



PIRANHA LITES INSTALLATION GUIDE



A Division of Control Dynamics Inc.

ABOUT PIRANHA SAFETY

Thank you for purchasing the Piranha Lite System by Piranha Safety, a division of Control Dynamics, Inc.

For 20 years, Eric Moran, the owner of Piranha Safety, has been providing unique solutions for giants of industry, including The Boeing Company. With a strong background as an electrical contractor and with a passion for inventing, Eric Moran has been issued a number of patents including one for the Piranha Lox system.

Piranha Safety, headquartered in Everett, WA., is focused on the development of IPFPE or Intelligent Personal Fall Protection Equipment and equipment safety products. As a recognized leader in the industry, Piranha Safety and its parent company Control Dynamics Inc., have won many awards including the National Safety Award for Innovation in 2017. In addition, Piranha Safety has also submitted a new application for consideration in 2018 for The X Rail, a patented leading edge perimeter system that is fully programmable and can use BlueTooth, remote control, hardwired or manual activation.

We welcome the opportunity to help you solve your company's unique personal protective needs. Learn why organizations such as The Boeing Company and Genie Industries turn to Piranha Safety for innovation and viable solutions.

Best regards,

Piranha Safety Team



A Division of Control Dynamics Inc.
21 East Marine View Drive STE G
Everett, WA 98201

800-738-5004
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WARNING

Disconnect power before working on the lifts electrical system. Only qualified personnel should perform the electrical installation. Make sure you read and understand the installation instructions before beginning. Safety glasses should be worn at all times.



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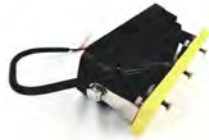
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Kit Contents:

1. Left and Right side light brackets



2. Stair light bracket



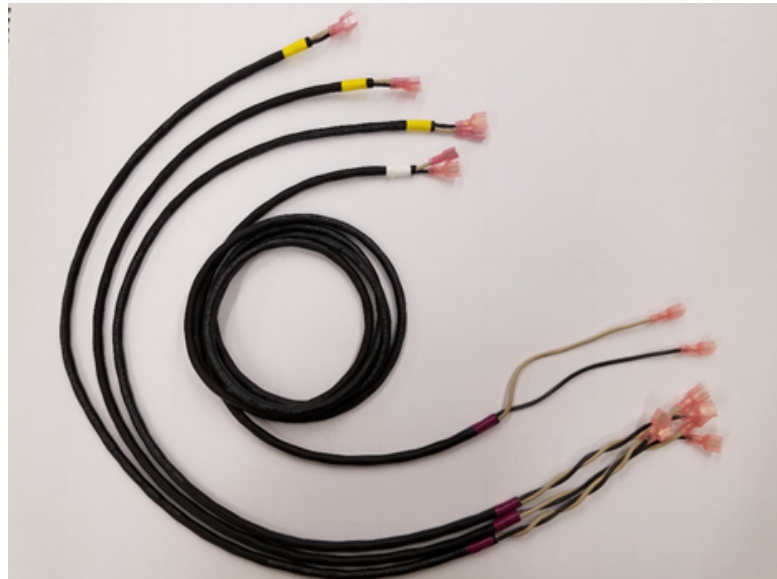
3. Front light bracket



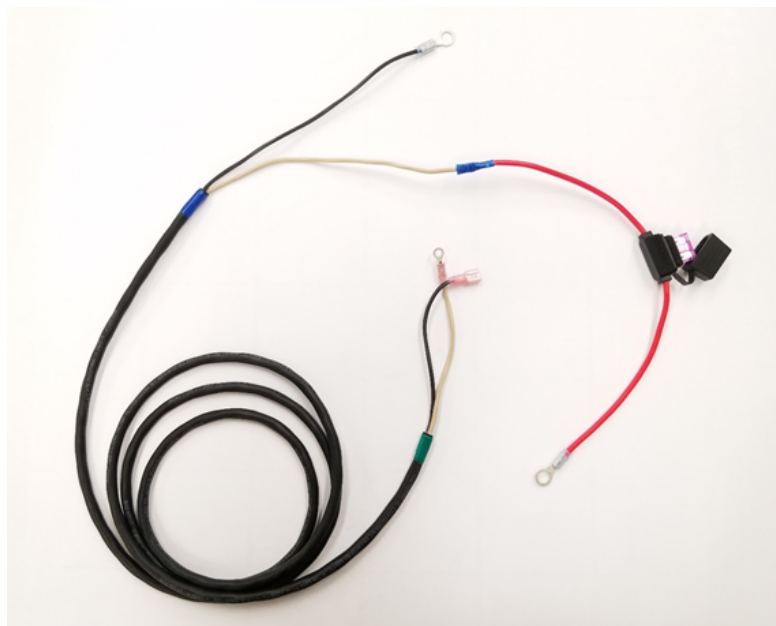
4. Wire Kit (see following pages).



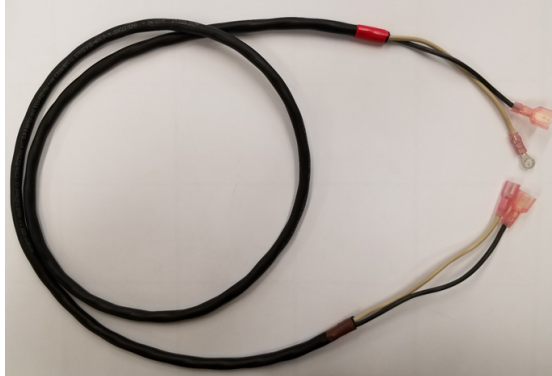
Qty-4 light cables: Three cables color coded with YELLOW on one end and VIOLET on the other. These cables will be used for the front and side lights. The fourth cable, color coded YELLOW on one end and WHITE on the other will be used for connecting the light at the rear of the lift under the steps.



