

Transfer Case Seal Replacement

Contributed By: Jay Rexroad

There are three places I'd consider most likely to be leaking. The rear output shaft seal, the front output shaft seal, or the input shaft seal. Other possibilities are the seals at the hi/lo shift linkage or the 4WD vacuum solenoid thingy. Also, maybe the least likely, the gaskets between the various components of the housing.

If it's the input shaft seal, the t-case does have to be removed from the transmission to get to it.

Whether it's the front or rear, the procedure is basically the same.

Raise the vehicle.

Drain the T-Case. (Optional)

Remove the drive shaft from the output shaft yoke.

Remove the output shaft yoke. (Note: (Rear) An additional cup or so of fluid will drain from the output shaft area at this time.)

Pry out the old seal with a seal removal tool or large screw driver. This can be a BIG PITA. This turned my seal replacement into a 3 or 4 day job (working on it in the evenings after work). Be careful not to damage the surface within the seal bore. In spite of my efforts, I did. Then, I smoothed the damage with a fine cone shaped grinding stone on my Dremel Tool and smeared a little gasket sealant on the roughened surface. It doesn't leak, but I don't look forward to the next time that seal has to be replaced. I may have to drop the T-Case then to get the seal out and fix it right. Maybe someone on the list has a good "why didn't I think of that" trick to easily remove old oil seals.

Install the new seal.

Lubricate the shaft splines and the yoke's inner splines with chassis grease or anti-seize compound.

Lubricate the new seal with Dexron II or petroleum jelly.

Lubricate the yoke's outer surface with Dexron II or petroleum jelly.

Reinstall the yoke. (Torque the nut to 120 ft lbs)

Reinstall the drive shaft. (Torque the u-joint strap bolts to 14 ft lbs)

Refill with the correct fluid. (For a NP 229 T-Case, the proper fluid is Dexron II, or equivalent) (Torque the drain and fill plugs to 18 ft lbs)

Check for leaks.

Lower the vehicle. Test drive.

Check again for leaks.

So, there it is. Can you replace the output shaft seals without dropping the t-case?

Yeah, and it SHOULD be a relatively easy job.

Is it that much easier than just biting the bullet and dropping the case in the first place? Well, it depends on how stubborn your old seals are, and you won't know that till you try. Besides, dropping the case will give you more room for working, but that's no guarantee you'll be able to remove the seals easily and without damaging the bores. Of course, with the t-case removed, you could disassemble it and drive the seals out from the other side, but that would be my absolute last resort.

When I ran into trouble with this, (Incidentally, this was before I got my computer and joined the list. I was on my own... not good) I considered dropping the t-case to alleviate my pain, But, my ego said that would be tantamount to failure. I mean, how could a simple seal job force me to do something I didn't want to, like drop the t-case? I was determined to show it who was boss... yadda, yadda, yadda.

Jay 85 GW