taking your foot off the brake pedal.

⚠ WARNING

It is dangerous to use the Resume feature when the previously set speed is too fast for existing traffic conditions.

In addition, the system is temporarily switched off if you are in **N** (**Neutral**) or in **1**.

Vehicles with manual transmission:

The system is temporarily switched off by stepping on the brake or clutch pedal, or by sliding switch **A** towards **OFF**.

The speed you are going at the time you temporarily switched off the system is stored and can be retrieved.

⚠ WARNING

It is dangerous to use the Resume feature when the previously set speed is too fast for existing traffic conditions.

Setting the speed

If the speed was erased, or if no speed was set when the system was temporarily turned off, perform one of the following steps to set the speed:

- Press the **upper** part off button **B** (**+**) and hold it until the desired speed is reached. Release the switch and speed is stored.

or

- Press the gas pedal until you reach the desired speed and press the **bottom** part of button **B** (**SET**) briefly The speed is stored.

Cruise Control, Turning Off Completely

⚠ WARNING

To prevent unintended operation of cruise control, turn it off when it is not being used.

Vehicles with automatic transmission:

The system is **completely switched off** by moving the selector lever into:

- **P, N** or **R**
- **1**

or

- by sliding switch **A** to the right stop (OFF).
- by switching off the ignition when the vehicle is stopped.

Vehicles with manual transmission:

- sliding switch **A** to the right stop (OFF)
- by switching off the ignition when the vehicle is stopped.

ALPHABETICAL INDEX

A

Adjustable steering column 68
Adjusting
- Climate controls 80
- Head Restraints 56
- Mirrors 50
- Seats 57

Adjustments Head Restraints 56
Adjustments – Mirror 50
Air circulation – luggage compartment . 72
Air conditioning 80
- Air recirculation 81
- ECON cooling 85
- Fan switch 80
- Maintenance 86
- Vents 82

Air outlets 82
Air recirculation
- Air conditioning 81
- Climatronic 89

Air vents
- Air conditioning , ... 82
- Climatronic 91

Airbag ..... *See also* **Booklet 2.1**
- Child safety 34
- Indicator light 16

Airbag indicator light 16
Alarm system 30
Alarms
- Anti–theft system 30
- Operation 30
- Setting 28

Alternator/Generator 19
Anti–lock braking system (ABS) 17
Anti–Slip regulation (ASR)
- Control switch 44
- Indicator light 23

Anti–Slip–Regulation 44
Anti–theft alarm system 30
..... *See also* **Alarms**
Armrest 66
- Front 66
- Rear 66
- Storage bin 66, 75

Ashtrays 78
ASR (Anti–Slip Regulation) 23
Assist handles 52
Automatic locking ..... *See* **Locks**
Automatic transmission
- Kick–Down 97
- Tiptronic 94
- Towing 98

Automatic transmission (5–speed) 93
- Back–up lights 96
- Ignition key safety interlock 93

Average driving speed indicator 11
Average fuel consumption indicator ... 11

ALPHABETICAL INDEX

B

Back–up lights 96
– Automatic transmission 96
– Manual transmission 99
Backrest 69
– Folding 69
– Lockable 69
– Raising 70
Backward adjustment of seats 59
Battery replacement, remote key 25
Battery – vehicle ..... *See* **Booklet 3.2**
Beverage holder 74
Brake – Warning light 18
Brakes
– Fluid ..... *See* **Booklet 3.2**
– Pads 16
– Warning light 18
– Wear indicator 16
Buzzer 21
..... *See also* **Chime**

C

Car seat, Child ..... *See* **Booklet 2.1**
Cargo Net – Tie–down hooks 72
Central locking system 31
– Rear lid 35
Central locking systems 33
Child Safety, – Child Car Seat 58
Child safety
..... *See also* **Booklet 2.1**
– Safety lock, rear doors 34
Chime 25, 42, 102
– Door 25
– Ignition 102
– Oil 21
– Safety belt 19
Cigarette lighter 76
Climate controls 80
See also **Air conditioning; Climatronic**
Climatronic 87
– air recirculation 89
– Air vents 87
– Automatic control 87
– Maintenance 92
– Manual control 87
– Operating controls 88
Clock 10
– Setting 10
Coat hooks 52
Controls
..... *See also* **Climate controls**
– Climate 80
– Interior light 49
– Locks 31
– Remote 27
– Unlocking window 36
Coolant temperature gauge 9
Cooling system
– Engine ..... *See* **Booklet 3.2**
– Interior ..... *See* **Climate controls**
Cruise control 105
Cup–holder 74

ALPHABETICAL INDEX

D

Dashboard 3
Data Link Connector (DLC) 23
Day–Night mirror 50
Daytime running lights 42
Defogging
- Side windows 83
- Windshield 83
- Windshield and side windows 83

Defrosting
- Rear window 43
- Windshield and side windows 82, 89

Digital clock 10
Dimmer switch, – Dashboard lights . . . 42
Displays . . *See* **Multi–Function Indicator**
Distance driven indicator 13
DLC 23
Doors 31
- Automatic locking 34
- Child safety lock, rear 34
- Closing 31
- Locking with key 31
- Opening 31
- Power locks 31
- Unlocking with key 31
- Unlocking with remote 28

Driver position 57
Driver's Seat
- Adjustments – Manual
  - Forward & Backward 59
  - Lumbar Support 59
  - Seatback 59
- Adjustments – Electrical
  - Forward & Backward 61
  - Backrest 61
  - Height 61
  - Raise & Lower 61
  - Memory 62

Driver's seat 57
- Adjustments, – Manual, – Height . . 59

Driver's seat–memory 62
Duplicate key 26

E

ECON cooling 85
Electrical / Electronic
- Heated driver's seat 43
- Heated passenger seat 44
- Power locks 31

Electrical/Electronic, Seat Adjustment . 60
Electrically heated driver's seat 43
Electrically heated passenger seat 44
Electronic Differential Lock 44
Electronic differential lock (EDL) 17
Electronic immobilizer 17, 102
Electronic power control (EPC) 19
Emergency
- Closing sunroof 41
- Flasher 43
- Off (Seat Memory) 65

Emergency brake 100
Emission control system
- Malfunction indicator 22
- Malfunction indicator light 22

ALPHABETICAL INDEX

Engine
- Compartment 104
- Coolant temperature 9
- Fuel specifications .. *See* **Booklet 3.2**
- fuel specs ..... *See* **booklet 3.2**
- Oil pressure 21
- Oil specifications .... *See* **Booklet 3.2**
- Oil specs ..... *See* **booklet 3.2**
- Specifications ..... *See* **Booklet 3.2**
- Windshild washer container ..... *See* **Booklet 3.2 + 3.3**

Environment
- considerations ..... *See* **Booklet 3.2**
- Starting procedures 102

F

Fahrenheit to Centrigrade, setting 89
Fan
- Climatronic 87
- Radiator ..... *See* **Booklet 3.2**
- Air conditioning 80
- Switch – Air conditioning 80

Fastening Cargo Net 72
Flasher, emergency 43
Floor mats 67
Fog lights – Front 42
Folding
- Outside mirrors 51
- Rear backrest 69

Forward adjustment of seats 59
Fresh air 85
Front armrest 66
Front door panel light 49
Front doors 31
Front fog lights 42
Front interior light 49
Front map lights 49
Front passenger position 58
Front passenger's seat, 58
Front seats 57
..... *See* **Booklet 2.1**
Fuel
- Consumption indicator, ... 11
- Momentary consumption
- Average consumption 13

Fuel filler flap release 44
Fuel gauge 10
Fuses ..... *See* **Booklet 3.2**

G

Garage door opener – Homelink 53
Gasoline engine – starting 103
Gauge
- Coolant temperature 9
- Engine coolant temperature 9
- Fuel 10
- Odometer 10
- Speedometer 10
- Tachometer 8

Gearshift lever 99
General illustration 3
Generator 19
Glove box light 49
Glove Box/Compartment 79
- Air Vent 79
- Light 49

ALPHABETICAL INDEX

H

Handbrake 100
Hat shelf 71
  Sun shade 71
Head Restraints 56
  . . . . . *See* **Booklet 2.1**
  Height Adjustment 56
  Installing 56
  Removing 56
Headlight
  – Dimmer switch 45
  – Flasher 45
Headlight dimmer switch lever 45
Headlight flasher 45
Heated
  – Driver's seat 43
  – Passenger's seat 44
  – Window 43
Heated driver's seat 43
Heated outside mirrors 51
Heated passenger seat 44
Heating 80
Heating interior quickly 83
Heating system . . . *See* **Climate controls**
Height adjustment of seats 59
High beam 16
High beam lever 45
Homelink 53
Hood, opening . . . . . *See* **Booklet 3.2**
Hooks, Tie–Down, Cargo Net 72
Horn 3
  . . . . . *See also* **Booklet 2.1**
How to use the air conditioning more economically 85
How to use this Manual 2

I

Ignition 101
  – Key safety interlock 93
Immobilizer 17, 102
Important information about this Manual 2
Increasing size of luggage compartment 71
Indicator – Multifunction (MFA) 11
Indicator lights 15
  – Airbag system 16
  – Anti–Lock brake system 17
  – Anti–Slip Regulation 23
  – Brake 18
  – Door open 22
  – Electronic immobilizer 17, 102
  – Electronic power control 19
  – Engine coolant temperature level . 19
  – Engine oil pressure 21
  – Front brake pads worn 16
  – Fuel level too low 22
  – Generator 19
  – High beam, ... 16
  – Malfunction indicator lamp 22
  – Safety belts 19
  – Trunk / Rear lid 22
  – Turn signals 16
  – Windshield washer 22
  – Windshield washer fluid level too low 22
Inside day–night mirror 50
Installing wiper blades 48

ALPHABETICAL INDEX

Instrument cluster 8
Instrument illumination 42
Instrument panel 3
- Digital clock 10
- Display, Multifunctioin indicator ... 11
- Engine coolant temperature gauge . 9
- Fuel gauge 10
- Odometer 10
- Speedometer 10

Interior light control 49
Interior lights 49

J

Jump starting ..... *See* **Booklet 3.2**

K

Keeping interior comfortable 83
Key
- Coding 28
- Duplicate 26
- Ignition, Safety Interlock 93
- Master with remote 25
- Remote release 25
- Replacement 26
- Tag 26
- Valet 26

Key for remote release 25
Keys 25
Kick–down 97

L

Lane changer 45
Light switch 42
Lighter 76
Lights 42
- Backup 96
- Brake warning 18
- Daytime running 42
- Door open 22
- Fog, front 42
- Front door panel 49
- Hazard 43
- Indicator 6, 15
- Interior control 49
- Interior front 49
- Luggage compartment 49
- Map 49
- Storage compartment 49
- Trunk / Rear lid 22

Loading a Roof Rack 73
Lock positions of trunk lock cylinder .. 35
Lockable Backrest 69
Locking the vehicle 31
Locks
- Doors 31
- Rear lid 35
- Truck / Rear lid 35

Locks, Glove Box/Compartment 79
Luggage compartment 71
- light 49
- Socket 77

ALPHABETICAL INDEX

M

Maintenance – Vehicle ..... *See* **Booklet 1.2 + 3.2**
Malfunction indicator lamp 22
Manual air conditioning 80
Manual transmission 99
– Back–up lights 99
Master key
– With remote 25
Mats, Floor 67
Maximum cooling 84
Memory
Retrieving
Driving Forward 64
Driving in Reverse 64
Setting
Driving Forward 62
Driving in Reverse 62
Memory for driver's seat and outside mirrors 62
Memory for outside mirrors 51
Memory functions
Driver's Seat 62
Initializing 65
Outside Mirrors 62
Memory functions
– Emergency Off, Seat 65
– Multi–Function Indicator (MFA) ... 11
MFA ..... *See* **Multi–Function Indicator**
Miles per gallon / Liters per 100 km ... 13
Miles per hour / Kilometers per hour .. 13
Mirrors 50
– Outside memory 62
– Power "fold flat" function 52
Retrieval
Driving Forward 64
Driving in Reverse 64
Tilt Position, Backing Up 62
Mirrors with power "fold flat" function 52
Momentary fuel consumption indicator 13
Multi–Function Indicator (MFA)
– Average driving speed 13
– Average fuel consumption 13
– Distance driven 13
– Driving time 13
– Erasing the settings 12
– Momentary fuel consumption 13
– Outside temperature 12
Multi–function indicator 11
Multi–function steering wheel 24
– Cruise control 24
– Lighting 24
– Radio system 24

N

Normal cooling 84

O

OBD II 23
Odometer 10, 14
Oil pressure 21
Oil specification ..... *See* **Booklet 3.2**
On Board Diagnostic System 23
One–touch down feature 36

ALPHABETICAL INDEX

One–touch up feature 36
Opening the hood ..... *See* **Booklet 3.2**
Opening the vehicle 31
Operating controls
– Air conditioning 80
– Climatronic 88
Outlets, – Air 82
Outside mirrors 50
Outside mirrors–memory 62
Outside temperature indicator 12

P

Panic button / switch 28
Parking 98
Parking brake 100
Pedals 67
Pinch protection
– Windows 38
– Sunroof 40
Power
– Steering 99
– Windows 36
Power controls
– Locking switch 33
– Locks 31
– Outside mirrors 51
– Roof 40
Power locking switch 33
Power locks 31
Power outside mirrors 51
Power roof 40
– Closing 40
– Convenience closing 41
– Emergency closing 41
– Opening 40
Power Window 36
Power windows
– Pinch protection 38

R

Radiator ..... *See* **Booklet 3.2**
Radio 24
..... *See also* **Booklet 3.2**
– Control on multifunction steering wheel 24
Rain sensor, ... 47
Rear
– View mirror 50
– Window defroster 43
Seat 69
Locking 69
Rear / Trunk lid
– Closing 35
– Inside release 35
– Locks 35
– Opening 35
Rear lid 35
Rear Socket 76
Rear view mirror 50
Rear window defogger 43
Recirculation air 81

ALPHABETICAL INDEX

Releases
- Fuel filler flap 44
- Hood ..... *See* **Booklet 3.2**
- Trunk / Rear lid 35

Remote control 25, 27
- Battery replacement 25

Remote controls 28
- Locking 28
- Release 28
- Resetting 28
- Unlocking 28

Remote locking / unlocking 27
Remote Transmitter 53
Removing the Roof Rack 74
Replacement of keys 26
Replacing
- Batteries, remote control 25
- Bulbs ..... *See* **Booklet 3.2**
- Keys 26
- Wiper blades 48

Replacing batteries, – Remote control . 25
Restraint System, Head Restraint 56
Restraint systems ..... *See* **Booklet 2.1**
Reverse
- Automatic transmission 96
- Manual transmission 99

Roof 40
Roof Rack 73
- Installing 74
- Loading 73
- Removing 74

S

Safety belt warning light 19
Safety belts ..... *See* **Booklet 2.1**
Seat
- Electrical Adjustment, Backrest 61
- Rear 69

Seat belts ..... *See* **Booklet 2.1**
Seatback adjustment 59
Seating position
- Driver 57
- Front passenger 58

Seats
- Belts ..... *See* **Booklet 2.1**
- Child seats ..... *See* **Booklet 2.1**
  - Child Car Seat 58
- Front 57
- Electrical Adjustment 60
  - Forward + Backward 61
  - Height 61
  - Raising + Lowering 61
  - Memory 62
- Manual Adjustment
  - Folding 69
  - Head Restraint 56
- –Foreward and backward adjustmen 59
- –Height adjustment 59
- –Manual adjustment 59
- –Seatback adjustment 59

Secondary key 26
Securing Luggage 72
Selector lever display 95
Selector lever position display 14
Self–dimming mirror 50
Sensor, rain 47

ALPHABETICAL INDEX

Settings
- Clock 10
- Odometer 10
- Outside Mirrors 62
- Seat Memory 62

Signals, Turn 16, 45
Socket 76, 77
Specifications, vehicle . . *See* **Booklet 3.3**
Speedometer 10
Starter switch 101
Starting, – Gasoline engine 103
Starting procedures 102
Steering
- Wheel, Multi–function 24
- Sound System 24
- Lighting 24

Steering lock 101
Steering wheel 68
Stopping engine 103
Storage
- Compartment light 49
- Box/Compartment 79

Sun roof . . . . . *See* **Power, roof**
Sun shade 71
Sun visors 53
Switches 42
- Anti–Slip Regulation (ASR) 44
- Daytime running lights 42
- Emergency flasher 43
- Fog lights, front 42
- Heated seat, driver's 43
- Heated seat, passenger's 44
- Instrument illumination 42
- Light switch 42
- Panic button switch 28
- Power locking switch 33
- Rear window defogger 43

Synchronised mirror adjustment 51

T

Tachometer 8
Tag, Key 26
Temperature control
- Air conditioning 80
- Climatronic 87

Temperature indicator, outside 12
Theft protection – Alarm system 30
Tie–Down Hooks, Cargo Net 72
Tilt and Telescopic Steering Wheel 68
Time driven indicator 13
tiptronic 94
- Top speed 96

Towing 98
Transmission
. . . . . *See* **Automatic transmission**
. . . . . *See* **Manual transmission**

Transporting heavy objects 71
Trip odometer 14
Trunk – Light 49
Turn signals 16, 45
- Indicators 16
- Operation 45

ALPHABETICAL INDEX

U

Universal Transmitter 53
Unlocking the vehicle 31

V

Valet key 26
Vehicle battery ..... *See* **Booklet 3.2**
Vehicle Identification Number ..... *See* **Booklet 3.3**
Vehicle specifications ... *See* **Booklet 3.3**
Ventilation 80, 85, 90

W

Warning / Indicator lights
- Airbag system 16
- Alternator / Generator 19
- Anti-Lock brake system 17
- Anti-Slip Regulation 23
- Brake 18
- Coolant level 19
- Coolant temperature 19
- Door open 22
- Electronic power control 19
- Engine coolant level, – Engine coolant temperature 19
- Engine oil pressure 21
- Front brake pads worn 16
- Fuel level 22
- Generator 19
- High beam 16
- Malfunction indicator light 22
- Rear lid 22
- Safety belts 19
- Trunk / Rear lid 22
- Turn signals 45
- Washer fluid 22

Warning lights 15
Washer fluid ..... *See also* **Booklet 3.2**
Washer system 46
Window / Windshield
- Pinch protection 36
- Rear defogger 43
- Wiper blades 48

Windows 36
- Defogging 83
- Defrosting 82, 89
- Ignition off 39
- Ignition on 39
- Pinch protection 38

Windshield wiper 46
Wiper 46
Wiper / Washer system
- Blades 48
- Rain sensor 47
- Windshield 46

Wiper blades 48
Wiper/Washer system
- Container capacity .. *See* **Booklet 3.3**
- Fluid ..... *See* **Booklet 3.2**

It has always been VOLKSWAGEN's policy to continuously improve its products. VOLKSWAGEN, therefore, reserves the right to make changes in design and specifications, and to make additions or improvements to its products without incurring any obligation to install them on products previously manufactured.

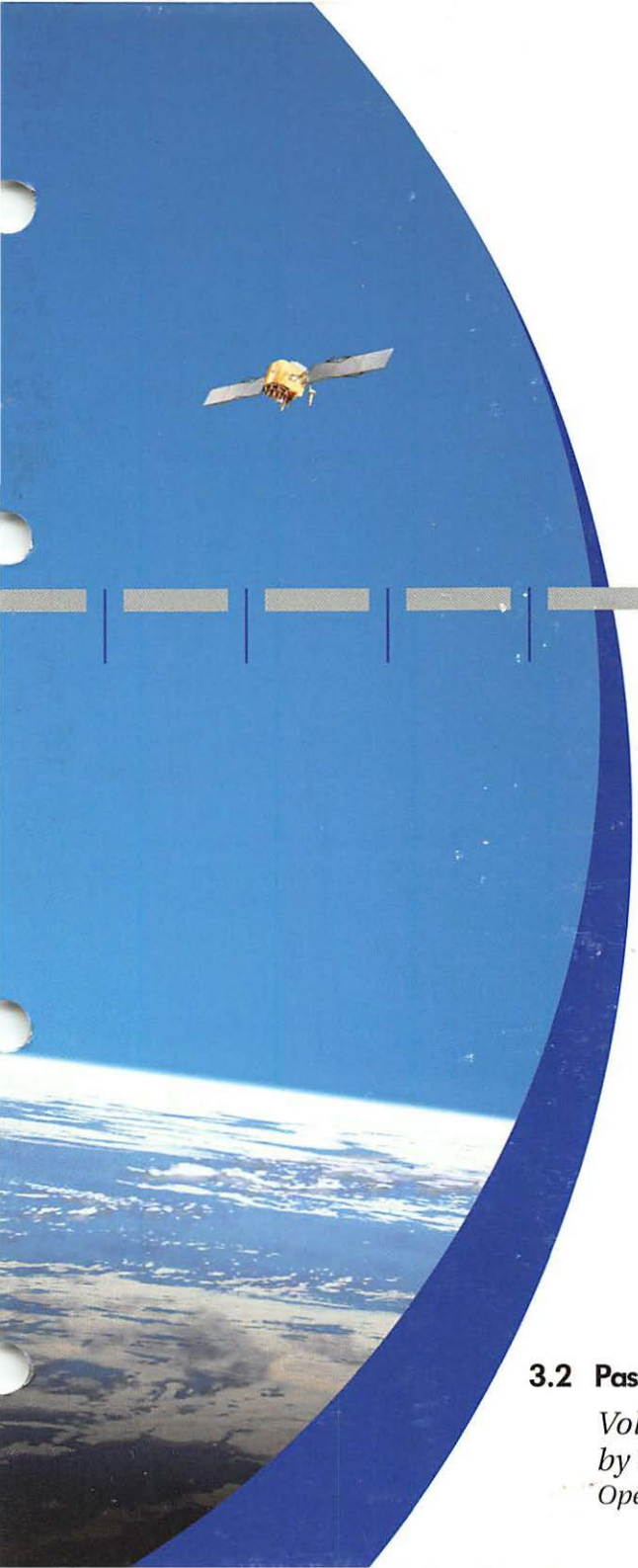
Text, illustrations and specifications in this manual are based on information and knowledge available at the time of printing.

All rights reserved. May not be reproduced or translated in whole or in part without the written consent of VOLKSWAGEN AG. Specifications are subject to change without notice

Printed on environmentally friendly paper (bleached without chlorine, recyclable). Printed in Germany

© 2002 VOLKSWAGEN AG

3.1 2004 Passat Sedan | Controls and Equipment | Art.-Nr.: 241.551.PLB.21
Print Status: 05.2003 | Edition: Nordamerika englisch 05.2003



3.2 Passat, Jetta Wagon

Volkswagen Telematics by OnStar

Operating Instructions

About this booklet

This booklet contains important information, tips, suggestions and warnings on using your vehicle. The other booklets in the Owner s Literature contain further information that you should be aware of for your own safety and for the safety of your passengers.

Make sure that you always keep the complete Owner s Literature in the vehicle. This is especially important when you lend or sell the vehicle.

This manual describes the **scope of vehicle equipment** at the time of publication. Some of the equipment described will not be available until a later date, or is only available for certain markets.

Illustrations may slightly vary from your vehicle. For this reason you should regard illustrations as a general guide.

At the beginning of this booklet, you will find a **table of contents** showing all the items described in this manual in the order they appear.

An **alphabetical index** is at the end of the booklet.

Directions and positions (for example right, left, front, rear) are always relative to the direction of travel of the vehicle unless stated otherwise.

Some sections of this booklet do not apply to all vehicles. If this is the case, a text at the beginning of the section indicates which vehicles it applies to, for example "Applies to vehicles with airbag system".

® Registered trademarks are marked ™ or ®. However, the absence of this symbol does not constitute a waiver of the rights concerning any term.

▶ The section is continued on the next page.

◀ Indicates the **end of a section.**

⚠ WARNING

Texts with this symbol contain important information on safety. They help protect you, your passengers and others from accidents and injury.

Caution

Texts with this symbol draw your attention to potential sources of damage to your vehicle.

For the sake of the environment

Texts with this symbol contain additional information on the protection of the environment.

Note

Texts with this symbol contain additional information.

Table of contents

Introduction 2
General information 2

OnStar Controls and Personal Calling 5
Using OnStar 5
OnStar services button 7
OnStar emergency button 8
OnStar communication button 9
Volume control 9
OnStar system status light 10
Memo recorder 10
Voice Response - Tips and Tricks 13
OnStar Personal Calling 16

OnStar Center and Services ... 25
OnStar Center 25
Information and Convenience Services 28

OnStar Virtual Advisor 29
U.S. models only 29
Available information 31

Additional information and system status messages 35
Additional information 35

Alphabetical index 38

Introduction

General information

Welcome to OnStar®

Dear Volkswagen Driver,

This manual gives you all the information you need to get started using Volkswagen Telematics by OnStar, with descriptions of the current OnStar services, including OnStar Personal Calling, Virtual Advisor[1], and the OnStar Subscriber Website.

Please keep this booklet in your vehicle for easy reference. If you need information regarding operation or features of OnStar, you'll have it readily at hand. Once you start using this booklet, you'll see how easy it is to take advantage of the safety, security, and convenience of OnStar. ◀

Subscription Service Agreement

Your OnStar subscription can be activated at your authorized Volkswagen dealership or directly through OnStar.

At sometime you will need to sign an OnStar-Subscriber agreement. This will normally happen as part of the sales process when you pick up your vehicle. If you need to subscribe without dealer assistance, call OnStar at 1-888-667-8271. ◀

What you should know about OnStar Safe & Sound Service

Your new vehicle comes with one year of OnStar Safe & Sound Service.

You must activate immediately to ensure that you receive your full year of service, as the prepaid subscription begins when the vehicle is delivered. How to activate ⇒ page 6.

If you do not activate your system or if you allow your service contract to expire, OnStar cannot guarantee that services can be provided.

Note

- Safe & Sound Services are provided for one year. You can obtain additional services by calling 1-888-4-OnStar (1-888-466-7827).
- When you sign an OnStar contract, you are given a PIN to access different OnStar services. ◀

[1] USA models only

Availability

OnStar service is only available throughout the United States (including Hawaii and Alaska) and Canada. If a request for service occurs outside of these areas, communications may not be available, and the OnStar Advisor may not be able to help you.

If you make an emergency or service call, the OnStar System uses the Global Positioning System (GPS) to determine your location automatically ⇒ page 3. ◀

OnStar Center

24 hour service.

The OnStar Center is the heart of your service - staffed 24 hours a day, 7 days a week with knowledgeable OnStar Advisors. Even on weekends and holidays there is always someone ready to help. For further details ⇒ page 25.

OnStar uses sophisticated Global Positioning System (GPS) satellites to locate your vehicle, wireless technology to provide the communications link, and seamless integration into your vehicle.

This system allows the OnStar Advisors to pinpoint your vehicle's location precisely. This way, the Advisors can provide you with a range of helpful services to make your driving experience safer and more convenient.

Also, for subscribers with some OnStar Service Plans ⇒ page 26, the Advisors can access an extensive database to assist you with directions, making reservations, and other convenient services. ◀

Global Positioning System (GPS)

Vehicle position is determined by receiving and interpreting signals transmitted by satellites.

Vehicle positioning information is relayed to the OnStar Center during OnStar Button or Emergency Service Button requests from the vehicle. Location information will be tracked and given only to the proper authorities in the event of a vehicle theft notification.

How GPS works:

The signal being sent from the GPS satellites is received by your vehicle, a computer determines its exact position.

If the signals are obstructed, positioning capability could be degraded or lost. This situation would be most prevalent in urban areas where tall buildings are located. Tunnels, underpasses, parking garages, trees and similar structures could also adversely affect positioning performance.

Note

- If the signals are obstructed, the system will operate but the OnStar Center could have difficulty identifying your current location. The last valid position obtained before the obstruction is retained, however, and can be sent. The OnStar Advisor may depend on you to provide verbal information regarding ▶

your vehicles location if such an obstruction of the satellites occurs.

- Even if your positional data was transmitted, there is no guarantee that your vehicle can always be located. ◀

OnStar subscriber website

The pesonalized MyOnStar web site offers a wide range of information and individual settings.

MyOnStar - Your personalized website will provide you with easy access to personalized account information and help with your OnStar system, including your Virtual Advisor[2)] and Personal Calling. You will also be able to plan your travel, receive location based or personal weather information, and interact with OnStar Advisors and customer care groups.

As an OnStar subscriber, you have access to the OnStar Subscriber Website. The MyOnStar Subscriber Website is designed to help you set up and manage the various news and information selections for your Virtual Advisor.

You can also customize your **OnStar Virtual Advisor Profile**. Your Profile allows you to customize the depth and breadth of the information you will have access to automatically when you sign on to the Virtual Advisor from your vehicle.

To access the Subscriber Website, simply go to:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar.

The Subscriber site is secured. Access requires your account number and personal identification number (PIN). If you do not know your account number or PIN, contact OnStar at **1-888-4-ONSTAR (1-888-466-7827).**

Note

For security reasons, your information can only be mailed to your address on record. ◀

System limitations

An OnStar Service Subscription Agreement is required in order to receive OnStar services.

This manual contains the latest information at the time it was printed. OnStar reserves the right to make changes to the services without prior notification.

In order to provide you with excellent service, any call to the OnStar call Center may be monitored or recorded.

Note

For more information, contact OnStar at 1-888-4-ONSTAR (1-888-466-7827). ◀

2) USA models only

OnStar Controls and Personal Calling

Using OnStar

Three OnStar buttons

The OnStar controls consist of three separate buttons and a system status light.

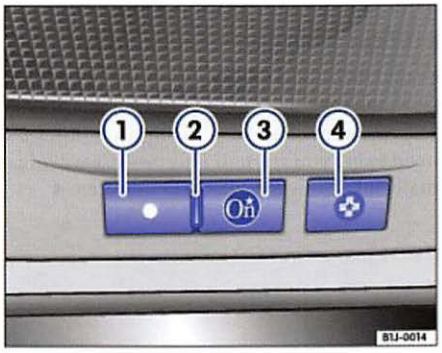


Fig. 1 OnStar buttons

① OnStar communication button (DOT button) 9
② OnStar system status light 10
③ OnStar services button (OnStar button) 7
④ OnStar emergency button ..... 8 ◀

OnStar activation

You must activate immediately to ensure that you receive your full year of service.

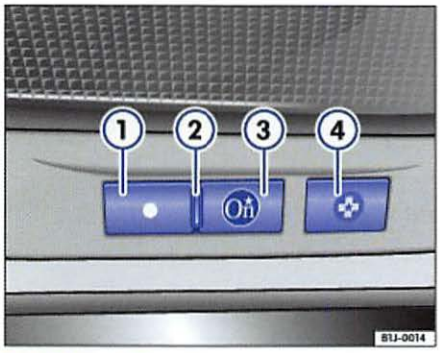


Fig. 2 Blue OnStar button

How to activate

– Press the blue OnStar button ⇒ fig. 2 (3) located on the headliner panel. A prerecorded message will be played, which explains OnStar services and activation.

– Press the blue OnStar button a *second* time. An Advisor will answer and assist you in the enrollment process (this could take a few minutes the first time).

The Advisor will request the information we need to get you started. This process will normally take between 10 and 15 minutes. ◀

OnStar services button

OnStar button

Using the blue OnStar *button, you are connected to an OnStar Advisor.*

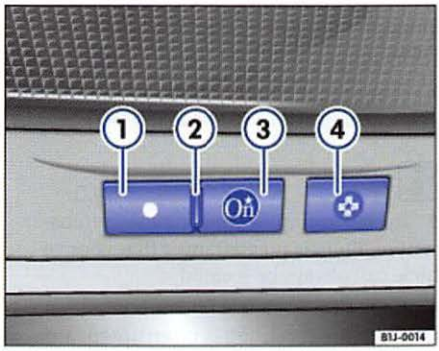


Fig. 3 OnStar services button (blue OnStar button)

– Press the blue OnStar button ⇒ fig. 3 (3), and you are connected to an OnStar Advisor.

You will hear a chime, followed by the words **<Connecting to OnStar>** or **<Connecting to Volkswagen Telematics by OnStar>**. OnStar then generates a sequence of **tones** during the connection process. The process will normally take about 15 seconds.

To cancel your call, press the OnStar Communication (DOT) button.

Note

After pressing the button to contact OnStar, normal connection time is 10-15 seconds. In unusual circumstances, it may take as long as 2-3 minutes to connect. Please allow sufficient time to make the connection. ◀

OnStar emergency button

Emergency button

Please use this button only for true emergencies.

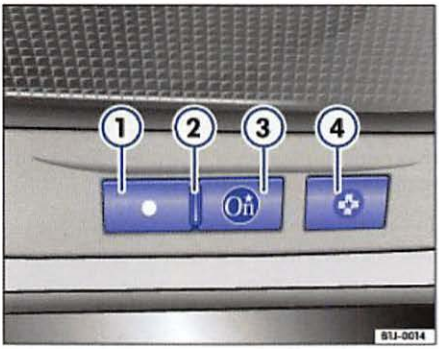


Fig. 4 OnStar emergency button

– In an emergency, press the button ⇒ fig. 4 (4) to connect with an OnStar Advisor.

Your call will be given the highest priority, and you will hear a tone followed by the words **<Connecting to OnStar Emergency>**.

The Advisor will attempt to locate your vehicle, find out what kind of assistance you require, and contact the nearest emergency services provider who can dispatch ambulance, fire, police or other emergency services.

If you made an unintentional emergency call, you can cancel it by pressing the DOT button.

Note

- Even if your positional data was transmitted, there is no guarantee that your vehicle can always be located.
- If the GPS system is interrupted ⇒ page 3 or if satellite reception is interrupted, automatic vehicle location may be interfered with or may even be unavailable.
- If the signals are obstructed, the system will operate but the OnStar Center could have difficulty identifying your current location. The last valid position obtained before the obstruction is retained, however, and can be sent. The OnStar Advisor may depend on you to provide verbal information regarding your vehicles location if such an obstruction of the satellites occurs. ◀

OnStar communication button

Communication button (DOT button)

Telephone calls can be ended with the blue OnStar communication (DOT) button.

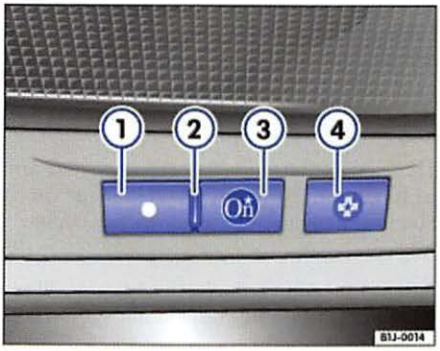


Fig. 5 DOT button

– Press the DOT button ⇒ fig. 5 ① at the end of a call. You'll hear the words **<OnStar Request Ended>**.

– Press this button to answer an incoming personal call, or cancel a call if one of the other buttons is accidentally pressed.

This button is also used for the Voice Recognition to access OnStar Personal Calling and Virtual Advisor[3] Services. ◀

Volume control

Volume control

The volume control knob on Sound System also controls the volume of the Telematics System.

– Turn the Sound System volume knob to control the volume.

Vehicles equipped with the Volkswagen Navigation System:

The Volkswagen Navigation System's audio prompts will talk over OnStar activity. You can turn down the Navigation System's audio prompts during OnStar calls by entering the Navigation System's menu and adjusting the Navigation volume. ◀

[3] USA models only

OnStar system status light

System status light

The system status light displays the status of the OnStar System.

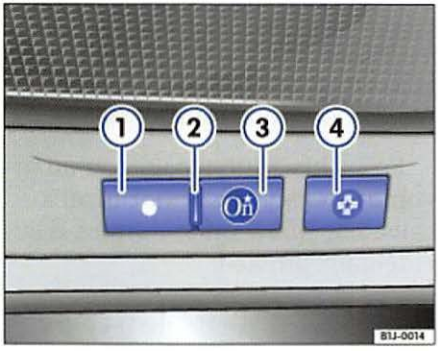


Fig. 6 System status light

The system status light ⇒ fig. 6 (2) is located between the DOT button and the Emergency button. It will take 10 to 15 seconds for this light to come on after you have switched on the ignition.

Solid green

Indicates the OnStar system in the vehicle is powered ON and ready to make calls or receive calls from the OnStar Center. The system status light will remain green even in areas without cellular coverage.

Blinking green

The light blinks green to indicate a call is being connected or in progress. If you notice this light blinking while you are not on a call, press the DOT button.

Red

This signals that your OnStar system may not be functioning properly. Press the blue OnStar button to attempt to contact an OnStar Advisor.

If the connection is made, the Advisor will assist you making sure your OnStar system is operating properly.

If you cannot contact the OnStar Center or if your system status light remains red, please take your vehicle to the nearest authorized Volkswagen dealer for diagnosis and service.

Note

If the system status light does not illuminate, the System is not operational. Have the OnStar System diagnosed by your authorized Volkswagen dealer. ◀

Memo recorder

Introduction

Your OnStar system is equipped with a memo recorder to store information given to you during a call with an OnStar Advisor or the OnStar Virtual Advisor[4]. You can play back the stored audio information at a later time, when you are no longer connected to OnStar. ▶

[4] USA models only

The memo recorder has the capacity to record up to 80 seconds of audio. ◀

Record

Only during a call with OnStar Call Center or Virtual Advisor.

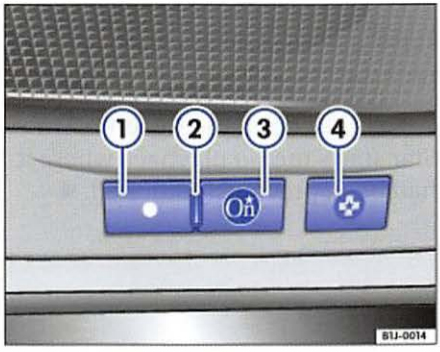


Fig. 7 OnStar services button

Starts recording

– Press the blue OnStar button ⇒ fig. 7 (3). The system beeps several times, followed by a longer beep.

