SAFETY:

Only qualified personnel should make repairs on this equipment. Use caution and follow Piranha procedures when working on the machine. Be sure to observe the following guidelines:

1. Before performing maintenance or repair, turn the power OFF and follow lock out/tag out (zero energy shutdown) procedures. Also, follow any lock out/tag out procedures applicable to your specific plant requirements.
2. Wear safety glasses and other personal protective equipment as required by applicable federal, local industry, and plant safety program standards.
3. Wear proper clothing. Do not wear watches, rings, jewelry, or loose-fitting clothes.
4. Read and review the manual carefully.
5. Be familiar with the operation of the machine.
6. Always replace safety guards and other safety devices removed for service and make sure that they are fully functional before operating the equipment.
7. Never remove, jumper out or bypass a safety device to permit machine production.
8. Never place yourself in a hazardous situation to observe a problem and ask someone else to operate the machine. This could be a very dangerous and life-threatening situation.

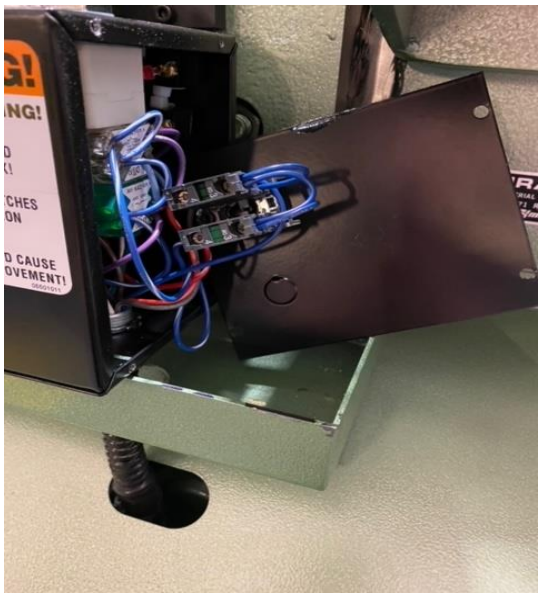
Danger

Always verify that ALL electrical supplies are isolated before undertaking any service or maintenance work. The machine may have more than one electrical supply.

Step1:
Remove the cover containing the front/off/rear selector switch on the front operator box. PH1/PH2

