CHRYSLER	SERVICE
Jeep	BUILETIN
DODGE	

<b>NUMBER:</b> 18	-006-04 REV. B
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**GROUP:** Vehicle Performance

DATE: September 13, 2004

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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 SOFTWARE AND REPROGRAMMING INSTRUCTIONS WILL BE AVAILABLE ON ITIL/ISIS DVD NOVEMBER, 2004.

THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-006-04 REV. A, DATED APRIL 6, 2004, WHICH SHOULD BE REMOVED FROM YOUR FILES. THIS IS A COMPLETE REVISION AND NO ASTERISKS HAVE BEEN USED TO HIGHLIGHT REVISIONS.

### SUBJECT:

Generic Powertrain Control Module (PCM) Procedure

### OVERVIEW:

This bulletin involves programming a generic PCM with software.

### **MODELS:**

2004	(AN)	Dakota
2004 - 2005	(CS)	Pacifica
2004 - 2005	(DR)	Ram Truck
2004 - 2005	(JR)	Sebring Convertible/Sebring Sedan/Stratus Sedan
2004 - 2005	(KJ)	Liberty
2004 - 2005	(KJ)	Cherokee (International Markets)
2002 - 2004	(LH)	300M/Concorde/Intrepid
2004 - 2005	(PL)	Neon
2004 - 2005	(PT)	PT Cruiser
2004 - 2005	(RG)	Chrysler Voyager (International Markets)
2004 - 2005	(RS)	Town & Country/ Caravan/Voyager
2005	(TJ)	Wrangler

NOTE: Refer to the following table for specific applications.

### Stick with the Specialists<sup>™</sup>

Model	Engine	Transmission
AN	3.7L or 4.7L	Auto or Man
CS	3.5L	Auto
DR	3.7L, 4.7L, or 5.7L	Auto or Man
JR	2.0L, 2.4L, 2.4L Turbo or 2.7L	Auto or Man
KJ	2.4L or 3.7L	Auto or Man
LH	All	Auto
PL	2.0L, 2.4L or 2.4L Turbo	Auto or Man
PT	2.0L, 2.4L or 2.4L Turbo	Auto or Man
RG	2.4L or 3.3L	Auto or Man
RS	2.4L, 3.3L or 3.8L	Auto
TJ	2.4L or 4.0L	Auto or Man

### **DISCUSSION:**

Mopar® is currently phasing out pre-programmed PCMs for the vehicles listed. New modules will no longer be pre-programmed when received from Mopar®. Replacement of future PCMs will require programming utilizing the DRBIII® and TechCONNECT. 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.

Qty.	Part No.	Description	Model	Remarks
1	56028805AD	Generic Powertrain Control Module	AN	Vehicles with 3.7L and Manual Transmission
1	56028806AD	Generic Powertrain Control Module	AN	Vehicles with 3.7L and Automatic Transmissio
1	56028796AD	Generic Powertrain Control Module	AN	Vehicles with 4.7L and Automatic Transmissio
1	56028797AD	Generic Powertrain Control Module	AN	Vehicles with 4.7L and Manual Transmission
1	05127196AA	Kit, Generic Powertrain Control Module	CS	Built on or before July 11, 2003 with a VIN sequence of 4R499999 or lower.
1	05134856AA	Generic Powertrain Control Module	CS	Built on or after July 12, 2003 through and including July 7, 2004

Qty.	Part No.	Description	Model	Remarks
1	05161322AA	Generic Powertrain Control Module	CS	Vehicles with 3.5L Built on or after July 8, 2004
1	05161323AA	Generic Powertrain Control Module	CS	Vehicles with 3.8L Built on or after July 8, 2004
1	56028805AD	Generic Powertrain Control Module	DR	2004 Vehicles with 3.7L and Manual Transmission
1	56028879AB	Generic Powertrain Control Module	DR	2005 Vehicles with 3.7L and Manual Transmission
1	56028806AD	Generic Powertrain Control Module	DR	2004 Vehicles with 3.7L and Automatic Transmission
1	56028881AB	Generic Powertrain Control Module	DR	2005 Vehicles with 3.7L and Automatic Transmission
1	56028797AD	Generic Powertrain Control Module	DR	2004 Vehicles with 4.7L and Manual Transmission
1	56029079AD	Generic Powertrain Control Module	DR	2005 Vehicles with 4.7L and Manual Transmission
1	56028796AD	Generic Powertrain Control Module	DR	2004 Vehicles with 4.7L and Automatic Transmission
1	56028892AC	Generic Powertrain Control Module	DR	2005 Vehicles with 4.7L and Automatic Transmission
1	56028799AD	Generic Powertrain Control Module	DR	2004 Vehicles with 5.7L and Manual Transmission
1	56028878AB	Generic Powertrain Control Module	DR	2005 Vehicles with 5.7L and Manual Transmission
1	56028800AD	Generic Powertrain Control Module	DR	2004 Vehicles with 5.7L and Automatic Transmission
1	56028930AB	Generic Powertrain Control Module	DR	2005 Vehicles with 5.7L and Automatic Transmission
1	04896301AD	Generic Powertrain Control Module	JR	Vehicles with 2.0L or 2.4L and Automatic Transmission Built on or before July 7, 2004
1	04606912AC	Generic Powertrain Control Module	JR	Vehicles with 2.0L, 2.4L or 2.4L Turbo and Automatic Transmission Built on or after July 8, 2004
1	04896304AE	Generic Powertrain Control Module	JR	Vehicles with a 2.0L or 2.4L and Manual Transmission Built on or before July 7, 2004
1	04606913AC	Generic Powertrain Control Module	JR	Vehicles with a 2.0L or 2.4L and Manual Transmission Built on or after July 8, 2004
1	04606819AD	Generic Powertrain	JR	Vehicles with 2.4L Turbo and

