



# Instructions for Replacement of 6" Big Flo Pump-Motor Assembly Units

The following defined terms are used throughout this literature to bring attention to the presence of hazards of various risk levels, or to important information concerning the life of the product.

**DANGER**

indicates presence of a hazard which *will* cause *severe* personal injury, death or substantial property damage if ignored.

**CAUTION**

indicates presence of a hazard which *will* or *can* cause *minor* personal injury, death or substantial property damage if ignored.

**WARNING**

indicates presence of a hazard which *can* cause *severe* personal injury, death or substantial property damage if ignored.

**NOTICE**

indicates special instructions on installations, operation, or maintenance which are important but not related to personal injury hazards.

**NOTICE**

**Not all installed pump/motor units will have a locknut securing the pump shell. Steps 3A and 12 can be skipped if no locknut is present.**

- Step 1 Place pump in a horizontal position on a clean surface.
- Step 2 Block up under the 3-inch column pipe so that the pump/motor assembly is about 2 inches above supporting surface.
- Step 3A If a locknut is present; loosen setscrew in locknut. Unscrew the locknut from the discharge head. Slide the adapter tube up to expose the four hex head machine bolts.
- Step 3B Loosen and remove the four hex head machine bolts on the top of the pumping unit just above the shell and around the motor.
- Step 4 Do not let the pump roll. Using your hands, (do not use a wrench) hold pump at the extreme bottom end and use a slight up and down motion to pull the pump from the casting attached to the 3-inch pipe.

**NOTICE**

**Up and down motion to remove the pump unit should not be greater than 1/4 inch. Motion greater than 1/4 inch could damage a positioning dowel pin in the top of the motor.**

- Step 5 If the motor leads tend to stay plugged into the motor, finish removing the motor until the leads can be pulled out of the top of the motor by hand. (This is a "plug in" type connection). Verify the number of wires. If there are only three wires, the pigtail and conduit seal must be replaced with the proper 5-wire version.

| HP  | Pigtail   | Buna Seal | Seal & Pigtail Kit | Chemical Viton | Chemical EPR |
|-----|-----------|-----------|--------------------|----------------|--------------|
| 2,3 | 213-065-4 | 110-038-4 | 213-065-5          | 110-048-4      | 110-049-4    |
| 5   | 213-069-4 | 110-038-4 | 213-069-5          | 110-048-4      | 110-049-4    |

**WARNING**

**Installed pump/motor units with 3-wire pigtails must be upgraded to the proper 5-wire pigtail and conduit seal assemblies.**

- Step 6 Push the leads back into the casting on 3-inch pipe.

**CAUTION**

**Match the projecting metal and rubber part of the plug in into the slot of the female receptacle.**

- Step 7 Remove the block from the top of the new pump/motor.
- Step 8 Slip the new “O” ring (in the small envelope) into the groove on the casting that is still screwed to the 3-inch pipe. Oil the “O” ring with light lubricating oil (SAE-10).
- Step 9 Look at bottom of the casting which remains screwed to the 3-inch pipe. Note the position of the one hex head bolt. Place the four machine bolts through the four bolt holes.

**NOTICE** One hole (180 degrees away from the hex head) remains open, this is the locating pin hole.

- Step 10 Find the locating pin on top of the motor. This pin must go into the remaining open hole referred to in notice following Step 9.
- Step 11 Place the new pump/motor assembly in position by starting the locating pin into the hole referred to above. Gently push the motor into place until the shell starts to pass over the large “O” ring. Position the four machine bolts into the bolt holes and start threads. Draw all bolts down evenly until all are snug. After all bolts are snug, torque bolts to 24-34 ft-lbs.

**NOTICE** Draw all bolts down evenly until all are snug. This will help avoid damaging the connector and dowel pin.

- Step 12 If a locknut is present; slide the adapter tube down over the discharge head so that it sets against the shell. Thread the locknut onto the discharge head and tighten until the adapter tube is firmly held in place against the pump shell. Torque locknut to 55-75 ft-lbs. Torque setscrew in locknut to 25-50 in-lbs.

**WARNING** Single phase pump/motor units must have a 108-403-1 control box installed.

**WARNING** Three phase pump/motor units must have proper overload and quick trip heaters installed in the control box.

| HP | Voltage | HZ | Control Box | Heaters (3 Req.) | Overload  |
|----|---------|----|-------------|------------------|-----------|
| 2  | 208/230 | 60 | 279-231-5   | 036-072-1        | 061-018-1 |
| 3  | 208/230 | 60 | or          | 036-076-1        | 061-018-1 |
| 5  | 208/230 | 60 | 279-327-5   | 036-080-1        | 061-018-1 |
| 5  | 575     | 60 | 279-230-5   | 036-100-1        | 061-018-1 |
| 3  | 380/415 | 50 | 279-231-5   | 036-070-1        | 061-018-1 |
| 5  | 380/415 | 50 | 279-231-5   | 036-074-1        | 061-018-1 |

**For Technical assistance, contact the  
Technical Support Department at 1-800-262-7539.**



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