



HWI to EI Conversion Kit



Pilot assembly and Electronic Ignition Module

Conversion Instructions

Install Confidence.™



FIRE INSPIRED™

860-EI-CK



These are Warning and Danger Symbols

When you see this symbol on the fire pit insert, or in this manual, look for one of the following signal word panels alerting you to the potential for personal injury, death, or major property damage.



WARNING: For Outdoor Use Only.

Installation and service must be performed by a qualified installer, service agency, or the gas supplier.



DANGER

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.



DANGER

FIRE OR EXPLOSION HAZARD

If you smell gas:

- Shut off gas to the appliance.
- Extinguish an open flame.
- If the odor continues, leave the area immediately.
- After leaving the area, call your gas supplier or fire department.

Failure to follow these instructions could result in fire or explosion, which could cause property damage, personal



DANGER



CARBON MONOXIDE HAZARD

This appliance can produce carbon monoxide which has no odor.

Using it in an enclosed space can kill you.

Never use this appliance in an enclosed space such as a camper, tent, car, or home.



WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

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1 Important Safety Information

- Hearth Products Controls Company recommends that our products are installed by professionals locally licensed by the authority having jurisdiction in gas piping. All installation instructions must be followed to ensure proper performance and safety. Hearth Products Controls Company assumes no responsibility for problems relating to the installation.
- To qualify for a warranty, all instructions must be strictly followed. Otherwise, warranty may be void. Never alter product or configuration in any way.
- Annual servicing should be handled by professionals certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists or in Canada by WETT (Wood Energy Technical Training).
- It is the installer’s responsibility to ensure a safe installation and to educate the end-user regarding the features, safety recommendations and proper operation of this product.
- Please reference page 1 for all warnings.



Technical Support

For information and support contact your Hearth Products Controls dealer.

