INSTRUCTIONS

J04578 2021-01-21

BEACH HANDLEBAR KIT

GENERAL

Kit Number

55967-08, 55801328

Models

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

ABS Models

⚠ WARNING

The rider's safety depends upon the correct installation of this kit. Dealer installation is required for vehicles equipped with ABS brakes. Proper installation of this kit requires the use of special tools available only through a Harley-Davidson Dealer. An improperly serviced brake system can adversely affect brake performance, which could result in death or serious injury. (00578b)

Tools and Supplies Required

Separate purchase of additional parts or accessories is required for proper installation of this Handlebar Kit on your model motorcycle. Please 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 your model.

Ask a Harley-Davidson dealer about the selection of Genuine Motor Accessory clutch, throttle/idle cables, brake lines and hand grips that are available.

For Australia, Brazil, England, Europe and Japan, two special screws (Part Number 2935A) will also be required.

Loctite® 271 (Red) Threadlocker and Sealant (H-D Part Number 99671-97) is required for the proper installation of this kit.

Fresh, uncontaminated brake fluid from a sealed container will also be needed. Refer to the Owner's Manual for the appropriate brake fluid.

⚠ 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)

Motorcycles equipped with a **glued** left hand grip will also require a new grip, sold separately, or replace with accessory hand grips available from your Harley-Davidson dealer.

2008 and Later Touring models require the separate purchase of a Twist Grip Sensor Kit.

⚠ 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 references Service Manual information. A Service Manual for your model motorcycle is required for this installation and is available from a Harley-Davidson Dealer.

Kit Contents

See Figure 9 and Table 1.

REMOVAL

Preparation - All Models

⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative (-) cable first) before proceeding. (00307a)

⚠ WARNING

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

1. See the service manual and remove the seat and disconnect battery cables or remove the main fuse.

⚠ WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

2. **Softail and Dyna models:** See the service manual and loosen the fuel tank.

⚠ CAUTION

Direct contact of DOT 5 brake fluid with eyes can cause eye irritation, swelling, and redness. Avoid eye contact. In case of eye contact flush with large amounts of water and get medical attention. Swallowing large amounts of DOT 5 brake fluid can cause digestive discomfort. If swallowed, obtain medical attention. Use in well ventilated area. KEEP OUT OF REACH OF CHILDREN. (00144b)

⚠ 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

Immediately wipe up any brake fluid spills with a clean, dry, soft cloth. Follow up by thoroughly wiping affected area with a clean, damp, soft cloth (small spills) or washing with a large quantity of soapy water (large spills).

Cover nearby motorcycle surfaces with a polyethylene protective sheet to help protect against damage to finish caused by spilled D.O.T. 4 brake fluid.

3. See the service manual and drain the brake fluid from the front brake reservoir.

Handlebar Removal - Softail and Dyna Models

NOTE

Cover the front fender and the front of the fuel tank with clean shop towels to prevent scratching. Damage to the finish could result.

NOTICE

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

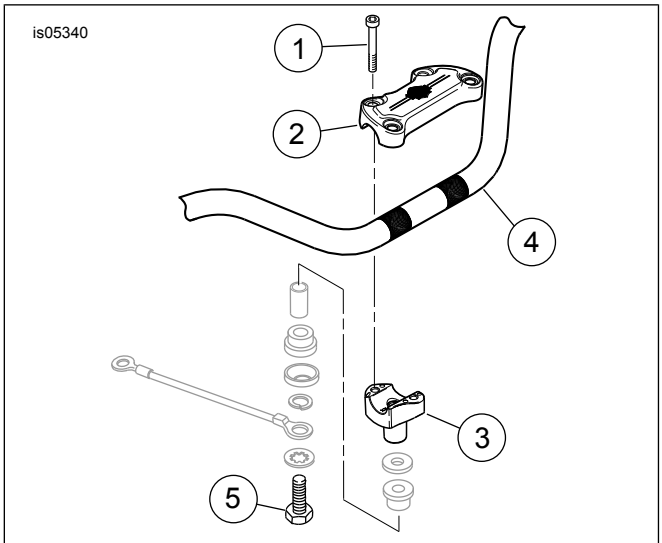
1. Note the front brake line routing and the orientation of the banjo fittings. See the service manual and disconnect and remove the brake line. Save the banjo bolts, but discard the brake line gaskets.
2. Remove the plastic wiring retainer clips that secure the turn signal harnesses to the handlebar.
3. Remove the front brake master cylinder and clutch lever assemblies from the handlebar.
4. See the service manual and disconnect the clutch cable from the clutch lever. **If the clutch cable is being replaced,** disconnect the clutch cable from the side cover and remove the cable from the vehicle.

NOTE

2007 and later models use Molex connectors. 2006 and earlier vehicles use Deutsch connectors. See the service manual for disconnection and connection procedures.

Note wire routing before disconnecting the handlebar wiring.

5. Disconnect the handlebar control wiring from the gray and black 6-way main harness connectors under the fuel tank.
6. Separate the 6-way turn signal connector halves.
7. See the service manual and perform the following:
   a. Remove the right side switch housing assembly and harness to access the throttle/idle cables.
   b. Disconnect the throttle/idle cables from the existing right hand grip/throttle sleeve assembly or remove them if replacing with new cables.
   c. Remove the left side switch housing assembly and wire harness.
8. See Figure 1. Remove and discard screws (1), upper clamp (2) and handlebar (4).



1. **Clamp screw (4)**
2. **Clamp**
3. **Handlebar riser (2)**
4. **Handlebar**
5. **Riser attaching screw (2)**

Figure 1. Handlebar Clamps and Risers

9. **If the left hand grip is not glued to the handlebar:** Remove the hand grip and set it aside for installation to the new handlebar, if desired.

NOTE

Note the sequence of the riser mounting hardware for correct installation.

10. Remove stock handlebar risers. Save hardware and risers for later installation as necessary.

NOTE

*DO NOT remove the wires from the connector **pin housings** under the fuel tank.*

11. Note the wire colors and positions in each cavity of the **socket housings** leading from the switches and from the turn signals. See the service manual and remove the wires from the socket housings.

