INSTRUCTION SHEET BUEL

-J02988

Kit Number 59439-04Y

REV. 2-25-2004

LED LICENSE PLATE FRAME

General

This kit fits all **2003 and later** XB9R and XB12R (Firebolt[®]) models and **2000 and later** P3 (Blast[®]) model motorcycles.

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

See the Service Parts illustration for kit contents.

This kit requires 145 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

It is possible to overload your motorcycle's charging system by adding too many electrical accessories. If your combined electrical accessories operating at any one time consume more electrical current than your vehicle's charging system can produce, the electrical consumption can discharge the battery and cause vehicle electrical system damage. See a Buell dealer for advice about the amount of current consumed by additional electrical accessories, or for necessary wiring changes. (00249b)

NOTE

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

AWARNING

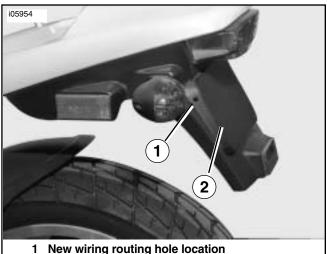
The rider's safety depends upon the correct installation of this kit. If the procedure is not within your capabilities or you do not have the correct tools, have a Buell dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00309a)

Installation, Blast Models

AWARNING

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

- 1. Refer to the Service Manual and follow the instructions given to remove the seat and disconnect the negative battery cable. Retain all seat mounting hardware.
- 2. Remove the license plate (if installed) from the vehicle.



2 Existing license-plate mounting bracket

Figure 1. Wire Routing Hole Location (Blast)

- 3. See Figure 1. Using a 3/8-inch drill bit, drill a hole (1) for wire routing through the left side of the existing license-plate mounting bracket (2) as shown.
- 4. See the Service Parts illustration. Insert the grommet (18) from the hardware kit into the new hole.

NOTE

Holes used for prior license-plate mounting can be used if properly located.

 Obtain the license-plate frame assembly (1) from the kit. Position the frame against the license-plate mounting bracket on the motorcycle, centering the frame on the bracket.

Mark the location of the four license-plate frame mounting holes on the mounting bracket. Remove the frame and set it aside.

- 6. Drill four 3/8-in. diameter holes in the license-plate mounting bracket at the marked locations.
- 7. Insert the license plate into the frame. Position the frame against the license-plate mounting bracket, aligning the frame on the newly-drilled holes.
- 8. Place a flat washer (16) from the hardware kit onto one of the screws (17) from the kit.

Insert the screw into the lower right-side mounting hole in the license-plate frame, through the license plate, the cover (3), and the lower right-side hole in the original license-plate bracket.

From the back side of the mounting bracket, place a second flat washer (16) and a nut (15) onto the screw threads. Hand tighten the nut.

Repeat for the remaining three mounting holes.

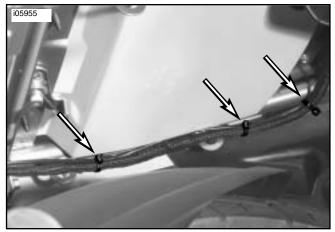


Figure 2. Securing Wire Underneath Seat (Blast)

9. Position the wires on the back of the license-plate frame so they are not pinched in the frame. Pull the wires to the underside of the license-plate frame through the grommet installed in Step 4.

Tighten the four screws and nuts securely.

- 10. See Figure 2. Route the license-plate frame wires alongside the existing wiring along the tail frame, securing with tie straps (13) from the hardware kit.
- 11. See Figure 3. Pull the wires through the pass-through hole next to the battery underneath the seat.

Wiring Connections, Blast Models

NOTE

See the lighting circuit wiring schematic in the appropriate Service Manual, and Figure 4 below, for wire and connection details.

