# **CRUISE CONTROL KIT**

### **GENERAL**

### **Kit Number**

77196-08, 77197-08

#### Models

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

### **Tools and Supplies Required**

#### NOTE

Functionality of this kit will require a **verification** that Cruise Control has been set to "ENABLED" in the vehicle's Electronic Control Module (ECM). This verification can ONLY be performed by a factory-trained technician at a Harley-Davidson Dealer, using the most recent version of the DIGITAL TECHNICIAN computer-based diagnostic software package.

# **AWARNING**

The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

### 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 3 and Table 1.

### **INSTALLATION**

### NOTE

if the motorcycle is equipped with the optional Harley-Davidson Smart Siren, the Maxi® Fuse MUST be removed BEFORE the alarm is activated. This WILL happen within 5 seconds of turning the ignition switch to the OFF position (except for HD-Japan models). If the Maxi Fuse is not removed promptly, the siren WILL SOUND.

- 1. Refer to the Service Manual and follow the instructions given to remove the Maxi<sup>®</sup> Fuse.
- For FLHT, FLHTC and FLHX models: Remove the outer fairing per the OUTER FAIRING; REMOVAL instructions in the Service Manual.

For FLHR models: Follow the HEADLAMP NACELLE: REMOVAL instructions in the Service Manual to remove

only the handlebar clamp shroud. Removing the nacelle is not necessary.

- Remove the windshield and headlamp door. Remove the headlamp housing assembly.
- b. Release the chrome trim strip at the top of the nacelle.
- Remove the two Phillips screws beneath the fork lock plate.
- Loosen the Phillips screw at the front of the handlebar clamp shroud, and the four acorn nuts on the side of the headlamp nacelle.
- e. Raise the shroud slightly, separate the nacelle halves and slide the shroud forward to remove it from the nacelle.

#### NOTE

Before disconnecting the handlebar control wiring, note the wire routing.

3. **For ALL models:** Refer to the MOLEX ELECTRICAL CONNECTORS section of the Service Manual. Disconnect the right-side handlebar socket housing from the **black** main harness pin housing inside the fairing or headlamp nacelle.

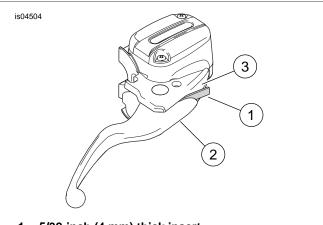
## CAUTION

Do not remove or install the master cylinder assembly without first positioning a 5/32-inch (4 mm) thick insert between the brake lever and lever bracket. Removing or installing the master cylinder assembly without the insert in place may result in damage to the rubber boot and plunger on the front stoplight switch. (00324a)

#### NOTE

A section of corrugated cardboard or the eyelet of an ordinary cable strap can be used for this purpose.

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- 1. 5/32-inch (4 mm) thick insert
- 2. Brake lever
- 3. Brake lever bracket

Figure 1. Protect Stop Light Switch

- See Figure 1. Place a 5/32-inch (4 mm) thick insert between the brake lever and the lever bracket.
- 5. Refer to HANDLEBAR SWITCHES; REMOVAL; RIGHT HANDLEBAR CONTROLS in the Service Manual, and follow the instructions to remove the brake hand lever/master cylinder assembly and right-hand upper and lower switch housing from the handlebar. It is not necessary to remove the throttle control grip.
  - For FLHR models: Disconnect the handlebar control socket housing from the gray eight-way main harness pin housing inside the headlamp nacelle. Refer to HANDLEBAR SWITCHES; REMOVAL; LEFT HANDLEBAR CONTROLS to remove the clutch hand lever and left-hand upper and lower switch housing from the handlebar.
- 6. **For ALL models:** Remove the friction shoe (if so equipped) from the end of the tension adjuster screw.

### NOTE

The friction shoe is a loose fit and may fall out or become dislodged if the lower switch housing is turned upside down or shaken.