12. Use tape to wrap the wire terminal ends **from each source** to make separate leaders. Wrap each leader tightly enough to enter the grommet hole and pass easily through the **new** handlebar. Proceed to **"INSTALLATION"**.

Handlebar Removal - 2007 & Earlier Touring Models

NOTE

Cover the front fender and the front of the fuel tank with clean shop towels to prevent scratching.

NOTICE

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

1. Remove and save the button head screw on the underside of the fork stem and bracket assembly that holds the brake line manifold tee.

2. Note the front brake line routing and the orientation of the banjo fittings. See the service manual and disconnect and remove the brake line. Save the banjo bolts, but discard the brake line gaskets.

3. Remove the plastic wiring retainer clips that secure the turn signal harnesses to the handlebar.

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

5. See the service manual and disconnect the clutch cable from the clutch lever. **If the clutch cable is being replaced,** disconnect the clutch cable from the side cover, and remove the cable from the vehicle.

6. See the service manual and remove the headlamp assembly from the headlamp nacelle.

NOTE

2007 and later models use Molex connectors. 2006 and earlier vehicles use Deutsch connectors. See the service manual for disconnection and connection procedures.

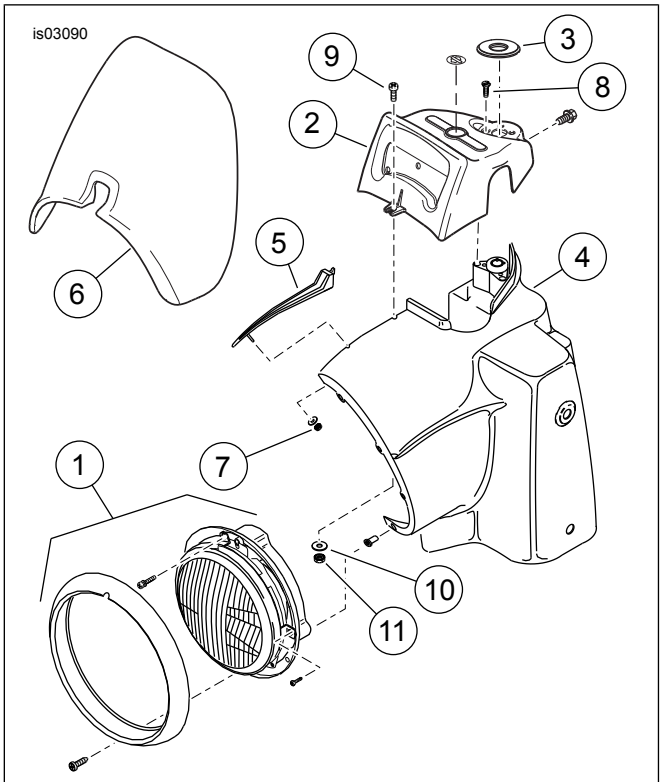
7. Disconnect the handlebar control wiring from the gray and black 6-way main harness connectors inside the headlamp nacelle. Separate the 6-way turn signal connector halves. Disconnect the electronic cruise control wiring from the two 4-way connectors if equipped.

8. See the service manual and perform the following:

   a. Remove the right side switch housing assembly and harness. This is necessary to access the throttle/idle cables.

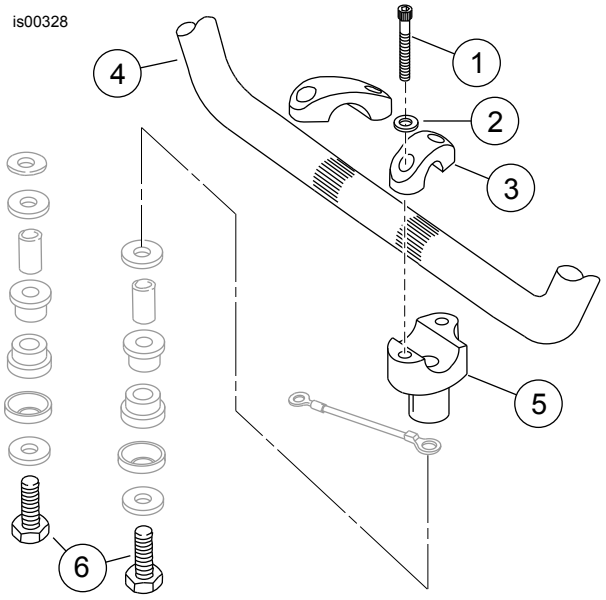
   b. Disconnect the throttle/idle cables from the existing right grip/throttle sleeve assembly.

   c. Remove the left side switch housing assembly and wire harness.



1. **Headlamp**
2. **Handlebar cover**
3. **Fork lock plate**
4. **Nacelle (left half)**
5. **Nacelle trim strip**
6. **Wind deflector**
7. **Flange nut**
8. **Flat head screw (2)**
9. **Pan head screw**
10. **Flat washer**
11. **Nut and washer**

Figure 2. Nacelle, Headlamp and Handlebar Cover (FLHRS Models)



1. **Clamp screw (4)**
2. **Flat washer (4)**
3. **Upper clamp (2)**
4. **Handlebar**
5. **Handlebar riser (2)**
6. **Riser mounting screw (2)**

Figure 3. Handlebar Clamps and Risers

9. See the service manual and follow the applicable steps to remove the handlebar cover, wind deflector and handlebar.

10. **If the left hand grip is not glued to the handlebar:** Remove the hand grip and set it aside for installation to the new handlebar, if desired.

NOTE

Note the sequence of the riser hardware for correct installation of new risers.

11. Remove and discard the stock handlebar risers. Save the hardware for later installation.

NOTE

2007 and later models use Molex connectors. 2006 and earlier vehicles use Deutsch connectors. See the service manual for terminal removal and installation procedures.

*DO NOT remove the wires connector **pin housings** inside the nacelle.*

12. Note the wire colors and positions in each cavity of the **socket housings** leading from the switches and from the turn signals. See the service manual and remove the wires from the socket housings.

13. Use tape to wrap the wire terminal ends **from each source** to make separate leaders. Wrap each leader tightly enough to enter the grommet hole and pass easily through the **new** handlebar. Proceed to **"INSTALLATION"**.

Handlebar Removal - 2008 & Later Touring Models

NOTE

Cover the front fender and the fuel tank with clean shop towels to prevent scratching.

