Penner Temperature Gauge Update

Pre-2008 Electrical Kit Gauge Install

11/18/2022

Instructions for Penner Spas to install new style gauges into pre-08' electrical kits. Will work for Cascade, Pacific, and Superior models. Older gauge production has been discontinued. This kit will install currently used (350535M-SER) temperature readouts and eliminate power pack, older gauges, and a few wires.

Scan for Video Help

Obsolete Power Pack
-Original Gauge
Obsolete as well.

350535M-SER
Temp Gauge

Original Electrical Kit

Updated Electrical Kit

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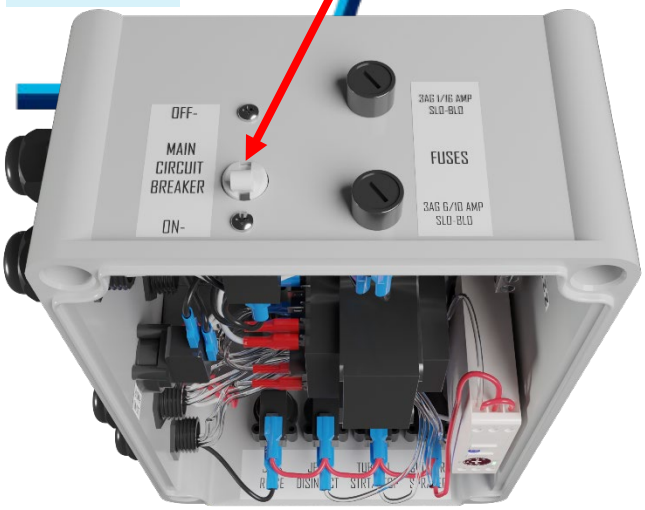
Reference Pictures for help. Highlighted wires, components and red arrows display objet that step is being referred to.

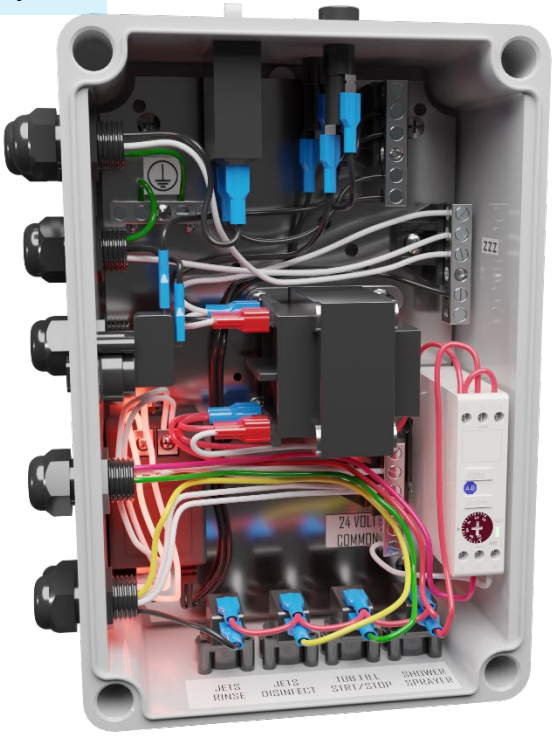
Step 1

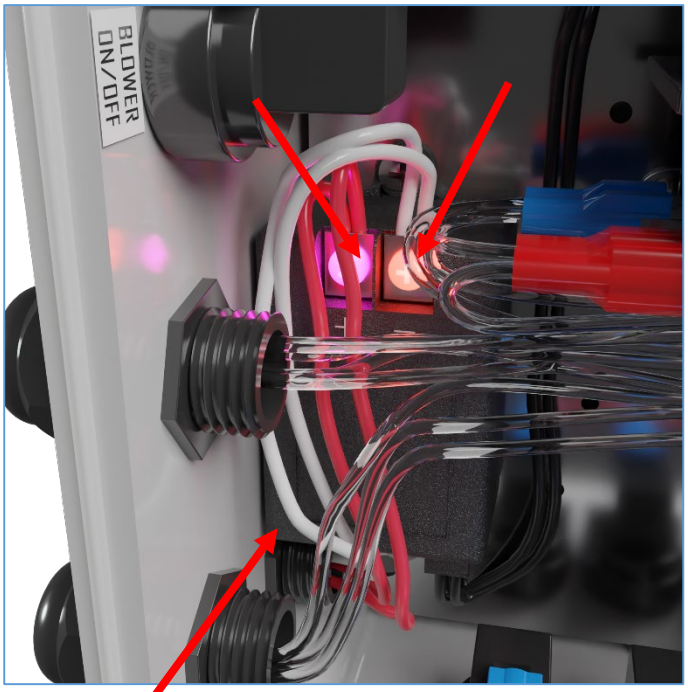


Make sure to turn power off to electrical kit. Turn off the main circuit breaker and/or disconnect power to the spa from the building supply.

