



**NUMBER:** 21-022-14 REV. A

**GROUP:** Transmission and Transfer Case

**DATE:** July 29, 2014

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**THIS BULLETIN SUPERSEDES SERVICE BULLETIN 21-022-14, DATED JULY 10, 2014, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **\*\*ASTERISKS\*\*** AND INCLUDE A STATEMENT TO MAKE SURE THE wiTECH IS DISCONNECTED WHEN CLEARING DTC C140F.**

**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 RELEASE 14.03 OR HIGHER TO PERFORM THIS PROCEDURE.**

***SUBJECT:***

4WD Lamp Illuminated and Diagnostic Trouble Code C140F Active in Final Drive Control Modules (FDCM) Memory

***OVERVIEW:***

This bulletin involves verifying FDCM software level and then flash reprogramming of the FDCM with new software.

***MODELS:***

2005 - 2010	WH/WK	Grand Cherokee
2006 - 2010	XH/XK	Commander

**NOTE: This bulletin applies to vehicles that have had Recall N23 performed.**

***SYMPTOM/CONDITION:***

Customers may indicate that the "Service 4WD" indicator in the instrument cluster is illuminated. They may also indicate that the transfer case will not shift from 4WD High, 4WD Low, and/or Neutral once the lamp is illuminated.

Further investigation identifies that a Diagnostic Trouble Code C140F is stored or active in the Final Drive Control Modules (FDCM) Memory

***DIAGNOSIS:***

If the customer describes the symptom, perform the Repair Procedure.

***REPAIR PROCEDURE:***

1. Using the wiTECH™, record the FDCM software number.

2. Was the FDCM software number 56044129AP, 56044199AP, or 68235713AB?
  - a. YES>>>The FDCM software is at the latest level. Please refer to the standard diagnostic information for C140F. Refer to DealerCONNECT>Service>TechCONNECT>Service Info>28 - DTC-Based Diagnostics>MODULE, Final Drive Control (FDCM)>Diagnosis and Testing>C140F-TRANSFER CASE RANGE POSITION SENSOR ERRATIC PERFORMANCE for additional information.
  - b. NO>>>>Proceed to the next step.

**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.**

3. Reprogram the FDCM with the latest software. 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.
4. Clear any DTC's that may have been set in other modules due to reprogramming. The wiTECH™ application will automatically present all DTC's after the flash and allow the tech to clear them.
5. \*\*Disconnect the wiTECH diagnostic scan tool.

**NOTE: It may be possible for the FDCM to not power down if the wiTECH is connected during the next step. Failure to disconnect the wiTECH diagnostic scan tool may result in the inability to properly move DTC C140F from an Active Code to a Stored Code.\*\***

6. Turn the ignition key OFF making sure that the key remains OFF for at least 5 seconds. Then cycle the ignition key ON making sure that the key remains ON for at least 5 seconds. Perform a total of three ignition key OFF to ON cycles making sure that there is at least a 5 second pause between each key cycle.
7. Using the wiTECH™, verify that DTC C140F is not active in the FDCM's memory.
8. Is DTC C140F active in the FDCM's memory?
  - a. YES>>>Please refer to the standard diagnostic information for C140F. Refer to DealerCONNECT>Service>TechCONNECT>Service Info>28 - DTC-Based Diagnostics>MODULE, Final Drive Control (FDCM)>Diagnosis and Testing>C140F-TRANSFER CASE RANGE POSITION SENSOR ERRATIC PERFORMANCE for additional information.
  - b. NO>>>Repair is complete.

**NOTE: If C140F is still active, please ensure that all harness and connections into the FDCM and into the Transfer Case Actuator are free from any bent, loose, or corroded terminals and repair as necessary.**

**POLICY:**

Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

Labor Operation No:	Description	Skill Category	Amount

18-19-07-9E	Module, Final Drive Control (FDCM) - Inspect and Reprogram (1 - Semi-Skilled)	3 - Driveline	0.2 Hrs.
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**FAILURE CODE:**

FM	Flash Module
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