

Position-Sensitive Pan/Sump Sensor

Installation Guide

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DAMAGE CLAIMS / LOST EQUIPMENT

Thoroughly examine all components and units as soon as they are received. If any cartons are damaged or missing, write a complete and detailed description of the damage or shortage on the face of the freight bill. The carrier's agent must verify the inspection and sign the description. Refuse only the damaged product, not the entire shipment.

VEEDER-ROOT'S PREFERRED CARRIER

1. Contact VR Customer Service at 800-873-3313 with the specific part numbers and quantities that were missing or received damaged.
2. Fax signed Bill of Lading (BOL) to VR Customer Service at 800-234-5350.
3. VR will file the claim with the carrier and replace the damaged/missing product at no charge to the customer. Customer Service will work with production facility to have the replacement product shipped as soon as possible.

CUSTOMER'S PREFERRED CARRIER

1. It is the customer's responsibility to file a claim with their carrier.
2. Customer may submit a replacement purchase order. Customer is responsible for all charges and freight associated with replacement order. Customer Service will work with production facility to have the replacement product shipped as soon as possible.
3. If "lost" equipment is delivered at a later date and is not needed, VR will allow a Return to Stock without a restocking fee.
4. VR will NOT be responsible for any compensation when a customer chooses their own carrier.

RETURN SHIPPING

For the parts return procedure, please follow the appropriate instructions in the "General Returned Goods Policy" and "Parts Return" pages in the "Policies and Literature" section of the Veeder-Root **North American Environmental Products** price list.

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Introduction

This manual contains procedures for the installation or replacement of the Veeder-Root Position-Sensitive Pan/Sump Sensor. This manual assumes all preliminary site preparation has been completed, and that field wiring from the console to the pan/sump junction box is in place.

Following sensor installation, you will need to setup the console to monitor the sensor.

Contractor Certification Requirements

Veeder-Root requires the following minimum training certifications for contractors who will install and setup the equipment discussed in this manual:

Level 1 Contractors holding valid Level 1 Certification are approved to perform wiring and conduit routing, equipment mounting, probe and sensor installation, tank and line preparation, and line leak detector installation.

Level 2/3 Contractors holding valid Level 2 or 3 Certifications are approved to perform installation checkout, startup, programming and operations training, troubleshooting and servicing for all Veeder-Root Tank Monitoring Systems, including Line Leak Detection and associated accessories.








Warranty Registrations may only be submitted by selected Distributors.


Related Manuals

- 576013-879 TLS-3XX Site Prep and Installation Manual
- 577013-879 TLS-4XX Site Prep and Installation Manual
- 576013-623 TLS-3XX System Setup Manual

Safety Precautions

The following safety symbols are used throughout this manual to alert you to important safety hazards and precautions.

 <p>Explosive Fuels and their vapors are extremely explosive if ignited.</p>	 <p>Flammable Fuels and their vapors are extremely flammable.</p>
 <p>Electricity High voltage exists in, and is supplied to, the device. A potential shock hazard exists.</p>	 <p>Turn Power Off Live power to a device creates a potential shock hazard. Turn Off power to the device and associated accessories when servicing the unit.</p>
 <p>Wear Eye Protection Fuel spray from residual pressure in the lines can cause serious eye injuries. Always wear eye protection.</p>	 <p>Injury Careless or improper handling of materials can result in bodily injury.</p>
 <p>Gloves Wear gloves to protect hands from irritation or injury.</p>	

⚠ WARNING	
	<p>This product is to be installed in systems operating near locations where highly combustible fuels or vapors may be present.</p> <p>Fire or explosion resulting in serious injury or death could result if the equipment is improperly installed or modified. Serious contamination of the environment may also occur.</p> <ol style="list-style-type: none"> 1. Read and follow all instructions in this manual, including all safety warnings. 2. Comply with all applicable codes including: the National Electrical Code; federal, state, and local codes; and other applicable safety codes. 3. Substitution of components may impair intrinsic safety. 4. Do not use this component for other systems aside from the TLS Console. Install only as described in this manual or you will void all warranties connected with this product.

Equipment Needed for Installation

1. Position-Sensitive Sensor - Form No. 794380-323, includes 12-foot cable w/ connector one end.
2. Wiring Kit - Part No. 312020-990 (Table 1).

