

Technical Service Bulletin (TSB)
Flash: Electric Power Steering (EPS) Module Updates

REFERENCE:	TSB: 08-146-23 REV. B GROUP: 08 - Electrical	Date:	October 4, 2023	REVISION:	08-146-23 REV. A
VEHICLES AFFECTED:	2022 (WS) Grand Wagoneer/Wagoneer			MARKET APPLICABILITY:	
				☒ NA	☒ MEA
				☒ SA	☒ IAP
				☒ EE	☐ CH
CUSTOMER SYMPTOM:	The customer may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find one or more of the following Diagnostic Trouble Codes (DTCs): • C2217-00 - Electric Power Steering Module Internal. • C221F-00 - ECU Not Initialized. • C1592-00 - Electronic Power Steering Motor Circuit. • C1593-00 - Steering Torque Sensor Circuit. **The following software enhancement is available: • Improved diagnostics for DTC C2217.** The customer may also experience one or more of the following: • Loss of steering assist and illuminated steering light in the Instrument Panel Cluster (IPC). • Lack of power steering assist at vehicle start up with no DTC.				
CAUSE:	EPS Software.				

This bulletin supersedes Technical Service Bulletin (TSB) ****08-146-23 REV. A**, date of issue August 11, 2023**, which should be removed from your files. All revisions are highlighted with ****asterisks**** and include a software enhancement and LOP.

This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 23-176, date of issue June 16, 2023. All applicable RSU VINs have been loaded. To verify this RSU service action is applicable to the vehicle, use VIP or perform a VIN search in DealerCONNECT/Service Library. All repairs are reimbursable within the provisions of warranty. This RSU will expire 18 months after the date of issue.

REPAIR SUMMARY:

This bulletin involves updating the EPS module with the latest available software.

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
18-19-56-9V	Module, Electric Power Steering (EPS) - Inspect (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.
**18-19-56-9X	Module, Electric Power Steering (EPS) - Inspect, Reprogram and EPS Reset (0 - Introduction)	6 - Electrical and Body Systems	0.3 Hrs. **
Failure Code	RF	Required Flash	
	CC	Customer Concern	

The dealer must choose which failure code to use depending on if this is a Rapid Service Update (RSU) or Technical Service Bulletin.

- The “RF” failure code is required for essential module flash/reprogramming and can only be used after confirmation that the VIN is included on the RSU.
- The failure code “RF” (Required Flash) can no longer be used on Technical Service Bulletin flashes. The “RF” failure code must be used on an RSU.
- If the customer’s concern matches the SYMPTOM/CONDITION identified in the Technical Service Bulletin, failure code CC is to be used. When utilizing this failure code, the 3C’s must be supplied.

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in DealerCONNECT/ Service Library, verify all related systems are functioning as designed. If DTCs or symptom conditions, other than the ones listed above are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If a customer’s VIN is listed in VIP or your RSU VIN list, perform the repair. If any vehicle not on the VIN list exhibits any of the symptoms listed above in the customer symptom section, perform the Repair Procedure.

SPECIAL TOOLS/EQUIPMENT:

Description	Ref. No.	Notes
wiTECH or Equivalent	–	–

REPAIR PROCEDURE:

NOTE: Install a battery charger to ensure battery voltage does not drop below 13.2 volts. Do not allow the charging voltage to climb above 13.5 volts during the flash process.

NOTE: If this flash process is interrupted/aborted, the flash should be restarted.

1. Is the vehicle on the RSU VIN list?
 - YES>>> Proceed to [Step 2](#).
 - NO>>> Proceed to [Step 3](#).
2. Is the EPS software at the latest version?
 - YES>>> This bulletin has been completed, use Inspect LOP (18-19-56-9V) to close the active RSU. Normal diagnosis should be performed.
 - NO>>> Proceed to [Step 3](#).
3. Reprogram the EPS module with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application’s “HELP” tab.
4. Wait two minutes after the EPS flash has been completed.
5. Perform an EPS reset in the Guided Diagnostics menu from wiTECH.

6. If the EPS module is not reset, this may cause the Electronic Vehicle Information Center (EVIC) to display a 'Service Active Lane Management' (ALM) message. To perform an EPS reset with wiTECH - Go to the Guided Diagnostics menu --> Select Reset ECU --> Select "EPS" from the list of modules --> Click "Continue" at the bottom of the page then follow the wiTECH prompts.
7. Using wiTECH, perform proxy alignment for EPS module. This routine is available under the 'Guided Diagnostics' tab found on the home, 'Vehicle View' page of wiTECH.
8. Please select "Align specific ECU" option and perform proxy configuration alignment for the EPS module, regardless of wiTECH screen is showing no ECU to align at this time. Please select "Align specific ECU" option and perform proxy configuration alignment for the EPS module, regardless of wiTECH screen is showing no ECU to align at this time. If the proxy configuration alignment is not performed DTC C221F-00 will set.
9. Perform another EPS reset in the Guided Diagnostics menu from wiTECH.
10. If the EPS module is not reset, this may cause the EVIC to display a service the ALM (Active Lane Management) message.
11. To perform an EPS reset in the guided diagnostics menu from wiTECH - Go to the Guided Diagnostics menu --> Select Reset ECU --> Select "EPS" from the list of modules --> Click "Continue" at the bottom of the page then follow the wiTECH prompts.
12. Clear all DTCs that may have been set in any module due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow them to be cleared.

POLICY:

Reimbursable within the provisions of the warranty.

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