

Work instruction

APPLY GLUE ON MECHANICAL SEAL FOR OIL TYPE END UNIT

FRED WANG 2/9/07

* APPLY GLUE ON OIL TYPE END UNIT ONLY.

APPLY GLUE

- EVENLY APPLY GLUE "PERMATEX 26B" ON THE METAL SURFACE OF MECHANICAL SEAL.



PRESS IN

- PRESS MECHANICAL SEAL INTO HUB WITHIN 5 MINUTES BEFORE THE GLUE DRY.

CHECK, CLEAN & WAIT 1 HR.

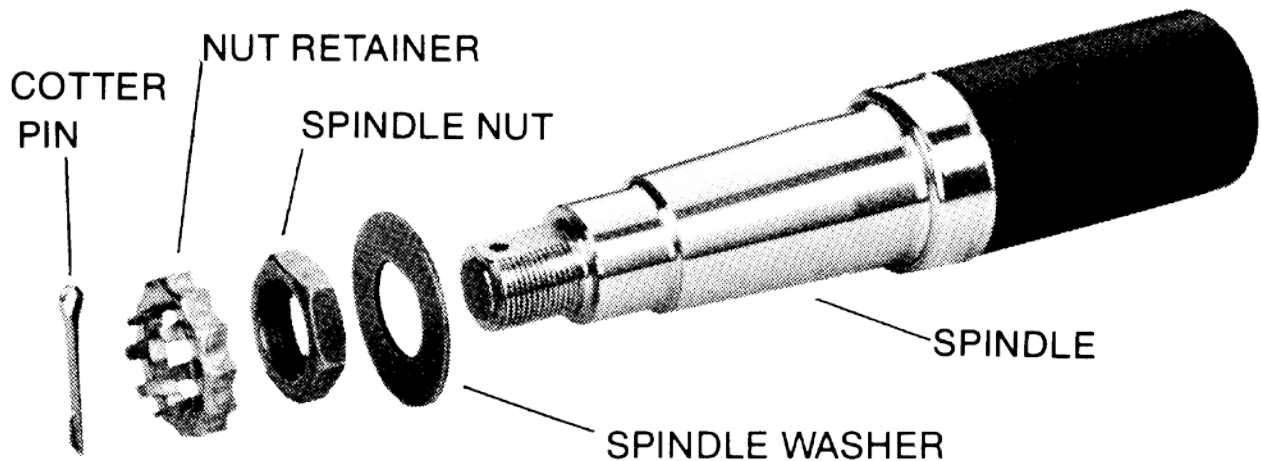
- VISUAL CHECK THAT RED GLUE SHOULD HAVE NO VOID ON CIRCLE. IF VOID THE SEAL MUST BE REMOVED.
- CLEAN EXCESS GLUE ON HUB.
- WAIT ONE HOUR FOR GLUE CURING BEFORE ADD OIL.



UFP Cotter Pin Installation

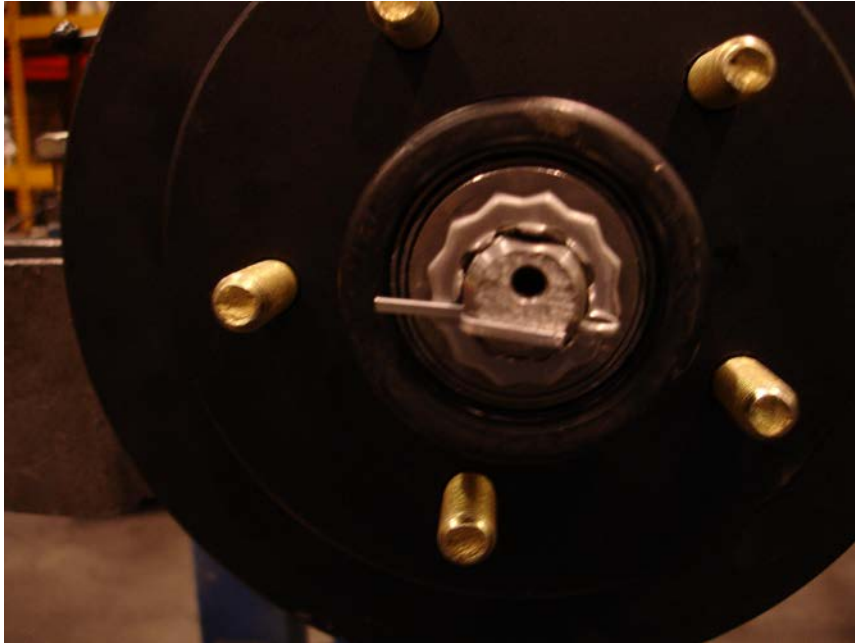
Cotter pins are fairly easy to install. They can be installed in various configurations. However, some bearing protectors require the cotter pins to be installed fairly tightly to the spindle end for clearance. Below is the recommended cotter pin installation method:

