INSTALLATION, OPERATION & MAINTENANCE MANUAL
FAHRENHEIT®
J-F & JX-F SERIES
SIDE DISCHARGE
Electric Submersible Pumps

Three Phase
208V, 230V, 460V & 575V

CAST IRON
THREE PHASE

J08-F	J15H-F
J15-F	J22H-F
J22-F	J37H-F
J37-F	J55CH-F
J55C-F	J75CH-F
J75C-F	

316 STAINLESS STEEL
THREE PHASE

JX08SS-F	JX15HSS-F
JX15SS-F	JX22HSS-F
JX22SS-F	JX37HSS-F
JX37SS-F	JX55CHSS-F
JX55CSS-F	JX75CHSS-F
JX75CSS-F	

Read this manual carefully before installing, operating or servicing these pump models. Observe all safety information. Failure to comply with instructions may result in personal injury and/or property damage. Please retain these instructions.

Version 9/18/18

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INTRODUCTION

This Installation, Operation and Maintenance manual provides important information on safety and the proper inspection, disassembly, reassembly and testing of the BJM Pumps® J-F & JX-F Series submersible pump. This manual also contains information to optimize performance and longevity of your **BJM Pumps** submersible pump. The F Series Fahrenheit® pumps are engineered to pump water based liquids up to 200° Fahrenheit (93°C).

The submersible J-F Series pumps are designed to pump water and wastewater. The JX-F Series pumps are designed to pump corrosive liquids in concentrations chemically compatible with 316SS and FKM. The J-F & JX-F Series pumps are not explosion proof. They are not designed to pump volatile or flammable liquids.

Note: Consult chemical resistance chart for compatibility between pump materials and liquid before operating pump. Consult BJM engineering if there is a question on chemical compatibility.

If you have any questions regarding the inspection, disassembly, assembly or testing please contact your **BJM Pumps** distributor, or BJM Pumps, LLC.

BJM Pumps, LLC
123 Spencer Plain Rd.
Old Saybrook, CT 06475, USA

Fax: 860-399-7784
Phone: 877-256-7867
Phone: 860-399-5937

Information, including pump data sheets and performance curves, is also available on our web site: www.bjmpumps.com

For assistance with your electric power source, please contact a certified electrician.

Please pay attention to the following alert notifications. They are used to notify operators and maintenance personnel to pay special attention to procedures, to avoid causing damage to the equipment, and to avoid situations that could be dangerous to personnel.

NOTE: Instructions to aid in installation, operation, and maintenance or which clarify a procedure.

⚠ DANGER Immediate hazards that WILL result in severe personal injury or death. These instructions describe the procedure required and the injury which will result from failure to follow the procedure.

⚠ WARNING Hazards or unsafe practices that COULD result in severe personal injury or death. These instructions describe the procedure required, and the injury which could result from failure to follow the procedure.

⚠ CAUTION Hazards or unsafe practices which COULD result in personal injury or product or property damage. These instructions describe the procedure required and the possible damage which could result from failure to follow the procedure.

SAFETY

Pump installations are seldom identical. Each installation and application can vary due to many different factors. It is the owner/service mechanics responsibility to repair, service, and test to ensure that the pump integrity is not compromised according to this manual.

⚠ WARNING Risk of electric shock – this pump has not been investigated for use in swimming pool areas.

⚠ DANGER **Do not pump flammable or volatile liquids. Death or serious injury will result.**

⚠ WARNING Before attempting to open or service the pump:

1) Familiarize yourself with this manual.
2) Unplug or disconnect the pump power cable to ensure that the pump will remain inoperative.
3) Allow the pump to cool if overheated.

⚠ WARNING Do not operate the pump with a worn or damaged electric power cable. Death or serious injury could occur.

⚠ WARNING Never attempt to alter the length or repair any power cable with a splice. The pump motor and pump motor and cable must be completely waterproof. Damage to the pump or personal injury may result from alterations.

⚠ WARNING After the pump has been installed, make sure that the pump and all piping are secure before operation.

⚠ WARNING Do not lift the pump by the power cable piping or discharge hose. Attach proper lifting equipment to the lifting handle (or lifting rings) fitted to the pump. Do not suspend the pump by the power cable.

⚠ WARNING Obtain the services of a qualified electrician to troubleshoot, test and/or service the electrical components of this pump.

⚠ CAUTION Pumps and related equipment must be installed and operated according to all national, local and industry standards.

INSPECTION

Review all safety information before servicing pump.

The following are recommended installation practices/procedures for the pump. If there are questions in regards to your specific application, contact your local **BJM Pumps** distributor or BJM Pumps, LLC.

PRE-INSTALLATION INSPECTION

1) Check the pump for damage that may have occurred during shipment.
2) Inspect the pump for any cracks, dents, damaged threads, etc.
3) Check power cord and sensor cable for any cuts or damage.
4) Check for, and tighten any hardware that appears loose.
5) Carefully read all tags, decals and markings on the pump.

If anything appears to be abnormal, contact your **BJM Pumps** distributor or BJM Pumps, LLC. If damaged, the pump may need to be repaired before use. Do not install or use the pump until appropriate action has been taken.

LUBRICATION:

No additional lubrication is necessary. The shaft seal and bearings are fully lubricated from the factory. Seal oil should be checked once per year. See table on page 7.

BJM Pumps

OIL FILL QUANTITY/TYPE

	Qty. oil in seal chamber		
Models	**U.S. fl. oz.**	**C.C.**	**Type of oil**
J08-F	9	265	ISO 32 NSF Food Grade Mineral Oil
J15-F	9	265	ISO 32 NSF Food Grade Mineral Oil
J22-F	10.8	320	ISO 32 NSF Food Grade Mineral Oil
J37-F	10.8	320	ISO 32 NSF Food Grade Mineral Oil
J55C-F	45.6	1350	ISO 32 NSF Food Grade Mineral Oil
J75C-F	45.6	1350	ISO 32 NSF Food Grade Mineral Oil

	Qty. oil in seal chamber		
Models	**U.S. fl. oz.**	**C.C.**	**U.S. fl. oz.**
J08H-F	9	265	ISO 32 NSF Food Grade Mineral Oil
J15H-F	9	265	ISO 32 NSF Food Grade Mineral Oil
J22H-F	10.8	320	ISO 32 NSF Food Grade Mineral Oil
J37H-F	10.8	320	ISO 32 NSF Food Grade Mineral Oil
J55CH-F	45.6	1350	ISO 32 NSF Food Grade Mineral Oil
J75CH-F	45.6	1350	ISO 32 NSF Food Grade Mineral Oil

	Qty. oil in seal chamber		
Models	**U.S. fl. oz.**	**C.C.**	**Type of oil**
JX08SS-F	10.1	300	ISO 32 NSF Food Grade Mineral Oil
JX15SS-F	10.1	300	ISO 32 NSF Food Grade Mineral Oil
JX22SS-F	13.5	400	ISO 32 NSF Food Grade Mineral Oil
JX37SS-F	13.5	400	ISO 32 NSF Food Grade Mineral Oil
JX55CSS-F	45.6	1350	ISO 32 NSF Food Grade Mineral Oil
JX75CSS-F	45.6	1350	ISO 32 NSF Food Grade Mineral Oil

	Qty. oil in seal chamber		
Models	**U.S. fl. oz.**	**C.C.**	**Type of oil**
J08HSS-F	10.1	300	ISO 32 NSF Food Grade Mineral Oil
JX15HSS-F	10.1	300	ISO 32 NSF Food Grade Mineral Oil
JX22HSS-F	13.5	400	ISO 32 NSF Food Grade Mineral Oil
JX37HSS-F	13.5	400	ISO 32 NSF Food Grade Mineral Oil
JX55CHSS-F	45.6	1350	ISO 32 NSF Food Grade Mineral Oil
JX75CHSS-F	45.6	1350	ISO 32 NSF Food Grade Mineral Oil

Note: The stator on this model is oil filled. This needs to be changed annually when the seal oil is changed. With the power cable entry removed, fill the motor chamber with oil to a level that insures the oil is covering the motor windings by ½", and that will be above the upper bearing. Do not overfill, an air gap of 10-15% must be maintained for heat expansion.

PUMP INSTALLATION

J-F & JX-F Series pumps have been evaluated for use with water or water based solutions. Please contact the manufacturer for additional information.

Lifting:

Attach a rope or lifting chain (not included) to the handle (or lifting rings) on the top of the pump.

⚠ CAUTION Do not lift the pump by the power cable or discharge hose/piping. Proper lifting equipment (rope/chain) must be used.

POSITIONING THE PUMP

BJM Pumps, J-F & JX-F Series pumps are designed to operate fully submerged. Data sheets can be obtained online at www.bjmpumps.com or by calling BJM Pumps, LLC at 860-399-5937.

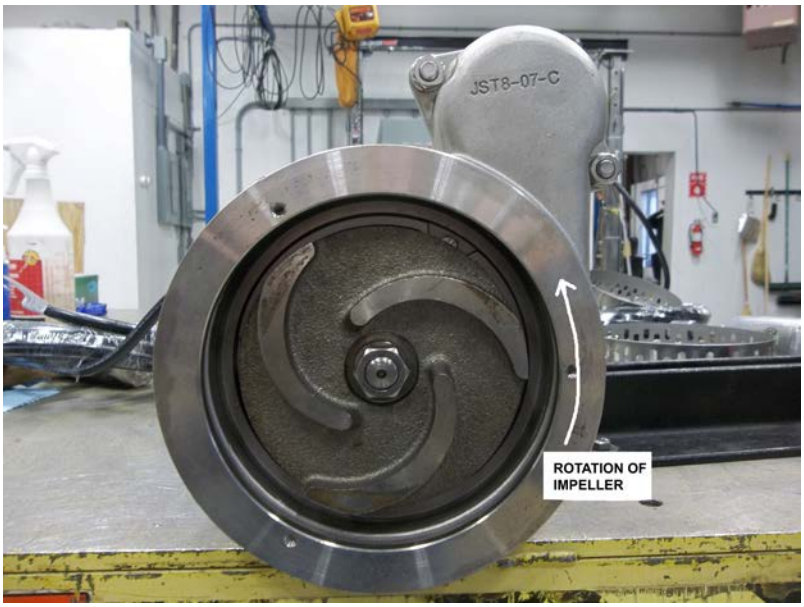
⚠ CAUTION

- Do not run pump dry.
- Pump liquid should not exceed a maximum temperature of 200°F (93°C).
- Never place the pump on loose or soft ground. The pump may sink, preventing water from reaching the impeller. Place on a solid surface or suspend the pump with a lifting rope/chain. The J-F & JX-F Series pumps are provided with a suction strainer to prevent large solids from clogging the impeller. Any spherical solids which pass through the strainer should pass through the pump.
- For maximum pumping capacity, use the proper size non-collapsible hose or rigid piping. A check valve may be installed after the discharge to prevent back flow when the pump is shut off.

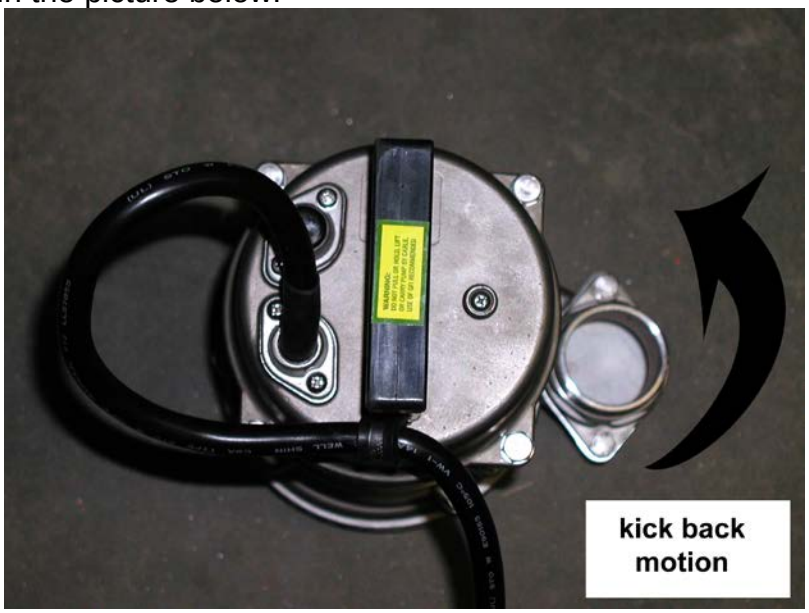
PUMP ROTATION

Two ways to check the correct pump rotation:

1. By looking at the impeller; the rotation of the impeller should be counter clockwise as shown in the picture below.



2. By looking from the top of the pump. Since the impeller cannot be seen, the best way to check the rotation is to check the kick back motion of the pump when the pump just starts. The kick back motion of the pump should be counter clockwise as shown in the picture below.



