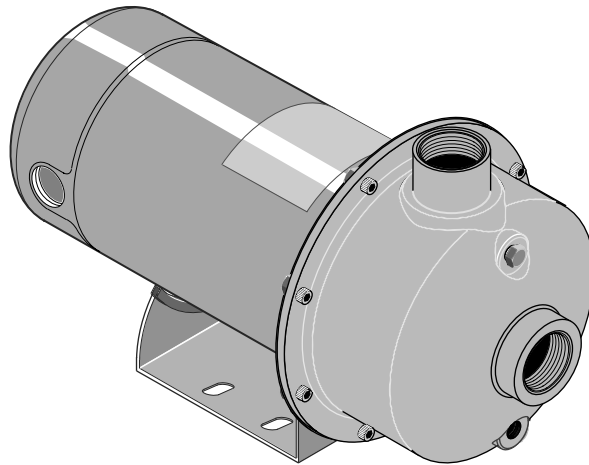




# OWNER'S MANUAL

INSTALLATION AND OPERATING INSTRUCTIONS  
REPAIR PARTS LIST

## “SSCX” AND “SSCXS” SERIES CENTRIFUGAL PUMP High Head



### MODELS

| HP    | Model Number     | ODP MOTORS   |                  | TEFC MOTORS  |                  |
|-------|------------------|--------------|------------------|--------------|------------------|
|       |                  | 115/230/60/1 | 208-230/460/60/3 | 115/230/60/1 | 208-230/460/60/3 |
| 1/2   | SS1XN-1/2        | B78635       | B78636           | B78647       | B78648           |
| 3/4   | SS1XN-3/4        | B78637       | B78638           | B78649       | B78650           |
| 3/4   | SS1XS-3/4        | B82411       | B82412           | B82413       | B82414           |
| 1     | SS1XN-1          | B78639       | B78640           | B78651       | B78652           |
| 1     | SS1XS-1          | B82415       | B82416           | B82417       | B82418           |
| 1-1/2 | SS1XN-1 1/2      | B78641       | B78642           | B78653       | B78654           |
| 1-1/2 | SS1XS-1 1/2      | B82419       | B82420           | B82421       | B82422           |
| 2     | SS1 1/4 XN-2     | B78643*      | B78644           | B78655*      | B78656           |
| 2     | SS1XS-2          | B82423*      | B82424           | B82425       | B82426           |
| 2-1/2 | SS1 1/4 XN-2 1/2 | B78645*      | B78646           | B78657*      | B78658           |
| 2-1/2 | SS1XS-2 1/2      | B82427*      | B82428           | B82429*      | B82430           |

\* 230 Volt only.