NOTICE

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

1. Remove and retain the button head screw on the underside of the fork stem and bracket assembly that holds the brake line manifold tee.
2. Note the front brake line routing and the orientation of the banjo fittings. See the service manual and disconnect and remove the brake line. Save the banjo bolts, but discard the brake line gaskets.
3. Remove the front brake master cylinder and clutch lever assemblies from the handlebar.
4. See the service manual and disconnect the clutch cable from the clutch lever. **If the clutch cable is being replaced,** disconnect the clutch cable from the side cover and remove the cable from the vehicle.
5. See the service manual and remove the headlamp assembly from the headlamp nacelle.
6. See the service manual and disconnect the handlebar control wiring from the gray eight-way and black six-way main harness connectors inside the headlamp nacelle. Disconnect the electronic cruise control wiring from the two three-way connectors if equipped.
7. See the service manual and perform the following:
   a. Remove the right side switch housing assembly and harness. This is necessary to access the throttle/idle cables.
   b. Disconnect the throttle/idle cables from the existing right hand grip/throttle sleeve assembly.
   c. Remove the left side switch housing assembly and wire harness.
8. Remove and discard wire retaining clips attached to harnesses or the handlebar.
9. **If the left hand grip is not glued to the handlebar:** Remove the end cap from the grip if equipped. Remove the hand grip and set it aside for installation onto the new handlebar, if desired.
10. Remove the end cap from the existing right hand grip if equipped, then remove the grip from the handlebar.

NOTE

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

To remove the hand grip, a slight tug may be necessary to release the index pins in the hand grip from the receptacle in the seal cap.

If the throttle grip IS NOT being replaced: *After removing the grip, note if the seal cap is attached to the end of the twist grip sensor. If not, remove the seal cap from the index pins* ***inside*** *the throttle grip with a stiff piece of mechanics wire.*

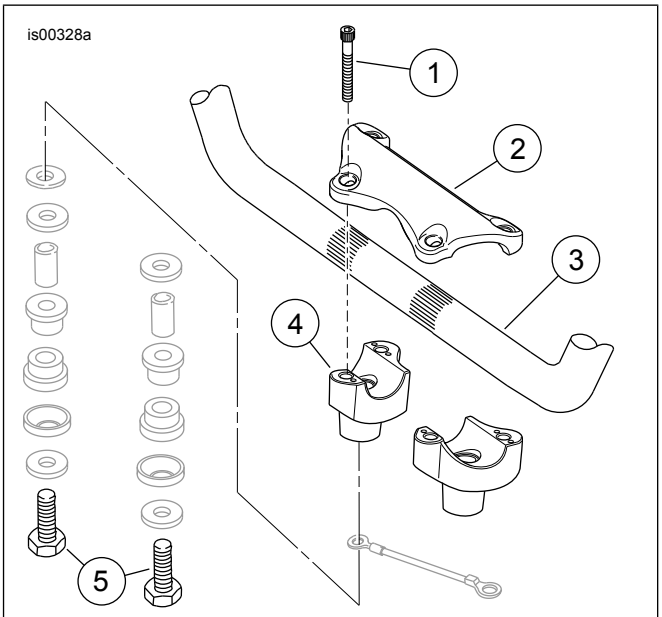
The original equipment (O.E.) twist grip sensor MUST be replaced with Twist Grip Sensor Kit (32310-08).

11. See the service manual and remove the O.E. twist grip sensor and twist grip sensor jumper harness. Save the jumper harness for later installation.

NOTE

For Australia, Brazil, England, Europe and Japan: *See Figure 2. The flat head screws (8) have break-away heads and are not easily removable. To remove screws with break-away heads, make a pilot hole in the top of each screw with a center punch and back out the screw with a 1/8 in. (3 mm) left-hand drill bit.*

If that fails, use a 3/16-inch (5 mm) long shank drill bit to carefully drill off the heads of the break-away screws. Use a pliers to remove the screw shafts from the fork lock.



1. **Clamp screw (4)**
2. **Upper clamp**
3. **Handlebar**
4. **Handlebar riser (2)**
5. **Riser attaching screw (2)**

Figure 4. Handlebar Clamp and Risers (FLHR Models)

12. See the service manual and follow the applicable steps to remove the handlebar cover, windshield and handlebar.

NOTE

Note the sequence of the riser mounting hardware for correct installation.

13. Remove and discard the original equipment (O.E.) handlebar risers. Save the hardware for later installation.

NOTE

DO NOT remove the wires from the Molex handlebar switch connector ***pin housings*** *inside the nacelle.*

14. Note the wire colors and positions in each cavity of the **socket housings** leading from the switches. Refer to the appropriate Service Manual. Remove the wires (with socket terminals) from the socket housings.

15. Use tape to wrap the wire terminal ends **from each source** to make separate leaders. Wrap each leader tightly enough to enter the grommet hole and pass easily through the **new** handlebar. Proceed to **"INSTALLATION"**.

INSTALLATION

New Handlebar Wiring - Dyna, Softail, 2007 and Earlier Touring Models

1. Remove the wire retaining clips that secures both switch harnesses to the handlebar.

2. See Figure 9. Slide the full-flange grommet (2) onto the left side switch harness and the partial-flange grommet (3) onto the right side switch harness, positioning the grommets close to the switch end.

NOTE

Apply a light coat of liquid soap, window cleaner or all purpose lubricant to harnesses before feeding them into the handlebar.

3. **For 2006 and later FXDB and FXDWG models:** Gently feed the right side turn signal wire into the small round grommet on the underside of the right side lower switch housing. Repeat for left side. **For all other models with handlebar mounted turn signals:** Gently feed the right side turn signal wire leader into the small round hole near the right side end of the new handlebar and toward the large opening in the center of the bar. Repeat for left side.

