Fiberglass Interstitial Sensor Installation Kit

User's Manual

VEEDER-ROOT

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Contact TLS Systems Technical Support for additional troubleshooting information at 800-323-1799.

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 must be notified of any damages and/or shortages within 30 days of receipt of the shipment, as stated in our Terms and Conditions.

VEEDER-ROOT'S PREFERRED CARRIER

1. Contact Veeder-Root 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 Veeder-Root Customer Service at 800-234-5350.

3. Veeder-Root 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, Veeder-Root will allow a Return to Stock without a restocking fee.

4. Veeder-Root 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" pages in the "Policies and Literature" section of the Veeder-Root **North American Environmental Products** price list. Veeder-Root will not accept any return product without a Return Goods Authorization (RGA) number clearly printed on the outside of the package.

Introduction

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This manual contains instructions for attaching the Veeder-Root Calibrated Sensor Positioning Strip to an interstitial liquid sensor and installing the sensor/strip assembly in the annular space of a fiberglass tank.

Instructions for completing the sensor's installation are discussed in the manual shipped with 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:

Installer Certification (Level 1): Contractors holding valid Installer Certification are approved to perform wiring and conduit routing; equipment mounting; probe, sensor and carbon canister vapor polisher installation; wireless equipment installation; tank and line preparation; and line leak detector installation.

Technician Certification (Level 2/3): Contractors holding valid Technician Certifications are approved to perform installation checkout, startup, programming and operations training, system tests, troubleshooting and servicing for all Veeder-Root Series Tank Monitoring Systems, including Line Leak Detection. In addition, Contractors with the following sub-certification designations are approved to perform installation checkout, startup, programming, system tests, troubleshooting, service techniques and operations training on the designated system.
- Wireless 2
- Tall Tank

Warranty Registrations may only be submitted by selected Distributors.

Related Manuals

576013-617   Interstitial Liquid Sensor - Fiberglass Tanks Installation Guide

Safety Precautions

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

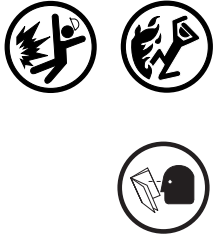|	
EXPLOSIVE Fuels and their vapors are extremely explosive if ignited.	**FLAMMABLE** Fuels and their vapors are extremely flammable.
READ ALL RELATED MANUALS Knowledge of all related procedures before you begin work is important. Read and understand all manuals thoroughly. If you do not understand a procedure, ask someone who does.	

⚠ WARNING

This product is to be installed and operated in the highly combustible environment of a gasoline storage tank where flammable liquids and explosive vapors may be present.

FAILURE TO COMPLY WITH THE FOLLOWING WARNINGS AND SAFETY PRECAUTIONS COULD CAUSE DAMAGE TO PROPERTY, ENVIRONMENT, RESULTING IN SERIOUS INJURY OR DEATH.

Leaking underground tanks can create serious environmental and health hazards. It is your responsibility to install this product in accordance with the instructions and warnings found in this manual. Failure to do so could result in undetected potential environmental and health hazards.

Failure to install this product in accordance with its instructions and warnings will result in voiding of all warranties connected with this product.

Installation Kit

Table 1 lists the components in the Calibrated Sensor Positioning Strip kit.

Table 1.   **Interstitial Sensor Installation Kit (P/N 330020-436)**

Item	Description	Part No.	Qty.
1	Calibrated Sensor Positioning Strip - 1/2" wide, 528" long	331969-001	1
2	Tie wrap	510901-337	4
3	Installation manual	577013-802	1

