SDS TAP Retrofit Install – Bartlett 12 Key

Installation of TAP Control for Models Originally
Built with Bartlett RTC 1000 (12 Key) Control

This SDS Industries TAP Retrofit kit and installation instructions are intended for use when converting kiln and oven models to the TAP, touchscreen control that were originally built with Bartlett RTC 1000 (12 key) control.

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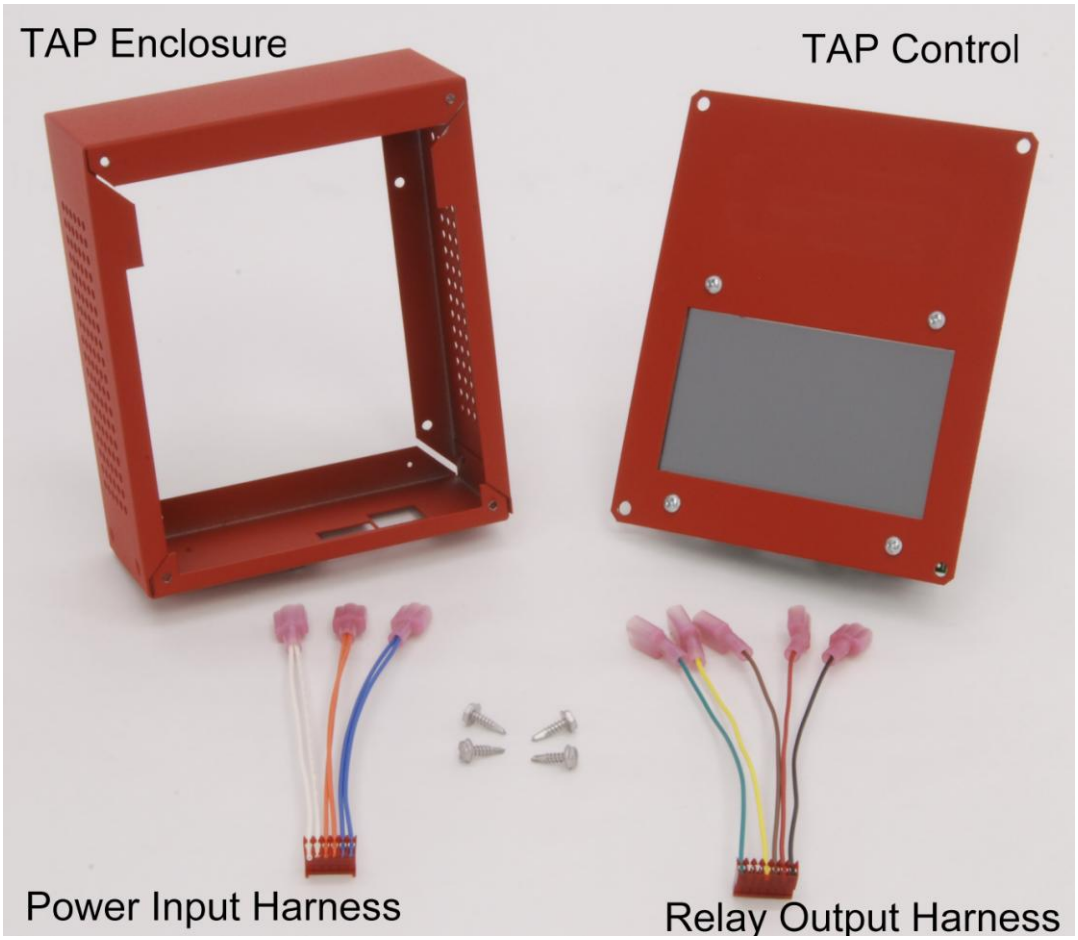
Unplug or disconnect power from the kiln or oven before performing this procedure!

TAP Retrofit Kit Contents:

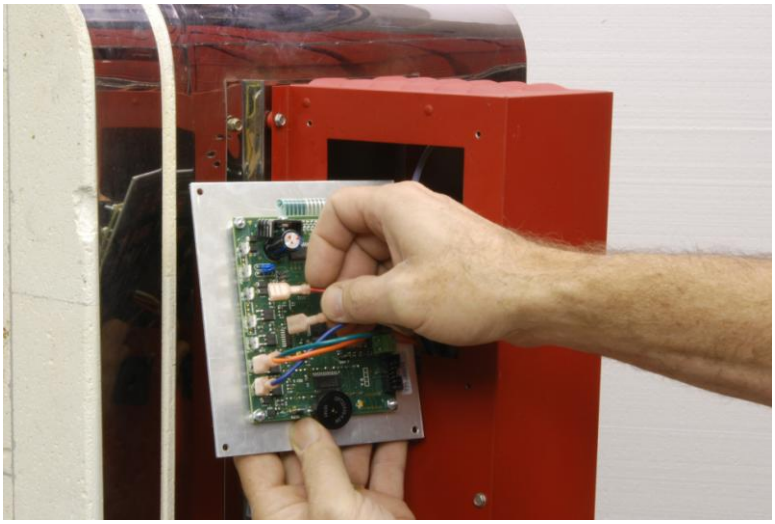
- TAP touchscreen control
- TAP Enclosure
- TAP Power Input Harness
- TAP Relay Output Harness
- 4, #6 Self-Tapping Sheet Metal Screws



