

Technical Service Bulletin (TSB)

Flash: Hybrid Control Processor (HCP) Updates

REFERENCE:	TSB: 08-145-23 GROUP 08 - Electrical	Date:	June 10, 2023	REVISION:	08-032-19
VEHICLES AFFECTED:	2019 (JL) Jeep Wrangler This bulletin applies to vehicles equipped with a 2.0L I4 DOHC DI Turbo E-torque Engine (Sales Code EC3).			MARKET APPLICABILITY: ☒ NA ☐ SA ☐ EE ☐ MEA ☐ IAP ☐ CH	
CUSTOMER SYMPTOM:	The customer 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): • **P0C01-00 - Drive Motor A Current High. • P0C05-00 - Drive Motor A Phase U-V-W Circuit/Open.** • P0507 - Idle Speed Performance Higher Than Expected. **In addition the customer may notice the following: • Loss of 12V charging (Battery Light) and/or loud noise from MGU motor.**				
CAUSE:	HCP Software.				

This bulletin supersedes Technical Service Bulletin (TSB) 08-032-19, date of issue April 10, 2019, which should be removed from your files. All revisions are highlighted with ****asterisks**** and include additional (DTCs), symptom/condition, repair procedure and LOP.

REPAIR SUMMARY:

This bulletin involves updating the HCP with the latest available software and if necessary replacing the Motor Generator Unit (MGU).

CLAIMS DATA:

Labor Operation No:	Labor Description	Skill Category	Labor Time
**18-19-86-AA	Hybrid Control Processor (HCP) - Reprogram (0 - Introduction)	6 - Electrical and Body Systems	0.2 Hrs.
08-52-02-93	Hybrid Control Processor (HCP) and Motor Generator Unit - Reprogram and Replacement (3 - Highly Skilled)	1 - Engine Repair and Performance	1.2 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 CC is 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.

SPARE PARTS:

Qty	Part No.	Description	Notes
1 (AR)	05185014AG	Unit, Motor Generator	MGU should only be replaced if DTCs P0C01-00 and P0C05-00 or a loud noise in the MGU is present.

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 Inspect Procedure.

1. **Are DTCs P0C01-00 and/or P0C05-00 present and/or a loss of 12V charging and/or loud noise from MGU motor?
 - YES>>> Proceed to [Step 1](#) of the Repair Procedure.
 - NO>>> Proceed to [Step 2](#) of the Repair Procedure.

SPECIAL TOOLS/EQUIPMENT:

Description	Ref. No.	Notes
wiTECH or Equivalent	—	—

REPAIR PROCEDURE:

NOTE: The Powertrain Control Module (PCM) and Anti-lock Brake System module (ABS) 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 ABS 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.

NOTE: 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. **Replace the MGU. Refer to the detailed service procedures available in DealerCONNECT> Service Library under: Service Info> 08 - Electrical / 8F - Engine Systems / eTorque System / Unit, Motor Generator (MGU) / Removal and Installation.

NOTE: After the MGU is replaced the HCP must still be updated with the latest available software. Proceed to [Step 2](#).**

2. 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.
3. Cycle the ignition key off then on.
4. 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.
5. Verify the PCM and ABS 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 ABS software.

POLICY:

Reimbursable within the provisions of the warranty.

