

PARTS LIST

QTY.	DESCRIPTION
1	Light Bar Assembly
4	Clamp Half, Male
4	Clamp Half, Female
4	Screw, Button Head, 5/16-18 x 5/8
4	Nut, Acorn, 5/16-18
6	Connectors. Scotchlok


Tools used in all installations:
Tools needed to remove fuel tank.
Hex Key Wrench, 3/16"
Socket, 9/16", with Wrench and 6" extension
Slipjoint Pliers
Masking Tape & Ink Pen
Pliers
Motorcycle Service Manual
TO THE INSTALLER

This accessory fits motorcycles manufactured from 1983 through current model year.

The method of attaching the Passing and Turnsignal lamps described in this manual is the simplest possible, through the use of self-stripping wiretaps.

Attachment of the wires into the original block connectors requires the purchase of the correct wire terminals for your machine. Your dealer can provide you with the correct terminals.

Some models and/or years have an Accessory wire that is activated by the ignition switch. This wire can be used to power the passing lamps. It is recommended that a switch be added to the Passing Lamp circuit so the lamps can be turned off.

Check your state laws concerning motorcycle Passing Lamps or Auxiliary Motorcycle Front Lighting Devices to determine if it is allowed to operate the Passing Lamps with either the Low- beam or Hi-beam or both. We recommend connection to the Low-beam circuit.

PREPARATION

Make certain the motorcycle is positioned securely on its sidestand or a work stand. Cover the front fender to avoid scratches due to a dropped part or tool.

Remove the fuel tank from the motorcycle to allow access to the wiring connection for the turnsignals and headlight.

INSTALLATION

Note: The motorcycle's Service Manual is required for performing some of the following procedures.

An assistant will be helpful in positioning the Light Bar Assembly.

1. Put a pair of male and female clamp halves together just above the lower triple-clamp. Squeeze the ends of the clamp together with a pair of pliers. Diagram A.
2. Have an assistant position the Light Bar Assembly so the lightbar bracket is to the outside of the clamp assembly. Make sure the wires from the Light Bar Assembly are below the lower triple clamp. Diagram B.
3. Insert a Screw through the clamp and Light Bar Assembly mounting bracket and thread on an Acorn Nut.
4. Hold the Light Bar Assembly in place in front of the lower triple clamp, assemble and attach the remaining clamps.
5. With all four clamp assemblies in place, tighten the clamping screws and nuts to 15 ft. lbs. (21 Nm).

Diagram A.

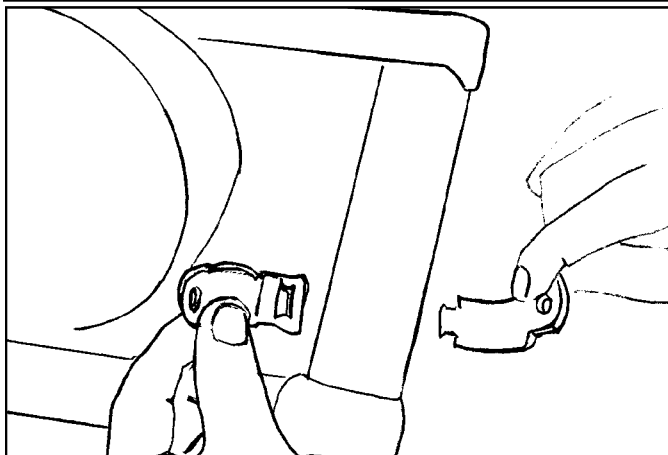
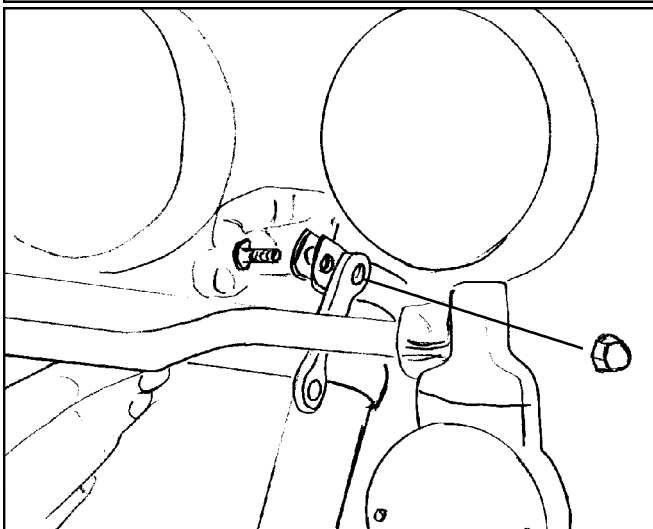


Diagram B.



WIRING

Refer to the service manual to gain access to the wire harness inside the fuel tank tunnel or inside the frame backbone. Also, verify the appropriate color wires for hook-up of the passing lamps and turnsignals and running lights.

Route the wires from the Light Bar Assembly, around the lower triple-clamp, and up to the frame backbone. Secure the wires so they cannot become pinched when turning the fork.