**Berkeley Pumps / 293 Wright Street / Delavan, WI 53115**

# Recommended pump suction and discharge connections

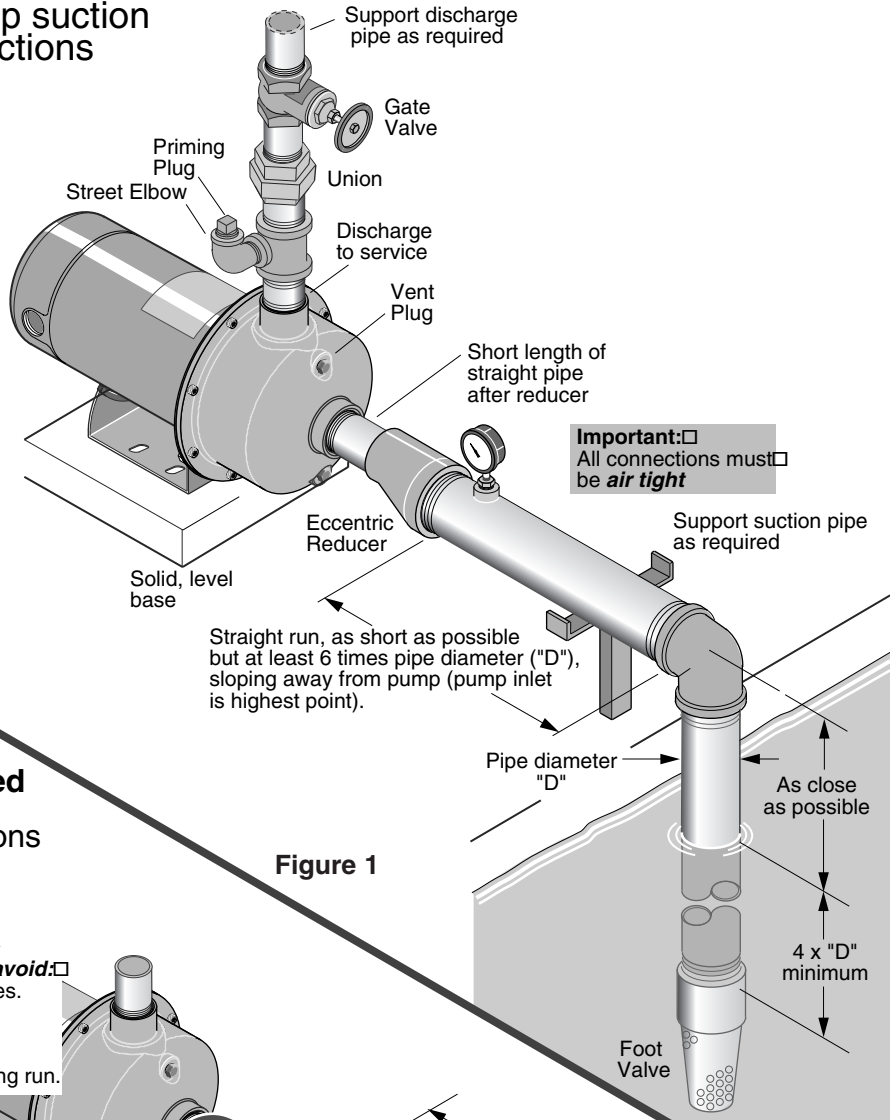


Figure 1

## Not recommended pump suction and discharge connections

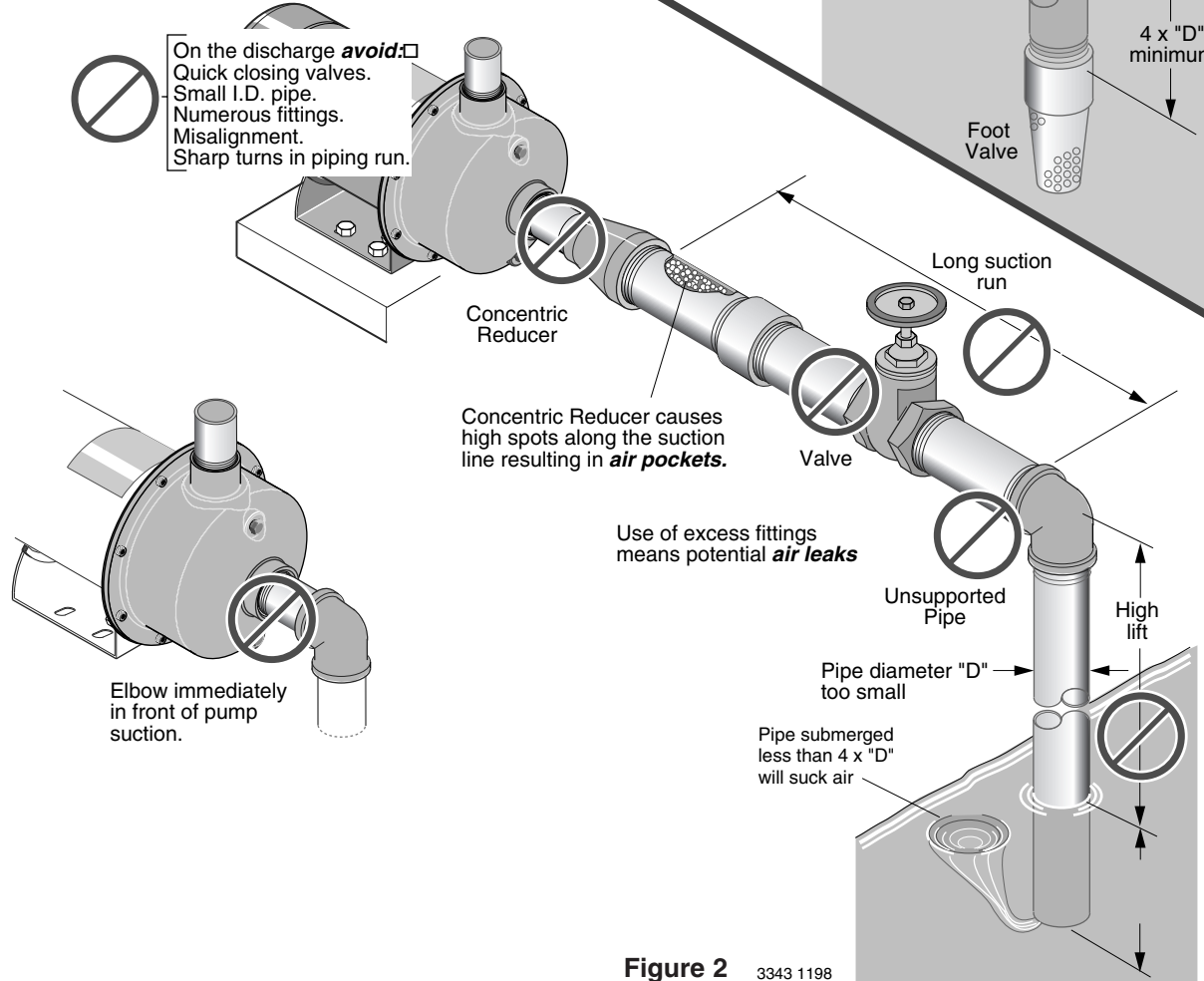


Figure 2 3343 1198

## 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.

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

**TABLE I**

| Pipe Tapping Size On Pump |           | 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     |

## SUCTION PIPE

Increase pipe size from pump tapping 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 tapping as show 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.

**NOTE:** If no water is pumped after 5 minutes, turn off pump, close valve, and repeat steps 1 thru 4.

**▲ WARNING Risk of explosion and scalding.** Never run pump against closed discharge. To do so can boil water inside pump, causing hazardous pressure buildup and possible explosion.

**▲ CAUTION Risk of flooding.** Do not run the pump dry. This will damage mechanical seal and void warranty. It may cause burns to person handling pump.

