



INSTRUCTIONS

J05280

2017-10-05



1.00 IN (25.4 MM) DIAMETER BATWING MINI-APE HANDLEBAR KITS

GENERAL

Kit Numbers

57474-11, 57485-11

Models

For model fitment information, see the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Installation Requirements

Separate purchase of more parts or accessories is required for proper installation of this kit on certain model motorcycles.

See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) for a list of required parts or accessories for a specific model.

2008-2013 Models require separate purchase of a Twist Grip Sensor Kit (H-D Part No. 32310-08).

FLHX Models require separate purchase of handlebar-mounted mirrors. If fairing-mounted mirrors are removed:

- **2008-2013 Models:** separate purchase of two small (Part No. 755) and two large (Part No. 732) hole plugs is recommended.
- **2014-Later Models:** plugging or covering of mirror mounting holes in fairing is recommended.

Vehicles equipped with a **glued** left side hand grip require a new grip, sold separately. Refer to the parts catalog for replacement original equipment (OE) hand grips.

Ask a Harley-Davidson dealer about the selection of Genuine Motor Accessory hand grips and handlebar-mounted mirrors (FLHX Models) that are available.

⚠ WARNING

Replace brake line gaskets. Re-using original gaskets can cause brake failure and loss of vehicle control, which could result in death or serious injury. (00318a)

Loctite[®] 243 Medium Strength Threadlocker and Sealant - Blue (Part No. 99642-97) is required for proper installation of this kit.

Fresh, uncontaminated DOT 4 brake fluid from a sealed container is needed.

A long shank ball-end socket (Snap-on[®] FABL6E or equivalent) aids in the removal and installation of the radio or storage box.

⚠ WARNING

Rider and passenger safety depend 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, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333b)

NOTE

This instruction sheet refers to service manual information. A service manual for this year/model motorcycle is required for this installation. One is available from a Harley-Davidson dealer.

Kit Contents

See Figure 4 and Table 1.

PREPARATION

⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)

NOTE

- **Vehicles WITH security siren:** With security fob present, turn ignition switch ON. After system is disarmed, turn ignition switch OFF. See service manual and remove main fuse.
- **Vehicles WITHOUT security siren:** See service manual and remove main fuse.

REMOVAL

ALL Models:

▲ WARNING

Contact with DOT 4 brake fluid can have serious health effects. Failure to wear proper skin and eye protection could result in death or serious injury.

- **If inhaled:** Keep calm, remove to fresh air, seek medical attention.
- **If on skin:** Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. If irritation develops, seek medical attention.
- **If in eyes:** Wash affected eyes for at least 15 minutes under running water with eye lids held open. If irritation develops, seek medical attention.
- **If swallowed:** Rinse mouth and then drink plenty of water. Do not induce vomiting. Contact Poison Control. Immediate medical attention required.
- See Safety Data Sheet (SDS) for more details available at sds.harley-davidson.com

(00240e)

NOTICE

DOT 4 brake fluid will damage painted and body panel surfaces it comes in contact with. Always use caution and protect surfaces from spills whenever brake work is performed. Failure to comply can result in cosmetic damage. (00239c)

NOTE

If DOT 4 brake fluid contacts painted surfaces, **IMMEDIATELY** flush area with clear water.

Cover nearby motorcycle surfaces with an H-D Service Cover or polyethylene protective sheet to help protect against damage to the finish caused by spillage or splash of DOT 4 brake fluid.

1. See service manual. Remove outer fairing.
2. See service manual. Remove fairing cap.
3. **FLHX Models:** Handlebar-mounted mirrors (purchased separately) are required for proper installation of this handlebar. Removal of inner fairing is required. See service manual. If fairing-mounted mirrors are being removed: Plug or cover fairing mirror holes (see **Installation Requirements**).

4. *NOTE*

ALL Models: Cover painted parts to protect finish.

Drain brake fluid from the front brake reservoir and lines per service manual. **2014-Later Models:** Drain the clutch fluid from the clutch reservoir and lines per service manual.