Table 1. Wiring Kit - Part No. 312020-990

Item	Description	Part No.	Qty.
1	Wire Nut	576008-461	2
2	Sealing Pack	514100-304	1
3	Cord Grip	331028-011	1
4	Tie Wrap	510901-337	2

3. Optional - Universal Sensor Mounting kit - Part No. 330020-012.
4. Optional - 20-foot cable w/ connector one end - Part No. 331102-001

Installation

Installation Requirements

1. The sensor should rest in the lowest point of the pan or sump and completely compress the position indicator or you will have a 'Sensor Out' alarm (see example illustrations).
2. The sensor should be mounted in a true vertical position to ensure proper operation of the sensor.
3. The sensor should be mounted such that you can pull the sensor straight out of the pan/sump if service is required.

Installation Procedure

IMPORTANT! Do not install the sensor if there is any liquid in the dispenser pan. Failure to comply can result in equipment damage or undetected potential environmental and health hazards.



1. Turn OFF power to the TLS Console.
2. Make sure no liquid exists in the pan/sump.

SENSOR INSTALLATION

Figure 1 through Figure 3 show sensor installation examples using rigid conduit to the console. However, direct burial cable may have been used from the junction box to the console. Also, the examples make use of the optional Universal Sensor Mounting kit. Other mounting methods, such as a tube in which the sensor is inserted, are acceptable if the installation requirements noted above are met.

