



INSTRUCTIONS

J04720

2008-11-21



PURSUIT LAMP KIT

GENERAL

Kit Number

68746-03B

Models

For model fitment information, see the Harley-Davidson Police and Fleet Motorcycle Catalog or the Police and Fire/Rescue section of www.harley-davidson.com (English only).

NOTE

This accessory must be removed when vehicle is sold for non-police use. Follow all applicable federal, state and local regulations when changing to a civilian vehicle.

Additional Parts Required

Models with turn signals mounted on the upper or lower triple clamp require the use of the Front Directional Relocation Kit (68603-01).

Tools and Supplies Required

An UltraTorch UT-100 (39969), Robinair Heat Gun (25070) with Heatshrink Attachment (41183), or other suitable radiant heating device is required for the proper installation of this kit.

A Crimp Tool (38125-8) will aid in the installation.

A flare nut socket (Snap-on® FRX181 or equivalent) will also be helpful.

▲ WARNING

Rider and passenger safety depend 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. (00333b)

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.

Electrical Overload

NOTICE

It is possible to overload the vehicle's charging system by adding too many electrical accessories. If the combined electrical accessories operating at any one time consume more electrical current than the vehicle's charging system can produce, the electrical consumption can discharge the battery and cause damage to the vehicle's electrical system. (00211d)

▲ WARNING

When installing any electrical accessory, be certain not to exceed the maximum amperage rating of the fuse or circuit breaker protecting the affected circuit being modified. Exceeding the maximum amperage can lead to electrical failures, which could result in death or serious injury. (00310a)

This kit requires up to **2.8 amps** additional current from the electrical system. In addition, it is recommended that the **engine hot idle be set to 1000 RPM**.

Kit Contents

See Figure 8 and Table 1.

INSTALLATION

▲ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative (-) cable first) before proceeding. (00307a)

▲ WARNING

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)

NOTE

For 2004 and later XL (Sportster®) models, the negative battery cable is most easily disconnected at the engine crankcase.

- Models with Main Circuit Breaker:** Refer to the service manual and follow the instructions given to remove the seat and disconnect the battery cables, negative cable first. Retain all seat mounting hardware.

▲ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)

2. **Models with Main Fuse:** Refer to the service manual and follow the instructions given to remove the main fuse.

▲ WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

3. Remove the fuel tank. See the service manual.
4. See Figure 8. Obtain the lamp mounting brackets (1 and 3), clamps (2 and 4) and four button head screws (5) from the kit.

NOTE

The mounting brackets and clamps are side-specific. Refer to the figures and make sure the correct components are selected for each side.

5. See Figure 1. Position the right side mounting bracket (4) and clamp (3) on the right side fork tube as shown. Loosely fasten with two button head screws (2), then the inboard screw (1) to 8–9 N·m (70–80 in-lbs).

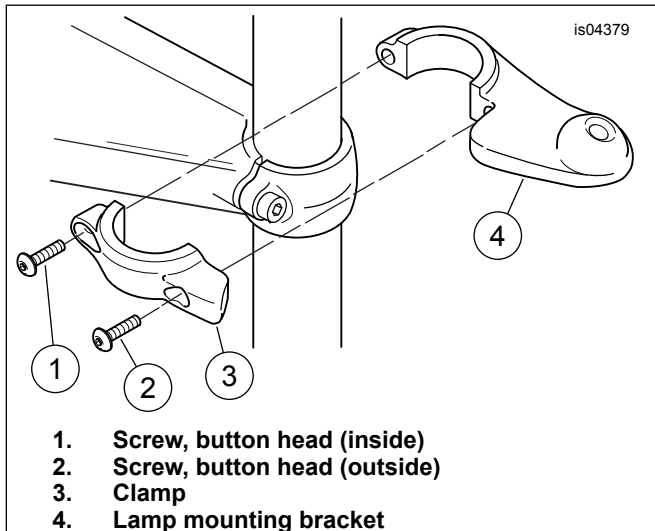


Figure 1. Install Mounting Bracket on Fork Tube (Right Side Shown)

6. See Figure 8. Obtain the pursuit lamp assemblies (6), two conduits (14), clamp blocks (15), lockwashers (16) and retainers (17) from the kit.
7. See Figure 2. Route the wire (2) of the **blue** pursuit lamp (1) through the right side mounting bracket (3), and secure the lamp to the bracket using a clamp block (4), lockwasher (5) and retainer (6). Tighten the retainer to 22–24 N·m (16–18 ft-lbs).

