

AMF | Harley-Davidson

# **Liberator<sup>®</sup> Fairing Owner's Manual and General Mounting Instructions**

## **TABLE OF CONTENTS**

<b>INTRODUCTION .....</b>	<b>PAGE 1</b>
<b>HOW TO USE INSTALLATION INSTRUCTIONS.....</b>	<b>PAGE 2</b>
<b>UNPACKING.....</b>	<b>PAGE 2</b>
<b>REPLACEMENT PARTS LIST.....</b>	<b>PAGE 3</b>
<b>NOMENCLATURE INTERIOR .EXTERIOR .....</b>	<b>PAGE 4</b>
<b>NOMENCLATURE HARDWARE.....</b>	<b>PAGE 4</b>
<b>STEP BY STEP INSTRUCTIONS.....</b>	<b>PAGE 5</b>
<b>TROUBLE SHOOTING .....</b>	<b>PAGE 21</b>
<b>MAINTENANCE AND REPAIR .....</b>	<b>PAGE 22</b>

### **INTRODUCTION**

The Liberator styling compliments and enhances all recent FLH-1200's and Electrogliides. It's also the only fairing specifically designed for frame mounting on these models. The LIBERATOR features dual headlights, class "A" sidelights, cigarette lighter, luggage compartments, tonneau covers and a completely enclosed dash that can accomodate various instruments and accessories. The LIBERATOR is made exclusively for AMF/HARLEY-DAVIDSON MOTOR CO. INC. by Vetter Fairing Co., the standard of excellence in fairings.

## **HOW TO USE LIBERATOR INSTALLATION INSTRUCTIONS**

- 1) Read over the Step-by-Step Instructions before attempting to install your fairing. Be sure that you understand each of the steps and mounting sequence before proceeding.
- 2) Installation procedures begin with removal of certain parts of the motorcycle, such as the gas tanks, the headlight assembly, the spotlight turnsignal assemblies, and a number of other items. After the removal of these items, the wiring of the fairing to the motorcycle is done. Notice that there are two different wiring instructions. Choose the wiring instructions that apply to your model of the Electra-Glide or FLH 1200. The upper bracket installation follows the wiring procedures. Adjustment of the handlebars and the repositioning of the horn and the brake hydraulic line must take place to prevent interference between these items and the fairing. Final steps in the installation of the fairing are the installation of the spotlight-turnsignal assemblies, the lower mounts, and the windshield. It takes between 2-3 hours for complete installation.
- 3) The installation instructions are provided to insure that the fairing is properly installed and to make installation as easy as possible. Follow them to be sure that you don't void your warranty through improper installation.

## **UNPACKING**

The Liberator consists of three main elements:

1. The Fairing Shell
2. The Windshield
3. The Mounting Assembly

Care should be taken to inspect these parts to insure that all parts are included for proper mounting. For your convenience, a parts list has been supplied. The windshield and the fairing shell should be kept separate until the time comes to mount them. This will prevent scratching or damage.

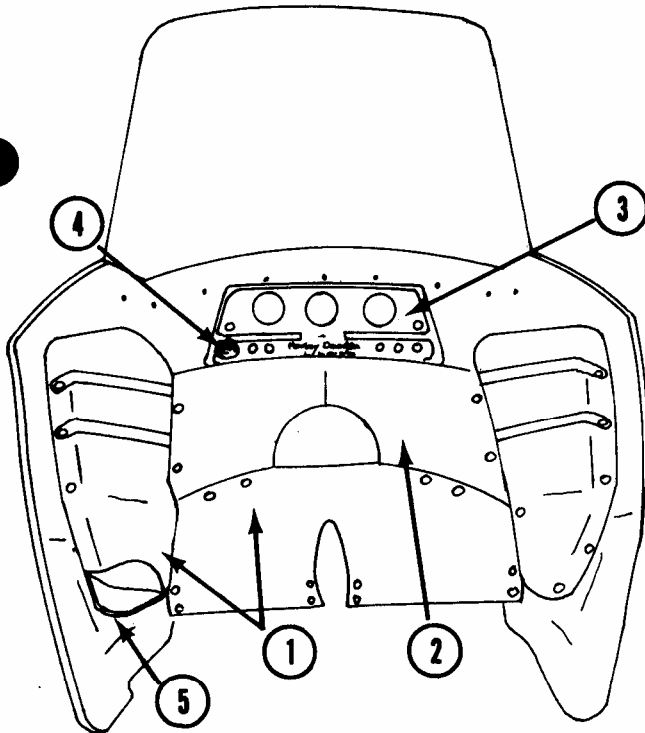
**WARNING:** Heavy metal staples are used in packing and should be removed with care. The box containing the windshield should NOT be opened with a knife or other sharp object that might scratch the windshield.

## **REPLACEMENT PARTS LIST**

### **PART # PARTS DESCRIPTION**

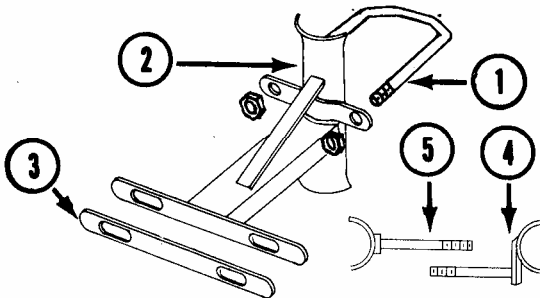
0813	AMF/Harley-Davidson Decal
0756	Reflective Striping for White Fairing (1 Pair)
0816	Reflective Striping for Black Fairing (1 Pair)
0854	Hardware - Steering Head "T" Bracket Pack
0855	Hardware - "U" Bolt Pack
0857	Hardware - Handle Bar Cover Adapter Pack
0858	Hardware - Horn Bracket
0846	Hardware - Straight Safety Guard Mounting Kit
0859	Hardware - Offset Safety Guard Mounting Kit
0800	Turnsignal Stalk Kit
0878	Mounting Shim Kit
0879	Sidelamp Complete with Shrink Tube
0880	Sidelamp Lens Only
0835	Flasher Relay
0819	External Wiring Harness
0836	Tonneau Covers
0810	Windshield Mounting Bolt Kit
0833	Windshield
0815	Windshield Foam Tape Complete
0860	Hotcha Fix Kit
0821	Headlight Bezel
0861	Chrome Side Edging Kit
0862	Pocket Edging Kit
0829	Instrument Plate
0828	Cigarette Lighter Assembly
0872	Togglers

## NOMENCLATURE



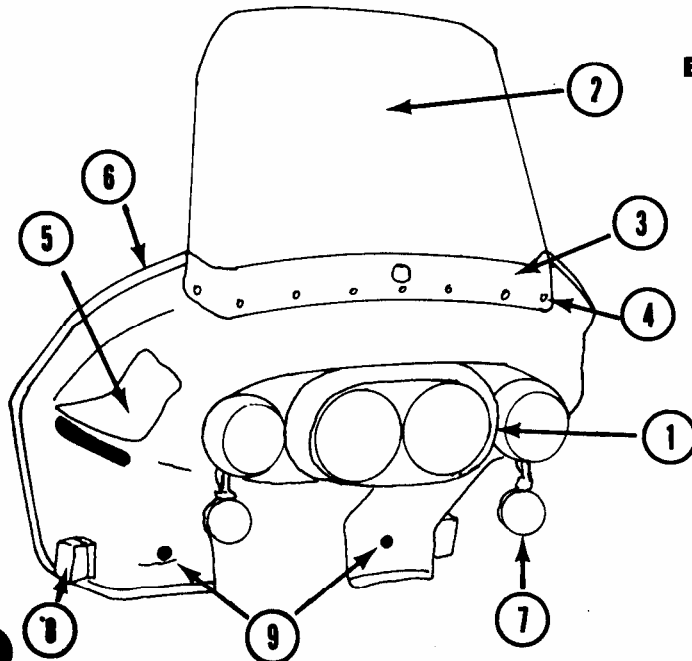
### INTERIOR LIBERATOR

1. Tonneau Covers
2. Fork Cover Plate
3. Instrument Plate
4. Cigarette Lighter
5. Pocket Edging



### HARDWARE LIBERATOR

1. U-Bolt Kit
2. "T" Head Bracket Kit
3. Mounting Shim
4. Offset Safety Guard Mount
5. Straight Safety Guard Mount



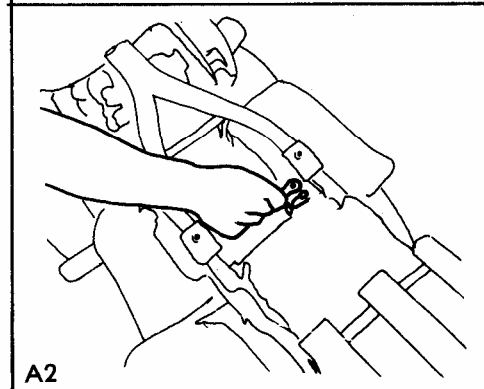
### EXTERIOR LIBERATOR

1. Headlight Bezel
2. Windshield
3. Foam Tape
4. Nylon Bolt
5. Reflective Striping
6. Chrome Side Edging
7. Turnsignal
8. Amber Side Lamps
9. Safety Bar Mounts

