

**NUMBER:** 21-034-14 REV. C

**GROUP:** Transmission and

Transfer Case

**DATE:** November 26, 2014

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 21-034-14 REV. B., DATED NOVEMBER 11, 2014 WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE MARKED WITH \*\*ASTERISKS\*\* AND IS BEING REVISED TO ADD ADDITIONAL ENGINE SALES CODES AND NEW LOPS.

THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 14-094. 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: 948TE 9 Speed Shift Enhancements And Quick Learn Enable

#### **OVERVIEW:**

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

## **MODELS:**

2015 (KL) Jeep Cherokee 2015 (UF) Chrysler 200

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

- KL vehicles equipped with a 2.4L engine (sales code ED6 or \*\*ED8\*\*) or 3.2L engine (sales code EHB) and equipped with the 948TE 9 speed transmission (sales code DFH or DFJ) built on or before October 21, 2014 (MDH 1021XX).
- UF vehicles equipped with a 2.4L engine (sales code ED6, \*\*ED8, EDD, or EDE) or 3.6L engine (sales code ERB)\*\* and equipped with the 948TE 9 speed transmission (sales code DFH) built on or before \*\*November 11, 2014 (MDH 1111XX)\*\*.

#### SYMPTOM/CONDITION:

The following TCM calibration update is being released to enable the new wiTECH based "Transmission Quick Learn" procedure to be performed anytime the transmission adaptation memory cells are cleared or when addressing customer concerns of poor shift quality. It is also being released to improve transmission downshift response time during normal driving.

## **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 other conditions are present, record them on the repair order and repair as necessary before proceeding further with this bulletin.

If a customer's VIN is listed in VIP or your RRT VIN list, perform the repair. For all other customers that describe the symptom/condition or if the technician finds the listed DTC, perform the Repair Procedure.

## REPAIR PROCEDURE:

CAUTION: The Powertrain Control Module must be updated to the latest available software to allow the quick learn procedure to function. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the PCM software.

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 wiTECH, check the TCM calibration and see if it is up to date. Does the TCM software need to be updated?
  - a. Yes>>> Proceed to Step #2.
  - b. No>>> This TSB does not apply. Use labor op \*\*18-19-05-V9\*\* to close out the RRT portion of this service bulletin.
- 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.

## NOTE: After reprogramming, the following must be performed.

- 3. Using wiTECH, Perform the TCM "VIN Verification" routine Located in the TCM "Misc Functions" menu and follow the on-screen prompts.
- 4. Using wiTECH, perform a "PROXI Configuration Alignment" routine located in the "Vehicle Preparations" tab on the main vehicle view screen .
- 5. Turn the ignition off and disconnect wiTECH for 1 minute.
- 6. Turn the ignition back on and reconnect wiTECH.
- 7. From the vehicle view screen, select "PROXI Configuration Alignment" routine in the "Vehicle Preparations" tab and verify all modules are properly aligned.

8. 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. Proceed to Step #9.

CAUTION: The Powertrain Control Module must be updated to the latest available software to allow the quick learn procedure to function. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the PCM software.

# NOTE: This flash will clear the transmission adaptive values which requires the "Transmission Quick Learn" procedure to be performed.

- 9. Start the engine and monitor the transmission temperature on the Electronic Vehicle Information Center (EVIC).
- 10. With the vehicle located in a suitable area, allow the transmission to warm up to minimum of 60°C (140°F) by performing the following steps:
  - 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. Continue to drive the vehicle until the transmission temperature reaches 60°C (140°F).

NOTE: If the vehicle is equipped with the start/stop feature (sales code XBU) it must be disabled prior to performing this procedure. To disable, press the on/off switch located on the center switch bank near the HVAC controls.

- 11. Connect wiTECH diagnostic scan too to the vehicle.
- 12. Check for active TCM DTCs (Diagnostic Trouble Codes). Do not perform the Quick Learn procedure if TCM DTCs are present. Repair transmission as required.
- 13. Select the TCM module in wiTECH.
- 14. Select the "Misc Functions" tab.

NOTE: If the "Quick Learn" option does not appear on wiTECH and both the TCM and PCM were just updated, restart the wiTECH application which should now be populated with the "Quick Learn" option.

- 15. Select the "Quick Learn" procedure, and follow the on-screen instructions to reset and learn the clutch adaptive values.
- Shift the transmission into Park and shut off the engine. The procedure is now complete.

## **POLICY:**

Reimbursable within the provisions of the warranty.

# TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-19-05-V9**	Module, Transmission Control- (TCM), Inspect Only (1 - Semi Skilled)	2 - Automatic Transmission	0.2 Hrs.
**18-19-05-W9**	Module, Transmission Control- (TCM) - Reprogram and perform Transmission Quick Learn (1 - Semi Skilled)	2 - Automatic Transmission	0.7 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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