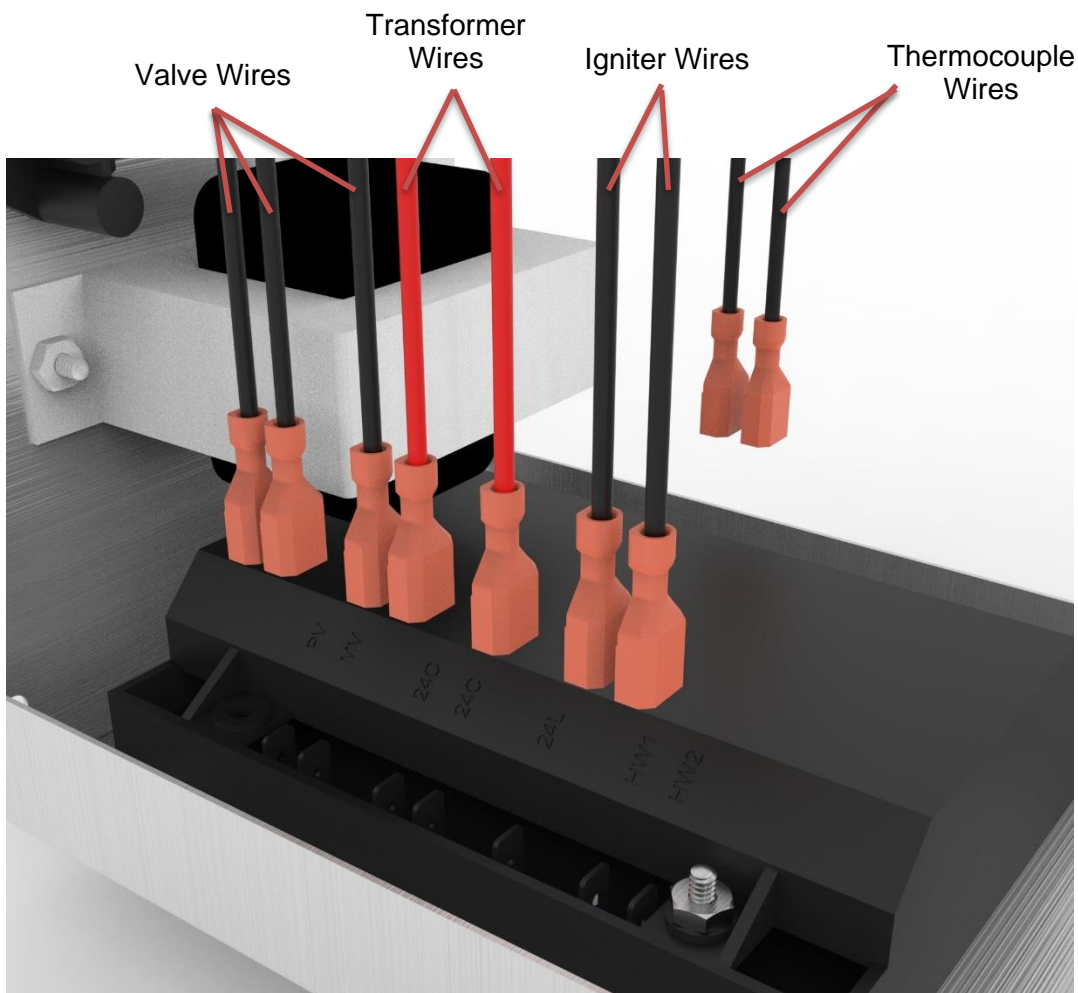


Fig. 2.1 HWI Module harness removal

Steps for HWI Module Removal:

1. Shut off power and fuel before proceeding
2. Disconnect gas line from inlet fitting and electrical connection
3. Remove lid from Valve box by removing inlet fittings and 6-32 screws
4. Disconnect wires from valve and module
 - Dispose wires
5. Remove both 6-32 module screws
 - Keep screws, nuts, and washers to be used with new module
6. Remove module from valve box

