



Dual Thermal Fuse Replacement Instructions:

(for use with these USI Roll Laminators:

CSL 2700, ARL 2700, ARL 4000)

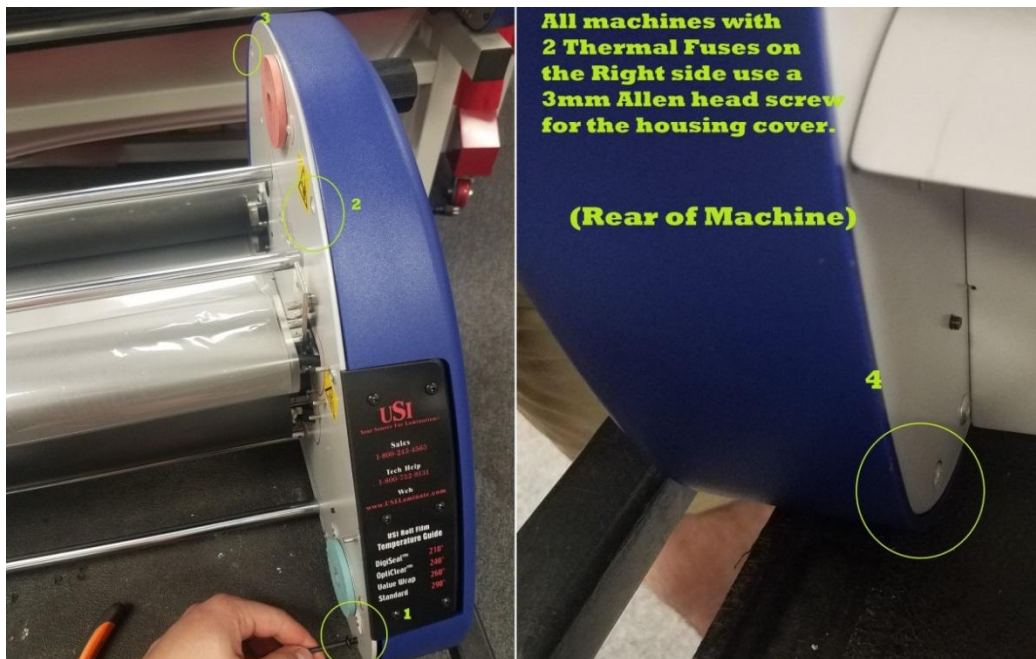
This guide is intended to walk you through the process of replacing the thermal cut-out fuses on your CSL or ARL 2700 Series USI Laminator (machines built in Sept. 2009 or later). You can skip steps 3-7 if you are only changing the lower thermal fuse, and you can skip steps 8 if you are only changing the upper thermal fuse.

1. The first step is to ensure you have the correct parts and tools for the replacement. You will need a 3mm metric allen wrench, and your replacement thermal fuse(s). These are shown below: **Once you have these items you unplug the laminator before beginning the replacement process.**

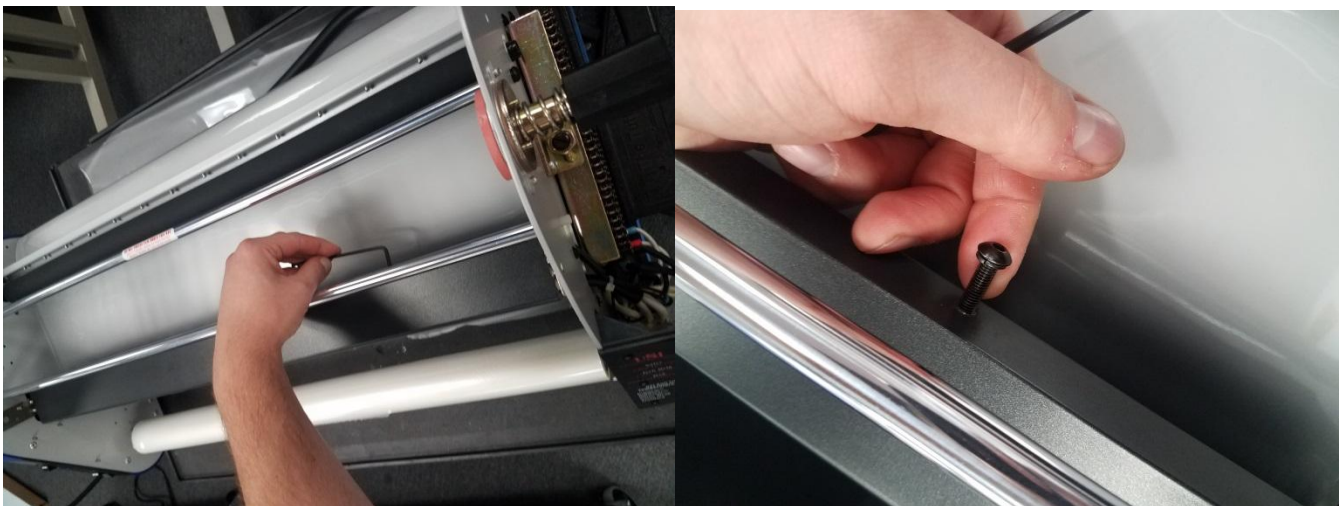


2. The next step is to remove the right side housing of the machine. This is done using your 3mm metric allen wrench. The location of the right side housing screws is shown in the