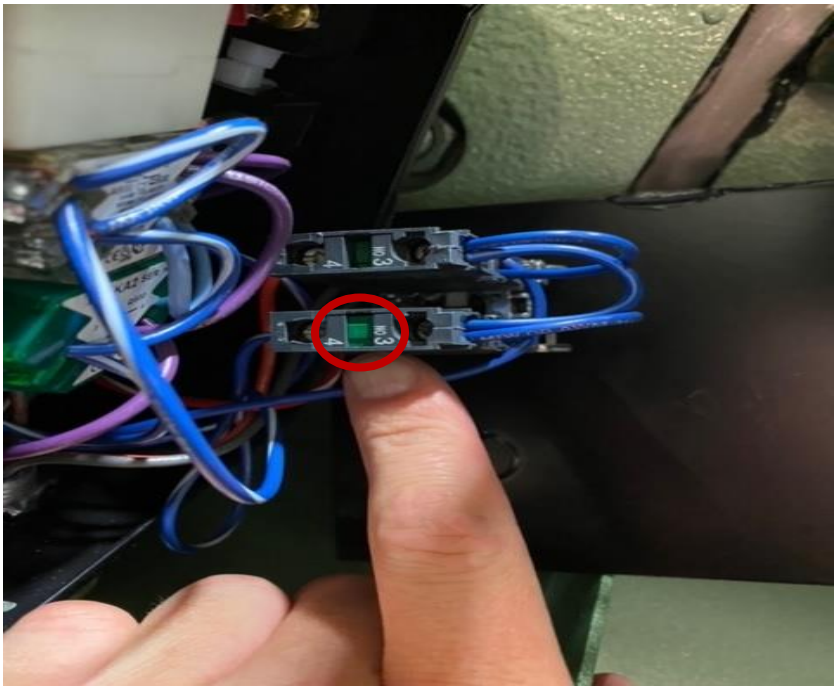
PH1

PH2



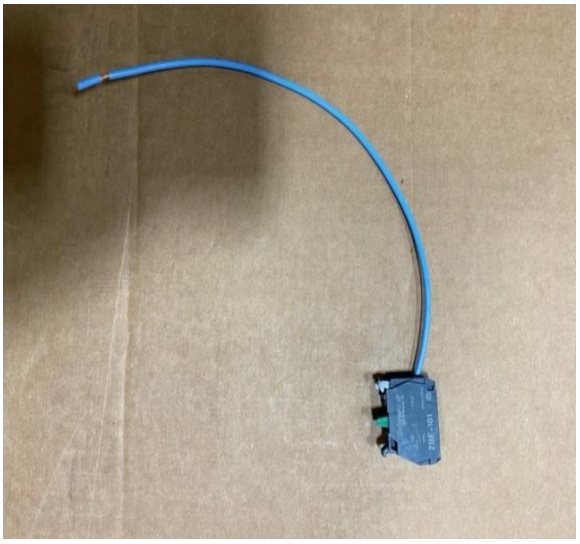
Step 2:
Locate the contacts on the back side of the front/off/rear selector switch. Find the contact that that is closed when the selector is in the “front” position. The green actuator in the middle of the contact will be at surface. As shown in PH3.

PH3

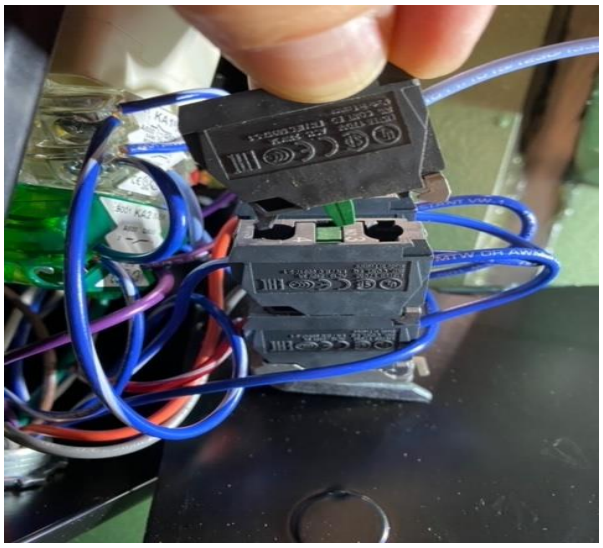


Step 3:
Locate the contact provided in the package (PH4). Clip the new contact on top of existing contact pointed out in step 2 (PH5-PH6). Be sure contact is fully seated and clipped in as shown in PH7.