Ends recording

– Press the blue OnStar button again. The system beeps again.

The series of beeps may last up to 5 seconds to clear an existing memo. A longer beep will be heard immediately before recording starts. ◀

Playback

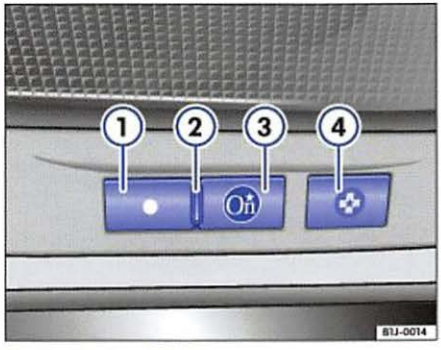


Fig. 8 OnStar: DOT button

– Press the DOT button ⇒ fig. 8 (1), OnStar response: **<Ready>**.

– Say the command **Memo**, OnStar response: **<Playback from start of memo>**. ◀

Stop playback (partially through)

– Press the DOT button.

Returns control to Audio system. ◀

To resume playback

– Press the DOT button ⇒ page 11, fig. 8 ①, OnStar response: **<Ready>**.

– Say the command **Memo**, OnStar response: **<Play or Resume>**.

– Say the command **Play**, OnStar starts memo playback from beginning, or

– Say the command **Resume**, OnStar starts memo playback where it had been previously stopped. ◀

Voice Response - Tips and Tricks

Operation of the OnStar speech recognition systems

Speech recognition allows the user to speak to a computer.

The computer tries to understand the user's command, and responds by speaking back, or by taking the appropriate action (e.g. dialing the phone).

The OnStar speech recognition systems use speech technology that is designed to understand a wide range of speakers of American English. However, the technology does not work equally well across all regional and ethnic accents.

Although there is no one "right" way to speak English, the system will work best when users try to modify their pronunciation in response to system errors. Users who do not obtain good results are advised to try the tips and workarounds found in this document.

OnStar users communicate with two speech recognition systems:

- OnStar Personal Calling
- OnStar Virtual Advisor[5)]

OnStar Personal Calling:

OnStar Personal Calling uses a speech recognition system that resides in the vehicle. When the user presses the Communication (DOT)) button, the system says, **<Ready>**, and listens for the user's command. The user can speak commands to control the hands-free wireless phone.

OnStar Virtual Advisor:

OnStar Virtual Advisor uses a remote speech recognition systems that you access through an automated phone call. The user connects to Virtual Advisor by requesting it through an OnStar Personal Calling command. The user is then transferred to the Virtual Advisor computer and communicates through the wireless connection. ◀

General tips for better speech recognition

Noise

Noise may confuse the speech recognition system. You usually get better performance from the system in quieter conditions:

The vehicle heating, ventilation, and air conditioning fan creates noise. Turn it down or off for better speech system performance.

Driving at high speeds creates louder engine noise and wind noise. You may get better results at lower speeds.

An open window or an open sunroof allows more noise to enter the vehicle. Close all windows for better results.

Noisy rainstorms can also reduce performance.

If passengers are talking while you use the speech system, it may be confused by their speech. You will get better results if all occupants of the vehicle are quiet, while the system is listening for commands. ▶

5) USA models only

When to speak

In OnStar Personal Calling, the system is only listening after it prompts you to speak.

When the system prompts you to speak, you have about 5 seconds to respond. If the system does not hear a response, it will prompt you again, or cancel the transaction.

If you begin to speak too soon, it will tell you **<Slower please>**. Try pausing for a half second before speaking.

In the Virtual Advisor[6], the system is listening for commands for a few seconds between information/entertainment segments.

How to speak

Speak forcefully and clearly. The system has been optimized for the driver. The noisier the environment, the louder you need to speak. If you are in the driver's seat, speak facing the front of the car. If you are a passenger, speak facing the rear view mirror.

Speak calmly and naturally. The system may sometimes fail to understand your repeated attempts to give a command. If your speech is distorted by shouting or frustration, this may cause more errors.

Individuals with high-pitched voices may have better results by speaking in a deeper, lower-pitched voice. However, do not lower the volume of the voice.

Avoid speaking with a rising intonation, like asking a question. Use a flat or falling intonation, like giving an answer. ◀

What to say

The commands for Personal Calling and the Virtual Advisor are different.

OnStar Personal Calling:

OnStar Personal commands are one word commands.

The OnStar Personal Calling system listens for only one word at a time. There are some exceptions, two-word phrases that are spoken and understood as a single word, e.g. **Virtual Advisor**[7], **Voice Feedback**, and **My Number**.

You can enter phone numbers only one digit at a time, and the system repeats each digit as it hears it.

For example, say **Help** at the Ready prompt to hear the list of OnStar Personal Calling commands.

Virtual Advisor: whole sentences

Virtual Advisor can understand sentences with more than one word. It also expects to hear a four-digit number all at once when it asks for your PIN.

For example, say **What are my choices?** to hear a list of commands that the Virtual Advisor understands. ◀

6) USA models only

7) USA models only

OnStar Personal Calling commands

It is important to speak the voice commands correctly and clearly.

The following table tells you what is important when speaking the individual commands.

Command	Emphasis
Add	Emphasize the **d** at the end of the word.
Call	Emphasize the **l** at the end of the word.
Cancel	Emphasize the **l** at the end of the word. If you are speaking the **can** syllable very quickly, try to lengthen it a little.
Clear	Emphasize the **r** at the end of the word.
Delete	Emphasize the **t** at the end of the word. Emphasize the **d** at the start of the word.
Dial	Emphasize the **l** at the end of the word.
Directory	Speak all four syllables clearly. Do not fade out at the end of the word.
Help	Emphasize the **h** sound at the start of the word. Emphasize the **p** sound at the end of the word.
My Number	Emphasize all three syllables.
No	Speak loudly and slowly. Emphasize the **n** sound at the start of the word. Draw out the **o** sound at the end of the word.
Redial	Try to emphasize and lengthen the first syllable: **re-dial**.
Security	Speak four syllables clearly. Say the **i** sound in the middle of the word clearly.
Store	Emphasize the **o** sound in the middle of the word in order to distinguish from **star**. Emphasize the **st** sound at the start of the word in order to distinguish from **four**.
Units	Speak loudly and clearly.
Verify	Speak three syllables clearly. Emphasize the **i** sound in the middle of the word.
Virtual Advisor	Emphasize both words.
Voice Feedback	Emphasize both words.
Yes	Emphasize the **y** sound at the start of the word. Emphasize the **s** sound at the end of the word.

OnStar Personal Calling - digits

Numbers must be spoken clearly as well.

The following table tells you what is important when saying the individual numbers.

Command	Emphasis
zero or **oh**	If the system does not understand **oh**, try **zero**, or vice versa.
one	Emphasize the **n** at the end of the word.
two	Round your lips for the **o** part of the word. If you are clipping the **o** very short, try to lengthen it, but do not draw it out excessively. Speak in a low pitch. Do not use a rising tone like asking a question; a falling tone like giving an answer is better.
three	End the word three in a smile, to draw back your lips. Lengthen the **ee** sound if you are clipping it very short.
four	Emphasize the **r** at the end of the word.
five	Emphasize the **v** sound.
six	Emphasize the **ks** sound at the end of the word.
seven	Emphasize the **n** at the end of the word. Lengthen the **sev** syllable.
eight	Emphasize the **t** at the end of the word. Lengthen the **e** sound at the start of the word.
nine	Emphasize the **n** sounds to distinguish from **five**.
star	Emphasize the **r** at the end of the word. Emphasize the **ah** sound in order to distinguish from **store**.
pound	Emphasize the **p** at the start of the word. Emphasize the **d** at the end of the word.

OnStar Personal Calling

General

You can use OnStar Personal Calling in your vehicle to place or to receive calls.

As an OnStar subscriber, you can use OnStar Personal Calling[8)], which provides you with a nationwide wireless phone service in your car that you can activate simply by pressing a button and speaking.

The voice-activated system will dial the number. Your party will answer through your stereo speakers.

With OnStar Personal Calling, you can enjoy the simplicity of a one-touch wireless connection. Whether you are placing or receiving a call, once you press the button, you never have to take your hands off the wheel or your eyes off the road. The ease of the hands-free communication service allows you to enjoy an even greater level of safety, security and convenience while driving. You will receive 30 trial minutes when you activate your personal calling service at no additional cost. ◀

To sign up for OnStar Personal Calling

In order to use this service, an OnStar Advisor must set up the cellular account and modify the settings in your vehicle.

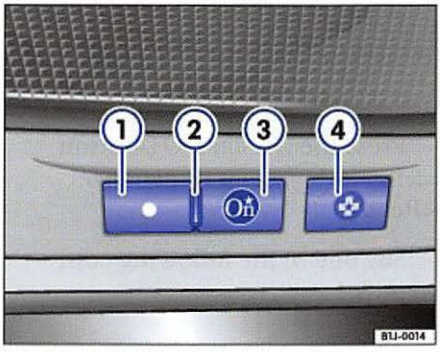


Fig. 9 OnStar services button

– Press the blue OnStar button ⇒ fig. 9 (3) in your vehicle.

– Inform the Advisor that you would like to activate OnStar Personal Calling.

As an OnStar subscriber, the OnStar Personal Calling capability is already built into your vehicle's OnStar hardware.

You must also provide a credit card in order to establish your prepaid cellular account. Usage charges will be deducted from this prepaid account of "units" (there is no monthly charge for this service). Units are easily replenished using the credit card on file at OnStar. Once you sign up for OnStar Personal Calling, you will be given your own personal phone number that you can provide to others so they can call into your vehicle.

The Advisor will set up your account. You will need to provide account and payment information.

You will be asked for your credit card information, so, contacting OnStar using a land-line phone or while the vehicle is stationary is recommended.

Credit Card information is secure, protected and used only for unit replenishment or other services you request. ◀

8) available in most markets in the USA and Canada (not available in Quebec)

OnStar Personal Calling error messages

If the OnStar System did not understand a command, it notifies you.

OnStar says:

- **<Pardon>** or
- **<Slower Please>**

If OnStar says **<Pardon>** - The system has not been able to match your command with a word that it knows. Repeating the command distinctly should fix the problem.

If OnStar says **<Slower Please>** - Repeat the command after a short pause. This response normally happens if you say a command before the system is ready for it or if there is substantial background noise. ◀

OnStar Personal Calling universal commands

There are commands for OnStar Personal Calling which can be used universally.

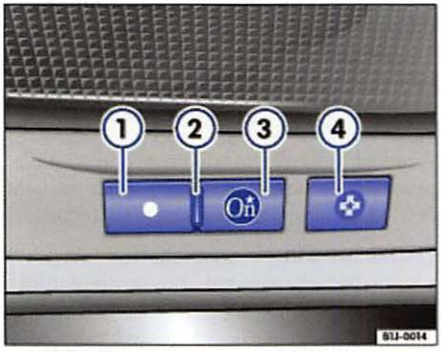


Fig. 10 DOT button

– Press the OnStar DOT button ⇒ fig. 10 ①, OnStar response **<Ready>**.

– Say one of the following commands:

Command	Action
Help	The system will provide a list of available commands.
Clear	When you are entering digits, this command will erase the last digit entered.
Cancel	This command takes you from the current function to the **<Ready>** prompt. If the last response from the system was **<Ready>**, this command will exit voice recognition. ◀

Placing a call

There are three ways to place a call.

– Press the OnStar DOT button, OnStar response <**Ready**>.

– Say the command **Dial**, **Call** or **Redial**.

Command	Action
Dial	By using a particular number.
Call	By using a stored nametag.
Redial	By dialing the last number.

To dial a number

The OnStar System repeats each digit of a telephone number spoken individually.

Operation/Command:	OnStar response:
Press the DOT button.	<**Ready**>
Say **Dial**	<**Number Please**>
Say 1st digit, for example **One**	<**One**>
Say 2nd digit, for example **Eight**	<**Eight**>
Say 3rd digit, for example **Eight**	<**Eight**>

Operation/Command:	OnStar response:
Continue saying numbers in this manner until finished.	
Say **Dial**	<**Dialing**>

Note

If you have spoken all the telephone numbers, but do not say the command **Dial**, OnStar asks if you would like to dial.

To dial using a "Nametag"

Operation/Command:	OnStar response:
Press the DOT button.	<Ready>
Say **Call**	<Nametag Please>
Say stored Nametag for example: **OnStar**	<Calling OnStar>

To redial the last number dialed

With the "redial command", a telephone number can only be redialed if it has already been dialed.

Operation/Command:	OnStar response:
Press the DOT button.	<Ready>
Say **Redial**	<Redialing>

Receiving a call

If someone calls your wireless phone number, the entertainment system in your vehicle will mute (if it is on), and you will hear a phone ringing sound.

– To answer the call, press the DOT button.

Ending a call

– When your call is finished, press the DOT button to end the call.

Note

It is not possible to end a call using voice commands.

To store a number in memory

Your OnStar system can store up to 20 numbers (up to 32 digits each) in memory that can be dialed by simply repeating the nametag.

Operation/Command:	OnStar response:
Press the DOT button.	<Ready>
Say **Store**	<Number Please>
Say 1st digit, for example: **One**	<One>
Say 2nd digit, for example: **Eight**	<Eight>
Say 3rd digit, for example: **Eight**	<Eight>
Continue saying numbers in this manner until finished.	
Say **Store**	<Nametag Please>

Operation/Command:	OnStar response:
Say New Nametag for example: **OnStar**	<Again>
Say **OnStar**	<Once More>
Say **OnStar**	<Storing OnStar>

On occasion, while storing a nametag, the system may respond with "sounds like" a previously stored nametag. In this case, try using a different sounding nametag. Nametags are speaker-dependant, therefore, nametags should be entered by the primary user. ◀

To delete a nametag from memory

Stored nametags may be deleted again at any time.

Operation/Command:	OnStar response:
Press the DOT or button.	<Ready>
Say **Delete**	<Nametag Please>

Operation/Command:	OnStar response:
Say Nametag for example: **Robert**	<Delete Robert, yes or no>
Say **Yes**	<Deleting Robert>

Units remaining

OnStar keeps track of the amount of calling time you have purchased and used in units.

The number of total remaining units is stored within the OnStar system, and can be accessed easily.

Operation/Command:	OnStar response:
Press the DOT button.	<Ready>
Say **Units**	<Verify or Add>
Say **Verify**	<You have # units remaining>

Adding more calling minutes/units

You can charge additional calling units by contacting OnStar, or by authorizing unit refill on the OnStar Subscriber Website.

Operation/Command:	OnStar response/Action:
Press the DOT button.	<Ready>
Say **Units**	<Verify or Add>
Say **Add**	You will be connected to OnStar for replenishment.

Note

If you run out of units during a call, your call will be terminated and you will be connected to OnStar for approval to replenish. You will be warned at the beginning of a call when you have ten or fewer calling units remaining.

Setting voice or tone response

You may change the system to respond with a tone response if you prefer.

Operation/Command:	OnStar response:
Press the DOT button.	<Ready>
Say **Voice Feedback**	<Voice Feedback is now ON>

Operation/Command:	OnStar response:
Say **Voice Feedback**	<Voice Feedback is now OFF>
If you repeat **Voice Feedback** the system will switch to the desired setting.	

Your system comes from the factory with voice responses to your commands to confirm that the system correctly understood the command or number you intended. For example, when you are entering a number, OnStar repeats the number back to you.

If you change to tone response, a digit tone will respond instead of the voice. All other responses will still be by voice. ◀

Retrieving your number

Once you have established an OnStar Personal Calling account, you can determine your phone number so others can call into the vehicle.

– Press the DOT button or contact OnStar at **1-888-4-OnStar (1-888-466-7827)**.

– Ask your OnStar Advisor to provide you the telephone number for your vehicle. ◀

Security/Locking your system

You can set up a Personal Security Code to ensure that unauthorized people cannot use your system.

Operation/Command:	OnStar response:
Press the DOT button.	<Ready>
Say **Security**	<Enter Four Digit Security Code>
Say 1st digit for example: **One**	<One>
Say 2nd digit for example: **Two**	<Two>
Say 3rd digit for example: **Three**	<Three>
Say 4th digit for example: **Four**	<Security One Two Three Four is now ON> or <Security One Two Three Four is now OFF>
If you repeat **Security** the system will switch to the desired setting.	

You can set up a four-digit Personal Security Code to ensure that unauthorized people do not use the calling capability of your system. With security set to ON, the system will not allow any personal calls.

You must turn security OFF before calls can be made or received. If security is ON, only calls to or from the OnStar Center will be connected.

Note

If you forget your Personal Security Code, press the OnStar [On] button for assistance. ◀

OnStar Personal Calling Tricks

Entering a phone number

If you have trouble getting numbers correctly into the system, store your frequently called numbers in the directory, so the system will remember them. After you have stored a number with a nametag, then you simply say **Call** and the nametag in order to call the number.

If the system cannot understand your numbers, ask a friend to help you enter your frequently called numbers. Your friend can speak the numbers, then you can speak the nametag.

Storing or dialing a number

When you have finished speaking your phone number, you do not need to say **Store** or **Dial** to indicate that you are done. If you pause and say nothing, the system will ask you if you want to store or dial. Say **Yes**.

Creating nametags

Short nametags that are similar may be easily confused by the system. You may get better recognition of your nametags if you make them longer, for example **George Washington** (no pause), instead of **George** only.

If you want to use nametags while driving, it is best to store the nametag with some vehicle noise in the background. If you are in park while you are storing nametags, you can turn the fan on low or open windows in order to create some background noise. ◀

OnStar Center and Services

OnStar Center

Connecting to the OnStar Center

Talking to an OnStar Advisor is accomplished with a single touch, and is thereafter hands-free.

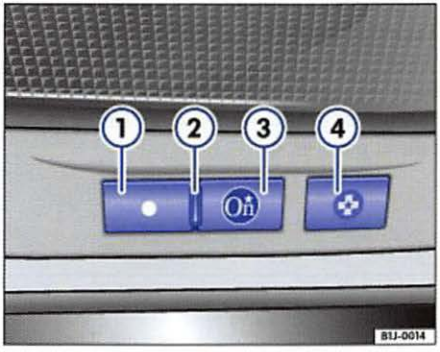


Fig. 11 OnStar services button (OnStar button) and emergency button

– Press the blue OnStar button ⇒ fig. 11 (3) or the OnStar emergency button (4). A small microphone picks up your voice and the OnStar Advisor talks to you through your stereo speakers.

In addition to using the 3-Button panel, there are two other ways to connect to the OnStar Center:

- Toll-free call
- Automatic notification

Toll-free call

To take advantage of your OnStar Services from outside your vehicle (e.g. to use door unlock), you can call OnStar toll-free at:

1-888-4-OnStar (1-888-466-7827)

Remember to have your Personal Identification Number (PIN) handy.

Automatic airbag notification

A priority signal will be sent to the OnStar Center with your exact location if any airbag deploys. (Vehicle electrical system and cellular service must be operable.) ◀

Your OnStar PIN (personal identification number)

The OnStar PIN is needed to access several services.

Your OnStar personal identification number (PIN)

When you sign up with OnStar, you are asked to provide a Personal Identification Number (PIN). You'll need your PIN to access many of OnStar's services. If, for example, you're locked out of your vehicle or it has been stolen, an Advisor will ask for your PIN in order to provide assistance.

This PIN can also be used for access to the OnStar Subscriber website, and for access to the OnStar Virtual Advisor[9]. When using your PIN to access the OnStar Virtual Advisor, say the four digits in a natural way, without pausing between digits.

Changing your OnStar PIN is easy. Call the OnStar Center and provide the Advisor with your current number, and he or she will assist you in setting up a new number. If you have forgotten your PIN, just call the OnStar Center. For security reasons, the PIN will be sent to you in the mail.

Your OnStar Personal Calling PIN

This four digit PIN is used to secure OnStar Personal Calling from unauthorized use. See "Security/Locking your system" for more details ⇒ page 36. ◀

The OnStar service plans

OnStar provides various service plans designed to meet the individual needs of subscribers. An OnStar service plan is included for a specific duration with each vehicle at time of purchase. Check with your authorized Volkswagen dealer, an OnStar Advisor or on the Internet in order to determine the services that your plan contains.

Log in at:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar. ◀

[9] USA models only

OnStar services

The following services are currently available from OnStar.

Automatic notification of airbag deployment

Should your airbag deploy, a priority signal will be sent to the OnStar Center with your vehicle's location (as long as cellular service and the vehicle's electrical system are operable). An Advisor will attempt to contact you to assess the nature of your emergency, and then notify the necessary emergency services provider.

Emergency services

Should you require emergency assistance, press the emergency button and an Advisor will contact the nearest emergency services provider with your exact location and your request for help.

Roadside assistance

There's nothing worse than being stranded on the road with car trouble. No matter what the problem is (flat tire, out of gas, or engine trouble), just call OnStar. An Advisor will contact the help you need to get you quickly back on the road.

OnStar is a communication service, and will contact your Volkswagen 24 hour Roadside Assistance provider. There will be no charge for Roadside Assistance while your vehicle is under warranty, and no charge for contacting Roadside Assistance while you have an OnStar subscription.

Stolen vehicle tracking

OnStar doesn't just protect you, it protects your vehicle, too. If your vehicle is ever stolen, just contact OnStar. An Advisor will put you in touch with the authorities and aid them in locating your vehicle. Ask your insurance carrier about possible premium discounts.

AccidentAssist

AccidentAssist provides step-by-step guidance about what to do in case of an accident. Working with leading insurance companies a "best practices" list has been developed to assist you through most accident situations. OnStar AccidentAssist can make the process of completing a police report and/or insurance claim less stressful.

Remote door unlock

If you've locked your keys in your vehicle, just call OnStar at:

1-888-4-OnStar (1-888-466-7827)

and an Advisor will send a signal to unlock your door. If you're having trouble locating your vehicle, OnStar can flash your hazard lights and sound your horn for you. These features require your PIN and are disabled 48 hours after the vehicle is parked in order to maintain battery charge.

After the door has been unlocked, you have approximately 60 seconds to open it, otherwise the vehicle will lock itself again.

Route support

With OnStar Route Support, an Advisor can help you find your way, no matter how far off course you are. You can get exact street directions, or guidance to nearby gas stations, restaurants, hotels or ATMs.

RideAssist

If you need a lift, anytime of the day or night, just call OnStar. An Advisor will contact transportation and send it right to you. ◀

Information and Convenience Services

OnStar concierge

OnStar's concierge service helps you save time by providing convenient access to various types of information and services.

Our Advisors have access to over seven million service listings including hotels, restaurants, gas stations, dealerships, hospitals, ATMs and airports - more than 400 service categories in all. OnStar Advisors can even assist you with hotel and restaurant reservations.

OnStar offers two levels of concierge service: *online* and *personal.*

Online concierge

Online concierge allows you to access self-serve concierge services 24 hours a day, 7 days a week for dining reservations, event ticket purchases, flower/gift recommendations and more!

Log in at:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar.

Personal concierge

Personal concierge also allows you to help yourself using online concierge services, plus the option to reach a live Concierge Advisor via phone, the OnStar blue button in your vehicle, e-mail, or live chat to have them handle the entire request for you.

You will not pay more than retail value for goods and services, or current market value for tickets, specialty items or unique services. For your convenience, your credit card will be billed for any purchases and/or shipping you authorize. ◀

OnStar Personal Calling

As an OnStar subscriber, you can use OnStar Personal Calling[10)], which provides you with a nationwide wireless phone service in your car that you can activate simply by pressing a button and speaking. For details ⇒ page 16. ◀

[10)] available in most markets in the USA and Canada (not available in Quebec)

OnStar Virtual Advisor

U.S. models only

Applies to the market: U.S. models only

Available with your OnStar Personal Calling subscription

The OnStar Virtual Advisor offers a great deal of useful information.

– To access, just press the DOT button when you are in your car, wait for the <**Ready**> prompt.

– Say **Virtual Advisor**.

As an OnStar Personal Calling subscriber, you can make your driving time more enjoyable and productive with the OnStar Virtual Advisor. With OnStar Virtual Advisor you can now listen to your favorite news, entertainment and information topics, such as weather reports, stock quotes and sports scores. You can even receive your e-mail, listen to it being read and even reply, without taking your hands off the wheel or eyes off the road. With the press of the Communication (DOT) button and a few simple voice commands, you can browse the pre-selected topics from your profile which you established on the MyOnStar website, or you can skip to the subjects that interest you.

To find out more about Virtual Advisor or to set up your Virtual Advisor personal profile, visit:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar. ◀

Applies to the market: USA models only

Calling the Virtual Advisor

– Press the DOT button. OnStar will respond <**Ready**>.

– Say **Virtual Advisor**. You will be connected to your Virtual Advisor (default or personal profile).

Provide your PIN when requested. You can disable this security feature if you wish.

Log in at:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar. ◀

Applies to the market: USA models only

Getting Information from the Virtual Advisor

The OnStar Virtual Advisor has a few simple commands you can say to help you request the information you desire.

When using the Virtual Advisor, and you are not sure what to say or ask for - say the following commands:

- **Play the Tutorial,**
- **What are my choices?** or
- **Help.**

For a complete up-to-date list of Virtual Advisor voice commands click on the subscribers section of the site. You will need your PIN for access.

Log in at:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar.

Note

The Virtual Advisor will be improved, updated and continuously expanded to meet the needs of our subscribers, so visit the website or use your Virtual Advisor frequently to learn about the newest additions. ◀

Applies to the market: USA models only

Exit Virtual Advisor

– Press the OnStar DOT button, or

– Say **Good-Bye.** ◀

Available information

Applies to the market: USA models only

Types of information

The following general categories will give you an overview of the types of information available to you.

General Categories	Command
Sports	Say **Get my Sports Scores** ⇒ page 31
Stocks	Say **Get my Stock Quotes** ⇒ page 32
News	Say **Get my News** ⇒ page 33
E-Mail	Say **Get my E-mail** ⇒ page 33
Weather	Say **Get my Weather** ⇒ page 34
Entertainment	Say **Get my Entertainment** ⇒ page 34
Traffic	Say **Get my Traffic** ⇒ page 34

For complete up-to-date categories:

Log in at:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar.

Then click on the link to the Subscriber Website. You can easily add any new Virtual Advisor content to your personal profile at the website. ◀

Applies to the market: USA models only

Sports scores

In the "Sports" category Virtual Advisor can give you information about various sports highlights.

– Press the DOT button, OnStar will respond **<Ready>**.

– Say **Virtual Advisor.**

– Say **Get my Sports Scores.**

– Say the command for the desired category.

The following categories are offered as options:

Category	Command
Major League Baseball	Say **Look up Major League Baseball.**
Hockey	Say **Look up professional hockey.**

Category	Command
Basketball	Say **Look up professional basketball.**
Football	Say **Look up professional football.**
Golf	Say **Look up professional golf.**
Racing	Say **Look up speedway racing.**
College Sports	Say **Look up the college sports update.**
College Basketball	Say **Look up college basketball.**
College Football	Say **Look up college football.**

OnStar Virtual Advisor can provide you with scores and highlights for your favorite college or professional team and sporting events, even if they are being broadcast on a local station. You can preset your personal favorites at:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar. ◀

Applies to the market: USA models only

Stock quotes

The OnStar Virtual Advisor can provide you with stock quotes for any stocks listed on the NYSE or NASDAQ, with a 15 minute delay.

– Press the DOT button, OnStar will respond **<Ready>**.

– Say **Virtual Advisor.**

– Say **Get my Stock Quotes.**

– Say **Look up a quote for** *any publicly traded company.*

You can personalize your Virtual Advisor Portfolio and preset the stocks you want to track and have them listed for you when you request them. Or, you can simply ask for a quote for any NYSE or NASDAQ stock by the name of the company. ◀

Applies to the market: USA models only

News headlines

The OnStar Virtual Advisor will provide current headlines from many of the major trusted news sources and include such categories.

– Press the DOT button, OnStar will respond <**Ready**>.

– Say **Virtual Advisor**.

– Say **Get my News**.

– Say the command for the desired category.

The following categories are offered as options:

Category	Command
Headline News	Say **Look up Headline News**
National News	Say **Look up National News**
World News	Say **Look up World News**
Business News	Say **Look up Business News**
Sports News	Say **Look up Sports News**

Applies to the market: USA models only

E-mail

By using voice commands, OnStar Virtual Advisor allows you to access your e-mails.

– Press the DOT button, OnStar will respond <**Ready**>.

– Say **Virtual Advisor**.

– Say **Get my E-mail**.

– Say **Get my new E-mail messages** or **Get my old e-mail messages**.

– Say **Play it**.

– Say **Get rid of it** or **Throw it away**.

You can also respond/reply to your e-mails just by saying **Reply** and then recording your response. Your reply will be delivered to the originator of the message in an audio file format.

Every Virtual Advisor enrollee receives an e-mail account. Visit the OnStar Subscriber Website, and set up your e-mail account.

Applies to the market: USA models only

Weather

The OnStar Virtual Advisor can give you weather information for a wide variety of locations.

– Press the DOT button, OnStar will respond <**Ready**>.

– Say **Virtual Advisor**.

– Say **Get my Weather**.

The OnStar Virtual Advisor will deliver a weather forecast for the current location of the vehicle by asking the Virtual Advisor to **Get my local Weather**.

The forecast includes current temperature, daily high/low, tomorrow's predicted high/low, precipitation forecast, and unusual conditions.

The Virtual Advisor can also provide weather information for other cities you have designated in your profile, which you can establish or modify at the OnStar subscriber website. ◀

Applies to the market: USA models only

Entertainment

OnStar Virtual Advisor allows you to access a variety of entertainment content.

– Press the DOT button, OnStar will respond <**Ready**>.

– Say **Virtual Advisor**.

– Say **Get my Entertainment**.

You can get updates on television series, soaps, lottery results, horoscopes, children's entertainment and more.

You can access the Virtual Advisor and ask for the category of your interest, or preset your favorites in your Personal Profile. ◀

Applies to the market: USA models only

Traffic

The OnStar Traffic service offers local traffic conditions for the current metro area and other available market areas.

– Press the DOT button, OnStar will respond <**Ready**>.

– Say **Virtual Advisor**.

– Say **Get my Traffic**.

OnStar will be adding the capability to provide you with up to 5 personalized traffic reports. Access information about construction, accidents, road obstructions and other delays when you want. ◀

Additional information and system status messages

Additional information

Warranty

OnStar hardware is warranted as part of the New Vehicle Limited Warranty. The manufacturer of the vehicle furnishes detailed warranty information. ◀

Communications issues

Inoperative if cellular signal is marginal or unavailable

Since OnStar uses the cellular technology for communication with the OnStar Center, it can only be operated in geographic areas where cellular coverage is available. Although nearly all of the North American population lives and works in cellular coverage areas, there are various rural and mountainous areas where coverage is marginal or does not exist. Cellular service is also subject to transmission limitations caused by atmospheric conditions.

Inoperative if communications service is inactive or inoperative

OnStar uses a dedicated cellular communications service but will not operate if, for some reason, cellular service has been deactivated by a cellular carrier.

Inoperative if cellular system is busy

In any area, the local cellular system can only handle a limited number of cellular calls at a given time. Once volume has reached the maximum limit, additional callers are denied access.

If this situation occurs when an OnStar request for services is made, the OnStar system will automatically redial (a few times for an OnStar Services call or indefinitely for an Emergency button press or airbag call).

Radio frequency interference

The OnStar system is a radio communications system. The proximity to other radio signals created by other electrical devices may adversely affect the performance of the OnStar System.

Note

OnStar service is only available throughout the United States (including Hawaii and Alaska) and Canada. If a request for service occurs outside of these areas, communications may not be available, and the OnStar Advisor may not be able to help you. ◀

Vehicle and power issues

Inoperative if battery is discharged or disconnected

OnStar is powered by your vehicle's battery and will not operate fully if the battery is discharged or disconnected.

Potentially inoperative if vehicle is in accident

If your vehicle is in an accident, some components could be damaged or disconnected, potentially rendering OnStar inoperative.

Add-On electrical equipment

The OnStar system is integrated into the electrical architecture of the vehicle. **Do not add any electrical equipment (e.g. 2-way mobile radio, CB radio, etc.) to your vehicle unless you check with your authorized Volkswagen dealer first.** Added electrical equipment may interfere with the operation of the OnStar system. Any damage would not be covered by your warranty.

OnStar Personal Calling

An existing OnStar Service Subscription Agreement is required. Additional usage charges apply for Personal Calling.

For system limitations and details, please call

1-888-4ONSTAR (1-888-466-7827).

Log in at:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar.

Virtual Advisor

Existing OnStar and OnStar Personal Calling service agreement required. Additional usage charges apply for OnStar Personal Calling.

For system limitations and details, please call

1-888-4ONSTAR (1-888-466-7827).

Log in at:

www.vw.com (USA)

www.vw.ca (Canada)

and select the link to OnStar. ◀

Data protection

Volkswagen and OnStar strictly observe all regulations regarding data protection.

Users of wireless communications are cautioned that the privacy of any information sent via wireless cellular communications can not be assured. Third parties may unlawfully intercept or access transmissions and private communications without your consent.

At OnStar, subscriber privacy is taken very seriously. Your personal information is never provided to another company or person unless you authorize it, or if required by the legal process, or in such cases where you have provided it for billing purposes.

Having credit card information on file with OnStar is a real advantage and helps you avoid repeating personal information over a cellular connection. Your trust is what we value most.

The complete OnStar privacy policy may be found at:

- **www.vw.com (USA)** ▶

- www.vw.ca (Canada)

and select the link to OnStar.

Note

- The personal data filed when you signed the contract is linked to your vehicle's OnStar system. Consequently, remember that when you leave your vehicle with others, your data could be linked to them in the event of service being provided. Please notify other users of your vehicle of this situation.
- After a change in vehicle ownership, contact an authorized Volkswagen dealer or OnStar immediately to find out about the expiration of the service contract. You can obtain more information from your authorized Volkswagen dealer or OnStar. ◀

Transferring OnStar

Because your OnStar system is an integral part of your vehicle, it cannot be transferred to another vehicle. Each OnStar system stays with the original vehicle in which it was installed.

The one-year OnStar prepaid subscription included with your new vehicle cannot be transferred to another vehicle. If you've purchased additional years or upgraded your OnStar service, when you dispose of the vehicle you have two choices:

- You may transfer the remaining service to the new owner of the vehicle or
- You may transfer the service to your new OnStar equipped vehicle or another vehicle on your OnStar account. ◀

OnStar subscription information

To renew your service or upgrade your plan, just push the OnStar button, or call the

OnStar customer billing department at 1-888-864-2801 between 8 a.m. and 6 p.m. EST.

OnStar and the OnStar emblem are trademarks of OnStar Corporation.

© 2003 OnStar Corp. All rights reserved. OnStar 301 F1(3) ◀

Alphabetical index

A

AccidentAssist (OnStar) 27
Additional information 35
Advisor - Virtual Advisor (OnStar) 29
Airbag deployment (OnStar)
  Automatic notification to OnStar 27
Available information (OnStar) 31

B

Blinking green light (OnStar) 10
Blue OnStar button 6

C

Calling time remaining (OnStar) 22
Communication button 9
Communications issues (OnStar) 35
Concierge service (OnStar) 28

D

Data protection 36
Doors (OnStar)
  Remote unlocking 27
DOT button 9

E

E-mail (OnStar) 33
Emergency button 8
Emergency services (OnStar) 27
Entertainment (OnStar) 34
Exit Virtual Advisor (OnStar) 30

G

Global Positioning System (OnStar) 3
GPS (OnStar) 3

L

Light (OnStar)
  Blinking green 10
  Red 10
  Solid green 10

M

Memo recorder (OnStar)
  Introduction 10
  Playback 11
  Record 11
  Stop playback 12
  To resume playback 12

N

Nametags (OnStar) 20
News headlines (OnStar) 33

O

OnStar
- Activation 6
- Adding calling minutes 22
- Automatic notification if your airbag deploys 25
- Available information 31
- Calling the Virtual Advisor 29
- Calling toll-free 25
- Center 3
- Communication button 9
- Communications issues 35
- Concierge 28
- Connecting to the OnStar Center 25
- Data protection 36
- Deleting numbers in memory 21
- Dialing a number 19
- Dialing a number using a nametag 20
- DOT button 9
- E-mail 33
- Emergency button 8
- Ending a call 20
- Entertainment 34
- Error messages 18
- Exit Virtual Advisor 30
- General information 2
- Global Positioning System (GPS) 3
- Information from the Virtual Advisor 30
- Memo recorder 10, 11
- Memo recorder - Playback 11
- Memo recorder - Stop Playback 12
- Memo recorder - To resume playback 12
- News headlines 33
- Personal Calling 16
- Personal Calling - universal commands 18
- Personal calling commands 15
- Personal calling digits 16
- Personal Calling Tricks 24
- PIN (Personal Identification Number) 26
- Placing a call 19
- Receiving a call 20
- Redialing the last number called 20
- Retrieving your number 23
- Security/Locking your system 23
- Service plans 26
- Services 27
- Services button 7
- Setting voice or tone response 22
- Speech recognition 13
- Sports scores 31
- Stock quotes 32
- Storing numbers in memory 21
- Subscription information 37
- Subscription Service Agreement 2
- System limitations 4
- System status light 10
- Tips for better speech recognition 13
- To sign up for Personal Calling 17
- Traffic 34
- Transferring 37
- Units remaining 22
- Virtual Advisor 29
- Warranty 35
- Weather 34
- Website 4
- What to say 14
- What you should know about OnStar Safe & Sound Service 2

OnStar button 6, 7

OnStar buttons 5

P

Personal Calling (OnStar) 17, 18
- Activating 16
- Adding calling minutes 22
- Calling minutes-Adding more 22
- Calling time-Automatic replenishment 22
- Commands 15
- Creating Nametag 24
- Deleting numbers in memory 21
- Dialing a number 19
- Dialing a number using a nametag 20
- Digits 16
- Ending a call 20
- Keeping track of calling time (units) remaining 22
- Locking your system 23
- Memory (nametags) 21
- Nametags 20
- Nametags (memory) 21
- Placing a call 19
- Receiving a call 20
- Redialing the last number called 20
- Retrieving your number 23
- Security 23
- Setting voice or tone response 22
- Storing a number 24
- Storing numbers in memory 21
- Tricks 24
- Universal commands 18

Personal Identification Number (PIN) with OnStar 26
PIN (Personal Identification Number) with OnStar 26
Power issues 36

R

Red light (OnStar) 10
Remote door unlock (OnStar) 27
RideAssist (OnStar) 27
Roadside assistance (OnStar) 27
Route support (OnStar) 27

S

Services (OnStar)
- AccidentAssist 27
- Automatic notification of airbag deployment 27
- Concierge 28
- Emergency services 27
- Remote door unlock 27
- RideAssist 27
- Roadside assistance 27
- Route support 27
- Stolen vehicle tracking 27

Services button 7
Solid green light (OnStar) 10
Speech recognition (OnStar)
- How to speak 13
- Noise 13
- Operation 13
- Voice response 13
- What to say 14
- When to speak 13

Sports scores (OnStar) 31
Stock quotes (OnStar) 32
Stolen vehicle tracking (OnStar) 27
Subscription information (OnStar) 37
Subscription Service Agreement (OnStar) 2
System information
- OnStar 2

System status light 5
System status light (OnStar)
- Blinking green 10
- Red 10
- Solid green 10

T

Traffic (OnStar) 34
Transferring OnStar 37

V

Vehicle issues 36

Virtual Advisor (OnStar) 29
Calling the Virtual Advisor 29
E-mail 33
Entertainment 34
Information from the Virtual Advisor 30
News headlines 33
Sports scores 31
Stock quotes 32
Traffic 34
Weather 34
Voice response (OnStar)
Speech recognition 13
Volume control 9

W

Weather (OnStar) 34
Website (OnStar) 4

Afterword

Volkswagen AG works continuously to develop and further improve all models. Please appreciate that we must therefore reserve the right to alter any part of the vehicle and its equipment or technical specifications at any time. No legal commitment can therefore be derived from the information, illustrations or descriptions in this manual.