- 12. Disconnect the rear lighting harness connector 7A and 7B.
- 13. Remove the following wires and pin terminals from housing 7A, (the main harness side of the connector):
 - Black wire and pin from cavity 6
 - Orange/ White wire and pin from cavity 2
 - Red/ Yellow wire and pin from cavity 5

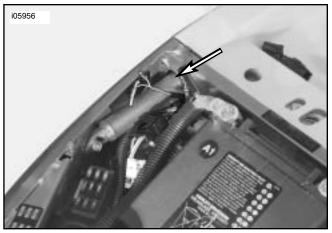


Figure 3. Pass-Through Hole Next To Battery (Blast)

- 14. See the Service Parts illustration. Obtain the harness assembly (6) from the kit. Connect the following wires and pin terminals from the harness assembly to housing 7A:
 - Black wire and pin to cavity 6
 - · Blue wire and pin to cavity 2
 - Red/ Yellow wire and pin to cavity 5
- 15. Obtain the 3-way socket housing (12) from the hardware kit. Connect the following wires and socket terminals from the license-plate frame to the socket housing.
 - · Blue wire and socket into cavity 1
 - · Red/ Yellow wire and socket into cavity 2
 - · Black wire and socket into cavity 3
- 16. Insert the following wires and pin terminals from the main harness to the pin housing (7) supplied with the harness assembly:
 - Orange/ White wire and pin into cavity 1
 - Red/ Yellow wire and pin into cavity 2
 - · Black wire and pin into cavity 3
- 17. Connect pin housing (7) to the socket housing on the harness assembly (6). Connect the pin housing on the harness to socket housing (12). Re-assemble connector halves 7A and 7B.

Proceed to Step 21.

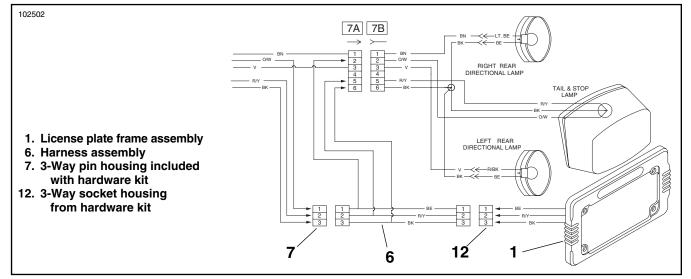


Figure 4. Wiring Connections (Blast)

Installation, Firebolt Models

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

- Refer to the Service Manual and follow the instructions given to remove the seat and pillion, and disconnect the negative battery cable. Retain all seat mounting hardware.
- 2. Remove the license plate (if installed) from the vehicle.
- 3. Remove the tail section body work. See SUBFRAME TAIL ASSEMBLY AND BODY WORK in the appropriate Service Manual.
- 4. See Figure 5. Using a 3/8-inch drill bit, drill a hole for wire routing through the lower tail body work as shown.

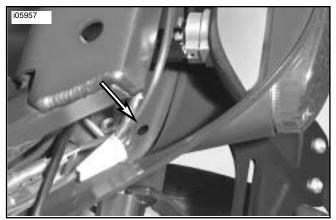


Figure 5. Wire Routing Hole Location (Firebolt)

- 5. See the Service Parts illustration. Insert the grommet (18) from the hardware kit into the new hole.
- 6. Obtain the license-plate frame assembly (1) from the kit. Insert the license plate into the frame.
- 7. Place a flat washer (16) from the hardware kit onto one of the screws (17) from the kit.

Insert the screw into the lower right-side mounting hole in the license-plate frame, through the license plate and the cover (3).

From the back side of the cover, place a second flat washer (16) and a nut (15) onto the screw threads. Hand tighten the nut.

Repeat for the lower left-side mounting hole.

8. Position the frame against the license-plate mounting bracket on the motorcycle, aligning the frame to the mounting holes in the bracket.

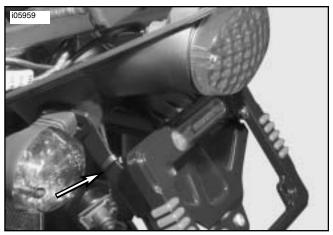


Figure 6. Securing Wire to License Plate Bracket (Firebolt)

9. Place a flat washer onto a screw from the kit.

Insert the screw into the upper right-side mounting hole in the license-plate frame, through the license plate, the cover (3), and the upper right-side hole in the original license-plate bracket.

