

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

#### **WARNINGS & ALERTS**

- This kit is designed for controlling Harley-Davidson OEM components only, and is intended for models equipped with 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 anyway.
- 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 out the white center locking device of the housing. Using the diagram/worksheet on page three of these instructions, 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. Use a paper clip to carefully push the connectors out of the housing. 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) is long enough to facilitate the recommended Burly handlebars and requires no modifications. Simply remove the throttle mechanism and it's wiring from the stock handlebars and reinstalled on the new ones in the same manner.
- 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 page 3. 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. At this point, if you are running your wires through your handlebars, you should do this now before reinstalling the connector housing. Otherwise continue to next step.
- 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 control harness.
- Install new handlebars and reinstall left and right handlebar control switches, grips, & throttle per your factory authorized service manual.
- At this point you are ready to plug your left and right handlebar control harnesses backing into the main harness be sure to plug the left into the left and the right into the right. Also don't forget to plug the electronic throttle control (throttle-by-wire) back in too. It's suggested that you 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 faring per your factory authorized service manual and proceed to clutch cable and brake line installation.

#### CLUTCH CABLE INSTALLATION INSTRUCTIONS

Install the Burly extended clutch cable as you would stock clutch 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.

- We suggest routing the new clutch cable up the right side of the frame, attach it to the frame-mounted cable/line guide (in place of the relocated upper brake-line noted below), through the back of the right side of the faring liner, around the front under the dash electronics, and out the left side of the faring liner through the hole near the base of the handle bars. Before reinstalling the ignition switch cover, you will need to remove the rubber grommet from the left side (that goes around the handlebar) to make room for the clutch cable.
- Adjust the clutch cable per the procedure described in your factory authorized service manual to ensure proper operation.

## BRAKE LINE RELOCATION INSTRUCTIONS

- There is no need to replace any of the brake-lines or open the brake hydraulic system. The upper line on the ABS system is long enough once re-routed.
- Re-route upper brake-line higher by removing it from the OE guide on the right side of the frame near the steering head, and securing it to the wiring harness above that point with wire-ties. This will give you enough slack to install on the taller handlebars.

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.





