

INSTRUCTIONS

-J02753 REV. 12-30-2002

Kit Number 59030-03

LED LICENSE PLATE FRAME

General

This License Plate Frame fits all **1999 and later** XL (Sportster) models, FXSTD/I, FLSTC/I and FLSTF/I Softail models, and all FX (Dyna) models **except** FXDWG.

It is designed to fit license plates measuring 7 in.x 4 in. (10.1 cm x 17.8 cm).

FXSTD (Deuce) models will also need a Tail/ Stop Lamp Jumper Harness, Part Number 70316-03, available separately from your Harley-Davidson Dealer.

See the Service Parts illustration for kit contents.

AWARNING

This kit requires 167 milliamps additional current from the electrical system.

When installing any electrical accessory, be certain not to exceed the maximum amperage rating of the fuse or circuit breaker protecting the circuit being modified. Exceeding the maximum amperage could lead to electrical failures which could result in death or serious injury.

CAUTION

Additional electrical equipment can overload the motorcycle's electrical system and can cause an unsafe operating condition. If your combined electrical accessories consume more electrical current than your vehicle's charging system can produce, the electrical consumption can discharge the battery leading to vehicle electrical system damage.

Ask your dealer for advice about the amount of current consumed by additional electrical accessories.

NOTE

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

Installation

AWARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative cable first) before proceeding, (00048A)

AWARNING

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)

 Refer to the Service Manual and follow the instructions given to remove the seat and disconnect the battery cables, negative cable first.

For all except FLSTC/I, FXDX, FXDXT, or FXSTD/I

- See the Service Parts illustration. Loosen the hex nut with lockwasher retaining the license-plate clamp, and remove the license plate (if installed) from the vehicle. Remove the reflector mounted to the license plate bracket and discard it.
- Remove the three 1/4-20 x 1/2 in. Pozidriv[®] screws and hex nuts with lockwashers retaining the license-plate bracket and support to the rear fender, and set the bracket and hardware aside for re-installation.
- Clean the mating area of the fender and license-plae support with a 50-50 mixture of isopropyl alcohol and water, and let it dry.

Peel the paper backing from one side of the adhesive pad (11) from the kit. Hold the pad, adhesive-side down, over the rear fender. Line up the holes in the pad with the three license-plate support mounting holes in the fender, and press the pad into place.

Peel the paper backing from the front side of the pad. Position the license-plate support onto the pad, and reattach with the original hardware in the <u>upper</u> and <u>right-side lower</u> holes only (see Figure 1). Tighten securely.

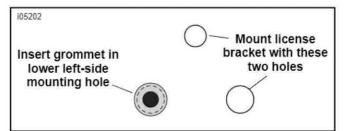


Figure 1. Grommet Location in License Plate Bracket

- See Figure 1. Insert the grommet (10) from the kit into the lower left-side hole in the license-plate bracket, through the support and into the fender.
- 6. Insert the license plate into the frame. Place a flat washer (6) onto one of the short screws (4) from the kit. Insert the screw into one of the <u>upper</u> license-plate mounting holes in the frame (1a), through the license plate, the backing plate (1b), another flat washer and a lock nut (7) from the kit. Repeat for the other <u>upper</u> license-plate mounting hole.
- Position the wires (1c) on the license-plate frame so they are not pinched in the frame.
- 8. Install the license-plate frame assembly onto the bike.

Place a flat washer onto a short screw from the kit. Insert the screw into one of the <u>lower</u> license-plate mounting holes in the frame (1a), through the license plate, backing plate (1b), the original license plate bracket, another flat washer and a lock nut from the kit.

Repeat for the other lower license-plate mounting hole.

- Insert the hook of the license plate clamp into the slot in the license plate frame backing plate. Tighten the four license-plate frame nuts and the clamp nut securely.
- Insert the wires from the license-plate frame, one at a time, through the grommet (10) in the fender. Pull the wires and conduit through the grommet to the underside of the fender.
- Remove the two screws holding the tail lamp to the base, and unplug the tail lamp connector. Remove the lamp and set it aside.
- See Figure 2. Insert the license plate frame harness wires into the socket housing (9) from the kit as shown.
 Refer to AMP MULTILOCK ELECTRICAL CONNECTORS in the Service Manual.

