



NUMBER: 18-008-04

GROUP: Vehicle
Performance

DATE: February 24, 2004

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THE SOFTWARE WILL BE AVAILABLE ON TechCONNECT ON MARCH 02, 2004.

SUBJECT:

Flash: Low Idle Speed Induced Drone and/or Intermittent Part Time Transfer Case Lamp

OVERVIEW:

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

MODELS:

2004 (WJ) Grand Cherokee (Domestic Market Only)

NOTE: This bulletin applies the vehicles equipped with a 4.0L engine (sales code ERH) and built prior to March 06, 2004 (MDH 0206XX)

SYMPTOM/CONDITION:

The vehicle operator may experience a drone-like sound that occurs when the vehicle engine is running at idle speed. The PCM automatically adjusts engine speed, while at idle, dependent upon various engine loads (i.e transmissions, air conditioning compressor, etc.). The variation in engine idle speed, due to various engine loading combinations while at idle, may vary the intensity of the low speed idle drone.

The vehicle operator may notice that the instrument cluster transfer case part time indicator lamp may illuminate intermittently. This condition may occur only on vehicles equipped with a Selec-Trac[®] (NV-242) transfer case, and only when either 4 (HI) Part Time or 4LO transfer case positions have been selected.

The new PCM software sets the engine idle speed at approximately 744 rpm (engine fully warm), and addresses the software induced intermittent transfer case part time indicator lamp illumination.

DIAGNOSIS:

Using a Scan Tool (DRBIII[®]) with TechCONNECT or the appropriate Diagnostic Procedures Manual, verify all engine systems are functioning as designed. If DTCs are present record them on the repair order and repair as necessary before proceeding further with this bulletin.

If the vehicle operator describes or experiences one or both conditions, perform the Repair Procedure.

PARTS REQUIRED:

| Qty. | Part No. | Description |
|------|------------|--------------------------------|
| 1 | 04275086AB | Label, Authorized Modification |

SPECIAL TOOLS/EQUIPMENT REQUIRED:

| | |
|---------|--|
| NPN | Battery Charger |
| CH2002 | General Purpose Interface Bus Cable Assembly |
| CH6000A | Scan Tool (DRBIII®) |
| CH7000A | J1962 Cable with red DRBIII® connector |
| | TechCONNECT PC |

NOTE: An updated J1962 cable has been released. This cable has a red colored connector at the DRBIII® connection. Use this cable whenever a flash is being performed.

REPAIR PROCEDURE:

NOTE: Whenever a controller is programmed, the software in the DRBIII®; must be programmed with the latest revision level available.

NOTE: If this flash process is interrupted/aborted, the flash should be restarted and then follow the directions on the DRBIII®.

1. Before beginning the reprogramming procedure, remove any old flash reprogramming files from the DRBIII® memory. To clear the memory from the MAIN MENU power up the DRBIII® and then:
 - a. Simultaneously press the "MORE" and "YES" keys.
 - b. A screen will appear requesting a "COLD BOOT".
 - c. Follow the on screen instructions by selecting the "F4" key.
 - d. When the DRB III® reboots to the MAIN MENU, proceed to (STEP #2)
2. With the ignition switch in the "RUN" position, determine the original part number of the PCM currently in the vehicle. Using the DRBIII® select:
 - a. "DRBIII® Standalone"
 - b. "1998 - 2004 Diagnostics"
 - c. "All (Except Below)"
 - d. "Engine"
 - e. "Module Display"
 - f. Record the "PCM part #" on the repair order for later reference.
3. Connect the DRBIII® to TechCONNECT. Open TechTOOLS and verify that the "DRBIII® Status: Connected" message is in the upper right corner of the TechTOOLS screen.
4. Enter the "PCM part #" recorded in (STEP #2) in the "Parts Criteria" area and select "Show Updates". TechTOOLS will populate the appropriate calibration.
5. Select the calibration.
6. Select the "DRBIII" radio button which is next to the "Download/Update" button.
7. Select the "Download/Update" button.

8. Monitor the "Flash Download/Update Progress" window on the TechCONNECT and follow the instructions on TechCONNECT. When the flash process is complete, proceed to (STEP #9).
9. **Disconnect the DRBIII® from TechCONNECT.**
10. Open the hood, install a battery charger and verify battery state is above 12.5 volts.
11. Connect the DRBIII® to the vehicle.
12. Download the flash from the DRBIII® to the vehicle. Using the DRBIII® select:
 - a. "Vehicle Flash"
 - b. Follow the directions on the DRBIII® screen. When the flash process is complete, proceed to (STEP #13).

NOTE: Due to the PCM programming procedure, a DTC may be set in other modules (TCM, BCM, MIC, SKIM, etc.) within the vehicle, if so equipped. Some DTC's may cause the MIL to illuminate. Check all modules using "Module Scan", record the DTC's, and erase these DTC's prior to returning the vehicle to the customer. Erase any DTC's in the PCM only after all other modules have had their DTC's erased.

NOTE: The following step is required by law.

13. Type the necessary information on the "Authorized Modification Label" p/n 04275086AB and attach near the VECI label (Fig. 1).

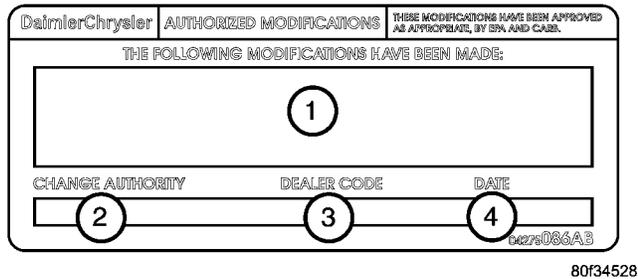


Fig. 1 AUTHORIZED MODIFICATION LABEL

- 1 - POWERTRAIN CONTROL MODULE P/N (INSERT P/N) USED
- 2 - CHANGE AUTHORITY: TSB XX-XXX-XX
- 3 - DEALER CODE: XXXXX
- 4 - DATE: XX-XX-XX

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

| Labor Operation No: | Description | Amount |
|---------------------|-------------------------------------|----------|
| 08-19-35-92 | Reprogram Powertrain Control Module | 0.8 Hrs. |

FAILURE CODE:

| | |
|----|--------------|
| FM | Flash Module |
|----|--------------|