Addendum

This is an addendum for the *Dispenser Pan Sensors and Containment Sump Sensors for TLS Consoles* Installation Manual (Manual Number 576013-306).

Installing the Fiberglass Trench Liner Sensor

This section describes the hardware, requirements, and procedures for installing the Solid-State Discriminating Fiberglass Trench Liner Sensor.

Installation Hardware

The Fiberglass Trench Liner Sensor comes with the following installation hardware:

❑ One 12-foot long cable (including connector) (Part No. 331103-002)

Important ☞ *If a longer cable is required, you may order a 20-foot long cable (Part No. 331103-001).*

❑ 1 Installation Kit (Part No. 330020-287)
❑ 1 Installation Addendum

Installation Requirements

The Fiberglass Trench Liner Sensor should rest at the lowest point of the fibertrench system. This point should be in the sump if there is a sump present.

Sensor-to-Console Wiring

Wire Type

In order to ensure the best operating systems available, Veeder-Root REQUIRES the use of shielded cable for all probes and sensors regardless of conduit material or application. In these installations, shielded cable must be rated less than 100 picofarad per foot and be manufactured with a material suitable for the environment, such as Carol™ C2534 or Belden™ 88760 or 8760.

Important ☞ *When using bonded metal conduit, the wiring MUST be contained in bonded metal conduit the ENTIRE way to the console, including wiring located indoors. Bonded conduit means that the metallic sections of conduit are permanently joined to form an electrically conductive path that will assure electrical continuity, and that the conduit has the capacity to conduct safely, any current likely to be imposed.*

V R VEEDER-ROOT
Environmental Products

Installation Procedures

⚠ WARNING

This device is installed in equipment where potentially lethal voltages may exist.

Electrical shock resulting in serious injury or death may result if power is on during installation and the device is improperly installed.

Before installing this device, turn off power to the system.

To install the Sensor:

1. Turn OFF power to the TLS console.

2. Inspect for any liquid in trench liner prior to installation.
   (Liquid levels at or above 13.3" will activate alarm with 794380-361. See Figure 2)
   (Liquid levels at or above 3.0" will activate alarm with 794380-362. See Figure 1)

