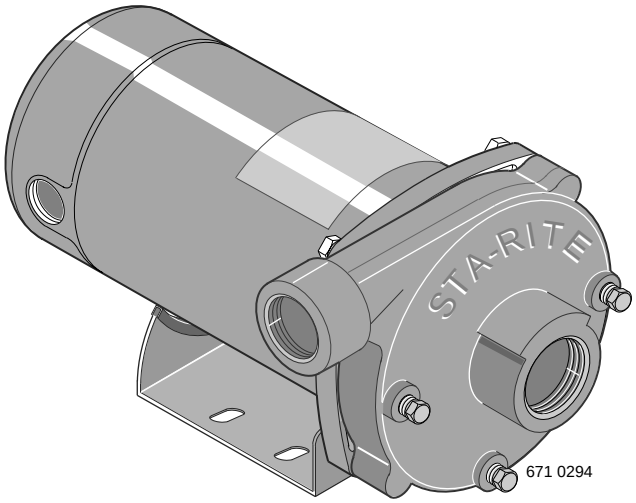
STA-RITE®

OWNER'S MANUAL

INSTALLATION AND OPERATING INSTRUCTIONS
REPAIR PARTS LIST

60 CYCLE "J" and "JB" SERIES CENTRIFUGAL PUMP



MODELS

HP	MEDIUM HEAD MODELS				HIGH HEAD MODELS			
1/3	JBMB-56S	–	JMB-56L	–	JBHB-61S	–	JHB-61HL	–
1/2	JBMC-56S	JBMC3-56S	JMC-56L	JMC3-56	JBHC-61S	JBHC3-61S	JHC-61HL	JHC3-61H
3/4	JBMD-57S	JBMD3-57S	JMD-57L	JMD3-57	JBHD-62S	JBHD3-62S	JHD-62HL	JHD3-62H
1	JBME-58S	JBME3-58S	JME-58L	JME3-58	JBHE-63S	JBHE3-63S	JHE-63HL	JHE3-63H
1-1/2	JBMF-40S	JBMF3-40S	JMF-40L	JMF3-40	JBHF-51S	JBHF3-51S	JHF-51HL	JHF3-51H
2	JBMG-41S	JBMG3-41S	JMG-41L	JMG3-41	JBHG-52S	JBHG3-52S	JHG-52HL	JHG3-52H
2-1/2	JBMMG-59S	JBMMG3-59S	–	–	JBHHG-53S	JBHHG3-53S	JHHG-53HL	JHHG3-53H

STA-RITE INDUSTRIES, INC., DELAVAN, WISCONSIN 53115

S873 (Rev. 3/3/99)

