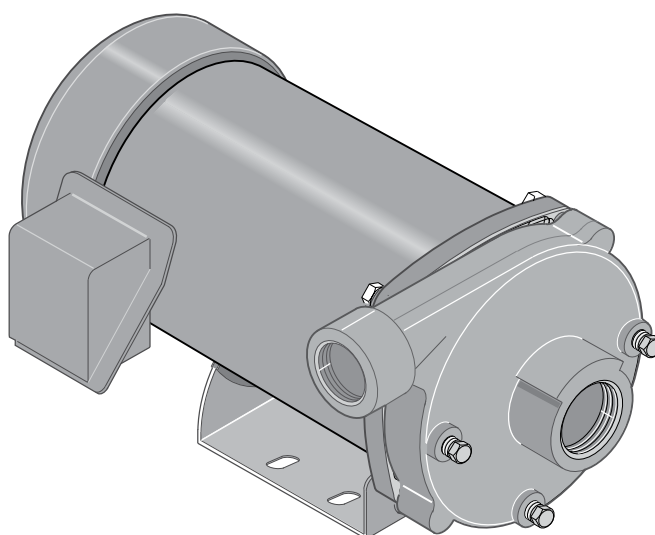


# 60 CYCLE "J" and "JB" SERIES CENTRIFUGAL PUMPS WITH TEFC MOTORS

**STA-RITE®**


671T 0294

## MODELS

| H.P.  | MEDIUM HEAD MODELS |          |            |             |
|-------|--------------------|----------|------------|-------------|
| 1/3   | JMBT-56            | –        | JMBT-56S   | –           |
| 1/2   | JMCT-56            | JMC3T-56 | JBMCT-56S  | JBMC3T-56S  |
| 3/4   | JMDT-57            | JMD3T-57 | –          | JBMD3T-57S  |
| 1     | JMET-58            | JME3T-58 | JBMET-58S  | JBME3T-58S  |
| 1-1/2 | JMFT-40            | JMF3T-40 | JBMFT-40S  | JBMF3T-40S  |
| 2     | JMGT-41            | JMG3T-41 | JBMGT-41S  | JBMG3T-41S  |
| 2-1/2 | –                  | –        | JBMMGT-59S | JBMMG3T-59S |

| H.P.  | HIGH HEAD MODELS |            |            |             |            |
|-------|------------------|------------|------------|-------------|------------|
| 1/3   | JHBT-61H         | –          | JBHBT-61S  | –           | –          |
| 1/2   | JHCT-61H         | JHC3T-61H  | JBHCT-61S  | JBHC3T-61S  | –          |
| 3/4   | JHDT-62H         | JHD3T-62H  | JBHDT-62S  | JBHD3T-62S  | JBH2DT-62S |
| 1     | JHET-63H         | JHE3T-63H  | JBHET-63S  | JBHE3T-63S  | –          |
| 1-1/2 | JHFT-51H         | JHF3T-51H  | JBHFT-51S  | JBHF3T-51S  | –          |
| 2     | JHGT-52H         | JHG3T-52H  | JBHGT-52S  | JBHG3T-52S  | –          |
| 2-1/2 | –                | JHHG3T-53H | JBHHGT-53S | JBHHG3T-53S | –          |