QTY-1 Power cable: The power cable is color coded with BLUE on one end of the cable and GREEN on the other end of the cable. Inline fuse 3-AMPS



Qty-1 switch cable: This cable is color coded with RED on one end and BROWN on the other end.



Qty-1 jumper: Switch jumper wire.



Qty-2 Splice connectors.



Install lights and brackets before disconnecting battery power. Raising and lowering the lift is needed while finding the mounting location for the lights. Once lights and brackets are installed disconnect battery before beginning electrical installation.

STEP 1:

Side Light Bracket Mounting: Begin by elevating lift to max height. Place light bracket on base edge approximately 3 inches forward of lift track (see image 1A). With light bracket slipped onto base begin to lower lift. While lift is lowering watch as hinge lowers to make sure it does not collide with light bracket (see image 1B). Move bracket if needed to prevent collision. Once lift is completely lowered and light bracket is set in place, tighten all bolts.

IMAGE 1A



IMAGE 1B



STEP 2

Front Light Bracket Mounting: Slide Light Bracket over lift front plate, center and tighten bolts (see image 2A).

IMAGE 2A



STEP 3:

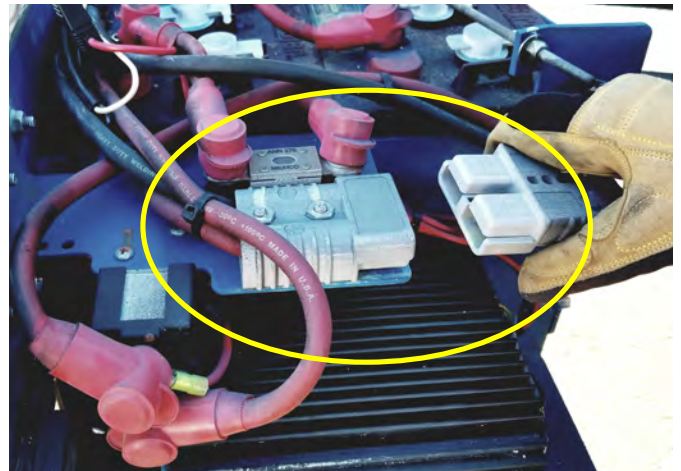
Stair Mount Light Bracket: The three holes in the tread may need to be enlarged to accommodate the bracket screws.(see image 3A). Once holes are enlarged, use supplied bolts and attach light bracket under top stair.

IMAGE 3A



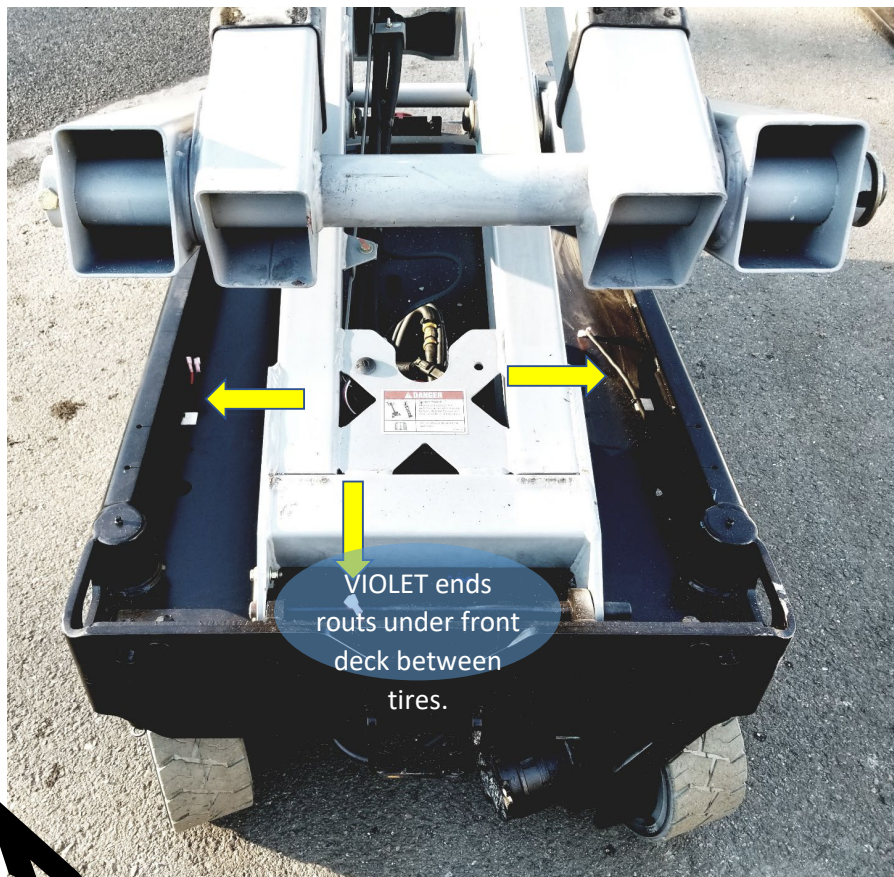
STEP 1:

Warning: Avoid electrical shock or injury! Disconnect power at the battery before proceeding. Disconnect shore power if needed before beginning. Verify that power has been removed from the machine.



