SERVICE BULLETIN

CHRYSLER
Jeep
DODGE

NUMBER: 18-007-06 REV. A

GROUP: Vehicle Performance

DATE: March 16, 2006

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

THE FLASH FILE WILL BE AVAILABLE ON THE NEXT StarSCAN® UPDATE CD RECEIVED AFTER CD 6.05.

THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-007-06 DATED MARCH 3, 2006, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS** AND INCLUDES A REVISED OVERVIEW AND FLASH PROCEDURES.

SUBJECT:
Generic Powertrain Control Module (PCM) Procedure

OVERVIEW:
This bulletin involves programming a generic replacement PCM with software using the StarSCAN.

MODELS:

2004 - 2005	(HB)	Durango
2005	(LX)	Chrysler 300/Magnum
2005	(ND)	Dakota
2005	(WK)	Grand Cherokee

DISCUSSION:
Replacement PCM's will require programming utilizing the StarSCAN. The PCM will not operate the engine until it is programmed. A Diagnostic Trouble Code (DTC) will be set - "not programmed".

CAUTION: Extreme care must be taken when programming a calibration into a generic PCM. Do not randomly select a calibration. Once a calibration is selected and programmed, the controller cannot be reprogrammed to a different calibration. The module can only be reprogrammed to a more recent version of that calibration.

PARTS REQUIRED:

Qty.	Part No.	Description	Model	Remarks
1	56029144AC	Generic Powertrain Control Module	HB	2004 Vehicles with a 3.7L Engine
1	56029078AC	Generic Powertrain Control Module	HB	2005 Vehicles with a 3.7L Engine
1	56028795AC	Generic Powertrain Control Module	HB	2004 Vehicles with a 4.7L Engine
1	56029080AC	Generic Powertrain Control Module	HB	2005 Vehicles with a 4.7L Engine
1	56029146AC	Generic Powertrain Control Module	HB	2004 Vehicles with a 5.7L Engine
1	56028983AC	Generic Powertrain Control Module	HB	2005 Vehicles with a 5.7L Engine
1	04896234AE	Generic Powertrain Control Module	LX	Vehicles with a 2.7L/3.5L Engines Built on or before June 27, 2004
1	04606834AC	Generic Powertrain Control Module	LX	Vehicles with a 2.7L/3.5L Engines Built on or after June 28, 2004
1	04606864AE	Generic Powertrain Control Module	LX	3.5L Engine and NAG1 Transmission Built on or after June 28, 2004
1	04896678AG	Generic Powertrain Control Module	LX	Vehicles with a 5.7L Engine Built on or before June 27, 2004
1	04606837AE	Generic Powertrain Control Module	LX	Vehicles with a 5.7L Engines Built on or after June 28, 2004
1	56029077AB	Generic Powertrain Control Module	ND	Vehicles with a 3.7L Engine and Manual Transmission
1	56029078AC	Generic Powertrain Control Module	ND	Vehicles with a 3.7L Engine and Automatic Transmission
1	56029079AD	Generic Powertrain	ND	Vehicles with a 4.7L Engine and Manual Transmission

Qty.	Part No.	Description	Model	Remarks
		Control Module		
1	56029080AC	Generic Powertrain Control Module	ND	Vehicles with a 4.7L Engine and Automatic Transmission
1	56044516AE	Generic Powertrain Control Module	WK	Vehicles with a 3.7L Engine
1	56044515AE	Generic Powertrain Control Module	WK	Vehicles with a 4.7L Engine
1	56044517AD	Generic Powertrain Control Module	WK	Vehicles with a 5.7L Engine
1	04275086AB	Label, Authorized Modification		

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
	StarSCAN Software Update CD