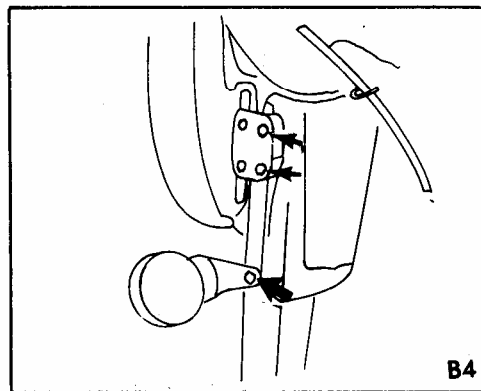
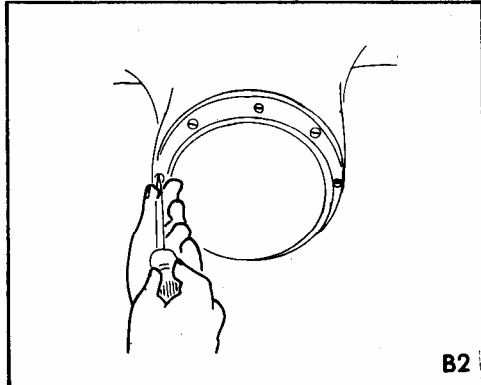
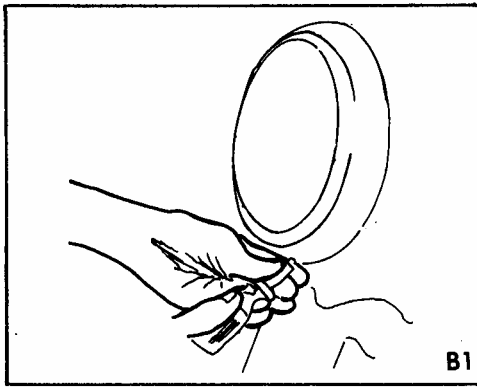
## STEP BY STEP INSTRUCTIONS

### A. PREPARATION

1. Place the motorcycle in clean area for assembly. Block it into vertical position with front wheel facing working area.
2. Remove the ground wire from the frame or battery. This will reduce the possibility of damaging the electrical wiring during assembly.
3. Drain the gas tanks. **CAUTION: Be sure all flames, cigarettes, etc. are extinguished before draining tank. Store the gasoline in flame-proof container.**
4. In the installation of the Liberator fairing, some parts will be removed from the motorcycle. A portion of these parts will be needed in the fairing assembly, some will go back on the motorcycle and the rest should be saved in case owner wishes to convert back to original configuration. To help keep these parts in order, place them in small boxes or plastic bags, (such as sandwich bags). Keeping the parts in order will aid in the fairing installation.



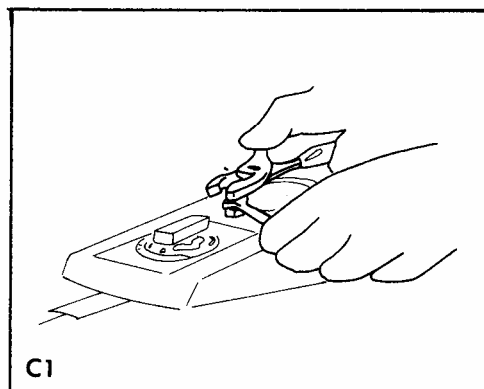
## B. HEADLIGHT REMOVAL



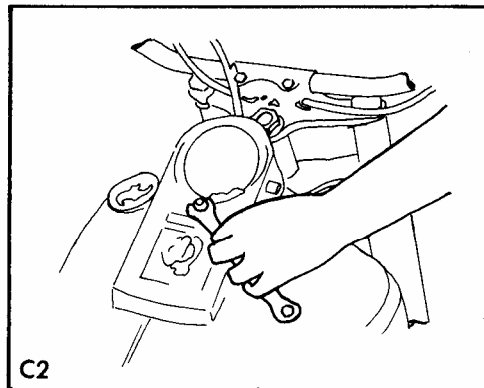
1. Remove headlight rim retaining screw and headlight rim.
2. Remove headlight screws holding the black headlight assembly to the housing and the headlight assembly.
3. Unplug headlight and remove.
4. Remove windshield bracket bolts and bolts holding the spotlight-turnsignal bracket. Place cloth on the front Fender and lay the assembly there until the wires going to the spotlight switch can be disconnected.
5. Unscrew the retaining nuts on the spotlight and flasher switches located on the right side of the headlight housing and push the switches loose of the right housing. This will ensure no damage to the switches when the housing is taken off.
6. Remove all screws and bolts holding the housing on the motorcycle.
7. Split the housing and remove from the motorcycle.
8. Unplug the wires from the terminal board to the spotlights and turnsignals.
9. Lay aside spotlight and turnsignal bar assembly.

### C. SPEEDOMETER COVER REMOVAL

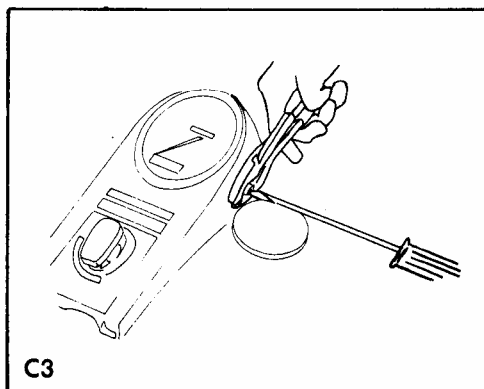
1. Hold choke knob with pliers and, using a 3/8" wrench to loosen the lock nut, remove choke knob and lock nut.



2. Use a 1/2" wrench to remove the hold nut.



3. With a small screwdriver, remove set screw in the end of the odometer tripmeter reset knob, while holding knob with pliers, and remove reset knob.



4. Lift the speedometer cover from the tank. Make sure all the nuts and bolts are conveniently placed for re-assembly later.

### D. REMOVE TANKS

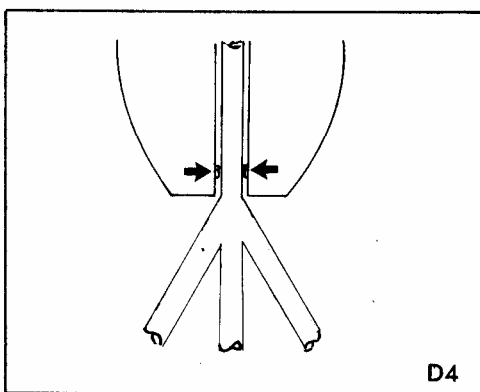
**Note:** Place cloth over safety guards to prevent tanks from getting scratched.

1. Make sure that the gas tanks have been drained of all gas. Disconnect cross over hose.

**CAUTION:** Be sure all flames, cigarettes, etc. are extinguished before draining tank. Store the gasoline in flame-proof container.

2. Remove front upper 5/16" bolt.
3. Remove front lower 5/16" bolt.





4. Remove the two rear 5/16" nuts. Watch for the washers between the tank and frame. They have tendency to fall into engine.

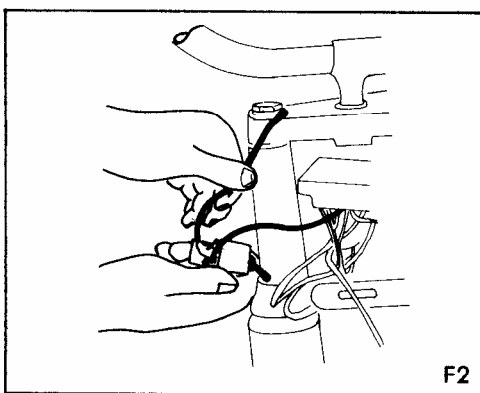
5. Remove tanks completely and re-install nuts and washers on studs, so they won't be lost.

#### E. HORN REMOVAL

1. Remove horn and bracket, using 1/2" wrench. Re-install bolt in fork lower bracket.

**Note: Check the wire color code in the motorcycle before starting the wiring instructions. Compare the actual motorcycle color code with the motorcycle color code listed in the Liberator Instructions. If they do not agree, use the color code of your bike. List your bike wire color along side its function on the wiring color code and terminal board position list. Double check each wire before disconnecting it from its position. Make sure the ground wire is disconnected.**

#### F. PROCEDURE FOR WIRING: ALL BIKES

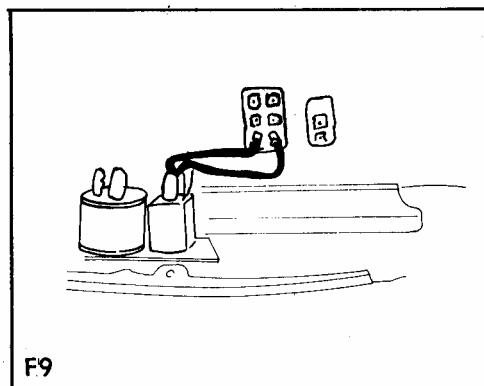


1. Remove two screws holding flasher mount to the lower fork bracket. Reinstall mounting screws in lower fork bracket.
2. Disconnect wires from the four-way flasher switch. Remove the violet wire from switch and terminal board. Remove brown wire from switch and terminal board. These wires are not needed with the Liberator.
3. The smaller relay will not be used in the fairing. Disconnect the wires from this relay to the terminal board at the terminal board and disconnect wire from handlebars to the relay.
4. Disconnect the spotlight switch (it may be identified by two male spade terminals on the bottom) by removing wires attached to it. The wire going from the spotlight switch into terminal board can be removed.

