

SOLEX

OFFROAD

XR650L Auxiliary LED Light and Bracket Kit Installation

Years: 1993 to Current



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Parts List

(2) LED Auxiliary Lights



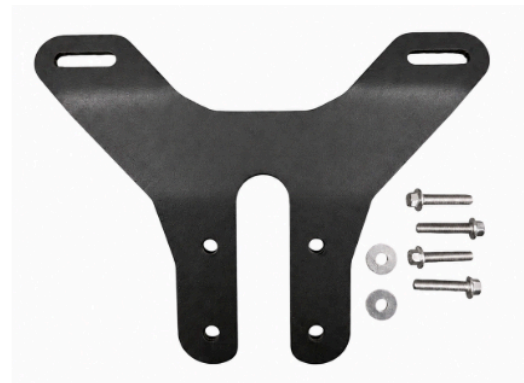
(1) Wiring Harness + Handle Bar Switch



(1) Rubber Battery Box Grommet



(1) Auxiliary Light Mounting Bracket and hardware (**Complete BRACKET ONLY kit**)



(1) Handle Bar Switch Mount

(2) M5x16mm Bolts





(11) Black Cable Ties



Pod Light Mounting
Hardware



Installation Instructions

NOTE: If installing the plug-and-play auxiliary light kit, read all instructions before installing. If installing the LED auxiliary light bracket kit **only**, follow these steps in order: 8, 30.

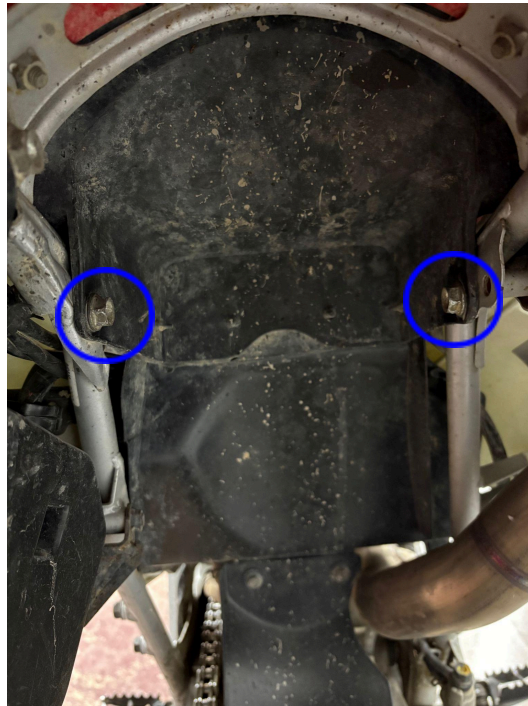
1. Move the fuel petcock to the off position (reference blue arrow below).

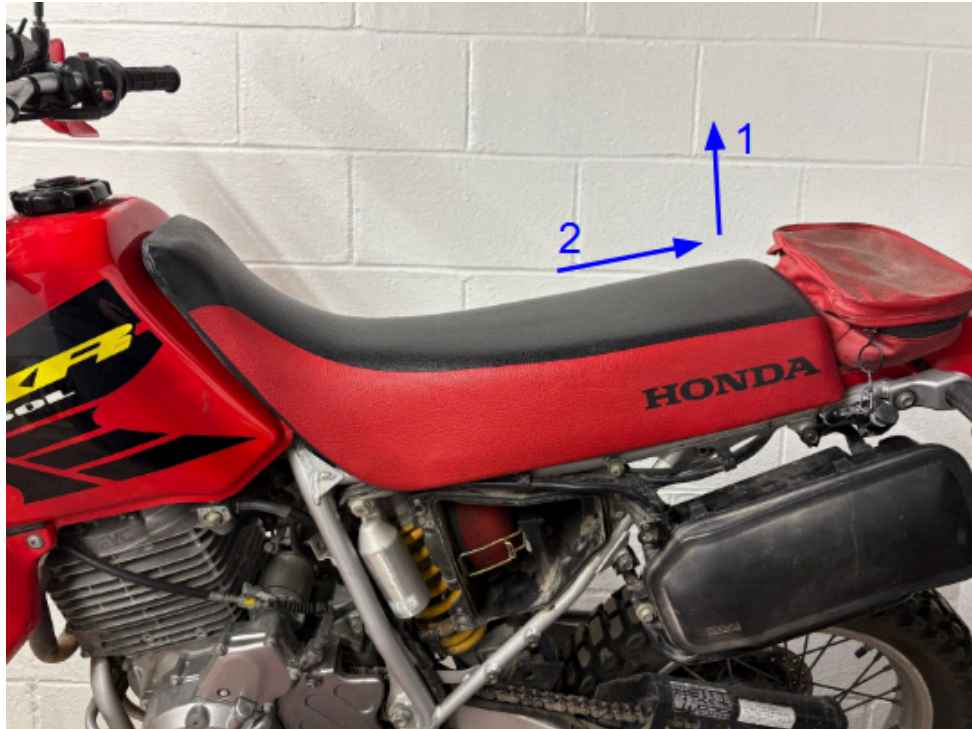


2. Remove the left side panel. Remove the three quarter turns on the side panel (circled in blue) and detach the side panel by pulling out on the bottom and shifting it downwards.

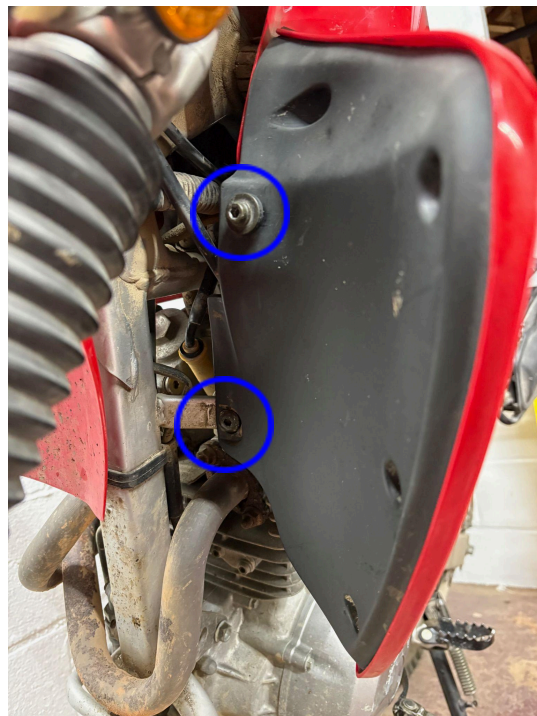


3. Remove the seat. Remove the two 12mm bolts below the rear fender that hold the seat in place. Next, detach the seat by picking it up from at the back and sliding it towards the rear of the bike.