2 Module Conversion

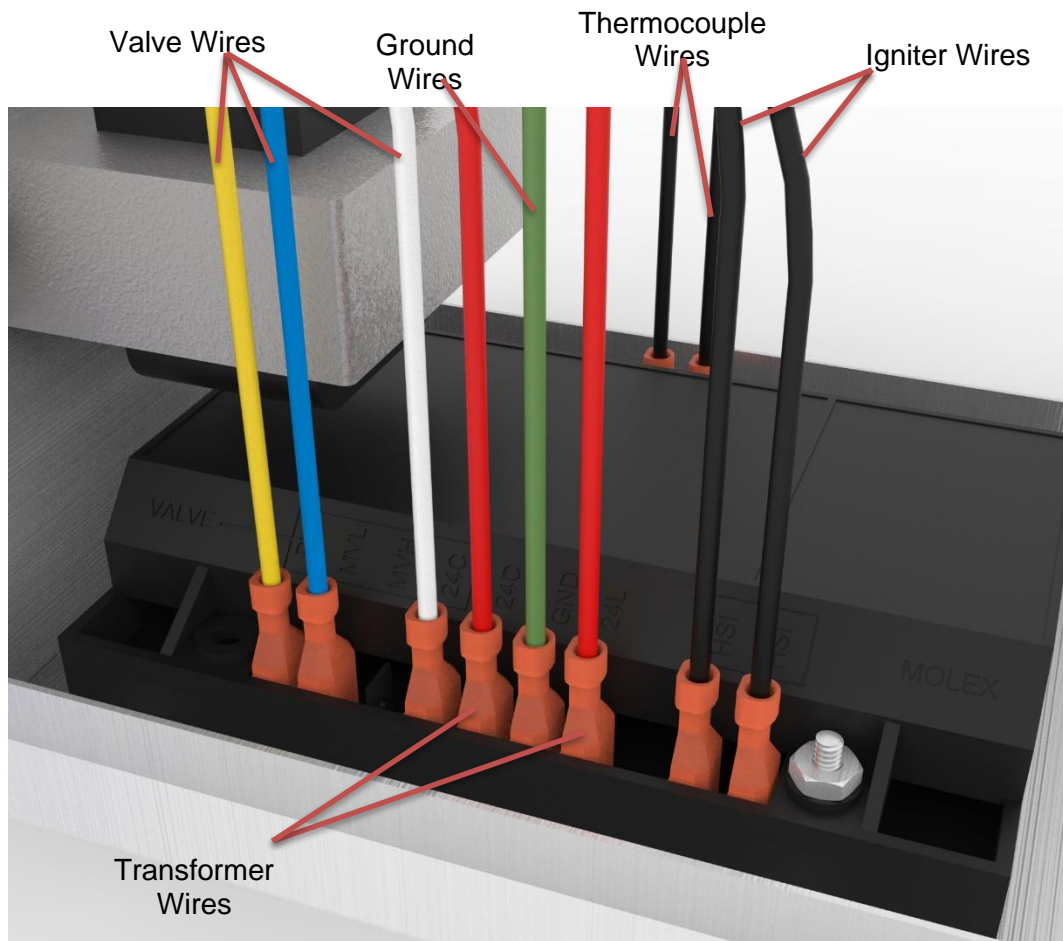


Fig. 2.2 EI Module harness install

Steps for EI Module Install:

NOTE: Loose red wire inside harness package is not needed and can be disposed.

1. Attach module to valve box using the 6-32 screws, nuts, and washers
2. Connect new wire harness to module (see Fig. 2.2, Fig. 2.3, and Fig 2.4)
 - Yellow = PV
 - Blue = MVL
 - White = 24C
 - Red = 24C and 24L
 - Green = Ground
 - Black Molex wires = HIS
 - Black Thermocouple wires = TC- and TC+
 - i. Positive TC wire is soldered to brass base
3. Connect new wire harness to valve
 - Yellow = PV
 - Blue = MV
 - White = C