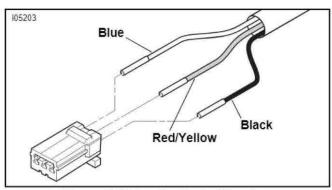


Figure 2. Wiring the Socket Housing

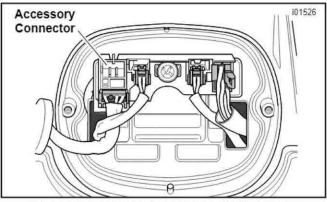


Figure 3. Connecting the License Plate Frame

- 13. See Figure 3. Route the license-plate frame harness through the left-side opening in the tail lamp base, and plug the socket housing into the Accessory connector at the upper left of the tail lamp circuit board. Use tie straps (12) from the kit as needed to secure the wiring.
- Re-attach the tail lamp connector, and re-assemble the tail lamp to the base with the screws removed earlier.
- 15. Peel the backing off of the reflector (8) from the kit. Hold the reflector up to the license plate bracket just below the new license plate frame, and press firmly into place Proceed to Step 22, on Page 6.

For FLSTC/I Models

See the Service Parts illustration. Loosen the hex nut with lockwasher retaining the license-plate clamp, and remove the license plate (if installed) from the vehicle.

Remove the reflector mounted to the license plate bracket and discard it.

- Remove the three 1/4-20 x 1/2 in. Pozidriv[®] screws and hex nuts with lockwashers retaining the license-plate bracket and support to the rear fender, and set the bracket and hardware aside for re-installation.
- Clean the mating area of the fender and license-plae support with a 50-50 mixture of isopropyl alcohol and water, and let dry.

Peel the paper backing from one side of the adhesive pad (11) from the kit. Hold the pad, adhesive-side down, over the rear fender. Line up the holes in the pad with the three license-plate support mounting holes in the fender, and press the pad into place.

Peel the paper backing from the front side of the pad. Position the license-plate support onto the pad, and reattach with the original hardware in the <u>upper</u> and <u>right-side lower</u> holes only (see Figure 1). Tighten securely.

- See Figure 1. Insert the grommet (10) from the kit into the lower left-side hole in the license-plate bracket, through the support and into the fender.
- 6. Insert the license plate into the frame. Place a flat washer (6) onto one of the short screws (4) from the kit. Insert the screw into one of the <u>upper</u> license-plate mounting holes in the frame (1a), through the license plate, the backing plate (1b), another flat washer and a lock nut (7) from the kit.

Repeat for the other upper license-plate mounting hole.

- Position the wires (1c) on the license-plate frame so they are not pinched in the frame.
- 8. Install the license-plate frame assembly onto the bike.

Place a flat washer onto a short screw from the kit. Insert the screw into one of the <u>lower</u> license-plate mounting holes in the frame (1a), through the license plate, backing plate (1b), the original license plate bracket, another flat washer and a lock nut from the kit.

Repeat for the other lower license-plate mounting hole.

- Insert the hook of the license plate clamp into the slot in the license plate frame backing plate. Tighten the four license-plate frame nuts and the clamp nut securely.
- Remove the two screws holding the tail lamp to the base, and unplug the tail lamp connector. Remove the lamp and set it aside.
- 11. Insert the wires from the license-plate frame, one at a time, through the grommet (10) in the fender. Pull the wires and conduit through the grommet to the underside of the fender, and through the left-side opening in the tail lamp base.
- 12. See Figure 3. Unplug the fender tip lamp from the Accessory connector at the upper left of the tail lamp circuit board. Cut the fender tip lamp wires as close as possible to the connector, and discard the connector.

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 Trim back the conduit if necessary, and remove approximately 3/8 in. (10 mm) of insulation from the ends of the fender tip lamp wires.

NOTE

DO NOT cut the red/yellow wire coming from the licenseplate frame.

Cut the <u>blue</u> and <u>black</u> wires coming from the licenseplate frame to a length matching the fender tip lamp wires. DO NOT cut the red/yellow wire. Remove about 3/8 in. (10 mm) of insulation from the cut ends of the blue and black wires, and set the short pieces aside. Use a tie strap (12) from the kit to bundle the wires coming from the lamps underneath the fender.