Step 2

Unscrew screws and disconnect gauge supply wires from power pack.





Power Pack Location

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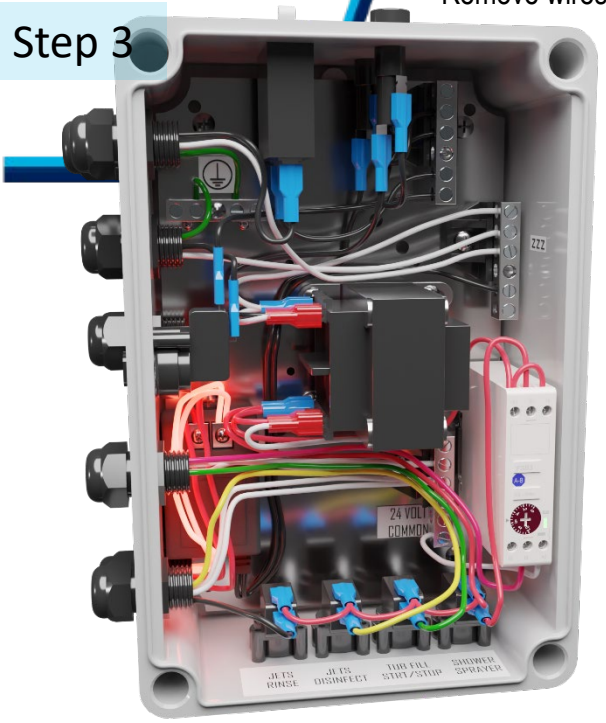
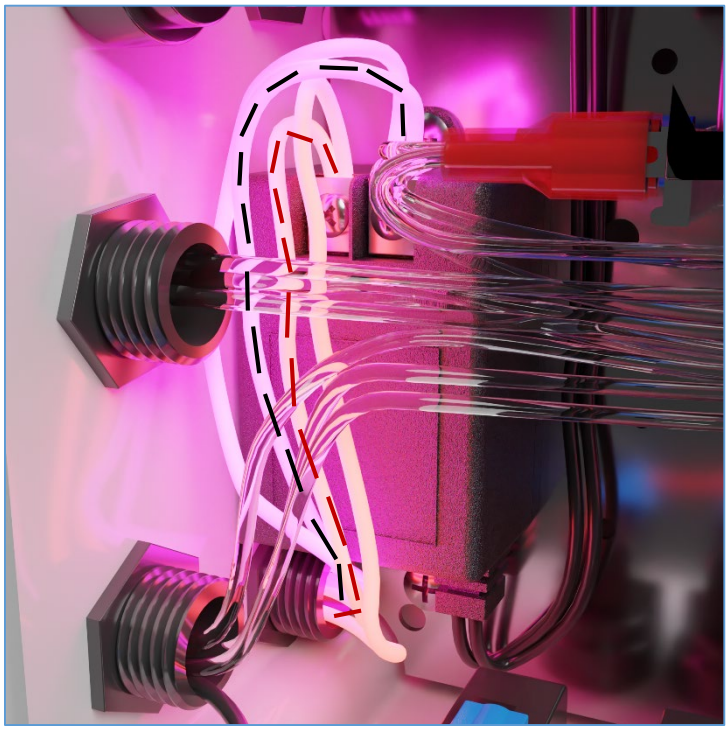
Remove wires and gauges from power pack and spa.

