

**NUMBER:** 21-005-15 REV. A

**GROUP:** Transmission and

**Transfer Case** 

**DATE:** May 07, 2015

THIS BULLETIN SUPERSEDES SERVICE BULLETIN 21-005-15, DATED JANUARY 29, 2015, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE ADDITIONAL SYMPTOM/CONDITIONS.

HELP USING THE WITECH DIAGNOSTIC APPLICATION FOR FLASHING AN ECU IS AVAILABLE BY SELECTING "HELP" THEN "HELP CONTENTS" AT THE TOP OF THE WITECH DIAGNOSTIC APPLICATION WINDOW.

THE WITECH SOFTWARE LEVEL MUST BE AT \*\*15.04\*\* OR HIGHER TO PERFORM THIS PROCEDURE.

#### SUBJECT:

Flash: Transmission Shift And Drivability Enhancements

#### **OVERVIEW:**

This bulletin involves reprogramming the Powertrain Control Module (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/CONDITIONS:

\*\*Customers may experience the Malfunction Indicator Lamp (MIL) on and upon further inspection the technician may find the following Diagnostic Trouble Codes (DTCs):\*\*

- \*\*P0171 Fuel System 1/1 LEAN\*\*
- \*\*P0174 Fuel System 2/1 LEAN\*\*

## ADDITIONAL SYMPTOM/CONDITIONS:

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

- \*\*False detonation (spark knock) detected during a Wide Open Throttle (WOT).(North American Market)\*\*
- 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 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 vehicle systems are functioning as designed. If DTCs or symptom conditions, other then the ones listed above are present, record them 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.

- Reprogram both the PCM and the TCM with the latest software. Help using the wiTECH Diagnostic Application for flashing control modules is available through the wiTECH Diagnostic Application. For instructions select the "HELP" tab on upper portion of the wiTECH window, then "HELP CONTENTS". This will open the Welcome to wiTECH Help screen where help topics can be selected.
- 2. Cycle the key off for 10 seconds and turn back on.
- 3. Clear any DTCs that may have been set in any modules due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow them to be cleared.

# NOTE: This software update will clear the transmission shift adaptive requiring a drive learn.

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:

Reimbursable within the provisions of the warranty.

## TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-19-05-AX**	Module, Transmission Control and Powertrain Control - Reprogram (0 - Introduction)	2 - Automatic Transmission	0.3 Hrs.

NOTE: The expected completion time for the flash download portion of this procedure is approximately 8 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

#### **FAILURE CODE:**

The dealer must choose which failure code to use. If the customer came in with an issue and the dealer found updated software to correct that issue, use failure code CC, for all other use failure code RF.

- If the customer's concern matches the SYMPTOM/CONDITION identified in the Service Bulletin, than failure code CC is to be used.
- If an available flash is completed while addressing a different customer concern, failure code RF is to be used.

CC	Customer Concern
RF	Routine Flash