- 14. See Figure 4, and the BUTT SPLICE CONNECTORS section of the Service Manual. Insert the blue wire from the license-plate frame and one of the fender tip lamp wires into one end of a butt-splice electrical connector (13) from the kit, and crimp with a Crimp Tool, Part No. H-D 38125-8.
- Bring the short piece of blue wire to the other end of the butt-splice connector from Step 14, and crimp the wire to the connector with the Crimp Tool.
- 16. Repeat Steps 14 and 15 with the black wire from the license-plate frame and the remaining wire from the fender tip lamp and the short black wire.

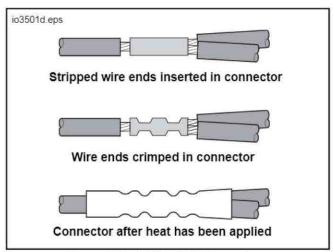


Figure 4. Installing Butt Connectors

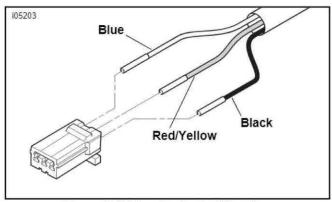


Figure 5. Wiring the Socket Housing

AWARNING

- 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.
- 17. Slide a piece of heat-shrink tubing (14) from the kit over each splice and using the UltraTorch UT-100 (H-D 39969), Robinair Heat Gun (H-D 25070) with Heatshrink Attachment (H-D 41183), or other suitable radiant heating device, heat the shrink tubing to encapsulate the butt splice connection. Apply heat from the center of the tubing out to each end until it shrinks tightly over the connector. Let the connector cool.

Repeat for the second splice.

- See Figure 5. Insert the three wire terminals into the socket housing (9) from the kit as shown. Refer to AMP MULTILOCK ELECTRICAL CONNECTORS in the Service Manual.
- See Figure 6. Plug the socket housing into the Accessory connector at the upper left of the tail lamp circuit board. Use tie straps (12) from the kit as needed to secure the wiring.
- Re-attach the tail lamp connector. Tuck any excess wiring into the cavity in the back of the tail lamp, and reassemble the tail lamp to the base with the screws removed earlier.
- Peel the backing off of the reflector (8) from the kit. Hold the reflector up to the license plate bracket just below the new license plate frame, and press firmly into place Proceed to Step 22, on Page 6.

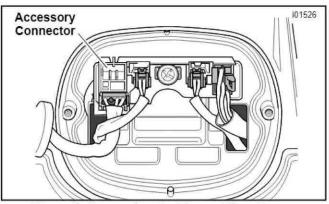


Figure 6. Connecting the License Plate Frame

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For FXDX and FXDXT Models

- See the Service Parts illustration. Loosen the hex nut with lockwasher retaining the license-plate clamp, and remove the license plate (if installed) from the vehicle.
 - Remove the reflector mounted to the license plate bracket and discard it.
- Insert the license plate into the frame. Place a flat washer (6) onto one of the short screws (4) from the kit.
 Insert the screw into one of the <u>upper</u> license-plate mounting holes in the frame (1a), through the license plate, the backing plate (1b), another flat washer and a lock nut (7) from the kit.

Repeat for the other upper license-plate mounting hole.

- Position the wires (1c) on the license-plate frame so they are not pinched in the frame.
- 5. Install the license-plate frame assembly onto the bike.

Place a flat washer onto a short screw from the kit. Insert the screw into one of the <u>lower</u> license-plate mounting holes in the frame (1a), through the license plate, backing plate (1b), the original license plate bracket, another flat washer and a lock nut from the kit.

Repeat for the other lower license-plate mounting hole.

- Insert the hook of the license plate clamp into the slot in the license plate frame backing plate. Tighten the four license-plate frame nuts and the clamp nut securely.
- Insert the wires from the license-plate frame, one at a time, through the grommet in the fender. Pull the wires and conduit through the grommet to the underside of the fender.
- Remove the two screws holding the tail lamp to the base, and unplug the tail lamp connector. Remove the lamp and set it aside.
- See Figure 7. Insert the license plate frame harness wires into the socket housing (9) from the kit as shown.
 Refer to AMP MULTILOCK ELECTRICAL CONNEC-TORS in the Service Manual.
- 10. See Figure 8. Route the license-plate frame harness through the left-side opening in the tail lamp base, and plug the socket housing into the Accessory connector at the upper left of the tail lamp circuit board. Use tie straps (12) from the kit as needed to secure the wiring.