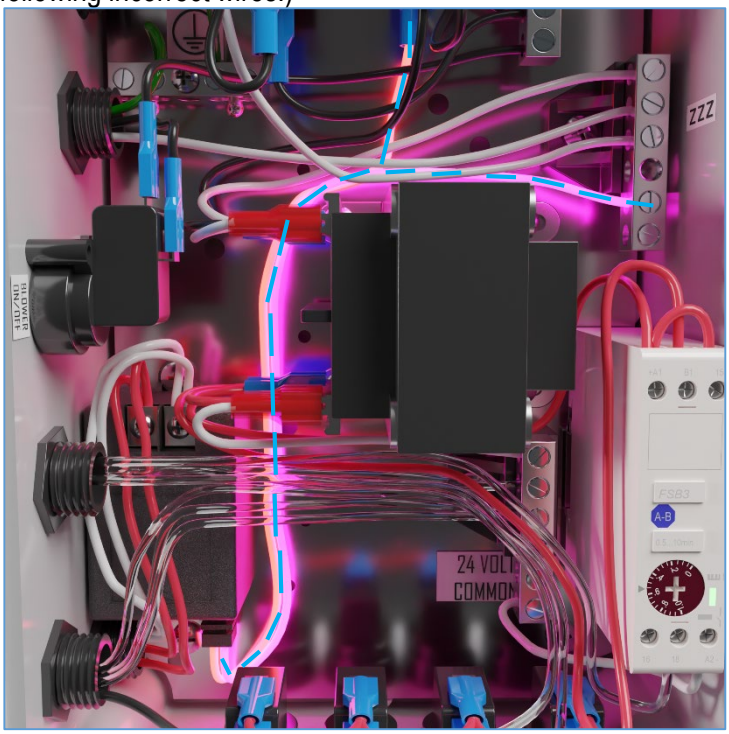
Step 3





Step 4

Disconnect power-pack supply wires. (Wires that are shown in clear are just to prevent from following incorrect wires.)



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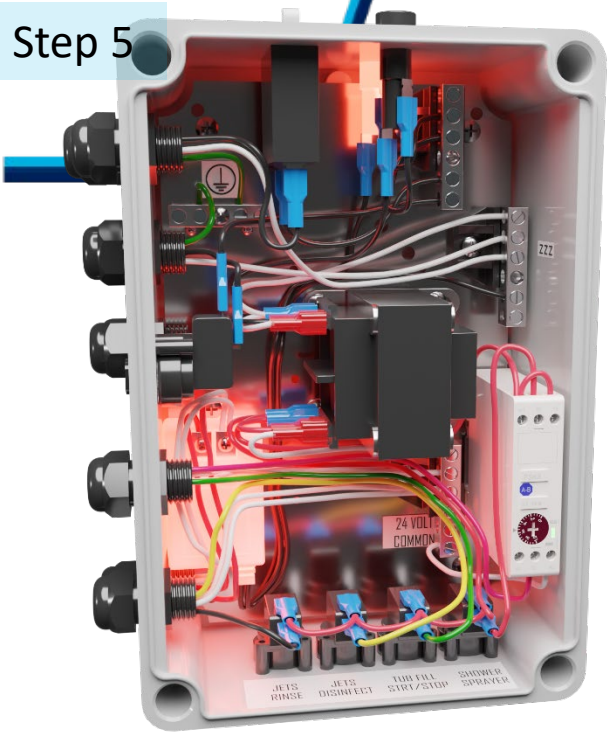
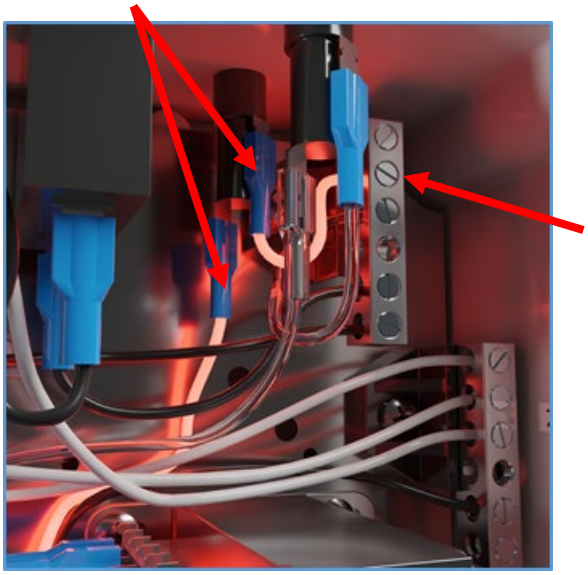
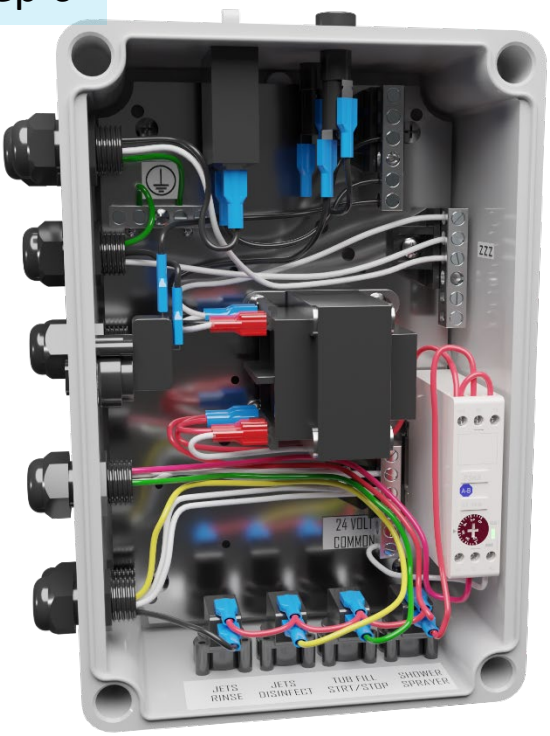
Step 5