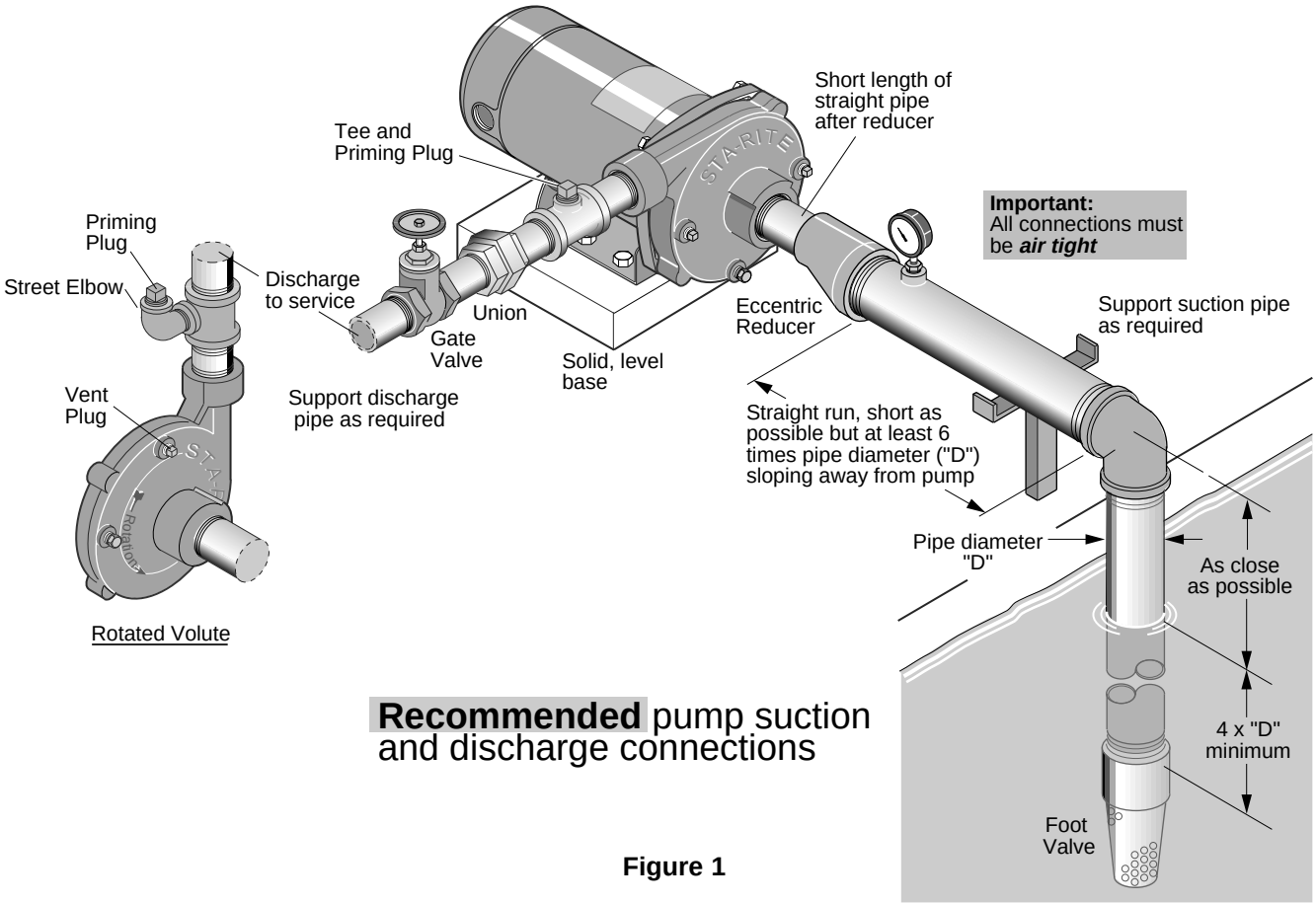


Figure 1

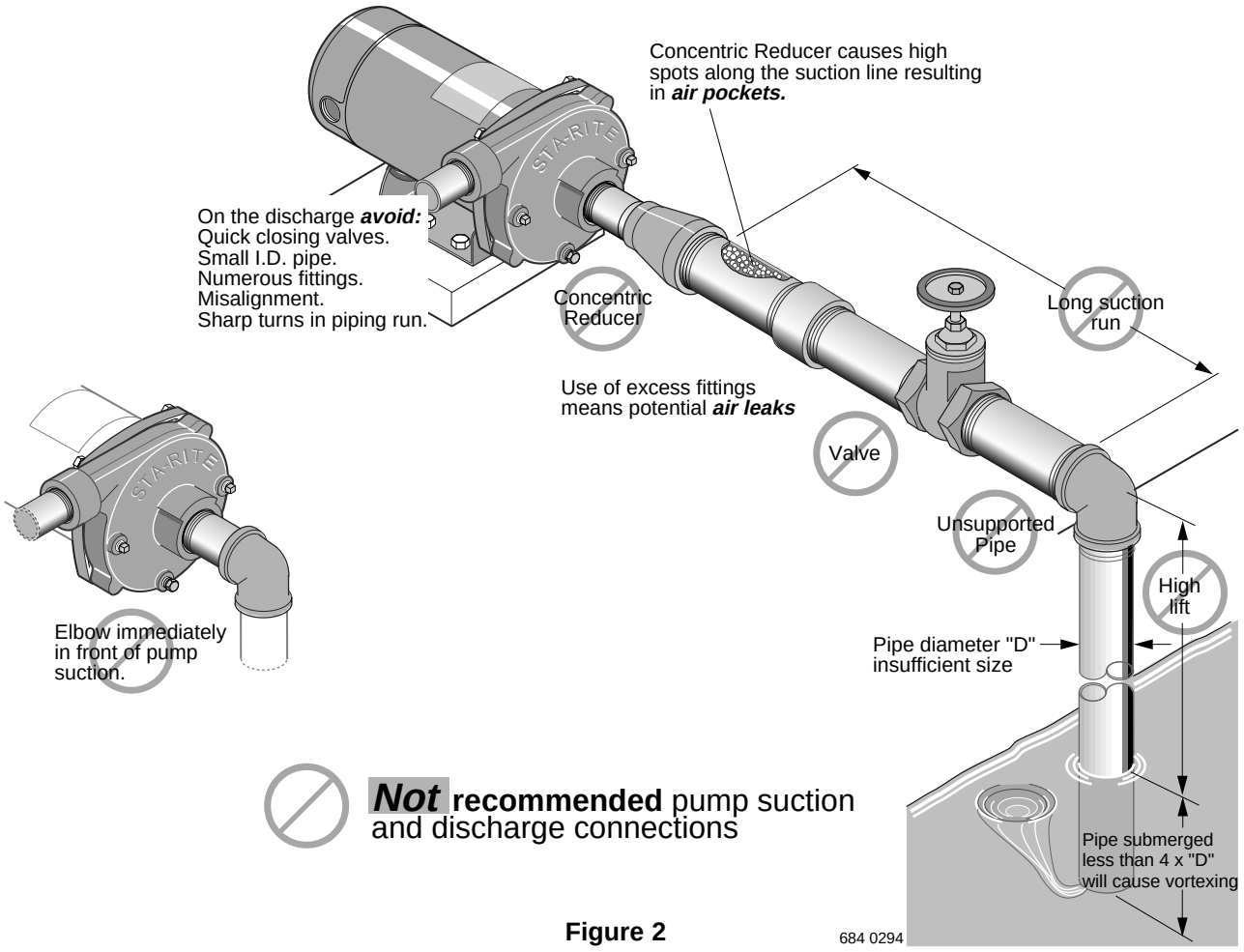


Figure 2

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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
2	1-1/2	3	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 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 and tighten when volute is completely filled with water.