The texts, illustrations and standards in this manual are based on the information available at the date of publication.

No part of this manual may be reprinted, reproduced or translated without the written permission of Volkswagen AG.

All rights under the laws of copyright are expressly reserved by Volkswagen AG. Subject to alteration and amendment.

Printed in Germany

© Volkswagen AG

For the sake of the environment

This paper was bleached without the use of chlorine.

3.2 Passat,Jetta Wagon | Volkswagen Telematics by OnStar | Art.-Nr.: 241.552.TEM.21
Print status: 05.2003 | Ausgabe: Amerikanisch 05.2003

3.4 Sound System

Premium CD / Monsoon

Pos. Page

Radio

1 – ON / OFF 5

Tap briefly to turn the unit ON/OFF. **Note:** The mode that was in use before the unit was last turned off – radio, cassette or CD – will automatically come back on again when you turn on the unit (Last Station Memory)

If you turn on the unit and there is no sound and the word "SAFE" appears in the display, then you must enter you own personal anti-theft code. See page 19 for instructions.

Volume control 5

Turn the knob to adjust the volume.

2 – Band buttons 6

FM 1/2 button

Use this button to select the FM band or to switch to the second set of presets.

AM 1/2 btton

Use this button to select the AM band or to switch to the second set of presets.

3 – Tone buttons 6

Bass control (BASS)

Turn the knob to adjust the bass as desired.

Middle control (MIDDLE)

Turn the knob to adjust the middle frequencies as desired.

Treble control (TREBLE)

Turn the knob to adjust the treble as desired.

Pos. Page

Balance control (BALANCE)

Turn the knob to adjust the balance.

Fader control (FADER)

Turn the knob to adjust the fader.

4 – AS button 7

The AS button can be used to store 6 stations automatically.

5 – SEEK button 7

Use this rocker button to automatically seek the next higher or lower frequency (radio station).

6 – Manual tuning (TUNE) 8

Turn the knob to manually tune your radio. Set the desired frequency by turning.

SCAN function 8

Stations or tracks (when listening to a CD or a cassette) can be played briefly.
Press the knob to start the scan function.

7 – Station preset buttons 8

You can preset one radio station on each of the six buttons in each of the four bands AM1, AM2, FM1 and FM2.

8 – Display

Radio 9

Cassette player 10

CD player 15

9 – LED 9

Blinks when you remove ignition key.

Contents

Overview	next pages
Important information	4
How the radio works	5
Cassette Mode	10
CD Mode	13
CD Changer *	16
Anti-Theft Coding	19
Warranty, Replacement, Antenna Care	21
Technical Description	22

The "Radio Card" must be detached and kept in a safe place – under no circumstances in the vehicle. Should the "Radio Card" with the code number be lost, please contact a Volkswagen dealer.

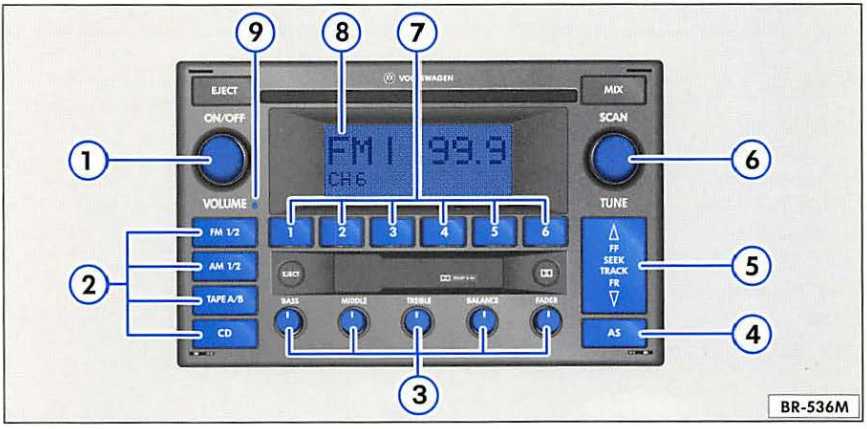
Radio Card
Premium CD / Monsoon

Serial Number

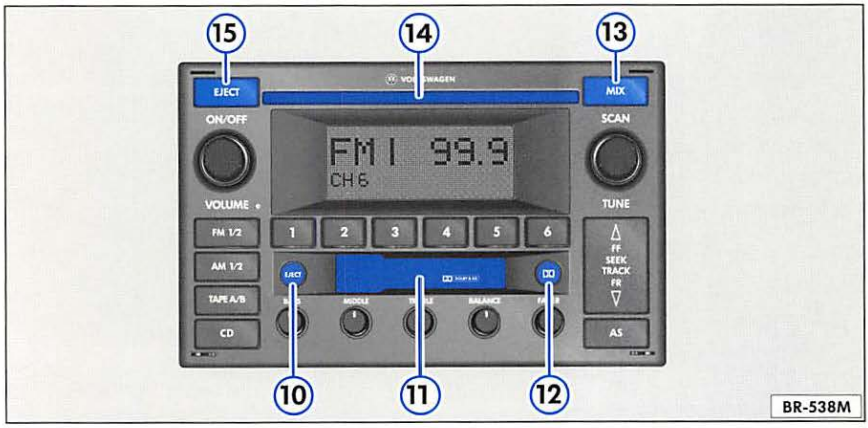
Code Number

RADIO CODE 1428

Place the self-adhesive labels for the serial number and code number in the appropriate boxes.



Cassette and CD mode



Please detach the "Radio Card" and keep it in a safe place away from your vehicle. If you lose the Radio Card containing the code number, contact your authorized Volkswagen dealer.

Pos. Page

Cassette player

TAPE A/B button

Tap the TAPE A/B button **(2)** when you want to listen to a cassette. Press the button while cassette tape is playing to change to the other side of the cassette.

Rewind/Fast Forward (FR-FF)

Press the rocker swithc **(5)**
Upper side: The tape will fast forward.
Lower side: The tape will rewind.

SEEK

The Music Seek System automatically finds and plays the next title.

To select the desired seek direction, press and hold the rocker button **(5)** for more than 2 seconds either the upper or lower side to start the seek function.

10 –Cassette EJECT button 10

Briefly pressed: stops the actual operating mode

Pressed longer: Cassette eject

11 –Cassette bay 10

12 –Dolby® button 10

Press this button when playing cassettes recorded with Dolby® noise reduction.

Pos. Page

CD player

CD button

Tap the CD button **(2)** when you want to listen to a CD.

TRACK

You can "skip" through the tracks on a CD by briefly pressing the rocker switch **(5)**.
Upper side: skips upwards
Lower side: skips downwards

CD selection*

You can select an individual CD in the CD changer* magazine by briefly pressing the corresponding buttons **(7)**.

13 –Mix Mode button 13

14 –CD-Slot

Insert the CD with the printed side facing up!

15 –CD EJECT button 13

Briefly pressed: stops the actual operating mode

Important information

Operating the Sound System while driving

Driving on today's roads demands the full attention of the driver.

The wide range of sophisticated equipment details of modern car radios offter not only a vast source of entertainment, but also important information regarding traffic updates, road conditions, weather reports, etc.

But remember, you should only operate the radio system with its numerous features when the traffic situation really allows.

For example, changing cassettes or reading song titles on a cassette case when driving is often the cause of auto accidents.

You should also set the volume of your radio system so that you can hear signals from other drivers at any time.

Always give your full attention to your driving and traffic conditions.

Important! Please note that items marked with an asterisk (*) may be standard on certain models, optional on others or not available on your model. Always check with your authorized Volkswagen dealer to see if the feature or item applies to your model.

Anti-theft coding

The anti-theft coding will electronically prevent unauthorized persons from operating the unit if it has been removed from the vehicle.

If "SAFE" appears in the display after switching the radio on, it can then only be operated again after entering the **correct code** – see page 19.

The radio code number and the radio serial number can be found on the "Radio Card" next to the table of contents at the beginning of this instruction booklet.

It is very important that you detach this "Radio Card" and keep it in a safe place - never keep it in the vehicle. Only then is the radio useless to thieves!

CD changer*

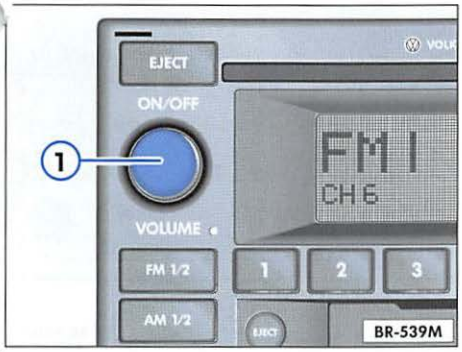
This car radio also has the attractive option of controlling the Genuine Volkswagen CD changer*.

The CD changer is installed in the luggage compartment. It's "remote controlled" by the radio unit. The magazine allows you to load up to 6 CDs in the CD changer. See page KEIN MERKER for further information.

Volkswagen dealers have all the information concerning installing the CD changer.

* Available as a factory installed option, or your authorized Volkswagen delaer can install the optional CD changer for you. Always check with your authorized Volkswagen dealer if this option is available for your model.

Radio



1 – ON/OFF

Press the button to turn the unit ON / OFF.

Whatever was playing when the unit was last turned off – radio, cassette or CD – will automatically come back on when the unit is turned on again.

The following settings are also saved when you turn off the system:

- Radio: the frequency setting
- Cassette: the selected cassette track
- CD player: the recently played track

The unit turn off automatically when you remove the key from the igntion lock.

The radio can be turned on while the igntion key is removed by simply pressing button **1**. The unit will turn off again automatically after about 1 hour. This procedure can be repeated as often as desired.

If the radio does not emit any sound when it is switched on and "SAFE" is displayed, then the unit has been electronically locked up. See page 19 for instructions.

Volume control

Turn the knob to adjust the volume.

Setting the turn–on volume level and Speed Volume Control (SVC)

Turn–on volume level

The volume setting when the unit is turned on is the same as it was when the unit was turned off. You can program the unit for your own personal turn- **hold** the Dolby® button (**12**, see page 10) on volume level:

- **Press and**) for longer than **3 seconds.**

You'll hear a signal tone, and **"SET UP VOL ON LIMIT**" will appear in the display.

The volume level is represented by a numerical value in the display.

Turn the knob (**6**) to adjust the volume.

Speed Volume Control (SVC)

The Speed Volume Control (SVC) automatically adjusts the volume in accordance with road speed.

- Press the Dolby® button (**12**) again.

You'll hear a signal tone, and "**SET UP SPEED DEP VOL**" will appear in the display.

The volume level is represented by a numerical value in the display. "0" means that the function is turned off.

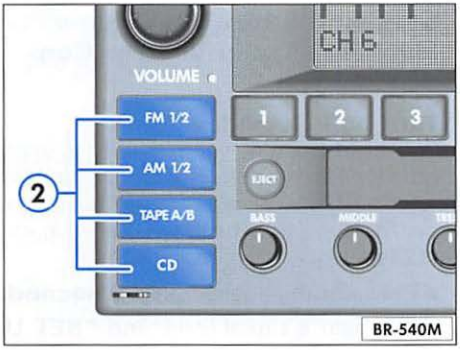
Turn the knob (**6**) to adjust the volume.

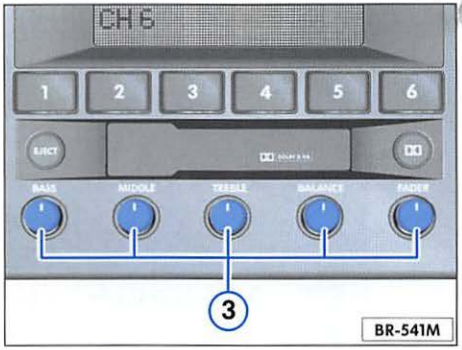
- Press the Dolby® button (**12**) again for longer than 3 seconds to confirm the settings you've just made.

You'll hear a signal tone. The unit is now in the normal operating mode and your changes are stored.

Notes

- If you do not confirm the setting you have just made, the unit will automatically return to the normal operation mode after about 30 seconds and your changes will not be stored.
- If the custom turn–on volume that you stored is louder than the turn–off volume level, the unit will use the turn–off volume the next time it's turned on.





2 - FM, AM, TAPE and CD buttons

FM1 / FM2 button

- Tap the FM button to select the FM band.
- Tap the button again to toggle between FM1 and FM2.

FM1 or FM2 appears in the display.

AM1 /AM2 button

- Tap the AM button to select the AM band.
- Tap the button again to toggle between AM1 and AM2.

AM1 or AM2 appears in the display.

TAPE A/B button

Tap the TAPE A/B button if you want play a cassette. See page 10 for more details.

CD button

Tap the CD button to select the CD mode. See page 13 for more details.

3 - Tone settings

BASS

- Use the rotary knob to raise or lower the bass.

Midrange control (MIDDLE)

- Use the rotary knob to set the desired midrange tones.

Treble control (TREBLE)

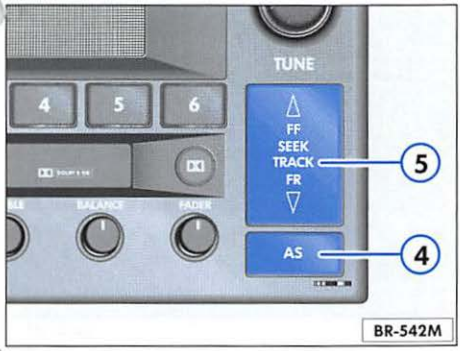
- Use the rotary knob to raise or lower the treble.

Balance control (BAL)

- Use the rotary knob to set the desired balance between the left and right speakers.

Fader control (FADER)

- Use the rotary knob to set the desired balance between the front and rear speakers.



4 - Autostore (AS) button

Using the Autostore feature, you can store the 6 best quality stations on the AM or FM wavelengths. The strongest will be memorized, in order of frequency.

Storing 6 radio stations

- Select AM or FM.
- Press the AS button for approximately 2 seconds."**STORE AM 1 TO 6**" or "**STORE FM 1 TO 6**" appears in the display. The 6 stations with the strongest signals on the chosen wavelength are automatically stored.

5 - SEEK

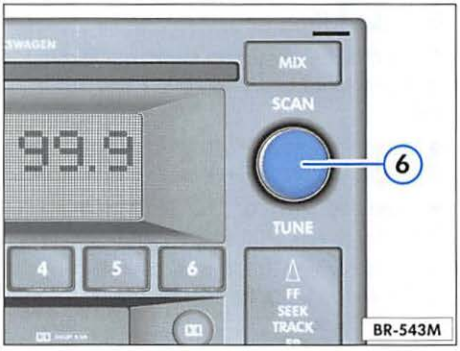
Tap the SEEK button to seek the next higher or lower frequency (radio station) automatically.

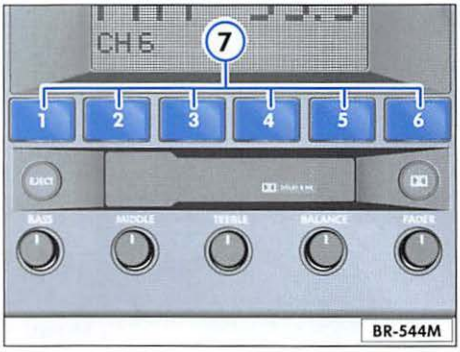
- Press "▲" to start the SEEK operation to the next higher frequency (radio station).
- Press "▼" to start the SEEK operation to the next lower frequency (radio station).

Once a station has been found, the Auto SEEK stops. Tap the button again to continue Auto SEEK.

Manual SEEK

Pressing and holding "▲" or "▼" allows you to tune to a desired frequency. Simply release "▲" or "▼" just before you reach the desired frequency. The SEEK function will then stop at the next station that offers acceptable reception.





6 - Manual tuning (TUNING)

Use this button to manually tune your radio.

Set the desired frequency by turning clockwise to tune upwards or counter-clockwise to tune downwards.

Automatic tuning (SCAN)

"**SCAN**" will appear in the display when you press this button. The radio immediately begins to scan upwards to the next higher frequency. When the SCAN feature finds a radio frequency, it will stop for approximately 5 seconds, and then continue to the next rado frequency. If you press the button during the 5 second "hold" period, the SCAN feature will stop there.

7 - Station preset buttons

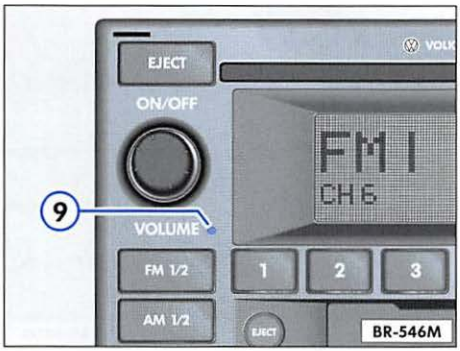
You can preset one radio station on each of the six buttons in each of the four bands **AM1**, **AM2**, **FM1** and **FM2**.

- Select the desired band / preset group (see **2**).
- Tune to the desired radio station (see **5** or **6**).
- Hold down the station button until you hear an audible signal. The sound will first be muted and then return. Your radio station is now preset on this button.

To listen to the station you just stored, press this button briefly.

Note

When selecting stations, only press the button briefly. If you hold it down for some time, the currently displayed frequency will be stored on this button.



8 – What you see in the display when listening to the radio

– Bands

Display: "**AM1 . . AM2**" or "**FM1 . . FM2**".

Refer to page 6 (**2**) for further details.

– Station preset buttons

Display: "**CH 1 . . . 6**".

Refer to page 8 (**7**) for further details.

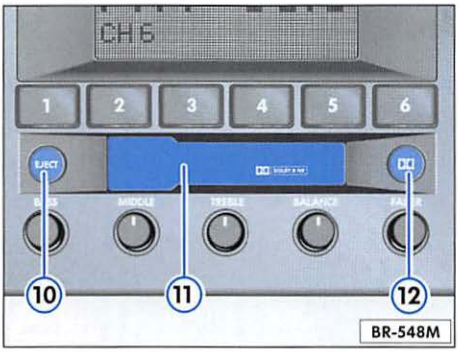
– Frequency display

Display: FM Band "103.1" MHz,
AM Band "980" KHz.

9 – LED

When the unit is turned off and the ignition key is removed from the ignition lock, the LED blinks to let you know the the anti–theft coding is on.

Cassette player



TAPE A / TAPE B button

- Tap the TAPE button to start playing a cassette you aleady have in the cassette bay.

Note
If you don't have a casette in the cassette bay and you press the TAPE A/B button, you'll hear an audible signal, and "**NO TAPE**" will appear in the display.

As soon as you insert a cassette in the cassette bay **11**, the unit automatically will start to play the cassette regardless whether the radio is on or if you are listening to a CD.

Selecting a tape side

- Briefly press this button while the tape is playing. The unit will switch to the other cassette track.

The tape direction will be displayed:

"**TAPE A**" = forward direction

"**TAPE B**" = reverse direction.

At the end of the tape, the unit automatically changes to the other track (auto reverse).

10 -EJECT button

- Press the EJECT button to eject the cassette tape out of the cassette bay.

11 -Cassette bay

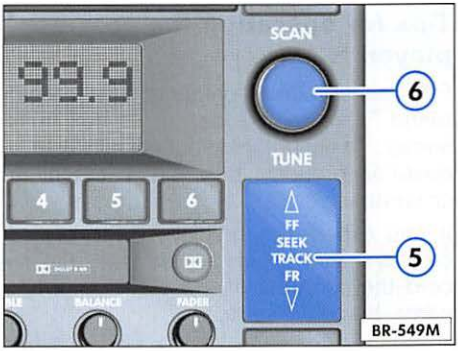
Insert the cassette all the way into the cassette bay **11** with the tape side facing to the right.

12 -Dolby® Noise Reduction

Press the Dolby button if you are playing a tape which uses Dolby® Noise Reduction

The Dolby® symbol will appear in the display.

® The Dolby Noise Reduction System is manufactured under license from Dolby Licensing Corporation. Dolby and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.



Rewind / Fast Forward (FR-FF)

Briefly press the FR-FF rocker switch (**5**). The tape will begin to fast forward or rewind.

The display will indicate the direction:

"**TAPE FR**" – Rewind

"**TAPE FF**" – Fast forward

Press the button again to stop rewind or fast forward at any time.

Music Seek System (SEEK)

The Music Seek System automatically finds and plays the next title.

To select the desired seek direction, **press and hold** either "▲" or "▼" of the rocker switch (**5**) for longer than 2 seconds.

The seek direction is displayed as:

"**MSS FOR**" – forward

"**MSS REV**" – reverse.

To stop the Music Seek, press the button again.

Note

The pauses between music titles must be at least 3 seconds long for the Music Seek System to function properly.

SCAN

When you briefly press the SCAN button (**6**) "**SCAN**" will appear in the display. Scanning will begin, and the introduction of the next track will start to play. After about 10 seconds, scanning will move onto the next track. Pressing the SCAN button during the 10 second period stops the scanning.

What you see in the display when listening to a cassette

– "DOLBY B NR ON"

Appears when Dolby® Noise Reduction is selected.

– "METAL"

Appears when metal cassettes are played.

– "TAPE A" or "TAPE B"

Shows you which side of the tape is currently being played.

See page 10 for further details.

® The Dolby Noise Reduction System is manufactured under license from Dolby Licensing Corporation. Dolby and the double–D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Tips for operating the cassette player

For optimal sound reproduction, we recommend "chrome dioxide" or "metal" cassettes. To ensure that your cassette player operates properly, only use name–brand cassettes.

If you experience problems with pre–recorded cassettes, it's a good idea to re–record the contents of the cassette onto a name–brand cassette.

To avoid problems caused by the cassettes themselves, only use cassettes having a maximum recording time of 90 minutes (C–90 cassettes). C–60 cassettes are especially well suited.

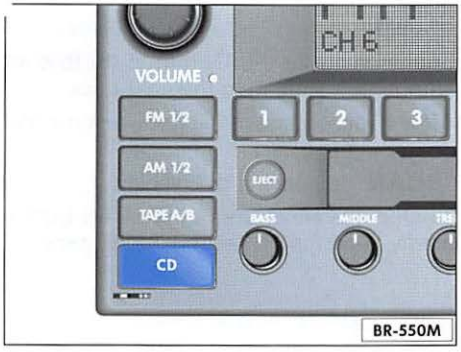
Do not place any adhesive labels or stickers onthe cassette housing. Heat can make them come loose while you're playing a tape, and this could cause the unit to malfunction!

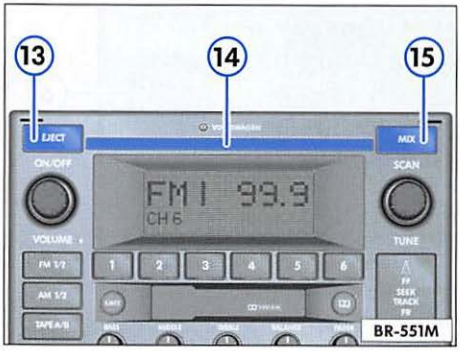
Never leave cassettes in the car when the temperatures are very low (below 15 ° F / –10° C) or very high (above 122° F / +50° C). Remember, the temperature inside your car can be much higher than the outside temperature.

Also, avoid exposing cassettes to direct sunlight. The best idea is to store cassettes in their original cases.

If the sound of the cassette has a muffled quality after the unit has been used for a relatively long period (about 100 hours, depending on what kind of tape material is being played), the tape head may be dirty. Clean it using a wet–type head–cleaning cassette. Use only name–brand cleaning cassettes and follow the manufacturer's instructions carefully.

CD player





The CD player / CD changer* is operated easily and conveniently using the controls on the radio.

CD button

Press the CD button when you want to listen to a CD.

Note

If no disc is loaded in the CD player or the magazine is not loaded in the CD changer you'll hear an audible signal, and "**NO DISC**" or "**NO MAGAZINE**" will appear in the display.

13 –Mix Mode button

Pressing the MIX button in the CD mode causes the tracks in the selected CD to be played **in random order**.

"**MIX**" appears in the display.

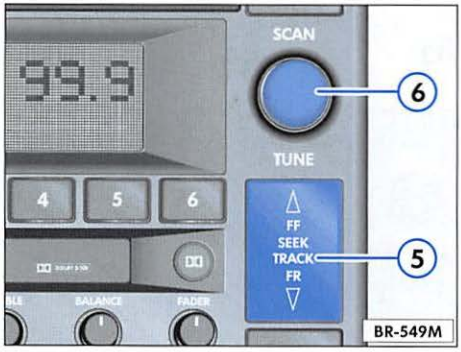
Press the MIX button again to stop the random play operation.

14 –CD slot

Insert the CD with the printed side facing up!

15 –CD Eject button

Press the CD Eject button to eject the CD.



Track selection button

You can "skip" through the tracks on a CD in two different ways:

- By briefly pressing the TRACK button (**5**).
"▲" skips upwards.
"▼" skips downwards.

Tap on the rocker switch repeatedly to select individual tracks.

- Page to the desired track by **turning** the knob (**6**). Clockwise to page upwards or counter clockwise to page downwards.

The currently selected track appears in the display:

"**TR01** . . . **TR02** . . . **TR03** . . ." etc.

Note

Briefly pressing the "▼" button while a track is playing will cause the unit to "jump" back to the beginning of the track and resume playing from there.

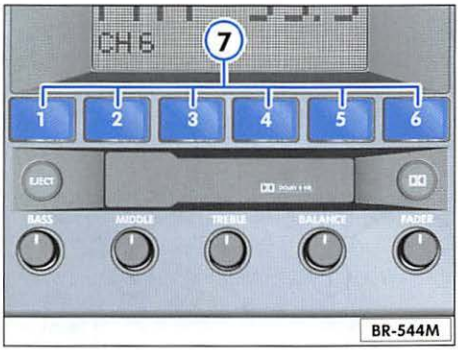
SCAN

Briefly press the SCAN button (**6**) to start automatic scanning to the next track.

After 10 seconds, scanning will resume and go to the next track.

"**SCAN**" appears in the display.

To stop scanning, press the SCAN button briefly durin the 10 second "hold" time.



Selecting an individual CD*

CD changer

Each individual CD in the magazine can be selected by briefly pressing the selection buttons **7**.

The currently selected CD will apear in the display – "**CD1**" . . . "**CD6**".

Note

- If no CD is in a magazine tray, you'll hear an audible signal and "**NO CD**" will appear in the display.
- If no magazine is loaded in the CD changer, you'll hear an audible signal and "**NO MAGAZINE**" will appear in the display.

What you see in the display when listening to a CD

- **CD changer magazine tray**

Display: "**CD1 . . . CD6**", or "**NO CD**", if no CD is present in a tray.

Refer to page 15 for further information.

- **Which CD track is currently being played**

Display: "**TR01** . . . **TR02** . . . **TR03** . . ." etc.

Refer to page 14 for further details.

- **"MIX" (random play)**

Refer to page 13 for further details.

Error displays when using the CD player

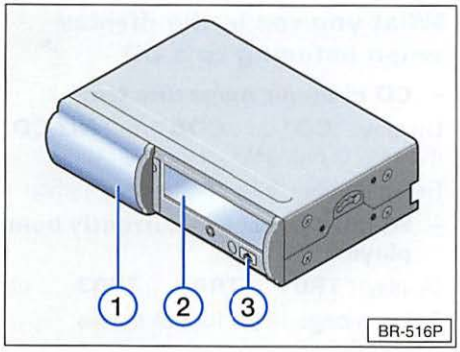
The following error messages can be displayed:

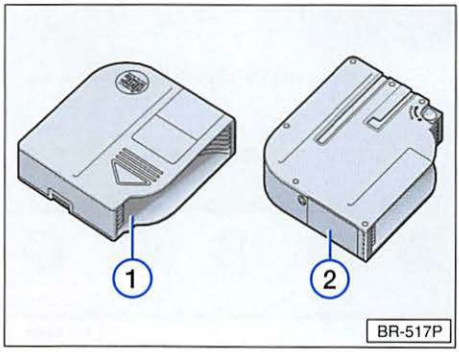
- **"NO CHANGER"** = CD changer not connected
- **"NO DISC"** = No disc in the player.
- **"NO MAGAZINE"** = No magazine in the changer
- **"CD ERR"** = The CD is dirty, scratched or inserted upside down. The next CD is automatically selected.
- **"ERROR"** = The CD changer mechanism is malfunctioning.

- In this case, press the eject button – see page 16.
- Re–insert the magazine in the changer.

If the unit still malfunctions, contact your authorized VOLKSWAGEN dealer for assistance.

CD changer*





The CD changer and magazine are located in the luggage compartment.

16 –Sliding door for closing the CD bay

17 –CD magazine bay

18 –Magazine eject button

CD magazine

1 – Top

2 – Bottom

Note

- Use CD magazines sold as Genuine Volkswagen accessories* only.
- If there is no magazine in the CD changer, you'll hear an audible signal, and "**NO MAGAZINE**" will appear in the display.

Removing the magazine

- Slide the magazine bay cover open.
- Press the eject button. The magazine will automatically eject.
- Remove the magazine.

Inserting the magazine

- Insert the magazine with the marking "disk" facing upward all the way.

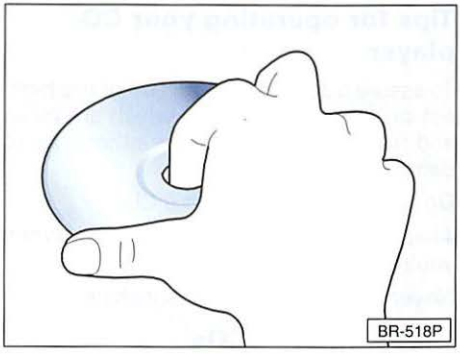
Be certain that the arrow located on the top of the magazine points **toward** the bay.

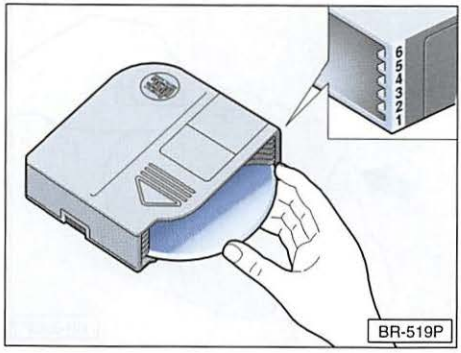
After you've inserted the magazine, you'll hear a noise indicating that the CD changer is working. The unit is analyzing how many CDs are in the magazine.

- Slide the bay cover close.

Note

Always close the bay cover after you've inserted the magazine to keep dust and dirt from getting into the CD changer.





Loading CDs into the magazine

- **Hold the CD by the center hold and the outer edge with the printed side facing up.**

Note

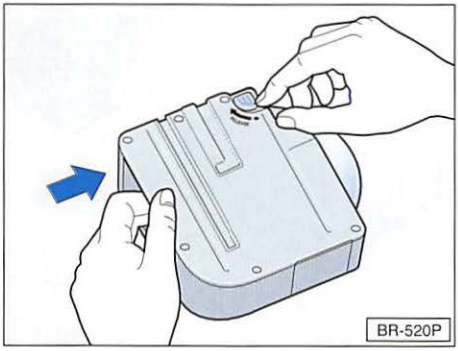
The magazine holds six standard size CDs. **Do not use any 8 cm CDs (singles)!**

To avoid changer malfunctions, **never use a CD protective film or stabilizer** (commercially available as CD accessories).

If there are no CDs loaded in a given magazine tray, you'll hear an audible signal if you select this tray. "**NO CD**" will appear in the display.

- Hold the magazine with "disk" facing up.
- Individually insert the CDs in the magazine **with their printed sides facing up.** Be sure to align them carefully when you insert them. You'll hear a clicking noise when each CD is properly engaged.

Note the order of the CDs on the right side of the magazine.



Removing CDs

- Turn the magazine over and hold it with the CD release lever facing up.
- Rotate the release lever against the spring force.
- Gently press the CDs through the opening in the back side of the magazine.

Take care not to let the CDs drop!

- Remove the CDs from the magazine.

Tips for operating your CD player

To assure a sound reproduction of the highest quality, use only CDs which are clean and free of scratches or any other type of damage.

Do not stick any labels on a CD.

Always store CDs in their cases when you're not listening to them.

Never leave CDs in direct sunshine.

Cleaning your CDs

For routine cleaning, wipe the playing surface with a clean, soft, lint–free cloth from the center of the disc to the outer edge. If the surface is heavily soiled, dampen a clean soft cloth in a solution of mild neutral commercial detergent before cleaning the disc.

Never use fluids such as benzene, paint thinner or record cleaners, otherwise you may damage the CD surface!

Preventative measures for laser units.

Laser devices are divided into safety classes 1 – 4.

Your VOLKSWAGEN CD changer conforms to safety class 1.

The laser used in Class 1 is so low and so well shielded, that no danger exists with proper usage.

Never remove the cover from the unit. The unit does not contain any parts that can be serviced by the used.

Anti-theft coding

When the unit is turned off and the ignition key is removed from the ignition switch, the flashing LED (**9**), indicates that the radio is equipped with an anti-theft coding system. See the Radio Card for the code.

If the unit is removed from the vehicle, this anti–theft coding electronically prevents the unit from being re–used by unauthorized persons.

The electronic lock–up is operational if:

- the radio is disconnected from the vehicle electrical system
- the battery is disconnected
- the radio fuse burns out.

If this happens, the **correct** code must be entered before the unit can be operated again.

The code number and serial number are provided on labels which are affixed to the "Radio Card" located in the front of this booklet.

Canceling the electronic lock

Perform the steps in exactly the following order:

- Turn on the radio. "**SAFE**" will appear in the display.
- After 3 seconds, the number **1000** will appear in the display.
- Use the radio station preset buttons 1 to 4 to enter the code number found on your Radio Card. Use preset button 1 to enter the first digit in the code number. Use button 2 to enter the second digit, etc. The value range for each of the 4 digits is "0 ... 9". The digit will increase by 1 each time you tap the preset button. The number returns to "0" after "9".
- After you finish entering the code, press either the upper side ("▲") of the SEEK button (**5**) or the SCAN button (**6**) for longer than 2 seconds until you hear an audible signal.
- If you've entered the code number correctly, "**LSM**" will appear in the display.

The unit is now ready to use again!

Wrong code number

If you've accidentally entered a wrong code number, "**SAFE**" will appear in the display. Initially it'll flash, then stay on.

You can repeat the procedure again **one time**. The number of attempts will appear in the display.

If the wrong code number is entered again, the unit will be disabled for about 1 hour. **Leave the unit ON and the key in the ignition switch for this hour**. After the hour has elapsed, the number of attempts will stop being displayed and you can cancel the electronic lock once again.

Remember, the cycle is....

– 2 attempts

– one hour locked.

Note

If you loose your Radio Card, contact your authorized VOLKSWAGEN dealer.

Warranty, Antenna Care

Warranty

Our radio systems are cvoerd by the warranty conditions that apply to new cars.

If a warranty claim is made during the warranty period, the unit will be repaired free–of–charge by any authorized Volkswagen dealer – provided that the dmage was not caused by improper treatment or attempts to repair it by non–qualified persons, and that the unit has not suffered any external damage.

Care of antenna

The antenna is designed to achieve optimal performance with the radio and is located at a position where reception is good and susceptibility to interference is low.

Vehicles equipped with antennas embedded in the windshield or backlights offer the further advantages of being completely protected from damage and wear.

Care: A dirty telescoping antenna is difficult to retract and can be bent during retraction. When you wash your vehicle, dry off the antenna and clean it occasionally using chrome polish. This also applies to bleack–chromated antennas.

Power antennas also need to be washed and cleaned with chrome polish on a regular basis to keep the functioning properly.