5. Remove the large flasher from mounting plate. One terminal on this flasher has two yellow wires that went to the four-way flasher switch. Leave these wires on flasher. Disconnect the other wire from terminal board.

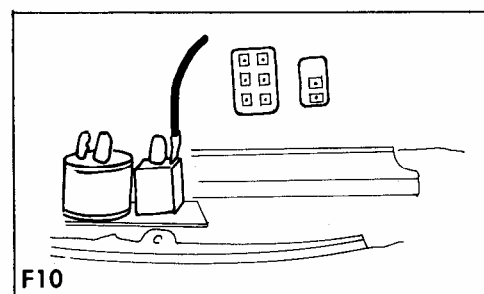
6. Remove the instrument panel from the Liberator fairing and orient as shown in figures F9 through F12.

7. Disconnect spotlight switch by removing wires from switch and terminal board. These wires are not used with the Liberator. Re-install this switch in the fairing instrument panel in hole marked 'spotlight'. Install flasher switch in hole marked 'flasher'. Position switches with lugs toward instrument wall. Spotlight switch has two terminals. Flasher switch has six terminals.



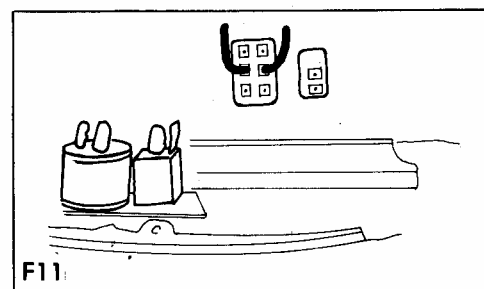
8. Re-install the large flasher by peeling off the paper backing on the double-sided tape. Make sure the flasher is free of dust and oil.

9. The two yellow wires from the flasher are connected to the two terminals of the flasher switch closest to the wall of the instrument panel.

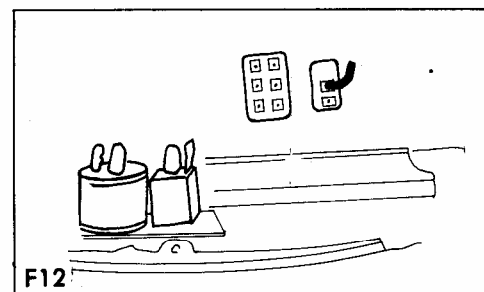


10. The red wire of the Liberator instrument wiring harness is connected to the other terminal of the flasher.

11. The blue wire and the orange wire from the instrument wiring harness are connected to the middle prongs on either side of the flasher switch.



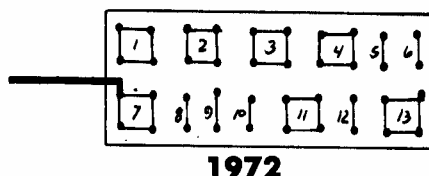
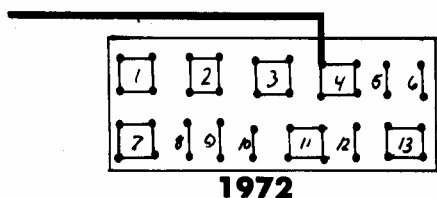
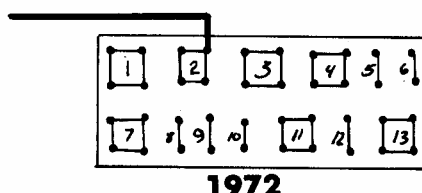
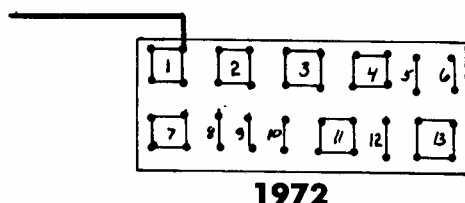
12. The spotlight switch is connected to the instrument panel wiring harness with the green wire.



## G. WIRING FOR HARLEY-DAVIDSON ELECTRA-GLIDES THROUGH 1972

**NOTE:** Before starting, make sure the color code on your motorcycle is the same as is listed below. If not, list your motorcycle color code in the column on the right.

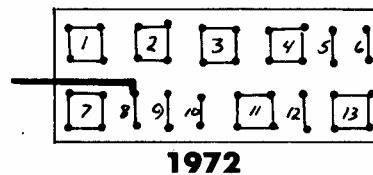
Fairing Wire		Bike Wire		Your bike
COLOR	FUNCTION	COLOR	POSITION	WIRE COLOR
White	High beam	White	7	_____
Yellow	Low Beam	Yellow	8	_____
Black	Ground	Black	1	_____
Orange	Left Turnsignal	Black	1	_____
Blue	Right Turnsignal	Black	2	_____
Green	Switch to Hot	Orange	4	_____
Brown	Instrument Light	Green	10	_____
Tan	Turnsignal Flasher Return	Green	16	_____
Red	Hot Wire	Tan	13	_____



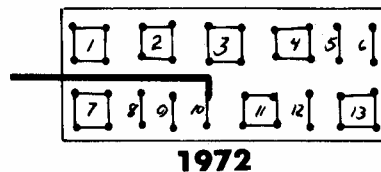
### Procedure for Connecting Wiring

1. Remove the motorcycle black turnsignal wire from position 1 on the motorcycle terminal board. This wire comes from the left turnsignal. Replace it with the orange wire from the Liberator wiring harness.
2. Remove the motorcycle black turnsignal wire from position 2 on the motorcycle terminal board. This wire comes from the right turnsignal. Replace it with the blue wire from Liberator wiring harness.
3. Remove the motorcycle orange wire from position 4 on the motorcycle terminal board. This wire comes from the turnsignal flasher. Replace it with the green wire from the Liberator wiring harness.
4. Remove the motorcycle white wire from position 7 on the motorcycle terminal board. This wire comes from the motorcycle headlight plug. Replace it with the white wire from the Liberator wiring harness.

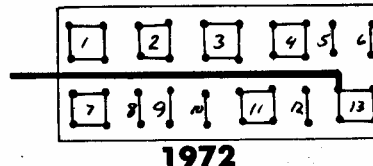
5. Remove the motorcycle yellow wire from position 8 on the motorcycle terminal board. This wire comes from the motorcycle headlight plug. Replace it with the yellow wire from the Liberator wiring harness.



6. Insert the Liberator brown wire into position 10 on the motorcycle terminal board.

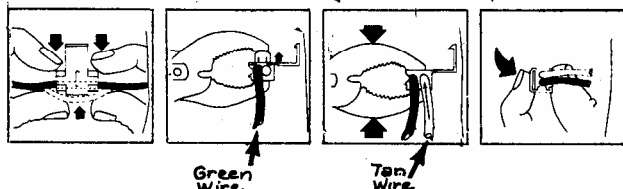


7. Insert the Liberator red wire into position 13 on the motorcycle terminal board.

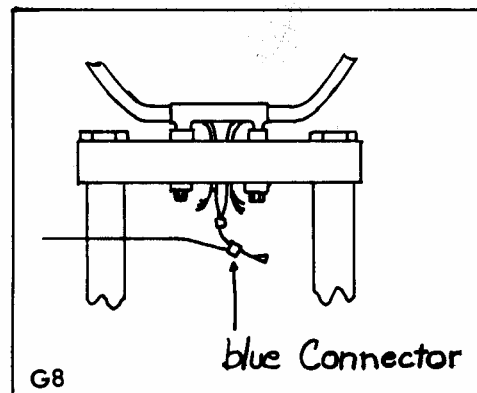


8. Using a blue connector, connect the tan wire into the motorcycle green wire under the handlebars where the flasher was disconnected.

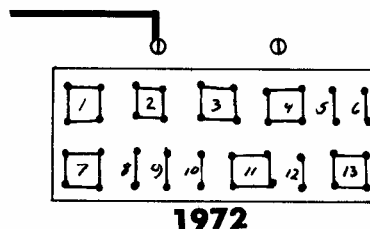
Blue Connector Sequence



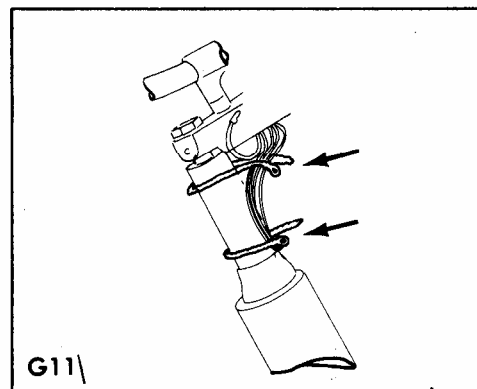
9. Unscrew the motorcycle black ground wire from above the terminal board and replace it with the Liberator black wiring harness wire.



10. Tape any exposed wire ends with electrical tape. Arrange the Liberator wiring harness in an orderly manner.



11. Ty-rap the wires to the righthand fork tube and lower fork bracket.

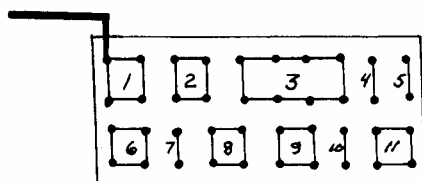


## H. WIRING FOR HARLEY-DAVIDSON FL-FLH 1200, 1973 and Later Models

**NOTE:** Before starting, make sure the color code on your motorcycle is the same as is listed below. If not, list your motorcycle color code in the column on the right.