- 7. See Figure 1. Verify that the 5/32-inch (4 mm) thick insert is in place between the brake lever and the lever bracket. Obtain the new right-hand control (Item 4 or 5, depending on model) from the kit. Separate the upper and lower halves of the control. Refer to HANDLEBAR SWITCHES; INSTALLATION; RIGHT HANDLEBAR CONTROLS in the Service Manual, and follow the instructions to install the right-hand upper and lower switch housing and brake hand lever/master cylinder assembly to the handlebar.
- Route the right-hand control harness along the same path as the original harness (along the right handlebar). Connect the pin housing to the black socket housing disconnected in Step 3.
- For FLHT, FLHTC and FLHX models: Continue at Step 11.

For FLHR models: Obtain the new left-hand control (6) from the kit.

Separate the upper and lower halves of the control. Refer to HANDLEBAR SWITCHES; INSTALLATION; LEFT HANDLEBAR CONTROLS in the Service Manual, and

- follow the instructions to install the left-hand upper and lower switch housing and clutch hand lever assembly to the handlebar.
- Route the left-hand control harness along the same path as the original harness (along the left handlebar). Connect the pin housing to the gray socket housing disconnected in Step 5.
- For ALL models: See Figure 3. Obtain wire harness retainers (1) from the kit as needed, and use them to secure the hand control wiring harness conduit to the holes in the handlebar.
- 12. For FLHR models: Continue at Step 18.

For FLHT, FLHTC and FLHX models: See Figure 2. Refer to MULTILOCK ELECTRICAL CONNECTORS in the Service Manual, and follow the instructions to separate the two halves of fairing cap switch connector [105]. Refer to FAIRING CAP SWITCHES; REMOVAL in the Service Manual to remove the fairing cap (1) from the motorcycle.

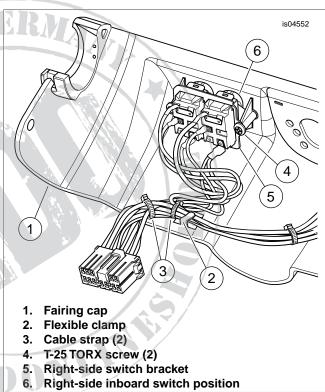


Figure 2. Fairing Cap (Right Side)

- 13. Bend back the flexible clamp (2) to release the switch wires from the inside of the fairing cap. Carefully cut the cable straps (3) closest to the 12-way Multilock® socket housing [105B] to free the wires from the bundle.
- 14. Remove two T-25 TORX® screws (4) to release the rightside switch bracket (5) from the fairing cap. Gently pry the latches on the bracket outward to release the tabs on the cruise switch hole plug in the inboard position (6). Discard the hole plug.

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- 15. See Figure 3. Install the CRUISE on/off switch (3) in the bracket inboard position.
  - a. Route the switch wiring through the bracket and place the switch into position.
  - Engage the tabs on the switch in the slots of the latches.
  - Gently bend the tabs upward to lock the switch into position in the switch bracket.
- 16. Refer to MULTILOCK ELECTRICAL CONNECTORS in the Service Manual, and follow the instructions to insert the switch wire terminals into the 12-way socket housing [105B] as follows:
- Orange/Violet Wire to Cavity 4.
- Red/Green Wire to Cavity 5.
- Black/Green Wire with terminal to Cavity 12.
- Black/Green Wire without terminal, connect to the speaker switch ground wire (if so equipped).

If there is no speaker switch, tape the wire end with electrical tape and secure to other wires.

