#### **Replacement Kit Instructions**

## Ignition Controller Replacement Kits for Pilot Codes 62, 63, 65, 66, 84

WARNING: To ensure safe and proper operation, read and follow the installation instructions. Failure to do so could result in property damage, personal injury, and/or death.

Controllers being replaced						Ignition Controller Replacement Kits		
P/N	*Pilot Code	Mfr No.	Reason fo	or replacement	Kit P/N	with Controller	Controller Characteristics	
89488	63	G67NG-2			257473	P/N 257010;	With lockout and one hour retry;	
97547	65	G770NGC-4	Contro	Controllers are no		Pilot Code 95	use with automatically controlled	
234012	84	G770NHC-1	longer ava	ailable from the		Code 95	vent damper	
89314	62	G67BG-2	manufacturer.		257472	P/N 257009;	Recycling (without lockout); cannot	
97782	66	G67BG-5				Pilot Code 94	be used with vent damper control	
P/N 8948	P/N 97547	P/N 234012	P/N 89314	P/N 97782	P/N 257 UTEC 1 514		P/N 257009, UTEC 1003- 638A	

\* Serial No. Decoding Sample of a Serial No. for Units manufactured beginning in 1975:

BDJ 66 W8 N 12345 Serial No. 1 2 3 4 5 Element

Element Key: 1 = Month and year of manufacture.; 2 = Type of safety pilot or ignition system.; 3 = Type of valve. (A dash indicates that the valve was field supplied.); 4 = Type of gas that the heater was originally manufactured to burn, L = Propane; N = Natural (Check for gas conversion label.); 5 = Consecutive number of heater manufactured. Used for identification purposes only. In addition to the basic five elements, the serial number may also include prefix and/or suffix codes. See Form P-VALVES for a complete listing and explanation of the Serial No. codes. All codes apply to original equipment only.

### **Kit Components**

Replacement
Kit P/N 257473
(100% Lockout,
Option AH3;
required with a
vent damper)

Qty	P/N	Description				
1	257475	Ignition Control Assembly including:				
1	257010	Ignition Control 100% Lockout, UTEC 1003-514				
1	173303	Red Wire Assembly (I.C. "24V")				
1	133108	Black Wire Assembly (I.C. "MV")				
1	98215	Brown Wire Assembly (I.C. "MV/PV")				
1	98214	Blue Wire Assembly (I.C. "PV")				
1	257074	Green Wire Assembly (I.C. "GND BURNER")				
1	98215	Brown Wire Assembly (I.C. "24V GND")				
1	257014	Red Wire Assembly (I.C. "SENSE")				
1	173307	Black Wire Assembly (I.C. "TH")  Only one of these loose wires will be				
1	122655	Yellow Wire Assembly (I.C. "TH")	used.			
1	257012	Control Mounting Bracket Used only on Models F, FE, B, E				
2	96426	#10 x 3/8" long Screw (to attach bracket) RX, RG and X.				
4	195638	#8 x 3/8" long Screw (to attach control)				
1	257478	Wiring Label (contains ignition controller with lockout)				
1	134704	Instruction Sheet, Form CP-IGN CNTRL				

Replacement
Kit P/N 257472
(recycling without lockout, Option
AH2)

Qty	P/N	Description				
1	257474	Ignition Control Assembly including:				
1	257009	Ignition Control without lockout, UTEC 1003-638A				
1	133108	Black Wire Assembly (I.C. "MV")				
1	98215	Brown Wire Assembly (I.C. "MV/PV")				
1	98214	Blue Wire Assembly (I.C. "PV")				
1	257074	Green Wire Assembly (I.C. "GND BURNER")				
1	98215	Brown Wire Assembly (I.C. "24V GND")				
1	257014	Red Wire Assembly (I.C. "SENSE")				
1	173307	Black Wire Assembly (I.C. "TH")	Only one of these loose wires will be			
1	122655	Yellow Wire Assembly (I.C. "TH") used.				
1	257012	Control Mounting Bracket	Used only on Models F, FE, B, BE,			
2	96426	#10 x 3/8" long Screw (to attach bracket)	RX, RG and X.			
4	195638	#8 x 3/8" long Screw (to attach control)				
1	257479	Wiring Label (recycling non-lockout)				
1	134704	Instruction Sheet, Form CP-IGN CNTRL				

## Installation Instructions

- 1. Verify the kit is the correct replacement. Check the components against the list on page 1.
- 2. Turn off the gas supply and the electric power to the heater.
- 3. Locate the ignition controller and disconnect the spark wire from the spike on the controller. Leave all other wires connected to the ignition controller; follow the wires and disconnect them from their various connections. Remove the ignition controller and attached wires.
- 4. Choose the instruction below that applies and attach the replacement controller.