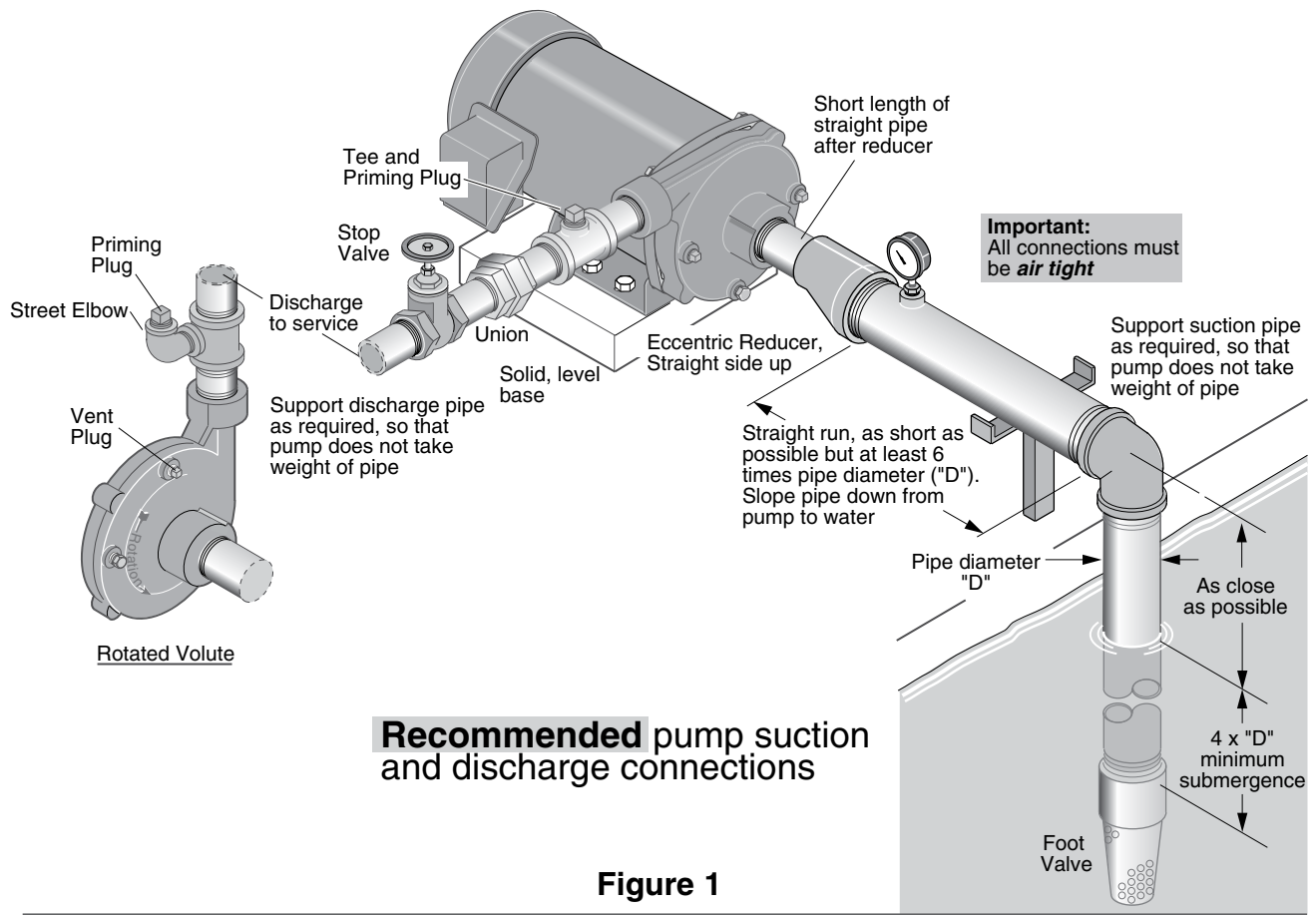


Figure 1

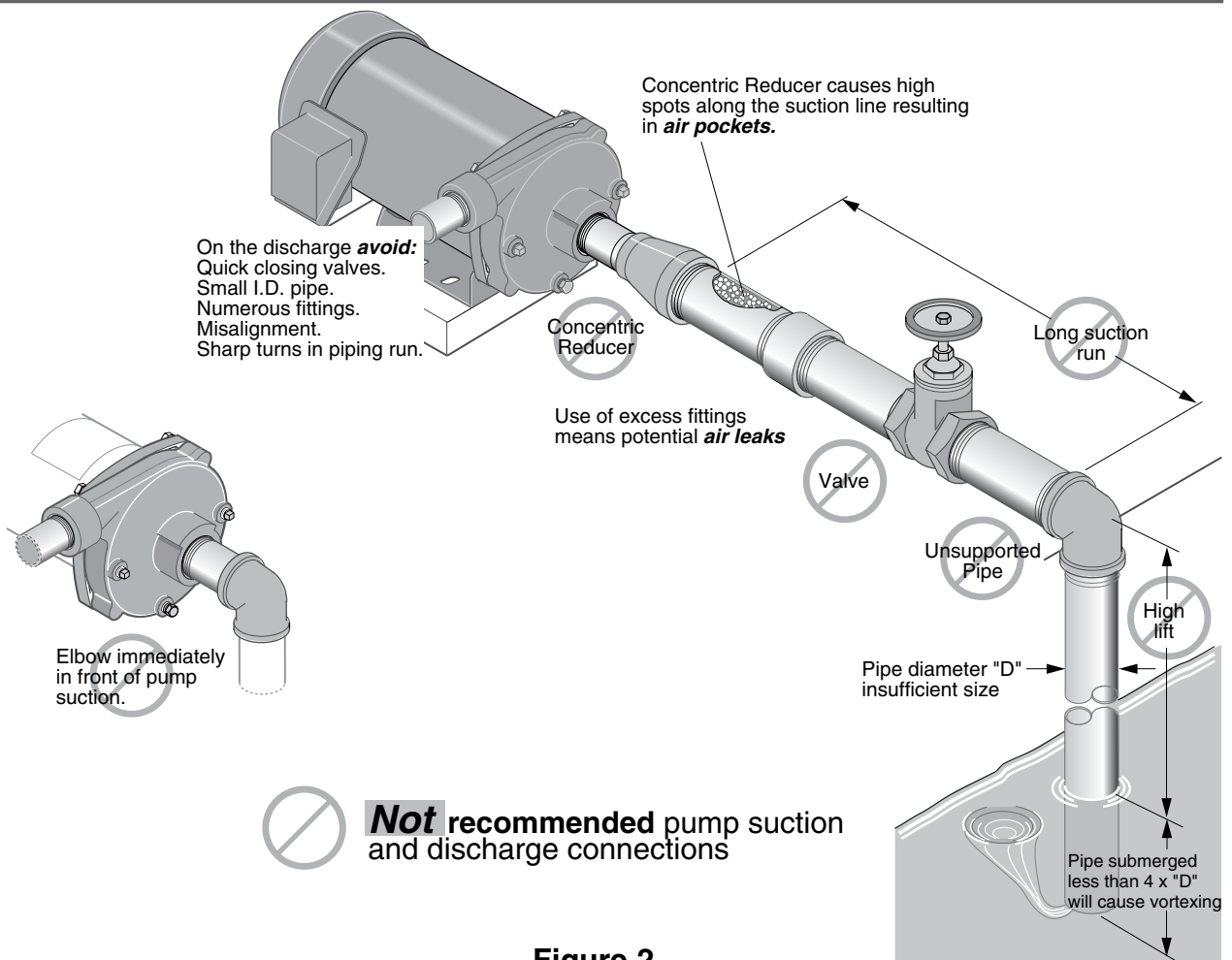


Figure 2

## California Proposition 65 Warning

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

## PIPING - GENERAL

Support both suction and discharge piping independently at a point near the pump to avoid putting a strain on the pump housing. Start all piping **AT THE PUMP**.

Increase pipe diameter at both the suction and discharge by one (1) standard pipe size (minimum) to obtain desired performance and flow rate. Refer to Table I when sizing pipe for your pumping system.

**NOTICE:** Do not use pipe with **smaller** diameter on the suction side of pump.

Do not allow pump or any system component to freeze. To do so will void warranty.

**TABLE I**

| Pump Port Size (NPT) |           | Recommended Pipe Size |           |
|----------------------|-----------|-----------------------|-----------|
| Suction              | Discharge | Suction               | Discharge |
| 1-1/4                | 1         | 1-1/2                 | 1-1/4     |
| 1-1/2                | 1-1/4     | 2                     | 1-1/2     |
| 2                    | 1-1/2     | 3                     | 2         |

## SUCTION PIPE

Increase pipe size from pump suction port as shown in Table I.

Figure 1 (Page 2) depicts a recommended run of pipe and fittings for the suction side of a centrifugal pump. Please refer to this illustration when choosing pipe and fittings for your suction connection.

**IMPORTANT:** All connections must be air tight!

Figure 2 (Page 2) depicts conditions that are **NOT DESIRABLE** on the suction side of a centrifugal pump and may cause problems in flow rate and priming. Please look this illustration over carefully before choosing pipe and fittings for your suction connection.

## DISCHARGE PIPING

Increase pipe size from pump discharge port as shown in Table I. Figure 1 (Page 2) depicts a recommended run of pipe and fittings for the discharge. Install tee with priming plug as close to pump as possible. Figure 2 (Page 2) notes conditions that should be avoided. Please read over carefully before making discharge connection.

## PRIMING THE PUMP

A pump is primed when all air in the suction line and pump volute has been evacuated and replaced with water.

**To Prime:**

1. Close valve in discharge line.
2. Remove priming plug from tee and fill pump and suction line with water until water is flowing back out of tee.
3. Replace priming plug.
4. Start pump and slowly open valve until desired water flow is achieved.

**NOTICE:** If water is not being pumped, turn off pump, close valve, and repeat steps 1 thru 4.

If pump volute is rotated as shown in Figure 1 (Page 2), loosen vent plug when priming to evacuate air trapped inside volute. Tighten when volute is completely filled with water.

**⚠ WARNING** **Never run pump against closed discharge.**

To do so can boil water inside pump causing hazardous pressure in unit, risk of explosion and possibly scalding persons handling pump.

**NOTICE:** Do not run the pump dry. This will damage mechanical seal and void warranty.

**⚠ CAUTION** **Burn Hazard.** Motor normally operates at high temperature and will be too hot to touch. It is protected from heat damage during operation by an automatic internal cutoff switch. Before handling pump or motor, stop motor and allow it to cool for 20 minutes.

# ELECTRICAL

## ⚠ WARNING



**Hazardous voltage.  
Can shock, burn, or  
cause death.**

Ground pump before  
connecting to power  
supply.

⚠ **Ground motor before  
connecting to electrical  
power supply.**

⚠ **Failure to ground motor  
can cause severe or fatal  
electrical shock hazard.**

⚠ **Do not ground to a gas  
supply line.**

⚠ **To avoid dangerous or  
fatal electrical shock,  
turn OFF power to motor  
before working on electrical  
connections.**

⚠ **Supply voltage must be  
within  $\pm 10\%$  of  
nameplate voltage. Incorrect**

**voltage can cause fire or seriously damage motor and  
voids warranty. If in doubt consult a licensed  
electrician.**

⚠ **Use wire size specified in Wiring Chart (below). If  
possible, connect pump to a separate branch  
circuit with no other appliances on it.**

⚠ **Wire motor according to diagram in motor  
junction box.**

## WIRING

1. Install, ground, wire and maintain this pump in accordance with electrical code requirements. Consult your local building inspector for information about codes.
2. Provide a correctly fused disconnect switch for protection while working on motor. Consult local or national electrical codes for switch requirements.
3. Disconnect power before servicing motor or pump. If the disconnect switch is out of sight of pump, lock it open and tag it to prevent unexpected power application.
4. Ground the pump permanently using a wire of the same size as that specified in wiring chart (below). Make ground connection to green grounding terminal in motor junction box marked GRD. or  $\oplus$ .
5. Connect ground wire to a grounded lead in the service panel or to a metal underground water pipe or well casing at least 10 feet long. Do not connect to plastic pipe or insulated fittings.
6. Protect current carrying and grounding conductors from cuts, grease, heat, oil, and chemicals.
7. Connect current carrying conductors to terminals in motor junction box. When replacing motor, check wiring diagram in motor junction box for correct wiring connections.

**TABLE II - RECOMMENDED FUSING AND WIRING DATA - 60 CYCLE MOTORS**

| MOTOR<br>HP                 | MAX. LOAD<br>AMPERES | BRANCH<br>FUSE*<br>RATING<br>AMPS | VOLT/<br>PHASE | DISTANCE IN FEET FROM MOTOR TO METER |                    |                    |                    |                    |
|-----------------------------|----------------------|-----------------------------------|----------------|--------------------------------------|--------------------|--------------------|--------------------|--------------------|
|                             |                      |                                   |                | 0'<br>TO<br>100'                     | 101'<br>TO<br>200' | 201'<br>TO<br>300' | 301'<br>TO<br>400' | 401'<br>TO<br>500' |
|                             |                      |                                   |                | WIRE SIZE                            |                    |                    |                    |                    |
| SINGLE PHASE - 115/230 VOLT |                      |                                   |                |                                      |                    |                    |                    |                    |
| 1/3                         | 8.2/4.1              | 15/15                             | 115/230/1      | 14/14(2/2)                           | 12/14(3/2)         | 10/14(5.5/2)       | 8/14(8.4/2)        | 8/12(8.4/3)        |
| 1/2                         | 8.2/4.1              | 15/15                             | 115/230/1      | 14/14(2/2)                           | 12/14(3/2)         | 10/14(5.5/2)       | 8/14(8.4/2)        | 8/12(8.4/3)        |
| 3/4                         | 11.6/5.8             | 15/15                             | 115/230/1      | 14/14(2/2)                           | 10/14(5.5/2)       | 8/14(8.4/2)        | 6/14(14/2)         | 6/12(14/3)         |
| 1                           | 14.2/7.1             | 20/15                             | 115/230/1      | 12/14(3/2)                           | 8/14(8.4/2)        | 6/14(14/2)         | 6/12(14/3)         | 4/10(21/5.5)       |
| 1-1/2                       | 18.0/9.0             | 25/15                             | 115/230/1      | 10/14(5.5/2)                         | 8/14(8.4/2)        | 6/12(14/3)         | 6/12(14/3)         | 4/10(21/5.5)       |
| THREE PHASE - 230/460 VOLT  |                      |                                   |                |                                      |                    |                    |                    |                    |
| 1/2                         | 2.2/1.1              | 15/15                             | 230/460/3      | 14/14(2/2)                           | 14/14(2/2)         | 14/14(2/2)         | 14/14(2/2)         | 14/14(2/2)         |
| 3/4                         | 2.9/1.45             | 15/15                             | 230/460/3      | 14/14(2/2)                           | 14/14(2/2)         | 14/14(2/2)         | 14/14(2/2)         | 14/14(2/2)         |
| 1                           | 3.6/1.8              | 15/15                             | 230/460/3      | 14/14(2/2)                           | 14/14(2/2)         | 14/14(2/2)         | 14/14(2/2)         | 14/14(2/2)         |
| 1-1/2                       | 4.8/2.4              | 15/15                             | 230/460/3      | 14/14(2/2)                           | 14/14(2/2)         | 14/14(2/2)         | 14/14(2/2)         | 14/14(2/2)         |
| 2                           | 6.0/3.0              | 15/15                             | 230/460/3      | 14/14(2/2)                           | 14/14(2/2)         | 14/14(2/2)         | 14/14(2/2)         | 12/14(3/2)         |
| 2-1/2                       | 7.0/3.5              | 15/15                             | 230/460/3      | 14/14(2/2)                           | 14/14(2/2)         | 14/14(2/2)         | 12/14(3/2)         | 12/14(3/2)         |
| SINGLE PHASE - 230 VOLT     |                      |                                   |                |                                      |                    |                    |                    |                    |
| 2                           | 10.4                 | 15                                | 230/1          | 14(2)                                | 14(2)              | 12(3)              | 10(5.5)            | 10(5.5)            |
| 2-1/2                       | 11.7                 | 15                                | 230/1          | 14(2)                                | 14(2)              | 12(3)              | 10(5.5)            | 10(5.5)            |
| SINGLE PHASE - 100-200 VOLT |                      |                                   |                |                                      |                    |                    |                    |                    |
| 3/4                         | 12.0/6.0             | 15/15                             | 100/200/1      | 14/14(2/2)                           | 10/14(5.5/2)       | 8/14(8.4/2)        | 6/14(14/2)         | 6/12(14/3)         |

