

**NUMBER:** 21-053-15**GROUP:** Transmission and Transfer Case**DATE:** October 07, 2015

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 21-035-14 REV.A, DATED NOVEMBER 1, 2014 WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS**** AND IS BEING REVISED TO ADD THE BU, VM AND FB WITH 1.4L, 2.0L and 2.4L ENGINE APPLICATION.**

THE wITECH SOFTWARE IS REQUIRED TO BE AT THE LATEST RELEASE BEFORE PERFORMING THIS PROCEDURE.

SUBJECT:

948TE 9 Speed Transmission Quick Learn Procedure

OVERVIEW:

This bulletin provides information on how to perform the new scan tool based transmission Quick Learn procedure. This procedure is required after certain transmission repairs or to improve a customer's concern of poor shift quality.

MODELS:

2015	(KL)	**Jeep** Cherokee
2015	(UF)	**Chrysler** 200
**2015	(BU)	Jeep Renegade
2015	(VM)	Ram ProMaster City
2016	(FB)	Fiat 500X **

NOTE: This bulletin applies to the following vehicles:

- **KL vehicles equipped with either a 3.2L engine (sales code EHB) or 2.4L engine (sales code ED6) and equipped with the 948TE 9 speed transmission (sales code DFH) or (sales code DFJ).**
- **UF vehicles equipped with either a 2.4L engine (sales code ED6) or 3.6L engine (sales code ERB) and equipped with the 948TE 9 speed transmission (sales code DFH).**
- ****BU vehicles equipped with either a 1.4L engine (sales code EAM), 2.0L engine (sales code EBT) or 2.4L engine (sales code ED6) and equipped with the 948TE 9 speed transmission (sales code DFH).**
- **VM vehicles equipped with a 2.4L engine (sales code ED6) and equipped with the 948TE 9 speed transmission (sales code DFH).**
- **FB vehicles equipped with either a 1.4L engine (sales code EAM), 2.0L engine (sales code EBT) or 2.4L engine (sales code ED6) and equipped with the 948TE 9 speed transmission (sales code DFH).****

SYMPTOM/CONDITION:

Customers may indicate that their transmission shift quality may be erratic.

DIAGNOSIS:

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available, verify all vehicle systems are functioning correctly. If any DTCs are present, record them on the repair order and repair as necessary before proceeding further with this bulletin.

If the above symptom/condition is present or if the transmission or valve body has been repaired or replaced and adaptation memory cells were cleared, perform the Repair Procedure

SPECIAL TOOLS/EQUIPMENT REQUIRED:

NPN	wiTECH VCI Pod Kit
NPN	Laptop

REPAIR PROCEDURE:

NOTE: A new software patch was released to wiTECH software version 15.02 which will update the scan tool to 15.02.21 patch 2. The scan tool must be updated to this software version or higher in order to perform the transmission Quick Learn.

NOTE: Transmission Quick Learn must be performed anytime the transmission is repaired/replaced and/or the Valve Body or TCU assembly is replaced. It must also be performed when the adaptation memory cells are cleared with the wiTECH diagnostic scan tool. Transmission Quick Learn is also one of the first steps to improve a transmission shift quality concern on these vehicles.

NOTE: If the Valve Body or TCU assembly is replaced, the VB/Solenoid Learn procedure must be run.

1. Are there any active DTCs in the Transmission Control Module (TCM's) memory?
 - a. YES>>> Using current published service information, diagnose and repair the conditions that set the DTC(s) before proceeding with this bulletin.
 - b. NO>>> Proceed to [Step #2](#).

NOTE: The Powertrain Control Module (PCM) and Transmission Control Module (TCM) calibration files must be at the latest software level to perform this procedure.

NOTE: All labor times and procedures for reprogramming of TCM and PCM covered under other service actions

2. Using wiTECH, check the TCM calibration and see if it is up to date. Are there any software updates available for the TCM?

- a. Yes>>> Flash the TCM to the latest software level available referring to all currently published applicable TCM flash Service Bulletins available in Service Information for detailed repair procedures and labor times. Proceed to [Step #3](#) .
- b. No>>> Proceed to [Step #3](#).
- 3. Using wiTECH, check the PCM calibration and see if it is up to date. Are there any software updates available for the PCM?
 - a. Yes>>> Flash the PCM to the latest software level available. Refer to all currently published applicable PCM flash Service Bulletins available in Service Information for detailed repair procedures and labor times. Proceed to [Step #4](#).
 - b. No>>> Proceed to [Step #4](#).
- 4. Start the engine and monitor the transmission temperature on the Electronic Vehicle Information Center (EVIC).
- 5. 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. 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.

- 6. Connect wiTECH diagnostic scan tool to the vehicle.
- 7. Check for TCM DTC (Diagnostic Trouble Codes). Do not perform the Quick Learn procedure if TCM DTCs are present. Repair transmission as required.
- 8. Select the TCM module in wiTECH.
- 9. 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.

- 10. Select the “Quick Learn” procedure, and follow the on-screen instructions to reset and learn the clutch adaptive values.
- 11. 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-S9	Perform 9-Spd 948TE Transmission Quick Learn Procedure (1 - Semi Skilled)	2- Automatic Transmission	0.4 Hrs.

FAILURE CODE:

ZZ	Service Action
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