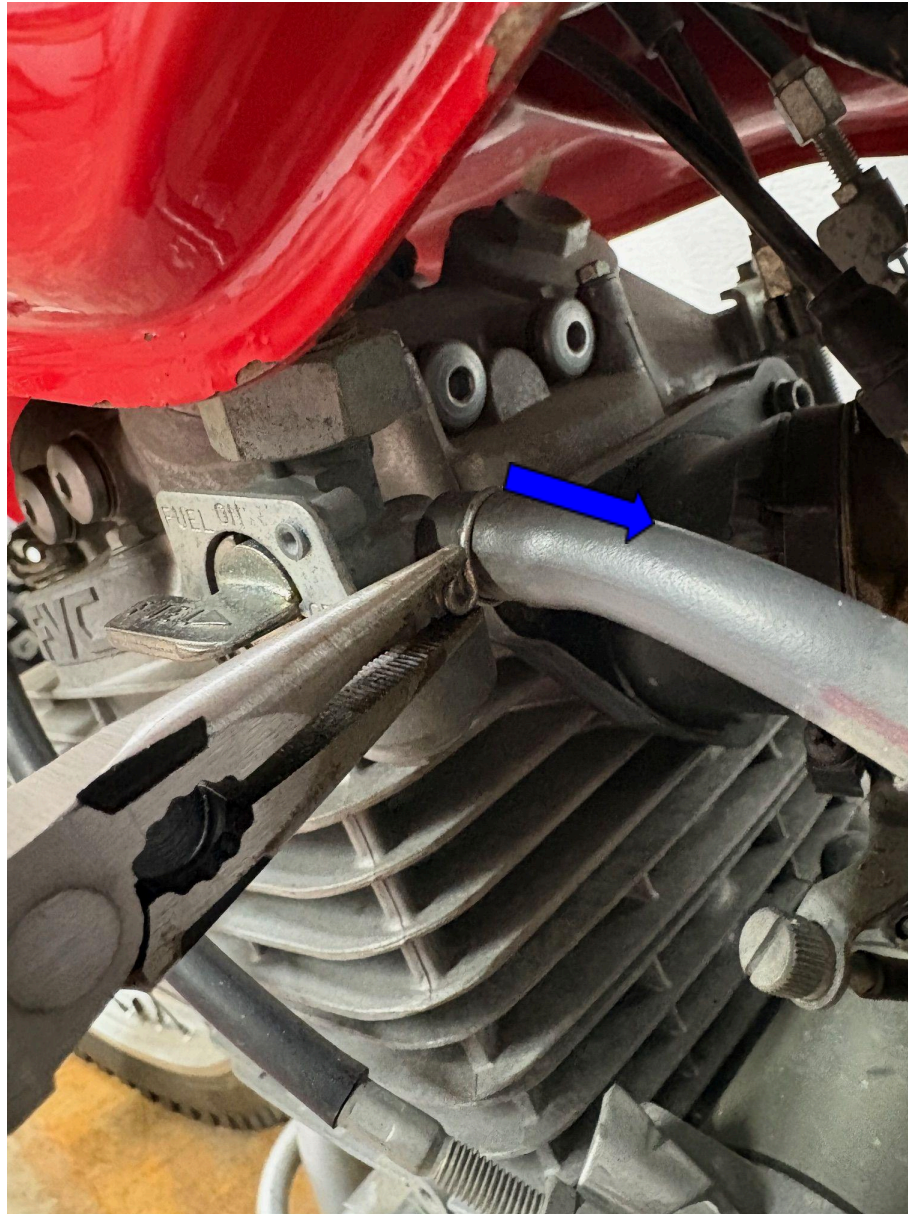




4. Remove both front fairings. Remove the three 5mm hex bolts (see the blue circles below) that attach the fairings to the tank and frame. Complete this for both sides.



5. Remove the fuel line from the gas tank valve. Squeeze the gas line clamp with pliers and work the gas line off of the valve by pulling back on it. Be careful not to pull too hard otherwise you risk damaging the fuel line or injury.



6. Remove the gas tank. Remove the 10mm bolt on the back of the tank. Lift the rear of the gas tank up and slide it towards the back of the bike to remove it.

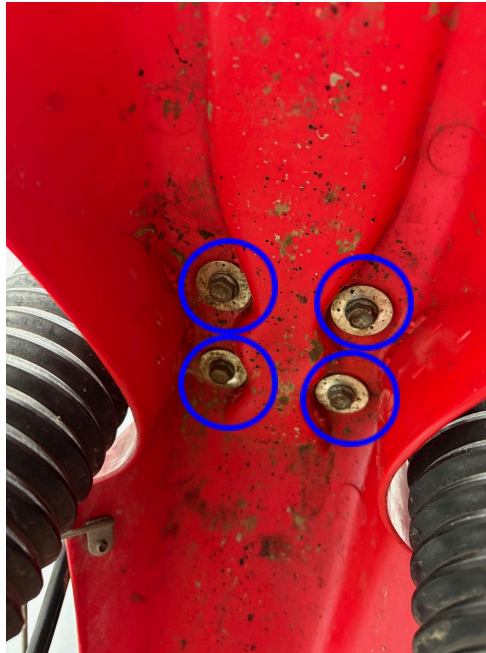


7. Remove the headlight shroud. Remove the two 10mm bolts on the sides of the headlight housing cover. Tip the top of the cover

towards the front of the bike, lift up, and then move the cover towards the front of the bike to remove it.



8. Move the front fender out of the way. Remove the four 10mm bolts under the front fender and lower the fender onto the front tire.



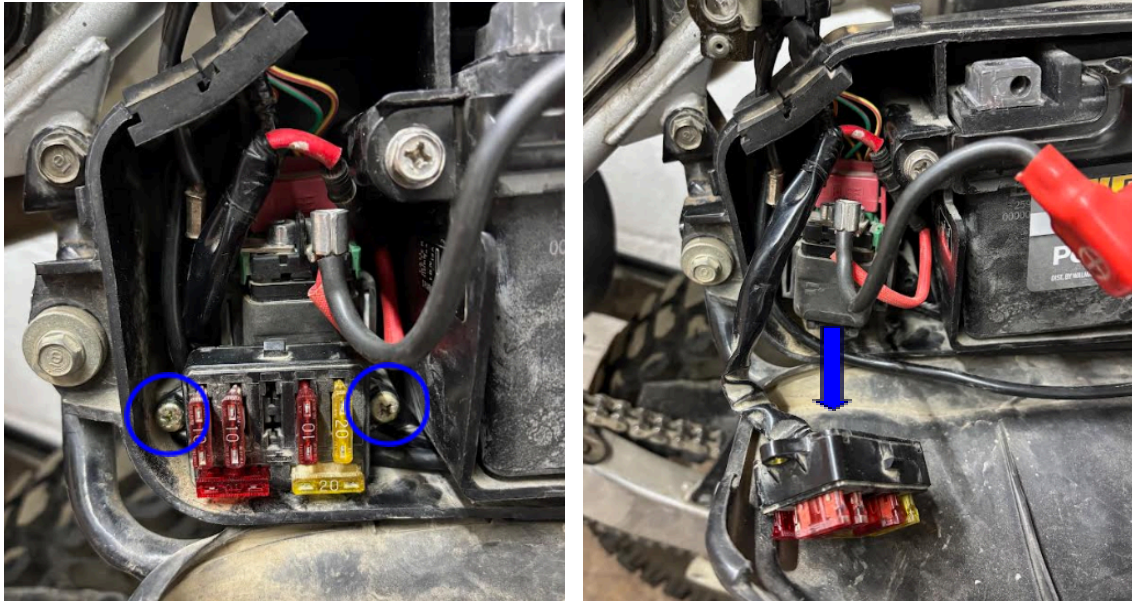
9. Open the rubber cover on the battery compartment by unclipping the top two rubber clips and pulling down.