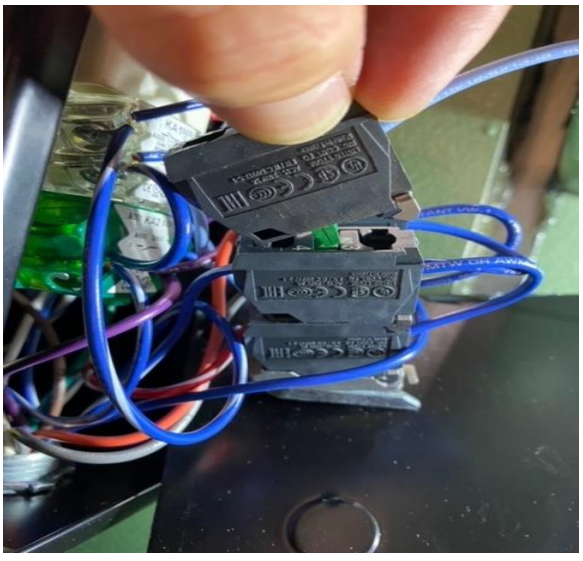
PH4



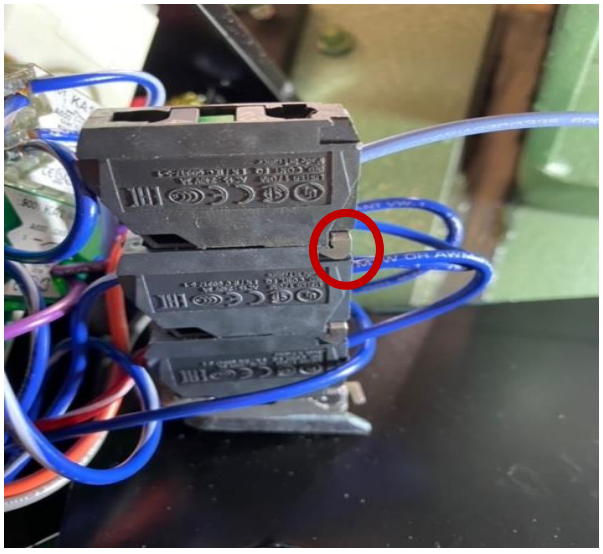
PH5



PH6



PH7



Step 4:
Remove retaining nut and washer from top side of the joystick. Note which side of the joystick is facing outwards so the orientation will be correct upon reassembly. (PH8-PH9)

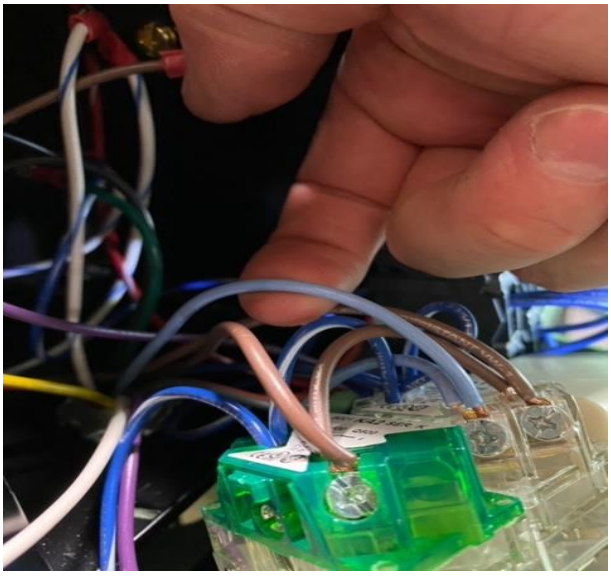
PH8

PH9

Step 5:
Carefully pull out the joystick from the control box and locate the contact that contains 2 light blue wires (PH10). Remove the light blue wire that is coming up from the hole in the bottom of the box (PH11).

PH10

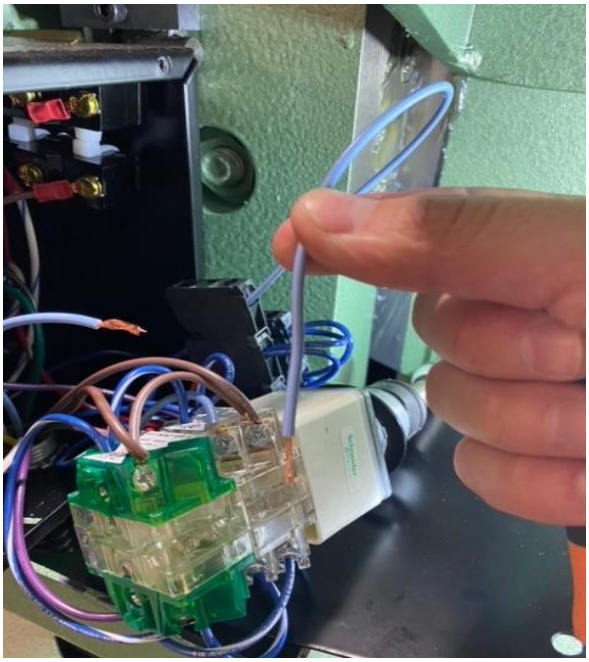
PH11



Step 6:

Insert blue wire from the newly added contact in place of wire removed from step 5 (PH12-PH13). Tighten the terminal screw, give wires a pull to ensure they are secure.

