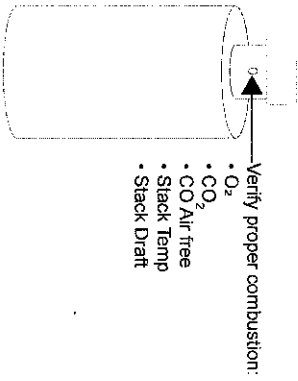
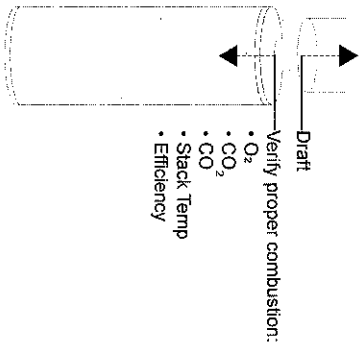


TYPICAL COMBUSTION - WHERE TO TEST

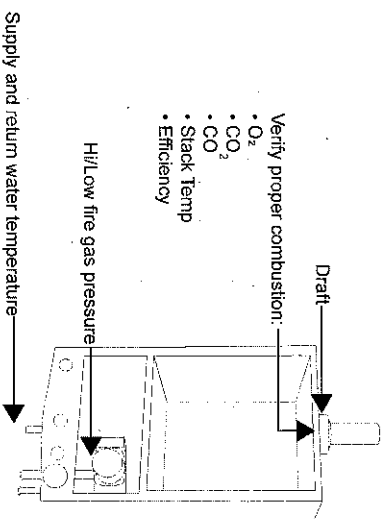
BOILER



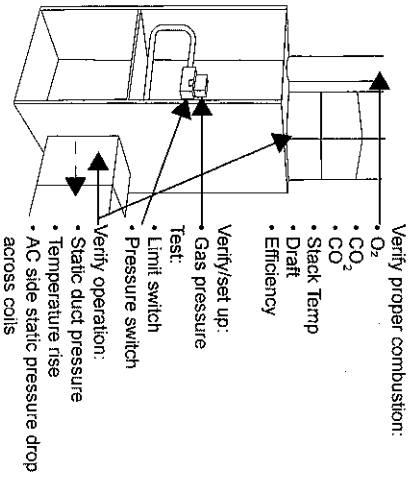
WATER HEATER



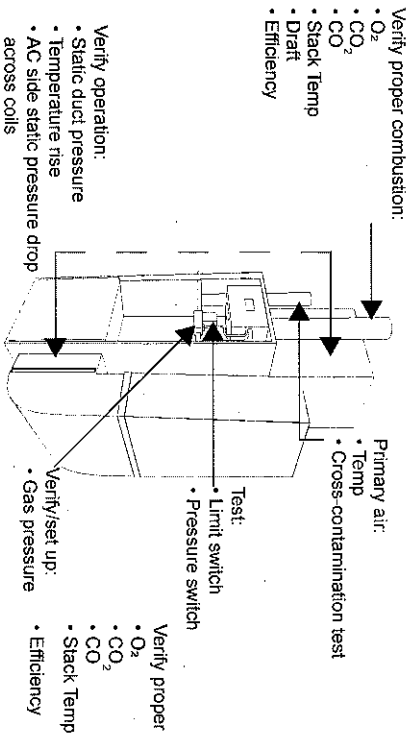
HIGH EFFICIENCY, SEALED INSTANT WATER HEATER



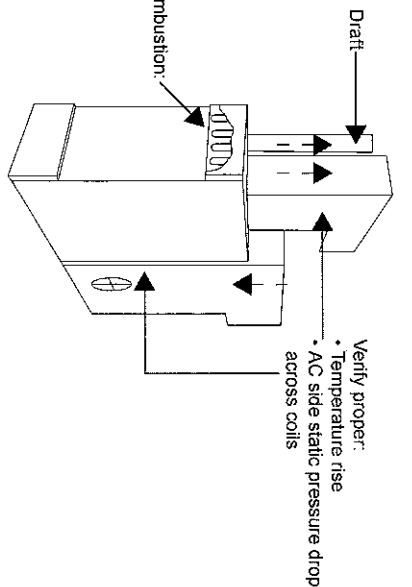
FURNACES 80%



HIGH EFFICIENCY CONDENSING FURNACES (90%)

