

## PREPARATION

1. Make certain the motorcycle is securely positioned for this installation. Cover the front fender with a protective cloth to avoid scratches.

**NOTE:** right and left on the motorcycle are determined from the rider's position.

2. Remove Headlight from Headlight Shell (8mm Socket), set aside.

3. Disconnect Turn signal wires inside Headlight Shell.

4. Remove Turn signals from motorcycle (Socket, 8mm), set aside they will not be reused.

## INSTALLATION

1. Mount the Light Bar Assembly:

**A.** Hold the Light Bar assembly up to the Headlight Shell mounting bracket, below the Headlight Shell.

**B.** Start both M6 x 16 screws, with washers into the welded nuts on the headlight shell mounting bracket.

**C.** Align the light bar assembly to be square with the front fork.

**D.** Tighten the M6 x 16 screws to 35 to 45 in.lb. (3.25 to 4.25Nm) (Socket, 8mm).

**NOTE:** check vertical aim of the lamps. They should aim approximately 5° downward. If adjustment is required see "Adjustment" page 2 of this instruction otherwise proceed with wiring step 2.

2. Wire the Light Bar Assembly:

**NOTE:** ground for the lightbar is through the fork and frame.

**A.** Route the light bar assembly wires straight up, into the headlight shell.

**B.** Attach wires as recommended in the following list. Do one at a time and check for correct operation. You may need to change wire connections to get the correct operation. (Connectors and Pliers)

|                     | <u>Light Bar</u> | <u>Motorcycle</u> |
|---------------------|------------------|-------------------|
| Turn signal, left   | Short Red        | Orange            |
| Turn signal, right  | Short Red        | Blue              |
| Running lamp, left  | Short Black      | Orange/White      |
| Running lamp, right | Short Black      | Blue/White        |
| Passing lamps       | Long Blue        | White (lo-beam)   |

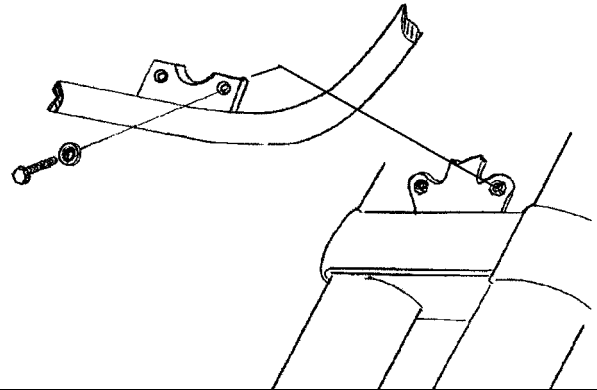
**NOTE:** Check local regulations for proper passing lamp operation. Some states require passing lamps be lit only with hi-beam.

## PARTS LIST

| <u>Description</u>      | <u>Qty.</u> |
|-------------------------|-------------|
| Lightbar Assembly, N933 | 1           |
| Wire Connectors         | 6           |
| Flat Washer             | 2           |
| Screws, Hex, M6 x 16    | 2           |



Socket 8mm and wrench  
Pliers, Slip Joint  
Small sharp knife



**Place light bar assembly up to the headlight shell mounting bracket.**

### Note, Light Bar Wiring Helpful Hints:

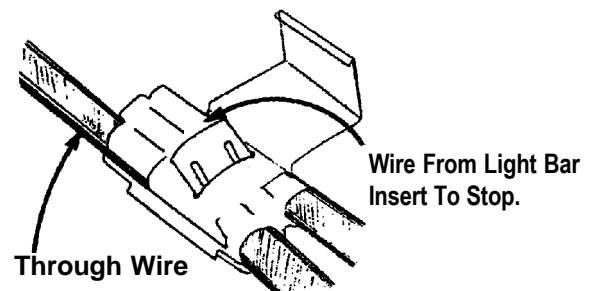
The **long Blue** wire is the main power wire for the spotlights on the light bar. Connect that to the main power source from the headlight. Either the High Beam wire or the Low Beam wire. The choice is your preference. Turn on bike and Check.