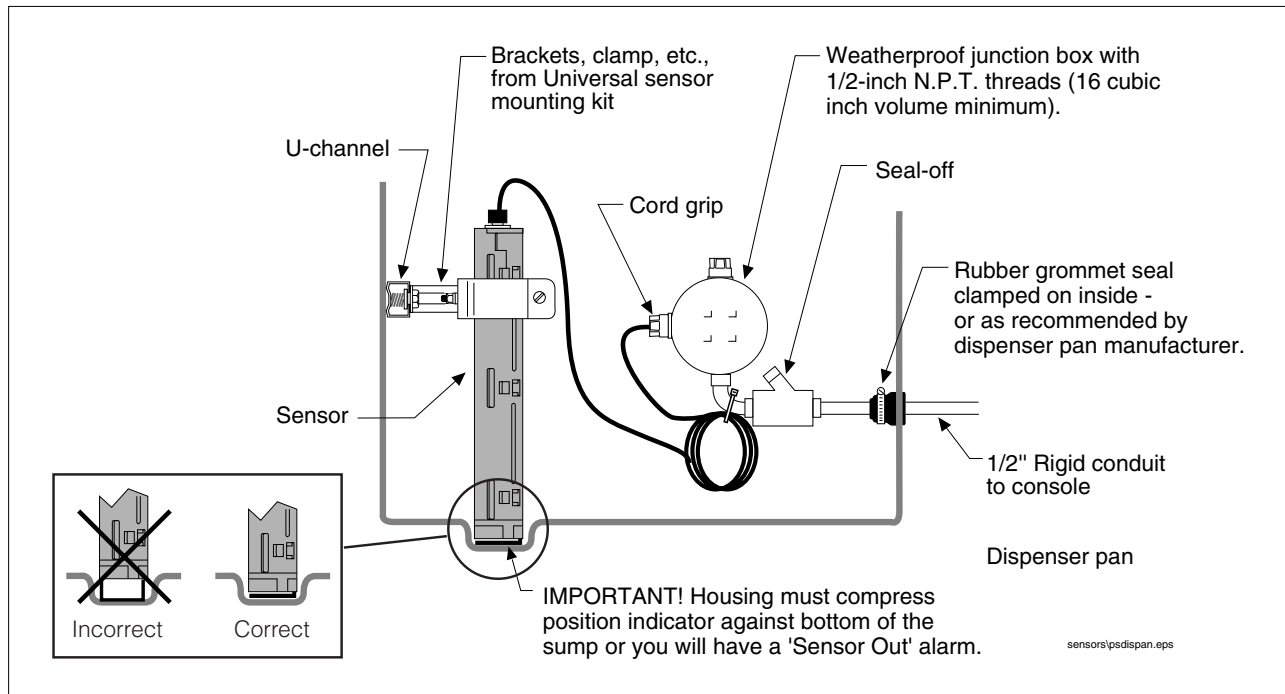


Figure 1. Example Dispenser Pan Installation

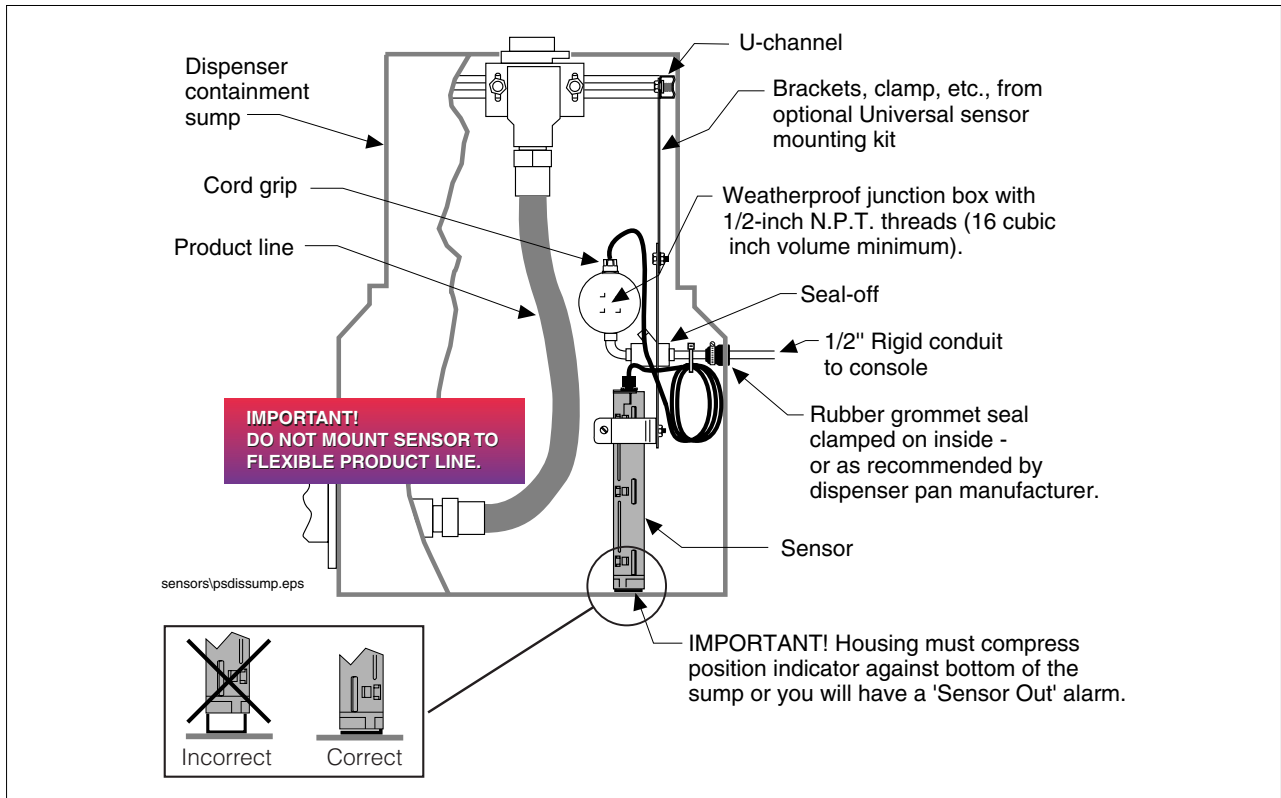


Figure 2. Example Dispenser Containment Sump Installation

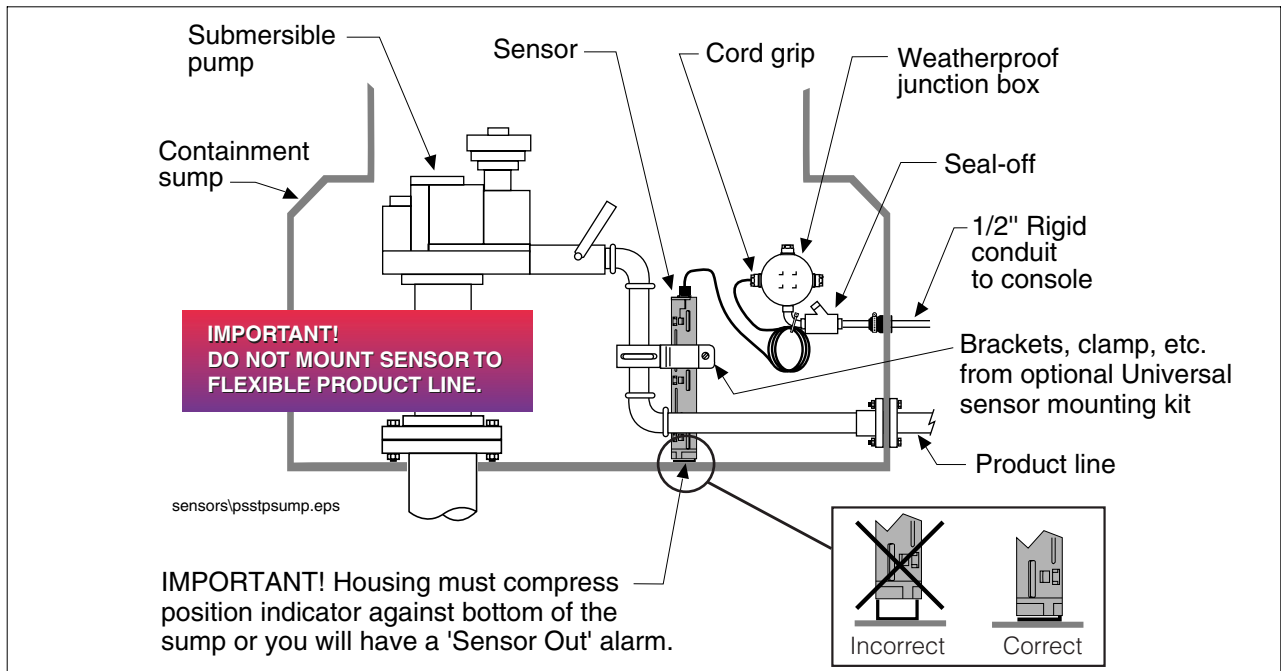


Figure 3. Example STP Containment Sump Installation

SENSOR WIRING

1. Screw the connector on the end of the sensor cable onto the plug in the top of the sensor housing.
2. Install the Cord Grip supplied with the wiring kit in the pan/sump junction box in which the field wiring from the console terminates.