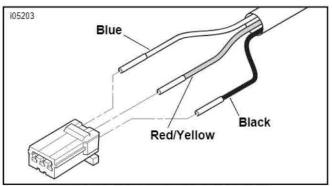


Figure 7. Wiring the Socket Housing

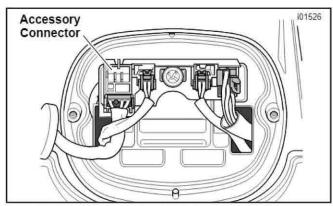


Figure 8. Connecting the License Plate Frame

- Re-attach the tail lamp connector, and re-assemble the tail lamp to the base with the screws removed earlier.
- Peel the backing off of the reflector (8) from the kit. Hold the reflector up to the license plate bracket just below the new license plate frame, and press firmly into place Proceed to Step 22, on Page 6.

For FXSTD/I Models

- 2. Remove the license plate (if installed) from the vehicle.
- Obtain the license-plate frame assembly and two long screws (5) from the kit. Position the frame against the license-plate mounting bracket on the motorcycle. Insert the screws through the bottom holes in the frame and the slots in the mounting bracket. Center the licenseplate frame on the license-plate mounting bracket.

Mark the location of the upper license-plate frame mounting holes on the mounting bracket. Remove the frame and screws, and set aside.

To prevent damage to the rear tire, place a block of wood between the rear tire and the bracket.

See Figure 9. Drill two 3/8 in. diameter holes in the license-plate mounting bracket at the marked locations. Drill another 3/8 in. diameter hole approximately 3/8 in. to the left of the lower left-hand slot for the license-plate frame wiring to pass through.

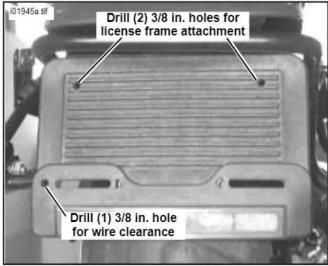


Figure 9. Drill Holes in License Plate Mounting Bracket (FXSTD)

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- Insert the license plate into the frame. Position the wires (1c) on the license-plate frame so they are not pinched in the frame.
- Insert the wires, one at a time, through the clearance hole drilled in Step 4. Pull the wires and conduit through the hole to the underside of the license-plate mounting bracket.
- Install the license-plate frame assembly onto the motorcycle.

Place a flat washer (6) onto one of the long screws (5) from the kit. Insert the screw into one of the <u>upper</u> license-plate mounting holes in the frame (1a), through the license plate, the backing plate (1b), the rubber spacer (3), the license plate bracket on the motorcycle, another flat washer and a lock nut (7) from the kit.

Repeat for the other upper license-plate mounting hole.

Place a flat washer onto a long screw from the kit. Insert
the screw into one of the <u>lower</u> license-plate mounting
holes in the frame (1a), through the license plate, the
backing plate, the rubber spacer, the license plate
bracket, another flat washer and a lock nut from the kit.

Repeat for the other lower license-plate mounting hole. Tighten all four nuts securely.

9. See Figure 10. Insert a Phillips-head screwdriver into

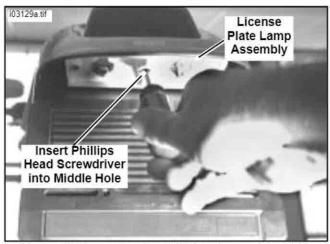


Figure 10. Removing the Tail/ Stop Lamp Assembly

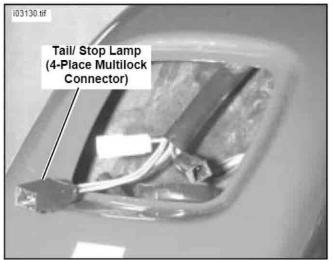


Figure 11. Disconnect Tail/ Stop Lamp Wires

the middle hole of the license plate illuminator assembly. Push the screwdriver in to disengage the clip while gently pulling the tail/ stop lamp assembly out of the fender.