PUMP OPERATION

⚠WARNING This pump is designed to handle dirty water that contains some solids. It is not designed to pump volatile or flammable liquids. Do not attempt to pump any liquids which may damage the pump or endanger personnel as a result of pump failure.

⚠ DANGER **Do not operate this pump where explosive vapors or flammable material exist. Death or Serious injury will result.**

TYPICAL MANUAL WATER/WASTEWATER EFFLUENT INSTALLATION

NOTE: Maximum recommended starts should not exceed 10 times per hour.

All J-F & JX-F models are provided with a 33" (10m) power cord. NEVER splice the power cable due to safety and warranty considerations. Always keep the lead end dry.

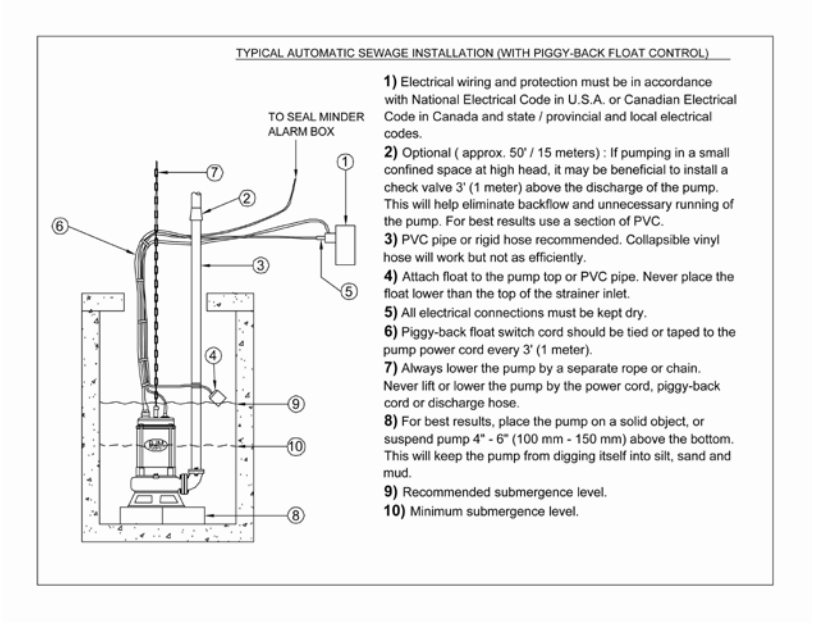
Note: 208V, 230V, 460V & 575V three phase units do not have a plug and have to be provided separately.

⚠WARNING Do not alter the length or repair any power cable with a splice. The pump motor and cable must be completely waterproof. Damage to the pump or personal injury may result from alterations.

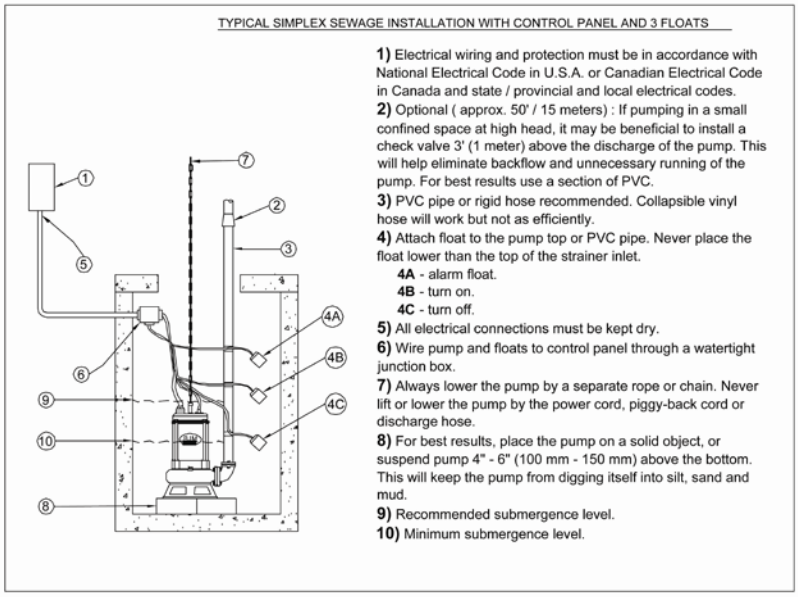
For manual operation: 208, 230, 460 & 575 volt: Connect directly to the power source or control box. Check the direction of the rotation. Tilt the pump and start it. It should twist in the opposite direction of the arrow (on pump).

TYPICAL AUTOMATIC WATER/WASTEWATER EFFLUENT INSTALLATION

NOTE: Maximum recommended starts should not exceed 10 times per hour.

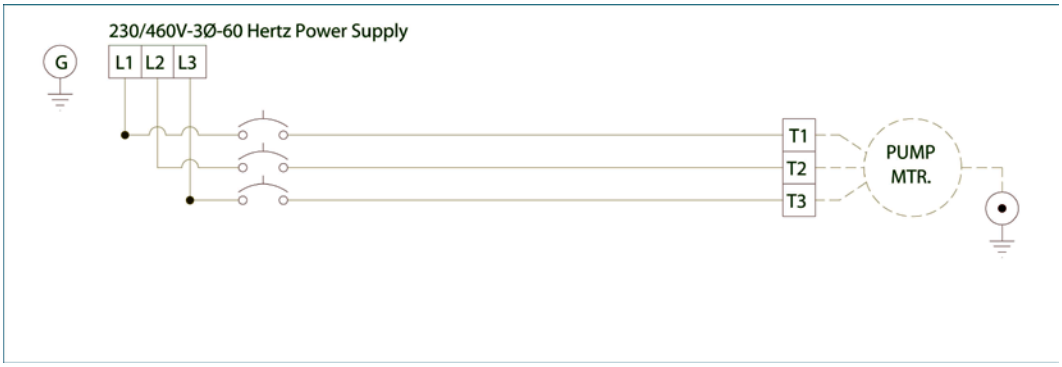


Three phase pumps need a separate control box with float(s) for automatic operation.



STOPPING

To stop the pump (manual and automatic mode), unplug it from the power source, turn off the breaker, or turn the power source off (generator).



Typical 3 Phase Manual Control 1

INTENDED METHODS OF CONNECTION

⚠ CAUTION Use with approved motor control that matches motor input in full load amperes. “UTILLISER UN DÉMARREAR APPROUVÉ CONVENANT AU COURANT Á PLEINE CHARGE DU MOTEUR.”
BJM Pumps submersible pumps have been evaluated for use with water or water based solutions. Please contact the manufacturer for additional information.

⚠ WARNING **FOR YOUR PROTECTION, ALWAYS DISCONNECT PUMP FROM ITS POWER SOURCE BEFORE HANDLING.**

⚠ WARNING **“Risk of electrical shock”** Do not remove power supply cord and strain relief or connect conduit directly to the pump.

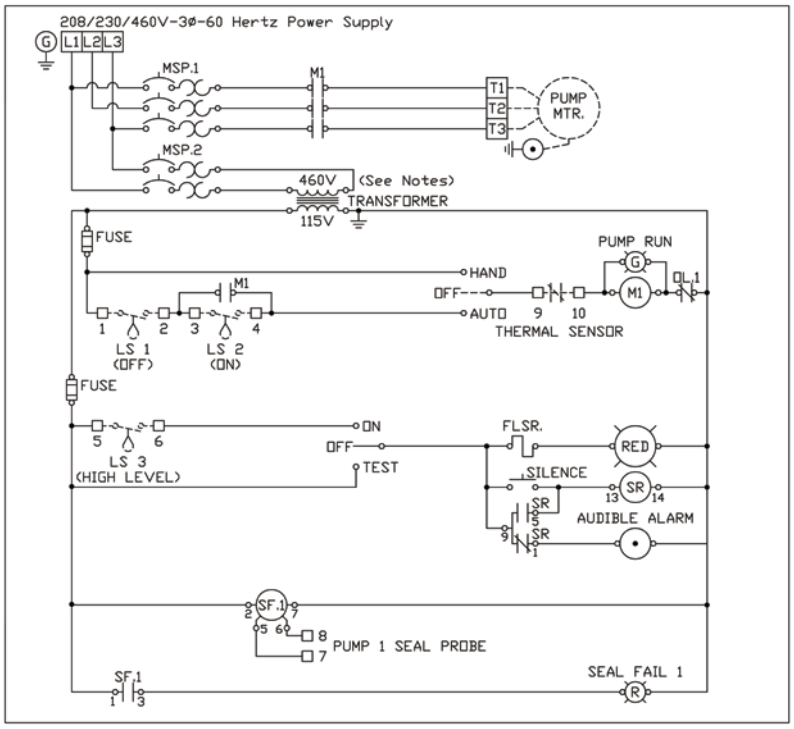
⚠ WARNING Installation and checking of electrical circuits and hardware should be performed by a qualified licensed electrician.

THREE PHASE WIRING INSTRUCTIONS

⚠ WARNING **FOR YOUR PROTECTION, ALWAYS DISCONNECT PUMP FROM ITS POWER SOURCE BEFORE HANDLING.**

⚠ WARNING **“Risk of electrical shock”** Do not remove power supply cord and strain relief.

⚠ WARNING Installation and checking of electrical circuits and hardware should be performed by a qualified licensed electrician.



Typical 3 Phase Auto Control 1

To automatically operate a non-automatic three phase pump, a control panel is required. Follow the instructions provided with the panel to wire the system. For automatic three phase pumps see automatic three phase wiring diagram.

Before installing a pump, make sure both of the ground leads and the power leads have been connected properly. Once the power connections have been confirmed, then check the pump rotation. Momentarily energize the pump, observing the directions of kick back due to starting torque. Momentarily energize the pump, observing the directions of kick back due to starting torque. Rotation is correct if kick back is in the opposite direction of rotation arrow on the pump casing. If rotation is not correct, switching of any two power leads other than ground will provide the proper rotation.

Three phase pumps do NOT have integral motor overload protection. Pumps **must** be installed in accordance with the National Electrical Code and all applicable local codes and ordinances. Pumps are not to be installed in locations classified as hazardous in accordance with National Electrical Code, ANSI/NFPA 70.

Connect pump to a junction box, outlet box, control box, enclosure with a wiring compartment that meets NEC and local codes. The provision for supply connection shall reduce the risk of water entry during temporary, limited submersion and shall comply with the applicable requirements of the Standard for Enclosures for Electrical Equipment, UL 50, or the standard for Metallic Outlet Boxes, UL 514A, and the standard for Motor-Operated Water Pumps. UL 778.

TROUBLE SHOOTING

⚠ WARNING **Disconnect the power source to the pump BEFORE attempting any type of trouble shooting, service or repair.**

PUMP WILL NOT RUN

1. Check power supply (fuses, breaker). Reset power.
2. Blocked impeller. Remove strainer, check and clean.
3. Defective cable or incorrect wiring.
4. Strainer clogged. Check and clean as necessary.
5. Float switch tangled/obstructed. Clean and free float switch from obstruction.
6. Float switch defective. Replace float switch.

PUMP RUNS BUT DOES NOT DELIVER RATED CAPACITY

1. Discharge line clogged, restricted or hose kinked. Check discharge hose/pipe.
2. Worn impeller and/or suction cover. Inspect and replace as necessary.
3. Pump overloaded due to liquid pumped being too thick.
4. Pumping air. Check liquid level and position of pump.
5. Excessive voltage drops due to long cables.
6. Three phase only; pump running backwards, check rotation.