How the Strip Positions the Sensor in the Annulus

Select an out-of-the-way spot at the site where you can unroll the Calibrated Sensor Positioning Strip from the kit (the strip is 44 feet long). Notice that there are 10-, 8-, 6-, and 4-foot markers on both ends of the strip. The distance between any of two identical FT markers (e.g., 4 and 4) is equal to the circumference of that diameter tank, plus 12 feet. Notice at the very center of the Calibrated Sensor Positioning Strip there is a small hole in a painted area centered between two larger holes. The sensor is attached to the strip at this point so that for any of the four tank diameters, the sensor will always be positioned at the bottom of the tank annulus when the markers line up above the top of the riser (see Figure 1).
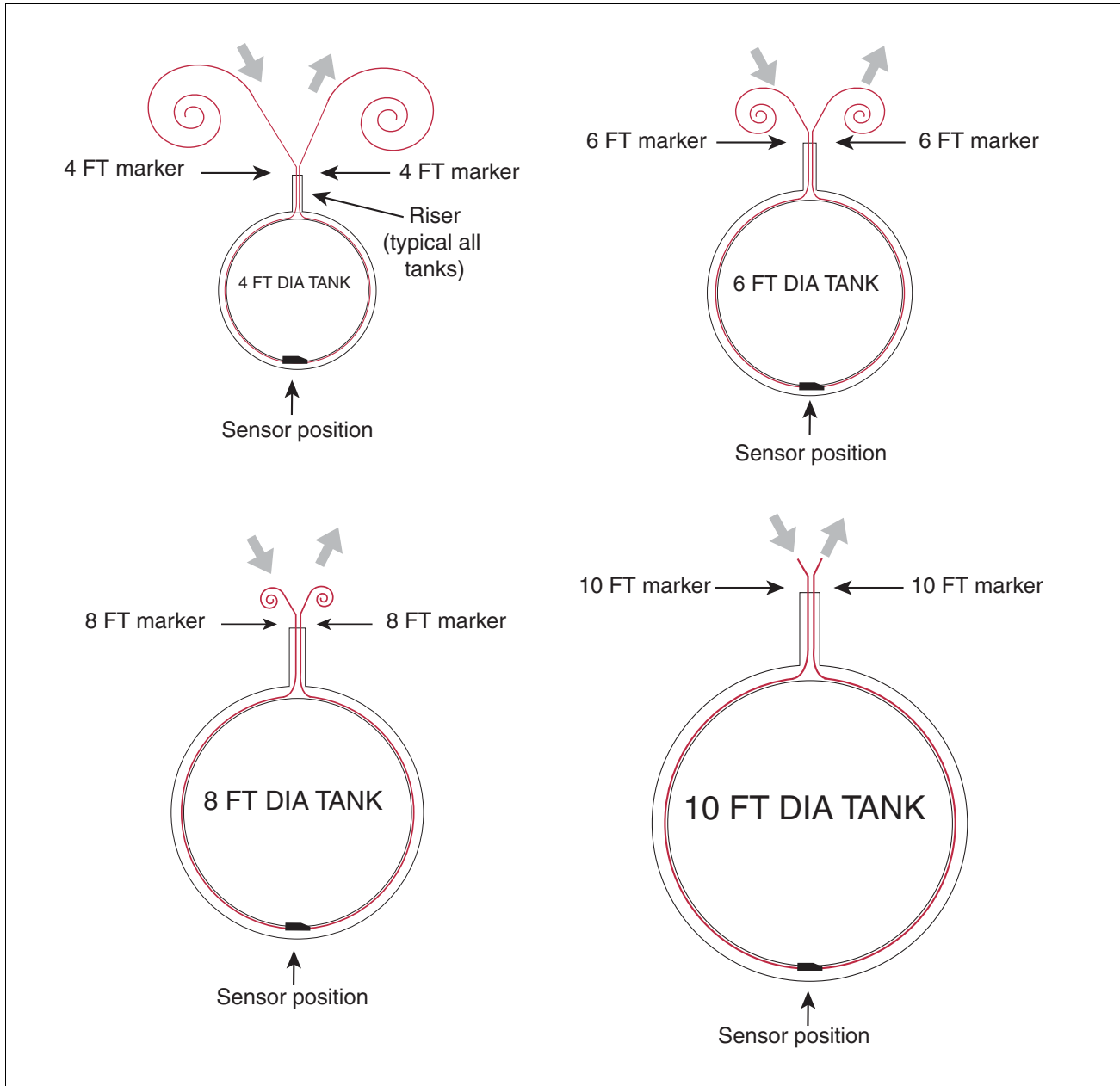
Figure 1.

Attaching the Sensor to the Strip

1. With the strip unrolled, look at the center of the strip. Notice that there are three holes in the center of the strip's length, one small hole in a painted area (which marks the Calibrated Support Strip's center point), equally spaced between two larger (5/16") holes. Orient the Calibrated Support Strip so that the painted side is up.