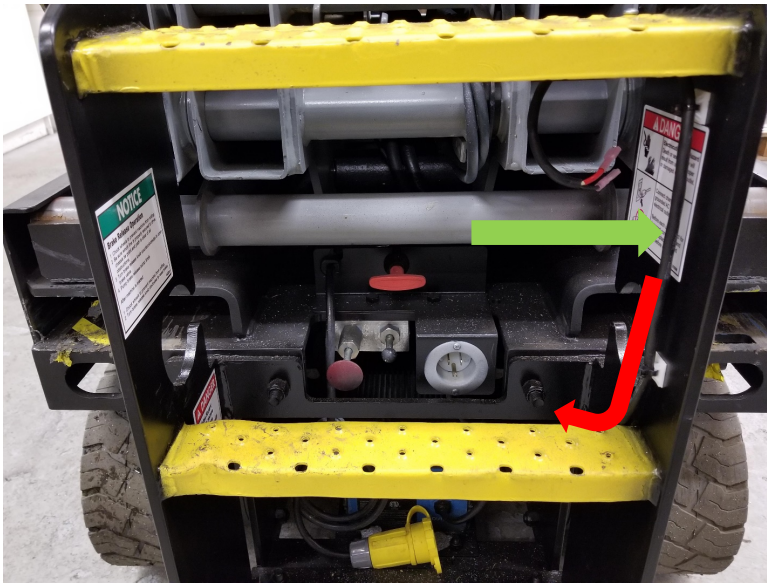
STEP 2:

Routing the 4 light cables: Cables that are color coded with YELLOW and VIOLET are the same length. The Yellow end of the cable should be connected to the light fixtures mating connectors. The VIOLET end of the cable should be routed to the front of the lift and underneath using a method to secure the cables to existing wiring. Use existing holes in platform to route cables underneath.

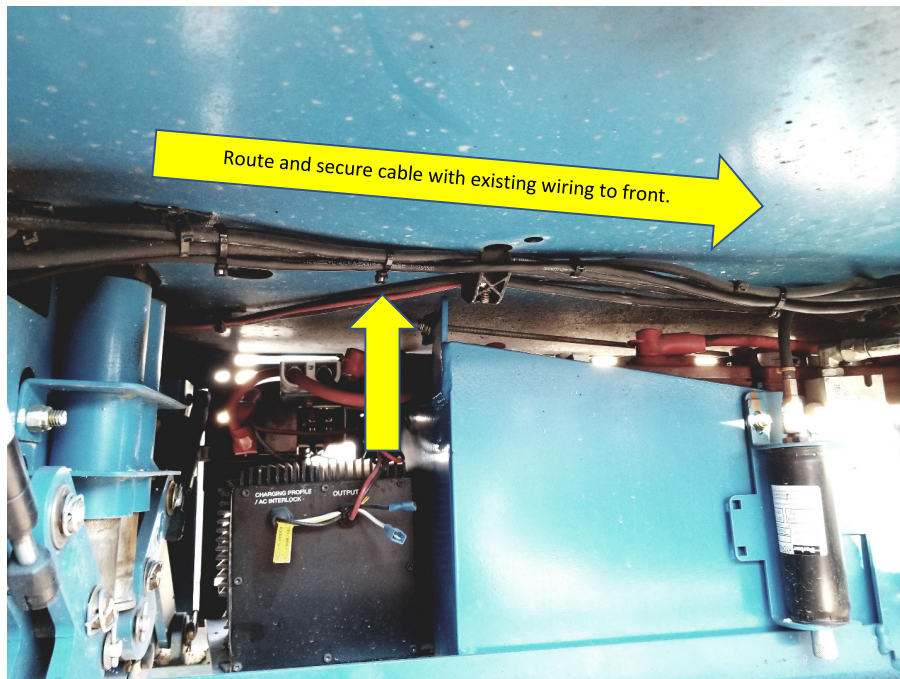


STEP 3:

VIOLET and WHITE cable is for the rear light located under the stairs. The WHITE side of the cable connects to the lights mating connectors. The VIOLET side is routed through the under side of the lift.

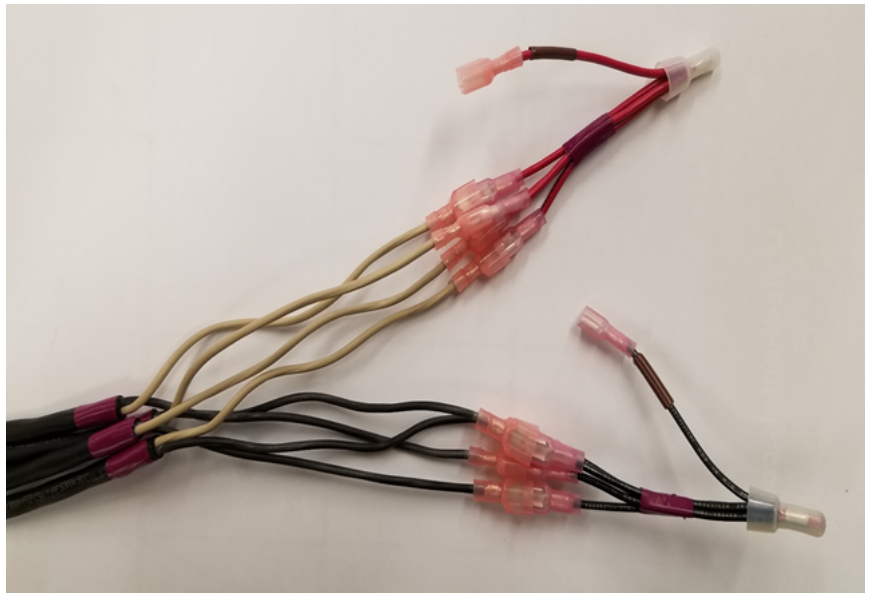


When the access doors of the lift are opened there should be a bundle of existing cables and wires that lead to the front of the lift. Secure the cable to the existing bundle using the provided cable ties. At this stage there should be 4 cables to front of the lift. All the cable ends should be VIOLET.



