PVi
A WATTS Brand

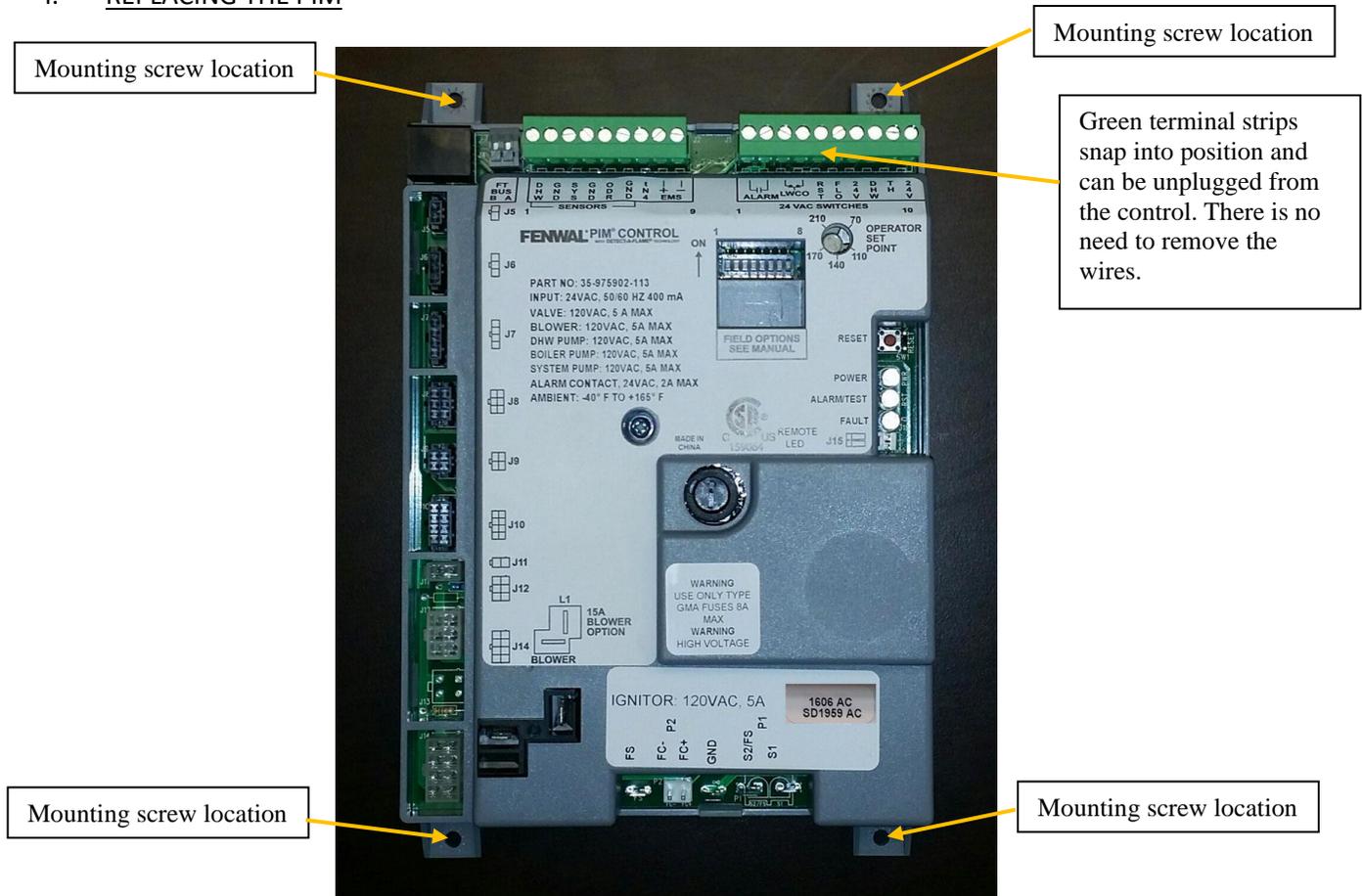## Installation Instructions - Supplemental

REPLACING THE EOS PIM control on **TURBOPOWER 96®** Water Heaters
For model prefixes 50 through 160

TURBOPOWER 96 Models 50 through 160

The following instructions are included to assist in the proper replacement of the EOS PIM control. Refer to the Installation & Maintenance Manual for proper adjustments, settings, startup procedures and safety precautions. Installation and service must be performed by a qualified installer or service agency.

Part Number 145261 **KIT, PIM DEV PROGRAMMING REPLACEMENT TPX HEATERS** is required.

I.   REPLACING THE PIM

Mounting screw location

Mounting screw location

Green terminal strips snap into position and can be unplugged from the control. There is no need to remove the wires.

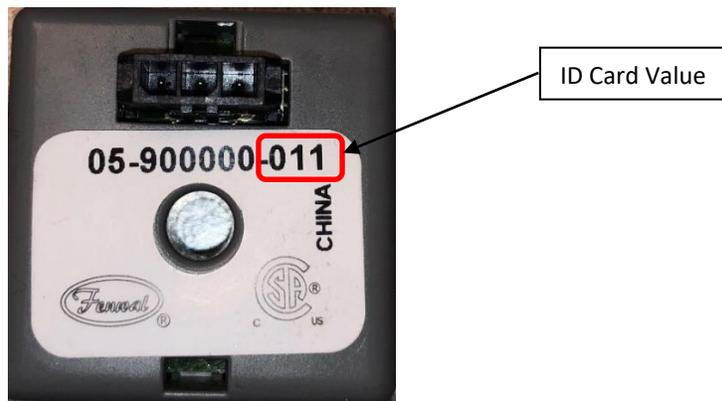Mounting screw location

Mounting screw location

1. Turn water heater power switch to the OFF position.
2. Shut OFF electrical service to the unit.
3. Remove lower control enclosure cover.
4. Unplug all wiring from the control. The green terminal strips at the top of the control snap into position and can be removed from the control. There is no need to unscrew the wires from the terminal strip.
5. Remove mounting screws from all four corners of the existing PIM control. Remove the PIM control.
6. Secure the replacement PIM control to the back of the control box using the mounting screws.
7. Reconnect all wiring plugs to the control face.
8. Turn ON electrical service to the unit.
9. Turn water heater power switch to ON position. Note, you may have to cycle power off and on again to fully initialize with the PIM control.