Fairing Wire		Bike Wire		Your bike
COLOR	FUNCTION	COLOR	POSITION	WIRE COLOR
White	High beam	White	6	_____
Yellow	Low Beam	Yellow	7	_____
Black	Ground	Black	12	_____
Orange	Left Turnsignal	Violet	1	_____
Blue	Right Turnsignal	Brown	2	_____
Brown	Instrument Light	Light Blue	8	_____
Green	Switch to Hot	Orange	3	_____
Tan	Turnsignal Flasher Return	Green	14	_____
Red	Hot Wire	Tan	11	_____

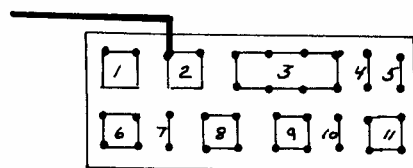
(3 for 1975 models)



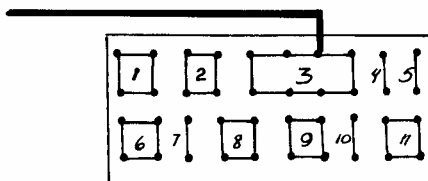
1973

### Procedure for connecting wiring

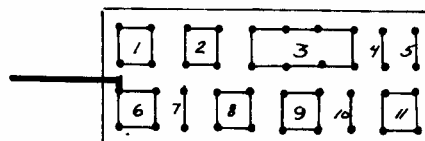
1. Remove the motorcycle violet wire from position 1 on the motorcycle terminal board. This wire comes from the flasher switch. Replace it with the orange wire from the Liberator wiring harness.
2. Remove the motorcycle brown wire from position 2 on the motorcycle terminal board. This wire comes from the flasher switch. Replace it with the blue wire from the Liberator wiring harness.
3. The orange wire from position 3 was removed with the flasher relay. Insert the green wire from the Liberator wiring harness in this position.
4. Remove the motorcycle white wire from position 6 on the terminal board. This wire comes from the headlight plug. Replace it with the white wire from the Liberator wiring harness.



1973

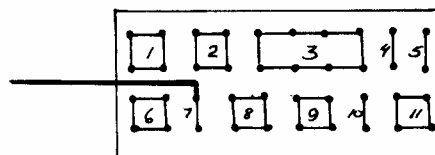


1973



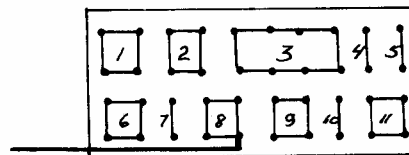
1973

5. Remove the motorcycle yellow wire from position 7 on the terminal board. This wire comes from the headlight plug. Replace it with the yellow wire from the Liberator wiring harness.



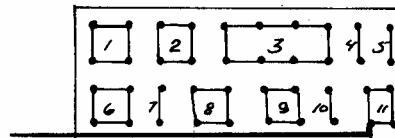
1973

6. Insert the brown wire from the wiring harness into position 8 on the terminal board.



1973

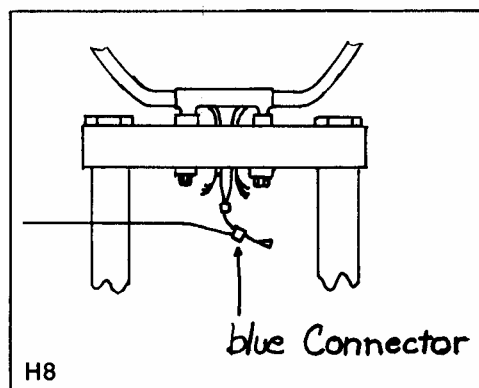
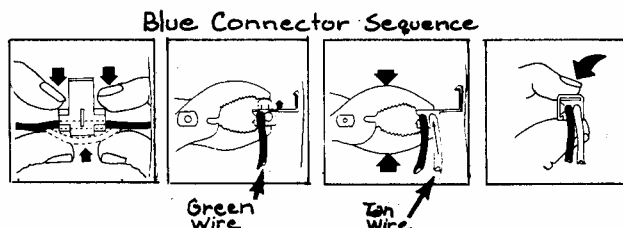
7. Insert the red wire from the Liberator wiring harness into position 11 on the terminal board.



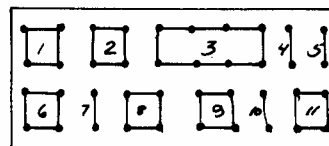
1973

**NOTE:** For 1975 models, use position 3 on terminal board.

8. Connect the tan wire to the motorcycle green wire under the terminal board from handle bars.



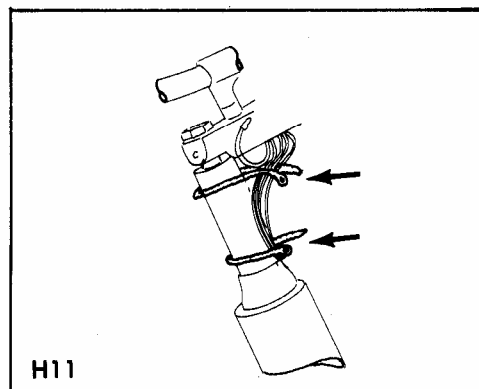
9. Unscrew the motorcycle black ground wire from above the terminal board. Replace it with the black ground wire from the Liberator wiring harness.

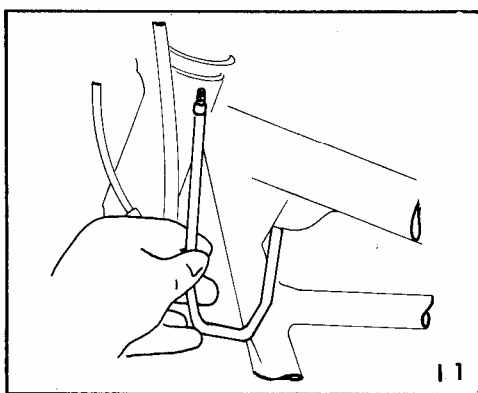


1973

10. Tape any exposed wire ends with electrical tape. Arrange the Liberator wiring harness wires in an orderly manner.

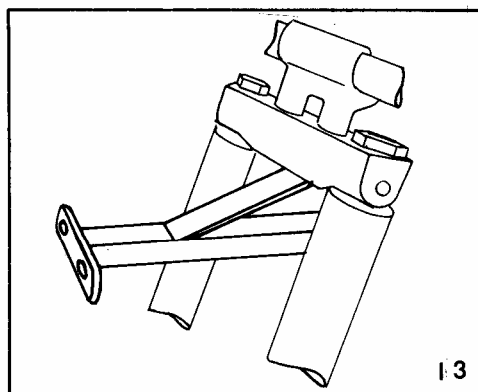
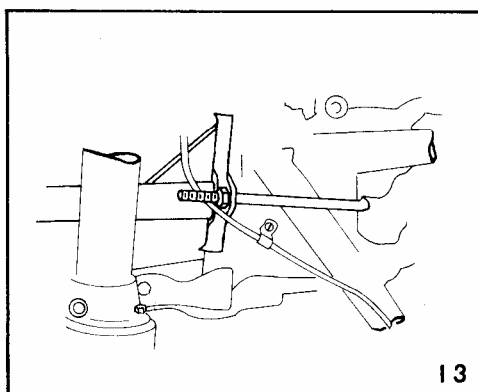
11. Ty-rap the wires to the righthand fork tube and lower fork bracket.





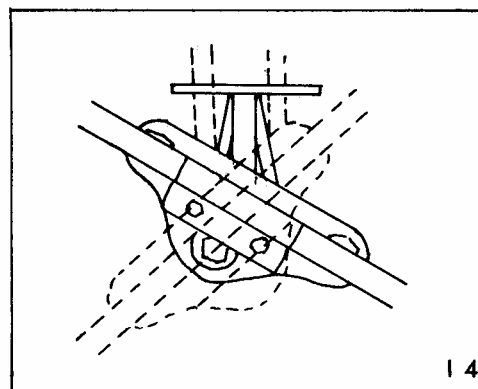
## I. INSTALLING "U" BOLT

1. Without removing speedometer cable, install the 15/16" large "U" bolt through the frame from left side. Arrange it so that the threaded ends are facing forward.
2. Remove the terminal plate from the fork head with a screwdriver to facilitate mounting the U-bolt bracket. Do not remove any wires from terminal plate sockets.



3. Install U-bolt mounting bracket on the fork head with a 9/16" wrench.

**NOTE:** Check and make sure handlebar bolts do not rub "T" bracket.



4. Check for horizontal centering of the mounting bracket by turning the forks left and right to full lock. Measure the distance between the fork and the mounting bracket. These distances should be equal. When the bracket is centered, gently tighten each nut until tight. Then, recheck the centering and adjust if necessary.