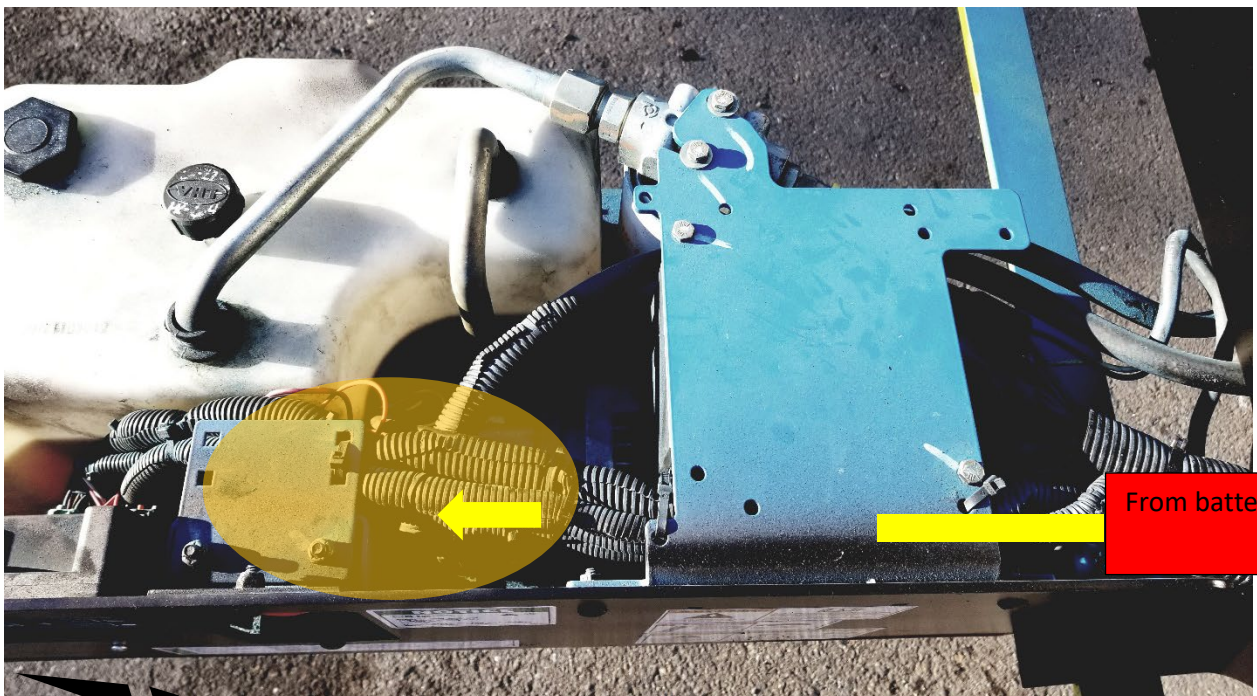
STEP 4:

Using the splice connectors, mate the black wires to the black wires and mate the white wires to the red wires. These are bundled and marked with a matching VIOLET color. The BROWN coded wire should not be connected at this time.



STEP 5:

Routing the power cable: Route the power cable from the battery bank through the front of the lift to the opposite door and into the area of the key switch. Shaded area below. Do not connect the cable to the battery.



