



**NUMBER:** 21-009-03

**GROUP:** Transmission

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**SUBJECT:**

Automatic Transmission Diagnostic Teardown Procedure

**OVERVIEW:**

This bulletin provides a procedure to determine repair versus replacement of an automatic transmission assembly. Follow the proper repair procedure based on the transmission type. This procedure is to be used after the transmission has been removed from the vehicle.

Every transmission assembly returned to DaimlerChrysler, due to a DaimlerChrysler paid replacement, must include a completed diagnostic sheet. Refer to Warranty Bulletin D-03-08.

**MODELS:**

1995	(AA)	Spirit/Acclaim/LeBaron Sedan
1995 - 2003	(AB)	Ram Van/Wagon
1997 - 2004	(AN)	Dakota
1995	(AJ)	LeBaron Coupe/LeBaron Convertible
1995 - 2002	(BR/BE)	Ram Truck
2004	(CS)	Pacifica
1998 - 2003	(DN)	Durango
2002 - 2004	(DR)	Ram Truck
1995 - 2000	(FJ)	Sebring/Avenger/Talon
2004	(HB)	Durango
1995 - 2000	(JA)	Cirrus/Stratus/Breeze
2001- 2004	(JR)	Sebring Sedan & Convertible/Stratus Sedan
1996 - 2000	(JX)	Sebring Convertible
2002 - 2004	(KJ)	Liberty
2002 - 2004	(KJ)	Cherokee (International Markets)
1995 - 2004	(LH)	Concorde/Intrepid/Vision/LHS/New Yorker /300M
1996 - 2000	(NS)	Town & Country/Caravan/Voyager
1996 - 2000	(GS)	Chrysler Voyager (International Markets)
1995 - 2004	(PL)	Neon
2001 - 2004	(PT)	PT Cruiser

2002	(PG)	PT Cruiser (International Markets)
1997 - 2002	(PR)	Prowler
2001 - 2004	(RS)	Town & Country/Caravan/Voyager
2001 - 2004	(RG)	Chrysler Voyager (International Markets)
1997 - 2004	(TJ)	Wrangler
1999 - 2004	(WJ)	Grand Cherokee
1999 - 2004	(WG)	Grand Cherokee (International Markets)
1995	(YJ)	Wrangler
1996 - 1998	(ZG)	Grand Cherokee (International Markets)
1996 - 1998	(ZJ)	Grand Cherokee/Grand Wagoneer

***SPECIAL TOOLS/EQUIPMENT REQUIRED:***

C-3339A	Set, Dial Indicator
C-3752-A	Puller Set
6227	Spring Compressor/Alignment
8257	Support Stand
8261	Plate, Alignment
8266A	Fixtures, End Play

***REPAIR PROCEDURE:***

**40TE, 41TE/AE and 42LE/RLE Transmissions**

1. Remove fluid using approved Team PSE Automatic Transmission Fluid X-changer or equivalent.
2. Remove torque converter (keep with unit).
3. Measure input shaft end play.
4. Remove input speed sensor.
5. Remove pump assembly.
6. Remove input clutch assembly.
7. Remove front sun gear assembly.
8. Remove front carrier/rear annulus assembly.
9. If transmission is determined to be greater than 70% failed follow steps 10 through 13. If transmission is determined to be less than 70% failed, refer to the service information available in TechCONNECT or the appropriate service manual in Section 21 for detailed repair instructions.
10. Drop #2 thrust bearing into transmission pan.
11. Reassemble transmission by reversing steps 4 through 8.
12. Place torque converter in box new converter was shipped in, and place this box with transmission in return container.
13. Return any loose items by attaching to bellhousing in plastic bag.