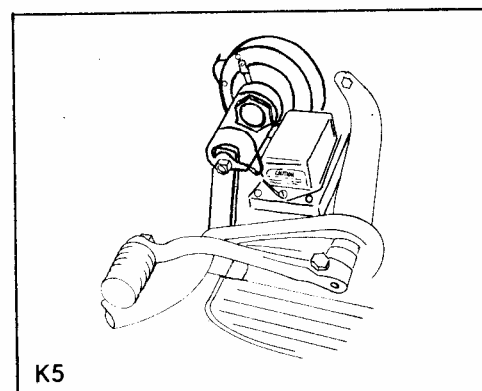
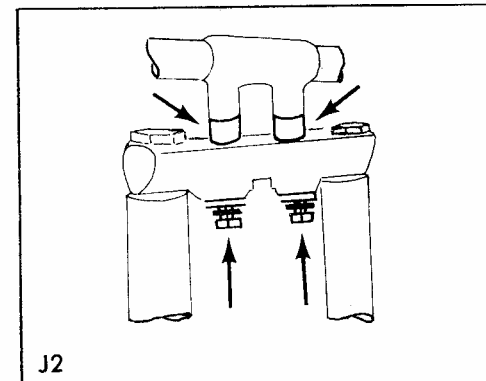
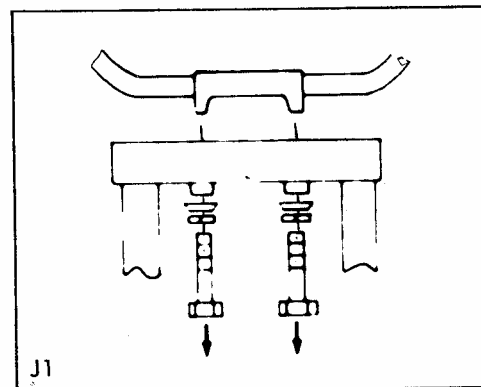
## J. HANDLEBAR ADJUSTMENT

1. Remove the two 1/2" handlebar bolts.
2. Two sizes of the handlebar bolts are included with the hardware kit. **FOR SAFE OPERATION**, you must use the proper sized bolts for your motorcycle. The proper sized bolt, when inserted through the lock-washer, the retaining washer, the upper fork clamp and the spacer, will have at least 1/2" of threaded area with which to attach the handlebar clamp. If the 3" bolt does not give you 1/2" of threaded area, use the 3 1/2" bolt in your installation.

**IMPORTANT NOTE:** Threaded area of less than 1/2" will result in the handlebar clamp not being securely fastened to the motorcycle.

## K. INSTALLING HORN

1. Install the 20" piece of black wire supplied in the hardware kit by plugging the female spade terminal on it into the male spade terminal on the black horn wire, below the motorcycle terminal board.
2. Tape this connection with electrical tape.
3. Remove the angled horn bracket from the horn assembly.
4. Replace it with the 6" horn bracket supplied in the hardware kit. Make sure to place the ground strip across the vibration damper.
5. This bracket goes on the inside left front bolt which holds the left foot board and left safety guard end to the frame.
6. Place the horn mount on the inside of the frame tab, then bolt into position. Make sure the gear shift lever mechanism, engine, or frame does not touch horn.
7. Route the horn wire extension in back of the fork lower bracket and down the frame tubes. Attach to the frame tube with black tape.
8. Attach the female spade terminal on the 20" wire extension to the horn terminal.

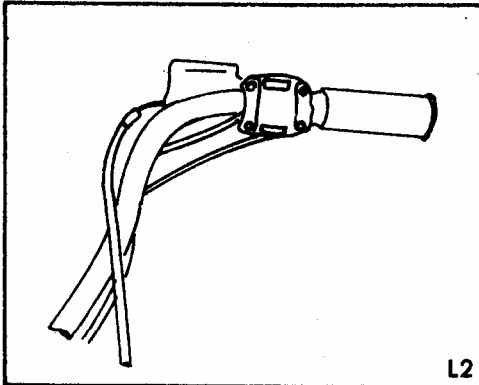




## L. HYDRAULIC BRAKE LINE

In order for the front brake hydraulic line not to rub on the fairing, the following steps must be taken:

1. Remove the hydraulic brake line at the master cylinder on the right handlebar. Make sure none of the hydraulic fluid can leak on any painted surface.



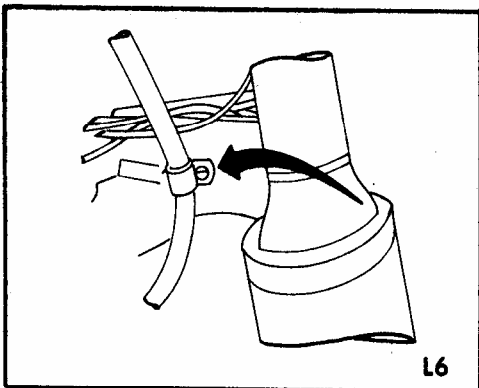
2. Re-route the line so it comes up to the master cylinder in the back of and then over the handlebar to the cylinder, instead of coming up in front of the handlebar as before.

3. Reinstall the line on cylinder.

4. Bleed the brake by slowly, but repeatedly, actuating the brake lever to pump out all air in the line. Check fluid level after bleeding.

5. Make sure the line is not bound, kinked or rubbing on any part of the bike or fairing as the handlebars are turned from left to right.

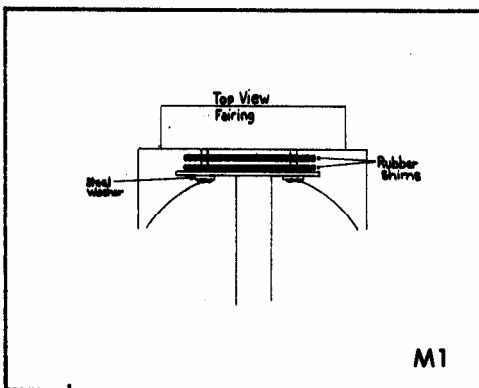
6. Mount the hydraulic brake line clamp under the wiring harness clamp on the back of the fork lower right bracket.



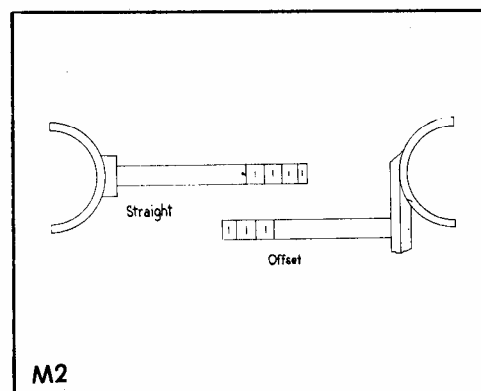
## M. FAIRING INSTALLATION

1. Remove the tonneau cover and fork covers. Bolt fairing to upper mount installing two 1" x 8" rubber shims, with two 5/16" x 1 1/4" bolts and two washers.

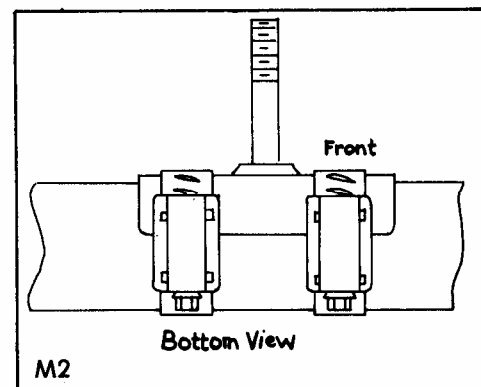
**NOTE:** Between 1 and 4 rubber shims may be required between the hardware and the fairing, depending upon the height of the safety guard. These adjustments are made on the following page, step 6.



2. Install the lower mount on the safety guard which comes nearest to fitting using the straight or offset lower mount. Lower mounts should be clamped down with four hose clamps provided. Bolt centers should be 12" apart or 6" from safety guard center mount bolt.

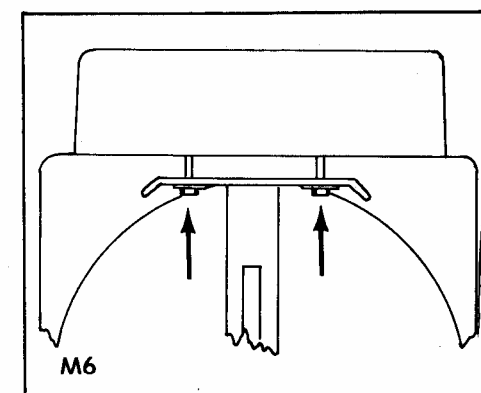
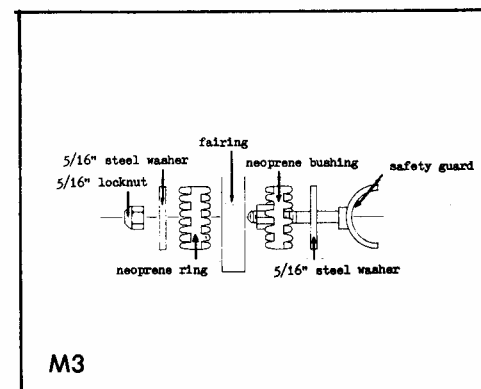


