

# INSTRUCTIONS

-J02556 REV. 05-16-2002

Kit Number 56364-02

# FLSTC BEACH HANDLEBAR KIT

#### General

This kit fits 2000 and later FLSTC model motorcycles. Installing this kit also requires installing new hand grips, sold separately. Refer to the latest Harley-Davidson Parts and Accessories Catalog for a selection of hand grips.

See the Service Parts illustration for a list of items contained in this kit.

#### **WARNING**

A Service Manual is required to install this kit. The rider's safety depends upon the correct installation of this kit. If the procedure is not within your capabilities or you do not have the correct tools, have your Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury.

#### NOTE

A Service Manual for your model motorcycle can be purchased from your Harley Davidson dealer.

## **Preparation**

## **A**WARNING

To protect against shock and accidental start-up of vehicle, disconnect the battery cables, negative cable first, before proceeding. Inadequate safety precautions could result in death or serious injury.

## **A**WARNING

Always disconnect the negative battery cable first. If the positive battery cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.

 Remove the seat and disconnect the battery cables, negative cable first.

#### **AWARNING**

Gasoline is extremely flammable and highly explosive. When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Inadequate safety precautions can result in death or serious injury.

- Loosen the fuel tank. Refer to FUEL TANK-PARTIAL REMOVAL in the appropriate section (Carbureted or EFI Engine) of the Service Manual.
- 3. Bleed the brake fluid from the front brakes. See BLEED-ING HYDRAULIC BRAKES in the Service Manual.

## Removing the Stock Handlebar

#### **CAUTION**

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

#### **CAUTION**

Damaged banjo bolt surfaces will leak when reassembled. Prevent damage to seating surfaces by carefully removing brake line components.

- Remove the brake line that runs from the front-brake master cylinder to the front-brake caliper. See FRONT BRAKE MASTER CYLINDER in the Service Manual.
- Using a T27 TORX drive head, remove the front-brake master cylinder and clutch-lever assemblies (refer to CLUTCH CABLE in the Service Manual) from the stock handlebar.
- Disconnect the handlebar control wiring from the gray and black 6-place main harness connectors under the fuel tank.
- Refer to the RIGHT HANDLEBAR SWITCH section of the Service Manual for removal of the right-side switch housing assembly. This is necessary to access the throttle cables.
- 5. Refer to the THROTTLE CONTROL section of the Service Manual to disconnect the throttle cables from the existing right grip/throttle sleeve assembly.
- 6. Using a T25 TORX drive head, remove the switch housings and attached wiring from the stock handlebar. Refer to HANDLEBAR SWITCHES in the Service Manual.
- See Figure 1. Remove and discard the four hex socket head screws (1) holding the stock handlebar upper clamp (2). Remove the upper clamp and discard.
- 8. Remove the handlebar (3) from the motorcycle.
- 9. Remove and discard the stock handlebar risers (4). Save the remaining hardware for later installation.

#### NOTE

DO NOT remove the wires from the <u>male</u> Deutsch connectors behind the fuel tank.

- 10. Note the wire positions in the <u>female</u> Deutsch connectors leading from the switches. Refer to the wiring diagram and the DEUTSCH ELECTRICAL CONNECTORS section in the Service Manual. Remove the wires from the connectors.
- 11. Bind the loose pin-terminal ends of each switch-wire bundle with tape.

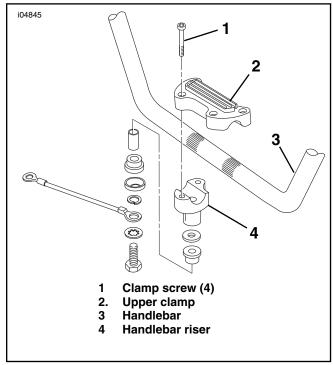


Figure 1. Removing the handlebar cover

# Wiring the New Handlebar

#### **A**WARNING

Grommets at each end of the handlebar must be in position during and after routing the switch wiring through the handlebar. Switch and wiring installation or operation without the grommets in place may damage the wires, causing a short circuit which could result in death or serious injury.

- 1. Remove the wiring retainers from both switch harnesses.
- See the Service Parts illustration. Check that the grommets (5) are in place in the holes near each end of the handlebar.
- Apply a light spray of all-purpose lubricant, such as WD-40<sup>®</sup>, to the right-side switch wire bundle.

#### **WARNING**

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

 See Figure 2. Route the wire bundle through the switch housing as shown. Gently feed the wire bundle into the right-side grommeted hole and toward the center of the new handlebar.