Step 1: Be sure the bearings are correctly adjusted per UFP instructions: If new bearings and races/cups were installed in the hub as part of service, first seat the bearings in the races/cups by tightening the spindle nut up to about 20-25 FOOT-Pounds while rotating the hub slowly. The bearings should bind up slightly while rotating at this point. Then slowly loosen the spindle nut until the “D” washer just releases its pressure from under the nut. You may hear or feel a slight click or pop when the “D” washer releases, and the spindle nut will just begin to come loose, but there should not be any end play in the bearings. Then retighten the nut to 18-20 INCH- pounds. When done, the spindle nut should be at about 18-20 inch pounds of torque, which is slightly more than finger tight, and no apparent end play should be felt in the bearings. If you’re not sure, repeat the above tightening/loosening/tightening process again to 18-20 inch pounds and check again. Then install the nut retainer (looks like a cookie cutter) by lining up the appropriate notch in the nut retainer with the hole in the end of the spindle without disturbing the bearing adjustment.



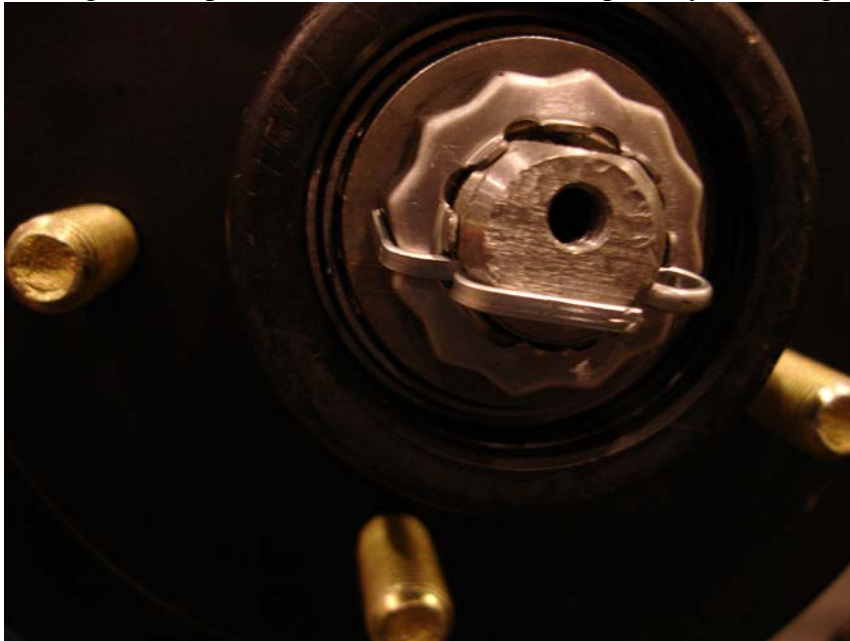
Step 2: Install A NEW cotter pin through the spindle hole and the appropriate notches in the nut retainer. The loop on the end of the cotter pin should be seated in the notch in the nut retainer and against the hole in the spindle. Rotate the cotter pin so the long leg of the pin is to the outside. Before bending the pin legs, verify that the bearings/hub at this point will rotate smoothly with only a slight amount of drag. Also at this point if you pull/push in/out or try to rock the hub or rotor, you shouldn’t feel any obvious play in the bearings. Note that it is normal for bearings pre-installed dry to rotate with somewhat increased drag (Typically Vault or Bearing Lube assemblies are lubricated after the bearings are installed using a grease/zerc fitting through the integral lubrication galley in the spindle) over those pre-assembled with lubricant (Typically Trailer Buddy Grease are assembled with the bearings pre-packed with #2 NLGI grease in the conventional manner by hand). If satisfied with bearing endplay and rotation, proceed to Step 3.

Step 3: Fold the long leg of the cotter pin back over the end of the spindle while keeping the cotter pin loop fairly snug against the spindle end. Once you have folded it back over the end of the spindle, tap it flat against the spindle end.



Step 4: Using a flat screwdriver, punch, or short piece of 1.5" EMT conduit, drive the short end of the cotter pin down and around the nut retainer. The short leg should just wrap down to the washer.