SERVICING YOUR SUBMERSIBLE PUMP

Pump should be disconnected from the electric power supply before proceeding to do any service or maintenance**.**

The design of the “F” Series high temperature pump models is unique and requires specific knowledge to perform the proper assembly. BJM Pumps recommends that all electrical service work be performed at the factory, or by a factory trained and certified repair technician, to insure that the materials and assembly methods meet BJM standards.

MAINTAINING YOUR PUMP

- Pump should be disconnected from the electric power supply before proceeding to do any service or maintenance**.**
- Pump should be inspected at regular intervals.
- More frequent inspections are required if the pump is used in a harsh environment.
- Preventative maintenance should be performed to reduce the chance of premature failure.
- Worn impellers and lip seals should be replaced.
- Cut or cracked power cords must be replaced. **(Never operate a pump with a cut, cracked or damaged power cord.)**

- Seal oil should be checked once per year.
- Maintenance should always be done when taking a pump out of service before storage.
    1) Clean pump of dirt and other build up.
    2) Check condition of oil around the shaft seals.
    3) Check hydraulic parts: check for wear.
    4) Inspect power cable. Make sure that it is free of nicks or cuts.

CHANGING SEAL OIL

Changing the seal oil in the J-F & JX-F Series pumps is very easy.

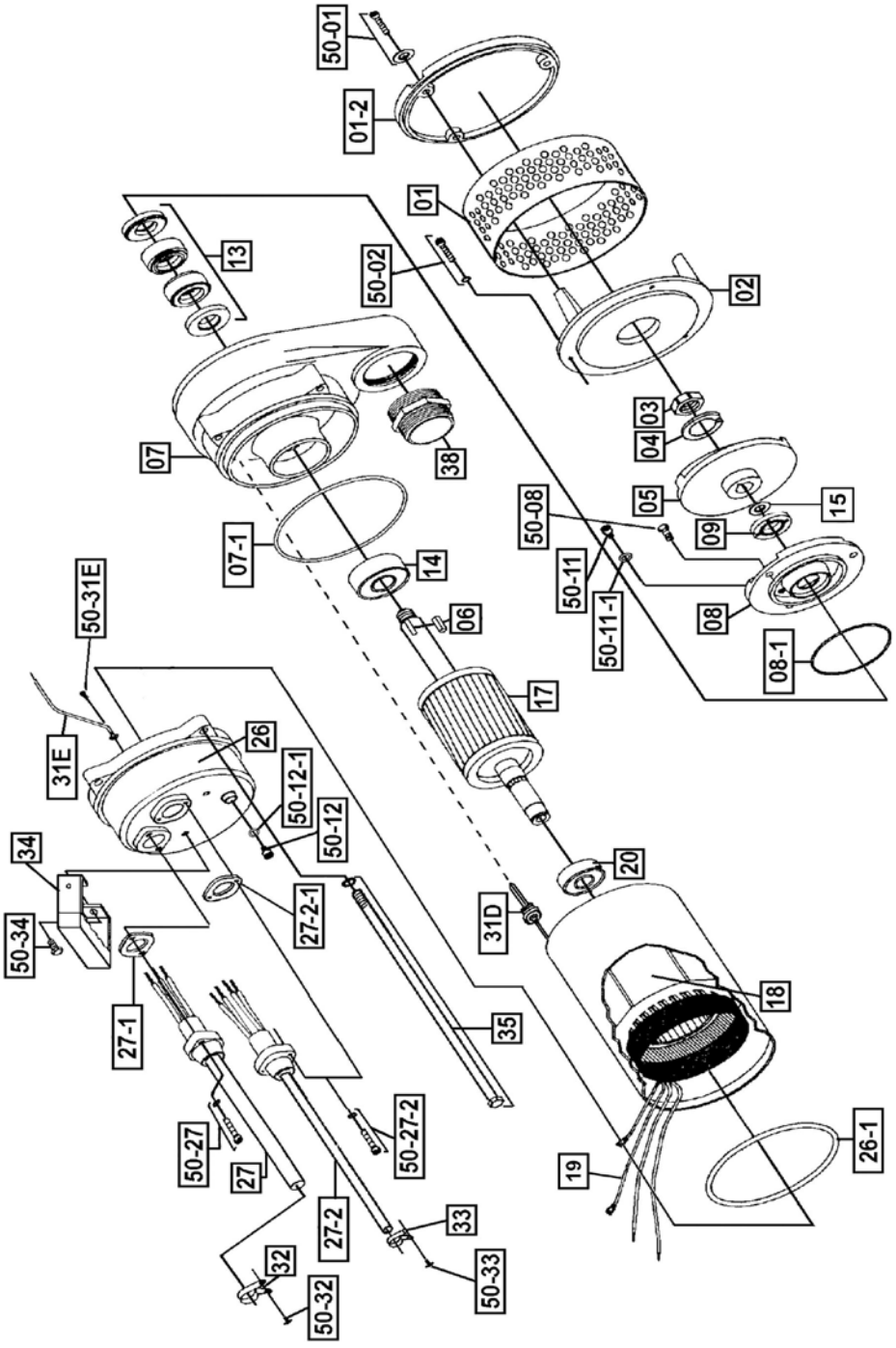
1) Make sure that the pump is deengergized and locked out for service.
2) Lay the pump down on its side.
3) Remove the screws that hold the bottom plate in place.
4) Remove bottom plate.
5) Remove screws holding the suction cover.
6) Remove the suction cover.
7) Remove the impeller.
8) Remove the inspection screw for the oil chamber (pos#50-08). Pour out a small sample of the oil. If it is milky white, or contains water, then the oil and possible, the mechanical seal, should be changed. If an oil change is needed:
9) Remove the screws that hold the oil chamber cover in place & remove the oil.
10) Replace the mechanical seal if necessary.
11) Replace the oil.
12) Assemble the pump.

STATOR REPLACEMENT OR ELECTRICAL REPAIR

The BJM Pumps “F” Series designed pumps utilize unique construction methods and materials. The inner connection of all wiring requires use of a BJM wire connection kit. Included in this kit are specific instructions on how a qualified factory trained and certified repair technician can perform this work properly. No other materials or methods should be used on this product.