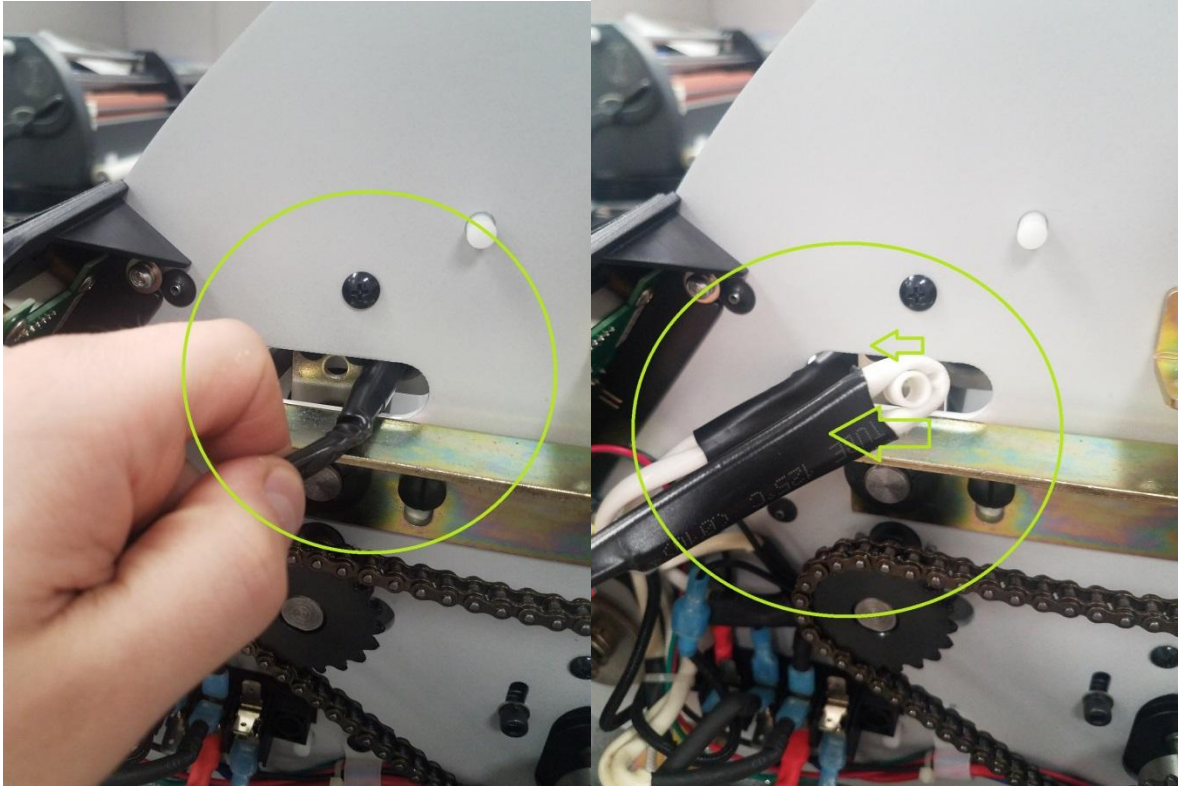
pictures below:



3. The next step is to remove the retaining screw for the upper thermal fuse. The screw is located behind the upper heat shoe – closer to the right side of the machine – as shown in the pictures below:

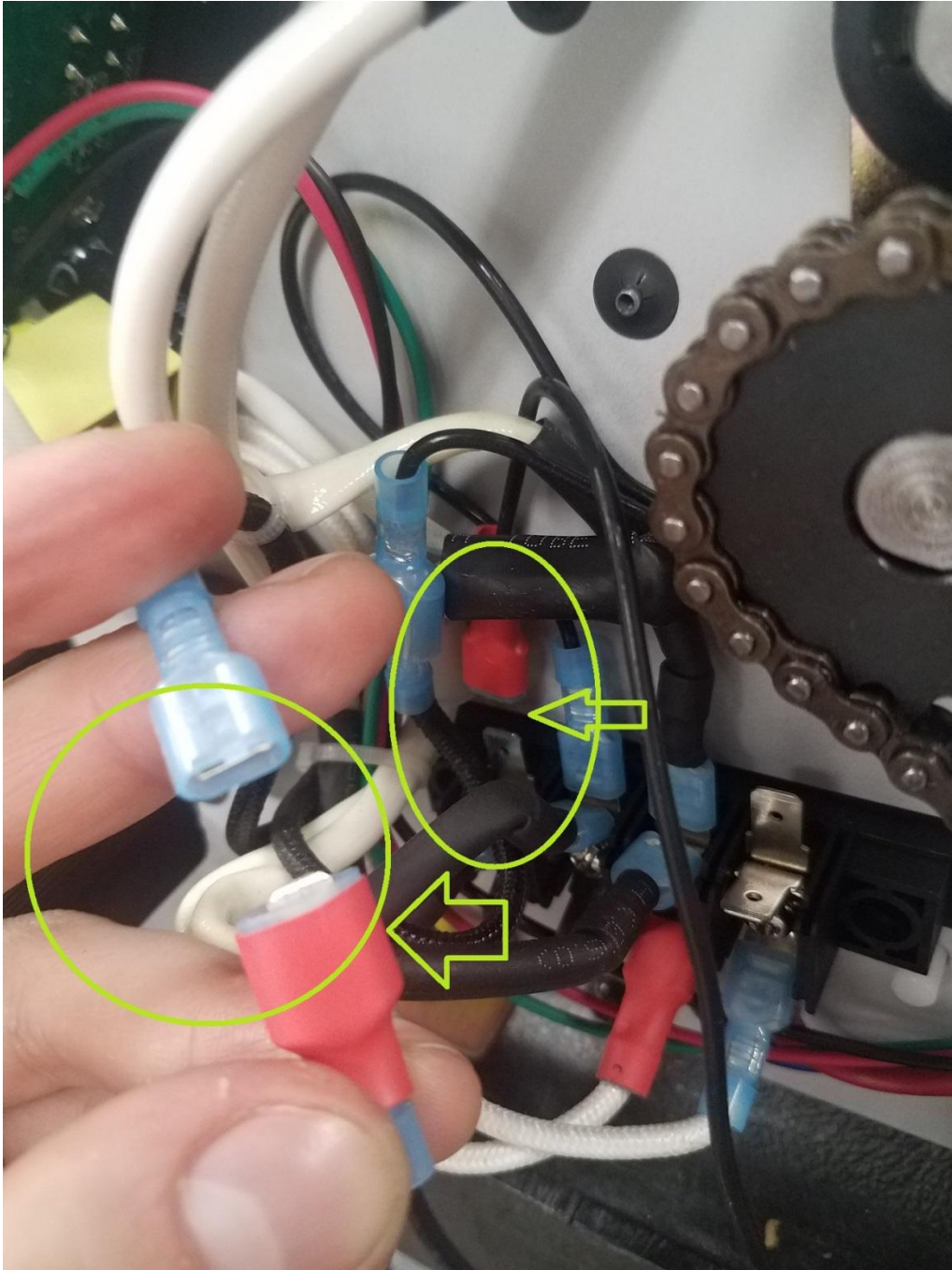


4. **Once this screw is removed – it should be discarded as it is difficult to reinstall without removing the heat shoe and it is possible to pinch and damage the new thermal fuse if it is installed incorrectly. It's used only for shipping purposes to keep the fuse in place.**
Next, look at the wires on the right side of the machine. Here you will locate the thermal fuse wires coming out of the right side of the top heat shoe. Pull firmly on them to remove the thermal fuse from the machine (as shown in the pictures below):

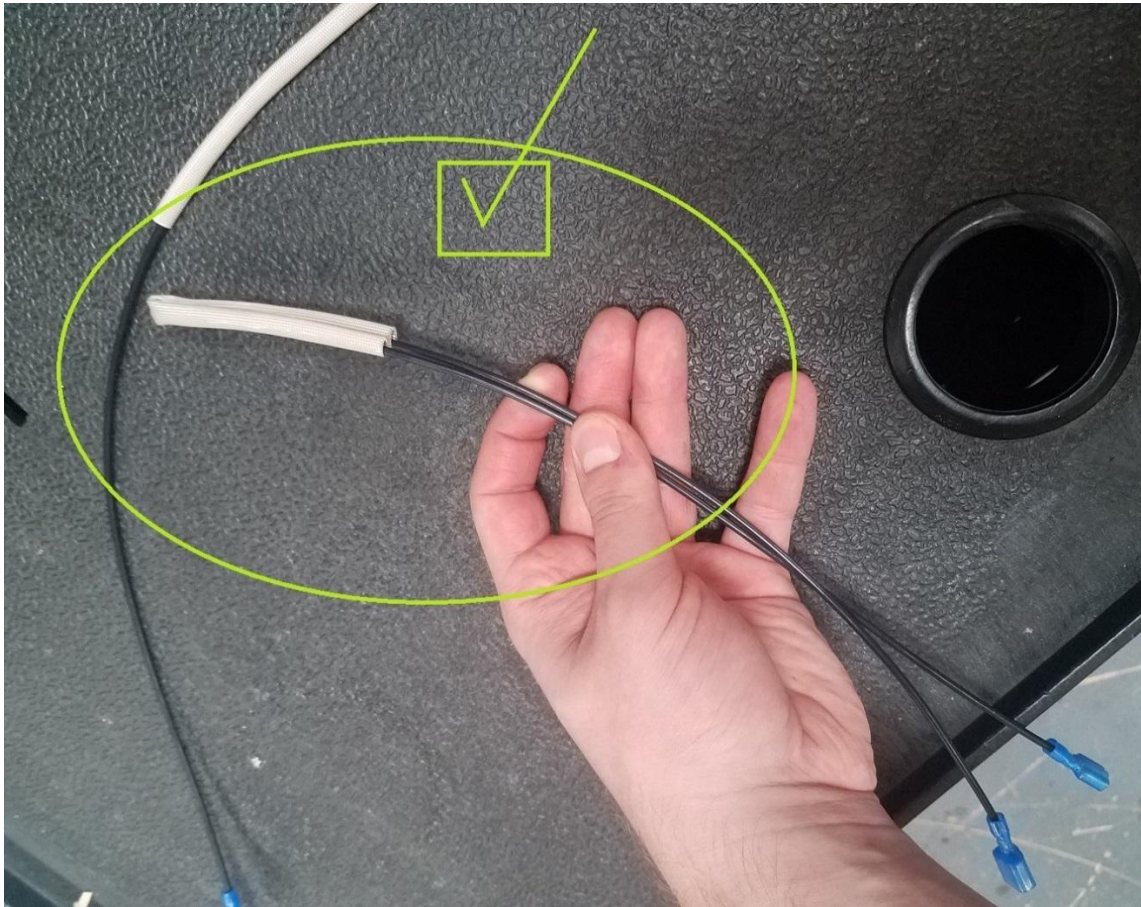
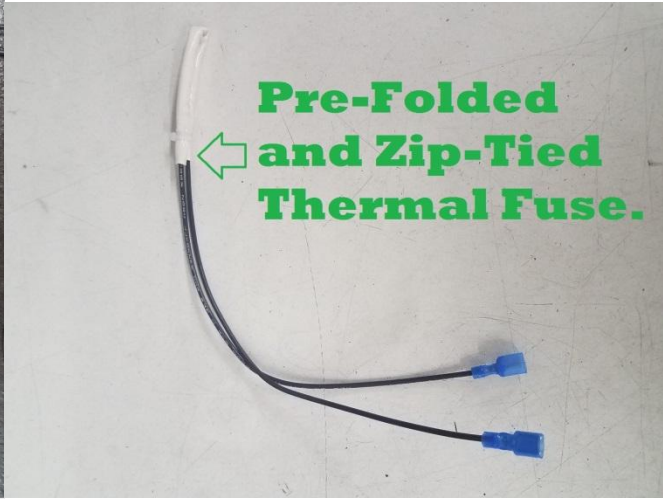
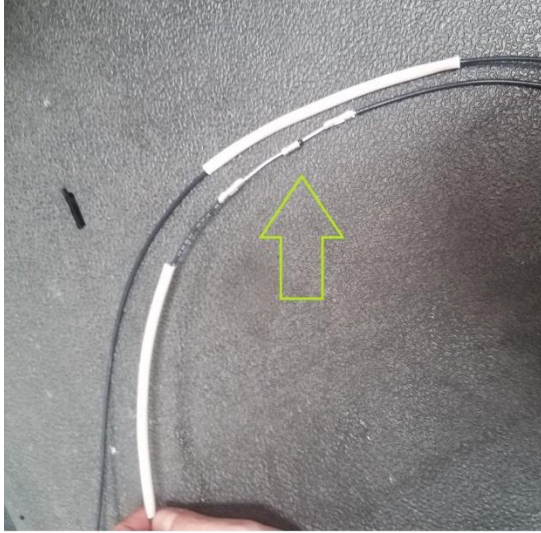