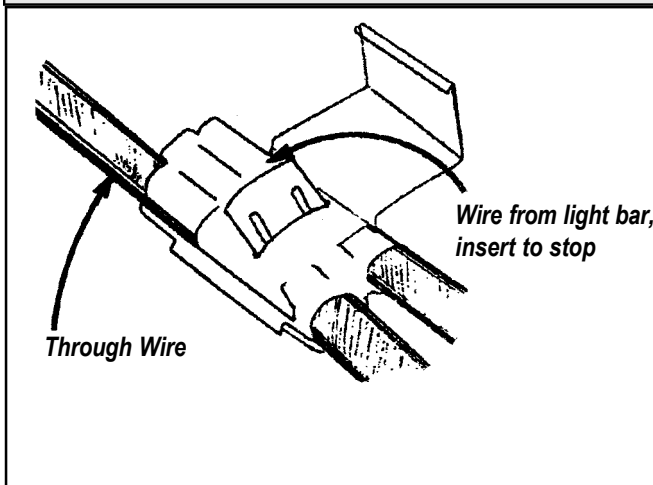
- A. The short black wires from the Light Bar Assembly connect to the wires powering the running lights.**
- B. The short red wires from the Light Bar Assembly connect to the wires powering the turnsignals.**
- C. The long blue wires from the Light Bar Assembly connect to the wire powering the headlight low beam.**

TESTING

After the wires are connected, verify the operation of the passing lamps, running lights and turnsignals. Correct any connection problems before reassembling the motorcycle.

Reinstall the fuel tank. Check all fasteners used during this installation for tightness.

Wiring



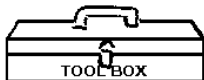
ADJUSTMENT PROCEDURE

HORIZONTAL AIM

A. To adjust the Spotlights or Turnsignals right or left gently rotate the lamp into the correct position. In the event that the lamps become loose, refer to the procedure for vertical adjustment.

2. VERTICAL AIM

(In addition to the tools needed for installation)

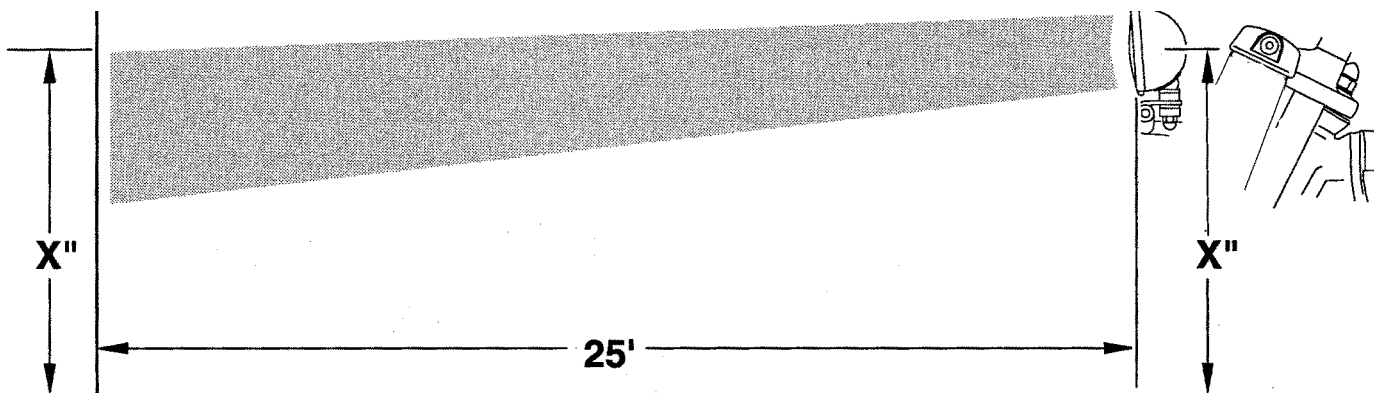


Hex Key, 5/32" or 4mm
Deep Socket and Socket ; 9/16" or 14mm

NOTE: As a substitute for the deep socket you may use a slotted socket such as Snap On Brand part number FRX181 used in the auto trade as an OXY Sensor Socket. This eliminates the need to disconnect and move the wires.

- A. Disconnect wire connections inside the Headlight Shell.
- B. Pull the wires out of the Light Bar tube.
- C. Turn the Turnsignal to provide access to the mounting screws.

- D. Unscrew the Turnsignal mounting screws and remove the Turnsignal (Hex Key).
- E. Push the Spotlight wire up into the Spotlight Shell.
- F. Loosen the nut on the Spotlight stud (Deep Socket).
- G. Now, adjust the Spotlight. Reconnect the spotlight wire and illuminate to verify its projection.
- H. Push wire into the Spotlight Shell.
- I. Firmly retighten the nut on the Spotlight stud.
- J. Pull the wire out of the Spotlight Shell.
- K. Reassemble in reverse order of disassembly.
- L. Adjust the Spotlights and Turnsignals horizontally by rotating into position.
- M. Verify operation of the lights.



REPLACEMENT PARTS and ACCESSORIES

Description	N938 Part No.	N938E Part No.
Light Head Assembly	90-910501-000	90-910501-000
Lamp Assembly E13/DOT Reflector, Lens and Bulb	90-901011-000	90-901011-000
Turn Signal Assembly	90-930921-000	90-930921-000
Turn Signal Lens	90-930213-000	90-930213-000

Turn Signal Bulb Only: Bulb 1157 Available at Most Auto Parts Stores.

Light Bar Accessories

Chrome Visor	N9005
Alternate Thumb Switch	N9001

MAINTENANCE AND CARE

The high quality chrome finish of your National Cycle light bar can be maintained with any quality chrome cleaner and /or polish.

Replacement lamps for the Spotlights can be found at motorcycle dealer and motorcycle accessory dealers world-wide, particularly dealers specializing in Harley-Davidson® motorcycles.

Replacement bulbs for the Turnsignals can be found at motorcycle and accessory dealers, as well as automobile parts stores.

Accessories

Pictured are:

- N2220 Custom Heavy Duty™ windshield (made from Lexan® hardcoated polycarbonate)
 - N741 Billet Windshield Trim Kit
 - N1320 Holdster™ windshield bag
 - N938 Light Bar
- Also available:
Cruiseline Hard Saddlebags.
N1100 and mount kit SB402.



Harley-Davidson FXDWG