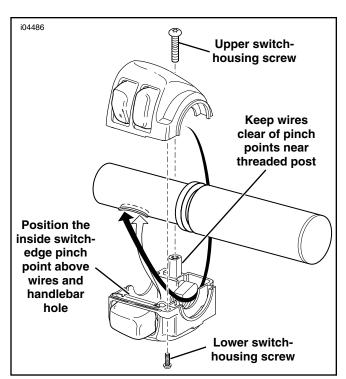


Figure 2. Switch-Housing Wire Routing (Right-Side Housing Shown)

#### **A**WARNING

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

- Pull the taped end of the wire bundle through the wireexit hole at the bottom-center of the handlebar.
- 6. Repeat Steps 3 through 5 for the left-side switch wires.

#### **A**WARNING

Avoid the pinch points shown in Figure 2. Pinch points in the switch housings can short-circuit or sever wires, which could cause loss of vehicle control resulting in death or serious injury.

#### WARNING

Grommets at each end of the handlebar must be in position after routing the switch wiring through the handlebar. Vehicle operation without the grommets in place may damage the wires, causing a short circuit which could result in death or serious injury.

- 7. See the Service Parts illustration. Check that the grommets (5) are still in place in the holes at the ends of the handlebar.
- 8. Loosely fasten the brake-lever and clutch-lever clamps to the new handlebar.
- Loosely fasten the handlebar-switch housings to the new handlebar.

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# **Wiring the New Handlebar (Continued)**

- See the Service Parts illustration. Cut the heat-shrink tubing (11) from the kit into two equal pieces. Slide one piece of the tubing over the end of each wire bundle exiting the bottom center of the handlebar (4).
- 11. Remove the tape from the ends of the wire bundles.
- 12. Check for electrical continuity between the handlebar and each wire in the wire bundles. Continuity would indicate a short circuit, which would require examination of the wires and routing in the switch housing.
- 13. Refer to the wiring diagram and the DEUTSCH ELEC-TRICAL CONNECTORS section in the Service Manual. Insert each pin-connector from the left-side wire bundle into the correct cavity of the GRAY female Deutsch pin connector removed in Removing the Stock Handlebar, step 10, on Page 1.
- Insert each pin-connector from the right-side wire bundle into the correct cavity of the BLACK female Deutsch pin connector removed earlier.

## **A**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 the wires with shrink tubing can cause short-circuits or severed wires, which could cause loss of vehicle control resulting in death or serious injury.

#### NOTE

The heat-shrink tubing on the wire bundles 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.

 Position the heat-shrink tubing (installed on the wire bundles in step 10, above) in the area of the center wire-exit hole on the handlebar.

## **A**WARNING

- Use extreme caution when operating the UltraTorch UT-100 or any other radiant heating device. Read the manufacturer's instructions carefully before using the tool. Improper tool handling can result in death or serious injury.
- Always keep hands away from tool tip area and heat shrink attachment.
- Avoid directing the 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.
- Be sure to turn the "ON/OFF" switch to the "OFF" position after use.
- 16. Use a heat gun or suitable radiant-heating device to shrink the heat-shrink tubing to the wire bundles.

### Installing the New Handlebar

- Install the new handlebar risers (6) from the kit using the saved hardware. Torque the riser bolts to 25-30 ftlbs (34-41 Nm).
  - Center the new handlebar on the risers. To make sure that the handlebar is centered, verify that the knurled areas on the outboard side of each riser are equal.
- 2. Position the new upper handlebar clamps (3) and install with new clamp screws (1) and flat washers (2) from the kit. Snug the upper screws, but do not fully tighten.
- See the Service Parts illustration. Connect the 6-place Deutsch connectors coming from the bottom-center of the handlebar to the correct main harness connectors under the fuel tank.

Match the gray harness connector to the gray left-hand switch-control connector, and the black harness connector to the black right-hand switch-control connector.

## **A**WARNING

Gasoline is extremely flammable and highly explosive. When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Inadequate safety precautions can result in death or serious injury.

 Tighten the fuel tank. Refer to FUEL TANK-INSTALLA-TION (AFTER PARTIAL REMOVAL) in the appropriate section (Carbureted or EFI Engine) of the Service Manual.

#### **WARNING**

Improperly aligned handlebars can contact the fuel tank when turned to the left or right. Contact with the fuel tank while riding can cause loss of vehicle control resulting in death or serious injury.

- 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 obtained.
- 6. 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 the rear screws to 12-16 ft-lbs (16.3-21.7 Nm).
  - c. Tighten the front screws to 12-16 ft-lbs (16.3-21.7 Nm).

#### NOTE

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

Follow instructions in the Service Manual to install a new right grip/throttle sleeve to the handlebar, and connect the throttle cables.

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#### NOTE

If the handlebar grips are patterned, align the pattern on the left grip with the pattern on the right grip with the throttle in the fully closed position.

- 8. Install a new handlebar grip on the left end of the new handlebar according to the handlebar grip instruction sheet.
- Adjust the positions of the switch housings, and the clutch and brake-lever assemblies on the handlebar for rider posture and comfort. The brake master cylinder must be horizontally level.

