

 NUMBER:
 08-037-21

 GROUP:
 08 - Electrical

**DATE:** March 16, 2021

This bulletin is supplied as technical information only and is not an authorization for repair. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without written permission of FCA US LLC.

## SUBJECT:

Flash: Hybrid Control Processor (HCP) Updates

# OVERVIEW:

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

### MODELS:

2021 (DT) RAM 1500 Pickup

- NOTE: This bulletin applies to vehicles within the following markets/countries: North America, EMEA, APAC and LATAM.
- NOTE: This bulletin applies to vehicles built on or before January 05, 2021 (MDH 0105XX) equipped with a 3.6L V6 24V VVT eTorque Engine UPG I (Sales Code ERG).

### 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).

- P1A26-00 BPCM Hybrid Battery State Of Charge Performance.
- P0A7E-00 Hybrid/EV Battery Pack Over Temperature.
- U1003-00 ESP Can C Bus Performance.
- P2534-00 Ignition Switch Run/Start Position Circuit Low.
- P0506 Idle Speed Performance Lower Than Expected.
- P0507 Idle Speed Performance Higher Than Expected.

One Trip DTC Changed to a Two Trip DTC.

- P0AC6-00 Hybrid/Ev Battery Temperature Sensor 2 Circuit Performance.
- P0ACB-00 Hybrid/Ev Battery Temperature Sensor 3 Circuit Performance.
- U0121-00 Lost Communication With Anti-Lock Brake System (ABS) Control Module.
- U0140-00 Lost Communication With Body Control Module.
- U1818-00 Lost Communication With ECM/PCM On D-PT Can.
- U0100-00 Lost Communication With ECM/PCM.
- U0102-00 Lost Communication With Transfer Case Control Module / AWD.
- U1003-00 ESP Can C Bus Performance.
- P0562 Battery/System Voltage Low.
- P060C-00 Internal Control Module Main Processor Performance.
- U0415-00 Implausible Data Received From ABS.
- U1850-00 Implausible Data Received From PCM on D-PT.

Two Trip DTC Changed to a One Trip DTC.

- P0E52-00 DC/DC Converter Current Sensor Circuit A Range/Performance.
- P0C39-00 DC/DC Converter Temperature Sensor 1 Performance.
- P0C3E-00 DC/DC Converter Temperature Sensor 2 Performance.
- P0E59-00 DC/DC Converter Temperature Sensor C Circuit Range/Performance.
- P0E32-00 DC/DC Converter Voltage Sensor 1 Performance.
- P0E37-00 DC/DC Converter Voltage Sensor 2 Performance.
- P2C8D-00 DC/DC Converter Temperature Sensor "D" Circuit Range/Performance.
- P2535-00 Ignition Switch Run/Start Position Circuit High.
- P2534-00 Ignition Switch Run/Start Position Circuit Low.

# 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.

# REPAIR PROCEDURE:

- 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.

## POLICY:

Reimbursable within the provisions of the warranty.

# TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-86-9R	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