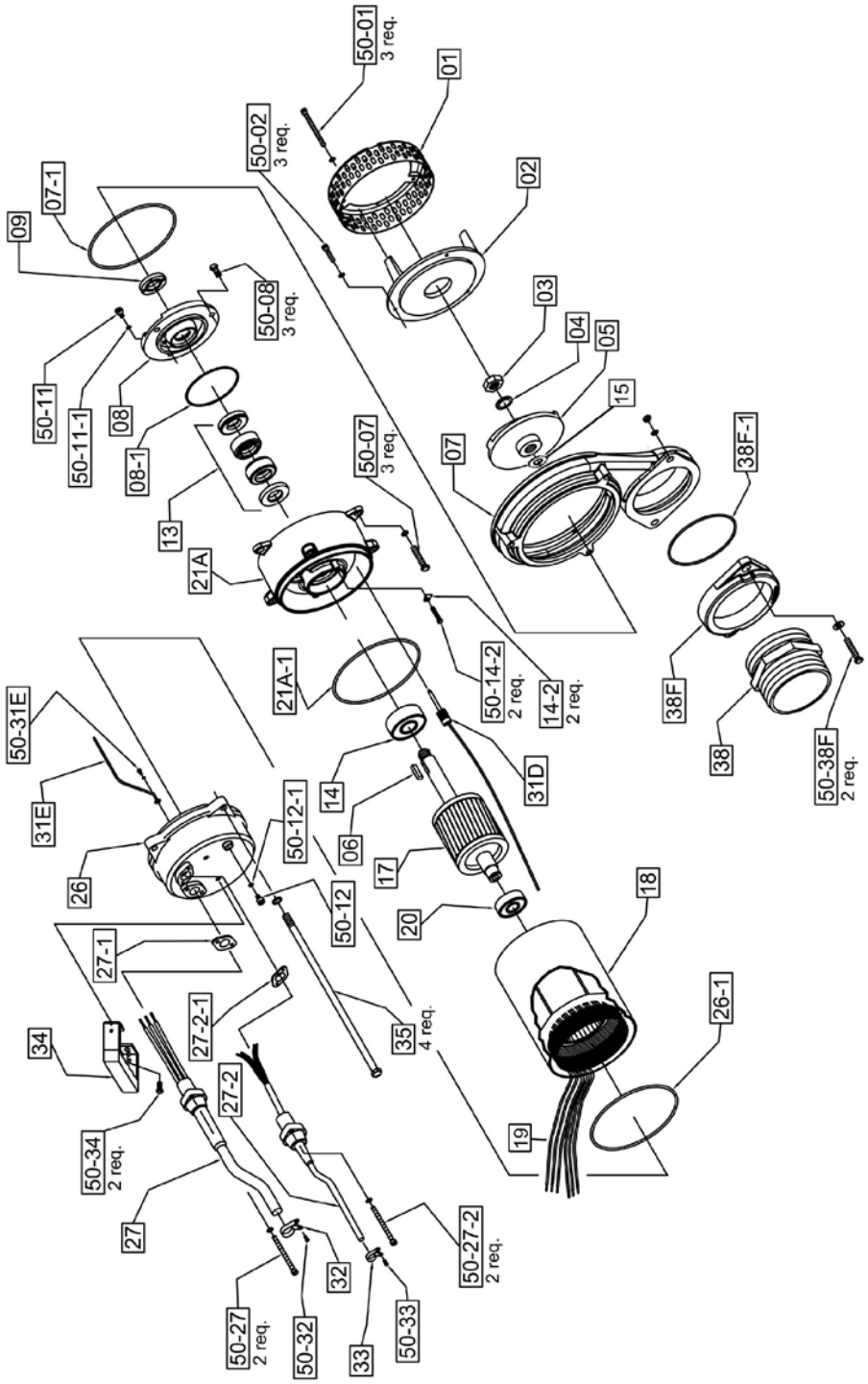
BJM Pumps

EXPLODED VIEW OF J08-F, J15-F, J15H-F



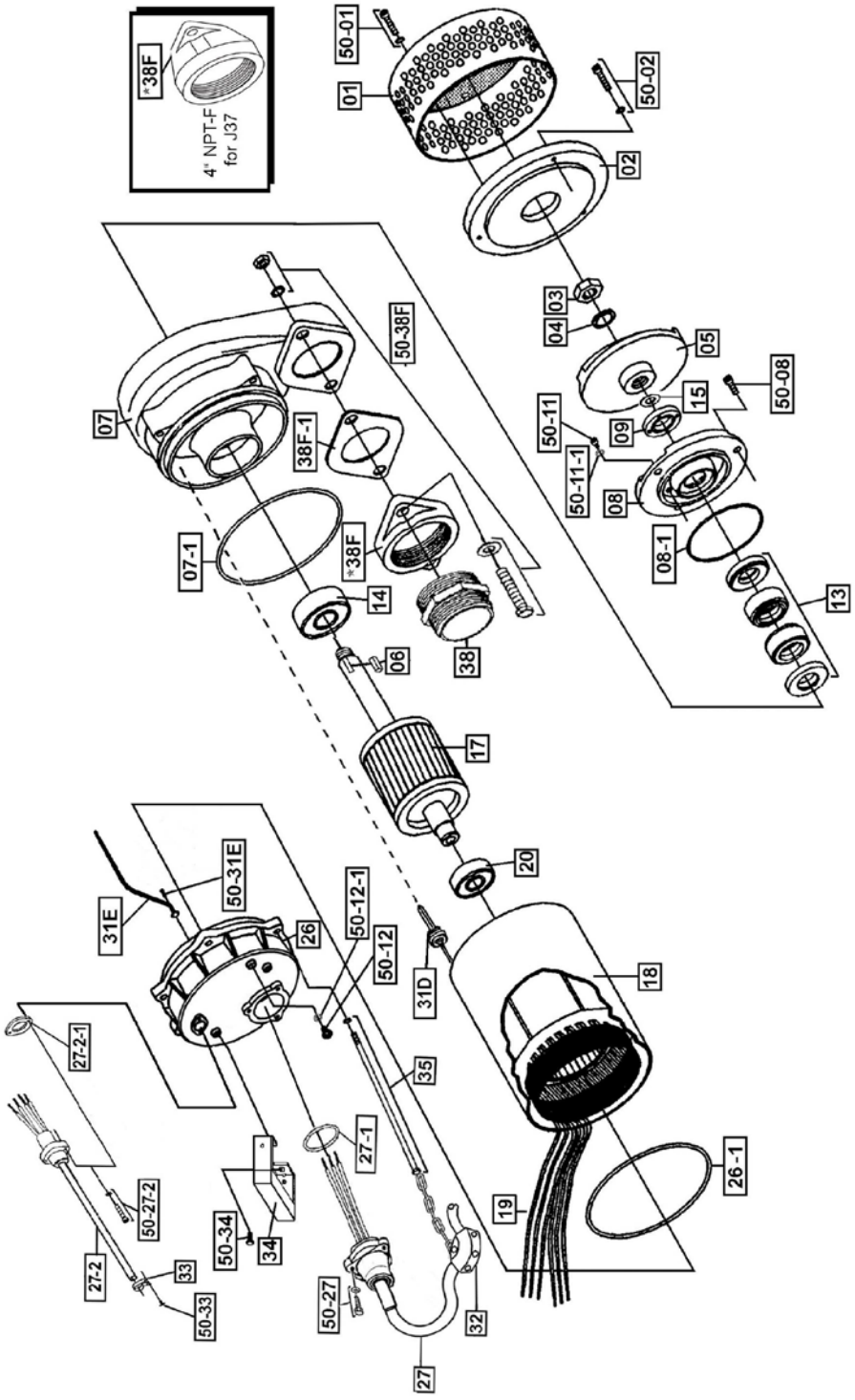
BJM Pumps

EXPLODED VIEW OF JX08SS-F, JX15SS-F, JX15HSS-F



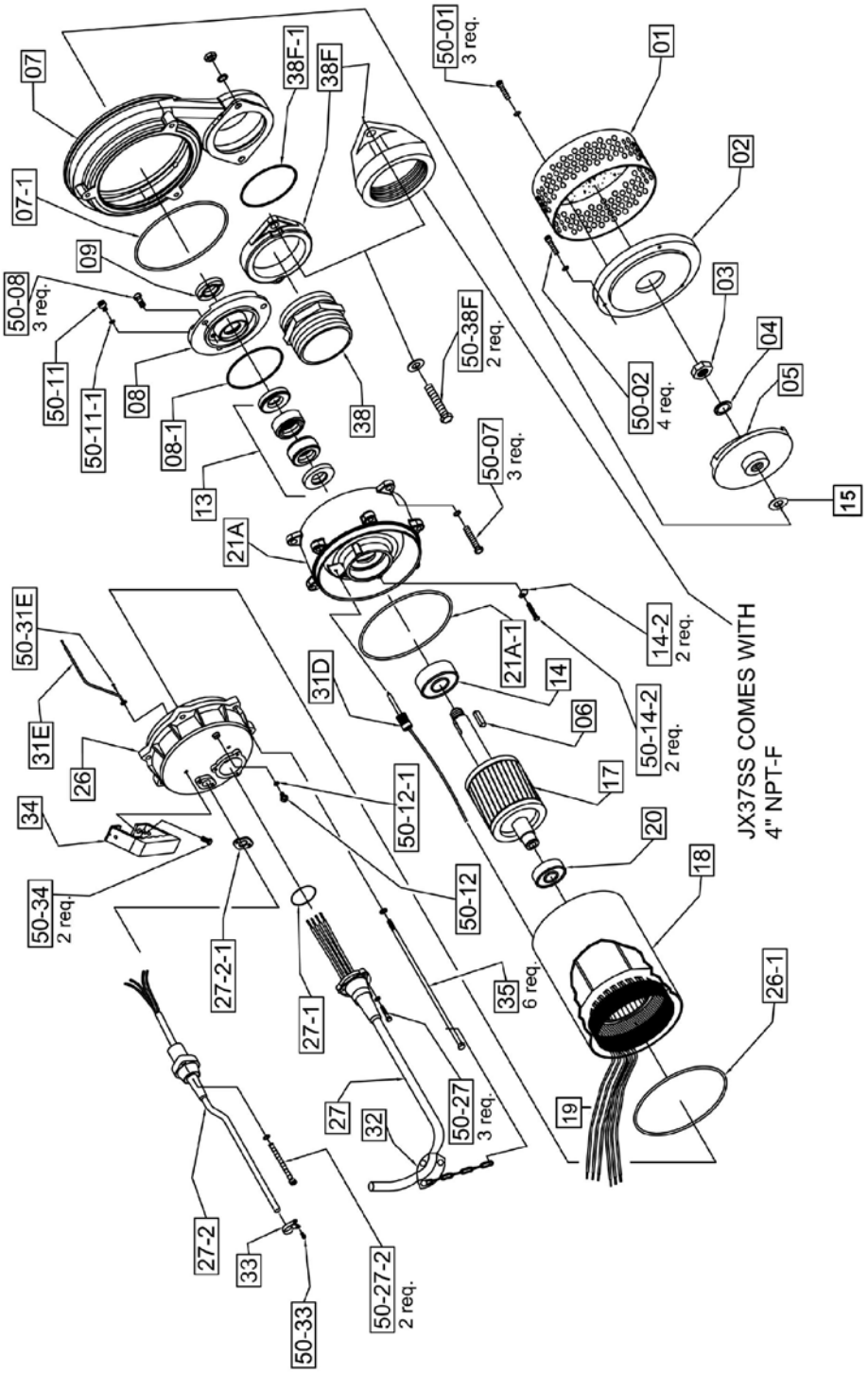
BJM Pumps

EXPLODED VIEW OF J22-F, J22H-F, J37-F, J37H-F



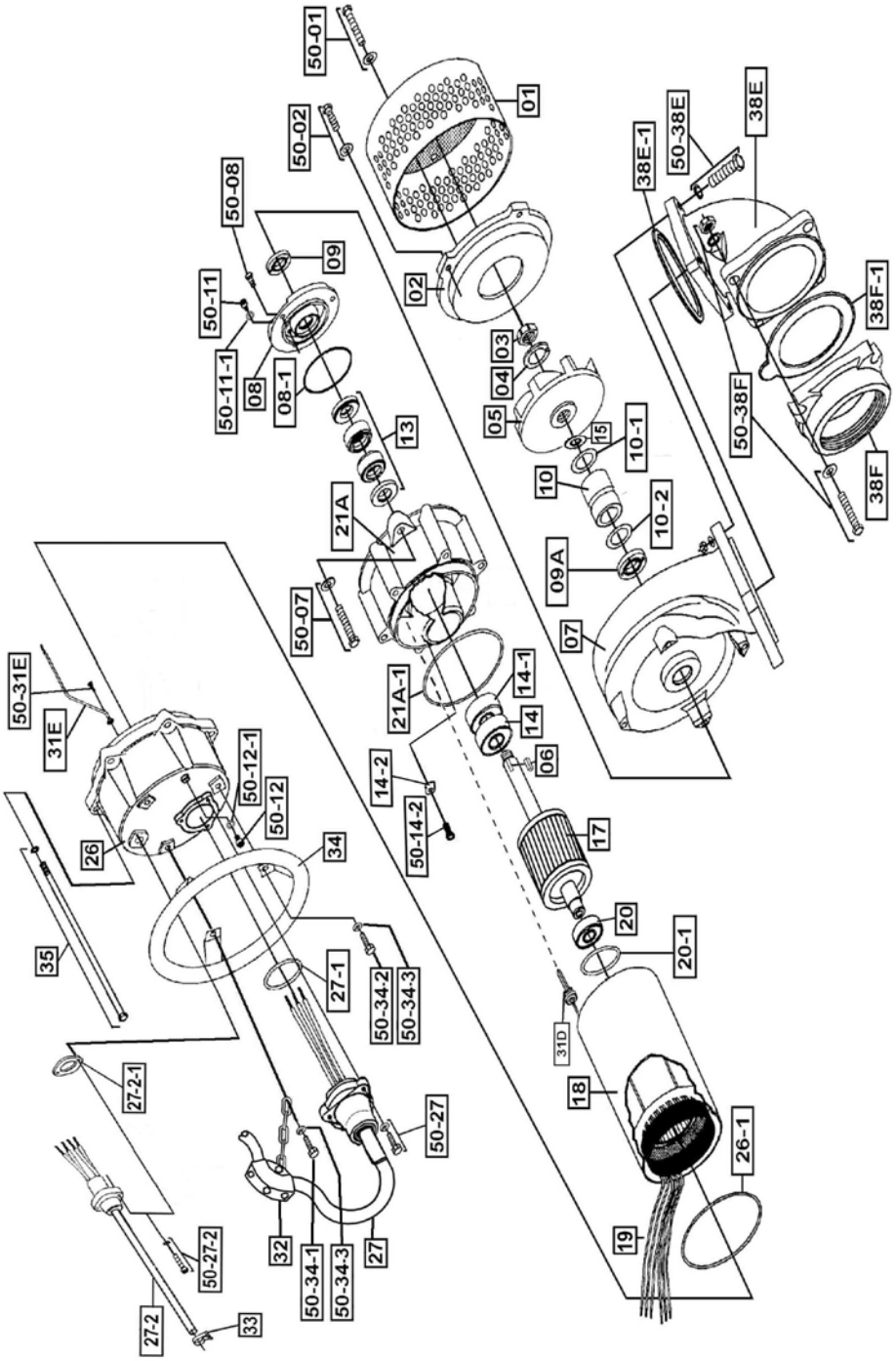
BJM Pumps

EXPLODED VIEW OF JX22SS-F, JX22HSS-F, JX37SS-F, JX37HSS-F



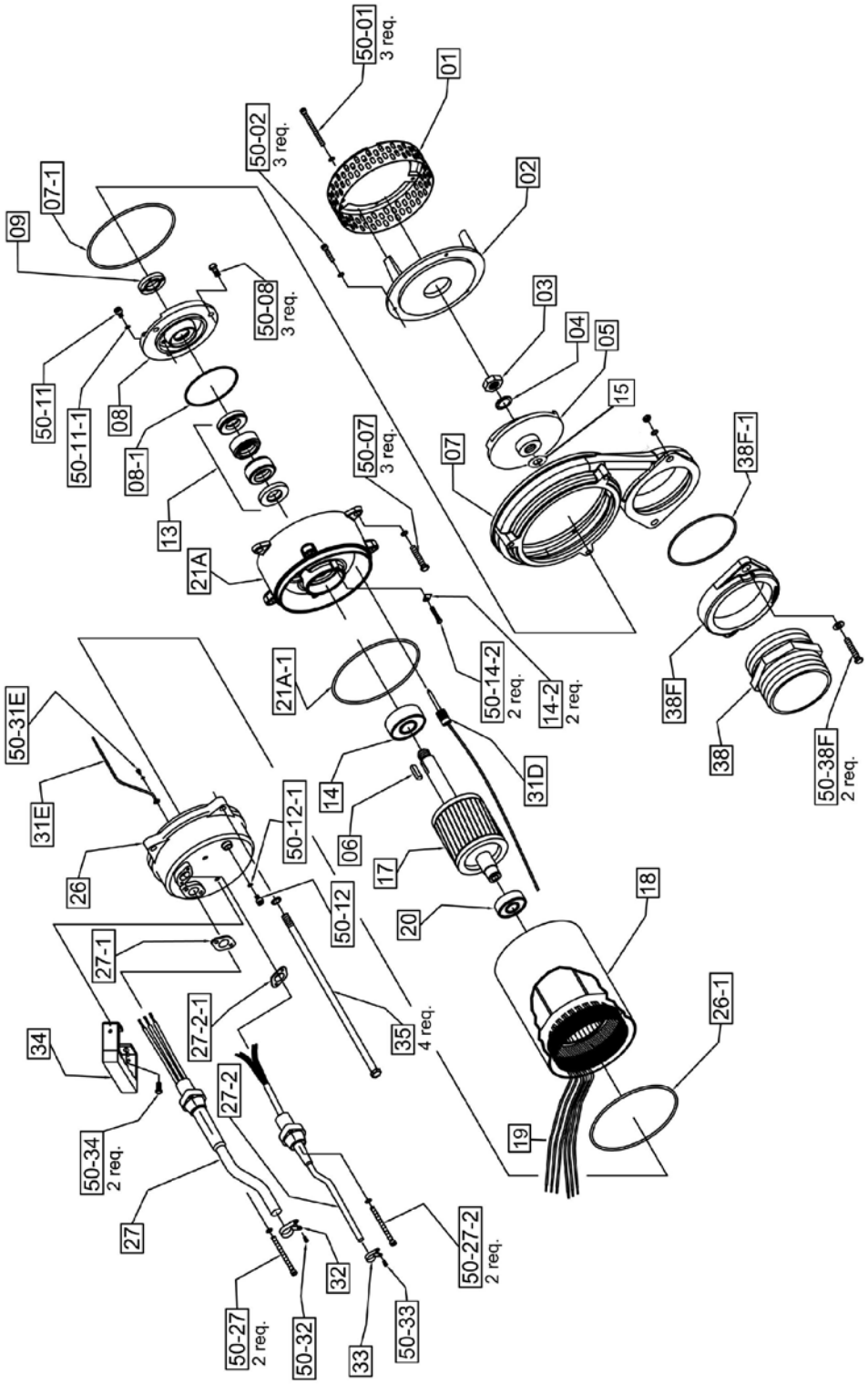
BJM Pumps

EXPLODED VIEW OF J55C-F, JX55CSS-F, J55CH-F, JX55CHSS-F, J75C-F, JX75CSS-F, J75CH-F, JX75CHSS-F



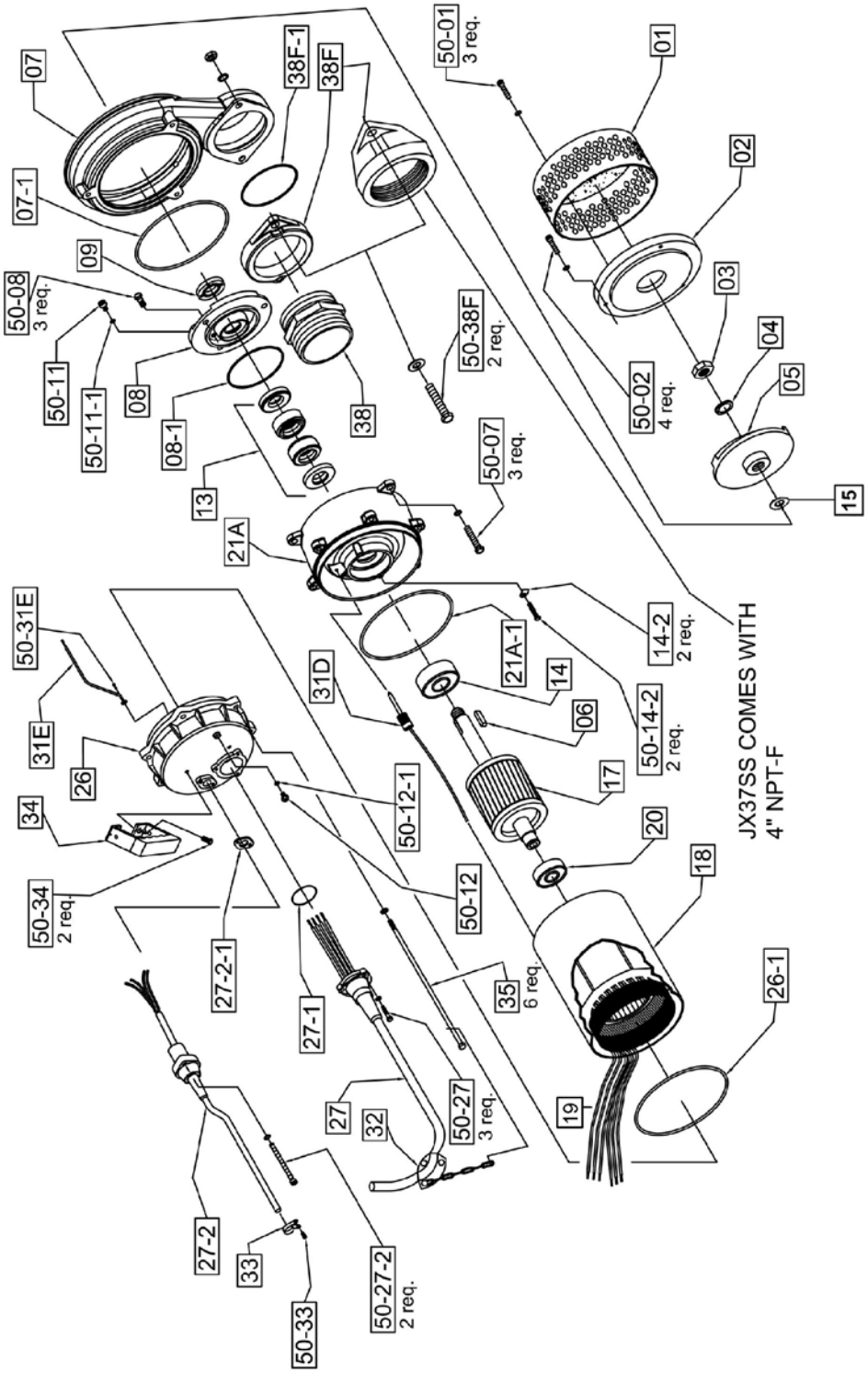
BJM Pumps

EXPLODED VIEW OF JX08SS-F, JX15SS-F, JX15HSS-F (PRECISION CAST MODELS)



BJM Pumps

EXPLODED VIEW OF JX22SS-F, JX37SS-F (PRECISION CAST MODELS)



J-F SERIES PARTS LIST

	Pump Model	J08F	J15F	J15HF	J22F	J22HF	J37F	J37HF	J55CF	J55CHF	J75CF	J75CHF
Pos. No.	**Part Description**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**
01	Strainer with Bottom Plate	-	-	-	201973	201973	201973	201973	201976	201976	201976	201976
01	Strainer	201969	201969	201969	-	-	-	-	-	-	-	-
01-2	Bottom Plate	202007	202007	202007	-	-	-	-	-	-	-	-
02	Suction Cover	202026	202026	202026	202009	202011	202009	202011	202031	202032	202031	202032
03	Impeller Nut	202894	202894	202894	202894	202894	202894	202894	202895	202895	202895	202895
04	Lock washer	202907	202907	202907	202907	202907	202907	202907	202904	202904	202904	202904
05	Impeller	202933	202067	202069	202937	202072	202074	202076	202078	202079	202082	202083
06	Impeller Key	202140	202140	202140	202140	202140	202140	202140	202141	202141	202141	202141
07	Pump Housing	202163	202165	202163	202167	202167	202167	202167	203007	203007	203007	203007
07 -1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
08	Oil Chamber Cover	202211	202211	202211	202211	202211	202211	202211	203043	203043	203043	203043
08 -1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
09	Lip Seal FKM	202233	202233	202233	202233	202233	202233	202233	203058	203058	203058	203058
09A	Double Lip Seal FKM	-	-	-	-	-	-	-	202240	202240	202240	202240
10	Shaft Sleeve	-	-	-	-	-	-	-	202256	202256	202256	202256
10-1	O-Ring (Kit Only)	-	-	-	-	-	-	-	Kit	Kit	Kit	Kit
10-2	O-Ring (Kit Only)	-	-	-	-	-	-	-	Kit	Kit	Kit	Kit
13	Mechanical Seal FKM	204240	204240	204240	204240	204240	204240	204240	200304	200304	200304	200304
14	Lower Ball Bearing	200958	200958	200958	200959	200959	200959	200959	200960	200960	200961	200961
14-1	Lower Ball Bearing	-	-	-	-	-	-	-	200960	200960	200961	200961
14-2	Lower Bearing Retainer Clip	-	-	-	-	-	-	-	202279	202279	202279	202279
15	Impeller Shim Kit (Required)	200480	200480	200480	200480	200480	200480	200480	200479	200479	200479	200479
17	Rotor w/ Shaft, 3 PH	204015	204016	204016	204017	204017	204018	204018	204019	204019	204020	204020
18	Stator w/Casing, 208V, 3PH	200525	200529	200529	200533	200533	200537	200537	200666	200666	-	-
18	Stator w/Casing, 230/460V, 3PH	200547	200551	200551	200555	200555	200559	200559	200563	200563	200567	200567
18	Stator w/Casing, 575V, 3PH	200589	200593	200593	200597	200597	200601	200601	200606	200606	200610	200610
19	Wire Connection Kit*	204202	204202	204202	204203	204203	204203	204203	204203	204203	204203	204203
20	Upper Ball Bearing	200967	200967	200967	200958	200958	200958	200958	200959	200959	200959	200959
20-1	O-Ring (Kit Only)	-	-	-	-	-	-	-	Kit	Kit	Kit	Kit