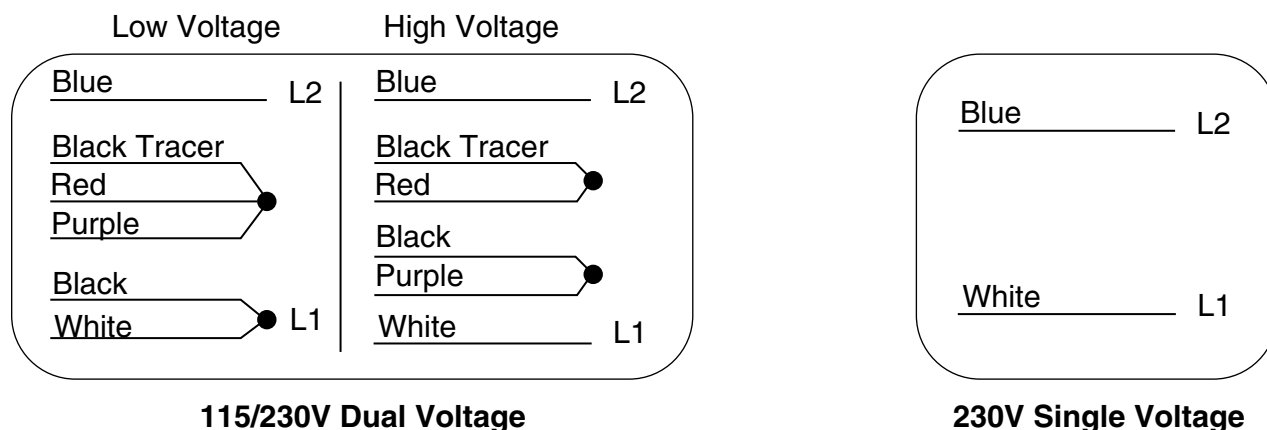
\*A Fusetron is recommended instead of a fuse in any motor circuit

# ELECTRICAL

8. Motor has automatic internal thermal overload protection. If motor has stopped for unknown reasons, thermal overload may restart it unexpectedly, which could cause injury or property damage. Disconnect power before servicing motor.
9. If this procedure or the wiring diagrams are confusing, consult a licensed electrician.

Connect wires to motor according to wiring diagram below or in motor junction box. Be sure motor is connected for correct line voltage. If diagram in motor junction box is different from diagram in this manual, follow diagram on motor.

**For All 3-phase Motors:** Follow wiring diagram in motor junction box or on motor nameplate.



**Figure 3 - Motor wiring connections for 100/200V, 115/230V, and 230V only motors (single phase).**

# SERVICE

## PUMP SERVICE

This centrifugal pump requires little or no service other than reasonable care and periodic cleaning. Occasionally, however, a shaft seal may become damaged and must be replaced. The procedure as outlined below will enable you to replace the seal.

**NOTICE:** These mechanical seals are supplied with either a rubber seat ring or a sealing O-Ring. They are completely interchangeable.

**NOTICE:** The highly polished and lapped faces of this seal are easily damaged. Read instructions and handle the seal with care.

Some models are equipped with an impeller screw, which has a left hand thread. Before unscrewing the impeller, remove the impeller screw.

## REMOVAL OF OLD SEAL

1. After unscrewing impeller (Key No. 5, Page 6), carefully remove rotating part of seal by prying up on sealing washer, using two screwdrivers (see Figure 4A). Use care not to scratch motor shaft.
2. Remove seal plate (Key No. 3) from motor and place on flat surface, face down. Use a screwdriver to push ceramic seat out from seal cavity (see Figure 4B).

## INSTALLATION OF FLOATING SEAT (Figure 4C)

1. Clean polished surface of floating (ceramic) seat with clean cloth.

2. Turn seal plate over so seal cavity is up; clean cavity thoroughly.
3. Lubricate outside rubber surface or O-ring of ceramic seat with soapy water and press firmly into seal cavity with finger pressure. If seat will not locate properly in this manner, place cardboard washer over polished face of seat and press into seal cavity using a 3/4" socket or 3/4" piece of standard pipe.
4. **Dispose of cardboard washer.** Be sure polished surface of seat is free of dirt and has not been damaged by insertion. Remove excess soapy water.

## INSTALLATION OF ROTATING PART OF SEAL UNIT (Figure 4D)

1. Reinstall seal plate using extreme caution not to hit ceramic portion of seal on motor shaft.
2. Inspect shaft to make sure that it is clean.
3. Clean face of sealing washer with clean cloth.
4. Lubricate inside diameter and outer face of rubber drive ring (see Figure 4D) with soapy water and slide assembly on motor shaft (sealing face first) until rubber drive ring hits shaft shoulder.
5. Screw impeller on shaft until impeller hub hits shaft shoulder. This will automatically locate seal in place and move the sealing washer face up against the facing seat. Reinstall impeller screw (if used).

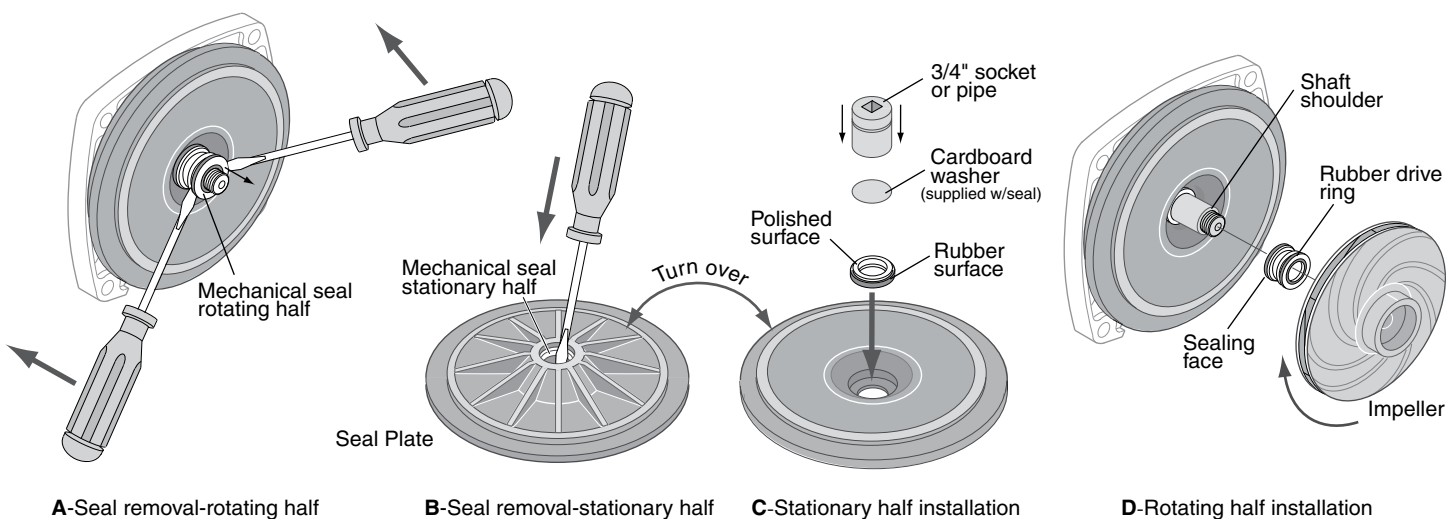
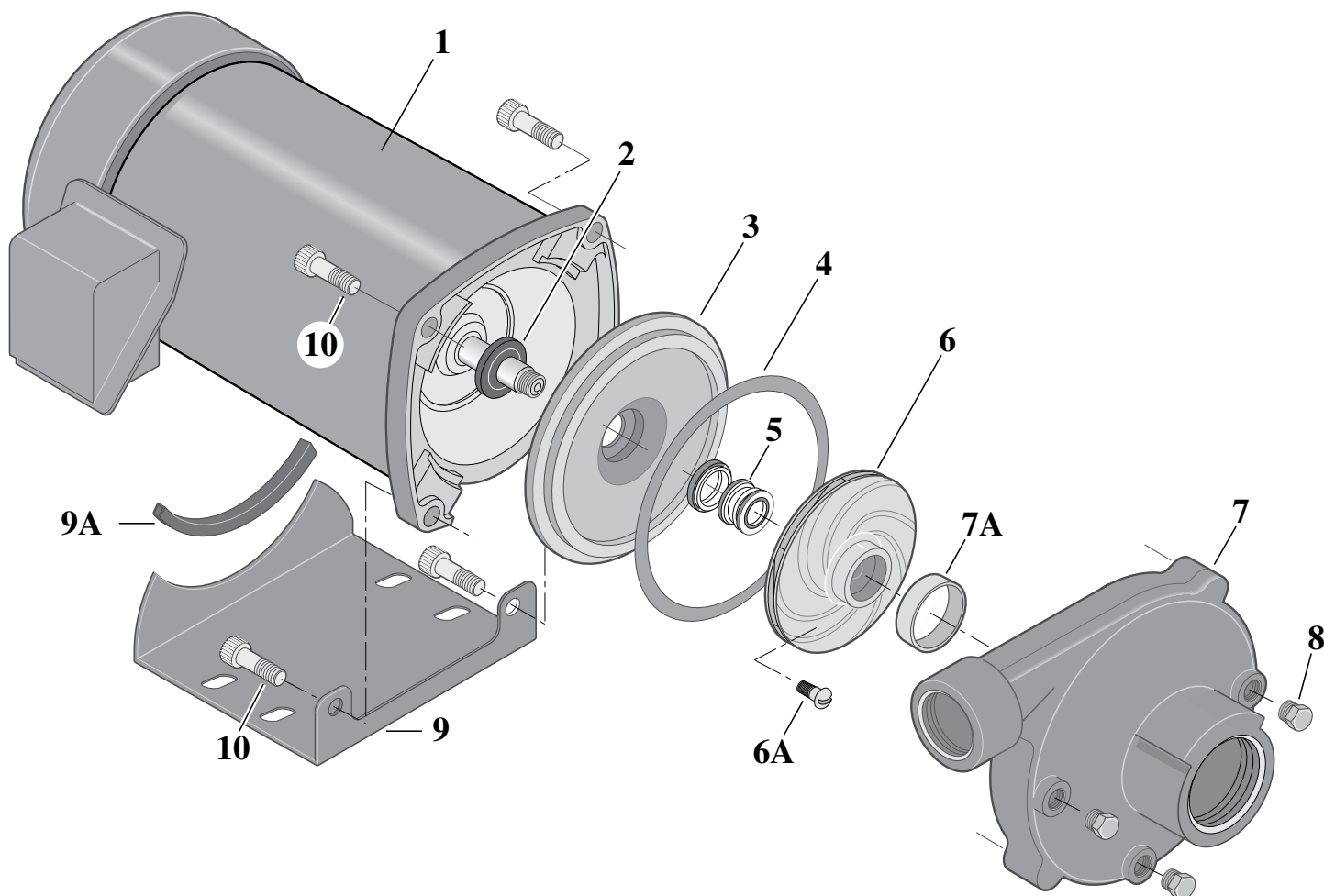