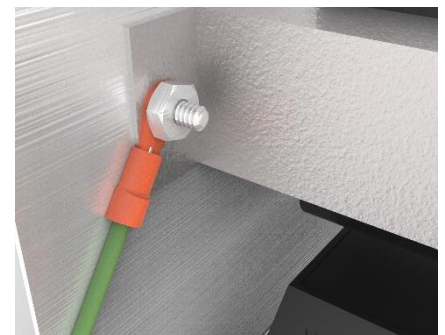


Fig. 2.3 Attach ground wire to transformer mounting screw

2 Module Conversion

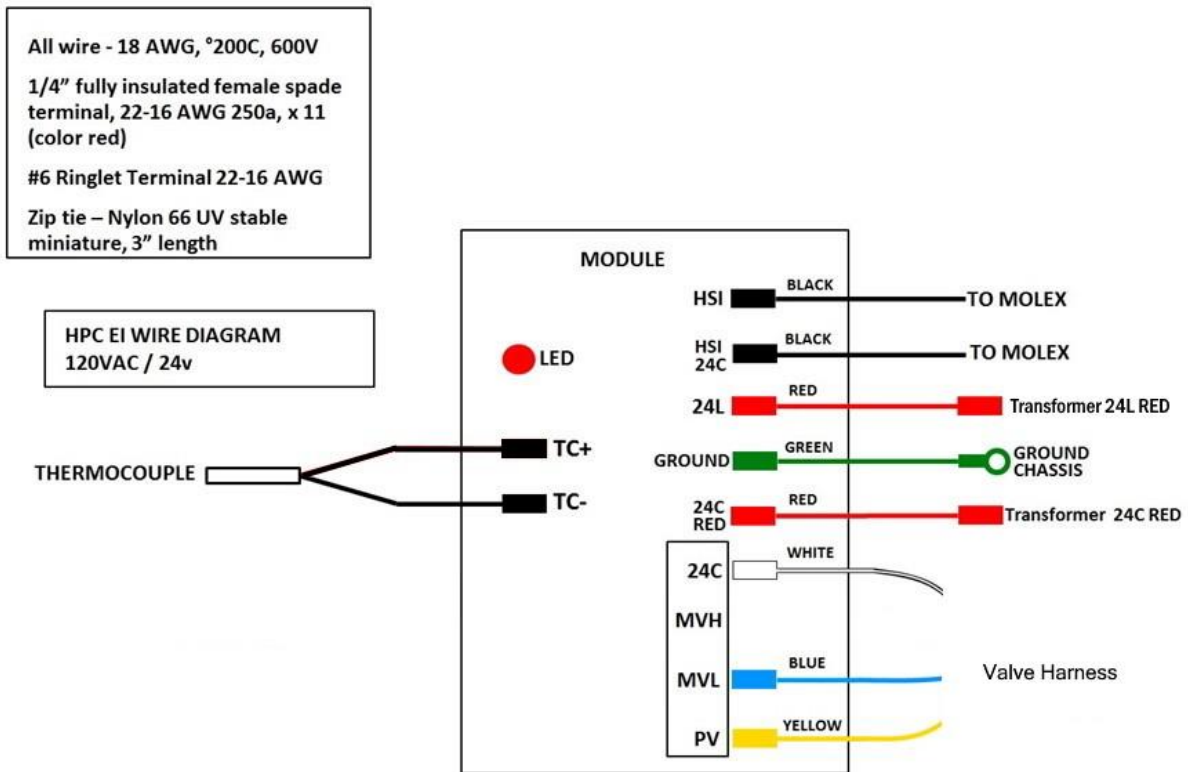


Fig. 2.4 EI Module Wiring Diagram

Lidding Valve Box:

1. Apply new wiring diagram inside lid over old diagram
2. Set lid on valve box base and align valve inlet with opening on lid
3. Using thread sealer, thread tape or pipe dope, fasten inlet fittings into valve
4. Use the 6-32 screws to fasten down lid to valve box base

