

Bar End Turn Signal Installation

(For clarity this installation will be for a 6 volt BMW Motorcycle)
12 volt models are similar but the source for the bulbs is already installed, therefore that is an even easier installation.)

Let me start by saying that there is nothing mystical about wiring, there is however, a very high price to pay, if, the task's are not completed correctly. So, the most important thing when working with anything electrical is, DISCONNECT the POWER.

This will give you a chance to correct any problems before you need to call the Fire Dept.

You really should have all the components and materials neatly arraigned so that you will not be forced to stop in the middle of what you are doing to run down to Home Depot or Ace Hardware for some little item that was overlooked. With that in mind I think the best place to start is with the PARTS LIST. Or did you think that all you had to do was slap those puppies in the end of the bars and flash your way into the sunset?

Parts list:

Bar-end T/sig housing's 2 required

6 or 12 volt Festoon Bulbs 2 required

6 or 12 volt two prong Flasher 1 required

Turn Signal Switch 1 required, we will talk about the different options later.

MATERIALS for INSTALATION

Approx. 6ft. of 18ga. Wire (if you have several different colors life is simpler, but black will do.

Shrink Tubing π “ is fine, as long as it will cover the three wires coming from the switch into the headlamp housing.

Solder & Soldering gun

Black Elec. Tape

Drill & Bits Center punch, (to start drilling and keep the bit from walking all over the bars.)

Small rubber grommets (for use when wires pass thru metal)

Clean Towels

Black Marks-a lot

A 2&1/2ft. length of ball type pull chain like the kind used for ceiling fans or chandelier lamps.

I think that about does it! OK, are you ready to put these things on?
Great!

DISCONNECT THE BATTERY!!!!

Let's start with the Bars

If the bars are all ready on the bike, make sure they are in the normal position that you ride in. Feel the underside of the bars for an opening @ the center bottom of the bars. If there is an existing hole, smile, you can skip the next step, if not, place a towel or two on the tank to prevent any scratching; on the bottom of the bars, in the center, mark them with a marks-a lot. Then loosen the bars so that you can rotate them until the mark you made is facing up and is as level as can be. This can be accomplished on most bikes without even moving the grips, but if not do what you need to safely drill a π " hole, start by using the center punch to make a starter dent for an 1/8" bit and enlarge the hole until you arrive @ the aforementioned π "size. The towels you placed on the tank have kept the shavings from damaging your beautiful paint so you might want to shake them out and carefully put them back on. You can now rotate the bars about \leq of the way back to their normal upright position. You must now cut a circular hole in the end of each grip; it needs to be large enough for the shaft of the T/Sig to pass thru. You can test fit (loosely) When that's done we can start setting up the T/Signals.

Setting up the T/Signals

Pull one wire thru each end of the bars (I like to make the right a green wire & the left a yellow but they can both be black) and have both wires

exit thru the center hole you drilled. This is where the length of ball type pull chain comes in handy, if you tape the chain to your wire and feed the chain into the bars, it will fall thru the hole allowing you to pull the wire thru, leave a good bit of excess on both ends & thru the center, (I like a foot or better) One note here may be of some use. Original HELLA T/Sig's had a key- notch on the housing that kept the signals from turning in the handlebars, these T/signals may or may not have these, if not there will be an expansion plug in the housing but that has nothing to do with wiring so back to work.

Now that you have wire extending from the bar-end you can slip a piece of shrink tubing over the ends extending from the grip ends, disassemble the T/sig housing and look @ how it must be placed in the bar you can solder the wire that stick's out of the T/sig to the wire coming out of the bar and shrink the tubing around the soldered joint for protection..

Do the same for both sides (This is where different color wire would come in handy but as long as you know which one is which that's all that is necessary) both of these wires will now go into the headlamp housing and meet the wires from the switch on the bars. I install a rubber grommet and shrink tubing where they pass thru the drilled hole in the bars .Remove the lens from the Head lamp so that you can place the required flasher, make sure it is secured and not able to flop around inside the housing.

The Wiring

The T/Signal switch will have four positions on the bottom marked R-right L-left

54-to flasher & H-horn that is not used. So what you will use will be the L-R & 54

Once the Flasher is secured attach a wire from one prong to the # 15 fuse protected terminal on the circuit board. Place the T/sig switch in it's proper position on the handlebars and run the three wires in thru the back of the head-lamp housing bringing them out so that the wire's from the T/sig on each side can meet with the corresponding wire's from the switch & the remaining wire from the 54 position on the switch can be attached to the open prong on the flasher .I try to make all the places

where wire travels look as if the factory did them. I recommend that all wire connections be soldered and covered in shrink tubing. Make sure all connections are tightened and before you put the lens cover back on Check that everything was done properly.

OK, RE-CONNECT THE BATTERY No Smoke? GOOD!

I seem to have gotten off a bit on installation rather than the wiring procedure so I'm including a drawn diagram that should help This was the install I did on my /2 BMW later models have a T/signal de-activator/electronic flasher that automatically cancels the signal after a predetermined period of time. The unit works with 6 or 12 volt systems and replaces the flasher; it also comes with additional wiring instructions. If the light's are slow (or fast) or inoperative, make sure there is a good ground, most problems are related to bad grounds. The # 31 terminal on the bottom of the circuit board is the Brown ground circuit & can have a wire run from it to the housing for a better connection. I hope this has been helpful in installing your T/Signals. I love the looks and safety they provide & caferace.com provides good quality parts at reasonable prices.
HAVE FUN!

Diagram

