



Answers To Some Mysterious Complaints On Chrysler Manual Transmissions

By Mike Weinberg
Contributing Editor

Every week there is an endless flow of incoming tech calls. These vary from common problems to "first time we heard that one." Some patterns get established that enable us to come up with a fix to a common problem and help rebuilders get the job out the door. On the other hand, there will be a problem that crops up often enough so that it isn't new but the cause is elusive, and many times it can't be re-created on a test vehicle so solving the problem becomes an itch you can't scratch.

The first problem concerns Chrysler front-wheel-drive transaxles from 1990 to 1995. The main concern of the vehicle owner was to have the transaxle locked in neutral or reverse after shifting out of reverse. The mystery occurred when the technician removed the shift cover to inspect the internal linkage and shift rails, found nothing really wrong, lined everything up and reinstalled the cover. A road test would show everything to be working properly. The customer would leave only to have the problem recur. The greatest cause of premature hair loss for the shop was having a customer call up with the unit stuck in reverse or neutral. The tow truck would be sent to bring the car to the shop and when the car was dropped off, no malfunction could be found. It seems that whatever changes in attitude or bouncing around occurred getting the car to the shop would

make the problem resolve itself temporarily. Well, we got lots of calls on this one and tried unsuccessfully to re-create the conditions in a test vehicle. At the same time a real good gearbox man down in Baltimore was doing his own research and found that Chrysler was working out a fix and turned us on to the magic cure. Many thanks to Will at Rose's Transmissions. The following tech bulletin is the answer to this problem.

Models:

1990-1995 (AA) Spirit/ Acclaim/ LeBaron Sedan
1990-1993 (AG) Daytona

Chatter-Free Transfer Case Lubricant

Prevent Costly T-Case Repairs

- **Eliminates driveline chatter and shudder in clutch-type transfer cases***
- **Prevents clutch failure from lubricant breakdown**
- **This is a lubricant not an additive**

* **Chatter-Free will not repair transfer cases that are already damaged!**



1990-1995 (AJ) LeBaron Coupe, LeBaron Convertible
1990-1994 (AP) Shadow/Shadow Convertible/Sundance
1990-1994 (AS) Caravan/Voyager
1992-1995 (ES) Chrysler Voyager (European Market)

Symptom/Condition:

The manual transaxle is locked in neutral or locked in reverse after shifting out of reverse.

Diagnosis:

If the operator of the vehicle describes this condition, perform the repair procedure. It is possible for the transaxle to "fix itself" because of vibration or impacts experienced while being towed in for repair, and the problem could happen again if the

repair procedure is not performed. A rotated detent roller or clutch that is not fully disengaging will increase the chances of this condition happening.

Parts Required:

- 1 4798366 Spring, Detent
- AR 4531302 Detent, Roller
- 2 6502049 Bolts, Gearshift Cover Shoulder
- 2 6501370 Bolts, Gearshift Cover
- 2 6500318 Bolts, Gearshift Cover
- AR 4318083 Mopar Gasket Maker

Repair Procedure:

This bulletin involves installing a stronger spring for the reverse detent.

1. With the shifter in neutral, remove the lock pin on the gearshift housing and reinstall with the long end down (Refer to Figure 1). If the transaxle is not equipped with a lock pin, skip to step 2.

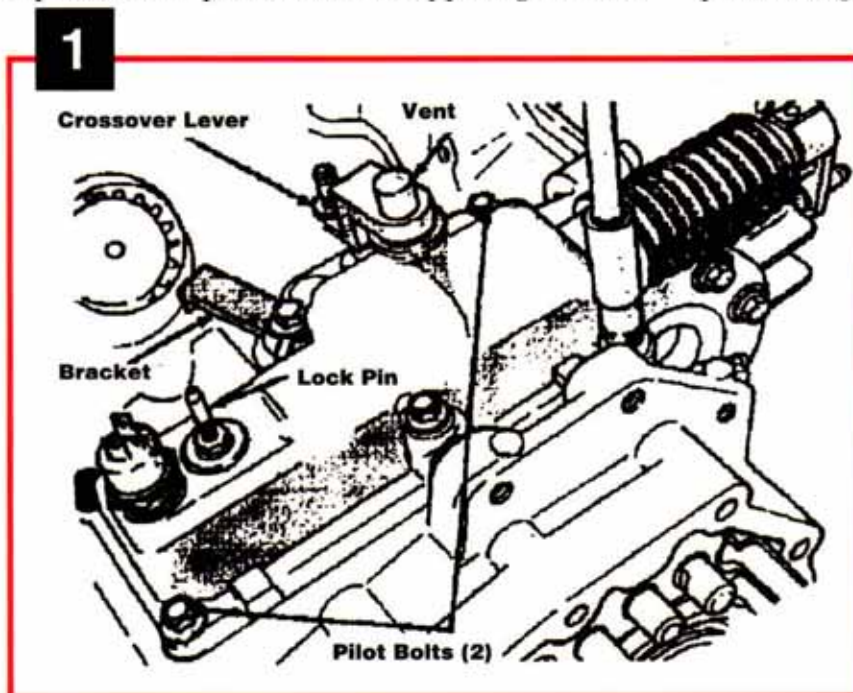
2. Remove the six bolts attaching the gearshift housing and remove and set aside the gearshift housing.

