



Installation and Operating Instructions

SJE VERTICALMASTER® PUMP SWITCH U.S. Patent No. 5,155,311 & Canadian Patent Pending.

SJE VERTICALMASTER® II PUMP SWITCH U.S. Patent No. 6,140,925 & Foreign Patents Pending.

SJE-Rhombus® pump switches provide automatic control of pumps in sump, effluent, and non-potable water applications.

SPECIFICATIONS

This equipment is suitable for Category II installations, rated to 52°C, and protected by double insulation.
Approved for use in non-potable water.



SJE VERTICALMASTER® PUMP SWITCH

CABLE: Flexible 16 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

MOUNTING BRACKET & HOSE CLAMP: Stainless steel

LIFT ROD: Acetal

LIFT ROD STOP PIN: Nylon

FLOAT STOP GROMMET: Neoprene

SWITCH AND FLOAT HOUSING: high impact, corrosion resistant, PVC

Switch and Float Overall: 30.5 cm high x 12.7 cm x 7.6 cm wide

Switch Housing: 5 cm high x 7.1 cm wide, has IPX7 protection

Float Housing: 6.4 cm high x 6.9 cm wide

ELECTRICAL:

120 VAC Rated Voltage:

Maximum Pump Running Current: 13 amps

Maximum Pump Starting Current: 60 amps

Frequency: 50/60 Hz

230 VAC Rated Voltage:

Maximum Pump Running Current: 13 amps

Maximum Pump Starting Current: 60 amps

Frequency: 50/60 Hz

Switch must be used with pumps that provide integral thermal overload protection. Switch is not recommended for controlling electric loads less than 2A, 12 VAC or non-arcing electric loads.

SJE VERTICALMASTER® II PUMP SWITCH

CABLE:

Flexible 18 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

MOUNTING BRACKET & HOSE CLAMP: Stainless steel

LIFT ROD: Acetal

LIFT ROD STOP PIN: Nylon

FLOAT STOP GROMMET: Neoprene

SWITCH AND FLOAT HOUSING: high impact, corrosion resistant, PVC

Switch and Float Overall: 30.5 cm high x 12.7 cm x 7.6 cm wide

Switch Housing: 5 cm high x 7.1 cm wide, has IPX7 protection

Float Housing: 6.4 cm high x 6.9 cm wide

ELECTRICAL:

125 VAC Rated Voltage:

Maximum Pump Running Current: 10 amps

Maximum Pump Starting Current: 60 amps

Frequency: 50/60 Hz

250 VAC Rated Voltage:

Maximum Pump Running Current: 10 amps

Maximum Pump Starting Current: 60 amps

Frequency: 50/60 Hz

Switch must be used with pumps that provide integral thermal overload protection. Switch is not recommended for controlling electric loads less than 100 miliamps, 12 VAC or non-arcing electric loads.

SJE-RHOMBUS® FIVE-YEAR LIMITED WARRANTY

Five-Year Limited Warranty.

For complete terms and conditions, please visit www.sjerrhombus.com.

⚠ WARNING**ELECTRICAL SHOCK HAZARD**

Disconnect power before installing or servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.

**⚠ WARNING****EXPLOSION OR FIRE HAZARD**

Do not use with flammable liquids. Install in accordance with ANSI/NFPA 70. Suitable for usage with intrinsically safe circuit extensions as defined by UL 698A.