5. See service manual to expose the handlebar riser area.

6. **2013-Earlier Models:** Remove the radio or storage box. **2014-Later Models:**

- a. Access the four socket head screws fastening the radio or storage box to the left and right radio support brackets through the oblong holes in the fairing brackets. After loosening, use a long shank ball-end socket to remove the screws.
- b. Pull the radio or storage box forward to remove it from the opening in the inner fairing.
- c. Remove auxiliary and turn signal lamp brackets per the service manual.
- d. Remove fairing cap.
- e. Loosen two lower fairing mount fasteners. Remove the upper fairing mount fasteners. Retain all hardware.
- f. Lift and tip the inner fairing forward.

NOTICE

Remove brake line components carefully. Damage to seating surfaces can cause leakage. (00320a)

NOTICE

Remove clutch fluid lines carefully. Damage to seating surfaces can cause leakage. (00327a)

7. Note the front brake line routing and the orientation of the banjo fittings. Disconnect the brake line from the front brake calipers and the front brake master cylinder assembly. Save the banjo bolts, but **discard** the two gaskets found at each banjo fitting. Remove the front brake line assembly.

8. *NOTE*

Ask a Harley-Davidson dealer about the selection of Genuine Motor Accessory Custom Braided Clutch Cables, Clutch Lines and Brake Lines that are available.

2013-Earlier Models: Disconnect clutch cable from the clutch lever. See service manual. **If clutch cable is being replaced:** See service manual. Disconnect clutch cable from the side cover. Remove cable from the vehicle. **2014-Later Models:** Note hydraulic clutch line routing. Remove hydraulic clutch line.

9. *NOTE*

Note harness routing and location of connector clips and cable straps before disconnecting and removing wiring inside the fairing.

Remove front brake master cylinder and clutch lever assemblies from handlebar.

10. See service manual. Identify, label and disconnect handlebar control wiring from main harness connectors inside the fairing.

11. Remove and discard cable straps that secure both switch harnesses to the handlebar.

12. Remove right side switch housing assembly and wire harness per service manual.
13. See service manual. Remove the left side switch housing assembly and wire harness.
14. **If the left side hand grip is not glued to the handlebar:** Remove end cap from the hand grip, if present. Remove hand grip. Set it aside for installation onto the **new** handlebar.

15. **NOTE**

The twist grip sensor in the right side of the handlebar has a seal cap that protects internal electrodes from dirt and moisture. It also serves as a throttle grip retainer.

Remove end cap from right side hand grip, if present.
Remove hand grip from handlebar.

16. Tug hand grip to remove.
 - a. **If the throttle grip IS being replaced:** Discard throttle grip.
 - b. **If the throttle grip IS NOT being replaced:** After removing grip, note if the seal cap is attached to the end of the twist grip sensor.

NOTE

- *If the seal cap is attached to the sensor.*
 - *If the seal cap is still fastened to the index pins inside the throttle grip, use a stiff piece of mechanics wire to capture the seal cap. Pull it free of the index pins.*
17. Remove OE twist grip sensor per service manual.

2013-Earlier Models: Discard the twist grip sensor.
2014-Later Models: Retain the twist grip sensor for later installation.

 - a. If seal cap is attached to the sensor.
 - b. If seal cap is still fastened to the index pins **inside** the throttle grip, use a stiff piece of mechanics wire to capture the seal cap. Pull it free of the index pins.

18. **NOTE**

Do not remove wires from handlebar switch connector pin housings inside the fairing.

See Figure 1. Remove screws (1) that fasten handlebar upper clamp (2) to risers (4). Remove clamp. Remove handlebar (3).