Disconnect wires from 1/16 fuse holder. Fuse holder can remain to keep hole sealed but it will NOT be used.



Step 6



Remove power pack and wires as highlighted above. - There will be one to two screws holding power pack in place. Wires should pull off of fuse holder. Unscrew power bar screw to remove fuse supply power wire.

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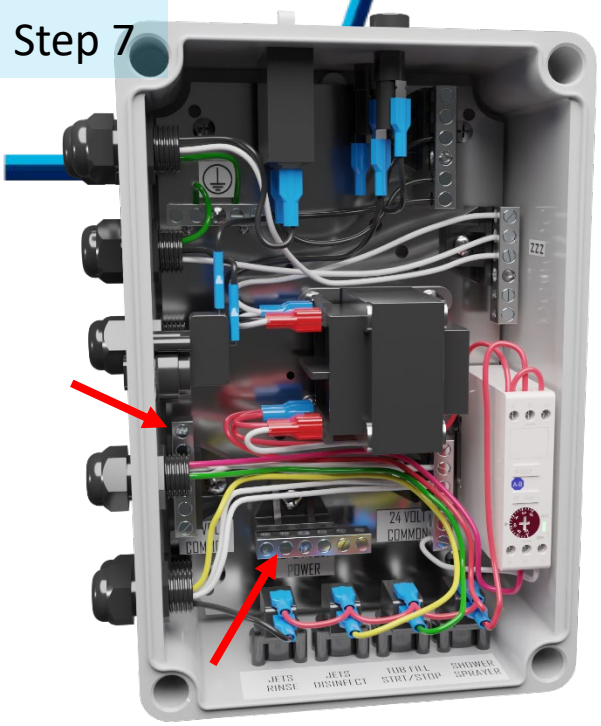
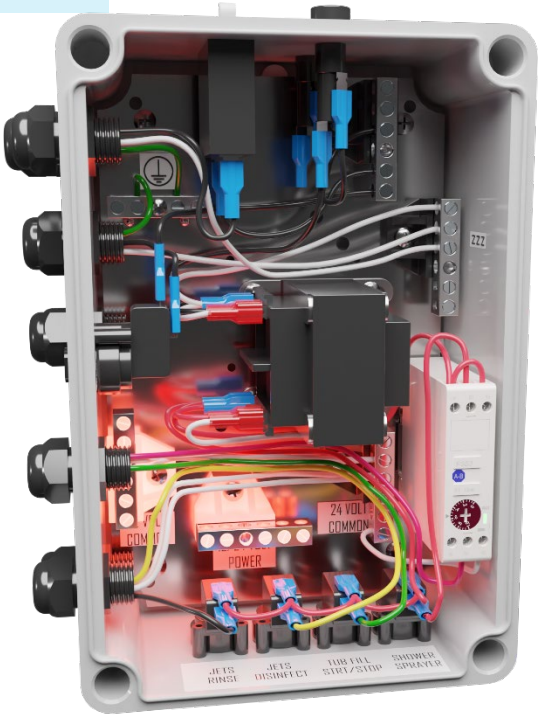
Step 7



