## *80 Gallon Tank Expansion Kit*

Thank you for your purchase of this waste-oil heater accessory product. Please read and understand this product information completely before attempting to install, operate, or service the product. Refer to your waste-oil heater's instructional manual and your local codes and standards for safety, clearance, and ventilation requirements. Alternative application configurations can be achieved with regard to the tank's position and orientation, relative to the heater. However, **five (5) feet [1.5m] of clearance must be maintained between the tank and heater for safety** and the fire-stop valve, filter, and tank drain plug must remain accessible for service. If you wish to increase the distance from the heater to the tank with additional materials, ensure that the fuel tubing is gravity fed and do not exceed twenty-five (25) feet [7.6m] in total.

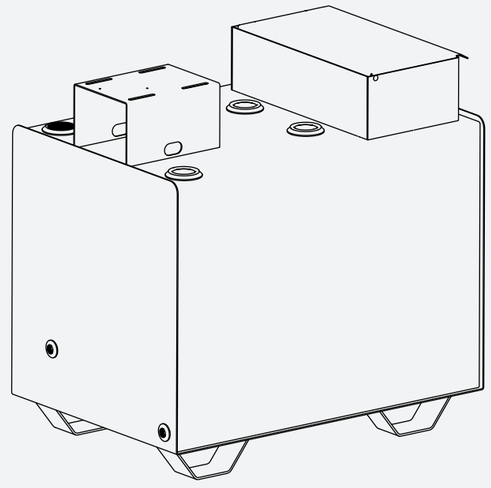
If you have any questions, please refer to your waste-oil heater's instruction manual for information regarding technical service.

### *Included in This Kit:*

1. 80 gallon waste-oil tank
2. 1/2" NPT square plug x3
3. Fire-stop valve
4. Filter-head assembly
5. Spin-on filter
6. 3/8" copper tubing with fittings x150"
7. Float-switch junction box + fasteners
8. Low-fuel cutoff float-switch assembly
9. 3-wire cable x180" (not shown)

***NOT TO SCALE***

**1.**



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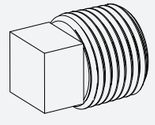

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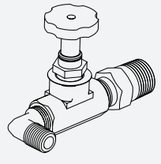

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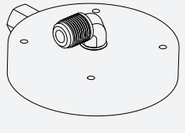

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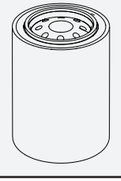

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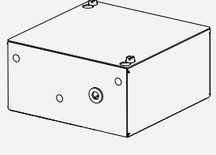
**7.**



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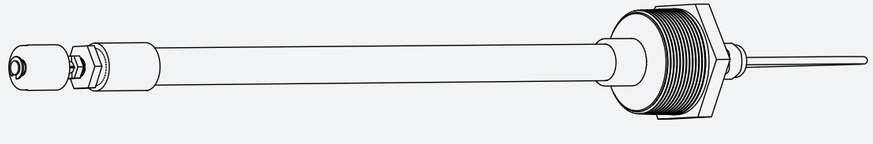
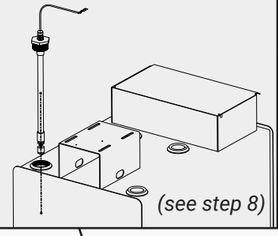


### *Assembly & Setup Instructions:*

1. Unpack the tank and position it in the desired operating location, providing proper clearance and service access. Also consider your use case and the orientation of the tank filling-drain grate on the top of the tank.
2. Identify the desired side of the tank to install the fuel pickup. Using oil-rated thread sealant (not included), plug the **lower** drain port and the two (2) ports on the other side of the tank with the three (3) 1/2" NPT square plugs included with this kit. **Do not use thread-sealant "Teflon" tape on any connections in this assembly.**
3. Use oil-rated thread sealant to install the straight portion of the fire-stop valve into the pickup port, which is at a higher level than the drain port, of the tank so that the fire-stop valve handle is positioned upwards.
4. Use oil-rated thread sealant to install the filter-head assembly to the fire-stop valve so the filter will hang down vertically from the filter head.
5. Fill the filter with fuel and apply some fuel to the filter's gasket. Then, spin the filter onto the bottom of the filter head assembly until the gasket of the filter seats snugly to the filter head. **Hand-tighten only.**
6. At the waste-oil heater, disconnect the existing fuel-pickup tube from the fuel pump and use a tube-bending tool to fashion one end of the 3/8" copper tube (provided with this kit) to the pump pickup. **Do not use thread sealant on flared fittings.**
7. Carefully route the tube from the waste-oil heater (on or near the floor, so gravity will fill it with fuel) to the outlet of the filter head on the new tank. Use a cutting wheel and flaring tool to customize your installation, or tuck excess coil horizontally under the tank without twisting the tube. **Do not orient excess tube vertically, as it will trap air in the fuel line.** Take care not to kink or crease the tube during this process. Choose a route that will protect the tube from being damaged or crushed while working in the area.
8. Install the low-fuel cutoff float-switch (LFCO) assembly into the 2" bung adjacent to the raised bracket on the top of the tank. Thread sealant is not required.
9. Use the screws included in this kit to mount the float-switch junction box to the bracket on the top of the tank. Remove the junction cover and connect the LFCO to one side of the terminal block. Attach one end of the 3-wire cable to the other side of the terminal block, matching wire colors across the terminal.
10. Route the 3-wire cable to the LFCO terminal block of the heater, remove the heater's existing LFCO float-switch wires from the terminal block and replace them with the new wire, matching wire-connection colors.
11. Turn the handle of the fire-stop valve clockwise to ensure that it is closed and fill the tank with approved fuel to a level above the heater's pump pickup, pausing periodically to ensure that the tank, pickup assembly, and plug ports are properly sealed with no leaks.
12. Turn the fire-stop valve handle counter-clockwise to open it. At the heater, wrap a rag around the copper tube, just below the connection fitting, and loosen the fitting to allow the tube to purge air and fill with fuel. When fuel has filled the tube, tighten the fitting and wipe excess fuel from the tube.
13. Attempt to operate the heater. Multiple attempts may be necessary to complete the priming process.
14. Once the fuel system is primed, you may resume normal operation of your heating system.

