

HPT Controller Maintenance & Repair



November 2015
Geoprobe



HPT Controller Maintenance & Repair

Winterizing the HPT Pump

Prior to any long storage, shipment or exposure to freezing temperatures, the HPT controller must be evacuated of all water. This must be done by pumping RV antifreeze through the pump. **Never use an air compressor to blow water from the controller.**



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Winterizing the HPT Pump

- With the trunkline removed, insert the HPT water supply line into a bottle of RV antifreeze and turn on the pump.
- When the antifreeze is coming out of the injection port, close the Flow Valve on the pump – this will deliver the antifreeze through the bypass circuit.
- When antifreeze is draining out the bypass line the HPT controller is fully “winterized”.



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Winterizing the HPT Trunkline

- The trunkline can be filled with RV antifreeze if you choose by leaving it connected to the controller when filling the pump and allowing the antifreeze to fill the whole trunkline. When it comes out of the HPT screen the trunkline is filled.
- Another option for *only* the trunkline is to use compressed air to blow out the trunkline. Compressed air *will not* damage the HPT sensor but *will* damage the HPT flow sensor in the controller if used to blow water out of the HPT controller.

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Cleaning out the Inline Filter

There is an inline filter that will accumulate precipitates from hard water as well as biological growth from stagnant water left in the pump over time. This debris will get caught in this filter and will affect the stability of your flow and internal line pressure which will be seen by very unstable pressure on the HPT reference test with flow.

This filter should be cleaned out at least every 6 months.



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Cleaning out the Inline Filter

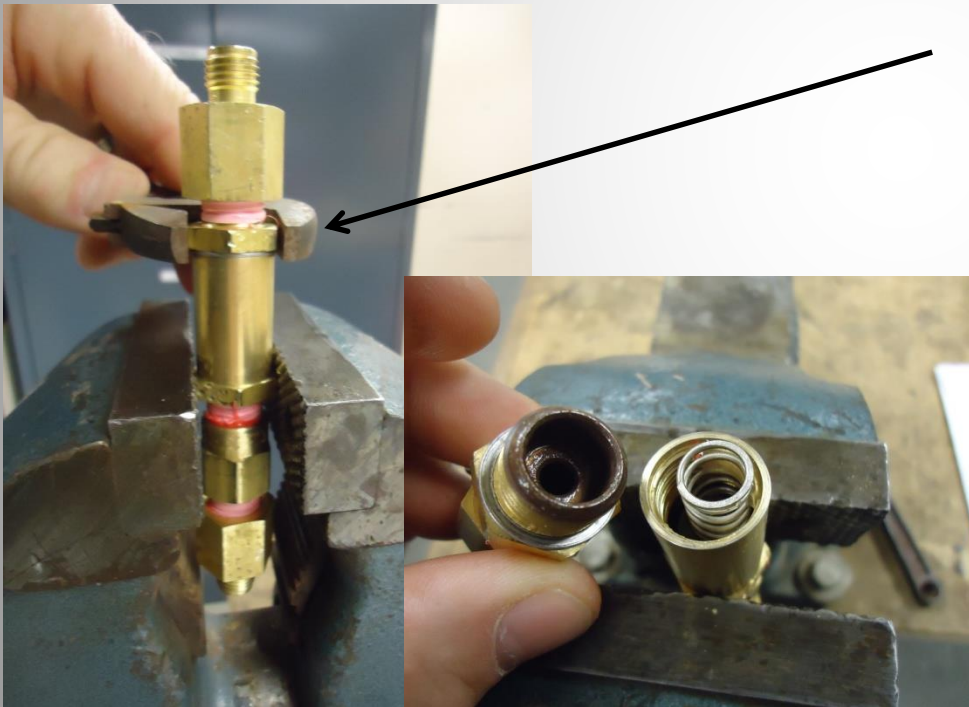


The filter location is on the left side of the controller held under a plastic band. Remove the ¼" water line fittings on either end of the filter module.

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Cleaning out the Inline Filter

Place the filter in a vice and unscrew the threads of the filter at the location shown on the left.



Inside the filter there will be a spring on top of the filter. The filter can be removed but does not need to be to clean.

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Cleaning out the Inline Filter



If debris is present it will be visible when looking down on the filter. This can usually be cleaned out by simply running water over the open screen as shown to the left. If need be you can remove the screen and wash it out.



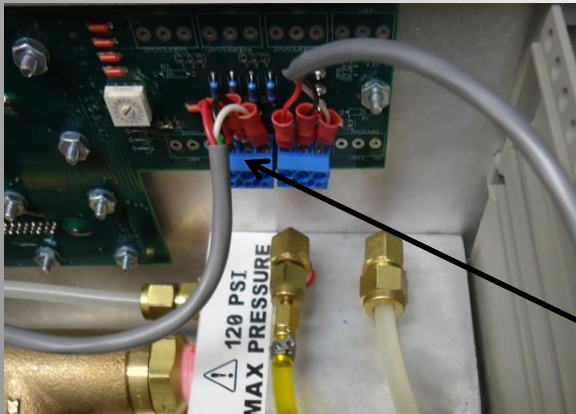
Put back together in reverse order of disassembly.

Replacement parts are also available if you choose to replace the entire module.

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Replacing the Flow Sensor

- Replacing a HPT line pressure sensor just requires screwing the old sensor from the manifold and removing the 3 wires from the left side terminal at the back right of the controller.



HPT Flow Sensor Wires

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Replacing the Line Pressure Sensor

If the Line Pressure Sensor gets damaged – typically from freezing HPT line pressure will read 0 PSI and not change.

To replacing the line pressure sensor (MN) follow these steps:

- Removal of the old sensor requires unscrewing the sensor from the manifold and loosening the screw heads in the terminal block on the right side of the circuit board.



Line Pressure Sensor

Line Pressure Sensor Wires

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Replacing the Line Pressure Sensor

- Installing the new lines pressure sensor requires threading in the new sensor moderately tight into the manifold and properly connecting the 3 wires red, black, white (L to R) and tightening the screws.



Line Pressure Sensor

Line Pressure Sensor Wires



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