TAP Retrofit Kit Contents

Step 1:

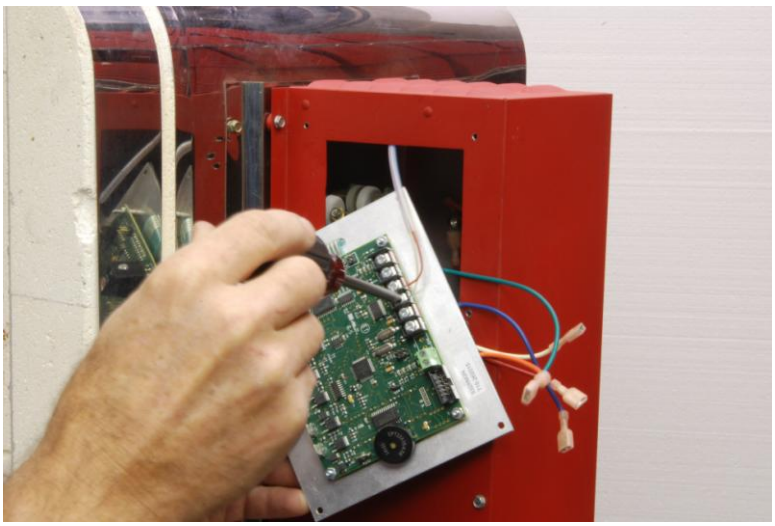
Remove the 4 screws that secure the existing control to the control panel.



Step 2:

Pull the control away from the enclosure and remove the wires as shown.

Hint: It's best to grasp the terminal and wiggle a bit as you're pulling them off. Try not to pull directly on the wires.



Step 3:

Remove the thermocouple leads from the control as shown.

Step 4:

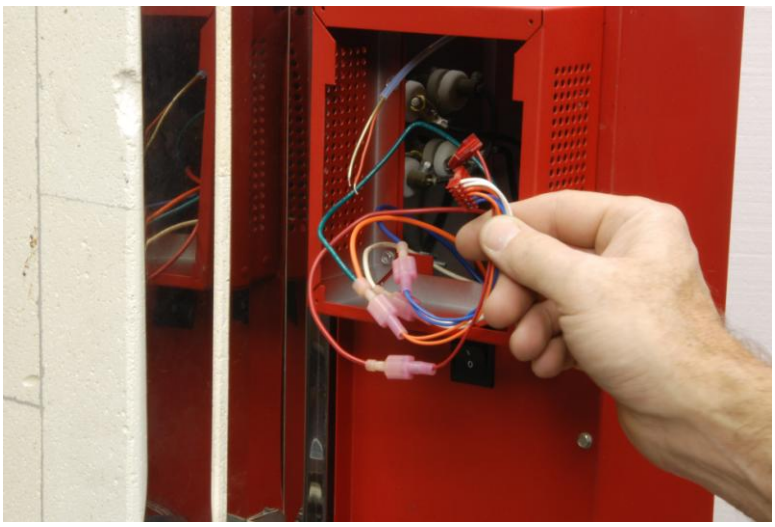
Disassembly is now complete.

Step 5:

Place the TAP Enclosure over the existing panel opening as shown.

Center and square it up as best you can while taking note to surround and cover the existing control panel opening completely.

Secure the TAP Flat panel enclosure to the control panel as shown using the 4, #6 self-tapping screws provided.



Step 6:

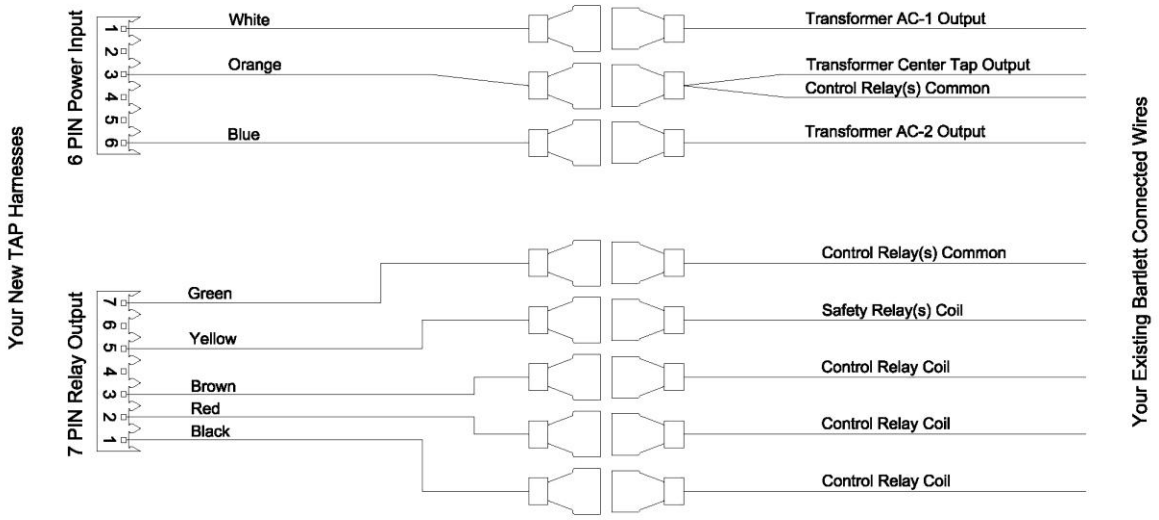
Attach the TAP control harnesses as shown.