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

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 DealerCONNECT > Service > StarSCAN and StarMOBILE Tools > Online Documentation or at 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, install a battery charger and verify that the charging rate provides approximately 13.5 volts. Set the battery charger timer to maintain the charging voltage for the duration of 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 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.
6. Replace the PCM with the appropriate Generic PCM. Refer to the detailed service information available in TechCONNECT, under: Service Info, 8-Electrical, Electronic Control Module, Powertrain Control Module, Removal.
7. Program the PCM as follows:
    a. Using the StarSCAN® at the "Home" screen, 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. Select "Browse for New File". Follow the on screen instructions.
    f. Highlight the appropriate calibration based on the part number recorded in Step 5.
    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".
    l. Verify the part number at the top of the "Flash PCM" screen has updated to the new part number.
8. Is "WCM - Wireless Control Module" displayed in the "ECU Overview" screen list of modules?
    a. Yes >> go to Step #9.
    b. No >> go to Step #10.
9. Program the PCM to the Wireless Control Module (WCM).
    a. Highlight the WCM.
    b. Select "Misc. Function".
    c. Highlight "PCM Replaced".
    d. Select "Start"
    e. Follow the on screen instructions. Select "Next" after each step . Select "Finish" after completing the last step.
    f. When complete proceed to Step #11.
10. Program the VIN into the PCM.
    a. Scroll through the list of controllers and highlight the PCM.
    b. Select "Misc. Function".
    c. Highlight "Check PCM VIN".
    d. Select "Start"
    e. Follow the on screen instructions. Select "Next" after each step . When the window appears with 17 boxes, select "Show Keyboard". Place the cursor to the right of the last box and then backspace to delete the boxes from the window. Enter the VIN. Select "Finish" after completing the last step.
    f. Unplug the scan tool from the Data Link Connector.
    g. At the "Vehicle Disconnected" screen, press "OK".
    h. Connect the scan tool to the Data Link Connector and verify that the VIN is visible at the top of the "Home" screen.
11. Is the vehicle is equipped with a 3.7L or 4.7L engine?

    a. Yes >> go to Step #13.
    b. No >> go to Step #12.

12. Using the StarSCAN at the "Home" screen:
    a. Select "ECU View"
    b. Scroll through the list of controllers and highlight the PCM.
    c. Select "Misc. Function".
    d. Highlight "Learn ETC".
    e. Select "Start"
    f. Follow the on screen instructions. Select "Next" after each step . Select "Finish" after completing the last step.

NOTE: Due to the PCM 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.

NOTE: The following step is required by law when reprogramming a PCM and/or TCM.

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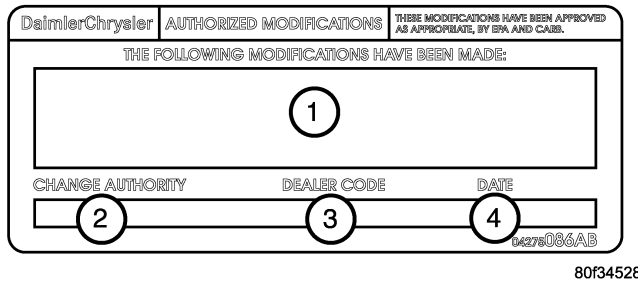

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Fig. 1 AUTHORIZED MODIFICATION LABEL

1 - ENGINE CONTROL MODULE P/N (INSERT P/N) USED

2 - CHANGE AUTHORITY: TSB XX-XXX-XX

3 - DEALER CODE: XXXXX

4 - DATE: XX-XX-XX

REPAIR PROCEDURE USING SOFTWARE UPDATE CD TO RETRIEVE THE FLASH FILE:

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

NOTE: For detailed information on the operation of the StarSCAN®, refer to the Quick Reference documentation provided in the StarSCAN® documentation kit. In addition, more recent information may also be available at the www.dcctools.com website. Look under "Training Aids" and also under "Download Center > Frequently Asked Questions" for more help.

