



These instructions describe how to properly install 16” FBI EZ Install Kits on 2008-2013 FLHTCUSE & FLHXSE (Hydraulic Clutch Models)

109716- Install kit for 16“ Handlebars for 08-13 FLHTCUSE, FLHXSE (Hydraulic Clutch Models)

**WARNING: The rider’s safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, contact a dealer to perform the installation. Improper installation of this kit could result in death or serious injury.**

**Test brakes at low speed. If brakes are not operating properly, testing at high speeds can cause loss of control, which could result in death or serious injury.**



109716

Tools & Supplies Needed			
3/16 Allen Socket	Torque Wrench	Small Flat Screwdriver	T27 Torx
9-16 Wrench	T25 Torx	T40 Torx	Side Cutters
Small Pick	Paper Clip	Heat Gun/Heat Source	Black Tape
1/4 Allen	Torque Wrench	Solder/Soldering Gun	Air Blower
13mm Wrench	3/8 Wrench	Tank/Front Fender Cover	7/16 Wrench
1/2 Wrench	Needle Nose Pliers	3/32 Allen	12 mm Wrench

1. Install center handlebar bolt. Torque to 10 ft. lbs.



2. Remove ignition switch knob by inserting key, press and hold button underneath the side of the knob while turning the key to the left past the unlock position. Pull knob straight out.



3. Remove ignition nut and spacers from fairing cap.



4. Remove fairing cap.

5. Remove outer fairing and windshield.

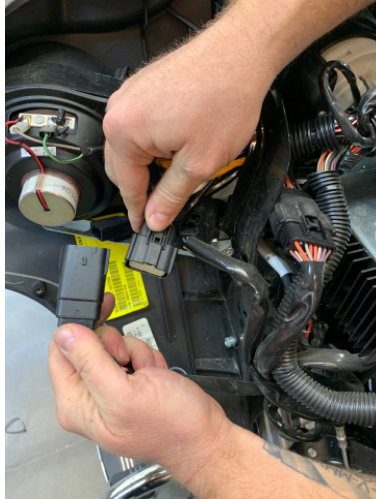
6. Unplug and remove turn signals.



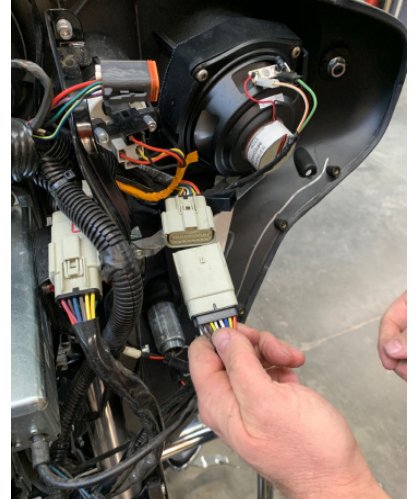
7. Unplug handlebar and throttle wiring.



Throttle Sensor Plug In

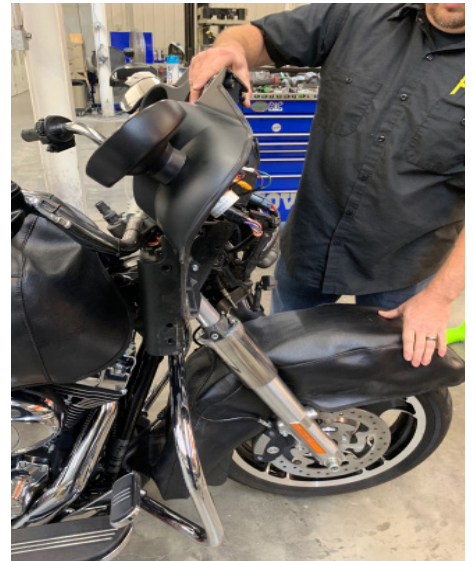


Right Handlebar Switch



Left Handlebar Switch

8. Remove lower triple tree cover. Rotate inner fairing forward by spreading bottom of fairing out away from forks and lifting up.