⚠ WARNING

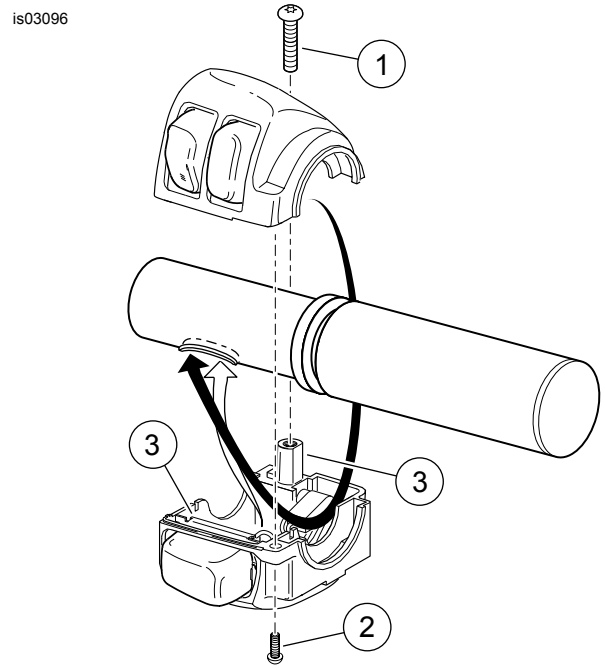
Carefully pull the wires through hole in handlebar to prevent stripping the wires. Stripped wires can cause short circuits and damage vehicle electrical components, which could cause loss of vehicle control resulting in death or serious injury. (00418b)

4. Pull the taped end of the wires through the hole at the center of the handlebar, one side at a time.

⚠ 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)

5. See Figure 5. Route the switch wire harness (and turn signal harness, if routed through the switch housing) through the switch housing. Gently feed the harnesses into the oblong switch wire hole near the right side end of the handlebar toward the center of the handlebar. Repeat for left side.



1. Upper switch housing screw
2. Lower switch housing screw
3. Pinch points

Figure 5. Switch Housing Wire Routing (Right Side Housing Shown)

⚠ WARNING

Grommets in each of the wiring holes in the handlebar must remain in position after routing the wiring through the handlebar. Operation without the grommets in place can damage wires, causing a short circuit which could result in death or serious injury. (00416d)

6. Pull the taped ends of the wires through the hole at the bottom center of the handlebar, one side at a time.

7. See Figure 9. Insert the grommets (2 and 3) into place in the holes in the handlebar.

8. Loosely fasten the brake lever and clutch lever clamps to the new handlebar.

9. Loosely fasten the handlebar switch housings to the new handlebar.

10. See Figure 9 :

    a. Cut each heat shrink tube (4 and 5) into two equal lengths.

    b. Slide one piece of the larger diameter tubing (4) over the end of each switch harness exiting the center hole of the handlebar (1).

    c. Slide one piece of the smaller diameter tubing (5) over the end of each turn signal harness exiting the center hole of the handlebar.

11. Remove the tape from the ends of the harnesses.

12. Check for electrical continuity between the handlebar and each wire in the harnesses. Continuity indicates a short circuit, which requires examination of the wires and routing in the switch housing.

NOTE

The heat shrink tubing on the harnesses exiting the bottom center of the handlebar must be installed to protect the wires from damage and short circuits at the center hole on the handlebar.

⚠ WARNING

Wires exiting the bottom center of the handlebar must be protected from wear with heat-shrink tubing at the wire-exit hole on the handlebar. Failure to protect wires with shrink tubing can cause short-circuits or severed wires, which could cause loss of vehicle control resulting in death or serious injury. (00432c)

13. Position the heat shrink tubing (previously installed on the harnesses) in the area of the center hole of the handlebar.

⚠ WARNING

Be sure to follow manufacturer's instructions when using the UltraTorch UT-100 or any other radiant heating device. Failure to follow manufacturer's instructions can cause a fire, which could result in death or serious injury. (00335a)

- Avoid directing heat toward any fuel system component. Extreme heat can cause fuel ignition/explosion resulting in death or serious injury.
- Avoid directing heat toward any electrical system component other than the connectors on which heat shrink work is being performed.
- Always keep hands away from tool tip area and heat shrink attachment.

14. Use a heat gun or suitable radiant heating device to shrink the heat shrink tubing to the harnesses.

New Handlebar Installation - Dyna, Softail, 2007 and Earlier Touring Models

1. See Figure 9. Install the risers onto the upper fork bracket with the saved hardware in the same sequence as removed. Snug the riser bolts, but do not fully tighten at this time.

2. Center the new handlebar on the risers.

3. Install handlebar upper clamps with clamp screws and flat washers. Snug the upper screws, but do not fully tighten.

4. **Dyna and Softail models:**

   a. Route the switch harnesses down through the large oval opening in the upper fork bracket, then route them to the switch connectors under the fuel tank as previously noted.

   b. Route both turn signal harnesses down through the large oval opening in the upper fork bracket, then route them to the 6-way turn signal pin housing under the right side of the fuel tank as previously noted.

NOTE

2007 and later models use Molex connectors. 2006 and earlier vehicles use Deutsch connectors. See the service manual for disconnection and connection procedures.

5. Refer to the notes made during the removal steps and the appropriate section and wiring diagrams in the Service Manual and proceed as follows:

   a. Insert each socket terminal from the left side switch harness into the correct cavity of the **gray** socket housing removed earlier.

   b. Insert each socket terminal from the right side switch harness into the correct cavity of the **black** socket housing removed earlier.

   c. Insert each socket terminal leading from the turn signals into the correct cavity of the Multilock socket housing removed earlier.

   d. Install the clips and/or wire guides saved earlier.

6. **Touring models:** Route switch and turn signal socket housings into the headlamp nacelle.

7. Connect the gray 6-way switch wire socket housing coming from the bottom center of the handlebar to the gray 6-way pin housing. Connect the black 6-way switch wire socket housing to the black 6-way pin housing.

8. Connect the black 6-way Multilock connector coming from the bottom center of the handlebar to the black 6-way Multilock pin housing.

⚠ WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

9. **Dyna and Softail models:** See the service manual and secure the fuel tank to the frame.

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)

10. Slowly turn the front wheel to the full right fork stop and then the full left fork stop to be sure the handlebar does not contact the fuel tank. If contact occurs and the handlebars are properly centered, raise the handlebar angle as necessary until proper clearance is attained.

NOTE

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

11. Tighten the upper handlebar clamp screws as follows:

    a. Tighten the front screws until the upper handlebar clamps make contact with the handlebar riser.

    b. Tighten rear screws to 16.3–21.7 N·m (12–16 ft-lbs).

    c. Tighten front screws to 16.3–21.7 N·m (12–16 ft-lbs).

