

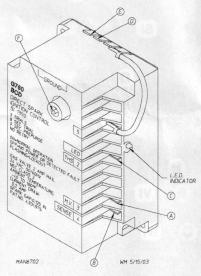
235/236 Conversion Instructions from Johnson to Fenwal Control Module

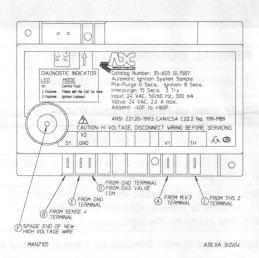
(Kit Part Numbers 884162 and 884284)

Important

You must disconnect and lockout the electric supply and the gas supply before any covers or guards are removed from the machine to allow access for cleaning, adjusting, installation, or testing of any equipment per OSHA (Occupational Safety and Health Administration) standards.

Read these instructions carefully before attempting conversion/installation.





System Operation

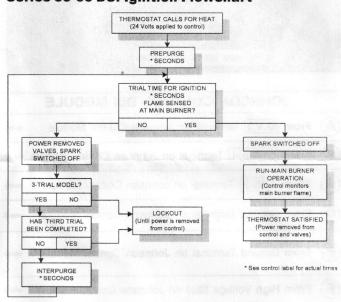
On a call for heat by dryer's controls, 24 VAC is applied to the Direct Spark Ignition (DSI) module at which time modules light emitting diode (L.E.D.) indicator will light "GREEN", indicating that power has been established to the module. Almost immediately (up to approximately 1.5-seconds [prepurge]), the valve will open and the spark burst will be evident (on) for approximately 8-seconds. The burner flame should now be established/confirmed.

If at this time, the flame has not established/confirmed, the DSI module will try two more times, and then if still no ignition the modules' red indicator will blink three times. To reset or cancel the "LOCKOUT" condition, open and close the main door and restart the dryer.

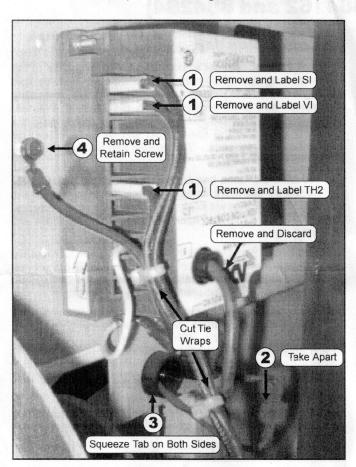
Once the burner flame is established/confirmed, the DSI module L.E.D. indicator will stay "GREEN" and the burner system will continue through a normal heating cycle, where the DSI system will cycle on and off as required by the dryer's controls.

During the normal heating cycle, should a flameout occur (i.e. severe air turbulence forces the flame away from the ignitor assembly flame probe), the DSI module will shut the gas valve off and try to reestablish the burner flame after 30-seconds.

Series 35-60 DSI Ignition Flowchart



- 1. Label all wires from each terminal, then disconnect.
- 2. Disconnect red wire.
- 3. Disconnect black plastic flex tubing from plate.
- Remove green end screw used to secure Johnson Control Module and Plate Assembly.
- 5. Remove Johnson Control Module and Plate Assembly.
- 6. Install new Fenwal Module and bracket supplied with this kit.
- 7. Reassemble black plastic flex tubing on the new Fenwal plate.



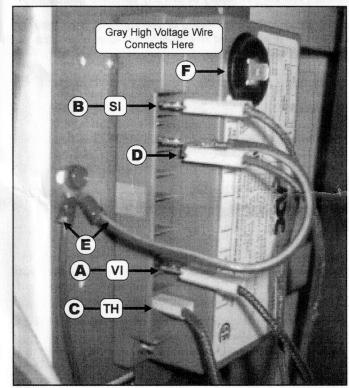
8. Follow directions below to reconnect wires.

To prevent electrical shock and/or equipment damage, disconnect the electrical power to system, at main fuse or circuit breaker box until installation/conversion is complete.

Important

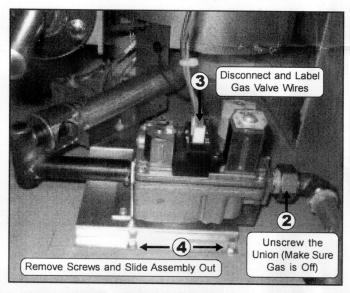
Caution

The gray high voltage wire (F) and the red flame probe wire (B) can run parallel to one another but, if possible, should not touch one another and must not be cable-tied together; nor should these two wires be wrapped around one another at any point. Doing so can result in erratic operation of the DSI module/system.

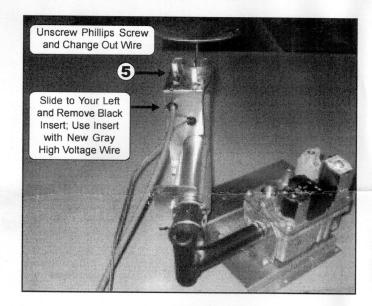


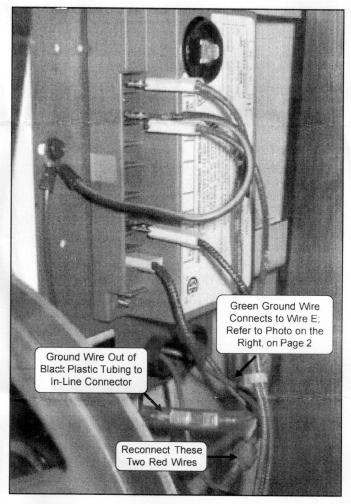
JOHNSON CONTROL DSI MODULE	FENWAL CONTROL DSI MODULE
A From M.V.3 Terminal on Johnson Control Module →	A To V1 Terminal on Fenwal Control Module
B From Sense 4 Terminal on Johnson Control Module	B To S1 Terminal on Fenwal Control Module
C From THS 2 Terminal on Johnson Control Module →	© To TH Terminal on Fenwal Control Module
D From Ground Terminal on Johnson Control Module →	To V2 GND Ground Screw Fenwal Control Module Plate. Refer to the photo on the right, page 3.
E From Ground Terminal on Johnson Control Module →	To Ground Wire with Plastic In-Line Connector then Connects to Fenwal Ground Screw Plate. Refer to the photo on the right, page 3.
F From High Voltage Stud on Johnson Control Module	F To High Voltage Spade Terminal on Fenwal Control Module

- 1. SHUT OFF GAS TO THE DRYER.
- 2. Unscrew union.
- 3. Disconnect and label the two wires "TO GAS VALVE".
- 4. Remove two hex screws and slide gas train out.



- Remove ignitor screw and orange High Voltage wire. Remove the black plastic bushing (refer to photo below).
- Install new gray High Voltage wire in place of where the old orange High Voltage wire was installed. Next, install black plastic bushing that was removed in Step #5.
- 7. Connect the other end of High Voltage wire to Fenwal Module (F); refer to photo on the right, on page 2.





Note

Make sure to reconnect these two red wires (that come out of each of the black plastic tubing). Install gas train, tighten gas union, and secure with the two hex screws (refer to photo on the top left). Make sure to reconnect the two wires to the gas valve (refer to photo on the top left).

Reestablish electrical power to the dryer.

Operate through one complete cycle to ensure that the system is functioning properly.