



# Toyostove and Oil Miser Exhaust Smell

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## **WARNING**

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## **Toyostove Laser 30 – Oil Miser-22/23 Oil Exhaust Smell**

The Toyostove Laser 30 and Oil Miser 22/23 are positive pressure systems, meaning that the blower motor is at the combustion air entrance, and PUSHES air through the machine. If there are any leaks in gaskets, screw, or holes, that positive pressure will force exhaust gases out of the burner assembly. You must be very diligent in maintaining good seals. A combustible gases detector is very handy for detecting leaks. If the heat exchanger or flue are even partially clogged, this will increase the internal air pressure and lead to increased outgassing. Putting a small bead of high-temperature silicone on screw holes before putting in the screw will help. If gaskets are damaged in any way, replace them.

## **Toyostove Laser 30 only**

With the unit cool (L30 only), gently try to spin the heat chamber in place (cylinder with the peep window). If it spins at all, the heat element inside is likely warped and will need to be replaced, along with the heat chamber cover and the associated gaskets. When this piece becomes warped or bent, it will force the heat chamber away from the burner assembly, and the seal will be compromised, allowing combustion gases to escape.

Check the 90° exhaust elbow that drops from the heat exchanger and turns out the back of the heater. There is a U-shaped clip that holds this 90 in place, and sometimes the clip will wear a hole in the exhaust 90.

The igniter area is another place to give some attention. If the igniter guide gasket or igniter gasket are not sealing properly, they should be replaced. Install the guide gasket

with the seam up and press it firmly into the area around the igniter guide tube. New igniters come with a new gasket, or the gasket can be purchased separately.

### **All Toyostove and Oil Miser Heaters**

However, if the smell is a raw diesel smell, as opposed to an exhaust gases smell, check every part of the fuel distribution line, from where the fuel line enters the building to the burner pot, as there is a leak somewhere. If the leak is not obvious, use paper towels to completely wipe down the component/fuel line you are inspecting, and let it sit for a few minutes. If you then wipe a clean, dry finger along that surface, especially on the underside of fuel lines/connections, and you see an oily sheen on your finger, there is your leak.

There is a small black o-ring where the fuel pipe by-pass assembly attaches to the top of the fuel sump. This o-ring prevents vaporized fuel and the accompanying odor from escaping the sump. If this o-ring is missing or cracked, this will cause raw fuel odor. Oil-rated Teflon tape (yellow) can be used to seal this leak. Take a length of the Teflon tape, about 3" long, and fold it in half twice to make it shorter. Twist it into a sort of rope and wrap it around the end of the fuel pipe by-pass assembly before tightening the screw that presses down on the bracket that holds the fuel pipe in place. This creates a very effective and long-lasting seal. Also tighten down the fuel leveler pipe connection to the fuel sump with a 14 MM wrench.

It is very important to have a level stove and burner, so that the fuel will spread and burn evenly. A shop vac to the outside of the flue is good for sucking out the heat exchanger and also helpful when working on the stove, as it keeps the inside of the building cleaner.