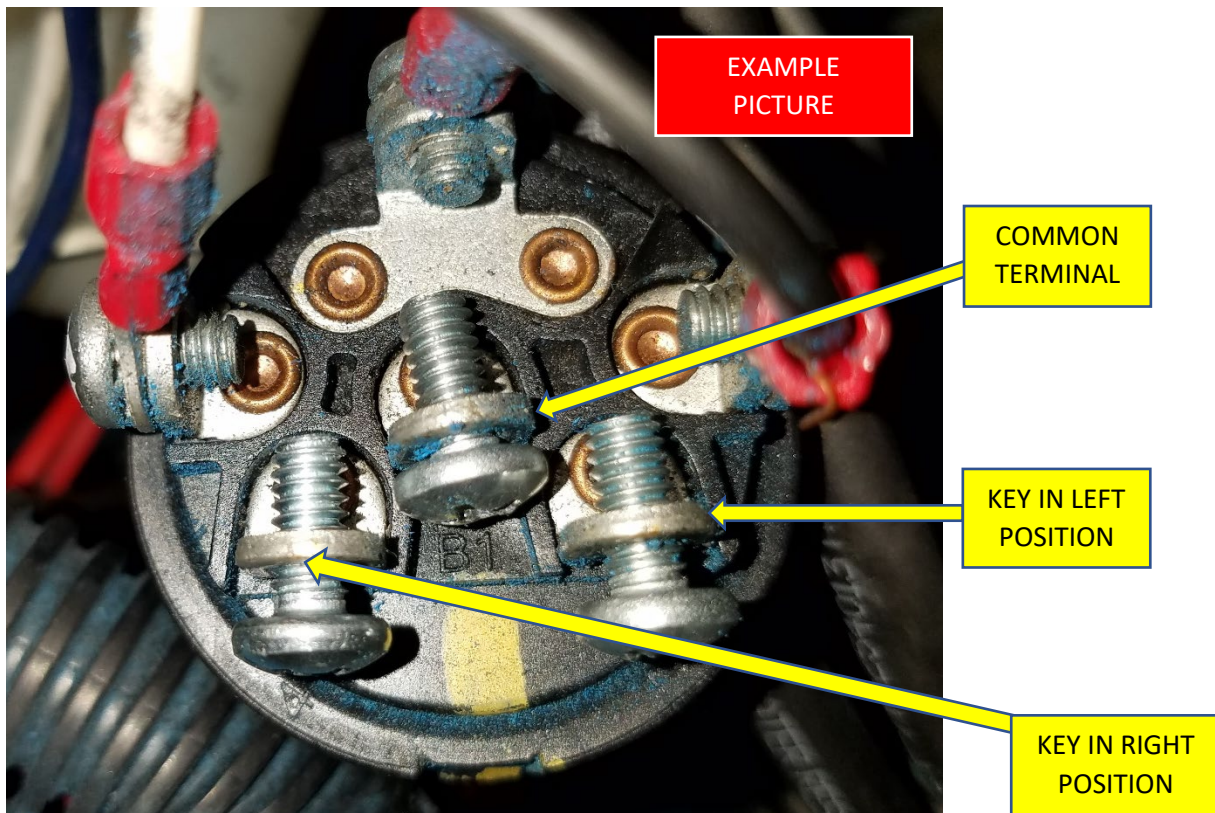
STEP 6:

Remove the key switch from the door.



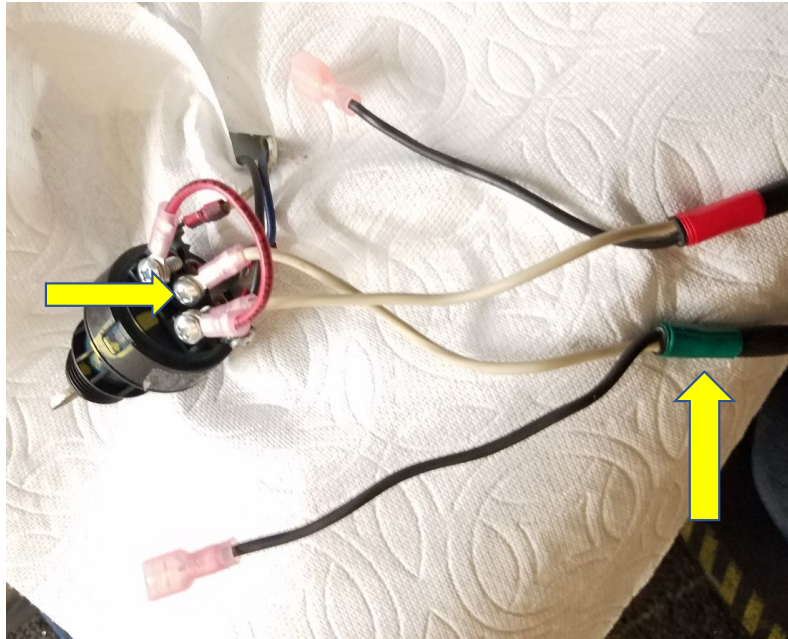
STEP 7:

Identify the switch terminals and contacts. With the switch in the off position there should be no continuity between the common terminal and the normally open terminals. When the switch is turned to the left or to the right the common terminal should make with its designated contact to close the lighting circuit.



STEP 8:

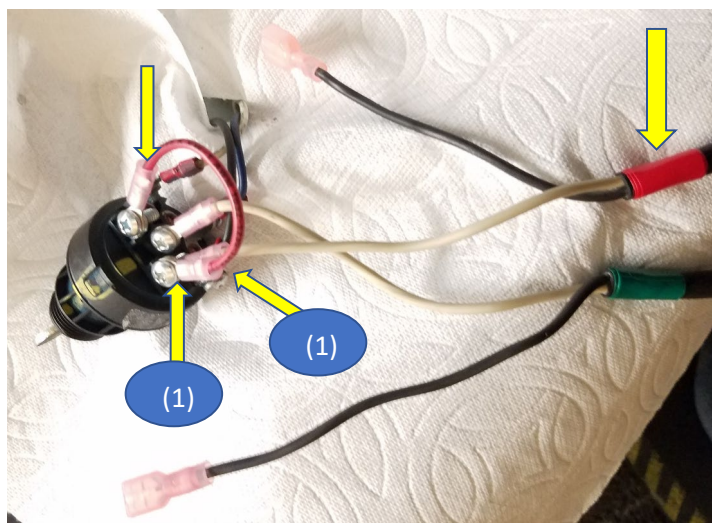
Take the Green end of the power cable. Terminate the white wire with the ring terminal to the COMMON terminal on the switch. This will give the switch the needed battery voltage to power the lights.