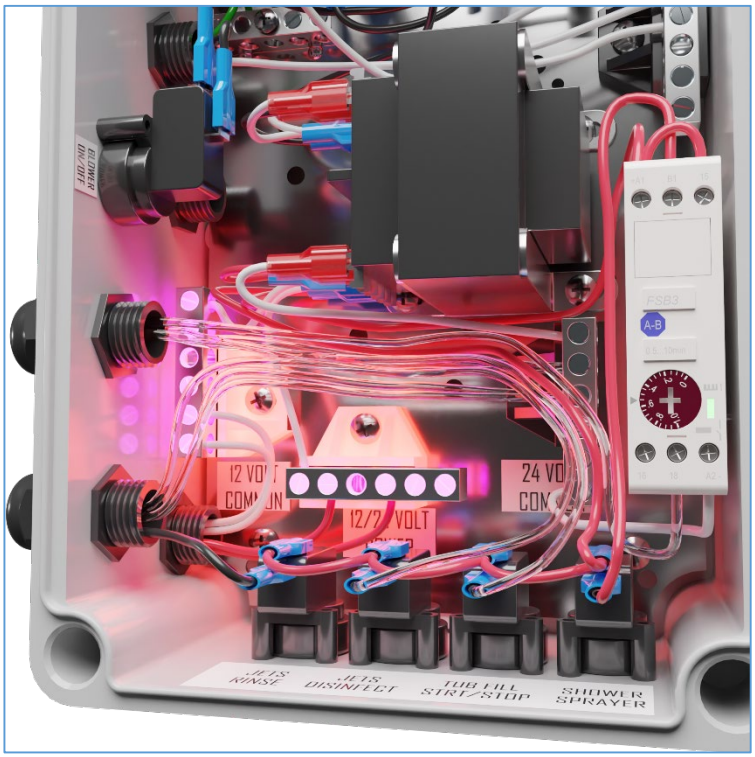
Insert (140926) common bar and power bar and install where power pack previously was. (The bars are the same). Mount as show in the picture. The 12volt common bar will mount vertically while the 12/24volt power bar will mount horizontally. You should see holes in the back plate to mount these units.

140926 Insulated Ground Bar

Step 8



Picture shown below have the solenoid supply wires <u>cleared</u> out to help visually locate where the electrical bars will be placed.



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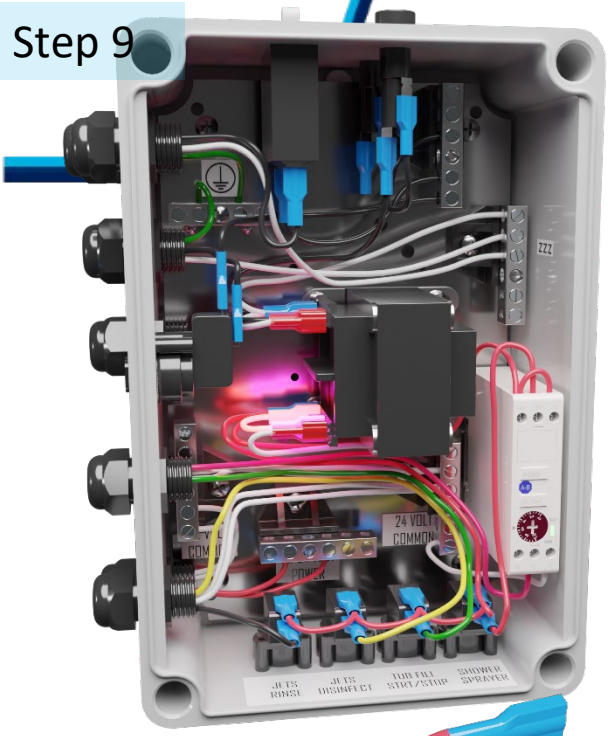
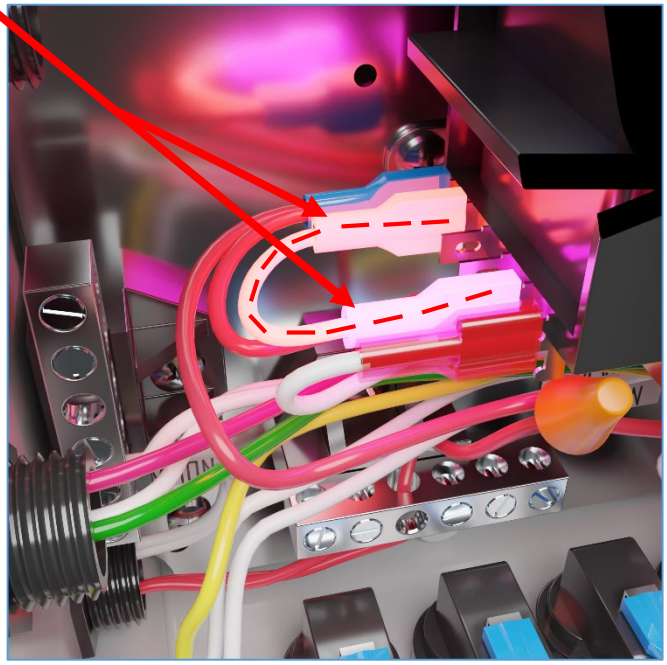
Step 9