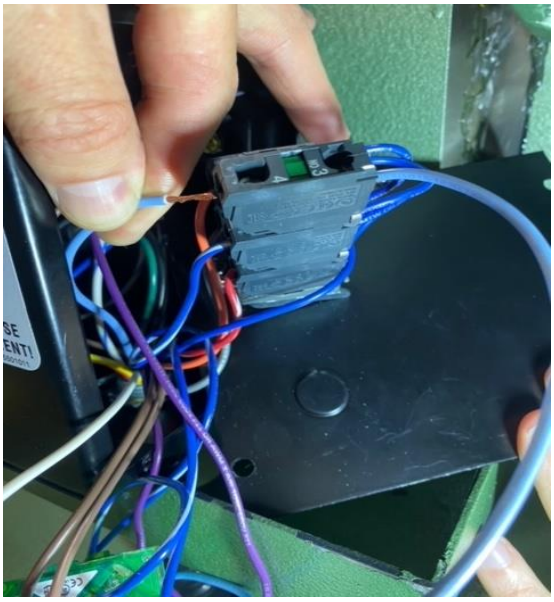
PH12



PH13

Step 7:
Take the light blue wire that was removed from the joystick contact, insert in the newly added contact and tighten the terminal screw. Give wire a pull to ensure its secure(PH14-PH15).

PH14



PH15

Step 8:
Take picture of contact installed and connection to joystick as ilustrated picture PH15

Step 9:
After ensuring all connections are tight, carefully reinstall the joystick in proper orientation using the nylon washer and nut. Reinstall the control box cover being cautious to not pinch any wires(PH16-PH18).

PH16

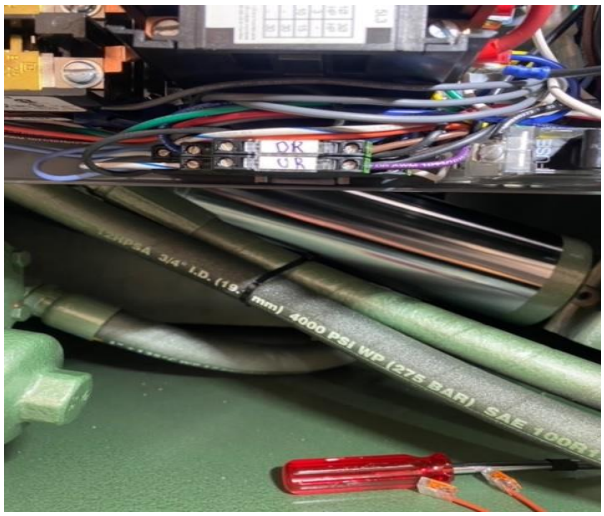
PH17

PH18

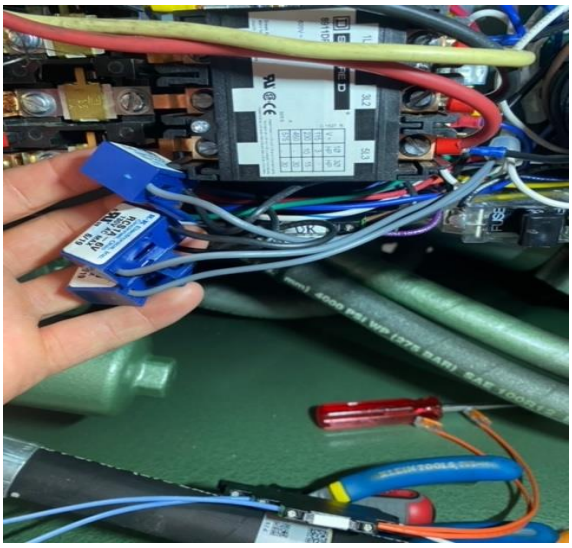
Step 10:
Locate the main electrical enclosure of the machine (PH19). Remove the 2 screws and take off the front cover. Locate the relays labeled “DR” & “UR” (PH20). Slide relays up on the mounting rail to make room for the additional relay. It may be required to push some wiring and the blue suppressor boxes up out of the way to create room (PH21-PH22).

