



## VTX 1300/1800 C Rear LED Turn Signal Assembly Installation Guide

### Pre-Installation Notices:

- Installation requires the removal of the stock turn signal and license plate assembly, which is welded to the inner fender and is a PERMANENT modification. You will not be able to install our turn signal without removing this piece.
- Designed to fit stock VTX C-model fenders (only). Bikes that have been excessively lowered or fitted with an oversized tire *may* encounter clearance issues. It does have, however, a much lower profile than the stock turn signal and license plate assembly.
- These products are not DOT approved. Use at your own risk, we are not responsible for any damages or losses incurred while using our products.
- Use of these products may be limited, regulated or prohibited in your state, please check all applicable motor vehicle code and laws before installation.
- Please note that the flash rate will vary from bike to bike based on the bike's total electrical load impedance, and can be modified with the installation of a load equalizer (not included). As stated on our conditions page @ [www.mbwmotorcycle.com](http://www.mbwmotorcycle.com) this is not an acceptable reason for refund/return.
- Prior to installation it is recommended that you perform a pre-install function check. To do so, remove the left side battery cover from the bike and expose the post terminals. Hold the positive red lead from the turn signal to the positive red lead of the battery and then place the negative black lead from the turn signal to the negative black lead of the battery. Do one side at a time and ensure that both sides light prior to installation.

### Tools Suggested

Bike lift, Dremel with metal cutting wheel or air grinder or other similar cutting tool for the stock turn signal bracket removal, metric socket and/or combination wrenches, allen wrenches/sockets, wire cutter/stripper/crimper, soldering iron and solder, shrink wrap, Loc-tite (medium strength)

PROCEDURE

Average Time: 2 - 2½ HOURS

## Step 1 Remove rear fender

- Secure the bike on an appropriate bike lift and strap it down. Place a piece of wood or other suitable object underneath the rear tire so it doesn't drop when the shocks are removed.
- Disconnect the wires leading to the fender. They are behind the right side cover. Make a note of where they go – there are three solid green ones. Remove the seat.
- You will need to remove at least one shock and fender support. The left one allows the easiest access. Remove the two shock bolts and remove the shock. It will probably need to be wiggled around a bit.
- Remove the Shock Stud with a 10 mm allen socket (it's unlikely to come off with just an allen wrench or t-handle) and then the chrome strut cover.
- Remove the three fender bolts from the opposite side and the fender slides right off. It is highly recommended that you also remove the bracket from the other side as well to allow even more space to protect the fender during removal.

## Step 2 Remove stock Turn Signal Assembly

- Turn the rear fender assembly upside down on a stable and covered/protected surface to prevent damaging the fender/paint.
- Remove the license plate mounting bracket and disconnect the plate illuminating wires. Using an a Dremel with metal cutting wheel or other appropriate cutting tool, removal the stock turn signal and license plate mounting bracket from the rear fender, see the picture below for appropriate cut lines.



Your fender should now look like this...



Step 3 Install turn signal and wire LED turn signal assemblies into stock wiring harness.

- Wire color coding is as follows:

Right rear turn signal: Stock blue positive to MBW red positive. Stock green negative to MBW black negative.

Left rear turn signal: Stock orange positive to MBW red positive. Stock green negative to MBW black negative.

Do not trim the wiring to the turn signal assembly until positioning it in relatively close proximity of the two brake light mounting studs. Placing it directly on the studs may result in the wires being too taut.

If you are going to use an illuminated plate frame, this would be an appropriate time to wire it.

- At this time complete a test of the assembly prior to soldering the wires to make sure it is functioning properly. It is now when you should determine whether or not you desire the use of a load equalizer, (not included), to modify the turn signals' blink rate. See below for Load Equalizer installation.
- Solder the turn signals to their respective/corresponding wiring harness. If you intend on using shrink-wrap, slide it onto either one of the corresponding wires, before you start to solder.

- Once soldering is complete, heat up your shrink-wrap, or wrap the connection tightly in electrical tape.
- Place the turn signal bracket into position on the brake light mounting studs on top of the rubber spacer and reinstall and secure the wires into the loom.
- Using a small amount of Loc-tite, firmly bolt the turn signal assembly into place.

#### Step 4 Reinstall rear fender

- Installation is the reverse of removal, if needed the jack can be used to get the shocks to line up properly.

#### Step 5

- You're done. What are you waiting for?!

#### Load Equalizer Installation (Optional)

If you wish to use a load equalizer to maintain the stock flash rate, we recommend that it be positioned near the right side cover, where the rear fender wiring harness plugs in. Because the wires are covered in the loom, it may take some experimentation to get the correct wires, but be sure to take one positive (yellow lead) from the load equalizer and wire it into each positive side of the turn signal. You may then ground the load equalizer into either negative turn signal (not brake light) (green) ground. Due to the thin gauge of the wire it's possible to slip the load equalizer into the bullet connector and have sufficient tension to keep it in place, otherwise you can solder it onto the appropriate bullet connector. Be sure to test all connections and function before cutting or soldering any wires.

***Time to ride...***