START-UP OF PLATINUM® WATER HEATERS

FOR DETAILED INFORMATION SEE INSTALLATION & MAINTENANCE MANUAL *

WARNING: These startup instructions are prepared for a qualified service installer, service agency or gas supplier and require and rely on the experience and training of these qualified gas appliance technicians to be safely completed. Attempting to follow these instructions without such training and experience can result in property damage, exposure to hazardous materials, personal injury or death.

1. Check the water heater tank to make sure it is full of water. (Remove air through T&P valve)

2. Remove lower front jacket cover to expose the burner and gas train assembly.

3. Visually check that all components are intact and no damage has occurred during transit or installation.

4. Check all connections within the control cabinet. A loose wire connection could cause intermittent shutdowns.

5. Check the inlet/supply gas pressure before startup, using a U-tube manometer or a 0 to 28" W.C. pressure gauge for inlet gas pressure (This is the pressure measured before all components in the gas train). The manometer must stay connected throughout the testing to monitor the inlet gas pressure while the burner is firing. Record static pressure when not firing and record flow pressure while firing and ensure these pressures do not exceed the maximum inlet pressure and is not below the minimum inlet pressure shown on the appliance rating plate located on the front control panel door. Pressures above or below those on the rating plate could result in gas valve damage, unreliable operation or the creation of dangerous carbon monoxide.

6. Check the flue gases with an electronic combustion analyzer to make final adjustments to the gas pressure regulator:

    a. Readings should be taken through a small hole in the vent located no more than 12 inches downstream of the appliance flue outlet.

    b. Measure the vent pressure using a manometer or draft gauge capable of reading up to 1/2" W.C. and record vent pressure. Vent pressure must not exceed +0.4" W.C., Excessive vent pressure indicates a vent obstruction or inadequately sized vent.

    c. When water in tank is above 120°F, insert the analyzer sensor into the hole in the vent and record O_2 reading (4% to 7.5%). Record CO_2 if available.

    d. Record CO reading (200 ppm maximum).

    e. To prevent products of combustion from escaping, cover the test hole in the vent with aluminum adhesive tape.

    f. Check the operating control to be sure it functions properly by lowering and raising the operating temperature setting (see section “Thermostat Setting”) causing the burner to cycle on and off.

7. Complete the attached startup report.

Important – Contact PVI Customer Service, 800-433-5654, if any recommended setpoint or analysis reading falls outside of the recommended ranges before completing startup.

START-UP REPORT
PLATINUM® WATER HEATERS

Warning: Startup must be performed by a qualified service installer, service agency or the gas supplier.

Model Number:_____ Serial Number: _____

Job Name: _____

Address: _____

GENERAL INFORMATION

Restart? ☐ Yes ☐ No Installation is: ☐ New ☐ Replacement/Renovation ☐ Indoor ☐ Outdoor

Primary operating voltage supply: _____ VAC Voltage from neutral to earth ground: _____ (should be zero)

Thermostat Setting: _____ °F Thermostat Setting: _____ °F Hi-Limit Setting _____ °F

Is the T & P Relief Valve plumbed to a suitable drain? ☐ Yes ☐ No

BOILER INSTALLATIONS (Closed Loop Heating System)

Boiler water supply and return piping size _____ Is there a Primary (boiler bypass) loop? ☐ Yes ☐ No

Primary (boiler bypass) loop contains: ☐ Modulating 3-way valve ☐ Manual valve ☐ No valve

What is the horsepower of the primary (boiler loop) circulator pump? _____ VFD? ☐ Yes ☐ No

What is the location of the primary circulator pump? ☐ Downstream from boiler ☐ Upstream from boiler

Is there a balancing valve (circuit setter) in the primary loop? ☐ Yes ☐ No

Supply water temperature: _____ °F Return water temperature: _____°F

What is the horsepower of the secondary (main heating loop) circulator pump? _____ VFD? ☐ Yes ☐ No

What is the location of the secondary circulator pump? ☐ Downstream from boiler ☐ Upstream from boiler

Is there a balancing valve (circuit setter) in the secondary loop? ☐ Yes ☐ No

WATER HEATER INSTALLATIONS

Type of piping connected to heater: ☐ Copper ☐ Brass ☐ Galvanized

Is there a check valve in the supply water piping? ☐ Yes ☐ No

Is there a water softener on the cold water supply? ☐ Yes ☐ No Operational? ☐ Yes ☐ No

Is there a mixing valve on the hot water supply? If yes; temperature setting: _____°F ☐ No

Is there expansion relief in the cold water supply? If yes, what type: ☐ tank ☐ valve ☐ No

Is there a recirculation loop? ☐ Yes Circulating pump horsepower: _____ ☐ No

Is there a floor drain in the room? ☐ Yes ☐ No

Model Number:_____ Serial Number: _____

VENTING and COMBUSTION AIR

Vent Material: _____ (PVC; CPVC; AL29-4C Stainless Steel)

Vent diameter: _____ inches; Vent Length: _____ feet Vent Type: ☐ Through-the-roof ☐ Through Sidewall

Does vent have condensate Drain? ☐ Yes ☐ No Does vent have elbows? ☐ Yes; Qty _____ ☐ No

Does vent contain any of these devices? ☐ Power Vent ☐ Draft Inducer ☐ Draft Regulator ☐ Flue Damper

Combustion air louvers or openings? ☐ Yes; Qty: _____ Size: _____ ☐ No Interlocked? ☐ Yes ☐ No

Have direct-ducted combustion air? ☐ Yes; duct diameter _____ inches, length _____ feet. ☐ No

Duct Material: _____ Does duct have elbows? ☐ Yes; Qty _____ ☐ No

GAS SUPPLY

Type of Gas: ☐ Natural ☐ LP Inlet Static Gas Pressure: _____ "W.C. (10.5" W.C. maximum)

Gas Supply Pipe Size: _____ Inlet Flow Gas Pressure: _____ "W.C. (see data label)

Combination Gas Pressure Switch Setting: High_____ "W.C. Low_____ "W.C.

COMBUSTION ANALYSIS RESULTS

Manifold Gas Pressure (see data label) "W.C.		Vent Pressure (not to exceed +0.4" W.C.)	
Carbon Dioxide CO_2 (8-9%)		Gross Vent Temperature °F (See Note)	
Oxygen O_2 (5-7%)		less Room Temperature °F	
Carbon Monoxide CO (less than 200 ppm)		= Net Vent Temperature °F	
Nitrogen Oxide NO_X (if available)		Note: Max Gross Temp for PVC = 140°F; CPVC = 230°F	

Important: You must submit the original copy of the completed form to your PVI representative before the warranty will become effective on this product. Contact Customer Service for assistance at 1-800-433-5654.

Comments: _____

_____

_____

_____

_____

Service Company Name: _____ Phone:_____

Service Co. Address: _____

Start-up Performed By: _____ Date: _____

Customer: _____ Phone No.:_____ Date:_____