12. One at a time, remove the riser bolts. Apply a small amount of Loctite® 271 (Red) to the bolt threads and install again. See the service manual and tighten the riser bolts to specification.

13. See the service manual, and follow the instructions given to install the throttle control cables and a new (purchased separately) or original right hand grip/throttle sleeve assembly.

14. Adjust the position of the switch housing and the brake lever assembly on the handlebar for rider comfort and posture. The brake master cylinder must be horizontally level.

NOTE

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

15. Tighten the top then the bottom brake lever clamp screws.

    Torque: 8–9 N·m (71–80 **in-lbs**) *screw*

NOTE

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

16. Tighten the lower then the upper **switch housing** screws.

    Torque: 4–5.1 N·m (35–45 **in-lbs**) *screw*

17. Verify that the right hand grip/throttle sleeve rotates and returns freely and does not bind on the handlebar or switch housing.

18. See Figure 9. Position a brake, throttle and idle cable clip (E, purchased separately) approximately 12 in (305 mm) from where the cables exit the throttle control. Insert the throttle and idle cables into the small diameter openings in the clip, then insert the brake cable into the larger opening.

NOTE

If the hand grips are patterned, align the pattern on the left hand grip with the pattern on the right hand grip while the throttle is in the fully-closed position.

19. Install a new (purchased separately) or original hand grip on the left end of the new handlebar according to the hand grip instruction sheet or the appropriate Service Manual.

20. See the service manual and adjust the positions of the switch housing and the clutch lever assembly on the handlebar for rider comfort and posture.

21. Tighten the top then the bottom clutch lever clamp screws.

    Torque: 8–9 N·m (71–80 **in-lbs**) *screw*

22. Tighten the lower then the upper **switch housing** screws.

    Torque: 4–5.1 N·m (35–45 **in-lbs**) *screw*

New Handlebar Wiring - 2008 and Later Touring Models

1. Obtain three pieces of string, mechanic's wire or equivalent, each of sufficient length to extend inside the handlebar, from the end of the bar to the lower center wire slot, plus 6-12 in. (15-30 cm) of additional length to extend beyond the openings.

    a. Tie a small weight (for example, a spare nut or washer small enough to fit through the center wire slot) to one end of each string.

    b. Insert the weighted end of **two** of the strings into the **right side** handlebar end, and tip the handlebar so that the weights and strings slide down the handlebar to the lower center wire slot. If necessary, an air hose can be used to blow the weights and strings through the handlebar to the center slot.

    c. While ensuring that the **non-weighted ends** of the strings remain extended out of the right side handlebar end, pull the **weighted ends** out of the lower center wire slot. Remove the weights from the strings.

    d. With a tweezers or similar tool, fish **one** string out through the **switch** wiring slot near the right side handlebar end. Allow the second string to remain extended out of the right side handlebar end.

    e. Repeat Steps 1b through 1d with the one remaining string and the **left side** handlebar end. Fish the string out through the **switch** wiring slot near the left side handlebar end.

2. If not already done, remove the plastic wiring retainer clips that secured both handlebar switch harnesses to the original handlebar.

NOTE

Pay attention to the style and orientation of the grommets so they will install into the switch harness slots correctly when the wire harnesses have been pulled through.

3. See Figure 9. Slide the full-flanged left side grommet (2), flange end first onto the **left side** switch harness, positioning the grommet close to the switch end. Slide the partial-flanged right side grommet (3), flange end first onto the **right side** switch harness, positioning the grommet close to the switch end, with the flange oriented toward the center of the handlebar.

NOTE

DO NOT use the O.E. twist grip sensor with the new handlebar. The small green connector on the O.E. sensor is not compatible with internally wired handlebars. The O.E. sensor MUST be replaced with Twist Grip Sensor Kit (32310-08).

4. Use tape to wrap the wire terminals on the ends of the twist grip sensor wires to make a single leader. Wrap the leader tightly enough to pass easily through the **new** handlebar.

5. Tie the end of the string from the right side handlebar end hole to the twist grip sensor harness.

6. Tie the end of the string from the right side **switch wire** hole to the right side switch harness.

NOTE

Apply a light coat of liquid soap, window cleaner or all purpose lubricant to harnesses before feeding the harnesses into the handlebar.

⚠ 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)

7. Gently feed the twist grip sensor harness into the right side handlebar end. See Figure 5. Route the right side switch wire bundle through the switch housing as shown. Gently feed the harness into the right side switch wire hole. Pull the bundles down through the new handlebar and toward the center of the bar, while fitting the index tabs on the twist grip sensor into the slots on the end of the handlebar. One index tab and slot are smaller than the other for ease of 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)

8. Pull the taped ends of the wire harnesses through the center hole of the handlebar.

⚠ WARNING

Grommets in each of the wiring holes in the handlebar must remain in position after routing the wiring through the handlebar. Operation without the grommets in place can damage wires, causing a short circuit which could result in death or serious injury. (00416d)

9. Tie the end of the string from the left side **switch wire** hole to the left side switch harness.

10. Route the left side switch harness through the switch housing similar to that shown in Figure 5 for the right side wiring. Feed the harness into the left side switch wire hole. Pull the bundle down through the new handlebar and toward the center of the bar.

NOTE

Insert the right side grommet into the handlebar slot with the flange toward the center of the bar.

11. See Figure 9. Insert the switch wire grommets (2 and 3) into place in the switch wire holes in the handlebar.

12. Loosely fasten the brake lever and clutch lever clamps to the new handlebar.

13. Loosely fasten the handlebar switch housings to the new handlebar.

14. See Figure 9 :

    a. Cut the 4 in. (102 mm) long piece of heat shrink tubing (4) from the kit into two equal pieces.

    b. Slide one piece of the tubing over the end of each switch harness exiting the center hole of the handlebar.

15. Remove the tape from the ends of the harnesses.

16. Check for electrical continuity between the handlebar and each wire in the harnesses. Continuity indicates a short circuit, which requires examination of the wires and routing in the switch housing.

NOTE

The heat shrink tubing on the harnesses exiting the bottom center of the handlebar must be installed to protect the wires from damage and short circuits at the wire exit hole on the handlebar.

