INSTALLATION INSTRUCTIONS

APPLICATION

Hot Surface Igniter is a field service replacement igniter in gas fired appliance which uses a 120-volt silicon Carbide igniter design with long life.

BEFORE YOU START

- 1. Review this instruction sheet fully to assure you are familiar with steps and information necessary to complete the installation properly.
- 2. Confirm the existing hot surface igniter has failed:
 - a. Run an appliance cycle and observe the installed igniter.
 - b. If the igniter glows, the problem is not the igniter.
 - c. If the igniter does not glow during an ignition cycle:
 - I. Unplug the igniter lead wires.
 - ii. Set a voltmeter's scale to 300 VAC and connect the voltmeter to the igniter harness.
 - iii. Run another cycle and confirm 120 VAC power at the harness during the warmup time.
- 3. Check the appliance construction and wiring diagram (typically located on an appliance panel).
- 4. If the appliance is a sealed combustion model, determine if the existing hot surface igniter ceramic is part of the sealing of the burner box. If it is, check carefully to determine if this kit will allow the proper appliance function.

INSTALLATION

- 1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
- 2. Installer must be a trained, experienced service technician.
- 3. After installation is complete, check out appliance operation as provided in these instructions.

WARNING: Fire or Explosion or Electrical Shock Hazard. Can cause severe injury, death, or property damage.

- 1. Never install where water can flood, drip, or condense on the igniter or its controller.
- 2. Liquefied petroleum (LP) gas is heavier than air and will not naturally vent upward.
 - a. Do not operate electric switches, lights, or appliances until you are sure the appliance area is free of gas.
- 3. Disconnect power supply before wiring or making wiring connections to prevent electrical shock or equipment damage.

Remove the old igniter assembly

- 1. Turn off electrical power supply external to the appliance.
- 2. Turn off gas supply to the appliance.
- 3. Set thermostat to the lowest setting or OFF.
- 4. Remove the appliance panel to expose the burner area. If necessary, remove the burner box panel to expose the installed igniter.
- 5. Disconnect the installed igniter from the appliance wiring harness and move the wiring harness out of the way.
- 6. Carefully review the location of the installed igniter in the appliance. Pay attention to where the igniter is located relative to the burners and other parts of the appliance. This will help confirm the location of the new igniter for installation.
- 7. Locate and remove the screw(s) holding the installed igniter or igniter bracket assembly in place. Remove the installed igniter very carefully to avoid damaging it. Retain the screw(s) for re-installation.

Install the replacement igniter

- 1. Carefully position the replacement igniter and bracket assembly into the appliance.
- 2. Position the assembly so the existing mounting screw holes align with the mounting holes or slots in the replacement assembly.
- 3. Secure the replacement igniter bracket with the original igniter screws.
- 4. NOTE: In some applications, a shorter screw may simplify installation.
- 5. Orient the replacement igniter the same way as the original igniter was positioned and secure it. Be sure the igniter portion does not touch the appliance or burners.
- 6. Carefully route the replacement igniter lead wires away from the burner flame and any moving parts on the combustion air blower in the appliance.
- 7. Locate the appliance igniter wiring harness. Clip off the connector and strip both wires to 1/4 in. (6 mm).

Check Installation

- 1. Recheck location of the igniter bracket assembly and lead wires to assure there is no interference and that the lead wires will not be exposed to excessive heat or moving parts when the appliance is firing.
- 2. Recheck the line voltage connections between the igniter harness and the appliance wiring harness to be sure they are secure. Assure that no bare wire is exposed at this connection.
- 3. Turn the electrical power supply on, but leave the gas supply off, and initiate a light off (call for heat) cycle. Observe the hot surface igniter during the sequence to confirm it gets hot and that there is sufficient clearance between the igniter and other appliance parts. Also confirm that the lead wire routing does not interfere with appliance operation.
- 4. Remove the call for heat signal.
- 5. Turn the gas supply on.
- 6. Initiate a call for heat. Observe the light off sequence and confirm that the appliance lights properly and stays lit once the actual gas flow starts.
- 7. If the appliance lights and the main flame stays stable, remove the call for heat and allow the shutdown sequence to be completed. Repeat step 6 two more times to assure the light off of the appliance is reliable.
- 8. If the appliance does not light properly, it may be necessary to adjust the location of the hot surface igniter. Turn the gas supply off then loosen the mounting screw(s) and make adjustments. Re-tighten the screw(s) and repeat from step 5.



Disconnect power before servicing equipment.