

2006 Harley Davidson Street Bob  
Internal Handlebar Wiring  
2008/06/12



A riders view of the wires. On the left hand grip they are the ones closest to the ground. The right grip has the wires, the throttle cables and the front brake line



The project is running the electrical wiring for the hand switches through the handlebars. The wires are just plain ugly. Start by marking where all your hand controls are located and how the bars are currently mounted. I used a sharpie and just put some tick marks near the grips and by the center clamp. This makes putting everything back together easy. Also mark out where you want your holes to go. Take your time on these measurements.



We need to remove the gas tank to get to the wires. Take the fuel pump fuse out, then start the bike. After it dies run the starter for three seconds. Then disconnect the high pressure fuel line (warning it sprays a little gas at you, use a rag to block it). Remove the instrument panel.



Finish removing the gas tank. Disconnect the tube that allows the gas to flow from the left side to the right side. Make sure your container is large enough to catch all the gas. Cleanup all spilled gasoline.



Remove the bolts that hold the tank on, disconnect the fuel gauge and the gas escape line from the fuel tank. There should be nothing holding the tank on now, just remove it. If you didnt drain all the gas you will spill some more all over.



Now the tank is removed. Put it in a good place so that you wont knock it over on accident.





Shim the brake lever according to the service manual. I used a small piece of cardboard. Remove the hand controls. Be careful not to strip the torx bolts. They are two different sizes (t25 and t27) however I didnt have a t27 torx bit, so I was just real careful. Remove the handlebars. Pull all the wiring out from under the frame so you can get to the connectors.



It doesnt really look like a bike now. Try to keep your parts organized, dont let the dogs run by and knock your bolts around the garage floor.





One last shot of the stripped bike. One thing I did do differently than the last time I took the bike apart: I tied a small piece of twine to the brake master cylinder and to the ceiling of the garage. This kept it upright and kept any brake fluid from leaking out.



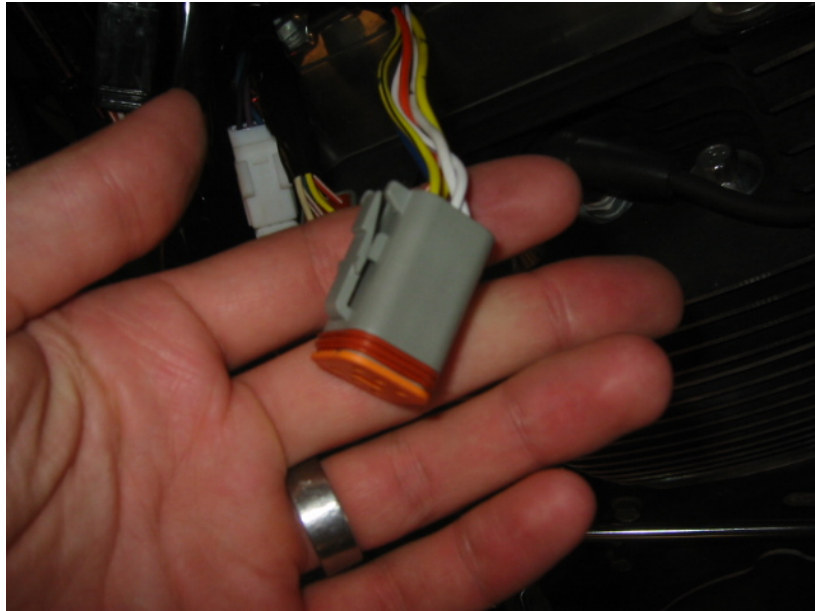
Put the handle bars in your vice. I used wooden blocks to keep from scratching the bars while drilling.



