

Technical Service Bulletin (TSB)
Flash: Hybrid Control Processor (HCP) and
Auxiliary Hybrid Control Processor (AHCP) Updates

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|---------------------------|---|--------------|-------------------|--|-----------|
| REFERENCE: | TSB: 08-253-24 GROUP: 18 - Vehicle Performance | Date: | December 12, 2024 | REVISION: | 08-052-22 |
| VEHICLES AFFECTED: | 2021 (RU) Chrysler Pacfica (PHEV) This bulletin applies to vehicles built equipped with a 3.6L V6 PHEV Hybrid Engine (Sales Code EH3). | | | MARKET APPLICABILITY: <input checked="" type="checkbox"/> NA <input type="checkbox"/> MEA <input type="checkbox"/> SA <input type="checkbox"/> IAP <input type="checkbox"/> EE <input type="checkbox"/> CH | |
| CUSTOMER SYMPTOM: | <p>Customers must experience a Malfunction Indicator Lamp (MIL) illumination and the vehicle must exhibit/set one or more of the following Diagnostic Trouble Codes (DTCs):</p> <ul style="list-style-type: none"> ● **P0A78 - Drive Motor A Inverter Performance. ● P0A79 - Drive Motor B Inverter Performance.** ● P0A33 - Drive Motor B Temperature Sensor 1 Circuit High. ● P0A2D - Sensor Power Supply 1 Circuit High ● P215B - Vehicle Speed Output Shaft Speed Correlation. ● P0C4A - Drive Motor A Inverter Over Temperature. ● P0E15 - Hybrid-Ev Battery Pack Coolant Heater A Control Performance. ● P1AFE - MCPB Improper Shut Down. ● P1AF8 - MCPA Control Module Shutdown Performance. ● P0513 - Invalid Skim Key. ● U151A-87 - Hybrid Control Processor Secret Code-Missing Message. <p>Customers may also experience one or more of the following:</p> <ul style="list-style-type: none"> ● **Message on Instrument Cluster stating: "Vehicle shutting down in two minutes".** ● The scheduled charging does not occur on desired schedule. ● Vehicle does not start when pushing ignition switch with no MIL for DTCs P1AFE and P1AF8 (pending DTCs). ● Vehicle does not start when pushing ignition switch with DTCs P0513 and U151-A87 (stored or active). ● Scheduled charging start/end does not align with displayed time (ex: 12:05 pm end time on radio, but charging ends at 12:06 pm). ● Scheduled charging does not start following a power outage. ● Scheduled Cabin Conditioning (SCC) feature will not function properly if they schedule the departure time in between 50 minutes to 480 minutes at extreme cold ambient temps below -24°C (-11 °F). ● "Charge Now" soft button does not always work. ● The vehicle will get a rough engine spin-down, and then "Service Charging System" warning and shutdown if the vehicle is quickly re-cranked after the initial key crank. ● Unable to pass a smog check for certain states that require no DTCs present (stored or active). ● Vehicle shutdown (MIL set) if the acceleration pedal is 100% and the vehicle is on ice. ● Vehicle may not have a successful second remote start if customer happens to request it immediately after first remote start without letting the vehicle sleep while at low High Voltage (HV) battery State of Charge (SOC). ● Vehicle may not achieve propulsion through a cold key crank if the HV battery was not conditioned using thermal periodic wake-up feature at critical cold temperatures around -33 °C (-27 °F) even if the vehicle was left plugged into a charger for an extended period of time. | | | | |

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| | <p>In addition, the following software enhancement is available:</p> <ul style="list-style-type: none"> • Corrections to allow the vehicle to clear the permanent fault codes. |
| CAUSE: | HCP/AHCP module software updates |

This bulletin supersedes Technical Service Bulletin (TSB) 08-052-22, date of issue March 11, 2022, which should be removed from your files. All revisions are highlighted with ****asterisks**** and include new DTCs, new Customer Symptom, new RSU statement, new LOP and new Repair Procedure steps.

****This Technical Service Bulletin (TSB) has also been released as a Rapid Service Update (RSU) 21-062, date of issue May 22, 2021. 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 HCP/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-BC | Processor, Hybrid Control (HCP/AHCP) - Reprogram (0 - Introduction) | 1 - Engine Repair And Performance | 0.3 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 CCis 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 ones 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:

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).

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!

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

1. **Reprogram the HCP and AHCP with the latest software. If issues arise when flashing a module using the wiTECH Diagnostic Application, please submit a ticket to the Helpdesk. The helpdesk can be found within the Help menu.
2. 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.

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