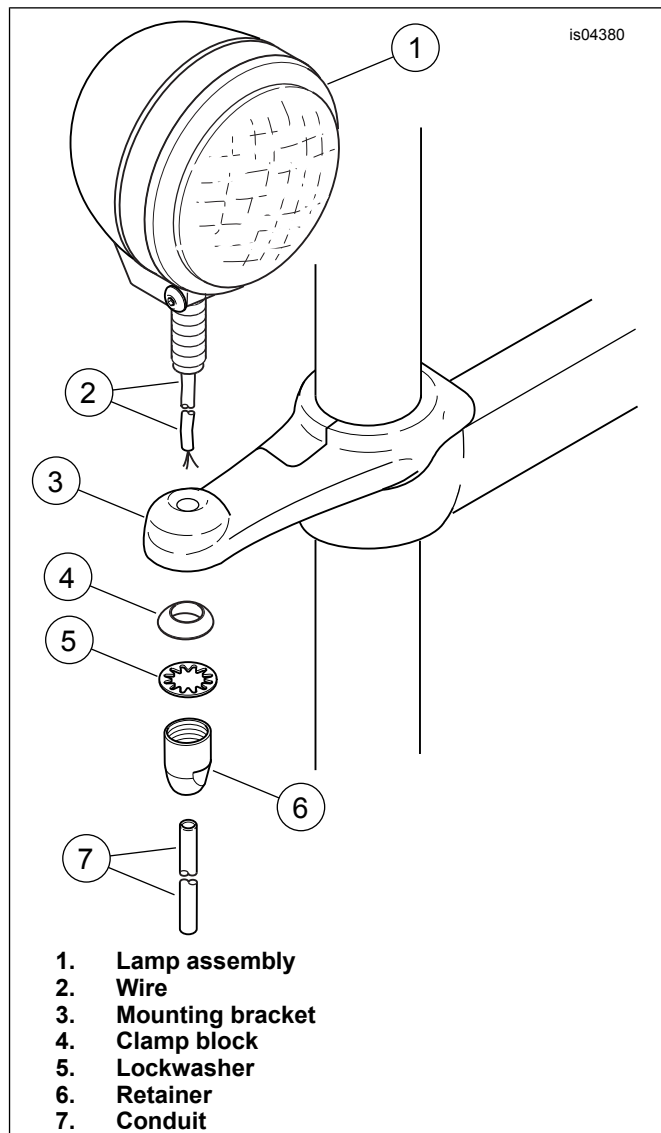


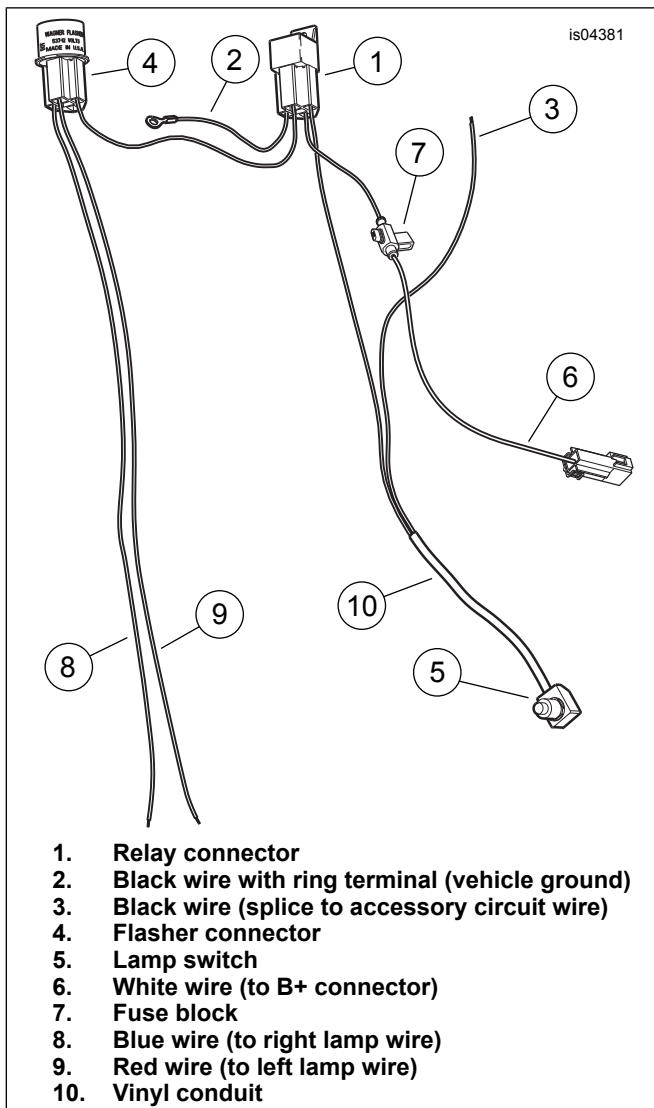
Figure 2. Install Lamps

8. Slide the conduit (7) over the lamp wire.
9. Repeat Steps 4 through 7 with the red lamp on the left side of the vehicle.

NOTE

See Figure 3 for the location of components of the wiring harness.

10. **For 2003 and earlier models:** See Figure 4. Install the wiring harness (8). Place the relay (1) and flasher (4) in the opening below the seat pan, and route the long leg of the harness (8) along the frame backbone. **For 2004 and later models:** See Figure 