

DISASSEMBLY AND ASSEMBLY INSTRUCTIONS

 **Always flush pump with water, or neutralizing agent before servicing.**

Disassembly

In most cases, seal replacement requires disassembly of only the pump half of the unit.

NOTE: Instructions following in *[italics]* describe procedures for the polypropylene centrifugal pumps, when different than the cast iron pumps.

1. Remove the four casing cap screws with 9/16" box end wrench. Tap pump casing on discharge port with rubber hammer, if necessary, to break loose from mounting flange. Check inside of pump casing including suction port. If badly eroded *[or damaged]*, pump casing should be replaced. Remove O-ring and discard. O-ring should always be replaced. *[Using a 1/2" wrench, remove the six bolts from the front. Also remove the 5/16" screw from the rear near the outlet port].*
2. To remove the impeller nut, clamp the flange in a vise and insert a large screwdriver or file (at least 10" long) into impeller vanes to prevent impeller from turning when loosening nut. Use a socket wrench (3/4" for Series 9000C or 5/8" for Series 9200C and 9400C) to remove the impeller nut by turning it counter-clockwise. *[Use 7/8" deep socket wrench to remove plastic seal nut, then 9/16" deep socket to remove metal jam nut, rubber gasket and washer].*
3. Once nut *[and washer]* is removed, place a screwdriver on each side behind the impeller and pry away from the mounting flange. Remove key from the shaft. Remove O-ring from the mounting flange.
4. Using two screwdrivers positioned opposite each other, pry the rotary portion of the seal from the shaft.
5. *[Remove plastic back cover flange. Knock seal out from back with a hammer and screwdriver].*
6. Remove stationary seat and boot by prying out with two small screwdrivers in manner similar to impeller removal. **(Caution: The seal will be damaged from removal. A new seal MUST be used when pump is reassembled).**

7. Use a circular bottle-type wire brush to clean the pump ports and seal areas. It is also recommended that the pump casing and mounting flange be further cleaned in a solvent tank to remove rust and corrosion particles. *[Do not wire brush seal bore & ports on poly models].*

Assembly

This is a universal kit. Some parts are not required for your pump and are to be discarded. Be extremely careful with the new seal. Take special care not to scratch the lapped sealing faces of the rotary washer and stationary seat.

1. Lubricate seal cavity in mounting flange with WD-40, LPS or equivalent.
2. Install the stationary portion of the mechanical seal by sliding over the shaft with the ceramic side out.
3. To seat the seal in the seal cavity, use a piece of 3/4" PVC pipe 4" to 6" in length. Press it in firmly and squarely. Lubricate sealing surface on seal after it is seated.

IMPORTANT: Make sure seal cavity is clean and lubricated.

4. Before installing the rotary portion of the seal, be sure that the pump shaft and inside of seal is clean and free of any lubricants. Only water should be used in these areas to assist installation.
5. To install the rotary portion of the mechanical seal, place it over the shaft with the carbon side facing in, and press until it bottoms out against the stationary portion.

IMPORTANT: Do not lubricate shaft prior to installation of the rotary seal.

6. Install the gasket onto the shaft; adjust seal.
7. Insert key into shaft key slot. Place impeller on shaft. Put *[washer, jam nut and gasket]* impeller nut on shaft end and using a large screwdriver or file in the impeller vanes for support, tighten impeller nut securely.
8. Install O-ring on mounting flange. Replace O-ring if worn or damaged.
9. Place pump casing on mounting flange, insert and tighten bolts evenly.



Centrifugal Pump Seal Repair Kit


Form L-0379C
Rev. A

**Kit No. 3430-0826, Buna-N
Kit No. 3430-0827, Viton**
Seal Kit for Series 9200C, 9300C,
9300P and 9400C Centrifugal
Pumps

**Kit No. 3430-0828, Buna-N
Kit No. 3430-0829, Viton**
Seal Kit for Series 9400P, 9000P,
9000C, 9200P and 9500C
Centrifugal Pumps



GENERAL SAFETY INFORMATION

 **California Proposition 65 Warning** -- This product and related accessories contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

1. WARNING: DO NOT PUMP FLAMMABLE OR EXPLOSIVE FLUIDS SUCH AS GASOLINE, FUEL OIL, KEROSENE, ETC. DO NOT USE IN EXPLOSIVE ATMOSPHERES. THE PUMP SHOULD BE USED ONLY WITH LIQUIDS COMPATIBLE WITH THE PUMP COMPONENT MATERIALS. FAILURE TO FOLLOW THIS WARNING CAN RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE AND WILL VOID THE PRODUCT WARRANTY.

2. Be sure all exposed moving parts such as PTO shafts and adapters are properly shielded or guarded and that all coupling devices are securely attached before applying power.
3. Pumps mounted directly on to PTO shaft or other power shaft must be prevented from rotating with the power shaft. Pump must float freely on the power shaft and must not be tied rigidly to equipment on which it is mounted.

4. **DO NOT EXCEED** recommended speed, pressure and temperature for pump and equipment being used.
5. **BEFORE SERVICING**, disconnect all power, make sure all pressure in the system is relieved, drain all liquids from the system and flush.
6. Secure the discharge lines before starting the pump. An unsecured line may whip, causing personal injury and/or property damage.
7. Check hose for weak or worn condition before each use. Make certain that all connections are tight and secure.
8. Periodically inspect the pump and the system components. Perform routine maintenance as required.
9. Protect pump from freezing conditions by draining liquid and pumping rust inhibiting antifreeze solution through the system, coating the pump interior.
10. Use only pipe, hose and fittings rated for the maximum PSI rating of the pump.

For more detailed information on the repair procedures for Hypro Centrifugal Pumps, please refer to Hypro Form Nos. L-0300AG, L-0310C, or L-1526 that was shipped with your pump. If you do not have a copy of the form you need and would like to get one, please call your local dealer, or Hypro at 800-424-9776 and ask for the Customer Service Representative for your area.