⚠ WARNING

Wires exiting the bottom center of the handlebar must be protected from wear with heat-shrink tubing at the wire-exit hole on the handlebar. Failure to protect wires with shrink tubing can cause short-circuits or severed wires, which could cause loss of vehicle control resulting in death or serious injury. (00432c)

17. Position the heat shrink tubing in the area of the center of the handlebar.

⚠ WARNING

Be sure to follow manufacturer's instructions when using the UltraTorch UT-100 or any other radiant heating device. Failure to follow manufacturer's instructions can cause a fire, which could result in death or serious injury. (00335a)

- Avoid directing heat toward any fuel system component. Extreme heat can cause fuel ignition/explosion resulting in death or serious injury.
- Avoid directing heat toward any electrical system component other than the connectors on which heat shrink work is being performed.
- Always keep hands away from tool tip area and heat shrink attachment.

18. Use a heat gun or suitable radiant heating device to shrink the heat shrink tubing to the harnesses.

New Handlebar Installation - 2008 and Later Touring Models

1. See Figure 6. Position each riser with the mounting hole (8) to the outside as shown. Install the new risers onto the upper fork bracket with the saved hardware in the same sequence as removed. Snug the riser bolts, but do not fully tighten at this time.

2. Center the new handlebar (9) on the risers.

3. Position the **new** handlebar upper clamps (included in the Handlebar Riser Kit) with the rounded "lobes" (10) outboard, as shown, and loosely install with **new** clamp screws and flat washers from the kit.

NOTE

The handlebar upper clamps are machined to leave a gap between the clamp and riser on one side of the handlebar when installed. The non-gap side will be to the rear of the handlebar on the left clamp and to the front on the right clamp when the lobes are oriented outward.

4. Snug the upper clamp screws, but do not fully tighten, in the following sequence:

   a. Snug **only** the rear screw (1) on the left side clamp.

   b. Snug **only** the front screw (2) on the right side clamp.

NOTE

See the service manual for disconnection and connection procedures.

5. Insert each socket terminal from the right side switch harness into the correct cavity of the black socket housing removed earlier.

6. Connect the gray socket housing to the gray eight-way pin housing inside the nacelle. Connect the black socket housing to the black six-way pin housing inside the nacelle. If equipped, connect the three-way cruise control pin and socket housings in the same manner.

7. Obtain the PVC tubing from the Twist Grip Sensor Kit (purchased separately). Install the tubing over ALL of the wires coming from the twist grip sensor.

8. Obtain the six-way black Molex pin housing from the Twist Grip Sensor Kit (purchased separately). Insert each pin terminal from the twist grip sensor into the correct cavity of the pin housing as follows: From the **yellow** conduit, From the **black** conduit,

   a. BLACK wire to cavity 1

   b. WHITE wire to cavity 2

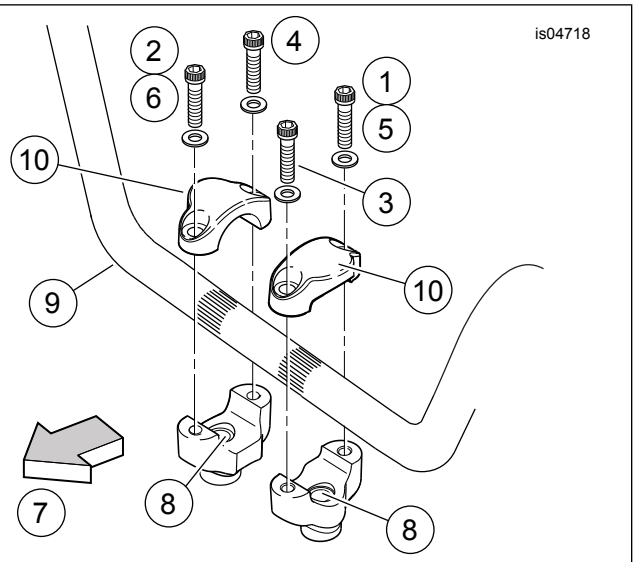
   c. RED wire to cavity 3

   d. BLACK wire to cavity 4

   e. WHITE wire to cavity 5

   f. RED wire to cavity 6

9. Connect the six-way black Molex pin housing from the twist grip sensor to the black six-way socket housing inside the nacelle. Position the previously installed PVC tubing to prevent chafing of the twist grip sensor wires inside the nacelle.



1. Snug left rear screw
2. Snug right front screw
3. Tighten left front screw
4. Tighten right rear screw
5. Tighten left rear screw
6. Tighten right front screw
7. Front of vehicle
8. Riser mounting holes to outside
9. Handlebar
10. Upper clamp lobes to outside

Figure 6. Handlebar and Clamp Assembly to Risers

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)

10. Slowly turn the front wheel to the full-right fork stop and then the full-left fork stop to be sure the handlebar does not contact the fuel tank. If contact occurs and the handlebars are properly centered, raise the handlebar angle as necessary until proper clearance is attained.

NOTE

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

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

11. See Figure 6. Tighten the upper handlebar clamp screws as follows:

   a. Tighten the left side rear screw (1) until the left side handlebar clamp makes contact with the rear of the handlebar riser.

   b. Tighten the right side front screw (2) until the right side handlebar clamp makes contact with the front of the handlebar riser.

   c. Tighten the left front screw (3).

      Torque: 16.3–21.7 N·m (12–16 ft-lbs) *screw*

d. Tighten the right rear screw (4).

Torque: 16.3–21.7 N·m (12–16 ft-lbs) *screw*

e. Tighten the left rear screw (5).

Torque: 16.3–21.7 N·m (12–16 ft-lbs) *screw*

f. Tighten the right front screw (6).

Torque: 16.3–21.7 N·m (12–16 ft-lbs) *screw*

12. One at a time, remove riser bolts. Apply a small amount of threadlocker to bolt threads and install. Tighten.

Torque: 41–54 N·m (30–40 ft-lbs) *bolt*
Consumable: LOCTITE 271 HIGH STRENGTH THREADLOCKER AND SEALANT (RED) (Loctite 271)

13. Install a new (purchased separately) or original hand grip on the left end of the new handlebar according to the hand grip instruction sheet or an appropriate Service Manual.