II.   BTCII CONTROL PARAMETERS

After replacing the PIM control, the BTCII user interface control must be programmed for parameters **START MOD**, **MIN MOD**, **MAX MOD**, and **OPERATOR** prior to operating the water heater. The parameters and values are listed below.
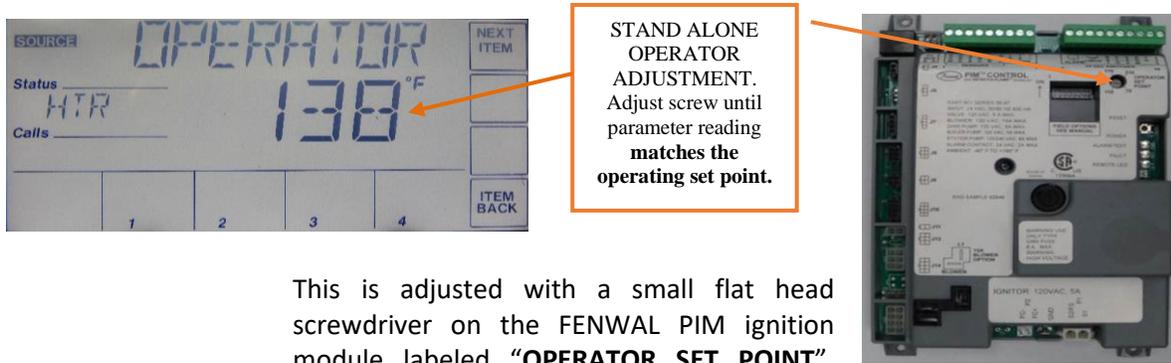
The **OPERATOR** is the failsafe operating set point manually established on the PIM control should the user interface BTCII control fail. The new PIM control needs to have the OPERATOR parameter set to the factory default for the heater of 120°F. If the operating set point of the heater differs from that setting, it can also be adjusted in the field if desired.

ID Card Value

FAMILY		TURBOPOWER 96					
MODEL	MENU	40	50	75	100	130	160
SETPOINT	SETUP	120	120	120	120	120	120
HTR DIFF	SETUP	4	4	4	4	4	4
HTR OFFSET	SETUP	0	0	0	0	0	0
HTR RANGE	SETUP	1	1	1	1	1	1
START MOD	SOURCE	30	30	35	35	40	40
MIN MOD	SOURCE	30	30	35	35	40	40
MAX MOD	SOURCE	50	60	60	85	85	90
OPERATOR	SOURCE	120	120	120	120	120	120
ID CARD	SOURCE	010	010	012	012	014	014

III. ADJUSTING THE CONTROL PARAMETERS
1. The parameters require **ACCESS** to be set to **INST** before you can edit them:
   a. From the View Menu, press and hold the **Home Button** for 3 seconds to enter the Control System Menu.
   b. Press **NEXT ITEM** or **ITEM BACK** buttons to navigate to the **TOOL BOX** MENU.
   c. Press the **ENTER** button.
   d. The first parameter in the **TOOL BOX** MENU is the **ACCESS** level screen.
   e. Adjust the **ACCESS** level using the **#4 button** to select the **ADV**anced value. If the highest value is **INST**, then press and hold the **#4 button** for 3 seconds. (If the **#4 button** does not move to **ADV**anced, try the arrow buttons.)
   f. Press the **Home Button** one time to back up to the Control System Menu.
   g. Press **NEXT ITEM** or **ITEM BACK** buttons to navigate to the **SOURCE** MENU.
   h. Press **ENTER** to enter the **SOURCE** MENU.
2. To change the **OPERATOR**, **MIN MOD**, **START MOD**, and **MAX MOD** values:
   a. Enter Control System Menu (press and hold the **Home Button** for 3 seconds).
   b. Press **NEXT ITEM** or **ITEM BACK** buttons to navigate to the **SOURCE** MENU.
   c. Press **ENTER** to enter the **SOURCE** MENU.
   d. Once in the **SOURCE** MENU, use the **NEXT ITEM** button to move to **OPERATOR.**

STAND ALONE OPERATOR ADJUSTMENT. Adjust screw until parameter reading **matches the operating set point.**

This is adjusted with a small flat head screwdriver on the FENWAL PIM ignition module labeled "**OPERATOR SET POINT**". Adjust with screwdriver and note the setting in the display. Do not reference the index printed on the PIM module.

    e. Press **NEXT ITEM** to the **MIN MOD**, **START MOD**, and **MAX MOD** parameters. Using the arrow buttons, enter the values as per the parameter table shown. Note: If the arrow buttons are not be visible, push and hold the **#4 button** at the bottom right of the screen until the **UP** and **DOWN** arrows appear.

    f. To exit and return to normal View Menu, press the **Home Button** 2 times or wait 60 seconds.

3. Return BTCII control to the **USER** access level (refer previous instructions for setting **ACCESS** to **INST**, but change to **USER**).