

SERVICE BULLETIN



M-1071

Safety Recall Code 091

July 22, 1998

1994-1998 FL TOURING MODEL IGNITION SWITCH

General

As recently advised in ML-354, Harley-Davidson has decided that a defect that relates to motorcycle safety exists with the ignition switch on all 1994 through 1998 FL Touring model motorcycles.

Harley-Davidson has determined that the affected motorcycles may be subject to a loss of electrical power through the ignition switch. This condition could cause the engine to fail to start, operate erratically or lose power. This loss of engine power could occur with or without obvious warning.

As a precautionary measure, Harley-Davidson has elected to initiate a voluntary recall campaign in the interest of motor vehicle safety and customer satisfaction. This voluntary recall applies to 1994 through 1998 FL Touring model motorcycles.

The models involved are:

FLHS	FLHT	FLHTC	FLHTCI	FLHTCU
FLHTCUI	FLHTP	FLHTPI	FLTC	FLTCU
FLTCUI	FLTR	FLTRI		

All potentially affected vehicles are being recalled for the replacement of the circuit breaker, ignition switch and installation of a keyswitch jumper harness or replacement of the circuit breaker and installation of the relay kit. Attached is a list which contains the vehicle identification numbers (VIN) of all vehicles that were delivered to your dealership and are involved in this recall campaign.

To ensure rider safety, it is your responsibility to perform the required service on all affected vehicles even if the motorcycle was not purchased from your dealership. You will be required to perform the required service on all affected vehicles in your dealership inventory prior to selling or leasing those vehicles.

If you are not sure that a safety recall has been completed on a particular motorcycle, contact the Harley-Davidson Recall Information Line at 1-800-448-1708 for a computer check of our recall records.

IMPORTANT NOTE

Because only registered owners will receive notification from us, we request that you contact any owners of vehicles that your records show as unregistered. Advise them of the safety recall and make arrangements for them to come in for recall service. We also require that you provide us with their names, addresses and VIN's as soon as possible to enable us to mail them an owner's letter, as required by the National Traffic and Motor Vehicle Safety Act (as amended).

Kit usage

Kit **93857** is to be used **ONLY** on 1998 unsold or sold but not delivered motorcycles built after January 14, 1998. These motorcycles are identified on pages 14 through 17 of the bulletin. Motorcycles from this list used as "demos" must use Kit 93858.

Kit **93858** is to be used on all motorcycles with the exception of those identified above.

Kit Shipment

Kit **93857** - Your total requirements of the kits will automatically be shipped to you on or about July 22, 1998. All kits will be shipped no charge, transportation paid. If additional kits are needed, fill in the attached order form and send it to the attention of the Warranty Department.

Kit **93858** - Your initial shipment of kits will be a percentage of your total kit requirements. We will make a second automatic shipment of kits which will also be a percentage of your remaining requirements. After you receive your second automatic shipment, fill in the attached order form and send it to the attention of the Warranty Department. As stated above, all kits will be shipped no charge, transportation paid.

The Safety Recall Kits contain the following items.

Kit 93857

Qty.	Description
1	jumper harness, keyswitch
1	Circuit breaker, 40A
2	Tie wrap

Kit 93858

Qty.	Description
1	jumper harness, keyswitch
1	Circuit breaker, 40A
1	Switch, Ignition
1	Decal
2	Gasket
5	Tie wrap
1	Adapter terminal
1	Screw

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO. 1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	TECHNICIAN NO. 4	RETURN THIS TO:
INITIAL HERE									

1998 Harley-Davidson® Inc.

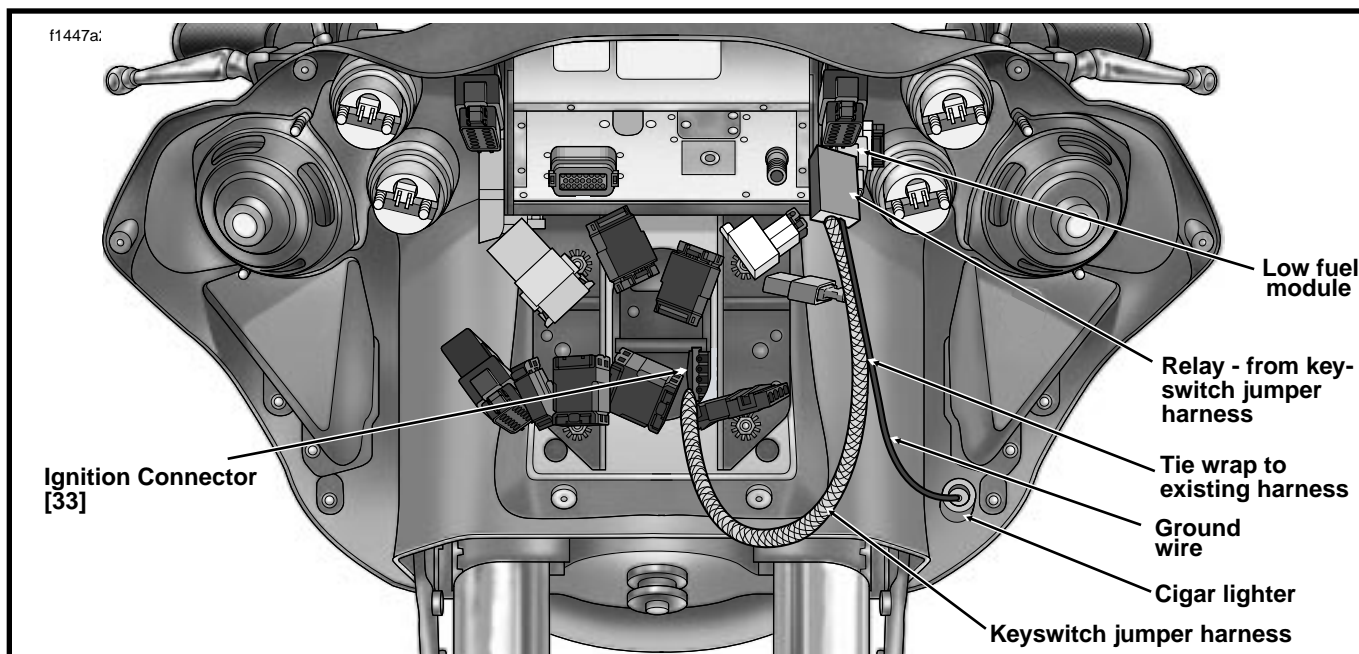


Figure 1. FLTR/I - Existing harness removed for clarity

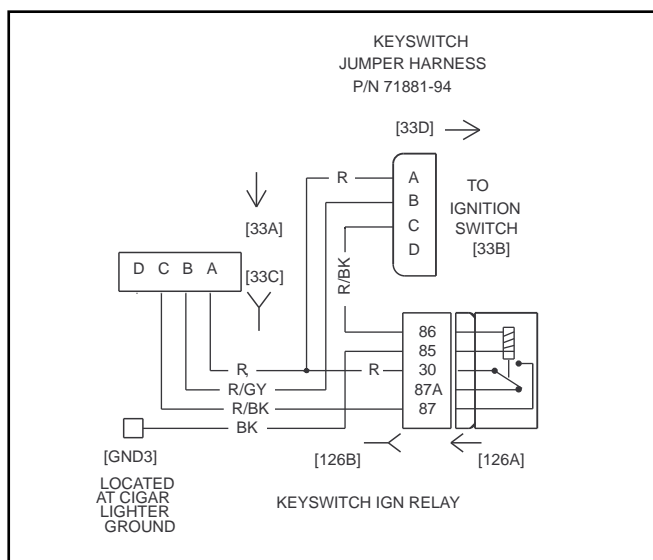


Figure 2. Harness Connections

1998 FLTR/I

Kit 93857 - Installation

1. Remove seat.

⚠WARNING

To protect against shock and accidental start-up of vehicle, disconnect the battery cables before proceeding. Always disconnect the negative battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

