Replacement Kit for G60PFH-2 Ignition Control for Models (H)X, (H)RX, (H)SC and SC(A,B,E)

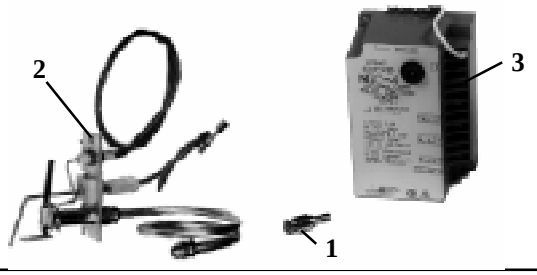
This kit, **P/N 95238**, is designed to permit the replacement of ignition controller, J/C Model G60PFH-2, with ignition controller, J/C Model G770NGC-4 on the models listed. Both controllers provide spark ignition with 100% lockout. The new Model G770NGC-4 ignition controller has 120 second lockout and operates with a lower-level flame signal. (For future troubleshooting, note that the microamp flame signal on the new controller should be a minimum of 0.2 microamps as measured by a microampmeter.)

Do not use this kit on Models (H)RPV, (EE)XL)B) or (H)EEDU.

Kit, **P/N 95238**, includes:

Code	Qty	P/N	Description
1	1	63088	Pilot Orifice (natural)
2	1	61146	Spark Pilot assembly (Propane)
3	1	97547	Ignition Controller, J/C #770NGC-4
	1	90509	Flame Sensor Wire Assy
	2	90503	Screws, No. 6 x 1" long (for attaching ignition controller)
	1	96101	Lighting Instruction Plate

Figure 1 - Items 1-3 of Replacement Kit



WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury, or death. Read the installation instructions thoroughly before installing this equipment.

Installation Instructions

DANGER: This replacement ignition controller kit is to be installed by a qualified agency in accordance with these instructions and in compliance with all codes and requirements of authorities having jurisdiction. Failure to follow instructions could result in death, serious injury, and or property damage. The qualified agency performing this work assumes responsibility for this installation.

1. Turn off the gas and power supply to the heater.
2. Remove the access panel on the control side of the unit.
3. Disconnect the flame probe (Terminal 4 on the bottom) and the ignitor lead from the ignition controller. Loosen the two screws that hold the pilot assembly to the burner rack (save the screws to use in attaching the new pilot.) With leads attached, remove the pilot assembly.
4. Install the new pilot assembly:

   Propane Gas Units – Install the new pilot assembly (Item 3) on the burner rack, using the same screws that held the original pilot. (The natural gas pilot orifice included in the kit will not be used.)

   Natural Gas Units – Remove the pilot orifice from the new pilot assembly. Replace it with the natural gas pilot orifice (Item 2) shipped loose in the kit. Attach the new pilot assembly with the natural gas orifice to the burner rack, using the same screws that held the original pilot. (The propane gas pilot orifice removed from the pilot assembly will not be used.)
5. Check the spark gap of the pilot burner. Correct spark gap is 7/64". See Figure 2 for correct measurement.
6. Mark the remaining wires connected to the ignition controller with their respective terminal numbers. Disconnect the wires and remove the ignition controller.
7. Position the new controller as shown in Figure 3. Mark the hole locations. Drill two 7/64" holes and mount the controller using the screws in the kit.

Figure 2 - Enlarged View of Pilot Spark Gap

Spark gap must be 7/64" measuring from spark electrode tip to the pilot head at point "X"

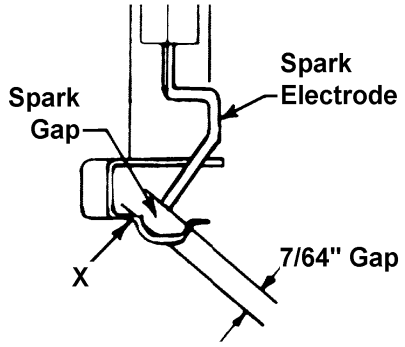
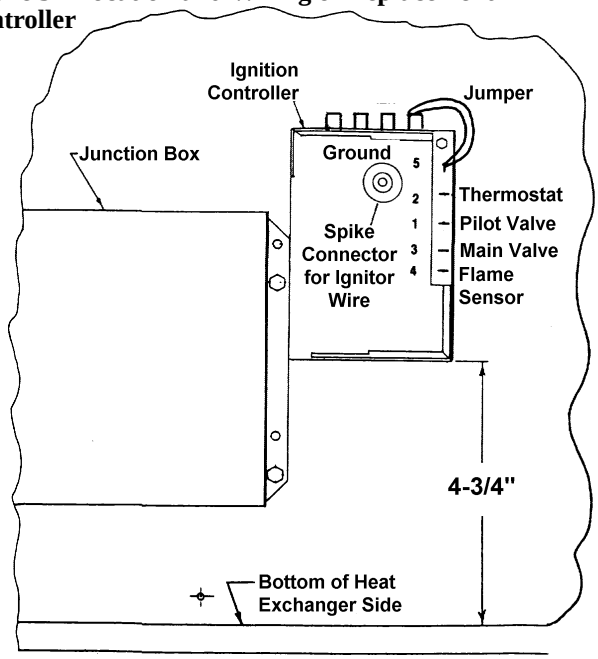