See Figure 11. Disconnect the tail/ stop lamp wiring at the 4-place Multilock connector.

 Install the Tail/ Stop Lamp Jumper Harness, Part Number 70316-03 (not included in the kit), between the two parts of the tail/ stop lamp connector.

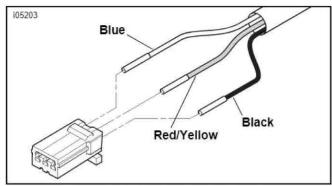


Figure 12. Wiring the Socket Housing

- See Figure 12. Insert the license plate frame harness wires into the socket housing (9) from the kit as shown. Refer to AMP MULTILOCK ELECTRICAL CONNEC-TORS in the Service Manual.
- Route the license plate frame harness up between the license-plate mounting bracket and the license plate illuminator assembly through the tail/ stop lamp opening in the fender.

Plug the socket housing into the Tail/ Stop Lamp Jumper Harness. Use tie straps (12) from the kit as needed to secure the wiring.



Figure 13. Installing the Tail/ Stop Lamp Assembly

13. See Figure 13. Align the tail/ stop lamp assembly with the opening in the fender as shown. Insert the upper spring into place and push upward slightly on the lower spring while firmly pressing the lamp assembly toward the fender.

The assembly is securely in place when the upper and lower springs "click".

Proceed to Step 22, on Page 6.

AWARNING

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)

22. Connect the battery cables, positive cable first.

AWARNING

Check for proper rear lamp operation before riding motorcycle. Visibility is a major concern for motorcyclists. Improper rear lamp operation may lead to an accident which could result in death or serious injury.

- Turn the ignition on, and check the license plate frame lights <u>and</u> the motorcycle lamps for proper operation:
 - With the ignition switch "ON", the five red LED's on each side and the Harley-Davidson script at the top of the frame should be lit, along with the motorcycle's tail lamp and, on FXSTD/I, the license plate illuminator lamps.
 - When the brake pedal is activated, the five red LED's on each side should noticeably brighten, along with the motorcycle's stop lamp(s).
- Refer to the Service Manual, and follow instructions to install the seat.

AWARNING

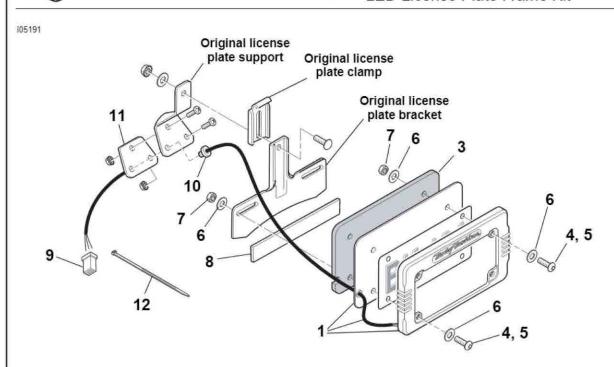
After installing seat, pull upward on front of seat to be sure it is in locked position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070a)



Part No. 59030-03

Date 12/02

LED License Plate Frame Kit



Item	Description	Part No.	Item	Description	Part No.
1	License plate frame assembly	59276-03	6	Washer, flat (8)	6339
1a	Frame		7	Lock nut (4)	94026-92T
1b	Backing plate		8	Reflector	59988-72
1c 2	Wire harness and conduit		9	Housing, socket (3-way)	73153-96BK
2	Hardware kit		10	Grommet	59344-03
	(includes items 3 through 12)	59337-03	11	Pad	59345-03
3	Spacer, license plate frame		12	Tie strap, black,	
	(for FXSTD only)	59075-03		7.75 in (20 cm) long (8)	10006
4	Screw, socket head, Grade 8,		13	Connector, butt splice (3)	
	1/4-20 x 7/8 in (4) (except FXSTD)	94387-92T		(not shown)	70581-73
5	Screw, socket head,		14	Conduit, heat shrink (3) (not shown)	67113-83
	1/4-20 x 1 in (4) (FXSTD only)	94408-03			
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