5. Once the old thermal fuse is removed from the top heat shoe, you can trace the wires to where they connect (as shown below) and connect the two ends of your new thermal fuse unit into the same locations. One end of the thermal fuse wire is a male connector and the other is a female.

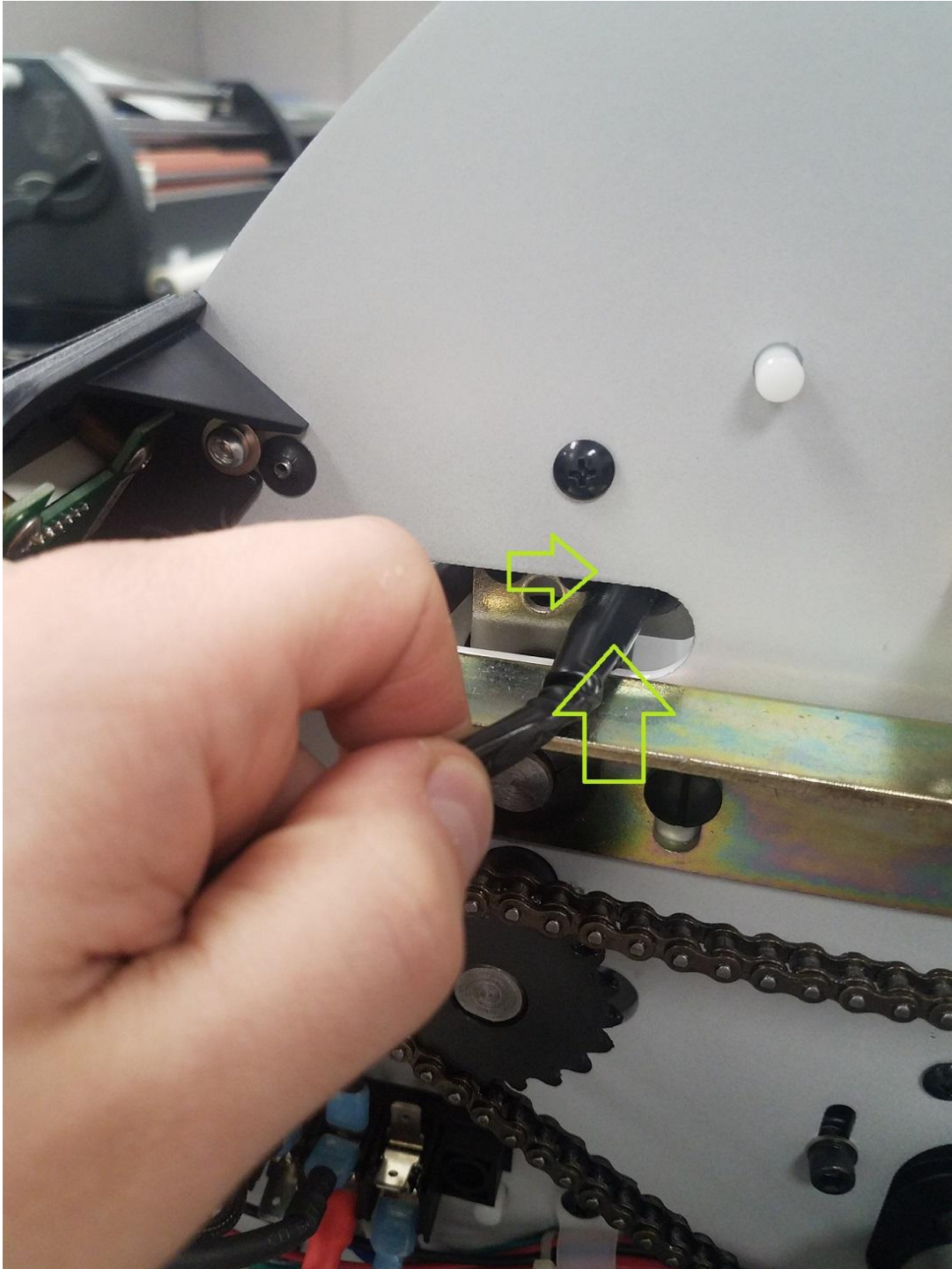
The female end connects on the terminal block in the left most position, on the upward facing tab/prong (indicated with the smaller arrow in the image below). The male end of the thermal fuse couples to a black braided wire (indicated with the larger green arrow in the image below):