PH19

PH20



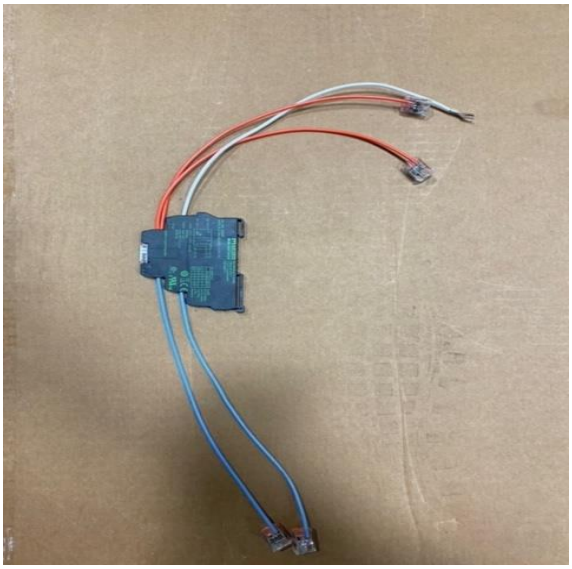
PH21



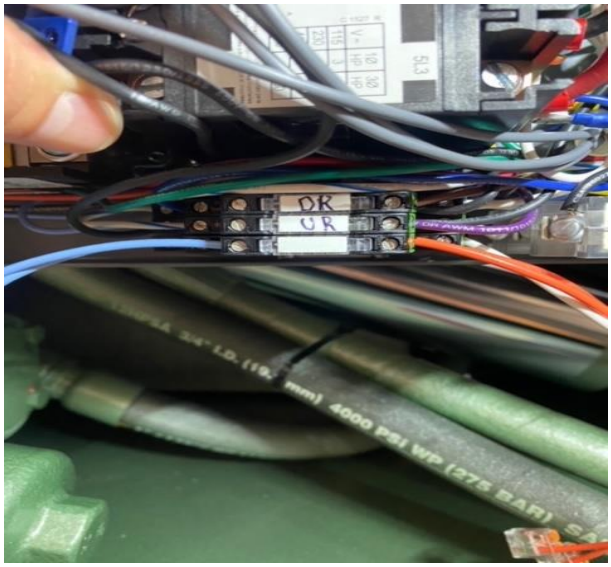
PH22

Step 11: Locate the relay provided in the package (PH23). Clip the new relay onto the mounting rail in the provided space made (PH24).