**▲ CAUTION 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.

**TABLE II - RECOMMENDED FUSING AND WIRING DATA - 60/50 CYCLE MOTORS**

| MODEL                             | MOTOR HP | VOLTAGE       | MAX. LOAD AMPERES | BRANCH FUSE* RATING AMPS | DISTANCE IN FEET FROM MOTOR TO METER |              |              |              |              |
|-----------------------------------|----------|---------------|-------------------|--------------------------|--------------------------------------|--------------|--------------|--------------|--------------|
|                                   |          |               |                   |                          | 0' TO 100'                           | 101' TO 200' | 201' TO 300' | 301' TO 400' | 401' TO 500' |
|                                   |          |               |                   |                          | WIRE SIZE                            |              |              |              |              |
| <b>SINGLE PHASE - ODP MOTORS</b>  |          |               |                   |                          |                                      |              |              |              |              |
| SS1XN-½                           | 1/2      | 115/230/1     | 8.8/4.4           | 15/15                    | 14/14                                | 12/14        | 10/14        | 8/14         | 8/12         |
| SS1XN-¾                           | ¾        | 115/230/1     | 12.4/6.2          | 20/15                    | 12/14                                | 10/14        | 8/14         | 6/12         | 6/12         |
| SS1XS-¾                           | ¾        | 115/230/1     | 14.8/7.4          | 20/15                    | 12/14                                | 8/14         | 6/14         | 6/12         | 4/10         |
| SS1XN-1                           | 1        | 115/230/1     | 14.8/7.4          | 20/15                    | 12/14                                | 8/14         | 6/14         | 6/12         | 4/10         |
| SS1XS-1                           | 1        | 115/230/1     | 19.2/9.6          | 25/15                    | 10/14                                | 8/14         | 6/12         | 4/10         | 4/10         |
| SS1XN-1½                          | 1-1/2    | 115/230/1     | 19.2/9.6          | 25/15                    | 10/14                                | 8/14         | 6/12         | 4/10         | 4/10         |
| SS1XS-1½                          | 1-1/2    | 115/230/1     | 24.0/12.0         | 30/15                    | 10/14                                | 6/12         | 6/12         | 4/10         | 3/8          |
| SS1½XN-2                          | 2        | 115/230/1     | 24.0/12.0         | 30/15                    | 10/14                                | 6/12         | 6/12         | 4/10         | 3/8          |
| SS1XS-2                           | 2        | 115/230/1     | 26.0/13.0         | 35/20                    | 8/12                                 | 6/12         | 4/10         | 4/10         | 3/8          |
| SS1½XN-2½                         | 2-1/2    | 115/230/1     | 26.0/13.0         | 35/20                    | 8/12                                 | 6/12         | 4/10         | 4/10         | 3/8          |
| SS1XS-2½                          | 2-1/2    | 115/230/1     | 26.0/13.0         | 35/20                    | 8/12                                 | 6/12         | 4/10         | 4/10         | 3/8          |
| <b>SINGLE PHASE - TEFC MOTORS</b> |          |               |                   |                          |                                      |              |              |              |              |
| SS1XN-½                           | 1/2      | 115/230/1     | 8.2/4.1           | 15/15                    | 14/14                                | 12/14        | 10/14        | 8/14         | 8/12         |
| SS1XN-¾                           | ¾        | 115/230/1     | 11.6/5.8          | 20/15                    | 14/14                                | 10/14        | 8/14         | 6/14         | 6/12         |
| SS1XS-¾                           | ¾        | 115/230/1     | 14.2/7.1          | 20/15                    | 12/14                                | 12/14        | 10/14        | 8/12         | 8/10         |
| SS1XN-1                           | 1        | 115/230/1     | 14.2/7.1          | 20/15                    | 12/14                                | 12/14        | 10/14        | 8/12         | 8/10         |
| SS1XS-1                           | 1        | 115/230/1     | 18.0/9.0          | 25/15                    | 10/14                                | 8/14         | 6/12         | 4/10         | 4/10         |
| SS1XN-1½                          | 1-1/2    | 115/230/1     | 18.0/9.0          | 25/15                    | 10/14                                | 8/14         | 6/12         | 4/10         | 4/10         |
| SS1XS-1½                          | 1-1/2    | 115/230/1     | 11.7              | 15                       | 14                                   | 14           | 12           | 10           | 10           |
| SS1½XN-2                          | 2        | 230/1         | 11.7              | 15                       | 14                                   | 14           | 12           | 10           | 10           |
| SS1XS-2                           | 2        | 230/1         | 11.7              | 15                       | 14                                   | 14           | 12           | 10           | 10           |
| SS1½XN-2½                         | 2-1/2    | 230/1         | 11.7              | 15                       | 14                                   | 14           | 12           | 10           | 10           |
| SS1XS-2½                          | 2-1/2    | 230/1         | 11.7              | 15                       | 14                                   | 14           | 12           | 10           | 10           |
| <b>THREE PHASE - ODP MOTORS</b>   |          |               |                   |                          |                                      |              |              |              |              |
| SS1XN-½                           | 1/2      | 230/460/3     | 2.3/1.15          | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XN-¾                           | ¾        | 230/460/3     | 3.1/1.55          | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XS-¾                           | ¾        | 230/460/3     | 3.6/1.8           | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XN-1                           | 1        | 230/460/3     | 3.6/1.8           | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XS-1                           | 1        | 230/460/3     | 4.7/2.35          | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XN-1½                          | 1-1/2    | 230/460/3     | 4.7/2.35          | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XS-1½                          | 1-1/2    | 230/460/3     | 6.8/2.4           | 15                       | 14/14                                | 14/14        | 14/14        | 12/14        | 12/14        |
| SS1½XN-2                          | 2        | 230/460/3     | 6.8/2.4           | 15                       | 14/14                                | 14/14        | 14/14        | 12/14        | 12/14        |
| SS1XS-2                           | 2        | 230/460/3     | 8.5/4.25          | 15                       | 14/14                                | 14/14        | 14/14        | 12/14        | 12/14        |
| SS1½XN-2½                         | 2-1/2    | 230/460/3     | 8.5/4.25          | 15                       | 14/14                                | 14/14        | 14/14        | 12/14        | 12/14        |
| SS1XS-2½                          | 2-1/2    | 230/460/3     | 8.5/4.25          | 15                       | 14/14                                | 14/14        | 14/14        | 12/14        | 12/14        |
| <b>THREE PHASE - TEFC MOTORS</b>  |          |               |                   |                          |                                      |              |              |              |              |
| SS1XN-½                           | 1/2      | 208-230/460/3 | 2.2/1.1           | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XN-¾                           | ¾        | 208-230/460/3 | 2.9/1.45          | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XS-¾                           | ¾        | 208-230/460/3 | 3.6/6.8           | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XN-1                           | 1        | 208-230/460/3 | 3.6/6.8           | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XS-1                           | 1        | 208-230/460/3 | 4.8/2.4           | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XN-1½                          | 1-1/2    | 208-230/460/3 | 4.8/2.4           | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 14/14        |
| SS1XS-1½                          | 1-1/2    | 208-230/460/3 | 6.0/3.0           | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 12/14        |
| SS1½XN-2                          | 2        | 208-230/460/3 | 6.0/3.0           | 15                       | 14/14                                | 14/14        | 14/14        | 14/14        | 12/14        |
| SS1XS-2                           | 2        | 208-230/460/3 | 7.0/3.5           | 15                       | 14/14                                | 14/14        | 14/14        | 12/14        | 12/14        |
| SS1½XN-2½                         | 2-1/2    | 208-230/460/3 | 7.0/3.5           | 15                       | 14/14                                | 14/14        | 14/14        | 12/14        | 12/14        |
| SS1XS-2½                          | 2-1/2    | 208-230/460/3 | 7.0/3.5           | 15                       | 14/14                                | 14/14        | 14/14        | 12/14        | 12/14        |