STEP 9:

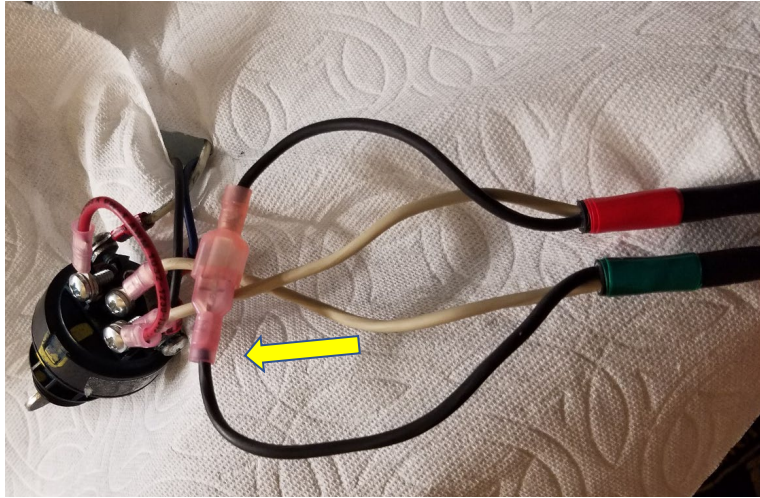
Terminating the switch jumper and the switch cable.

The switch cable is color coded RED and BROWN. Using the RED end of the cable. Terminate the white wire and the “switch jumper” (red wire) to either the left or right normally open contact. The ring terminals should be placed together (1). Then terminate the other end of the switch jumper to the other normally open contact. This will allow the lights to activate in either switch location.



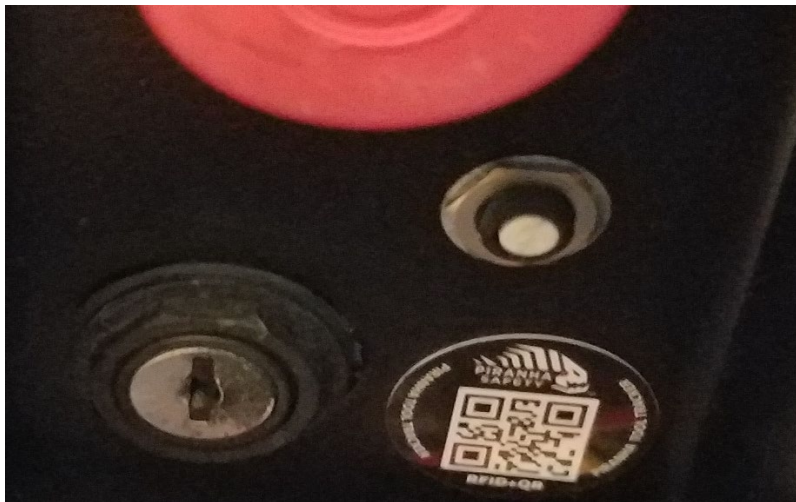
STEP 10:

Take the GREEN cable end and the RED cable end and connect the black wires together with their mating connectors.



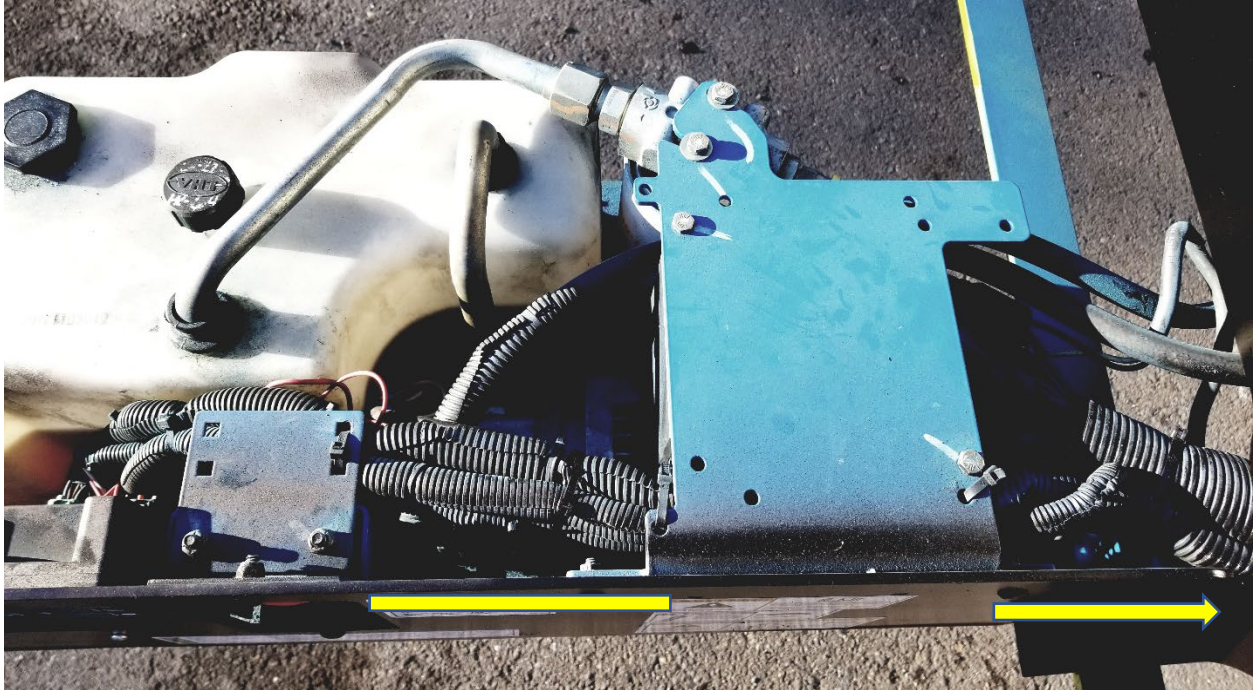
STEP 11:

Reinstall key switch making sure that the it is orientated the same way before it was removed.