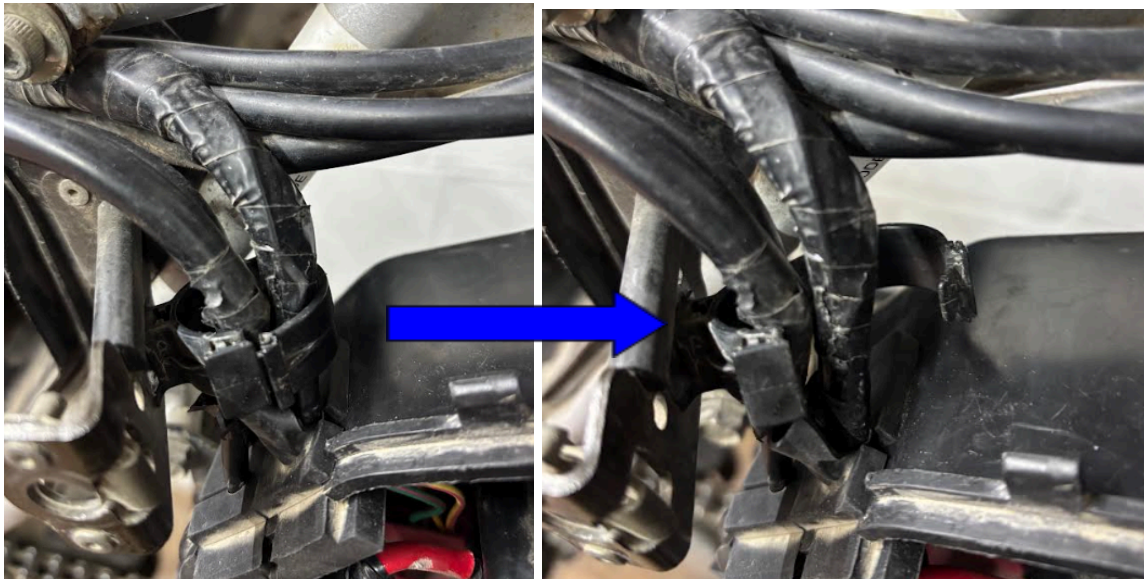
10. Remove the positive red rubber terminal guard out of the way and use a large phillips screwdriver to remove the positive terminal. Be careful not to make contact with anything metal with the tool while doing this. Disconnect it and isolate it away from the battery.



11. Remove the two phillips screws on the fuse block (circled in blue) and gently pull the block assembly away from the bike to remove it.



12. Unclip the wire clamp located near the top left corner of the battery compartment to allow wires to move freely.



13. Remove the rubber grommet (marked by the red triangle below) with the wires out of the battery compartment case by sliding it outwards.



14. Remove the factory rubber grommet from the wires and set aside. This part will NOT be reused. The below image shows the wires with the factory grommet reviewed.