Qty.	Part No.	Description	Model	Remarks
		Control Module		Automatic Transmission Built on or before July 7, 2004
1	04896302AD	Generic Powertrain Control Module,	JR	Vehicles with a 2.7L and Automatic Transmission Built on or before June 30, 2004
1	04606916AC	Generic Powertrain Control Module	JR	Vehicles with a 2.7L and Automatic Transmission Built on or after July 1, 2004
1	56044397AD	Generic Powertrain Control Module	КJ	Vehicles with 2.4L or 3.7L and Manual Transmission Built on or before July 11, 2004
1	56044665AC	Generic Powertrain Control Module	KJ	Vehicles with 2.4L or 3.7L and Manual Transmission Built after July 12, 2004
1	56044396AD	Generic Powertrain Control Module	KJ	Vehicles with 3.7L and Automatic Transmissio Built on or before July 11, 2004
1	56044666AB	Generic Powertrain Control Module	KJ	Vehicles with 3.7L and Automatic Transmissio Built on or after July 12, 2004
1	05127196AA	Kit, Generic Powertrain Control Module	LH	All
1	05134852AB	Generic Powertrain Control Module	PL	Vehicles with 2.0L, 2.4L and Manual Transmission Built before July 8, 2004
1	05161105AA	Generic Powertrain Control Module	PL	Vehicles with 2.0L, 2.4L and Manual Transmission Built on or after July 9, 2004
1	05134858AA	Generic Powertrain Control Module	PL	Vehicles with 2.0L or 2.4L and Automatic Transmission Built before July 8, 2004
1	05161104AA	Generic Powertrain Control Module	PL	Vehicles with 2.0L or 2.4L and Automatic Transmission Built on or after July 9, 2004
1	05134853AB	Generic Powertrain Control Module	PL SRT-4	All with 2.4L Turbo and Manual Transmission
1	05033290AE	Generic Powertrain Control Module	PT	Vehicles with a 2.0L, 2.4L or 2.4L Turbo and Manual Transmission Built on or before July 22, 2004
1	05033326AE	Generic Powertrain Control Module	PT	Vehicles with a 2.0L, 2.4L or 2.4L Turbo and Manual Transmission Built on or after July 23, 2004

Qty.	Part No.	Description	Model	Remarks
1	05033291AD	Generic Powertrain Control Module	PT	Vehicles with a 2.0L or 2.4L and Automatic Transmission Built on or before July 22, 2004
1	05033327AC	Generic Powertrain Control Module	PT	Vehicles with a 2.0L or 2.4L and Automatic Transmission Built on or after July 23, 2004
1	05033292AD	Generic Powertrain Control Module	PT	Vehicles with a 2.4L Turbo and Automatic Transmission Built on or before July 22, 2004
1	05033328AC	Generic Powertrain Control Module	PT	Vehicles with a 2.4L Turbo and Automatic Transmission Built on or after July 23, 2004
1	05134854AA	Generic Powertrain Control Module	RG	Vehicles with 2.4L and Manual Transmission Built on or before October 17, 2004
1	05161103AA	Generic Powertrain Control Module	RG	Vehicles with 2.4L and Manual Transmission Built on or after October 18, 2004
1	05134855AA	Generic Powertrain Control Module	RS	Vehicles with 2.4L and Automatic Transmissio Built on or before July 8, 2004
1	05161102AA	Generic Powertrain Control Module	RS	Vehicles with 2.4L and Automatic Transmissio Built on or after July 9, 2004
1	05134857AA	Generic Powertrain Control Module	RG/RS	Vehicles with 3.3L or 3.8L and Automatic Transmission Built on or before July 7, 2004
1	05161324AA	Generic Powertrain Control Module	RG/RS	Vehicles with 3.3L or 3.8L and Automatic Transmission Built on or after July 8, 2004
1	56044499AD	Generic Powertrain Control Module	TJ	Vehicles with 2.4L or 4.0L and Manual Transmission
1	56044529AC	Generic Powertrain Control Module	TJ	Vehicles with 2.4L or 4.0L and Automatic Transmission
1	04275086AB	Label, Authorized Modification		