PH23

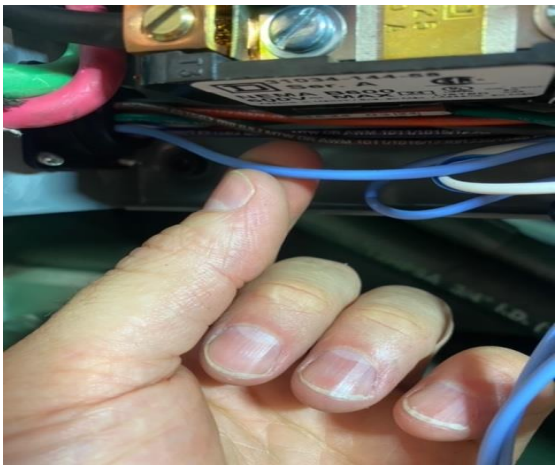


PH24

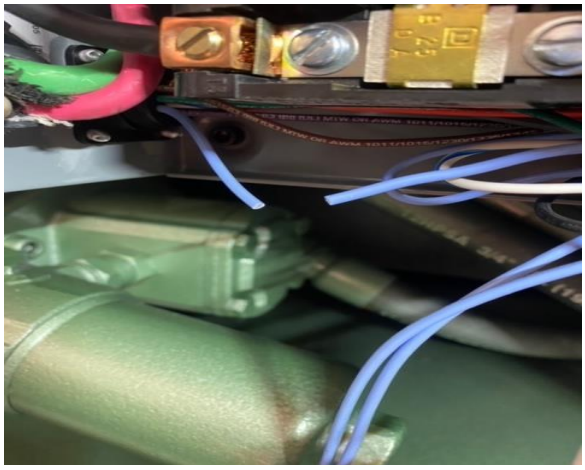


Step 12: Locate the light blue wire coming from the connector on the left side of the enclosure box (PH25). Cut the wire approximately 1.5 inches back from the connector (PH26).

PH25

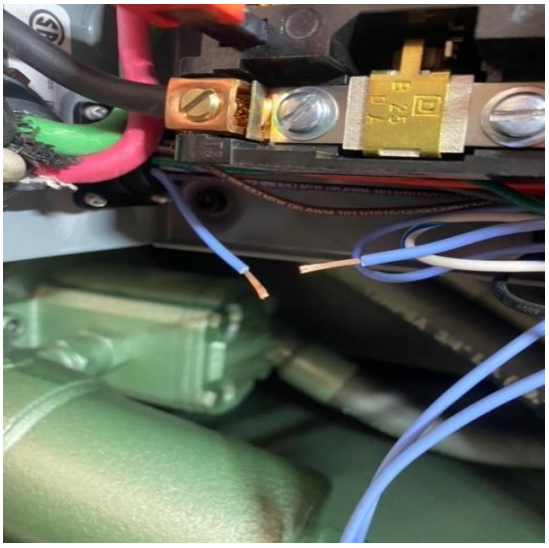


PH26

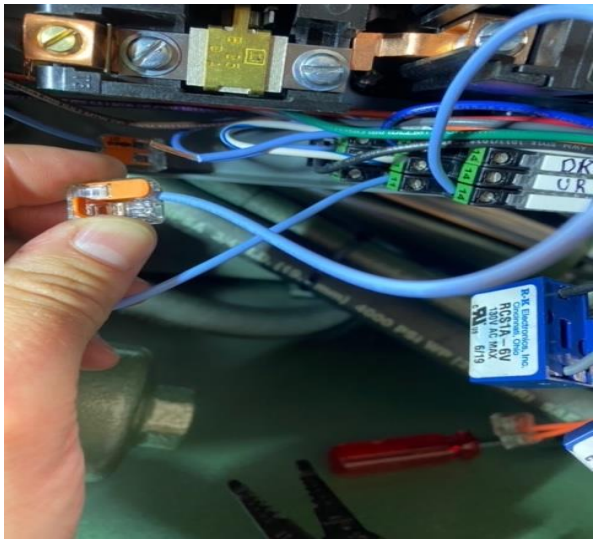


Step 13: Strip both ends of the light blue wire that was cut (PH27). Connect both light blue wires to the pre-wired light blue wires on the added relay. You may connect to either wire, there is no polarity. Pull up orange lever on empty terminal of the Wago connector (PH28). Insert the wire fully into the connector and press the lever back down to secure the wire (PH29). Tuck both Wago connectors into the lower portion of the box (PH30).