2. Unthread bolt from terminal nut and remove battery negative (-) cable and spacer from battery terminal.

3. Place protective material on top of front fender to protect paint from scratches or other damage.
4. Standing on left side of vehicle, use a T25 TORX drive head to remove screw just below glove compartment.
5. Remove screw at edge of fairing outboard of the left speaker.
6. Loosen top left and right screws just outboard of the fuel and volt gauges, respectively.
7. Remove screw at edge of fairing outboard of the right speaker.
8. Remove screw just below right side glove compartment.
9. In area of front turn signal lamp, remove two acorn nuts with flat washers from studs. Repeat step on left side of vehicle.
10. Turning handlebar to access stud plate, push on ends of studs to release stud plate from inboard side of left fairing support. Repeat step to remove stud plate from right fairing support.
11. Remove top left and right screws just outboard of the fuel and volt gauges, respectively (previously loosened).
12. Raise outer fairing slightly and then rest on protective fender pad.
13. Squeeze two external tabs to disconnect headlamp harness connector.
14. Install keyswitch jumper harness between connector [33] halves.
15. Pull ground wire out of conduit and install on ground lug of cigar lighter.
16. Remove "forward" screw retaining low fuel module and swing the module down, pivoting on the remaining screw. Using the screw removed from the low fuel module attach the relay at the vacant hole. Secure the keyswitch jumper harness and ground wire to existing harness with tie wraps. See Figure 1.

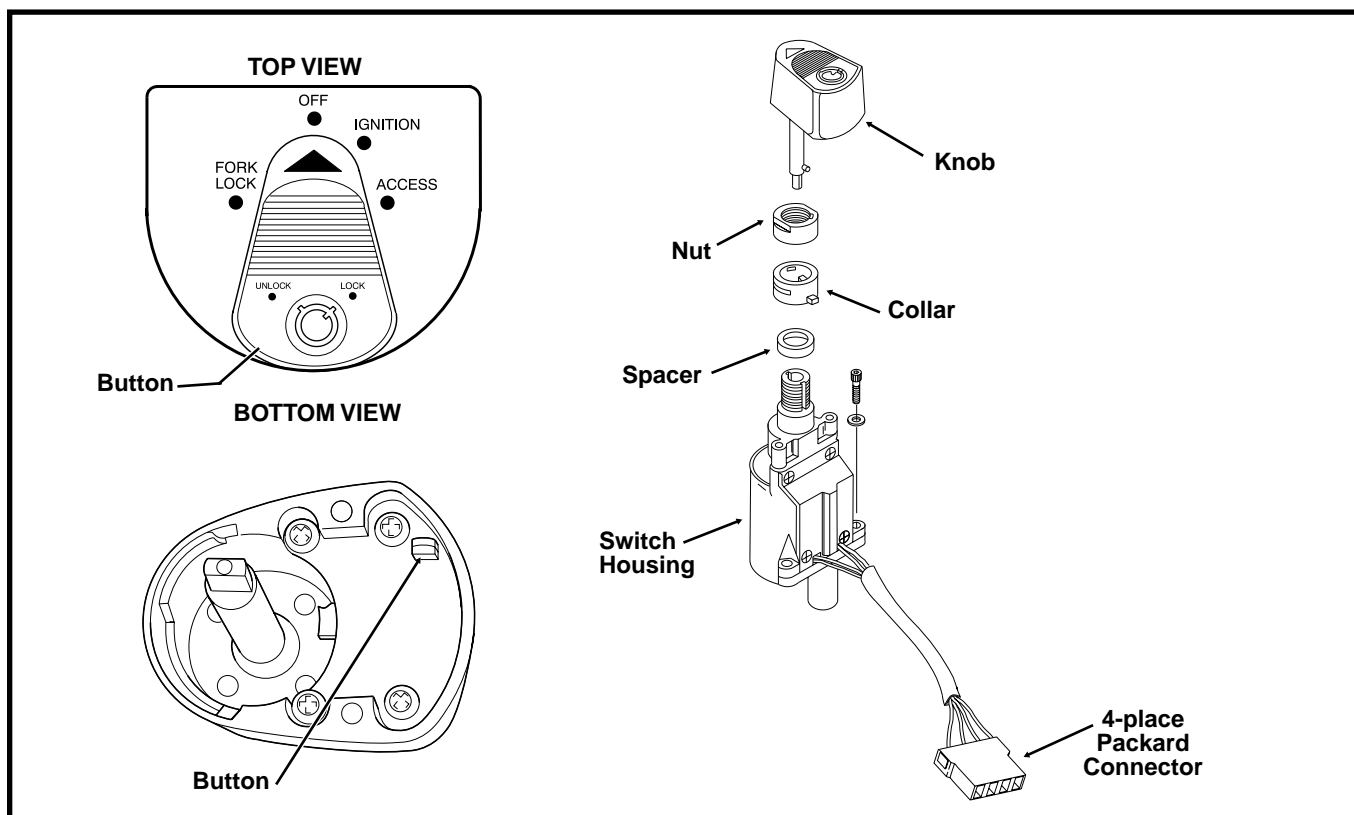


Figure 3. Ignition Switch

17. Place outer fairing into position against inner fairing. Two slots in outer fairing must fully engage hooks on radio bracket. Move harness conduit and wiring as necessary to ensure full engagement between outer and inner fairing.
18. Move to side of outer fairing to verify that alignment tabs are properly engaged. Alignment tabs on inner fairing must be positioned outboard of those on the outer fairing. Repeat step on opposite side of vehicle.
19. Remove 50A main circuit breaker and replace with 40A breaker (red in color) from kit.
20. Insert bolt through battery negative (-) cable, spacer and negative battery terminal. Thread bolt into terminal nut and tighten to 40 in-lbs (4.5 Nm).

⚠ WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

21. Install seat.

⚠ WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation and startle the rider, causing loss of control and personal injury.

Kit 93858 - Installation

NOTE

Leave windshield in place during outer fairing removal.