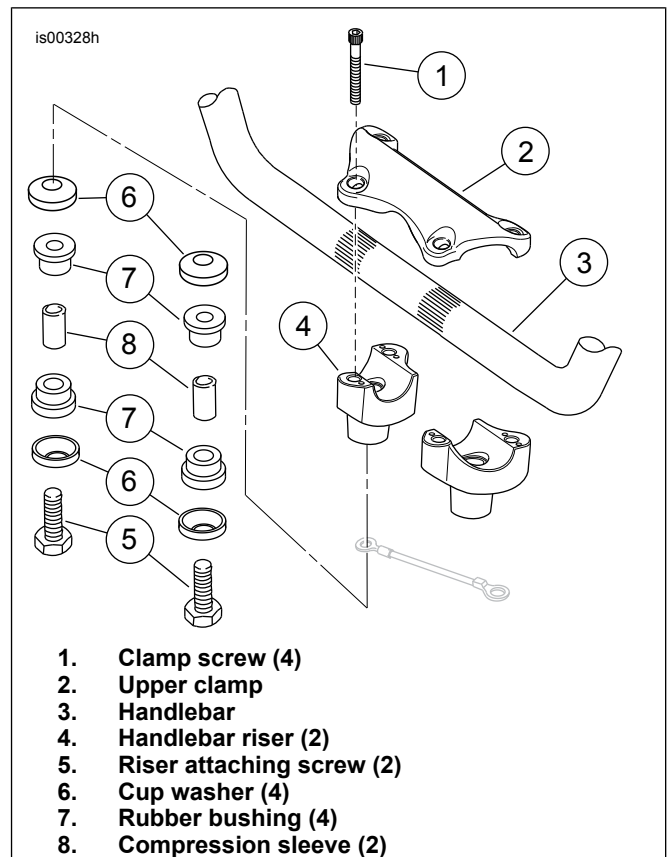


Figure 1. Handlebar Clamp and Risers (FLHT, FLHX)

19. Remove riser attachment screws (5). Remove rubber bushings (7), cup washers (6) and compression sleeves (8). Discard rubber bushings and compression sleeves.
20. See Figure 4. Apply a small amount of Loctite 243 - Blue to the **clean** riser screw threads. Replace rubber bushings with aluminum bushings (2) from the kit. Install the cup washers and riser screws. Tighten until snug. The screws are tightened to specification later in the procedure.
21. Note the wire colors and positions in each cavity of the socket housings leading from the switches. Refer to the wiring diagram and service manual. Remove wires (with socket terminals) from the socket housings.
22. Use tape to wrap the wire terminal ends from each source to make separate leaders. Wrap each leader tight enough to enter the wire entrance hole at the handlebar switch location and pass easily through the **new** handlebar.

INSTALLATION

Internal Handlebar Wiring

1. Cut three pieces of string, each long enough to reach from the end of the **new** handlebar to the lower center wire slot. Plus more to extend beyond the handlebar openings, add:

15–30 cm (6–12 in)

 - a. Get three weights (nuts or washers are ideal) small enough to fit through the handlebar center wire slot. Tie a weight to one end of each string.

- b. Insert weighted ends of TWO strings into the **right** end of the handlebar. Tip the handlebar to guide the weighted string ends to the handlebar **center** wire slot.
 - c. Make sure that the **unweighted** string ends remain outside the right handlebar end and slot. Pull out the **weighted** ends through the handlebar center wire slot. Remove the weights from the strings.
 - d. Insert weighted end of the remaining string into the **left** end of the handlebar. Tip the handlebar to guide the weighted string end to the handlebar **center** wire slot.
 - e. Make sure that **ALL** unweighted string ends remain outside the handlebar. Pull out the **weighted** string end through the handlebar center wire slot. Remove the weight.
 - f. Fish the end of the left string out of the switch wiring slot **near** the left handlebar end. Fish the end of **one** string out of the switch wiring slot **near** the right handlebar end.
6. Gently feed twist grip sensor wire bundle into the right side handlebar end. See Figure 2. Route right side switch wire bundle through switch housing as shown. Gently feed wire bundle into right side switch wire hole. Pull bundles through handlebar toward the center. Fit the twist grip sensor index tabs into slots on the end of the handlebar. One index tab and slot are smaller than the other to aid in proper assembly.

▲ WARNING

Carefully pull the wires through hole in handlebar to prevent stripping the wires. Stripped wires can cause short circuits and damage vehicle electrical components, which could cause loss of vehicle control resulting in death or serious injury. (00418b)