⚠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 CYCLE MOTORS

MOTOR HP	MAX. LOAD AMPERES	BRANCH FUSE* RATING AMPS	DIAMETER IN FEET FROM MOTOR TO METER					
			0' TO 50'	51' TO 100'	101' TO 200'	201' TO 300'	301' TO 400'	401' TO 500'
			WIRE SIZE					
SINGLE PHASE - 115/230 VOLT								
1/3	9.4/4.7	15/15	14/14	14/14	10/14	10/14	6/14	6/12
1/2	9.4/4.7	15/15	14/14	14/14	10/14	10/14	6/14	6/12
3/4	12.2/6.1	20/15	12/14	12/14	10/14	8/14	6/12	6/12
1	14.8/7.4	20/15	12/14	12/14	8/14	6/14	6/12	4/10
1-1/2	19.2/9.6	25/15	10/14	10/14	8/14	6/12	4/10	4/10
SINGLE PHASE - 230 VOLT								
2	12.0	15	14	14	14	12	10	10
2-1/2	12.0	15	14	14	14	12	10	10
THREE PHASE - 230/460 VOLT								
1/2	2.3/1.15	15/15	14/14	14/14	14/14	14/14	14/14	14/14
3/4	3.1/1.55	15/15	14/14	14/14	14/14	14/14	14/14	14/14
1	3.6/1.8	15/15	14/14	14/14	14/14	14/14	14/14	14/14
1-1/2	4.7/2.35	15/15	14/14	14/14	14/14	14/14	14/14	14/14
2	6.8/3.4	15/15	14/14	14/14	14/14	14/14	12/14	12/14
2-1/2	8.5/4.25	15/15	14/14	14/14	14/14	14/14	12/14	10/14

*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, or if motor does not match these pictures, follow the connection diagram on the motor nameplate.

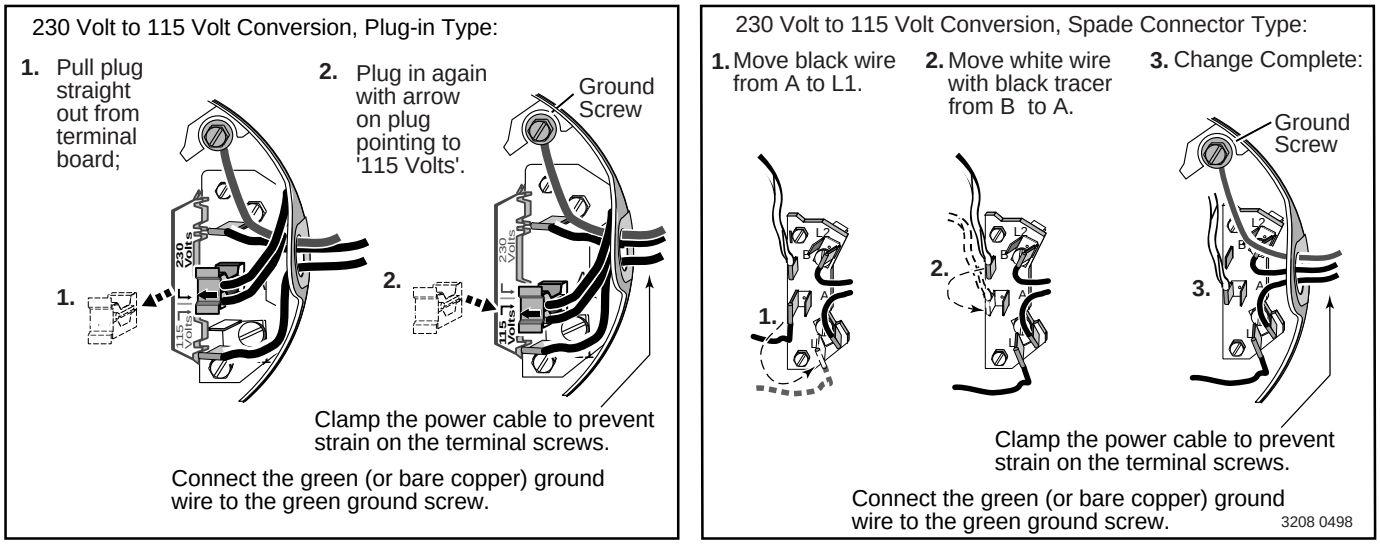


FIGURE 3 – 115/230V Dual Voltage Single Phase Wiring Diagram

⚠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 ±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 ⏚.
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 ##. 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