1. Remove seat.

⚠ WARNING

To protect against shock and accidental start-up of vehicle, disconnect the battery cables before proceeding. Always disconnect the negative battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

2. Unthread bolt from terminal nut and remove battery negative (-) cable and spacer from battery terminal.
3. Place protective material on top of front fender to protect paint from scratches or other damage.
4. Standing on left side of vehicle, use a T25 TORX drive head to remove screw just below glove compartment.
5. Remove screw at edge of fairing outboard of the left speaker.
6. Loosen top left and right screws just outboard of the fuel and volt gauges, respectively.
7. Remove screw at edge of fairing outboard of the right speaker.
8. Remove screw just below right side glove compartment.

9. In area of front turn signal lamp, remove two acorn nuts with flat washers from studs. Repeat step on left side of vehicle.
10. Turning handlebar to access stud plate, push on ends of studs to release stud plate from inboard side of left fairing support. Repeat step to remove stud plate from right fairing support.
11. Remove top left and right screws just outboard of the fuel and volt gauges, respectively (previously loosened).
12. Raise outer fairing slightly and then rest on protective fender pad.
13. Squeeze two external tabs to disconnect headlamp harness connector.
14. Using a T25 TORX drive head, remove screw on left and right side of instrument bezel.
15. Use thumbs to push tab at rear of bezel from slot above speedometer and fuel tank. Gently raise free side of bezel until tabs on left and right sides of instrument nacelle become disengaged from slot at top of bezel (slot is concealed behind decorative adhesive strip).
16. Rotate knurled nut at back of speedometer gauge to release speedometer drive cable.
17. At lower right side of instrument nacelle, remove knurled nut to free odometer reset knob. Pull reset knob (with rubber washer) from hole in instrument nacelle.
18. Remove bezel from vehicle.
19. Pull throttle cable clip from hole on upper right side of instrument nacelle.
20. To remove the ignition switch knob, first turn the Ignition Switch key to UNLOCK and then turn the knob to ACCESS. Depress the release button at bottom (left side) with a small screwdriver, and while pushing key down, turn 60 degrees in a counter-clockwise direction. Lift and remove knob, See Figure 3.
21. Using a 7/8 inch wrench on flats, loosen switch nut and remove from threaded post of ignition switch housing. Remove collar and spacer.
22. Remove the switch position plate from threaded post of ignition switch housing.
23. Using a T40 TORX drive head, remove two bolts to release left side of instrument nacelle from fork side.
24. Using a T40 TORX drive head, remove two bolts to release right side of instrument nacelle from fork side.
25. Allow left and right sides to hang on each side of forks. Separate to allow access to ignition switch housing screws.
26. Remove screws from ignition switch housing and remove housing from triple clamp bore.
27. Unplug ignition switch connector at inner fairing (near tunnel opening of inner fairing mount in the 5 o'clock position).
28. Using a piece of wire, pull ignition switch and harness out of tunnel. Attach wire to new ignition switch harness and pull back through tunnel.
29. Install ignition switch.
30. Install keyswitch jumper harness between connector [33] halves. See Figure 2.
31. Pull ground wire out of conduit and install on ground lug of cigar lighter.
32. Remove "forward" screw retaining low fuel module and swing the module down, pivoting on the remaining screw. Using the screw removed from the low fuel module attach the relay at the vacant hole. Secure the keyswitch jumper harness and ground wire to existing harness with tie wraps. See Figure 1.
33. Carefully place instrument nacelle on vehicle. Using a T40 TORX drive head, install two bolts to fasten instrument nacelle to fork side. Be sure to capture clutch cable in cable clip when installing upper bolt on left side.
34. Verify that left and right sides of nacelle are properly mated. Four pins on left side of nacelle must fully engage holes on right.
35. Install the switch position plate onto threaded post of ignition switch housing.
36. Slide spacer over threaded post of ignition switch housing until it contacts switch position plate. Slide collar over post with the tab side down (and forward). Install nut, and using a 7/8 inch wrench on flats, tighten until snug. See Figure 3.
37. With the red arrow pointing toward the ACCESS position, install the ignition switch knob. Turn key clockwise to UNLOCK position and then turn knob to OFF.
38. Slide odometer reset knob (with rubber washer) through hole at lower right side of instrument nacelle. Install knurled nut to secure.
39. Insert pin of speedometer drive into speedometer gauge and rotate knurled nut until tight.
40. Verify that left and right sides of instrument nacelle are properly mated.
41. Insert tab at rear of bezel into slot of instrument nacelle (just above ignition switch). Holding left and right sides of nacelle together, place bezel over instrument nacelle flange. When properly mated, tabs on each side of the instrument nacelle engage lip in slot at top of bezel (behind decorative adhesive strip).

NOTE

*If tabs do not properly engage slot at top of bezel, then a loose fit will result. Remove decorative adhesive strip by gently prying up outer edges, and using a flat bladed screwdriver, carefully raise tabs so that they engage lip in slot. If damaged, install **new** decorative adhesive strip.*

42. Using a T25 TORX drive head, install screw on each side of bezel. Tighten screws to 6-12 **in-lbs** (0.7-1.4 Nm).
43. Capture throttle cables in cable clip. Insert cable clip into hole in upper right side of instrument nacelle.
44. Place outer fairing into position against inner fairing. Two slots in outer fairing must fully engage hooks on radio bracket. Move harness conduit and wiring as necessary to ensure full engagement between outer and inner fairing.

