



**NUMBER:** 18-042-03

**GROUP:** Vehicle  
Performance

**DATE:** November 28, 2003

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***SUBJECT:***

Flash - Rough Idle

**THIS BULLETIN IS BEING PROVIDED IN ADVANCE. THE SOFTWARE WILL BE AVAILABLE ON TechCONNECT ON OR AFTER DECEMBER 15, 2003.**

***OVERVIEW:***

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

**NOTE: For some 2002 LH vehicles it may be necessary to replace the PCM, refer to the part table below.**

***MODELS:***

2002 - 2004 (LH) 300M/Concorde/Intrepid/LHS (U.S. Market)

**NOTE: This bulletin applies to 2002 - 2004 LH vehicles equipped with a 3.5L engine.**

**NOTE: This bulletin is complex, the entire bulletin must be read and understood before performing the flash/repair process.**

***SYMPTOM/CONDITION:***

Vehicle will exhibit rough idle quality after a cold start in ambient temperatures range of between 4.4° C (40° F) and 29.4° C (85° F). The engine will exhibit rough idle condition through several minutes during the engine warm up cycle. The engine will not exhibit rough idle quality when fully warm.

***DIAGNOSIS:***

Using a Scan Tool (DRBIII®) with the appropriate Diagnostic Procedures Manual, verify all other 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 the technician experiences the Symptom/Condition, perform the Repair Procedure.

**PARTS REQUIRED:**

Qty.	Part No.	Description
1	04275086AB	Label, Authorized Modification
1	05127196AA	Generic Powertrain Control Module

For 2002 model year LH vehicles equipped with the original PCM (as determined by the table below) the PCM must be replaced with a generic PCM, part number 05127196AA. If Service Bulletin 18-017-03 has been performed on a 2002 LH, the vehicle is a 2003 or 2004 model year, a new PCM **WILL NOT** be needed, only perform the flash update.

Engine	original PCM Part No.	PCM Part No. per Service Bulletin 18-017-03	Generic PCM Part No.
3.5L	04606904AA thru AI	05102175AB	05127196AA
	04606876AA thru AC	05102180AB	05127196AA
	04896224AA thru AE	05102185AB	05127196AA
	04896124AA thru AK	05102176AB	05127196AA
	04896874AA thru AC	05102181AB	05127196AA
	04896226AA thru AE	05102186AB	05127196AA
	04606683AA thru AJ	05102177AB	05127196AA
	04606873AA thru AC	05102182AB	05127196AA
	04896227AA thru AE	05102187AB	05127196AA
	04896652AA thru AJ	05102178AB	05127196AA
	04606878AA thru AC	05102183AB	05127196AA
	04896212AA thru AE	05102188AB	05127196AA
	04896554AA thru AE	05102189AB	05127196AA
	04606879AA thru AE	05102190AB	05127196AA

**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: 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. 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 vehicle is a 2002 LH equipped with the original PCM installed (as determined by the table above) use the PCM Part # per Service Bulletin 18-017-03 as the part number for the "Parts Criteria" p/n window (refer to column "PCM Part No. per Service Bulletin 18-017-03" from table above). If the label on the controller is not legible, proceed to next step.**

2. Page back to the "Main Menu"
3. 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.
4. If the vehicle is not equipped with SKIM then proceed to step 5. If the vehicle is equipped with SKIM obtain the vehicle Personal Identification Number (PIN) before continuing with step 5. 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.**

5. If the vehicle is a 2002 LH equipped with the original PCM (as determined by the table above) replace the PCM with part number 05127196AA. Refer to the service information available in TechCONNECT or the appropriate service manual in Section 8E, Electronic Control Modules, Powertrain Control Module, Removal/Installation.
6. Open the hood, install a battery charger and verify battery state is above 11.5 volts.

7. If the old "PCM part #" is known, proceed to step 13. If the old "PCM part #" is not known, proceed to next step.
8. On DealerCONNECT select the "Service" tab.
9. Select "Vehicle Information Plus".
10. Manually enter the VIN and mileage and select "Enter".
11. Select the "Vehicle Option" tab.
12. Under the "Vehicle Option" window, identify and record:
  - a. Engine.
  - b. Emissions (Federal or California).
  - c. Transmission (Automatic, 5-speed manual, etc.).
13. 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.
14. 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 15a below.**

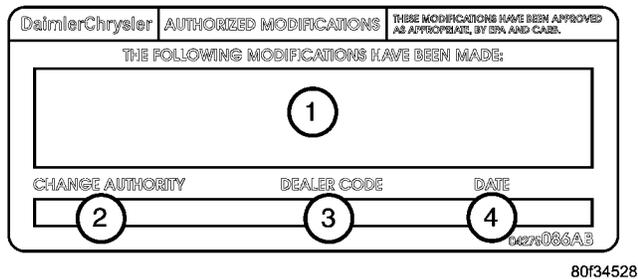
15. Determine the proper calibration:
  - a. If the old "PCM part #" is known, enter the part number of the old controller in the "Parts Criteria" p/n window. If the vehicle is a 2002 LH equipped with the original PCM (as determined by the table above) installed use the PCM Part #. per Service Bulletin 18-017-03 as the part number for the "Parts Criteria" p/n window (refer to column "**PCM Part No. per Service Bulletin 18-017-03**" from table above). 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 12.
16. Select the correct calibration.
17. Select the "Download/Update" button.
18. 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.
19. 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 19h. 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®.
20. 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"
  - h. Enter the current odometer mileage and then press "Enter".
  - i. Cycle the ignition key to the OFF position and back to the ON position and then press "Enter".
21. 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.**

22. 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: SB XX-XXX-XX
- 3 - DEALER CODE: XXXXX
- 4 - DATE: XX-XX-XX

**POLICY:**

Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

<b>Labor Operation No:</b>	<b>Description</b>	<b>Amount</b>
08-19-39-94	Replace Powertrain Control Module and Reprogram with New Software	1.0 Hrs.
08-19-39-95	Reprogram Powertrain Control Module	0.8 Hrs.

**FAILURE CODE:**

FM	Flash Module
58	Internal Defect