TECHNICAL SERVICE BULLETIN

NUMBER: 08-052-22

GROUP: 08 - Electrical

DATE: March 11, 2022

This bulletin supersedes Technical Service Bulletin (TSB) 08-091-21, date of issue May 22, 2021, which should be removed from your files. All revisions are highlighted with **asterisks and include an updated build date, Diagnostic Trouble Codes (DTCs), symptom/condition and LOP.**

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 Sold and Un-Sold 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.

SUBJECT:

Flash: Hybrid Control Processor (HCP) and Auxiliary Hybrid Control Processor (AHCP) Updates

OVERVIEW:

This bulletin involves reprogramming the HCP and AHCP or also known as Power Inverter Module (PIM) with the latest available software.

MODELS:

2021	(RU)	Chrysler Pacifica (PHEV)

NOTE: This bulletin applies to vehicles within the following markets/countries: North America.

NOTE: This bulletin applies to vehicles built on or before **February 28, 2022 (MDH 0228XX) equipped with a 3.6L V6 PHEV Hybrid Engine (Sales Code EH3).**

SYMPTOM/CONDITION:

Technicians and/or customers may report the vehicle will not pass a state smog check due to permanent fault codes which will not clear. As a result, the vehicles are not eligible to be registered in certain states.

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find one or more of the following DTCs have been set:

- **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.

Customers may also experience more or more of the following:

- **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% 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.

In addition, the following software enhancement is available:

- Corrections to allow the vehicle to clear the permanent fault codes.

NOTE: An additional module flash is required for this update to be effective, the following modules are all to be updated along with this HCP and AHCP update:

- **Powertrain Control Module (PCM).**

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 the symptom/condition or finds permanent fault codes stored, perform the repair.

REPAIR PROCEDURE:

NOTE: The Powertrain Control Module (PCM) 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 PCM software.

WARNING! Failure to update the PCM module following an HCP and AHCP software update may result in vehicle malfunctions.

NOTE: Install a battery charger to maintain a 12 volt system voltage.

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

1. Does the HCP and AHCP have the latest software already installed?
   - YES>>> This bulletin has been completed, use inspect LOP **(18-19-86-AB)** to close the active RSU.
   - NO>>> Proceed to Step 2.
2. Reprogram the HCP and AHCP 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. 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.
4. Verify the PCM are also programmed with the latest available software. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the PCM software.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-19-86-AB	Hybrid Control Processor (HCP) and Auxiliary Hybrid Control Processor (AHCP) - Inspect (0 - Introduction)	1 - Engine Repair and Performance	0.2 Hrs.
18-19-86-AC	Processor, Hybrid Control (HCP/AHCP) - Inspect and Reprogram (0 - Introduction)	1 - Engine Repair and Performance	0.3 Hrs.**

NOTE: The expected completion time for the flash download portion of this procedure is approximately 9 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

FAILURE CODE:

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 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.

RF	Required Flash - RSU
CC	Customer Concern