3 EI Pilot Assembly Conversion

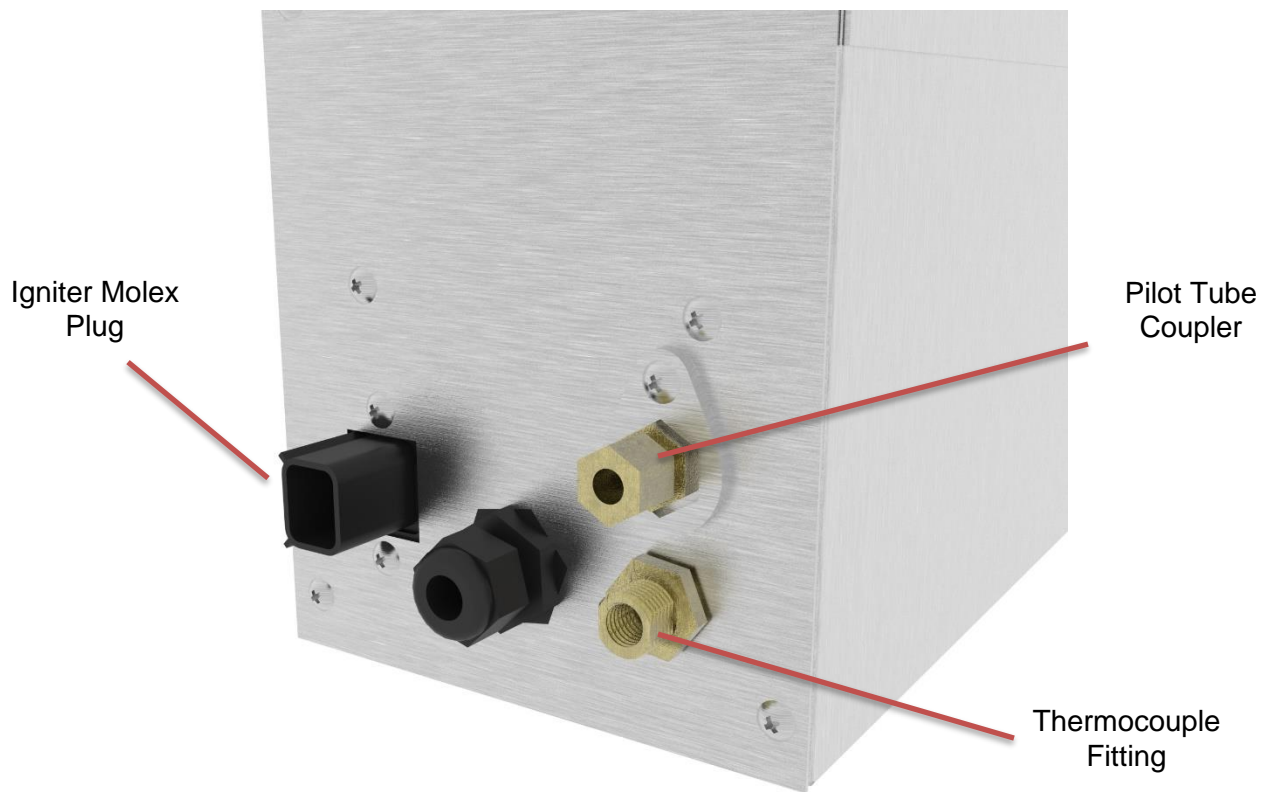


Fig. 3.1 Valve box pilot connection's location

First Steps for Removal:

1. Using a 3/8" wrench to thermocouple nut to remove thermocouple
2. Remove pilot tube using a 9/16" wrench from the valve box
3. Remove Molex plug by pulling back on the white clip, if equipped, then press in the black tab and pull back removing the plug
 - This may be difficult. Be careful not to damage the connector.
4. Remove pilot assembly from pan by unfastening the screws holding down the pilot shroud.
5. Guide pilot assembly out from the pan

3 EI Pilot Assembly Conversion

Installation of new Pilot Assembly:

Attach Pilot Assembly to pan

1. If applicable, attach transition plate to existing hole for pilot in pan
2. Slide pilot assembly replacement through hole of transition plate and mount pilot shroud to pan

Transition
Plate

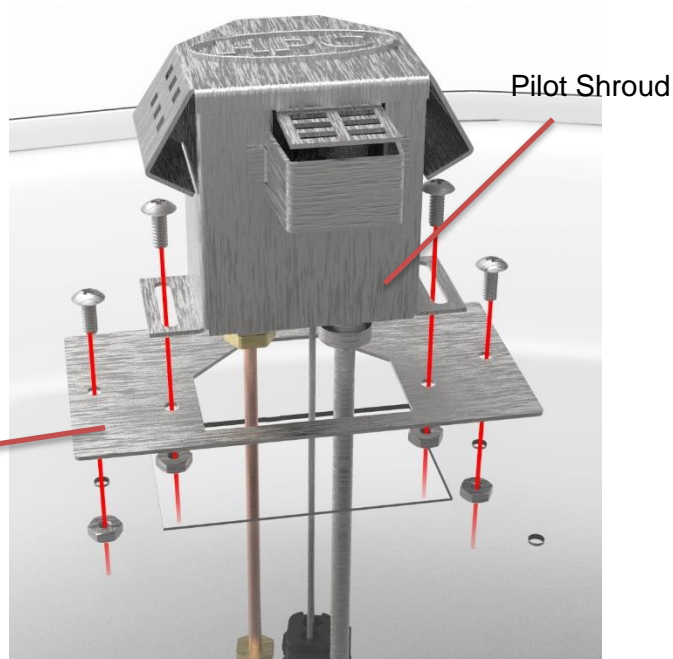


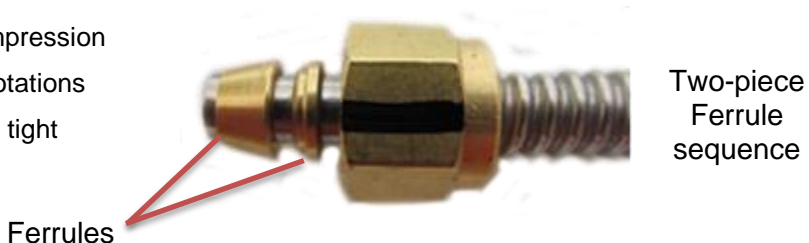
Fig. 3.2 Pilot Assembly with transition plate

