

Automatic Transmission 1997-2000 Dodge

REMOVAL & INSTALLATION

NOTE

The transmission and torque converter must be removed as an assembly to avoid component damage. The converter drive plate, pump bushing, or oil seal can be damaged if the converter is left attached to the drive plate during removal.

CAUTION

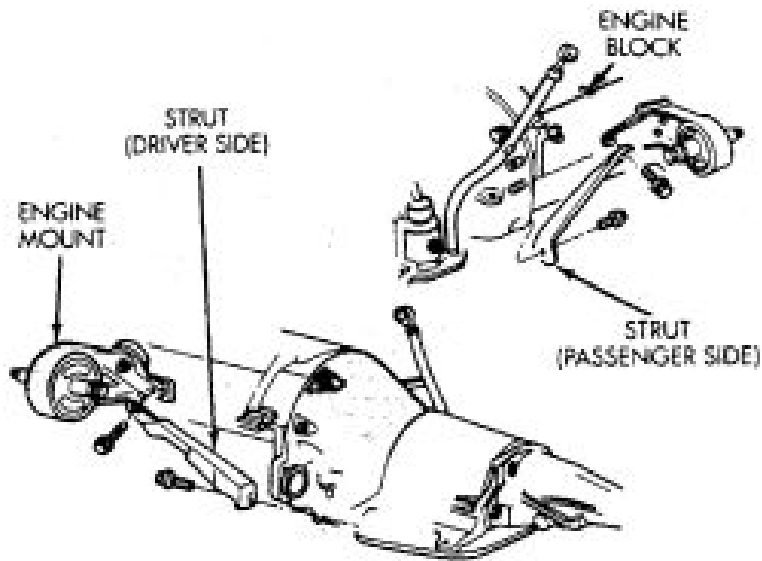
Significant equipment is required to remove and install the transmission safely. This includes supports and jacks for the truck, the engine, transfer case (if equipped) and transmission.

1. Disconnect the battery negative cable(s).
2. Raise and support the vehicle safely.
3. Remove the skidplate(s) if fitted.
4. Remove the skidplate support crossmember, if fitted.
5. Remove any exhaust pipes and crossover pipes that would interfere with transmission removal.
6. Disconnect the fluid cooler lines at the transmission.
7. Remove the starter motor.
8. On Ram: remove the engine-to-transmission struts, if fitted.
9. On Dakota and Durango:
 1. Support the engine with a suitable jack device and wooden block.
 2. Remove the bolts attaching the engine-to-transmission brackets to the transmission.
 3. Remove the bolt and nut securing each engine-to-transmission bracket to the motor mounts.
 4. Remove the engine-to-transmission brackets from the front axle, if fitted.
 5. Loosen the brackets on each side of the engine block.
10. Disconnect and remove the crankshaft position sensor. Retain the sensor attaching bolts.
11. Remove the torque converter access cover.
12. If the transmission is being removed for rebuilding, remove the oil pan and drain the fluid. Reinstall the pan before removing the unit to protect internal components.
13. Remove the fill tube bracket bolts and pull the tube out of the transmission. Retain the fill tube seal.
14. On 4x4 vehicles, remove the bolt attaching the transfer case vent tube to the converter housing.
15. Mark the torque converter and drive plate for assembly alignment. Note that the bolt holes in the crankshaft flange, drive plate, and torque converter all have one offset hole.
16. Rotate the crankshaft CW until the converter bolts are accessible. Then remove the bolts one at a time. Rotate the crankshaft with a socket wrench on the dampener bolt.
17. Matchmark the driveshaft(s) and yokes or flanges for assembly alignment, then disconnect and remove them. On 4x4 vehicles, remove the front driveshaft as well.
18. Disconnect the wires from the park/neutral position switch and the transmission solenoid.
19. Disconnect the gearshift rod and torque shaft assembly from the transmission.
20. Disconnect the throttle valve cable from the transmission bracket and throttle valve lever.
21. On 4x4 models, disconnect the shift rod from the transfer case shift lever.
22. Support the rear of the engine with safety stands or a heavy-duty jack.

23. Raise the transmission slightly with a service jack to relieve the load on the crossmember and supports.
24. Remove the bolts securing the rear support and cushion to transmission and crossmember.
25. Raise the transmission slightly, slide the exhaust hanger arm from the bracket and remove the rear support.
26. Remove the bolts attaching the crossmember to the frame. Remove the crossmember.
27. On 4x4 vehicles, remove the transfer case.
28. Attach a small C-clamp to the edge of the bell housing to hold the converter in place during transmission removal. Otherwise the front pump bushing might be damaged.
29. Remove the converter housing bolts.
30. Carefully work the transmission and torque converter assembly rearward off the engine block dowels.
31. Lower the transmission assembly and remove it from the vehicle.
32. To remove the torque converter, remove the C-clamp from the edge of the bell housing and carefully slide the torque converter out of the transmission.

