



A 100% Employee-Owned Company

10901 Pump House Road | Annapolis Junction, MD 20701
2213 Northwood Drive, Unit 6 | Salisbury, MD 21801

Mechanical Equipment
Sales & Service

Pump Start Up & Alignment Procedure

Installation Inspection:

- 1.) Confirm all Pumps are piped and mounted correctly.
- 2.) Check that the suction or discharge lines are not forced into position.
- 3.) Check that there is a strong, rigid support for the suction and discharge lines.
- 4.) Confirm all Pump bases are properly secured and grouted to concrete foundation
- 5.) Inspect Area around pump for recommended service clearance.
- 6.) If isolation is used check that flexible piping is used on both the suction and discharge sides of the pump.
- 7.) Check that the bearing assembly grease fittings are accessible and visible and are not covered.
- 8.) Check that the vent slots on the sides and bottom of the bearing assembly are uncovered and completely open.

Preliminary Alignment procedure

- 1) Check to ensure distances across Coupler flanges are equal (checking 4 places)
- 2) Move or shim the drive unit, if necessary, until the permitted reading value is obtained.
- 2) Check for parallel misalignment:
- 3) Put a straight edge across one coupling half.
- 4) Measure the gap between the straight edge and the opposite coupling half. Use the micrometer or the caliper.
A gap of maximum 1/64 in. (0.397 mm) is permitted.

When the procedure is complete, check both the angular and parallel alignment must meet the permitted tolerances. Note that with variable frequency drives, the angular and parallel dimensional values are reduced by 50%.

Perform fine alignment

- 1.) Mount the dial indicator base to one coupler half or shaft.
- 2.) Position the dial indicator button on the opposite coupler half:
- 3.) For angular alignment, position the button on the front or rear face.
- 4.) For parallel alignment, position the button on the outside diameter.
- 5.) Set the dial to zero.
- 6.) Rotate both coupler halves together.

Make sure the indicator button always indicates off the same spot.
Misalignment within 0.004 in. (0.102 mm) TIR is permissible.

Check the rotation (if power is available)

1. Lock out power to the driver.
2. Make sure that the coupling hubs are fastened securely to the shafts.
3. Unlock power to the driver.
4. Make sure that everyone is clear, and then jog the driver long enough to determine that the direction of rotation corresponds to the arrow on the pump.