If the power antenna does not retract or extend properly, the telescopic sections must be cleaned. Never forcibly push in or pull out the antenna by hand.

No antenna care is required for vehicles equipped with roof mounted antennas.

Technical Description

Anti-theft protection

The unit is electronically locked whenever the power source is interrupted. It can only be returned to working condition by entering the correct code number.

Frequency ranges

FM and AM

Band selection

Momentary-contact buttons

Displays

Frequency, band, bass, balance, treble, preset button, cassette functions, Dolby® symbol, CD functions, coding

Illumination

The controls and display are illuminated glare-free from the interior (night driving design) – maximum brightness when driving lights are off. When the driving lights are on, the intensity is controlled together with the instrument panel intensity.

Station selection

In the radio mode, the unit automatically plays the last station selected when the unit was turned off (last staton memory).

Radio

Automatic and manual tuning. Six station preset buttons each for FM1, FM2, AM1 and AM2. Manual tuning is possible in both directions. Microprocesor-controlled stabilization of station frequencies (PLL quartz tuning).

Cassette player

Low-wear, high performance tape head, latching buttons for fast forward and reverse, auto-reverse, Music Search System (MSS), Dolby® Noise Reduction, automatic detection of metal cassettes.

CD changer*

Remote controlled via radio sound system unit. Changer magazine for 6 CD's with motor-driven ejection, 6 CD selection buttons. Mix mode, automatic track scan / seek.

Sound reproduction

Stereo (radio, cassette, CD), adjustable treble / bass controls, fader control integrated in the radio, multiple speaker system

Max. power output

4 x 20 Watt (high)
2 x 20 Watt (low)
2 x 30 Watt (sub-woofer)

Options

Electronic antenna, CD changer. Additional information on these options is available from authorized VOLKSWAGEN dealers.

Interference suppression

The automatic interference suppression circuitry integrated in the unit eliminates most outside interference in the FM band.

Specially tuned interference suppressors eliminate nearly all interference pulses from the engine and other parts of the electrical system such as the heater blower, windshield wipers and radiator fan.

® The Dolby Noise Reduction System is manufactured under license from Dolby Licensing Corporation. Dolby and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

A

Adjusting
- Balance between left and right speakers 6
- Bass 6
- Fader 6
- Midrange 6
- Speed volume control 5
- Treble 6
- Volume 5

AM button 6
Antenna, – How to take care of .. 21
Anti-Theft protection 22
Anti–theft alarm system, – How do I know if my radio is electronically locked up? 19
Anti–theft coding 4, 19
- Blinking LED 9
- Canceling the electronic lock–up . 19
- What do I do if I enter an incorrect code number? 19
- When does the Sound System lock up electronically? 19

AS (Autostore) 7
Automatic seek 7
Automatic tuning 8
Autostore (AS) 7

B

Balance control 6
Bands received 22
BASS 6
Broadcasting mode 5
Button
- AM 6
- AS (Autostore) 7
- Balance 6
- Bass 6
- CD 6, 13
- CD Eject 13
- Dolby Noise Reduction 10
- EJECT 10
- Fader 6
- FM 6
- Manual tuning 8
- Midrange 6
- Mix Mode 13
- ON/OFF 5
- Radio station preset 8
- SCAN 11
- SEEK 11
- TAPE 6
- TAPE A / TAPE B 10
- Tone settings 6
- Track selection (when playing a CD) 14
- Treble 6

C

Cassette housing 12
Cassette player 10
- Cassette bay 10
- Changing cassette tracks 10
- Ejecting a cassette 10
- Fast forward 11
- Fast forward to the next track 11
- Fast reverse 11
- Fast rewind to the previous track 11
- How can I tell which side of my cassette tape is being played? . 10
- How do I switch from one side of a tape to the other? 10
- SCAN function 11
- Tape A / Tape B button 10

– Tips for operating 12
– Tips for taking care of your cassettes 12
– What you see in the display .. 12
Cassettes, – Taking care of your cassettes 12
CD button 6
CD Changer, – Installed in the luggage compartment 4
CD changer 4, 16
CD magazine 16
– How many CDs can I load in the CD magazine? 17
– Inserting into the CD changer . 16
– Loading with CDs 17
– Removing CDs from the magazine 18
– Removing from the CD changer . 16
CD player 13
– Automatic scan to the next track (SCAN) 14
– Automatic track scanning 14
– CD button 13
– CD ERR – What does it mean when CD ERR appears in the display? 15
– Cleaning your CDs 18
– Display 15
– Ejecting a CD 13
– ERROR – What does it mean when ERROR appears in the display? 15
– Fast forward to next track 14
– Fast reverse to previous track 14
– How to load CDs into the magazine 17
– How to remove a CD from the CD magazine 18
– How to select an individual CD in the magazine 15
– Inserting the CD magazine into the CD changer 16
– Loading CDs 13, 17
– Malfunction display 15
– NO CHANGER – What does it mean when NO CHANGER appears in the display? 15
– NO DISC – What does it mean when NO DISC appears in the display? 13, 15
– NO MAGAZINE – What does it mean when NO MAGAZINE appears in the display? 13
– Random play 13
– Removing the CD magazine from the CD changer 16
– SCAN (automatic track selection) 14
– Selecting a CD 15
– Selecting a CD track 14
– Skipping backward to the previous CD track 14
– Skipping forward to the next CD track 14
– Tips when using 18
– Track selection button 14
– What is the correct way to insert a CD into the slot? 13
CDs
– Cleaning 18
– Take care of your CDs 18
Chrome dioxide tapes 12
Code number 19

D

Digital displays 15
Displays 15, 22
– Radio modes 9
Dolby Noise Reduction 10

E

EJECT 10
Electronic lock 19
ERROR 15

F

Fader control 6
Fast forward 11
FM button 6

I

Identification number 19
Ignition lock 5
Illumination 22
Interference suppression 22
Intro scan (SCAN) 11

K

Key 5

L

LED – What does it mean when the LED is blinking? 9
LSM, – What does it mean when LSM appears in the display? 19

M

Manual SEEK 7
Manual tuning 8
Maximum power output 22
Midrange control 6
MIX, – What does it mean with MIX appears in the display when I am playing a CD? 13
Mix mode 13
MSS – Music Seek System 11
MSS FOR 11
MSS REV 11

N

NO CHANGER 15
NO DISC 13, 15
NO MAGAZINE 13
NO TAPE 10
NO TAPE – What does it mean when NO TAPE appears in the display? . 10

O

ON / OFF 5

P

Power antennas 21
Preset buttons 8

R

Radio Card 4, 19
Radio card 19
– Where should I keep my Radio Card? 4
Radio code number 4
Radio mode 5
Radio station preset buttons, – How can I store a radio station? 8
Rewind 11
Roof mounted antennas 21

S

SAFE – What does it mean when "SAFE" appears in the display? ... 4
SEEK
- Automatic ... 7
- Manual ... 7

Serial number ... 19
SET UP SPEED DEP VOL ... 5
SET UP VOL ON LIMIT ... 5
Setting
- AM radio stations ... 6
- Balance ... 6
- Bass ... 6
- Fader ... 6
- FM radio stations ... 6
- Midrange ... 6

Sound reproduction ... 22
Speed dependant volume ... 5
Speed Volume Control (SVC) ... 5
Station buttons ... 8
Station selection ... 22
SVC (Speed Volume Control) ... 5

T

TAPE A ... 10
TAPE B ... 10
TAPE button ... 6
TAPE FF ... 11
TAPE FR ... 11
Technical description ... 22
- Cassette player ... 22
- CD changer ... 22
- Radio ... 22

Telescopic antenna ... 21
Tone settings
- BAL ... 6
- Bass ... 6
- FADER ... 6
- Midrange (MIDDLE) ... 6
- TREBLE ... 6

TR01, TR02, TR03, etc. ... 14
TREBLE ... 6
Tuning
- Automatic (SCAN feature) ... 8
- Manual ... 8

Turn–on volume level ... 5

V

Volume control ... 5

W

Warranty ... 21

It has always been Volkswagen' policy to continuously improve its products. Volkswagen, therefore, reserves the right to make changes in design and specifications, and to make additions or improvements in its products, without incurring any obligation to install them on products previously manufactured.

Text, illustrations and specifications in this manual are based on knowledge and information available at the time of printing.

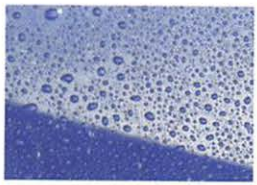
Technical specifications are subject to change without notice.

All rights reserved. No part of this manual may be reproduced, copied, or translated without the express written permission of Volkswagen AG.

Volkswagen AG expressly retains all rights provided by copyright laws. Subject to alteration.

This paper is produced from non-chlorine-bleached pulp.

© 2001 VOLKSWAGEN AG
Printed in Germany



3.4 2004 Passat

Tips and Advice
- operating your vehicle the right way

Please read this important information before reading your booklet.

Vehicle Equipment

This manual describes all the equipment intended to be offered at the time of printing. Some of the equipment may be available at a later date or not at all.

Please note that items marked with an asterisk may be standard on certain models, optional on others or not available on your model.

Notes about Environment

Texts identified by this symbol and written in italics are important notes regarding the environment and how you can help protect it.

Illustrations

Each illustration in the manual shows a feature and / or equipment which your vehicle may or may not have, depending on the model. The illustrations are simply to show you how a feature looks and its function.

Alphabetical Index

At the back of this book, you will find an extensive Alphabetical Index. This will help you to find information quickly by using key words.

Table of Contents

On the following page, you will find the Table of Contents which describes all the features of your vehicle in the order they appear in this manual.

Indication of directions

Whenever a direction is specified (for example: left, right, forward, backward, etc.), you should imagine yourself as sitting in the vehicle facing in the driving direction. If something is explained which is different from this position, it will be clearly identified.

WARNINGS

WARNINGS

concern safety and are highlighted like this throughout this manual.

Texts printed in bold type refer to possible damage to your vehicle, or to other important information.

If one of the Warning and indicator lights marked with a STOP-sign comes on while you are driving, move a safe distance off the road, turn off the engine, turn the emergency flasher on and use other warning devices to alert other motorists. Go to listed page in your booklet for explanations.

TABLE OF CONTENTS

FILLING YOUR TANK

Fuel tank 2
Fuel supply 4

OPTIMAL TECHNOLOGY

Braking 6
Electronic differential lock (EDL) .. 9
4MOTION* (All Wheel Drive) 10
Anti-Slip Regulation (ASR) 11
Power steering 11

DRIVING AND PROTECTING OUR ENVIRONMENT

The first 1,000 miles (1 500 km) – and afterwards 12
Operate your vehicle safely 13
Difficult operating conditions 14
Operate your vehicle economically and minimize pollution 15
Warranty coverages 18
Trailer towing 18

CARE AND CLEANING

Cleaning and protection 22
Care of exterior 23
Care of interior 27
Maintenance 31

CHECKING AND FILLING

Engine hood 33
Engine compartment 34
Engine oil 36
Engine cooling system 40
Brake fluid 43
Battery 45
Windshield washer container 50

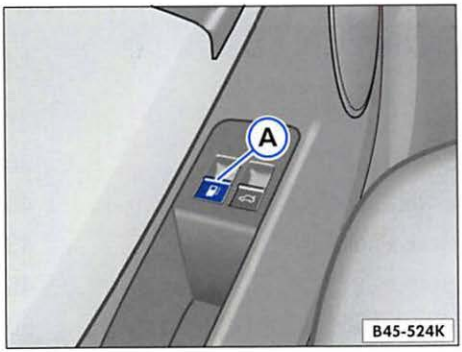
KEEPING YOUR VEHICLE IN GOOD WORKING CONDITION

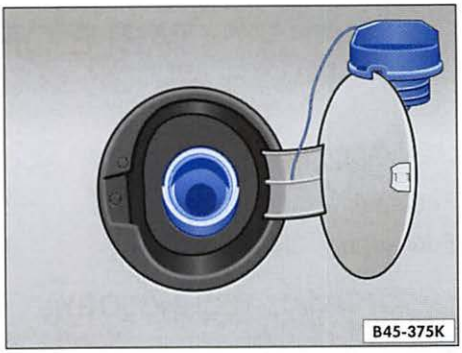
Additional accessories, Modifications and Parts replacement 51

WHAT DO I DO NOW?

Service kit 52
Jack and tool kit, spare tire 53
Tires / Wheels 56
Changing a wheel 66
Anti–theft wheel bolts 72
Fuses 73
Replacing bulbs 74
Installing / replacing a radio 74
Mobile telephones and CB radios . 75
Emergency Starting 75
Emergency towing with commercial tow truck 78
Lifting vehicle 79
Reporting safety defects 81
Outside the U.S.A. or Canada 81
VOLKSWAGEN Service Repair Manuals 82

Fuel tank





Fuel filler flap release...

The switch **A** for the fuel filler flap release is located in the driver's door panel.

Pull the switch to unlock the fuel filler flap. The switch also works with the ignition switched off.

The fuel filler neck is on the right rear side panel behind the fuel filler flap. The fuel filler neck is accessible after you have opened the filler flap. When refueling, hang the fuel filler cap on the fuel filler flap as shown in the right illustration.

The capacity of the tank is approximately 16.3 US gallons (62 liters). Reserve is approx. 2.1 US gallons (8 liters) of total capacity.

Note

- **Don't drive until the fuel tank is completely empty. Gasoline could get in the exhaust system and damage the catalytic converter.**
- **If any fuel has spilled onto the vehicle, it should be removed immediately to prevent damage the paintwork.**

⚠ WARNING

Under normal operating conditions, never carry additional fuel containers in your car. Such containers, full or empty, may leak and could cause a fire in a collision.

If you must transport fuel to use for your lawn mower, snow blower, etc., be very careful and always observe local and state laws regarding the use, transportation and storage of such fuel containers. Make certain the containers meets industry standards (ANSI / ASTM F852–86).

Refuelling the vehicle

Your vehicle fuel tank has an on-board refuelling vapor recovery system. This feature helps to prevent fuel vapors from escaping from the tank and polluting the environment while you refuel your vehicle.

In order to fill your tank properly while protecting the environment, please follow this refueling procedure carefully:

- Turn off the ignition.
- Unscrew fuel filler cap and remove.
- Insert the fuel nozzle from the gasoline pump into the fuel filler neck as far as it will go.
- When filling your tank, select a medium refueling rate so that the nozzle switches off automatically when the tank is full.

As soon as the correctly operated nozzle switches off automatically for the first time, the tank is full. Do not try to add more fuel, because fuel may spill out. In addition, the expansion space in the fuel tank will be filled – causing the fuel to overflow when it becomes warm and pollute the environment.

- After filling your tank, twist the fuel filler cap clockwise until you hear a definite click.

To avoid fuel spilling or evaporating from the fuel tank always close fuel filler cap properly and completely.

Note

Running your engine while refuelling may cause vapors to escape or even fuel to spill out of the tank. This would then shut off the fuel nozzle before the tank is full.

Filling a Portable Fuel Container in Exceptional Cases

WARNING

To reduce the risk of fire and personal injury when filling a fuel container for a lawn mower or snow blower, etc. please remember:

- **Never fill a portable fuel container leaving it still in the luggage compartment or on top of the car. Static electricity can build up while filling and can ignite fuel vapors causing a fire. Always place a portable fuel container on the ground before filling.**
- **Always keep the fuel pump nozzle completely inside the portable container before and during filling to help prevent static electricity discharge and fire.**
- **Never spill fuel inside the luggage compartment or vehicle interior. Fuel vapors are highly flammable and can cause fire and serious burns.**
- **Always observe local and state (provincial) laws regarding the use, storage and transportation of such containers.**
- **Make certain the fuel container meets industry standards (ANSI / ASTM F852–86).**

Fuel supply

Use only unleaded fuel in your vehicle.

Octane rating

Octane rating indicates a gasoline's ability to resist engine damaging "knock" caused by pre–ignition and detonation. Therefore, buying the correct grade of gasoline is very important to help prevent possible engine damage and a loss of engine performance.

The recommended gasoline octane rating for your engine can be found on a label located on the inside of the fuel filler flap. This rating may be specified as AKI (CLC) or RON (ROZ).

Gasolines most commonly used in the United States and Canada have the following octane ratings that can usually be found on the filler pump:

Premium Grade: 91 – 96 AKI

Regular Grade: 87 – 90 AKI

Fuel Recommendation

The fuel recommended for your vehicle is unleaded premium grade gasoline with a minimum octane rating of 91 AKI (CLC) or 95 RON (ROZ).

Notes

- **Do not use any fuel with octane ratings lower than 87 AKI or 91 RON otherwise expensive engine damage will occur.**
- **Do not use leaded gasoline!**

The use of leaded gasoline will severely damage your vehicle's catalytic converter and its ability to control exhaust emissions.

Unleaded gasoline is available throughout the USA, Canada, and in most European countries. We recommend that you do not take your vehicle to areas or countries where unleaded gasoline may not be available.

Use of gasoline containing alcohol or MTBE (methyl tertiary butyl ether)

You may use unleaded gasoline blended with alcohol or MTBE (commonly referred to as oxygenates) if the blended mixture meets the following criteria:

Blend of gasoline methanol (wood alcohol or methyl alcohol)

- Anti–knock index must be 87 or higher
- Blend must contain no more than 3% methanol
- Blend must contain more than 2% CO solvents

Note

Methanol fuels which do not meet these requirements may cause corrosion and damage to plastic and rubber components in the fuel system.

Blend of gasoline and ethanol (grain alcohol or ethyl alcohol)

- Anti-knock index must be 87 AKI or higher.
- Blend must not contain more than 10% ethanol.

Blend of gasoline and MTBE

- Anti-knock index must be 87 AKI or higher.
- Blend must contain not more than 15% MTBE.

Notes

- **Do not use fuels that fail to meet the criteria specified above.**
- **If you are unable to determine whether or not a particular fuel blend meets the specifications above, ask your service station or its fuel supplier.**
- **Do not use fuel for which the contents cannot be identified.**
- **Fuel system damage and performance problems resulting from the use of fuels different from those specified above are not the responsibility of VOLKSWAGEN and are not covered under the New Vehicle or the Emission Control System Warranties.**
- **If you experience a loss of fuel economy or driveability and performance problems due to the use of one of these fuel blends, we recommend that you switch to unblended fuel.**

Seasonally adjusted gasoline

Many gasolines are blended to perform especially well for winter or summer driving. During seasonal change-over, we suggest that you fill up at busy gas stations where the seasonal adjustment is more likely to be made in time.

Gasoline additives

A major concern among many auto manufacturers is carbon deposit build-up caused by the type of gasoline you use.

Although gasolines differ from one manufacturer to another, they have certain things in common. All gasolines contain properties that can cause deposits to collect on vital engine components, such as fuel injectors and intake valves. Although most gasoline brands include additives to keep engine and fuel systems clean, they are not equally effective.

After an extended period of using inadequate fuels, built-up carbon deposits can rob your engine of peak performance.

Note

Damage or malfunction due to poor fuel quality is not covered by the VOLKSWAGEN New Vehicle Limited Warranty.

Braking

General notes

The brakes on today's automobiles are still subject to wear depending largely on operating conditions and driving habits. On vehicles which are driven mostly in stop–and–go city traffic or which are driven hard, the brake linings should be checked by your authorized VOLKSWAGEN dealer more often than specified in the **Maintenance booklet** → ***booklet 1.1.***

⚠ WARNING

- **If you damage the front spoiler, or if you install a different spoiler, be sure the air flow to the front brakes is not obstructed, otherwise the brake system could overheat reducing the effectiveness of the entire brake system.**
- **Failure of one brake circuit will impair the braking capability resulting in an increased stopping distance. Avoid driving the vehicle and have it towed to the nearest VOLKSWAGEN dealer or qualified workshop.**
- **New brake pads don't have the best stopping power and must be "broken–in" during the initial 100 to 150 miles (150 to 200 kilometres) of normal city driving. You can compensate for this by pressing the brake pedal more firmly. This also applies later when new pads are installed.**

Conditions affecting braking efficiency

Moisture or road salt

⚠ WARNING

- **Under certain climatic and operating conditions such as passing through water, driving in heavy rain or after washing the vehicle, the effectiveness of the brakes can be reduced. In winter, ice can accumulate on the brake pads, linings, discs and drums. Cautiously apply brakes for a test. Brakes will dry and ice coatings will be cleaned off after a few cautious brake applications.**
- **Driving for an extended period of time on salt–covered roads without using your brakes can also affect braking efficiency. Clean off accumulated salt coating from brake discs and pads with a few cautious brake applications.**

⚠ Always read and heed all WARNINGS on next page.

Overheating the brakes

WARNING

- **Do not "ride the brakes" by resting your foot on the pedal when you do not intend to brake. This may cause the brakes to overheat, premature wear and increased stopping distance.**
- **Before descending a steep grade, reduce speed and shift transmission into a lower gear or lower driving position. Do not ride the brakes or hold the pedal down too long or too often. This could cause the brakes to get hot and diminish braking efficiency.**
- **If you damage the front spoiler, or if you install a different spoiler, be sure the air flow to the front brakes is not obstructed. Otherwise the brake system could overheat reducing the effectiveness of the entire brake system.**
- **Failure of one brake circuit will impair the braking capability resulting in an increased stopping distance.**
  Avoid driving the vehicle and have it towed to the nearest VOLKSWAGEN dealer or qualified workshop.

Brake booster

WARNING

- **The brake booster works with vacuum pressure which is created only when the engine is running. Never let the vehicle roll to a stop with the engine shut off.**
- **If the brake booster is not working, for example when towing your vehicle, or because the brake booster has somehow been damaged, the brake pedal must be pressed harder to make up for the lack of booster assistance.**

Functioning of Anti-Lock Brake System (ABS)*

The ABS contributes effectively to vehicle control since it prevents the wheels from locking when the brakes are applied. This means that the vehicle remains steerable and is less likely to skid.

You don't have to "pump" the brake. Just hold the brake pedal down.

However, do not expect that the ABS shortens braking distance under all circumstances. When driving on gravel or on newly fallen snow on top of icy surfaces, braking distance may be even longer. Therefore, under these circumstances, it is especially important that you drive slowly and with great care.

Vehicle modifications (brake system or chassis modifications, for example, or a different wheel/tire combination) can affect the function of the ABS, EDS, ESP and ASR systems.
Therefore please pay close attention to the advice provided on page 51.

How the ABS system works

An automatic check is made when a speed of about 4 mph (6 km / h) is reached. When this happens a pumping noise can be heard.

If an individual wheel begins to rotate too slowly in relation to vehicle speed and tends to lock, the ABS automatically reduces brake pressure to prevent that wheel from lokking.

This automatic adjustment process will cause a slight vibration of the brake pedal and some noises to alert you that vehicle speed must be adapted to existing road and traffic conditions.

If ABS is not functioning properly, a warning light will come on.
For more details see chapter *"Warning / Indicator lights"* ***Booklet 3.1.***

⚠ WARNING.

Although the ABS is very effective, always remember that braking capability is limited by tire traction. Always adjust your driving speed according to the road and traffic conditions. Do not let the extra safety afforded by the ABS tempt you into taking extra risks. The ABS cannot overcome the laws of physics.

Electronic differential lock (EDL)*

The EDL operates in conjunction with the ABS. The EDL works automatically, i.e. without the driver's intervention.

With the aid of the ABS sensors, the system monitors the speed of the driven wheels. At speeds up to 25 mph (40 km / h), if a difference of approx. 100 rpm's in the speed of the driven wheels is detected (i.e. **one** driven wheel is on a slippery surface), that wheel will be braked in a controlled manner, and more of the engine's power will be directed to the other wheel via the differential to achieve greater traction.

This automatic adjustment process will make some sounds.

To optimize use of the EDL, accelerate and use the clutch appropriate to the street conditions.

⚠ WARNING

When accelerating on a slippery surface, for example on ice or snow, be careful! In spite of the EDL, the wheels could start to spin and adversely affect the stability of the vehicle.

Please note:

- When driving off, always be sure to keep road conditions in mind as you accelerate. If a drive wheel spins because it's on a slipperier surface, gradually increase the pressure on the accelerator pedal until the vehicle starts to move.
- When accelerating on slippery surfaces, such as on ice or snow, always be careful when depressing the accelerator pedal. Even with the EDL working, the drive wheels can spin and reduce you ability to control your vehicle.
- To prevent the disc brake of the braked wheel from overheating if subjected to excessive loads, the EDL cuts out temporarily. The vehicle remains operational and behaves in the same way as a vehicle without EDL.

If a fault occurs in the ABS, the EDL also does not function. This is indicated by the ABS warning light.

⚠ WARNING

The increased safety afforded by EDL does not mean that you can take safety risks. Always adapt your driving style to the road conditions and traffic situation.

Vehicle modifications (brake system, engine or chassis modifications, for example, or a different wheel/tire combination) can affect the function of the ABS, EDS, ESP and ASR systems.
Therefore please pay close attention to the advice provided on page 51.

4MOTION*(All Wheel Drive)

The 4MOTION requires no maintenance on your part. The drive force is distributed automatically to the wheels and adapts itself to the driving conditions for optimal vehicle handling.

⚠ WARNING

- **Always adjust your driving to road and traffic conditions. Do not let the extra safety afforded by 4MOTION tempt you into taking extra risks.**
- **Although the 4MOTION is very effective, always remember that braking capacity is limited by tire traction and is no different than on vehicle with just front wheel drive. You should therefore not drive at excessive speeds on icy or slippery road surfaces.**
- **On wet or slippery road surfaces, be careful not to drive to fast. The wheels could begin to slide on top of the water (hydroplaning). If this should occur, you will have no warning from a sudden increase in engine speed as with front-wheel drive vehicles. Always drive at speeds which are suitable to the road conditions.**

Using winter tires on vehicles with 4MOTION*

The 4MOTION gives your vehicle optimal handling even when driving in winter conditions with standard tires. However, if you choose to mount winter tires or all season tires, **they must be mounted on all 4 wheels.**

Snow chains

When required, you can mount snow chains on your tires. For more information regarding snow chains, see "Tires / Wheels" on page 65.

Replacing tires/wheels

All four wheels must always have the same rolling radius. For more information on replacement of tires/wheels, see "Tires / Wheels" on page 63.

Anti-Slip Regulation (ASR)*

On vehicles with front-wheel drive, ASR prevents the front wheels from spinning when the vehicle is accelerated by reducing the engine power directed to these wheels. The system operates in conjunction with the ABS across the entire speed range. If a fault occurs in the ABS, the ASR is also inactive.

The ASR is switched on automatically when the engine is started. If required, it can also be switched on and off manually by briefly pressing the switch.

When the system is switched off, the ASR warning light comes on.

The ASR should normally be left switched on. The system should only be switched off in certain circumstances where wheelspin can offer advantages:

- when driving with snow chains, in deep snow or on loose surfaces;
- when rocking back and forth to free the vehicle when stuck.

The system should be switched on again afterwards.

⚠ WARNING

Do not allow the extra safety of the ASR system to tempt you into taking risks. Always adjust your speed to suit the road and traffic conditions.

Note

To ensure that the ASR works properly, all four wheels must be fitted with identical tires. Any differences in the rolling radius of the tires can cause the system to reduce engine power when this is not desired.

See also "wheel and tire replacement" on page 59.

Power steering

When the engine is running, never hold the steering wheel turned all the way to the right or to the left for longer than 15 seconds. The power steering pump will overheat the hydraulic fluid if you hold the steering wheel all the way turned.

This will damage the power steering system.

Each time the steering wheel is turned all the way to the right or left when stopped, you will hear noises caused by the severe stress placed on the power steering pump. At the same time, engine idle speed drops.

The first 1,000 miles (1 500 km) – and afterwards

Break-in period

During the first few hours of driving, the engine's internal friction is higher than later when all the moving parts have been broken in. How well this break-in process is done depends to a considerable extent on the way the vehicle is driven during the first 1,000 miles (1 500 kilometres).

For the first 600 miles (1,000 kilometres):

As a rule of thumb:

- **Do not use full throttle.**
- **Do not drive faster than $^3/_4$ of top speed shown on the speedometer**
- **Avoid high engine speeds.**
- **If possible, avoid towing a trailer.**

⚠ WARNING

- **New tires tend to be slippery and must also be "broken-in." Be sure to remember this during the first 350 miles (500 kilometres). Brake gently. Avoid following closely behind other vehicles or other situations that might require sudden, hard braking.**
- **New brake pads don't have the best stopping power and must be "broken-in" during the initial 100 to 150 miles (150 to 200 kilometres) of normal city driving. You can compensate for this by pressing the brake pedal more firmly. This also applies later when new pads are installed.**

From 600 to 1,000 miles (1,000 to 1,500 kilometres):

Speeds can gradually be increased to maximum permissible road or engine speed.

During and after Break-In Period

- **Do not rev the engine up to high speeds when it is cold. This applies whether the transmission is in N (Neutral) or in gear.**

Do not drive with unnecessarily high engine speeds – upshifting early saves fuel, reduces noise and protects the environment – see also page 15.

- Do not let the engine labor. Downshift when the engine is no longer running smoothly.

Operate your vehicle safely

The condition of your vehicle is directly related to driving safety.

Therefore, always be sure to observe the following points before you drive off:

- **Check lights and turn signals.**
- **Check fuel level.**
- **Adjust the mirrors.**
- **Make sure that all lights and all windows are clean.**
- **Make sure the air intake slots between the engine hood and the windshield is free of leaves, snow and ice.**
- **Check warning and indicator lights when starting the engine.**

For driving safety, always follow the specified maintenance intervals in your **Maintenance booklet** ***see Booklet 1.1*** – especially for changing the brake fluid, see page 43 in this booklet.

Your personal driving style and your attitude affect driving safety to a very great extent.

Therefore, for your own safety:

- **Wear your safety belts and wear them properly, even if you're just driving in the city or to the corner store – see "*Safety belts*" *Booklet 2.1.***
- **Make sure that all passengers are wearing their safety belts properly, even those sitting in the rear – see "*Safety belts*" *Booklet 2.1.***

Passengers not wearing safety belts endanger not only themselves in case of an accident, but also the driver and other passengers.

- **Make sure that children always sit on the rear seat properly restrained by a restraint system appropriate for their size and age.**
- **Never transport a child in a rear-facing child or infant seat on the front passenger seat.**
- **Adjust your seat so that you can easily reach all controls as far away from the airbag as possible but no closer than 10 in. (25 cm) – see "Front seats" *Booklets 2.1 and 3.1.***
- **The seating position is very important for the airbag performance – see "Airbag system" *Booklet 2.1***
- **Always adjust the head restraints to the correct height.**

For maximum protection, the upper edge of the head restraints should be **at least** at eye level, or higher.

- **Always make sure that the movement of the pedals is not restricted in any way – see "Pedals" *Booklet 3.1.***
- **Store luggage and light items properly**

  – **in the luggage compartment – see "Luggage compartment" *Booklet 3.1.***

  – **on the roof – see "Roof rack " *Booklet 3.1.***

If you drink, do not drive.

The use of alcohol, drugs and certain medications will seriously impair perception, reactions and driving ability, and substantially increase the risk of an accident and personal injury.

- **Do not drive if you are tired.**

Make frequent rest stops, at least after every two hours of driving.

- **Always adapt vehicle speed to traffic, weather and road conditions.**

Remember that especially on smooth, slippery roads, vehicle handling and braking depend a great deal on tire adhesion. On wet roads, the front wheels can hydroplane especially at higher speeds. If this happens, you will then, no longer be able to steer or brake properly.

- **Always observe the posted speed limits and use common sense. Your good judgment can mean the difference between arriving safely at your destination and having an accident.**

Additional information regarding safety can be found in the individual chapters of this manual and ***see Booklet 2.1.***

Difficult operating conditions

Driving under difficult conditions

Your Volkswagen has been designed and equipped for normal operating conditions. The frequency and the extent of service requirements as stated in the Maintenance Booklet brochure are based on normal operating conditions.

If you are planning to drive your vehicle under difficult operating conditions (for example, continuous trailer towing, very hot or cold weather, very dusty conditions, poor fuel quality, etc.) you may want to make special preparations such as changing to an appropriate oil viscosity, having your vehicle thoroughly inspected, etc. Furthermore, the maintenance should always be matched to the operating conditions (see page 31).

Operate your vehicle economically and minimize pollution

Various factors influence fuel consumption: engine wear, brakes and tires, environmental impact.

This chapter addresses some of these points.

Your personal style of driving will determine the economy of your vehicle as well as exhaust and noise levels.

Do not let your vehicle stand and warm up.

When the engine is idling, it takes a very long time to warm up. Moreover, during warm-up, both engine wear and exhaust gas emissions are very high. Therefore, be ready to drive off immediately after starting the engine and avoid high engine speeds.

Avoid full throttle.

Accelerating gently reduces fuel consumption and engine wear, and does not disturb the environment.

Upshift as early as possible – do not drive at unnecessarily high engine speeds.

The highest fuel economy and the least disturbance to the environment are attained when you drive at low engine speeds and in the highest possible gear.

For example, fuel consumption is twice as high in 2nd gear as it is in the highest gear. Also, lowering engine speeds means reduced engine noise. Therefore, drive as often and as long as possible in the highest gear possible for prevailing road and traffic conditions.

Downshift only when the engine is no longer running smoothly.

Depending on the transmission you have, you can normally drive in the highest gear at 25 to 37 mph (40 to 60 km / h) on flat land and still be able to accelerate.

Avoid driving at high speed.

Fuel consumption, exhaust emissions and engine noise increase disproportionately at high speeds. If you drive at approximately three quarters of top speed, fuel consumption will be reduced by one half. Never drive faster than the posted speed limit and weather conditions permitting.

Drive as smoothly as possible and keep a lookout ahead.

Unnecessary accelerating and braking increase fuel consumption and disturb the environment.

Switch off your engine if you are caught in a traffic jam. This saves fuel and reduces emissions.

The external conditions in which you drive also affect your fuel consumption.

The following conditions increase fuel consumption:

- Heavy traffic, especially in large cities with many traffic lights.
- Stop-and-go driving, especially short distances so that the engine never warms up as it should.
- Driving in heavy, slow moving traffic in low gear so that the engine speed is relatively high when compared to the distance driven.

Plan your trips ahead of time. Organize your trips to include several errands and to avoid heavy traffic.

Of course, there are some conditions that will affect fuel consumption that you can't control.

For example, fuel consumption increases in the winter or under difficult conditions (bad roads, towing a trailer, etc.).

The technical requirements

for optimum fuel consumption and economy were "built" into your vehicle. Special attention was paid to the environment. To retain and make use of these characteristics, please note the following points:

Use only unleaded gasoline in gasoline engines.

Leaded gasoline causes damage to the catalytic converter and other components of the emission system.

Have your vehicle serviced by a VOLKSWAGEN dealer at the specified intervals – see page 31 and your Maintenance booklet ***see Booklet 1.1.***

Having your vehicle regularly serviced by a VOLKSWAGEN dealer helps ensure that it runs properly and economically, that it does not disturb the environment, and that it has a long service life.

Check your tire pressure once a month.

Low tire pressure increases fuel consumption and tire wear, and impairs vehicle handling.

WARNING

Underinflation and overloading of tires can lead to tire failure. Sudden failure on the road could cause a serious or fatal accident. See page 57 for inflation information.

Do not carry unnecessary items in the luggage compartment.

Particularly in city traffic where you must often accelerate, weight influences fuel consumption.

Remove supplementary roof rack components when not in use.

At high road speeds, the increased air resistance caused by the cross bars also increases fuel consumption.

Switch off any electrical equipment when no longer needed.

The rear window defogger, additional driving lights and the heater blower consume a lot of electricity. The more electricity you consume, the higher the fuel consumption. For example, if you keep the rear window defogger on for 10 hours, your fuel consumption will increase by about 1 quart (1 liter).

Use the air conditioning only when really needed.

The air conditioning decreases engine output and increases fuel consumption.

Check your vehicle's fuel consumption regularly. Keep a written record or use the trip odometer.

Check your fuel consumption each time you refuel. By doing this, you can discover any inconsistencies which could result in increased fuel consumption and have these chekked before other problems appear.

- **Check your oil each time you fill your tank**

The amount of oil used is related to engine load and speed.

It is normal for the oil consumption of a new engine to reach its lowest value after a certain mileage has been driven.

You must drive your vehicle about 3,000 miles (5 000 kilometres) before you can properly assess oil consumption.

This also applies to fuel consumption and engine output.

• The published ENVIRONMENTAL PROTECTION AGENCY (EPA) and Transport Canada consumption estimates may not correspond to your actual consumption on the road, which will vary depending upon vehicle load and speed, road and weather conditions, trip length, etc.

The catalytic converter is an efficient "clean–up" device built into the exhaust system of the vehicle. The catalytic converter burns many of the pollutants in the exhaust gas before they are released into the atmosphere.

Using unleaded fuel is critically important for the life of the catalytic converter and proper functioning of the engine – see page 4.

• The catalytic converter will be permanently damaged by:

- Exceeding the correct engine oil level – see page 38.
- Driving until the fuel tank becomes completely empty. The engine could misfire. Unburned fuel could also get into the exhaust system and this could cause the catalytic converter to overheat;
- Push or tow starting your vehicle;
- Other unusual operating conditions.

Do not continue to operate your vehicle under these conditions, as otherwise gasoline fuel can reach the catalytic converter. This could result in overheating of the converter, requiring its replacement.

To assure efficient operation of the Emission Control System:

• Have your vehicle maintained properly and in accordance with the service recommendations in your Maintenance booklet *see Booklet 1.1.*

Lack of proper maintenance as well as improper use of the vehicle will impair the function of the emission control system and could lead to damage.

• Do not alter or remove any component of the Emission Control System unless approved by the manufacturer.

• Do not alter or remove any device, such as heat shields, switches, ignition wires, valves, which are designed to protect your vehicle's Emission Control System and other important vehicle components.