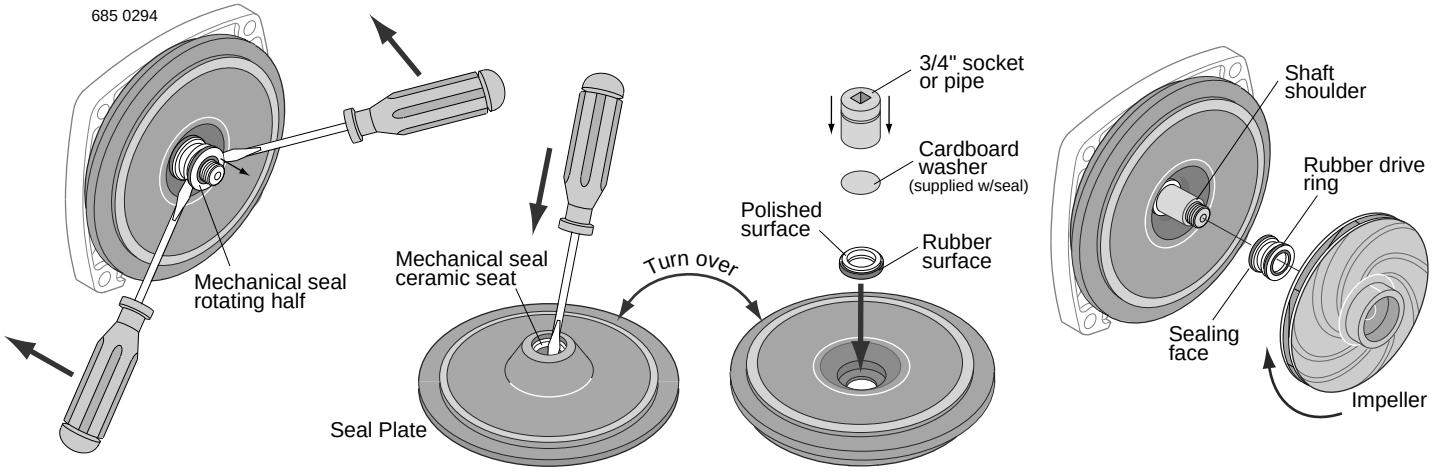
1. After unscrewing impeller, carefully remove rotating part of seal by prying up on sealing washer, using two screwdrivers (see Figure 4A). Use care not to scratch motor shaft.
2. Remove seal plate from motor and place on flat surface, face down. Use a screwdriver to push ceramic seat out from seal cavity (see Figure 4B).

INSTALLATION OF FLOATING SEAT (Figure 4C)

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.

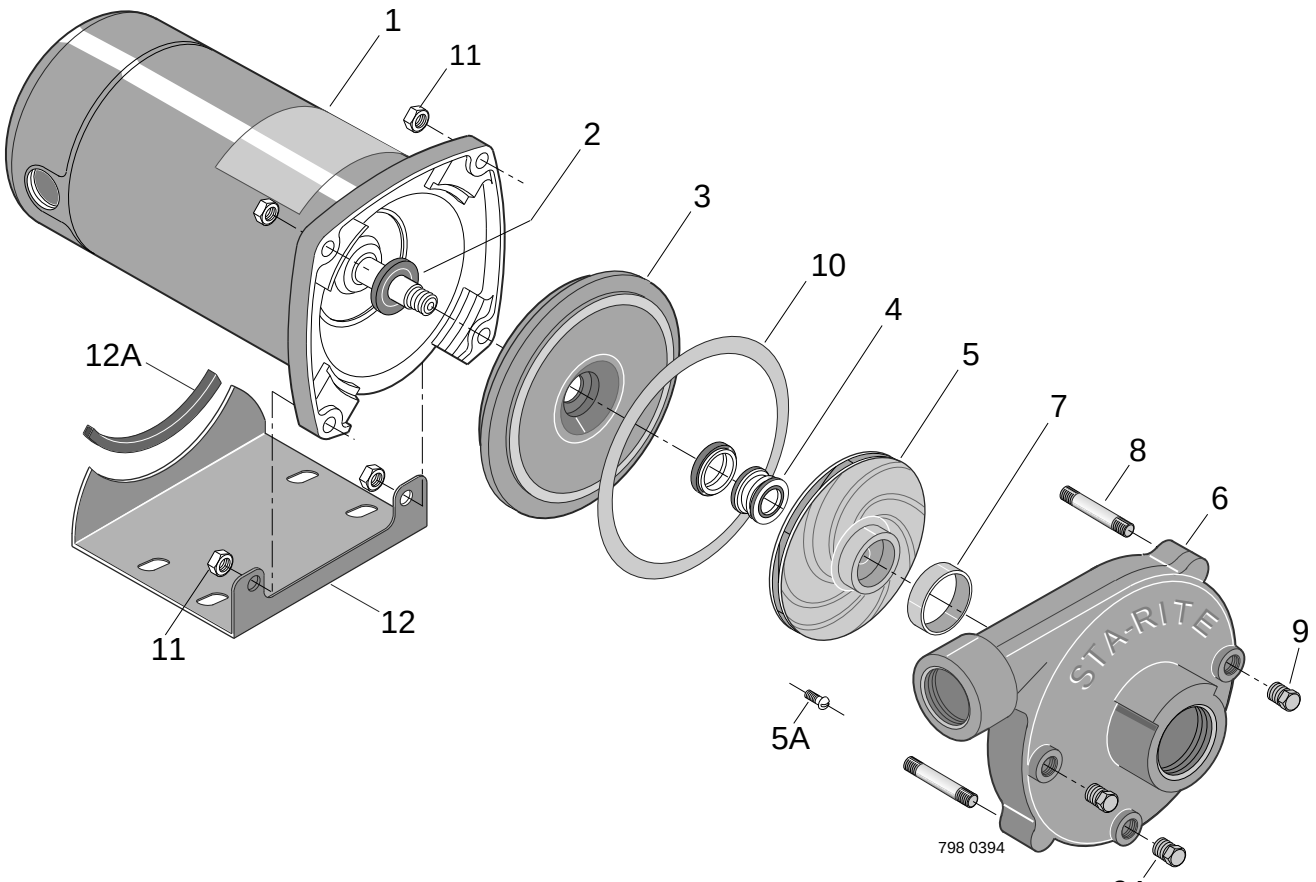
INSTALLATION OF ROTATING PART OF SEAL UNIT (Figure 4D)