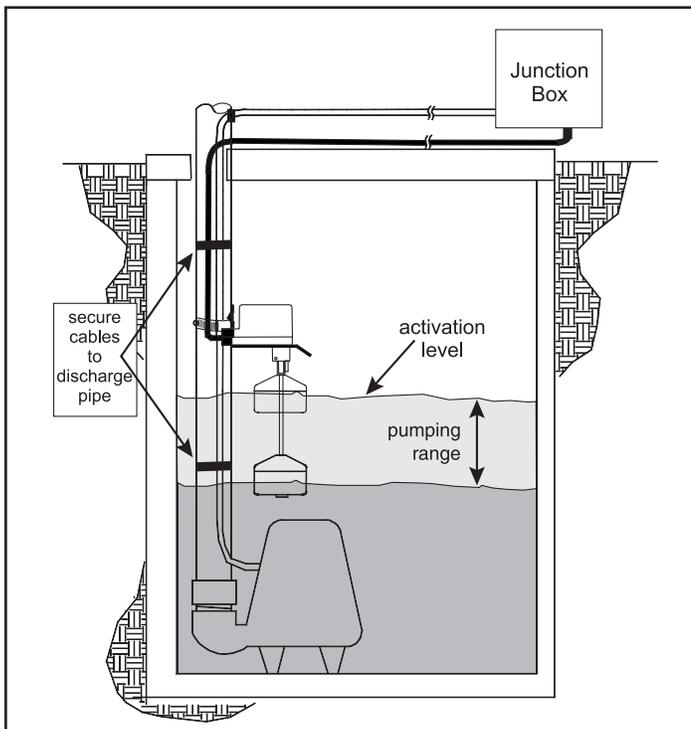
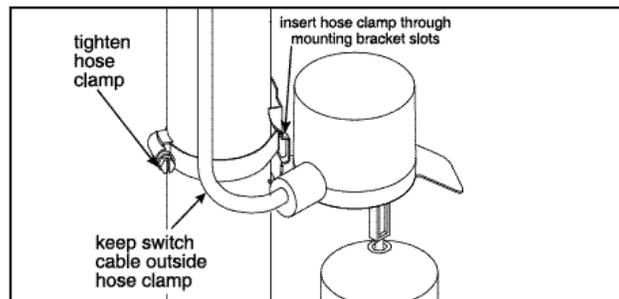
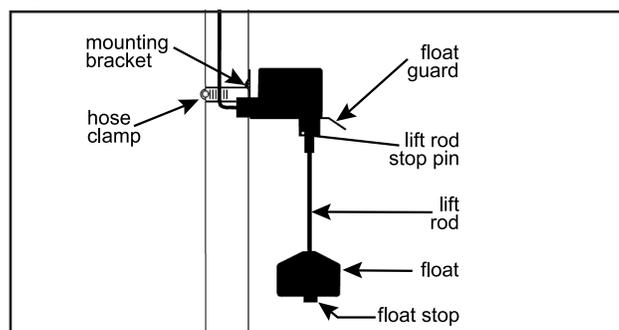
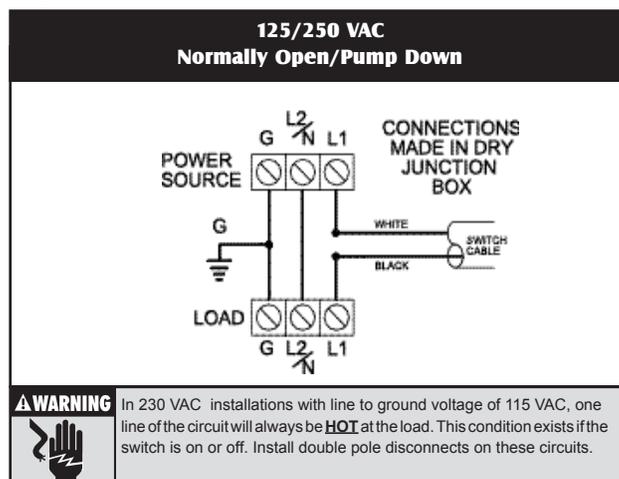
Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSI/NFPA 70 so as to prevent moisture from entering or accumulating within boxes, conduit bodies, fittings, float housing, or cable.

For detailed specifications on this product, or for the complete line of SJE-Rhombus® panel, alarm, and switch products, visit our web site at www.sjerhombus.com.

INSTALLING THE SWITCH

Warning: Do not install switch in direct line of incoming liquid.

1. Determine desired activation level and pumping range as shown in Figure A. Pumping range can be adjusted by moving the float stop up or down the rod.
2. Insert hose clamp through slots in mounting bracket as shown in Figure B.
3. Position hose clamp around discharge pipe with bracket gripping tabs against pipe. Cable should remain outside of hose clamp.
4. Tighten the hose clamp securely.
5. Secure pump cable and switch cable to discharge pipe as shown in Figure A with wire ties (not supplied).
6. Wire switch as shown in Figure D.
7. Check the installation. Verify that the float is free to move and activate the switch. Allow system to cycle to ensure proper operation.

Figure A**Figure B****Figure C****Figure D****PREVENTATIVE MAINTENANCE**

- Periodically inspect the product. Check that the cable has not become worn or that the housing has not been damaged so as to impair the protection of the product. Replace the product immediately if any damage is found or suspected.
- Periodically check to see that the float and rod are free to move and operate the switch.
- Use only SJE-Rhombus® replacement parts.



22650 County Highway 6 ■ P.O. Box 1708 ■ Detroit Lakes, Minnesota 56502 USA
1-888-DIAL-SJE (1-888-342-5753) ■ Phone: 218-847-1317 ■ Fax: 218-847-4617 ■ E-mail: sje@sjerhombus.com