#### NOTE

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

- Using a T27 TORX drive head, tighten first the upper, then the lower brake-lever and clutch-lever clamp screws to 60-80 in-lbs (6.8-9.0 Nm).
- Using a T25 TORX drive head, tighten first the lower, then the upper handlebar-switch housing screws to 35-45 in-lbs (4.0-5.1 Nm).
- Verify that the right grip/throttle sleeve rotates and returns freely and does not bind on the handlebar or switch housing.

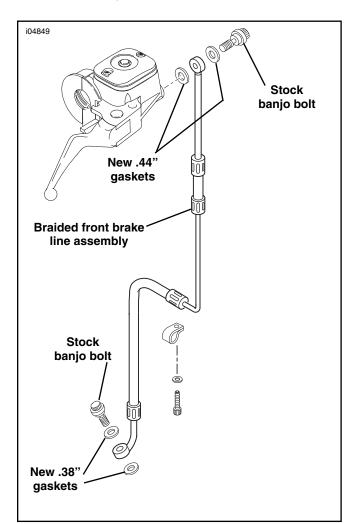


Figure 3. Front Braided Brake line Assembly

## Final Assembly

### WARNING

Do not re-use brake-line gaskets. Use of original brakeline gaskets could cause front brake failure and loss of control which could result in death or serious injury.

#### **CAUTION**

To avoid leakage, verify that the washers, banjo bolt, brake line and caliper bore are completely clean.

1. See Figure 3 and the Service Parts illustration.

Use the stock banjo bolts and new brake-line gaskets (items 8 and 9) from the kit to fasten the new braided front brake line assembly (7) between the front-brake master cylinder and the front-brake calipers.

Replace the stock "P"-clamps with the new clamps (10) from the kit. Route the brake line through the new clamps and adjust as necessary.

Torque the banjo bolts to 17-20 ft-lbs (23-30 Nm). Torque the brake line manifold screw to 10-15 ft-lbs (13.6-20.3 Nm).

Bleed the brakes. See BLEEDING HYDRAULIC BRAKES in the Service Manual.

## **Safety Check**

1. Turn the handlebar to the left and right steering stops, testing the handlebar control functions at each stop.

#### **A**WARNING

Clutch cables must not pull tight when handlebars are turned fully to left or right fork stops. Be sure wires and cables are clear of fork stops at steering head so they will not be pinched when fork is turned against stops.

Steering must be smooth and free with no binding or interference. Interference with steering could result in loss of vehicle control and death or serious injury.

## **A**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 which could result in death or serious injury.

- 2. Connect the battery cables, positive cable first.
- 3. Turn the Ignition/Light Key Switch to IGNITION and test each handlebar switch for proper operation.
- 4. Apply the front brake hand lever to test operation of the brake lamp.
- 5. Refer to the Service Manual, and follow instructions to install the seat.

## **A**WARNING

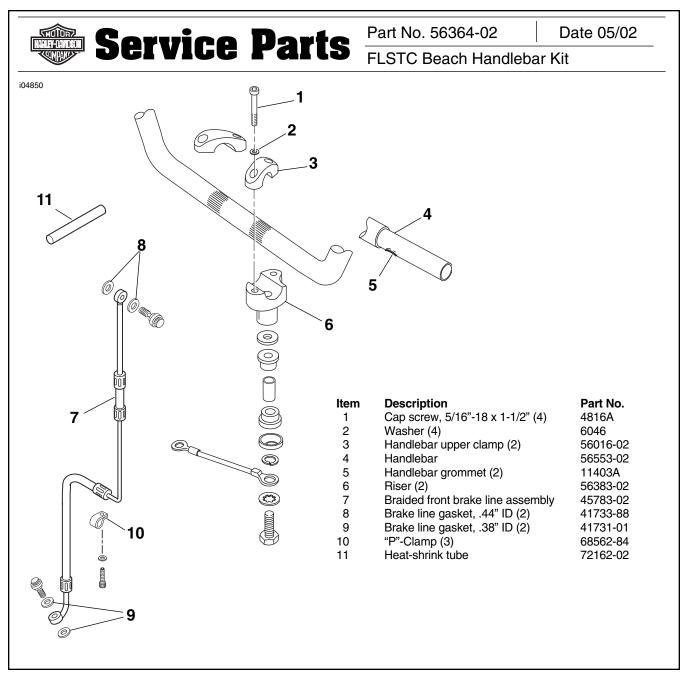
After installing seat, pull upward on front of seat to be sure it is locked in position. If seat is loose, it could result in shifting during vehicle operation, loss of control of vehicle, death or serious injury.

#### **A**WARNING

Prior to starting engine, verify that the throttle control will snap back to the idle position when released. A throttle control that prevents the engine from automatically returning to idle can lead to a loss of control, which could result in death or serious injury.

## **A**WARNING

After completing this installation and bleeding the system, always test motorcycle brakes at low speed. If brakes are not operating properly, or braking efficiency is poor, testing at high speeds could result in death or serious injury.



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