Connecting pilot tube to valve

1. Slide compression nut onto end of pilot tube
2. Slide two-piece Ferrule onto pilot tube
 - See Two-piece Ferrule sequence image
3. Connect pilot tube to pilot tube coupler
4. Insert tube into coupler until it stops
5. Hand tight compression nut onto pilot tube coupler
6. Tighten the compression fitting using a 9/16" wrench at 1 ¼ turns
 - As a guide, make a mark on the compression nut to help visualize the amount of rotations
7. Pull/twist pilot tube to ensure that tube is tight



Fig. 3.3 Pilot Tube



Ferrules

Connecting thermocouple to control box

1. Tighten to snug using a 3/8" wrench
 - Over tightening will damage the connection

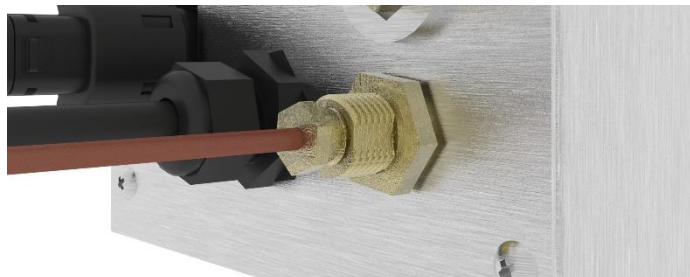


Fig. 3.4 Thermocouple Lead

3 EI Pilot Assembly Conversion

Connecting igniter to Molex connector

1. Connect Molex until it snaps in place
2. Push in white clip, if applicable.

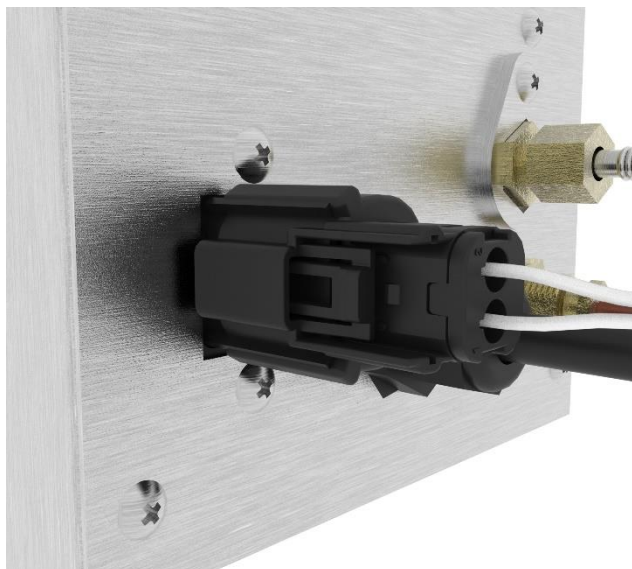


Fig. 3.1 Igniter Molex

Final Steps After Installation:

1. Reconnect the gas line and electrical connection
2. Leave fire pit insert loose out of enclosure until final checks are complete
3. Turn on power and fuel



WARNING: Before use, be sure to test all gas connections for leaks. Do not use a fire pit if there is any evidence of leaking gas. If leaking gas is suspected, turn off the main gas supply and repair it immediately.

4. When checks are completed, reinstall fire pit insert



FIRE INSPIRED™

Hearth Products Controls

Fire-inspired since 1975.

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For detailed product information, go to www.hpcfire.com