



## Soot Build-Up



Soot build-up on the heat exchange coil is a symptom of an ill-maintained burner. Soot causes a variety of problems including difficulties with draft, efficiency, and carbon monoxide. Soot plugs the coil and reduces the airflow which in turn, reduces the pressure washer's efficiency and overall equipment life. As soot builds up on the burner coil, fuel consumption and costs increase.

### Soot Build-Up can be Avoided by:

**Proper voltage:** Low voltage will affect burner performance. Adjust RPM for proper voltage (gas engines).

**Burning clean fuel:** Old, contaminated or dirty diesel fuel can block the fuel nozzle which will in turn, produce soot. Kerosene is a much cleaner burning fuel but if diesel is used, adding soot remover (\$14.96 for 16 oz at your local Hotsy dealer) to every tankful will assist in reducing build-up.

**Correct electrode settings/replacing damaged electrodes:** Incorrect gap settings will impair electrode settings and cracked or chipped electrodes must be replaced for optimum efficiency.

**Air/fuel mixture:** Soot can build up in fire tubes due to incomplete combustion of fuel caused by improper air to fuel ratios. If the air/fuel mixture is not correct, the exhaust will be expelled as smoke or soot.

## Preventative Maintenance

Preventative maintenance is the key to dealing with soot, by not allowing soot to build up at all. Professional preventative maintenance is strongly recommended annually for all pressure washer burner systems. Maintaining and adjusting your oil burner can save on heating costs and add years of life expectancy to pressure washer equipment.

Oiling Burner Motor - By proper oiling twice a year, the motor life will be increased; only a few drops of a non-detergent type of oil are needed.

Burner fan and housing - This must be kept clean, free of dirt and lint. Hay, canola and grains should be cleared well after each use since mice are especially susceptible to nesting in the fan.

Burner transformer - If the burner transformer is weak, ignition is delayed. This will cause fuel oil to be injected but not ignited which increases fuel consumption.

Oil burner electrodes - This is very important for reliable ignition of the fuel oil; check once a year.

Oil burner nozzle and assembly - The nozzle should be changed at least once a year. Replace with proper nozzle. Handle nozzles by hex only. Oil and contaminants from the fingers on the face or filter of nozzle may adversely affect spray characteristics.

Oil burner fuel pump - If the fuel pump pressure is not correct, fuel vapor is not maintained then fuel consumption and efficiency is affected.

Filter - The oil filter cartridge should be replaced once a year so the fuel oil will not become contaminated and plug up fuel pump and nozzle of the oil burner.

Fuel tank - The fuel tank should be cleaned once each year to prevent contaminants from blocking fuel lines affecting combustion.

## **Hotsy Service**

Maintaining pressure washer burners require a great deal of experience and training. Combustion test instruments are required for the adjustment of oil burners and technicians must be certified and well versed in all applicable codes, standards and ordinances.

Hotsy service technicians are factory trained to repair and maintain pressure washer oil burners.

Call your local dealer to inquire about our [scheduled maintenance inspections](#) and to book your mobile or in-house service today.