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

# ELECTRICAL

Connection diagram for dual voltage, single-phase motors. Your dual-voltage motor's terminal board (under the motor end cover) will match one of the diagrams below. Follow that diagram if necessary to convert motor to 115 Volt power. Connect power supply wires to L1 and L2.

For 3-phase motors, TEFC motors, and motors that do not match these pictures, follow the connection diagram on the motor nameplate, or in the connection box.

## THE MOTOR IS SET FOR 230 VOLTS WHEN SHIPPED.

To change the motor to use 115 volts:

1. Turn off power
2. Remove the back motor cover.
3. Use a screwdriver or 1/2" wrench and turn the voltage selector dial counterclockwise until 115 shows in the dial opening.
4. Reinstall the motor cover.

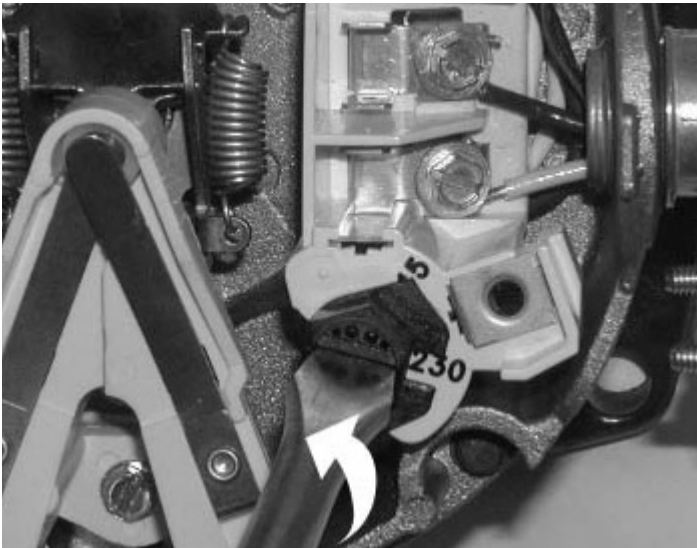


Figure 3: Changing the Voltage Setting



Figure 4: Motor Set for 115 Volt Operation

**⚠ WARNING** **Hazardous voltage.** Can shock, burn, or cause death. Disconnect power to motor before working on pump or motor. Ground motor before connecting to power supply.

## WIRING

**⚠** 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 damage motor and voids warranty. If in doubt consult a licensed electrician.

**⚠** Use wire size specified in Wiring Chart (Page 3). If possible, connect pump to a separate branch circuit with no other appliances on it.

**⚠** Wire motor according to diagram on motor nameplate. If nameplate diagram differs from diagrams above, follow nameplate diagram.

1. Install, ground, wire and maintain your pump in compliance with the National Electrical Code (NEC) in the U.S., or the Canadian Electrical Code (CEC), as applicable, and with all local codes and ordinances that apply. Consult your local building inspector for code information.
2. Provide a correctly fused disconnect switch for protection while working on motor. For switch requirements, consult your local building inspector for information about codes.
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 (Page 3). Make ground connection to green grounding terminal under motor canopy 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 L1 and L2 under motor canopy. When replacing motor, check wiring diagram on motor nameplate against Figure 3. If the motor wiring diagram does not match either diagram in Figure 3, follow the diagram on the motor.

**IMPORTANT:** 115/230 Volt single phase models are shipped from factory with motor wired for 230 volts. If power supply is 115 volts, remove motor canopy and reconnect motor as shown in Figure 3. Do not try to run motor as received on 115 volt current.

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.