- NOTE*
- *Route wires through the handlebars per service manual instructions.*
 - *2013-Earlier Models: The twist grip sensor MUST be replaced with a new sensor (H-D Part No. 32310-08), sold separately.*
 - *2014-Later Models: Reuse the OE twist grip sensor assembly. Route all wiring inside the handlebar.*
 - *Trike models: Reverse switch must be wired externally.*
2. Get the twist grip sensor assembly. Use tape to wrap the wire terminals on the ends of the twist grip sensor wires to make a single leader. Wrap the leader tight enough to pass easily through the handlebar.
 3. Tape end of string from right side handlebar end hole to the twist grip sensor wire bundle.
 4. Tape end of string from the right side switch wire hole to the right side switch wire bundle.
 5. Apply a light coat of liquid soap, window cleaner or all-purpose lubricant to the right side switch and twist grip sensor wire bundles.
 7. Pull taped ends of the wire bundles through the wire-exit hole at the bottom center of the handlebar.
 8. Tape end of the string from the left side switch wire hole to the left side switch wire bundle.
 9. If necessary, apply a light coat of liquid soap, window cleaner or all-purpose lubricant to the left side switch wire bundle.
 10. Route the left side switch wire bundle through the switch housing as shown in Figure 2 for the right side wiring. Gently feed the wire bundle into the left side switch wire hole. Pull the bundle down through the new handlebar and toward the center of the bar.
 11. Loosely fasten the brake lever and clutch lever clamps to the new handlebar.
 12. Loosely fasten the handlebar switch housings to the new handlebar.
 13. Remove tape from the ends of the wire bundles.
 14. Check for electrical continuity between the handlebar and each wire in the wire bundles. Continuity would indicate a short circuit, which would require examination of the wires and routing in the switch housing. Proceed to **Handlebar Installation**.

▲ WARNING

Wiring in the switch housings must be routed exactly as shown. Pinch points in the switch housings can short-circuit or sever wires, which could cause loss of control resulting in death or serious injury. (00415b)

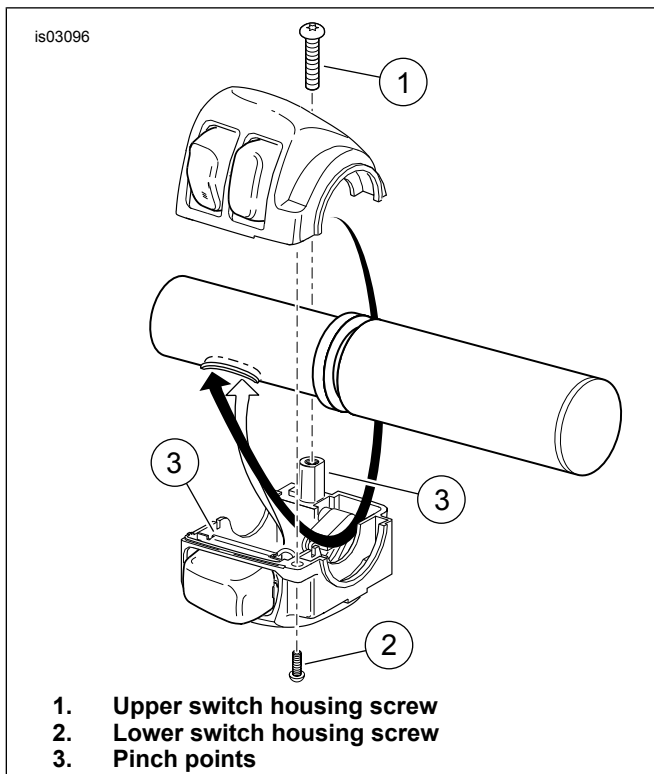


Figure 2. Switch Housing Wire Routing (Right Side Housing Shown)

Handlebar Installation

1. Center **new** handlebar on the risers. Verify that the knurled handlebar areas exposed on the outboard side of each riser are equal.
2. Position the original handlebar upper clamp and loosely install with the clamp screws saved earlier.
3. Position handlebar:

NOTE

The handlebar upper clamp is designed to leave a gap between the clamp and riser to the rear of the handlebar when installed.

- a. **2013-Earlier Models:** Rotate handlebar forward until handlebar contacts the inner fairing. Rotate handlebar back until there is a gap away from the inner fairing. 3–6 mm (1/8–1/4 in)
- b. **2014-Later Models:** Align handlebar in the approximate final position. Lightly snug fasteners to hold the handlebar in place. Rotate inner fairing to the installed position. Adjust handlebar so it is away from the fairing. Lift and tip inner fairing forward. Snug fasteners to secure the handlebar position. 3–6 mm (1/8–1/4 in)