## 2002 LH Part Number Reference

Engine	Old PCM Part No.	New PCM Part No.
2.7L	04896257AA thru AJ	05102174AC
	04606877AA thru AC	05102179AB

Engine	Old PCM Part No.	New PCM Part No.
	04896220AA thru AE	05102184AB
	04896348AA thru AG	05103225AB
	04896440AA thru AC	05103226AB
	04896221AA thru AE	05103279AB
	04896349AA thru AC	05103227AB
	04896441AA thru AC	05103228AB
	04896222AA thru AE	05103280AB
	04896469AA thru AF	05103229AB
	04896442AA thru AD	05103230AB
	04896223AA thru AE	05103281AB
3.5L	04606904AA thru AI	05102175AB
	04606876AA thru AC	05102180AB
	04896224AA thru AE	05102185AB
	04606905AA thru AE	05103231AB
	04896443AA thru AC	05103232AB
	04896225AA thru AE	05103282AB
	04896124AA thru AK	05102176AB
	04896874AA thru AC	05102181AB
	04896226AA thru AE	05102186AB
	04606683AA thru AJ	05102177AB
	04606873AA thru AC	05102182AB
	04896227AA thru AE	05102187AB
	04606789AA thru AF	05103278AB
	04896444AA thru AC	05103233AB
	04896228AA thru AE	05103285AB
	04606872AA thru AC	05103234AB
	04896445AA thru AC	05103235AB
	04896229AA thru AE	05103283AB
	04896095AA thru AG	05103236AB
	04896446AA thru AC	05103237AB
	04896210AA thru AE	05103284AB
	04896447AA thru AC	05103238AB
	04896211AA thru AE	05103287AB
	04896652AA thru AJ	05102178AB

Engine	Old PCM Part No.	New PCM Part No.	
	04606878AA thru AC	05102183AB	
	04896212AA thru AE	05102188AB	
	04606871AA thru AF	05103239AB	
	04896448AA thru AC	05103240AB	
	04896213AA thru AE	05103286AB	
	04896554AA thru AE	05102189AB	
	04606879AA thru AE	05102190AB	

### SPECIAL TOOLS/EQUIPMENT REQUIRED:

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

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: When flashing a 2002 2004 LH vehicle the BCM may need to be disconnected if experiencing failures during the flash of the transmission portion of the PCM. The BCM will need to be disconnected after the module ID portion of the flash is complete. Before pressing Page Forward to begin the flash of the PCM Turn the Key to the OFF position and disconnect the BCM. Then turn the KEY to the RUN position and Press Page Forward to begin the PCM flash session.
- NOTE: If vehicle is a DAKOTA, then the ABS CAB module connector MUST be disconnected prior to performing this Repair Procedure. The CAB module and the PCM are connected at the same diagnostic connector pin (Pin #9). Turn ignition switch to the OFF position, disconnect the CAB module connector, and reprogram the PCM per the Repair Procedure. When reprogramming is complete turn the ignition switch to the OFF position, connect the CAB module connector, and then check for any erroneous DTC's. If the PCM becomes "locked" during reprogramming because the ABS CAB module connector was not disconnected, then the PCM may be recovered by following the procedure in this NOTE.
- 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.

### NOTE: If your vehicle is a 2002 LH and the original PCM part number begins with 04 the technician should use the 2002 LH Part Number Reference chart above to determine the corresponding "NEW" part number. This new number from the chart should then be entered into the Tech tools application as the orginal part number. If the original PCM number begins with 05 no change to the flash selection process is required.

- 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 first ten (10) characters of the "PCM part #" on the repair order for later reference.
- NOTE: If the PCM is not operational, the part number can be obtained from the label on the old controller. If the label on the controller is not legible, proceed to next step.
- 3. Page back to the "Main Menu"
- 4. Determine if the vehicle is equipped with SKIM. Using the DRBIII® select:
  - a. "DRBIII Standalone"
  - b. "1998 2004 Diagnostics"
  - c. "All"
  - d. "System Monitor"
  - e. "J1850 Module Scan"
  - f. Look for "SKIM" in the list of modules.
- 5. If the vehicle is not equipped with SKIM then proceed to step 6. If the vehicle is equipped with SKIM obtain the vehicle Personal Identification Number (PIN) before continuing with step 6. This information is available from one of the following:
  - a. The original selling invoice.
  - b. The DealerCONNECT system under the "Sales" or "Parts" tabs select "Key Codes".
  - c. By contacting the DaimlerChrysler Customer Assistance Center (DCCAC) at 1-800-992-1997.