3. Coil up the excess cable and tie wrap it out of the way. Feed the two-lead end of the sensor cable through the cord grip in the junction box. Tighten the cord grip nut to ensure a watertight seal at the cable entry.
4. Using wire nuts, connect the two-wire cable to the field wires from the console as shown in Figure 4. and seal connections in epoxy pack as shown in Figure 5.
5. Push the epoxy sealed bag into the junction box. Replace and tighten the junction box cover.

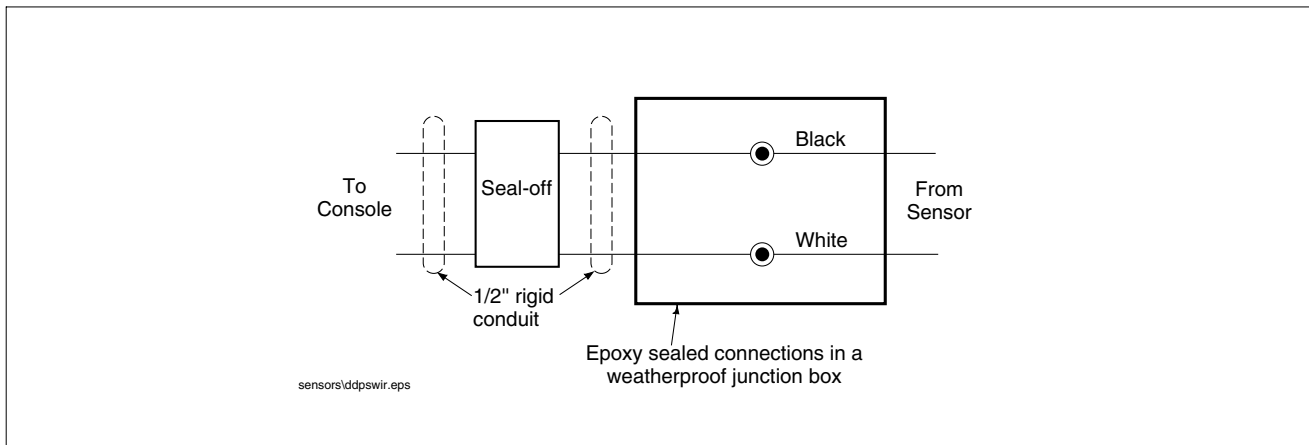


Figure 4. Sensor Wiring Connections (No Polarity)

SENSOR SETUP NOTES

To set up the console to monitor Position-Sensitive Sensors, select **TRI-STATE (SINGLE FLOAT)** for **LIQUID SENSOR TYPE**.