# 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: Pumps use mechanical seals with a rubber seat ring or a sealing O-Ring. THESE SEALS 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, carefully remove rotating part of seal by prying up on sealing washer, using two screwdrivers (see Figure 5A). Use care not to scratch motor shaft.
2. Remove seal plate from motor and place on flat surface, face down. Use a screwdriver to push ceramic seat out from seal cavity (see Figure 5B).

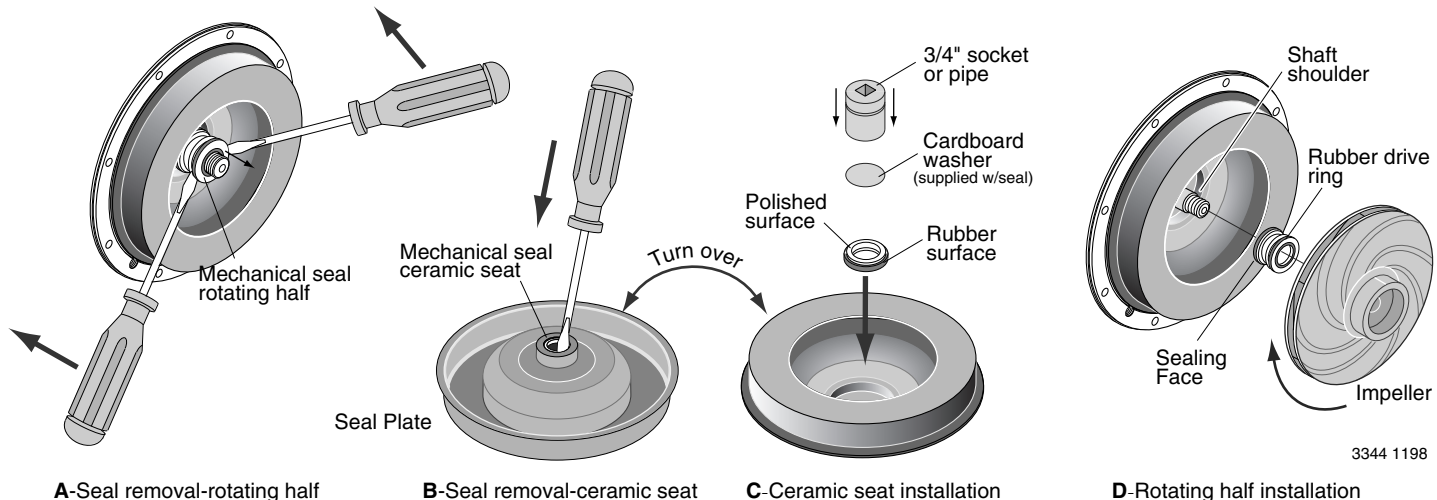
### INSTALLATION OF FLOATING SEAT (Figure 5C)

1. Clean polished surface of floating seat with clean cloth.

2. Turn seal plate over so seal cavity is up, clean cavity thoroughly.
3. Lubricate outside rubber surface 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 5D)

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 with soapy water and slide assembly on motor shaft (sealing face first) until rubber drive ring hits shaft shoulder.
5. Screw impeller onto shaft until impeller hub hits shaft shoulder. This will automatically locate seal in place and move the sealing washer face up against seat facing. Reinstall impeller screw (if used).



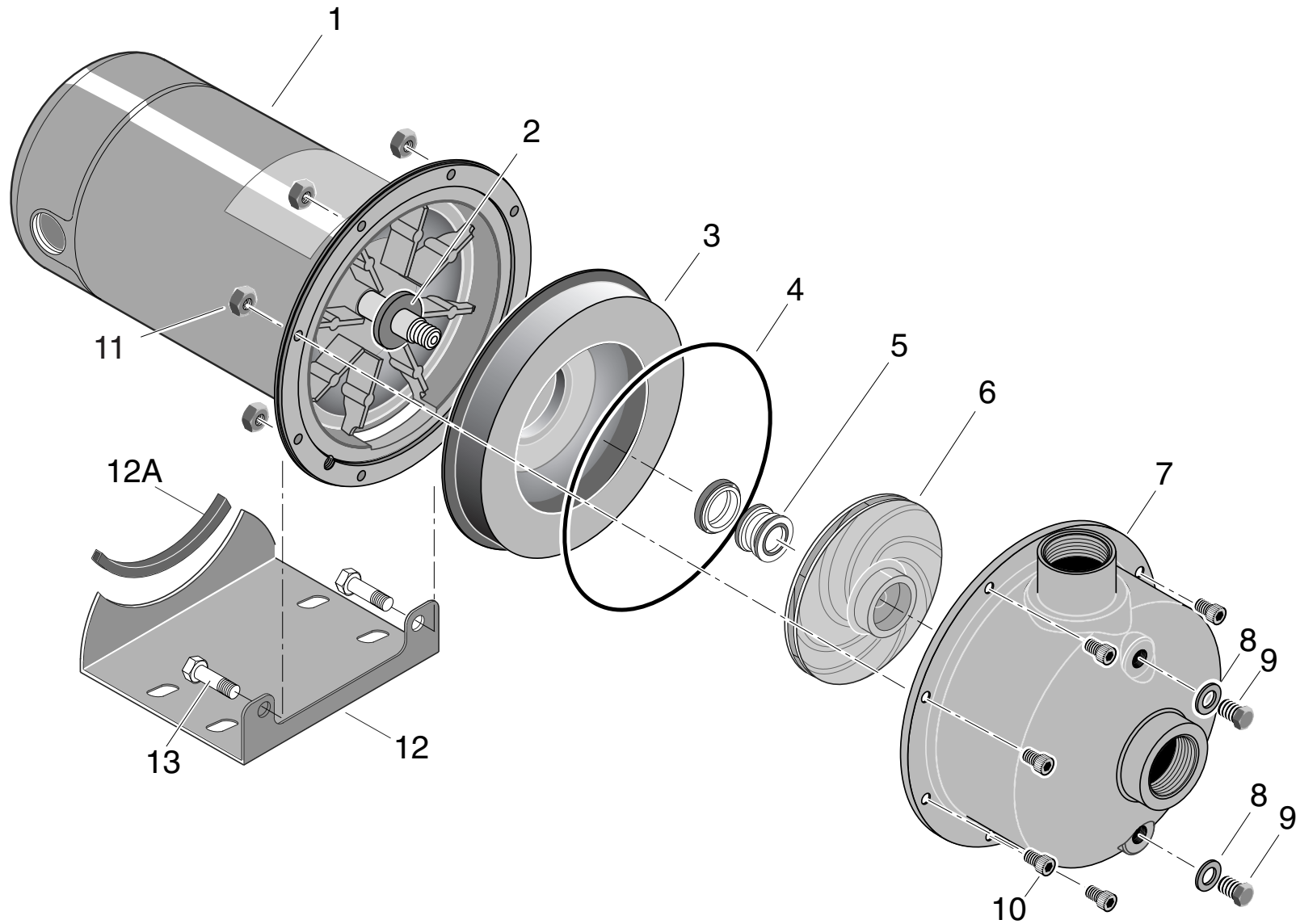
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**FIGURE 5: Seal replacement**