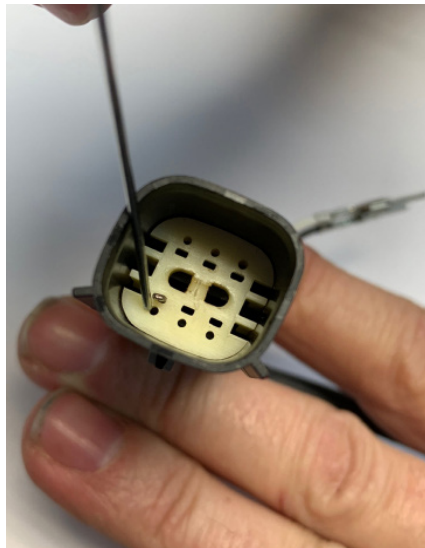


9. Cut zip ties that hold the wires to the handlebars and remove master cylinder and switch housings.

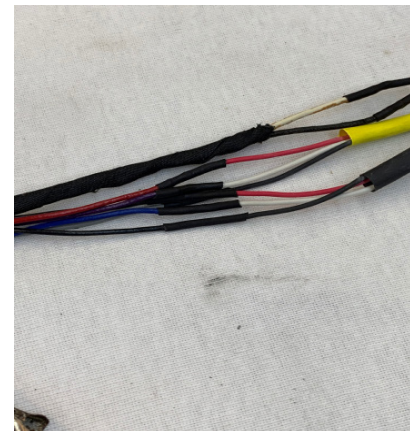
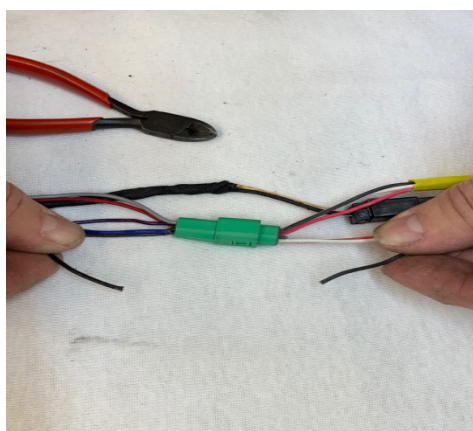
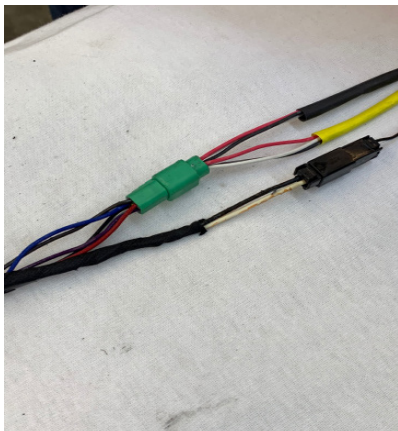


10. Remove the 4 bolts that hold handlebar clamp and remove stock handlebars from bike.

11. Remove molex plug from the end of throttle sensor wires and molex plugs from switch housing wires. Insert needle nose pliers or pick into center of connector and pull outward until a click is heard. Then insert a paper clip or wire detent tool into round hole next to terminal to release wire from plug-in. Before removing wires make notes of wire color to corresponding number on terminal.



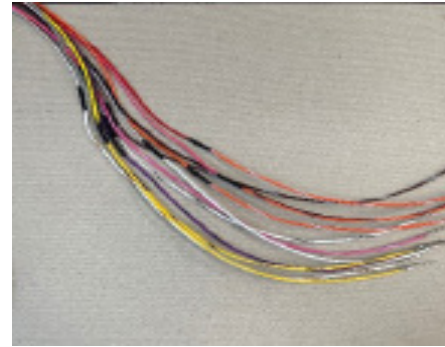
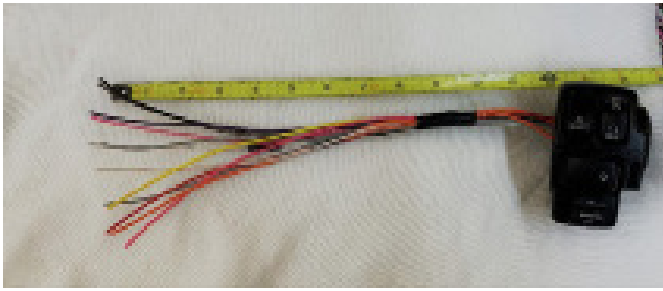
12. Remove throttle tube sensor from stock handlebars. Cut and remove green and black connector from the harness. When removing green connector, cut and solder 1 set of wires at a time. Use supplied shrink tube to cover soldered connections. Once all connections are made and soldered, wrap harness with black tape.