The two short **RED** wires are for the turn signals. One **RED** wire for the Left side turn signal and one for the Right side turn signal. Turn on bike and check.

The two short **BLACK** wires are for the running lights. One **BLACK** wire for the Left side running light and one for the Right side running light. Turn on bike and check.

The Light Bar attached to the front fork of the motorcycle serves as the ground in most cases. A precautionary step to insure proper grounding is to take one of the Green Ground wires from the existing turn signals and ground that between the Light Bar Mount and the Triple Tree Bracket.

Always start by doing one side at a time. Preferably the right side or high side of the bike first.



## ⚠ WARNING

After wiring the light bar check for clearance. Make sure the wires can not get pinched when the fork is turned to a full fork lock left and right.

Check all lights for proper operation.

Check the tightness of all fasteners that have been involved in this installation.

## MAINTENANCE

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

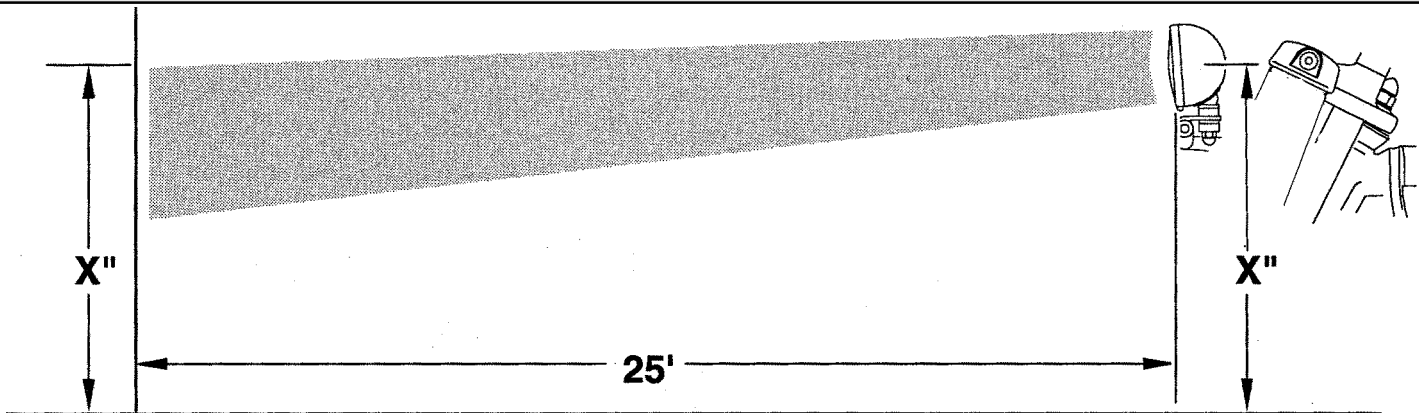
Replacement bulbs and bulbs for the turn signals can be found at motorcycle and accessory dealers as well as automobile parts stores, or by calling National Cycle.

## REPLACEMENT PARTS

Order replacement parts through your local dealer or contact National Cycle.

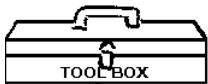
| Description   | N933<br>Part No. | N933E<br>Part No. |
|---|------------------|-------------------|
| Light Head Assembly   | 90-910501-000    | 90-910501-000     |
| Lamp Assembly E13/DOT Reflector, Lens and Bulb                        | 90-901011-000    | 90-901011-000     |
| Turn Signal Assembly  | 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. |                  |                   |
| <b>Light Bar Accessories</b>  |                  |                   |
| Chrome Visor  | N9005            | N9005             |
| Alternate Thumb Switch  | N9001            | N9001             |

## ADJUSTMENT



### 1. HORIZONTAL AIM

**A.** To adjust the spotlights or turn signals 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.



**To adjust vertical aim you will need:**

Hex Key, 5/32" or 4mm

Deep Socket 9/16" or 14mm and Socket Wrench

**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.

### 2. VERTICAL AIM

**A.** Disconnect wire connections inside the headlight shell.

**B.** Pull the wires out of the light bar tube.

**C.** Turn the turn signal 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 back 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.