FIGURE 4

5939 0109

| <b>TROUBLE - CAUSES AND REMEDY</b>                                      |   |
|---|---|
| <b>TROUBLE AND CAUSE</b>  | <b>REMEDY</b>   |
| <b>FAILURE TO PUMP</b>  |   |
| 1. Pump not properly primed.  | 1. Make sure pump casing and suction line are full of water.<br>See priming instructions. |
| <b>REDUCED CAPACITY AND/OR HEAD</b>                                     |   |
| 1. Air pockets or leaks in suction line.                                | 1. Check suction piping.  |
| 2. Clogged impeller.  | 2. Remove and clean.  |
| <b>PUMP LOSES PRIME</b>   |   |
| 1. Air leaks in suction line.   | 1. Check suction piping.  |
| 2. Excessive suction lift and operating too near shut-off point.        | 2. Move pump nearer to water level.   |
| 3. Water level drops while pumping, uncovering suction piping.          | 3. Check water supply. Add length of pipe to suction to keep submerged end under water.   |
| <b>MECHANICAL TROUBLES AND NOISE</b>                                    |   |
| 1. Bent shaft and/or damaged bearings.                                  | 1. Take motor to authorized motor repair shop.  |
| 2. Suction and/or discharge piping not properly supported and anchored. | 2. See that all piping is supported to relieve strain on pump assembly.                   |



2413T 0496

## REPAIR PARTS LIST “J” SERIES WITH TEFC MOTORS - HIGH HEAD

| Key No. | Part Description                            | No. Used | JHGT-52H<br>JHG3T-52H<br>2 HP | JHHG3T-53H<br>2-1/2 HP |
|---------|---|----------|-------------------------------|------------------------|
| 1       | Motor, 2 HP, 230V, 1 Phase                  | 1        | AE100GL-T                     | AE100G5L-T             |
| 1       | Motor, 2 HP, 230/460V, 3 Phase              | 1        | AP100GL-T                     | AP100G5L-T             |
| †2      | Water Slinger                               | 1        | 17351-0009                    | 17351-0009             |
| 3       | Seal Plate                                  | 1        | C3-181                        | C3-181                 |
| †4      | Gasket, Seal Plate                          | 1        | C20-122                       | C20-122                |
| †5      | Shaft Seal                                  | 1        | U109-6A                       | U109-6A                |
| 6       | Impeller                                    | 1        | C105-214PCA                   | C105-214PA             |
| 6A      | Impeller Screw (3 Phase Only)               | 1        | C30-14SS                      | C30-14SS               |
| 7       | Volute Assembly with Wear Ring              | 1        | C101-264B                     | C101-264B              |
| 7A      | Wear Ring                                   | 1        | C23-19                        | C23-19                 |
| 8       | Pipe Plug, 1/4" NPT Hex Hd.                 | 3        | U78-941ZPV                    | U78-941ZPV             |
| 9       | Base  | 1        | J104-9A                       | J104-9A                |
| 9A      | Motor Pad                                   | 1        | C35-5                         | C35-5                  |
| 10      | Socket Head Capscrew, 3/8" - 16 x 1-1/4" Lg | 4        | U30-104ZP                     | U30-104ZP              |

| SERVICE KIT                                    |   |        |        |
|--|---|--------|--------|
| Seal and Gasket Kit (J Series)                 | 1 | PP1700 | PP1700 |
| <b>NOTE:</b> † Included in Seal and Gasket Kit |   |        |        |

\*For repair or service to motors, always give the motor Model Number and any other data found on the Motor Model Plate.