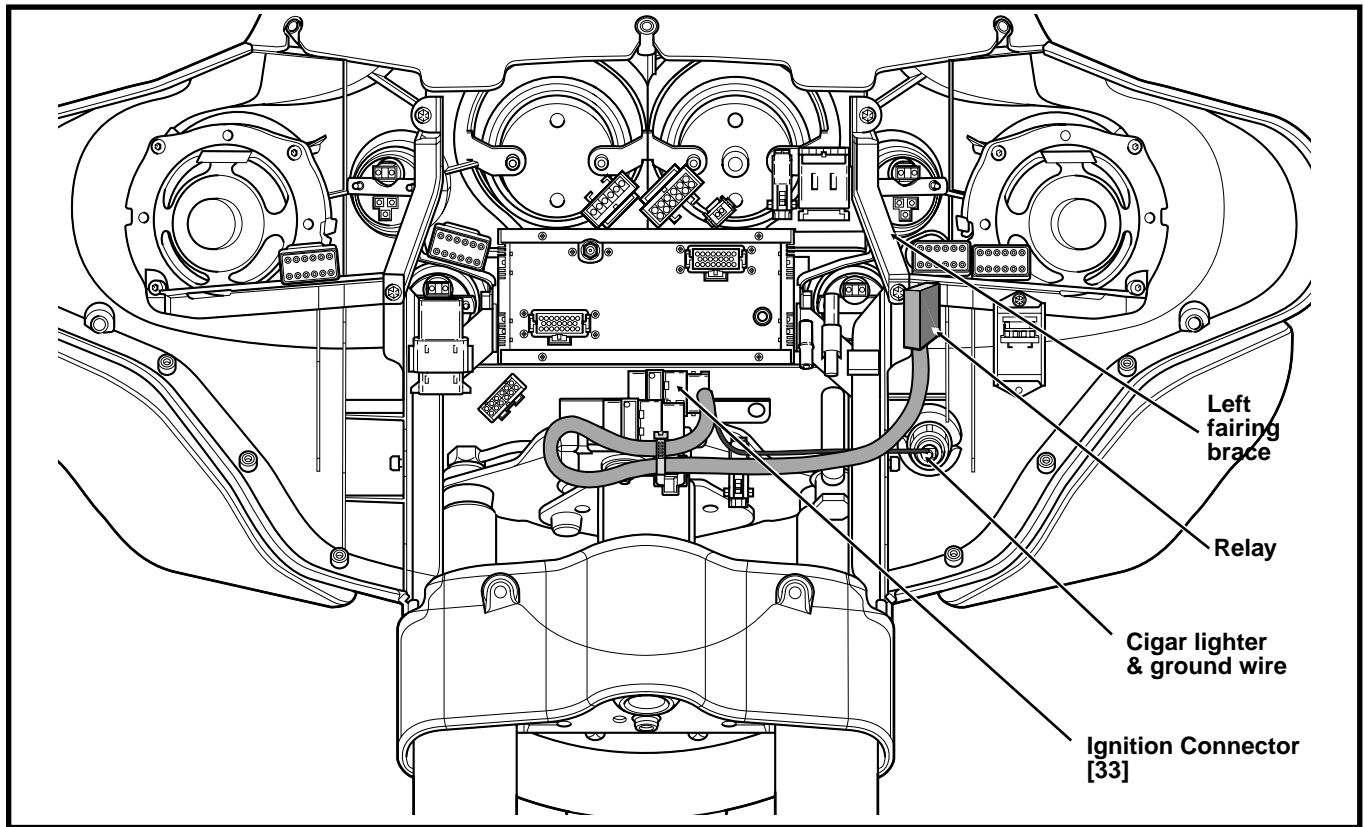


Figure 4. FLHT/C/I - Existing harness removed for clarity

45. Move to side of outer fairing to verify that alignment tabs are properly engaged. Alignment tabs on inner fairing must be positioned outboard of those on the outer fairing. Repeat step on opposite side of vehicle.
46. Remove 50A main circuit breaker and replace with 40A breaker (red in color) from kit.
47. Insert bolt through battery negative (-) cable, spacer and negative battery terminal. Thread bolt into terminal nut and tighten to 40 in-lbs (4.5 Nm).

⚠ WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

48. Install seat.

⚠ WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation and startle the rider, causing loss of control and personal injury.

1996-1998 FLHT/C/U/I

Kit 93857 - Installation

1. Remove the seat.

⚠ WARNING

To protect against shock and accidental start-up of vehicle, disconnect the battery cables before proceeding. Always disconnect the negative battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

2. Unthread bolt from terminal nut and remove battery negative (-) cable and spacer from battery terminal.
3. Remove the outer fairing as follows:
 - a. Standing at the front of the vehicle, use a T27 TORX drive head to remove the three outer fairing screws (with flat washers) just below the wind-shield.
 - b. Moving to the inner fairing side, use a T25 TORX drive head to remove the two fairing screws just above the wind deflectors on the left and right side.
 - c. Turn the handlebar to the right and remove the outer fairing screw reaching in below the fairing cap. Turn the handlebar to the left and remove the fairing screw on the opposite side.
 - d. Tilting the outer fairing toward the front, squeeze the two external tabs to remove the wire connector at the back of the headlamp assembly.

- e. Lift the fairing (with headlamp assembly) off the motorcycle.

CAUTION

Since the outer fairing screws hold the windshield in place, the windshield may fall to the floor if not removed.

4. Install keyswitch jumper harness at ignition switch connector [33]. See Figure 4.
5. Attach relay at left fairing brace using tie wrap.
6. Position keyswitch jumper harness along ignition switch connectors and tie wrap to existing wiring. See Figure 4.
7. Attach ground wire to cigar lighter ground.
8. Replace 50A main circuit breaker with 40A (red in color) from kit.
9. Install windshield.
10. Install the outer fairing.

WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

11. Insert bolt through battery negative (-) cable, spacer and negative battery terminal. Thread bolt into terminal nut and tighten to 40 in-lbs (4.5 Nm).
12. Install seat.

WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation and startle the rider, causing loss of control and personal injury.

1996-1998 FLHT/C/U/I Kit 93858 - Installation

1. Remove the seat.

WARNING

To protect against shock and accidental start-up of vehicle, disconnect the battery cables before proceeding. Always disconnect the negative battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

2. Unthread bolt from terminal nut and remove battery negative (-) cable and spacer from battery terminal.
3. Remove the outer fairing as follows:
 - f. Standing at the front of the vehicle, use a T27 TORX drive head to remove the three outer fairing screws (with flat washers) just below the wind-shield.
 - g. Moving to the inner fairing side, use a T25 TORX drive head to remove the two fairing screws just above the wind deflectors on the left and right side.

- h. Turn the handlebar to the right and remove the outer fairing screw reaching in below the fairing cap. Turn the handlebar to the left and remove the fairing screw on the opposite side.

- i. Tilting the outer fairing toward the front, squeeze the two external tabs to remove the wire connector at the back of the headlamp assembly.
- j. Lift the fairing (with headlamp assembly) off the motorcycle.

4. To remove the ignition switch knob, first turn the Ignition Switch key to UNLOCK and then turn the knob to ACCESS. Depress the release button at bottom (left side) with a small screwdriver, and while pushing key down, turn 60 degrees in a counter-clockwise direction. Lift and remove knob. See Figure 3.
5. Using a 7/8 inch wrench on flats, loosen switch nut and remove from threaded post of ignition switch housing. Remove collar and spacer.
6. Using a T27 TORX drive head, remove the two screws (with flat washers) that secure fairing cap to left and right sides of inner fairing.
7. Remove the decal plate by pulling tabs from slots in fairing cap. If necessary, raise the fairing cap slightly to facilitate removal.
8. With the forks turned fully to the left, disconnect the Fairing switch connector [105], 12-place Multilock (black), from behind right side of fairing cap. Depress the button on the plug side of the connector to pull apart the pin and socket halves.
9. Remove the fairing cap from the motorcycle.
10. Locate the Ignition switch connector [33], 4-place Packard (black), just above the turn signal module. Separate the pin and socket halves.
11. Remove the socket screws (with flat washers) and lift the switch housing from the triple clamp bore. Route the Ignition switch connector to rear of inner fairing and remove switch housing from the vehicle.
12. Slide base of ignition switch into bore of triple clamp. Install screws (with flat washers) and tighten to **40-45 in-lbs** (4.5-5.1 Nm).
13. Route the Ignition switch connector [33], 4-place Packard (black), to front of inner fairing so that it is positioned just above the turn signal module. Mate pin and socket halves.
14. Install keyswitch jumper harness at ignition switch connector [33].
15. Attach relay at left fairing brace using tie wrap.
16. Position keyswitch jumper harness along ignition switch connectors and tie wrap to existing wiring. See Figure 4.
17. Attach ground wire to cigar lighter ground.
18. Replace 50A main circuit breaker with 40A (red in color) from kit.
19. Verify that the rubber grommets are installed on each side of the fairing cap. Barbs on cap fit into holes in grommets.