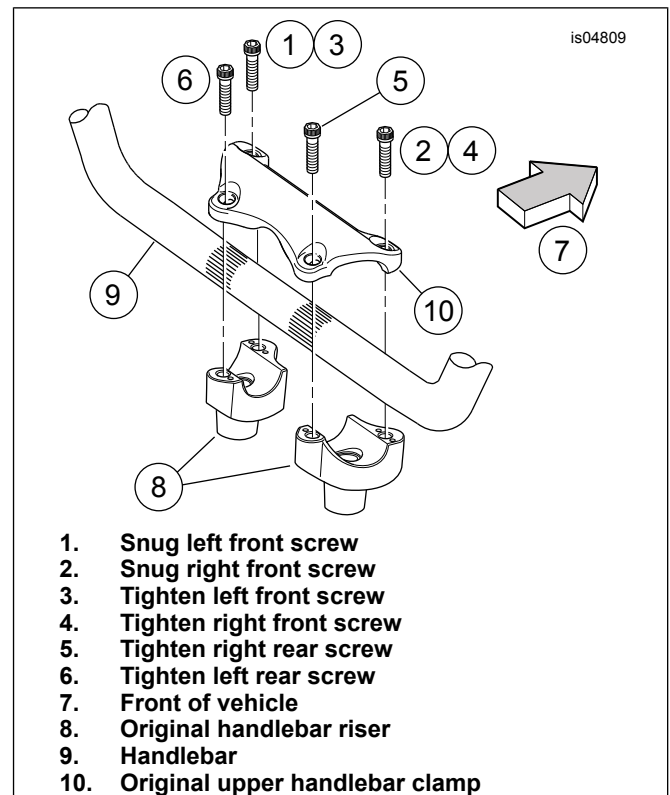


Figure 3. Handlebar Clamp Screw Tightening Sequence

4. See Figure 3. Snug, but do not fully tighten, only the front two upper clamp screws (1) and (2):
5. Refer to the notes made during the removal steps, and the wiring diagram and service manual. Insert each socket terminal from the left side switch wire bundle into the correct cavity of the socket housing removed earlier.

6. NOTE

Disconnecting wire harness housings from the fairing supports is necessary. After connecting pin and socket housings, tie the wiring with a cable strap to secure it inside the fairing.

Insert each socket terminal from right side switch wire bundle into the correct cavity of the socket housing removed earlier.

7. Connect handlebar switch wire socket housings to the pin housings inside the nacelle.
8. **2014-Later Models:** Identify and connect the stock twist grip sensor connectors within the fairing. Route and secure as noted previously. Proceed to step 11. **2013-Earlier Models:** Obtain the PVC tubing and the six-way black Molex pin housing from the Twist Grip Sensor Kit (purchased separately). Install the tubing over ALL of the wires coming from the twist grip sensor.

9. Insert each pin terminal from twist grip sensor into the correct cavity of the pin housing: From the **yellow** conduit, From the **black** conduit, Position the PVC tubing installed in earlier in the area of the radio or storage box. The tubing is moved to the proper location at final assembly.
 - a. Black wire to cavity 1
 - b. White wire to cavity 2
 - c. Red wire to cavity 3
 - d. Black wire to cavity 4
 - e. White wire to cavity 5
 - f. Red wire to cavity 6
10. Connect six-way black Molex pin housing from twist grip sensor to the black six-way socket housing inside the fairing.

NOTICE

Improperly aligned handlebars or components can contact the fuel tank when turned to the left or right. Contact with the fuel tank can cause cosmetic damage. (00372b)

11. Slowly turn handlebar to full left lock and full right lock. Verify there is no contact or binding. If contact occurs and the handlebars are properly centered, reorient the handlebar angle as necessary until proper clearance is attained.
12. Tighten riser screws:
Torque: 41–52 N·m (30–40 ft-lbs) *Hex socket head screws*

NOTE

The upper handlebar clamp screws MUST be final-tightened in the following sequence to make sure that proper clamping is achieved.

13. See Figure 3. Tighten upper handlebar clamp screws:
 - a. Tighten left side front screw (3):
Torque: 21.7–27.1 N·m (16–20 ft-lbs) *screw*
 - b. Tighten right side front screw (4):
Torque: 21.7–27.1 N·m (16–20 ft-lbs) *screw*
 - c. Tighten right side rear screw (5):
Torque: 21.7–27.1 N·m (16–20 ft-lbs) *screw*
 - d. Tighten left side rear screw (6):
Torque: 21.7–27.1 N·m (16–20 ft-lbs) *screw*

NOTE

There will be a slight gap between the upper clamps and the risers toward the rear of the handlebar after tightening.