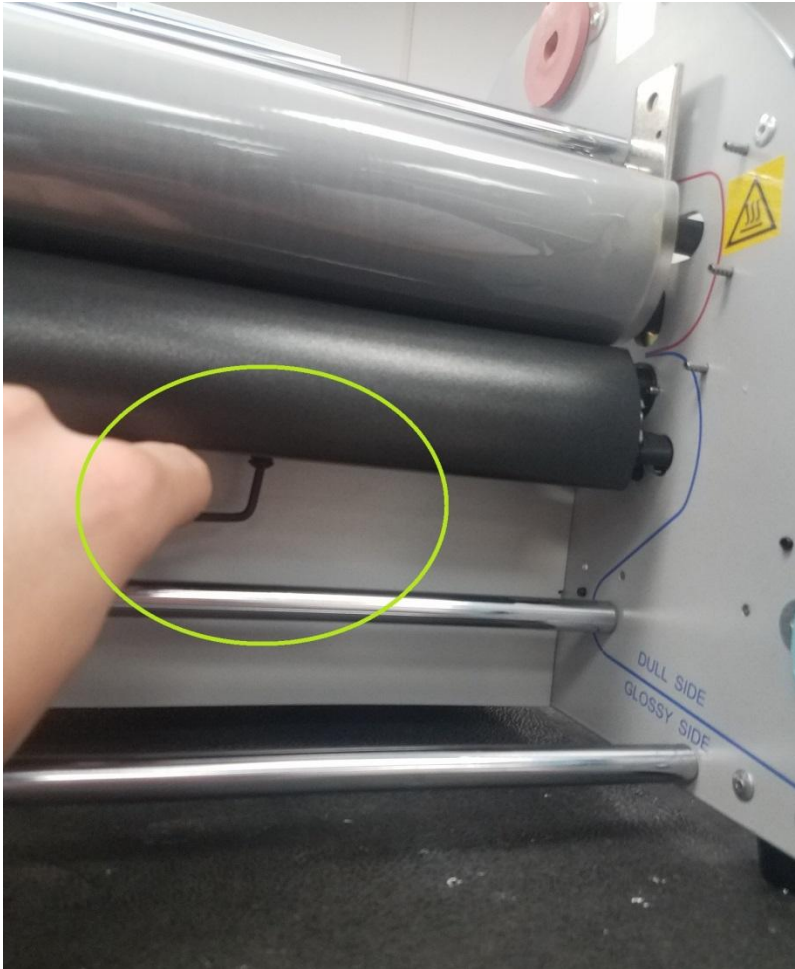
6. After connecting your new thermal fuse unit, you must ensure that the protective sleeve is centered over the middle of the fuse wire and the wire folded to insulate it electrically while it's inside the heat shoe. (Note: Some thermal fuse units come pre-folded with the protective sleeve zip tied in place – these fuses are ready to install.)



7. The next step is to insert the newly connected thermal fuse into the location you removed the old one from (as shown in the image below):