20. Connect the Fairing switch connector [105], 12-place Multilock (black), on the right side of fairing cap.
21. With the forks turned fully to the left, install fairing cap over ignition switch housing.
22. Install decal plate fitting tabs in slots of fairing cap. Plate snaps in place when properly installed. Exercise care to avoid breaking tabs. Replace plate if tabs are broken.
23. Using a T27 TORX drive head, start two fairing cap screws (with flat washers). Verify that grommets in fairing cap fully capture handlebar along with throttle and clutch cables.
24. Slide spacer over threaded post of ignition switch housing until it contacts decal plate. Slide collar over post with the tab side down (and forward). Install nut, and using a 7/8 inch wrench on flats, tighten until snug. See Figure 3.
25. With the red arrow pointing toward the ACCESS position, install the ignition switch knob. Turn key clockwise to UNLOCK position and then turn knob to OFF.
26. Using a T27 TORX drive head, tighten two fairing cap screws to 45-55 **in-lbs** (5.1-6.2 Nm).
27. Verify operation of both the ignition switch and fork lock assemblies.
28. Install windshield
29. Install the outer fairing.
30. Insert bolt through battery negative (-) cable, spacer and negative battery terminal. Thread bolt into terminal nut and tighten to 40 **in-lbs** (4.5 Nm).

⚠WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

31. Install seat.

⚠WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation and startle the rider, causing loss of control and personal injury.

1996-1998 FLHT/C/U (International)

Kit 93859 - Installation

1. Remove the seat.
2. Unthread bolt from terminal nut and remove battery negative (-) cable and spacer from battery terminal.

⚠WARNING

To protect against shock and accidental start-up of vehicle, disconnect the battery cables before proceeding. Always disconnect the negative battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery

explosion leading to personal injury and/or property damage.

3. Remove the outer fairing.

⚠CAUTION

Since the outer fairing screws hold the windshield in place, the windshield may fall to the floor if not removed.

4. Peel back the decal from the top of the ignition switch knob and discard.
5. Pull out the four aluminum tamper-proof plugs with a stud extractor or Easy-Out. If necessary, carefully drill out plugs using a 3/8 inch or 9.5mm bit, but exercise caution to avoid damaging hex in button head allen screws. See Figure 5.
6. Remove the four button head allen screws from the ignition switch knob. Remove the knob from the ignition switch housing. Remove the gaskets from the surface of the fairing cap, if present.
7. Using a T27 TORX drive head, remove the two screws (with flat washers) that secure fairing cap to left and right sides of inner fairing.
8. Remove the plate by pulling tabs from slots in fairing cap. If necessary, raise the fairing cap slightly to facilitate removal.
9. With the forks turned fully to the left, disconnect the Fairing switch connector [105], 12-place Multilock (black), from behind right side of fairing cap. Depress the button on the plug side of the connector to pull apart the pin and socket halves.
10. Remove the fairing cap from the motorcycle.
11. Locate the Ignition switch connector [33], 4-place Packard (black), just above the turn signal module. Separate the pin and socket halves.
12. Reaching in at side of inner fairing, use a 3/16 inch bit (with long shank) to carefully drill out the two break-away screws at the base of the ignition switch housing. To avoid chatter marks or other damage, be sure to use a center punch to make a pilot hole.
13. Using a pliers, remove the shafts of the break-away screws.
14. Route the Ignition switch connector to rear of inner fairing and remove switch housing from the triple clamp bore.
15. Slide base of ignition switch housing into bore of triple clamp.
16. Route the Ignition switch connector [33], 4-place Packard (black), to front of inner fairing so that it is positioned just above the turn signal module.
17. Attach relay at left fairing brace using tie wrap.
18. Position keyswitch jumper harness along ignition switch connectors and tie wrap to existing wiring. See Figure 4.
19. Attach ground wire to cigar lighter ground.
20. Replace 50A main circuit breaker with 40A (red in color) from kit.

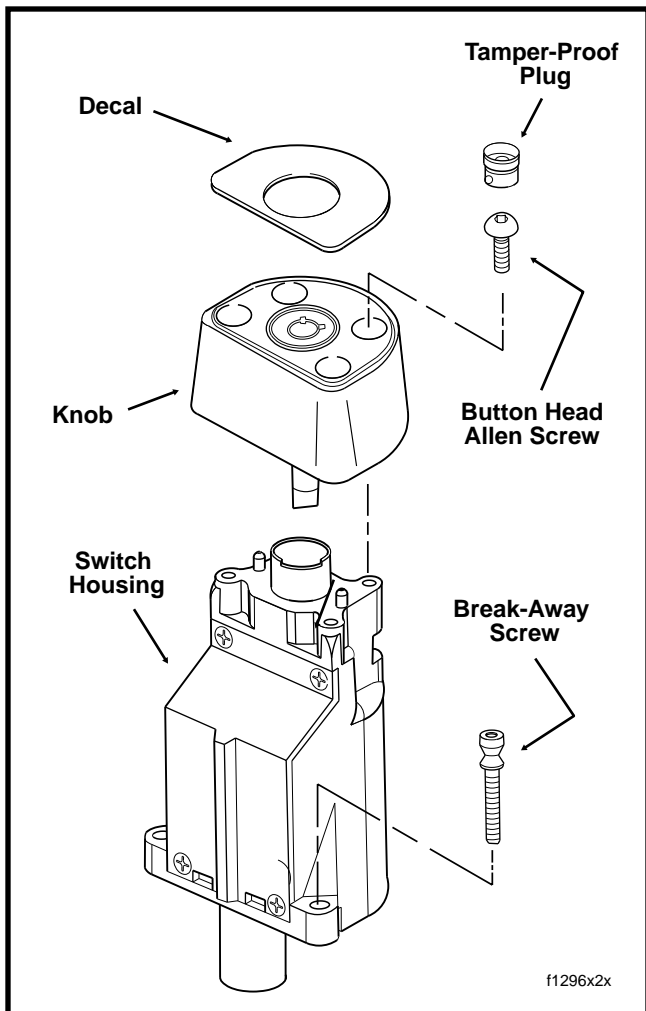


Figure 5. Ignition Switch Assembly (International)

⚠ CAUTION

Verify that the threads in the triple clamp and ignition switch housing are clean and in good condition. Dirty and/or damaged threads may cause the heads of the break away screws to snap off before the switch housing is properly tightened.

⚠ CAUTION

Exercise care to avoid losing heads of screws in vehicle. Vibration may cause captured heads to scratch finished surfaces, chafe wires or cause other damage.

