



Tigerloop® Twin



FIG 1

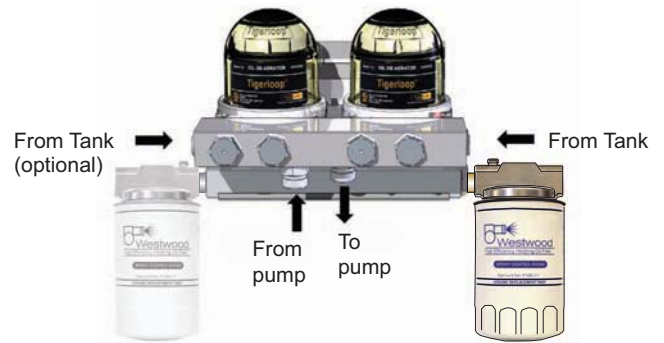


FIG 2

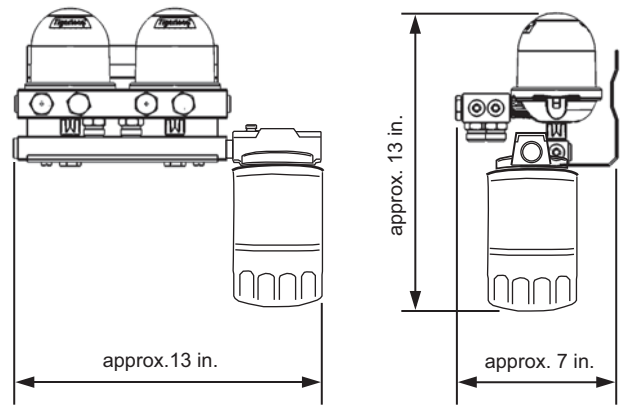


FIG 3

Technical Data	Tigerloop Twin
Maximum nozzle capacity	40 GPH
Maximum return oil flow	60 GPH
Maximum de-aerating capacity	16 l/h
Maximum operating temperature	105°F
Maximum inlet pressure	8 PSI
Filter Media	30 micron
Pump connections	1/4" - NPT(M)
Tank (filter) connection	3/8" - NPT(F)
Fuel	No. 1 or No. 2 Heating Oil

Tigerloop® Twin

Automatic oil de-aerator

The Tigerloop® Twin is a product designed to meet increasing demands on energy savings, environmental and operational safety. Tigerloop® Twin is specially designed to distribute and de-aerate oil evenly between the two Tigerloop® units for best possible results. Environmental regulations and changes in oil qualities continue to place high demands not only on material selection, but also on clean and air-free oil for optimal combustion with minimal discharge of harmful particles.

Tigerloop® Twin makes it possible to use a one-pipe system in all types of heating installations, thus ensuring the most environmentally safe method for transporting oil from the oil tank to the burner.

Tigerloop® Twin combines the advantages of a two-pipe system for the oil pump with the advantages of a one-pipe system for the oil tank. By using a one-pipe system and Tigerloop® Twin, only the amount of oil used by the oil burner is sucked from the oil tank. As the oil flow decreases, so does the amount of dirt particles transported from the tank. This results in

cleaner combustion.

The pressurised return line to the oil tank is removed eliminating the risk for return line leakage and environmental damages. A large amount of air bubbles are released when oil is sucked from the oil tank to the oil burner. These bubbles cause breakdowns, increased soot and cavitation noise in the oil pump. By functioning as a daily supply tank with automatic de-aeration, Tigerloop® Twin eliminates all such problems.

FIG 1:

Tigerloop® Twin consists of two units of standard Tigerloop® conveniently connected in parallel and combined with a separate oil filter. The oil filter can be installed on either side of the unit. Install the two washers, nipple and filter. Seal both ends of the nipple with Loctite gas, oil and HVAC sealant to the correct position. Be sure the filter is positioned correctly according to the oil flow arrow. Install the blind plug on the opposite tank connection end.

FIG 2:

Tigerloop® Twin dimensions

FIG 3:
Tigerloop® Twin technical data

Tigerloop® Twin is only to be used with No. 1 or No. 2 heating oil.

Installation

Install the bracket, included, in a horizontal position using the 4 sheet metal screws at a suitable place near the oil burner. However, the Tigerloop® Twin should not be exposed to temperatures in excess of 105°F. It should not, therefore, be installed on a non-insulated furnace or above a cover of a firebox or flue pipe. The Tigerloop® Twin is placed in the bracket and secured at the bottom with the two M6 screws. Use oil resistant lines for connection to the oil pump. Oil hoses are to be connected between the oil pump and the feed and return on the Tigerloop® Twin as indicated in the instructions.

Since today's oils place a high demand on materials, we recommend changing the Tigerloop® Twin after 10 years.

Installing the oil line

Check that the oil line is tight by pressure test. The Tigerloop® Twin must not be connected while pressure testing. The oil line and connections must be completely tight. A leak in the suction line can lead to air being sucked in, which gives unstable combustion. When starting an empty system the Tigerloop® Twin will automatically de-aerate the system. Press the reset button on the primary control if necessary. The oil pump should not be run without oil for more than 5 minutes.

Oil filter

The Westwood Products F100-1 commercial spin-on filter provides 30 micron protection that insures the Tigerloop® Twin will perform on high firing rate installations.

Trouble shooting

Excessive foaming in the oil de-aerators
Possible causes:

1. Leak in suction line. Check that all connections and lines are tight.
2. The feed line can be empty. Start the burner by pushing the reset button and let it run. If the burner trips out, wait and reset. Repeat a couple of times. The burner should not run without oil for more than 5 minutes.
3. The tank is almost empty.

Noise from the oil pump

Possible causes:

1. Leak in suction line. Check that all connections and lines are tight.
2. Suction height is too high. Suction height must not exceed 12 feet.
3. The oil filter is clogged. Change the filter element.

Oil is not sucked up from the tank

Possible causes:

1. Large leak in suction line. Check that all connections and lines are tight.
2. Suction height is too high. Suction height must not exceed 12 feet.
3. The by-pass plug for the oil pump has not been installed. Install the by-pass plug.

Oil level in the Oil De-Aerator

The level of oil in the lower chamber of the oil de-aerator may vary depending on

the installation conditions. For example, with an air-tight suction line and air-free oil where the oil tank is placed higher than the burner, the air pocket in the lower chamber of the de-aerator may slowly disappear until the lower chamber is completely filled with oil. **IMPORTANT!** This is not a problem. The oil de-aerator is functioning correctly. As conditions change and air enters the system, an air pocket will again form in the lower chamber of the de-aerator. On the other hand, if the upper chamber of one of the Tigerloop® Twin contains oil, it is damaged and should be replaced.

Exterior Cleaning

When cleaning the Tigerloop® Twin, only mild soap and water are to be used. No alcohol based cleaning agents are to be used.

IMPORTANT:

BE CAREFUL TO FOLLOW LOCAL CODES AND REQUIREMENTS DURING INSTALLATION.

EACH OIL BURNER MUST HAVE ITS OWN Tigerloop® Twin.

THE PUMP MUST ALWAYS BE SET FOR TWO-PIPE (BY-PASS PLUG INSTALLED).

SUCTION HEIGHT MUST NOT EXCEED 12 FEET.

Tigerholm

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Westwood

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