

**NUMBER:** 21-018-14 REV. B

**GROUP:** Transmission and

**Transfer Case** 

DATE: December 09, 2014

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 21-018-14 REV. A, DATED JULY 09, 2014, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* ARE BEING USED AND INCLUDES REMOVAL OF VEHICLES EQUIPPED WITH THE 2.4L ENGINE (SALES CODE ED6).

THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 14-040. ALL APPLICABLE SOLD AND UN-SOLD RRT VIN'S HAVE BEEN LOADED. TO VERIFY THAT THIS RRT SERVICE ACTION IS APPLICABLE TO THE VEHICLE, USE VIP OR PERFORM A VIN SEARCH IN TECHCONNECT. ALL REPAIRS ARE REIMBURSABLE WITHIN THE PROVISIONS OF WARRANTY.

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 \*\*15.02\*\* OR HIGHER TO PERFORM THIS PROCEDURE.

# SUBJECT:

Flash: Transmission Shift and Diagnostic Enhancements

### **OVERVIEW:**

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

NOTE: Vehicles that are being updated from TCM software p/n 682235\$\$AN or 682354\$\$AN (\$\$ are wild cards for any number) will not require the 9 Speed Adaptation Drive Learn Procedure to be performed. However, vehicles being updated from any other software part number will require the Adaptation Drive Learn Procedure to be performed. Refer to all applicable published service bulletins regarding the 9 Speed Adaptation Drive Learn procedure for detailed repair procedures and labor times.

# **MODELS:**

2014 KL Cherokee

NOTE: \*\*This bulletin applies to vehicles built on or before May 5, 2014 (MDH 0505XX) equipped with a 3.2L engine (Sales Code EHB) and the 948TE 9-Speed transmission (sales code DFJ or DFH).\*\*

# SYMPTOM/CONDITION:

Diagnostic Trouble Code (DTC) robustness improvements are included in this software release. These improvements apply to the following DTCs:

- P072F- Stuck in Gear 4
- P076F- Gear 7 shift incorrect ratio
- P0810- Clutch position control error
- P1CC9- Unable to engage gear
- P0734- Gear 4 shift incorrect ratio
- P061B- Internal control module torque calculation performance

NOTE: Diagnostic Trouble Code (DTC) robustness improvements were included in TCM software p/n 682235\$\$AN or 682354\$\$AN (\$\$ are wild cards for any number) only. Standard diagnostic trouble shooting procedures should be followed for any vehicle equipped with TCM software p/n 682235\$\$AN or 682354\$\$AN exhibiting any of the previous codes.

Transmission shift improvements are included in this software release. These improvements apply to the following:

- Garage shifts (Park to Reverse or Drive).
- Coastdown shift quality.
- Shift quality.
- Throttle response and performance feel.
- Management and prevention of busy shifting.
- Lift foot/change mind shift quality.

#### **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™, record the current TCM software number.
- Reprogram the TCM with the latest software. Detailed instructions for flashing control
  modules using the wiTECH Diagnostic Application are available by selecting the
  "HELP" tab on the upper portion of the wiTECH window, then "HELP CONTENTS."
  This will open the Welcome to wiTECH Help screen where help topics can be
  selected.
- 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 the tech to clear them.
- 4. Was the TCM software part number recorded in Step 1 p/n 682235\$\$AN or 682354\$\$AN (\$\$ refers to any number in these two locations)?
  - a. YES>>>Repair is complete.
  - b. NO>>>Proceed to Step #5.

NOTE: In the event that the TCM part number was not recorded (as stated in Step 1), refer to the Clutch Filling Counter and Fast Filling Counter information in wiTECH. If all of the counters are 0 (zero), the 9 Speed Adaptation Drive Learn must be performed.

5. Perform the 9 Speed Adaptation Drive Learn Procedure. Refer to all applicable published service bulletins regarding the 9 Speed 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
18-19-05-9Z	Module, Transmission Control (TCM) - Reflash - (1 - Semi-Skilled)	2- Automatic Transmission	0.2 Hrs.

NOTE: The expected completion time for the flash download portion of this procedure is approximately 5 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

FM	Flash Module	
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NOTE: When performing the Adaptation Drive Learn, use LOP 08190595 OR 08190596 depending on the results of the Subjective Measurement evaluation. In addition, a porter is not required to perform the Shift Quality Subjective Measurement and is not allowed with LOP 08-19-05-95.

Related Operation No:	Description	Skill Category	Amount
08-19-05-95	, ,	2- Automatic Transmission	0.4 Hrs.

08-19-05-96	Adaptation Drive Learn - Determining Shift Quality Subjective Measurement and Learn - B, C, and D Clutches (2 -Skilled)	2- Automatic Transmission	0.9 Hrs.
95-21-44-02	Adaptation Drive Learn - Determining Shift Quality Subjective Measurement - Porters Time Flat Fee Allowance		\$20.00
95-14-01-02	Adaptation Drive Learn -Fuel Allowance		\$8.00
Optional Operation No:			
08-19-05-97	Adaptation Drive Learn - E Clutch, Determining Shift Quality Subjective Measurement (2 -Skilled)	2- Automatic Transmission	0.4 Hrs.