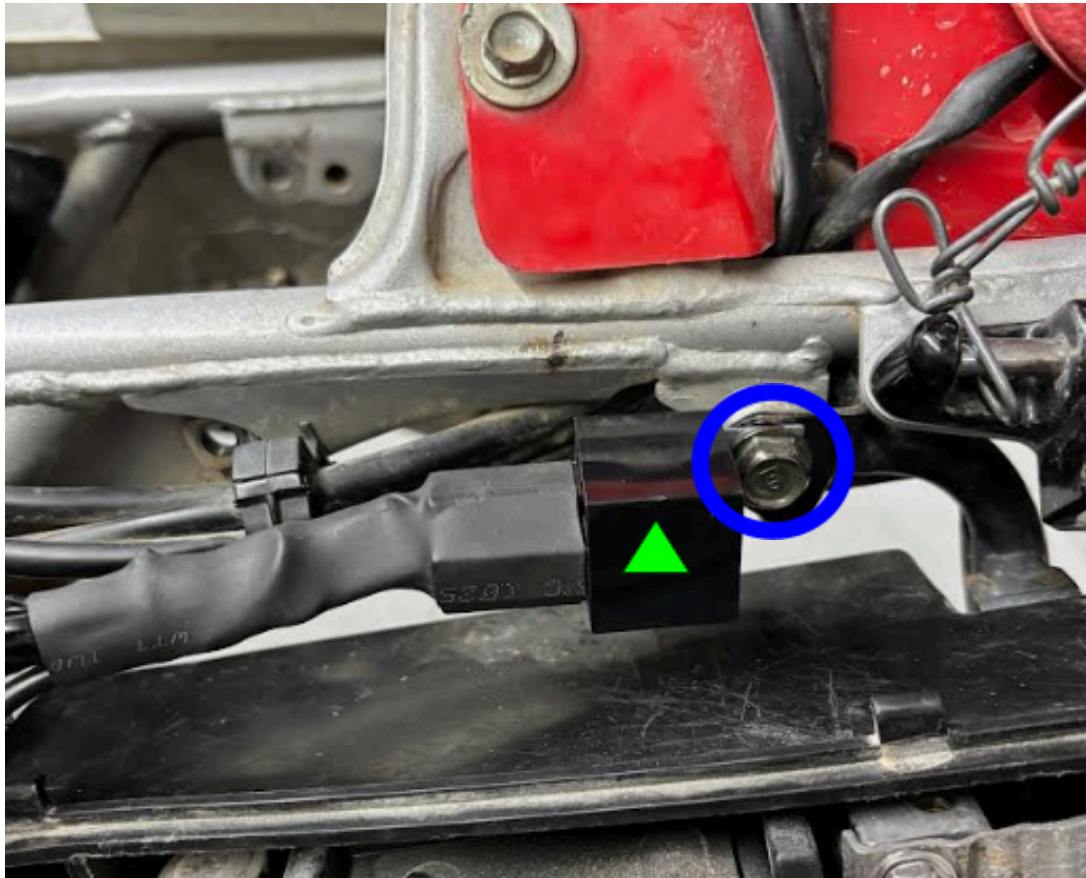


15. Remove the **12mm bolt** located above the battery compartment attaching the black bracket (see blue circle below).



Begin Installation

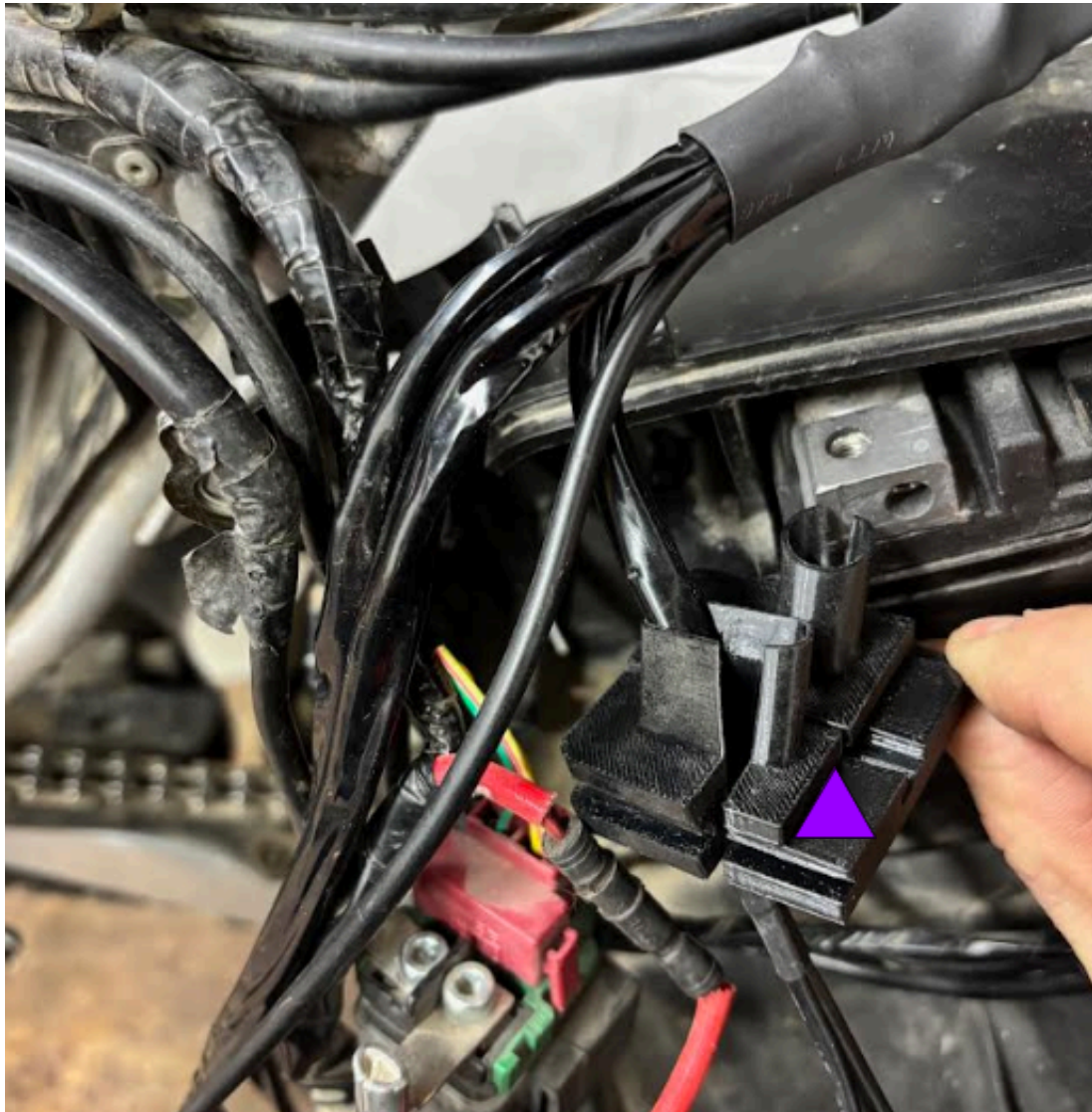
16. Mount the relay (black plastic box within the wiring harness - marked by a green triangle below). Place the **12mm bolt** (circled in blue) that was removed in step 15 through the tab located on the relay and tighten the bolt.



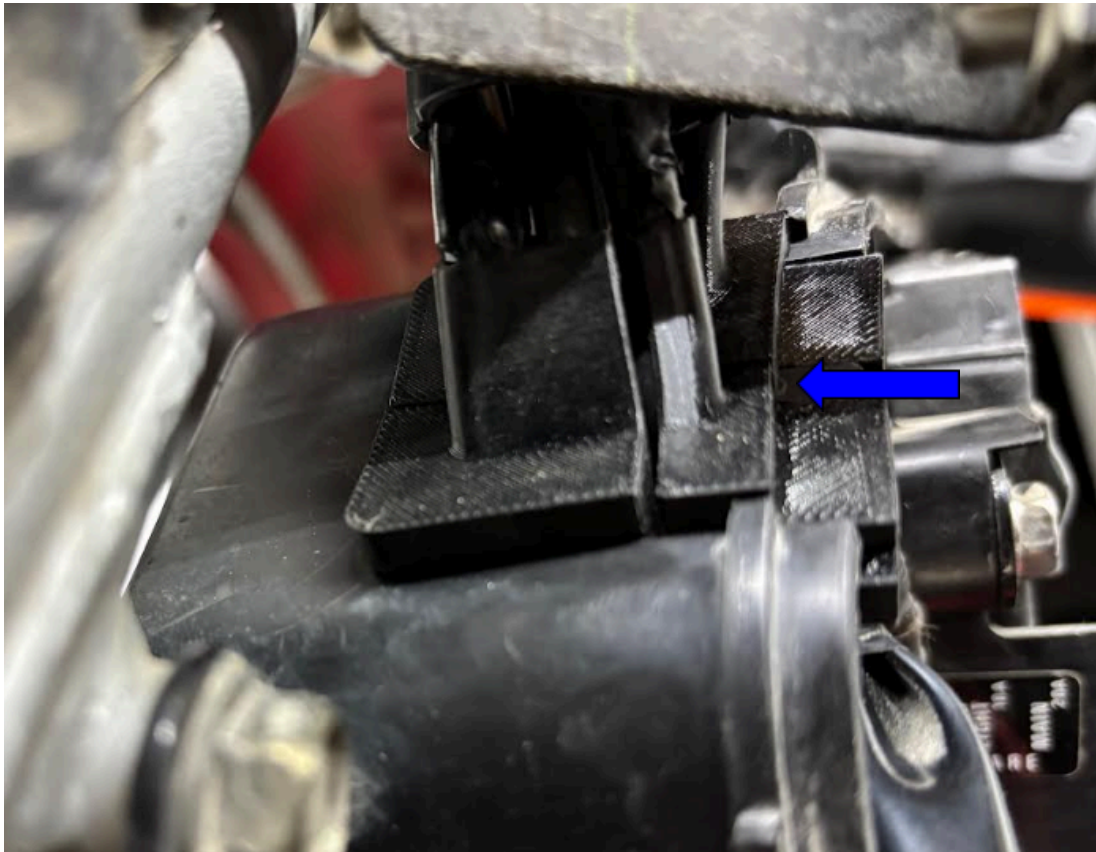
17. Direct the wires. Direct the shorter wires (two with ring terminals and one with a fuse) towards the battery compartment (marked by the blue arrow), through the opening. Direct the other three longer wires towards the front of the bike (marked by a red arrow).