Figure 3 - Location and Wiring of Replacement Controller



Installation Instructions (cont'd)

8. Connect wiring to the ignition controller using terminal identifications and wire markings. Terminal numbers on the new controller are identical to those on the removed device, except that Terminal 6 is no longer used. Completely remove and discard the yellow wire that was connected to Terminal 6. See the terminal illustrations in Figures 3 and 4.

Connect the ignitor lead to the new controller by pushing the ignitor wire directly on to the spike connector on the ignition controller so that the spike is fully inserted and the wire is secure.

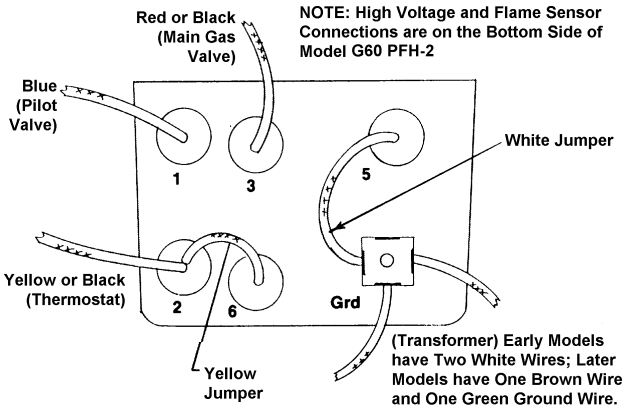
9. Adhere the new lighting instruction plate to the junction box cover.

10. Turn on the power and the gas supply. Bleed the pilot and main gas lines. Check for gas leaks using a leak-detecting solution.

WARNING: All components of gas supply system must be leak tested prior to placing equipment in service. NEVER TEST FOR LEAKS WITH AN OPEN FLAME. FAILURE TO COMPLY COULD RESULT IN PROPERTY DAMAGE, SEVERE PERSONAL INJURY OR DEATH.

11. Replace the access panel. Check complete operation of the heater. **CHECK ALL SAFETY FEATURES FOR PROPER OPERATION.** Keep this sheet for future reference.

Figure 4 - Wiring Connections on Original Controller



FOR YOUR SAFETY

If you smell gas:

1. **Open windows.**
2. **Don't touch electrical switches.**
3. **Extinguish any open flame.**
4. **Immediately call your gas supplier.**

The use and storage of gasoline or other flammable vapors and liquids in open containers in the vicinity of this appliance is hazardous.

DANGER: The gas burner in Reznor gas-fired equipment is designed and equipped to provide safe and economically controlled complete combustion. However, if the installation does not permit the burner to receive the proper supply of combustion air, complete combustion may not occur. The result is incomplete combustion which produces carbon monoxide, a poisonous gas that can cause death. Safe operation of indirect-fired gas burning equipment requires a properly operating vent system which vents all flue products to the outside atmosphere. FAILURE TO PROVIDE PROPER VENTING WILL RESULT IN A HEALTH HAZARD WHICH COULD CAUSE SERIOUS PERSONAL INJURY OR DEATH.

Always comply with the combustion air requirements in the installation codes and instructions. Combustion air at the burner should be regulated only by manufacturer-provided equipment. NEVER RESTRICT OR OTHERWISE ALTER THE SUPPLY OF COMBUSTION AIR TO ANY HEATER. Indoor units installed in a confined space must be supplied with air for combustion as required by Code and in the heater installation manual. MAINTAIN THE VENT SYSTEM IN STRUCTURALLY SOUND AND PROPERLY OPERATING CONDITION.

1098 2.5M WE Form CP-18A.2