21A	Oil Chamber	-	-	-	-	-	-	-	202178	202178	202169	202169
21A-1	O-Ring (Kit Only)	-	-	-	-	-	-	-	Kit	Kit	Kit	Kit
26	Pump Top Cover	202435	202435	202435	202445	202445	202445	202445	202439	202439	202439	202439
26-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit

27	Power Cable w/ Gland- 3PH (High-Temp)	204452	204452	204452	203776	203776	203776	203776	203776	203776	203776	203776
27-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
27-2	Seal Minder/Temp. Sensor Cord (High-Temp)	204453	204453	204453	204453	204453	204453	204453	204453	204453	204453	204453
27-2-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
31D	Seal Minder Probe	202409	202409	202409	203998	203998	203998	203998	204000	204000	204000	204000
31E	Ground Wire w/Ring Term.	203145	203145	203145	203145	203145	203145	203145	203145	203145	203145	203145
32	Power Cord Line Clip/Strain Relief	203161	203161	203161	202497	202497	202497	202497	202497	202497	202497	202497
33	Seal Minder Cable Line Clip	203163	203163	203163	203163	203163	203163	203163	203163	203163	203163	203163
34	Handle	202517	202517	202517	202517	202517	202517	202517	203171	203171	203171	203171
35	Holding Rods	202669	202670	202670	202671	202671	202672	202672	202673	202673	202674	202674
38	Discharge Nipple	202531	202534	202531	202534	202818	202534	202531	-	-	-	-
38E	Discharge Elbow	-	-	-	-	-	-	-	202560	202560	202560	202560
38E-1	Gasket Discharge Elbow FKM	-	-	-	-	-	-	-	203211	203211	203211	203211
38F	Discharge Flange	-	-	-	202545	202543	202545	202543	202537	202538	202537	202537
38F	Discharge Connection 4" FNPT	-	-	-	202552	-	202552	-	-	-	-	-
38F-1	Gasket - Discharge Flange FKM	-	-	-	202660	202660	202660	202660	203211	203211	203211	203211
50-01	Bolt - Strainer/Stand	203238	203238	203238	203231	203231	203231	203231	203241	203241	203241	203241
50-02	Screw	203216	203216	203216	203228	203228	203228	203228	203229	203229	203229	203229
50-07	Screw	-	-	-	-	-	-	-	203229	203229	203229	203229
50-08	Screw	203219	203219	203219	203219	203219	203219	203219	203246	203246	203246	203246
50-11	Screw	203218	203218	203218	203218	203218	203218	203218	203218	203218	203218	203218
50-11-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
50-12	Screw	203218	203218	203218	203218	203218	203218	203218	203218	203218	203218	203218
50-12-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
50-14-2	Screw	-	-	-	-	-	-	-	203219	203219	203219	203219
50-26	Acorn Nut and Washer	-	-	-	-	-	-	-	-	-	-	-
50-27	Screw	203216	203216	203216	203246	203246	203246	203246	203246	203246	203246	203246
50-27-2	Screw for Seal Minder Cable	203216	203216	203216	203216	203216	203216	203216	203216	203216	203216	203216
50-31E	Screw	202692	202692	202692	202692	202692	202692	202692	202692	202692	202692	202692
50-32	Screw	203214	203214	203214	-	-	-	-	-	-	-	-
50-33	Screw	203214	203214	203214	203214	203214	203214	203214	-	-	-	-
50-34	Screw	203219	203219	203219	203219	203219	203219	203219	-	-	-	-
50-34-1	Screw for Handle w/ Cable Chain	-	-	-	-	-	-	-	203228	203228	203228	203228
50-34-2	Screw for Handle	-	-	-	-	-	-	-	203288	203288	203288	203288
50-34-3	Lock Washer	-	-	-	-	-	-	-	202902	202902	202902	202902
50-38E	Bolt - Discharge Elbow	-	-	-	-	-	-	-	203287	203287	203287	203287
50-38F	Bolt - Discharge Flange	-	-	-	203253	203253	203253	203253	203287	203287	203287	203287
	O-Ring Kit-FKM	202648	202648	202648	202643	202643	202643	202643	202645	202645	202645	202645

