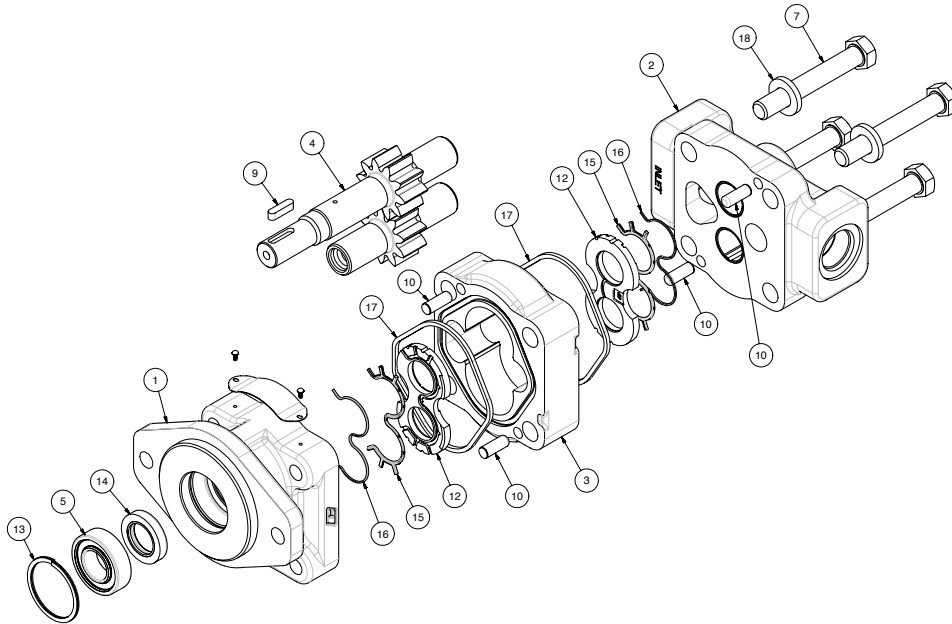


Instructions: Change of Rotation and Seal Replacement (PGP300 Series)



Cautions:

During disassembly, use extreme caution when prying apart castings. The marring of machined surfaces could cause leakage. Excessive use of force can result in misalignment and seriously damage parts.

Disassembly Instructions:

1. Clamp the pump in a vise, with the drive shaft pointing down, on the mounting flange.
2. Scribe a line across each casting in the assembly. This ensures proper alignment during reassembly.
3. If the pump has a key type shaft, remove the key from the drive gear. Lightly stone any burrs that may be on the shaft to prevent any damage to the seal during disassembly.
4. Remove all the bolts and washers from the assembly.
5. Remove the rear port end cover.
6. Remove the thrust plate by hand. Do not pry. The channel seals can remain in the thrust plate groove.
7. Carefully remove the gears from the gear housing. Keep gears together because they are a matched set.
8. Carefully remove the second thrust plate by hand from the shaft end cover surface. Keep the channel seals in the thrust plate groove.
9. Lift the gear housing from the shaft end cover. Keep the gasket seals in the gear housing groove.
10. **Important:** PGP350 series only and some other, older 300 series pumps. Some units have two holes in the face of the shaft end cover. Mark the hole that is without a plug.



Parker Hannifin Corporation
Gear Pump Division
1775 Logan Avenue
Youngstown, Ohio 44501
Tel: (330) 746-8011 Fax: (330) 746-1148
<http://www.parker.com/gearpump>

Instructions for Change of Rotation

These instructions are intended for use in changing the rotation of a single section PGP300 series gear pump. For changing the rotation of a tandem unit contact Gear Pump Product Support.

Reassembly Instructions:

1. If unit has two holes in the face of the shaft end cover, move the plug to the open hole that was marked. Inlet side will be open, outlet side will be plugged. Apply loctite to threads and stake plug in hole.
2. Rotate gear housing 180° from original position and place over shaft end cover. Make sure gasket seals are in the grooves, a light coat of grease will hold them in.
3. It may be necessary to reposition the dowel pins.
4. Gently slip the thrust plate into the gear housing bore with the channel seals towards the shaft end cover. The relief groove in the plate must face the outlet side of the pump.
5. Slide the drive shaft gear through the gear housing, bushing and shaft seal. Be careful not to damage the shaft seal. Slide the driven gear through the gear housing and into the bushing.
6. Slip the second thrust plate over the gear journals and into the gear housing. The channel seals will be facing up. The relief groove in the plate must face the outlet side of the pump.
7. From its original position rotate the port end cover 180° around the shaft axis and position over the gear housing. Lightly tap the port end cover down until it rests against the gear housing.
8. Replace the washers and bolts into the unit. Torque bolts in a cross corner pattern.
PGP330, PGP350, PGP365 = 2400 in-lbs or 200 ft-lbs.
PGP315 = 1700 in-lbs or 141 ft-lbs
9. Rotate drive shaft with a small wrench to check for any binding.

Seal Replacement Instructions

These instructions are intended for use in changing the seals of a single or multiple section PGP300 series gear pump.

Important: Note the shape and orientation of all seals before and during removal.

Shaft Seal:

1. If shaft end cover has snap ring and outboard bearing, carefully remove. Insert small diameter punch from inside cover into shaft seal opening. Gently tap to drive out the lip seal.
2. Apply a light coat of non-hardening gasket sealant to the outer edge of the replacement seal. Press the seal flush with the seal recess in the shaft end cover.

Gear Housing Gasket Seals:

1. Carefully remove seals in groove.
2. Insert new seals in grooves. Apply a light coat of grease to seals to hold it in place during reassembly of pump.

Thrust plate Seals:

1. Remove the back-up seal and channel seal from groove in back of thrust plate.
2. Place the soft black Buna-N seal into the seal groove with the flat side down. Place the hard white nylon back-up seal, flat side up, into the groove on top of the Buna-N seal.