

Replacement 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 non-breakable, clearly marked container, suitable for collecting and transporting hazardous fuels during service.

NOTICE: NOTICE is used to address practices not related to physical 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

Suggested Equipment: V-R kit# 330020-873, approved 5-gallon container to receive diesel fuel; siphon pump; petroleum jelly; UL classified for petroleum, non-setting thread sealant; wire strippers; two 1-1/4" open-end or adjustable wrenches and a 1/2" drive ratchet and extension.

PROCEDURE

1. Turn off power to the TLS-450PLUS console and Fuel Conditioning Controller and all related circuits to the sump.
2. Close STP Adapter ball valve to isolate the Fuel Conditioner unit from the pump (see Figure 1).
3. Using a 1/2" drive ratchet and extension remove either of the two filter cap nuts.
4. Remove filter and set aside. Using the siphon pump and approved container, pump out the fluid in filter compartment until the fuel level is below the filter cavity.

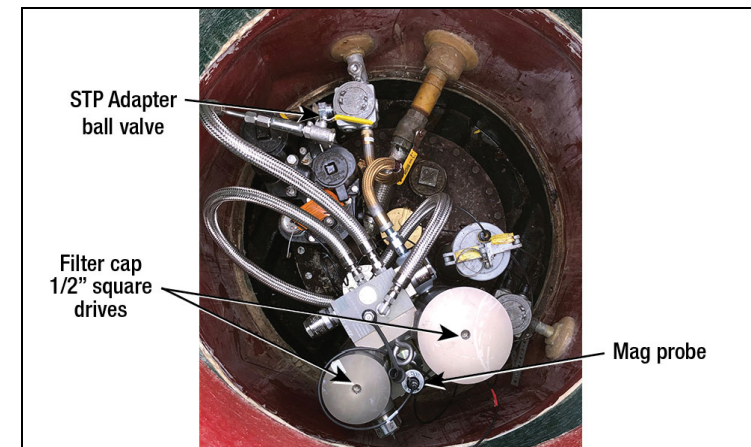


Figure 1.

5. Disconnect the cable from the top of the FC Mag Probe. Clear ATG probe Out alarm.
6. Using a wrench, loosen the 1-1/4" Adapter nut (see Figure 2), then carefully lift the old Mag Probe and float assembly out of the Fuel Conditioner opening.

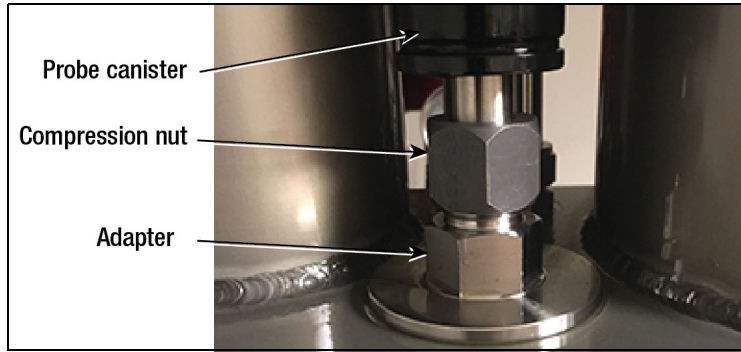


Figure 2.

7. Get the new Mag Probe and parts from V-R kit# 330020-873.
8. Apply Lubriplate 630-AA, or similar grease to the o-ring and position it into the groove under the flange of the adapter (see Figure 3).

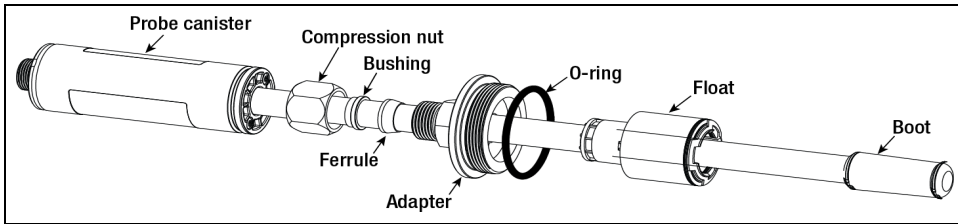


Figure 3.