21. Install **new** break-away screws at base of ignition switch housing. Turn screws in a clockwise direction until heads snap off.
22. Verify that the rubber grommets are installed on each side of the fairing cap. Barbs on cap fit into holes in grommets.
23. Connect the Fairing switch connector [105], 12-place Multilock (black), on the right side of fairing cap.
24. With the forks turned fully to the left, install fairing cap over ignition switch housing.

25. Install plate fitting tabs in slots of fairing cap. Plate snaps in place when properly installed. Exercise care to avoid breaking tabs. Replace plate if tabs are broken.
26. If provided, place gaskets over the switch housing so that they rest flat on the fairing cap.
27. Using a T27 TORX drive head, start two fairing cap screws (with flat washers). Verify that grommets in fairing cap fully capture handlebar along with throttle and clutch cables. Tighten fairing cap screws to 45-55 **in-lbs** (5.1-6.2 Nm).
28. With the flat side of the ignition switch knob facing the front of the vehicle, insert the lock shaft into the switch housing bore. Loosely install the four button head allen screws.
29. Alternately tighten the two front button head allen screws to 18-23 **in-lbs** (2.0-2.6 Nm). While keeping the lock centered in the switch housing, alternately tighten the two rear screws to a maximum of 18-23 **in-lbs** (2.0-2.6 Nm).
30. Verify operation of both the ignition switch and fork lock assemblies.
31. Install four **new** tamper-proof aluminum plugs into bores of ignition switch knob. Be sure that pilot mark on each plug faces upward.
32. Install a **new** decal.
33. Install the outer fairing.
34. Place the windshield in position on the inner fairing aligning the slots with the threaded inserts.
35. Install the outer fairing as follows:
 - a. Place the fairing (with headlamp assembly) on the motorcycle installing the wire connector at the back of the headlamp assembly.
 - b. Using a T27 TORX drive head, start the three outer fairing screws (with flat washers) just below the windshield.
 - c. Moving to the inner fairing side, use a T25 TORX drive head to start the two fairing screws just above the wind deflectors on both the left and right side.
 - d. Turn the handlebar to the left and reaching in below the fairing cap, start the next fairing screw. Turn the handlebar to the right and start the fairing screw on the opposite side.
 - e. Alternately tighten the four fairing screws on the inner fairing side to 45-55 **in-lbs** (5.1-6.2 Nm).
 - f. Moving to the front of the vehicle, tighten the outer fairing screws below the windshield to 10-13 **in-lbs** (1.1-1.5 Nm).

⚠ WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

36. Insert bolt through battery negative (-) cable, spacer and negative battery terminal. Thread bolt into terminal nut and tighten to 40 **in-lbs** (4.5 Nm).

37. Install the seat.

⚠WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation and startle the rider, causing loss of control and personal injury.

1994-1996 FLTCU/I Kit 93858 - Installation

1. Remove the seat.

⚠WARNING

To protect against shock and accidental start-up of vehicle, disconnect the battery cables before proceeding. Always disconnect the negative battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

2. Disconnect the battery cables, negative cable first.
3. Remove tripset knob, speedometer cable (bottom first, by twisting the outer cable cover counterclockwise until removed) and instrument panel screws. Lift instrument panel and disconnect connectors [20,21].
4. Remove throttle cables, front brake hose, and loosen and remove clutch cable (remove cable strap).
5. Disconnect the following connectors:
 - 6-place [22] gray handlebar switch connector
 - 3-place [16] gray set/resume switch connector
 - 6-place [25] black interconnect to radio overlay connector
 - 4-place [33] black ignition switch connector
 - 2-place gray [34] PTT switch connector and remove it from the T-stud.
 - 12-place [24] gray handlebar switch connector and remove it.
6. Relieve pressure from anti-dive and remove anti-dive hose.
7. Remove handlebar clamps and remove handlebar assembly.
8. Place ignition switch knob in "Access" position, depress button with small screwdriver, turn key fully counterclockwise and lift to remove knob. Remove switch nut, collar, and decal. See Figure 3.
9. Depress the locking latch that retains the circuit breaker block to the mounting bracket and slide the block off of the mounting bracket. Remove the harnesses from the metal clips on the sides of the instrument panel support. Remove the four bolts that retain the instrument panel support to the upper fork bracket and lift instrument panel support up and out of the way.

⚠CAUTION

Do not damage the cruise light ground wire while raising the instrument panel support. It may be necessary to disconnect the ground wire to raise the support high enough to remove the switch.

10. Remove lower switch screws and remove switch.
11. Place new switch into position. Install screws and tighten to 40-45 in-lbs (4.5-5.1 Nm).
12. Install keyswitch jumper harness at ignition switch connector [33]. Position one plug between the handlebar risers. The second plug is located to the right of the handlebar riser. Secure with tie wrap.
13. Route harness down in front of the triple clamp on the right side. Relay will follow fairing harness into front fairing.
14. See Figure 6. Arrange relays as follows:
 - a. remove new relay from keyswitch jumper
 - b. unplug brake relay connector (on vehicle right) and install keyswitch jumper to this relay
 - c. plug relay removed in step a in brake relay connector
 - d. place loose relay and harness between relays mounted to fairing
 - e. use wire tie to attach relay to fairing where radio harness exits top of fairing
15. Install headlamp assembly.

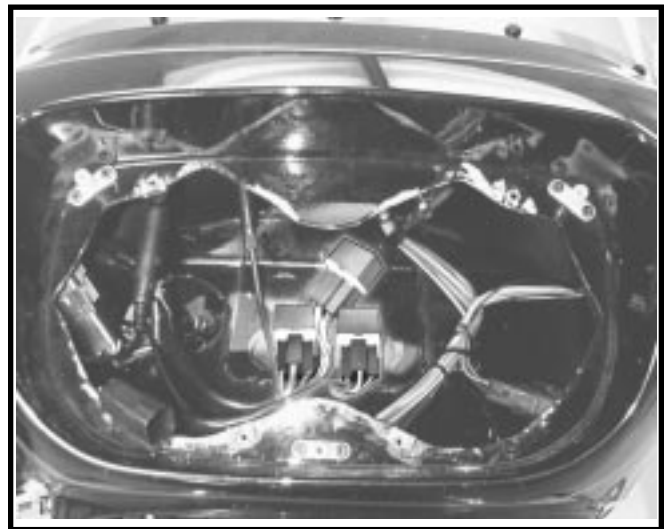


Figure 6.

16. Attach adapter spade terminal using screw and location of ground wire on top left triple clamp. Attach ground wire from keyswitch jumper harness to this spade.
17. Replace 50A circuit breaker with new 40A (red in color) breaker.
18. Lower instrument panel support back into position. Install the four bolts that retain the instrument panel support to the upper fork bracket.
19. Install switch collar (tab down) and nut. Tighten nut and install knob. See Figure 3.

