STELLANTIS
PARTS & SERVICES

Technical Service Bulletin (TSB)

Flash: Power Inverter Module (PIM) Updates

REFERENCE:	**TSB:** 08-045-24 REV. B **GROUP:** 08 - Electrical	**Date:**	November 13, 2024	**REVISION:**	08-045-24 REV. A
VEHICLES AFFECTED:	**2024 (GC) Alfa Romeo Tonale** **This bulletin applies to vehicles built on and before **May 24, 2024 (MDH 0524XX)** equipped with a 1.3L I4 DOHC Turbo PHEV Engine (Sales Code EYG).**			**MARKET APPLICABILITY:** ☒ NA ☐ MEA ☐ SA ☐ IAP ☐ EE ☐ CH	
CUSTOMER SYMPTOM:	**Customers must experience a Malfunction Indicator Lamp (MIL) illumination and the vehicle mustexhibit/set one or more of the following Diagnostic Trouble Codes (DTC)s:** • **P2601-00 - Electric Coolant Pump Control Circuit Performance Stuck Off. • U0623-00 - Lost Communication With Coolant Pump "A".** • P1DBA - Battery Cooling System Failure (Module, Hybrid Control Processor (HCP)).				
CAUSE:	**Module software updates**				

This bulletin supersedes Technical Service Bulletin (TSB) 08-045-24 REV. A, date of issue April 24, 2024, which should be removed from your files. All revisions are highlighted with **asterisks and include converting to an RSU, an updated build date, new DTCs, new LOPs, New Related LOP, new Warning and Caution notes and new Repair Procedure steps.**

****This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 24-153 date of issue November 13, 2024 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.****

REPAIR SUMMARY:

This bulletin involves reprogramming the Auxiliary Hybrid Control Processor (AHCP) also known as Power Inverter Module (PIM), with the latest available software.

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
**18-19-86-BB	Inspect AuxiliaryHybrid Control Processor/Power Inverter Module(AHCP/PIM) (0 - Introduction)	1 - Engine Repair And Performance	0.2 Hrs.
18-19-86-90	Inspect And Reprogram AuxiliaryHybrid Control Processor/Power Inverter Module(AHCP/PIM) (0 - Introduction)	1 - Engine Repair And Performance	0.6 Hrs.**
Failure Code	CC	Customer Concern	
	RF	Required Flash	

****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.**

**RELATED LOPS:

Labor Operation No:	Labor Description	Skill Category	Labor Time
18-19-87-53	wiTECH Routine to Disable/Enable HV Battery Contactors for Service; Includes 5 Minute Waiting Period (0 - Introduction)	1 - Engine Repair And Performance	0.2 Hrs.**

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 customers 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 symptom listed above in the customer symptom section, perform the Repair Procedure.

SPECIAL TOOLS/EQUIPMENT:

Description	Ref. No.	Notes
wiTECH or Equivalent	–	–

REPAIR PROCEDURE:

WARNING!

- ****Before performing the software reprogramming, it is necessary to make the vehicle safe.**
- **When performing repairs that directly involve or imply possible contact with live high voltage components/systems, the technician must ensure that the power supply of the high-voltage system is disconnected throughout the operation.**
- **Only specifically trained technicians qualified to perform repairs on vehicles with high voltage systems under current national laws/regulations are authorized to work on the vehicle.**
- **Before performing any diagnostic repair work on the vehicle, carefully read and comply with the general instructions for working safely on hybrid/electric vehicles and use suitable general equipment and Personal Protective Equipment (PPE).**

WARNING!
The vehicle must not be connected to a high voltage charger when performing software updates.**

NOTE: Install a battery charger to ensure sufficient battery voltage is provided during the flash process.

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

CAUTION!
****Removal of the Brake Booster Vacuum Pump is necessary for this Repair Procedure. Failure to remove the 30 Amp fuse may result in damage to the Brake Booster Vacuum Pump.****

1. Is the vehicle on the RSU VIN list?
   - YES>>> Proceed to Step 2.
   - NO>>> This bulletin does not apply. Perform further diagnostics.
2. Is DTC P1DBA present?
   - YES >>> Proceed to Step 3.
   - NO >>> This bulletin does not apply. Perform further diagnostics.
3. **Disable the HV Battery Contactors using wiTECH - Go to the Misc Functions tab --> Select Disable HV Battery Contactors --> then follow the wiTECH prompts.
4. Use wiTECH to confirm that the contactors are open and waiting five minutes. If the contactors do not open turn the ignition on, then off. Once successful a note will appear on the wiTECH screen indicating the contactors are open.
5. Remove the 30 Amp fuse for the Brake Booster Vacuum Pump from the Power Distribution Center (PDC) located in the engine compartment.**
6. Reprogram the PIM with the latest available software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.
7. **Install the 30 Amp Brake Booster Vacuum Pump fuse.
8. Enable the HV Battery Contactors using wiTECH - Go to the Misc Functions tab --> Select Enable HV Battery Contactors For Service--> then follow the wiTECH prompts.**
9. 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.