

10. DRIVE END ASSEMBLY (ANSI OR ISO PUMPS WITH IEC MOTORS) (-B5 FLANGE ONLY)

10-a. MOUNTING ADAPTER, OUTER DRIVE AND FOOT

1. Place the motor vertically on worktable or floor so that shaft is pointing upwards. Be sure to cover the work surface with corrugated cardboard or similar material to prevent damage to the fan cover.
Caution!: Motors with plastic fan covers may be damaged in the vertical orientation. Perform the following assembly in the horizontal orientation.
2. Place the motor mounting plate on the motor flange. The motor mounting plate for 80 and 90 frame motors has the rectangular boss facing upwards. For the 100/112, 132 and 160 frame motors have the rectangular boss facing downwards. Bolt the motor mounting plate to the motor flange with the appropriate four bolts. See figure 10-1.
3. Place the round end of the IEC bracket onto the motor mounting plate and line up the holes. Use four 12mm X 35mm hex head bolts with lock washers to secure the bracket to the motor mounting plate. Tighten bolts to snug only.
4. Back out both of the set screws on the outer drive hub so they do not protrude into the bore. Slide the outer drive onto the motor shaft making sure that the shaft key is in place. Position the outer drive so that the groove in the outer drive lines up with the end of the bracket +1/16", -0" (+1.6mm, -0mm.) Tighten the two set screws to 10 ft-lb (13.6 N-m.) See Figure 9-1. Figure 10-1 shows the outer drive position with respect to the motor mounting plate for reference. Install the 3/8" NPT pipe plug into the hole on top of the adapter plate. This is to keep dirt out of the motor shaft area.

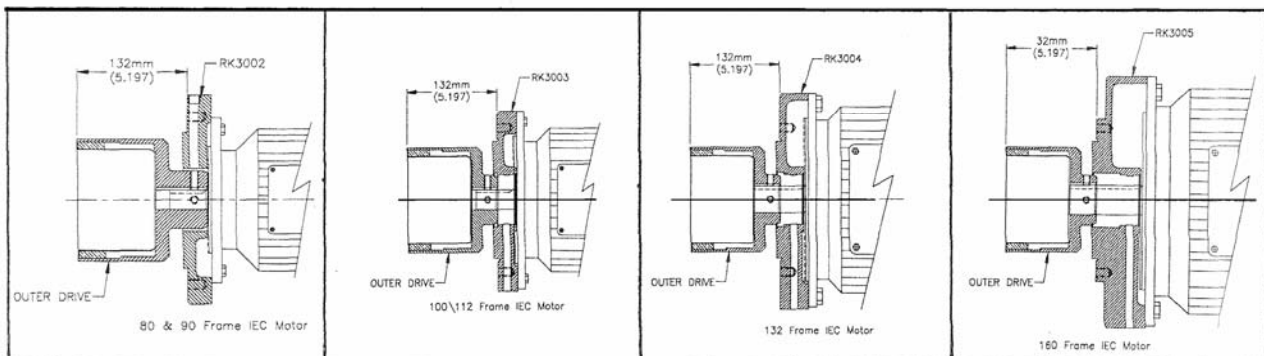


Fig. 10-1: IEC Outer Drive Mounting Positions (Reference)

- The outer magnet ring, OMR, (P4091X) is interchangeable to maintain the outer drive mounting positions without removing the adapter hub (P4069X). After the initial installation, the outer magnet ring of the outer drive assembly can be attached to the initial adapter hub position using the two countersunk screws (02-414DJ). Tighten the screws to 60-70 in-lb using a long T handle 5/32" allen wrench. Ensure the polygon drive and mounting surfaces of the adapter hub and OMR are clean and smooth; a light oil may be used for preservation.

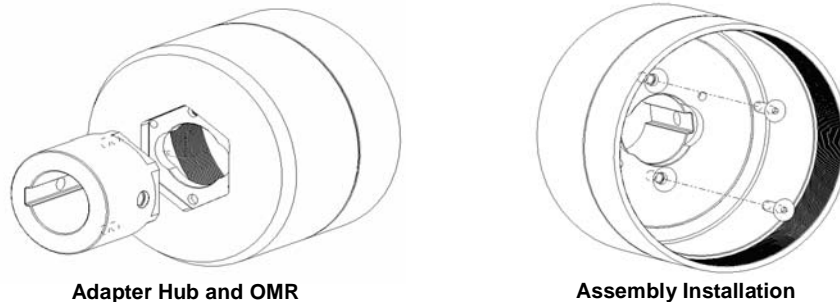


Fig. 10-2. Outer Drive Assembly

- Mount the IEC foot to the bottom of the IEC close-coupled bracket using 3, M12-1.75 hex head screws.
- Verify that the outer drive is protruding 41.5 (+1.5/-0.0) mm beyond the front edge of the close coupled bracket.

The IEC motor drive end is now ready to mount to either an ANSI or ISO wet-end.
 Note: IEC motors do not require motor risers.

10-b. MOUNTING DRIVE END TO WET END



<ol style="list-style-type: none"> Thread the two jack screws through the front flange of the bracket until they protrude as far forward as possible. Line up the wet end with front of the bracket. While firmly grasping the inlet and outlet flanges or the outside of the casing, carefully guide the wet end into the bracket. Retract the jack screws a few turns at a time. The strong magnetic attraction will grab the wet end when you get close enough, pulling it into the bracket forcefully. 	 <p style="text-align: center;">RECOMMENDED</p>	 <p style="text-align: center;">NOT RECOMMENDED DANGEROUS</p>
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Fig. 10-3

CAUTION!: Be very careful to keep fingers away from mating faces to avoid injury!

10-c. Aligning Pump Mounting Feet

Set the complete pump assembly on its feet on a flat surface. Ensure that all feet are flat on the surface. This may require slightly loosening the bolts at the three piloted joints – the rear support to pump case, the bracket to rear support and the bracket to motor mounting plate. Adjust the clocking of the parts at these joints as required to get all feet to sit flat. This may require lightly tapping on any foot not in contact with the flat surface, or tapping on the parts adjacent to the joints. Re-snug all bolts. Then torque all bolts in increasing torque values in a star pattern at each joint. Final torque at all three joints is 40 ft-lb (54N-m.)