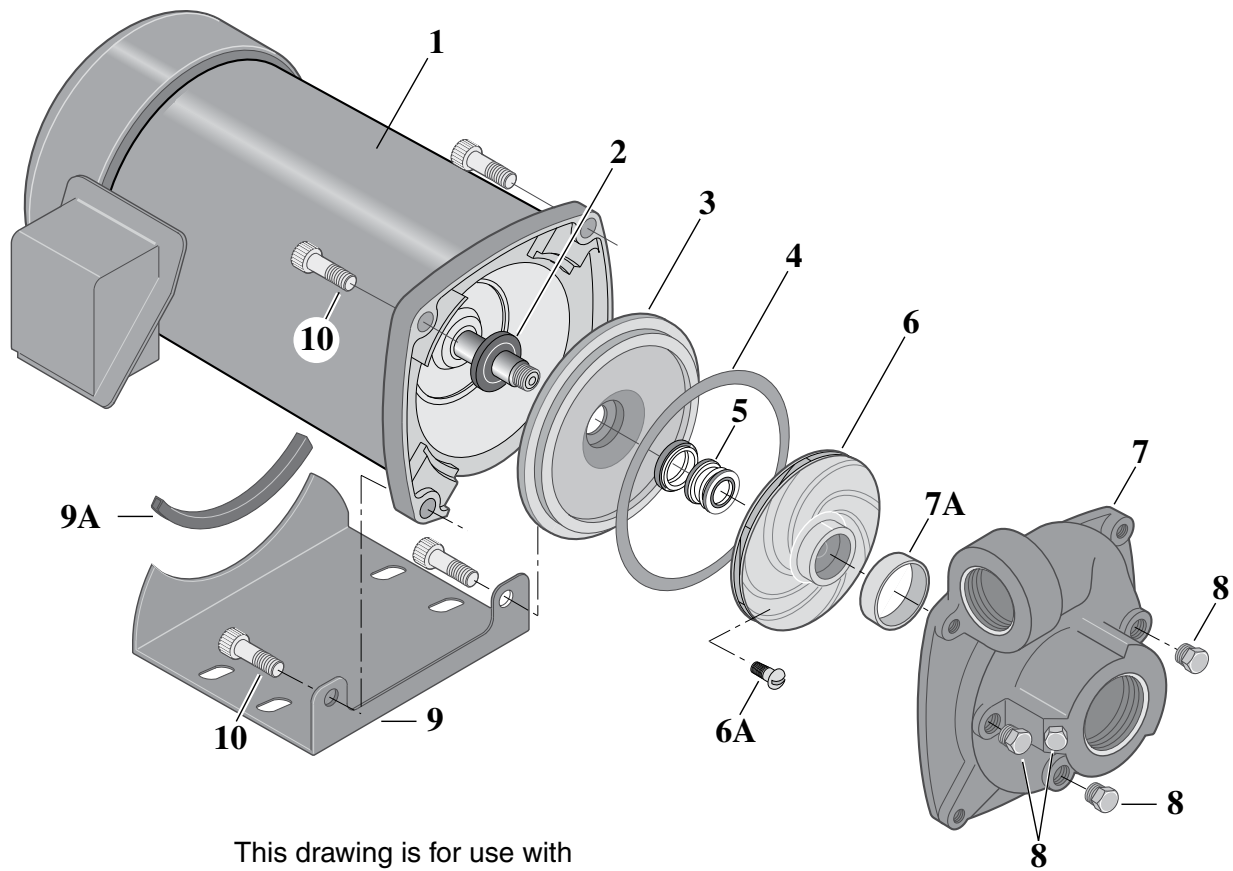
## REPAIR PARTS LIST

### “J” SERIES WITH TEFC MOTORS - HIGH HEAD

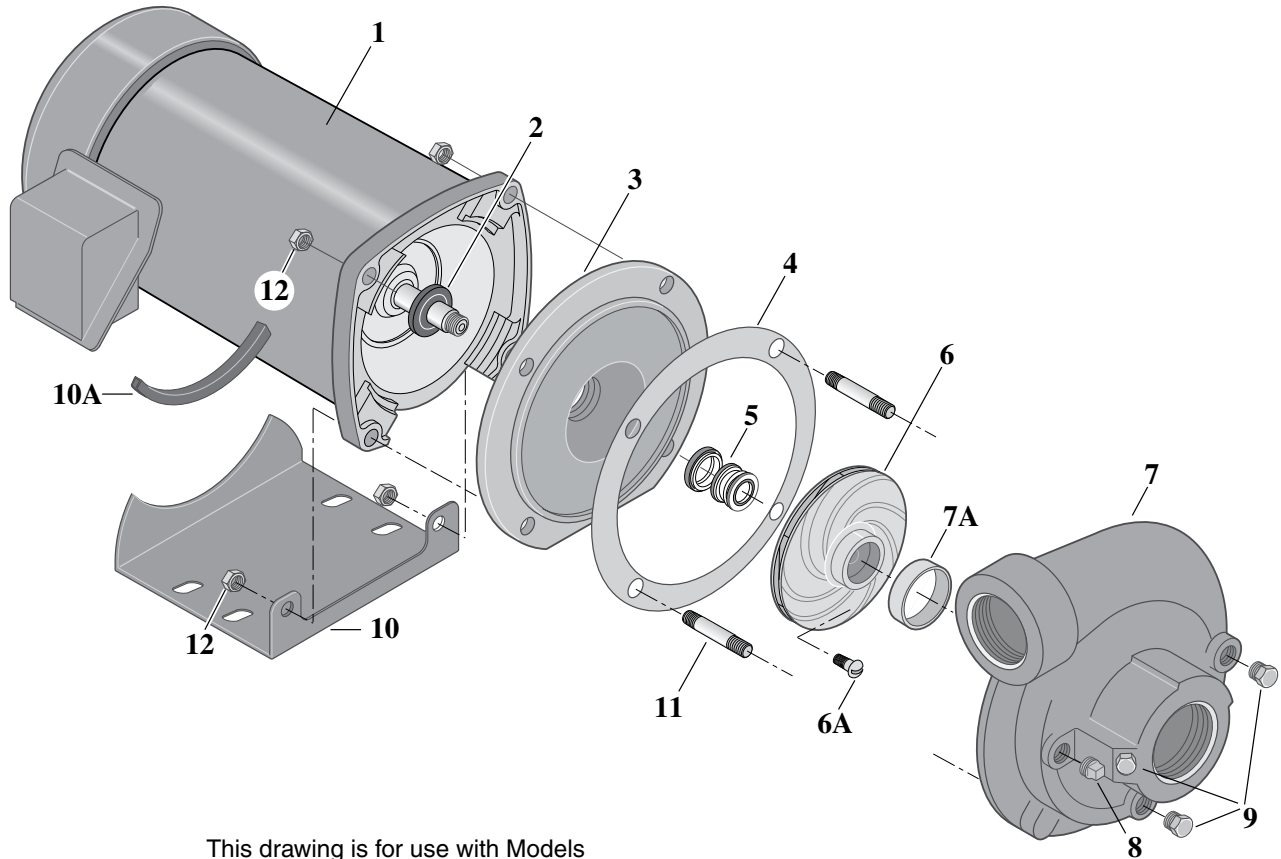
| Key No. | Part Description                             | No. Used | JHBT-61H<br>–<br>1/3 HP | JHCT-61H<br>JHC3T-61H<br>1/2 HP | JHDT-62H<br>JHD3T-62H<br>3/4 HP | JHET-63H<br>JHE3T-63H<br>1 HP | JHFT-51H<br>JHF3T-51H<br>1-1/2 HP |
|---------|--|----------|-------------------------|---------------------------------|---------------------------------|-------------------------------|-----------------------------------|
| 1       | Motor, 115V, 1 Phase                         | 1        | A100BH-T                | –                               | –                               | –                             | –                                 |
| 1       | Motor, 115/230V, 1 Phase                     | 1        | –                       | A100CL-T                        | A100DL-T                        | A100EL-T                      | A100FL-T                          |
| 1       | Motor,, 230/460V, 3 Phase                    | 1        | –                       | AP100CL-T                       | AP100DL-T                       | AP100EL-T                     | AP100FL-T                         |
| †2      | Water Slinger                                | 1        | 17351-0009              | 17351-0009                      | 17351-0009                      | 17351-0009                    | 17351-0009                        |
| 3       | Seal Plate                                   | 1        | C3-1042P                | C3-1042P                        | C3-1042P                        | C3-1042P                      | C3-1042P                          |
| †4      | Gasket, Seal Plate                           | 1        | C20-121                 | C20-121                         | C20-121                         | C20-121                       | C20-121                           |
| †5      | Shaft Seal                                   | 1        | U109-6A                 | U109-6A                         | U109-6A                         | U109-6A                       | U109-6A                           |
| 6       | Impeller, Single Phase                       | 1        | C105-92PN               | C105-92PN                       | C105-92PM                       | C105-92PL                     | C105-92PB                         |
| 6       | Impeller, Three Phase                        | 1        | –                       | C105-92PNA                      | C105-92PMA                      | C105-92PLA                    | C105-92PBA                        |
| 6A      | Impeller Screw                               | 1        | –                       | C30-14SS                        | C30-14SS                        | C30-14SS                      | C30-14SS                          |
| 7       | Volute Assembly with Wear Ring               | 1        | C101-284A               | C101-284A                       | C101-284A                       | C101-284A                     | C101-284A                         |
| 7A      | Wear Ring                                    | 1        | C23-27                  | C23-27                          | C23-27                          | C23-27                        | C23-27                            |
| 8       | Pipe Plug, 1/4" NPT Hex Hd.                  | 1        | U78-941ZPV              | U78-941ZPV                      | U78-941ZPV                      | U78-941ZPV                    | U78-941ZPV                        |
| 9       | Base   | 1        | J104-9A                 | J104-9A                         | J104-9A                         | J104-9A                       | J104-9A                           |
| 9A      | Motor Pad                                    | 1        | C35-5                   | C35-5                           | C35-5                           | C35-5                         | C35-5                             |
| 10      | Socket Head Capscrew, 3/8" - 16 x 1-1/4" Lg. | 4        | U30-104ZP               | U30-104ZP                       | U30-104ZP                       | U30-104ZP                     | U30-104ZP                         |

| SERVICE KIT                                    |   |        |        |        |        |        |
|--|---|--------|--------|--------|--------|--------|
| Seal and Gasket Kit (J Series)                 | 1 | PP1700 | PP1700 | PP1700 | PP1700 | PP1700 |
| <b>NOTE:</b> † Included in Seal and Gasket Kit |   |        |        |        |        |        |

\*For repair or service to motors, always give the motor Model Number and any other data found on the Motor Model Plate.



2409T 0496 SPC



2410T 0496 SPC

## REPAIR PARTS LIST

### “J” SERIES WITH TEFC MOTORS - MEDIUM HEAD

| Key No. | Part Description                             | No. Used | JMBT-56<br>–<br>1/3 HP | JMCT-56<br>JMC3T-56<br>1/2 HP | JMDT-57<br>JMD3T-57<br>3/4 HP | JMET-58<br>JME3T-58<br>1 HP |
|---------|--|----------|------------------------|-------------------------------|-------------------------------|-----------------------------|
| 1       | Motor, 115V, 1 Phase                         | 1        | A100BH-T               | –                             | –                             | –                           |
| 1       | Motor, 115/230V, 1 Phase                     | 1        | –                      | A100CL-T                      | A100DL-T                      | A100EL-T                    |
| 1       | Motor, 230/460V, 3 Phase                     | 1        | –                      | AP100CL-T                     | AP100DL-T                     | AP100EL-T                   |
| 2       | Water Slinger                                | 1        | 17351-0009             | 17351-0009                    | 17351-0009                    | 17351-0009                  |
| 3       | Seal Plate                                   | 1        | N3-8                   | N3-8                          | N3-8                          | N3-8                        |
| 4       | Gasket, Seal Plate                           | 1        | N20-26                 | N20-26                        | N20-26                        | N20-26                      |
| 5       | Shaft Seal                                   | 1        | U109-6A                | U109-6A                       | U109-6A                       | U109-6A                     |
| 6       | Impeller, Single Phase                       | 1        | J105-42PHA             | J105-42PHA                    | J105-42PJA                    | J105-42P                    |
| 6       | Impeller, Three Phase                        | 1        | –                      | J105-42PHA                    | J105-42PJA                    | J105-42PPA                  |
| 6A      | Impeller Screw                               | 1        | –                      | C30-6SS                       | C30-6SS                       | C30-6SS                     |
| 7       | Volute Assembly with Wear Ring               | 1        | C101-122E              | C101-122E                     | C101-122E                     | C101-122                    |
| 7A      | Wear Ring                                    | 1        | N23-7                  | N23-7                         | N23-7                         | N23-7                       |
| 8       | Pipe Plug, 1/4" NPT Hex Hd.                  | 4        | U78-941ZPV             | U78-941ZPV                    | U78-941ZPV                    | U78-941ZPV                  |
| 9       | Base   | 1        | J104-9A                | J104-9A                       | J104-9A                       | J104-9A                     |
| 9A      | Motor Pad                                    | 1        | C35-5                  | C35-5                         | C35-5                         | C35-5                       |
| 10      | Socket Head Capscrew, 3/8" - 16 x 1-1/4" Lg. | 4        | U30-104ZP              | U30-104ZP                     | U30-104ZP                     | U30-104ZP                   |

