

Technical Service Bulletin

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GROUP: Transmission

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SUBJECT:

Torque Converter Break In Information/ATF +4 Update

MODELS:

2000 (NS) Town & Country/Caravan/Voyager

2000 (GS) Chrysler Voyager (International Market)

NOTE: THIS INFORMATION APPLIES TO MODELS EQUIPPED WITH A 41TE TRANSAXLE FILLED WITH ATF +4 TRANSMISSION FLUID.

DISCUSSION:

A running change was made in the 2000 model year to incorporate ATF +4. Assembly plant implementation is as follows:

| MODELS | BUILD DATE |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GS | AFTER NOVEMBER 8, 1999 (MDH1108XX) |
| NS | AFTER OCTOBER 10, 1999 (MDH1010XX) WINDSOR ASSY PLANT AFTER OCTOBER 18, 1999 (MDH1018XX) ST LOUIS ASSY PLANT 11 TH POSITION OF VIN - R = WINDSOR/B = ST LOUIS |

In addition to this new fluid, Torque Converter Break In was implemented (on NS/GS models only) to eliminate early mileage shudder concerns. The break in feature burnishes the clutch material by operating the torque converter in partial Electronically Modulated Clutch Control (EMCC) for the first several hours of vehicle operation. After break in completion, the torque converter EMCC feature will operate normally.

Under normal circumstances, there is no need for further action once the break in process is completed. However, if a Transmission Control Module (TCM) is replaced with less than 1500 torque converter break in miles, or the torque converter is replaced at any time, the break in feature must be re-initialized using the DRB III[®].

The DRB III[®] is used to view the break in status, and enable, or disable the feature. To access the DRB III[®] screen, select DRB III[®] standalone diagnostics, transmission diagnostics, miscellaneous, and TCC Break In.

NOTE: IF A TCM IS REPLACED WITH LESS THAN 1500 TORQUE CONVERTER BREAK IN MILES, OR THE TORQUE CONVERTER IS REPLACED AT ANY TIME, THE BREAK IN FEATURE MUST BE RE-INITIALIZED.

2000 model year vehicles built prior to the above implementation dates were filled with ATF +3. ATF +4 can be used in these models by using the following procedures to update the vehicle for ATF +4 use. The benefits of using ATF +4 are described in Technical Service Bulletin 21-16-99 but most notably is the change in scheduled maintenance as follows:

RECOMMENDED SERVICE INTERVALS

Normal Maintenance (Schedule A) - None (Fill For Life)

Severe Maintenance (Schedule B) - Fluid/Filter 77,000 km (48,000 miles)

NOTE: ATF +4 CAN BE USED AS A REPLACEMENT FLUID IN ALL 2000 MODEL GS/NS VEHICLES. THE FOLLOWING PROCEDURES ARE REQUIRED IF MAJOR TRANSAXLE SERVICE IS PERFORMED AND THE TRANSAXLE IS FILLED WITH ATF +4.

ATF +3 to ATF +4 UPDATE PROCEDURE**PARTS REQUIRED:**

| | | |
|----|------------|-----------------------------------|
| 1 | 04669020 | Label, Authorized Software Update |
| 1 | 04275086 | Label, Authorized Modification |
| 1 | 04659086AB | Dipstick, For Use With ATF +4 |
| AR | 05013457AA | ATF +4 Type 9602 (Quarts) |

EQUIPMENT REQUIRED:

| | | |
|---|-------------|--------------------------------------------|
| 1 | CH6000 | Scan Tool (DRB III®) |
| 1 | CH7035 | General Purpose Interface Bus Cable (GPIB) |
| 1 | CH7000/7001 | J1962 Cable |
| 1 | | MDS2 |

NOTE: THE MDS2 AND DRB III® ARE REQUIRED TO PERFORM PART OF THIS PROCEDURE. THE MDS2 SYSTEM MUST BE OPERATING AT CIS CD2045 OR HIGHER.

UPDATE PROCEDURE:

1. Replace the dipstick with p/n 4659086AB. This will permanently reflect the ATF +4 change on the handle.

NOTE: THE FLASH REPROGRAMMING PORTION OF THIS TSB IS APPLICABLE TO VEHICLES BUILT PRIOR TO THE ABOVE IMPLEMENTATION DATES.

2. Log onto the MDS2 system.
3. Connect the MDS2 (Mopar Diagnostic System) and DRB III® (Scan Tool) to the vehicle and switch the ignition key to "ON".
4. Use the arrow keys and select #2 CONNECT TO MDS1 OR MDS2 on the DRB III® MAIN MENU SCREEN.
5. Use the arrow keys and select #2 RUN MDS2 APPLICATION on the DRB III® MAIN MENU SCREEN.

NOTE: ONCE MDS2, DRB III[®], AND VEHICLE COMMUNICATION HAS BEEN ESTABLISHED, 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.

6. Push the FLASH tab on the MDS2.

NOTE: A MESSAGE MAY APPEAR 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.

7. Select READ PART NUMBERS FROM VEHICLE and click SHOW UPDATES on the MDS2.

NOTE: A MESSAGE MAY APPEAR 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, THE TCM (TRANSMISSION CONTROL MODULE) IS AT THE LATEST SOFTWARE LEVEL THAT SUPPORTS TORQUE CONVERTER BREAK IN.

8. Select the new TCM software part number with the light pen and click UPDATE CONTROLLER SOFTWARE.

9. The MDS2 and DRB III[®] will prompt for any operator action needed during the remainder of the reprogramming process.

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.



FIGURE 1

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


| | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------------|----------------------------------------------------------------------------------------|
|  | AUTHORIZED MODIFICATIONS | | <small>THESE MODIFICATIONS HAVE BEEN APPROVED AS APPROPRIATE, BY EPA AND CARB.</small> |
| | THE FOLLOWING MODIFICATIONS HAVE BEEN MADE: | | |
| | 1 | | |
| | CHANGE AUTHORITY | DEALER CODE | DATE |
| 4275086 | 2 | 3 | 4 |
| 1 - CONTROL MODULE PART NUMBER (INSERT NEW P/N) USED 2 - CHANGE AUTHORITY: TSB XX-XX-XX 3 - DEALER CODE: XXXXX 4 - DATE: XX-XX-XX | | | |

FIGURE 2

If the torque converter was replaced along with the conversion to ATF +4, use the DRB III[®] to enable the torque converter break in feature. If the torque converter was not replaced, DO NOT enable the break in feature.

The addendum card (in the owners manual) that tells the customer to use ATF +3 should be removed and discarded.

POLICY: Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No: 08-19-45-91 TCM - Reprogram.....0.5 Hrs.
 21-75-17-50 Dipstick - Replace (Related).....0.1 Hrs.

FAILURE CODE: FM - Flash Module P8 - New Part