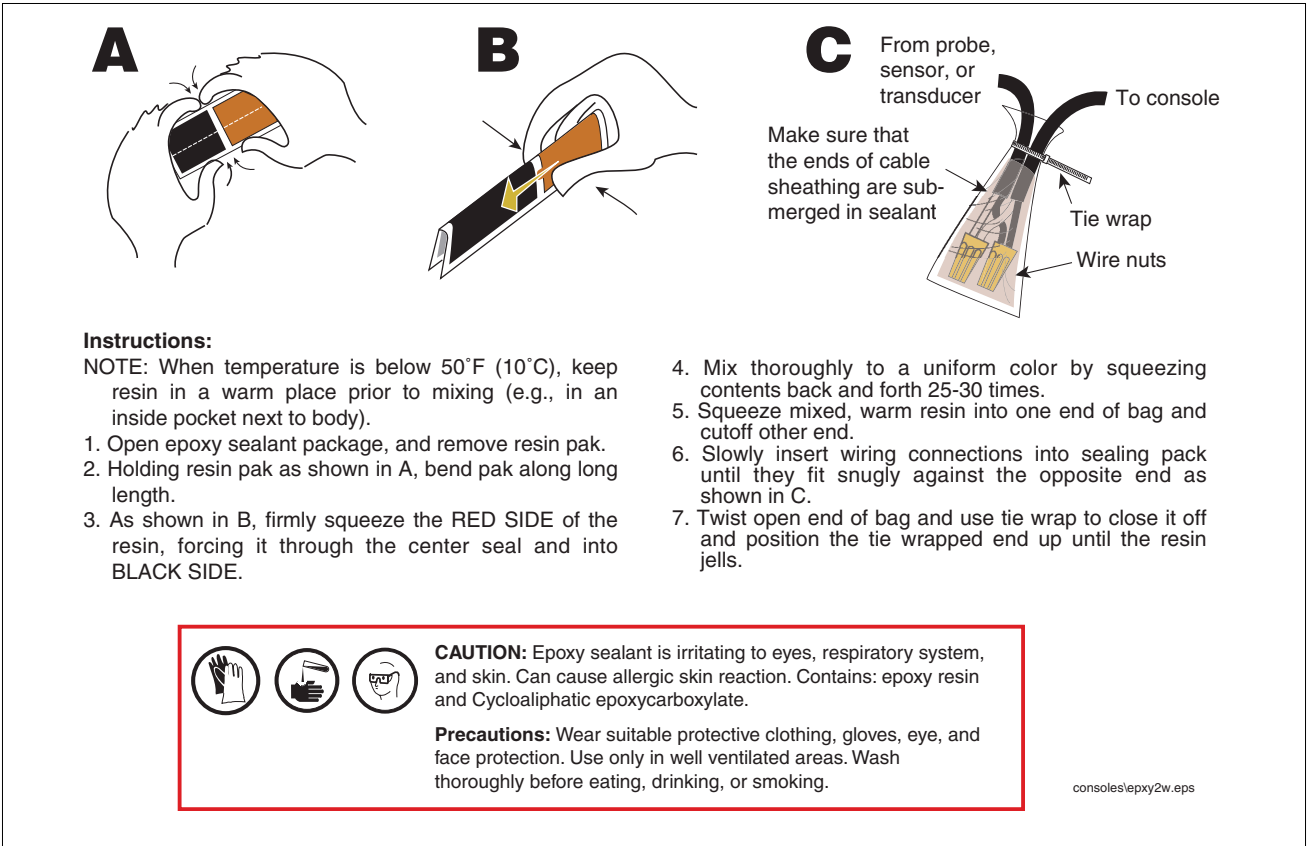


Figure 5. Epoxy Sealing Two-Wire Connections