Note

Do not leave the engine idling unattended after starting. If warning lights should come on to indicate improper operation, they would go unheeded. Extended idling also produces heat, which could result in overheating or other damage to the vehicle or other property.

⚠ WARNING

• Parking

Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other material which can cause a fire.

• Undercoating

Do not apply additional undercoating or rustproofing on or near the exhaust manifold, exhaust pipes, catalytic converter or heat shields. During driving, the substance used for undercoating could overheat and cause a fire.

Warranty coverages

Your Volkswagen is covered by the following warranties.

- Limited New Vehicle Warranty
- Limited Powertrain Warranty
- Limited Warranty Against Corrosion Perforation
- Emissions Control System Warranty
- Emissions Performance Warranty
- California Emissions Control Warranty (USA vehicles only)
- California Emissions Performance Warranty (USA vehicles only)

Detailed information regarding your warranties can be found in your Warranty Booklet. ***See Booklet 1.2.***

Trailer towing*

Your VOLKSWAGEN was designed primarily for passenger transportation. If you plan to tow a trailer, please remember that your car will be performing a service it was not intended for. The additional load will affect durability, economy and performance.

Trailer towing not only places more stress on the vehicle, it also calls for more concentration from the driver.

For these reasons, always follow the operating and driving instructions given and use common sense.

Technical requirements

Trailer hitch

Use a weight-carrying hitch conforming to the gross trailer weight. The hitch must be suitable for your vehicle and trailer and securely bolted to appropriate place on the vehicle's chassis. Use only a trailer hitch with removable ball mount. Always check with the trailer hitch manufacturer to make sure that you are using the correct hitch.

Do not use a bumper hitch.

The hitch must be installed in such a way that it does not interfere with the impact-absorbing bumper system. No modifications should be made to the vehicle exhaust and brake systems. From time to time, check that all hitch mounting bolts remain securely fastened.

When you are not towing a trailer, remove the trailer hitch ball mount. This prevents the hitch from causing damage should your vehicle be struck from behind.

⚠ WARNING

When you are no longer towing a trailer, remove the entire trailer hitch. When doing so, seal all bolt holes to prevent water and deadly exhaust fumes from entering the vehicle.

Engine cooling system

Towing a trailer make the engine work harder. It is important the the engine cooling system be up to the job. Make sure that the cooling system has enough fluid.

Trailer brakes

If your trailer is equipped with a braking system, check to be sure that it conforms to all regulations.

The trailer brake system must not be directly connected to the vehicle's brake system.

Safety chains

Always use safety chains between your vehicle and trailer.

Trailer lights

Trailer lights must meet all regulations. Do not connect the trailer light system directly to the light system of your vehicle. Be sure to check with your VOLKSWAGEN dealer for correct wiring, switches and relays.

Mirrors

If you are unable to see the traffic behind you using the regular outside mirrors, then you must install extended mirrors. It's important that you always have clear vision to the rear.

Operating instructions

Maximum trailer weight

A trailer for your vehicle is limited to a typical class 1 or class 2 trailer.

The maximum gross trailer weight and the tongue load must not exceed the specifications listed in the Technical Data section, see "Weights" ***Booklet 3.3.***

Do not exceed the gross vehicle weight, which is the weight of the vehicle, including driver, passengers, luggage, trailer hitch and tongue weight of the loaded trailer.

Trailer load distribution

Be sure the load in the trailer is held securely in place to guard against shifting, be it forward, backward or sideways.

Never allow a passenger to ride in a trailer.

⚠ WARNING

Anyone not properly restrained in a moving vehicle is at much greater risk in an accident. Never let anyone ride without the restraints provided by VOLKSWAGEN.

Tongue load

For best vehicle handling under these changed conditions, adjust the trailer load so that the tongue load is at the maximum allowable or slightly lower. You can get an approximation of the tongue load with a bathroom scale or you can measure the load at a trukking company or weighing station.

Tire pressure

When towing a trailer, inflate the tires of your vehicle to the cold tire pressure listed under "Full load" on the sticker on the right doorjamb. Inflate trailer tires to trailer and tire manufacturers' specifications.

Lights

The headlight settings should be checked with the trailer attached before driving off. Adjust as necessary so that you can see the road ahead but not blind on-coming traffic.

Check proper working of vehicle and trailer lights.

Safety chains

Be sure trailer safety chains are properly connected from the trailer to the hitch on the vehicle. Leave enough slack in the chains to permit turning corners. When you install safety chains, make sure they will not drag on the road when you are driving.

The chains should cross under the trailer tongue to prevent it from dropping in case of separation from the hitch.

Driving instructions

To obtain the best possible handling of vehicle and trailer, please note the following:

- A "balanced" rig is easier to operate and control. This means that the tow vehicle should be loaded to the extent possible and permissible while keeping the trailer as light as possible under the circumstances. Whenever possible, transfer some cargo to the luggage compartment of the tow vehicle while observing tongue load requirements and vehicle loading considerations.
- The higher the speed, the more difficult it becomes for the driver to control the rig. **Do not drive at the maximum permissible speed.** Reduce your speed even more under unfavorable load, weather or wind conditions – particularly when going downhill.

Be especially careful when passing other vehicles.

Reduce vehicle speed immediately if the trailer shows the slightest sign of swaying. Do not try to stop the swaying by accelerating.

Observe speed limits. In some areas speeds for vehicles towing trailers are lower than for regular vehicles.

- Always apply brakes early.

When driving downhill, shift into lower gear (selector lever position 3, 2 or 1) to use the engine braking effect to slow down the vehicle. Use of the brakes alone can cause them to overheat and fail.

- **The cooling effect of the radiator fan cannot be increased by downshifting because fan speed is independent of engine speed. Therefore, when driving uphill, you can always drive in the highest possible gear with low engine speed.**

If the coolant temperature warning light in the instrument cluster starts flashing in red, pull off the road, stop and let the engine idle for about 2 minutes to prevent a heat build-up.

Trailer towing tips

Your vehicle handles differently when towing a trailer because of the additional weight and weight distribution. Safety, performance and economy will greatly depend on how carefully you load your trailer and operate your rig.

Before you actually tow your trailer, practice turning, stopping and backing up in an area away from traffic until you learn the feel of your vehicle and trailer unit.

Backing up is difficult and requires practice. Steering while backing up is generally opposite of that when backing your vehicle without a trailer.

Maintain a greater distance between your vehicle and the one in front of you. You will need more room to stop.

To compensate for the trailer, you will need a larger than normal turning radius.

When passing, remember that you cannot accelerate as fast as you normally would because of the added load. Make sure you have enough room to pass. After passing, allow plenty of room for your trailer before changing lanes again.

Avoid jerky starts, sharp turns or rapid lane changes.

After parking, always block the wheels of both vehicle and trailer. Do not park with a trailer on a slope. If it cannot be avoided, do so only after doing the following:

- Apply foot brake.
- Have someone place chocks under both vehicle and trailer wheels.
- With chocks in place, slowly release brakes until wheel blocks absorb the load.
- Turn wheels to curb.
- Apply parking brake.
- Place automatic transmission in "**P**" and manual transmission in first or reverse gear.

If you move the selector lever of the automatic transmission to "**P**" before applying the parking brake and before blocking the wheels, you may require more force later to move the lever out of the "**P**" position.

When restarting after parking on a slope, reverse the procedure:

- Start the engine.
- Shift transmission into gear.
- Release the parking brake and slowly move away from the wheel blocks.
- Stop and have someone retrieve the wheel blocks.

Notes

- **Do not tow a trailer during the break-in period of your vehicle.**
- If you tow a trailer, your VOLKSWAGEN may require more frequent maintenance due to the extra load – see also page 31.

Cleaning and protection

Any automobile is subjected to abuse from industrial fumes, corrosive road salt, abandoned lollipops, muddy dog feet, etc. A well cared for VOLKSWAGEN can look like new many years after purchase. Regular and correct care will contribute to maintaining the beauty and value of your VOLKSWAGEN.

Furthermore, good care may be a condition for upholding a warranty claim should corrosion damage or paint defects occur.

Your VOLKSWAGEN dealer has a variety of vehicle-care products and can advise you which ones to use for cleaning the exterior and interior of your vehicle.

Whether you use products recommended by VOLKSWAGEN or other commercially available cleaning agents, please make very sure you apply them correctly.

Never try to remove mud, dirt or dust when the vehicle surface is dry. Never use a dry cloth or dry sponge to clean the vehicle since this can damage vehicle paint and window glass.

Use plenty of water to soften up mud, dirt and duster before trying to remove it.

⚠ WARNING

- **Cleaning agents may be poisonous. Keep them out of the reach of children.**
- **Observe all caution labels.**
- **Always read directions on the container before using any product. Follow these directions carefully.**
- **Most chemical cleaners are concentrates which require dilution.**
- **Only use spot removing fluids in well ventilated areas.**
- **Do not use gasoline, kerosene, Diesel fuel, nail polish remover or other volatile fluids. They may be toxic, flammable or hazardous in other ways.**
- **Do not wash, wax or dry the vehicle with the engine running.**
- **Do not clean the underside of chassis, fenders, wheel covers, etc. without protecting your hands and arms. You may cut yourself on sharp-edged metal parts.**
- **Moisture and ice on brakes may affect braking efficiency - see page 6. Test the brakes carefully after each vehicle wash.**

Select only environmentally friendly cleaning products. Any remaining cleaning products do not belong in the household waste.

Care of exterior

Washing

The best protection against environmental influences is frequent washing and waxing.

How often this is required depends on how much the vehicle is used, where it is parked (garage, in the open under trees, etc.), the seasonal and weather conditions as well as environmental influences. The longer bird droppings, insects, tree resin, road and industrial grime, tar, soot, road salt and other materials remain on the vehicle paint, the more lasting their destructive effect will be. High temperatures, as from strong sunlight, intensify the corrosive effect.

Under certain circumstances, weekly washing may be necessary. Under other conditions, a monthly washing and waxing may be adequate.

After the winter, the underside of the vehicle should be thoroughly washed.

Washing the vehicle by hand

In the interest of the environment, the vehicle should only be washed in special wash bays.

First soften the dirt with plenty of water and rinse off as well as possible.

Then clean the vehicle with a soft sponge, glove or brush starting on the roof and working down using only slight pressure. Special car wash soap should be used only for very persistent dirt.

Rinse the sponge or glove thoroughly and often.

Clean wheels and sill panels last, using a different sponge, if possible.

After washing the vehicle, rinse thoroughly with water and wipe it off.

Notes

- Do not wash the vehicle in direct sunlight.
- If the vehicle is rinsed with a hose, do not direct the water into the lock cylinders – otherwise they may freeze up in the winter.

Automatic car wash

The vehicle paint is so durable that the vehicle can normally be washed without problems in an automatic car wash. However, the effect on the paint depends to a large extent on the design of the facility, the filtering of the wash water, the type of wash and care material, etc. If the paint has a dull appearance after going through the car wash or is scratched, bring this to the attention of the operator immediately. If necessary use a different car wash.

Notes

- Before going through a car wash, be sure to take the usual precautions such as closing the windows and power roof*.
- To avoid damage to the outside mirrors make sure that you fold them towards the side windows – see "Mirrors" ***Booklet 3.1.***
- If you have installed additional accessories on the vehicle – such as spoilers, roof rack, etc. – it is best to ask the car wash operator if these should be removed.
- It is normally not necessary to remove the roof antenna that came with your vehicle.

Always read and heed all WARNINGS and the information given on page 22.

Washing your vehicle with a power washer

- Always follow the operating instructions for the power washer – especially for pressure and spraying distance.
- Make sure that the jet on the spray hose produces a "fan shape" spray. Do not use a jet which sprays the water out in a direct stream or one that has a rotating jet.
- Water temperature should not exceed 140°F (60°C).

To avoid damaging your vehicle, always make sure that there is an adequate distance between the sprayer and soft materials like rubber hoses, plastic parts and sound-deadening materials. This also applies to cleaning painted bumpers.

Remember: the closer the nozzle is to the surface of the material, the greater the stress on the material.

⚠ WARNING

Never wash tires with a jet that sprays the water out in a direct stream. This could invisibly damage and weaken the tires, even if they are sprayed from a relatively long distance for a very short amount of time. Damaged and weakened tires can fail and cause accidents and personal injury.

Polishing

Polish your vehicle only if the paint has lost its shine and the gloss cannot be brought back with wax. If the polish used doesn't contain preservative compounds, the paint must be waxed afterwards.

Do not treat matte-painted and plastic parts with polish or wax.

Touch-up paint

Your VOLKSWAGEN dealer has touch-up paint for minor scratches and stone chips. Scratches should be touched up soon after they occur to prevent corrosion.

If a spot starts to rust, however, a simple touch-up job won't be enough. The affected surface must be smoothed with sand paper and covered with an anti-rust primer before the painted finish can be restored.

The number for the original vehicle paint can be found on the vehicle identification label see "Vehicle identification" ***Booklet 3.3.***

Waxing

- A good wax coating protects the vehicle paint to a large extent against the environmental influences listed under "Washing" and even against light scratches.
- When water doesn't form small drops and roll off clean paint, apply a coat of good hard wax. Even if a wax solution is used regularly for washing your vehicle, it is advisable to protect the paint with a coat of hard wax at least twice a year.
- To protect bright metal trim, use car wax.
- Protect plastic body parts painted the same as the vehicle body with car wax.
- Do not use car wax on ...

– matte or anodized metal trim

– rubber or rubber-like trim.

⚠ Always read and heed all WARNINGS and the information given on page 22.

Bright Metal trim

Bright or black anodized metal trim will come clean with regular washing. Remove spots or dirt from chrome and stainless steel with a chrome cleaner. Apply a chrome polish for continued luster and protection.

Trim strips

Dirty patches and marks on the trim strips should be removed with a **pH-balanced** cleaning agent (do not use a chrome cleaner). VOLKSWAGEN dealers carry cleaning products which have been tested for use on your vehicle and are not harmful to the environment.

To avoid corrosion on the exterior trim strips, only a pH-balanced solution should be used for the windshield washer.

Weatherstrips

Keep silicone sprays off the windshield to avoid wiper smear in rain.

To seal properly, weatherstrips around hood, rear lid, doors, etc., must be pliable. Spray with silicone or coat with talcum powder or glycerine to retain flexibility of the rubber and to protect against freezing in the winter.

Dull finishes and plastics

Plastic parts, such as light bulb lenses, decorative stripes, panels, bumpers, etc., will come clean with regular washing. Should additional cleaning or spot removal be necessary, use a soft brush or cloth soaked with a mild detergent solution. Then rinse thoroughly and immediately with clear water.

Do not use anything which could mar the plastic or dull finished surfaces, such as wax, polish, abrasive detergents or chemical cleaning solvents.

Windows

Clean all windows regularly to remove road film and car–wash wax buildup. Use a lukewarm soap and water solution or an alcohol–based commercial window cleaning agent. If a chamois is used for polishing the glass, it should be used exclusively for that purpose. Also, be sure to clean all windows regularly on the inside.

The best way to remove **snow** from windows and mirrors is to use a brush.

Use a nonabrasive plastic ice scraper – better still, a spray deicer – to remove **ice** from windows and mirrors.

To help prevent dirt from scratching the window, always scrape in a forward direction – pushing the scraper away from you – never back and forth.

Never use warm or hot water to remove snow and ice from windows and mirrors. This could cause the glass to crack!

Windows should also be cleaned on the inside at regular intervals.

Never dry windows with the same chamois that you use to dry painted surfaces. Wax residue on the chamois can impair vision through windows.

Note

To prevent damage the **wires of the rear defogger**, do not place any adhesive stikkers in the inside of the rear window over the wires.

Always read and heed all WARNINGS and the information given on page 22.

Steel wheels

Always include the hub caps and wheel rims when washing your vehicle to remove road dirt, salt sprays and brake dust. If necessary, use a commercial wheel cleaner to remove accumulated brake dust. Paint scratches should be touched up as soon as possible to prevent corrosion.

⚠ WARNING

Moisture, ice, and road salt on brakes may affect braking efficiency. Test the brakes carefully after each washing.
Always read and heed all WARNINGS and the information given on pages 6 and 22.

Light alloy wheels*

To preserve the decorative appearance of the light alloy wheels, some special care is necessary. In addition to road dirt and salt sprays, brake dust is also corrosive. If left on too long, brake dust can cause pitting. Wash the wheels with a sponge or hose brush every other week.

Road salt should be removed weekly with an acid free cleaning solution. Every three months (after regular cleaning) coat the wheels with petroleum jelly or car wax. Rub it in firmly with a soft cloth. Never use abrasive or metal polishing cleaning agents.

⚠ WARNING

Moisture, ice, and road salt on brakes may affect braking efficiency. Test the brakes carefully after each washing.
Always read and heed all WARNINGS and the information given on pages 6 and 22.

Body cavity sealing

All body cavities which could be affected by corrosion have been given thorough protection at the factory.

This sealing does not require any inspection or additional treatments. If any wax should seep out of the cavity when the outside temperature is high, it can be removed with a plastic scraper and a suitable solvent.

⚠ WARNING

- **Benzine is flammable and toxic. If you use benzine for removing the wax, keep sparks, flame and lighted cigarettes away. Never dump benzine on the ground, into open streams or down sewage drains.**
- **Be sure to observe all safety and environmental regulations. Follow all instructions on the container.**

Chassis

The lower body shell of your VOLKSWAGEN is also thoroughly protected against corrosion. Any damage to the undercoating caused by road hazards should be repaired promptly.

⚠ WARNING

Do not apply additional undercoating or rustproofing on or near the exhaust manifold, exhaust pipes, catalytic converter or heat shields. During driving, the substance used for undercoating could overheat and cause a fire.

Care of interior

Taking Care of Chrome Parts

Use a damp cloth to clean chrome parts, and then polish them with a soft, dry cloth. If this is not enough, use a chrome cleaner/polish.

Use a chrome cleaner/polish to remove spots and deposits that build up on chrome parts. Regular use of a chrome cleaner/polish prevents deposits from building up on the surface. Make certain that you apply the product uniformly over the entire surface.

Notes

- **Never use any cleaning agent that has an abrasive action.**
- **Never clean or polish chrome surfaces in a dusty or sandy environment.**

Windows

Use the same cleaning agents as for exterior glass surfaces and polish dry. For more details see page 25.

Fabric

Use a vacuum cleaner or a soft bristle brush to remove dust and loose dirt from carpeting, upholstery, headliner and other trim. Dirt stains can usually be removed with a lukewarm soapy water or all–purpose cleaner solution, or a dry foam cleaner.

For greasy, oily and other stubborn stains, use a spot remover. Do not pour the liquid on the fabric. Dampen a clean cloth and rub carefully, starting at the edge and working inward.

Plastic Parts, Instrument Panel and Leatherette

Always use a clean cloth moistened in clear water to clean these areas. If this fails to do the trick, use a Volkswagen approved **solvent–free** plastic cleaner/protectant.

Cleaning agents containing solvents will attack the material.

⚠ WARNING

Never clean the instrument panel or the surface of Airbag modules with cleaning products that contain solvents.

Products containing solvents will make the surface of this part porous. Serious injuries can result if plastic parts come loose when the airbag is deployed.

Plastic and vinyl

Use a clean, damp cloth or sponge to remove dust. For other soil, use a lukewarm all–purpose cleaning solution or a mild saddle soap for vinyl trim. Remove water spots and soap traces with a clean, damp cloth or sponge. Use a clean, soft cloth to rub dry.

Grease, tar or oil stains can be removed with a clean cloth or sponge soaked with all–purpose cleaner or with a solvent type vinyl cleaning agent.

Occasionally apply a colorless vinyl or leather preservative to retain the material's luster and pliability.

⚠ Always read and heed all WARNINGS and the information given on page 22.

Cleaning and care of leather upholstery*

VOLKSWAGEN does everything possible to preserve the special qualities of natural leather upholstery. When treating the hides, care is taken to avoid all processes which could impair the natural advantages of the material which make for extra comfort.

Because of the exclusive nature of the hides selected and the natural properties of the leather, this kind of upholstery requires a certain amount of care in everyday use since the leather is sensitive to materials such as oil, grease and dirt or wet clothing. If it is given regular attention, the leather upholstery will retain its high quality for many years.

Dust and small particles of dirt lodging in the pores, grain and seams can have an abrasive effect and damage the surface and the seams. If the vehicle is left standing for a long time in the sun, cover the upholstery or use the sun blinds to protect the leather from direct sunlight and prevent fading or discoloration.

Depending on the amount of use, clean the natural leather upholstery occasionally. **Never use solvents, wax polish, shoe cream, spot removers or similar materials.**

For normal cleaning of leather–covered steering wheels, leather seat upholstery, etc., slightly moisten a cotton or woollen cloth with water and wipe over the areas affected.

More stubborn dirt can be removed using a mild soap solution (pure liquid soap: two teaspoons dissolved in 1 quart of water). **It is very important not to let the water soak through the leather or penetrate into the seams.** Then wipe off with a soft, dry cloth.

In addition to this regular cleaning, it is worthwhile treating the leather with a suitable leather-care product. This should be done about twice a year for upholstery in normal use. Apply these products very sparingly and follow the manufacturer's directions.

Safety belts

Keep belts clean! Dirty belts may not retract properly.

For cleaning, use a mild soap and water solution. Let belts dry thoroughly and away from direct sunlight.

Do not allow inertia reel safety belts to retract before they are completely dry.

⚠ WARNING

- **Anything that might damage your safety belts could mean that you and your passengers would not be adequately protected in an accident.**
- **Safety belt performance depends on correct installation. Never remove belts from the vehicle to clean them.**
- **Do not use chemical cleaning agents, bleach or dyes. They have corrosive properties which weaken the webbing.**
- **When cleaning your safety belts, inspect them for damage. If you discover damage, see your VOLKSWAGEN dealer.**

Engine compartment

⚠ WARNING

- **Before working in the engine compartment, be sure to read the WARNINGS on page 34.**
- **Before reaching into the front plenum panel, always remove the ignition key. Otherwise, the windshield wiper system could unintentionally be switched on, possibly causing personal injury from the moving wiper linkage.**
- **Do not wash, wax or dry the engine with the engine running. Moving or hot parts could injure you.**
- **Do not clean the underside of the chassis, fenders, wheel covers, or other hard to reach parts without protecting your hands and arms. You may cut yourself on sharp-edged metal parts.**
- **Moisture and ice on brakes may affect braking efficiency. Test the brakes carefully after each vehicle wash.**

Remove leaves from the plenum panel in front of the windshield under the engine hood. This prevents the water drain holes from becoming blocked, and it prevents debris from entering the vehicle interior through the heating and ventilation ducts

The engine compartment and transmission have been corrosion protected at the factory.

⚠ Always read and heed all WARNINGS and the information given on page 22.

Good anti–corrosion treatment is very important, particularly in the winter. If the vehicle is frequently driven on salted roads, the entire engine compartment and plenum panel should be thoroughly cleaned at the end of winter and retreated to prevent salt damage. At the same time, the underside of the vehicle should be washed as well.

⚠ WARNING

Never reach into the area around or touch the radiator fan. It is temperature controlled and can switch on suddenly – even when the engine is off and the ignition key has been removed.

Always switch off the ignition before cleaning the engine.

If the engine compartment is cleaned at any time with grease removing solutions[1], or if you have the engine washed, the anti–corrosion treatment is almost always removed as well. It is therefore essential to ask for a long–lasting corrosion protection of all surfaces, seams, joints and components in the engine compartment.

If you must rinse off gasoline, oil residue or grease while your are cleaning your engine, then the dirty water should be run through an oil separator filter. We recommend that you have your engine cleaned at a qualified workshop or service station.

[1] Use only the correct cleaning solutions. Never use gasoline or Diesel fuel.

General notes

- We recommend that you have the engine compartment and the underside of your vehicle inspected twice a year for any damage to the protective coating, preferably before and after the winter season. Have necessary repairs done as soon as possible.
- Also, whenever the lower body shell, axle, transmission or engine assemblies have been repaired, any anti-corrosion coating lost on the affected surfaces should be reapplied.
- Oil-based protective sprays must not be applied. Only tar- or wax-based anti-corrosion protectors are compatible with the factory applied corrosion protection. Before application, road dirt, salt spray deposits and oily substances must be removed.

Your authorized VOLKSWAGEN dealer stocks the cleaning and preservation solutions recommended by the factory for this purpose and has the equipment necessary to apply them. Therefore, any additional corrosion protection work should be performed by a VOLKSWAGEN dealer. Using incorrect cleaning solutions could damage rubber parts or painted surfaces.

⚠ WARNING

- **Use only the correct cleaning solutions. Never use gasoline, Diesel fuel or solvents which could could cause a fire.**
- **Always read and heed all WARNINGS and the information given on page 22.**

Maintenance

Your vehicle has been designed to help keep maintenance requirements to a minimum.

However, a certain amount of regular maintenance is still necessary to assure your vehicle's safety, economy and reliability.

By regularly maintaining your vehicle, you help make sure that emission standards are maintained, thus minimizing adverse effects on the environment.

For detailed vehicle maintenance consult your Maintenance booklet ***see Booklet 1.1.***

Under difficult operating conditions, for example at extremely low outside temperatures, in very dusty regions, when towing a trailer very frequently, etc., some service work should be performed between the intervals specified.

This applies particularly to:

Oil changes, and cleaning or replacing the air filter.

Important considerations for you and your vehicle:

The increasing use of electronics, sophisticated fuel injection and emission control systems, and the generally increasing technical complexity of today's automobiles, have steadily reduced the scope of maintenance and repairs which can be carried out by vehicle owners. **Also, safety and environmental** concerns place very strict limits on the nature of repairs and adjustments to engine and transmission parts which an owner can perform.

Maintenance, adjustments and repairs usually require special tools, testing devices and other equipment available to specially trained workshop personnel in order to assure proper performance, reliability and safety of the vehicle and its many systems.

Improper maintenance, adjustments and repairs can impair the operation and reliability of your vehicle and even void your vehicle warranty. Therefore, proof of servicing in accordance with the maintenance schedule may be a condition for upholding a possible warranty claim made within the warranty period.

Above all, operational safety can be adversely affected, creating unnecessary risks for you and your passengers.

If in doubt about any servicing, have it done by your VOLKSWAGEN dealer or any other properly equipped and qualified workshop.

We strongly urge you to give your authorized VOLKSWAGEN dealer the opportunity to perform all scheduled maintenance and necessary repairs. Your dealer has the facilities, original parts and trained specialists to keep your vehicle running properly.

Performing limited maintenance yourself

The following pages describe a limited number of procedures which can be performed on your vehicle with ordinary tools, should the need arise and trained personnel be unavailable. Before performing any of these procedures, always thoroughly read all of the applicable text and carefully follow the instructions given. Always rigorously observe the **WARNINGS** provided.

Before you check anything in the engine compartment, always read and heed all WARNINGS on page 34 and on next page.

⚠ WARNING

- **Serious personal injury may occur as a result of improperly performed maintenance, adjustments or repairs.**
- **Be extremely careful when working on the vehicle. Follow commonly accepted safety practices and good judgment. Never risk personal injury.**
- **Do not attempt any of the maintenance, checks or repairs described on the following pages if you are not fully familiar with these or other procedures with respect to the vehicle, or are uncertain how to proceed. Do not do any work without the proper tools and equipment. Have the necessary work done by your VOLKSWAGEN dealer or another properly equipped and qualified workshop.**
- **The engine compartment of any motor vehicle is a potentially hazardous area.**
- **Always support your vehicle with safety stands if it is necessary to work underneath the vehicle. The jack supplied with the vehicle is not adequate for this purpose and could collapse causing serious personal injury.**
- **Never reach into the area around or touch the radiator fan. It is temperature controlled and can switch on suddenly – even when the engine is off and the ignition key has been removed.**

⚠ WARNING continued

The radiator fan switches on automatically when the coolant reaches a certain temperature and will continue to run until the coolant temperature drops. This may last up to about 10 minutes.

- **If you must work underneath the vehicle with the wheels on the ground, always make sure the vehicle is on level ground, that the wheels are always securely blokked and that the engine cannot be started. Always remove the ignition key before anyone gets under the vehicle.**

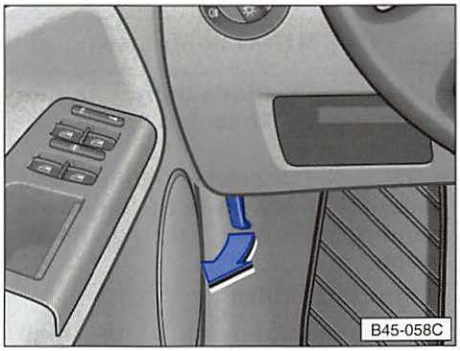
Always make sure the transmission selector lever (automatic transmission) is in "P" (Park position) and the hand brake is firmly applied.

- **Always be extremely careful when working on the vehicle. Always follow commonly accepted safety practices and general common sense. Never risk personal injury.**

❀ ***Changing the engine settings will adversely affect emission levels. This is detrimental to the environment and increases fuel consumption.***

Always observe environmental regulations when disposing of old engine oil, used brake fluid, dirty engine coolant, spent batteries or worn out tires.

Engine hood



To unlock the engine hood, pull the release lever on the left under the dashboard (see left illustration). The hood pops up slightly under spring pressure.

At the same time the hood release lever will pop out between the louvers of the front radiator grille – see right illustration.

Note

Before opening the engine hood, make sure that the windshield wipers are folded flat against the windshield. Otherwise, they could damage the paint on the hood.

To open, lift the engine hood slightly. Pull the release lever in the direction indicated (see right illustration). This will release the hook under the hood.

Open the hood all the way. It will be held up by gas pressure in the strut.

To close

Grasp the engine hood on the side where the gas pressure strut is located. Pull the hood down until the pressure from the strut is reduced. Then let the hood fall and latch in place – **you do not need to press the hood down again.**

⚠ WARNING

- **A hood that is not completely latched could fly up and block your view while driving. When you close the engine hood, check it to make sure the safety catch has properly engaged. The hood should be flush with the surrounding vehicle body parts.**
- **If you ever notice while driving that the hood is not secured properly, stop at once and close it.**

⚠ Always heed all WARNINGS on next page.

Engine compartment

⚠ WARNING

The engine compartment of any motor vehicle is a potentially hazardous area. Before you check anything in the engine compartment, stop the engine and let it cool down. Always exercise extreme caution when working under the engine hood. Before you check anything under the engine hood:

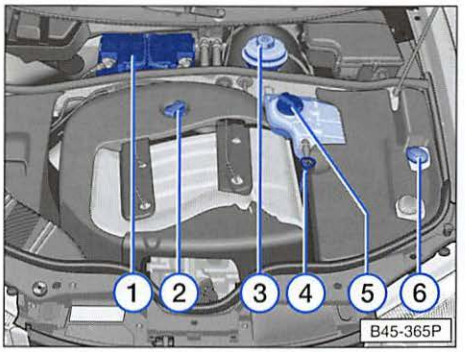
- **Switch off the engine. Remove the ignition key.**
- **Set the parking brake fully. Move the selector lever to P (Park) (Automatic transmission) or Neutral (Manual transmission).**
- **Always let the engine cool down. Hot components will burn skin on contact.**
- **To reduce the risk of being burned, never open the hood if you see or hear steam or coolant escaping from the engine compartment. Wait until no steam or coolant can be seen or heard before carefully opening the hood.**
- **Never touch the radiator fan. It is temperature controlled and can switch on suddenly – even when the ignition is off and the ignition key has been removed.**
- **If work on the fuel system or the electrical system is necessary:**
  - **Always disconnect the battery.**
  - **Never smoke or work near heaters or open flames. Fluids in the engine compartment could start a fire.**
  - **Keep an approved fire extinguisher immediately available.**

⚠ WARNING continued

- **Never spill fluids on hot engine components. They can cause a fire.**
- **To avoid electrical shock and personal injury while the engine is running or being started, never touch:**
  - **Ignition cables**
  - **Other components of the high voltage electronic ignition system.**
- **If you must perform a check or repair with the engine running:**
  - **First, fully apply the parking brake, move selector lever to P (Park) (Automatic transmission) or Neutral (Manual transmission).**
  - **Always use extreme caution to prevent clothing, jewelry, or long hair from getting caught in the radiator fan, V-belts or other moving parts, or from contacting hot parts. Tie back hair before starting, and wear no clothing that will hang or droop into the engine.**

When adding fluids, always make sure that they are poured into the proper container or filler opening, otherwise serious damage to vehicle systems will occur.

To detect leaks in time, inspect the vehicle floor pan from underneath regularly. If you see spots from oil or other vehicle fluids, have your vehicle inspected by an authorized VOLKSWAGEN dealer or qualified workshop.

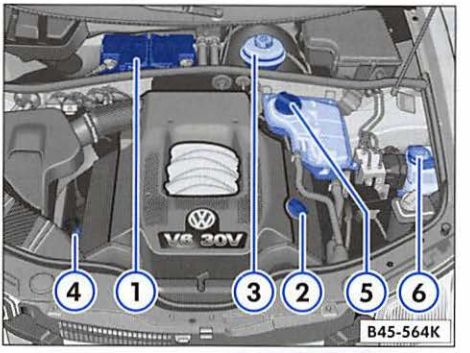


Gasoline engine 170 hp (2.3L)

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

Always exercise extreme caution when working under the engine hood.

Pos.		Page
1 -	Vehicle battery	45
2 -	Engine oil filler cap	37
3 -	Brake fluid reservoir	43
4 -	Engine oil dipstick	37
5 -	Coolant expansion tank	41
6 -	Windshield washer container	50



Gasoline engine 190 hp (2.8L)

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

Always exercise extreme caution when working under the engine hood.

Pos.		Page
1 -	Vehicle battery	45
2 -	Engine oil filler cap	37
3 -	Brake fluid reservoir	43
4 -	Engine oil dipstick	37
5 -	Coolant expansion tank	41
6 -	Windshield washer container	50

Engine oil

Specifications and viscosity

Your engine was factory filled with an all season high quality engine oil that has a viscosity grade of ILSAC GF3 SAE 5W-40. You can use this oil over all temperature ranges for normal driving. If you need to add oil between oil changes use any high quality petroleum– or synthetic–based oil with correct specifications. If engine oil viscosity grade SAE 5W-40 is not available, you can also use SAE 5W-30, but **only for adding** or topping off.

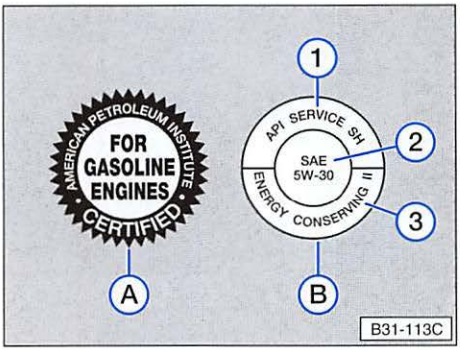
To assure that the oil you use is of the highest quality required by your vehicle the following terms must appear on the oil container singly or in combination with other designations:

- VW 503 01, VW 505 01 or
- ILSAC GF3 SAE 5W-40 (when performing an oil change or adding)

In exceptional cases you may use

- ILSAC GF3 SAE 5W-30

for topping up only!



Engine oil identification symbol

Oils of the proper quality for your vehicle will be identified with a new "starburst" symbol **A**. The starburst symbol indicates that the oil has been certified by the American Petroleum Institute (API).

Another oil identification symbol **B** could be added to the oil container to help you select the correct oil.

1 - The top portion indicates the oil quality by API designations.

2 - The center portion shows the SAE oil viscosity grade.

3 - The lower portion indicates that the oil has fuel saving capabilities.

Note

Look for one of these symbols on the front of the oil container, and use only oils that display these symbols.

Engine oil consumption

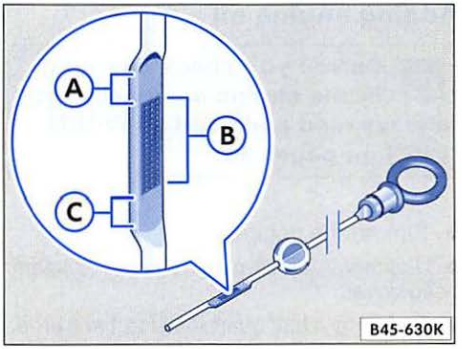
The rate of the oil consumption depends on the quality and viscosity of oil, the speed at which the engine is operated, the climate, and road conditions as well as amount of dilution and oxidation of the lubricant.

Because of these variables, no standard rate of oil consumption can be established, but drivers should expect higher oil consumption at high speeds and when the engine is new.

Notes

- **The engine in your vehicle depends on oil to lubricate and cool all of its moving parts. Therefore the engine oil should be checked regularly and kept at the required level.**
- **Make it a habit to have the engine oil level checked with every fuel filling.**
- **Lack of sufficient engine oil may lead to severe engine damage.**
- **The oil pressure warning light is not an oil level indicator.**

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.



Checking the engine oil level

The position of the oil dipstick and the engine oil filler opening can be seen in the illustrations beginning on page 35.

The best time to check the engine oil level is when the oil is warm.

To get a true reading, the vehicle must be on level ground.

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

- After turning off the engine, wait a few minutes for the oil to return to the oil pan.
- Pull out dipstick and wipe it clean with a rag.
- Reinsert dipstick; push it all the way in.
- Pull dipstick out again and read the level:

A –You **must not** add oil.

B – You **can** add oil. The oil level may go into the **A** range, but not above the **A** range

C –You **must** add oil.
After filling in oil, make sure that the oil level is somewhere within the **B** range.

- After checking the oil level, please make sure that the dipstick is pushed back in all the way.

Adding engine oil

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

- Turn off the engine.
- Unscrew the oil cap from the cylinder head cover.
- Add oil by a half quart (half liter) at a time.
- Check the oil level with the dipstick.

The oil level must never be above the "A" range see page 37.

Otherwise oil could be drawn into the crankcase breather and get into the atmosphere through the exhaust system. **The oil would burn in the catalytic converter and cause damage.**

WARNING

Spilled oil is a fire hazard. The oil filler cap must be secure to avoid an oil spill.

