

NV4500 Input Shaft Kit

Installation Instructions

Disassembly

1. Remove the 4 bolts that hold the input shaft retainer in place, remove old retainer.
2. Remove old pocket bearing and thrust bearing from transmission.
3. Check for any damaged gears or synchronizers (Do not install new input shaft in a damaged transmission!)

Assembly

1. Lubricate the drive gear thrust bearing in Syntorq transmission oil and install it on the main shaft, the bearing rollers should face towards the front.
2. Lubricate the pocket bearing in Syntorq transmission oil and slip it into the input shaft.
3. Install the input shaft through the synchronizer clutch splines and onto the main shaft until seated.
4. Lubricate the input shaft bearing cup and input shaft seal lip with petroleum jelly.
5. Apply a 1/8" bead of RTV sealant to the flange surface of the bearing retainer.
6. Locate the round lube-channel hole in the bearing retainer. This lube-channel matches a slot in the top of the transmission case.
7. Install the bearing retainer onto the transmission. Apply silicone sealant to the bolt threads; install the bolts into the retainer. Torque the bearing retainer bolts to 22 lb. ft.
8. After installing the retainer, make sure the lube-channel hole is not blocked by RTV!
9. Check that the input shaft rotates freely and has no in and out play.

1



Thrust bearing

2



Pocket bearing

3



Lip seal

(Installed in retainer)

4



Cup race

(Installed in retainer)

5



Lube-channel hole

6



Cone bearing

(installed on input shaft)

3 and 4 have been installed in the retainer and 6 has been pressed onto the input shaft for your convenience.