5. Remove the nuts retaining the ignition module (1) and temporarily reposition the module as shown. Place the relay in the recessed area (2) of the oil reservoir. Install the ignition module. Route the long leg of the harness along the frame backbone.



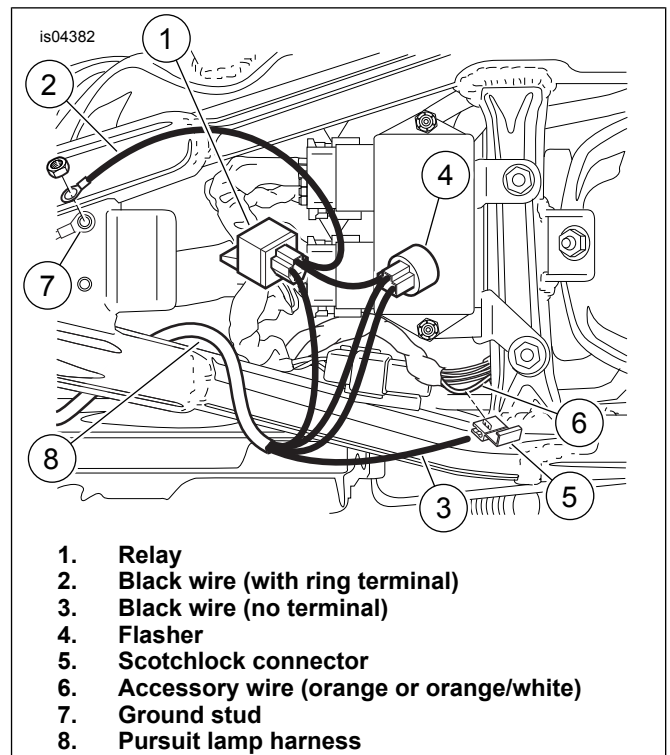
1. Relay connector
2. Black wire with ring terminal (vehicle ground)
3. Black wire (splice to accessory circuit wire)
4. Flasher connector
5. Lamp switch
6. White wire (to B+ connector)
7. Fuse block
8. Blue wire (to right lamp wire)
9. Red wire (to left lamp wire)
10. Vinyl conduit

