Snap Tap Connectors

Installation Instructions
Notice

Veeder-Root makes no warranty of any kind with regard to this publication, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Veeder-Root shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this publication.

Veeder-Root reserves the right to change system options or features, or the information contained in this publication.

This publication contains proprietary information which is protected by copyright. All rights reserved. No part of this publication may be photocopied, reproduced, or translated to another language without the prior written consent of Veeder-Root.

Contact Red Jacket Technical Support for additional troubleshooting information at 800-323-1799.

DAMAGE GOODS/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.

VR 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. Fax Bill of Lading to V/R Customer Service at 800-234-5350.
2. Call V/R Customer Service at 800-873-3313 with the specific part numbers and quantities that were received damaged or lost.
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. Customer files claim with carrier.
2. Customer may submit a replacement purchase 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

# Table of Contents

**Introduction**
- Safety Precautions ............................................................................................................1
- Warnings and Instructions ................................................................................................2
  - IMPORTANT SAFETY INFORMATION .......................................................................2
  - PRELIMINARY PRECAUTIONS ..............................................................................2
  - REQUIREMENTS FOR USE ....................................................................................3
  - OPERATING PRECAUTIONS ..................................................................................3

**Installation Instructions**
- Installation with the FX2DV/FX2V Leak Detector .............................................................5

**Figures**
- Figure 1. Snap tap installation examples ........................................................................5
Snap tap connectors provide convenient functions for servicing underground piping systems. When used with the Red Jacket FX2DV/FX2V mechanical line leak detector and the FX Tester, snap tap connectors provide a quick and convenient method for testing the FX2DV/FX2V and accessing the line for service, without spilling product and without locking or tagging out the pump.

**NOTICE!** Snap tap Connectors shall not be left permanently installed into the impact/shear valves and must be removed upon completion of testing.

**Safety Precautions**

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

<table>
<thead>
<tr>
<th>Explosive</th>
<th>Flammable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuels and their vapors are extremely explosive if ignited.</td>
<td>Fuels and their vapors are extremely flammable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electricity</th>
<th>Turn Power Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>High voltage exists in, and is supplied to, the device. A potential shock hazard exists.</td>
<td>Live power to a device creates a potential shock hazard. Turn Off power to the device and associated accessories when servicing the unit.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Warning</th>
<th>Read All Related Manuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heed the adjacent instructions to avoid equipment damage or personal injury.</td>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wear Eye Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wear eye protection when working with pressurized fuel lines to avoid possible eye injury.</td>
</tr>
</tbody>
</table>
In addition to the specified torque values noted in this manual, when properly tightened, all flanged fittings should have metal-to-metal contact.

**Warnings and Instructions**

**IMPORTANT SAFETY INFORMATION**

This section introduces the hazards and safety precautions associated with installing, inspecting, maintaining or servicing this product. Before performing any task on this product, read this safety information and the applicable sections in this manual, where additional hazards and safety precautions for your task will be found. Fire, explosion, electrical shock or pressure release could occur and cause death or serious injury, if these safe service procedures are not followed.

**PRELIMINARY PRECAUTIONS**

You are working in a potentially dangerous environment of flammable fuels, vapors, and high voltage or pressures. Only trained or authorized individuals knowledgeable in the related procedures should install, inspect, maintain or service this equipment.

**Read the Manual**

Read, understand and follow this manual and any other labels or related materials supplied with this equipment. If you do not understand a procedure, call 1-800-323-1719 to locate a qualified technician. It is imperative to your safety and the safety of others to understand the procedures before beginning work. **Make sure your employees and any service contractors read and follow the instructions.**

**Follow the Regulations**

Applicable information is available in National Fire Protection Association (NFPA) 30A; *Code for Motor Field Dispensing Facilities and Repair Garages*, NFPA 70; *National Electrical Code* (NEC), Occupational Safety and Hazard Association (OSHA) regulations and federal, state, and local codes. All these regulations must be followed. Failure to install, inspect, maintain or service this equipment in accordance with these codes, regulations and standards may lead to legal citations with penalties or affect the safe use and operation of the equipment.
Prevent Explosions and Fires

Fuels and their vapors will explode or burn, if ignited. Spilled or leaking fuels cause vapors. Even filling customer tanks will cause potentially dangerous vapors in the vicinity of the dispenser or island.

Working Alone

It is highly recommended that someone who is capable of rendering first aid be present during servicing. Familiarize yourself with Cardiopulmonary Resuscitation (CPR) methods, if you work with or around high voltages. This information is available from the American Red Cross. Always advise the station personnel about where you will be working, and caution them not to activate power while you are working on the equipment. Use the OSHA Lockout/Tagout procedures. If you are not familiar with this requirement, refer to OSHA documentation.

Working With Electricity Safely

Ensure that you use safe and established practices in working with electrical devices. Poorly wired devices may cause a fire, explosion or electrical shock. Ensure that grounding connections are properly made. Ensure that you do not pinch wires when replacing covers. Follow OSHA Lockout/Tagout requirements. Station employees and service contractors need to understand and comply with this program completely to ensure safety while the equipment is down. Before you start work, know the location of the Emergency Power Cutoff Switch (the E-STOP). This switch cuts off power to all fueling equipment and submerged turbine pumps and is to be used in the event of an emergency. The buttons on the console at the cashier’s station WILL NOT shut off electrical power to the pump/dispenser. This means that even if you press a button on the console labeled EMERGENCY STOP, ALL STOP, PUMP STOP, or something similar, fuel may continue to flow uncontrolled.

