



NUMBER: 21-001-15

GROUP: Transmission and Transfer Case

DATE: January 10, 2015

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THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 15-003. 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 Transmission C-Clutch Snap Ring Durability

OVERVIEW:

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

MODELS:

2014-2015	(KL)	Jeep Cherokee
2015	(UF)	Chrysler 200

NOTE: This bulletin applies to the following vehicles equipped with a 948TE 9 speed transmission (sales code DFH or DFJ) and the following engines:

- **KL vehicles built on or after June 26, 2013 (MDH 0626XX) and on or before December 1, 2014 (MDH 1201XX) equipped with a 2.4L engine (sales code ED6 or ED8) or 3.2L engine (sales code EHB).**
- **UF vehicles built on or after May 9, 2014 (MDH 0509XX) and on or before October 23, 2014 (MDH 1023XX) equipped with a 2.4L engine (sales code ED6 or ED8).**

SYMPTOM/CONDITION:

The following software enhancement, for the 948TE 9-Speed transmission, is being released to change clutch application characteristics to prevent the C-Clutch snap from dislodging.

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.

REPAIR PROCEDURE:

CAUTION: Both the PCM and TCM software must be updated during this procedure. Failure to do so may result in undesirable transmission shift quality.

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, verify the TCM software is up to date. Is the TCM programmed with the latest available software?
 - a. Yes>>> Proceed to [Step #3](#).
 - b. No>>> Proceed to [Step #2](#).
2. 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. Proceed to [Step #3](#).
3. Using wiTECH, verify the PCM software is up to date. Is the PCM programmed with the latest available software?
 - a. Yes>>> If the TCM was reprogrammed, proceed to [Step #5](#). If the TCM calibration was already up to date at the beginning of this procedure then this TSB does not apply. Use Labor op 18-19-05-A5 to close out the RRT portion of this service bulletin.
 - b. No>>> Reprogram the PCM 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. Proceed to [Step #4](#).
4. Was the TCM reprogrammed?
 - a. Yes>>> Proceed to [Step #5](#).
 - b. No>>> Proceed to [Step #23](#).
5. Using wiTECH, Perform the TCM "VIN Verification" routine Located in the TCM "Misc Functions" menu and follow the on-screen prompts.
6. Using wiTECH, perform a "PROXI Configuration Alignment" routine located in the "Vehicle Preparations" tab on the main vehicle view screen .
7. Turn the ignition off and disconnect wiTECH for 1 minute.
8. Turn the ignition back on and reconnect wiTECH.
9. From the vehicle view screen, select "PROXI Configuration Alignment" routine in the "Vehicle Preparations" tab and verify all modules are properly aligned.

10. 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 #11](#).
11. Is your vehicle a 2014 KL?
 - a. Yes>>> Proceed to [Step #12](#).
 - b. No>>> Proceed to [Step #15](#).
12. Using wiTECH navigate to the TCM data and locate the transmission fill and fast fill counters. Did the counters all reset to 0 counts?
 - a. Yes>>> Perform the transmission Adaptation Drive Learn procedure. Refer to all applicable published service bulletins regarding “9 Speed Transmission Adaptation Learn” for detailed repair procedures and labor times and proceed to [Step #13](#).
 - b. No>>> Proceed to [Step #13](#).
13. Perform a Transmission Drive Verification Test by performing the following steps
 - a. Start the vehicle and allow the coolant temperature to reach between 35°C and 105°C (95°F and 221°F).
 - b. Allow the transmission temperature to reach between 50°C and 115°C (122°F and 239°F).
 - c. Ensure the vehicle is below an altitude of 8000 ft.
 - d. With the vehicle located in a suitable area and traveling in a straight line, bring the vehicle to a minimum of 30 mph (5th gear) and perform a 0 throttle coasting deceleration until the transmission downshifts from 5th gear to 4th gear.
 - e. Repeat this coasting downshift 10 times.
14. Did the PCM set an active U0402 code?
 - a. Yes>>> Refer to all current, normal diagnostics published in DealerCONNECT/TechCONNECT regarding the U0402 code and repair as necessary following normal warranty repair guidelines.
 - b. No>>> Proceed to [Step #25](#).
15. Start the engine and monitor the transmission temperature on the Electronic Vehicle Information Center (EVIC).
16. 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.

17. Connect wiTECH diagnostic scan tool to the vehicle.
18. Check for active TCM DTCs (Diagnostic Trouble Codes). Do not perform the Quick Learn procedure if TCM DTCs are present. Repair transmission as required.
19. Select the TCM module in wiTECH.
20. 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.

21. Select the "Quick Learn" procedure, and follow the on-screen instructions to reset and learn the clutch adaptive values.
22. Shift the transmission into Park and shut off the engine. Proceed to [Step #23](#).
23. Perform a Transmission Drive Verification Test by performing the following steps
 - a. Start the vehicle and allow the coolant temperature to reach between 35°C and 105°C (95°F and 221°F).
 - b. Allow the transmission temperature to reach between 50°C and 115°C (122°F and 239°F).
 - c. Ensure the vehicle is below an altitude of 8000 ft.
 - d. With the vehicle located in a suitable area and traveling in a straight line, bring the vehicle to a minimum of 30 mph (5th gear) and perform a 0 throttle coasting deceleration until the transmission downshifts from 5th gear to 4th gear.
 - e. Repeat this coasting downshift 10 times.
24. Did the PCM set an active U0402 code?
 - a. Yes>>> Refer to all current, normal diagnostics published in DealerCONNECT/TechCONNECT regarding the U0402 code and repair as necessary following normal warranty repair guidelines.
 - b. No>>> Proceed to [Step #25](#).
25. The procedure is now complete. No further action is required.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-05-A5	Module, Transmission Control- (TCM) Powertrain Control Module (PCM)- Inspect Only. Software Up To Date. (1 - Semi Skilled)	2 - Automatic Transmission	0.2 Hrs.
18-19-05-A6	Module, Transmission Control- (TCM) Powertrain Control Module (PCM)- Reprogram. Includes Transmission Quick Learn and Drive Verification (2015 Only) (1 - Semi Skilled)	2 - Automatic Transmission	1.5 Hrs.
18-19-05-A7	Module, Transmission Control- (TCM) Powertrain Control Module (PCM)- Reprogram (2014 Only). Includes Drive Verification (1 - Semi Skilled)	2 - Automatic Transmission	1.2 Hrs.

NOTE: The expected completion time for the flash download portion of this procedure is approximately 8 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

FAILURE CODE:

ZZ	Service Action
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