

**V-Twin Mfg.
Spotlamp Kit
Fits 1986-1999 FLST Models
VT No. 33-2030**

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.

Installation

1. Remove and discard two socket head screws from both sides of headlight housing.
2. Remove back panel and side trim strip from left side of headlight housing. Mark a spot one inch out from the inside edge and halfway between the top and bottom edges of the panel.
3. Drill a small lead hole at marked spot, see parts illustration below. Enlarge hole to 1/2 in. Mount toggle switch (11) and label (12), using knurled nut (24) on toggle switch. Set panel aside for later use.
4. Attach passing lamp bracket (10) to headlight housing with 5/16-24 x 1-3/8 in. bolt (2) and spacer (3) (between housing and bracket) at top hole, 5/16-24 x 1 in. bolt (1) in bottom. Place a flat washer (5) and a lock washer (6) on each bolt, with the lock washer next to the bolt head. Tighten right side only to 19 ft-lbs.
5. Attach passing lamps (13) to mounting bracket (10) with hardware as shown on Parts illustration.

NOTE: The Belleville washer (4) must be positioned cupped side up.

Wiring:

1. Collect wires from both passing lamps. Combine ends and terminate with a single spade connector (8). Attach connector to closest terminal on toggle switch. Use cable straps (9) to secure wires to mounting bracket and frame.
2. Obtain length of black vinyl covered wire cable (28) from kit. Terminate one end with remaining single spade connector and connect to remaining terminal on toggle switch. Encase this wire with conduit (27) from kit.
3. Headlight housing back panel can now be bolted into place under left side of passing lamp mounting bracket. Route wires so they are not pinched between headlight housing and fork bracket. Secure wires to frame with cable straps. Tighten mounting bracket to 19 ft-lbs.
4. Remove headlight rings and headlight. Route end of toggle switch wire through back of grommet in rear of headlight housing.

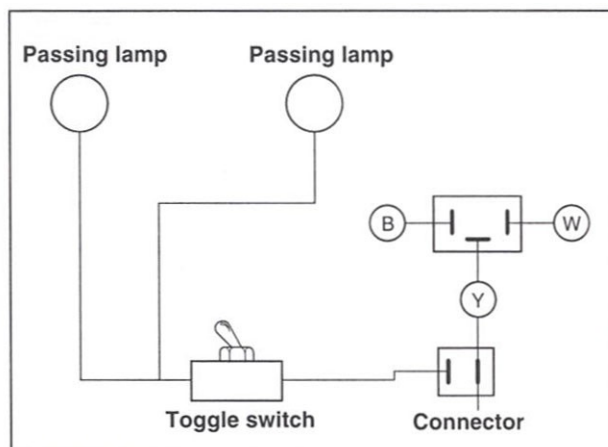
NOTE: To route wire through back of grommet, push a hooked piece of wire through back of grommet. Soap toggle switch wire and pull through grommet with hooked wire.