Hazardous Materials

Some materials may present a health hazard if not handled correctly. Ensure that you clean hands after handling equipment. Do not place any equipment in the mouth.

WARNING! FAILURE TO COMPLY WITH THE FOLLOWING WARNINGS AND SAFETY PRECAUTIONS COULD RESULT IN PROPERTY DAMAGE, INJURY OR DEATH.

FIRE HAZARD! Do NOT use power tools (Class I Division I and Class I Division II) during the installation or maintenance of equipment. Sparking could ignite fuel or vapors, resulting in fire.

CHEMICAL EXPOSURE HAZARD! Wear appropriate safety equipment during installation or maintenance of equipment. Avoid exposure to fuel and vapors. Prolonged exposure to fuel may cause severe skin irritations and possible burns.

Requirements for Use

• The Red Jacket submersible pumps are designed for use only at facilities dispensing motor fuels.
• The application of Red Jacket submersible pumps must be consistent with NFPA Code 30A, OSHA regulations, and federal, state and local fire codes, and other applicable local regulations.
• The selection of any Veeder-Root product must be based upon physical specifications and limitations and the product’s compatibility with the materials to be handled. Veeder-Root makes no warranty of fitness for a particular purpose.
• All Veeder-Root products should be used in accordance with applicable federal, state and local laws, ordinances and regulations.

Operating Precautions

• NO SMOKING. Extinguish all open flames and pilot lights, such as on RV appliances.
• TURN OFF cell phones and other electronic devices to avoid distractions while fueling.
• GASOLINE CAN BE HARMFUL OR FATAL IF SWALLOWED. Long-term exposure may cause cancer. Keep eyes and skin away from liquid gasoline and gasoline vapors. Avoid prolonged breathing of gasoline vapors.
WARNING! Before installing leak detector, review the application section in leak detector manual #5191 for limitations or restrictions on usage.

NOTICE! This instruction sheet should be kept with the end user of the leak detector for reference.

When using 117-182 Big-Flo Diaphragm Valve, refer to installation instructions #042-108-1 included with the valve. When using an FXV model leak detector with adapter housing #038-072-5, refer to installation instructions #041-415-1 included with the housing. FXV Leak Detectors are for use with all UL-listed 4-inch Red Jacket models containing a “P” or “AG” prefix; FE Petro UL-listed 4-inch “STP” models; Tokheim UL-listed 4-inch models – 585A-34 and 585A-150.

WARNING! Tampering with the screws or seals on this leak detector may inhibit operation and will void warranty.

DO NOT wire submersible pumps to run continuously. Red Jacket line leak detectors will not perform leak tests on pumping systems that run continuously.

NOTICE! ALL AIR MUST BE OUT OF THE SYSTEM FOR THE LEAK DETECTOR TO WORK PROPERLY. Before installing leak detector in the pump, fill the system with product by running the pump and delivering product from each dispenser (starting with the farthest from the pump and working to the pump) until all air is removed from system.

Certain regulatory bodies require that leak detectors remain in the system after the lines have been installed. The lines may be purged of air by back-pressuring the lines with an inert gas, such as helium or nitrogen, to a pressure of 25 psi (172 kPa). This may be done at the impact valve under the dispenser. When this pressure has been reached, the leak detector will be in the open position. By turning on the pump and gradually bleeding the gas from the line through a valve at the impact valve of the farthest dispenser, the line may be purged of air.
Installation Instructions

Installation with the FX2DV/FX2V Leak Detector

1. Remove 1/4-inch pipe plug from tank test port in the packer (in 6-inch Big-Flow applications, remove the 1/4-inch pipe plug from the riser/flange assembly).

2. Apply a UL-classified, non-toxic pipe thread sealant to the threads of a 1/4-inch NPT 45-degree elbow and install in tank test port of the packer. For 6-inch Big-Flo applications, the elbow may be installed in the riser/flange assembly.

3. Install a 1/4-inch tee on the 45-degree elbow that is in the tank test port (or on 6-inch Big-Flo riser/flange assembly) to accommodate both the vent tube and snap tap.

4. Apply a UL-classified, non-toxic pipe thread sealant to the threads of the 1/4-inch NPT 90-degree elbow vent tube fitting and install in the tee.

5. Apply a UL-classified, non-toxic pipe thread sealant to the threads of the 1/4-inch NPT straight vent tube fitting and install in the leak detector vent opening in the cap of the leak detector.

6. Install the vent tubing into both fittings and tighten.

7. To install snap tap connectors in FX2DV/FX2V models, apply a UL-classified, non-toxic pipe thread sealant to the snap tap connectors and install one in the body of the FX2DV/FX2V leak detector and the other in the tee attached to the 45-degree elbow installed in the tank test port of the packer (Figure 1). For 6-inch Big-Flo applications, install two snap tap connectors - on in the FX2DV/FX2V leak detector and one in the riser/flange assembly.

8. Attach and crimp loop of the retaining tether around the snap tap threads.

9. Replace the caps over the quick-connect couplings and tighten snugly.

---

**Figure 1. Snap tap installation examples**