Figure 3. Wiring Harness Components

⚠ WARNING

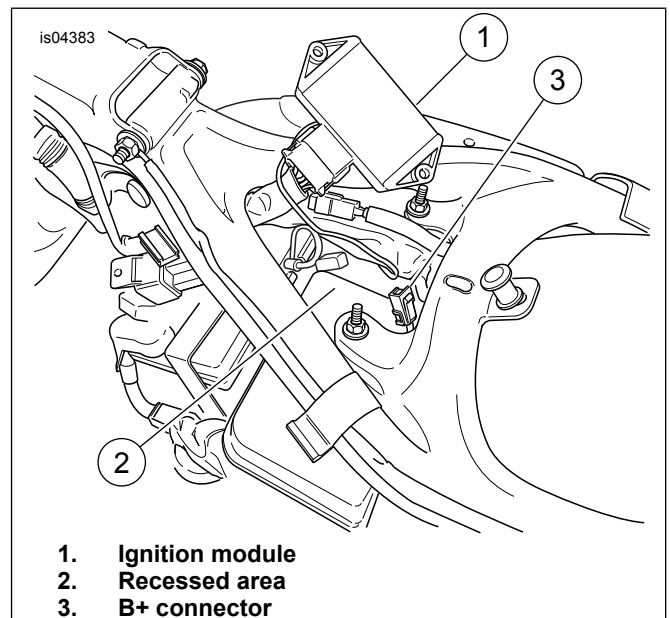
When routing wires and harnesses, ensure that they are clear of moving parts, heat sources and pinch points to avoid wire damage or a short circuit, which could cause loss of control resulting in death or serious injury. (00554b)

11. **For 2003 and earlier models:** See Figure 4. Cut the connector from the white power lead (6), and replace it with the ring terminal (Figure 8, 18) supplied in the kit. Connect the white wire with the ring terminal to the copper stud (BAT) terminal of the main circuit breaker. **For 2004 and later models:** See Figure 5. Connect the pin housing on the white wire to the B+ socket housing (3) on the vehicle harness.
12. **For ALL models:** See Figure 4. Connect the black ground wire with ring terminal (2) at the ground stud (7) under the seat, or at any good electrical ground point. Secure the pursuit lamp harness to the adjacent harnesses with cable straps from the kit.



1. Relay
2. Black wire (with ring terminal)
3. Black wire (no terminal)
4. Flasher
5. Scotchlock connector
6. Accessory wire (orange or orange/white)
7. Ground stud
8. Pursuit lamp harness

Figure 4. Install Wiring Harness (2003 and Earlier Models)



1. Ignition module
2. Recessed area
3. B+ connector

Figure 5. Install Wiring Harness (2004 and Later Models)

13. Route the pursuit lamp harness past the steering head, and route the lamp switch leg of the harness along the left side of the handlebar to the clutch control.
14. See Figure 8. Remove the boot (9) from the lamp switch (A), and install the switch into the switch mounting bracket (13) from the kit. Assemble the boot to the switch.

NOTE

Over time the boot may become lost, worn or damaged. Replace the boot as needed to prevent moisture from entering the switch.

15. See Figure 6. Remove the lower screw (1) and washer from the clutch control clamp, and install the lamp switch and bracket assembly (2). Install the screw and washer and tighten to 7–9 N·m (60–80 **in-lbs**).