## TROUBLE - CAUSES AND REMEDY

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

# SSCX Series





## REPAIR PARTS LIST

| Key No. | Part Description                         | No. Used | MOTOR AND HORSEPOWER                           |  |  |  |  |  |
|---------|--|----------|--|--|--|--|--|--|
|         |  |          | SS1XN-½  | SS1XN-¾  | SS1XN-1                                      | SS1XN-1½   | SS1¼XN-2                                     | SS1¼XN-2½  |
|         |  |          | B78635<br>B78647<br>B78636<br>B78648<br>1/2 HP | B78637<br>B78649<br>B78638<br>B78650<br>3/4 HP | B78639<br>B78651<br>B78640<br>B78652<br>1 HP | B78641<br>B78653<br>B78642<br>B78654<br>1-1/2 HP | B78643<br>B78655<br>B78644<br>B78656<br>2 HP | B78645<br>B78646<br>B78657<br>B78658<br>B80427†<br>B80428††<br>B80429†<br>B80430††<br>2-1/2 HP |
| 1*      | Motor, 115/230V/60 Hz., 1 Phase, ODP     | 1        | B80440   | B80441   | B80442                                       | B80443   | B80444                                       | B80445   |
| 1*      | Motor, 115/230V/60 Hz., 1 Phase, TEFC    | 1        | B80452   | B80453   | B80454                                       | B80455   | B80456                                       | B80457   |
| 1*      | Motor, 208-230/460V/60 Hz., 3 Phase, ODP | 1        | B80446   | B80447   | B80448                                       | B80449   | B80450                                       | B80451   |
| 1*      | Motor, 230/460V/60 Hz., 3 Phase, TEFC    | 1        | B80458   | B80459   | B80460                                       | B80461   | B80462                                       | B80463   |
| 2       | Water Slinger                            | 1        | 17351-0009                                     | 17351-0009                                     | 17351-0009                                   | 17351-0009                                       | 17351-0009                                   | 17351-0009   |
| 3       | Seal Plate                               | 1        | C3-200SS                                       | C3-200SS                                       | C3-200SS                                     | C3-200SS   | C3-200SS                                     | C3-200SS   |
| 4       | O-Ring**                                 | 1        | 111P0490                                       | 111P0490                                       | 111P0490                                     | 111P0490   | 111P0490                                     | 111P0490   |
| 5       | Shaft Seal***                            | 1        | U109-6A  | U109-6A  | U109-6A                                      | U109-6A  | U109-6A                                      | U109-6A  |
| 6       | Impeller - 1 Phase                       | 1        | C105-92PNS                                     | C105-92PMS                                     | C105-92PLS                                   | C105-92PBSS                                      | C105-214PCASS                                | C105-214PASS   |
| 6       | Impeller - 3 Phase                       | 1        | C105-92PNSA                                    | C105-92PMSA                                    | C105-92PLSA                                  | C105-92PBSSA                                     | C105-214PCASS                                | C105-214PASS   |
| •       | Impeller Screw - 1 Phase                 | 1        | –  | –  | –  | –  | C30-14SS                                     | C30-14SS   |
| •       | Impeller Screw - 3 Phase                 | 1        | C30-14SS                                       | C30-14SS                                       | C30-14SS                                     | C30-14SS   | C30-14SS                                     | C30-14SS   |
| 7       | Casing/Diffuser Assembly                 | 1        | 723S2990                                       | 723S2990                                       | 723S2990                                     | 723S2990   | 723S3370                                     | 723S3370   |
| 8       | Washer                                   | 2        | 111P0990                                       | 111P0990                                       | 111P0990                                     | 111P0990   | 111P0990                                     | 111P0990   |
| 9       | Stainless Steel Plug                     | 2        | 121P3780                                       | 121P3780                                       | 121P3780                                     | 121P3780   | 121P3780                                     | 121P3780   |
| 10      | Screw                                    | 8        | 121P0310                                       | 121P0310                                       | 121P0310                                     | 121P0310   | 121P0310                                     | 121P0310   |
| 11      | Nut, M6x1                                | 8        | U36-207SS                                      | U36-207SS                                      | U36-207SS                                    | U36-207SS  | U36-207SS                                    | U36-207SS  |
| 12      | Base                                     | 1        | J104-9F  | J104-9F  | J104-9F                                      | J104-9F  | J104-9F                                      | J104-9F  |
| 12      | Base (1 Phase, TEFC only)                | 1        | J104-9A  | J104-9A  | J104-9A                                      | J104-9A  | J104-9A                                      | J104-9A  |
| 12A     | Motor Pad                                | 1        | C35-5  | C35-5  | C35-5  | C35-5  | C35-5  | C35-5  |
| 13      | Capscrews, 3/8-16x3/4"                   | 2        | U30-72SS                                       | U30-72SS                                       | U30-72SS                                     | U30-72SS   | U30-72SS                                     | U30-72SS   |

