

All installations and services must be performed by qualified service personnel.

H. HEAT EXCHANGER CLEANING INSTRUCTIONS:

⚠WARNING: THE HEAT EXCHANGER MUST BE CLEANED BY A QUALIFIED SERVICE PERSON.

It is important to inspect and clean the heat exchanger once a year, or as necessary, to remove any build-up of soot. A layer of soot on the inside of the heat exchanger will act as an insulator and reduce heat transfer, resulting in less efficiency.

To clean the heat exchanger, first turn off all power to the unit. Remove clean-out plugs, the vent connector pipe to the chimney, the burner, and the burner mounting plates. When removing the clean-out plugs, remove the screw at the 12 o'clock position. Then, pull clean-out plug straight back.

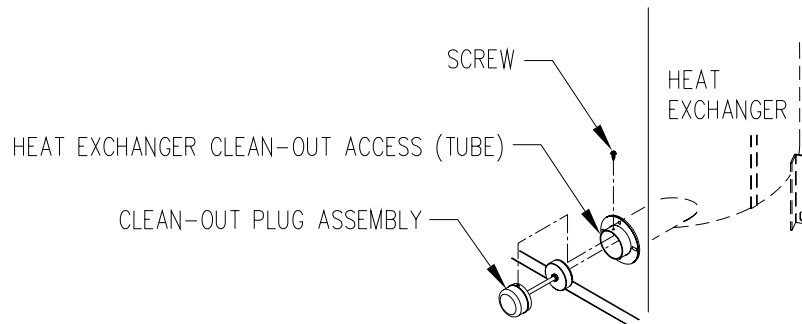


Fig. 6: Clean-out plug removal

With access to the inside of the heat exchanger through the burner area, clean-out openings, and vent pipe connection, it is possible to use a long, flexible wire brush and an industrial type vacuum cleaner to remove any soot build-up. **NOTE:** A one inch (outside diameter) vacuum cleaner hose will fit into the radiator.

To vacuum and brush the outer radiator of the heat exchanger, go through the clean-out openings in both directions, as shown in figure 7, below.

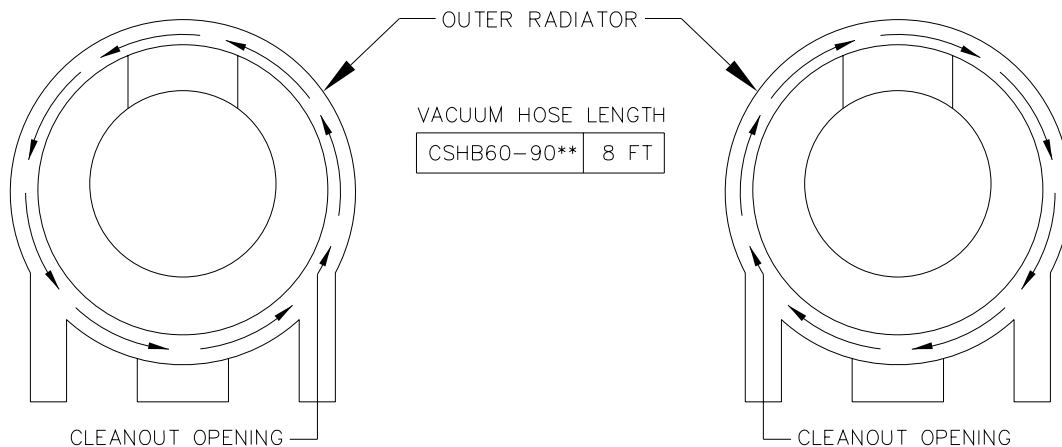


Fig. 7: Recommended method and device for cleaning inside of heat exchanger.

Reassemble the furnace to its original construction*. Remount the burner being certain that the air tube is properly inserted into the chamber opening (see section F). If heavy soot deposits were found in the heat exchanger, this may indicate the burner is out of adjustment.

*When returning clean-out plugs to their original position, insert plug and replace screw at the 12 o'clock position. This is sufficient for sealing the access tube.

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III. USERS INFORMATION SECTION

A. OIL SUPPLY: Do not allow the fuel tank to run completely empty. During the summer, keep the tank full to prevent condensation of moisture on the inside surface of the tank. If the fuel tank runs completely dry, it may be necessary to purge the lines of trapped air. Contact a qualified technician to bleed the lines and restart the burner.