# CAUTION: Failure to install the SKIM pin number into the module after flashing the PCM will cause a start and stall condition.

- 6. Replace the PCM using the appropriate generic control module. Refer to the service information available in TechCONNECT or the appropriate service manual in Section 8E, Electronic Control Modules, Powertrain Control Module, Removal/Installation.
- 7. Open the hood, install a battery charger and verify battery state is above 11.5 volts.
- 8. If the old "PCM part #" is known, proceed to step 14. If the old "PCM part #" is not known, proceed to next step.
- 9. On DealerCONNECT select the "Service" tab.
- 10. Select "Vehicle Information Plus".
- 11. Manually enter the VIN and mileage and select "Enter".
- 12. Select the "Vehicle Option" tab.
- 13. Under the "Vehicle Option" window, identify and record:
  - a. Engine.
  - b. Emissions (Federal or California).
  - c. Transmission (Automatic, 5-speed manual, etc.).
- 14. Connect the DRBIII® to TechCONNECT and the vehicle. Open TechTOOLS and verify that the "DRBIII® Status: Connected" message is in the upper right corner of the TechTOOLS screen.
- 15. TechTOOLS should automatically populate the VIN in the "Vehicle Criteria" area and the available updates. If not, manually enter the VIN then TechTOOLS will populate the available updates.

## NOTE: Do NOT enter the generic controller part number in step 16a below.

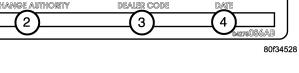
- 16. Determine the proper calibration:
  - a. If the old "PCM part #" is known, enter the part number of the old controller in the "Parts Criteria" p/n window. Proceed to step 16.
  - b. If the old "PCM part #" is not known, select the correct calibration based on the information that was recorded from "Vehicle Options" in step 13.
- 17. Select the correct calibration.
- 18. Select the "Download/Update" button.
- 19. Monitor the "Flash Download/Update Progress" window on the TechCONNECT and follow the instructions on TechCONNECT/DRBIII®. When the flash process is completed, proceed to next step.
- 20. Enter the VIN in the PCM. Using the DRBIII® select:
  - a. "DRBIII Standalone"
  - b. "1998 2004 Diagnostics"
  - c. "All"
  - d. "Engine"
  - e. "Miscellaneous"
  - f. "Check VIN"
  - g. If the vehicle is not equipped with SKIM proceed to step 20h. If the vehicle is equipped with SKIM follow the directions on the DRBIII®. When the VIN and SKIM key has been programmed, proceed to step 20.
  - h. Enter the VIN as requested by the DRBIII®.
- 21. Update the PCM mileage. Using the DRBIII® select:
  - a. "DRBIII® Standalone"
  - b. "1998 2004 Diagnostics"
  - c. "All (Except Below)"
  - d. "Engine"
  - e. "Miscellaneous"
  - f. "Check PCM Odometer"
  - g. "NO"
  - $\tilde{h}$ . Enter the current odometer mileage and then press "Enter".

- 22. Proceed as follows:
  - a. If the vehicle is equipped with an automatic transmission, proceed to step 24.
  - b. If the vehicle is equipped with a non-turbo engine and manual transmission, it is not necessary to set the pinion factor. Proceed to step 24.
  - c. If the vehicle is equipped with a Turbo engine and manual transmission, proceed to step 23.
- 23. On vehicles equipped with a Turbo engine and manual transmission, set the Pinion Factor. Using the DRBIII® select:
  - a. "DRBIII® Standalone"
  - b. "1998 2004 Diagnostics"
  - c. "All (Except Below)"
  - d. "Engine"
  - e. "Miscellaneous"
  - f. "Pinion Factor"
  - g. Select the correct tire size and then select "Page Back" to exit.
  - h. Proceed to step 24.
- 24. On vehicles equipped with an automatic transmission, set the Pinion Factor. Using the DRBIII® select:
  - a. "DRBIII® Standalone"
  - b. "1998 2004 Diagnostics"
  - c. "All (Except Below)"
  - d. "Transmission"
  - e. "Transmission Module"
  - f. "Miscellaneous"
  - g. "Pinion Factor"
  - h. Select the correct tire size and then select "Page Back" to exit.
  - i. Enter "Quick Learn" and then follow the instructions on the DRBIII®.

### 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.

25. 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:

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