

INSTRUCTIONS FOR P30/50/75 ROTATION CHANGE

If the pump is assembled **CW**: Facing the shaft end cover with the drive shaft on top and the idler gear on bottom, the inlet will be on the left side of the pump and the outlet will be on the right side of the pump. Ref: Fig. A.

To convert to CCW:

- 1) Remove the capscrews on single units or the hex nuts and studs on multiple units holding the pump together.
- 2) Remove the port end cover.
- 3) Remove the gear housing and gears. Keep gears together because they are a matched set. On multiple units, also remove the bearing carrier and then the next gear housing and gear set, until you are left with only the shaft end cover.
- 4) Remove plug in shaft end cover with screwdriver and install in other drain hole. Screw in tightly and stake plug with punch at both edges of screwdriver slot. Plug is located on high pressure (outlet) side of pump. If the shaft end cover is assembled with 2 checks in the drain holes, "leave as is"; shaft end cover is already set up for double rotation.
- 5) Before assembly of unit, stone off and deburr all machined surfaces that might have gotten nicked and damaged during disassembly.

On the gears, stone lightly the tips of the gear teeth to remove the metal pickup on the edge of the teeth.

Rinse parts in solvent and wipe clean.

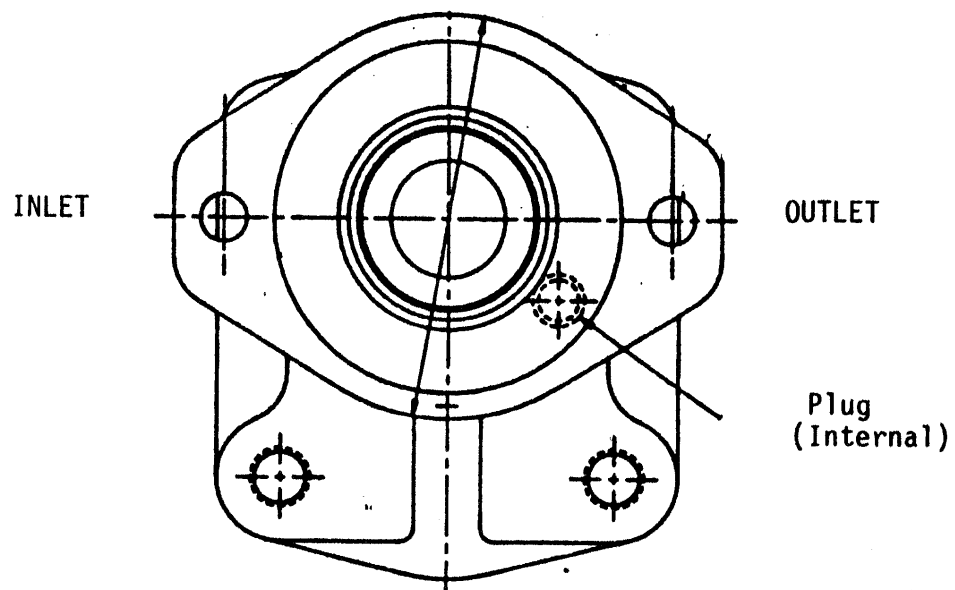
- 6) Rotate all thrust plates. The relief groove must be on the high pressure (outlet) side of pump. Ref: Fig. C.
- 7) Insert gears into shaft end cover. Use sleeve over drive gear shaft to protect lip seal from damage when inserting gear through it.
- 8) Flip gear housing 180° and slide over gears. Keep each gear in the same gear housing bore that it was in originally. Ref: Fig. D.
- 9) **For multiple units only:** Flip the bearing carrier 180° and install over gears and gear housing.

Note: If bearing carrier has an L-shaped porting configuration, it cannot be used. A new bearing must be machined to the proper configuration.

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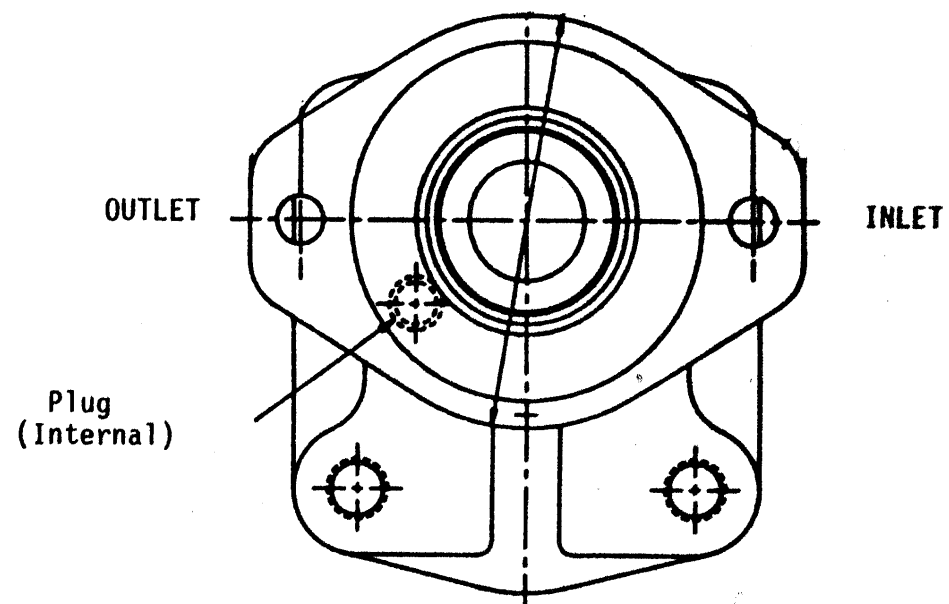
- 9(a) Insert gears into bearing carrier.
- 9(b) Flip the gear housing 180° and slide over gears.
- 10) Place the port end cover over the gears and tap lightly against the gear housing.
- 11) Insert the capscrews or studs into the unit and torque to 2400 in-lbs.
- 12) To verify for **CCW**: Facing the shaft end cover with the drive shaft on top and the idler gear on bottom, the inlet will be on the right side of the pump and the outlet will be on the left side of the pump.
Ref: Fig. B.

For a pump assembled **CCW**, to convert to **CW** rotation the same procedure can be followed.



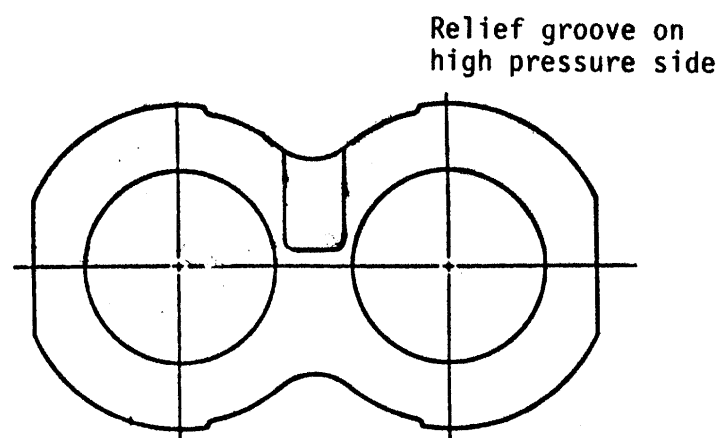
CW ROTATION

FIG. A



CCW ROTATION

FIG. B



THRUST PLATE
FIG. C

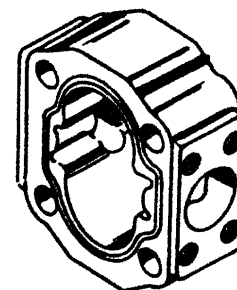


FIG. D