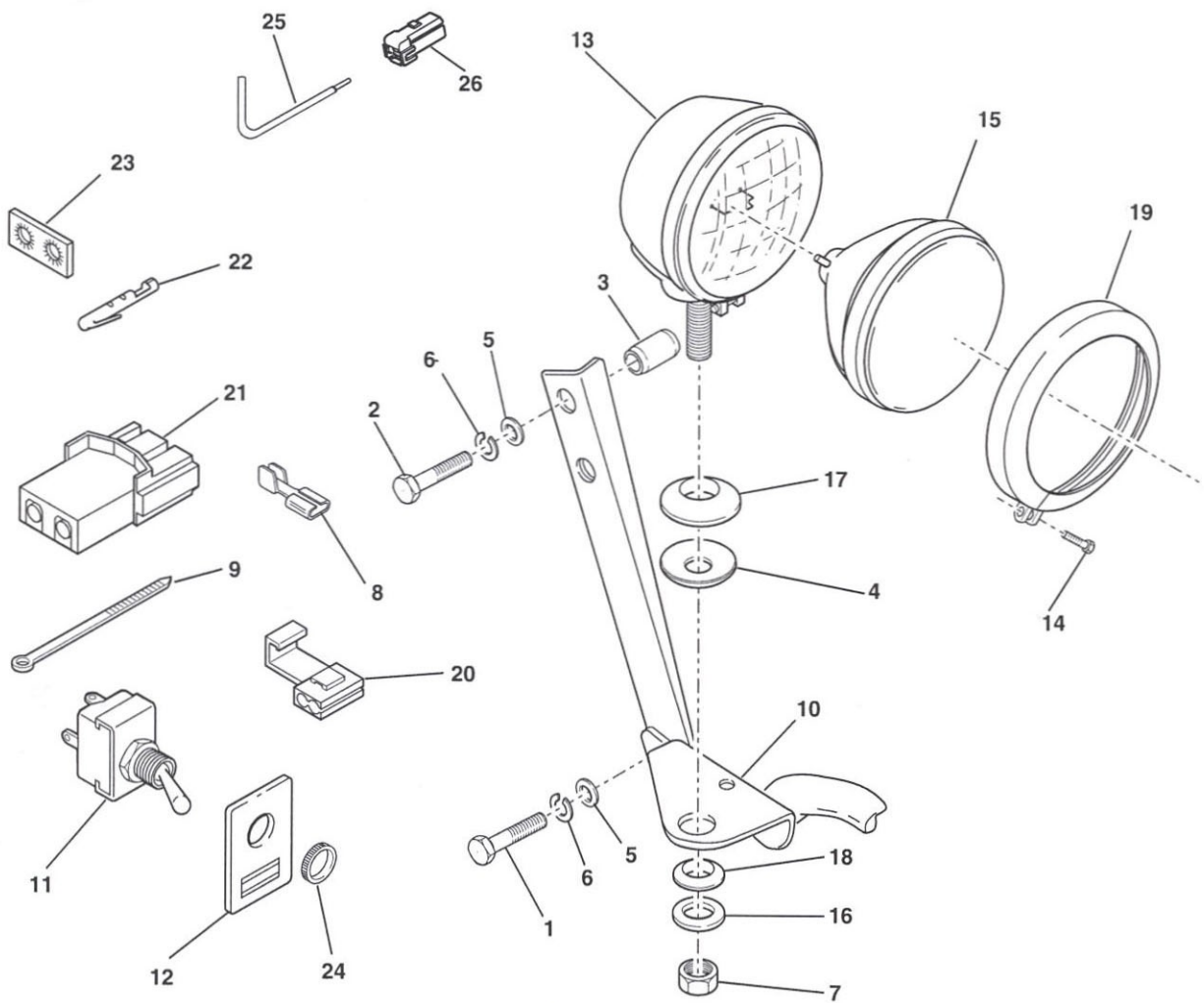
5. Connect toggle switch lead to yellow (low beam) wire from headlight socket with connector from kit. See wiring diagram below.

NOTE: Wired in this manner, the passing lamps can only be operated while the headlight is on low beam.

6. Reassemble headlight.
7. Reconnect battery cables (positive cable first).
8. Test headlight, high and low beams and passing lamps. Aim passing lamps and tighten passing lamp mounting nuts.

NOTE: If this kit is to be used as a replacement for the original passing lamps on 1995 and earlier FLSTC models, installing the pin connectors (22), two pin connector housing (21) and two terminal tab connector (23) allows for electrical fitment to the wiring harness. On 1996 and later FLSTC models, the electrical connector (25) and socket terminals (26) should be used.





Parts List

Item	Description	Qty	Item	Description	Qty
1	Bolt, 5/16-24 x 1 in.	2	14	Screw	2
2	Bolt, 5/16-24 x 1-3/8 in.	2	15	Sealed beam unit	2
3	Spacer	2	16	Swivel washer,	2
4	Belleville washer	2	17	Passing lamps clamp block,	2
5	Washer, flat 5/16 in.	4	18	Passing lamps swivel block,	2
6	Lockwasher, 5/16 in.	6	19	Molding	2
7	Locknut, 3/8-16	2	20*	Electrical connector	2
8*	Single spade connector	2	21*	Housing, pin two circuit	For use on 1995 FLSTC and earlier models
9*	Cable strap (10)	10	22*	Pin terminal	For use on 1995 FLSTC and earlier models
10	Bracket, passing lamps	1	23*	Tab connector, two terminal	For use on 1995 FLSTC and earlier models
11*	Toggle switch	1	24*	Knurled nut for toggle switch	1
12*	Passing Lamp switch label	1	25*	Electrical connector	For use on 1996 and later FLSTC models
13	Clear Passing lamp	2	26*	Socket terminal	For use on 1996 and later FLSTC models

* **Note:** Not included with kit, shown for reference only.