HydrX™ Fuel Conditioner Inlet/Outlet Filter



Replacement Instructions

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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.

WARNING: Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

GENERAL PRECAUTIONS

To ensure proper installation, operation, and continued safe use of this product:

- 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. Substitution of components may impair intrinsic safety.
- 4. Do not modify or use service parts other than those provided by Veeder-Root.

Reference Documents: Manual 577014-466, 577014-446

Required Equipment: V-R filter kit: P/N 330020-904 for Boss Seal Cap w/external square drive, or P/N 330020-868 for Face Seal Cap w/recessed square drive); 1/2" drive ratchet and extension.

PROCEDURE







Tag, lockout power to the STP.

- 1. Close STP Adapter ball valve to isolate the HydrX unit from the pump (see Figure 1).
- 2. Using a 1/2" drive ratchet and extension remove both of the two filter caps. Set caps aside.
- 3. Lift filters by the hinged ring in their top, out of their housings and discard.



Figure 1.

- 4. Allow fluid in the filter housings to drain back into the UST before proceeding.
- 5. Get the two new filters and o-ring lubricant from the kit. Apply lubricant to both the brown grommet on the bottom of the 6" Inlet filter and the brown o-ring in the bottom of the 4" Outlet filter (see Figure 2).

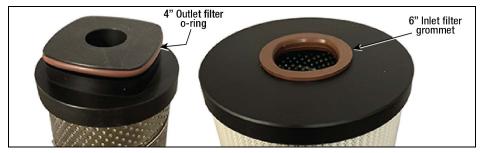


Figure 2.

- 6. Remove both o-rings from both caps using the provided o-ring pick (4 o-rings total removed).
- 7. Take the new o-rings from the kit and lubricate them with the included o-ring lubricant.
- 8. Install the new o-rings onto the caps, taking care to not damage, twist or contaminate the seals (see Figure 3 for Face Seal caps or Figure 4 for Boss Seal caps as appropriate).

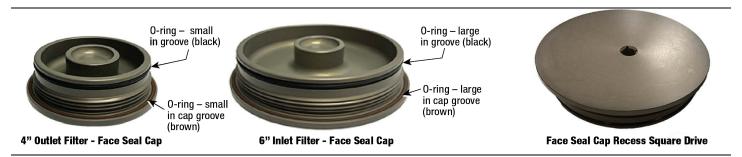


Figure 3. O-Ring Locations for Face Seal Cap w/Recessed Square Drive



Figure 4. O-Ring Locations for Boss Seal Cap w/External Square Drive

9. Lower the grommet end of the 6" filter into the Inlet filter housing until it rests on the bottom. Rotate the filter left/right until the round-cornered square opening in the grommet is aligned onto the round-cornered square flange in the bottom of the housing. Push down firmly on the filter to seat it (see Figure 5).

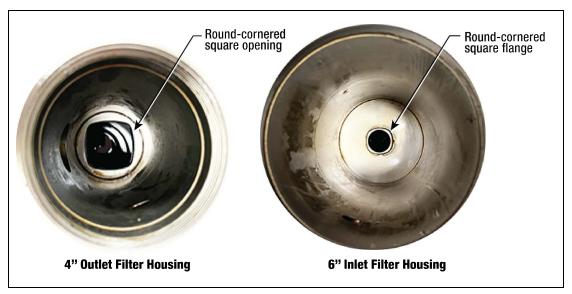


Figure 5.

- 10. Lower the round-cornered square end of the 4" filter into the Outlet filter housing until it rests on the bottom. Rotate the filter left/right until it 'drops' into the round-cornered square opening in the bottom of the housing. Push down firmly on the filter to seat it (see Figure 5).
- 11. Replace the filter caps and tighten each cap with the 1/2" drive ratchet until snug.
- 12. Turn on power to the STP.
- 13. Re-open the pump STP Adapter ball valve (see Figure 1).
- 14. If the ATG is controlling the HydrX System, follow the instructions in the New Filter Reset ATG Controlled HydrX section below. If the FCC is controlling the HydrX System, follow the instructions in the New Filter Reset - FCC Controlled HydrX section below.

NEW FILTER RESET - ATG CONTROLLED HYDRX

 Touch Menu>Diagnostics>Hydrx>Overview (Item 1, Figure 6) to open the HydrX Diagnostic Overview screen (see Figure 7).



Figure 6. Accessing HydrX Diagnostic Overview Screen



Figure 7. HydrX Diagnostic Overview Screen

Touch the Actions button (Item 2, Figure 7) to open the HydrX diagnostic service buttons menu. Note: Gray Action buttons are disabled.



Figure 8. HydrX Diagnostic Service Menu

3. Touch **New Filter** (Item 3, Figure 8) to refill the HydrX filter compartments with fuel from the tank and reset the Inlet and Outlet Filter initial pressure level.

NEW FILTER RESET - FCC CONTROLLED HYDRX

 At the Fuel Conditioning Controller Display Home screen, touch the Service button (Figure 2) to open the FCC Service Home screen (see Figure 10).

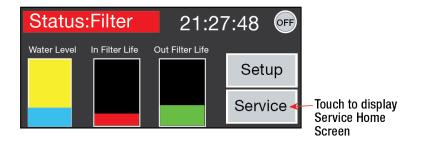


Figure 9. FCC Display Home Screen

2. Touch the **New Filter** button to refills the Fuel Conditioner filter compartments with fuel from the tank and reset the filter End of Life counters.

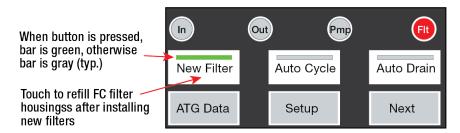


Figure 10. FCC Service Home Screen

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