

How to install an Apex Copperhead

Warnings and common problems:

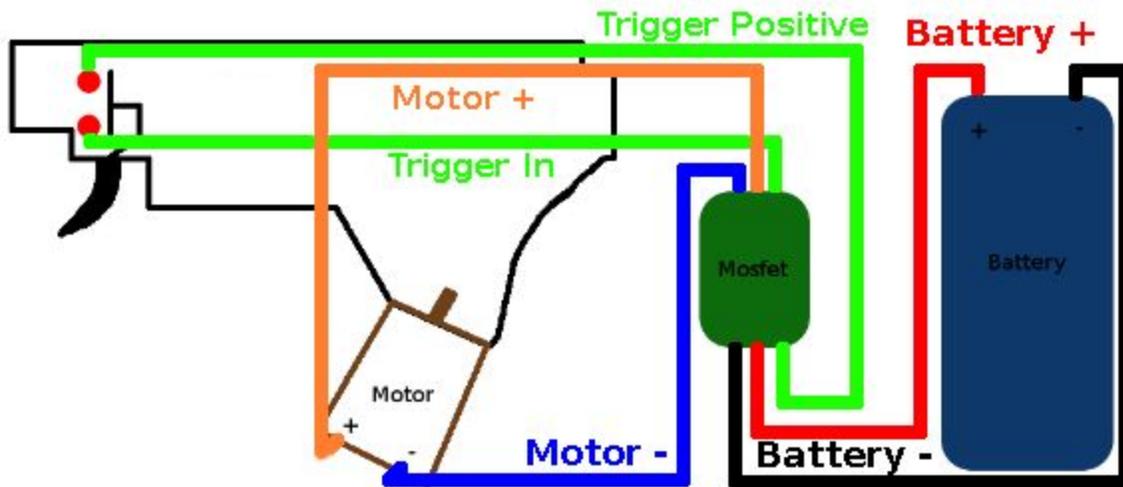
- When stripping the wire to install into the screw terminal you should take care not to strip too much insulation off or it may bend and accidentally short to the wire next to it.
- When inserting the wire into the screw terminals make sure all of the strands are inside as loose strands may cause a short.
- Do not fully assemble your gun without first trying your new wiring. We recommend disconnecting the motor from the rest of the gearbox and make sure it spins freely before attempting to test it inside the gearbox.
- If for any reason the gun does not fire or the motor doesn't spin DO NOT hold the trigger down. This is a common instinct but holding it down will not fix the issue and will likely cause damage to something, whether it be the battery, motor, or mosfet. In this case double check all your connections, your trigger contacts, battery charge, and that it is hooked up correctly.
- Make sure you remember which terminal on the motor is which. Plugging the positive side of the motor into the negative side of the wiring and the negative side of the motor into the positive side of the wiring will cause the motor to try to spin backwards and may damage the motor, gears, or anti-reversal latch. If you hear the gun click when you pull the trigger and it doesn't fire this is likely the case.

The copperhead has 6 screw terminals so you don't need to solder the mosfet in. The connections are labelled on the back side of the mosfet and depending on which way you'd like to configure your wiring there's a couple of options.

Using the wire harness:

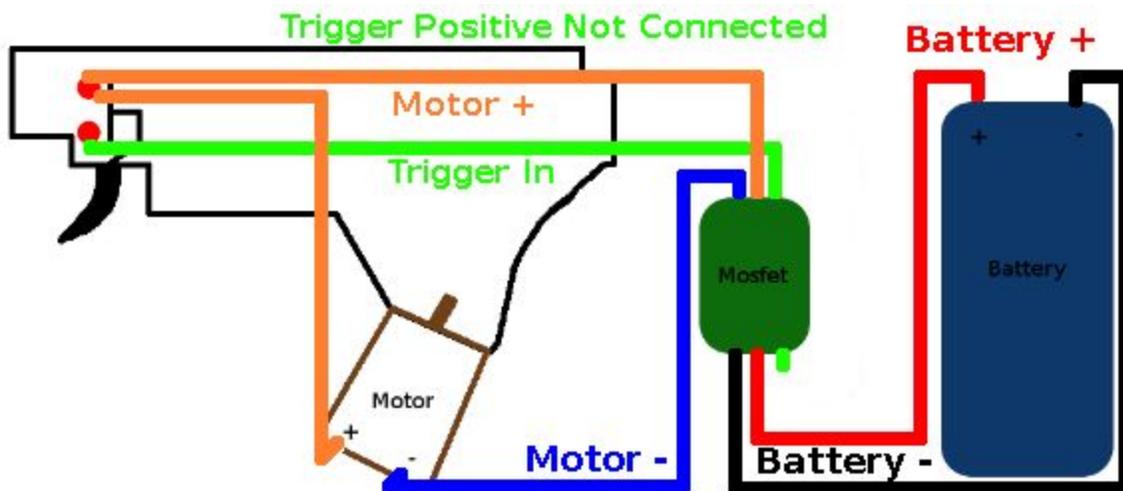
1. Install the trigger assembly into your gearbox and route the attached wires to where you will be installing the mosfet.
2. Route the main wiring starting at your battery and bring the motor connectors to your motor. Make sure to pass the place you will be installing the mosfet.
3. Cut the main wiring harness at the location you will install the mosfet and connect the motor wires to their corresponding terminals on the mosfet.
4. Cut the trigger wires to length and attach each end to the trigger terminals. It does not matter which wire goes to which terminal you just need them connected in any order.
5. Cut the remaining main wiring to length so the deans will reach your battery with a bit of slack to make installing and removing your battery a little easier.

Your wiring setup should look similar to this diagram:



Using your own wiring:

The steps are very similar to the above steps. The only difference you may want to do is instead of using the trigger positive terminal you can route the motor positive wire to one of the trigger contacts and then to the motor such as the following diagram. There is no difference really between the two but this setup seems to be the most common so it is worth mentioning.



Warranty

Apex Electrix LLC warrants your product to be free from manufacturing defects and premature failure for a period of 2 years from the original retail purchase. If you encounter a defect or failure we shall repair or replace your product at our discretion using new or refurbished parts. In the event that we are unable to repair or replace your exact model, a comparable model with similar features and price will be offered.

After the initial 2 year term we will offer to repair any failure free of labor at the sole cost of the parts required for repair and shipping.

Failures Not Covered

This warranty does not cover any defects or failures resulting in misuse of the product or failure to follow reasonable precautions.

This warranty will be considered void under the following conditions:

- The heat shrink material has been removed
- The user tried to modify or repair the product
- The failure is a result from improper installation or abuse
- Failure to use a fuse with the product (does not apply to products with fuses built in, please check the product description or contact us)
- Mechanical failure due to excessive force during installation

Limits of Liability

If your product fails or does not perform as warranted your sole recourse shall be to repair or replace the product as described above. We will not be liable to you or anyone else for any damages that result from the failure of this product. Typical damages may include but are not limited to: battery damage, motor damage, damage to gearbox internals, and personal injury. Under no circumstances shall Apex Electrix LLC be liable for more than the purchase price of the product.

We specifically disclaim all other warranties, expressed or implied, and the user shall deem the use of this product an acceptance of these terms.

How to Obtain Service

Please contact Apex Electrix LLC at: support@apexelectrix.com. Once we have verified that your problem requires you to send in the product we will provide you with an RMA number and return address. You must include the RMA number either visibly on the outside of the package or on a note inside the package.

It is the owner's responsibility to provide the initial packaging and postage. We will pay for the shipping cost to return your product to you for products under warranty. We are not responsible for any customs fees or duties.