

# Terraplane Hardware Mounting Instructions

## 1980, 81, 82 Honda GL1100 Standard, Interstate

**note:** Interstate models will require a late model CB750 Honda replacement turnsignal, available at your Honda dealer.

All fasteners should be torqued to the following specifications:

8mm -1.8-2.5 Kg-m (13-18 ft.lb.)  
10mm -3.0-4.0 Kg-m (22-29 ft.lb.)  
12mm -5.0-6.0 Kg-m (36-43 ft.lb.)  
5/8 -11.1-15.0 Kg-m (80-108 ft.lb.)

**note:** Use the illustrations as a guide to assembly sequence.  
For initial Terraplane set up, see the Driver's/Owner's Manual supplied with every Terraplane.

Read the instructions carefully. Following the step-by-step procedures will make mounting the Terraplane an easy task and insure that it performs properly to give you many miles of trouble free riding. If you have a problem with mounting or handling, rereading the instructions will, in most instances, point out the problem area.

To insure maximum handling and steering capabilities with your Terraplane equipped motorcycle, we recommend the use of a fork brace which will help minimize fork flex caused by the side loading which a sidecar creates.

Head shaking (low speed wobble) is a common occurrence with a sidecar outfit. The best way to minimize or possibly eliminate it is to install either a hydraulic or friction type steering dampner. We recommend the hydraulic type which is the easiest to mount and the most effective.

Both of the above mentioned items are available through your local motorcycle dealers or accessory shops.

### Customer Service:

If you have any questions on installing the Terraplane that your dealer is unable to answer, contact the Vetter Corporation Customer Service Department, Rantoul, IL, 61866, (217) 893-9300. These instructions contain valuable information for future reference. They must be given to the customer.

### warning

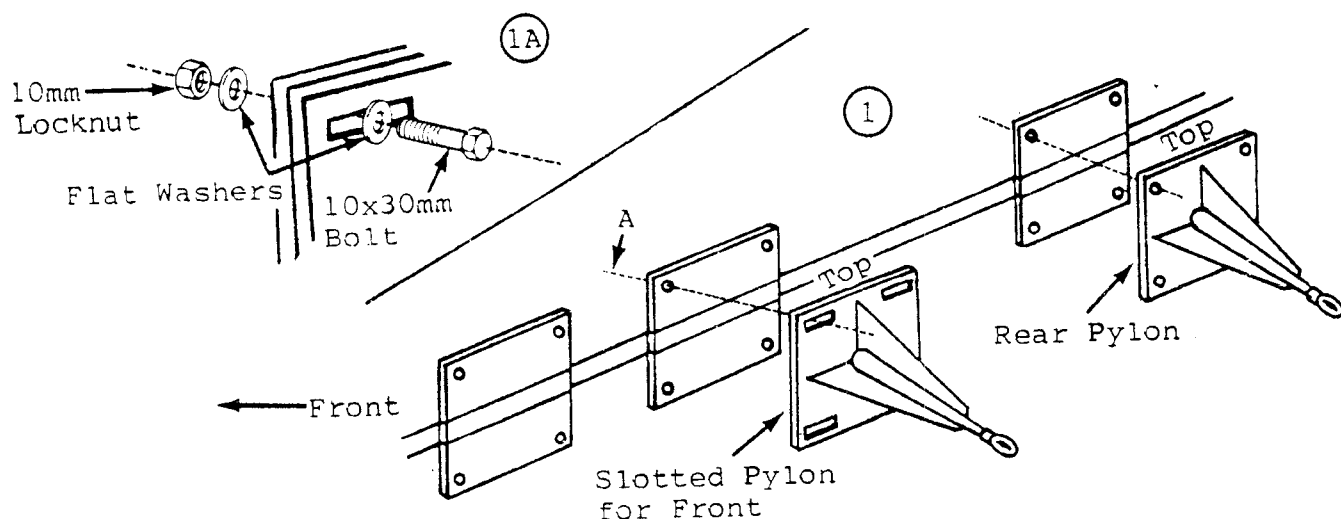
THE HARDWARE DESCRIBED IN THIS MANUAL WAS DESIGNED TO MOUNT THE VETTER TERRAPLANE SOLELY FOR THE MOTORCYCLE(S) DESIGNATED.