14. Adjust the positions of the switch housing and the clutch lever assembly on the handlebar for rider comfort.

15. Tighten top then bottom clutch lever clamp screws.

Torque: 8.1–12.2 N·m (72–108 **in-lbs**) *screw*

16. Tighten the lower then the upper switch housing screws.

Torque: 4–5.1 N·m (35–45 **in-lbs**) *screw*

NOTE

If the hand grips are patterned, align the pattern on the right hand grip with the pattern on the left hand grip while the throttle is in the fully-closed position.

17. Refer the appropriate Service Manual, and follow the instructions given to install the new (purchased separately) or original right hand grip/throttle sleeve.

18. Adjust the position of the switch housing and the brake lever assembly on the handlebar for rider comfort. The brake master cylinder must be level.

NOTE

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

19. Tighten top then bottom brake lever clamp screws.

Torque: 8.1–12.2 N·m (72–108 **in-lbs**) *screw*

NOTE

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

20. Tighten lower then upper switch housing screws.

Torque: 4–5.1 N·m (35–45 **in-lbs**) *screw*

21. Verify that the right hand grip/throttle sleeve rotates and returns freely and does not bind on the handlebar or switch housing.

FINAL ASSEMBLY

Softail and Dyna Models

⚠ 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** brake line for damage or defects, and replace if damaged. Install the brake line per the Service Manual instructions or the instructions included with the Brake Line Kit.
2. See the service manual and bleed the brakes.
3. See the service manual and install the clutch cable to the clutch lever or install a **new** clutch cable (sold separately).

Touring Models

⚠ WARNING

The rider's safety depends upon the correct installation of this kit. Dealer installation is required for vehicles equipped with ABS brakes. Proper installation of this kit requires the use of special tools available only through a Harley-Davidson Dealer. An improperly serviced brake system can adversely affect brake performance, which could result in death or serious injury. (00578b)

1. To avoid possible damage to the brake hose, verify that the trim strips remain installed on the inside edges of the headlamp nacelle. Replace the strips if missing, cracked or broken.

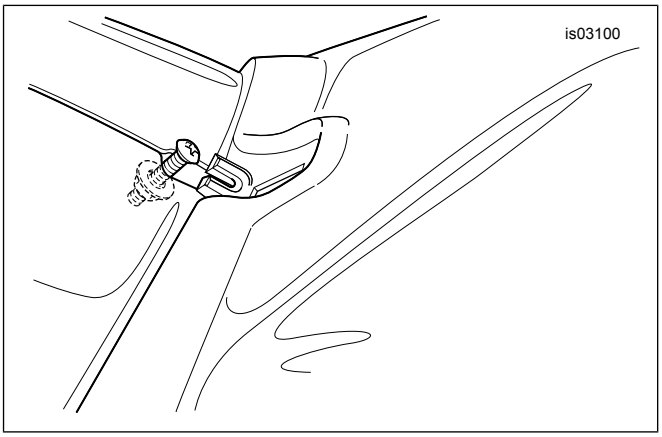


Figure 7. Wind Deflector Assembly to Nacelle (FLHRS Models)

2. **Models with wind deflectors:**

   a. See Figure 9. Obtain **new** handlebar clamp cover (D, sold separately), and wind deflector and three hex head serrated flange screws saved earlier. Fasten cover to wind deflector with screws and alternately tighten.

      Torque: 16.3–24.4 N·m (12–18 ft-lbs) *screw*

   b. Position the deflector and cover assembly onto the flange at the top of the headlamp nacelle.

   c. Loosely assemble the pan head screw, flange nut and flat washer removed earlier.

   d. See Figure 7. Holding screw assembly, reach inside headlamp nacelle and insert **just the screw head** up through the opening to engage slot in tab at front of wind deflector. The nut and flat washer should remain inside the nacelle. Tighten.

      Torque: 1.1–2.3 N·m (10–20 **in-lbs**) *screw*

3. **Models without wind deflectors:** See Figure 8. Loosen the two acorn nuts securing the left half of the nacelle (see arrows). Repeat for the right half of the nacelle.

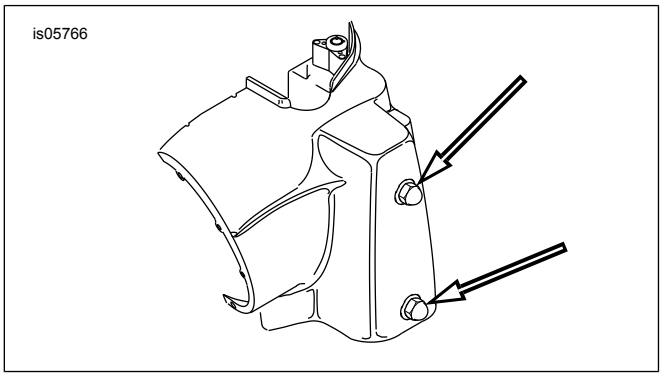


Figure 8. Headlamp Nacelle Fasteners (FLHR Models)

4. See Figure 9. **For North America:** Obtain a **new** handlebar clamp cover (D, sold separately), and the two **flat head** Phillips screws (B, saved earlier). **For Australia, Brazil, England, Europe and Japan:** Obtain a **new** handlebar clamp cover (D, sold separately), and two **new** screws (B, part number 2935A, purchased separately).

5. See Figure 9. Position cover onto flange at top of headlamp nacelle. Install two screws (B) to secure handlebar clamp cover to fork lock mechanism. **For North America:** Tighten flat head Phillips screws.

   Torque: 1.1–2.3 N·m (10–20 **in-lbs**) *screw*

6. **For Australia, Brazil, England, Europe and Japan:** Tighten the special T-27 TORX® screws until the break-away heads snap off.

7. Press the original fork-lock label plate (A) into position on the handlebar cover.

8. Obtain **pan head** Phillips screw, nut and flat washer removed earlier. Insert screw (C) through hole at front of handlebar cover and top of headlamp nacelle. Reach inside nacelle and install nut and flat washer onto screw threads. Tighten.

   Torque: 1.1–2.3 N·m (10–20 **in-lbs**) *screw*

9. Obtain nacelle trim strip and serrated flange nut removed earlier. Insert hook on trim strip into slot on handlebar cover. Insert weld stud on trim strip into hole at top of headlamp nacelle, and reach inside nacelle to install the flange nut. Tighten.