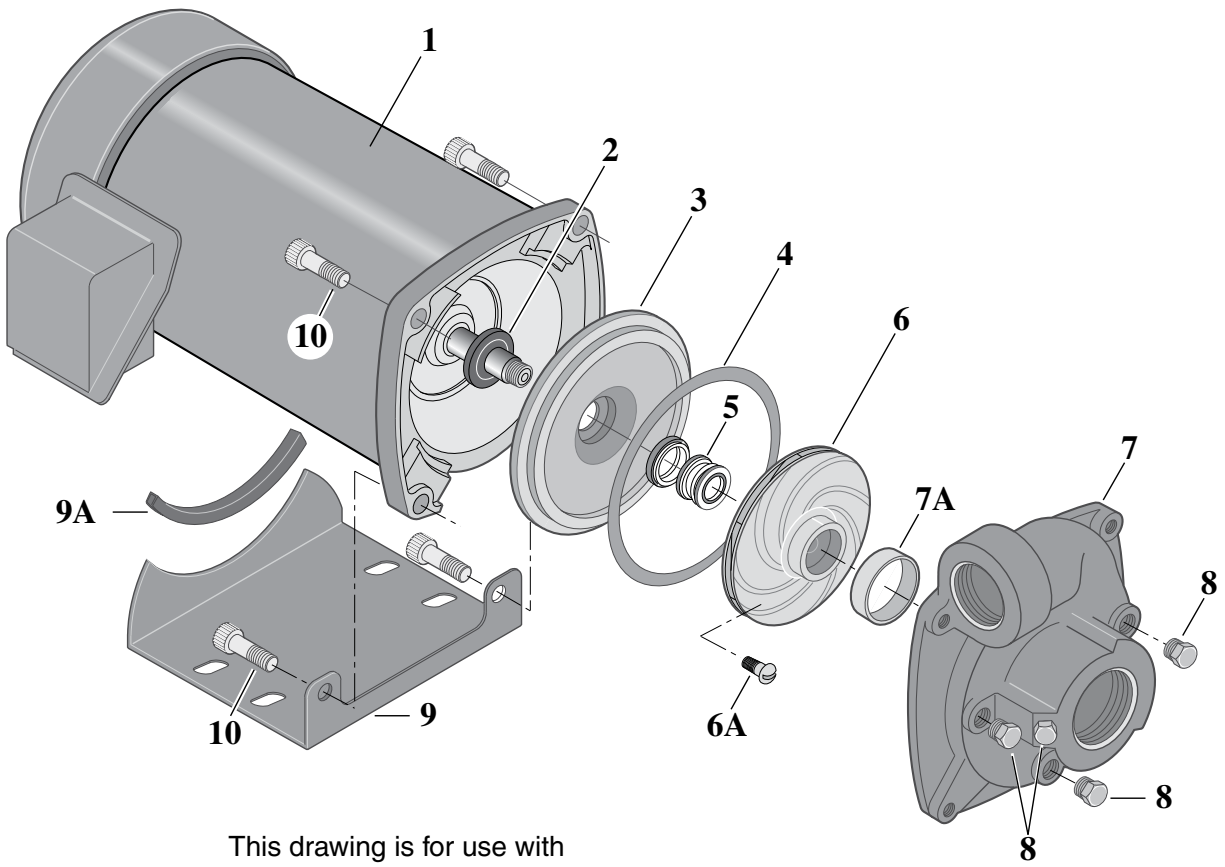
| SERVICE KIT                                    |   |        |        |        |        |
|--|---|--------|--------|--------|--------|
| Seal and Gasket Kit (J Series)                 | 1 | PP1700 | PP1700 | PP1700 | PP1700 |
| <b>NOTE:</b> † Included in Seal and Gasket Kit |   |        |        |        |        |

\*For repair or service to motors, always give the motor Model Number and any other data found on the Motor Model Plate.

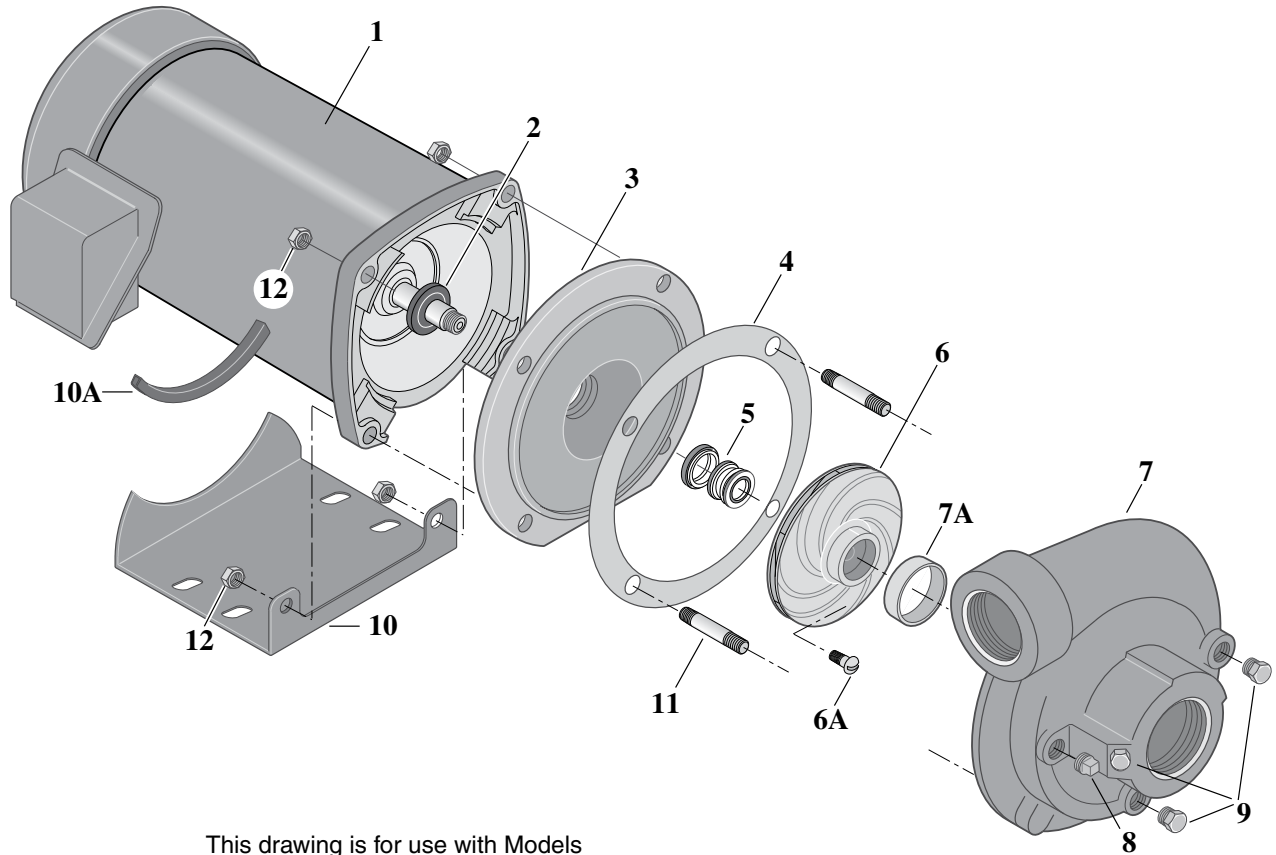
| Key No. | Part Description               | No. Used | JMFT-40<br>JMF3T-40<br>1-1/2 HP | JMGT-41<br>JMG3T-41<br>2 HP |
|---------|--------------------------------|----------|---------------------------------|-----------------------------|
| 1       | Motor, 115/230V, 1 Phase       | 1        | A100FL-T                        | AE100GL-T                   |
| 1       | Motor, 230/460V, 3 Phase       | 1        | AP100FL-T                       | AP100GL-T                   |
| 2       | Water Slinger                  | 1        | 17351-0009                      | 17351-0009                  |
| 3       | Seal Plate                     | 1        | C3-52                           | C3-52                       |
| 4       | Gasket, Seal Plate             | 1        | C20-21                          | C20-21                      |
| 5       | Shaft Seal                     | 1        | U109-6A                         | U109-6A                     |
| 6       | Impeller, Single Phase         | 1        | C105-114PC                      | C105-114PA                  |
| 6       | Impeller, Three Phase          | 1        | C105-114PCA                     | C105-114PA                  |
| 6A      | Impeller Screw                 | 1        | C30-14SS                        | C30-14SS                    |
| 7       | Volute Assembly with Wear Ring | 1        | C101-123                        | C101-123                    |
| 7A      | Wear Ring                      | 1        | C23-19                          | C23-19                      |
| 8       | Pipe Plug, 1/4" NPT Sq. Hd.    | 1        | U78-57DT                        | U78-57DT                    |
| 9       | Pipe Plug, 1/4" NPT Hex Hd.    | 3        | U78-941ZPV                      | U78-941ZPV                  |
| 10      | Base                           | 1        | J104-9                          | J104-9                      |
| 10A     | Motor Pad                      | 1        | C35-5                           | C35-5                       |
| 11      | Stud, 3/8 - 16 x 1-13/16"      | 4        | U30-35SS                        | U30-35SS                    |
| 12      | Hex Nut, 3/8 - 16              | 4        | U36-38ZP                        | U36-38ZP                    |

| SERVICE KIT                                    |   |        |        |
|--|---|--------|--------|
| Seal and Gasket Kit (J Series)                 | 1 | PP1700 | PP1700 |
| <b>NOTE:</b> † Included in Seal and Gasket Kit |   |        |        |

\*For repair or service to motors, always give the motor Model Number and any other data found on the Motor Model Plate.