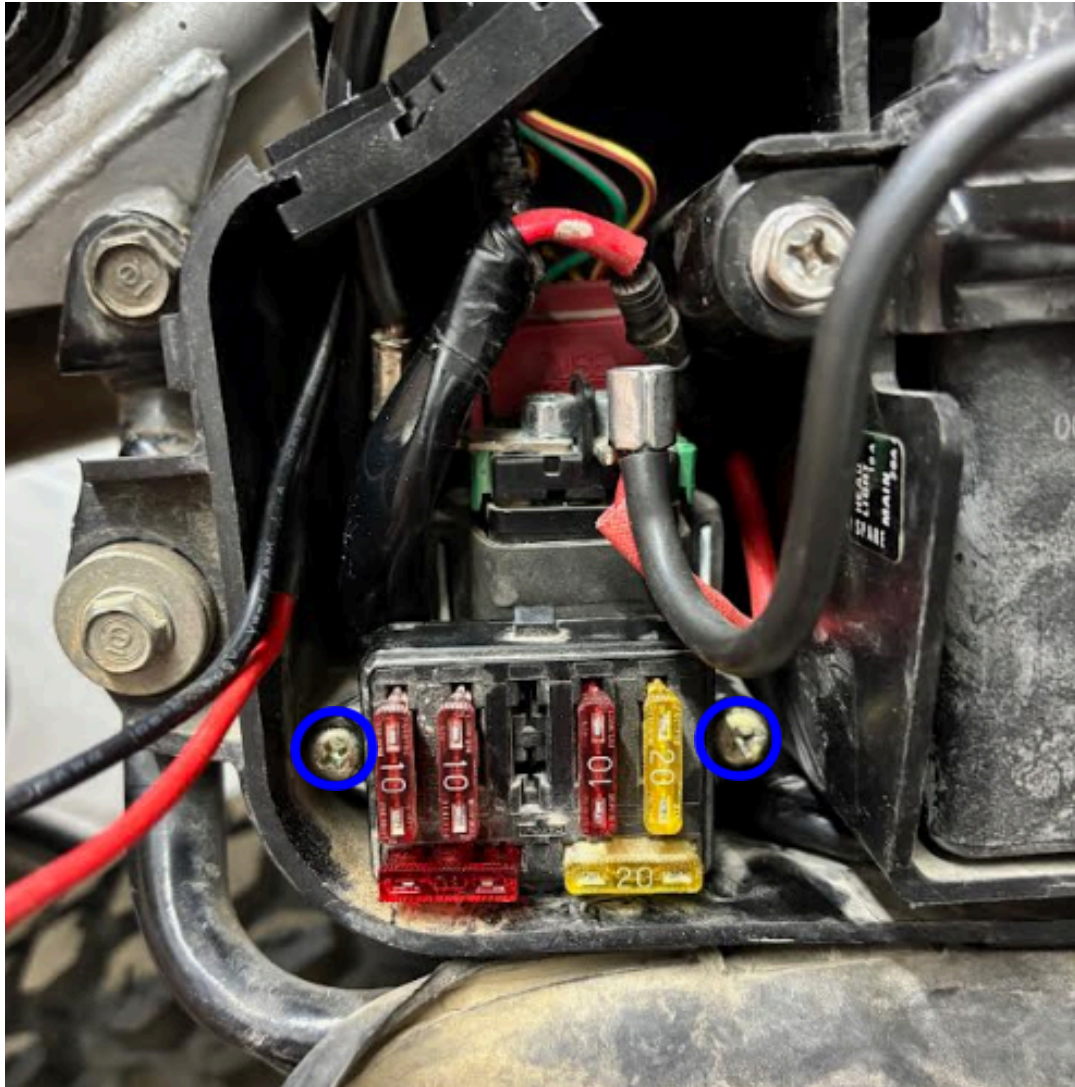
18. Install the new battery box grommet provided with the kit (marked by a purple triangle below). Note the new grommet replaces the original two small holes with a larger slot. Insert the original wires into their respective places in the new grommet. Insert the two new wires into the larger slot on the new grommet.



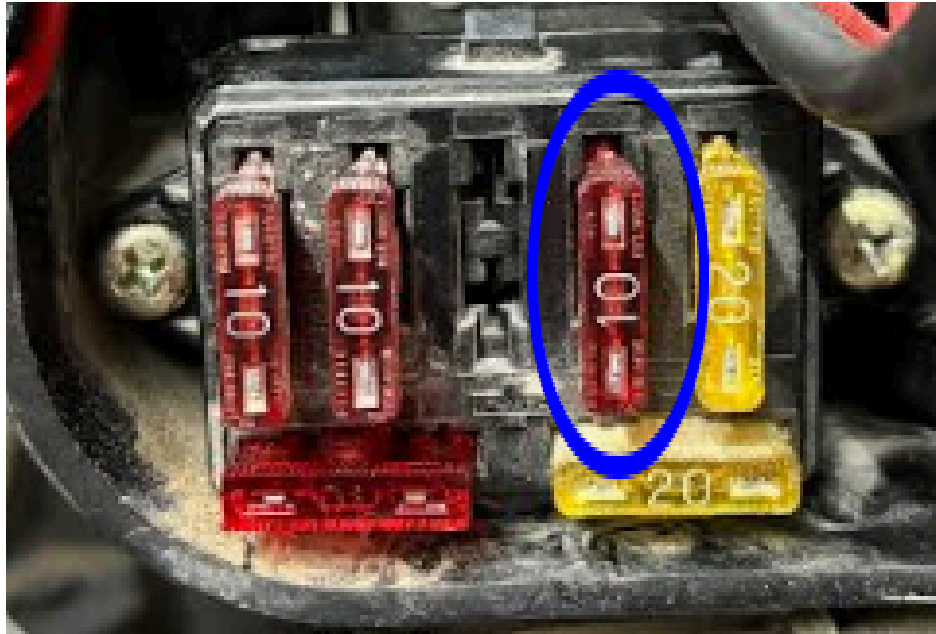
19. Install the grommet. Once the wires are all inserted into the grommet, slide it into place on the battery compartment enclosure. Tape the top of each opening on the grommet around the wires with high-quality electrical or loom tape.



20. Reinstall the fuse block. Gently push the fuse block back into place and re-install the two phillips screws (circled in blue below). Do not over-tighten these screws.



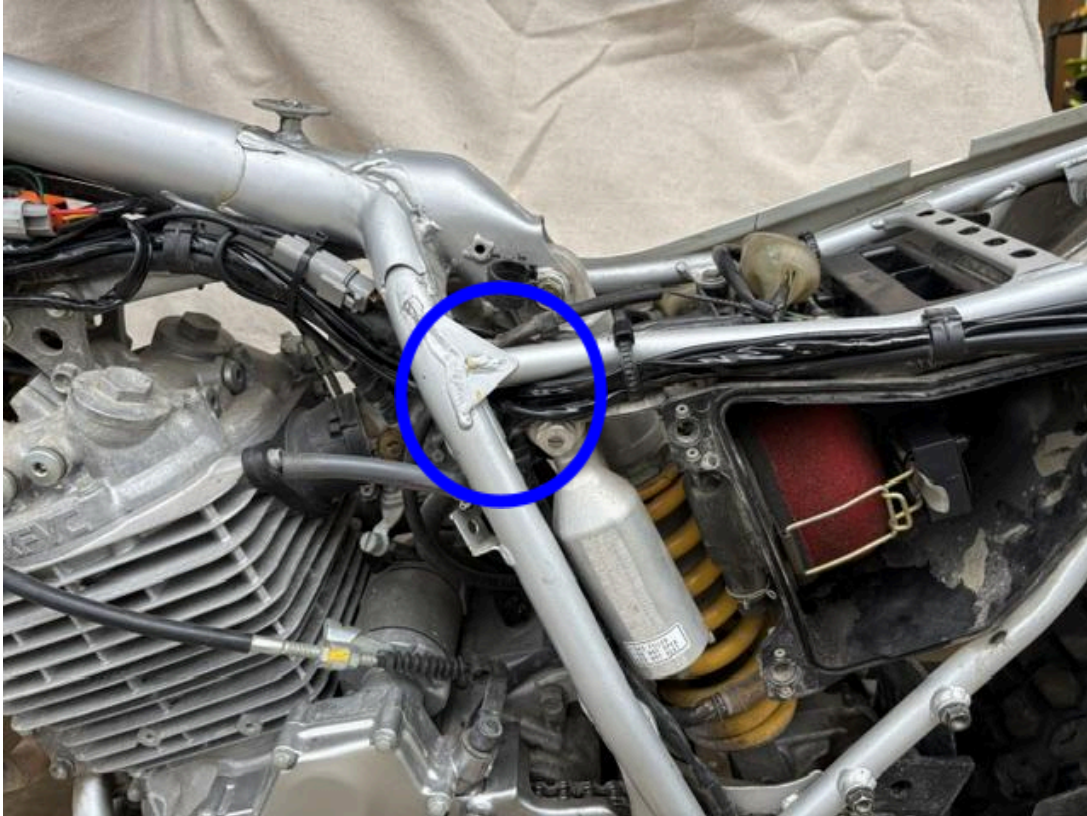
21. Install the new fuse adapter. Remove the 10 amp fuse shown below (circled in blue). Plug in the provided fuse adapter located on the kits wiring harness. Note that an additional 10 amp fuse will already be installed into the adapter - leave this in place.