3. Lower the sensor into the Monitoring Well.

Important ☞ Refer to Figure 1, "Typical Fiberglass Trench Liner Sensor Installation without Sump" and Figure 2, "Typical Fiberglass Trench Liner Sensor Installation with Sump"
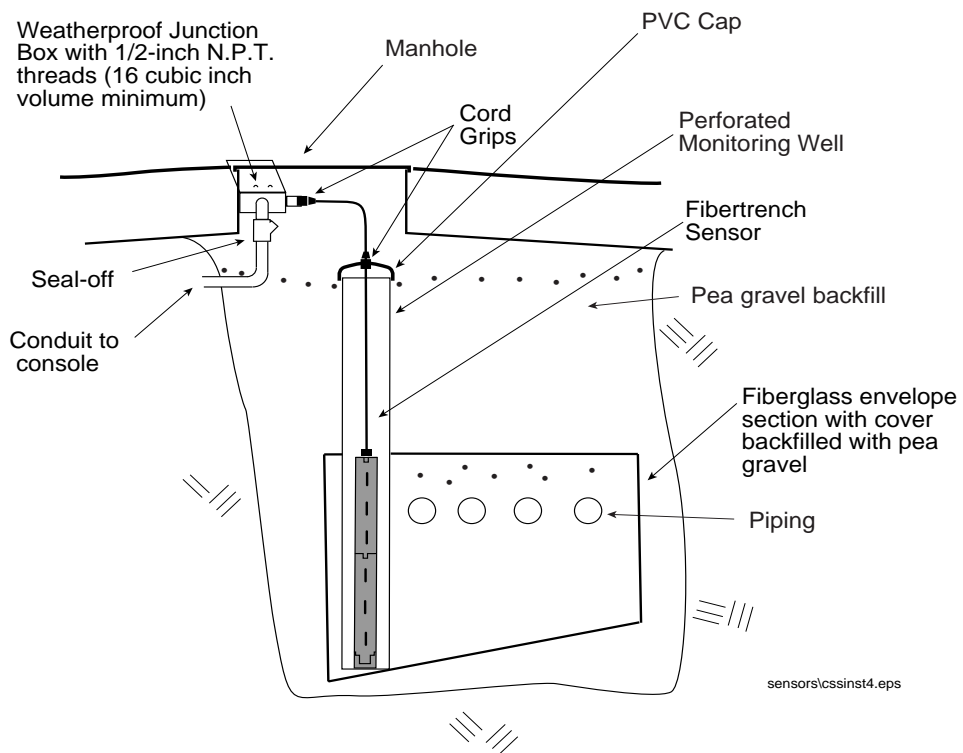
Figure 1. Typical Fiberglass Trench Liner Sensor Installation Without Sump
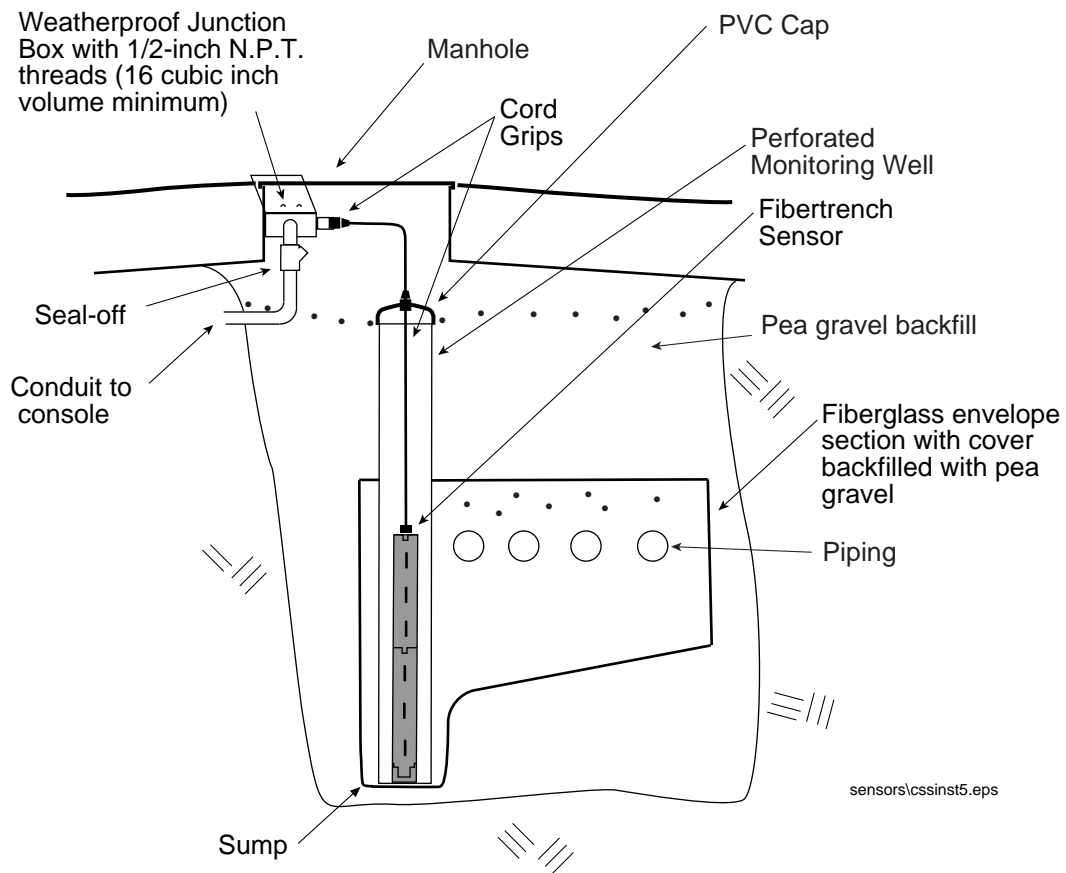using 794380-362

Figure 2. Typical Fiberglass Trench Liner Sensor Installation with Sump
using 794380-361.