2.   Place the Interstitial sensor along the top of the support strip so that the sensor body is over the painted area <u>and</u> the hole in the front of the sensor aligns with the 5/16" hole to the right of the center hole (see Figure 2). The black housing of the sensor must be facing up and the flat white perforated side of the sensor against the strip.
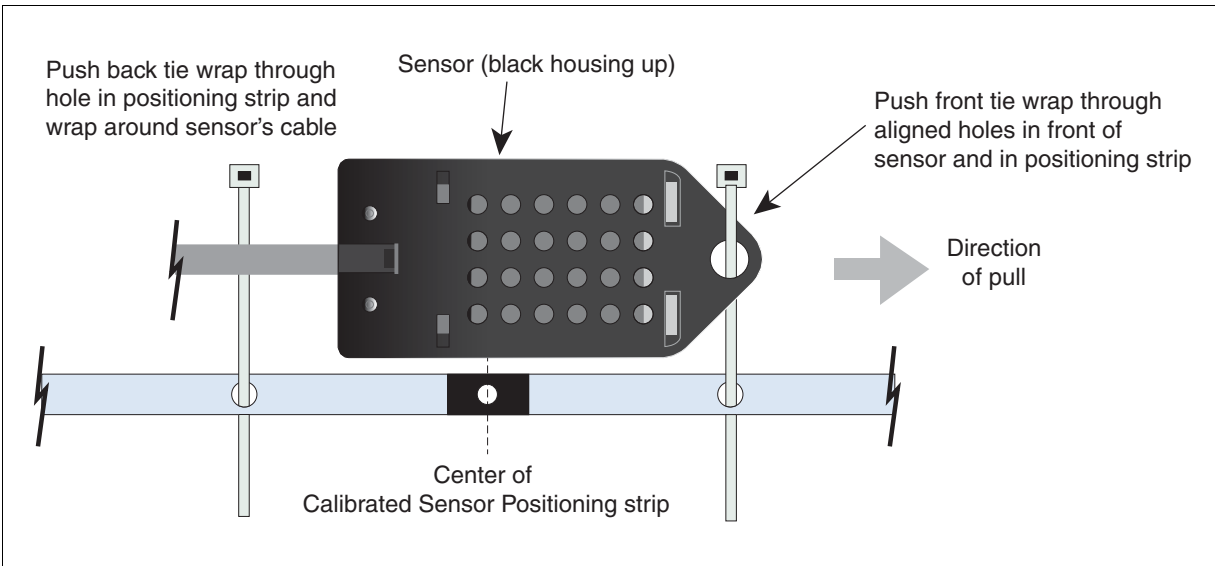

Push back tie wrap through hole in positioning strip and wrap around sensor's cable

Sensor (black housing up)

Push front tie wrap through aligned holes in front of sensor and in positioning strip

Direction of pull

Center of Calibrated Sensor Positioning strip

Figure 2.

3.   Thread one of the tie wraps from the kit through the aligned holes of the Sensor and the Calibrated Support Strip. Snug up the tie wrap until the sensor is flat against the Calibrated Support Strip (see Figure 2). Thread another tie wrap from the kit through the 5/16" hole to the left of the calibrated support strip's center hole and around the sensor's cable. Pull the tie wrap ends until the sensor is snug against the calibrated support strip (see Figure 3). Trim off excess ends from tie wraps.
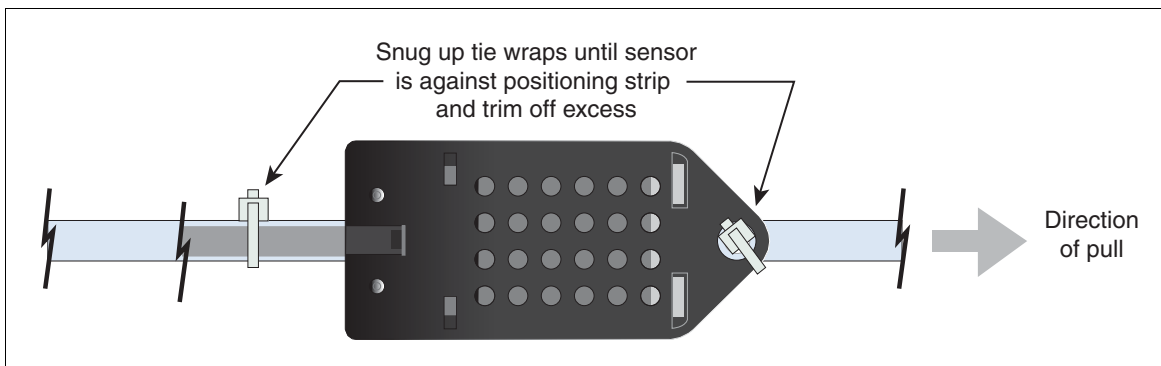

Snug up tie wraps until sensor is against positioning strip and trim off excess

Direction of pull

Figure 3.

