

# HydrX™ Fuel Conditioner Siphon Cartridge



## Service/Installation Instructions

### Notice and Disclaimer

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

### CONTRACTOR CERTIFICATION REQUIREMENTS

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

**Service Technician Certification (Previously known as 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.

**TLS-4xx Technician Certification:** Contractors holding valid TLS-450 Technician Certifications are approved to perform installation checkout, startup, programming and operations training, troubleshooting and servicing for all Veeder-Root TLS-450 Series Tank Monitoring Systems, including Line Leak Detection and associated accessories.

**Warranty Registrations** may only be submitted by selected Distributors.

### SAFETY WARNINGS AND PRECAUTIONS

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

**THIS SYSTEM OPERATES NEAR HIGHLY COMBUSTIBLE FUEL STORAGE TANKS.**

**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.

**USE SAFETY BARRICADES:** Unauthorized people or vehicles in the work area are dangerous. Always use safety cones or barricades, safety tape, and your vehicle to block the work area.

**APPROVED CONTAINER:** Use a nonbreakable, clearly marked container, suitable for collecting and transporting hazardous fuels during service.

**NOTICE:** Indicates information considered important, but not hazard-related.

### GENERAL PRECAUTIONS

1. Read and follow all instructions in this manual, including all safety procedures, local and federal guidelines.
2. Have equipment installed by a contractor trained in its proper installation and in compliance with all applicable codes including: National Electrical Codes 70 and 30A; federal, state, and local codes; and other applicable safety codes.
3. Do not modify or use service parts other than those provided by Veeder-Root.

**Reference Documents:** Manuals 577014-466, 577014-446 and 577014-472

**Suggested Equipment:** Petroleum jelly; 1/2" drive ratchet and 7/8" socket.

## INSTALLATION PROCEDURE

**⚠ WARNING**



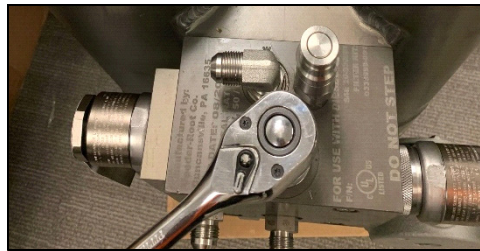
**Tag, lockout power to the STP.**

1. Close STP Adapter ball valve to isolate the HydrX unit from the pump (see Figure 1).



**Figure 1.**

2. Locate the siphon cartridge on the HydrX manifold shown in Figure 1 above and remove using the 1/2" drive ratchet and 7/8" socket. The siphon cartridge cavity is open to the ullage space of the tank so there is no risk of spilling fuel or releasing pressure from this port under normal conditions (see Figure 2 - hoses not shown for clarity).



**Figure 2.**

3. Inspect the siphon cartridge and port for any signs of debris. Any debris present on the screen of the siphon cartridge or inside the port should be removed before replacement. (see Figure 3).



**Figure 3.**

- Before installing the new cartridge, apply petroleum jelly to all three o-rings (see Figure 4).



Figure 4.

- Thread the cartridge into the manifold by hand then finish tightening with the ratchet and socket to a recommended torque of 15-30 ft-lb.
- Run a Fill Cycle to refill the HydrX with fuel from the tank as outlined below for ATG and FCC controlled HydrX systems.

## FILL CYCLE - ATG CONTROLLED HYDRX

- Touch **Menu>Diagnostics>HydrX>Overview** (Item 1, Figure 5) to open the HydrX Diagnostic Overview screen (see Figure 6).

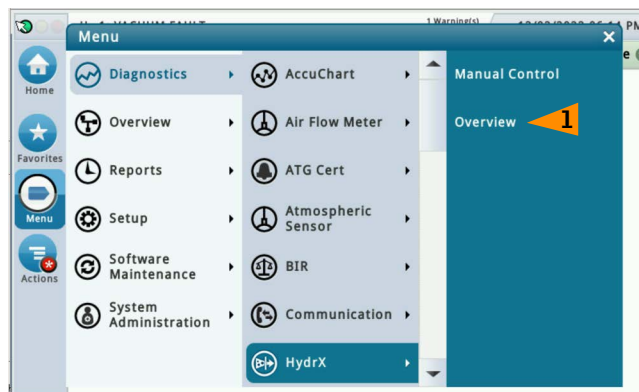


Figure 5. Accessing HydrX Diagnostic Overview Screen

- Touch the **Actions** button (Item 2, Figure 6) to open the HydrX diagnostic service buttons menu. Note: Gray Action buttons are disabled.

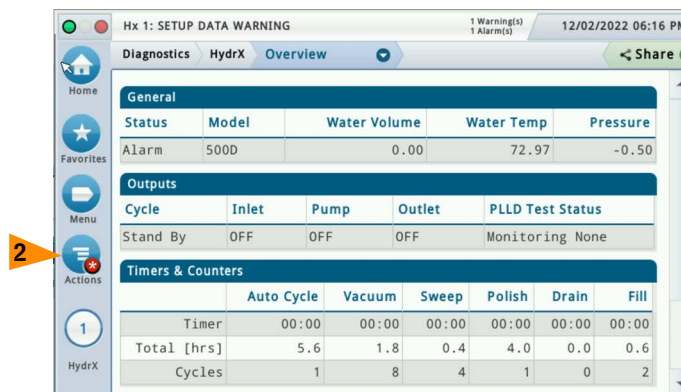


Figure 6. HydrX Diagnostic Overview Screen

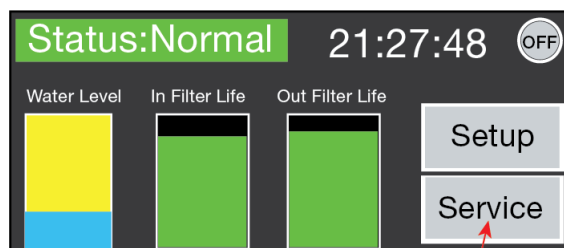
3. Touch **Fill** (Item 3, Figure 7) to refill the HydrX filter compartments with fuel from the tank.



Figure 7. HydrX Diagnostic Service Menu

### FILL CYCLE - FCC CONTROLLED HYDRX

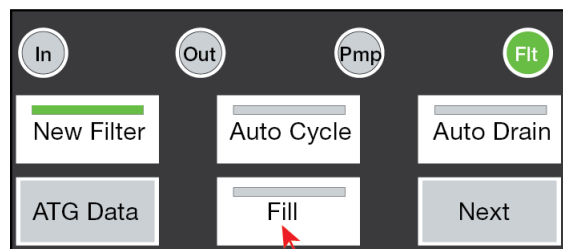
1. At the Fuel Conditioning Controller Display Home screen, touch the Service button (Figure 8) to open the FCC Service Home screen (see Figure 9).



Touch to display Service Main Screen

Figure 8. FCC Display Home Screen

2. Touch the **Fill** button to refill the Fuel Conditioner filter compartments with fuel from the tank.



Touch to refill the FC tank with fuel

Figure 9. FCC Service Home Screen

For additional assistance, please contact Veeder-Root Technical Support by phone at 800-323-1799 or by email to [technical-support@veeder.com](mailto:technical-support@veeder.com).