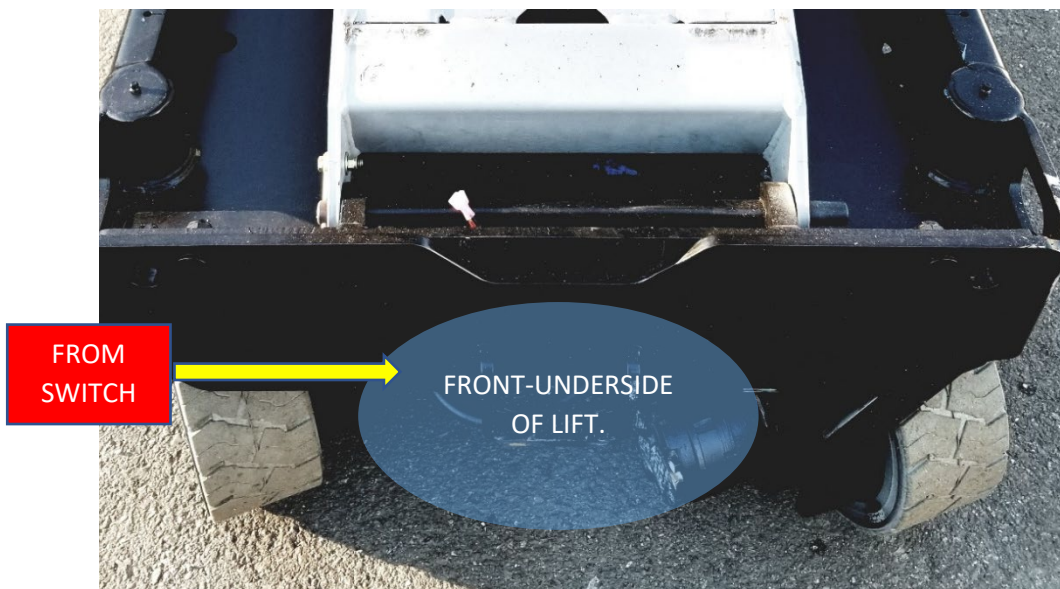


STEP 12:

Route the BROWN end of the switch cable to the front of the lift.



The BROWN cable should now be in the same location as the VIOLET light cables and the splice connectors.



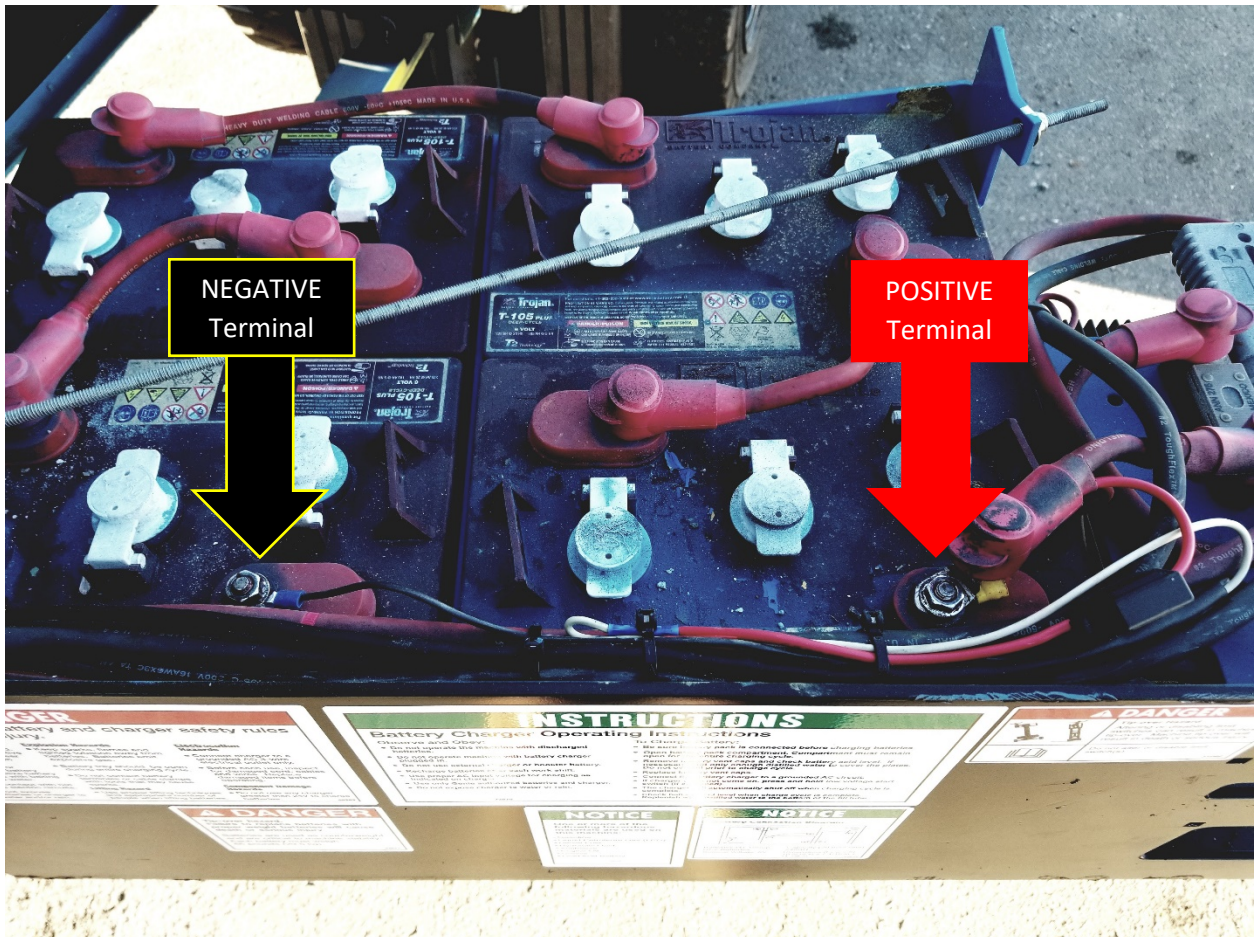
STEP 13:

The black wire goes to the black splice connector. It is identified with brown. The white wire goes to the red splice connector and it is also identified with brown.



STEP 14:

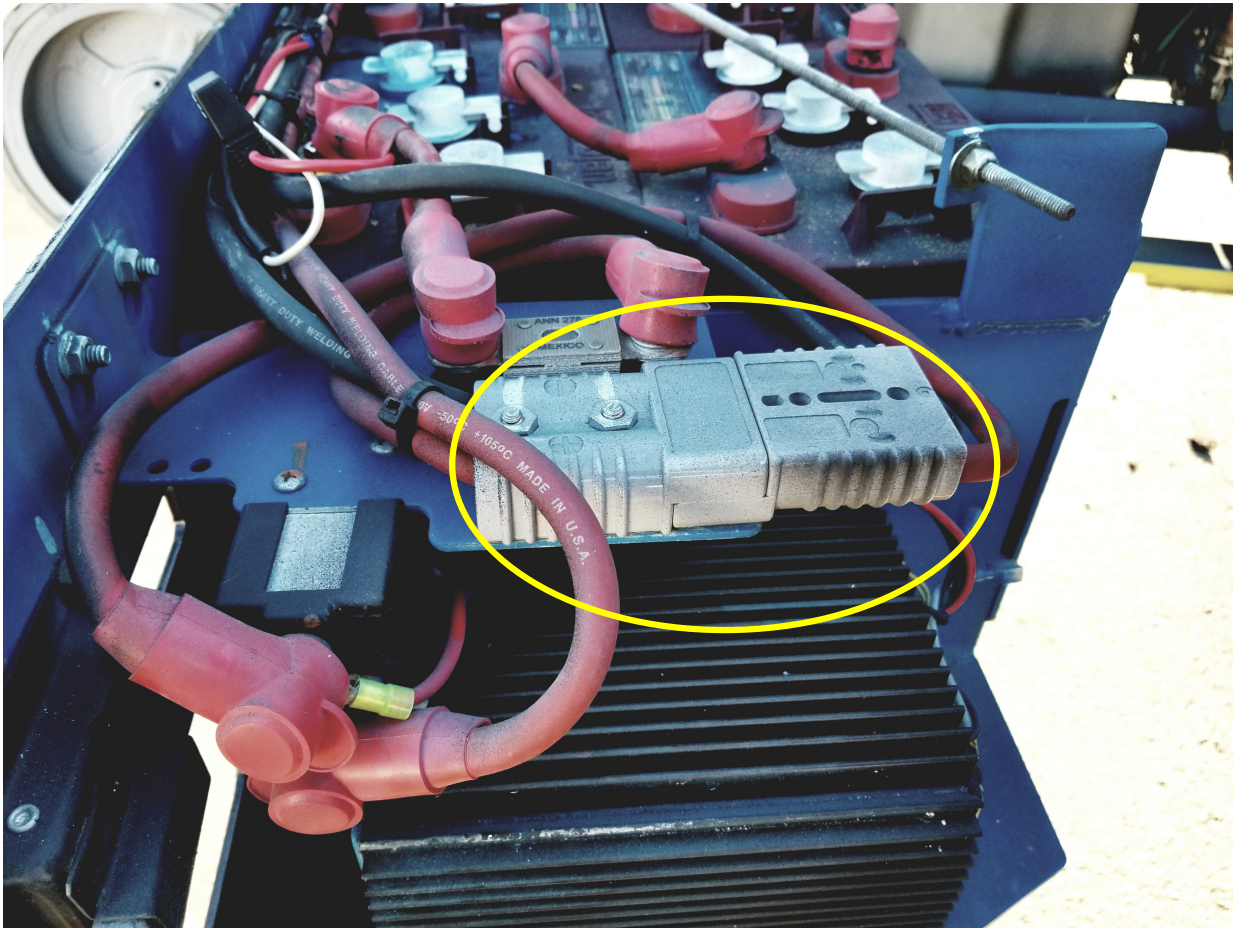
Terminate the power cable at the battery. The power cable will have two ring connectors on the wires. The black wire will terminate to the NEGATIVE terminal of the battery. The Red wire will terminate to the POSITIVE battery terminal.



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Reconnect battery power.



Make sure all cables and connections are secured and away from moving parts. Energize lift by connecting battery power. The lights should illuminate when the selector switch is turned to ground controls or basket controls position.

If further assistance is needed please contact Piranha Safety.



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