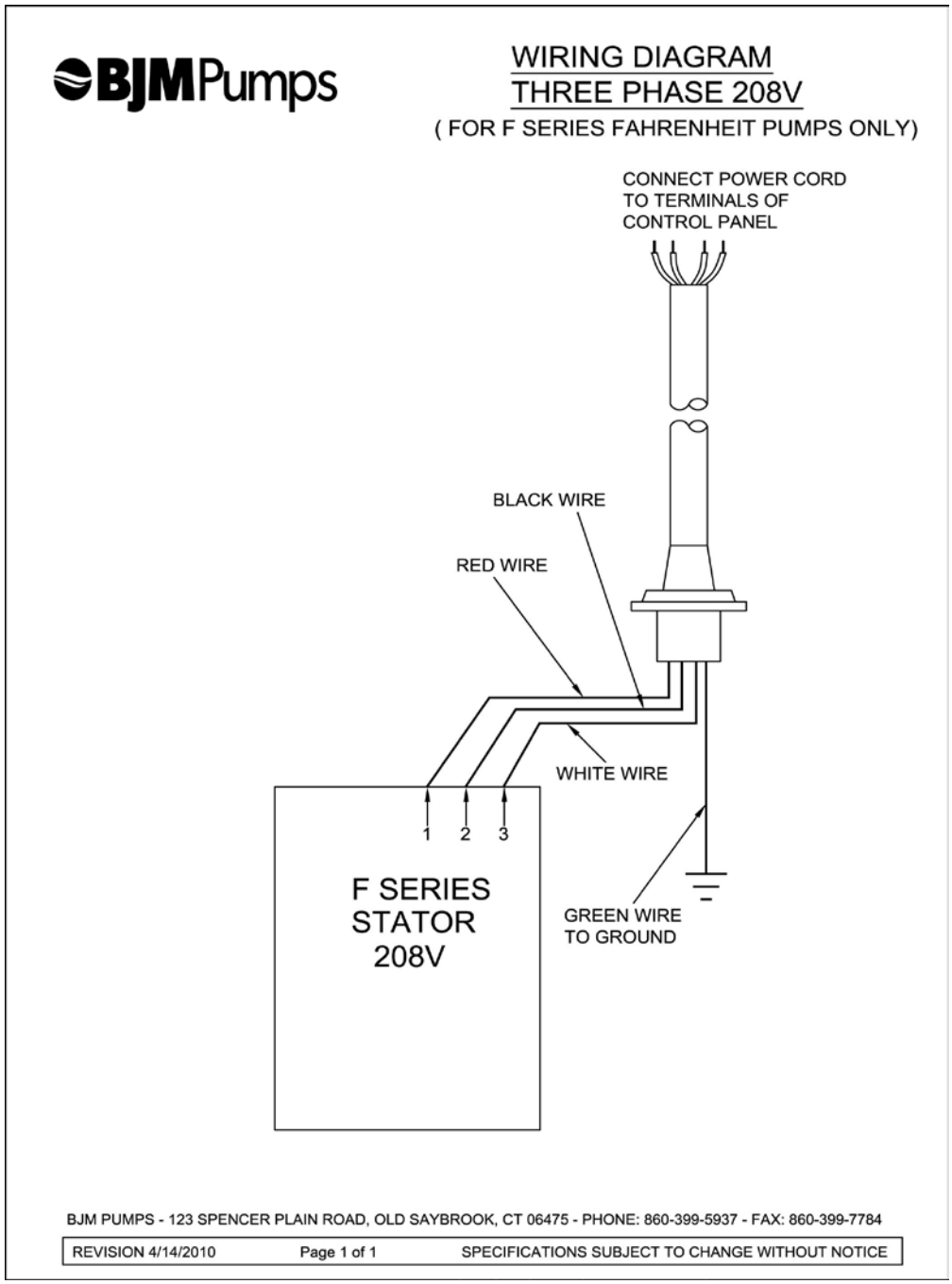
JX-F SERIES PARTS LIST

	Pump Model	JX08SSF	JX15SSF	JX15HSSF	JX22SSF	JX22HSSF	JX37SSF	JX37HSSF	JX55CSSF	JX55CHSSF	JX75CSSF	JX75CHSSF
Pos. No.	**Part Description**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**	**Item #**
01	Strainer with Bottom Plate	201971	201971	201971	201974	201974	201974	201974	201977	201977	201977	201977
02	Suction Cover	202027	202028	202027	202010	202012	202010	202012	202034	202033	202034	202033
03	Impeller Nut	202894	202894	202894	202894	202894	202894	202894	202895	202895	202895	202895
04	Lock washer	202907	202907	202907	202907	202907	202907	202907	202904	202904	202904	202904
05	Impeller	202066	202068	202070	202071	202073	202075	202077	202081	202080	202085	202084
06	Impeller Key	202140	202140	202140	202140	202140	202140	202140	202141	202141	202141	202141
07	Pump Housing	202164	202166	202164	202168	202168	202168	202168	202171	202171	202171	202171
07 -1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
08	Oil Chamber Cover	202214	202214	202214	202219	202219	202219	202219	202216	202216	202216	202216
08 -1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
09	Lip Seal FKM	202232	202232	202232	202235	202235	202235	202235	203058	203058	203058	203058
09A	Double Lip Seal FKM	-	-	-	-	-	-	-	202240	202240	202240	202240
10	Shaft Sleeve	-	-	-	-	-	-	-	202257	202257	202257	202257
10-1	O-Ring (Kit Only)	-	-	-	-	-	-	-	Kit	Kit	Kit	Kit
10-2	O-Ring (Kit Only)	-	-	-	-	-	-	-	Kit	Kit	Kit	Kit
13	Mechanical Seal FKM	204240	204240	204240	204243	204243	204243	204243	200304	200304	200304	200304
14	Lower Ball Bearing	200958	200958	200958	200959	200959	200959	200959	200960	200960	200961	200961
14-1	Lower Ball Bearing	-	-	-	-	-	-	-	200960	200960	200961	200961
14-2	Lower Bearing Retainer Clip	202279	202279	202279	202279	202279	202279	202279	202279	202279	202279	202279
15	Impeller Shim Kit (Required)	200480	200480	200480	200480	200480	200480	200480	200479	200479	200479	200479
17	Rotor w/ Shaft, 3 PH	204021	204022	204022	204023	204023	204024	204024	204051	204051	204052	204052
18	Stator w/Casing, 208V, 3PH	200527	200531	200531	200535	200535	200539	200539	200668	200668	-	-
18	Stator w/Casing, 230/460V,3PH	200549	200553	200553	200557	200557	200561	200561	200565	200565	200569	200569
18	Stator w/Casing, 575V, 3PH	200591	200595	200595	200599	200599	200603	200603	200608	200608	200612	200612
19	Wire Connection Kit*	204202	204202	204202	204203	204203	204203	204203	204203	204203	204203	204203
20	Upper Ball Bearing	200967	200967	200967	200958	200958	200958	200958	200959	200959	200959	200959
20-1	O-Ring (Kit Only)	-	-	-	-	-	-	-	Kit	Kit	Kit	Kit
21A	Oil Chamber	202197	202197	202197	202198	202198	202198	202198	202179	202179	202170	202170
21A-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
26	Pump Top Cover	202436	202436	202436	202438	202438	202438	202438	202440	202440	202440	202440
26-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
27	Power Cable w/ Gland- 3PH (High Temp)	201733	201733	201733	203777	203777	203777	203777	203777	203777	203777	203777
27-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit

27-2	Seal Minder/Temp. Sensor Cord (High Temp)	201741	201741	201741	201741	201741	201741	201741	201741	201741	201741	201741
27-2-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
31D	Seal Minder Probe	202408	202408	202408	202410	202410	202410	202410	204000	204000	204000	204000
31E	Ground Wire w/Ring Term.	203145	203145	203145	203145	203145	203145	203145	203145	203145	203145	203145
32	Power Cord Line Clip / Strain Relief	203161	203161	203161	202499	202499	202499	202499	202499	202499	202499	202499
33	Seal Minder Cable Line Clip	203163	203163	203163	203163	203163	203163	203163	203163	203163	203163	203163
34	Handle	202517	202517	202517	202517	202517	202517	202517	203171	203171	203171	203171
35	Holding Rods	202684	202685	202685	202686	202686	202687	202687	202673	202673	202674	202674
38	Discharge Nipple	202532	202535	202532	202535	202532	202535	202532	-	-	-	-
38E	Discharge Elbow	-	-	-	-	-	-	-	202561	202561	202561	202561
38E-1	Gasket Discharge Elbow FKM	-	-	-	-	202818	-	-	203211	203211	203211	203211
38F	Discharge Flange	202563	202546	202563	202546	202544	202546	202544	202540	202539	202540	202540
38F	Discharge Connection 4" NPT-F	-	-	-	202553	-	202553	-	-	-	-	-
38F-1	O-Ring - Discharge Flange FKM	202723	202724	202723	202724	202724	202724	202724	-	-	-	-
38F-1	O-Ring - Discharge 4" NPT-F FKM	-	-	-	203328	-	203328	-	-	-	-	-
38F-1	Gasket Discharge Flange FKM	-	-	-	-	-	-	-	203211	203211	203211	203211
50-01	Screw	203215	203215	203215	203297	203297	203297	203297	203241	203241	203241	203241
50-02	Screw	203216	203216	203216	203220	203220	203220	203220	203229	203229	203229	203229
50-07	Screw	203296	203296	203296	203296	203296	203296	203296	203229	203229	203229	203229
50-08	Screw	203219	203219	203219	203219	203219	203219	203219	203246	203246	203246	203246
50-11	Screw	203218	203218	203218	203218	203218	203218	203218	203218	203218	203218	203218
50-11-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
50-12	Screw	203218	203218	203218	203218	203218	203218	203218	203218	203218	203218	203218
50-12-1	O-Ring (Kit Only)	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit	Kit
50-14-2	Screw	203219	203219	203219	203219	203219	203219	203219	203219	203219	203219	203219
50-27	Screw	203295	203295	203295	203246	203246	203246	203246	203246	203246	203246	203246
50-27-2	Screw for Seal Minder Cable	203295	203295	203295	203295	203295	203295	203295	203216	203216	203216	203216
50-31E	Screw	202692	202692	202692	202692	202692	202692	202692	202692	202692	202692	202692
50-32	Screw	203214	203214	203214	-	-	-	-	-	-	-	-
50-33	Screw	203214	203214	203214	203214	203214	203214	203214	-	-	-	-
50-34	Screw	203219	203219	203219	203296	203296	203296	203296	-	-	-	-
50-34-1	Screw for Handle w/ Cable Chain	-	-	-	-	-	-	-	203228	203228	203228	203228
50-34-2	Screw for Handle	-	-	-	-	-	-	-	203288	203288	203288	203288
50-34-3	Lock Washer	-	-	-	-	-	-	-	202902	202902	202902	202902
50-38E	Bolt - Discharge Elbow	-	-	-	-	-	-	-	203287	203287	203287	203287
50-38F	Bolt - Discharge Flange	203229	203294	203229	203294	203294	203294	203294	203287	203287	203287	203287
	O-Ring Kit-FKM	202647	202647	202647	202642	202642	202642	202642	202645	202645	202645	202645