20. Place handlebars into position and install anti-dive hose. Position handlebar grommets and handlebars. Install clamps and torque fasteners to 12-15 ft-lbs (16-20 Nm).
21. Connect the 12-place [24] black handlebar switch connector and attach to T-stud.
22. Place harnesses back into the metal clips on the sides of the instrument panel support. Push the circuit breaker block back into position on the mounting bracket. Connect 4-place black ignition switch connector [33] and tuck it between the handlebar risers. On Ultras, connect the 2-place gray [34] PTT switch connector and attach it to the T-stud.

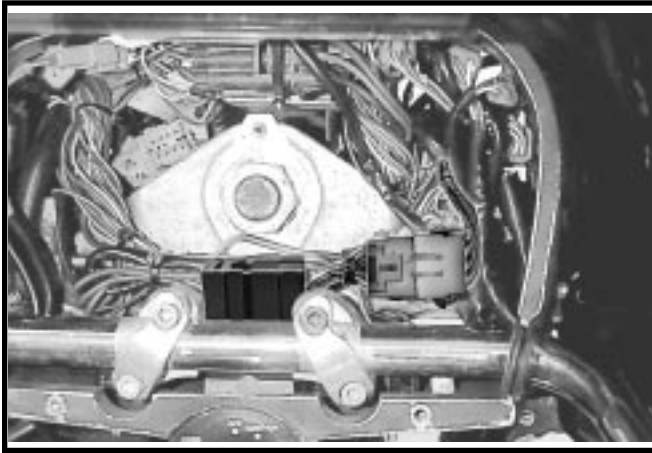


Figure 7

23. Mate the following connectors and attach to their respective T-studs:
 - 6-place [22] gray handlebar switch connector
 - 3-place [16] gray set/resume switch connector
 - 6-place [23] black radio overlay to radio control harness connector
24. Install throttle cables and clutch cable (adjust for 1/8 in. - 3/16 in. gap between ferrule and bracket on clutch cable). Use a cable strap to retain the clutch cable to front downtube. Install front brake hose using new washers. Tighten banjo bolt to 17-22 ft-lbs (23-30 Nm) torque if steel and rubber washers are used.
25. Install instrument panel after connecting wire connectors [20,21]. Install tripset knob, speedometer cable (top first, and twist the outer cable cover at the bottom until it is "wound up" and then feed it into the speedometer drive). Install instrument panel screws.

⚠CAUTION

Turn handlebars to full left and full right to verify wire clearance to fairing bracket. Pinched or chafing wiring may lead to electrical problems or failure.

⚠WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

26. Insert bolt through battery negative (-) cable, spacer and negative battery terminal. Thread bolt into terminal nut and tighten to 40 in-lbs (4.5 Nm).
27. Turn ignition on and check operation of switches and lights.
28. Install the seat.

⚠WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation and startle the rider, causing loss of control and personal injury.

29. Inflate front suspension and bleed front brakes.

1994-1995 FLHT/C/U Domestic and 1994 FLHT/C/U - International Kit 93858 - Installation

NOTE

In following procedure, disregard references to cruise control or CB components if FLHTC model is being repaired. Numbers in parenthesis after connector description are connector numbers assigned in wiring diagrams.

1. Remove the seat.

⚠WARNING

To protect against shock and accidental start-up of vehicle, disconnect the battery cables before proceeding. Always disconnect the negative battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

2. Disconnect the battery cables, negative cable first.
3. Place a clean towel on the front fender to rest the passing lamp bar on. Remove headlight assembly and outer fairing. Disconnect speedometer cable from instrument cluster.
4. Disconnect 4-place black ignition switch connector [33].
5. Relieve pressure from anti-dive and remove anti-dive hose.

6. Remove gas tank console. Reinstall gas cap. Cover fuel tank to prevent damage to the tank or inner fairing.

⚠WARNING

Gasoline is extremely flammable and highly explosive under certain conditions. Do not smoke or allow open flame or sparks anywhere in the area when refueling or servicing the fuel system. Refuel only in a well ventilated area. Inadequate safety precautions could result in personal injury.

7. Remove the front brake hose. Remove handlebar clamps and remove handlebar assembly.

⚠CAUTION

Carefully pad the area between the handlebar controls and the inner fairing to prevent damage to the inner fairing.

8. Use a bungee cord to hold handlebars in place. See Figure 8.
9. Place ignition switch knob in "Access" position, depress button with small screwdriver, turn key fully counter-clockwise and lift to remove knob. Remove switch nut, collar and decal. Remove screws from under decal.
10. Remove the remaining two bolts that retain the inner fairing to the upper fork bracket and lift inner fairing up.
11. Tilt fairing assembly forward and allow to rest on handlebar clamps. See Figure 8.
12. Remove lower switch screws and remove switch.
13. Place new switch into position. Install screws and tighten to 40-45 **in-lbs** (4.5-5.1 Nm).
14. Install keyswitch jumper harness at ignition switch connector [33].
15. Position harness on triple clamp. Loop harness to the left and then route forward and down in front of right side triple clamp. Loop harness back up. Attach relay at main wire harness below 12-pin connector. Fasten in position with tie wraps. See Figure 7.
16. Locate ground spade on cigar lighter and install ground from keyswitch jumper harness. If motorcycle is not equipped with a cigar lighter, tie wrap leads to harness near instrument cluster. Locate ground terminal from interconnect harness and attach spade terminal from keyswitch jumper harness.
17. Reassemble fairing.
18. Replace 50A circuit breaker with new 40A (red in color) breaker.
19. Lower inner fairing back into position. Loosely install the four bolts that retain the inner fairing to the upper fork bracket.
20. Install countersunk screws, new switch decal, collar (tab down) and nut. Tighten nut and install knob.
21. Place handlebars into position and install anti-dive hose. Position handlebar grommets and handlebars. Install clamps and torque fasteners to 12-15 ft-lbs (16-20Nm).

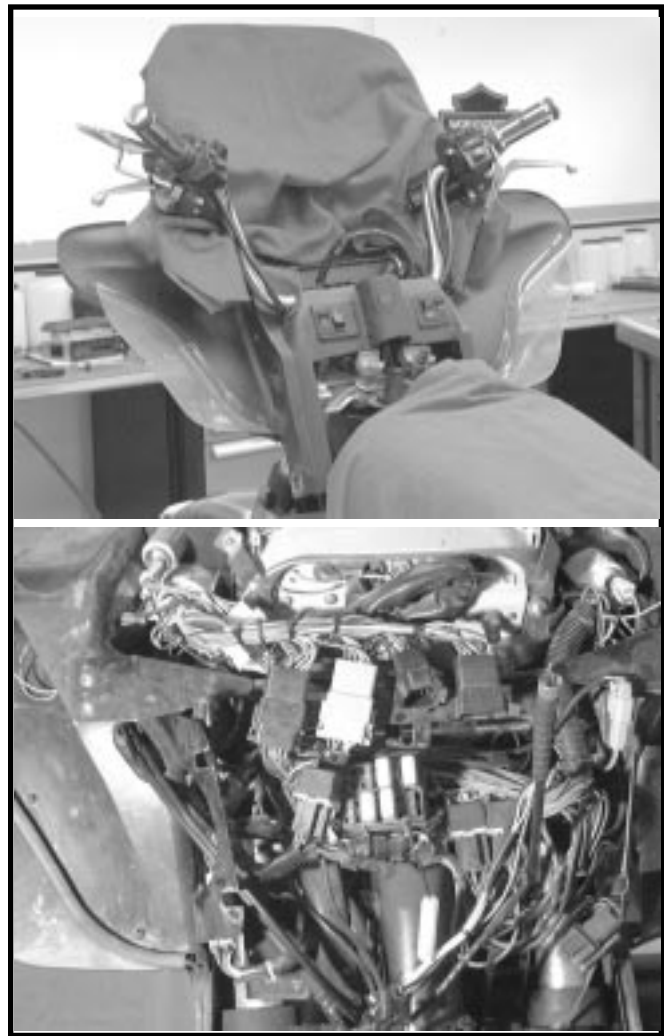


Figure 8.

