

Technical Service Bulletin (TSB)

Flash: Powertrain Control Module (PCM) Updates

REFERENCE:	TSB: 18-081-23 GROUP 18 - Vehicle Performance	Date:	June 30, 2023	REVISION:	–	
VEHICLES AFFECTED:	2021 (GA) Alfa Romeo Giulia This bulletin applies to vehicles equipped with a 2.9L V6 Twin-Turbo PDI Engine W/ESS (Sales Code EEC).			MARKET APPLICABILITY: ☒ NA ☐ SA ☐ EE		☐ MEA ☐ IAP ☐ CH
CUSTOMER SYMPTOM:	Customers 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) have been set: • P043E-00 - EVAP System Leak Detection Reference Orifice Low Flow. • P2C33-00 - Crankcase Pressure Sensor B Circuit Range/Performance. • P2C91 - Crankcase Ventilation System - Hose "B" Disconnected. • P00B2-00 - Radiator Coolant Temperature Sensor Circuit Range-Performance. • P304A-00 - Fuel Rail Pressure Sensor 1 - Out Of Range High. • P304E-00 - Fuel Rail Pressure Sensor 2 - Out Of Range High. • P02D2-00 - Cylinder 4 Fuel Injector "A" Offset Learning At Min Limit. • P0607-00 - Control Module Performance. • P0072-00 - Ambient Air Temperature Sensor Circuit Low. • P0073-00 - Ambient Air Temperature Sensor Circuit High.					
CAUSE:	PCM Software					

REPAIR SUMMARY:

This bulletin involves reprogramming both the Primary (ECM) and Secondary (ECM2) Engine Control Modules (ECMs) also known as Powertrain Control Modules (PCMs) with the latest available software.

NOTE: Additional module flash is required for this update to be effective, the following module is to be updated along with this PCM update:

- Transmission Control Module (TCM).

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
18-19-06-93	Module, Powertrain Control (PCM) - Reprogram (0 - Introduction)	1 - Engine Repair and Performance	0.7 Hrs.
Failure code	CC	Customer Concern	

The dealer must use failure code CC with this Technical Service Bulletin.

- If the customer's concern matches the SYMPTOM identified in the Technical Service Bulletin, failure code CC is to be used.
- When utilizing this failure code, the 3C's (customer's concern, cause and correction) must be provided for processing Technical Service Bulletin flash/reprogramming conditions.

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 one listed above are present, record the issues on the repair order and repair as necessary before proceeding further with this bulletin.

If the customer describes 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: This vehicle has two ECMs (Primary and Secondary). Both must be updated to the latest available software. The Primary ECM must be programmed first then the Secondary ECM2 (both known as PCMs).

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.

NOTE: The TCM must be updated to the latest available software at the conclusion of this repair procedure. Refer to all applicable published technical service bulletins for detailed repair procedures and labor times regarding updating the TCM software.

CAUTION! Failure to update the TCM module following an PCM software update may result in vehicle malfunctions.

1. Reprogram the ECM (Primary) with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.
2. Reprogram the ECM2 (Secondary) with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.
3. Perform the control unit reprogramming routine in wiTECH located in the ECM "Misc. Functions" menu tab.
4. Perform the control unit reprogramming routine in wiTECH located in the ECM2 "Misc. Functions" menu tab.

NOTE: Before performing the next two steps, the key must be in the ON position, engine off and engine temperature must be above 80 °C (176 °F).

5. Perform the oil level sensor replacement in wiTECH located in the ECM2 "Misc. Functions" menu tab.
6. Verify the TCM is also programmed with the latest available software. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the TCM software.
7. Clear any DTCs that may have been set in any modules 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.