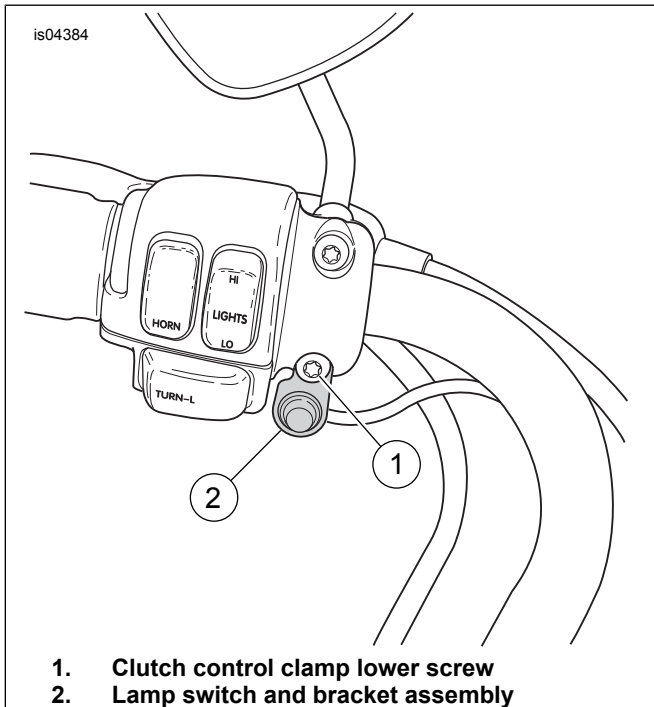


Figure 6. Install Lamp Switch to Clutch Control Clamp

16. Secure the lamp switch leg of the pursuit lamp harness to the handlebar using the **new** wire harness retainers (Figure 8, 19) as needed. Snap the retainers into the holes in the handlebar.
17. See Figure 4. Route the black wire without the ring terminal (3) to a convenient location under the seat, and splice the black wire to the accessory circuit wire on the vehicle harness using the Scotchlok[®] connector (Figure 8, 20).

- **On 2003 and earlier models**, the accessory wire is orange.
- **On 2004 and later models**, the accessory wire is orange with a white stripe.

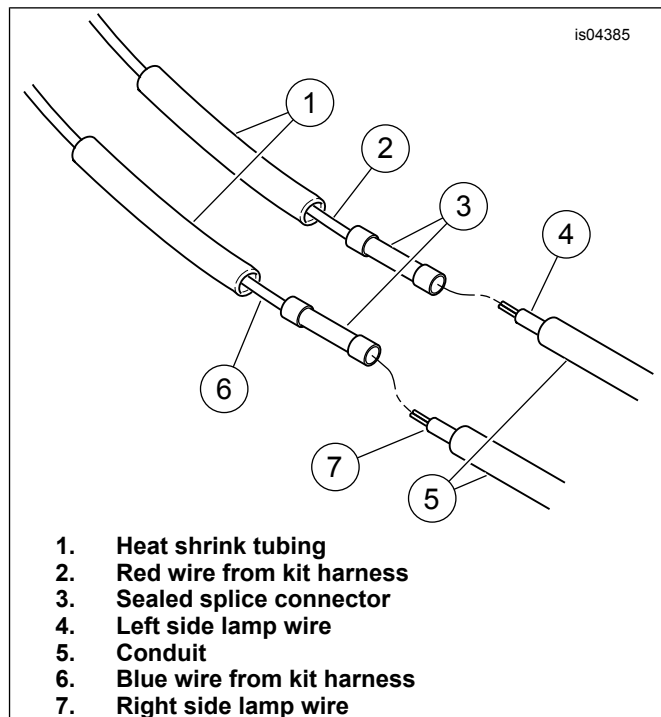


Figure 7. Connect Lamp Wires to Kit Harness

NOTE

Sealed splicing is a necessary step in the installation of the Pursuit Lamp Kit to the motorcycle. Refer to the service manual for proper sealed splicing procedures.