13. Prepare handlebar switch harness for installation.

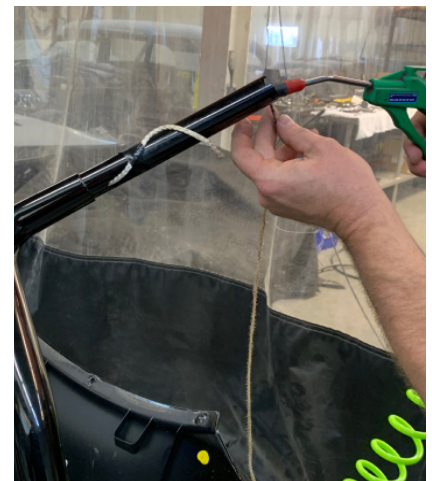
14. Remove stock covering from switch harnesses.

15. Add wire extensions to right and left switch harnesses by soldering supplied extensions to stock harness. Cut switch housin wires 12” from switch housing. Solder supplied extensions. Cover with supplied heat shrink.



Left Side	Right Side
Orange/Black	Orange/White
Gray/Green	Red/Blue
Green/Blue	Gray
Pink/White	White/Black
Brown/Black	White/Brown
Violet/Black	Black/Red
Yellow/Black	Brown/White
White/Violet	Gray/White
White	Pink/White
Blue	Violet/Black
Yellow	White/Blue
Orange/White	Blue/Black
Black	
Black/Red	

16. Using supplied ropes, use an air blower to push 1 rope through the left FBI handlebar grip tube hole to center clamp hole. Blow 1 rope through right FBI handlebar grip tube hole to center clamp hole and 1 rope through the right FBI handlebar throttle hole to center clamp hole.



17. Take left switch housing and tape wires to the left string at the grip housing hole. Apply supplied petroleum jelly to the tape. Pull taped string and wires through left handlebar center clamp hole by pushing the taped end and pulling on the string end. Push and pull until the taped end is through the center clamp hole of the handlebar.



18. Tape right switch housings to the left string that comes out the grip housing hole. Tape throttle wires to the string that comes out the top throttle hole of the right handlebar. Add lubricant generously to both the switch wires and throttle wire taped ends. Pull the switch housing taped wires through the handlebar and then pull the taped throttle wire through the handlebar.



19. Reinstall the connectors by putting the color wire to corresponding number on terminal that was written down in Step 11. Install FBI handlebars on to bike. Torque handlebar clamp bolts to 18-22 ft lbs.