4.   Notice to which end of the Calibrated Sensor Positioning Strip the front of the sensor is pointing (this will be the direction of pull). Place a piece of tape at that end of the calibrated Sensor Positioning Strip - this is the end to which you will attach the tank's annulus pull cord.

Installing Sensor

1. Move the Sensor/Support strip assembly to the tank in which it will be installed.

2. Tie the tank pull cord to the end of the Calibrated Sensor Positioning Strip which you marked with tape above as identifying the 'direction of pull' end. As you pull the Calibrated Sensor Positioning Strip into the annulus, make sure the painted side of the strip is facing in towards the tank (see Figure 4).
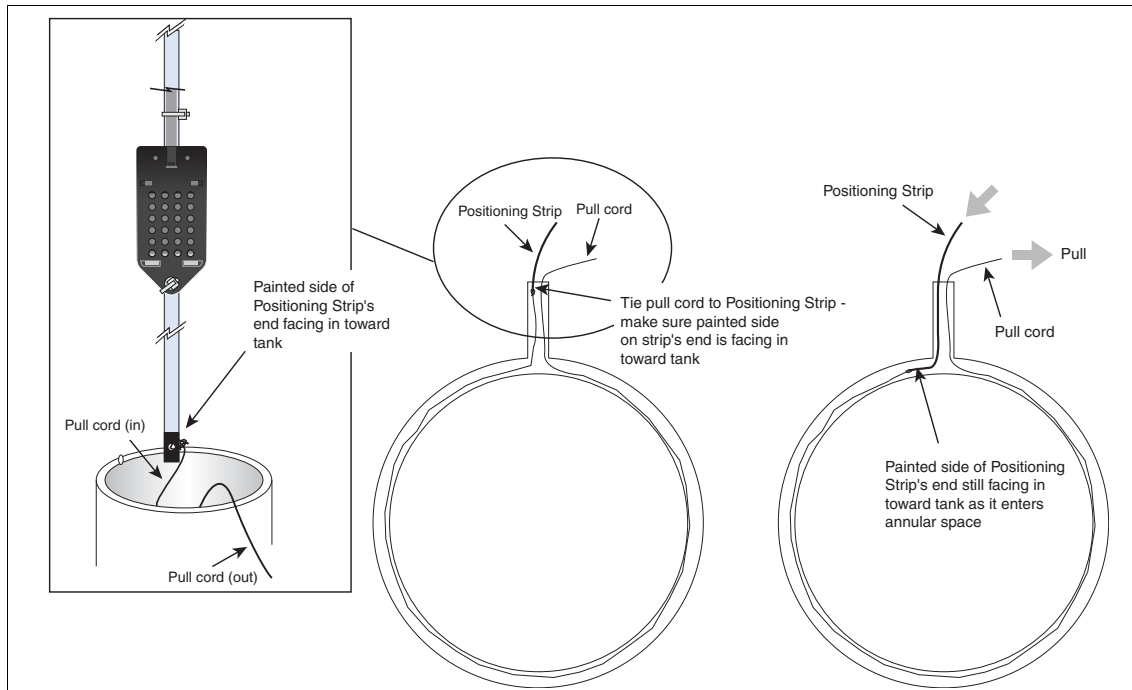

Figure 4.

3. Continue to pull the cord while feeding the sensor/strip assembly into the annulus. Depending on what diameter tank you have, pull the strip until the markers for that tank size are visible above the top of the riser. Pull both ends of the strip until the two markers line up (see Figure 5).
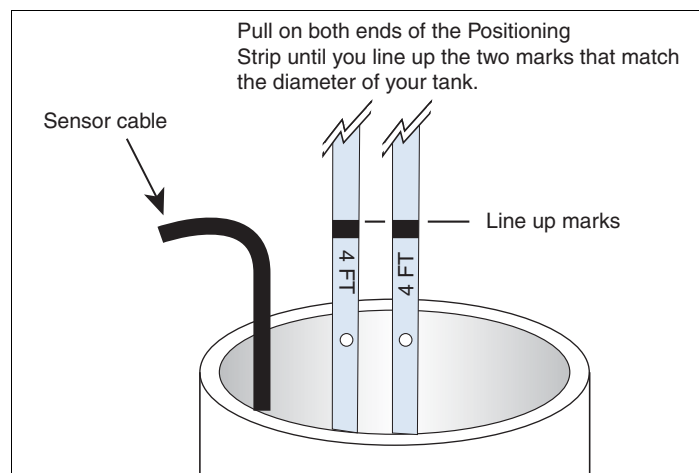
Figure 5.

