

GROUP: Vehicle Performance

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THE DRBIII® FLASH FILES FOR THIS BULLETIN ARE AVAILABLE ON DealerCONNECT.

FOR MARKETS OUTSIDE OF THE UNITED STATES AND CANADA, THE FLASH FILES AND REPROGRAMMING INSTRUCTIONS WILL BE AVAILABLE ON ITIL/ISIS DVD FEBRUARY 2005.

SUBJECT:

Flash: Erroneous Diagnostic Trouble Codes - P0320 and P1494

OVERVIEW:

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

MODELS:

2004	(ZB)	Viper
2004	(DR)	Ram Truck - SRT 10

SYMPTOM/CONDITION:

The following enhancements are included with this software:

The vehicle operator may experience a MIL illumination. Further diagnosis may determine that the MIL was caused by one or more of the following erroneous Diagnostic Trouble Codes (DTC's):

- P0320 No Crank Reference Signal At PCM
- P1494 Leak Detection Pump Switch Or Mechanical Fault

DIAGNOSIS:

Using a Scan Tool (DRBIII®) with 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 the Symptom/Condition, perform the Repair Procedure.

PARTS REQUIRED:

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

Stick with the Specialists™

NPN	Battery Charger
CH2002	General Purpose Interface Bus Cable Assembly
CH6000A	Scan Tool (DRBIII®)
CH7000A/7001A	J1962 Cable with red DRBIII® connector
	TechCONNECT Workstation

SPECIAL TOOLS/EQUIPMENT REQUIRED:

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:
 - 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 DRBIII® 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 2005 Diagnostics"
 - c. "All (Except Below)"
 - d. "Engine"
 - e. "Module Display"
 - f. Record the "PCM part #" on the repair order for later reference.
- 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 that the charging rate provides approximately 13.5 volts.

If the vehicle is a 2003 or later AN or 2002 or later DN or DR model, proceed to Step #12. If not proceed Step #15.

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- 12. Using the DRBIII®, determine the pinion factor stored in the Controller Anti-lock Brakes (CAB) and record it on the work order for later reference.
- 13. Turn the ignition switch to the "Off" position.
- 14. Disconnect the CAB module electrical connectors. Proceed to Step #15.
- 15. Connect the DRBIII® to the vehicle.
- 16. Turn the ignition to the "Run" position (engine not running).
- 17. 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 #18.
- 18. If the vehicle is a 2003 and later AN or 2002 or later DN or DR model, proceed to Step #19. If not proceed to Step #23.
- 19. Turn the ignition to the "Off" position.
- 20. Connect the CAB electrical connectors.
- 21. Turn the ignition switch to the "Run" position (engine not running).
- 22. Using the DRBIII®, check the pinion factor in the CAB to be sure that it was not erased during the flash process. If the pinion factor is not present or is not correct, enter the correct pinion factor. Proceed to Step #23.
- 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.

23. 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

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Amount
08-19-45-91	Reprogram Powertrain Control Module	0.8 Hrs.

FAILURE CODE:

FM	Flash