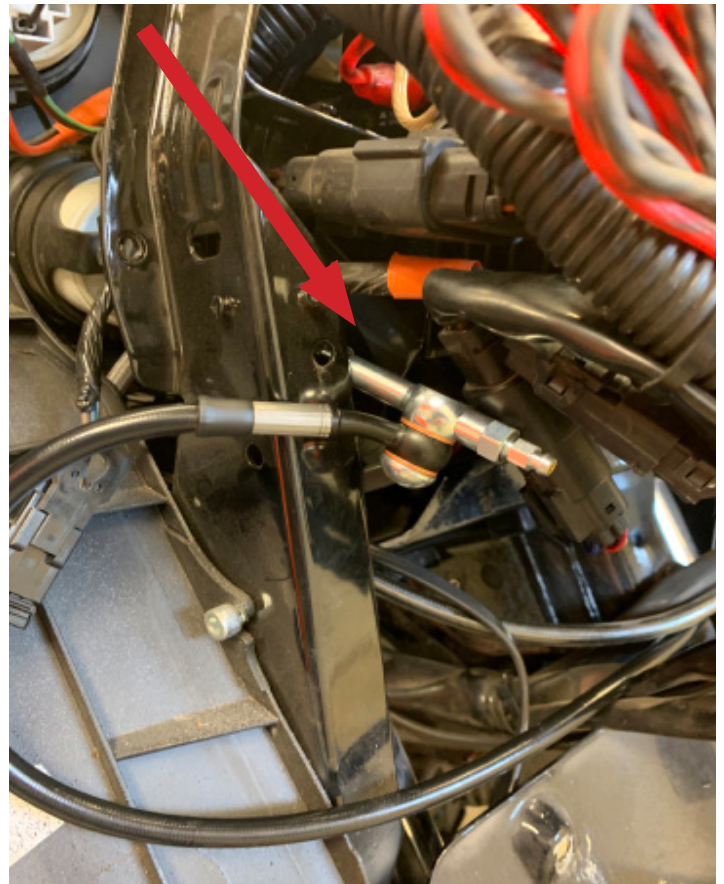
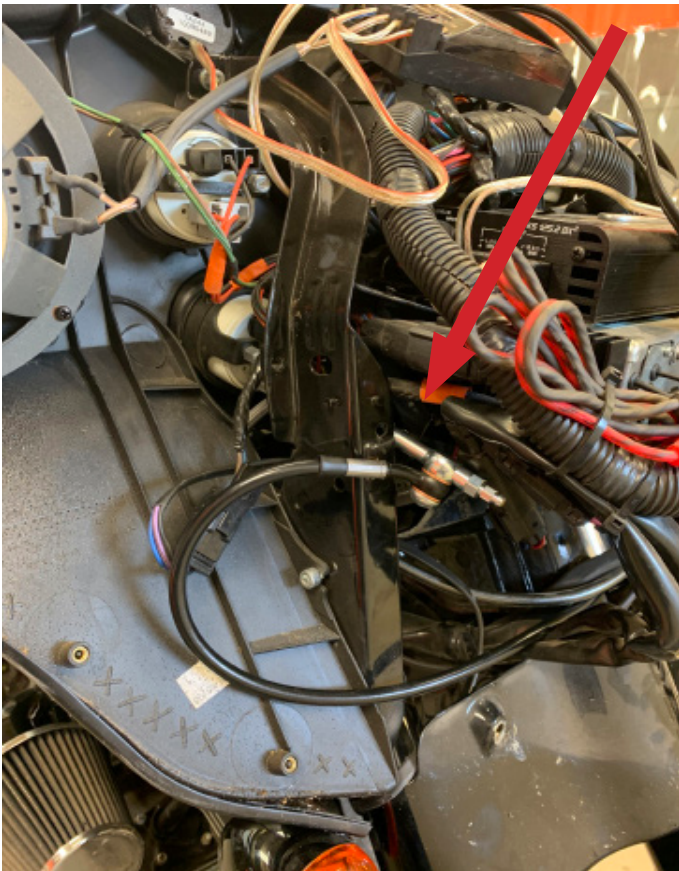
20. Reposition inner fairing to stock location on triple trees. Route throttle sensor wire to stock location and plug-in. Reinstall front brake master cylinder.

21. Bleeding process.

Items Needed: 1/4" Hose, Catch Cup, Brake Fluid

1. Open bleeder 1/4 turn and then install hose. Note: The bleeder valve provided is a speed bleeder. It has a spring and a ball inside of it. As you pump the levers, it allows fluid to pass out of the bleeder and reseals itself. No need for a vacuum bleeder.
2. Remove reservoir cap and position master cylinder in a downward position so air does not trap inside the reservoir.
3. Pump handlebar lever 8 to 10 times or until the lines are filled with fluid.
4. Retighten bleeder screw.
5. Apply brake/clutch and check for any leaks.
6. Reinstall gauge cluster.

### Line Extension Routing



22. Reinstall lower triple tree cover, turn signals, out fairing and windshield.