

BW Model 1339 Quadra-Trac Front Seal Replacement

Contributed By: Joe Sego

A while back I noticed a drip from my 1979 Cherokee Chief's transfer case. Upon further inspection I determined it was Dexron tranny fluid and NOT the Jeep QT fluid. The seals between the TH400 auto transmission and the Quadra-trac unit were bad. Tranny fluid was entering the transfer case.....NOT GOOD!

There are two seals in the transfer case, there are NO seals on rear of the TH400 transmission. Actually this is a blessing, I'd much rather pull the transfer case than the Th400. I ordered the new seals from a Jeep dealer. They were \$3.39 each, not bad huh? *note* some model years require a gasket between tranny and transfer case. The 79 Cherokee does not.

PULLING The Borg Warner 1339 Quadra-Trac Case

1. Jack up vehicle and use jack stands.
2. Mark front and rear drive shafts so they can be installed in same position.
3. Remove front and rear drive shafts
4. If so equipped unhook low range linkage and low range unit
5. Mark and unhook the two vacuum lines to Emergency Drive poppet valve on top of transfer case.
6. Unplug wire to Emergency Drive light indicator
7. Remove two 3/8" bolts from transfer case to transmission (on rear of case)
8. Remove two 3/8" bolts from tranny to transfer case (front of case)
9. **CAREFULLY** slide transfer case rearward, approx. 4" until it disengages from tranny rear shaft. **THE CASE WEIGHS ABOUT 75 POUNDS** !! I'd use a tranny jack if available.
10. Once it's on the floor, clean it up and remove the two front seals. Pay particular attention to the fact that both seals are back to back and turned opposite of each other. Install the new ones in same manner! They drive right in with the help of a small piece of pipe and a hammer.

REASSEMBLY

Please note you will need two 3/8" bolts approx 5" long with the head cut off. These are screwed in the holes where the two rear bolts were removed. These bolts act as a guide for the transfer case, installing the case without these bolts will almost always damage the new seals. Once the case is up against the tranny the guide bolts can be removed and regular bolts installed. The rest of the assembly is the reverse of the above. I would go ahead and change the transfer case fluid. It takes two quarts and you need to buy it at Jeep. \$9.95 per quart. Yes, it is a special fluid for the clutches in the Quadra-Trac unit. Regular oil will NOT work.