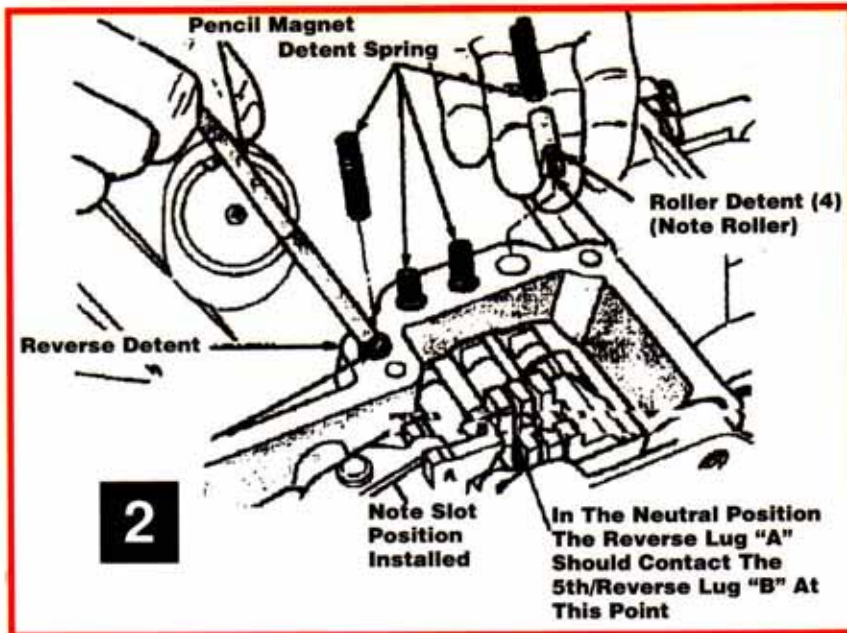
3. Inspect ALL roller detents for improper alignment or damage. Properly align any misaligned roller detents and replace any damaged detents with P/N 4531302.

4. Ensure the reverse lug is in the neutral position. The reverse lug should be shifted fully toward the engine and contact the 5th reverse lug (Refer to Figure 2).

5. Replace the original reverse detent spring with revised spring P/N 4798366 (Refer to Figure 2).

6. Clean all old sealer from the transaxle case and gearshift hous-





ing. Apply Mopar Gasket Maker, P/N 4318083, and install the gearshift housing using new bolts. Note the position of the shouldered pilot-bolt locations (Refer to Figure 1). Torque the six bolts to 28 N-m (21 ft/lbs.).

7. Remove the lock pin on the gearshift housing and reinstall with the long end up. If the transaxle is not equipped with a lock pin, use the following procedure:

A. Gain access to the crossover shift-cable adjustment screw located at the floor shifter in the vehicle interior, as outlined in the appropriate service manual.

B. Loosen the screw to allow the crossover-cable adjustment fitting to slide freely (Refer to Figure 3).

C. Shift the transaxle straight back into 4th gear, straight into 3rd gear and straight back into 4th gear. Leave gearshift lever in the 4th-gear position and tighten crossover-cable adjusting screw to 4.5 N-m (70 in/lbs.).

Caution: Do not lean on or apply a side-to-side load to the shift lever when tightening the adjusting screw.

D. Install all hardware removed in Step A.

8. Test drive the vehicle to ensure proper shifting. Test for complete clutch disengagement by checking for excessive "spin-down" time (maximum 5 seconds). To test for excessive "spin-down" time, place the transaxle in neutral with the engine idling and the clutch engaged, then fully depress the clutch pedal and shift into reverse. If the transaxle grinds after you wait 5 seconds before attempting to

shift into reverse, a clutch malfunction is indicated

and requires further diagnosis.

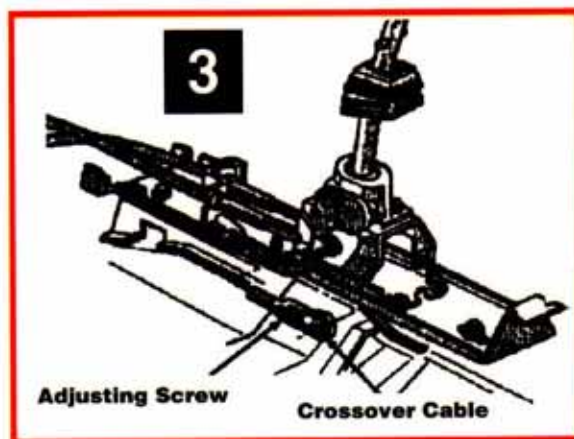
Refer to section 6 of the appropriate service manual. **TD**

THE BOTTOM LINE:

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- 85 Useful information.
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ALL PICKUPS - NP208C, NV241C, NV243C, NV261C, NV263C, BW4401C, BW4470C, S10, S15-NP207C, NP231C, NV233C, NV136C, NV236C, BW4472C

BLAZER, JIMMY - NP208C, NV241C, NV243C

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**Includes New Morse Chain*

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