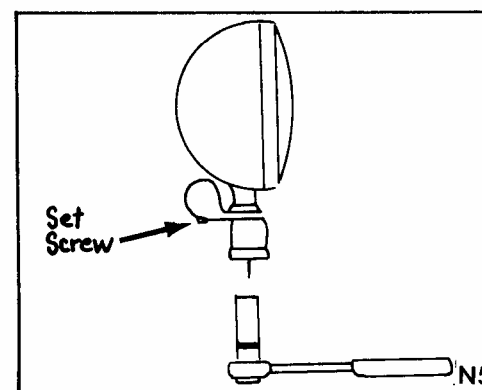
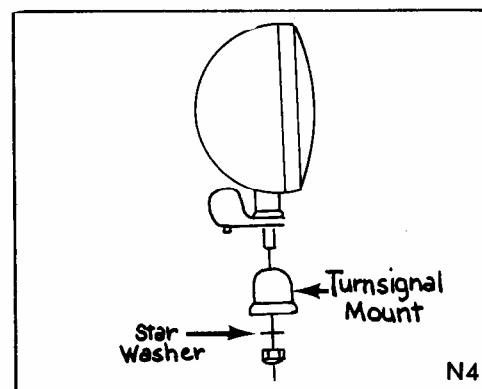
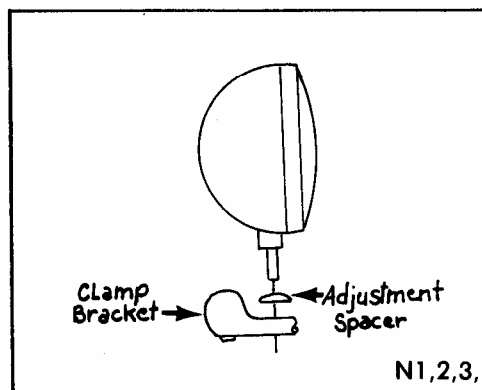
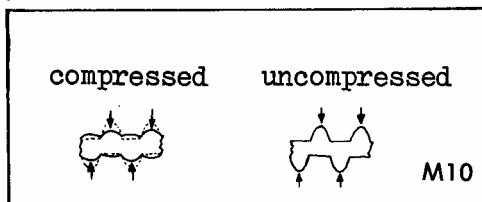
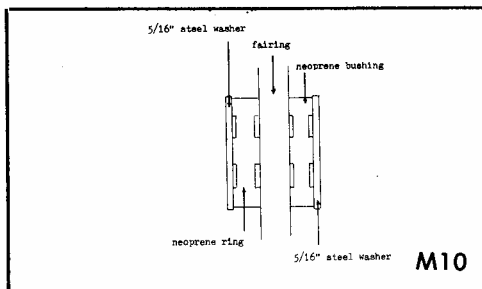
3. Remove the upper mounting bolts and remove the fairing. Slide a 5/16" steel fender washer onto lower mounts, making sure that the smooth side of the washer will be in contact with the neoprene bushing. Slide a 5/16" internal diameter neoprene bushing onto each lower mount. Make sure that the bushing is installed as shown in the illustration, so that the smaller outside diameter of the bushing inserts into the fairing mounting hole.



**NOTE: ONLY NEOPRENE RINGS AND BUSHINGS SHOULD BE IN CONTACT WITH THE FAIRING.**

4. Reinstall fairing by sliding fairing onto lower mount. Bring fairing up to upper mount and install, but don't tighten 5/16" x 1 1/4" bolts.
5. Observe gap between fairing and upper mounting bracket. If it is not parallel, the mounting bracket must be loosened and adjusted.
6. Lift the front of the fairing lightly up against the upper bolts, and check clearance. Now take the rubber shims for this purpose, stack them up until they are thick enough to space between the fairing and bracket face. Remove the bolts and install the shims in space. Place a 5/16" steel flat washer on each bolt and reinstall.





7. Slide a 5/16" internal diameter neoprene ring on each lower mount.

8. Slide 5/16" fender washer on lower mounts.

9. Install 5/16" lock nut on lower mounts.

**NOTE: ONLY NEOPRENE RINGS AND BUSHINGS SHOULD BE IN CONTACT WITH THE FAIRING.**

10. Tighten the locknut until the ring and bushing are slightly compressed as shown.

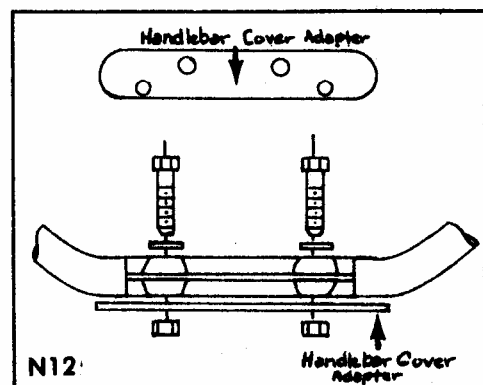
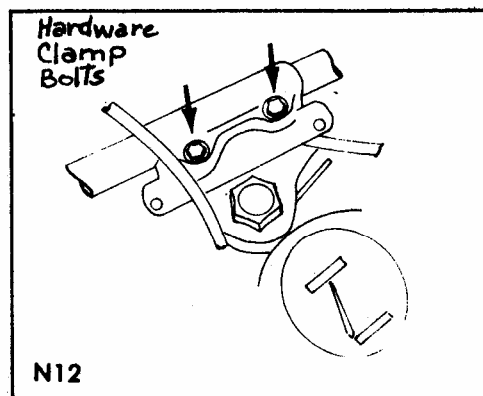
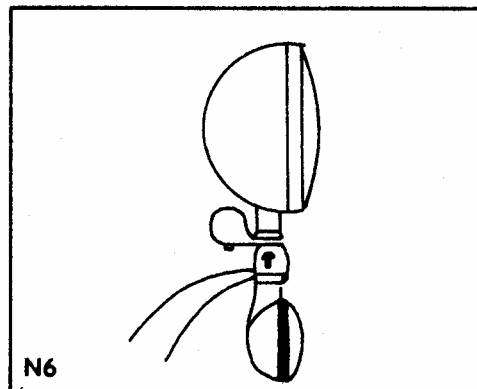
## N. FAIRING ASSEMBLY

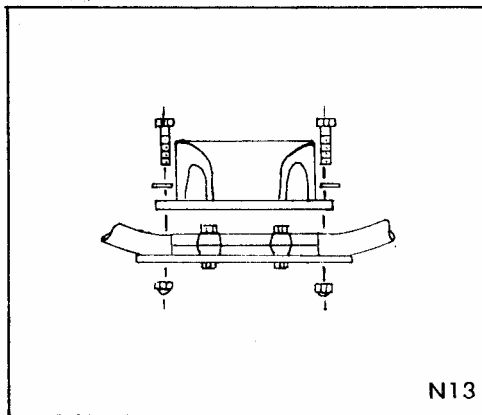
### Spotlight and Turnsignal Installation

1. Clip wires 10" from end of the spotlight and turnsignals and strip 1/4" of insulation from the ends of all the wires. Twist the strands on each wire.
2. Slip the adjustment spacer over the spotlight wire with the round side towards the spotlight.
3. Slide the clamp bracket over the wire with the round side towards the spotlight.
4. Slip the turnsignal bracket over the wire with the star washer and lock nut. Slip this assembly over turnsignal stalk installed on fairing.

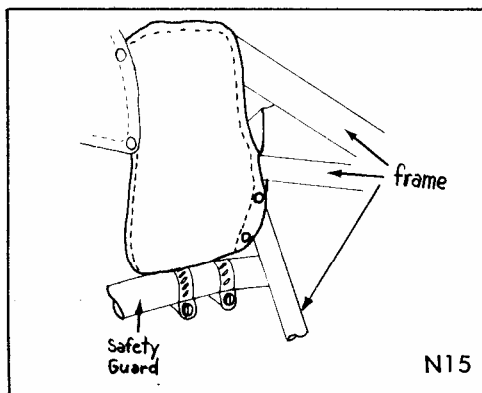
5. Tighten the nut holding the assembly together using a 9/16" deep well socket. The spotlight wires can be slipped upwards into their housing to allow the socket to slip over the nut. Be sure to aim the spotlight before tightening all the way. Tighten small allen set screw in the spotlight bracket.

6. Install the turnsignals with the two screws and lock-washers provided with the turnsignals. Be sure not to pinch the wires.
7. Route the wires between the housing and crimp the spotlight grey wire to the black and white wire coming from the fairing. Using the butt splice provided, pull test to insure a good clamp.
8. Do the same for the turnsignal wire. Attach it to the orange and blue wires respectively, using the butt splices provided on the ends of the wires. Push the excess wire into the fairing.
9. Install the instrument panel on the interior of the fairing, making sure to first connect the plug from the fairing with the plug on the instrument panel of a corresponding color. Also, connect the white/black wire from the fairing interior to the spotlight switch lug. Attach the instrument panel to the fairing using the five screws provided and place a black washer on each screw before installation.
10. Place the fork cover plates in the mounting location and check for clearance between handlebars and the fork cover plates. If the fork cover plates hit the lower sides of the handlebars, add the extra rubber spacer to lower the fairing. If the fork covers contact the upper fork clamp, remove one of the rubber spacers.
11. After adjusting the fairing for fork cover clearance and making sure that the forks do not bind when turning from lock to lock, left and right, tighten up the two hardware bolts on the upper bracket. Snug up the lower lock nuts and tighten hose clamps.
12. Remove the handlebar clamp bolt from both sides of the handlebar clamp. Install the provided bracket for the aluminum fork cover plate using the two 3/8" x 1 1/2" fork clamp bolts provided in the hardware kit.



