

Horn Relay Kit Regular Instruction Sheet

This PDF is a first draft. See the online instruction page for photos.

Note: Wire colours may vary but black is always negative.

Description:

The Horn Kit puts battery power directly to a pair of horns (or single horn if the Single Horn Kit). The trigger leads plug into your existing horn wires. And the battery leads attach to the bike's battery posts. The horn leads plug onto the horn(s).

Please read and understand these instructions fully before proceeding with installation. Take the kit and instructions out to the bike and identify everything first, while reading these instructions carefully. Check, identify, and verify your bike's wiring well.

If you have difficulty understanding any of these instructions, maybe you should ask an electrically savvy friend to do the work with you.

Things you Will Need:

- Philips screwdriver and wrench - to remove and reinstall the battery wires.

Things you Might Need:

- Service manual - Clymer, Chilton and Haynes produce manuals for many motorcycle models. Your dealer may be a good source for these. A manual is not necessary, but it will make things easier, especially if you need to remove parts to get at your horn button wiring.

- Any other tools needed for gas tank removal, etc.

- An assistant will be valuable to help you hold things during the tests below

Preparation and Identification:

You will likely want to remove your bike's gas tank to mount the relay and route the wires along the frame under the tank. You'll also need access to the battery. Before starting, remove the battery negative lead(s) to disable the bike's electrical system.

Remove the screw (bolt) holding the wire(s) onto the negative battery terminal, being careful not to lose any nut on the other end of the screw (bolt). Bend the wires away from the battery to make sure they won't touch the negative battery post during your installation.

Connecting the Horn Trigger Leads:

You can just plug them into the existing horn female spades. Plug the black wire into the negative lead and the blue (colour may vary) wire into the positive lead. It's not absolutely necessary to match up the polarity of these leads, since the relay trigger coil is not polarity sensitive, but it's nice to have all your wires connected correctly by colour. Make sure you insulate the wire terminals you connect as shown below, so that they don't short out or get corroded. Two pieces of shrink wrap are included which you can put over the connections and shrink into place as shown here. A lighter or a match can be used to carefully shrink the shrink tubing pieces, if you don't have a heat gun. Don't burn the tubing, just warm it enough until it shrinks a bit. Be careful with an open flame around a bike! Do not leave the connections dangling, but tie them up out of harm's way.

Connecting Your Horn(s):

Route the Horn Lead wires carefully up to the horn(s), and plug them into the correct terminals as marked on the horn(s). (black wire is negative, blue is positive) With the Horn Dual Kit you now have a choice of keeping the entire length of wires and tying them up somewhere safely, or shortening the leads to length and reattaching them to their Posi-Locks near the relay.

Bending the horn wires - as shown on the right here you can see how the shrinktube on the horn terminals can be easily bent at a right angle if necessary. **DO NOT BEND THE TERMINALS**, but only the wire and shrinktube where it enters the terminals. Heat the area and bend, then when it cools the wire/tube will remain in position. Be careful not to heat too much or burn yourself. Use a heat gun if possible but if you're careful you can do this with an ordinary cigarette lighter. The shrinktube has a glue inside that gets soft when heated but when cooled is very stiff and tough. In all cases, make sure you have the wires carefully routed and tie wrap them up from the horns back to the relay, so they are not hanging down or rubbing anywhere when the handlebars are moved all the way from side to side. Be particularly careful in routing the wires up past the steering and forks, that they are not pulled or pinched when the handlebars are fully turned to either side.

Note: Horns need some kind of special mounting that is not rigid but allows the horns to vibrate a bit. Make sure you have the proper mounting brackets for your horns. Read your horn instruction manual carefully to locate and mount them before running the wires to them.

Relay Installation:

Before tie wrapping all the wires on each side of the relay, decide on a location under the gas tank for the relay. You can bolt it into place using the mounting tab, or tie-wrap it in place. It should not move or disturb other bike components. Carefully route and tie-wrap the wiring under the tank from the relay all the way back to battery. Usually you can follow along next to the existing wiring on the bike and tie-wrap everything carefully into place. Make sure the wires will not be rubbed anywhere. Make sure no wires are pinched between something like the gas tank and the frame.

Battery Wiring Installation:

- You should already have removed the battery negative lead(s) as instructed at the top of this page. The Kit is shipped with two fuses in the bag, but none installed in the fuseholder. DO NOT install a fuse yet!
- Remove the screw (bolt) holding the wire(s) onto the positive battery terminal, being careful not to lose any nut on the other end of the screw (bolt). Clean all connection surfaces with fine sandpaper and check the condition of all existing terminal(s) and wire(s) you removed, including the battery post and the screw (bolt) and nut.
- Replace all Positive wire(s) together with the M6 ring terminal on the kit's red wire (near the fuse holder), onto the positive battery terminal with the bolt/nut/screw. Tighten the screw (bolt) securely.
- Clean all connections on the negative battery post and terminal surfaces with fine sandpaper and check the condition of all existing terminal(s) and wire(s) you removed, including the battery post and the screw (bolt) and nut. Now is a good time to find a loose battery post or almost broken terminal, if there is one.
- Replace all negative wire(s) together with the M6 ring terminal on the kit's black wire (last wire not connected), onto the negative battery post with the bolt/nut/screw. Tighten the screw (bolt) securely.

The wiring around the battery area should now be tied up neatly with the fuse holder accessible. This is a good time to check your battery's fluid levels and top up if needed. As always, familiarize yourself with everything in the area. You never know what the previous owner might have done. Caution! Do not put a larger than 20 amp fuse in the kit. If you blow this fuse, you have a problem. Please contact me if you need help. Do not install the fuse in the kit until you read and do the Final Check below!

Final Checks and Testing the Installation:

Final Check: Before going for a test ride, go back over all your work carefully. With the kit's fuse OUT and your bike's ignition turned ON, push the Horn Button. You should hear a soft click from the relay as it goes from OFF to ON. Install the fuse and test the horn(s). Be prepared for the shock blast.

Other Notes: Battery connectors do corrode over time. Special non-conductive grease is available to avoid this. If you find your battery terminals are covered with some kind of this grease, you must clean and remove all of this material before re-attaching any wires. Then re-apply it if desired, when you're finished. Make sure any battery terminal shields are not broken, and are properly replaced when finished. Battery connections that are not covered with grease should be removed and cleaned yearly, so don't avoid this important step. Don't over tighten connectors, and check the routing and condition of all existing bike wiring you see as you go. It is very important on a bike that wiring is not being rubbed or worn between other bike parts, or allowed to hang loosely with movement. The relays are light and tough enough to just hang on tie-wrapped wiring under the gas tank or you can tie wrap them to any convenient position in a fairing or relay box. Pay attention that no wiring is pulled or pinched when the handlebars are moved from the full left to full right positions.

As mentioned, check out the existing wiring very carefully as you install the kit. You never know what evil electrical connections have been made to your bike, even if it's always been dealer serviced.

Do not wire in another electrical device to a horn relay kit. Horns draw a lot of power; leave them on their own relay and circuits. If you want to wire in accessories, buy a Fuse Panel or one of my Accessory Relay Kits for that purpose.

I guarantee the quality of my kit and its components. I guarantee that it is wired correctly and if you follow my instructions carefully you will have no problem. I can not be responsible for any other wiring on your bike. I also can't be responsible for connectors other than supplied on the kit, or problems caused by poor installation.