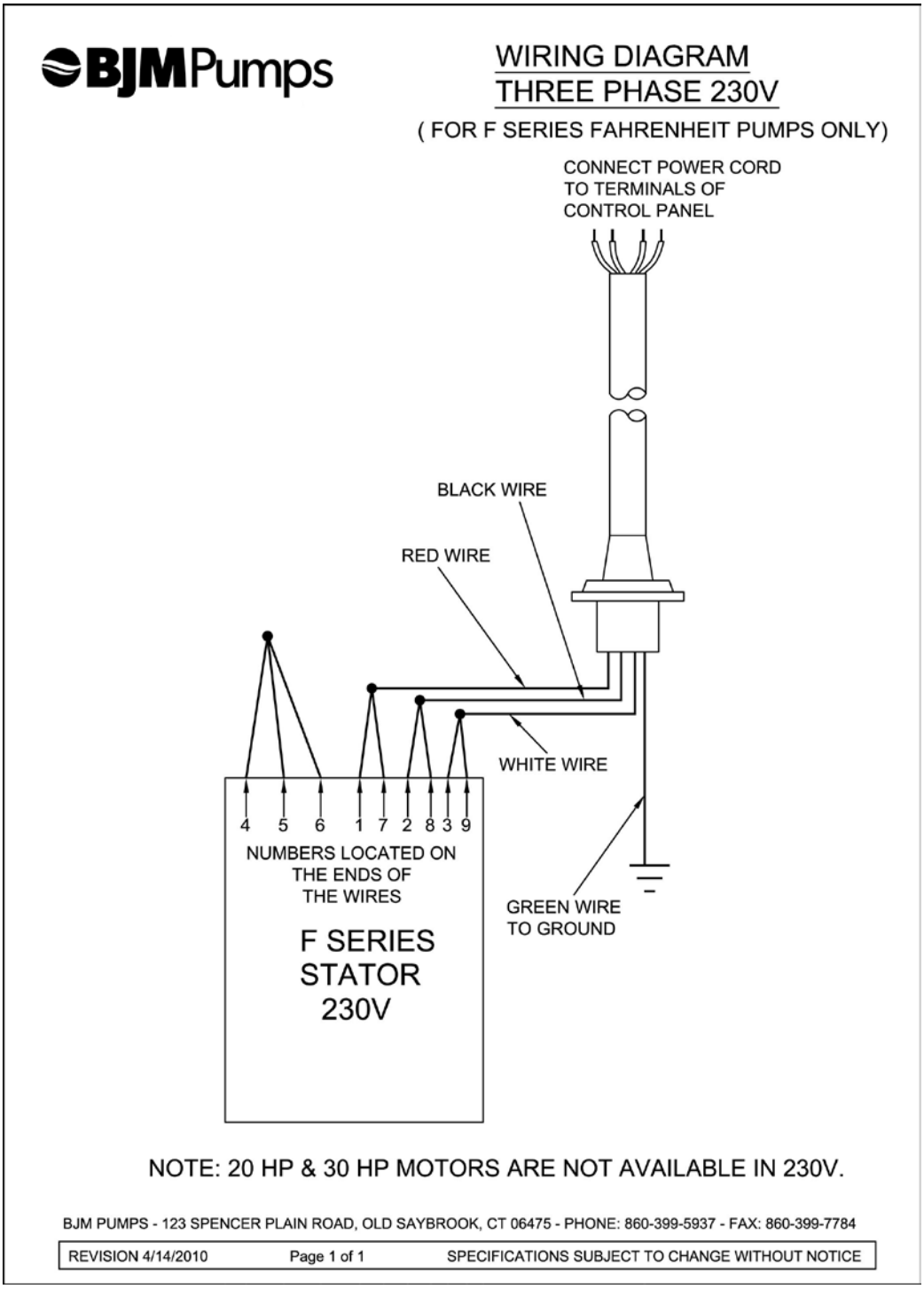
THREE PHASE WIRING DIAGRAM

208V



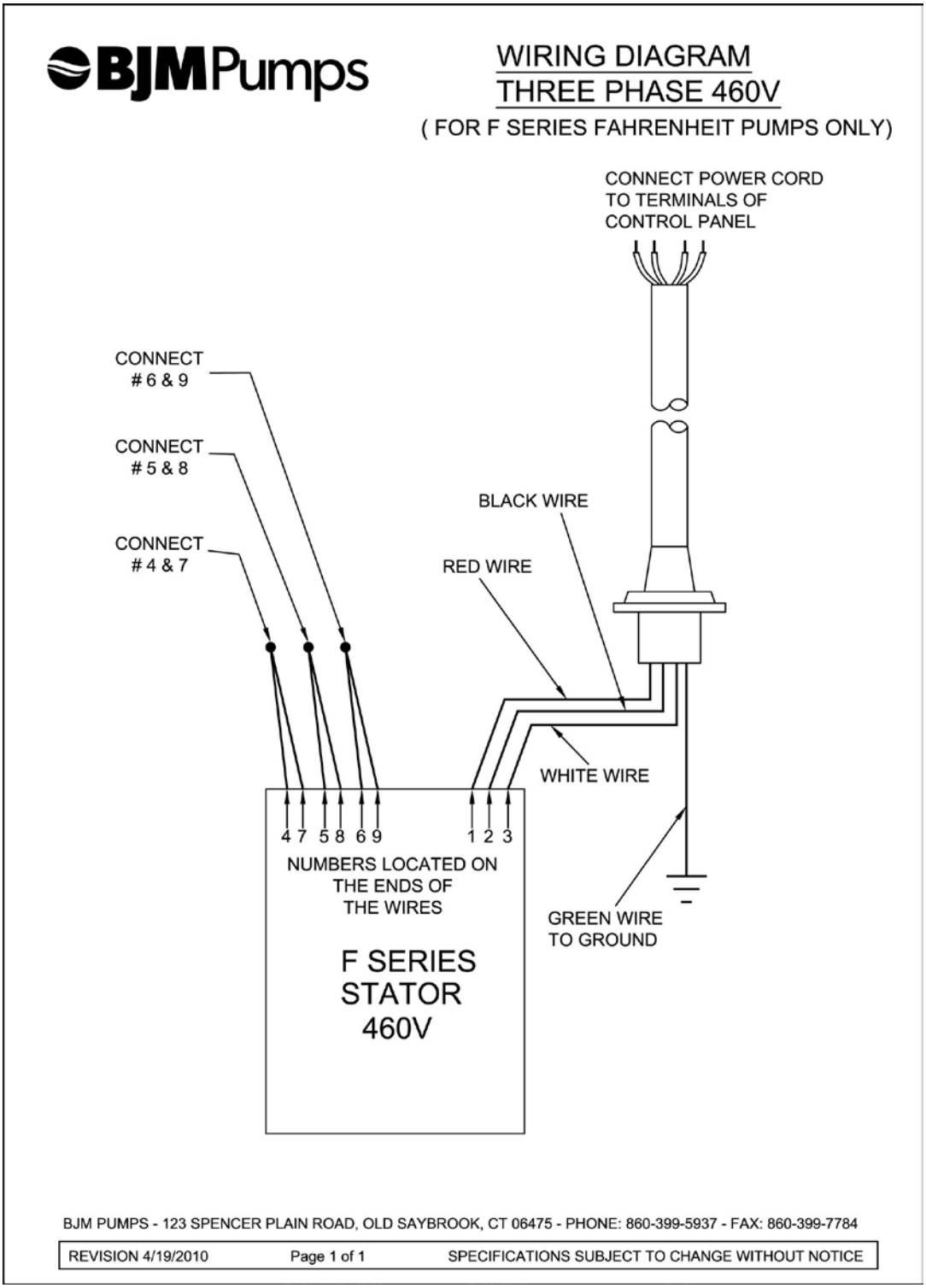
MODELS: J08-F, JX08SS-F, J15-F, JX15SS-F, J15H-F, JX15HSS-F, J22-F, JX22SS-F, J22H-F, JX22HSS-F, J37-F, JX37SS-F, J37H-F, J37HSS-F, J55C-F, J55CSS-F, J55CH-F, J55CHSS-F

230V



MODELS: J08-F, JX08SS-F, J15-F, JX15SS-F, J15H-F, JX15HSS-F, J22-F, JX22SS-F, J22H-F, JX22HSS-F, J37-F. JX37SS-F, J37H-F, J37HSS-F, J55C-F, J55CSS-F, J55CH-F, J55CHSS-F, J75C-F, JX75CSS-F, J75CH-F, J75CHSS-F

460V

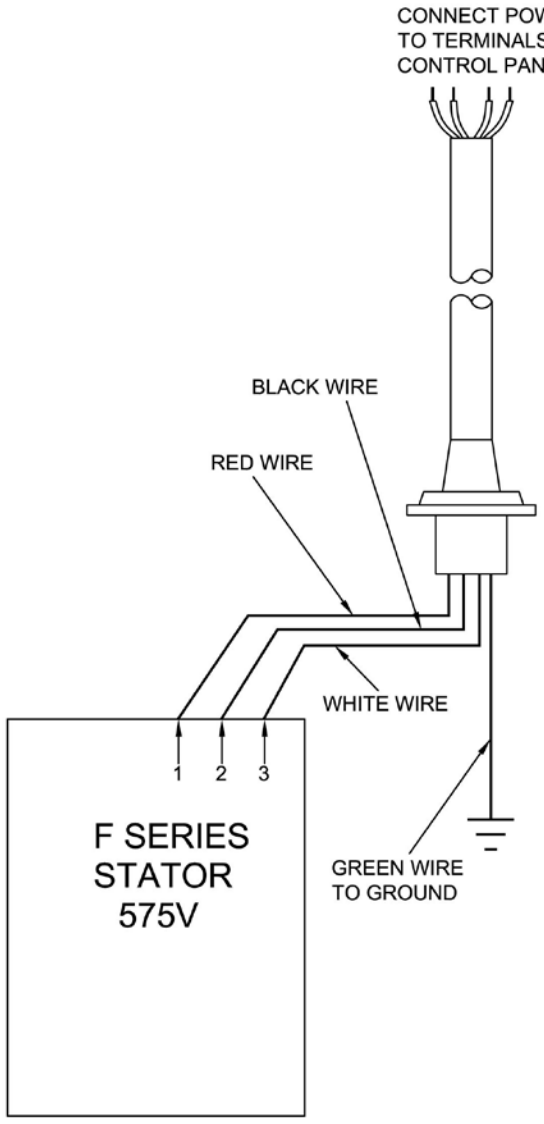


MODELS: J08-F, JX08SS-F, J15-F, JX15SS-F, J15H-F, JX15HSS-F, J22-F, JX22SS-F, J22H-F, JX22HSS-F, J37-F. JX37SS-F, J37H-F, J37HSS-F, J55C-F, J55CSS-F, J55CH-F, J55CHSS-F, J75C-F, JX75CSS-F, J75CH-F, J75CHSS-F

575V

BJMPumps

WIRING DIAGRAM
THREE PHASE 575V
(FOR F SERIES FAHRENHEIT PUMPS ONLY)



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REVISION 4/14/2010 Page 1 of 1 SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

MODELS: J08-F, JX08SS-F, J15-F, JX15SS-F, J15H-F, JX15HSS-F, J22-F, JX22SS-F, J22H-F, JX22HSS-F, J37-F. JX37SS-F, J37H-F, J37HSS-F, J55C-F, J55CSS-F, J55CH-F, J55CHSS-F, J75C-F, JX75CSS-F, J75CH-F, J75CHSS-F