**NOTE: All parts must be returned with transmission.**

### **30RH, 30TH, 31TH, 32RH, 36RH, 42RE/RH, 44RE/RH, 46RE/RH, 47RE and 48RE Transmissions**

1. Remove fluid using approved Team PSE Automatic Transmission Fluid X-changer or equivalent.
2. Remove torque converter (keep with unit).
3. Measure input shaft end play.
4. Remove pump assembly.
5. Loosen front band adjustment screw until link can be removed (keep link with unit).
6. Rotate front band and remove (keep with unit).
7. Remove front clutch retainer and rear clutch retainer assembly.
8. Remove intermediate shaft snap ring (keep with unit).
9. Remove front and rear planetary assemblies and drive shell (keep with unit).
10. Remove low/reverse drum snap rings.
11. Remove low/reverse drum.
12. Remove overdrive unit.
13. Remove overdrive clutch snap ring.
14. Remove overdrive clutch disc and plates.
15. Remove overdrive wave spring.
16. Remove overdrive snap ring.
17. Remove access cover and gasket.
18. Expand output shaft bearing snap-ring with expanding type snap ring pliers. Then push output shaft forward to release shaft bearing from locating ring.
19. Remove geartrain assembly.
20. If transmission is determined to be greater than 70% failed follow steps 21 through 24. If transmission is determined to be less than 70% failed, refer to the service information available in TechCONNECT or the appropriate service manual in Section 21 for detailed repair instructions.
21. Drop band adjustment link in pan.
22. Reassemble transmission by reversing steps 4 through 19.
23. Place torque converter in box new converter was shipped in, and place this box with transmission in return container.
24. Return any loose items by attaching to bellhousing in plastic bag.

**NOTE: All parts must be returned with transmission.**

### **45RFE/545RFE Transmissions**

1. Remove fluid using approved Team PSE Automatic Transmission Fluid X-changer or equivalent.
2. Remove torque converter (keep with unit).
3. Remove the transmission oil pan from the transmission case.
4. Remove the primary oil filter and the oil cooler return filter.
5. Remove the cooler return filter bypass valve.
6. Remove the valve body from the transmission case.
7. Install Support Stand 8257 onto the transmission case.
8. Measure input shaft end play.
9. Remove input speed sensor.
10. Remove extension/adapter housing from the transmission case.
11. Remove front pump cover.
12. Remove front pump assembly.
13. Remove input clutch assembly.

14. Remove the 4C clutch retainer/bulkhead tapered snap-ring from the transmission case.
15. Remove the 4C clutch retainer/bulkhead from the transmission case.
16. Remove the front 2C clutch pack snap-ring from the transmission case.
17. Remove the 2C clutch pack from the transmission case.
18. Remove the reaction annulus from the reaction planetary carrier.
19. Remove the snap-ring holding the park sprag gear onto the output shaft.
20. Remove the input/reverse planetary assembly.
21. Remove the snap-ring holding the low/reverse clutch retainer into the transmission case.
22. Remove the low/reverse clutch retainer from the transmission case.
23. If transmission is determined to be greater than 70% failed follow steps 24 through 26. If transmission is determined to be less than 70% failed, refer to the service information available in TechCONNECT or the appropriate service manual in Section 21 for detailed repair instructions.
24. Reassemble transmission by reversing steps 3 through 22.
25. Place torque converter in box new converter was shipped in, and place this box with transmission in return container.
26. Return any loose items by attaching to bellhousing in plastic bag.

**NOTE: All parts must be returned with transmission.**

***POLICY:***

Reimbursable within the provisions of the warranty.

**NOTE: These labor operation numbers are only to be used when repair exceeds 70% of the cost of transmission assembly replacement.**

**NOTE: Transmissions received missing components are subject to warranty part return chargebacks. See Global Warranty Administration Manual pages P19 and P20.**

**NOTE: Warranty repairs claiming one of the following Labor Operation Numbers must include a completed diagnostic sheet. Refer to Warranty Bulletin D-03-08. If the diagnostic sheet is not returned with the transmission assembly, the diagnostic tear down time allowance will be charged back.**

**TIME ALLOWANCE:**

<b>Labor Operation No:</b>	<b>Description</b>	<b>Models</b>	<b>Amount</b>
21-00-21-94	40TE Transaxle 41TE/AE Transaxle	AA AJ CS FJ JA JX JR NS GS PL PG PT RS RG	0.8 Hrs.
21-00-21-95	42LE Transmission	LH	0.8 Hrs
21-00-21-96	30TH Transmission 31TH Transmission	AA AJ NS GS RS RG PL	0.8 Hrs
21-00-27-91	30RH Transmission 32RH Transmission 36RH Transmission 42LE/RLE Transmission	AB KJ PR HB TJ YJ	0.8 Hrs

21-00-27-92	42RE/RH Transmission 44RE/RH Transmission 46RE/RH Transmission 47RE Transmission 48RE Transmission	AB AN BE BR DN DR ZJ ZG WG WG	1.1 Hrs.
21-00-27-93	45RFE Transmission 545RFE Transmission	AN DN DR HB KJ WG WJ	1.2 Hrs.