

NUMBER: 18-006-08 REV. A

GROUP: Vehicle Performance

DATE: April 8, 2008

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THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 18-006-08 DATED JANUARY 31, 2008, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS** AND INCLUDE THE ADDITION OF A ADDITIONAL MODEL.

THE StarSCAN® FLASH FILES FOR THIS BULLETIN MUST BE RETRIEVED FROM THE INTERNET.

StarSCAN® SOFTWARE LEVEL MUST BE AT RELEASE 8.04 OR HIGHER FOR THIS BULLETIN.

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

SUBJECT:

FLASH: 3.0L Diesel - No Start Cold / Hard Start Warm

OVERVIEW:

This bulletin involves selectively erasing and reprogramming the Engine Control Module (ECM) and performing the injector quantity adjustment procedure.

MODELS:

| **2006 - 2007 | (LE) | 300C/300 Touring (International Markets)** |
|---------------|------|--|
| 2007 | (WH) | Grand Cherokee (International Markets) |
| 2006 - 2007 | (XH) | Commander (International Markets) |

NOTE: This bulletin applies to vehicles equipped with DPF only.

SYMPTOM/CONDITION:

Some vehicle's may experience a no start when cold or a hard start when warm condition.

DIAGNOSIS:

Using a Scan Tool (StarSCAN®) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine systems are functioning as designed. If DTC's are present record them on the repair order and repair as necessary before proceeding further with this bulletin.

If no DTC's are present, perform the Repair Procedure.



PARTS REQUIRED:

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

SPECIAL TOOLS / EQUIPMENT REQUIRED:

| NPN | Battery Charger | |
|---------|--------------------------------------|--|
| CH9401 | StarSCAN® Tool | |
| CH9404D | StarSCAN® Vehicle Cable | |
| CH9409 | StarSCAN® Documentation Kit | |
| CH9410 | StarSCAN® Ethernet Cable, 12 ft. | |
| CH9412 | StarSCAN® Software Update Device Kit | |
| | TechCONNECT PC or equivalent | |

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

1. Disconnect the field wire connector at the alternator (Fig. 1).

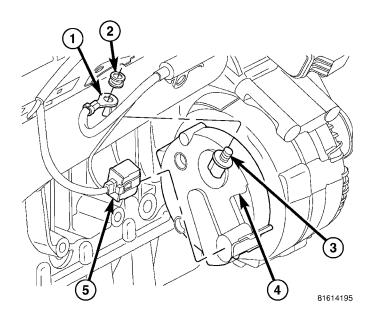


Fig. 1 ALTERNATOR CONNECTORS - DIESEL

- 1 B+ FEED WIRE
- 2 B+ FEED NUT
- 3 B+ FEED TERMINAL
- 4 ALTERNATOR
- 5 FIELD WIRE CONNECTOR
- 2. Does the vehicle start?
 - a. Yes >>> proceed to Step #3.

- b. NO >>> This bulletin does not apply, further diagnosis is required. Refer to the appropriate diagnostic procedures available in TechCONNECT.
- NOTE: When performing this Repair Procedure, the software release level in the StarSCAN®; must be programmed with 8.04 software 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, to take advantage of this feature you must first configure the StarSCAN® for your dealership's network. Make sure the StarSCAN® is configured to the dealership's network before proceeding. For instruction on setting up your StarSCAN® for the dealer's network refer to either: "DealerCONNECT > Service > StarSCAN and StarMOBILE tools > Online Documentation", or refer to the StarSCAN® Quick Start Networking Guide. The StarSCAN® Quick Start Networking Guide is also available on the www.dcctools.com website under the "Download Center".

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

3. Open the hood and install a battery charger. Using a voltmeter, verify that the charging rate provides 13.0 - 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.

- 4. Connect the CH9410 StarSCAN® ethernet cable to the StarSCAN® and the dealer's network drop.
- 5. Connect the CH9404D StarSCAN® vehicle cable to the StarSCAN® and the vehicle.
- 6. Power ON the StarSCAN®.
- 7. Turn the ignition switch to the run position.
- 8. Using the StarSCAN® at the "Home" screen:
 - a. Select "ECU View".
 - b. Touch the screen to highlight the PCM in the list of modules.
 - c. Select "More Options"
 - d. Select "ECU Flash"
 - e. Record the part number at the top of the "Flash PCM" 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". Follow on screen instructions.
 - k. When the update is complete, select "OK".
 - I. Verify the part number at the top of the "Flash PCM" screen has updated to the new part number.
- 9. Type the necessary information on the "Authorized Modification Label" p/n 04275086AB and attach near the VECI label (Fig. 2).

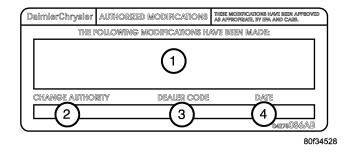


Fig. 2 AUTHORIZED MODIFICATION LABEL

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

NOTE: Due to the ECM programming procedure, a DTC will be set in other modules 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.

10. Turn ignition switch "ON".

NOTE: Before performing this procedure, make a note of the seven digit alphanumeric codes and the physical location of each injector. You will need to enter them into the scan tool during the Injector Quantity Adjustment procedure.

- 11. Using a StarSCAN®, select ECU View, then MISCELLANEOUS FUNCTIONS.
- 12. Select Injector Quantity Adjustment, then NEXT.
- 13. Select YES, then NEXT, and follow the directions on the StarSCAN®I.
- 14. Access the keyboard function on the StarSCAN®, and type the seven digit alphanumeric code next to the cylinder number that corresponds to the physical location where the injector is located.
- 15. Click NEXT. The StarSCAN® will prompt to turn the ignition switch off for 12 seconds.
- 16. Repeat step 12 through 15 for every other injector.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

| Labor Operation No: | Description | Amount |
|---------------------|---|----------|
| 18-19-04-71 | Diagnose Only For No Start Condition (B) | 0.2 Hrs. |
| 18-19-04-70 | Diagnose And Reprogram Module, Engine Control (ECM) and Set Injector Quantity Adjustment values (B) | |

FAILURE CODE:

| ZZ | Service Action |
|----|----------------|
|----|----------------|