

Waste oil furnaces

The cost of traditional fuel continues to become more expensive each year. There are many alternative heating devices on the market today. One popular option, especially in auto repair shops, is the waste oil furnace, which burns recycled oil products.

When using waste-oil unit heaters, consider the following safety precautions:

- The unit should be tested, listed and labeled by a nationally recognized testing laboratory, such as Underwriting Laboratories (UL).
- “Homemade” oil burners/furnaces are not considered to be acceptable.
- Proper safety measures should be in place, such as combustion and atomizing air sensors, flame failure devices, thermostatic controls, high temperature limit switches, and remotely located safety shut-off switches.
- Heat-activated safety shut-off valves controlling the flow of fuel oil and/or electrical power are also recommended. Units equipped with self-igniting burners eliminate some of the hazards associated with hand-lit units.
- The waste-oil heater should be located in an area free of combustible materials and flammable liquids.
- The unit should be installed according to manufacturer’s instructions. Special attention should be paid to details such as appropriate clearance from combustible materials, electrical wiring, and fuel storage procedures.
- Fuel oil storage tanks should be non-pressurized and constructed of steel with a maximum capacity of 660 gallons. Tanks should be designed to meet the UL 80 standard for steel inside tanks for oil burner fuel.
- Fuel oil supply lines should be protected from mechanical damage.
- Fuel oil tanks should be equipped with shut-off valves, non-glass level gauges and pressure relief valves.
- Furnaces should be properly vented for removal of combustion gases and intake of fresh air.
- A minimum of five feet of clearance should be maintained between the furnace and fuel oil tank, with a minimum of three feet of clearance between the tank and electric panels.
- It is recommended that oil be purchased from a reliable waste oil recycling company. This will reduce the potential for the fuel supply to become contaminated with flammable liquids.
- Only trained personnel should operate the heater.
- Waste-oil heaters should only be used in occupied commercial and industrial buildings, and they should be shut off during non-business hours. The use of these units in other occupancies is not considered to be acceptable.
- Preventative maintenance of the heater unit is critical to maintain safe operation. Maintenance should be performed according to manufacturer’s recommendations.
- Any fuel oil that has been contaminated with, or suspected to have been contaminated with, a flammable liquid (i.e. gasoline) should be disposed of properly and not used as fuel oil.
- All electrical connections should be made by a qualified electrician. Hard-wired units are preferred over temporary “plug-in” units.

For more information, contact your Allied Insurance Loss Control representative.

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