

# Installation Instructions Extended Cable/Line Kit 2008-2013 FLHX & FLHT/C/U (non-ABS)

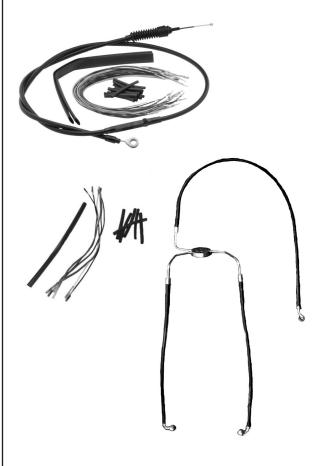
#### **WARNINGS & ALERTS**

- This kit is designed for controlling Harley-Davidson OEM components only, and is intended for models without anti-lock brake systems (ABS).
- The supplied clutch cable must be installed per factory specifications. Torque not to exceed 60 in-lbs during installation.
- The operator must use extreme caution when operating a modified motorcycle, particularly while familiarizing himself with its altered characteristics.
- Once installation is complete, be certain ALL controls are properly adjusted to the specifications outlined in your factory authorized service manual before attempting to operate your motorcycle.

### LIMITED GUARANTEE

We continually inspect and try to improve our products. All parts have been inspected prior to packaging, and our guarantee is limited to replacement of defective parts. This guarantee is in lieu of all guarantees or warranties implied or expressed. Because we cannot control the application of our products, buyer assumes risks for any and all damage caused by himself or third party, by virtue of failure of these parts. We make no warranty as to products distributed by us, expressed or implied, including without limitation any warranties or merchant ability and fitness for a particular purpose. We will however, pass on all warranties made by the manufacturer, who has sole responsibility for performing such warranties. The manufacturer shall solely be responsible for any damage to person or property arising from design, manufacturing and testing of all products, and we accept no liability for such damages. We shall not be liable for indirect or consequential damages.

## PARTS INCLUDED



Read all the instructions carefully before installing this kit on your motorcycle. Use your authorized Harley-Davidson service manual as a reference while installing this kit.

#### **DISASSEMBLY INSTRUCTIONS**

In preparation to install your new handlebars and control extension kit, the following must first be removed per your authorized factory service manual:

- Disconnect Battery.
- Remove Faring to access control connector housings.
- Remove your stock clutch cable noting routing.
- Remove the stock Throttle Control, complete with twist grip and wiring.
- Remove front brake reservoir & lever assembly from the handlebars but do not loosen brake-line or open the system.
- Remove the left handgrip, both handlebar switch housings and the wiring attached to them.
- NOTE: If your handlebar wiring is mounted outside of the bars, you need to remove all wire ties that hold the wiring in place. If the wiring is run through the bars, carefully remove it by pulling on the wire, not on the housing (this may be easier by first removing the connector housings noted on page two in "WIRING HARNESS EXTENSION INSTALLATION INSTRUCTIONS").
- Remove stock handlebars.

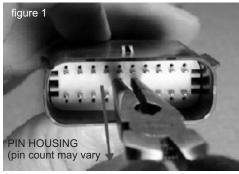
After completing these tasks, proceed with the three installation procedures noted on page two.

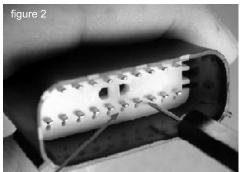


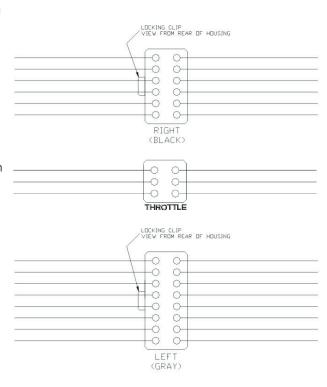
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#### WIRING HARNESS EXTENSION INSTALLATION INSTRUCTIONS