22. Route the long wires. Zip tie the three long wires in the new harness to the OEM wires heading towards the front of the bike.



23. Route the wires through the inside corner of the frame (circled in blue below), following the oem harness.



24. Once the slack is pulled out, add the wires into the reusable OEM zip tie circled in blue below.



25. Mount the switch. Place the switch bracket next to the mirror bracket on the left side handlebar (or in another desired location) and tighten it down using the provided hardware. Be sure not to over-tighten. Use a small amount of medium strength thread locker applied to the bolts to keep them from backing out.

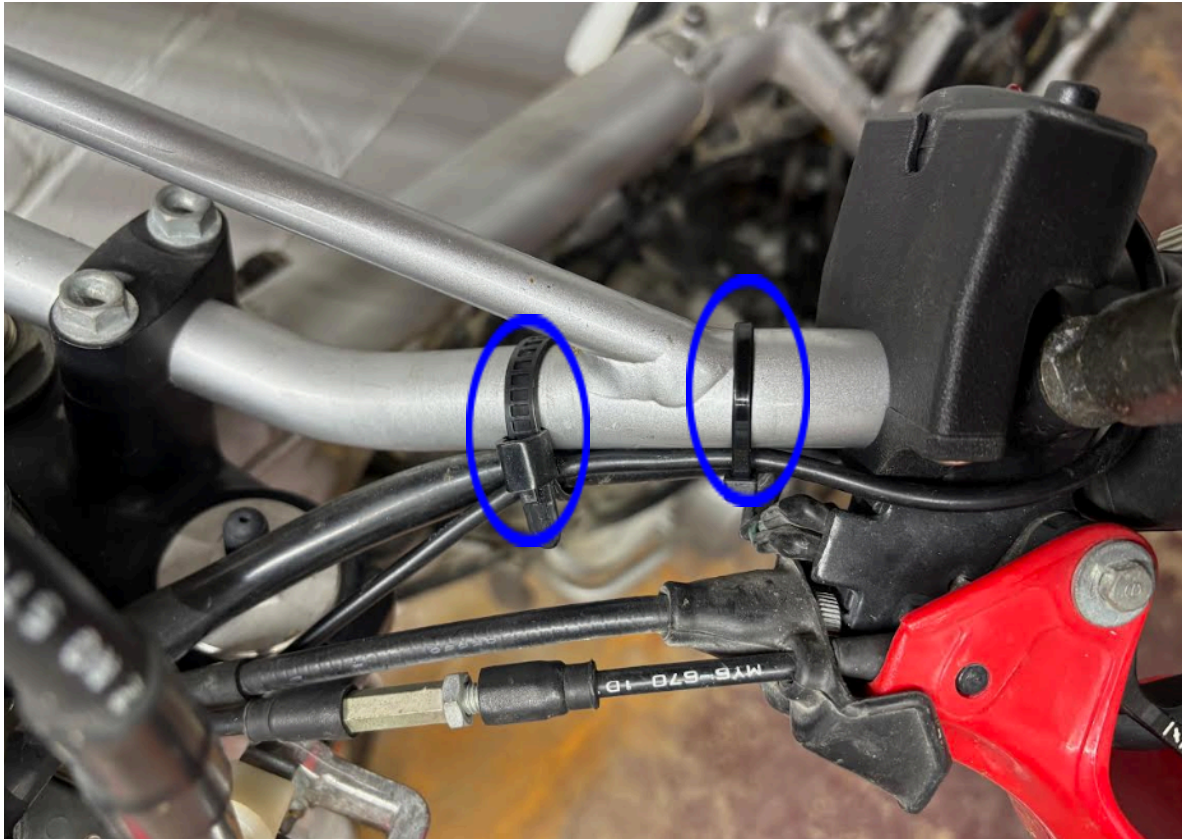


26. Peel the white backing off of the switch to expose the adhesive pad. Place it into the mounted bracket. Keep the wire pointed out the bottom.



NOTE: Your switch style may vary from that shown in the above images. The mounting procedure and implementation remains the same.

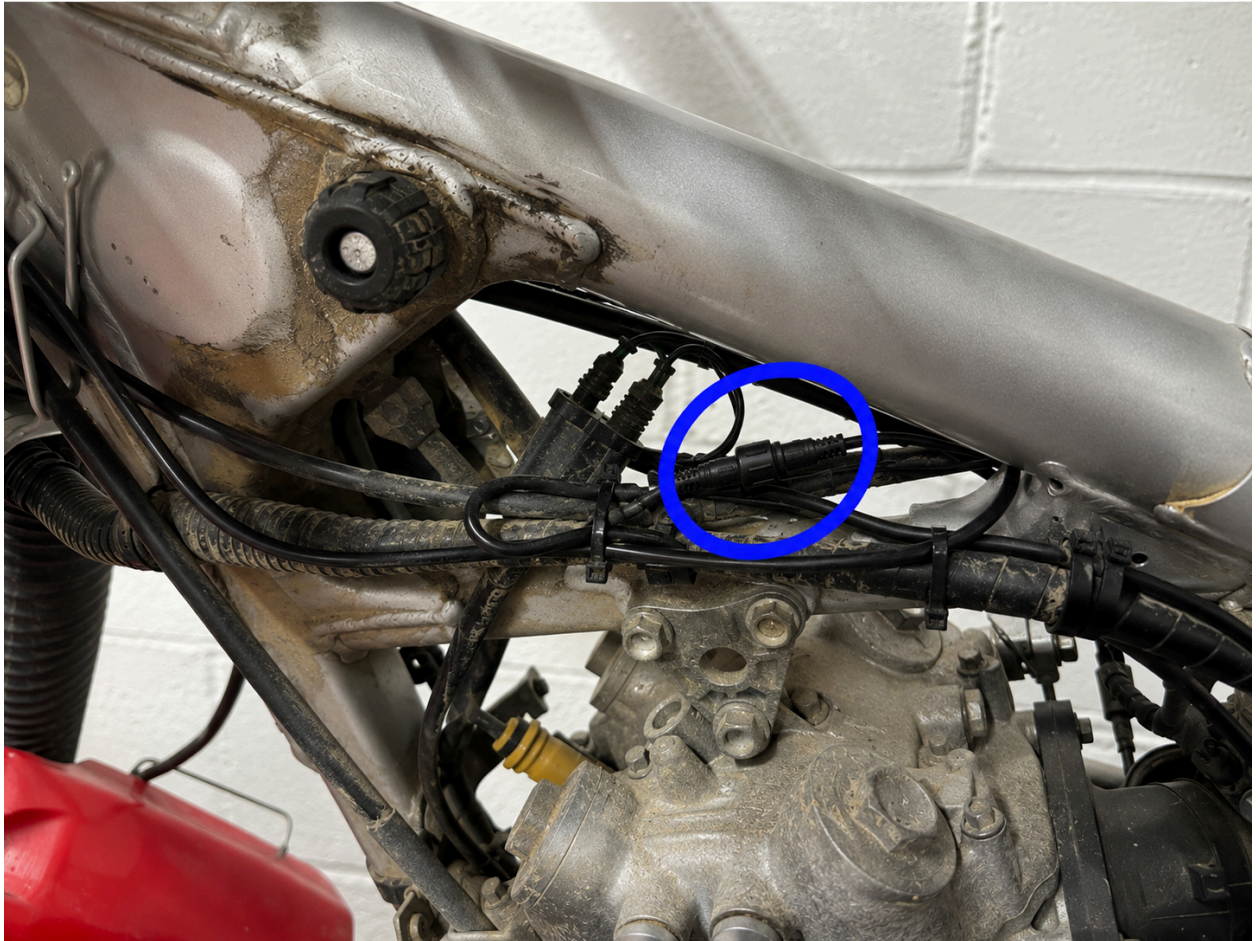
27. Use the OEM (if available) and included zip ties to secure the wires to the handle bars (circled in blue below).