OIL SUPPLY VALVE: Turn the oil supply valve off if the burner is shut down for an extended period of time.

B. COMBUSTION AIR SUPPLY: The burner requires a generous amount of clean combustion air to operate safely. Lack of adequate combustion air can result in erratic operation of the burner, noisy combustion, or fuel odors in the air. **NEVER BLOCK THE FURNACE FROM THE SUPPLY OF COMBUSTION AIR.** If there is an exhaust fan, dryer or return air grill in the furnace room, there should be increased concern and additional efforts may be required to provide adequate combustion air to the furnace at all times.

C. INSPECTION AREAS

VESTIBULE: The furnace vestibule area or burner compartment should be inspected by removing the front door of the furnace and looking for signs of excessive heat such as discoloration of components materials damage, from rust or corrosion, soot or carbon build-up.

EXTERIOR OF FURNACE: The furnace exterior should be inspected for signs of excessive heat such as discoloration of materials and damage from rust or corrosion.

FLUE PIPE, VENT PIPE OR CONNECTOR: The furnace vent pipe should be inspected for signs of rust, corrosion pitting or holes in pipe, and leakage around seams in pipe, indicated by soot or condensate streaks.

CHIMNEY OR VENTING SYSTEM: The furnace venting system should be inspected for signs of rust, corrosion pitting or holes, and signs of condensation or moisture leakage from the venting system.

If any of the above symptoms are evident, call a qualified heating contractor for assistance.

⚠CAUTION: DO NOT ATTEMPT TO MAKE REPAIRS YOURSELF!

⚠WARNING: The area around the furnace should be kept free and clear of combustible liquids and material, especially papers and rags.

⚠WARNING: NEVER burn garbage or refuse in your furnace. Never try to ignite oil by tossing burning papers or other material into your furnace.

⚠WARNING: Crown oil furnaces are designed to burn No. 1 or No. 2 distillate fuel oil. **NEVER USE GASOLINE OR A MIXTURE OF OIL AND GASOLINE.**

⚠CAUTION: DO NOT ATTEMPT TO START THE BURNER WHEN:

- 1. Excess oil has accumulated,**
- 2. The furnace is full of vapors**
- 3. The combustion chamber is very hot.**

IF ONE OR MORE OF THESE CONDITIONS EXIST, CONTACT A QUALIFIED SERVICE PERSON.

D. STARTING THE BURNER:

1. Turn the main service switch to "OFF" position.
2. Set thermostat substantially above room temperature.
3. Open shut-off valves in oil supply line to burner.
4. Turn service switch to furnace "ON". If burner starts and runs, but stops again on lockout, it may be necessary to bleed the lines or make burner combustion air adjustments. Contact a qualified service person to adjust and start burner.

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E. FILTER CLEANING AND LOCATION:

The air filters should be inspected each month and cleaned when dirty. Cleaning the air filters frequently may reduce airborne contaminants from entering the furnace and depositing in the furnace, duct system and home.

⚠WARNING: To avoid injury from moving parts, hot surfaces, or electrical shock, shut off the power to the furnace before removing any furnace access doors to service the air filters.

The filter rack will be located between the return air plenum and the return air opening on the side of the furnace, refer to figure 8. Slide the dirty filter out, clean it with a mild soap and water solution. Make sure filter is thoroughly dry before replacing.

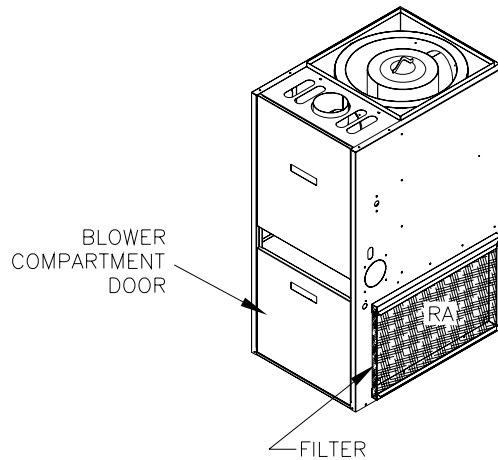


Fig. 8: Location of the air filter on the typical highboy furnace.