18. See Figure 7. Slide heat shrink tubing (1) from the kit over the blue wire on the pursuit lamp harness. Crimp the sealed splice connector (3) to the blue wire using a Crimp Tool (38125-8). Bring the right side pursuit lamp wire to the connector and trim the wire, allowing approximately one inch (25 mm) of the wire to extend past the sealed splice connector. Trim the conduit (5) approximately 1-1/2 inch (38 mm) back from the end of the wire.
19. Remove approximately 3/8 inch (10 mm) of insulation from the end of the lamp wire.
20. Insert the end of the right side lamp wire into the sealed splice connector (3). Use the Crimp Tool to crimp the wires to the sealed splice connector.
21. Repeat Steps 17 through 19 to connect the left side pursuit lamp wire to the red wire of the harness.

▲ WARNING

Be sure to follow manufacturer's instructions when using the UltraTorch UT-100 or any other radiant heating device. Failure to follow manufacturer's instructions can cause a fire, which could result in death or serious injury. (00335a)

- Avoid directing 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.
- Always keep hands away from tool tip area and heat shrink attachment.

NOTE

While applying heat to the electrical connector, protect the heat shrink tubing from the heat source.

22. Slide the heat shrink tubing away from the splice, and using the UltraTorch UT-100, Robinair Heat Gun with Heatshrink Attachment, or other suitable radiant heating device, heat the crimped **sealed splice connector**. Apply heat from the center of the crimp out to each end until the meltable sealant exudes out of both ends of the connector. Let the connector cool.
23. Slide the heat shrink tubing over the splice, and use the heating device to heat the tubing to encapsulate the sealed splice connection. Apply heat from the center of the tubing out to each end.
24. Secure the wires to the lower fork steering bracket using the adhesive-backed clips from the kit.

NOTE

Be sure that wiring harness does not get pinched between fuel tank and frame during tank installation.

▲ WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

25. Install the fuel tank. See the service manual.
26. Verify that the ignition/light key switch is turned to the OFF position.

SERVICE PARTS

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
1	Bracket, pursuit lamp mounting (right)	Not sold separately
2	Clamp, pursuit lamp mounting (right)	Not sold separately
3	Bracket, pursuit lamp mounting (left)	Not sold separately
4	Clamp, pursuit lamp mounting (left)	Not sold separately
5	Screw, hex socket button head, 1/4-20 x 3/4 inch (4)	927A
6	Pursuit lamp assembly, blue or red (includes Item 7)	Not sold separately
7	<ul style="list-style-type: none"> • Lens and bulb assembly, blue • Lens and bulb assembly, red • Bulb only (not shown) 	68728-09 68727-09 68453-05
8	Wiring harness assembly (includes items 9 through 12)	69298-04
9	<ul style="list-style-type: none"> • Boot, switch 	67880-94
10	<ul style="list-style-type: none"> • Relay 	31504-91B
11	<ul style="list-style-type: none"> • Flasher 	68563-04
12	<ul style="list-style-type: none"> • Fuse, blade type, 15 Amp (blue) 	72330-95
13	Bracket, switch mounting	70371-00
14	Conduit, vinyl (2)	Not sold separately
15	Clamp block (2)	68720-62
16	Lockwasher (2)	7130W
17	Retainer, lamp, mounting (2)	Not sold separately
18	Ring terminal	9858
19	Retainer, wiring harness (4)	70345-84

▲ WARNING

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)

27. **Models with Main Circuit Breaker:** Apply a light coat of petroleum jelly or corrosion retardant material to the battery terminals. Refer to the service manual and follow the instructions given to connect the battery cables (positive cable first). **Models with Main Fuse:** Refer to the service manual and follow the instructions given to install the main fuse.

▲ WARNING

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

28. Refer to the service manual and follow instructions to install the seat.
29. Align the pursuit lamps as follows:
 - Insert a flare nut socket (Snap-on[®] FRX181 or equivalent) at the bottom of the turn signal mounting bracket, and loosen the locknut on the stud.
 - Move the lamp and swivel block to the desired position.
 - Using the flare nut socket, tighten the locknut to 24.4 N-m (18 ft-lbs).