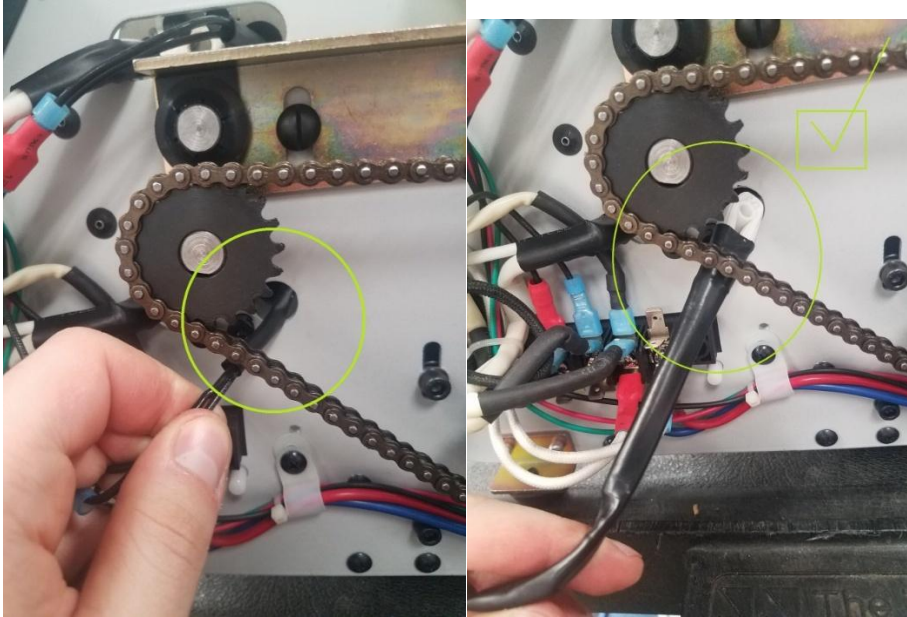


8. Once the upper fuse is replaced you can remove the retaining screw for the lower thermal fuse. The screw is located underneath the lower heat shoe and closer to the right side of the machine. The location is shown in the images below:

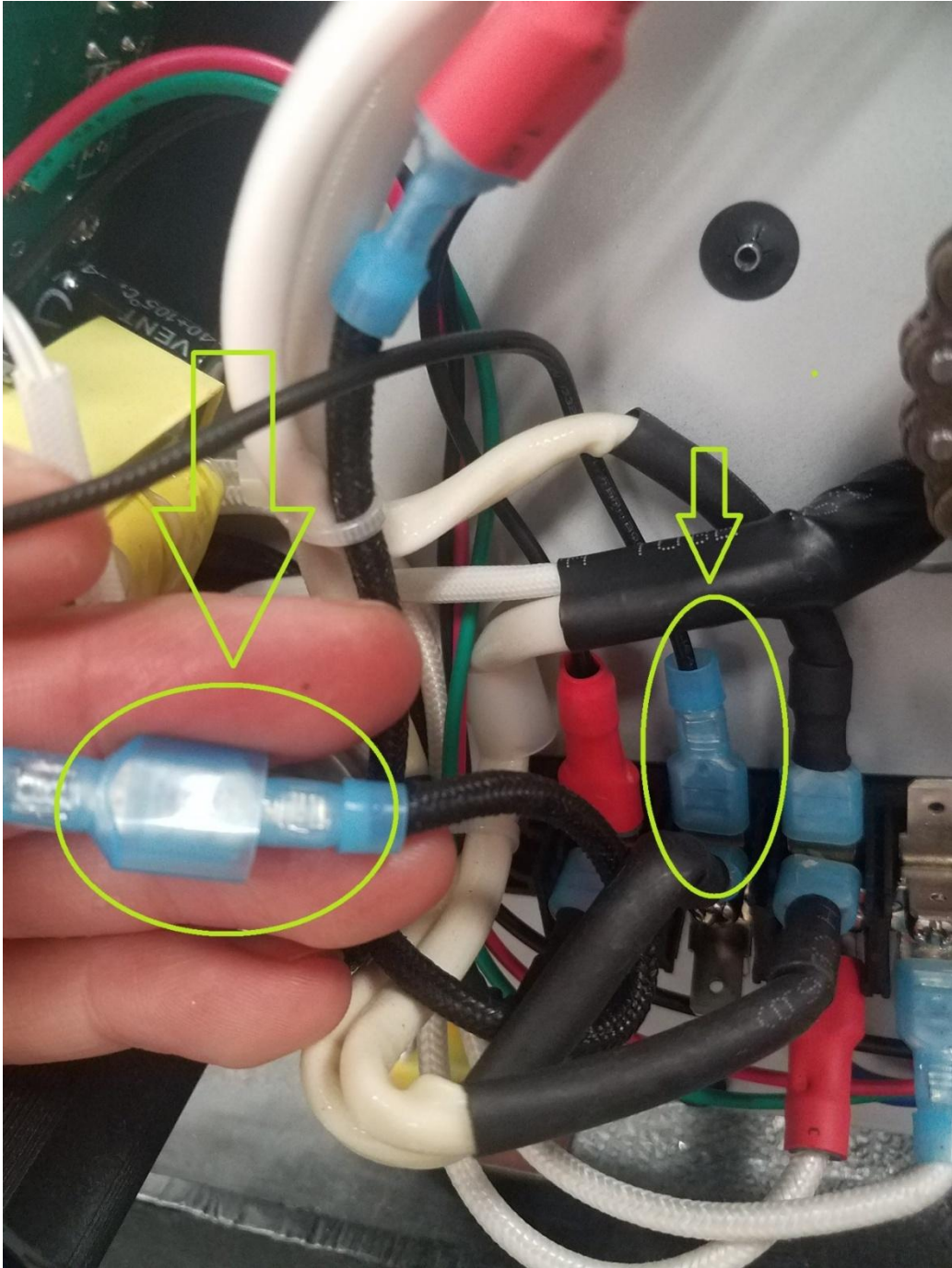


9. **Once this screw is removed – it should be discarded as it is difficult to reinstall without removing the heat shoe and it is possible to pinch and damage the new thermal fuse if it is installed incorrectly. It's used only for shipping purposes to keep the fuse in place.**

