Technical Service Bulletin

NUMBER: 18-025-01

GROUP: Vehicle Performance

DATE: October 15, 2001

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THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 21–09–00, DATED SEPTEMBER 15, 2000, WHICH SHOULD BE REMOVED FROM YOUR FILES.
ASTERISKS HAVE BEEN USED TO HIGHLIGHT CHANGES. THIS BULLETIN ADDS A MODEL YEAR AND REQUIRES A REPROGRAMMING OF THE 1999 AND 2000 GRAND CHEROKEE POWERTRAIN CONTROL MODULE (PCM).

SUBJECT:

45RFE **and 545RFE Shift** Quality Enhancements for the** 2-3, 4-5, and 5-4** Shifts

OVERVIEW:

This bulletin involves selectively erasing and reprogramming the **Transmission Control Module (TCM) with new software: '99-'01 WJ (PN 05019701AC Ver 9.3), '00 AN/DN (PN 05018454AB Ver 9.1), or '01 AN/DN (PN 56028285AI Ver 8.4), and requires reprogramming of the Powertrain Control Module (PCM) for the 1999 and 2000 Grand Cherokees only (with callibration 99Cal20 (1999) or 00Cal17 (2000).**

NOTE: THE 2001 GRAND CHEROKEE DOES NOT REQUIRE REPROGRAMMING OF THE PCM AS IT IS ALREADY AT THE CORRECT CALIBRATION LEVEL.

NOTE: WHENEVER A PCM OR TCM IS REPLACED OR REPROGRAMMED, THE SOFTWARE OF THE PCM MUST BE VERIFIED AS HAVING THE LATEST REVISION LEVEL.

MODELS:

2000 - **2001** (AN) Dakota 2000 - **2001** (DN) Durango 1999 - **2001** (WJ) Grand Cherokee

NOTE: THIS BULLETIN APPLIES TO VEHICLES EQUIPPED WITH A 4.7L ENGINE AND A 45RFE **OR 545RFE** TRANSMISSION.

SYMPTOM/CONDITION:

Some vehicles **may exhibit one or more of the following performance conditions**:

- 1. A harsh 2-3 upshift causing a powertrain clunk or shudder when accelerating.
- **A harsh 4-5 upshift ('01 Grand Cherokee only).**
- 3. **A harsh 5-4 downshift ('01 Grand Cherokee only).**

18-025-01 -2-

NOTE: THIS REVISION TO THE TCM SOFTWARE ADDRESSES THE ABOVE SHIFT QUALITY CONDITIONS FOR ALL VEHICLES AND, ADDS A FINAL GEAR RATIO TO THE **1999 AND 2000 MY** GRAND CHEROKEE TRANSMISSION ONLY. (2001 MY GRAND CHEROKEE ALREADY HAS THIS UPGRADE.)

NOTE: TO MAINTAIN EMISSIONS COMPLIANCE, GRAND CHEROKEE VEHICLES THAT ARE EQUIPED WITH A FEDERAL EMISSION SYSTEM (SALES CODE NAA) MUST HAVE THEIR PCM REPROGRAMMED. IF THE SOFTWARE LEVEL IS AT OR HIGHER THAN THOSE IN THE OVERVIEW ABOVE, OR IF THE GRAND CHEROKEE HAS A CALIFORNIA EMISSIONS SYSTEM (SALES CODE NAE), REPROGRAMMING IS NOT NECESSARY.

DIAGNOSIS PROCEDURES:

Using the Mopar Diagnostic System (MDS2) and or the Diagnostic Scan Tool (DRBIII®) with the appropriate Diagnostic Procedures Manual, verify that all engine and transmission systems are functioning as designed. If Diagnostic Trouble Codes (DTC's) are present, record them on the repair order and repair as necessary before performing this repair. If no DTC's are present, and the above symptom has been experienced, perform the Repair Procedure.