2409T 0496 SPC



2410T 0496 SPC

## REPAIR PARTS LIST

### “JB” SERIES WITH TEFC MOTORS - MEDIUM HEAD

| Key No. | Part Description                              | No. Used | JMBT-56S<br>–<br>1/3 HP | JBMCT-56S<br>JBMCT3T-56S<br>1/2 HP | JBMDT-57S<br>JBMD3T-57S<br>3/4 HP | JBMET-58S<br>JBME3T-58S<br>1 HP |
|---------|---|----------|-------------------------|------------------------------------|-----------------------------------|---------------------------------|
| 1       | Motor, 115V, 1 Phase                          | 1        | A100BH-T                | –                                  | –                                 | –                               |
| 1       | Motor, 115/230V, 1 Phase                      | 1        | –                       | A100CL-T                           | A100DL-T                          | A100EL-T                        |
| 1       | Motor, 230/460V, 3 Phase                      | 1        | –                       | AP100CL-T                          | AP100DL-T                         | AP100EL-T                       |
| 2       | Water Slinger                                 | 1        | 17351-0009              | 17351-0009                         | 17351-0009                        | 17351-0009                      |
| 3       | Seal Plate                                    | 1        | N3-8                    | N3-8                               | N3-8                              | N3-8                            |
| 4       | Gasket, Seal Plate                            | 1        | N20-26                  | N20-26                             | N20-26                            | N20-26                          |
| 5       | Shaft Seal                                    | 1        | U109-6A                 | U109-6A                            | –                                 | U109-6A                         |
| 5       | Shaft Seal*                                   | 1        | –                       | –                                  | U109-118                          | U109-118                        |
| 6       | Impeller, Single Phase                        | 1        | J105-42MA               | J105-42MA                          | –                                 | J105-42NA                       |
| 6       | Impeller, Three Phase                         | 1        | –                       | C105-42CA                          | J105-42BA                         | J105-42HA                       |
| 6A      | Impeller Screw                                | 1        | –                       | C30-6SS                            | C30-6SS                           | C30-6SS                         |
| 7       | Volute Assembly with Wear Ring                | 1        | C101-122E               | C101-122E                          | C101-122E                         | C101-122                        |
| 7A      | Wear Ring                                     | 1        | N23-7                   | N23-7                              | N23-7                             | N23-7                           |
| 8       | Pipe Plug, 1/4" NPT Hex Hd.                   | 4        | U78-941ZPV              | U78-941ZPV                         | U78-941ZPV                        | U78-941ZPV                      |
| 9       | Base  | 1        | J104-9A                 | J104-9A                            | J104-9A                           | J104-9A                         |
| 9A      | Motor Pad                                     | 1        | C35-5                   | C35-5                              | C35-5                             | C35-5                           |
| 10      | Socket Head Capscrew, 3/8" - 16 x 1-1/4" Lg.† | 4        | U30-104ZP               | U30-104ZP                          | U30-104ZP                         | U30-104ZP                       |

| SERVICE KIT                                    |   |        |        |        |        |
|--|---|--------|--------|--------|--------|
| Seal and Gasket Kit (J Series)                 | 1 | PP1700 | PP1700 | PP1700 | PP1700 |
| <b>NOTE:</b> † Included in Seal and Gasket Kit |   |        |        |        |        |

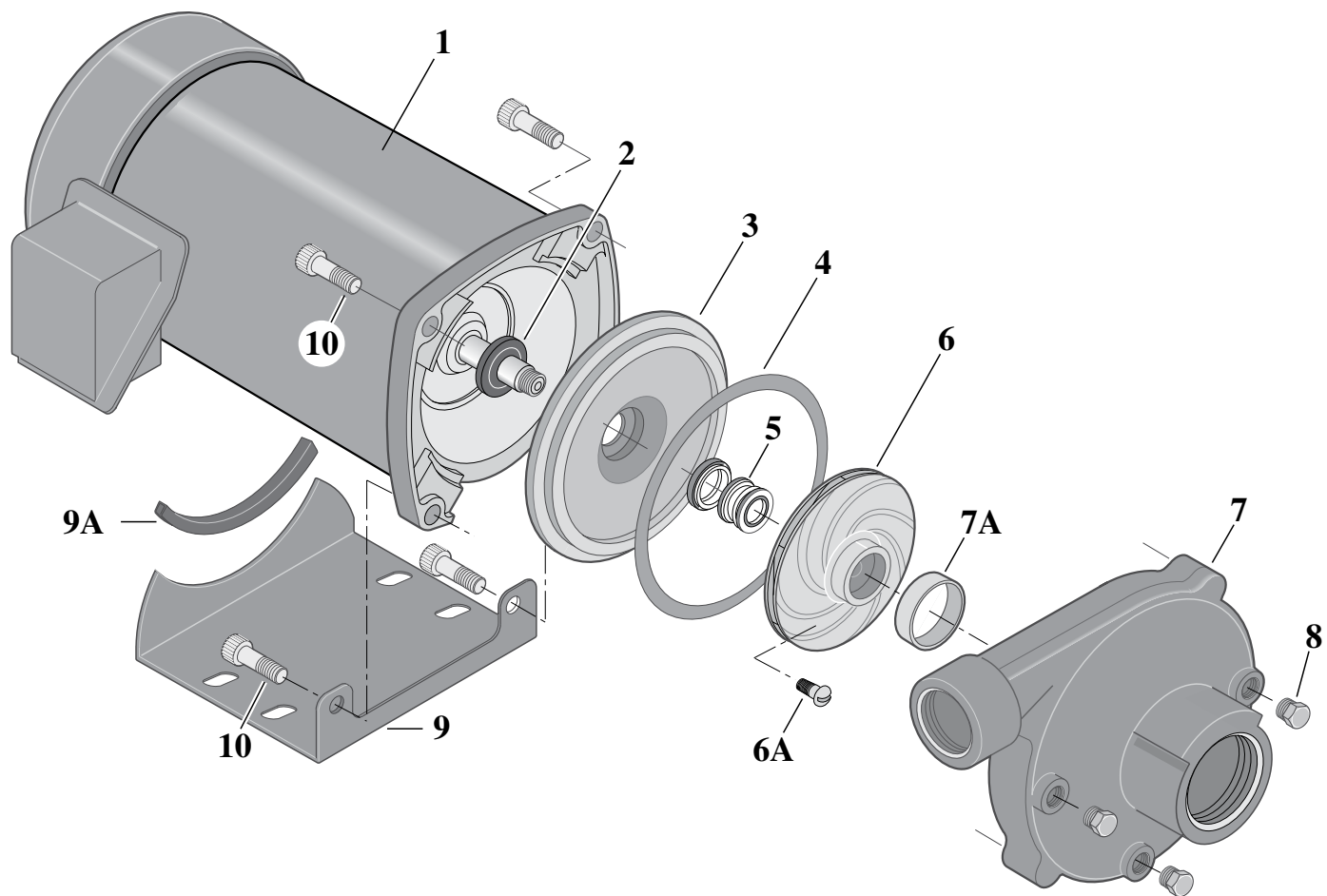
\*For repair or service to motors, always give the motor Model Number and any other data found on the Motor Model Plate.

† Model JBMET-58S uses (2) U30-104ZP and (2) U30-778SS.

| Key No. | Part Description               | No. Used | JBMFT-40S<br>JBMF3T-40S<br>1-1/2 HP | JBMGT-41S<br>JBMG3T-41S<br>2 HP | JBMMGT-59S<br>JBMMG3T-59S<br>2-1/2 HP |
|---------|--------------------------------|----------|-------------------------------------|---------------------------------|---------------------------------------|
| 1       | Motor, 115/230V, 1 Phase       | 1        | A100FL-T                            | –                               | –                                     |
| 1       | Motor, 230/460V, 3 Phase       | 1        | AP100FL-T                           | AP100GL-T                       | AP100G5L-T                            |
| 1       | Motor, 230V, 1 Phase           | 1        | –                                   | AE100GL-T                       | AE100G5L-T                            |
| 2       | Water Slinger                  | 1        | 17351-0009                          | 17351-0009                      | 17351-0009                            |
| 3       | Seal Plate                     | 1        | C3-52                               | C3-52                           | C3-52                                 |
| 4       | Gasket, Seal Plate             | 1        | C20-21                              | C20-21                          | C20-21                                |
| 5       | Shaft Seal                     | 1        | U109-6A                             | U109-6A                         | U109-6A                               |
| 6       | Impeller, Single Phase         | 1        | C105-79B                            | –                               | –                                     |
| 6       | Impeller, Three Phase          | 1        | C105-79BA                           | C105-73BA                       | C105-80DA                             |
| 6A      | Impeller Screw                 | 1        | C30-14SS                            | C30-14SS                        | C30-14SS                              |
| 7       | Volute Assembly with Wear Ring | 1        | C101-123                            | C101-123                        | C101-123B                             |
| 7A      | Wear Ring                      | 1        | C23-19                              | C23-19                          | C23-19                                |
| 8       | Pipe Plug, 1/4" NPT Sq. Hd.    | 1        | U78-57DT                            | U78-57DT                        | U78-57DT                              |
| 9       | Pipe Plug, 1/4" NPT Hex Hd.    | 3        | U78-941ZPV                          | U78-941ZPV                      | U78-941ZPV                            |
| 10      | Base                           | 1        | J104-9A                             | J104-9A                         | J104-9A                               |
| 10A     | Motor Pad                      | 1        | C35-5                               | C35-5                           | C35-5                                 |
| 11      | Stud, 3/8 - 16 x 2"            | 4        | U30-35SS                            | U30-35SS                        | U30-35SS                              |
| 12      | Hex Nut, 3/8 - 16              | 4        | U36-38ZP                            | U36-38ZP                        | U36-38ZP                              |

| SERVICE KIT                                    |   |        |        |        |
|--|---|--------|--------|--------|
| Seal and Gasket Kit (J Series)                 | 1 | PP1700 | PP1700 | PP1700 |
| <b>NOTE:</b> † Included in Seal and Gasket Kit |   |        |        |        |

\*For repair or service to motors, always give the motor Model Number and any other data found on the Motor Model Plate.