4. Install the Cord Grip (Part No. 331028-011), supplied with the wiring kit, in the PVC cap.

5. Feed the cable through the cord grip on the cap.

6. Tighten the cord grip nut to ensure a watertight seal.

7. Install the Cord Grip (Part No. 331028-011), supplied with the wiring kit, on the junction box.

8. Feed the cable through the cord grip on the junction box.

9. Tighten the cord grip nut to ensure a watertight seal at the cable entry.

10. Using wire nuts, connect the three-wire cable to the field wires in the sensor junction box. Be sure to observe color codes to maintain proper polarity hookup with the Type B Interface Module (Part No. 847490-106) in the TLS-350 or TLS-350R console.
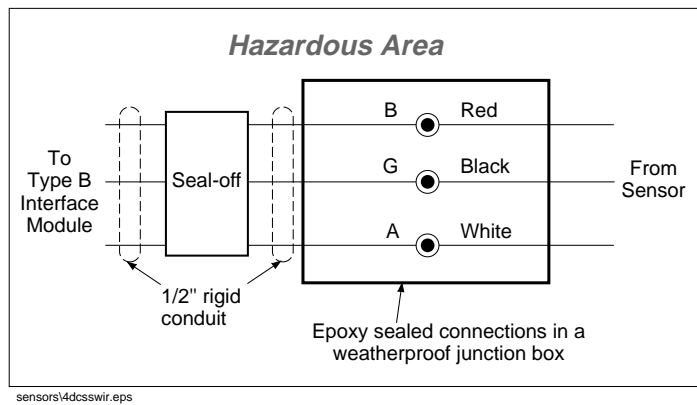
Important ☞   *Refer to Figure 3 below.*

Hazardous Area

To
Type B
Interface
Module

Seal-off

B ● Red

G ● Black

A ● White

From
Sensor

1/2" rigid
conduit

Epoxy sealed connections in a
weatherproof junction box

sensors\4dcsswir.eps

Figure 3.   Three-Wire (Type B Interface) Sensor Wiring Installation Diagram

Important ☞   *Refer to Figure 4: "Epoxy Sealant for Three-Wire Connections" below.*

Using thumbs and forefingers as
shown, bend epoxy sealant package
back and forth until seal between
compound sections has broken. Then
using fingers squeeze package to mix
sealant.

When mixture becomes well blended
and warm, cut off one end of package
and insert the wire nuts and wires
down into the sealant mixture. Use tie
wrap to close up package around
wires.

To sensor

To console

Make sure that end of
sensor cable sheathing
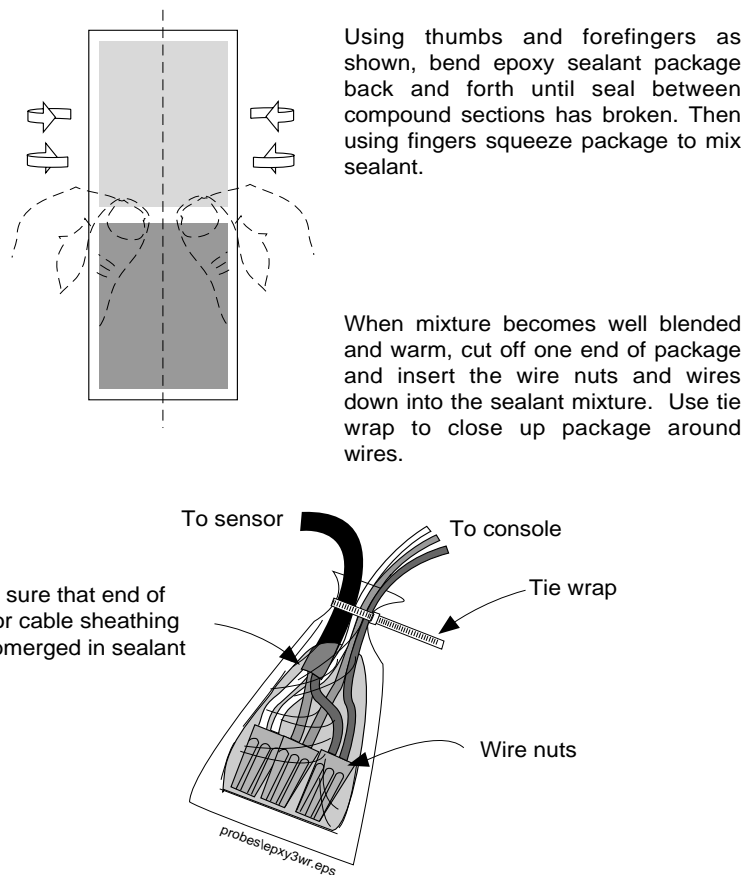is submerged in sealant

Tie wrap

Wire nuts

probes\epxy3wr.eps

Figure 4.   Epoxy Sealant for Three-Wire Connections