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 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 seat facing. Reinstall impeller screw (if used).

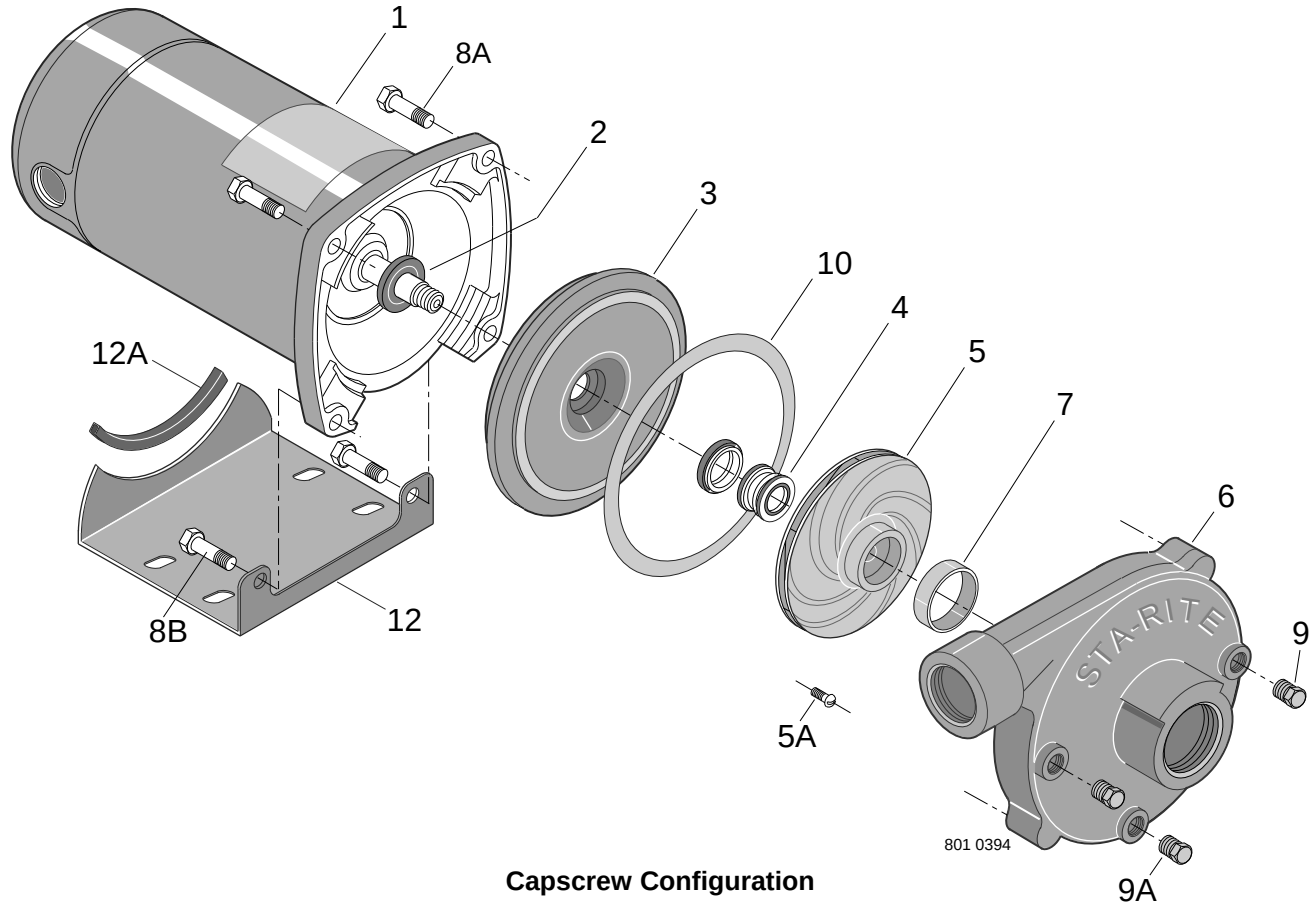


A-Seal removal-rotating half **B**-Seal removal-ceramic seat **C**-Ceramic seat installation **D**-Rotating half installation