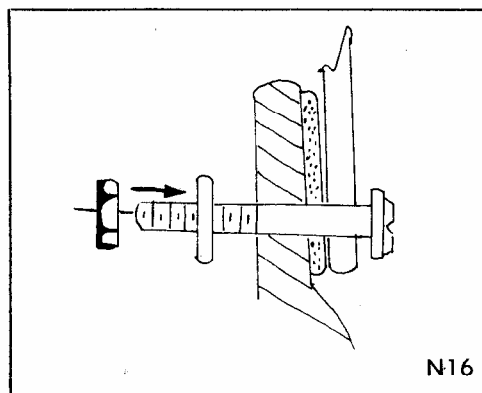


13. Install the handlebar clamp cover using the two 1/4" x 3/4" bolts, nuts and washers provided in the hardware kit.



14. Install the fork covers, using four screws provided. Be sure to place a black nylon washer on each screw before installing it. Do not overtighten the screw. There is a fifth screw provided that is used in the center of the fork cover plates. Install this screw placing a nylon washer on it and with light downward pressure on the screwdriver, thread it into the plastic nut and tighten.

15. Reinstall tonneau covers making sure the top of the center portion goes over the frame and behind the steering head. Fasten the snaps on the bottom of the center portion such that it goes under the frame and above the lower tank mount.



16. Reinstall gas tanks. Make sure to reconnect cross-over lines. Reattach ground wire on motorcycle frame.

### Windshield Assembly

17. Using one of the nylon bolts, poke through the holes. Holding the windshield in one hand, install the windshield center bolt and install the nylon washer and nut on the back side. Working from side to side, install the remaining windshield bolts **FINGERTIGHT ONLY**.

## O. FINAL CHECK

Make sure the wiring is checked to insure that the turnsignals, spotlights, four way flasher, running lights, horn and high-low beam work properly.

1. Turn on the headlight assembly and aim both headlights. Check the spotlights for proper aiming and inspect the turnsignal and side lamps to insure that all the bulbs are lit. Side lamps should flash with turnsignals, and only one headlamp is lit on low beam.
2. If the headlight requires aiming, remove the four Phillips head screws holding the clamp door on the assembly. Use the upper adjustment screw for vertical alignment and the side adjustment screw for horizontal alignment. When the alignment is completed, reinstall the door.
3. Double check that the throttle cable, wiring, and brake line are not kinked and do not chafe when the handlebars are turned from left to right. Also, check that the fairing and motorcycle do not interfere with each other.

The following items removed from the motorcycle should be left over at the completion of the fairing installation.

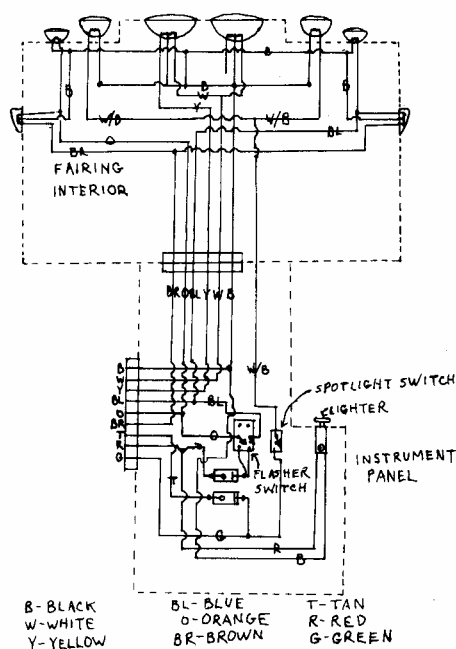
1. Right angle horn bracket.
2. Small flasher.
3. Flasher mounting bracket.
4. Electrical wires.
5. Headlight plug.
6. Headlight housing and bolts.
7. Headlight, headlight assembly and screws.
8. Chrome headlight rim and retaining screw.
9. Two 1/2" handlebar bolts.
10. Two 3/8" handlebar bolts.
11. Two 1/2" x 3" or two 1/2" x 3 1/2" handlebar bolts, provided in the Liberator hardware kit.

## TROUBLESHOOTING

If you are having trouble in mounting your Liberator, it can probably be corrected by rereading your instructions and rechecking your work.

### ELECTRICAL

If your problem is electrical, the first thing to do is a check of your color code to insure the proper wires have been connected. If your colors check out, the next step is to check the electrical connectors for good contact. A bad connection on your ground is easily diagnosed. If your headlamp is weak and your turnsignals don't function properly, your ground is probably not making good contact.



## **MAINTENANCE AND REPAIR**

The Liberator requires little maintenance, but we do recommend that you make periodic checks. The mounting clamps, mounting bolts and the windshield bolts should be checked for tightness and adjustments made as necessary.

### **CLEANING AND WAXING THE FAIRING:**

When washing your fairing, use a mild detergent and warm water. Washing should be done with a soft cloth or a sponge. Wash the windshield with the same solution, being careful not to rub or scratch the surface. Waxing the fairing is easy. Pledge furniture polish works as well as anything we have found. To finish cleaning the windshield, a Plexiglas cleaner and polisher should be used. Soft flannel cloth is best for this final cleaning of the windshield.

### **STRUCTURAL REPAIR**

Structural damage to the Liberator may be repaired by using a Hotcha Fix Kit, available through your dealer, and by following these instructions:

1. Clean the inside of the fracture and the surrounding interior surface with alcohol. Light sanding on the interior surface may be necessary to increase the bonding strength of the Hotcha adhesive.
2. Mix the Hotcha adhesive according to the included instructions. Apply the mixture to the fracture, preferably from the inside of the fairing. Clamp or hold the repair in place until the adhesive is set. This prevents the crack from separating.

**NOTE: FRACTURES FROM THE MOUNTING BOLT HOLES CANNOT BE REPAIRED WITH THE HOTCHA FIX KIT.**

3. To increase the strength of the bond, apply a second layer of adhesive along the line of the crack on the interior surface. Heat a piece of fairing patch material supplied with the Hotcha Fix Kit in a toaster type oven until pliable. Then form it to the proper contour. Be sure to wear a leather or asbestos glove when handling the hot material. After the part has cooled and taken "set", apply adhesive to the side to be in contact with the damaged area and bond it to the inside surface surrounding the crack.
4. If necessary, regular automotive body filler may be used to fill the void in the exterior to prepare it for touch up paint.

### **PAINTING INSTRUCTIONS**

If you desire to repaint your fairing, we recommend that the following steps be taken:

1. Remove the reflective striping and Harley-Davidson logo.
2. Sand thoroughly with 320 grit wet sandpaper.
3. Resand with 400 grit wet sandpaper.
4. Dry fairing surface thoroughly with a lint free cloth.
5. Spray with DuPont S30 Surface Primer as per instructions on the can.
6. Spray with DuPont Acrylic Lacquer, in desired color, as per instructions on the can.
7. Reinstall the Liberator and Harley-Davidson graphics.

### **IMPORTANT DRILLING INSTRUCTIONS**

When drilling holes in your Liberator fairing to mount accessory lights, horns, brackets, etc., you should take care to insure that accessories will not put too much stress on the fairing. Glue a piece of ABS on the interior of the fairing, using the Hotcha Adhesive as directed on the Hotcha Fix Kit Instructions. When mounting your accessories, pad both sides of the fairing with a rubber washer and a regular steel Washer. Note that metal should not come in contact with the fairing shell. Failure to follow these instructions can result in failure at the mounting hole and invalidation of your warranty.

**PACKAGED BY**  
**THE HANDICAPPED**

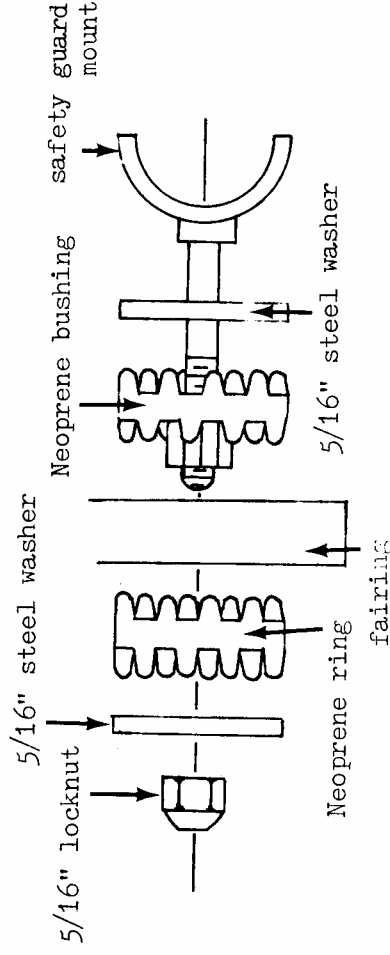
DEVELOPMENTAL SERVICES CENTER  
717 S. NEIL, CHAMPAIGN, ILL. 61820



# AMF | Harley-Davidson Liberator® Fairing

**IMPORTANT:** THIS SUPPLEMENTAL INSTRUCTION SHEET SUPERSEDES STEP M-3, M-7, AND ILLUSTRATION M-3 OF LIBERATOR FAIRING ILLUSTRATION ON PAGE 17 OF THE MOUNTING INSTRUCTIONS.

**M-3** Remove the upper mount bolts and remove the fairing. Slide a 5/16" steel fender washer onto lower mounts, making sure the smooth side of the washer will be in contact with the Neoprene bushing. Slide a 5/16" internal diameter Neoprene bushing onto each lower mount. Make sure the bushing is installed as shown in the illustration so that the smaller outside diameter of the bushing inserts into the fairing mounting hole.



**M-7** Slide a 5/16" internal diameter Neoprene ring on each lower mount.

**NOTE:** Only the Neoprene rings and bushings should be in contact with the fairing. After the outside fender washer is installed with the 5/16" locknut, tighten the locknut down until the ring and bushing are only slightly compressed.