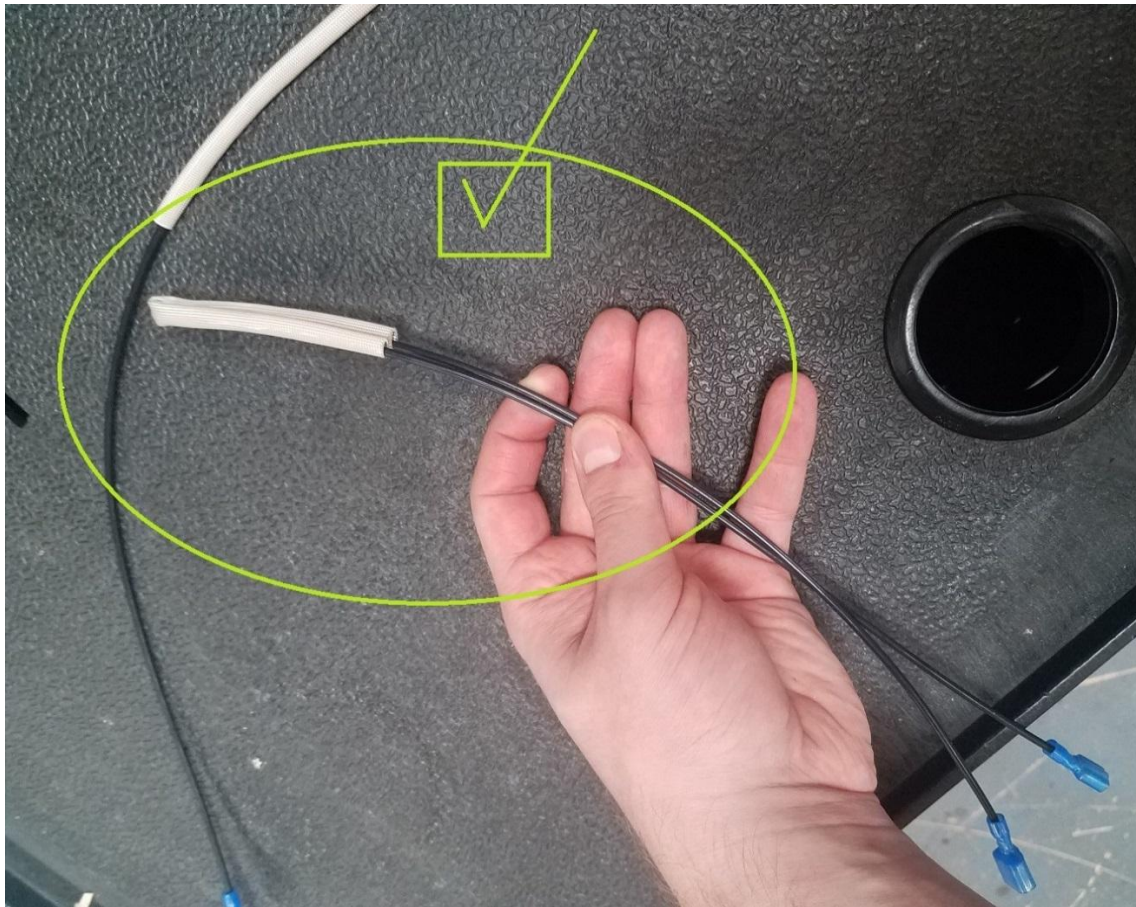
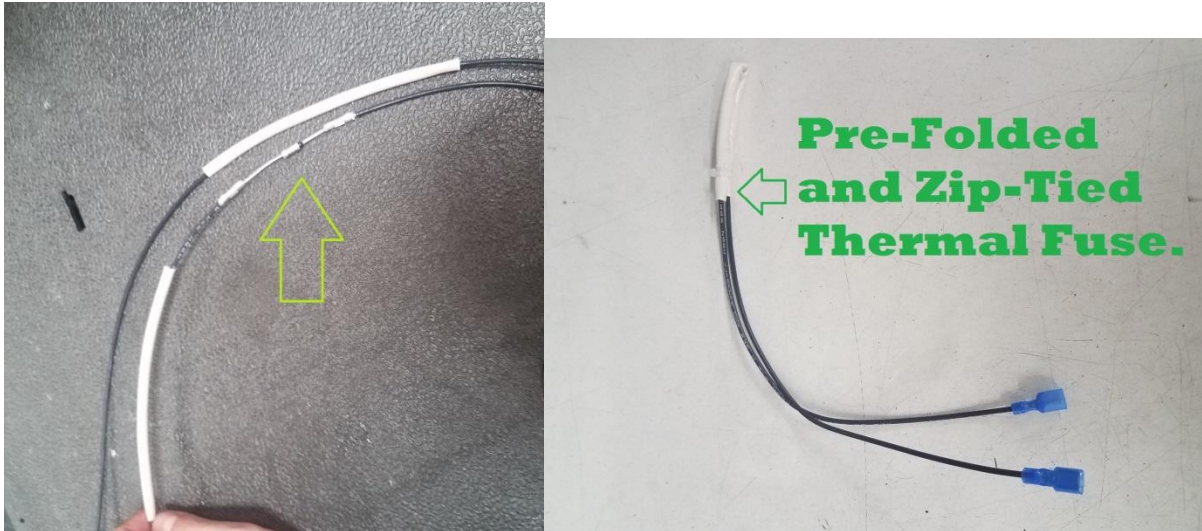
Next, you can go around to the right side of the machine and locate the thermal fuse wires coming out of the lower heat shoe (as shown in the image below). Depending on how tightly tucked the wires are on your machine, you may have to remove several zip ties in order to get a grip on the wires and pull out the thermal fuse from the heat shoe (refer to images below):