FIGURE 4



Stud Configuration



Capscrew Configuration

REPAIR PARTS LIST – "J" SERIES - HIGH HEAD

Key No.	Part Description	No. Used	MOTOR AND HORSEPOWER						
			JHB-61HL – 1/3 HP	JHC-61HL JHC3-61H 1/2 HP	JHD-62HL JHD3-62H 3/4 HP	JHE-63HL JHE3-63H 1 HP	JHF-51HL JHF3-51H 1-1/2 HP	JHG-52HL JHG3-52H 2 HP	JHHG-53HL JHHG3-53H 2-1/2 HP
1*	Motor, 115V, Single Phase	1	A100BHL	–	–	–	–	–	–
1*	Motor, 115/230V, Single Phase	1	–	A100CLL	A100DLL	A100ELL	A100FLL	–	–
1*	Motor, 230V, Single Phase	1	–	–	AP100DL	AP100EL	AP100FL	A100GSL	AE100G5L
1*	Motor, 230/460V, Three Phase	1	–	–	–	–	–	AP100GL	AP100G5L
†2	Water Slinger	1	C69-2	C69-2	C69-2	C69-2	C69-2	C69-2	C69-2
3	Seal Plate	1	C3-178	C3-178	C3-178	C3-178	C3-178	C3-181	C3-181
†4	Shaft Seal	1	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A
5	Impeller - Single Phase	1	C105-92PN	C105-92PN	C105-92PM	C105-92PL	C105-92PB	C105-214PCA	C105-214PA
5	Impeller - Three Phase	1	–	C105-92PNA	C105-92PMA	C105-92PLA	C105-92PBA	C105-214PCA	C105-214PA
5A	Impeller Screw - Single Phase	1	–	–	–	–	–	C30-47SS	C30-47SS
5A	Impeller Screw - Three Phase	1	C30-12	C30-12	C30-14SS	C30-14SS	C30-14SS	C30-47SS	C30-47SS
6	Volute Assembly - Complete	1	C101-281B	C101-281B	C101-281B	C101-281B	C101-281B	C101-264	C101-264B
7	Wear Ring	(1)	C23-27	C23-27	C23-27	C23-27	C23-27	C23-19	C23-19
8A	Capscrew - 3/8 - 16 x 1" Lg.	(2)	–	–	–	–	–	U30-74ZP	U30-74ZP
8A	Capscrew - 3/8 - 16 x 1-1/4" Lg.	(2)	U30-75ZP	U30-75ZP	U30-75ZP	U30-75ZP	U30-75ZP	–	–
8B	Capscrew - 3/8 - 16 x 1-1/4" Lg.	(2)	–	–	–	–	–	U30-75ZP	U30-75ZP
8B	Capscrew - 3/8 - 16 x 1-1/2" Lg.	(2)	U30-76ZP	U30-76ZP	U30-76ZP	U30-76ZP	U30-76ZP	–	–
9	Pipe Plug - 1/4" NPT	(3)	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV
†10	Gasket - Volute	1	C20-121	C20-121	C20-121	C20-121	C20-121	C20-122	C20-122
11	Nuts - 3/8 - 16 Hex	4	U36-38ZP	U36-38ZP	U36-38ZP	U36-38ZP	U36-38ZP	–	–
12	Base	1	J4-9	J4-9	J4-9	J4-9	J4-9	J4-9	J4-9
12A	Motor Pad	1	C35-5	C35-5	C35-5	C35-5	C35-5	C35-5	C35-5
	SERVICE KIT								
	Seal and Gasket Kit	1	PP1700	PP1700	PP1700	PP1700	PP1700	PP1700	PP1700
	NOTE: † 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 - MEDIUM HEAD

Key No.	Part Description	No. Used	MOTOR AND HORSEPOWER					
			JMB-56L – 1/3 HP	JMC-56L JMC3-56 1/2 HP	JMD-57L JMD3-57 3/4 HP	JME-58L JME3-58 1 HP	JMF-40L JMF3-40 1-1/2 HP	JMG-41L JMG3-41 2 HP
1*	Motor, 115V, Single Phase	1	AS100BHL	–	–	–	–	–
1*	Motor, 115/230V, Single Phase	1	–	A100CLL	A100DLL	A100ELL	A100FLL	–
1*	Motor, 230V, Single Phase	1	–	–	–	–	–	A100GSLL
1*	Motor, 230/460V, Three Phase	1	–	–	AP100DL	AP100EL	AP100FL	AP100GL
†2	Water Slinger	1	C69-2	C69-2	C69-2	C69-2	C69-2	C69-2
3	Seal Plate	1	N3-8	N3-8	N3-8	N3-8	C3-52	C3-52
†4	Shaft Seal	1	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A
5	Impeller - Single Phase	1	J105-42PHA	J105-42PHA	J105-42PJA	J105-42P	C105-114PC	C105-114PA
5	Impeller - Three Phase	1	–	J105-42PHA	J105-42PJA	J105-42PPA	C105-114PCA	C105-114PA
5A	Impeller Screw - Single Phase	1	–	–	–	–	–	C30-14SS
5A	Impeller Screw - Three Phase	1	C30-21	C30-6SS	C30-6SS	C30-6SS	C30-14SS	C30-14SS
6	Volute Assembly - Complete	1	–	–	–	–	C201-123	C201-123
6	Volute Assembly w/Wear Ring	1	C101-122E	C101-122E	C101-122E	C101-122	–	–
7	Wear Ring (Only)	(1)	N23-7	N23-7	N23-7	N23-7	C23-19	C23-19
8	Studs - 3/8 - 16 x 2"	(4)	–	–	–	–	U30-35SS	U30-35SS
8A	Capscrews - 3/8 - 16 x 1-1/4"	(2)	U30-75ZP	U30-75ZP	U30-75ZP	U30-75ZP	–	–
8B	Capscrews - 3/8 - 16 x 1-1/2"	(2)	U30-76ZP	U30-76ZP	U30-76ZP	U30-76ZP	–	–
9	Pipe Plug - 1/4" NPT	(4)	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV
†10	Gasket - Volute	1	N20-26	N20-26	N20-26	N20-26	C20-21	C20-21
11	Nuts - 3/8 - 16 Hex	4	–	–	–	–	U36-38ZP	U36-38ZP
12	Base	1	J4-9	J4-9	J4-9	J4-9	J4-9	J4-9
12A	Motor Pad	1	C35-5	C35-5	C35-5	C35-5	C35-5	C35-5
SERVICE KIT								
	Seal and Gasket Kit	1	PP1700	PP1700	PP1700	PP1700	PP1700	PP1700
	NOTE: † 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 – “JB” SERIES - HIGH HEAD