- Carefully screw the oil cap back on and insert the oil dipstick all the way. Otherwise oil could leak out when the engine is running.

Engine oil additives

VOLKSWAGEN does not recommend the use of oil additives. They may adversely affect your New Vehicle Warranty.

Changing the engine oil

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

The engine oil must be changed according to the intervals specified in your Maintenance booklet ***see Booklet 1.1.***

This is very important because the lubricating properties of oil diminish gradually during normal vehicle use.

Under some circumstances the engine oil should be changed more frequently. Change oil more often if you drive mostly short distances, operate the vehicle in dusty areas or under predominantly stop-and-go traffic conditions, or have your vehicle where temperatures remain below freezing for extended periods.

Detergent additives in the oil will make fresh oil look dark after the engine has been running for a short time. This is normal and is not a reason to change the oil more often than recommended.

Always heed all WARNINGS on next page.

⚠ WARNING

- **If you must change the engine oil in your vehicle:**
- **Wear eye protection.**
- **To reduce the risk of burns from hot engine oil let the engine cool down to the touch.**
- **When removing the oil drain plug with your fingers, stay as far away as possible. Always keep your forearm parallel to the ground to help prevent hot oil from running down your arm.**
- **Drain the oil into a container designed for this purpose, one large enough to hold at least the total amount of oil in your engine.**
- **Engine oil is poisonous. Keep it well out of the reach of children.**
- **Continuous contact with used engine oil is harmful to your skin. Always protect your skin by washing thoroughly with soap and water.**

Before changing your oil, you should first make sure you know where you can properly dispose of the old oil.

Always dispose of used engine oil properly. Do not dump it on garden soil, wooded areas, into streams or down sewage drains.

Recycle used engine oil by taking it to a used engine oil collection facility in your area, or contact a service station.

Because of the problem of proper disposal, along with the special tools and necessary expertise required, we strongly recommend that you have your oil changed by an authorized VOLKSWAGEN dealer or a qualified workshop.

⚠ Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

Engine cooling system

The cooling system is sealed and generally requires little attention.

The cooling system has been filled at the factory with a permanent coolant which does not need to be changed. The coolant consists of a mixture of water and the manufacturer's coolant additive **G 12 A8D** – antifreeze on a glycol base with anti–corrosion additives (50% for USA and Canadian models). This mixture assures the necessary frost protection and protects alloy components in the engine's cooling system from corrosion and scaling. It also raises the boiling point of the coolant.

Do not reduce the concentration of the coolant in the summer by adding plain water. **The proportion of coolant additive must be at least 40% but not more than 60%** to maintain antifreeze protection and cooling efficiency.

For year-round driving, antifreeze is added at the factory for temperatures down to:

–31°F (–35°C) USA and Canada

⚠ Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

Never use any coolant additive other than our G12 A8D additive (check label) for your vehicle. This coolant additive is available at VOLKSWAGEN dealers.

Other types of antifreeze can, above all, significantly reduce corrosion protection. The resulting corrosion can cause a loss of coolant and therefore serious engine damage.

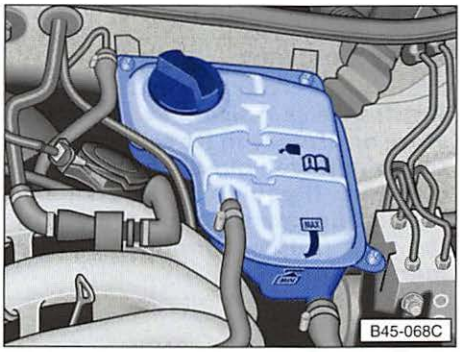
When adding coolant additive to your cooling system, please remember:

Under no circumstances may G12 A8D be mixed with other coolant additives (for example G 11).

You can recognize G12 A8D in the expansion tank by its red color. If the liquid in the expansion tank is brown, G 12 A8D has been mixed with another coolant additive. In this case, your vehicle's coolant must be changed as soon as possible.

Note

Mixing coolant additives can result in serious malfunction or engine damage!



Checking the engine coolant level

⚠ Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

The coolant expansion tank is located on the left side in the engine compartment.

⚠ WARNING

To reduce the risk of being burned, never open the hood if you see or hear steam or coolant escaping from the engine compartment. Wait until no steam or coolant can be seen or heard before carefully opening the hood and following the precautions on the next page.

The correct coolant level is important for proper functioning of the cooling system.

Therefore, check the coolant level regularly – preferably at every fuel filling when you check the oil.

To obtain an accurate reading, the engine must be switched off.

Since the expansion tank is transparent, the cap need not be removed to check the coolant level.

The coolant level must be between the "**MIN**" and "**MAX**" marks when the engine is cold and can be slightly above the "**MAX**" mark if the engine is warm.

The expansion tank in your vehicle is equipped with an electric coolant level checking device.

When the coolant level is too low, the warning light (see "Warning / Indicator lights," chapter *"INSTRUMENT PANEL AND CONTROLS"* ***see Booklet 3.1.***) will blink until the coolant level has been restored to normal.

Coolant losses

Coolant losses may indicate a leak in the cooling system. In the event of coolant losses, the cooling system should be inspected immediately by your authorized VOLKSWAGEN dealer. It is not enough merely to add coolant.

In a sealed system, losses can occur only if the boiling point of the coolant is exceeded as a result of overheating.

Adding coolant

WARNING

The cooling system is under pressure and can get very hot. Reduce the risk of scalding from hot coolant by following these steps.

- **Turn off the engine and allow it to cool down.**
- **Protect face, hands and arms escaping fluid and steam by covering the cap with a large, thick rag.**
- **Turn the cap slowly and very carefully in a counter-clockwise direction while applying light, downward pressure on the top of the cap.**
- **To help avoid being burned, do not spill antifreeze or coolant on the exhaust system or hot engine parts. Under some conditions, the ethylene glycol in engine coolant can catch fire.**

If, in an emergency, only water can be added, the correct ratio between water and antifreeze (see previous page) must be restored as soon as possible.

If you have lost a considerable amount of coolant, then you should add cold antifreeze and cold water only when the engine is cold.

Do not fill coolant above the "max" mark.

Note

Coolant pollutes the environment and could cause an engine fire. Excess coolant will be forced out through the pressure relief valve in the cap when the engine becomes hot.

Screw cap on again tightly.

WARNING

Antifreeze is poisonous. Always store antifreeze in its original container and well out of the reach of children. If you drain the coolant, it must be caught and safely stored in a proper container clearly marked "poison."

Drained coolant should not be reused. Always dispose of used coolant observing all environmental regulations.

Radiator fan

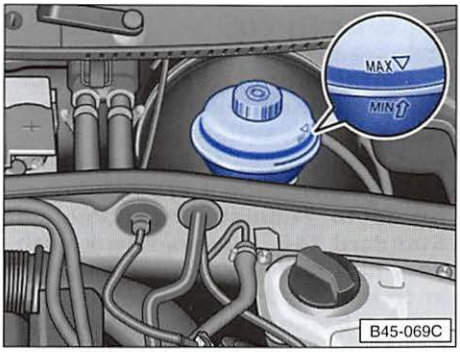
The electric radiator fan is controlled by thermoswitches that switch on and off depending on coolant and engine compartment temperatures.

WARNING

- **Never touch the radiator fan It is temperature controlled and can switch on suddenly – even when the ignition is off and the ignition key has been removed**
- **The radiator fan switches on automatically when the coolant reaches a certain temperature and will continue to run until the coolant temperature drops.**

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

Brake fluid



Checking brake fluid level

⚠ Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

The brake fluid reservoir is below the left side of the plenum panel, see illustration above and on page 35.

The correct fluid level is important for the proper functioning of the brake system. The fluid level in the brake fluid reservoir should always be between the "**MAX**" and "**MIN**" markings.

The fluid level may drop slightly after some time due to the automatic adjustment of the brake pads. This is no cause for alarm.

STOP If the brake fluid level falls considerably below the "MIN" mark, the brake warning light will come on. Do not continue to operate the vehicle. The complete brake system should be thoroughly chekked by a VOLKSWAGEN dealer or another qualified workshop and the cause corrected.

For more details see "Warning / Indicator lights," chapter *"INSTRUMENT PANEL AND CONTROLS"* ***see Booklet 3.1.***

Contact a VOLKSWAGEN dealer immediately.

Changing brake fluid

The brake fluid reservoir can be difficult to reach, therefore, we recommend that you have the brake fluid changed by your authorized VOLKSWAGEN dealer. Your dealer has the correct tools and know-how to do this for you.

Brake fluid absorbs moisture from the air. If the water content in the brake fluid is too high, corrosion in the brake system may result after a period of time. The boiling point of the brake fluid will also decrease considerably.

Therefore, the brake fluid must be changed every 2 years.

Note

Remember that brake fluid is harmful to the paint of your vehicle.

Because of the problem of proper disposal of brake fluid along with the special tools required and the necessary expertise, we recommend that you have your brake fluid changed by your VOLKSWAGEN dealer during a Maintenance Service.

WARNING

Brake failure can result from old or inappropriate brake fluid. Observe these precautions:

- **Use only brake fluid that meets SAE specification J 1703 and conforms to Federal Motor Vehicle Standard 116. Always check with your authorized Volkswagen dealer to make sure you are using the correct brake fluid. The correct type of brake fluid is also found labeled on the brake fluid reservoir.**
- **The brake fluid must be new.**
- **Brake fluid is poisonous. Therefore, it must be stored only in the closed original container out of reach of children.**

Battery

⚠ WARNING

Always heed the following WARNINGS and safety precautions when working on the battery.

Shield eyes. Explosive gases can cause blindness or injury.

No
- sparks
- flames
- smoking.

Sulfuric acid.
Can cause blindness or severe burns.

Flush eyes immediately with water.
Get medical help fast.

Always keep the battery well out of the reach of children.

When a battery is charged, it produces hydrogen gas which is explosive and could cause personal injury.

Always wear eye protection. Do not let battery acid or any lead particles get on your skin or clothing.

Do not expose the battery to an open flame, electric sparks or an open light. Do not smoke. Do not reverse polarity.

Battery acid contains sulfuric acid. Always wear gloves and eye protection. Do not tilt the battery because acid could leak out of the ventilation openings. If you get battery acid in your eyes or on your skin, immediately rinse with cold water for several minutes and call a doctor. If you should ingest any battery acid, get a doctor immediately.

- **Before work is done on the electrical system, disconnect the negative ground cable.**
- **When working on the battery, be sure not to short circuit the terminals with tools or other metal objects. This would cause the battery to heat up very quickly, which could lead to damage or explosion and personal injury.**

California Proposition 65 Warning:

⚠ WARNING

Battery posts, terminals and related accessories contain lead and lead components, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Do not disconnect the vehicle battery when the ignition is switched on or when the engine is running. Otherwise, you will damage electronic components in the electrical system.

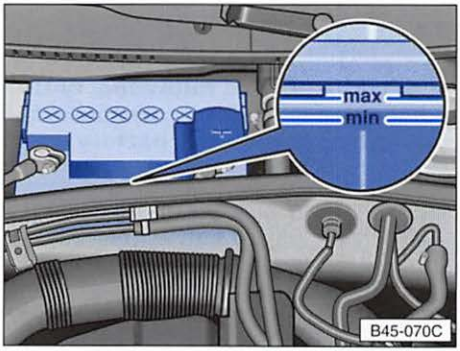
When working on the engine, protect the battery housing from ultra violet (UV) rays by not parking the vehicle in direct sunlight.

Winter operation

During the winter months, battery capacity tends to decrease as temperatures drop. More power is also consumed while starting, and the headlights, blower fan, rear window defogger, etc., are used more often.

Avoid unnecessary power consumption, particularly in city traffic or when traveling only short distances. Let your VOLKSWAGEN dealer check the capacity of the vehicle battery before winter sets in. A well charged battery will not only prevent starting problems but will also last longer.

If your vehicle is left standing for several weeks at extremely low temperatures, the vehicle battery should be removed and stored where it will not freeze. This will prevent it from being damaged.



Location of vehicle battery

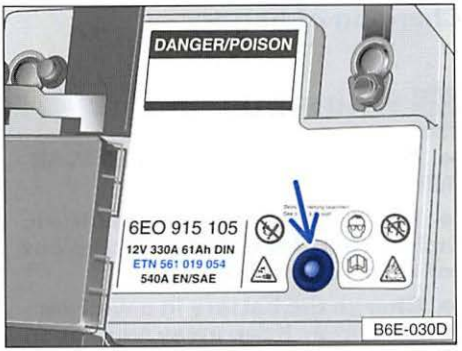
Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

The vehicle battery is located in the plenum chamber at the back of the engine compartment. – see illustration above and on page 35.

Battery acid level

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

Under **normal** operating conditions, the battery in your VOLKSWAGEN does not need any maintenance. At high outside temperatures it is advisable, however, to check the fluid level at regular intervals.



WARNING

- **Always shield your eyes and avoid leaning over the battery whenever possible.**
- **Do not let battery acid come in contact with skin, eyes, fabric, or painted surfaces.**
- **If you get battery acid in your eyes or on your skin, immediately rinse with cold water for several minutes and call a doctor.**
- **Do not expose the battery to an open flame or electric spark. Hydrogen gas generated by the battery can explode and cause personal injury.**

Battery with "magic eye"*

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

On the upper side of the battery, you'll find a round "window". This window (magic eye) changes color as the battery charge and electrolyte level change. This color helps your authorized Volkswagen dealer when diagnosing your battery.

Air bubbles in the window can cause an inaccurate reading. Carefully tap on the side of the window.

If the window **has no color or is bright yellow**, the acid level is low. Add distilled water to top up.

We recommend you have your authorized Volkswagen dealer inspect your battery.

A battery that is older than five years and has a low acid level should be replaced.

Note

Do not overfill the battery. Otherwise battery acid will overflow through the vent opening. This will damage the paint and cause corrosion.

Charging of battery

WARNING

- **Always read and heed all WARNINGS on page 45.**
- **The battery contains sulfuric acid. Therefore, keep battery out of reach of children.**
- **Charge the battery in a well ventilated area. Keep away from open flame or electrical spark. Do not smoke. Hydrogen gas generated by the battery is explosive.**
- **Always shield your eyes and avoid leaning over the battery whenever possible.**
- **If you get battery acid in your eyes or on your skin, immediately rinse with cold water for several minutes and call a doctor.**
- **Fast charging a battery is dangerous and should only be attempted by a competent mechanic with the proper equipment.**
- **Never charge a frozen battery. It may explode because of gas trapped in the ice. Allow a frozen battery to thaw out first.**
- **Do not reuse batteries which have frozen. The battery housing may have cracked and weakened when the battery froze.**

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

- **Battery acid that may spill during charging should be washed off with a solution of warm water and baking soda to neutralize the acid.**
- **Never use a fast charger as a booster to start the engine. This will seriously damage sensitive electronic components, such as glow plugs*, control units, relays, radio, etc., as well as the battery charger.**

Slow battery charging

WARNING

Heed all WARNINGS and follow instructions that come with your battery charger.

- Before charging the battery, switch off the ignition and all electrical consumers.
- Make sure the area is well ventilated when you charge the battery.
- It is not necessary to remove the battery from the engine compartment, and it is also not necessary to disconnect the battery cables.
- Connect charger cables.

Charger cables must be connected POSITIVE (+) to POSITIVE (+) and NEGATIVE (–) to NEGATIVE (–).

WARNING

To reduce the danger of explosion, never connect or disconnect charger cables while the charger is operating.

- Switch on charger.

For more details see next page.

Charging rate not over 6 amps.

Normally, a battery should be charged at no more than 10 percent of its rated capacity.

For example, a charging current of 4.5 amps. would be used on a battery rated at 45 Ah. Rated capacity of the battery in your vehicle is listed on the battery housing.

- After charging, first turn off the charger and then disconnect charger cables.

When disconnecting and connecting the battery ...

When you **disconnect** the vehicle battery please note the following:

- all the data stored in the **MFA*** (Multi Function Indicator) are erased,
- the digital clock goes out,
- the factory installed radio locks up,
- the one-touch-up and one-touch-down functions of the power windows* no longer work.

After you **reconnect** the battery, you must reset the digital clock ***see Booklet 3.1.***

You also have to reset the one-touch-up and one-touch-down feature on power windows – see "Power windows" ***see Booklet 3.1.***

The radio must be re-coded with the correct radio code – see your radio Operating Instructions ***see Booklet 3.4.***

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

Removing Battery

Switch off the ignition and all electrical consumers before removing the battery.

First disconnect the minus cable (usually black or brown) and then the plus cable (usually red). Then remove the battery mount and remove the battery.

Replacement battery

A replacement battery must have the same specifications and dimensions as the original equipment battery. Specifications are listed on the battery housing.

When installing the battery, make sure the ignition and all electrical consumers are switched off.

Because of the problem of proper disposal of a battery, we recommend that you have your VOLKSWAGEN dealer change the battery for you. Batteries contain sulfuric acid and lead and must always be disposed of properly observing all environmental regulations.

Windshield washer container

The windshield washer container is located on the left side of the engine compartment. It can be identified by the blue cap – see illustration.

The fluid container for the windshield washers system holds about 3.2 quarts (3.0 liters).

Wagon only:

The washer fluid container in the engine compartment also supplies washer fluid for the rear window washer system.

Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

Filling the container

To add washer fluid, just lift the filler cap by the small tongue. The container can be filled to the top.

Since clear water is usually not adequate for cleaning the glass, add a cleaning solution to the water.

Use winterized windshield washer solvent during the cold season even though the vehicle may be equipped with **heated* washer jets**. It helps to keep your windshield clean and prevents the fluid from freezing in the winter.

Do not use engine coolant anti-freeze or any other solution that can damage the vehicle paint.

Follow the directions on the can for the correct amount to be used.

After filling the container, press the cap onto the filler neck.

Adjusting washer jets

You need special equipment to adjust the jets for the windshield and the headlight washer system*. See your authorized VOLKSWAGEN dealer.

Additional accessories, Modifications and Parts replacement

Your vehicle incorporates the latest safety design features ensuring a high standard of active and passive safety.
This safety could be compromised by non–approved changes to the original new–vehicle condition. For this reason, if parts have to be replaced or if any modifications are made to the vehicle, please observe the following points when installing additional accessories:

- **Always consult** an authorized VOLKSWAGEN dealer **before** purchasing accessories and **before** any modifications are carried out.
- Approved VOLKSWAGEN accessories and genuine VOLKSWAGEN parts are available from authorized VOLKSWAGEN dealers. These dealers also have the necessary facilities, tools and trained specialists to install the parts and accessories properly.
- Our guidelines must be consulted before any modifications of a technical nature are undertaken. This will ensure that the vehicle is not damaged in any way, that highway and operating safety is maintained and that the modifications are permissible.

Authorized Volkswagen dealers will perform this work in a professionally competent manner or, in special cases, refer you to a firm that specializes in such modifications.

⚠ WARNING

- **In your own interest, we advise you to use only expressly approved VOLKSWAGEN accessories and genuine VOLKSWAGEN spare parts. These parts and accessories have been specially designed to be used on your vehicle.**
- **Accessories such as telephone cradles or beverage holders should never be installed on airbag covers or within the airbag deployment zones. Doing so will increase the risk of injury if airbags are triggered in an accident!**
- **Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.**

Service kit*

Service kit*

You can mount a first-aid kit and special traffic warning triangle in the luggage compartment.

Notes

- Your vehicle **does not** come equipped with a first-aid kit or a warning triangle.
- **Make sure the first-aid kit and warning triangle must meet all legal requirements.**
- **Don't forget to look at the expiration date on the contents of your first-aid kit. If the date has expired, you should purchase another one as soon as possible.**

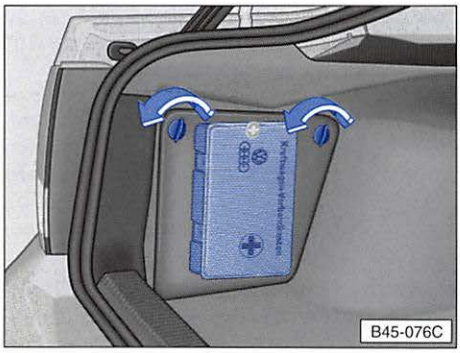
Warning triangle*

You can mount a traffic warning triangle behind a cover on the left side of the luggage compartment.

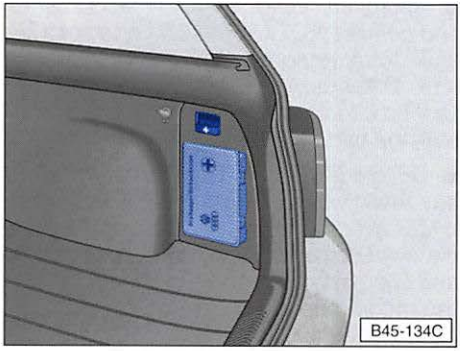
To open the cover, push down on the release button and then swing the cover down.

Note

If you want to equip your vehicle with a warning triangle, contact your authorized VOLKSWAGEN Dealer.



Sedan model



Wagon model

First-aid kit*

Sedan model

Stow the first-aid kit behind the cover on the left side of the luggage compartment. To open the cover, turn the two "quick-releases" in the direction of the arrow – see illustration, and fold the cover down.

Wagon model

Stow the first-aid kit behind the cover on the right side of the luggage compartment.

To open the cover, push down on the release button and then swing the cover down.

Jack and tool kit, spare tire

Jack and tool kit

⚠ WARNING

• Always make sure the jack, the tools, the spare tire and even a flat tire are secured in place and not loose. Otherwise, in an accident or sudden maneuver they could fly forward, causing injury to passengers in the vehicle.

• The jack must never be used as a support to work underneath the vehicle. If the jack is accidentally dislodged, you could be seriously injured.

• Before you use the jack, be sure the ground is level and firm. If necessary, use a sturdy board under the jack.

• Using a bumper jack to raise the vehicle will cause damage to the bumper system. Also, the jack may slip, causing injury.

• Do not support your vehicle on cinder blocks, bricks or other objects. These may not be able to support the load and could cause injury.

• Do not start or run the engine while the vehicle is supported by the jack.

• If you must work under the vehicle, always use safety stands specifically designed for this purpose.

Your vehicle comes equipped with the following tools:

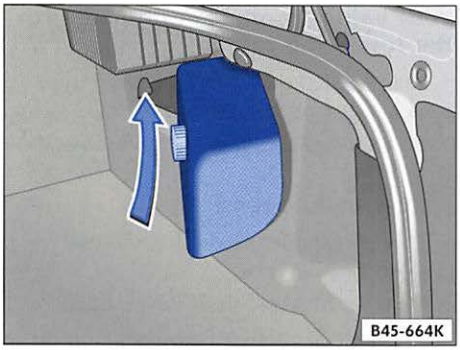
- Lug wrench
- Hub cap puller clips* for hub caps or plastic removal tools * to remove wheel bolt covers
- Open ended wrench 10 x 13
- Plastic mounting pin for use when changing wheels
- Adapter* for anti-theft wheel bolts
- Screwdriver with a hexagonal socket in the handle for removing previously loosened wheel bolts.
  The screwdriver has a reversible blade (flat blade on one end and Phillips head on the other).
- Vehicle jack
  Before you put the jack back into the tool box, make sure it is completely rewound.

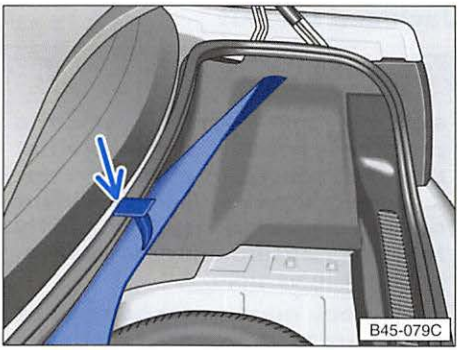
Note

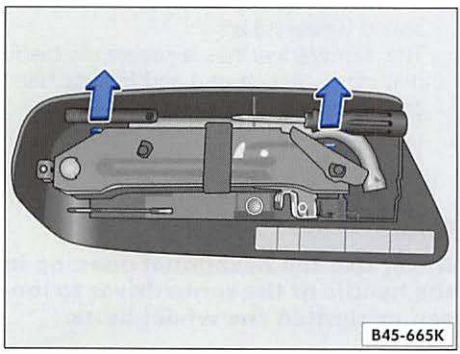
Never use the hexagonal opening in the handle of the screwdriver to loosen or tighten the wheel bolts.

⚠ WARNING

Always make sure the jack and tool kit, the spare tire and even a flat tire are secured in place and not loose, otherwise they could fly forward causing personal injury to passengers in the vehicle in an accident or sudden maneuver.







Sedan models with 4MOTION

The vehicle tools and vehicle jack are stored in a special tool box, which is located in the front of the luggage compartment on the right-hand side. The tool box is fastened with a plastic nut.

- Turn the plastic nut to the left to remove and then lift the tool box out. You will need to tilt the tool box while you are lifting it out.
- To remove the jack, first release the tether strap holding the jack in place and then press both releases (arrows) to the side.

When you reinstall the jack, make sure the crank is facing toward the bottom and folded down flat.

- To reinstall the tool box, tilt the tool box and slide it into its holder.

While doing this, you want to make sure the tab on the front of the tool box fits properly into its mount.

- Reinstall the plastic nut by turning it clockwise.

Wagon models

The tool kit and jack are either located behind a cover panel on the left side of the luggage compartment. To open the cover, push down the release button and then swing the cover down.

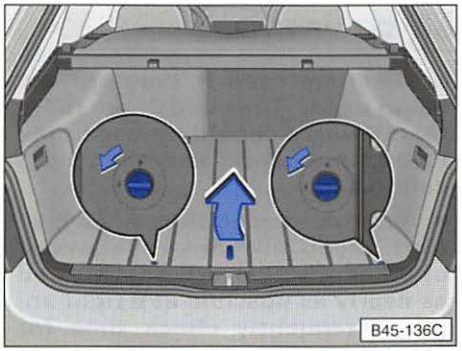
Sedan models

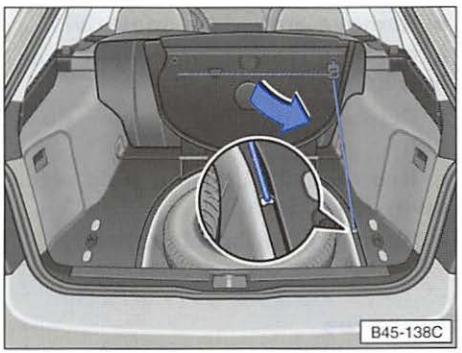
The tool kit and jack are stowed in a well below the floor carpeting on the left side of the luggage compartment. The tool kit is fastened with a plastic bracket.

Spare tire

Sedan models

In order to have both hands free when removing the spare wheel, hang the carpeting up on the upper edge of the luggage compartment cover – see illustration.



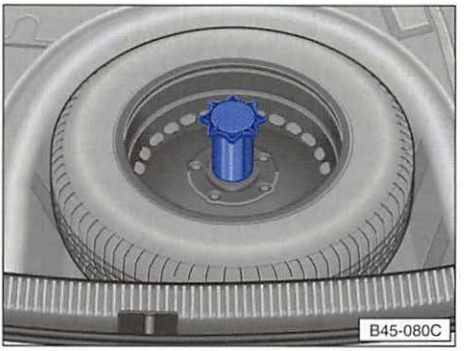


Wagon model

- Open the rear lid and lift up the floor covering.
- Turn the two locking knobs on the cover counter–clockwise, then lift up the cover.
- Hold the cover securely in this position.

In order to have both hands free when removing the spare tire, prop the cover under the floor mat.

- Remove the cover support from its mounting in the spare tire well and hook the support into the opening provided for this purpose – see illustration. The tool kit and spare tire are now accessible.



The spare tire is stored under the carpeting in the luggage compartment. A large plastic nut holds it in place – see illustration.

Securing the flat tire in the luggage compartment.

- Place the flat tire into the tire well and secure it with the mounting nut.
- Turn the mounting nut clockwise until the tire is securely in place.
- Unhook the luggage compartment carpeting.

Note

If your vehicle is equipped with alloy wheels, and the spare tire is a steel wheel you want to use a second plastic nut to secure the flat tire in place. The second plastic nut comes with your vehicle.

⚠ WARNING

Always make sure the jack and tool kit, the spare tire and even a flat tire are secured in place and not loose, otherwise they could fly forward causing personal injury to passengers in the vehicle in an accident or sudden maneuver.

Tires / Wheels

Tires are important but often abused parts of a vehicle. They not only influence comfort and ride, but perform vital safety functions. This section is intended to provide you with important information regarding their proper use, care and replacement.

- Be sure to inspect your tires at least every 2,000 miles (3 000 kilometres) for wear and damage.
- Damage to wheels and tires is not always easy to see. If you believe that a tire or wheel has been damaged, it is best to have it replaced as soon as possible. Internal tire damage can never get better or "heal" itself, it can only get worse over time. Tire damage can lead to tire failure and loss of vehicle control. See your authorized VOLKSWAGEN dealer for advice and assistance.
- Mark tires before removing them. Remount tires on the same vehicle side because the rotation direction must stay the same.
- Store removed tires in a cool, dry and preferably dark place. Tires which are not on wheels should be stored standing up.
- New tires may have different tread depths due to the configuration and design by the tire manufacturers. When replacing tires, use ones with matching tread depth.

⚠ WARNING

- **Tires age even if they are not being used. Tires which are more than 6 years should be used only in an emergency and then with caution.**
- **Avoid damaging tires and wheel rims. If you must drive over a curb or other obstacle, drive slowly and as nearly as possible at a right angle. Frequently check tires for uneven wear and damage.**
- **Remove embedded material.**
- **Replace worn or damaged tires immediately.**
- **Replace missing valve dust caps.**
- **Keep oil, fuel, brake fluid, etc. away from tires.**
- **Keep tires inflated correctly.**

New tires

New tires tend to be slippery and cannot offer full traction until they have been properly broken in.

⚠ WARNING

New tires tend to be slippery and must also be "broken-in." To help avoid loss of control, always operate a vehicle with new tires at lower speeds and with special caution for the first 350 miles (500 kilometres). Brake gently. Avoid following closely behind other vehicles or other situations that might require sudden, hard braking.

Tire service life

The service life of your tires depends for the most part on the following factors:

Tire pressure

Required cold tire inflation pressures are listed on a sticker on the fuel filler flap.

⚠ WARNING

- **Incorrect tire pressures can lead to a serious or fatal accident:**
- **Incorrect tire pressures cause increased tire wear and can affect handling of the vehicle.**
- **Incorrect pressures can also lead to sudden tire failure and deflation, causing loss of vehicle control.**

Low tire pressures increase fuel consumption which is detrimental to the environment.

Tire pressures should be checked at least once a month and always before a long trip.

Tire pressures are very important, particularly when the vehicle is driven at higher speeds.

Vehicles which have full hub caps have valve extenders instead of dust caps. To check tire pressure or to add air, you do not need to remove the extender.

Always check tire pressures when the tires are cold. When the tires are warm, the pressure will be higher. **Do not reduce the pressure of warm tires.**

Don't forget to check the spare wheel.

Use an accurate tire pressure gauge when checking inflation pressures. Never exceed the maximum tire inflation pressure listed on the tire sidewall. Cold tire inflation pressure means: the vehicle has been standing for at least 3 hours or driven for less than 1 mile (1 km).

Do not forget to reinstall the valve stem caps after checking tire pressure.

Driving habits

Fast cornering, heavy acceleration and hard braking all increase tire wear.

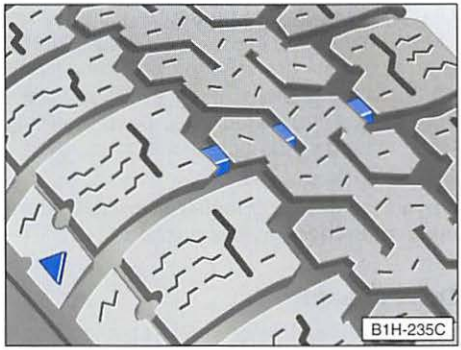
Wheel balancing

The wheels on new vehicles are balanced. When driving, however, various conditions can cause a wheel to become unbalanced. This may be noticed as vibrations in the steering.

Since tire imbalance can cause wear on the steering, suspension and tires, you should have your wheels re–balanced. A wheel should always be balanced if a new tire has been mounted or a tire was repaired.

Incorrect wheel alignment

Incorrect wheel alignment causes excessive and uneven tire wear, impairing the safety of the vehicle. If you notice excessive tire wear, contact your authorized VOLKSWAGEN dealer.



Tire wear

The original tires on your vehicle have built–in wear indicators. They are molded into the bottom of the tread grooves and will appear as approximately $^1/_2$ inch (12 mm) bands when the tire tread depth wears down to $^1/_{16}$ inches (1.6 mm). Depending on the tire manufacturer, there are six to eight wear indicators evenly spaced around the circumference of the tire. Markings on the sides of the tires (e.g. the letters "TWI", a triangle, or other symbols) show the locations of the wear indicators.

When the indicators appear in two or more adjacent grooves, it is time to replace the tires. We recommend, however, that you do not let the tires wear down this far. Worn tires cannot grip the road surface properly, and are even less effective on wet roads.

⚠ WARNING

- **Worn tires can lead to a serious accident.**
- **Tires showing cuts, bruises or other damage may lead to tire failure, sudden deflation and loss of vehicle control.**
- **Since worn tires do not grip the road surface properly when the vehicle is driven on wet roads, the vehicle may tend to hydroplane sooner.**

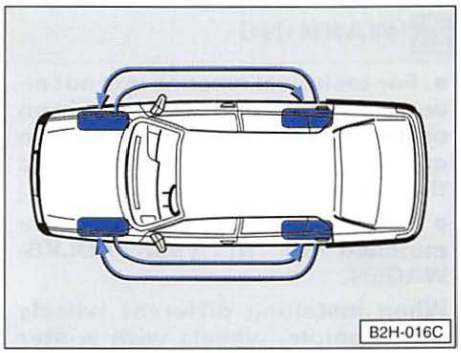
Wheel Bolts

The wheel bolts must always be clean and easy to turn when you're removing or installing them. Never oil or lubricate wheel bolts.

Check the wheel bolts whenever you change a tire, and also each time when you're switching between summer and winter tires.

⚠ WARNING

- **The use of wheel bolts that do not meet specifications of the original factory installed equipment will adversely affect the safe operation of your vehicle and may cause an accident and personal injury.**
- **If insufficient torque is used to tighten wheel bolts, they can come loose and cause an accident during vehicle operation!**
  Extremely high torques can damage the wheel bolts and/or their threads.



Tire rotation

If the front tires are worn more than rear tires, then you must rotate the front tires with the rear tires as shown in the illustration. By doing this, all tires will have approximately the same service life.

Tires should always remain on same side of vehicle.

Only when tires show unusual wear such as feather–edging should they be rotated diagonally. Your vehicle may be equipped with tires which have a specified rotation direction. The rotation direction is identified by arrow markings on the sides of the tires. The rotation direction must not be reversed. Therefore, these tires cannot be switched diagonally. If in doubt, discuss any unusual tire wear with your authorized VOLKSWAGEN dealer's service department.

After rotation adjust tire pressure and torque wheel bolts diagonally to 88 ft lb (120 Nm). Refer to "Changing a wheel" on page 66 for details.

Wheel and tire replacement

Wheels and tires approved by the manufacturer have been specially matched to your vehicle and contribute greatly to the road–holding, driving characteristics and safety of the vehicle.

⚠ WARNING

Installing improper or unmatched tires on your vehicle can lead to a very serious accident. Be sure always to use tires of the recommended size and type and follow all replacement recommendations below.

- If the spare tire is different from the tires that you have mounted on your vehicle (for example winter tires or wide profile tires), then use the spare tire for a short period of time only and drive with extra care. Replace the flat tire with a tire matching the others on your vehicle as soon as possible.
- Fitting and repairing tires requires expert knowledge and special tools. This work should only be performed by a specialist.
- We recommend that you have your tires changed by a authorized VOLKSWAGEN dealer, because they have the special tools and necessary expertise.

Furthermore, your authorized VOLKSWAGEN dealer stocks a range of tires and wheels.

- For safety reasons, tires should be replaced in pairs and not individually. The tires with the deepest tread should always be mounted on the front wheels.

- Never mount used tires if you are not sure of their previous history.
- Whenever replacing a tubeless tire, always install a new valve stem. Tire repair should only be performed by a specialist.
- In the interest of maximum safety and best all-around vehicle handling, always buy replacement radial tires that have the same specifications with regard to tire size, design, load carrying capacity, speed rating, tread pattern, tread depth, etc. This also applies to VOLKSWAGEN recommended alternate replacement tires.

Make sure that the new tires also meet the specifications listed on the label located on the inside of the fuel filler flap.

If you wish to equip your vehicle with tires or wheels other than those installed at the factory, please note the following:

- Before you plan on exchanging steel wheels, light alloy wheels, or winter tires already mounted on wheel rims, consult your authorized VOLKSWAGEN dealer. They have the technical information necessary to advise you which wheel rims and wheel bolts are compatible with the original factory installations.

⚠ WARNING

- **For technical reasons it is not always possible to use wheels from other vehicles – under certain conditions not even wheels from the same vehicle model.**
- **Wheel rims and wheel bolts are matched to fit your VOLKSWAGEN.**

When installing different wheels (for example, wheels with winter tires), the correct wheel bolts with the proper length and conical shape of the bolt head must be used. The secure fit of the wheels and the proper functioning of the brake system and safety are dependent upon this.

- **If wheel trim discs or a front spoiler are installed, make sure the airflow for cooling the brakes is not obstructed.**
- **Incorrect tire/wheel parts may cause an accident and personal injury. Such parts will adversely affect the safe operation of your vehicle. Always use tires, wheel rims and wheel bolts that meet specifications of the original factory-installed equipment.**

Tire specifications

WARNING

Never mix tires of different design such as steel belted radials with radial bias belted or bias ply tires etc. Mixing tire types will adversely affect road holding and can lead to loss of vehicle control and personal injury.