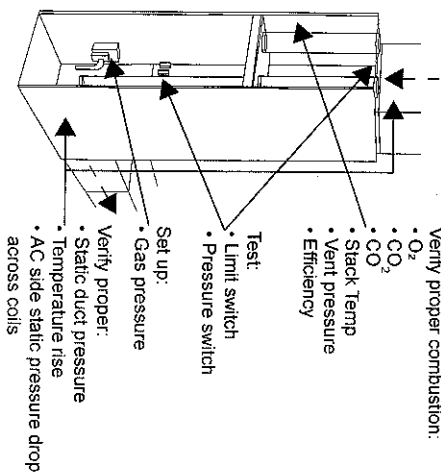


ATMOSPHERIC FURNACE

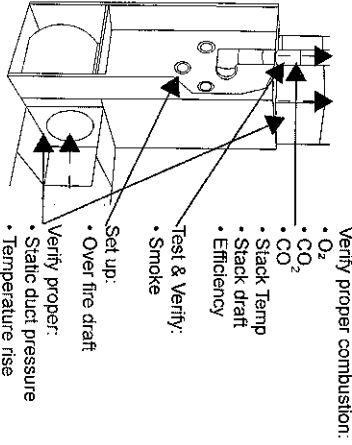


TYPICAL COMBUSTION - WHERE TO TEST

NATURAL GAS AND PROPANE



OIL FURNACES*



* Test smoke prior to using analyzer

K000000000S9 035719 191120

TYPICAL ACCEPTABLE COMBUSTION RESULTS

PLEASE FOLLOW MANUFACTURER'S SPECIFICATIONS

Oil Fired Power Burners (#2 Fuel Oil)	
Oxygen (O2)	4 to 7%
Carbon Monoxide (CO)	< 100 ppm
Carbon Dioxide (CO2)	10.0% - 13.0%
Stack Temp	325 to 600°F
Stack Draft	-.02 to -.04 inWC
Overfire Draft	-.02 inWC
Smoke	0 (or manufacturer's specifications)
Gas Fired Power Burners	
Oxygen (O2)	3 to 6%
Carbon Monoxide (CO)	< 100 ppm
Carbon Dioxide (CO2)	8.0% - 11.0%
Stack Temp	275 to 500°F
Stack Draft	-.02 to -.04 inWC OR Manufacturer's Specifications
Overfire Draft	-.02 inWC
High efficiency Gas Fired 90+ Power Burners	
Oxygen (O2)	5 to 7%
Carbon Monoxide (CO)	< 100 ppm
Carbon Dioxide (CO2)	7.0% - 9.0%
Stack Temp	Less than 125°F
Stack Draft	+ .02 to +.08 inWC OR Manufacturer's Specifications
Atmospheric Gas Fired Burners	
Oxygen (O2)	7 to 9%
Carbon Monoxide (CO)	< 100 ppm
Carbon Dioxide (CO2)	6.0% - 8.0%
Stack Temp	325 to 600°F
Stack Draft	-.02 to -.04 inWC OR Manufacturer's Specifications
Overfire Draft	-.02 inWC

Check for Cracked Heat Exchanger

O2 & Excess Air are the easiest methods to checking for a cracked heat exchanger. Here is the simple test:
Place Probe in stack. Watch the O₂ & Excess Air readings as you turn the blower on. Should the O₂ & Excess Air readings change substantially, there could be a cracked heat exchanger and further evaluation should be done (on Oil systems, possible a gasket missing or clean out port is loose).