Key No.	Part Description	No. Used	MOTOR AND HORSEPOWER						
			JBHB-61S – 1/3 HP	JBHC-61S JBHC3-61S 1/2 HP	JBHD-62S JBHD3-62S 3/4 HP	JBHE-63S JBHE3-63S 1 HP	JBHF-51S JBHF3-51S 1-1/2 HP	JBHG-52S JBHG3-52S 2 HP	JBHHG-53S JBHHG3-53S 2-1/2 HP
1*	Motor - 115V, Single Phase	1	A100BHL	–	–	–	–	–	–
1*	Motor - 115/230V, Single Phase	1	–	A100CLL	A100DLL	A100ELL	A100FLL	–	–
1*	Motor - 230V, Single Phase	1	–	AP100CL	AP100DL	AP100EL	AP100FL	A100GSL	AE100G5L
1*	Motor - 230/460V, Three Phase	1	–	–	–	–	–	AP100GL	AP100G5L
2	Water Slinger	1	C69-2	C69-2	C69-2	C69-2	C69-2	C69-2	C69-2
3	Seal Plate	1	C3-178	C3-178	C3-178	C3-178	C3-178	C3-178	C3-178
3	Seal Plate (-53H)	1	–	–	–	–	–	C3-181	C3-181
4	Shaft Seal	1	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A
5	Impeller - Single Phase	1	–	–	C105-94B	–	–	C5-257BB	C5-257B
5	Impeller - Three Phase	1	C5-256BA	C5-256BA	C105-94BA	C5-254BA	C5-254BC	C5-257BB	C5-257B
5A	Impeller Screw - Single Phase	1	–	–	–	–	–	–	C30-14
5A	Impeller Screw - Three Phase	1	C30-12	C30-14SS	C30-14SS	C30-14SS	C30-14SS	C30-14	C30-14
5A	Impeller Screw - Three Phase Only	1	–	–	–	–	–	C30-14SS	C30-14SS
6	Volute Assembly - Complete	1	C101-281B	C101-281B	C101-281B	C101-281B	C101-281B	C101-264	C101-164B
7	Wear Ring (Only)	(1)	C23-27	C23-27	C23-27	C23-27	C23-27	C23-19	C23-19
8A	Capscrew - 3/8 - 16 x 1”	(2)	–	–	–	–	–	U30-74ZP	U30-74ZP
8A	Capscrew - 3/8 - 16 x 1-1/4”	(2)	U30-75ZP	U30-75ZP	U30-75ZP	U30-75ZP	U30-75ZP	–	–
8B	Capscrew - 3/8 - 16 x 1-1/4”	(2)	–	–	–	–	–	U30-75ZP	U30-75ZP
8B	Capscrew - 3/8 - 16 x 1-1/2”	(2)	U30-76ZP	U30-76ZP	U30-76ZP	U30-76ZP	U30-76ZP	–	–
9	Pipe Plug - 1/4” NPT	(3)	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV
10	Gasket - Volute	1	C20-121	C20-121	C20-121	C20-121	C20-121	C20-121	C20-121
10	Gasket - Volute (-53H)	1	–	–	–	–	–	C20-122	C20-122
11	Nuts - 3/8 - 16 Hex	4	U36-38ZP	U36-38ZP	U36-38ZP	U36-38ZP	U36-38ZP	–	–
12	Base	1	J4-9	J4-9	J4-9	J4-9	J4-9	J4-9	J4-9
12A	Motor Pad	1	C35-5	C35-5	C35-5	C35-5	C35-5	C35-5	C35-5

* 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 – “JB” SERIES - MEDIUM HEAD

