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:

- 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. 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 or open ended wrench, remove one of the two filter caps. The other filter cap must remain installed. Filters must be changed individually.
- 3. With one of the two filter caps removed, lift the filter element by the hinged ring on the top and out of the housing. Gentle rocking of the filter element may be required to disengage seals. DO NOT TWIST ELEMENTS DURING REMOVAL. Dispose of used element accordingly.

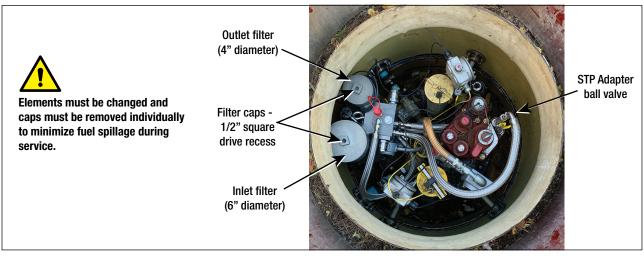


Figure 1.

- 4. With one of the elements removed, allow the fluid within the filter housing to drain back into the UST. Fluid may be removed manually as well.
- 5. Get the corresponding filter from the kit, Apply provided lubricant to the seal (o-ring/grommet) on the lower end-cap of the filter (see Figure 2).





- 6. Using the pick provided, remove both O-Rings from the filter cap removed in step 2.
- 7. Take the new o-rings from the kit and lubricate them with the provided lubricant. The kit contains 4" and 6" o-rings for the two different sized caps. Be sure to select the proper o-rings for the cap you are servicing.
- 8. Install the new o-rings onto the cap removed during step 2, being sure to select the proper o-rings for the cap removed (Face Seal Cap Kit P/N 330020-868 and Boss Seal Cap Kit P/N 330020-904). Take care not to damage, twist or contaminate the seals. (See Figure 3 for face Seal caps or Figure 4 for boss seal caps as appropriate). Include parts # for face/boss seal kit.

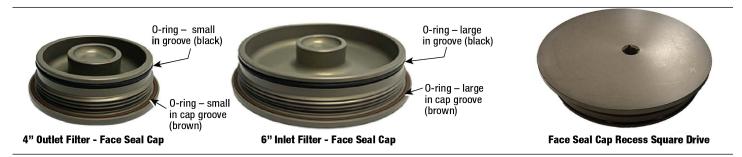






Figure 4. O-Ring Locations for Boss Seal Cap w/External Square Drive

9. Lower the grommet end of the filter removed in step 2 into the filter housing until it rests on the bottom. Gently rotate the filter clockwise to engage the squared flange at the bottom of the housing (see Figure 5). Push down firmly on the element to seat it in the housing.



Figure 5.

10. With the element seated, replace the filter cap removed in step 2 and tighten it with a 1/2" drive ratchet or adjustable wrench until snug.

- 11. Repeat steps 2-11 for the remaining filter element.
- 12. Turn on power to the STP.
- 13. Re-open the pump STP Adapter ball valve (see Figure 1).

NEW FILTER RESET - ATG CONTROLLED HYDRX

2

1. 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

Hx	Hx 1: SETUP DATA WARNING						Warning(s) Alarm(s)	12/02/	2022 06:1	
Dia	agnostics H	lydrX Ove	rview	0					< Sha	
	eneral									
St	atus N	lodel	del V		Water Volume		Water Temp		Pressure	
Al	arm 5	DOD		0	0.00		72.9	7	-0.50	
0	Outputs									
Cy	cle	Inlet	Inlet Put		mp Outlet F OFF		PLLD Test Status Monitoring None			
St	and By	OFF								
Ti	mers & Cour	iters								
		Auto C	ycle	Vacuum	Sv	veep	Polish	Drain	Fill	
	Time	r 0	0:00	00:00	0	0:00	00:00	00:00	00:00	
	Total [hrs	1	5.6	1.8	£	0.4	4.0	0.0	0.6	
	Cycle	c	1	8		4	1	0	2	

Figure 7. HydrX Diagnostic Overview Screen

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

•	Actions	×	1 Warning(s) 1 Alarm(s) 12/02/2022 06:55 PM				
\bigcirc	New Filter	Stop Cycle		_	-	< Sha	ire O
Home	Auto Cycle			PLLD Test Status			
Favorites	Auto Cycle	Help	Monitoring None				
	(1) Vacuum			Polish	Drain	Fill	
Menu	Sweep		þ	00:00	00:00	00:00	
Actions	O Polish		1	4.0	0.0	0.6	
	🕞 Drain		r	e	%	Services	
HydrX	🚇 Fill				.10	1	
17			5	9 100	.00	1	-

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.