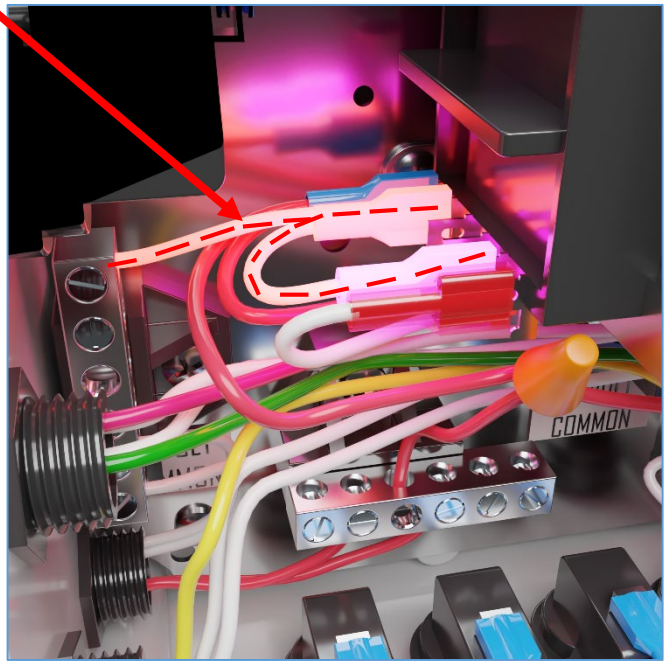


Remove Common wire jumper from Transformer. Second one from the back plate on bottom row that leads to third connection on that transformer. Discard.



Step 10

Insert supplied jumper (360599-5) with splice. Run splice to Common bar. Install Push connectors as positioned beforehand.



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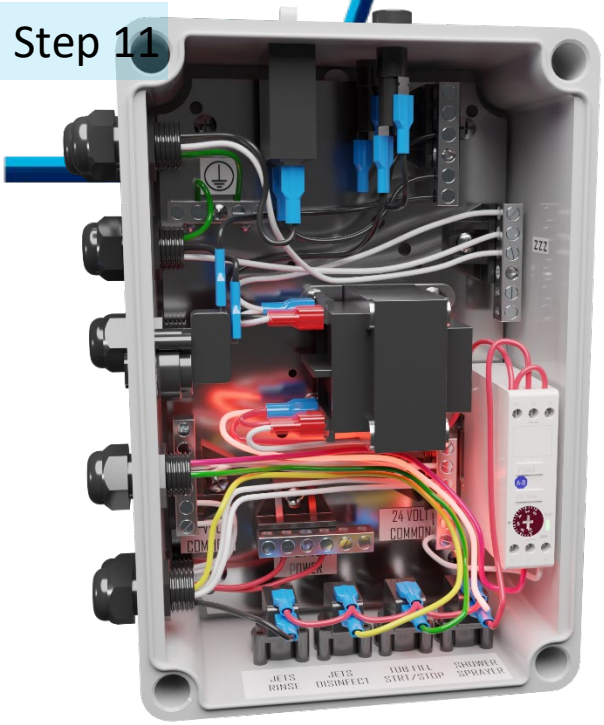
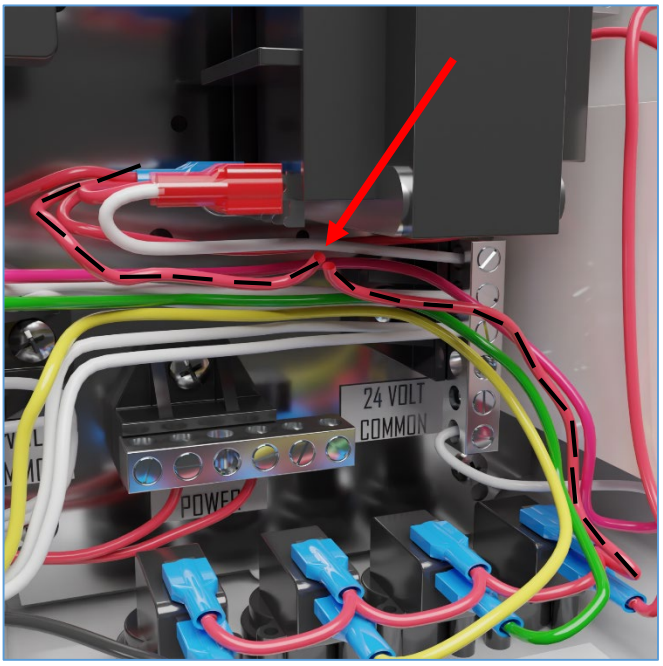
11/18/2022

