

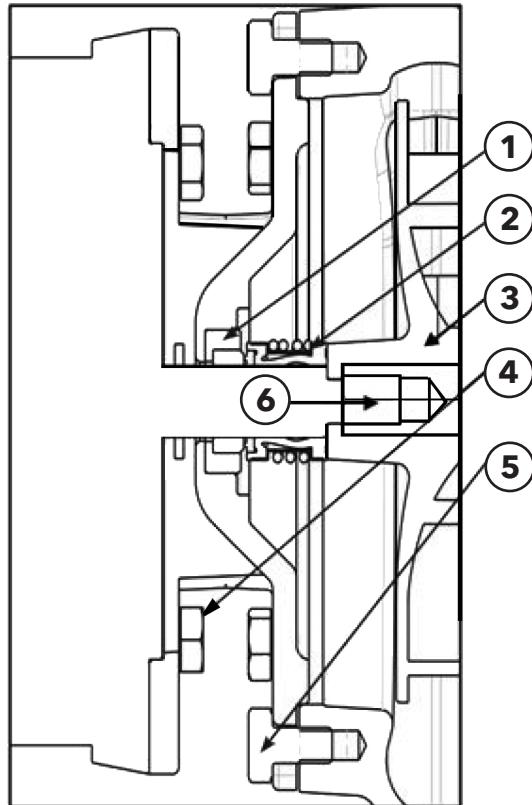
# Series e-90 & e-1535

## Pump Assembly Instructions (from Kit)

1. Trim the impeller to the proper diameter, deburr, and balance. Balance the impeller to ISO 1940 Grade G6.3.
2. Remove the plug or cover from the motor rear end plate. This will allow access to the end of the motor shaft. A slot or wrench flats are provided on the end of the shaft to retain the shaft during assembly.
3. Clean the motor shaft and bracket recess with a clean lint free cloth.
4. Lubricate the OD of the cup mounted seal seat with soapy water or P80 Rubber Lubricant and push into the bracket. Install the bracket onto the motor.
5. Clean the seal faces, gently wipe with a lint free cloth to prevent scratching.  
The seal head assembly is a unitized design and should not be disassembled.  
Lubricate the ID of the seal head assembly with soapy water or P80 and push onto the motor shaft.
6. Clean the motor, impeller, and jam nut threads. Apply Loctite 7471 Primer to the threads of the jam nut. Allow to dry.
7. Apply a small amount Loctite Retaining Compound 609 or 680 to the jam nut threads. Care must be used when applying Loctite so that it does not get on surrounding areas.
8. Screw the impeller onto the motor shaft. Using a large screwdriver or an end wrench and a strap wrench on the impeller OD tighten the impeller to the motor shaft. Do not insert anything between the impeller vanes or motor fan blades as damage may occur. Torque the impeller to 20-25 ft-lbs. 25 ft-lbs can be approximated by turning the impeller until the impeller hub is firmly against the motor shaft shoulder and then turning an additional 15 degrees. Place jam nut into bore of impeller and screw the jam nut onto the motor shaft. Torque the jam nut to 20-25 ft-lbs.

**Note:** On three phase motors it is very important to follow these instructions. Failure to comply to these instructions could allow the impeller to come loose during the motor rotation check if the motor starts in reverse rotation.

9. Clean the bracket and volute gasket surfaces. Install a new volute gasket on the bracket.
10. Insert the motor assembly into the pump casing. Tighten the casing capscrews evenly.
11. Paint the pump and apply the pump nameplate and safety decals.
12. Additional information can be found in the Pump IOM.



1. Seal Seat
2. Seal Head
3. Impeller
4. Motor Capscrew
5. Volute Capscrew
6. Jam Nut