# **SJE Rhombus** SJE HiTempMaster<sup>™</sup> Pump Switch Installation Instructions

Mechanically-activated, wide-angle pump switches that provide automatic control of pumps in sump applications up to 200°F (93°C).

The SJE HiTempMaster<sup>™</sup> pump switch consists of a float housing with a twin wall design (patent pending). The switch is not sensitive to rotation or turbulence, allowing it to be used in both calm and turbulent applications.

### SJE HI TEMP MASTER™ Mechanically activated pump and control switch for: Water Sewage applications Tether 9 15 3.5 6 12 18 Length min. Pumping 8 12 17 23 30 36 Range

NOTE: Pumping range listed above is a general guide. Actual pumping range will increase slightly based on the temperature of the water being controlled. Watch several cycles of operation to assure that the pumping range is accurate for your installation.

### 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 is free to move and operate the switch.
- Use only SJE-Rhombus<sup>®</sup> replacement parts.

# SJE-RHOMBUS® FIVE-YEAR LIMITED WARRANTY

**SJE-RHOMBUS**<sup>®</sup> warrants to the original consumer that this product shall be free of manufacturing defects for five years after the date of consumer purchase. During that time period and subject to the conditions set forth below, **SJE-RHOMBUS**<sup>®</sup> will repair or replace, for the original consumer, any component which proves to be defective due to defective materials or workmanship of **SJE-RHOMBUS**<sup>®</sup>.

### THIS EXPRESS WARRANTY DOES NOT APPLY TO THE MOTOR START KIT COMPONENT. SJE-RHOMBUS® MAKES NO WARRANTIES OF ANY TYPE WITH RESPECT TO THE MOTOR START KIT.

### ELECTRICAL WIRING AND SERVICING OF THIS PRODUCT MUST BE PERFORMED BY A LICENSED ELECTRICIAN.

THIS WARRANTY DOES NOT APPLY: (A) to damage due to lightning or conditions beyond the control of SJE-RHOMBUS<sup>®</sup>; (B) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with printed instructions provided; (C) to failures resulting from abuse, misuse, accident, or negligence; (D) to units which are not installed in accordance with applicable local codes, ordinances, or accepted trade practices, and (E) to units repaired and/or modified without prior authorization from SJE-RHOMBUS<sup>®</sup>. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**TO OBTAIN WARRANTY SERVICE:** The consumer shall assume all responsibility and expense for removal, reinstallation, and freight. Any item to be repaired or replaced under this warranty must be returned to **SJE-RHOMBUS**<sup>®</sup>, or such place as designated by **SJE-RHOMBUS**<sup>®</sup>.

ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. SJE-RHOMBUS® SHALL NOT, IN ANY MANNER, BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES AS A RESULT OF A BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.

## NOTICE!

Products returned must be cleaned, sanitized, or decontaminated as necessary prior to shipment to ensure that employees will not be exposed to health hazards in handling said material. All applicable laws and regulations shall apply.

#### **ELECTRICAL SHOCK HAZARD** WARNING

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.



**EXPLOSION OR FIRE HAZARD** Do not use this product with flammable liquids. Do not install in hazardous locations as defined by National Electrical Code, ANSI/NFPA 70.

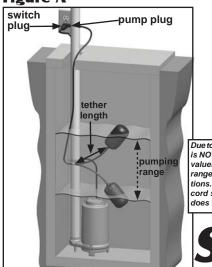
Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSI/NFPA 70 so as to 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.

# **MOUNTING THE SWITCH**

- WARNING: The installation site may be HOT. Assure that the installation site is cool to the touch prior to installing to avoid being burned.
- Determine the required cord 1. tether length according to product specifications on the front page and as shown in Figure A.
- 2. Refer to Figure B. A.)Place clamp onto cord. B.)Place the clamp onto threaded stud. C.)Place the locking nut onto threaded stud and tighten. D.)Thread band of hose clamp through slots of mounting clip.
- Locate clamp assembly at desired 3. activation level and secure the hose clamp to the discharge pipe as shown in Figure B. Note: Do not install cord under hose clamp.
- 4. Tighten the hose clamp using screwdriver. Over tightening may result in damage to the clamp components. Make sure the float cable is not allowed to touch the excess hose clamp band during operation.
- Follow direct wire or piggy-back 5. plug instructions for further installation.
- Note: All hose clamp components are made of 18-8 stainless steel material. See your SJE-Rhombus® supplier for replacements.

# Figure A



# **PIGGY-BACK PLUG INSTALL**

- Electrical outlet must not be located in pump chamber.
- Electrical outlet voltage, piggy-back plug voltage, and pump voltage must match.
- 1. Follow steps 1 through 4 of "Mounting The Switch."
- 2. Insert switch's piggy-back plug into outlet as shown in Figure A.
- 3. Plug pump into piggy-back plug as shown in Figure A.
- 4. Check installation. Allow system to cycle to insure proper operation.

# **Figure B**

# **DIRECT WIRE INSTALL**

- 1. Follow steps 1 through 4 of "Mounting The Switch."
- Wire switch as shown in Figure C. 2.
- 3. Check installation. Allow system to cycle to insure proper operation.

L2 1 L1

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POWER SOURCE

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WARNING

CONNECTIONS

MADE IN DRY

JUNCTION

BOX

In 230 VAC installations, one

side of the line going to the load

is always HOT. This condition exists if the switch is on or off.

Install double pole disconnect on

all 230 VAC circuits.

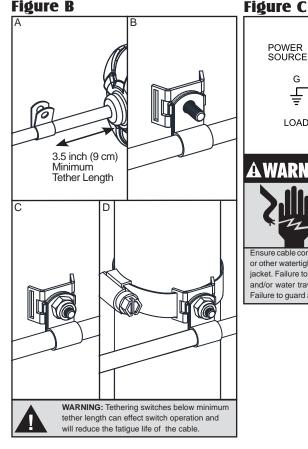
Ensure cable connections are performed in a dry junction box

or other watertight seal that seals both conductors and cable jacket. Failure to do so could result in electrical shock hazard

and/or water traveling down cable and entering the switch.

Failure to guard against this may effect switch performance.

SWITCH CABLE



Due to weight of cable, pumping range above horizontal is NOT equal to pumping range below horizontal. Use values published on front page as a guide. Pumping ranges are based on testing in non-turbulent condi tions. Range may vary due to water temperature and cord shape. Note: As the tether length increases, so does the variance of the pumping range.



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