Burner Trouble Shooting / Kerosene & Diesel

Problem:	Cause:	Solution:
Burner will not fire.	Burner switch is off.	Turn burner switch on. Turn on thermostat (if equipped).
	Low or no fuel.	Fill fuel tank. Only fill tank with approved kerosene or diesel.
	Trigger on spray gun is not pulled.	Squeeze trigger on trigger gun to fire burner.
	Fuel filter is clogged.	Remove and clean fuel filter. Replace fuel filter.
	Spray nozzle is clogged.	Remove, clean, and re-attach spray nozzle to lance.
	Overload has been tripped on burner motor.	Reset overload switch after locating and correcting the source of the overload.
	Nozzle not attached to wand.	Place nozzle in wand. Listen for click to ensure proper attachment.
	Low pressure to the water pump.	See Pump Trouble Shooting Page.
	Fuel pump or nozzle clogged.	Check fuel pressure, fuel filter, fuel lines. Replace pump, filter, lines, or nozzle.
	Faulty Temperature, Flow, Pressure, or Vacuum switch.	Test electrical continuity with pump spraying and burner turned on. Replace faulty part.
	Faulty fuel solenoid valve.	Replace fuel valve if it does not open when power is applied.
	Low voltage output from generator.	Adjust generator RPM for proper voltage under full load conditions.
	Faulty Burner relay (12V Burners only)	Replace burner relay.
Burner will not fire. Fumes are emitted from the exhaust port.	Fuel to air ratio is out of adjustment.	Set air band and fuel pressure to specs.
	Fuel nozzle is partially clogged.	Replace fuel nozzle.
	Ignition transformer is not providing spark to fuel.	Clean and adjust the electrodes. Replace ignition transformer.
Burner fires & smokes.	Fuel to air ratio is out of adjustment.	Set air band and fuel pressure to specs.

	Excessive soot on coil.	Clean soot from coil to improve air flow.
	Improper voltage at burner.	Adjust RPM of generator (if equipped).
Burner continues to fire when trigger on spray gun is released.	Faulty Flow, Pressure, or Vacuum switch.	Replace faulty switch.
	Faulty fuel solenoid.	Replace fuel solenoid.
Discharge water exceeds maximum operating temperature.	Burner input is too high for conditions.	Decrease the fuel pump pressure and/or fuel nozzle size.
	Restricted water flow.	Clean or replace proper sized nozzle. Descale coil and clear obstructions.
	Faulty high temperature switch / switch is set too high.	Replace or reset temperature limit switch.
Discharge water does not reach maximum operating temperature.	Burner input is too low for conditions.	Increase the fuel pump pressure and/or fuel nozzle size.
Battery keeps losing voltage. (12-V burner systems)	Battery voltage is low.	Check and load test battery. Charge or replace if necessary. Allow water to cool for 2 minutes before shutting off the engine.
	RPM is too low.	Engine RPM should be 3600 RPM with no load.
	Faulty engine charging system.	Check engine charging system. Must have 16-amp output.
	Incorrectly adjusted electrodes.	Adjust electrodes to a maximum of 1/8” gap.
	Fuel pump pressure is too high.	Fuel pump pressure should be approximately 100 – 110 PSI.
	Air band is open too far.	Adjust air band for proper burn.
	Burner amp draw is too high.	Check amp draw of burner motor. It should be 13 amps or less. Check amp draw of transformer. It should be 4.2 or less.

DPW Sales & Service
901 Ulrich Ave.
Louisville, KY 40219
502-966-2564
www.dpwservices.com