



**NUMBER:** 21-003-14 REV. A

**GROUP:** Transmission and Transfer Case

**DATE:** December 05, 2014

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**THIS BULLETIN SUPERSEDES SERVICE BULLETINS 21-031-14, DATED SEPTEMBER 26, 2014, 21-003-14, DATED FEBRUARY 14, 2014, AND 21-016-14, DATED APRIL 04, 2014, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **\*\*ASTERISKS\*\*** AND INCLUDE ADDITIONAL SOFTWARE ENHANCEMENTS AND AN ADDITIONAL VEHICLE LINE.**

**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: 845RE Transmission Shift Enhancements, 2-1 Downshift

**OVERVIEW:**

This bulletin involves reprogramming the Transmission Control Module (TCM) with the latest available software.

**MODELS:**

2014	(LD)	Dodge Charger
2014	(LX)	Chrysler 300
<b>**2014</b>	<b>(WK)</b>	<b>Jeep Grand Cherokee**</b>
2014	(WD)	Dodge Durango
2014	(DS)	Ram 1500 Pickup

**NOTE:** This bulletin applies to vehicles equipped with the following:

- **LX vehicles equipped with a 3.6L engine (Sales Code ERB) or 3.0L gas engine (sales code EHD) and equipped with an 845RE Automatic Transmission (Sales Code DFL).**
- **LD vehicles equipped with a 3.6L engine (Sales Code ERB) and equipped with an 845RE Automatic Transmission (Sales Code DFL).**
- **WK vehicles equipped with a 3.6L engine (Sales Code ERB) or 3.0L gas engine (sales code EHD) and equipped with an 845RE Automatic Transmission (Sales Code DFL).**
- **WD vehicles equipped with a 3.6L engine (Sales Code ERB) and equipped with an 845RE Automatic Transmission (Sales Code DFL).**
- **DS vehicles equipped with a 3.6L engine (Sales Code ERB) and equipped with an 845RE Automatic Transmission (Sales Code DFL).**

**SYMPTOM/CONDITION:**

The following TCM calibration improvements are available for vehicles equipped an 845RE Automatic Transmission (Sales Code DFL). These updates are listed by vehicle and engine.

**LD and LX vehicles equipped with a 3.6L engine (Sales Code ERB)**

- **\*\*Software to correct a harsh bump feel during a 2-1 downshift.\*\***
- **Software to enable the scan tool based transmission "Quick Learn."**
- **Software to address customer concerns of Malfunction Indicator Lamp (MIL) illumination and Diagnostic Trouble Code (DTC) P215C Output Shaft Speed, Wheel Speed Correlation setting on AWD equipped vehicles.**

**\*\*LX and WK vehicles equipped with a 3.0L engine (Sales Code EHD)**

- **Software to correct a harsh bump feel during a 2-1 downshift.\*\***

**\*\*WK vehicles equipped with a 3.6L engine (Sales Code ERB)**

- **Software to correct a harsh bump feel during a 2-1 downshift.\*\***

**DS vehicles equipped with 3.6L engine (Sales Code ERB)**

- **\*\*Software to correct a harsh bump feel during a 2-1 downshift.\*\***
- **Software to address a customer's concern of less than desired shift quality in Four Wheel Drive (4wd) Low mode during medium to heavy acceleration.**
- **Software to address customer concerns of Malfunction Indicator Lamp (MIL) illumination and Diagnostic Trouble Code (DTC) P215C Output Shaft Speed, Wheel Speed Correlation setting on AWD equipped vehicles.**
- **Software improvements to powertrain braking in Tow/Haul mode.**
- **Software to improve downshift response from a medium to heavy pedal acceleration.**
- **Driveability improvements at higher altitudes.**
- **Software to improve acceleration during cruise control operation**
- **Software to correct a condition where DTC U11C3 - ESM Lost Communication With TCM On D-Pt CAN may have been displayed instead of U11E3 - TCM Lost communication with ESM On D-PT CAN.**

**\*WD vehicles equipped with a 3.6L engine (Sales Code ERB)**

- **\*\*Software to correct a harsh bump feel during a 2-1 downshift.\*\***
- **Software to improve driveability and shift performance while in ECO mode.**



**DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available, verify all vehicle systems are functioning correctly. If any DTCs other than 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: 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 the TCM with the latest available 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.
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.
3. Turn the ignition off, disconnect wiTECH and let the modules go to sleep.
4. Start the engine and monitor the transmission temperature on the EVIC.
5. With the vehicle located in a suitable area, perform the following steps to help enable the transmission to quickly warm up to minimum of 55°C (131°F).
  - a. Apply the service brake.
  - b. Shift Transmission from Park to Reverse.
  - c. Shift Transmission from Reverse to Drive.
  - d. Accelerate the vehicle to minimum of 45 mph to allow the transmission to cycle through each gear.
  - e. Drive the vehicle until the transmission temperature reaches 55°C (131°F).
6. Reconnect wiTECH to the vehicle.
7. Check for TCM DTCs that may have reset.

**NOTE: Do not perform the Quick Learn procedure if TCM DTCs are present. Repair transmission as required per the DTC flow chart.**

8. Select the TCM module in wiTECH.
9. Select the "Misc Functions" tab.
10. Select "Reset Adaptive Values" and follow the on-screen instructions to reset the clutch adaptive values.
11. Next select the "Quick Learn" procedure, and follow the on-screen instructions to learn new clutch adaptive values. The Quick Learn procedure will take 2-5 minutes to complete.

**POLICY:**

Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

Labor Operation No:	Description	Skill Category	Amount
18-19-05-A1	Module, Transmission Control (TCM) - Reprogram w/845RE Transmission Quick Learn Procedure. (1 - Semi-Skilled)	2 - Automatic Transmission	0.5 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.

**FAILURE CODE:**

ZZ	Service Action
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