Key No.	Part Description	No. Used	MOTOR AND HORSEPOWER						
			JBMB-56S – 1/3 HP	JBMC-56S JBMC3-56S 1/2 HP	JBMD-57S JBMD3-57S 3/4 HP	JBME-58S JBME3-58S 1 HP	JBMF-40S JBMF3-40S 1-1/2 HP	JBMG-41S JBMG3-41S 2 HP	JBMMG-59S JBMMG3-59S 2-1/2 HP
1*	Motor, 115V, Single Phase	1	AS100BHL	–	–	–	–	–	–
1*	Motor, 115/230V, Single Phase	1	–	A100CLL	A100DLL	A100ELL	A100FLL	–	–
1*	Motor, 230V, Single Phase	1	–	–	–	–	–	A100GSLL	AE100G5LL
1*	Motor, 230/460V, Three Phase	1	–	AP100CL	AP100DL	AP100EL	AP100FL	AP100GL	AP100G5L
2	Water Slinger	1	C69-2	C69-2	C69-2	C69-2	C69-2	C69-2	C69-2
3	Seal Plate	1	N3-8	N3-8	N3-8	N3-8	C3-52	C3-52	C3-52
4	Shaft Seal	1	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A	U109-6A
5	Impeller - Single Phase	1	J105-42MA	J105-42MA	J105-42LA	J105-42NA	C105-79B	C105-73BA	C105-80DA
5	Impeller - Three Phase	1	–	J105-42MA	J105-42LA	J105-42NA	C105-79BA	C105-73BA	C105-80DA
5A	Impeller Screw - Single Phase	1	–	–	–	–	–	C30-14SS	C30-14SS
5A	Impeller Screw - Three Phase	1	–	C30-6SS	C30-6SS	C30-6SS	C30-14SS	C30-14SS	C30-14SS
6	Volute Assembly - Complete	1	–	–	–	–	C201-123	C201-123	C201-123B
6	Volute Assembly w/Wear Ring	1	C101-122E	C101-122E	C101-122E	C101-122	–	–	–
7	Wear Ring (Only)	(1)	N23-27	N23-27	N23-27	N23-27	C23-19	C23-19	C23-19
8	Studs - 3/8 - 16 x 2” Lg.	(4)	–	–	–	–	U30-35SS	U30-35SS	U30-35SS
8A	Capscrews - 3/8 - 16 x 1-1/4” Lg.	2	U30-75ZP	U30-75ZP	U30-75ZP	U30-75ZP	–	–	–
8B	Capscrews - 3/8 - 16 x 1-1/2” Lg.	2	U30-76ZP	U30-76ZP	U30-76ZP	U30-76ZP	–	–	–
9	Pipe Plug - 1/4” NPT	(3)	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV	U78-941ZPV
9A	Drain Plug - 1/4” NPT	(1)	U78-941ZPV	–	–	–	–	–	–
10	Gasket - Volute	1	N20-26	N20-26	N20-26	N20-26	C20-21	C20-21	C20-21
11	Nuts - 3/8 - 16 Hex	4	–	–	–	–	U36-38ZP	U36-38ZP	U36-38ZP
12	Base	1	J4-9	J4-9	J4-9	J4-9	J4-9	J4-9	J4-9
12A	Motor Pad	1	C35-5	C35-5	C35-5	C35-5	C35-5	C35-5	C35-5

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

TROUBLE - CAUSES AND REMEDY

TROUBLE AND CAUSE	REMEDY
FAILURE TO PUMP	
1. Pump not properly primed.	1. Make sure pump casing and suction line are full of water. See priming instructions.
REDUCED CAPACITY AND/OR HEAD	
1. Air pockets or leaks in suction line.	1. Check suction piping.
2. Clogged impeller.	2. Remove and clean.
PUMP LOSES PRIME	
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.
MECHANICAL TROUBLES AND NOISE	
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.

LIMITED WARRANTY

Sta-Rite Industries, Inc., warrants to the original consumer of the products listed below, that they will be free from defects in material and workmanship for the Warranty Period from the date of original installation or manufacture as noted.

Product	Warranty Period
Water Systems Products – jet pumps, small centrifugal pumps, submersible pumps and related accessories	*whichever occurs first:* 1 year from date of original installation, or 2 years from date of manufacture
Hydro-Flow Filters	1 year from date of purchase
Signature 2000 Fibrewound Tanks	5 years from date of original installation
Pro-Source Steel Pressure Tanks	5 years from date of original installation
Pro-Source Epoxy-Line Tanks	3 years from date of original installation
Sump/Sewage/Effluent Products	1 year from date of original installation, or 2 years from date of manufacture

Our warranty will not apply to any product that has been subject to negligence, misapplication, improper installation or maintenance. In the event a three phase submersible motor is operated with single phase power through a phase converter, or if three-leg ambient compensated, extra-quick trip overload relays of recommended size are not used, our warranty is void.

Buyer's only remedy and Sta-Rite Industries, Inc.'s only duty is to repair or replace defective products (at Sta-Rite Industries, Inc.'s choice). Buyer agrees to pay all labor and shipping charges associated with this warranty and to request warranty service through the installing dealer as soon as a problem is discovered. If warranty service is requested more than 30 days after the Warranty Period has ended, it will not be honored.

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

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

Certain states do not permit the exclusion or limitation of incidental or consequential damages or the placing of limitations on the duration of an implied warranty, therefore, the limitations or exclusions herein may not apply. This warranty sets forth specific legal rights and obligations, however, additional rights may exist, which may vary from state to state.

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