- As with any repair or modification involving the wiring system, first disconnect the battery.
- Locate the left and right handlebar wiring connector housings. These are typically located in the faring, requiring the removal of the faring to access the connectors. The connector housings are rectangular in shape and should have 12 wires (black) for the right-hand controls and 16 (gray) for the left.
- Cut the wire-ties required to easily access these connector housings as well as all the wire-ties from the forward connector housings to the handlebar controls, as these are the portions of the wiring harness that will be extended and they will need to be completely re-tied.
- Starting with either the left or right connector housing but noting which is which unplug the first connector housing and using some needle-nose pliers carefully pull the white center locking device outward until you hear/feel it click (fig 1). Using the diagram/worksheet on right, write down which color wire is in which position in the connector housing NOTE, not all positions in the connector housing are used on all models. Insert a small round tool such as a straightened paper clip or pin into the small hole adjacent to each terminal-pin (fig 2) to unlock that wire and carefully pull the connector out of the housing. Repeat for each wire. Be sure to hold the rear seal of the connector housing in place as you do this, as removing the wires may displace the seal. At this point, if your handlebar control harnesses are running through your current handlebars, which you are replacing, then carefully pull them out of the handlebars by pulling the wire harness itself not the handlebar control.
- The wiring for the electronic throttle control (throttle-by-wire) harness will require extending as well. Simply remove the throttle mechanism and it's wiring from the stock handlebars and remove the wires from the housing in the same manner as described above.
- Now with all the wires free of the connector housing, choose the corresponding color extension wire from the Burly kit and firmly plug the proper end onto the wire on the handlebar controller harness.
- If there is no corresponding color extension wire, then choose the closest color and be sure to note the new color next to the old on the diagram/worksheet you wrote the original color and positions on the right. Repeat for all wires. The most important thing is that the same wire (though now extended) gets back into the same position in the connector housing – but do not reinstall the wires into the housing yet.
- One by one, slide the smaller 1/8" inch heat-shrink tubing over each extension connection and apply heat from a heat gun until the tubing has shrunk snugly around the connection. After doing this to all the wires, slide the large 3/8" inch heat-shrink tubing over all the wires and apply heat from a heat gun until they are snugly wrapped into a tight bundle.
- Using the notes you made earlier regarding which color wire goes in which position in the connector housing noting any color variations of the extensions push the proper color wire contact straight into the connector housing grommet until a "click" is felt. A slight tug will confirm that it is locked into place. Repeat for all wires. Be careful not to accidently use any positions in the connector housing that were previously unused.
- Once all the contacts are back in place, push the white locking device back down into the center of the housing - the center piece will snap into place locking the connectors into the housing.
- Repeat the last five steps on the other handlebar & throttle control harnesses.









### WIRING HARNESS EXTENSION & INSTALLATION INSTRUCTIONS (Cont.)

- Using a wire "fish tape" tool or similar (thin wire coat-hanger, or safety wire) fish all the wires through your new handlebars from the bar-ends down to the middle and out to where the main harness connectors will be located. It is best to fish the wire tool up through the bars in the middle (figure 3) and out by the control area first, then secure the newly extended wire harness to that wire tool (figure 4) and carefully "pull" the wire harness back down through the handlebars to the center and out, while feeding the harness into the bar at the control area (figure 5). Repeat on other side (figures 6).
- Install new handlebars and reinstall left and right handlebar control switches & throttle per your factory authorized service manual.
- At this point you are ready to plug your left and right handlebar control (and throttle control) harnesses back into the main harness be sure to plug the left plug into the left socket and the right plugs (both of them) into the right sockets. Now hook the battery back up and make sure everything functions properly. After doing that, re-secure the wire harness at the same points it was secured and reinstall the fuel tank per your factory authorized service manual and proceed to cable and brake line installation.









#### **CLUTCH CABLE INSTALLATION INSTRUCTIONS**

■ Install the Burly extended clutch cable as you would stock cable per your factory authorized service manual - noting to route the new longer cable in such a manner that no kinking or binding occurs through entire range of steering. Check this by turning the handlebars all the way to the left and right while operating the controls.

Warning: The supplied clutch cable must be installed per the factory recommended torque specifications. Refer to your factory service manual for proper torque specification. Exceeding the recommended maximum torque value of 60 in-lbs could lead to clutch cable malfunction resulting in loss of control, injury or death

Adjust the clutch cable per the procedure described in your factory authorized service manual to ensure proper operation.

## BRAKE LINE INSTALLATION INSTRUCTIONS

- Install the Burly extended Brake Line as you would stock brake line per your factory authorized service manual noting to route the new longer Brake Line in such a manner that no kinking or binding occurs through entire range of steering. Check this by turning the handlebars all the way to the left and right while carefully observing the Brake Line. Also make sure there is no binding or stretching of the line when fork is completely extended or compressed.
- Refill the brake system with the recommended fluid and bleed any air out of it per the procedure described in your factory authorized service manual. Check for leaks and repair if need be.

After installing these components it is vital that ALL controls must be adjusted to the recommend specifications noted in your factory authorized service manual. DO NOT attempt to operate the vehicle before making such adjustments or damage, injury, or death may result.