Compressed

Uncompressed



Insert #1/January 29, 1975

# AMF | Harley-Davidson Liberator® Fairing Warning

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN A DANGEROUS CONDITION WHICH COULD CAUSE SERIOUS INJURY. FOR YOUR SAFETY, READ AND FOLLOW THESE INSTRUCTIONS.

Handlebar Spacer Kit  
Instruction Supplement

(see page 15, section J of your Owners Manual)

Two bolt sizes are included with the Handlebar Spacer Kit,  $\frac{1}{2}$ "x3" and  $\frac{1}{2}$ "x3 $\frac{1}{2}$ ".

To determine which bolt size is necessary for your motorcycle, follow the instructions in the Owners Manual (page 15, section J on installation of the handlebar spacers), using the 3" bolt.

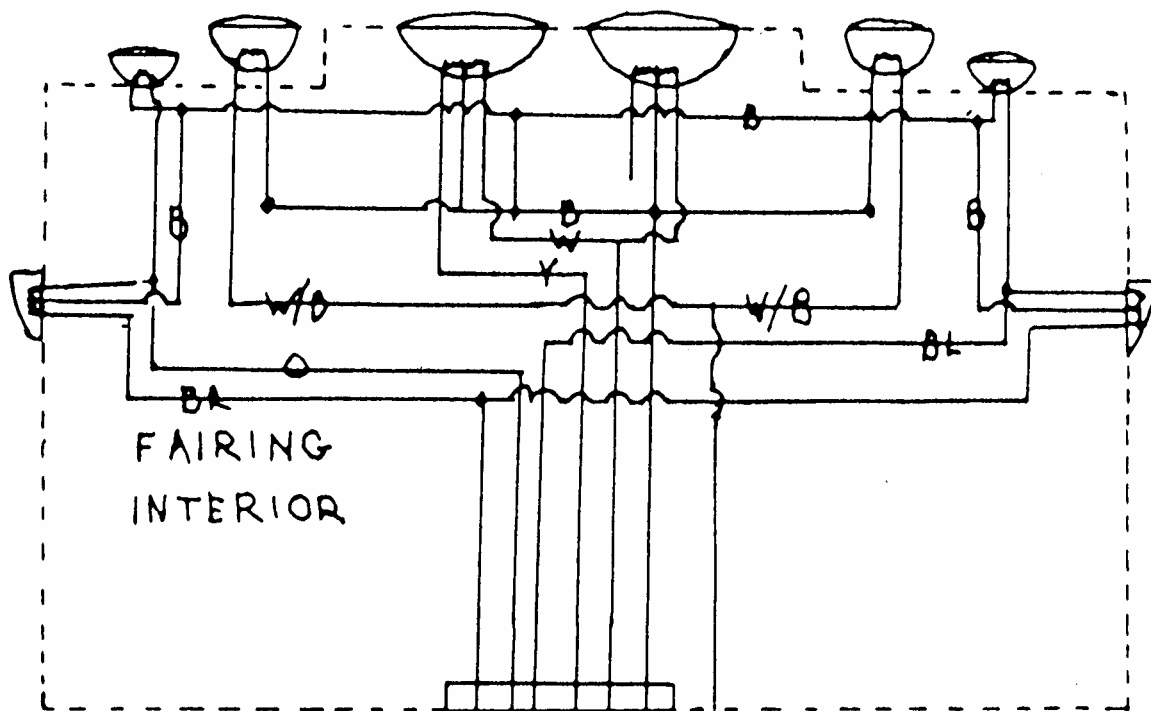
When the bolt is inserted through the washers, the upper fork clamp, and the spacer, you should have at least one-half inch of thread with which to attach the handlebar clamp.

If you do not have at least one-half inch of threaded area with the 3" bolt, use the 3 $\frac{1}{2}$ " bolt in your installation.

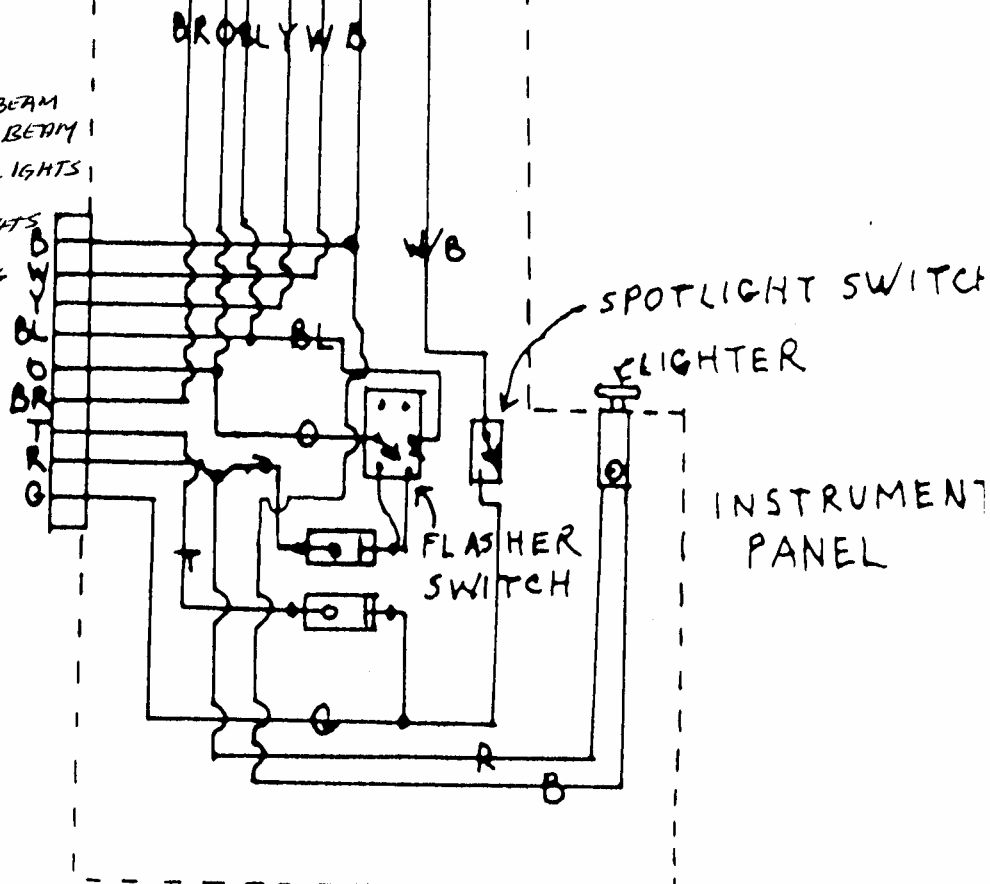
THREADED AREA OF LESS THAN ONE-HALF INCH WILL RESULT IN THE HANDLEBAR CLAMP NOT BEING SECURELY FASTENED TO THE MOTORCYCLE.

YOU MUST USE PROPER SIZED BOLTS FOR SAFE OPERATION

Insert #2/January 29, 1975



B - BLACK GROUND  
 W - WHITE HEADLIGHT HI BEAM  
 Y - YELLOW HEADLIGHT LO BEAM  
 W/B - WHITE/BLACK SPOT LIGHTS  
 BR - BROWN CLEARANCE LIGHTS  
 BL - BLUE RIGHT TURN SIG  
 O - ORANGE LEFT TURN SIG



B - BLACK  
 W - WHITE  
 Y - YELLOW

BL - BLUE  
 O - ORANGE  
 BR - BROWN

T - TAN  
 R - RED  
 G - GREEN

**AMF HARLEY-DAVIDSON LIBERATOR FAIRING WARRANTY REGISTRATION****WARRANTY**

Fairing Serial No. \_\_\_\_\_  
(located on plug-in plate)

Date of Purchase \_\_\_\_\_

Motorcycle V.I.N. \_\_\_\_\_

Owner's Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Dealer \_\_\_\_\_

Dealer Account No. \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

**OWNER:** Keep this copy for your records.

We warrant to the original purchaser only, each new Harley-Davidson Liberator Fairing, including parts thereof (hereinafter "Fairing"), to be free from defects in material and workmanship under normal use and service for a period of 90 days after installation by an authorized Harley-Davidson dealer (hereinafter "dealer"), subject to the following terms and conditions.

1. If such Fairing is found by us to be defective within the above warranty period, at our option we will replace or repair such defective Fairing. We assume no liability for labor charges in connection with the replacement or repair of defective Fairings.
2. This warranty does not apply to Fairings damaged by accident, collision, unauthorized alteration or improper installation, or to Fairings which in our judgment have been subjected to abuse, misuse or neglect of any kind. Fairings used in competition shall constitute misuse and shall void this warranty.
3. This warranty also does not apply to light bulbs or paint, chrome or trim where the alleged defects are due to wear or normal deterioration.
4. The repair or replacement of defective Fairings as stated in this warranty shall constitute the sole remedy of the purchaser and the sole liability of the dealer and Harley-Davidson Motor Co., Inc. Harley-Davidson or its dealer shall not otherwise be liable under any circumstances for incidental, consequential or indirect damages caused by defects in Fairings or workmanship or any delay in the repair or replacement thereof.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, AND EXTENDS ONLY TO THE ORIGINAL PURCHASER.

HARLEY-DAVIDSON MOTOR CO., INC.