

INOV8 MODEL S200 BURNER TROUBLE SHOOTING GUIDE

Problem	Possible Cause(s)	Remedy
Burner motor does not Start	Oil temp set too low	Increase interlock temperature setting
	Motor reset tripped	Allow motor to cool & push reset button
	Pump coupler damaged	Replace coupler
	Safety shutdown	Find cause, correct & push Fireye reset button
Burner motor starts but oil remains cold	6-prong connect is loose	Push securely into place
	Fuse is blown	Replace 8 amp – blue fuse
	Heating element is defective	Replace
	Heater switch is OFF	Turn on – push the top side in
Burner motor runs but no oil is delivered to nozzle	Low oil supply	Refill tank
	Clogged inline filter	Clean
	Clogged VE filter	Replace
	Clogged pump strainer	Clean
	Failed pump shaft or seal	Replace shaft & seal or pump
	Needle not retracting	Check air pressure at 30 psig, increase temporarily, then remove Bimba & check needle
	Oil solenoid not working	Remove plunger & clean, replace solenoid coil if cleaning doesn't correct problem
	Air leak in oil supply line	Find leak, tighten fittings
Can't sustain flame	Dirty UV sensor	Clean lens
	Excessive secondary air	Reduce opening of air band
	Flame retention head is blocked by debris	Clean
	Blockage in nozzle spinner	Clean thoroughly outer & inner passages
	Oil solenoid not working	Remove plunger & clean, replace solenoid coil if cleaning doesn't correct problem
	Lingering flame after combustion ends	Allow oil & flame to burn out, clean nozzle, close air bands, reduce oil pressure, find cause of excess oil, press reset button on Fireye
	Excessive ash in furnace	Remove
	Burner motor runs but there is no air pressure	Air regulator is too low
Water is compressed air		Remove & install air dryer
Erratic flame	Blockage in nozzle spinner	Clean thoroughly outer & inner passages
	Water in oil	Remove left hose & flow into bucket until good oil is available again
	Air band out of adjustment	Adjust per manual or until flame smooths out
Oil gauge bouncing	Bimba air cylinder failing	Check for oil leaking and/or in air line – replace Bimba cylinder
	Air sucked into oil supply line	Tighten connections, replace compression fittings or leaky fittings, check tank supply line is under oil supply, check oil filter for leaks

	Oil solenoid not working	Remove plunger & clean, replace solenoid coil if cleaning doesn't correct problem
	Vapor eliminator relief valve is not open enough	Adjust to get fast drips per second
	Oil preheat is too high	Lower until gauge stops bouncing – see manual
Furnace not putting out as much heat	Oil pressure is too low	Increase pressure but not to exceed limits outlined in instruction manual
	BTU value of oil is lower	Increase oil pressure adjusting air bands accordingly
	Fan/limit switch not set properly or failing	Check settings according to manual & replace if necessary
	Ash filled furnace	Remove ash
Flame adjustments	Flame is too short	If nozzle is clean increase oil pressure until flame is 6" from target wall. If oil pressure is over factory settings, then check oil for BTU content, decrease secondary air bands & monitor flame until it returns to normal.
	Flame is too long	Reduce oil pressure until flame is 6" from target wall. Increase secondary air bands, monitor flame until it returns to normal.
Fireeye Shutdown	If within 10 seconds	UV sensor or flame retention head needs cleaning. Once cleaned then use voltmeter to check for 10 volts on probes in Fireeye – under the cover. Normal range is 5 to 10. If too low either UV sensor or MAUV4 is failing. Call INOV8.
	Burner starts, oil up to temperature but no PTFI	Little brown 10 amp fuse under the Fireeye cover, left-hand side is blown.
	Alarm condition with no apparent cause	No oil spray, after-burn (flame light is on pre-PTFI), no ignition, no air pressure, Fireeye component failure.