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

\*\* Models B80427, B80428, B80429 and B80430 use Part Number U9-434.

\*\*\* Models B80427 and B80428 use Shaft Seal Number U109-432SS.

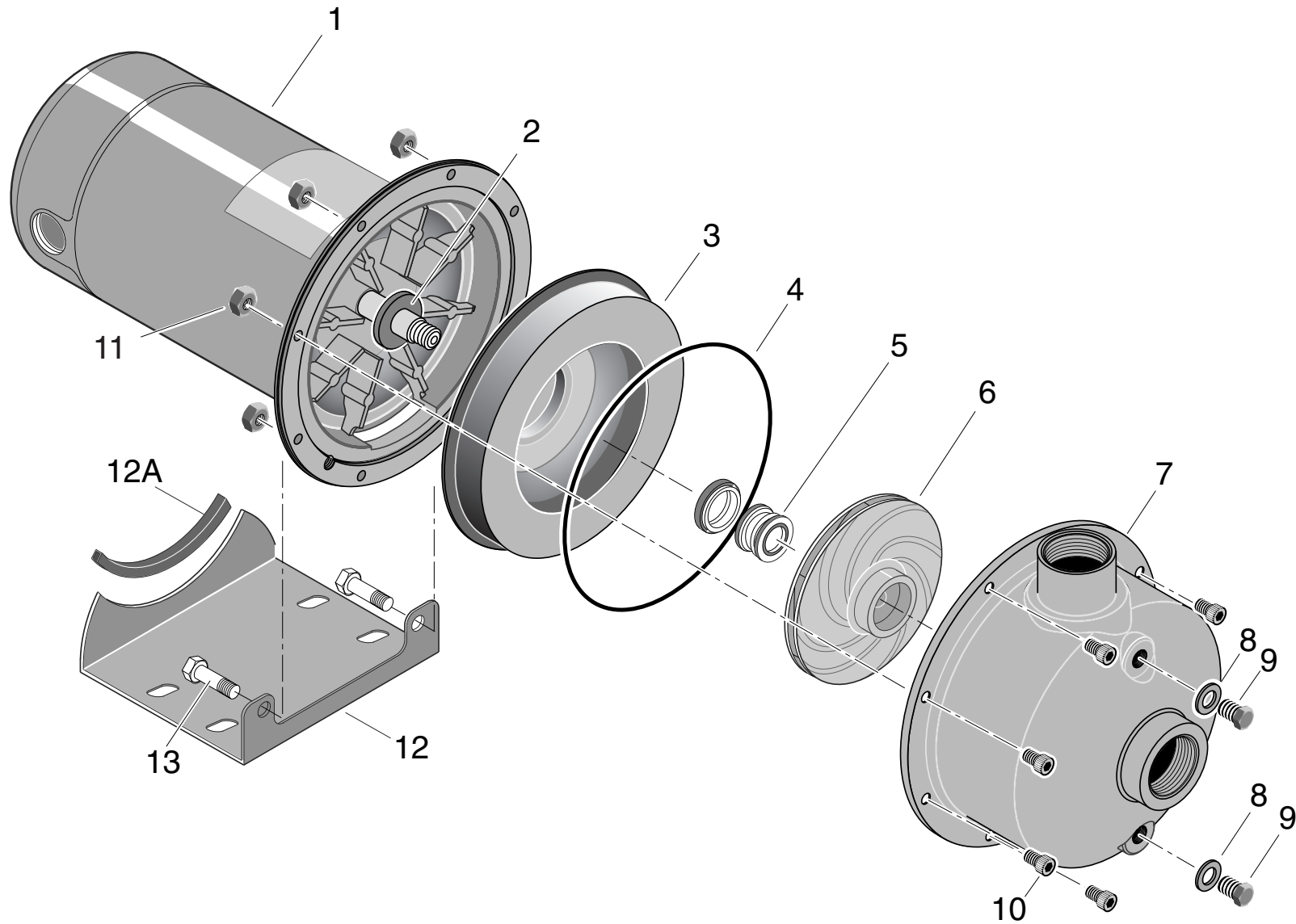
Models B80429 and B80430 use Shaft Seal Number U9-437.

† These models use Motor Number B80445.

†† These models use Motor Number B80451.

• Not illustrated.