28. Route the switch wire through the wire retainer clip on the left hand side of the frame, just behind the forks.



29. Connect the switch wire plug to the matching connector on the harness routed from the battery box (circled in blue below). Secure excess wire using the provided zip ties. **NOTE:** Your connector for the switch to the new harness may look different than the grey connector shown below.



30. Install the front mounting plate above the fender. Use the provided 8mm hex head bolts and washers. Note: washers are only used on the two **REAR** holes, **ABOVE** the plate as shown in the picture below. Leave the OEM shoulder washers that pass through the fender in-place during fastening.





31. Remove the bottom positioning screws on both sides of each pod light (circled in blue below).



32. Rotate the lights so that the bracket mounting bolt can be placed into the bottom mounting hole.



33. Rotate the lights back into place once the mounting bolts have been installed. Reinstall the bottom positioning screws for each light.



34. Place the mounting bolts through the front mounting plate and secure it in the desired position using a provided washer and lock-nut (circled in blue below). Repeat for the other light.



35. Route the right side pod wire through the retainer clip on the right side of the frame, just behind the forks.



36. Route the left side pod wire through the retainer clip on the left side of the frame.



37. Connect the lights to their respective connectors on the harness routed from the battery box. It doesn't matter which of the two connectors they connect to.



38. Secure excess wire using zip ties at your discretion.



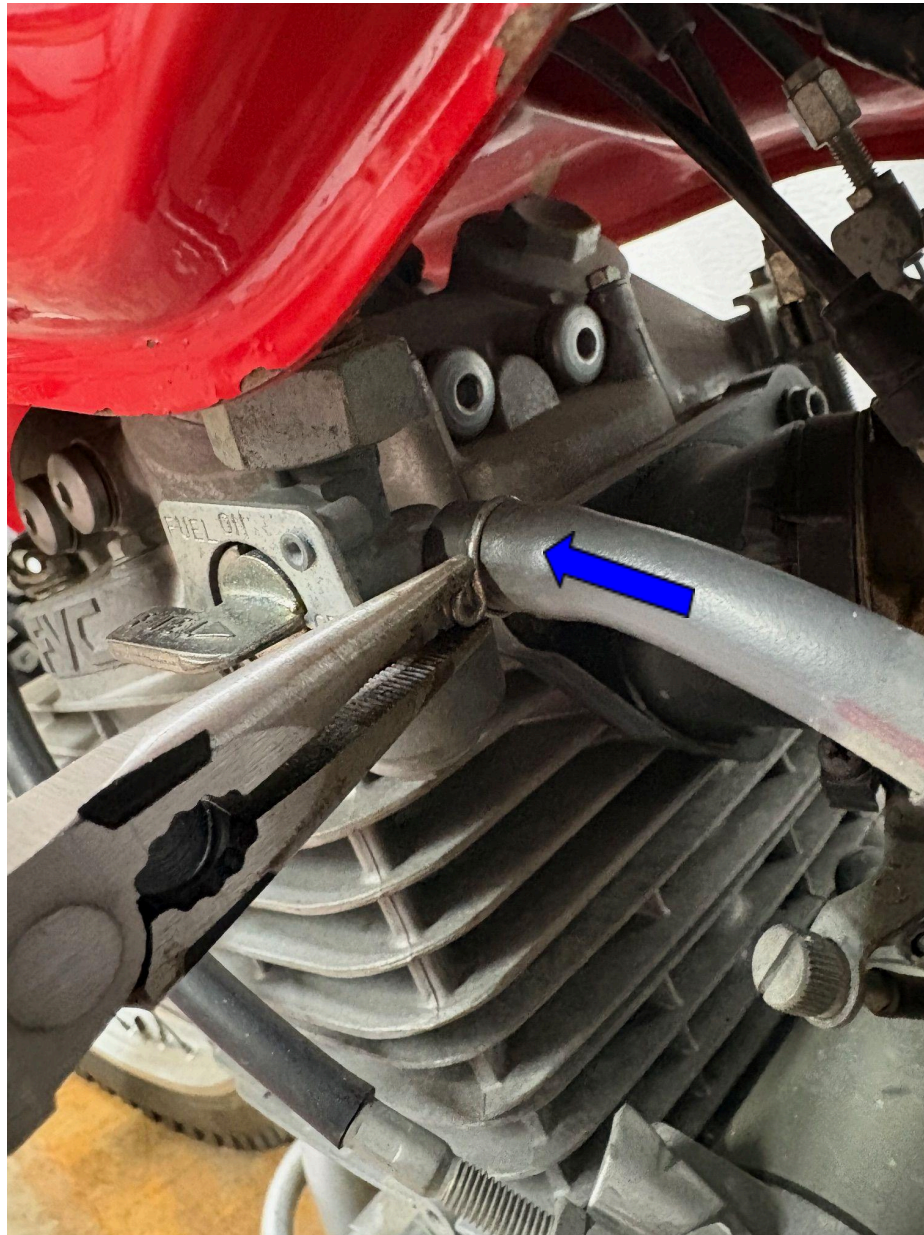
39. Install the headlight shroud. Tip the top of the cover towards the front of the bike, push down, and then move the cover towards the back of the bike to install it. Install the two 10mm bolts on the sides of the cover to secure it.