- 17. See FAIRING CAP SWITCHES; INSTALLATION in the Service Manual, and follow the instructions to:
  - Secure the switch bracket to the fairing cap with the two screws removed in Step 14.
  - b. Secure the cruise wiring to the wire bundle with new cable straps from the kit, and to the fairing cap with the flexible clamp. Route as shown in Figure 2.
  - Verify that the rubber grommets on each side of the fairing cap are in place.
  - d. Connect the 12-way socket housing [105B] to pin housing [105A] on the vehicle harness.
  - Install the fairing cap over the ignition switch housing, verifying that the grommets fully capture the handlebar and clutch cables.
  - Start the two screws (with flat washers) removed earlier, then alternately tighten to the specified torque.
  - g. Assemble the ignition switch.
- For FLHT, FLHTC and FLHX models: Re-install the outer fairing per the OUTER FAIRING; INSTALLATION instructions in the Service Manual.

For FLHR (and FLHRS?) models: Follow the HEADLAMP NACELLE: INSTALLATION instructions in the Service Manual to re-install the handlebar clamp shroud as follows:

- If disassembled, re-install the Phillips screw, flat washer and nut on the handlebar clamp shroud.
- Slide the shroud rearward down the gap in the top of the nacelle into position.
- Mate the nacelle halves, and tighten the Phillips screw to the specified torque.
- Secure the handlebar clamp shroud to the fork lock mechanism, and install the fork lock plate.
- e. Verify that the trim strips are in place, and replace if damaged or missing.
- f. Install the chrome trim strip at the top of the nacelle.
- g. Tighten the four acorn nuts on the side of the headlamp nacelle to the specified torque.
- h. Re-install the headlamp housing assembly. Re-install the headlamp door and windshield.
- 19. Locate the four-way data link connector [91A] under the right side cover. Gently pull on the connector to disengage it from the arms on the electrical bracket.

Remove the rubber protective plug from the connector.

- Refer to the DIGITAL TECHNICIAN or the Touring Models Electrical Diagnostic Manual to verify the cruise control function on the vehicle ECM.
- Re-install the rubber protective plug into the data link connector, and engage the connector into the arms of the electrical bracket.
- 22. Verify that the Ignition/Light Key Switch is turned to the OFF position.

Refer to the Service Manual and follow the instructions given to re-install the Maxi® Fuse.

## **A**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)

- 23. Turn the Ignition/Light Key Switch to IGNITION, but do not start the motorcycle. Turn the handlebar to the left and right steering stops, testing the handlebar control functions at each stop.
- 24. Apply the front brake hand lever to test operation of the brake lamp.
- 25. Refer to the Cruise Control section in the Owner's Manual for cruise control operating instructions. Test ride the motorcycle and verify that the cruise control is operating properly.

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# **SERVICE PARTS**

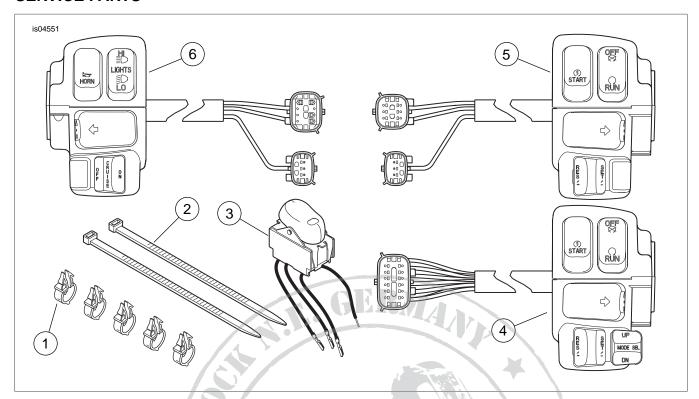


Figure 3. Service Parts, Cruise Control Kits

**Table 1. Service Parts Table** 

Kit	Item	Description (Quantity)	Part Number
Kit 77196-08	1	Retainer, wire harness	70345-84
	2	Cable strap (6)	10065
	3	Switch, fairing cap CRUISE on/off	71513-98
	4	Handlebar control assembly, right-side	Not sold separately
Kit 77197-08	1	Retainer, wire harness (5)	70345-84
	2	Cable strap (2)	10065
	5	Handlebar control assembly, right-side	Not sold separately
	6	Handlebar control assembly, left-side	Not sold separately
		(HDON)	

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