# SSCXS Series



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## REPAIR PARTS LIST

| Key No. | Part Description                         | No. Used | MOTOR AND HORSEPOWER                         |  |  |  |  |
|---------|--|----------|--|--|--|--|--|
|         |  |          | SS1XS-¾                                      | SS1XS-1                                      | SS1XS-1½   | SS1XS-2                                      | SS1XS-2½   |
|         |  |          | B82414<br>B82413<br>B82412<br>B82411<br>¾ HP | B82418<br>B82417<br>B82416<br>B82415<br>1 HP | B82422<br>B82421<br>B82420<br>B82419<br>1-1/2 HP | B82426<br>B82425<br>B82424<br>B82423<br>2 HP | B82430<br>B82429<br>B82428<br>B82427<br>2-1/2 HP |
| 1       | Motor, 115/230V/60 Hz., 1 Phase, ODP     | 1        | B80442                                       | B80443                                       | B80444   | B80445                                       | B80445   |
| 1       | Motor, 115/230V/60 Hz., 1 Phase, TEFC    | 1        | B80454                                       | B80455                                       | B80456   | B80447                                       | B80447   |
| 1       | Motor, 208-230/460V/60 Hz., 3 Phase, ODP | 1        | B80448                                       | B80449                                       | B80450   | B80451                                       | B80451   |
| 1       | Motor, 230/460V/60 Hz., 3 Phase, TEFC    | 1        | B80460                                       | B80461                                       | B80462   | B80463                                       | B80463   |
| 2       | Water Slinger                            | 1        | 17351-0009                                   | 17351-0009                                   | 17351-0009                                       | 17351-0009                                   | 17351-0009                                       |
| 3       | Seal Plate                               | 1        | C3-200SS                                     | C3-200SS                                     | C3-200SS   | C3-200SS                                     | C3-200SS   |
| 4       | O-Ring                                   | 1        | U9-434                                       | U9-434                                       | U9-434   | U9-434                                       | U9-434   |
| 5       | Shaft Seal*                              | 1        | U109-196A                                    | U109-196A                                    | U109-196A  | U109-196A                                    | U109-196A  |
| 6       | Impeller                                 | 1        | 731S6230                                     | 731S6220                                     | 731S6210   | 731S6200                                     | 731S6190   |
|         | • Impeller Screw - 1 Phase               | 1        | -  | -  | -  | C30-14SS                                     | C30-14SS   |
|         | • Impeller Screw - 3 Phase               | 1        | C30-14SS                                     | C30-14SS                                     | C30-14SS   | C30-14SS                                     | C30-14SS   |
| 7       | Casing/Diffuser Assembly                 | 1        | 723S2990                                     | 723S2990                                     | 723S2990   | 723S2990                                     | 723S2990   |
| 8       | Washer                                   | 2        | 111P0990                                     | 111P0990                                     | 111P0990   | 111P0990                                     | 111P0990   |
| 9       | Stainless Steel Plug                     | 2        | 121P3780                                     | 121P3780                                     | 121P3780   | 121P3780                                     | 121P3780   |
| 10      | Screw                                    | 8        | 121P0310                                     | 121P0310                                     | 121P0310   | 121P0310                                     | 121P0310   |
| 11      | Nut, M6x1                                | 8        | U36-207SS                                    | U36-207SS                                    | U36-207SS  | U36-207SS                                    | U36-207SS  |
| 12      | Base                                     | 1        | J104-9F                                      | J104-9F                                      | J104-9F  | J104-9F                                      | J104-9F  |
| 12      | Base (1 Phase, TEFC only)                | 1        | J104-9A                                      | J104-9A                                      | J104-9A  | J104-9A                                      | J104-9A  |
| 12A     | Motor Pad                                | 1        | C35-5  | C35-5  | C35-5  | C35-5  | C35-5  |
| 13      | Capscrews, 3/8-16x3/4"                   | 2        | U30-72SS                                     | U30-72SS                                     | U30-72SS   | U30-72SS                                     | U30-72SS   |

\* Models B82413, B82414, B82417, B82418, B82421, B82422, B82425, B82426, B82429, B82430 use Part Number U9-437.

• Not illustrated.

## **BERKELEY LIMITED WARRANTY**

Berkeley/Wicor Canada Company ("Wicor") warrants to the original consumer purchaser ("Purchaser") of its products that they are free from defects in material or workmanship.

If within twelve (12) months from the date of installation or twenty-four (24) months from the date of manufacture any such product shall prove to be defective, it shall be repaired or replaced at Berkeley's/Wicor's option, subject to the terms and conditions set forth below.

### **General Terms and Conditions**

Purchaser must pay all labor and shipping charges necessary to replace product covered by this warranty. This warranty shall not apply to products which, in the sole judgement of Berkeley/Wicor, have been subject to negligence, abuse, accident, misapplication, tampering, alteration; nor due to improper installation, operation, maintenance or storage; nor to other than normal application, use or service, including but not limited to, operational failures caused by corrosion, rust or other foreign materials in the system, or operation at pressures in excess of recommended maximums.

Requests for service under this warranty shall be made by contacting the installing Berkeley/Wicor dealer as soon as possible after the discovery of any alleged defect. Berkeley/Wicor will subsequently take corrective action as promptly as reasonably possible. No requests for service under this warranty will be accepted if received more than 30 days after the term of the warranty.

The warranty on all three phase submersible motors is void if three-leg overload protection of recommended size is not used. This warranty sets forth Berkeley's/Wicor's sole obligation and purchaser's exclusive remedy for defective products.

**BERKELEY/WICOR SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, OR CONTINGENT DAMAGES WHATSOEVER.**

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**In the U.S.: Berkeley, 293 Wright St., Delavan, WI 53115**

**In Canada: Wicor Canada Company, 1800 Courtney Park Drive East, Unit 5-7, Mississauga, Ontario L5T 1W1**