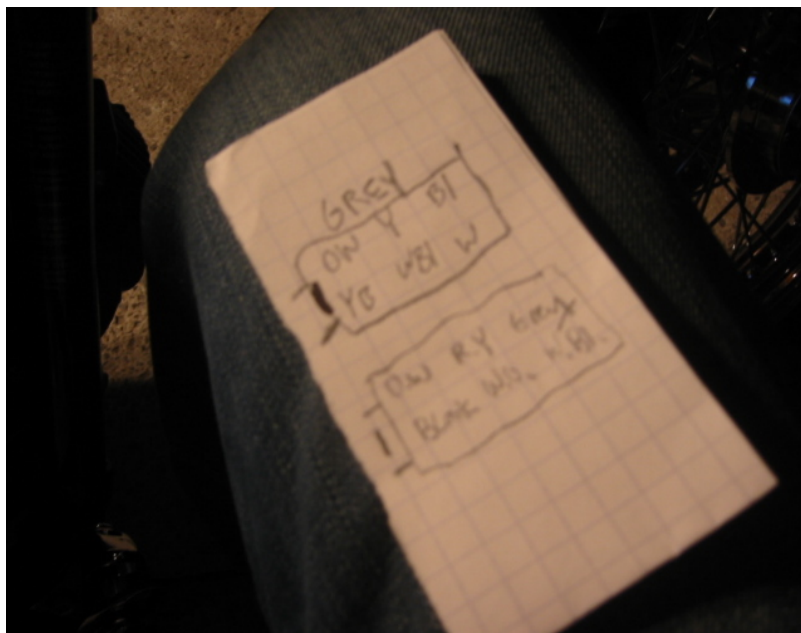
I drilled pilot holes with a 1/8 inch bit, then widened them some. There are two holes in the middle of the handlebars that ended up being 1/2 inch. Then there is one hole at each hand grip which is 3/8 of an inch. The 1/2 inch bit was not working well with the contour of the handlebars out by the grip. Use oil on your bits when you drill these holes and try not to wipe off your tick marks. File down any sharp edges. When you are complete, hose off all the metal shavings from inside the handlebars (or use an air compressor).



Position the bars on your bike. Angle them so you have easy access to the holes. We will adjust them later for comfort.



Locate the deutsche connectors for the handgrip wiring. Carefully note where each wire goes. mark the connector itself on your diagram and on the connector itself so you will be sure to orient it properly in reassembly. Refer to your service manual to take them apart. If you dont have one, pry the orange cover off with a flat head (carefully) then use an exacto knife to pry up the prongs holding the wires in place. One by one, remove each wire.



Wiring diagram.





When taken apart they look like this.



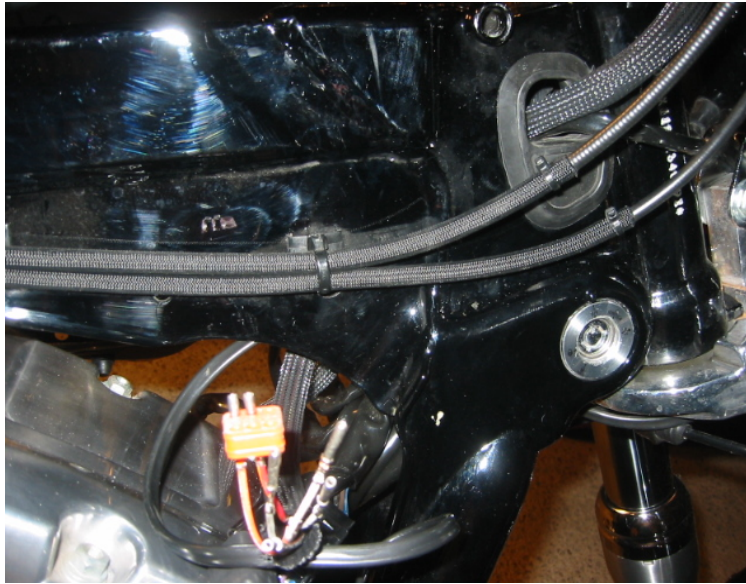
These connectors are really pretty slick. I actually noticed that many of the connectors in this bike are the same as those in my Ducati (weird?). Who would have thought?



Pull all of the hand grip wiring out of the bike, not back to the bars.



I ran a small flexible wire through the holes. I then attached the small flexible wire to the hand grip wiring and slowly (slowly) fed it through while pulling and pushing the wires. I was able to feed the wires and the plastic sleeve through the handlebars all in one shot. It was really tight but I just took my time and tried to be very careful not to bind against those sharp edges I filed down.



Route the wires back through the bike. I electrical taped mine to keep them together so that I could "thread" them back through. Its tight with all those wires.



Ensure that everything is wired properly and that you have clearance before you start to connect everything. Then reassemble the wiring connectors. Plug them in and do a test of the blinkers and hazards to make sure that they work. You cant test everything now because you havent put the fuel tank on yet, but once you verify that at least the blinkers work, move on to putting the tank back on, getting the bars angled right, hand grips on, etc. If you have a service manual check it for the torque rating of all the different bolts. This will keep you from over tightening everything.





When you are all done it will look something like this.



No wires. Now doesn't that look better? The project took about 5-6 hours.