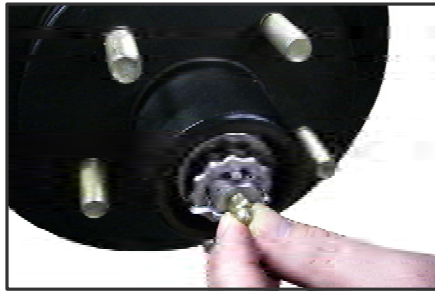
Step 5: Well Done! If this is a Vault or Bearing Lube end unit, don't forget to lubricate the bearings at this point! Note: The zerc used temporarily for filling is 1/16" NPT thread size.



If you have any questions about this procedure or any other UFP parts related questions, please e-mail warrantytn@ufpnet.com, or call 931-967-5101 x16.



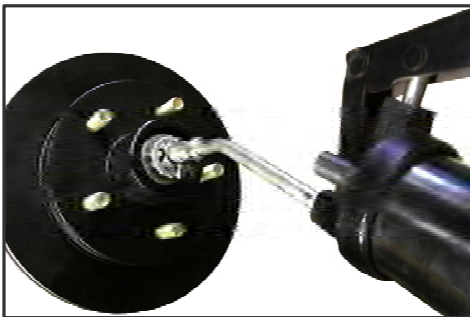
Install hub nose O-ring & adjust bearings per attached UFP Assembly Instructions.*



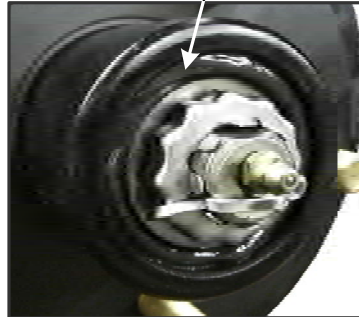
Screw a 1/16" NPT (Auto parts store) grease fitting into the threaded hole in the end of the spindle.



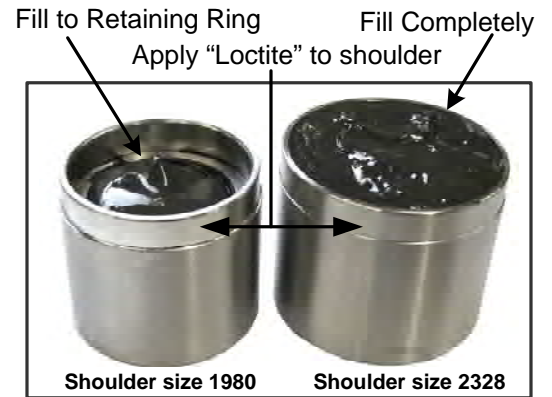
ONLY use UFP's proprietary HYBRID-OIL lubricant in a grease gun. *If no spindle hole, hand pack bearings during assembly.



Fill hub cavity with the HYBRID-OIL lubricant. Rotate hub during filling to disperse air.



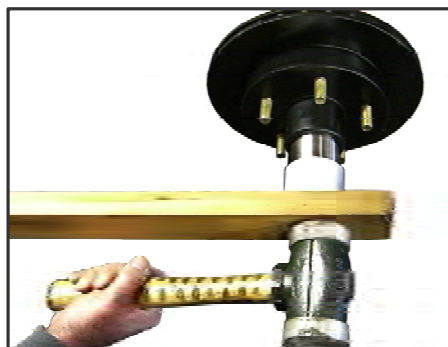
Hub cavity is full when the HYBRID-OIL lubricant first appears around edge of spindle washer. Remove grease fitting.



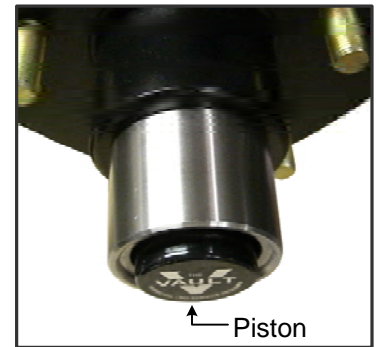
Fill THE VAULT protector cap with HYBRID-OIL lubricant. As shown in the photo above. Apply "Loctite" retaining compound to shoulder of protector.



Place PVC collar over protector (2"x1-1/2" slip collar for 1980 size) (2" female adapter for 2328 size) in order to prevent damage to the protector during installation.



Place a piece of wood over the collar and hit with a mallet to drive the protector STRAIGHT into the hub. You can expect excess HYBRID-OIL to escape from the sides of the protector.



When properly installed, THE VAULT piston will extend out of the end of the protector approx. 1/16" to 3/16".