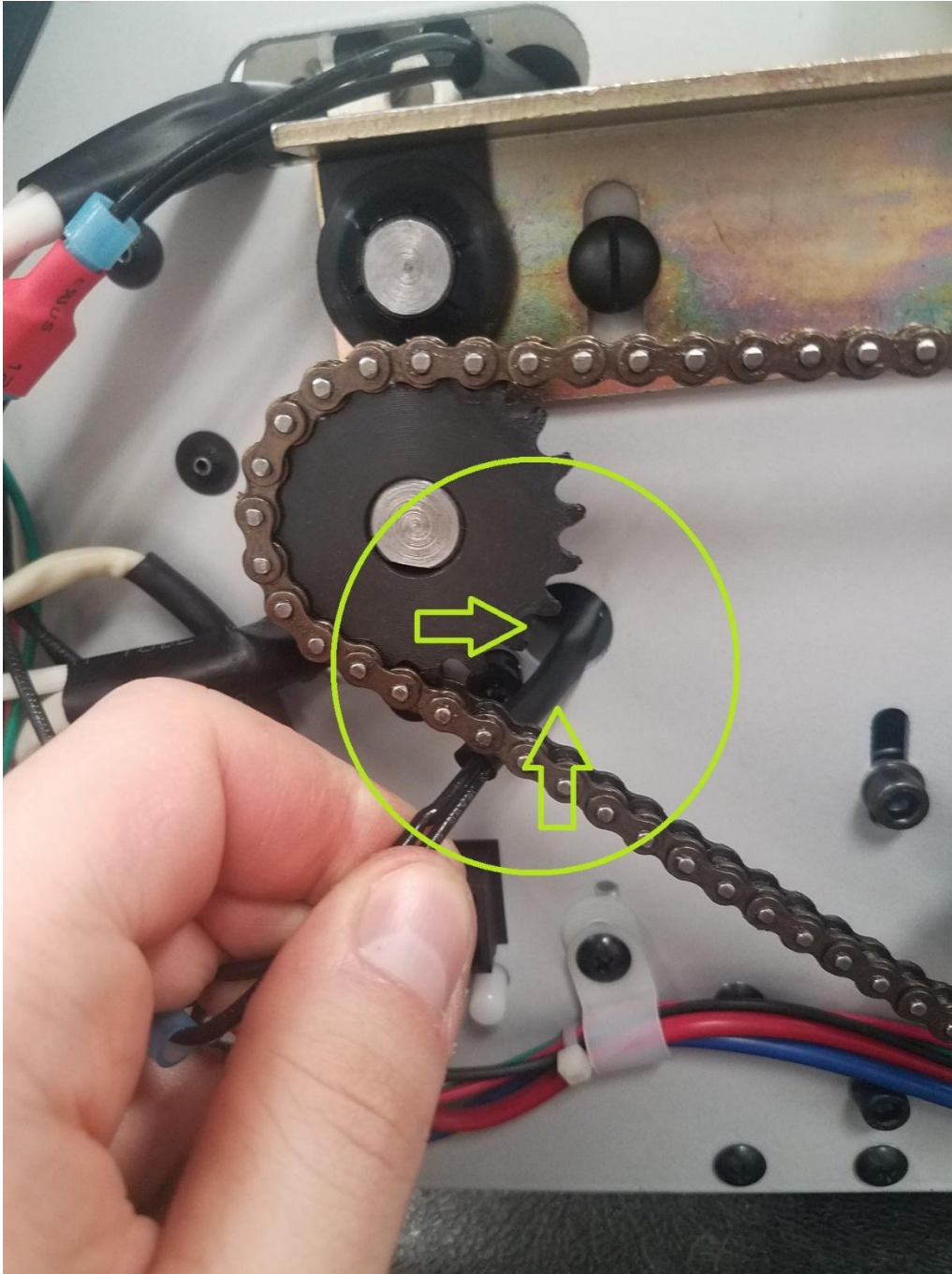
10. Once the old thermal fuse is pulled out from the lower heat shoe you can trace the two ends to where they connect. The female end will connect on the terminal block onto an upward facing tab/prong (indicated by the smaller arrow in the image below). The male end will connect/couple to a black braided wire coming from the temperature control board (indicated by the larger green arrow in the image below).



11. After connecting your new thermal fuse unit you must ensure that the protective sleeve is centered over the middle of the fuse wire and the wire folded; in order to insulate it electrically while it's inside the heat shoe. (Some thermal fuse units come pre-folded with the protective sleeve zip tied in place – these fuses are ready to install/insert).



12. Once your new fuse is ready to insert, you can insert the unit back into the hole where you removed the old one (i.e., through the wall of the machine and into the lower heat shoe as shown in the image below):



13. Once the new fuse is installed, you can test the machine to ensure it is heating correctly (being mindful of live electrical connections while the cover is removed). If BOTH the top

and bottom heaters are warming up, you can zip tie or (electrical) tape the wires out of the way of the drive chain and replace the blue housing cover.

If you have questions or need more information, please contact
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