From the back side of the mounting bracket, place a flat washer and nut onto the screw threads. Hand tighten the nut.

Repeat for the upper left-side mounting hole.

10. Position the wires on the back of the license-plate frame so they are not pinched in the frame. Route the wires, from underneath, through the grommet installed in Step 5.

Tighten the four screws and nuts securely.

- 11. See Figure 6. Using a cable strap, secure the wire to the license plate bracket.
- 12. Cut the existing "fir tree" strap and remove from the tail section.
- 13. See Figure 7. Route the license-plate frame wires alongside the existing wiring along the tail frame, securing with a new "fir tree" strap (14) from the kit.
- 14. On either side of the "fir tree" strap, secure the harness to the existing wires with tie straps (13).

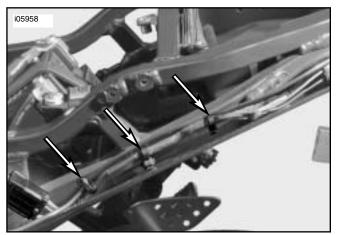


Figure 7. Wiring Routing Along Tail Frame (Firebolt)

Wiring Connections, Firebolt Models

NOTE

See the lighting circuit wiring schematic in the appropriate Service Manual and Figure 8 for wire and connection details.

- 15. Disconnect the rear lighting harness connector 7A and 7B.
- 16. Remove the following wires and pin terminals from housing 7A, (the main harness side of the connector):
 - · Black wire and pin from cavity 1
 - Orange/ White wire and pin from cavity 3
 - Red/ Yellow wire and pin from cavity 5
- 17. See the Service Parts illustration. Obtain the harness assembly (6) from the kit. Connect the following wires and pin terminals from the harness assembly to housing 7A:
 - Black wire and pin to cavity 1
 - Blue wire and pin to cavity 3
 - Red/ Yellow wire and pin to cavity 5
- Obtain the 3-way socket housing (12) from the hardware kit. Connect the following wires and socket terminals from the license-plate frame to the socket housing.
 - · Blue wire and socket into cavity 1
 - Red/ Yellow wire and socket into cavity 2
 - · Black wire and socket into cavity 3

- 19. Insert the following wires and pin terminals from the main harness to the pin housing (7) supplied with the harness assembly:
 - Orange/ White wire and pin into cavity 1
 - Red/ Yellow wire and pin into cavity 2
 - · Black wire and pin into cavity 3
- Connect pin housing (7) to the socket housing on the harness assembly (6). Connect the pin housing on the harness to socket housing (12). Re-assemble connector halves 7A and 7B.

All Models

21. Refer to the Service Manual and follow the instructions given to re-connect the negative battery cable

Be sure that all lights and switches operate properly before operating motorcycle. Low visibility of rider can result in death or serious injury. (00316a)

- 22. Turn the ignition on, and check the license plate frame lights and the motorcycle lamps for proper operation:
 - With the ignition switch "ON", the five red LED's on each side and the Buell script at the top of the frame should be lit, along with the motorcycle's tail lamp.
 - 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).
- 23. Refer to the Service Manual, and follow instructions to install the seat .

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)

24. **Firebolt models:** Refer to the Service Manual, and follow instructions to install the pillion.

After installing pillion, pull upward on front of pillion to be sure it is locked in position. If pillion is loose, it could shift position during vehicle operation while carrying a passenger, resulting in loss of control of vehicle and death or serious injury.

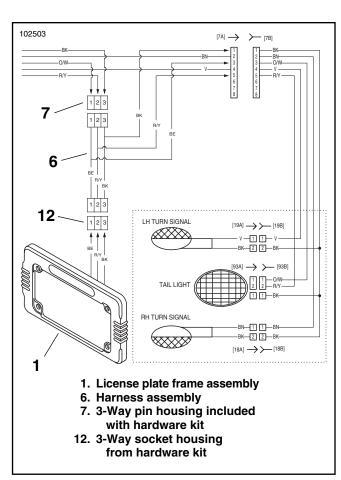


Figure 8. Wiring Connections (Firebolt)