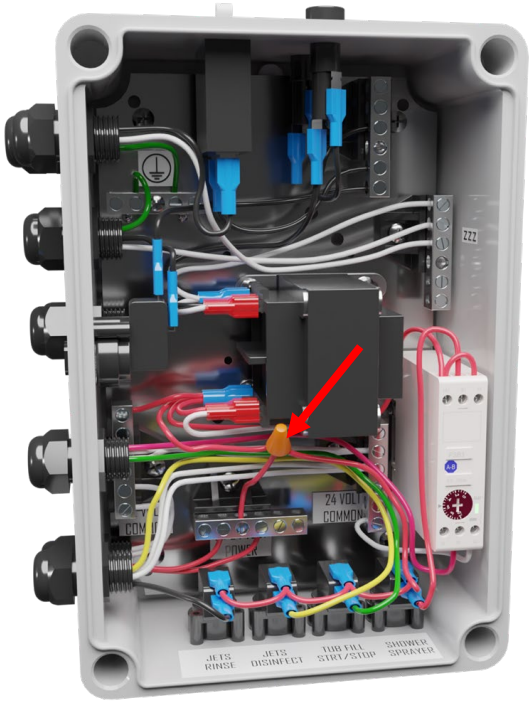
Step 11



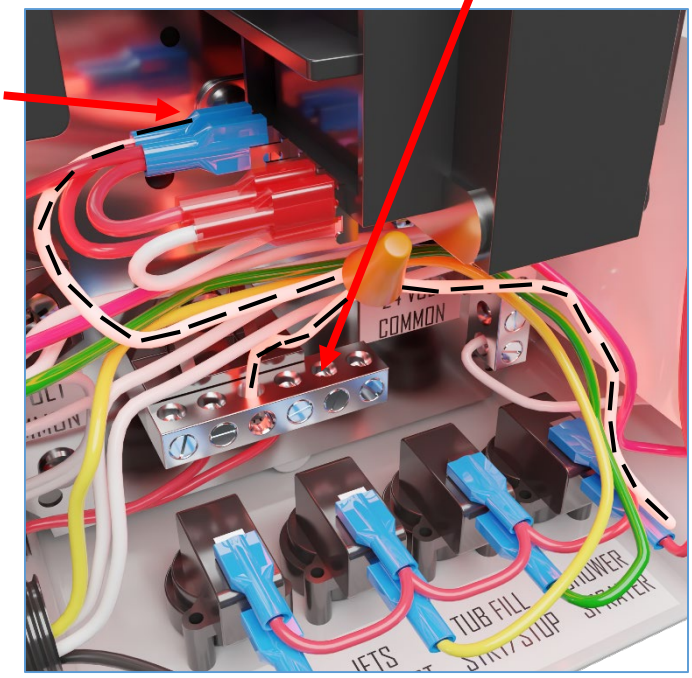
Cut Power wire that runs to switch about middle length; leaving connected to transformer and switch. It is the first wire from back plate on bottom row of transformer.



Step 12



Insert splice cable and run wire to power bar. Use Wire nut to connect the three ends together.



