

**NUMBER:** 08-017-20

**GROUP:** 08 - Electrical

DATE: February 6, 2020

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# SUBJECT:

Flash: Hybrid Control Processor (HCP) Updates

# OVERVIEW:

This bulletin involves updating the HCP with the latest available software.

## MODELS:

2020 (DT) RAM 1500 Pickup

- NOTE: This bulletin applies to vehicles within the following markets/countries: North America.
- NOTE: This bulletin applies to vehicles built on or before November 04, 2019 (MDH 1104XX) equipped with a 5.7L V8 HEMI MDS VVT eTorque Engine (Sales Code EZL).

## SYMPTOM/CONDITION:

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:

- P0731-00 Gear 1 Shift Incorrect Ratio.
- P0733-00 Gear 3 Shift Incorrect Ratio (while operating in 4-Lo range).
- P0734-00 Gear 4 Shift Incorrect Ratio.

The customer may describe the following:

- Bump/clunk felt during 1-2, 2-3, 4-5 or 5-6 upshifts.
- Bump during coast down with medium to heavy acceleration.

The following enhancement is also included in this software update:

- Improvements in prematurely setting the following DTCs: P0731, P0733, P0734.
- Improvements for the regen blending driveability.
- Improved 1-2, 2-3, 4-5 or 5-6 upshifts to eliminate bump/clunk felt during these upshifts.

# 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 the symptom/condition listed above or if the technician finds the DTC, perform the Repair Procedure.

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# **REPAIR PROCEDURE:**

- NOTE: The Powertrain Control Module (PCM) and Transmission Control Module (TCM) must be updated to the latest available software at the conclusion of this repair procedure. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the PCM and TCM software.
- 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.
- CAUTION! The HCP is flash programmable and is sensitive to cold temperature during module flashing. The HCP will need to be flashed when the vehicle is at room temperature. Failure to flash the module at room temperature can cause the flash procedure to not complete which could suggest an unnecessary component replacement.
- 1. Reprogram the HCP with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application' "HELP" tab.
- 2. Clear any DTCs that may have been set in other modules due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow them to be cleared.
- 3. Verify the PCM and TCM are programmed with the latest available software. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the PCM and TCM software.

### POLICY:

Reimbursable within the provisions of the warranty.

### TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-86-9D	Hybrid Control Processor (HCP) - Repro- gram (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.

NOTE: The expected completion time for the flash download portion of this procedure is approximately 5 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

### FAILURE CODE:

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

- If the customer's concern matches the SYMPTOM/CONDITION identified in the 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 Service Bulletin flash/reprogramming conditions.

CC	Customer Concern
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