A knowledge of tire designations makes it easier to choose the correct tires. Radial ply tires have the following designations:

e.g. **195 / 65 R 15 91 H**	
195	= Tire width in mm
65	= Height / width ratio in %
R	= Tire construction: **R**adial
15	= Rim diameter in inches
91	= Load rating code
H	= Speed rating code letter

The speed rating letter code indicates the maximum permissible road speeds:

Summer tires:

S – up to 110 mph (180 km / h)

T – up to 118 mph (190 km / h)

H – up to 130 mph (210 km / h)

V – up to 150 mph (240 km / h)

Z – over 150 mph (240 km / h).

"Z" tires carry the speed rating code letter in combination with the tire construction letter "R."

Winter tires see page 64.

WARNING

- **Driving faster than the maximum speed for which tires are rated and approved can lead to sudden tire failure. This can cause loss of vehicle control and lead to an accident and personal injury.**
- **Never operate a vehicle at speeds greater than the maximum speed rating of its tires.**
- **Always observe speed limits and adjust your vehicle to prevailing road and traffic conditions.**

Note

Your vehicle is normally factory equipped with all season tires, which possess excellent driving characteristics and give your VOLKSWAGEN optimum driving comfort. The speed limit of this tire is 130 mph (210 km / h).

WARNING

Never operate this vehicle at speeds greater than 130 mph. Exceeding 130 mph (210 km / h) under any conditions will lead to sudden tire failure which can cause loss of vehicle control and personal injury. Always observe speed limits and adjust your vehicle speed to prevailing road and traffic conditions.

Always read and heed all WARNINGS on next page.

The manufacturing date on the tire side wall (possibly only on the inside of the wheel):

DOT ... **250** ... means that the tire was produced in the **25**th week of 200**0**.

Tire strength and performance decline with age – even if the tires are not used. Tire manufacturers caution that a tire more than six years old cannot be expected to perform reliably and safely even in normal use.

⚠ WARNING

Old tires can fail in use, causing loss of vehicle control and personal injury.

Replace tires after six years regardless of tread wear. Always reduce speed and drive cautiously if you must use an old tire in an emergency. Replace the tire as soon as possible.

Uniform Tire Quality Grading

Quality grades can be found where applicable on the tire side wall between tread, shoulder and maximum section width.

For example: Tread wear 200, Traction AA, Temperature A

All passenger vehicle tires must conform to Federal Safety Requirements in addition to these grades.

Temperature

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger vehicle tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

⚠ WARNING

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. for example, a tire graded 150 would wear one and one half ($1^{1/2}$) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

Traction

The traction grades, from highest to lowest, are AA, A, B and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

⚠ WARNING

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning or peak traction characteristics.

Replacement tires / wheels

If you wish to equip your vehicle with tires or wheels other than those installed at the factory, please note the following:

- **For technical reasons it is not always possible to use wheels from other vehicles – under certain conditions not even wheels from the same vehicle model.**
- **Wheel rims and wheel bolts are matched to fit your VOLKSWAGEN. When installing different wheels (for example, wheels with winter tires), the correct wheel bolts with the proper length and conical shape of the bolt head must be used. The secure fit of the wheels and the proper functioning of the brake system and safety are dependent upon this.**
- **Wheel rims and wheel bolts are matched to fit your VOLKSWAGEN.**
- **Before you plan on exchanging steel wheels, light alloy wheels, or winter tires already mounted on wheel rims, consult your authorized VOLKSWAGEN dealer. They have the technical information necessary to advise you which wheel rims and wheel bolts are compatible with the original factory installations.**

⚠ WARNING

- **Incorrect tire/wheel parts may cause an accident and personal injury. Such parts will adversely affect the safe operation of your vehicle. Always use tires, wheel rims and wheel bolts that meet specifications of the original factory-installed equipment.**
- **If wheel trim discs or a front spoiler are installed, make sure the airflow for cooling the brakes is not obstructed.**

Winter tires

The tires for your vehicle were selected for optimal performance under a variety of driving conditions.

For winter driving, the driveability of your vehicle can be improved by installing radial winter tires (M+S) with or without studs[1].

The **all season tires** with which your vehicle may have been equipped at the factory are performance tires advertised by the tire manufacturer as suitable for all weather use or with special mud and snow (M+S) capability.

Winter tires, sometimes also called snow tires, are designed for maximum traction in mud and snow.

If your VOLKSWAGEN is equipped with high performance tires (identified by code letter V on the tire flank) and you drive frequently on ice or snow, you should consider the installation of all season or winter tires. Let your authorized VOLKSWAGEN dealer advise and assist you.

When installing winter tires, please note the following:

- Only radial ply winter tires may be installed. Ask your authorized VOLKSWAGEN dealer for the recommended tire size.
- Winter tires **must** be mounted on all four wheels.
- Because of the special design characteristics of radial ply M+S tires, they must be inflated 3 psi above the cold tire inflation pressures required for the regular radial ply tires. However, never exceed the maximum tire inflation pressure listed on the tire sidewall.

Winter tires will not do their job if the tread depth is less than 5/32 of an inch (4 mm).

⚠ WARNING

- **Tires with badly worn treads and studs are very dangerous. Make sure they are replaced immediately.**
- **Never mix tires of different design such as steel belted radials with radial bias belted or bias ply tires, etc. Mixing tire types will adversely affect road holding and can lead to loss of vehicle control and personal injury.**

[1] Check with your local Motor Vehicle Bureau for possible restrictions.

- Winter tires with studs should be run only at moderate speeds when new in order to give the studs time to settle.

Do not drive a vehicle equipped with winter tires at prolonged high speed.

Winter tires use a softer rubber compound and a deeper tread pattern and therefore have a lower speed rating and reduced traction and durability when used on dry roads.

- Winter tires must have the same load capacity as original equipment tires.

WARNING

- **Winter tires available for your vehicle may have a maximum speed rating which is less than the maximum speed of your vehicle.**
- **Driving faster than the maximum speed for which tires are rated and approved will lead to sudden tire failure. This can cause loss of vehicle control and lead to an accident and personal injury.**
- **Never operate a vehicle at speeds greater than the maximum speed rating of its tires.**
- **Always observe speed limits and adjust your vehicle to prevailing road and traffic conditions.**

Snow chains

WARNING

For your own safety, pay close attention to the installation instructions provided by the snow chain manufacturer.

Snow chains can be used on the front wheels only. This applies also to vehicles with 4MOTION!

Snow chains must only be used on tires with 175/80 R 14 or 195/65 R 15 rims.

When necessary the vehicle must be equipped with smaller tires – ask your authorized VOLKSWAGEN dealer.

Only use chains with fine pitch links protruding no more than $^1/_2$ inch (15 mm), including tensioner, from tire tread and side walls. Wheels must rotate freely in all steering positions with chains mounted to prevent damage to body, axle or brake components. **Drive slowly and follow the chain manufacturer's instructions.**

Remove chains when roads are free of snow. Otherwise, the chains can damage the tires and impair vehicle handling.

Changing a wheel

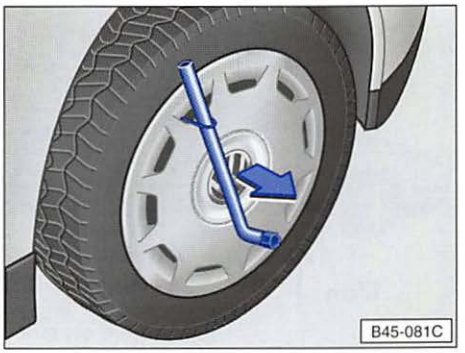
⚠ WARNING

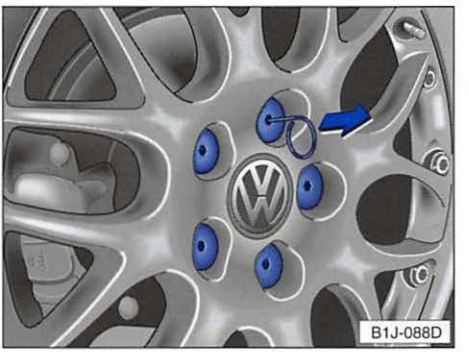
You or your passengers could be injured while changing a wheel if you do not follow safety precautions:

- **If you have a flat tire, move a safe distance off the road. Turn off the engine, turn the emergency flasher on and use other warning devices to alert other motorists.**
- **Passengers must not remain in the vehicle when it is jacked up. This includes children as well as adults.**
- **Make sure that passengers wait in a safe place away from the vehicle and well away from the roadway and traffic.**
- **Before you change a wheel, be sure the ground is level and firm. If necessary, use a sturdy board under the jack.**
- **After installing the spare tire, make sure that you remount the flat tire in its storage area properly and tighten the nut securely.**

⚠ WARNING continued

- **To help prevent the vehicle from moving suddenly and possibly slipping off the jack, always fully set the parking brake and block the wheel diagonally opposite the wheel being changed. When one front wheel is lifted off the ground, placing the Automatic transmission in P (Park), or engaging a gear in a manual transmission will not prevent vehicle movement.**
- **After installing the spare tire, make sure that you remount the flat tire/wheel in its storage area properly and tighten the nut securely.**
- **If you're pulling a trailer, you'll have to unhook the trailer before you can change a tire.**



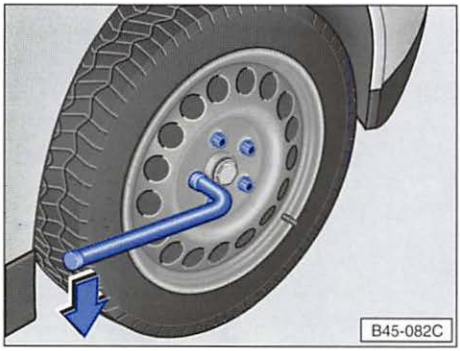


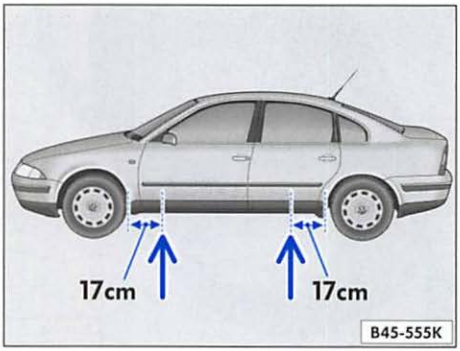
To Change the wheel:

- Take the jack and tool kit and the spare tire out of the luggage compartment.
- Depending on the type of wheel on your vehicle, you will have to do one of the following to remove the cover from the wheel on the vehicle:

– Attach the hub cap puller clip onto the edge of the full wheel trim. Slide the lug wrench through the clip and pull off – see illustration.

– Pull wheel bolt covers off using the wire clip. Place the hook into the openings and pull the cap off – see illustration.





- Mount the lug wrench over the wheel bolt all the way and turn counterclockwise – see illustration. When doing this, hold the lug wrench at the end.

If the wheel bolts do not come loose, you can push the end of the lug wrench, if necessary, using your foot. Make sure you are standing firmly on the ground and hold on to the vehicle for support. **Never support yourself on the vehicle when it has been jacked up.**

Loosen all wheel bolts about one turn.

Do not yet remove the bolts.

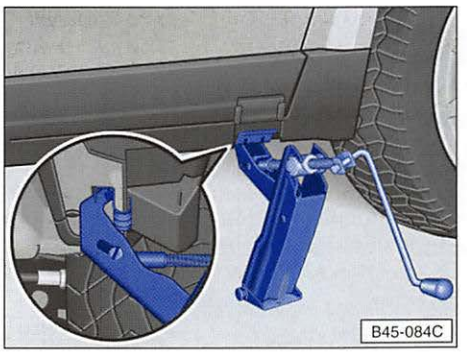
To remove the anti–theft bolts*, see the information on page 72.

⚠ WARNING

Jacking at any place other than those specified may damage the vehicle or make it fall on the jack and result in personal injury.

- **Mounting points for the vehicle jack:**

There is **one** location at the front and **one** impression at the back under the body to show you where to position the jack – see arrows in illustration. Place the jack **directly at** the impression.



- **Position the vehicle jack under the vehicle:**

The illustration shows the jack positioned on the right front side.

WARNING

An unstable surface under the jack may cause the vehicle to slip off the jack. Always provide a firm base for the jack on the ground. If necessary, use a sturdy board under the jack.

- Place the jack exactly under the positioning point on the rocker panel so that the spacer touches the rocker panel – see illustration.
- Turn the handle on the jack until the jack claw is just underneath the vehicle.
- **The jack claw must cradle the vertical rib underneath the vehicle so that it cannot slip when the vehicle is lifted – see illustration.**
- Place a sturdy board under the jack if you are parked on soft ground.

WARNING

To help prevent injury to yourself and your passengers.

- **Do not raise the vehicle until you are sure the jack is securely engaged.**
- **Passengers must not remain in the vehicle when it is jacked up.**
- **Make sure that passengers wait in a safe place away from the vehicle and well away from the roadway and traffic.**
- **Make sure jack position is correct, adjust as necessary and then continue to raise the jack.**

- **To raise** the vehicle, turn the handle clockwise. Only raise the vehicle as much as is needed to change a wheel.

- Unscrew the wheel bold nearest the top, using the screwdriver handle (see above illustration). Place it on clean surface (for example inside the hub cab, or on a piece of toweling) next to the jack.

- Screw the threaded end of the mounting pin from the tool kit hand-tight in the bolt whole that has become free.

Inserting the pin in the bolt whole assures that the wholes in the wheels are in line with the threaded wholes in the wheel hub.

- Then fully unscrew the other wheel bolts and remove the wheel leaving the plastic pin in the bolt whole.

- Slide the spare wheel over the mounting pin.

The wheel bolts must be clean and easy to turn – never grease or oil them! See page 58 for more details.

- Use the screwdriver handle to tighten the wheel bolts hand-tight.

- Remove the mounting pin and tighten the remaining wheel bolts slightly.

Use the special adapter to tighten the anti-theft wheel bolt*, see the information on page 72.

For more details see next page.

- **To lower** the vehicle, turn the handle counterclockwise until the jack is fully released. Then go crosswise from one bolt to another tightening them firmly.
- On vehicles with a standard spare wheel, mount the wheel cover.

When installing the full wheel trim, you must first press the trim onto the valve cut-out, and then snap the entire circumference in completely.

- Always securely store the damaged wheel or flat tire in the luggage compartment of the vehicle.

Notes on changing a wheel.

The hexagonal opening in the screwdriver handle makes it easier to handle the wheel bolts. Remove the blade first before using.

Please read the information on pages 54 and 63 if you are going to be using the spare tire or a spare tire which is different from the tires on your vehicle.

Always observe the following steps in the order given when taking off a wheel and installing a spare tire:

Never use the hexagonal opening in the handle of the screwdriver to loosen or tighten the wheel bolts.

After you change a tire:

- **Check the tire air pressure immediately.**
- **-Have the wheel bolt tightening torque checked with a torque wrench as soon as possible by your authorized VOLKSWAGEN dealer or qualified service station.**
- **-On steel and alloy wheel rims, the correctly tightened bolts should have a torque of 87 ft. lb (120 Nm).**

If you notice while changing a tire that the wheel bolts are corroded and difficult to turn, they should be replaced before you check the tightening torque.

Until then, drive with extra care and at reduced speeds.

- Have the flat tire repaired as quickly as possible and remounted on your vehicle. Remount the wheel cover or protective caps for the wheel bolts.

⚠ WARNING

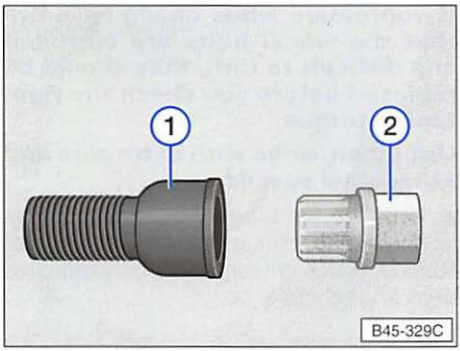
- **If you are going to equip your vehicle with tires or rims that differ from those that were factory installed, be sure to read the information on page 59.**
- **Always make sure the damaged wheel or even a flat tire and the jack and tool kit are secured in place and not loose.**
- **In an accident or sudden maneuver they could fly forward, injuring anyone in the vehicle.**

Stowing the spare tire

⚠ WARNING

Always make sure the spare tire and even a flat tire are secured in place and not loose. Otherwise, in an accident or sudden maneuver they could fly forward, causing injury to passengers in the vehicle.

Anti-theft wheel bolts*



We recommend you always carry the adapter for the wheel bolt in the vehicle – the best would be in the tool kit.

The code number for the wheel bolt safety device is stamped on the front side of the adapter.

Please write down this number and store it separately.

Replacement adapters can be obtained only from authorized VOLKSWAGEN dealers using the code number.

Anti-theft wheel bolts

1 - Wheel bolt

2 - Wheel bolt adapter.

(The adapter is located in the tool kit).

Loosening or tightening a wheel bolt

Push the adapter **2** all the way over the bolt **1**.

Slide the lug wrench from the tool kit onto the adapter **2** until it stops. The wheel bolt can now be loosened or tightened.

After changing the wheel, pull the adapter off the wheel bolt.

Fuses

A problem in the electrical system may be caused by a blown fuse.

Fuses are arranged in one centralized unit. The unit is located under a cover at the end of the dashboard on the driver's side.

It is a good idea to keep a supply of spare fuses on hand. They are available from your authorized VOLKSWAGEN dealer.

Replacing a fuse

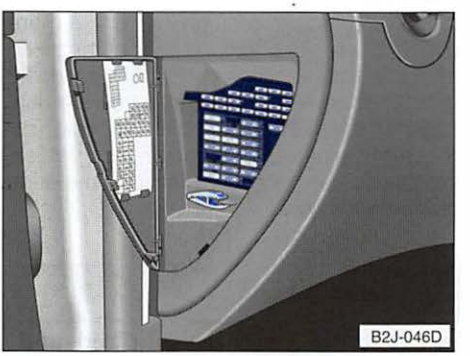
⚠ WARNING

A fuse with too high amperage could damage the electrical part and cause a fire. Do not use a fuse with a higher amperage than the fuse being replaced.

- **To avoid damaging the electrical system, turn off all lights and accessories and remove the ignition key before replacing a fuse.**
- Open the cover of the centralized unit by inserting a screwdriver in the slot below the cover and pry it off.
- Check the fuse listing on the separate fuse card attached to the inside cover to find out which fuse belongs to the component that has failed.

Color codes:

light brown:	5 amps
brown:	7.5 amps
red:	10 amps
light blue:	15 amps
yellow:	20 amps
transparent (white):	25 amps
light green:	30 amps



- Remove the blown fuse with the plastic clip provided. The clip is located close to the centralized unit (see illustration).
- Replace the blown fuse with a fuse of the **same** amperage. You can recognize the blown fuse by the burnt metal strip.
- Close the fuse box cover.

Notes

- **If a fuse blows repeatedly, do not keep on replacing it. The cause of the short circuit or overload must be found. On no account should fuses be repaired (e.g. patched up with tin foil or wire) as this may cause serious damage elsewhere in the electrical circuit or cause fire.**

Circuit breaker

The power windows are also protected by a circuit breaker. If these fuses are overloaded (for example, if the windows are frozen shut), the circuit breaker will automatically switch off and then on again after a few seconds to help prevent the fuse from being blown.

Replacing bulbs

It is becoming increasingly more and more difficult to replace vehicle light bulbs since in many cases, other parts of the vehicle must first be removed before you are able to get to the bulb. This applies especially to the light bulbs in the front of your vehicle which you can only reach through the engine compartment.

⚠ WARNING

• H7 bulbs* are pressurized and can explode when being changed. Potential risk of injury!

• On vehicles equipped with gas discharge bulbs* life-threatening injuries can result from improper handling of the high-voltage portions of such lamps!

For your safety, we recommend that you have your authorized VOLKSWAGEN dealer replace any bulbs for you, since your dealer has necessary tools, the correct bulbs and the expertise.

⚠ WARNING

• Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34.

Installing / replacing a radio

If you wish to install a radio or replace the factory installed radio*, please note the following:

• The factory installed radio connectors* are designed for Genuine VOLKSWAGEN Radios.

When installing a different radio, difficulties could arise such as:

- the radio may not fit into the space provided
- the electrical connections may not be compatible
- different connector terminals may be needed.

• Therefore, we recommend that you have your authorized VOLKSWAGEN dealer install or replace the radio.
They are the most familiar with the technical features of your vehicle. They also offer Genuine VOLKSWAGEN Radios with the necessary installation components and instructions.

⚠ WARNING

Improperly installing a radio could cause a short circuit.
This could result in an electrical fire.

Mobile telephones and CB radios

Mobile telephones or CB radios should not be used in the vehicle unless a separate outside antenna is installed.

If you use a mobile telephone or CB radio inside the vehicle without an outside antenna, the high frequency energy (resonance effect) emitted inside the vehicle can cause malfunctions in the vehicle's electronic system.

Moreover the unit achieves maximum pick-up only if an outside antenna is installed.

⚠ WARNING

Using a mobile telephone or CB radio inside the vehicle without having a separate outside antenna could be dangerous to your health due to the high frequency energy emitted!

Note

Always heed the instructions of mobile telephones and CB radios.

⚠ WARNING

Always keep your attention on the road and traffic!

Emergency Starting

Starting by Pushing or Towing

- **Vehicles with an automatic transmission cannot be started by pushing or towing.**
- **Vehicles with a manual transmission must not be started by pushing or towing. Damage to the catalytic converter and / or other parts of the vehicle may result.**

Starting with jumper cables

⚠ WARNING

- **Batteries contain electricity, acid, and gas. Any of these can cause very serious or fatal injury. Follow the instructions below for safe handling of your vehicle's battery.**
- **Always shield your eyes and avoid leaning over the battery whenever possible.**
- **A discharged battery can already freeze at temperatures just below 32°F (0°C). Before connecting a jumper cable, the frozen battery must be thawed completely, otherwise it could explode.**
- **Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately.**

⚠ Always heed WARNINGS on next page.

⚠ WARNING continued

- **Improper use of a booster battery to start a vehicle may cause an explosion.**
- **Vehicle batteries generate explosive gases. Keep sparks, flame and lighted cigarettes away from batteries.**
- **Do not try to jump start any vehicle with a low acid level in the battery.**
- **The voltage of the booster battery must also have a 12–Volt rating.**

The capacity (Ah) of the booster battery should not be lower than that of the discharged battery. Use of batteries of different voltage or substantially different Ah rating may cause an explosion and personal injury.

- **Never charge a frozen battery; allow it to first thaw out completely. Gas trapped in the ice may cause an explosion.**
- **Use of batteries of different voltage or substantially different amp. (Ah) rating may cause an explosion and injury. The capacity (Ah) of the booster battery should not be lower than that of the discharged battery.**

Note

- **Applying a higher voltage booster battery will cause expensive damage to sensitive electronic components, such as glow plugs*, control units, relays, radio, etc.**
- **Vehicle with discharged battery:**

– Turn off lights,

– only turn on the blower and the rear window defroster to draw off any voltage spikes that might occur when the battery is disconnected,

– move lever of automatic transmission to **N** (**Neutral**) or **P** (**Park**) or move gearshift lever of manual transmission to **neutral** and

– set parking brake all the way.

Use of jumper cables

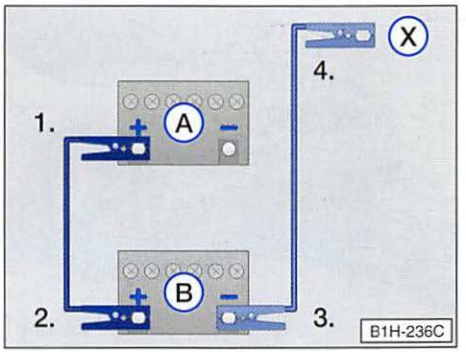
⚠ WARNING

- **To avoid serious personal injury and damage to the vehicle, heed all warnings and instructions of the jumper cable manufacturer. If in doubt, call for road service.**
- **The jumper cables must be long enough so that the vehicles do not touch.**
- **When connecting jumper cables, make sure that they cannot get caught in any moving parts in the engine compartment.**

Improper hook–up of jumper cables can ruin the alternator.

Always connect POSITIVE (+) to POSITIVE (+), and NEGATIVE (–) to ground on engine block (x).

For more details see next page.



A – Discharged vehicle battery

B – Booster battery

X – To ground on engine block.

⚠ Before you check anything in the engine compartment, always read and heed all WARNINGS on pages 34 and 75.

1 - Connect clamp of plus cable to positive (+) terminal (**1**) of discharged vehicle battery.

2 - Connect clamp on opposite end of cable to positive (+) terminal (**2**) of booster battery.

3 - Connect clamp of minus cable to negative (–) terminal (**3**) of booster battery.

4 - Connect clamp on opposite end of cable (**4**) to a bare metal part bolted directly to the engine block or to the engine block itself (**X**) of vehicle with discharged battery. Connect clamp as far away from battery as possible!

5 - Start the engine of the vehicle with the booster battery. Run the engine at a moderate speed.

6 - Start engine with discharged vehicle battery in the usual manner.
If engine fails to start, do not continue to crank but contact your nearest authorized VOLKSWAGEN dealer or qualified workshop.

7 - With engine running, remove jumper cables from both vehicles in exact reverse order: Steps 4 thru 1.

Emergency towing with commercial tow truck

The following information must be used by commercial tow truck operators who know how to operate their equipment safely.

General hints

- Whenever possible, tow with the front wheels off ground.
- The vehicle may be lifted in rear and moved to position for front hook–up.
- If a vehicle with a manual transmission must be towed with the front wheels on the ground, make sure transmission oil has not leaked or been drained.

Note

Your VOLKSWAGEN **cannot** be towed with conventional sling-type equipment or non-self-loading wheel dollies.
Towing with this type of equipment will cause bumper and body panel damage.

⚠ WARNING

A towed vehicle is not safe for passengers. Never allow anyone to ride in a towed vehicle for any reason.

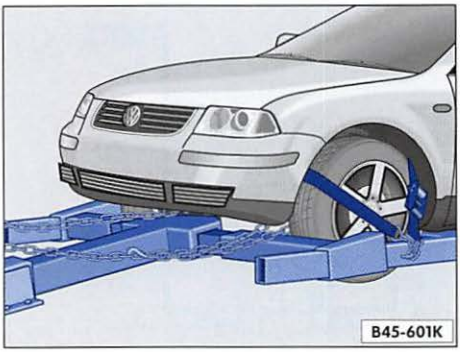
Towing speed and towing distance:

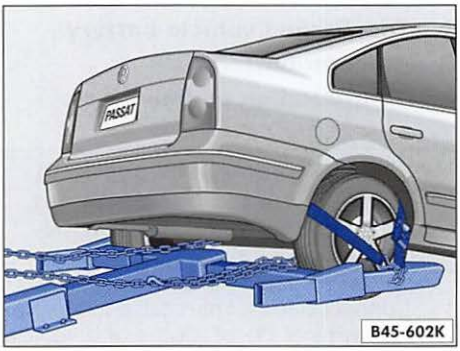
Manual transmission:

Towing speed: . . . . . 50 mph / 80 km / h
Towing distance: . . . . . 50 miles / 80 km

Automatic transmission

If the vehicle cannot be towed with wheel lift equipment in combination with self–loading dollies, it must be transported on a flat bed to avoid damage to the transmission caused by the lack of lubrication.





1 - Attach wheel lift equipment to wheels.
2 - Attach safety straps to wheels.

Front hook–up

3 - Attach safety chains to lower control arms.

Rear hook–up

3 - Attach safety chains to axle beam.

4 - Towing clearance: 6 – 12 inches (15 – 30 cm) between tires and ground.

Lifting vehicle

Lifting with workshop hoist and with floor jack

The vehicle should never be lifted or jacked up from underneath the engine oil pan, the transmission housing, the front or rear axle or the body side members. This could lead to serious damage.

The same lifting points as illustrated on the next page for the hoist also apply when a floor jack is used.

To avoid damage to the underbody or chassis frame, it is necessary to insert a rubber pad between the floor jack and the lift points.

⚠ WARNING

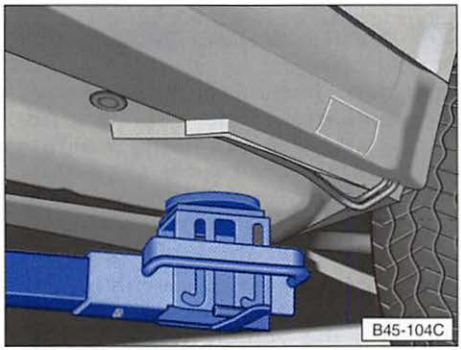
- **To reduce the risk of serious personal injury and vehicle damage, lift vehicle only at the special workshop hoist and floor jack lift points illustrated. Failure to lift vehicle at these points could cause the vehicle to tilt or fall from a lift when, for example, heavy components such as the engine block or transmission are removed resulting in a change in vehicle weight distribution and balance.**

⚠ WARNING continued

- **When removing such heavy components, anchor vehicle to hoist or add corresponding weights to maintain the center of gravity. Otherwise, the vehicle might tilt or slip off the hoist, causing serious damage or personal injury.**
- **If you must lift your vehicle with a floor jack to work underneath, be sure the vehicle is safely supported on stands intended for this purpose.**
- **Before driving over a workshop hoist, check that the vehicle weight does not exceed the permissible lifting capacity of the hoist.**
- **Before driving over a workshop hoist, ensure that there is sufficient clearance between the hoist and low parts of the vehicle.**

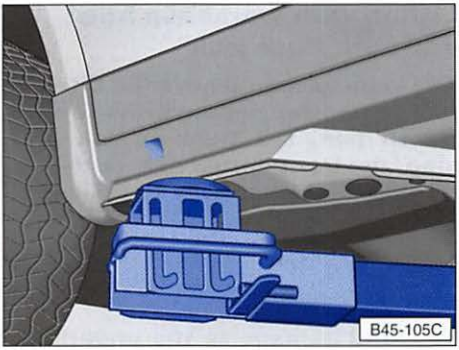
Note

The vehicle may only be lifted at the points are shown on next page.



Lifting point front

On the vertical reinforcement of the lower sill in the area of the marking for the on–board jack.



Lifting point rear

On the vertical reinforcement of the lower sill in the area of the marking for the on–board jack.

Lifting with vehicle jack

Refer to "Changing a wheel" on page 66.

Reporting safety defects

(Applicable to U.S. only)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying VOLKSWAGEN United States, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defects exists in a group of vehicles, it may order a recall and remedy campaign.

However, NHTSA cannot become involved in individual problems between you, your dealer, or VOLKSWAGEN United States, Inc.

To contact NHTSA, you may either call the Auto Safety Hotline toll–free at:

1–800–424–9393

(or 366–0123 in Washington, D.C. area)

or write to:

NHTSA, U.S. Department of Transportation, Washington, D.C. 20590.

You can also obtain other information about motor vehicle safety from the Hotline.

Outside the U.S.A. or Canada

Operating your vehicle outside the U.S.A. or Canada

Government regulations in the United States and Canada require that automobiles meet specific emission regulations and safety standards. Therefore, vehicles built for the U.S.A. and Canada differ from vehicles sold in other countries.

If you plan to take your vehicle outside the continental limits of the United States or Canada, there is the possibility that

- unleaded fuels for vehicles with catalytic converter may not be available;
- fuel may have a considerably lower octane rating. Improper fuel may cause engine damage;
- service may be inadequate due to lack of proper service facilities, tools or testing equipment;
- replacement parts may not be readily available.

VOLKSWAGEN cannot be responsible for mechanical damage that could result from inadequate fuel, service or parts availability.

VOLKSWAGEN Service Repair Manuals

Volkswagen Official Factory Service Manuals are published as soon as possible after model introduction.

Service manuals are available from either of the following sources:

Robert Bentley, Inc.

Order directly from the publisher: Call toll-free **1 (800) 423-4595** (from the United States and Canada, 8:30 AM to 5:00 PM EST) or go to **www.rb.com** on the internet.

Dyment Distribution, Inc.

Call toll-free 1 (800) 544-8021 from 8:30 AM to 8:00 PM, EST, Monday thru Friday.

ALPHABETICAL INDEX

A

ABS (Anti–Lock Brakes) 8
Accessories, – What should I do if I want to add an accessory to my vehicle? 51
Adding
- Brake fluid 44
- Engine coolant 42
- Engine oil 38
- Windshield washer fluid 50

Additional accessories 51
Adjusting, – Washer jets 50
All Wheel Drive (4MOTION) 10
Alloy wheels, – Cleaning 26
Anti–Lock Brake System 8
Anti–Lock Brakes
- How they work 8
- Warning light 8
- What does it mean when I feel a slight vibration on the pedal? .. 8

Anti–Lock Brakes (ABS) 8
Anti–Slip Regulation, – When would I switch it off? 11
Anti–Slip Regulation (ASR) 11
Anti–theft wheel bolts 72
ASR (Anti–Slip Regulation) 11
Automatic car wash
- Precautions when taking your vehicle to the car wash 23
- Should I remove the roof antenna? 23

B

Battery 45
- Battery acid level, checking .. 47
- Charging 48
  - Slow charging 48
- Connecting charger cables ... 48
- Disconnecting
  - Important information before you disconnect your battery! 49
  - What you must do after you reconnect the battery! 49
- Location 46
- Precaution 45
- Removing 49
- Replacing, – How often should I replace my battery? 49
- Winter operation 46

Body cavity sealing 26
Brake booster 7
Brake fluid 43
- How often should the brake fluid be changed? 44
- What is the correct brake fluid level? 43
- What kind of brake fluid should I use? 44
- What should I do if the brake warning light comes on? 43

Brake fluid reservoir 43
Brakes
- How does the moisture or road salt affect the brakes? 6
- Overheating 7
- What does it mean when I feel a slight vibration on the pedal? .. 8

Braking 6
Break–in period 12

ALPHABETICAL INDEX

C

Capacities
- Fuel tank 2
- Windshield washer fluid container 50

Care of
- exterior 23
- interior 27

Catalytic converter 17
CB radios 75
Changing a wheel 66
Changing engine oil 38
Checking
- Battery acid level 47
- Brake fluid level 43
- Engine coolant level 41
- Engine oil level 37
- Windshield washer fluid level . 50

Checking oil level, – Engine 37
Chrome parts, Taking care of chrome parts 27
Cleaning
- Engine compartment 29
- Glass 27
- Inside of vehicle 27
- Leather upholstery 28
- Outside of vehicle 23
- Safety belts 28

Cleaning and protection 22
Coolant losses 41
Cooling system 40
- Expansion tank 41

D

Differential lock 9
Difficult operating conditions 14
Do–it–yourself service 52
Driving economically 15
Driving in foreign countries 81
Driving under difficult conditions . 14

E

Electronic differential lock 9
Emergency
- Starting 75
- Towing 78

Emergency triangle 52
Emission control system 17
Engine
- Compartment 34
- Cooling 40
- Hood 33
- Oil 36

Engine compartment
- Precautions you should take before cleaning the engine compartment 29
- Precautions you should take when working inside the engine compartment 34

Engine coolant
- Additives 40
- Can I add plain water to the engine coolant? 40
- Coolant losses 41

ALPHABETICAL INDEX

Engine oil
- Adding 38
- Additives 38
- Changing 38
- Checking 37
- Grades 36

Engine oil level
- When should I check the engine oil level? 37
- Where is the oil dipstick? 37

Environment
- Brake fluid 44
- Cleaning and protection 22
- Coolant 42
- Driving to minimize pollution and noise 15
- Engine oil 39
- Fuel 3
- Maintenance 31
- Tire pressure 57
- Unleaded fuel 4
- Washing 23

Exhaust system 17
Expansion tank 41

F

Filler cap 3
Filling, – portable fuel container ... 3
Floor jack 79
Fluid
- Brake 43
- Coolant 40
- Windshield washer tank 50

Fuel
- Lock fuel tank 2
- Tank capacity 2

Fuel economy 15
Fuel supply 4
Fuel tank 2
- Refuelling 3

Fuses 73

G

Gasoline
- Additves 4
- Blends 4
- What would happen if I put leaded gasoline in my car? 4

ALPHABETICAL INDEX

H

Hood release 33
Hydroplaning 14

I

Installing a radio 74
Instrument panel, cleaning 27

J

Jack 69
Jack and tools 53
Jack support positions 69
Jumper cables 75

K

Plastic parts, cleaning 27

L

Leather, – How to clean 28
Lifting
- Floor jack 79
- Jack 66
- Workshop hoist 79

Lifting point
- front 80
- rear 80

Lifting vehicle 79
Light bulbs 74
Locks, – Fuel tank 2
Lubricants 36

M

Maintenance 31
Mobile telephones 75
Modifications 51

N

Noozle, – Fuel pump 3

O

Octane rating 4
Oil
- Additives 38
- Change 38
- Specification 36

Oil dip stick 37
Oil for your engine 36

P

Parts replacement 51
Portable fuel container 3
Power, – Steering 11

ALPHABETICAL INDEX

R

Radiator fan 42
Radio 74
Rear window washer container .. 50
Refuelling the vehicle 3
Repair manuals, – Ordering on the Web 82
Replacing a fuse 73
Replacing a radio 74
Replacing batteries, – Vehicle battery 49
Reporting safety defects 81
Road salt, – Removing from wheels 26

S

Safe driving tips 13
Safety belts 13
– Cleaning 28
Safety defects, – Reporting 81
Service kit 52
Snow chains 65
Spare wheel 53, 54
Speed range 12
Starting with jumper cables 75
Steel wheels, – Cleaning 26
Summer tires 61

T

Tire
– Pressure 57
– Replacement 59
– Rotation 59
– Specification 61
– Wear 58
Tire designation code 61
Tire quality grading 62
Tires 56
Tires/Wheels
– How often should I check the condition of my tires? 56
– How often should I check the tire pressure? 57
– M+S tires 64
– New tires, breaking in 56
– Snow chains 65
– Spare tire 54
– Uniform tire quality grading ... 62
– All season tires 64
– Changing a wheel 66
– Changing a wheel, precautions 66
Tools 53
Towing 78
– Distance 78
– Speed 78
– With a commercial tow truck . 78
Trailer towing 18
– Driving instructions 20
– Technical requirements 18
– Tips 21
– Tire pressure 19
– Tongue load 19
– Trailer brakes 19

ALPHABETICAL INDEX

U

Undercoating 17, 26
Uniform tire quality grading 62
Unleaded fuel 4
Upholstery, – Cleaning 28

V

Valve extenders 57
Vehicle battery 46
Vehicle care
- Exterior 23
- Instrument panel 27
- Interior 27
- Windows 25

Vehicle jack 53
Volkswagen Service Manuals
– Ordering 82

W

Warning triangle 52
Warranty 18, 31
Warranty booklet 18
Warranty coverages 18
Washer reservoir 50
Waxing your vehicle
- How often should I wax my vehicle? 23
- Where not to use wax 24

Wheel bolts 58
- Removing anti–theft wheel bolts 72

Wheels 56
- valve extenders 57

Wheels replacement 59
Windows 25
Windshield washer container 50
Winter operation
- Battery 46
- Cooling system 40
- Snow chains 65
- Tires 64
- Vehicle care 23
- Windows 25
- Windshield washer system ... 50

Winter tires 64
Workshop hoist 79

It has always been VOLKSWAGEN's policy to continuously improve its products. VOLKSWAGEN, therefore, reserves the right to make changes in design and specifications, and to make additions or improvements to its products without incurring any obligation to install them on products previously manufactured.