NOTICE The system can be damaged if the steps below are not followed exactly.

9. Referring to Figure 3, slide the parts onto the Mag Probe shaft in the following order: compression nut, stainless steel bushing, plastic ferrule, adapter with o-ring, and float. Finally, push the boot onto the bottom of the shaft until it snaps into the groove. Apply Lubriplate 630-AA, or similar grease to both the flat and tapered surfaces of the plastic ferrule prior to installation.
10. Thread the compression nut onto the probe adapter fitting hand tight. Note: The entire assembly should still slide freely on the probe shaft.
11. Carefully lower the Mag Probe assembly into the Fuel Conditioner opening until the boot on the Mag Probe shaft is resting on the bottom of the Fuel Conditioner tank.
12. While ensuring that the compression nut is still only hand tight, use the wrench to tighten the adapter in the Fuel Conditioner opening to 126 foot-pounds.
13. Ensure the probe boot is still resting on the bottom of the housing, then tighten the compression nut an additional 1/2 turn past hand tight to seal the assembly.
14. Replace the FC filter, cap and nut. Tighten the filter cap nut until snug.
15. Turn on power to TLS-450PLUS console and the Fuel Conditioning Controller and related circuits for that sump.
16. Verify that the probe is being read by checking the Fuel Conditioner screen on the ATG.
17. Touch the TLS-450PLUS Status Bar to clear the alarm.
18. Re-open the pump STP Adapter ball valve (see Figure 1).

19. At the Fuel Conditioning Controller front panel, touch the Service button to open the Service Home screen (see Figure 4).
20. Touch the Fill button to refill the Fuel Conditioner filter tank (see Figure 5).

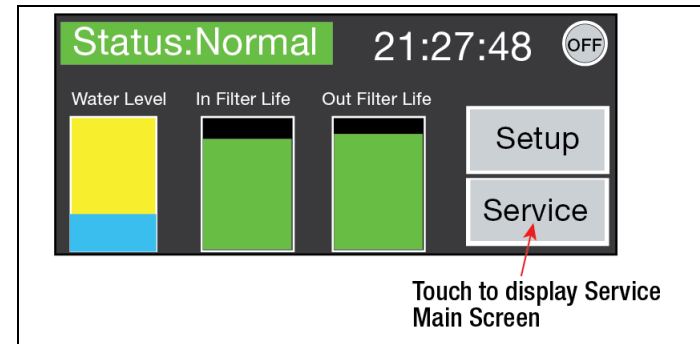


Figure 4.

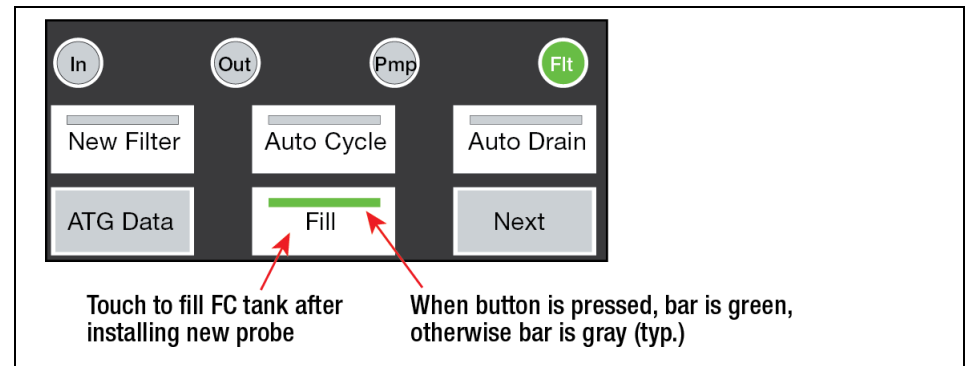


Figure 5.

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