INSTALLATION

INSTRUCTIONS

FOR

FENWAL "TRITON" SERVICE PARTS DIRECT SPARK IGNITION CONTROL KIT

KIT CONTENTS:

(1) Fenwal "Triton" 2461D Series direct spark gas ignition control
(1) High voltage electrode cable
(1) Low voltage jumper wire (may be pre-installed on ignition control terminals)
(1) Wiring label
(1) Installation Instruction

Examine the contents of this kit to make sure all parts are included.

DESCRIPTION:

This kit enables the Fenwal "Triton" local sense, 1-hour retry, direct spark ignition (DSI) control to be used as a service parts replacement for earlier versions of Fenwal DSI controls used on GHC and HW/HWC models. GRTC models with a direct spark ignition system require a different kit.

HW/HWC's manufactured after December, 1994 were factory equipped with the type of ignition control in this kit. For these units, only the ignition control from this kit (without jumper wire) is required; the other parts may be discarded.

Features and operation of this ignition control differ from the other types of DSI controls used on these products as follows:

1. Longer trial for ignition (15 seconds nominal).
2. One hour retry feature (if main burner operation is not proved after 3 trials for ignition, control goes into lockout for one hour, then automatically initiates another ignition sequence. Will repeat as long as call for heat exists.)
3. Senses flame through spark electrode (local flame sense) instead of through a separate flame sensor (remote flame sense).
4. Diagnostic LED indicates certain ignition and venting system malfunctions (refer to control label for specific diagnostic codes).
5. Includes flame current (FC) test terminals.

CONVERSION PROCEDURE

HW/HWC models with separate (remote) flame sensor:

1. Disconnect power and shut off gas supply.
2. Open burner access door, and disconnect all wires from existing ignition control. (NOTE: High voltage electrode cable will be replaced with one from this kit, and flame sensor wire will NOT be used with new control. There is no need to remove the remote flame sensor.)
3. Remove 2 screws securing ignition control, and remove control.
4. Install new ignition control from this kit.
5. Referring to the wiring label included with this kit, reconnect wires to the ignition control. Use the high voltage electrode cable from this kit. Make sure the jumper wire is connected between the "TH" and "24V" terminals, and that the ground wire is securely fastened to a good chassis ground point.
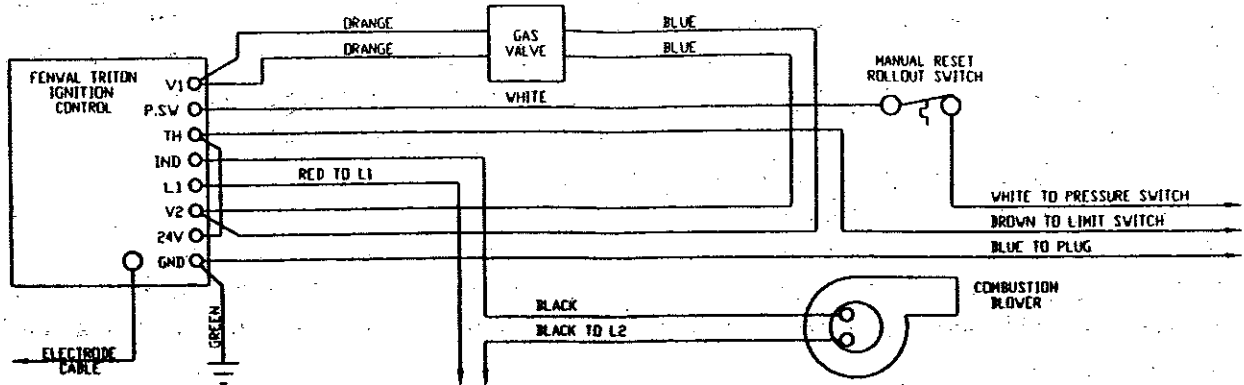
6. Close burner access door (be careful high voltage cable is not pinched between door and cabinet), turn on gas supply, and connect electric power supply. Initiate a call for heat and verify proper ignition and operation of all burners. Correct any deficiencies found.
7. Apply wiring label from this kit adjacent to wiring label on unit.
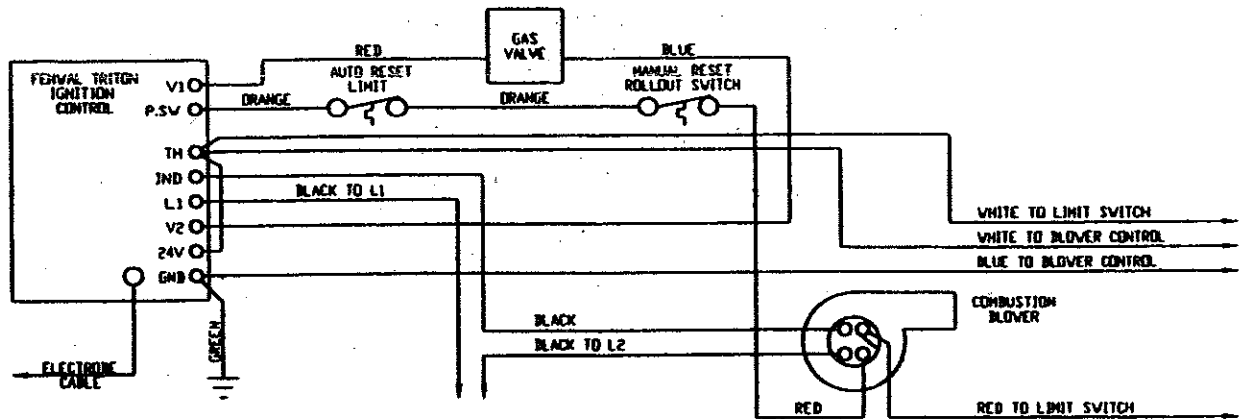
GHC models:

1. Disconnect power and shut off gas supply.
2. Remove burner access panel, and disconnect all wires from existing ignition control. (NOTE: High voltage electrode cable will be replaced with one from this kit, and flame sensor wire will NOT be used with new control. There is no need to remove the remote flame sensor.)
3. Remove 2 screws securing ignition control, and remove control.
4. Install new ignition control from this kit.
5. Referring to the wiring label included with this kit, reconnect wires to the ignition control. Use the high voltage electrode cable from this kit. Make sure the jumper wire from this kit is connected between the "TH" and "24V" terminals, and that the ground wire is securely fastened to a good chassis ground point.
6. Turn on gas supply and connect electric power supply. Initiate a call for heat and verify proper ignition and operation of all burners. Correct any deficiencies found.
7. Replace and secure burner access panel.
8. Apply wiring label from this kit adjacent to wiring label on unit.

WIRING LABEL FOR SERVICE PARTS
FENWAL 'TRITON' DIRECT SPARK IGNITION CONTROL

HW/HWC MODELS ORIGINALLY EQUIPPED WITH A
DIRECT SPARK IGNITION SYSTEM

GHC MODELS ORIGINALLY EQUIPPED WITH A
DIRECT SPARK IGNITION SYSTEM

GRTC MODELS ORIGINALLY EQUIPPED WITH A
DIRECT SPARK IGNITION SYSTEM