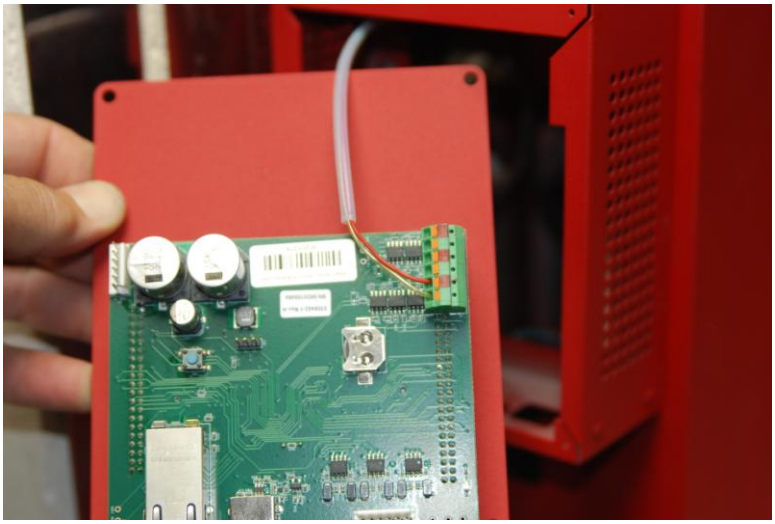
See the diagram below for proper connections.

Wire color from manufacturer to manufacturer is not the same. Do not rely on wire color for connections.

Below is the connection scheme for the TAP Power Input and Relay Output Harnesses. Please refer to original kiln manufacturers diagrams/schematics for wire identification.

It's common that you may not use all of the connections shown below. If the kiln is not large you probably won't use all of the "control relay coils". Unless you have solid state or a power interrupt switch, you probably won't use the "safety relay coil". You will find some of the TAP harness connectors to be covered with a protective cap. These are placed on wires you may or may not use. If you do need to use one, simply remove the protective cap.





Step 7:

Connect the thermocouple lead to the TAP control board as shown. The Yellow wire is connected to the lower point and the Red wire is connected to the next point up.

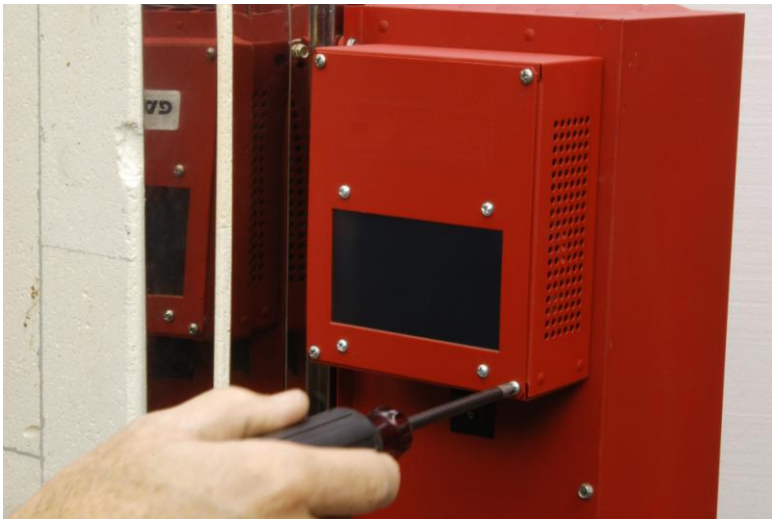
Connection is made by simply pushing the thermocouple wire into the associated hole.

Before installing these wires we recommend that you straighten them and trim the wire until about 1/4" of wire is showing past the colored wire insulation. This just makes for a cleaner and more secure connection.

Step 8:

Install the 7 Pin Relay Output harness socket and 6 PIN Power Input socket onto the TAP control as shown.

Note that the 7 pin relay output harness contains a single red wire in the image example. As noted above, not all wires are used and in the example only one is used.



Step 9:

Place the TAP control into the enclosure as shown and secure.

When placing the TAP control route the control harness wires in such a way as to place them to the right on the inside of the enclosure. When fastening we recommend that you insert all 4 screws into the mounting holes before fully tightening. Things just line up better that way! Install is complete.