



Model A7 One-Piece Frame Unit Assembly

Full thread length engagement is required for all fasteners.

Bearing Installation

Mounting of bearings on shafts must be done in a clean environment. Bearing and power end life can be drastically reduced if even very small foreign particles work their way into the bearings. Bearings should be removed from their protective packaging only immediately before assembly to limit exposure to possible contamination. After removing the packaging they should only come in contact with clean hands, fixtures, tools and work surfaces.

Note that the term “inboard bearing” refers to the bearing nearest to the casing. “Outboard bearing” refers to the bearing nearest to the motor.

Both bearings have a slight and preferred interference fit that requires that they be pressed on the shaft with an arbor or hydraulic press. Even force should be applied to the inner race only. Never press on the outer race, as the force will damage the balls and races. An alternate and preferred method of installing bearings is to heat the bearings to 200°F (93°C) in an oven or with an induction heater. Then place them quickly in position on the shaft.



1. Install the outboard bearing (62B) and locknut (62C) onto the shaft (62). We recommend that a bearing heater be used when installing bearings to avoid damage to the races. Be sure the bearing seats against the shoulder of the shaft. If the pump is grease lubricated, hand pack the bearings with the appropriate grease after the bearings are seated on the shaft.

⚠ CAUTION

Never heat the bearings above 230°F (110°C). To do so will likely cause the bearing fits to permanently change, leading to early failure



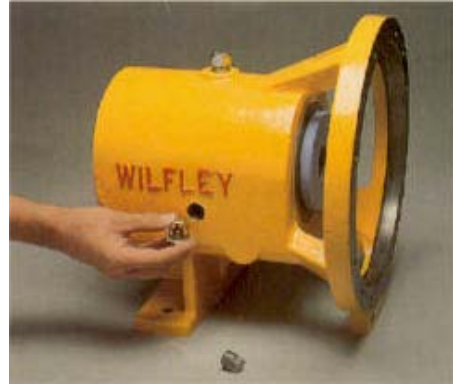
2. Install the outboard oil seal (76) into the bearing carrier (72). Please be sure that the notch in the seal faces down for drainage.



3. Slide the bearing carrier over the shaft and outboard bearing, and install the retaining ring (73) into the groove of the bearing carrier. Be sure the retaining ring is fully seated in the groove.



4. Install the inboard bearing (62A) onto the shaft.



6. Install the breather (61A), sight glass (79), and drain plug (61B) into the frame.



5. Install the inboard oil seal (67) into the frame.



7. Install the bearing carrier o-ring (72A) into the groove of the bearing carrier. To avoid damage, lubricate the o-ring with light oil and slide the assembly into the frame. The word "top" on the carrier must face up. Attach the bearing carrier with three retaining bolts (75), jacking bolts (75), and jam nuts (72B).