Models F/FE/B/BE/RX/RG/X - Position the control mounting bracket and attach it to the heater with the two #10x3/8" screws provided. Attach the ignition controller to the bracket with three of the #8x3/8" long screws.

<u>All other Models</u> - Position the new ignition controller in the same orientation and mark the holes. Drill four 7/64" holes and attach the new ignition controller using the four #8 x 3/8" long screws provided.

Refer to the wiring diagram label (or the appropriate diagram on page 3) and connect the wires. If the unit has terminal block wiring, cut and strip the ends as needed.

All of the wires are connected to the ignition controller at the factory except to the "TH" Terminal. There are two loose wire assemblies in the kit. If the existing wire from the limit control is yellow, use the yellow wire to connect the limit control to the "TH" terminal. If the existing wire from the limit is black, use the black wire to connect the limit control to the "TH" terminal. (One wire will not be used.) Check special wiring instructions below and follow if applicable.

## Special Wiring Instructions when replacing either a P/N 89488 or P/N 89314 ignition controller:

Replacing either P/N 89488 or P/N 89314 - In order to connect the ignitor lead to the new controller, it will be necessary to cut off the Rajah connector (metal terminal) on the spark wire. Push back the rubber boot and cut off the terminal (cutting off no more than 1" of wire). Remove the rubber boot. Push the wire directly onto the spike connector on the ignition controller.

## Special Wiring Instructions when using an automatic vent damper:

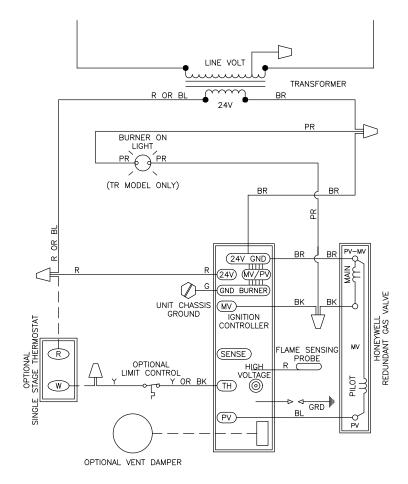
Remove the plug from the ignition controller and plug in the wiring harness from the vent damper. The wiring harness electrically interlocks the vent damper to the control. Unplugging either end results in a system shutdown.

- 6. Select a location near the current wiring diagram on the unit to adhere the wiring label. Do not put the label on a surface that will be hot when the heater is operating and do not put it over the existing wiring diagram. Wipe the selected area with a clean dry cloth. Peel the backing and adhere the new label.
- 7. Turn on the electric power and the gas supply. The heater has the same lighting instructions as with the original ignition controller. Check complete operation of the heater to ensure safe and proper operation.

CAUTION: Control, P/N 257010, with lockout is required with a vent damper. The controller has a safety feature that once it is used with a vent damper, it will no longer operate a unit without a vent damper.

## Wiring Diagram Label 257478 (ignition controller with lockout)

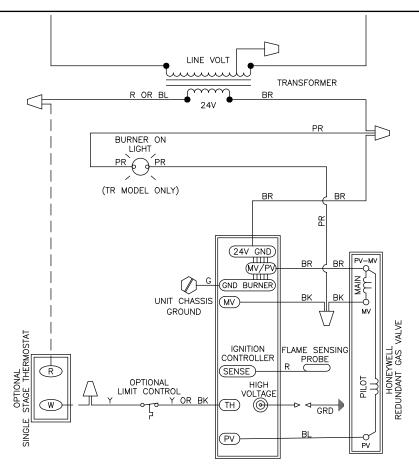
Minimum flame proving signal strength is 0.2 microamps.



USED ON: OPTION AH3 FIELD REPLACMENT WD# 257478R1

# Wiring Diagram Label 257479 (recycling/ non-lockout ignition controller)

Minimum flame proving signal strength is 0.2 microamps.



USED ON: OPTION AH2 FIELD REPLACEMENT WD# 257479 R1

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