

NY Thermal Inc. Tel: (506) 657-6000 Toll Free: 1-800-688-2575 Fax: 1-506-432-1135 Web: www.ntiboilers.com Email: info@ntiboilers.com

84094-1 HIGH GAS PRESSURE SWITCH KIT

Models Number: Lx500-800



Gas Pressure Switch - The model referenced in this Kit is the only switch that has been tested with the unit and pre-approved for field installation within the appliance cabinet of the NTI Trinity Lx500-800.

Installer Responsibilities

As the installing technician, it is your responsibility to ensure the installation is performed in accordance with the NTI Kit #84094-1 Installation Instructions, the switch manufacturer's instructions, as well as any applicable local or National installation codes. Verify Kit contents before commencing installation.



A WARNING

Manual Reset - If Gas Pressure Switch installed, functioning of switch shall cause safety shutdown and lockout requiring a manual reset from controller or touchscreen display.

Wire Protection - When passing wiring through the switch knockout, the installer must use wire grommets suitable for securing the wiring and preventing chafing. Failure to follow instructions may result in component failure, serious injury or death.

Kit Contents (P/N 84094-1)

#86369 - Dungs Gas Pressure Switch, manual reset (GMH-A4-4-4) #84647 - Bushing, Black Iron, 1/4" x 1/8" #84648 - Nipple, Black Iron, 1/8" Close

Installation Procedure

- 1. **Powering Down** Initiate a post-purge cycle to clear any gas from the combustion chamber. Locate the Manual Gas Shutoff Valve (MSOV) outside the unit and upstream of the Gas Valve, then turn the valve off. Shut off electrical power to the appliance. See "Lighting/Shutting Down the Appliance".
- 2. Gas Train Access To access the gas train 1) remove front cover, 2) remove display molding screws, tilt forward, unplug display cable, and remove display molding, 3) Remove screws from front top cover and detach by sliding forward. On Lx500 models, removal of the right side is also required to access the MSOV.
- 3. Switch Location Locate the Interior Manual GAS Shutoff Valve (MSOV) installed inside the appliance cabinet and downstream of the gas valve as shown. This manual shutoff valve can be left in the on position as shown (handle aligned with gas piping) provided the exterior or upstream Manual Shutoff Valve has been turned off. This position is actually recommended to make installation guicker and easier.
- 4. Gas Connection Remove threaded plug from the right side of the downstream MSOV (inside boiler cabinet). Prep the threads of the black iron fittings included in Kit with natural gas approved thread sealant. Peel the gas connection dust seal off the high-pressure connection (1/4" NPT tapping). Thread the bushing, nipple and High Gas Pressure Switch together then into the cored port on the blower side of the MSOV as shown. Tighten Gas Connections with a wrench until switch is mounted securely and fitting connections are snug.



Model Lx 800 shown

5. Wiring Connection - Remove dust seal from the electrical knockout hole in the bottom of switch. Retrieve Factory Wired Pigtail as shown on front left of cabinet interior near heat exchanger. Remove pigtail zip ties and wire nut and route wires through field supplied wire grommet in switch knockout. Remove clear cover and connect pigtail wires as follows: NC=Brown, C=Blue(s). See switch manufacturer's Terminal Diagram.

High Gas Pressure Switch Kit

- 6. Leak Check and Pressure Settings Complete gas and electrical connections, then perform a <u>Leak Check</u> as per switch manufacturer's instructions. <u>Pressure Setpoint Adjustment</u> is made by turning the adjustment dial clockwise to increase the pressure setting and counter-clockwise to decrease the pressure setting. Adjust pressure setting for high gas pressure to 10.5" w.c.
- 7. **Operation** When configured properly, the High Gas Pressure Switch will break C-NC and make C-NO when pressure rises to the scale setting creating a lockout condition. Model C6097B will require a manual reset when the control pressure falls to the scale setting minus differential; however, the onboard control will not allow this without a manual reset of the Sola from the controller itself or display screen. See instruction label "Manual Reset for Auto Gas Shut-off" on outside of unit.
- 8. **Power Up** Once pressure switch is commissioned, power up the unit and turn gas on. Follow instructions for "Lighting/Shutting Down the Appliance".

$oldsymbol{7}$ Lighting / Shutting Down the Appliance

Read Before Proceeding - If you do not follow these instructions exactly, a fire or explosion may result causing property damage, serious injury or death.

FOR YOUR SAFETY, READ BEFORE OPERATING

- A) This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
- B) BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
 - WHAT TO DO IF YOU SMELL GAS:
 - Do not try to light any appliance.
 - Do not touch any electric switch.
 - Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C) Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D) Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

OPERATING INSTRUCTIONS

- 1. STOP! Read the safety information above very carefully.
- 2. Set the thermostat to lowest setting. Turn off all electric power to the appliance.
- 3. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
- 4. Turn the manual gas valve to the OFF position. Remove front access panel.
- 5. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to the next step.
- 6. Turn the manual gas valve ON. Wait an additional five (5) minutes smelling for gas.
- 7. Replace the front access panel.
- 8. Set thermostat to highest setting. Turn on all electric power to the appliance.
- 9. Ignition sequence is automatic. Combustion will occur after a brief fan purge.
- 10. If ignition does not occur, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

TO TURN OFF GAS TO THE APPLIANCE

- 1. STOP! Read the safety information above very carefully.
- 2. Turn off all electric power to the appliance.
- 3. Turn the manual gas valve to the OFF position.