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GROUP: Transmission and Transfer Case

DATE: September 01, 2016

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 21-005-15 REV. A, DATED MAY 07, 2015, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS**** AND INCLUDE ADDITIONAL SYMPTOMS/CONDITIONS.**

NOTE: **WK (Jeep Grand Cherokee) SYMPTOMS/CONDITIONS** that are related to this Bulletin are included within the RC-S27-16 Recall. Please verify that the Powertrain Control Module (PCM) part number is up to date by following the S27 service action.********

FOR HELP WITH USING wiTECH FOR ECU FLASH REPROGRAMMING, CLICK ON THE APPLICATION'S "HELP" TAB.

THE wiTECH SOFTWARE IS REQUIRED TO BE AT THE LATEST RELEASE BEFORE PERFORMING THIS PROCEDURE.

SUBJECT:

Flash: Transmission Shift And Drivability Enhancements

OVERVIEW:

This bulletin involves reprogramming the PCM and Transmission Control Module (TCM) with new software.

NOTE: Both the PCM and TCM must be up to date for these changes to be effective.

MODELS:

2014 (WK) Jeep Grand Cherokee

NOTE: This bulletin applies to vehicles equipped with 6.4L V8 SRT Hemi MDS Engine (Sales Code ESG).

SYMPTOM/CONDITION:

Customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find that the following Diagnostic Trouble Codes (DTCs) have been set:

- **P1115 - General Temperature Rationality.
- P0441 - EVAP Purge System Performance.
- P0456 - EVAP System Small Leak.
- P030X - Cylinder x Misfire Detection.
- P0335 - Crankshaft Position Sensor Circuit.
- P0122 - Throttle Position Sensor 1 Circuit Low.
- P0123 - Throttle Position Sensor 1 Circuit High.
- P0222 - Throttle Position Sensor 2 Circuit Low.
- P0223 - Throttle Position Sensor 2 Circuit High.
- P2299 - Brake Pedal Position/Accelerator Pedal Position Incompatible.
- P2610 - PCM Internal Engine Off Timer Performance.**
- P0171 - Fuel System 1/1 Lean.
- P0174 - Fuel System 2/1 Lean.

The customer may also notice the following conditions:

- False detonation (spark knock) detected during a Wide Open Throttle (WOT) (**North American Market Only**).
- Will not reach max speed (over 256 kph) during freeway driving (**International Market Only**).
- Less than desired upshift quality in Normal or Sport mode.
- Shift inhibit while transitioning in/out of MDS mode.
- Less than desired downshift quality while coasting with the brake released or while passing.
- Vehicle will not display 2nd gear when entering Manual mode from Snow or ECO mode.
- High speed gear hunting (shifting back/forth repeatedly between two gears).
- Will not exceed 32 kph (20 mph) in reverse.
- Less than desired 2nd gear launch quality while in ECO mode.
- Unable to launch in 3rd gear in Snow mode in higher altitudes.
- Less than desired shift quality during accelerator pedal tip in/out acceleration during torque converter clutch operation.

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all related systems are functioning as designed. If DTCs or symptom conditions, other than the ones listed 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: Both the PCM and TCM must be up to date for these changes to be effective. The flash files for both PCM and TCM are combined into one flash file and are initiated by flashing the PCM. If the user attempts to start the flash process at the TCM, the wiTECH Diagnostic Scan Tool will instruct the user to start the flash process through the PCM.

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.

1. Reprogram both the PCM and the TCM with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.
2. Place the ignition in the OFF position for 10 seconds and turn back ON.
3. 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.

CAUTION: Do not clear the shift adaptives in the TCM's memory. This action may cause the transmission to not shift smoothly until the adaptives are re-learned.

4. Perform a Transmission Shift Adaptation Drive Learn. Refer to all applicable, published, service bulletins regarding the 8 Speed Transmission Shift Adaptation, Drive Learn Procedure for detailed repair procedures and labor times.

POLICY:

Information Only.