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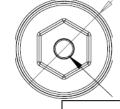
Fitch Fuel Catalyst - Residential Oil Burners Fitch models: HO-2UL, HO-5UL & HO-10UL



Features/Specs

HO-2UL: 3" OD x 3 3/16" HO5-UL: 3" OD x 3 3/4" HO10-UL: 3" OD x 4 1/16" 3/8" NPT Threaded End Cap

10 year service life on single pas system



3/8" NPT

INSTALLATION MUST BE PERFORMED BY A LICENSED TECHNICIAN THE BOILER / FURNACE MUST BE <u>PROPERLY CLEANED & TUNED</u> BEFORE FITCH INSTALLATION

NOTES: Technicians should verify the manufacture of the nozzle, nozzle size, etc. prior to scheduling the Fitch installation to be sure of the correct down size nozzle. Also determine whether the system is single pipe, 2 pipe or a tiger loop systems to ensure proper catalyst sizing. When faced with a tiger loop the FFC should be installed in the supply line not the tiger loop as the flow rate in the loop is much higher and would require a larger FFC. Ensure that technician has correct supply of fittings, adapters, correct nozzle and new oil filter. Residential heating systems stack temperature over 500 degrees (the normal stack temp. range is 350 - 450) usually indicates the need to clean or tune the system. Heating system (boiler/burner) must be clean prior to installing Fitch to insure accurate data collection.

NOTE: catalyst unit MUST be installed with the fuel flowing in the direction of the arrow.

Installations – Take all necessary precautions relative to installing on an oil fired system. Locate a suitable location in the fuel line supply line at or near the burner.

NOTE: all units <u>MUST</u> be installed after the filter, vertically with the fuel flowing into the bottom and out the top of the unit. *The direction arrow must be pointing UP*.

- 1. Clean the boiler or furnace first.
- 2. <u>Establish Baseline</u>. Measure the exhaust gas composition and ensure the system is functioning to the burner manufacturer's recommendation <u>before installing or engaging</u> fuel flow through the Fitch Fuel Catalyst.
- 3. Install the Fitch Fuel Catalyst at the selected location in compliance with building / piping codes. If a filter is not in place it is required, one is installed before the Fitch Fuel Catalyst.
- 4. Once installed check for leaks and let the burner run at 100% for approx. 15 minutes and take new exhaust gas measurement per (1).

Typical Observations

- i) Excess air may increase
- ii) Stack temperature may increase*
- iii) CO and CO2 both change.
- iv) Flame color change.
- * In rare cases a rise in stack temperature may not be recorded. To determine the increase in efficiency measure the timing of recycle pre and post installation. See Fitch Bulletin HO#1
- 5. Make the necessary adjustments to bring the burner to manufacturer's recommendation. **Typical Adjustments**
 - i) Reduce nozzle size or fuel pump pressure to reduce stack temp
 - ii) Reduction of air flow to reduce excess air.
 - iii) Adjust for optimal stack temp, minimal soot, minimal CO.