14. Install a new (purchased separately) or original left handlebar grip on the new handlebar per the handlebar grip instruction sheet or the service manual.

15. Adjust positions of the switch housing and clutch lever assembly on the handlebar for rider comfort.
16. Tighten first the top, then the bottom **clutch-lever clamp** screws to:
Torque: 8.1–12.2 N·m (72–108 **in-lbs**) *screw*
17. Tighten first the lower, then the upper **switch housing** screws to:
Torque: 4–5.1 N·m (35–45 **in-lbs**) *screw*
18. Install new (purchased separately) or original right grip/throttle sleeve. See service manual.
19. Adjust position of the switch housing and the brake lever assembly on the handlebar for rider comfort. The brake master cylinder must be roughly level when vehicle is placed on sidestand and bars rotated to left steer-stop..

NOTE

*Tighten the top **brake lever clamp** screw before tightening the bottom screw.*

20. Tighten first the top, then the bottom brake lever clamp screws to:
Torque: 8.1–12.2 N·m (72–108 **in-lbs**) *screw*

NOTE

Tighten the lower switch housing screw before tightening the upper screw. This sequence leaves any gap in the switch housing at the front for best appearance.

21. Tighten first the lower, then the upper switch housing screws to:
Torque: 4–5.1 N·m (35–45 **in-lbs**) *screw*
22. Verify that the right grip/throttle sleeve rotates and returns freely, and does not bind on the handlebar or switch housing.

Final Assembly

▲ WARNING

Replace brake line gaskets. Re-using original gaskets can cause brake failure and loss of vehicle control, which could result in death or serious injury. (00318a)

NOTICE

Avoid leakage. Be sure gaskets, banjo bolt(s), brake line and caliper bore are clean and undamaged before assembly. (00321a)

1. Carefully inspect the **new** (sold separately) brake line for damage or defects. Replace if necessary. Install following the instructions included with the brake lines. Bleed the brakes per the service manual.
2. Install **new** clutch cable or hydraulic clutch line (sold separately) following the instructions included with **that** kit. Bleed the hydraulic clutch line per the service manual, if installed.

3. **2013-Earlier Models With Radio:** Install radio per service manual. **2013-Earlier Models Without Radio:** Install storage box per service manual. **2014-Later Models:** Lift and tip the inner fairing forward. Install fairing per service manual, using the fasteners removed earlier.
4. Position the PVC tubing on the twist grip sensor wires to prevent the wires chafing against the heat sink fins on the radio (if present) and the sharp edges of the radio or storage box mounting bracket inside the fairing.
5. Install fairing cap per service manual.
6. Install outer fairing per service manual.
7. **FLHX Models:** Install handlebar-mounted mirrors. See service manual.

SAFETY CHECK

▲ WARNING

Be sure that steering is smooth and free without interference. Interference with steering could result in loss of vehicle control and death or serious injury. (00371a)

- Make sure wires, clutch cables and brake lines do not pull tight when handlebars are turned to full left or right fork stops.
1. Verify that the ignition switch is OFF. Install the main fuse. Refer to the service manual.

▲ WARNING

Be sure that all lights and switches operate properly before operating motorcycle. Low visibility of rider can result in death or serious injury. (00316a)

2. Turn the ignition switch to IGNITION, but do not start the vehicle. Test all switches and lights for proper operation.
3. Turn the handlebar to the left and right steering stops, testing the handlebar control functions at each stop.
4. Apply front brake hand lever to test operation of the brake lamp.