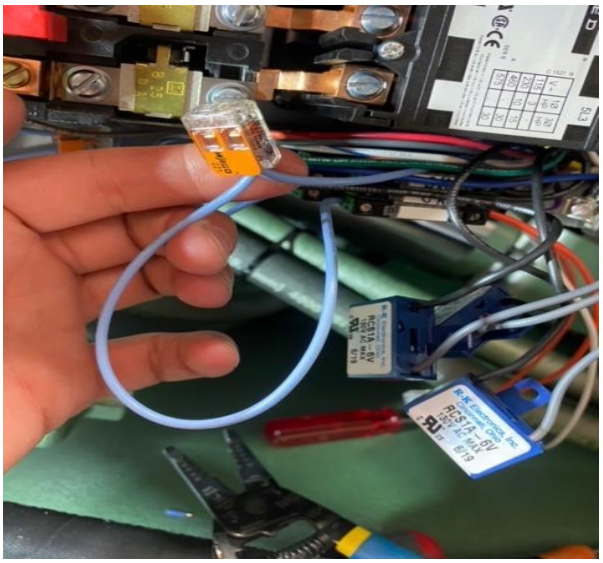
PH27



PH28



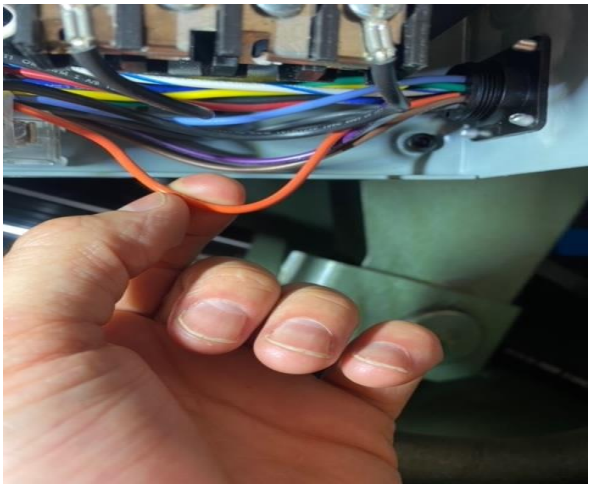
PH29



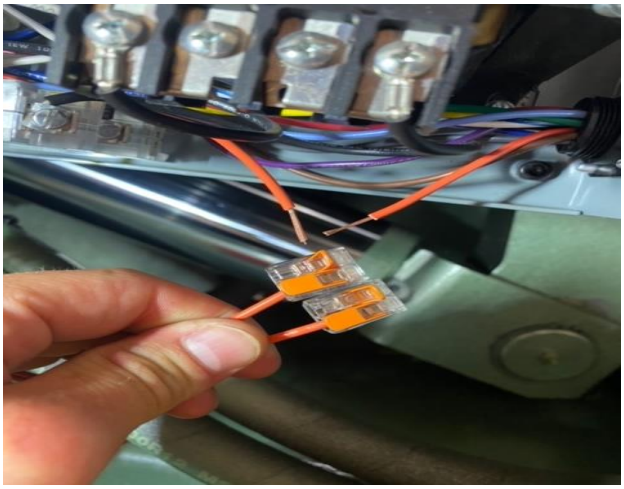
PH30

Step 14: Locate the orange wire coming from the connector on the right side of the enclosure box (PH31). Cut the wire approximately 1.5 inches back from the connector and strip both ends (PH32).

PH31

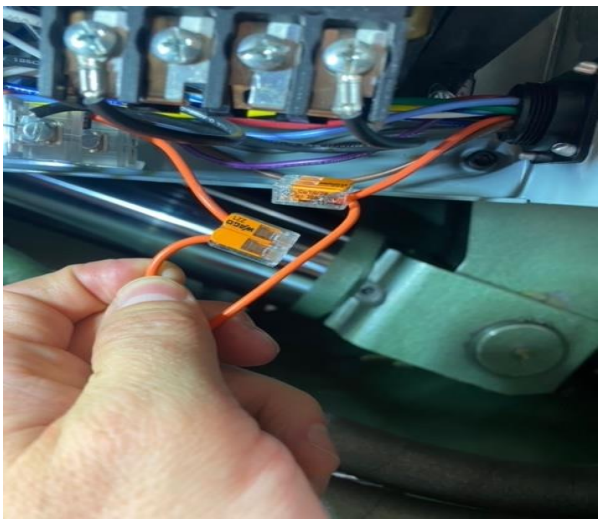


PH32



Step 15: Repeat the process from step 12 by connecting orange wires that were stripped to the orange wires on the added relay. Again, you may connect to either wire, there is no polarity (PH33). Tuck both Wago connectors into the lower portion of the box (PH34).