Text, illustrations and specifications in this manual are based on information and knowledge available at the time of printing.

All rights reserved. May not be reproduced or translated in whole or in part without the written consent of VOLKSWAGEN AG. Specifications are subject to change without notice

Printed on environmentally friendly paper (bleached without chlorine, recyclable). Printed in Germany

© 2002 VOLKSWAGEN AG

3.4 2004 Passat | Tips and Advice | Art.-Nr.: 241.551.PAR.21
Print Status: 05.2003 | Edition: Nordamerika englisch 05.2003

3.5 2004 Passat Sedan

Technical Data

Please read this important information before reading your booklet.

WARNINGS

⚠ WARNINGS

concern safety and are highlighted like this throughout this manual.

Texts printed in bold type refer to possible damage to your vehicle, or to other important information.

Vehicle Equipment

Please note that items marked with an asterisk may be standard on certain models, optional on others or not available on your model.

TABLE OF CONTENTS

General Information 2

Vehicle identification 3

170 hp engine 4

190 hp engine 6

190 hp engine 4MOTION 8

General Information

Weights

The Gross Vehicle Weight Rating (GVWR), and the Gross Axle Weight Rating (GAWR) for front and rear are listed on a sticker on the left door jamb.

The **Gross Vehicle Weight Rating** includes the weight of the basic vehicle plus full fuel tank, oil and coolant, plus maximum load, which combines passenger (150 lbs / 68 kg per designated seating position) and luggage weight.

Luggage weight is not increased by the use of a roof rack, unless the passenger capacity is reduced accordingly.

The **Gross Axle Weight Rating** is the maximum load that can be applied at each axle of the vehicle.

⚠ WARNING

- **The actual Gross Axle Weight Rating at the front and rear axles should not exceed the permissible weights, and their combination must not exceed the Gross Vehicle Weight Rating.**
- **Exceeding permissible weight ratings can result in vehicle damage, accidents and personal injury.**

Notes

- **The vehicle capacity weight figures apply when the load is distributed evenly in the vehicle (passengers and luggage). When transporting a heavy load in the luggage compartment, carry the load as near to the rear axle as possible so that the vehicle's handling is not impaired.**
- **Do not exceed the maximum permissible axle loads or the maximum gross vehicle weight.**
  Always remember that the vehicle's handling will be affected by the extra load. Therefore, adjust your speed accordingly.
- **Always observe local regulations.**
- **Do not exceed the weight limitations of your trailer hitch.**

Roof weight

The maximum permissible roof weight is 220 lbs (100 kg).

Only use the roof rack system specifically designed, tested and approved by VOLKSWAGEN.

Distribute the load evenly and do not exceed the **Permissible Roof Weight** (including the weight of the roof rack system) or the the **Gross Vehicle weight**.

For more details see "Roof racks / Roof railings," chapter *"SEATS AND STORAGE"* ***→ booklet 3.1.***

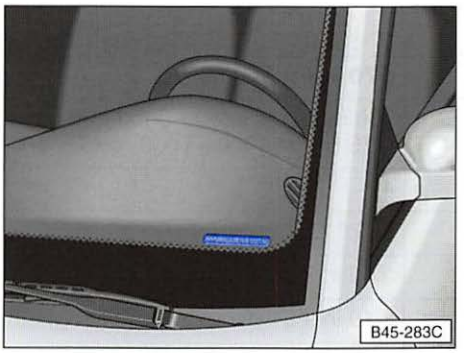
Dimensions

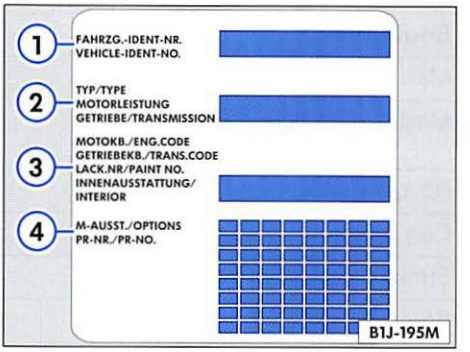
The specifications refer to the basic model. Differences may occur depending on the model type and options ordered, for example, tire sizes.

Note

When driving up steep ramps, on rough roads, over curbs, etc. it is important to remember that some parts of your vehicle, such as spoilers or exhaust system components, may be close to the ground.
Be careful not to damage them.

Vehicle identification





The Vehicle Identification Number (VIN)

is located on the instrument panel on the driver's side so that it is visible from the outside through the windshield – see illustration above.

The safety compliance sticker

is your assurance that your new vehicle complies with all applicable Federal Motor Vehicle Safety Standards which were in effect at the time the vehicle was manufactured. You can find this sticker on the left doorjamb.
It shows the month and year of production and the vehicle identification number of your vehicle (perforation) as well as the Gross Vehicle Weight Rating (GVWR) and the Gross Axle Weight Rating (GAWR).

The high voltage warning label

is located on the lock carrier.

The spark ignition system meets all requirements of the Canadian Interference-Causing Equipment Regulations.

⚠ Always heed all WARNINGS in chapter "Engine compartment" and chapter *"CHECKING AND FILLING"* → *booklet 3.2.*

The vehicle identification label

is located on the left side of the rear panel in the luggage compartment or under the carpeting on the luggage compartment floor. The label contains the following information:

1 - Vehicle identification no.
2 - Type code number / designation
Engine output in **K**ilo**w**atts
3 - Engine and transmission code letter
Paint no. / Interior
4 - Optional equipment numbers

Vehicle datas are also found in your Maintenance booklet.

170 hp engine

Engine data		
Maximum output SAE net		**170 hp** at 5900 rpm
Maximum torque SAE net		166 ft. lbs. at 1900 – 5000 rpm (225 Nm at 1900 – 5000 rpm)
No. of cylinders		4
Displacement		108.7 CID (1.781cm^3)
Stroke		3.40 in (86.4 mm)
Bore		3.19 in (81.0 mm)
Compression ratio		9.5 : 1
Fuel[1]		Premium[1] or Regular unleaded
Capacities		
Fuel tank	*in gal. / liters*	16.4 / 62
Reserve (included in total capacity)	*in gal. / liters*	2.1 / 8.0
Windshield washer container	*in quarts. / liters*	6.6 / 6.2
Engine oil[2]	*in quarts. / liters*	4.3 / 3.9

Maximum Permissible Trailer Weights[3]	**Automatic transmission**	**Manual transmission**
Trailer without brakes *in lbs.*	1430 (650 kg)	1430 (650 kg)
Trailer with brakes *in lbs.*	1500 (680 kg)	2000 (910 kg)
Tongue load *in lbs.*	165 (75 kg)	

1) For maximum engine performance, unleaded Premium is recommended.
Further details see "Fuel tank," chapter *"FILLING YOUR TANK"* ➔ ***booklet 3.2.***

2) The engine oil level should be checked while topping up.
Do not overfill – see "Engine oil," chapter *"CHECKING AND FILLING"*
➔ ***booklet 3.2.***

3) See also "Trailer towing," chapter *"DRIVING AND PROTECTING OUR ENVIREMENT"*
➔ ***booklet 3.2.***

Note

The spark ignition system meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Dimensions		
Wheelbase	*in inch. / mm*	106.4 / 2.703
Lenght[1)]	*in inch. / mm*	185.2 / 4.703
Width	*in inch. / mm*	68.7 / 1.746
Height (unladen)	*in inch. / mm*	57.6 / 1.462
Ground clearance	*in inch. / mm*	4.3 / 110
Turning circle diameter (wall to wall)	*in ft. / m*	37.4 / 11.4

Weights		**Automatic transmission**	**Manual transmission**
Total permissible weightl	*in lbs. / kg*	4.422 / 2.010	4.334 / 1.970
Maximum front axle load	*in lbs. / kg*	2.310 / 1.050	2.222 / 1.010
Maximum rear axle loadl	*in lbs. / kg*	2.156 / 980	2.156 / 980

1) Without front license plate

190 hp engine

Engine data		
Maximum output SAE net		**190 hp** at 5800 rpm
Maximum torque SAE net		206 ft. lbs. at 3200 rpm (280 Nm at 3200 rpm)
No. of cylinders		6
Displacement		168 CID (2.771cm^3)
Stroke		3.40 in (86.4 mm)
Bore		3.24 in (82.5 mm)
Compression ratio		10.6 : 1
Fuel[1)]		Premium[1)] or Regular unleaded
Capacities		
Fuel tank	*in gal. / liters*	16.4 / 62
Reserve (included in total capacity)	*in gal. / liters*	2.1 / 8.0
Windshield washer container	*in quarts. / liters*	6.8 / 6.2
Engine oil[2)]	*in quarts. / liters*	5.7 / 5.0

Maximum Permissible Trailer Weights[3)]		
Trailer without brakes	*in lbs. / kg*	1540 / 700
Trailer with brakes	*in lbs. / kg*	2000 / 910
Tongue load	*in lbs. / kg*	165 / 75

1) For maximum engine performance, unleaded Premium is recommended.
Further details see "Fuel tank," chapter *"FILLING YOUR TANK"* ➔ ***booklet 3.2.***

2) The engine oil level should be checked while topping up.
Do not overfill – see "Engine oil," chapter *"CHECKING AND FILLING"*
➔ ***booklet 3.2.***

3) See also "Trailer towing," chapter *"DRIVING AND PROTECTING OUR ENVIREMENT"*
➔ ***booklet 3.2.***

Note

The spark ignition system meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Dimensions		
Wheelbase	*in inch. / mm*	106.4 / 2.703
Lenght[1)]	*in inch. / mm*	185.2 / 4.703
Width	*in inch. / mm*	68.7 / 1.746
Height (unladen)	*in inch. / mm*	57.6 / 1.462
Ground clearance	*in inch. / mm*	4.3 / 110
Turning circle diameter (wall to wall)	*in ft. / m*	37.4 / 11.4

Weights		**Automatic transmission**	**Manual transmission**
Total permissible weightl	*in lbs. / kg*	4.554 / 2.070	4.444 / 2.020
Maximum front axle load	*in lbs. / kg*	2.442 / 1.110	2.332 / 1.060
Maximum rear axle loadl	*in lbs. / kg*	2.156 / 980	2.156 / 980

1) Without front license plate

190 hp engine 4MOTION

Engine data		
Maximum output SAE net		**190 hp** at 5800 rpm
Maximum torque SAE net		206 ft. lbs. at 3200 rpm (280 Nm at 3200 rpm)
No. of cylinders		6
Displacement		168 CID (2.771cm^3)
Stroke		3.40 in (86.4 mm)
Bore		3.24 in (82.5 mm)
Compression ratio		10.6 : 1
Fuel[1)]		Premium[1)] or Regular unleaded
Capacities		
Fuel tank	*in gal. / liters*	16.4 / 62
Reserve (included in total capacity)	*in gal. / liters*	2.1 / 8.0
Windshield washer container	*in quarts. / liters*	6.8 / 6.2
Engine oil[2)]	*in quarts. / liters*	5.7 / 5.0

Maximum Permissible Trailer Weights[3)]		
Trailer without brakes	*in lbs. / kg*	1650 / 750
Trailer with brakes	*in lbs. / kg*	2000 / 910
Tongue load	*in lbs. / kg*	185 / 85

1) For maximum engine performance, unleaded Premium is recommended.
Further details see "Fuel tank," chapter *"FILLING YOUR TANK"* ➔ ***booklet 3.2.***

2) The engine oil level should be checked while topping up.
Do not overfill – see "Engine oil," chapter *"CHECKING AND FILLING"* ➔ ***booklet 3.2.***

3) See also "Trailer towing," chapter *"DRIVING AND PROTECTING OUR ENVIREMENT"* ➔ ***booklet 3.2.***

Note

The spark ignition system meets all requirements of the Canadian Interference–Causing Equipment Regulations.

Dimensions		
Wheelbase	*in inch. / mm*	106.4 / 2.703
Lenght[1)]	*in inch. / mm*	185.2 / 4.703
Width	*in inch. / mm*	68.7 / 1.746
Height (unladen)	*in inch. / mm*	57.6 / 1.462
Ground clearance	*in inch. / mm*	4.3 / 110
Turning circle diameter (wall to wall)	*in ft. / m*	37.4 / 11.4

Weights		**Automatic transmission**	**Manual transmission**
Total permissible weightl	*in lbs. / kg*	4.752 / 2.160	–
Maximum front axle load	*in lbs. / kg*	2.464 / 1.120	–
Maximum rear axle loadl	*in lbs. / kg*	2.332 / 1.060	–

1) Without front license plate

It has always been VOLKSWAGEN's policy to continuously improve its products. VOLKSWAGEN, therefore, reserves the right to make changes in design and specifications, and to make additions or improvements to its products without incurring any obligation to install them on products previously manufactured.

Text, illustrations and specifications in this manual are based on information and knowledge available at the time of printing.

All rights reserved. May not be reproduced or translated in whole or in part without the written consent of VOLKSWAGEN AG. Specifications are subject to change without notice

Printed on environmentally friendly paper (bleached without chlorine, recyclable). Printed in Germany

© 2002 VOLKSWAGEN AG

Volkswagen models

Insert to Owner's Manual

Tether Strap Installation

Always keep this Insert with your other vehicle literature. If you still have questions about this feature or any other features on your vehicle, contact your authorized Volkswagen dealer.

Tether strap installation

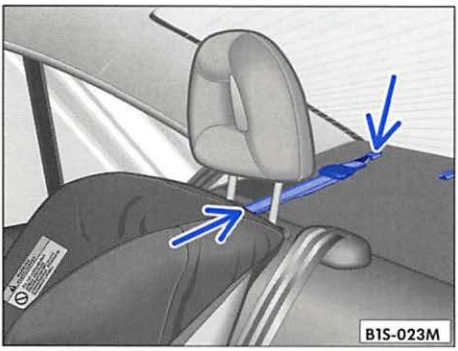


Fig. 1 The illustration above shows the the proper way to route a tether strap under the rear seat head restraint and attach it to the tether anchorage on the ***(Sedan models)***

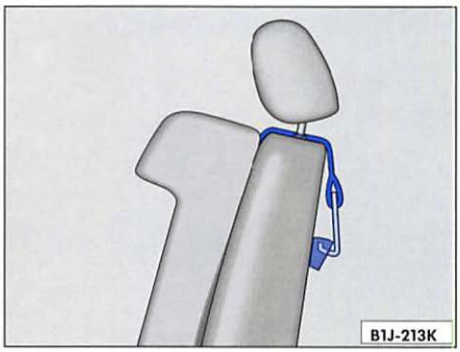


*Fig. 2 The illustration above shows the the proper way to route a tether strap under the rear head restraint and attach it to the tether anchorage located on the back of the rear seat back. (****Passat Wagon, Golf, Jetta Wagon and New Beetle)***

Attaching a child restraint tether strap to the tether anchor

- Release or deploy the tether strap on the child restraint according to the child restraint manufacturer's usage instructions.
- Guide the tether strap **under** the rear seat head restraint (raise the head restraint slightly if necessary) and attach the tether anchorage hook into the opening of the tether anchor. Pull on the anchorage hook so that it is held on the tether anchor by the spring catch of the hook.
- Tighten the tether strap firmly following the child restraint manufacturer's instructions.
- To release the tether strap, loosen the tension following the child restraint manufacturer's instructions. Depress the spring catch on the hook and release it from the tether anchor.

⚠ WARNING

Improper installation of child restraints will increase the risk of injury in a crash.

- **Never attach a tether strap to a tie-down hook in the luggage compartment.**

Supplement for 2004 Passat (all models)

Always keep this information with your other vehicle literature. If you still have questions, contact your authorized Volkswagen dealer.

This supplement describes updates since the last printing of *Safety First*, *Controls and Equipment*, *Tips and Advice*, and *Technical Data*.

Safety First

Belt pre-tensioner and load limiter for all Passat models

Controls and Equipment

High beam lever for Passat Sedan / Wagon W8

Manual transmission for Passat Sedan / Wagon W8

Tips and Advice

Fuel supply and octane rating for Passat W8 with 6-speed manual transmission

Tire inflation pressure sticker for all Passat models

Emergency towing for all Passat models with 4MOTION (All Wheel Drive)

Engine compartment: Gasoline engines 170 hp (1.8L) and 275 hp (4.0L)

Technical Data

Technical Data for Passat Sedan / Wagon W8 with manual transmission

Belt pre-tensioner and load limiter

The retractors for the front three-point safety belts and for the rear outboard three-point safety belts are equipped with belt tensioners and load limiters.

Sensors activate the belt tensioners in frontal collisions when deceleration is high enough. This tightens the belt and takes up belt slack. Taking up the slack helps to reduce forward occupant movement during a collision.

The belt tensioner can only be activated once.

The belt tensioner will not activate in a frontal collision when the deceleration is not high enough, or in any side impact, rollover, or rear end collision.

The load limiter feature helps to reduce the forces applied to the body in a crash.

Never let the belt remain over a rear seat back that has been folded forward. The rear belt tensioner will be activated unnecessarily in a crash and then have to be replaced.

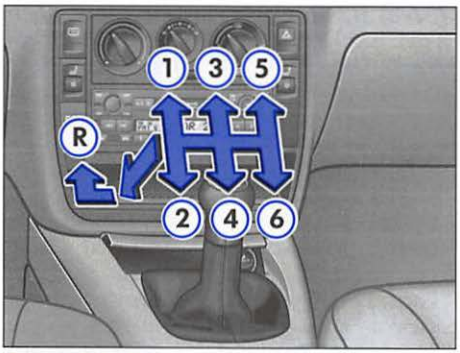
⚠ WARNING

- **Safety belt systems including belt tensioners cannot be repaired. Special procedures are required for removal and installation of this system. Therefore, any work on the safety belt system must be performed only by an authorized VOLKSWAGEN dealer.**
- **The belt tensioner system works for one accident only. If belt tensioners have been activated, the system must be replaced.**

Notes

- When the safety belt tensioner is activated, a fine dust is released. This is normal and is not caused by a fire in the vehicle.
- Observe all safety regulations if the vehicle or individual parts of the system, particularly the safety belt or airbag, are to be scrapped. Your authorized VOLKSWAGEN dealers are familiar with these regulations and can perform this service for you.

Manual transmission



Gearshift lever

Your Passat W8 with manual transmission is equipped with an "interlock-feature". **You must depress the clutch pedal all the way before you can start the engine.**

Always depress the clutch pedal fully when changing gears. Do not hold the vehicle on a hill with the clutch pedal partially depressed. This may cause premature clutch wear or damage.

Resting your hand on the gearshift lever knob while driving will cause premature wear in the transmission.

Drive in 6th gear for optimum fuel economy when cruising. However, if more acceleration is required (when passing, for example), shift down.

Gearshift pattern

Shift into R (Reverse) only when the vehicle is not moving.

To engage R (Reverse), move lever to left, press down and push forward.
Especially after driving forward, stop the vehicle completely, shift into **Neutral** and rest the shift lever in **Neutral** briefly before shifting into Reverse.

High beam lever

High beam

The headlights work only when the ignition is switched on.

The headlights stay on when you switch on the high beam.

Your vehicle is equipped with two high beams:

- high beam with full brightness.
- high beam with reduced brightness.

High beam with full brightness

Switching on:

With the headlights on, push the lever forward (**4**).
The blue indicator light in the instrument cluster will come on.

Switching off:

Pull the lever (**3**) towards you.

High beam with reduced brightness

With the headlights on, push the lever forward (**4**).
The blue indicator light in the instrument cluster will come on.

Pull the switch (**A**) qut to the second detent.
Symbol (**B**) on the switch will illuminate.

Switching off:

Pull the lever (**3**) towards you and push the switch (**A**) in as far as it will go.

Fuel supply

Octane rating for your W8 with manual transmisson

- **Do not use any fuel with octane ratings lower than 91 AKI or 95 RON (ROZ) otherwise expensive engine damage will occur.**
- **Do not use leaded gasoline!**

The use of leaded gasoline will severely damage your vehicle's catalytic converter and its ability to control exhaust emissions.

Blend of gasoline methanol (wood alcohol or methyl alcohol)

- Anti-knock index must be 91 or higher
- Blend must contain no more than 3% methanol
- Blend must contain more than 2% co-solvents

Tires / Wheels

Tire pressure

Required cold tire inflation pressures are listed on a sticker on the driver's door lock jamb.

This applies to all Passat models.

Emergency towing

Passat with 4MOTION (All Wheel Drive)

Towing speed and towing distance

Towing speed: ..... 30 mph / 50 km / h

Towing distance: ..... 30 miles / 50 km

Manual transmission

- You can use a standard towing bar or towing rope to emergency tow your vehicle.
- If you are going to have your vehicle towed by a commercial tow truck, either the front wheels or rear axle can be lifted off the ground.
- If you cannot tow your vehicle in a conventional way, or if you have to tow the vehicle further than 30 miles (50 km), then the vehicle must be transported on a special vehicle transporter (flat bed).

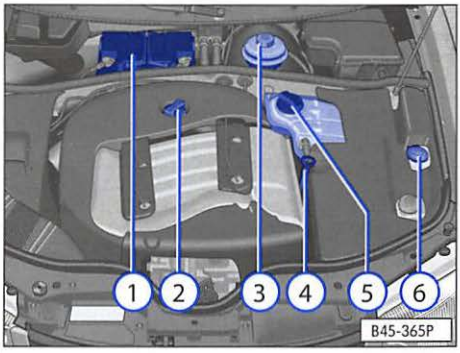
Automatic transmission

- You can use a standard towing bar or towing rope to emergency tow your vehicle.
- The selector lever must be in the N (Neutral) position.

Note

- If you are going to have your vehicle towed by a commercial tow truck, **neither the front wheels nor rear axle may be lifted off the ground.**
- If you cannot tow your vehicle in a conventional way, or if you have to tow the vehicle further than 30 miles (50 km), then the vehicle must be transported on a special vehicle transporter (flat bed).

Engine compartment

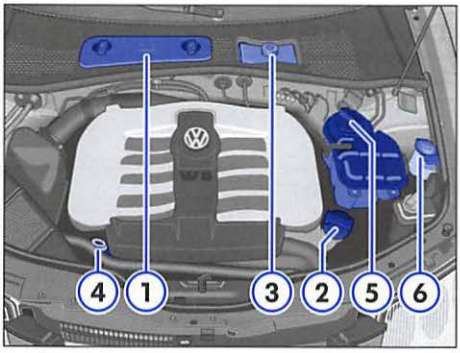


Gasoline engine 170 hp (1.8L)

Before you check anything in the engine compartment, always read and heed all WARNINGS in Booklet 3.2.

Always exercise extreme caution when working under the engine hood.

Pos.		Booklet
1 -	Vehicle battery	3.2
2 -	Engine oil filler cap	3.2
3 -	Brake fluid reservoir	3.2
4 -	Engine oil dipstick	3.2
5 -	Coolant expansion tank	3.2
6 -	Windshield washer container	3.2



Gasoline engine 275 hp (4.0L)

Before you check anything in the engine compartment, always read and heed all WARNINGS in Booklet 3.2.

Always exercise extreme caution when working under the engine hood.

Pos.		Booklet
1 -	Vehicle battery	3.2
2 -	Engine oil filler cap	3.2
3 -	Brake fluid reservoir	3.2
4 -	Engine oil dipstick	3.2
5 -	Coolant expansion tank	3.2
6 -	Windshield washer container	3.2

Passat W8 Sedan with manual transmission

Engine data		
Maximum output SAE net		**275 hp** at 6,000 rpm
Maximum torque SAE net		272 ft. lbs. at 2,750 rpm (370 Nm at 2,750 rpm)
No. of cylinders		8
Displacement		242 CID (3,999 cm^3)
Stroke		3.54 in (90.2 mm)
Bore		3.29 in (84.0 mm)
Compression ratio		10.8 : 1
Fuel[1]		Premium[1]
Capacities		
Fuel tank	*in gallons / litres*	21.1 / 80
Reserve (included in total capacity)	*in gallons / litres*	2.1 / 8.0
Windshield washer container	*in quarts / litres*	4.4 / 4.0
Engine oil[2]	*in quarts / litres*	9.4 / 8.3

Maximum Permissible Trailer Weights[3]		
Trailer without brakes	*in lbs. / kg*	1,500 / 680
Trailer with brakes	*in lbs. / kg*	1,500 / 680
Tongue load	*in lbs. / kg*	185 / 85

1) For maximum engine performance, unleaded Premium is recommended.
Further details see "Fuel tank," chapter *"FILLING YOUR TANK"* ***See Booklet 3.2.***

2) The engine oil level should be checked while topping up.
Do not overfill - see "Engine oil," chapter *"CHECKING AND FILLING"*
See Booklet 3.2.

3) See also "Trailer towing," chapter *"DRIVING AND PROTECTING OUR ENVIRONMENT"*
See Booklet 3.2.

Note

The spark ignition system meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Dimensions		
Wheelbase	*in inch / mm*	106.4 / 2,703
Length[1)]	*in inch / mm*	185.2 / 4,703
Width	*in inch / mm*	68.7 / 1,746
Height (unladen)	*in inch / mm*	57.5 / 1,461
Ground clearance	*in inch / mm*	5.8 / 147
Turning circle diameter (wall to wall)	*in ft. / metres*	37.4 / 11.5
Weights		
Total permissible weight	*in lbs. / kg*	5.004 / 2,270
Maximum front axle load	*in lbs. / kg*	2.623 / 1,190
Maximum rear axle load	*in lbs. / kg*	2.447 / 1,110

1) Without front license plate

Passat W8 Wagon with manual transmission

Engine data		
Maximum output SAE net		**275 hp** at 6,000 rpm
Maximum torque SAE net		272 ft. lbs. at 2,750 rpm (370 Nm at 2,750 rpm)
No. of cylinders		8
Displacement		242 CID (3,999 cm^3)
Stroke		3.54 in (90.2 mm)
Bore		3.29 in (84.0 mm)
Compression ratio		10.8 : 1
Fuel[1]		Premium[1]
Capacities		
Fuel tank	*in gallons / litres*	21.1 / 80
Reserve (included in total capacity)	*in gallons / litres*	2.1 / 8.0
Windshield washer container	*in quarts / litres*	4.4 / 4.0
Engine oil[2]	*in quarts / litres*	9.4 / 8.3

Maximum Permissible Trailer Weights[3]		
Trailer without brakes	*in lbs. / kg*	1,500 / 680
Trailer with brakes	*in lbs. / kg*	1,500 / 680
Tongue load	*in lbs. / kg*	185 / 85

1) For maximum engine performance, unleaded Premium is recommended.
Further details see "Fuel tank," chapter *"FILLING YOUR TANK"* ***See Booklet 3.2.***

2) The engine oil level should be checked while topping up.
Do not overfill - see "Engine oil," chapter *"CHECKING AND FILLING"*
See Booklet 3.2.

3) See also "Trailer towing," chapter *"DRIVING AND PROTECTING OUR ENVIRONMENT"*
See Booklet 3.2.

Note

The spark ignition system meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Dimensions		
Wheelbase	*in inch / mm*	106.4 / 2,703
Length[1)]	*in inch / mm*	184.4 / 4,682
Width	*in inch / mm*	68.7 / 1,746
Height (unladen)	*in inch / mm*	59.0 / 1,497
Ground clearance	*in inch / mm*	5.8 / 147
Turning circle diameter (wall to wall)	*in ft. / metres*	37.4 / 11.5
Weights		
Total permissible weight	*in lbs. / kg*	5.115 / 2,320
Maximum front axle load	*in lbs. / kg*	2.623 / 1,190
Maximum rear axle load	*in lbs. / kg*	2.557 / 1,160

1) Without front license plate

It has always been VOLKSWAGEN'S policy to continuously improve its products. VOLKSWAGEN, therefore, reserves the right to make changes in design and specifications, and to make additions or improvements to its products without incurring any obligation to install them on products previously manufactured.

Text and specifications in this manual are based on information and knowledge available at the time of printing.

All rights reserved. May not be reproduced or translated in whole or in part without the written consent of VOLKSWAGEN AG. Specifications are subject to change without notice

Printed in Germany

Printed on environmentally friendly paper (bleached without chlorine, recyclable).

© 2004 VOLKSWAGEN AG

3.5 Supplement for 2004 Passat / Passat W8 | Art.-Nr.: 241.552.EPT.21
Nordamerika englisch | Edition: 05.2003

Jetta Sedan, Passat Sedan,
Golf, New Beetle, Cabrio

Insert to Owner's Manual

Supplément de Manuel du propriétaire

Trunk escape handle

Poignée de sortie d'urgence du coffre

Always keep this Insert with your other vehicle literature. If you still have questions about this feature or any other features on your vehicle, contact your authorized Volkswagen dealer.

Conservez toujours ce supplément avec votre documentation de bord. Si vous avez des questions sur le système LATCH ou d'autres caractéristiques de votre véhicule, veuillez communiquer avec votre concessionnaire Volkswagen agréé.

Trunk escape handle

Opening from inside the luggage compartment

Inside the rear lid of your vehicle there is a glow–in–the–dark (florescent) trunk escape handle near the latch.

To open the rear lid from the inside, pull the handle.

⚠ WARNING

- **The trunk escape handle is to be used only in an emergency.**
- **Never obstruct the trunk escape handle, otherwise, you would not be able to reach it in an emergency.**

Poignée de sortie d'urgence du coffre

Ouverture du coffre de l'intérieur

Une poignée de sortie d'urgence lumineuse est située près du verrou.

Pour ouvrir le couvercle de coffre de l'intérieur, tirez sur la poignée.

⚠ AVERTISSEMENT

- **La poignée de sortie d'urgence du coffre ne doit être utilisée qu'en cas d'urgence.**
- **N'obstruez pas la poignée de sortie d'urgence du coffre pour pouvoir y accéder en cas d'urgence.**

Insert to Tips and Advice 2003 Passat

Engine Oil – Specifications and viscosity for 1.8L 170 hp, 2.8L 190 hp and 4.0L 270 hp engine

The information in this insert replaces page 36 in your 2003 Volkswagen Tips and Advice, booklet 3.2, delivered with your Owner's literature package. Always keep this information with your other vehicle literature. If you still have questions, contact your authorized Volkswagen dealer.

Supplément au Livret Trucs et conseils 2003 Passat

Huile-moteur – Spécifications et viscosité pour moteurs de 1,8L 170 ch, de 2,8L 190 ch et de 4,0L 270 ch

L'information contenue dans ce supplément remplace la page 36 de votre Livret 3.2 Trucs et conseils Volkswagen 2003 qui fait partie de l'ensemble de documentation pour le propriètaire. Veuillez conserver ces renseignements avec votre dcomentation de bord. Pour toute autre question, communiquez avec votre consessionaire Volkswagen agréé.

Engine oil

Specifications and viscosity for 1.8L 170 hp and 2.8L 190 hp engine

Your engine was factory filled with an all season high quality engine oil that has a viscosity grade of SAE 5W-40. You can use this oil over all temperature ranges for normal driving. If you need to add oil between oil changes use any high quality petroleum– or synthetic–based oil with correct specifications. If engine oil viscosity grade SAE 5W-40 is not available, you can also use SAE 5W-30.

To assure that the oil you use is of the highest quality required by your vehicle the following terms must appear on the oil container singly or in combination with other designations:

- VW500 00 or VW501 01 or VW 502 00
- ACEA A2 or ACEA A3
- API Service SJ

General recommendations

If SAE 5W-40 or 5W-30 viscosity grade oil is not available in your area, be sure to always use a viscosity grade suitable for the climate and seasonal conditions that exist where the vehicle is being operated. Always make sure that the oil meets the quality standards listed above.

Specifications and viscosity for 4.0L 270 hp engine

Your engine was factory filled with an all season high quality engine oil that has a viscosity grade of ILSAC GF3 SAE 5W-40. You can use this oil over all temperature ranges for normal driving. If you need to add oil between oil changes use any high quality petroleum– or synthetic–based oil with correct specifications. If engine oil viscosity grade SAE 5W-40 is not available, you can also use SAE 5W-30, but **only for adding** or topping off.

To assure that the oil you use is of the highest quality required by your vehicle the following terms must appear on the oil container singly or in combination with other designations:

- VW 503 01, VW 505 01 or
- ILSAC GF3 SAE 5W-40 (when performing an oil change or adding)

In exceptional cases you may use

- ILSAC GF3 SAE 5W-30

for topping up only!

Huile-moteur

Spécification et viscosité pour moteur de 1,8L 170 ch et de 2,8L 190 ch

Votre moteur a été rempli à l'usine d'une huile-moteur toute saison de qualité supérieure de type SAE 5W–40. Vous pouvez utiliser cette huile à l'année longue pour la conduite normale. Si vous devez faire l'appoint entre les vidanges d'huile, utilisez une huile synthétique ou à base de pétrole de qualité supérieure qui répond aux spécifications. Si l'huile SAE 5W–40 n'est pas disponible, vous pouvez aussi utiliser l'huile SAE 5W–30.

L'huile que vous utilisez pour votre véhicule doit être de très bonne qualité. Les désignations suivantes, seules ou en combinaison avec d'autres, doivent apparaître sur le contenant d'huile:

- VW500 00 ou VW501 01 ou VW 502 00
- ACEA A2 ou ACEA A3
- API Service SJ

Recommandations d'ordre général

Si l'huile SAE 5W–40 ou 5W–30 n'est pas disponible dans votre région, assurez–vous de toujours utiliser une huile convenant aux conditions climatiques de la région où le véhicule est conduit. Assurez–vous que l'huile respecte toujours les normes de qualité décrites ci–dessus.

Specifications et viscosité pour moteurs de 4,0L 270 ch

Votre moteur a été rempli à l'usine d'une huile-moteur toute saison de qualité supérieure de type ILSAC GF3 SAE 5W–40. Vous pouvez utiliser cette huile à l'année longue pour la conduite normale. Si vous devez faire l'appoint entre les vidanges d'huile, utilisez une huile synthétique ou à base de pétrole de qualité supérieure qui répond aux spécifications. Si l'huile SAE 5W–40 n'est pas disponible, vous pouvez aussi utiliser l'huile SAE 5W–30, mais **seulement pour faire l'appoint**.

L'huile que vous utilisez pour votre véhicule doit être de très bonne qualité. Les désignations suivantes, seules ou en combinaison avec d'autres, doivent apparaître sur le contenant d'huile:

- VW503 01, VW505 01 pu
- ILSAC GF3 SAE 5W–40 (pour une vidange faire l'appoint)

Dans des cas exeptionnels, vous pouvez utiliser:

- ILSAC GF3 SAE 5W–30 (seulement pour faire l'appoint)

It has always been VOLKSWAGEN'S policy to continuously improve its products. VOLKSWAGEN, therefore, reserves the right to make changes in design and specifications, and to make additions or improvements to its products without incurring any obligation to install them on products previously manufactured.

Text and specifications in this manual are based on information and knowledge available at the time of printing.

All rights reserved. May not be reproduced or translated in whole or in part without the written consent of VOLKSWAGEN AG. Specifications are subject to change without notice

Printed in Germany

Printed on environmentally friendly paper (bleached without chlorine, recyclable).
© 2002 VOLKSWAGEN AG

Volkswagen a toujours eu comme politique l'amélioration continue de ses produits. C'est pourquoi VOLKSWAGEN se réserve le droit de modifier la conception et les spécifications de ses véhicules, de faire des ajouts ou d'améliorer ses produits, sans aucune obligation de sa part d'apporter ces changements aux produits déjà fabriqués.

Le texte et les spécifications de ce manuel reposent sur les renseignements et les connaissances disponibles au moment de l'impression.

Tous droits réservés. Traduction ou reproduction, même partielles, interdites sans l'autorisation écrite de VOLKSWAGEN AG. Les spécifications peuvent être modifiées sans préavis.

Imprimé en Allemagne

Par respect pour l'environnement, ce manuel a été imprimé sur du papier recyclable et blanchi sans chlore.
© 2002 VOLKSWAGEN AG

3.5 Insert to 2003 Passat / Passat W8 | Tips and Advice | Art.-Nr.: 231.552.ERP.94
Nordamerika englisch, Canada französisch | Edition: 10.2002