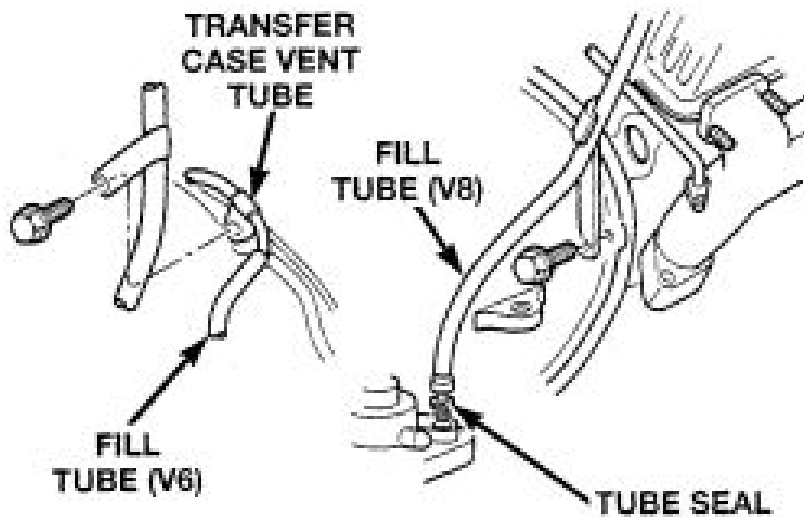
To install:

33. Reverse the removal procedure. Note the following points.
34. Check the torque converter hub and hub drive notches for sharp edges, burrs, and scratches. Polish off any imperfections with 400 grit paper. The hub must be smooth to avoid damaging the seal during installation.
35. Lubricate the seal lips and all engaging parts with clean ATF.
36. Check the converter seating after installation with a steel scale and straightedge. The surface of the converter lugs should be $\frac{1}{2}$ in. (13mm) below bell housing mounting (see illustration).
37. Be sure the transmission dowel pins are seated in the engine block and protrude far enough to hold the transmission in alignment.
38. Don't forget to align converter and drive plate.
39. Tighten converter-to-drive plate bolts as follows:
 - 10.75 in. converter: 23 ft. lbs. (31 Nm)
 - 12.2 in. converter: 35 ft. lbs. (47 Nm)
40. Don't forget to fill the transmission with ATF after installation.

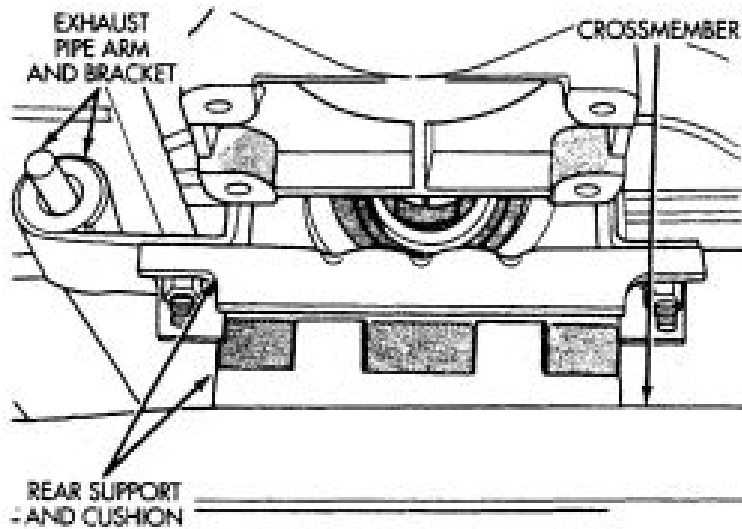


Transmission-to-engine strut

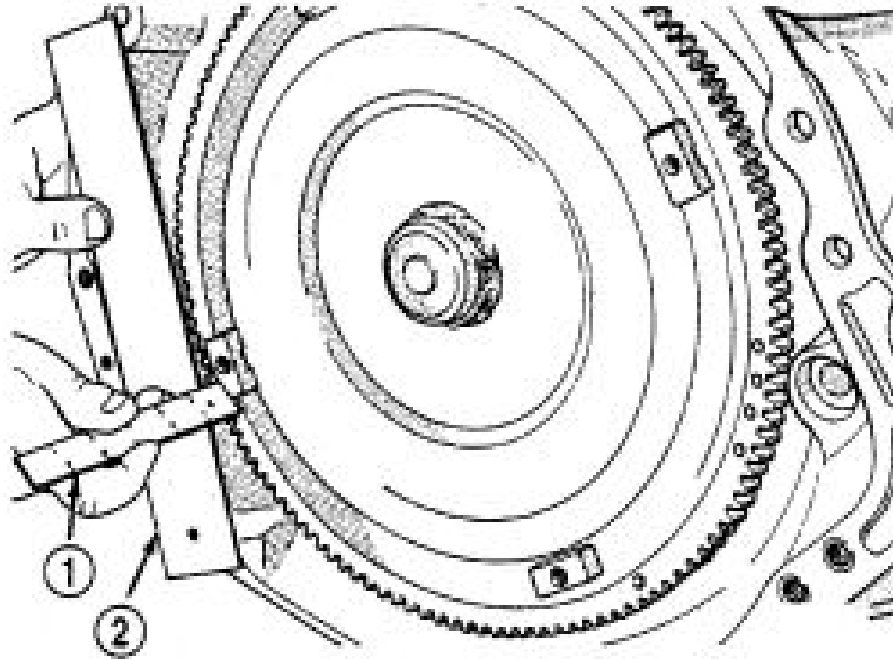
attachment—Ram shown



Fill tube attachment—typical



Rear support cushion—typical



Checking converter seating with scale (1) and straightedge (2). Surface of lugs should be $\frac{1}{2}$ in. below bell housing mounting flange