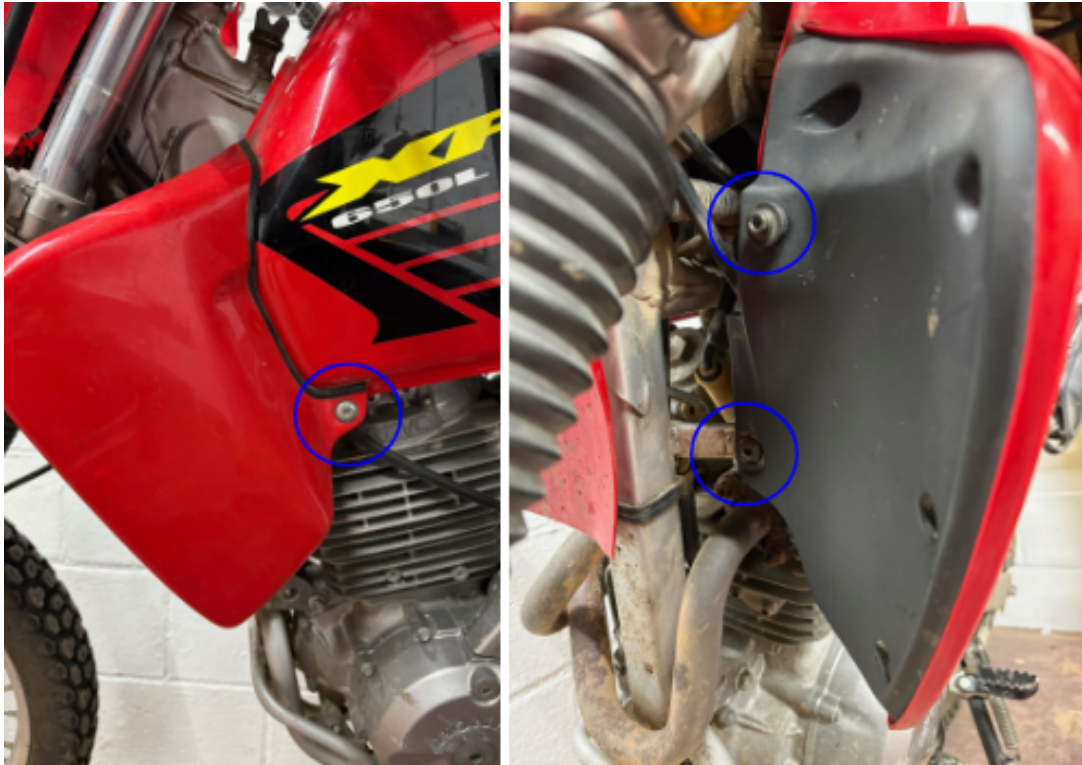
40. Install the gas tank. Lift the rear of the gas tank up and slide it towards the front of the bike, locking into the frame lugs, to install it. Install the single 10mm bolt on the back of the gas tank to secure it.



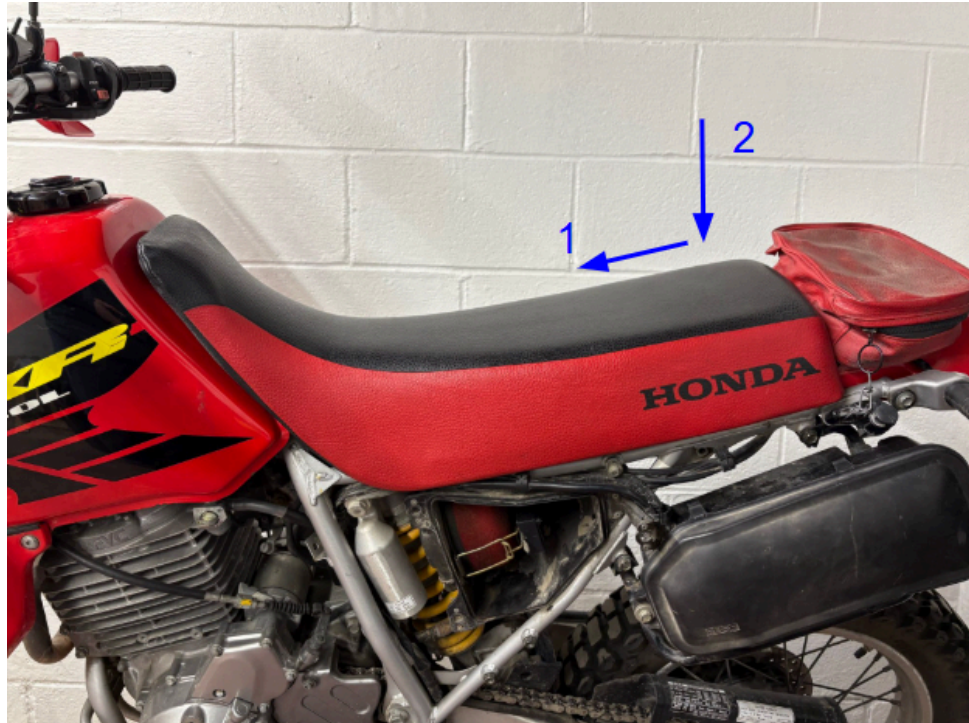
41. Install the fuel line onto the petcock. Work the gas line onto the petcock fitting. Squeeze the gas line clamp with pliers and work the clamp onto the fitting that the gas line is over. Careful not to push too hard otherwise you risk damaging the fuel line or injury.



42. Install both front fairings. Install the three 5mm hex bolts (see blue circles below) that attach the fairings to the tank and frame. Complete this for both sides.



43. Install the seat by picking it up from the back and sliding it towards the front of the bike to lock it onto the frame lugs. Install the two 12mm bolts below the rear fender that hold the seat in place (circled in blue below).



44. **NOTE: Use proper safety gear when working around live electric! Wear insulating gloves, eye protection, and use proper tools.** Attach the new positive and negative wires. Remove the phillips screws on the negative and positive terminals of the battery. Attach the negative and positive cable eyelets from the wiring harness of the kit to their respective terminals of the battery and reinstall the screws. Slide the positive terminal guard back into place.



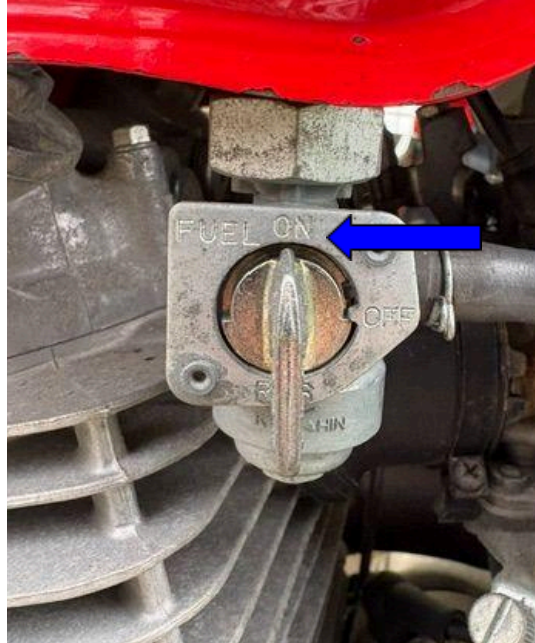
45. Close the rubber cover on the battery compartment by locking the top rubber tabs in place.



46. Install the left side panel. Install the three quarter turns on the side panel (circled in blue).



47. Return the fuel petcock to the ON position (reference the blue arrow below).



50. TESTING

- Turn the key to the ON position.
- Click the switches on the handlebar ON/OFF to test the LED lights and orange day time running lights.
- Ensure the headlight still functions properly.

Check all fasteners tightness, inspect all components, and ensure light functionality before every use.

Your SOLEX Offroad XR650L Pod Light kit has now been installed!
Check out our website for other offroad accessories for your XR650L:

<https://www.solexoffroad.com/instructions>



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