22. Connect speedometer cable. Install front brake hose using new washers. Tighten banjo bolt to 17-22 ft-lbs (23-30 Nm) torque if steel and rubber washers are used.

⚠WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion leading to personal injury and/or property damage.

23. Insert bolt through battery negative (-) cable, spacer and negative battery terminal. Thread bolt into terminal nut and tighten to 40 **in-lbs** (4.5 Nm).
24. Turn ignition on and check operation of switches and lights.
25. Install outer fairing, passing lamp assembly and headlight.

26. Install the seat.

WARNING

After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could shift during vehicle operation and startle the rider, causing loss of control and personal injury.

27. Inflate front suspension and bleed front brakes.

NOTE

If this procedure is completed on a 1994 HDI vehicle, the fender tip lamps will no longer be energized in the "locked" position. Rewiring of connector [32A] to energize the fender tip lights in the "ON" position is not legal in Europe, Australia, or Japan.

1995 FLHT/C/U/I International Kit 93859 Installation

1. Peel back the decal from the top of the ignition switch knob and discard. See Figure 5.
2. Pull out the four aluminum tamper-proof plugs with a stud extractor or Easy-Out. If necessary, carefully drill out plugs using a 3/8 inch or 9.5mm bit, but exercise caution to avoid damaging hex in button head allen screws.
3. Remove the four button head allen screws from the ignition switch knob. Remove the knob from the ignition switch housing. Remove the two gaskets from the surface of the inner fairing, if present.
4. Loosen and/or remove the windshield, outer fairing, running lamp bracket, speedometer cable, wire connectors, radio, handlebars and inner fairing as described in the preceding Domestic procedure.
5. Reaching in at side of inner fairing, use a 3/16 inch bit (with long shank) to carefully drill out the two break-away screws at the base of the ignition switch housing. To avoid chatter marks or other damage, be sure to use a center punch to make a pilot hole.
6. Separate the pin and socket halves of the 4-place Packard connector [33]. See Figure 4.
7. Lift the switch housing from the triple clamp bore.
8. Using a pliers, remove the shafts of the break-away screws.
9. Slide base of ignition switch housing into bore of triple clamp.

CAUTION

Verify that the threads in the triple clamp and ignition switch housing are clean and in good condition. Dirty and/or damaged threads may cause the heads of the break away screws to snap off before the switch housing is properly tightened.

CAUTION

Exercise care to avoid losing heads of screws in vehicle. Vibration may cause captured heads to scratch finished surfaces, chafe wires or cause other damage.

10. Install **new** break-away screws at base of ignition switch housing. Turn screws in a clockwise direction until heads snap off.
11. Install the inner fairing, handlebars, radio, wire connectors, speedometer cable, running lamp bracket, outer fairing and windshield as described in the preceding Domestic procedure.
12. With the flat side of the ignition switch knob facing the front of the vehicle, insert the lock shaft into the switch housing bore. Loosely install the four button head allen screws.
13. Alternately tighten the two front button head allen screws to 18-23 **in-lbs** (2.0-2.6 Nm) torque. While keeping the lock centered in the switch housing, alternately tighten the two rear screws to a maximum of 18-23 **in-lbs** (2.0-2.6 Nm) torque.
14. Verify operation of both the ignition switch and fork lock assemblies.

NOTE

After installing the recall kit on 1995 HDI vehicles, the ignition switch will operate the same as 1996 and later vehicles. The key can not be removed in the "ON" position. The key can be removed in the "OFF" position. Also note that the fender tip lamps will no longer be energized. Rewiring connector [32A] to energize the fender tip lights in the "ON" position is not legal in Europe, Australia, or Japan.

15. Install four **new** tamper-proof aluminum plugs into bores of ignition switch knob. Be sure that pilot mark on each plug faces upward.
16. Install a **new** decal.

Credit Procedures

For each vehicle repaired, completely fill out a Dealer Service Card. Place a "C" in the letter box. If using the new bar-coded card supplied to the customer with the notification, affix your bar-coded dealer label in the appropriate box. Labels are included with this bulletin. If using the old style Dealer Service Card, be sure you supply all necessary information, including VIN, your dealer number and dealership name and address.

When Harley-Davidson receives your properly completed Dealer Service Card, you will be credited for performing the procedures outlined in this bulletin, as shown in the table below, which includes 0.1 hour for dealer administration time.

DO NOT RETURN DEFECTIVE PARTS. CUT ALL WIRES AND DESTROY OLD SWITCH

93857	Model	Total Labor (includes admin. time)
Models built after 1/14/98	DJL, DDL, DGL, DFL, FCR, FFR, FLR, FGR, FMR, DPL	.6
Models built after 1/14/98	FSR, FPL	.7

93858	Model	Total Labor (includes admin. time)
1994-1995	DPL, DJL, DGL, DTL, DRL, DDL, DFL	1.3
1994-1996 1994-1995	DML, FER, DAL	1.8
1996-1998	DJL, DGL, DDL, DPL, FCR, FFR, FLR, FGR, FMR, DFL	1.1
1998	FPL, FSR	1.2



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ADDRESS **SAME** _____
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DEALER ORDER
ORDER DATE
DEALER NO.
ORDER TYPE
D-W
WARRANTY CLAIM NO.

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ACCT: 174-409.1
FRT: 174-409.1 ACCT:

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All goods covered by this order, including goods back-ordered, will be billed at prices current at the time of shipment. Goods are purchased for resale and delivery is made to purchaser F.O.B. factory, Milwaukee, Wisconsin or other point of origin. It is accepted that the order as accepted shall be subject to availability of goods to deliver. Any delay in shipment shall not relieve purchaser of responsibility for his acceptance of order and seller shall not be liable for any loss or damage due to delay in shipment of goods to deliver. Any request for cancellation of this order or any part thereof must be received by seller prior to the date of shipment, and in case of reshipment or return of goods to seller, purchaser shall pay the entire cost connected therewith, plus ten, or twenty-five percent of selling price, as determined by Company policy from time to time, as liquidated damages for loss of sale. Purchaser will be responsible for collection and payment of all Federal, State and Local taxes that accrue on the total amount of the order.

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