▲ WARNING

Before starting engine, be sure throttle control will snap back to idle position when released. A throttle control that prevents engine from automatically returning to idle can lead to loss of control, which could result in death or serious injury. (00390a)

▲ WARNING

After repairing the brake system, 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. (00289a)

SERVICE PARTS

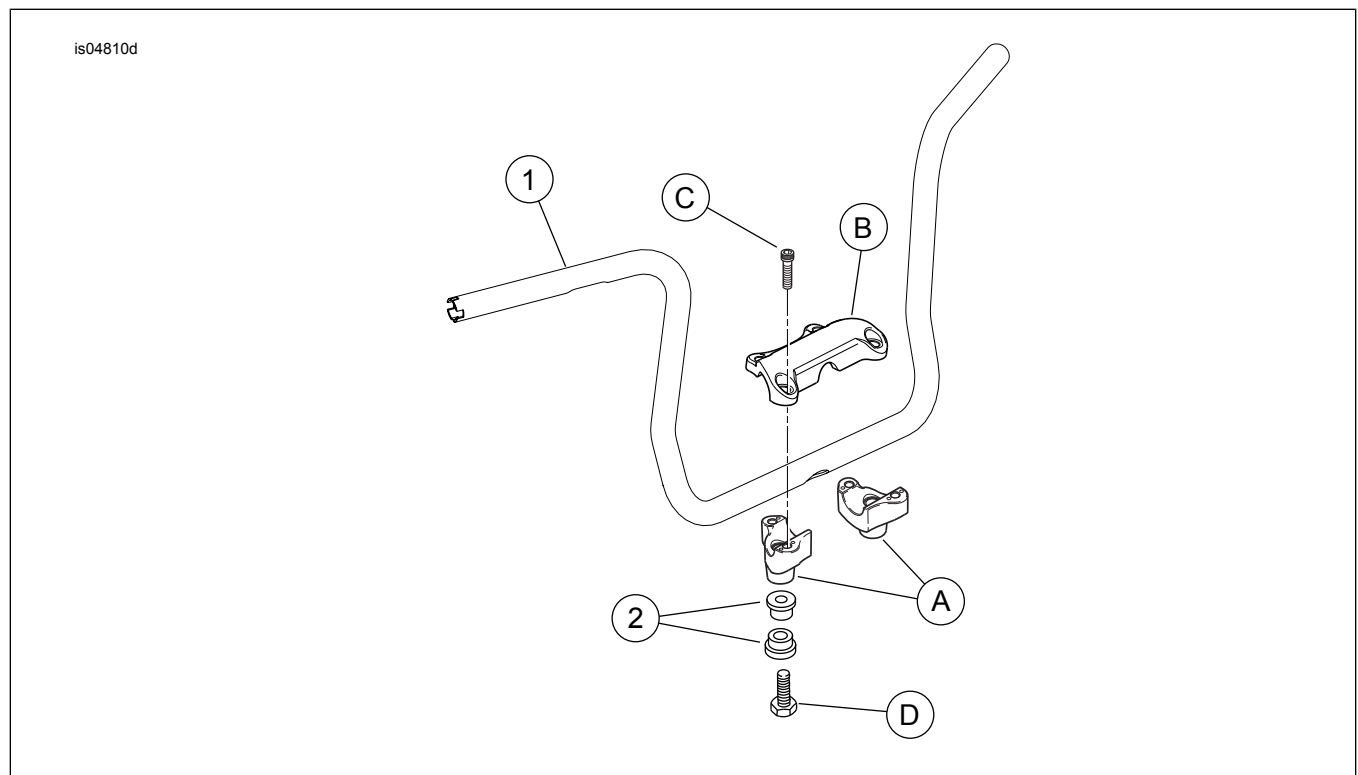


Figure 4. Service Parts: Handlebar Kits

Table 1. Service Parts

Kit	Item	Description (Quantity)	Part Number
Kit 57474-11	1	Handlebar	Not sold separately
Kit 57485-11	2	Handlebar bushing (4)	Not sold separately
Items mentioned in text, but not included in kit:			
	A	Original equipment (OE) handlebar riser (2)	
	B	OE upper handlebar clamp	
	C	OE handlebar clamp screw (4)	
	D	Screw (2)	
	E	Twist Grip Sensor Kit, Part No. 32310-08 (Purchased separately, for 2013-Earlier Models Only)	
	F	Small hole plug (2), Part No. 755 (Purchased separately, for 2013-Earlier FLHX Models Only)	
	G	Large hole plug (2), Part No. 732 (Purchased separately, for 2013-Earlier FLHX Models Only)	
	H	Hole plug (2), Not yet available (Purchased separately, for 2014-Later FLHX Models Only)	