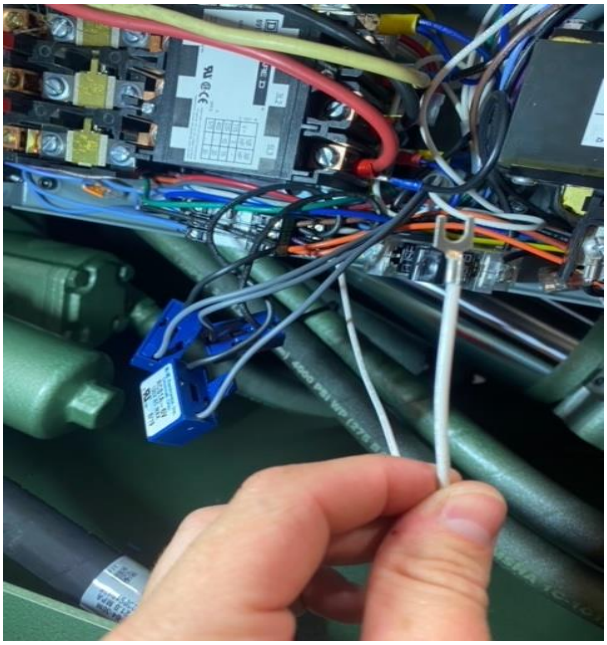
PH33



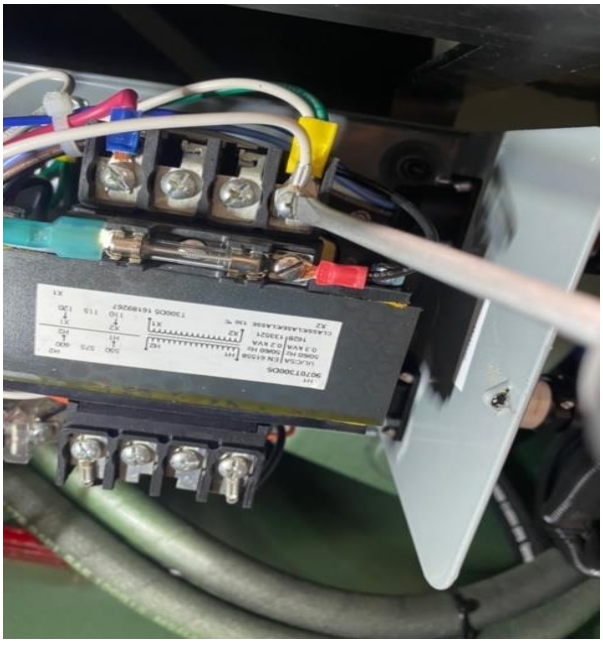
PH34

Step 16: Connect the white wire with the fork terminal from the added relay (PH35) to the top of the transformer on terminal X2. Loosen terminal screw and slide fork on top of existing white and green wire and tighten screw (PH36).

PH35



PH36



Step 17:
Take picture of relay installed and connections as indicated in pictures PH28, PH29, PH32, PH35

Step 18:
After work is completed and all panels are in place. Power up machine and verify all functions. Turn the switch to front mode and make sure all 4 directions work at the front joystick and machine cannot be moved using the rear joystick. Turn the switch to rear mode and make sure all 4 directions work at the rear joystick and machine cannot be moved using the front joystick.