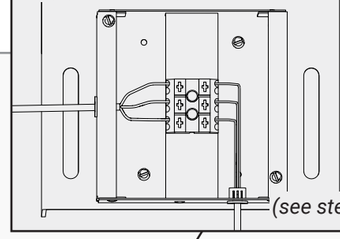
*Example Configuration:*

**LFCO FLOAT SWITCH**



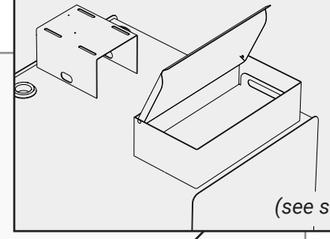
*(see step 8)*

**LFCO JUNCTION**

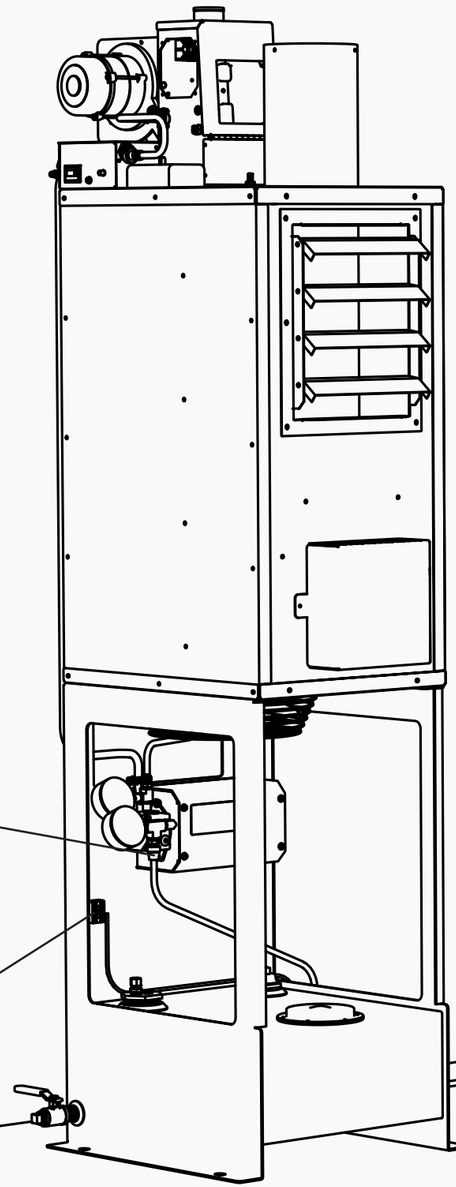


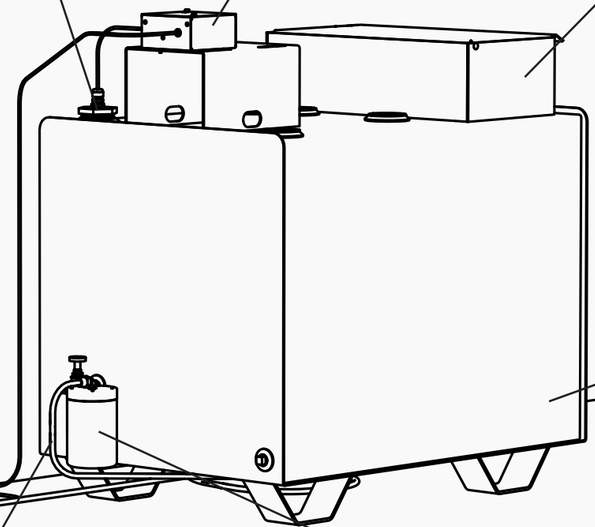
*(see step 9)*

**FILLING-DRAIN GRATE**

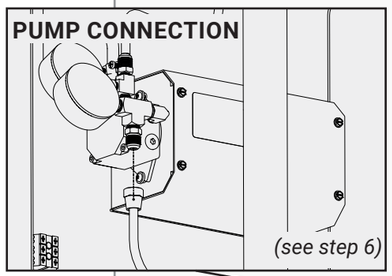


*(see step 1)*



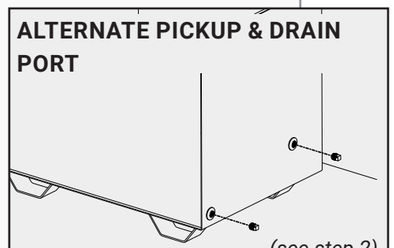


**PUMP CONNECTION**



*(see step 6)*

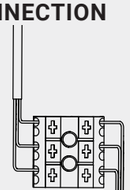
**ALTERNATE PICKUP & DRAIN PORT**



*(see step 2)*

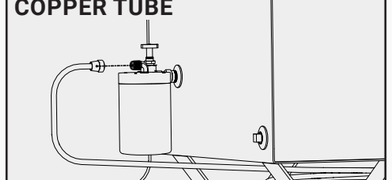
5' (1.5m) min.

**LFCO CONNECTION**



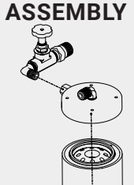
*(see step 10)*

**COPPER TUBE**



*(see step 7)*

**PICKUP ASSEMBLY**



*(see steps 3-5)*