SEAL MINDER® - THERMAL MOTOR SENSOR SWITCH

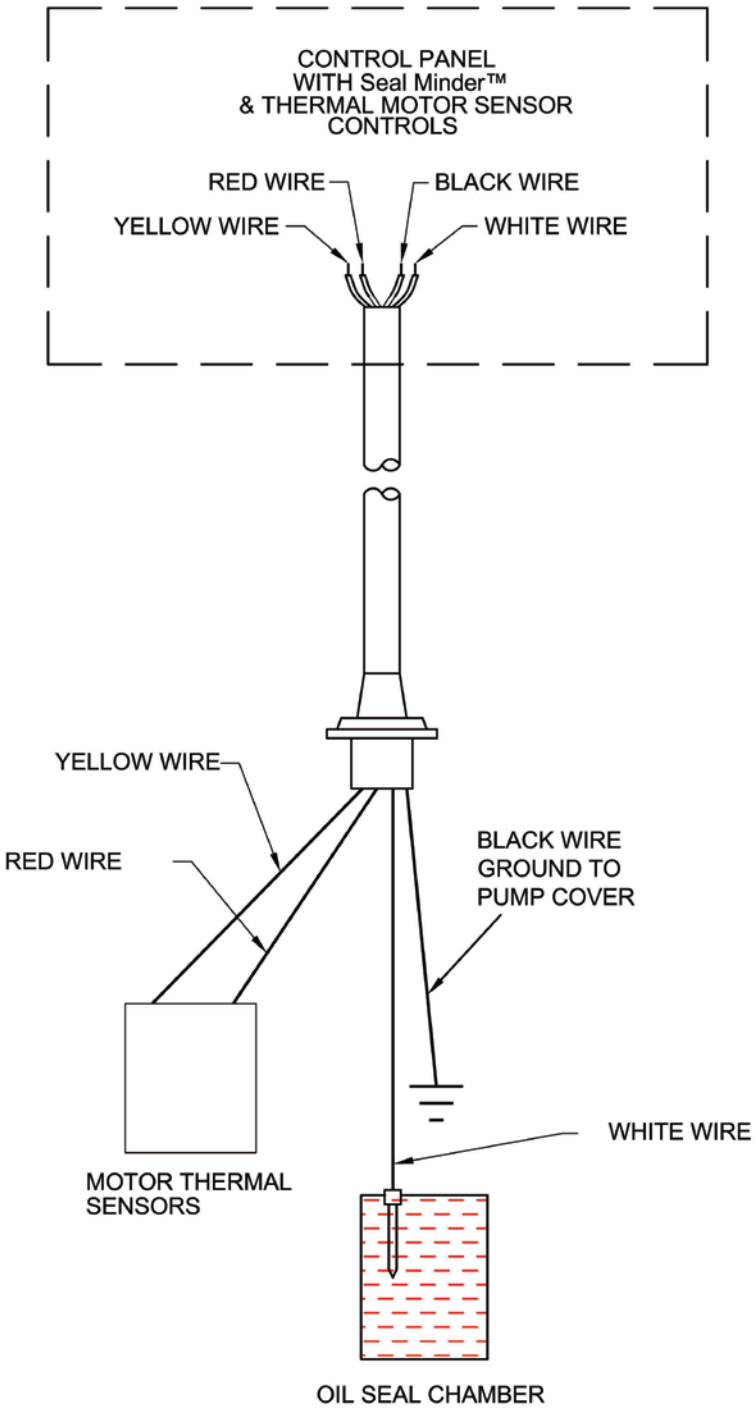
(For high temperature pump models)

Seal Minder:
Also known as a seal failure circuit (or moisture detection circuit) is designed to inform the pump operator that there is moisture within the oil chamber. This early warning can allow the operator to schedule repair & inspection on the pump. The **Seal Minder** sensor probe is inside the oil chamber. (The oil chamber houses the mechanical seals that are cooled & lubricated by oil). The **Seal Minder,** when properly connected to a control panel, can help indicate seal failure. The **Seal Minder** cord requires a seal fail circuit in control panel for warning signal.

Along, with the **Seal Minder**, the Fahrenheit ® Series high temperature pumps also feature thermal temperature sensor switches that are imbedded into the motor stator windings. Three switches are imbedded into the stator windings and wired in series. The leads are connected to the pump control panel through the sensor cable. If the windings would see a temperature above 300 degrees F, then the switch(s) would open and cut power to the pump. Once the temperature dropped below 300 degrees F, the switch(s) would reset, and the pump would be returned to a state of operation. This feature is designed to prevent damage to the stator winding and allow for longer pump life.

The sensor cable consists of four leads, two are connected to the **Seal Minder**, and two are connected to the thermal sensor switches located in the stator windings. These four leads run to the pump control panel and connect to the proper connections points for seal alarm and thermal cut off. The black and white wires are for the **Seal Minder** connections and the thermal sensors will be connected to the yellow and red wires. The three phase automatic wiring diagram shown earlier in the manual will give a guide to the connections in the control panel. The manual for the control panel should be consulted for the exact connections.

The sensor cable with **Seal Minder** and thermal sensor switch connections is standard on all Fahrenheit ® Series high temperature pumps. The cable is designed for a high temperature environment. The proper replacement part can be found parts list found in this manual. BJM Pumps, can supply a control with the Seal Minder and Thermal sensor switch option. Separate stand alone Seal Minder alarm panels are also available. Consult your BJM Pumps representative for part numbers and ordering details. BJM Pumps requires the **Seal Minder** and thermal sensor switches be used. Failure to connect or misuse of these devices will void warranty.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

BJM Pumps, LLC - 123 SPENCER PLAIN ROAD, OLD SAYBROOK, CT 06475 - PHONE: 860-399-5937 - FAX: 860-399-7784

BJM Pumps, LLC
123 Spencer Plain Road
Old Saybrook, CT 06475, U.S.A.

WARRANTY AND LIMITATION OF LIABILITY

Unless otherwise expressly authorized in writing, specifying a longer or shorter period, BJM Pumps, LLC warrants for a period of eighteen (18) months from the date of shipment from the Point of Shipment, or one (1) year from the date of installation, whichever occurs first, that all products or parts thereof furnished by BJM Pumps, LLC under the brand name **BJM Pumps**, hereinafter referred to as the "Product" are free from defects in materials and workmanship and conform to the applicable specification.

BJM Pumps, LLC's liability for any breach of this warranty shall be limited solely to replacement or repair, at the sole option of BJM Pumps, LLC, of any part or parts of the Product found to be defective during the warranty period, provided the Product is properly installed and is being used as originally intended. Any breach of this warranty must be reported to BJM Pumps, LLC or BJM Pumps, LLC's authorized service representative within the aforementioned warranty period, and defective Product or parts thereof must be shipped to BJM Pumps, LLC or BJM Pumps, LLC's authorized representative, transportation charges prepaid. Any cost associated with removal or installation of a defective Product or part is excluded.

IT IS EXPRESSLY AGREED THAT THIS SHALL BE THE SOLE AND EXCLUSIVE REMEDY OF BJM PUMPS, LLC'S DISTRIBUTORS AND CUSTOMERS. UNDER NO CIRCUMSTANCES SHALL BJM PUMPS, LLC BE LIABLE FOR ANY COSTS, LOSS, EXPENSE, DAMAGES, SPECIAL DAMAGES, INCIDENTAL DAMAGES OR CONSEQUENTIAL DAMAGES ARISING DIRECTLY OR INDIRECTLY FROM THE DESIGN, MANUFACTURE, SALE, USE OR REPAIR OF THE PRODUCT, WHETHER BASED ON WARRANTY, CONTRACT, NEGLIGENCE, OR STRICT LIABILITY. IN NO EVENT WILL LIABILITY EXCEED THE PURCHASE PRICE OF THE PRODUCT.

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BJM Pumps, LLC neither assumes, nor authorizes any person to assume for it, any other warranty obligation in connection with the sale of the Product. This warranty shall not apply to any Product or parts of Product which have (a) been repaired or altered outside of BJM Pumps, LLC's facilities unless such repair was authorized in advance by BJM Pumps, LLC or by its authorized representative; or (b) have been subject to misuse, negligence or accident; or (c) have been used in a manner contrary to BJM Pumps, LLC's instruction.

In any case of products not manufactured and sold under the BJM Pumps, LLC brand name, there is no warranty from BJM Pumps, LLC; however BJM Pumps, LLC will extend any warranty received from BJM Pumps, LLC's supplier of such products.

START-UP REPORT FORM

This form is designed to record the initial installation, and to serve as a guide for troubleshooting at a later date (if needed).

BJM Pumps, LLC
123 Spencer Plain Road
Old Saybrook, CT. 06475

Pump Owner's Name			
Location of Installation			
Person in Charge		Phone( )	
Purchased From			
Model	Serial No		
Voltage	Phase	Hertz	HP
Does impeller turn freely by hand?	☐ Yes ☐ No		
Condition of Equipment	☐ New ☐ Good ☐ Fair ☐ Poor		
Condition of Cable Jacket	☐ New ☐ Good ☐ Fair ☐ Poor		
Rotation: Direction of Impeller Rotation (Use C/W for clockwise, CC/W for counterclockwise): _____ Method used to check rotation (viewed from bottom) _____			
Resistance of cable and Pump Motor (measured at pump control)			
Red-Black_____ ohms	Red-White_____ ohms	White-Black____ohms	
Resistance of ground circuit between control panel and outside of pumps _____ Ohms			
MEG OHM CHECK OF INSULATION Red to ground_____ White to ground_____ Black to ground_____			
Condition of location at start-up	☐ Dry ☐ Wet ☐ Muddy		
Was equipment stored If YES, length of storage:	☐ Yes ☐ No.		
Liquid being pump			
Debris in bottom of station?	☐ Yes ☐ No		
Was debris removed in your	☐ Yes ☐ No		

presence?	
Are guide rails exactly vertical?	☐ Yes ☐ No
Is base elbow installed level?	☐ Yes ☐ No
Liquid level controls: Model_____	
Is control installed away from turbulence?	☐ Yes ☐ No

Operation Check

Tip lowest float (stop float), all pumps should remain off.
Tip second float (and stop float), one pump comes on.
Tip third float (and stop float), both pumps on (alarm on simplex).
Tip fourth float (and stop float), high level alarm on (omit on simplex).

If not on levels controls, describe type of controls	
Does liquid level ever drop below volute top?	☐ Yes ☐ No
Control Panel MFG & model no.	
Number of pumps operated by control panel	

NOTE: At no time should hole be made in top of control panel, unless proper sealing devices are utilized.

Short Circuit protection:	Type:	
Number and size of short circuit device(s)	Amp rating:	
Overload type: Size:	Amp rating:	
Do protective devices comply with pump motor amp rating?	☐ Yes ☐ No	
Are all pump connections tight?	☐ Yes ☐ No	
Is the interior of the panel dry?	☐ Yes ☐ No If No, correct moisture problem.	

Electrical readings

SINGLE PHASE		
Voltage supply at panel line connection, pump off	L1	L2
Voltage supply at panel line connection, pump on	L1	L2
Amperage load connection, pump on	L1	L2

THREE PHASE		
Voltage supply at panel line connection, pump off		
L1-L2	L2-L3	L3-L1

START-UP REPORT FORM

Voltage supply at panel line connection, pump on		
L1-L2	L2-L3	L3-L1
Amperage load connection, pump on		
L1	L2	L3
FINAL CHECK		
Is pump secured properly?	☐ Yes ☐ No	
Was pump checked for leaks?	☐ Yes ☐ No	
Do check valves operate properly?	☐ Yes ☐ No	
Flow: Does station appear to operate at proper rate?	☐ Yes ☐ No	
Noise level:	Acceptable ☐	Unacceptable ☐
Comments:		
Describe and equipment difficulties during start-up		
Installed by: Company: _____ Person: _____ Date: _____		
Maintained by: Company: _____ Person: _____		
Date and time of start-up_____ Present at start-up: ( ) Engineer's name_____ ( )Contractor's name_____ ( ) Operator's name_____ ( ) others_____		

NOTES:

BJM Pumps, LLC
123 Spencer Plain Road • PO Box 1138 • Old Saybrook, CT 06475, USA
• Phone: (860) 399-5937 • Fax: (860) 399-7784
Email: sales@bjmpumps.com • Web Site: www.bjmpumps.com

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