

JB Plugger Junction Box Installation Instructions

This junction box provides a convenient location to connect all wiring required for a typical pumping station installation. The junction box employs a receptacle to accept a 120 VAC or 230 VAC piggyback plug and a pump plug.

The JB Plugger also features an easy-to-use terminal strip which can be used for connecting an alarm system in the junction box.

The JB Plugger package ensures a liquid-tight seal and strain relief for the cable entering the junction box from the pumping station.

JB PLUGGER JUNCTION BOX

- NEMA 4X enclosure rated for outdoor use
- Hinged cover for convenience
- Receptacle for pump & pump switch (120V or 230V)
- Custom engineered liquid-tight cord seal
- Strain relief for pump and float cords provided by cord seal
- Terminal strip for use with alarm system
- Separate alarm and pump control circuitry provided by terminal strip
- Dual safety certification for the United States and Canada
- Three year limited warranty



PREVENTIVE 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 floats are free to move and operate the pump and alarm.

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.

⚠ 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 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 Liberty Pumps control panel, alarm, and switch products, visit us at www.LibertyPumps.com.

INSTALLING THE JB PLUGGER JUNCTION BOX

- Determine where the junction box will be mounted on the riser. Mount the junction box so the base of the enclosure will be at grade once backfilled as shown in Figure A.

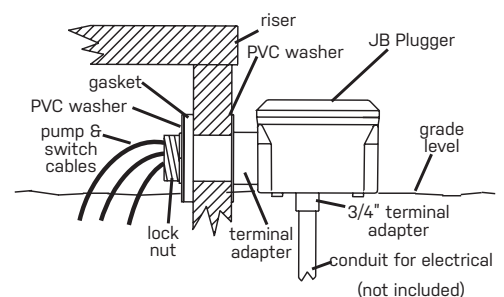
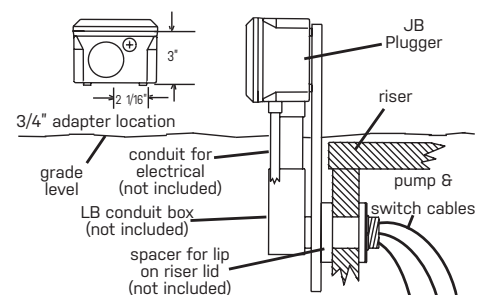
NOTE: Bottom mounting to the 3/4" terminal adapter may be preferred in some instances as shown in Figure B.
- Access the riser by providing a 2-3/8" access hole through the riser.
- Place the 6" threaded conduit into the terminal adapter that is already installed in the junction box. Slip one PVC washer over the conduit and slide the conduit through the riser wall.
- After installation through the riser, slip the 1/2" gasket and the second PVC washer over the conduit. Determine if the threads provided will be adequate to tighten the assembly to the riser. If threading is not adequate, remove the assembly and shorten the conduit until threading is adequate.

NOTE: The 1/2" gasket should compress approximately 1/4" when lock nut is tightened.
- Repeat Steps 3 and 4 until desired length is achieved. With PVC solvent, weld the conduit into the terminal adapter.
- Mount the 3/4" terminal adapter to the bottom of the junction box with the O-ring and lock nut provided. A 1-1/16" hole should be provided for the adapter.
- Mount the assembly through the riser as described in Steps 3 and 4. Using the 2" lock nut, compress the gasket and riser to secure the junction box.
- Bring the wiring for the pump power and alarm junction through the 3/4" terminal adapter. Connect the conductors for the pump to the terminal block; connect N (neutral) to position 1, and L1 (line) to position 2. Connect L2 to position 1 for 230 VAC installations.

NOTE: Overload protection, branch circuit protection and main disconnect provided by others.

Connect the conductors for the alarm circuit to positions 3 and 4.

NOTE: If an alarm system is not used, plug the third open position in the cord seal with the provided PVC plug.
- Pass the piggyback plug, pump plug and alarm float cables through the 2" conduit.
- With the three position cord seal, route the three cables through the seal, leaving approximately 8" of cable to work with. Insert the cord seal into the panel terminal adapter and tighten the hex nut until adequate strain relief is achieved.
- Gather all ground wires, including grounding conductor on the cord seal, and washer. Route and secure to ground terminal.
- Connect the conductors from the alarm float switch to positions 3 and 4. Coil remaining cable into the junction box.
- Seal the 3/4" terminal adapter with a conduit sealing compound.
- Plug the piggyback plug and pump plug into the receptacle.
- Secure the junction box cover using the two preinstalled screws.
- Turn on power.
- Check the installation by manually tipping the floats on the pump and then the alarm float.
- Test the unit periodically to insure proper operation.

Figure A**Figure B**

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