NOTE: **IF OTHER PERFORMANCE ISSUES REMAIN AFTER THE REPAIR
PROCEDURE HAS BEEN PERFORMED THEY DO NOT RELATE TO THIS
BULLETIN. REFER TO THE PROPER SERVICE OR DIAGNOSTIC PROCEDURES
MANUAL(S) FOR FURTHER ASSISTANCE.**

PARTS REQUIRED:

Qty.	Part No.	Description
1	04669020	Label, Authorized Software Update
1	04275086	Label, Authorized Modification

EQUIPMENT REQUIRED:

CH6000	Scan Tool (DRB III®)	
CH7035	General Purpose Interface Bus Cable (GPIB)	
CH7000/7001	J1962 Cable	
	MDS2 (Mopar Diagnostic System)	

NOTE: THE MDS2 AND DRB III® ARE REQUIRED TO PERFORM THIS REPAIR. WHEN USING THE MDS2 AND THE DRB III®, THE SYSTEM MUST BE OPERATING AT CIS CD **2093 OR HIGHER AND DRBIII® LEVEL 52.3 OR HIGHER. (CD 2093 AND DRBIII® VERSION 52.3 WILL BE IN THE DEALERSHIPS ON OCTOBER 15, 2001.)**

REPAIR PROCEDURE:

- 1. Log onto the MDS2 (Mopar Diagnostic System).
- 2. Connect the MDS2 and DRB III® to the vehicle and switch the ignition key to "ON".

NOTE: AUTO CONNECTION WILL OCCUR ONCE THE DRB III®, MDS2, AND VEHICLE ESTABLISH COMMUNICATION. THE "CANNOT READ VIN FROM DRB III®" MESSAGE (ON THE MDS2) WILL BE REPLACED BY THE VEHICLE VIN. PRESS THE "OK" BUTTON ON THE MDS2 TO REQUEST A MDS2 SESSION FOR THE VEHICLE VIN INDICATED. PRESS THE "OK"BUTTON WHEN ASKED TO BEGIN SESSION.

- 3. Push the FLASH tab on the MDS2.
- 4. Select READ PART NUMBERS FROM VEHICLE and click SHOW UPDATES on the MDS2.

NOTE: A MESSAGE MAY APPEAR (AFTER STEP 3 OR 4) THAT INDICATES NO UPDATES ARE AVAILABLE. IF THIS OCCURS, MAKE SURE YOUR DIAGNOSTIC EQUIPMENT IS OPERATING AT THE LATEST SOFTWARE LEVEL AS LISTED EARLIER IN THIS BULLETIN. IF THE LATEST SOFTWARE IS INSTALLED, AND NO UPDATES ARE AVAILABLE ANOTHER VEHICLE CONDITION EXISTS THAT WILL REQUIRE FURTHER INVESTIGATION.

- 5. Select the new software part number with the light pen and click UPDATE CONTROLLER SOFTWARE.
- 6. The MDS2 and DRB III® will prompt for any operator action needed during the remainder of the reprogramming process.

NOTE: DUE TO THE PCM REPROGRAMMING PROCEDURE, A DTC MAY BE SET IN OTHER MODULES (EATX, BCM, MIC, SKIM, ETC.) WITHIN THE VEHICLE, IF SO EQUIPPED. SOME DTC'S MAY CAUSE THE MIL TO ILLUMINATE. ALL DTC'S RELATE TO A LOSS OF COMMUNICATIONS WITH THE MODULE THAT IS BEING REPROGRAMMED. CHECK ALL MODULES, RECORD THE FAULTS, AND ERASE THESE FAULTS PRIOR TO RETURNING THE VEHICLE TO THE CUSTOMER. ERASE ANY FAULTS IN THE PCM ONLY AFTER ALL OTHER MODULES HAVE HAD THEIR FAULTS ERASED.

NOTE: THE FOLLOWING STEPS ARE REQUIRED BY LAW.

7. 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.

18-025-01 -4-

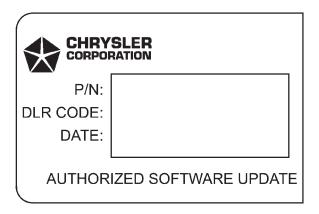


FIGURE 1 - AUTHORIZED SOFTWARE UPDATE LABEL

8. Type the necessary information on the "Authorized Modification Label" p/n 04275086 and attach the label near the VECI label (Figure 2).

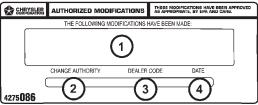


FIGURE 2 - AUTHORIZED MODIFICATION LABEL

1-	POWERTRAIN CONTROL MODULE P/N (INSERT P/N) USED
2-	CHANGE AUTHORITY: TSB XX-XX-XX
3-	DEALER CODE: XXXXX
4–	DATE: XX-XX-XX

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:		
08-19-49-93	Reprogram TCM	0.5 Hrs.
08-19-44-94	Reprogram PCM on 1999 or 2000 Grand Cherokee Only	0.5 Hrs.

FAILURE CODE:

FM Flash Module