4.   When the two markers are lined up, the sensor is centered correctly at the bottom of the annulus (Figure 6).
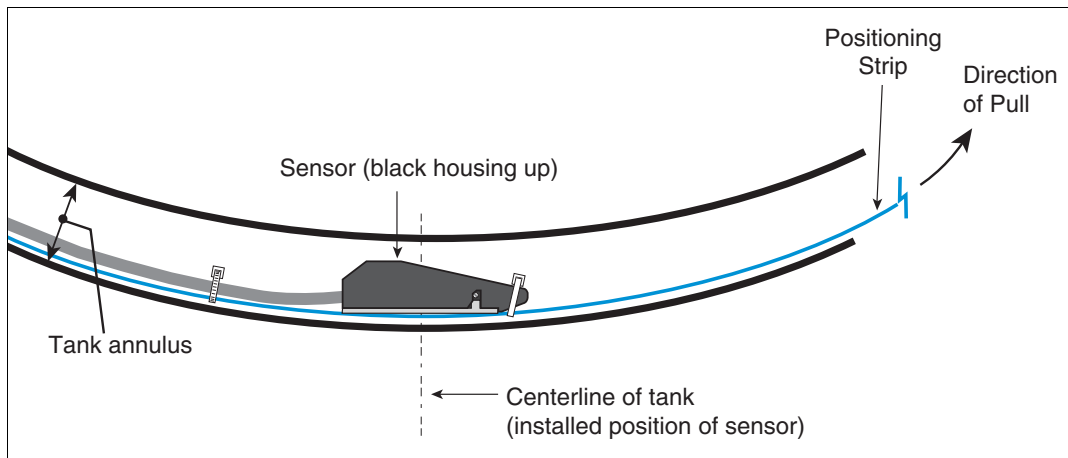

Figure 6.

5.   For 4-, 6-, and 8-foot diameter tank installations, trim off the two ends of the Calibrated Sensor Positioning Strip above the matched markers. IMPORTANT! **Be sure to reattach the pull cord in the hole below the marker on the 'out' end of the strip** (Figure 7). Attach a tie wrap through the two aligned holes to keep the sensor in its correct position.
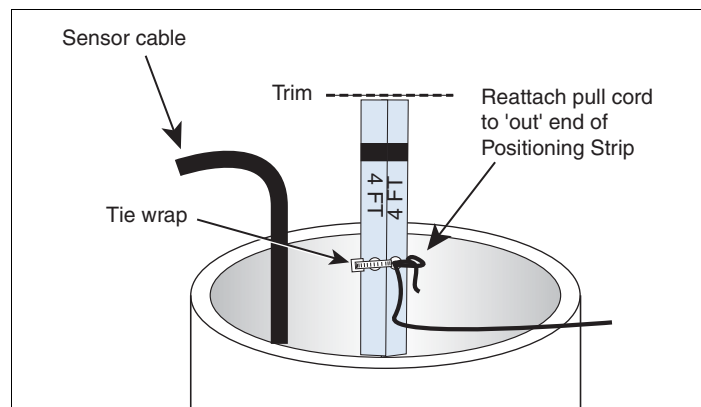

Figure 7.

6.   Tuck the strip ends and pull cord down into riser (Figure 8). Consult the Interstitial Liquid Sensor installation manual for instructions on completing sensor installation (install riser cap, connect field wiring, etc.).
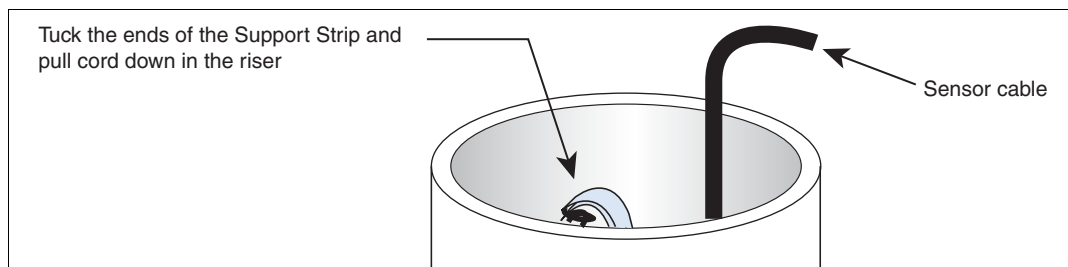

Figure 8.

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