2413T 0496

## REPAIR PARTS LIST

### “JBH” SERIES WITH TEFC MOTORS

| Key No. | Part Description                             | No. Used | JBHBT-61S<br>–<br>–<br>1/3 HP | JBHCT-61S<br>JBHC3T-61S<br>–<br>1/2 HP | JBHDT-62S<br>JBHD3T-62S<br>JBH2DT-62S<br>3/4 HP | JBHET-63S<br>JBHE3T-63S<br>–<br>1 HP | JBHFT-51S<br>JBHF3T-51S<br>–<br>1-1/2 HP |
|---------|--|----------|-------------------------------|--|---|--------------------------------------|--|
| 1       | Motor, 115V, 1 Phase                         | 1        | A100BH-T                      | –                                      | –   | –                                    | –  |
| 1       | Motor, 115/230V, 1 Phase                     | 1        | –                             | A100CL-T                               | A100DL-T  | A100EL-T                             | A100FL-T                                 |
| 1       | Motor, 100/200V, 1 Phase                     | 1        | –                             | –                                      | J218-896D                                       | –                                    | –  |
| 1       | Motor, 230/460V, 3 Phase                     | 1        | –                             | AP100CL-T                              | AP100DL-T                                       | AP100EL-T                            | AP100FL-T                                |
| †2      | Water Slinger                                | 1        | 17351-0009                    | 17351-0009                             | 17351-0009                                      | 17351-0009                           | 17351-0009                               |
| 3       | Seal Plate                                   | 1        | C3-1042P                      | C3-1042P                               | C3-1042P  | C3-1042P                             | C3-1042P                                 |
| †4      | Gasket, Seal Plate                           | 1        | C20-121                       | C20-121                                | C20-121   | C20-121                              | C20-121                                  |
| †5      | Shaft Seal                                   | 1        | U109-6A                       | U109-6A                                | U109-6A   | U109-6A                              | U109-6A                                  |
| 6       | Impeller, Single Phase                       | 1        | C5-256BA                      | C5-256BA                               | C105-94B  | C5-254BA                             | C5-254BC                                 |
| 6       | Impeller, Three Phase                        | 1        | –                             | C5-256BA                               | C105-94BA                                       | C5-254BA                             | C5-254BC                                 |
| 6A      | Impeller Screw                               | 1        | C30-14SS                      | C30-14SS                               | C30-14SS  | C30-14SS                             | C30-14SS                                 |
| 7       | Volute Assembly with Wear Ring               | 1        | C101-284A                     | C101-284A                              | C101-284A                                       | C101-284A                            | C101-284A                                |
| 7A      | Wear Ring                                    | 1        | C23-27                        | C23-27                                 | C23-27  | C23-27                               | C23-27                                   |
| 8       | Pipe Plug, 1/4" NPT Hex Hd.                  | 3        | U78-941ZPV                    | U78-941ZPV                             | U78-941ZPV                                      | U78-941ZPV                           | U78-941ZPV                               |
| 9       | Base   | 1        | J104-9A                       | J104-9A                                | J104-9A   | J104-9A                              | J104-9A                                  |
| 9A      | Motor Pad                                    | 1        | C35-5                         | C35-5                                  | C35-5   | C35-5                                | C35-5                                    |
| 10      | Socket Head Capscrew, 3/8" - 16 x 1-1/4" Lg. | 4        | U30-104ZP                     | U30-104ZP                              | U30-104ZP                                       | U30-104ZP                            | U30-104ZP                                |

| SERVICE KIT                                    |   |        |        |        |        |        |
|--|---|--------|--------|--------|--------|--------|
| Seal and Gasket Kit (JBH Series)               | 1 | PP1700 | PP1700 | PP1700 | PP1700 | PP1700 |
| <b>NOTE:</b> † Included in Seal and Gasket Kit |   |        |        |        |        |        |

\*For repair or service to motors, always give the motor Model Number and any other data found on the Motor Model Plate.

| Key No.  | Part Description                                  | No. Used | JBHGT-52S<br>JBHG3T-52S<br>2 HP | JBHHGT-53H<br>2-1/2 HP |
|--|---|----------|---------------------------------|------------------------|
| 1  | Motor, 230V, 1 Phase                              | 1        | AE100GL-T                       | AE100G5L-T             |
| 1  | Motor, 230/460V, 3 Phase                          | 1        | AP100GL-T                       | AP100G5L-T             |
| †2   | Water Slinger                                     | 1        | 17351-0009                      | C69-2                  |
| 3  | Seal Plate  | 1        | C3-181                          | C3-181                 |
| †4   | Gasket, Seal Plate                                | 1        | C20-122                         | C20-122                |
| †5   | Shaft Seal  | 1        | U109-6A                         | U109-6A                |
| 6  | Impeller  | 1        | C5-257BB                        | C5-257B                |
| 6A   | Impeller Screw                                    | 1        | C30-14SS                        | C30-14SS               |
| 7  | Volute Assembly with Wear Ring                    | 1        | C101-264                        | C101-264B              |
| 7A   | Wear Ring   | 1        | C23-19                          | C23-19                 |
| 8  | Pipe Plug, 1/4" NPT Hex Hd.                       | 3        | U78-941ZPV                      | U78-941ZPV             |
| 9  | Base  | 1        | J104-9A                         | J104-9A                |
| 9A   | Motor Pad   | 1        | C35-5                           | C35-5                  |
| 10   | Capscrew, 3/8 - 16 x 1" Hex Head                  | 2        | –                               | U30-74ZP               |
| 11   | Capscrew, 3/8 - 16 x 1-1/4" Hex Head              | 2        | –                               | U30-75ZP               |
| 11   | Capscrew, 3/8 - 16 x 1-1/4" Socket Head (1 Phase) | 4        | U30-104ZP                       | –                      |
| 11   | Capscrew, 3/8 - 16 x 1" Socket Head (3 Phase)     | 4        | U30-99SS                        | –                      |
| SERVICE KIT                                    |   |          |                                 |                        |
| Seal and Gasket Kit (JBH Series)               | 1   | PP1700   | PP1700                          |                        |
| <b>NOTE:</b> † Included in Seal and Gasket Kit |   |          |                                 |                        |

\*For repair or service to motors, always give the motor Model Number and any other data found on the Motor Model Plate.

## Limited Warranty

STA-RITE warrants to the original consumer purchaser ("Purchaser" or "You") of the products listed below, that they will be free from defects in material and workmanship for the Warranty Period shown below.

| Product  | Warranty Period  |
|--|--|
| Water Systems Products — jet pumps, small centrifugal pumps, submersible pumps and related accessories | <i>whichever occurs first:</i><br>12 months from date of original installation,<br>or 18 months from date of manufacture |
| Pro-Source™ Composite Tanks  | 5 years from date of original installation   |
| Pro-Source™ Steel Pressure Tanks   | 5 years from date of original installation   |
| Pro-Source™ Epoxy-Lined Tanks  | 3 years from date of original installation   |
| Sump/Sewage/Effluent Products  | 12 months from date of original installation, or<br>18 months from date of manufacture                                   |

Our warranty will not apply to any product that, in our sole judgement, has been subject to negligence, misapplication, improper installation, or improper maintenance. Without limiting the foregoing, operating a three phase motor with single phase power through a phase converter will void the warranty. Note also that three phase motors must be protected by three-leg, ambient compensated, extra-quick trip overload relays of the recommended size or the warranty is void.

Your only remedy, and STA-RITE's only duty, is that STA-RITE repair or replace defective products (at STA-RITE's choice). You must pay all labor and shipping charges associated with this warranty and must request warranty service through the installing dealer as soon as a problem is discovered. No request for service will be accepted if received after the Warranty Period has expired. This warranty is not transferable.

STA-RITE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, OR CONTINGENT DAMAGES WHATSOEVER.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE FOREGOING WARRANTIES SHALL NOT EXTEND BEYOND THE DURATION EXPRESSLY PROVIDED HEREIN.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on the duration of an implied warranty, so the above limitations or exclusions may not apply to You. This warranty gives You specific legal rights and You may also have other rights which vary from state to state.

This Limited Warranty is effective June 1, 2011 and replaces all undated warranties and warranties dated before June 1, 2011.

### **STA-RITE INDUSTRIES**

**293 Wright Street • Delavan, WI U.S.A. 53115**

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