

NO: 18-41-98

SUBJECT: Idle RPM Undershoot/Overshoot While In Low Range Four Wheel Drive

DATE: Dec. 18, 1998

NOTE: THIS INFORMATION APPLIES TO VEHICLES EQUIPPED WITH FOUR WHEEL DRIVE AND A 2.5L, 4.0L, OR 4.7L ENGINE BUILT PRIOR TO DEC. 18, 1998 (MDH 1218XX).

SYMPTOM/CONDITION:

Some vehicles may exhibit an idle undershoot condition while the vehicle is slowly moving at 1 - 2 mph in low range four wheel drive with the throttle closed. This may result in an engine stumble condition and may be more noticeable during deceleration. Manual transmission vehicles may experience an idle speed overshoot under the same conditions.

DIAGNOSIS:

Using the Mopar Diagnostic System (MDS/MDS2) or the Diagnostic Scan Tool (DRB III[®]) with the appropriate Diagnostic Procedures Manual, verify all engine/transmission systems are functioning as designed. If other Diagnostic Trouble Codes (DTC's) are present, record them on the repair order and repair as necessary before proceeding further with this bulletin. Following the Diagnostic Procedures Manual, check the evaporative purge solenoid and circuit for proper operation. If no trouble is found, perform the Repair Procedure.

NOTE: WHENEVER A POWERTRAIN CONTROL MODULE (PCM) IS REPLACED DUE TO FAILURE, THE SOFTWARE OF THE REPLACEMENT CONTROLLER SHOULD BE VERIFIED FOR THE LATEST REVISION LEVEL. USE THE FLASH PROCEDURE TO UPDATE REPLACED CONTROLLERS AS NECESSARY.

EQUIPMENT/PARTS REQUIRED:

Qty	Part No.	Description
1	CH6000	Scan Tool (DRB III [®])
1	CH7035	General Purpose Interface Bus Cable (GPIB)
1	CH7000/7001	J1962 Cable
1	04669020	Label - Authorized Software Update
1	04275086	Label - Authorized Modification

NOTE: THE MDS AND DRB III[®] ARE REQUIRED TO PERFORM THIS REPAIR AND THE SYSTEM MUST BE OPERATING WITH RELEASE 21 OR HIGHER AND TIL CD RELEASE 1175 OR HIGHER MUST BE INSTALLED.

REPAIR PROCEDURE:

This procedure involves selectively erasing and reprogramming the Powertrain Control Module (PCM) with new software (99cal14 calibration change).

1. Connect the MDS (Mopar Diagnostic System) and DRB III[®] (Scan Tool) to the vehicle and power them up.
2. Use the arrow keys and select #2 CONNECT TO MDS 1 OR MDS 2 on the DRB III[®] MAIN MENU Screen.
3. Select #1 MDS DIAGNOSTICS OR DRB UPDATE on the DRB III[®].
4. Use the arrow keys and select DIAGNOSTIC MENU on the MDS, then press NEXT MENU.
5. Use the arrow keys and select VEHICLE CONTROLLER PROGRAMMING on the MDS, then press NEXT MENU.
6. Use the arrow keys and select PROGRAMMING OF ALL OTHER CONTROLLERS USING MDS & DRB III[®] on the MDS, then press NEXT MENU.
7. Follow the steps presented on the MDS and DRB III[®] which will allow the DRB III[®] to obtain the current part number of the PCM.
8. The MDS will display the part number of the PCM on the vehicle and the appropriate replacement part number, then press NEXT MENU to begin programming.

If the PCM on the vehicle has already been updated or programmed, a NO UPDATES AVAILABLE message will be displayed. Check the part number of the PCM on the vehicle and compare it to the part number displayed. If the PCM has already been updated, then another condition exists that will require further diagnosis and repair.

9. The MDS and DRB III[®] will prompt for any operator action needed during the remainder of the programming process.

NOTE: XJ VEHICLES EQUIPPED WITH AN AISIN WARNER TRANSMISSION MAY SET DTC \$BE (CCD MESSAGE FROM JTEC FAILURE) WITHIN THE TCM BECAUSE OF THE FLASH PROCEDURE AND THE DTC LOGGED IN THE TCM MAY SET DTC \$89 (TCM CONTROLLER DTC PRESENT) WITHIN THE PCM. CHECK FOR AND ERASE THESE DTC'S PRIOR TO RETURNING THE VEHICLE TO THE CUSTOMER.

NOTE: THE FOLLOWING STEPS ARE REQUIRED BY LAW.

10. Type the necessary information on the "Authorized Software Update Label" p/n 04669020 ([Figure 1](#)). Attach the label to the PCM and cover the label with the clear plastic overlay.
11. Type the necessary information on the "Authorized Modification Label" p/n 04275086 and attach the label near the VECI Label ([Figure 2](#)).

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Op. No.	Time
08-19-42-92	0.5 Hrs.

FAILURE CODE:
