

NUMBER: 21-011-13 REV. A

**GROUP:** Transmission and

Transfer Case

**DATE:** August 27, 2014

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THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 21-011-13, DATED NOVEMBER 09, 2013, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDES UPDATED SYMPTOMS AND A NEW LABOR OP.

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 RELEASE \*\*15.01\*\* OR HIGHER TO PERFORM THIS PROCEDURE.

## SUBJECT:

Flash: Transmission Shift Enhancements

## **OVERVIEW:**

This bulletin involves flash reprogramming of the Transmission Control Module (TCM) with new software.

#### MODELS:

2014

(WK)

**Grand Cherokee** 

NOTE: This bulletin applies to vehicles built on or before July 01, 2014 (MDH 0701XX) equipped with the 3.0L engine (Sales Code EXF) and the 8HP70 Automatic Transmission (Sales Codes DFD).

#### SYMPTOM/CONDITION:

- \*\* 3-2, 2-1 Shift bump on deceleration. \*\*
- \*\* Shift quality during hard acceleration. \*\*
- \*\* Excessive shifts during cruise control operation. \*\*
- \*\* Intermittent delay shift condition. \*\*
- \*\* Engine braking improvements during downhill descent. \*\*
- \*\* Manual gear selection improvements at higher altitudes. \*\*
- \*\* Drivability improvements in 4 low. \*\*
- \*\* Hesitation improvements. \*\*
- Inconsistent and/or harsh 1-2, 2-3, 3-4, 4-5 upshifts at moderate throttle.
- Inconsistent and/or harsh lift-foot upshifts.
- Inconsistent and/or harsh coasting 3-2, 2-1 downshifts in Hi or Lo range.
- Ratio fault detection during 1-2 upshift or 8-7 downshift.

- Grade hunting (repeated shifting while ascending a grade).
- 8-7-8 shift busyness when approaching max vehicle speed.
- Undesired gear selection at high altitude.
- Undesired gear selection when driving downhill (not enough powertrain braking).
- Time to exit TIP (manual/paddle shift mode) takes too long.
- Unintended downshifts driving at certain speeds.
- 4-3 coasting downshift may cause excessive engine noise during engine braking.
- Shift hanging when vehicle is started cold.
- Undesired shift toggling in Manual/Paddle Shift mode.
- Lo range selec-speed control 1-2 shift busyness.

## **DIAGNOSIS:**

Using a Scan Tool (wiTECH™) with the appropriate Diagnostic Procedures available in TechCONNECT, verify no Diagnostic Trouble Codes (DTCs) are set. If DTCs are present record them on the repair order and repair as necessary before proceeding further with this bulletin.

If any of the above conditions are present, 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.

- 1. Using the wiTECH, reprogram the TCM with the latest software. 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.
- 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 the tech to clear them.

NOTE: 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.

# **POLICY:**

Reimbursable within the provisions of the warranty.

# TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
	Module, Transmission Control (TCM) - Reflash - (1 - Semi-Skilled)	2- Automatic Transmission	0.2 Hrs.

NOTE: The expected completion time for the flash download is approximately 10 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

# **FAILURE CODE:**

FM	Flash Module	