



NUMBER: 18-042-21

GROUP: 18 - Vehicle Performance

DATE: May 5, 2021

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This bulletin supersedes Technical Service Bulletins (TSBs) 18-088-17, date of issue October 05, 2017 and 18-027-18, date of issue March 27, 2018, which should be removed from your files. All revisions are highlighted with **asterisks**** and include additional symptom/condition and LOP.**

SUBJECT:

Flash: Powertrain Control Module (PCM) Updates

OVERVIEW:

This bulletin involves reprogramming the Powertrain Control Module (PCM) with the latest available software.

MODELS:

2015 - 2016	(BU)	Jeep Renegade
2016	(FB)	FIAT 500X

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

NOTE: This bulletin applies to vehicles equipped with a 1.4L I4 MultiAir Turbo Engine (Sales Code EAM).

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:

- P1D7F-00 - ETC Self-Learning Failure.
- P1523-00 - VVA Low Oil Pressure.
- P1524-00 - Oil Pressure Out Of Range - Camshaft Advance/Retard Disabled.
- P0141 - O2 Sensor 1/2 Heater Performance.

Some customers may experience one or more of the following conditions:

- ****After a short trip and shutting the engine off for 5-10 minutes, vehicle exhibits a long crank/ start condition (2016 BU EMEA only).****
- Cruise control will not set at 32 kph (20 mph).
- Engine cranking times out after five seconds.
- Cruise control will not engage at highway speeds and when in 6th gear.
- A ticking noise coming from the top of the engine area. The ticking noise is heard particularly at idle **(EMEA and APAC only)**.

The following enhancements are also included:

- Improved purge sensor performance.
- Updated fuel strategy to inhibit spark plug fouling.

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in DealerCONNECT/Service Library, verify all related vehicle 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 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.

NOTE: The Transmission Control Module (TCM) must be updated to the latest available software at the conclusion of the repair procedure. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the TCM software.

1. Reprogram the PCM with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.

NOTE: Follow all screen prompts that apply to the vehicle.

2. Is the vehicle equipped with a manual transmission?
 - YES>>> Fully depress the clutch pedal and then release it. Press "OK" to continue.
 - NO>>> Press "OK" to continue.
3. Is the vehicle equipped with cruise control?
 - YES>>> Depress cruise on/off switch until the cruise indicator in the cluster illuminates then press "OK" to continue.
 - NO>>> Press "OK" to continue.
4. Clear all DTCs that may have been set in any module 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
18-19-06-Z3	Module, Powertrain Control (PCM) - 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 6 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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