



NUMBER: 21-013-07

GROUP: Transmission

DATE: September 15, 2007

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THE StarSCAN® FLASH FILES FOR THIS BULLETIN ARE AVAILABLE VIA THE INTERNET.

StarSCAN® SOFTWARE LEVEL MUST BE AT RELEASE 8.02 OR HIGHER FOR THIS BULLETIN.

StarMOBILE STANDALONE MODE OR StarMOBILE DESKTOP CLIENT MAY ALSO BE USED TO PERFORM THIS PROCEDURE.

SUBJECT:

FLASH: Harsh 1-2 Shift Or 2-3 Shift

OVERVIEW:

This bulletin involves selectively erasing and reprogramming the Final Drive Control Module (FDCM) with new software.

NOTE: The FDCM will set an active DTC after the flash procedure is preformed. This will happen every time the FDCM is flash reprogrammed. Erase DTC using the appropriate Scantool.

MODELS:

2006 - 2007	(WK)	Grand Cherokee SRT-8
2006 - 2007	(WH)	Grand Cherokee (International Markets)

NOTE: This bulletin applies to vehicles equipped with a 6.1L engine (Sales Code ESF).

SYMPTOM/CONDITION:

A bump or a harsh shift is felt by the customer caused by the transfer case actuation. Customers describe this as either a harsh 1-2 shift or 2-3 shift. The transfer case clutch actuates at 20.5 mph for approximately 750 ms after each key cycle as directed via FDCM software to re-learn the clutch starting position. This can generate a torque pulse in the driveline under light to medium throttle conditions that can be construed as a transmission shift event.



Stick with the Specialists™

DIAGNOSIS:

Using a StarSCAN® with the appropriate Diagnostic Procedures available in TechCONNECT, verify all transmission systems are functioning as designed.

If the vehicle operator describes the Symptom/Conditions and they can be verified, perform the appropriate Repair Procedure.

SPECIAL TOOLS / EQUIPMENT REQUIRED:

NPN	Battery Charger
CH9401	StarSCAN® Tool
CH9404	StarSCAN® Vehicle Cable
CH9409	StarSCAN® Documentation Kit
CH9410	StarSCAN® Ethernet Cable, 12 ft.
CH9412	StarSCAN® Software Update Device Kit
	TechCONNECT PC or equivalent
	Latest StarSCAN® Software Update CD

REPAIR PROCEDURE - USING StarSCAN AND THE INTERNET TO RETRIEVE THE FLASH FILE:

NOTE: Before performing this Repair Procedure, the operating software in the StarSCAN® must be programmed with software release level 8.02 or higher. The software release level is visible in the blue header at the top of the StarSCAN® screen.

NOTE: The StarSCAN® diagnostic scan tool fully supports Internet connectivity. However, in order to take advantage of this feature you must first configure the StarSCAN® for your dealership's network. For instruction on setting up your StarSCAN® for the dealer's network; refer to the StarSCAN® Quick Start Networking Guide available on the www.dcctools.com website under the "download center".

NOTE: If this flash process is interrupted/aborted, the flash should be restarted.

1. Open the hood and install a battery charger. Using a voltmeter, verify that the charging rate provides 13.2 - 13.5 volts. Set the battery charger to continuous charge. Do not allow the charger to time out during the flash process. Remove the charger from the battery when the flash process is complete.

NOTE: Do not allow the charging voltage to climb above 13.5 volts during the flash process.

2. Connect the CH9410 StarSCAN® ethernet cable to the StarSCAN® and the dealer's network drop.
3. Connect the CH9404 StarSCAN® vehicle cable to the StarSCAN® and the vehicle.
4. Power ON the StarSCAN®.

5. Retrieve the old ECU part number. Using the StarSCAN® at the “Home” screen:
 - a. Select “ECU View”
 - b. Touch the screen to highlight the FDCM in the list of modules.
 - c. Select “More Options”
 - d. Select “ECU Flash”.
 - e. Record the part number at the top of the “Flash FDCM” screen for later reference.
 - f. Select “Browse for New File”. Follow the on screen instructions.
 - g. Select “Download to Scantool”.
 - h. Select “Close” after the download is complete, then select “Back”.
 - i. Highlight the listed calibration.
 - j. Select “Update Controller”.
 - k. When the update is complete, select “OK”.

NOTE: The FDCM will set an active DTC after the flash procedure is preformed. This will happen every time the FDCM is flash reprogrammed. Erase DTC using the appropriate Scantool.

NOTE: Due to the ECU programming procedure, a DTC may be set in other modules (TCM, BCM, MIC, SKREEM, etc.) within the vehicle, if so equipped. Some DTC's may cause the MIL to illuminate. From the “Home” screen select “System View”. Then select “All DTCs”. Press “Clear All Stored DTCs” if there are any DTCs shown on the list.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Amount
18-19-13-13	Module, Final Drive Control (FDCM) - Reprogram (B)	0.3 Hrs.

FAILURE CODE:

ZZ	Service Action
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