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
20	Connector, electrical (Scotchlok®)	70576-68
21	Connector, pre-insulated, sealed splice (2)	70586-93
22	Shrink tube (2)	72266-94
23	Clip, adhesive-backed (4)	10102
24	Strap, cable (12)	10181
Items mentioned in text:		
A	Pursuit lamp switch	

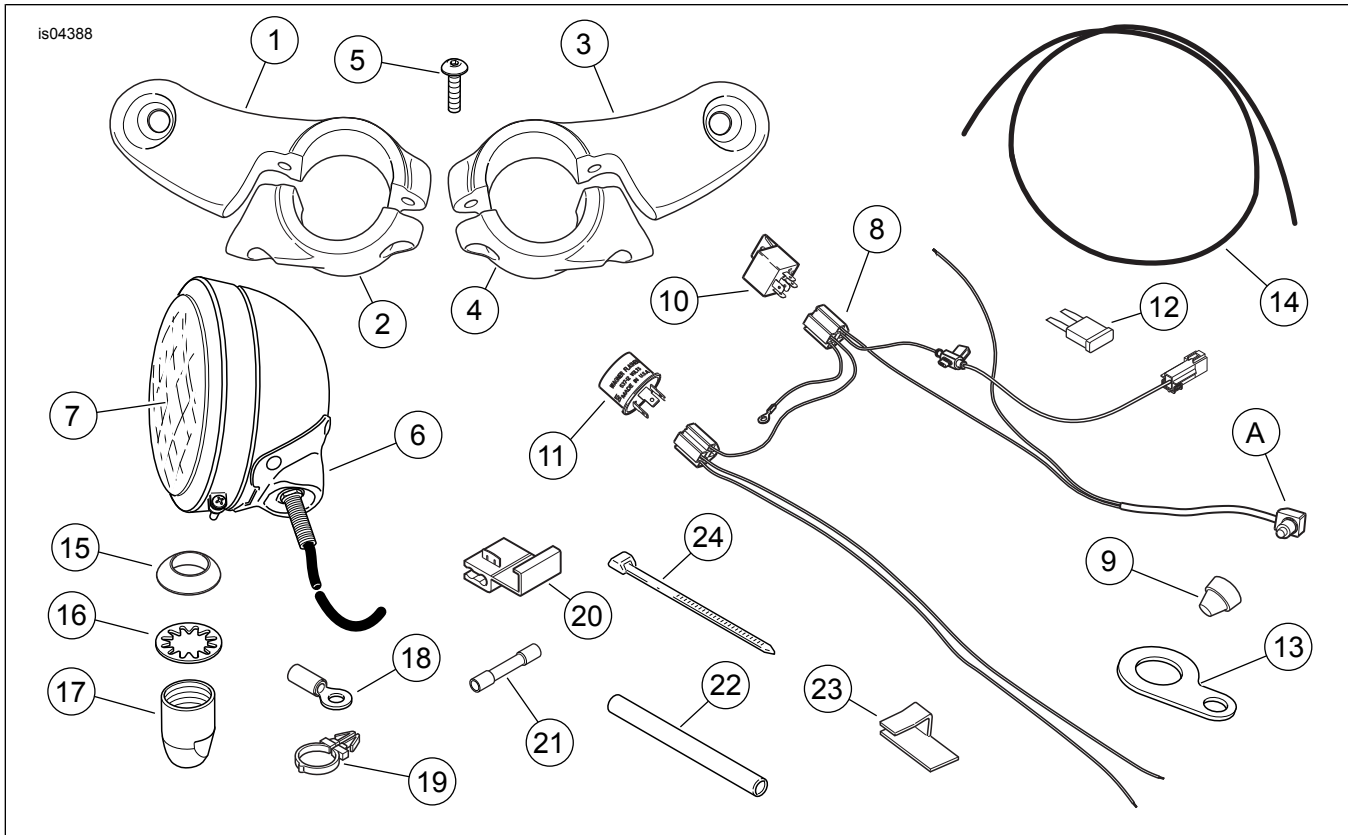


Figure 8. Service Parts, Pursuit Lamp Kit