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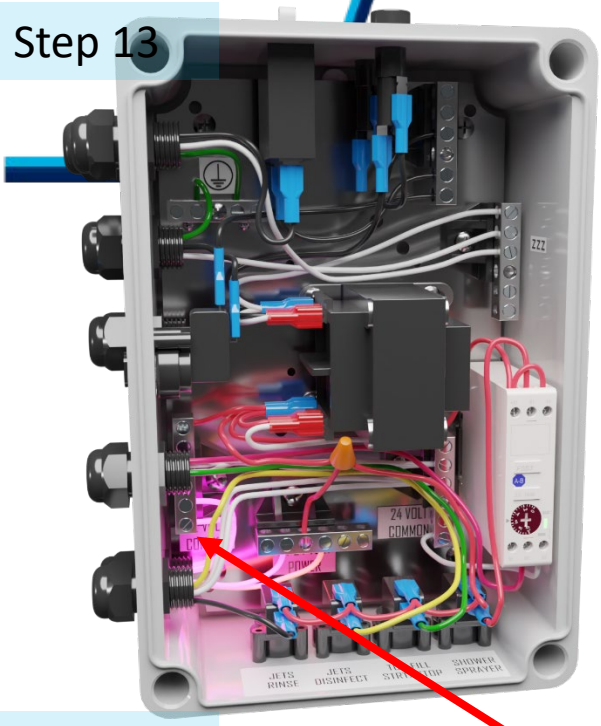
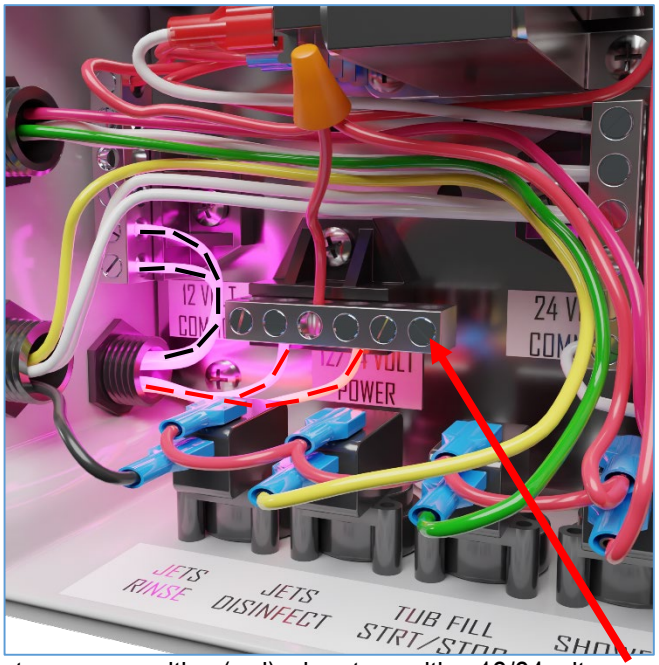
11/18/2022

Step 13

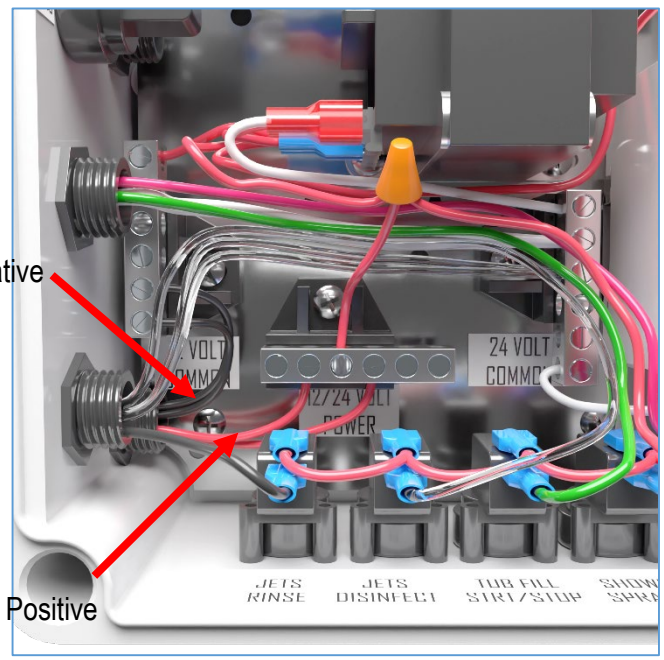


Install new gauges into spa and route wires and probe.



Step 14

Route gauge positive (red) wires to positive <u>12/24volt power</u> supply bar (horizontal bar) and negatives (black) to <u>12volt common bar</u> (vertical bar).



Step 15

Double checking wire placement and making sure wires are tight, turn circuit breaker back on and verify gauges work. Put cover back on electrical kit and put access doors back on if applicable. Installation complete.