

In-Line Fuse Installation

TDF

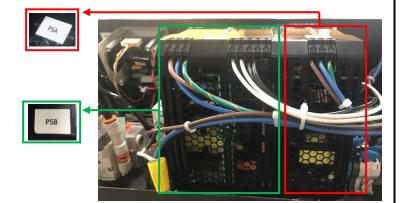
Service Procedure **TS045**

Revised: 7-11-2023 RJC

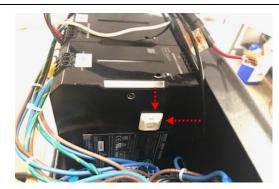
Follow this procedure to install the new in-line fuses provided in your TDF Electrical Fuse Kit.

- 1. Turn off the instrument and unplug the power cord. Unscrew the 14 screws on the electrical cabinet at the top of the instrument and remove the cover.
- 2. Locate power supply B (Omron 20amp) on the right side of the electrical cabinet. There will be a label on the top that says "PSB".

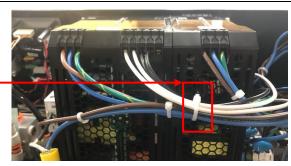
Power supply A is labeled "PSA" and it is to the right of power supply B.

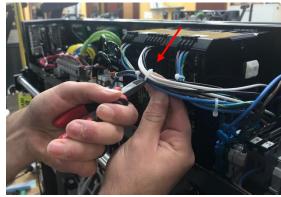


- 3. Adhere the white zip tie fastener to the right side of power supply A approximately 1 ½ inches from the back of the power supply and 1 inch from the top. This will be used later in the procedure.
 - *The location does not have to be precise.



4. Cut the main zip tie holding the wires going into power supply B.







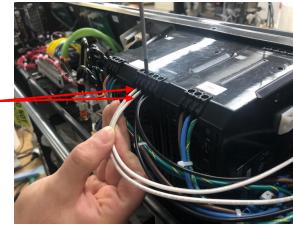
In-Line Fuse Installation

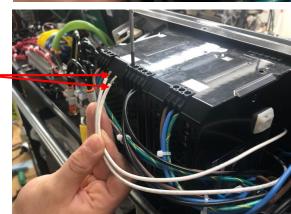
TDF

Service Procedure **TS045**

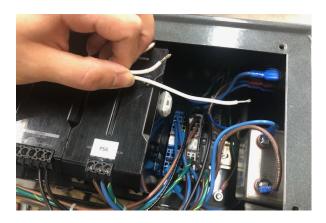
Revised: 7-11-2023 RJC

5. Unscrew the two white wires located on power supply B.



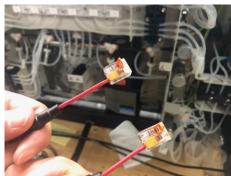


- 6. Cut approximately 6 inches off one of the white wires. It does not matter which one. On the second white wire, cut off approximately 10 inches.
 - Strip the insulation (approximately 11mm or $\frac{1}{2}$ ") off both white wires to expose the metal wire.



- 7. You received two red wires with in-line fuses. The black plastic cylinder contains (1) Fast Acting 10Amp Fuse.
 - On each red wire open the orange tab on the wire connector that does not contain the red wire.







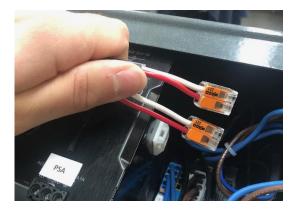
In-Line Fuse Installation TDF

Service Procedure **TS045**

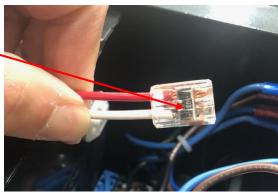
Revised: 7-11-2023 RJC

8. Insert one of the white wires into the empty slot on the wire connector and close the orange tab. Pull on the wires to ensure they are secure.

Repeat for the second white wire and second wire connecter.

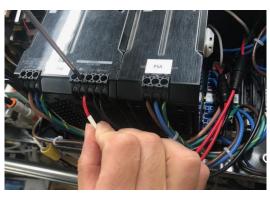


Note: Ensure both wires are pushed all the way into the empty slot and making contact with the metal bar on the back side of the wire connector.



9. Install the other end of the two red wires with inline fuses into power supply B where the white wires (the + locations) were removed in step 5. Ensure that they are screwed in tightly.

NOTE: Either wire can go into either location.







In-Line Fuse Installation TDF

Service Procedure **TS045**Revised: 7-11-2023 RJC

10. Wrap the new wires and existing black wires with the provided black wire sleeve. Make sure that the wires are completely encased.





11. Place a zip tie through the white zip tie fastener on the side of power supply A and loosely tighten around the wires being held by the black wire sleeve. Cut off zip tie excess.









In-Line Fuse Installation

TDF

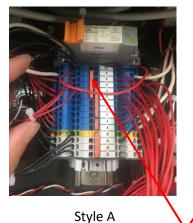
Service Procedure **TS045**

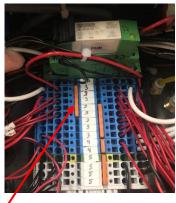
Revised: 7-11-2023 RJC

12. Locate the DIN rail with terminals on the left side of the electrical cabinet.

NOTE: There are two styles of DIN rails in production, but the procedure for both is the same.

Locate the orange, 5-place jumper on the terminals labeled "3" located closest to the relay.

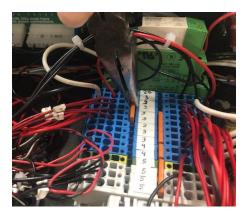




Style B

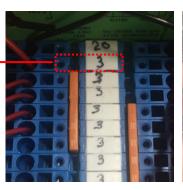
Orange 5-place jumper

13. For both styles of DIN rail, remove the orange 5-place jumper with needle nose pliers.



14. Reinstall the orange fuse jumper one terminal below its previous position. Make sure it is snapped in completely.

This is where the orange 5-place jumper used to be, it is now moved down in this image.





Style A

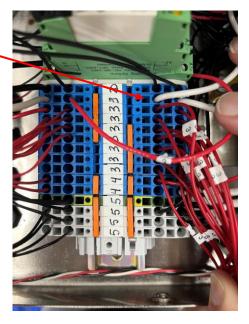
Style B



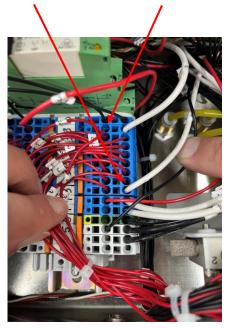
In-Line Fuse Installation TDF

Service Procedure **TS045** Revised: 7-11-2023 RJC

15. If the DIN rail has two white wires in the top #3 row as shown in the image below, proceed to step 16. If not, proceed to step 17.



16. Remove and swap the left #3 white wire with the #3 red wire in the last #3 row further down the DIN rail. The image below shows the wires in their new locations.



Note: To remove a wire from the DIN rail, insert a small flat blade screwdriver in the square hole next to the wire and press the screwdriver in the square hole until the wire is released. To insert the wire in the new location, press screwdriver in the hole next to the new location while inserting the wire. After removing the screwdriver, gently tug on the wire to ensure that it is securely captured.



In-Line Fuse Installation TDF

Service Procedure **TS045**Revised: 7-11-2023 RJC

17. The In-line Fuse Installation is now complete. Replace the electrical cabinet cover and secure to the top of the instrument with the fourteen screws.