   Torque: 1.7–2.3 N·m (15–20 **in-lbs**) *nut*

10. Install headlight into nacelle. See service manual.

11. See Figure 8. Tighten two acorn nuts securing left half of the nacelle.

    Torque: 8.1–12.2 N·m (72–108 **in-lbs**) *hex acorn nut*

12. Repeat for right half of nacelle.

⚠ 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)

13. Carefully inspect the **new** brake line or lines (sold separately) for damage or defects, and replace if damaged. Install per the instructions included with the brake lines.

14. See the service manual and bleed the brakes.

15. See the service manual and install the clutch cable to the clutch lever or install a **new** clutch cable (sold separately).

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)

- Be sure wires, clutch cables, throttle/idle cables and brake lines do not pull tight when handlebars are turned fully to left or right fork stops.

⚠ WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

1. Verify that the ignition/light key switch is turned to the OFF position. See the service manual and connect the battery cables or install the main fuse.

⚠ 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/light key switch to IGNITION and test each handlebar switch for proper operation.

3. **For 2005 and earlier FXDL and FXDWG models:**

⚠ WARNING

Be sure plug in lower forward section of rear fender is installed. Operation without plug installed could allow tire contact with wiring harness. Tire contact with wiring harness can cause wire damage, which could result in death or serious injury. (00456b)

- Inspect the lower forward section of the fender inside the rear wheel well. A 3 inch (76 mm) square hole in the fender should be covered with a rubber plug.
- If the plug is damaged, loose or missing, it MUST be replaced (Part Number 59150-90, available from a Harley-Davidson dealer). Without this plug in place, the wire harness could come out of the opening and contact the rear tire, causing rear lighting failure or other serious electrical problems.

4. **All Models:**

5. Turn the handlebar to the left and right steering stops, testing the handlebar control functions at each stop.
6. Apply the front brake hand lever to test operation of the brake lamp.
7. Verify that the throttle operates properly.
8. Refer to the Service Manual and follow instructions to install the seat.

⚠ WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

⚠ 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

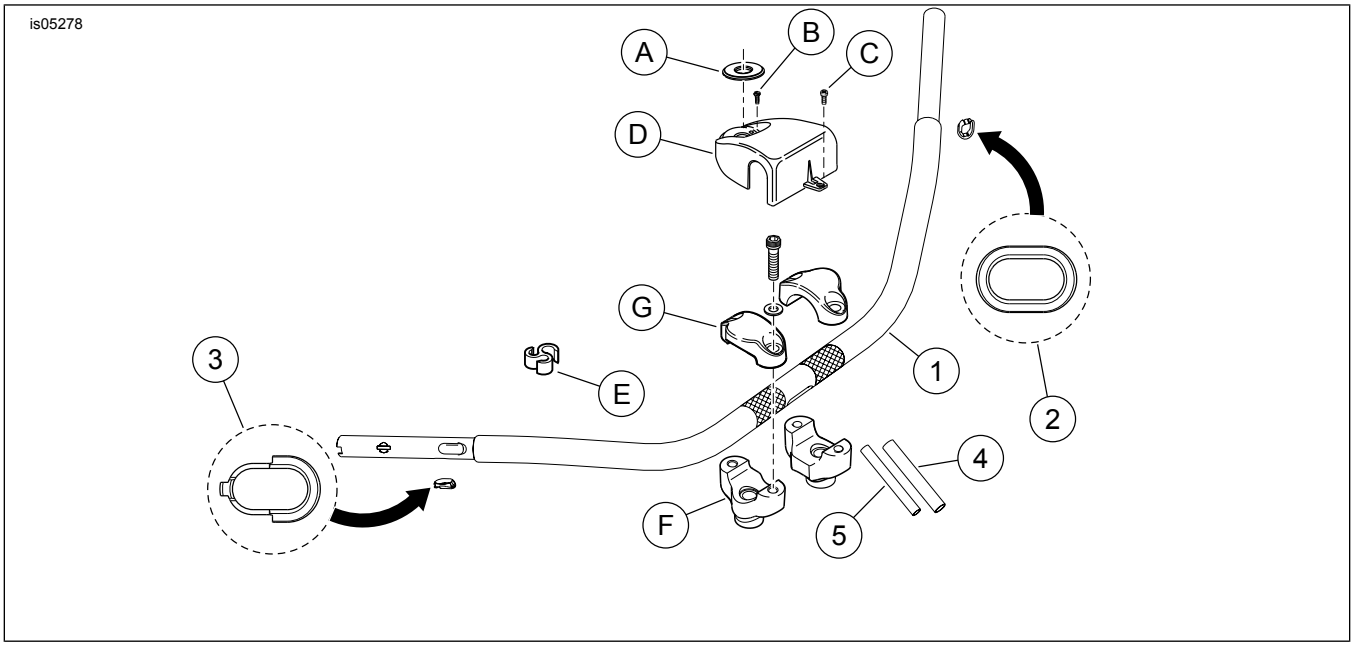


Figure 9. Service Parts for Beach Handlebar Kit (55967-08)

Table 1. Service Parts, Handlebar Kit

Item	Description (Quantity)	Part Number
1	Handlebar	Not sold separately
2	Handlebar grommet, left side (with full flange)	11403A
3	Handlebar grommet, right side (with partial flange)	11642
4	Heat shrink tube	72162-02
5	Heat shrink tube	72165-02

Table 1. Service Parts, Handlebar Kit

Item	Description (Quantity)	Part Number
Items mentioned in text, but not included in Handlebar Kit:		
A	Fork lock plate (Touring models only)	
B	Flat head screws (2, North America, Touring models only)	2933
	Break away flat head TORX screws (2, Australia, Brazil, England, Europe and Japan, Touring models only)	2935A
C	Pan head screw (Touring models only)	
D	Handlebar cover (purchase separately, Touring models only)	67893-02
E	Clip, 3-way (Touring models only)	70488-02
F	Handlebar riser (2)	
G	Handlebar upper clamp (2)	
H	Twist grip sensor (not shown, 2008 and later Touring model option)	32310-08