1. Open the hood, install a battery charger and verify that the charging rate provides approximately 13.5 volts. Set the battery charger timer to maintain the charging voltage for the duration of the flash process.
2. Connect the CH9404 StarSCAN® vehicle cable to the StarSCAN® and the vehicle.
3. Power ON the StarSCAN®.
4. Retrieve the old ECU part number. 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.
5. Replace the PCM with the appropriate Generic PCM. Refer to the detailed service information available in TechCONNECT, under: Service Info, 8-Electrical, Electronic Control Module, Powertrain Control Module, Removal.
6. Insert the StarSCAN® Software Update CD into the TechCONNECT or equivalent PC. The StarSCAN® Software Update CD will start automatically. Select "Download Flash Updates".
7. At the "**Select a method for looking up controller flash updates.**" screen:
   a. Select "Enter part number". Enter the "Part Number" recorded in Step #4 when prompted to do so.
   b. Using the mouse highlight the appropriate "Calibration". Select "Next".
   c. Follow the on screen instructions.
   d. When completed, proceed to Step #8.
8. With the StarSCAN® powered OFF, connect the USB Key and Gender Changer to the StarSCAN® USB port (Fig. 2).
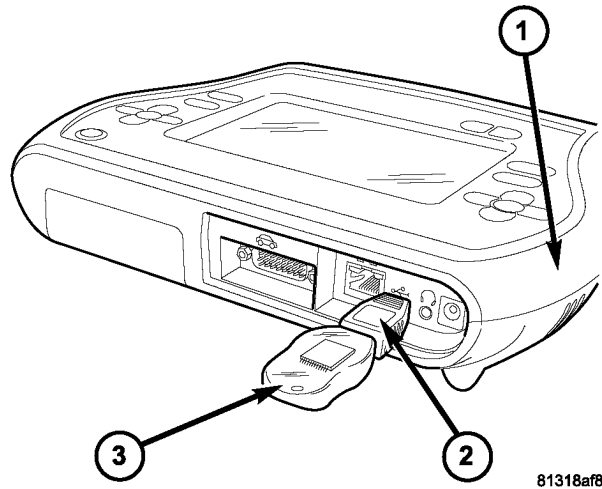
Fig. 2 USB KEY, GENDER CHANGER, AND StarSCAN

1 - StarSCAN® TOOL

2 - GENDER CHANGER

3 - USB KEY

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9. Connect the StarSCAN® to the vehicle (if not already connected).
10. Power ON the StarSCAN®.
11. Download the flash file from the USB key to the StarSCAN®. Using the StarSCAN® at the "Home" screen:
    a. Select "Flash Download", then select "Retrieve files from the USB storage device"
    b. Highlight the appropriate calibration. Select "Download to Scan Tool"
    c. When the download is complete, select "Close" and "Back".
12. Reprogram the ECU. Using the StarSCAN® at the "Home" screen:
    a. Select "ECU View".
    b. Select "More Options".
    c. Select "ECU Flash".
    d. Highlight the appropriate calibration.
    e. Select "Update Controller". Follow the on screen instructions.
    f. When the update is complete, select "OK".
    g. Verify the part number at the top of the "Flash PCM" screen has updated to the new part number.
13. Is "WCM - Wireless Control Module" displayed in the "ECU Overview" screen list of modules?
    a. Yes >> go to Step #14.
    b. No >> go to Step #15.
14. Program the PCM to the Wireless Control Module (WCM). Using the StarSCAN at the "Home" screen:
    a. Select "ECU View"
    b. Scroll through the list of controllers and highlight the WCM.

    c. Select "Misc. Function".
    d. Highlight "PCM Replaced".
    e. Select "Start"
    f. Follow the on screen instructions. Select "Next" after each step . Select "Finish" after completing the last step.
    g. When complete proceed to Step #16.

15. Program the VIN into the PCM.
    a. Scroll through the list of controllers and highlight the PCM.
    b. Select "Misc. Function".
    c. Highlight "Check PCM VIN".
    d. Select "Start"
    e. Follow the on screen instructions. Select "Next" after each step . When the window appears with 17 boxes, select "Show Keyboard". Place the cursor to the right of the last box and then backspace to delete the boxes from the window. Enter the VIN. Select "Finish" after completing the last step.
    f. Unplug the scan tool from the Data Link Connector.
    g. At the "Vehicle Disconnected" screen, press "OK".
    h. Connect the scan tool to the Data Link Connector and verify that the VIN is visible at the top of the "Home" screen.

16. Is the vehicle is equipped with a 3.7L or 4.7L engine?
    a. Yes >> go to Step #18.
    b. No >> go to Step #17.

17. Using the StarSCAN at the "Home" screen:
    a. Select "ECU View"
    b. Scroll through the list of controllers and highlight the PCM.
    c. Select "Misc. Function".
    d. Highlight "Learn ETC".
    e. Select "Start"
    f. Follow the on screen instructions. Select "Next" after each step . Select "Finish" after completing the last step.

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 "ECU View" from the Home screen, 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.

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

POLICY:
Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:
Refer to Quick Labor Operations or the appropriate Labor Operation Time Schedule manual.