## Vetter

Vetter Corporation, Rantoul, Illinois 61866 217/893-9300

# Terraplane Pylon Installation

1. Take the pylon with the slotted holes and mount it to the second mounting plate from the front, using the 4, 10x30mm bolts, 8 flat washers and 4, 10mm locknuts provided. Do not tighten these fasteners yet. Tightening will be done later in the Final Adjustment section. Be sure to mount the pylon top side up. Top is stamped into both pylon plates. (Illus. 1)

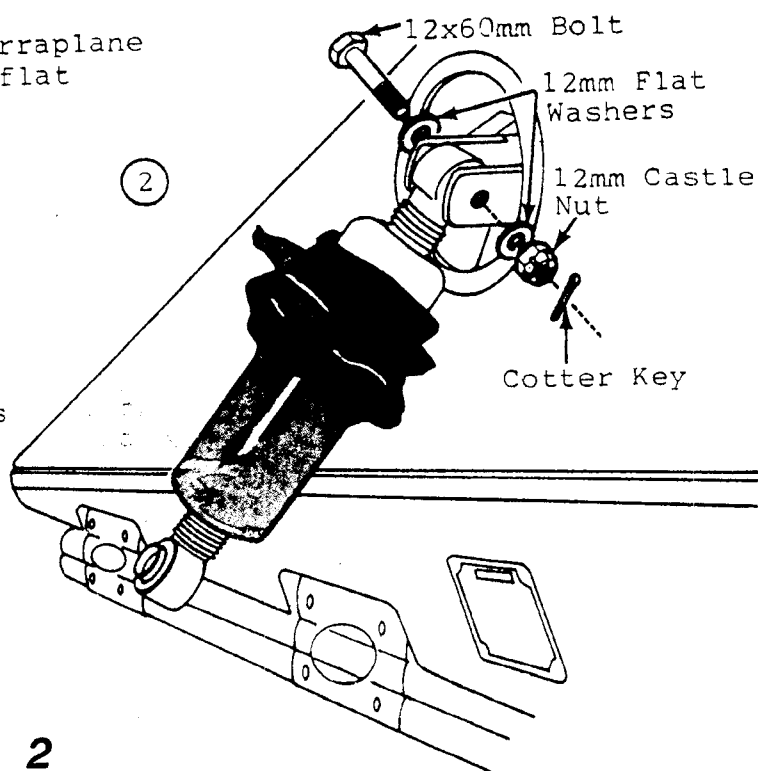


2. Mount the rear pylon, which does not have slots, to the rear mounting plate, top side up. Use the same type of fasteners used for mounting the front pylon. Tighten these fasteners, using torque wrench to 3.0-4.0 Kg-m (22-29ft.lb.). (Illus. 1)

3. Attach the Trim-Grip to the Terraplane using a 12x60mm bolt, 2, 12mm flat washers, a 12mm castle nut and cotter key. Tighten securely. (Illus. 2)

4. Rotate Trim-Grip to expose 4 threads at both ends.

5. Screw the rod ends into the pylons, leaving one thread exposed beyond the locknut. Do not tighten locknut at this time. These two locknuts will be tightened later in the Final Adjustment section.



# Motorcycle Hardware Mounting

## UPPER REAR MOUNTING BRACKET INSTALLATION

1. Remove the cap nut at the upper shock mount on both sides.

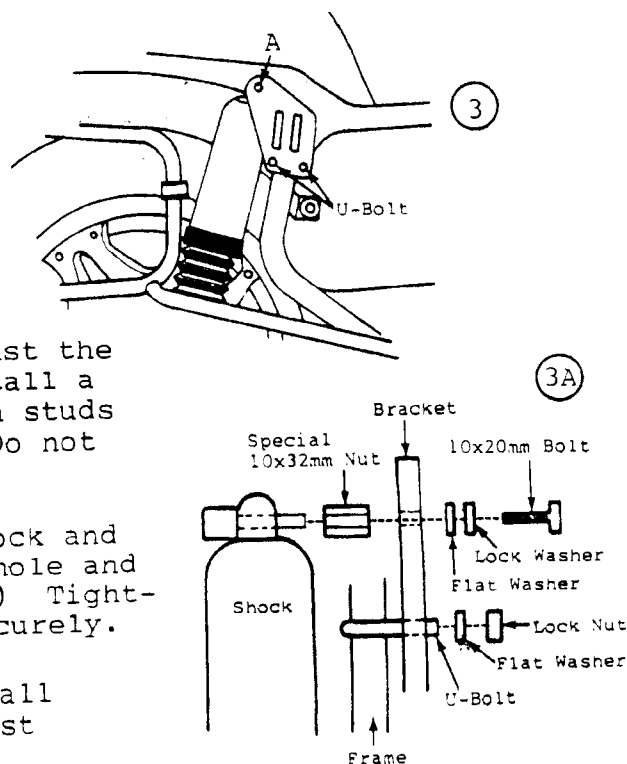
### **Interstate only:**

- A. Remove the right saddle bag by removing the (4) 6x25mm bolts on the inside of the bag.
- B. Remove the tail trunk.
- C. Remove the 8mmx30 bolt from the rear fender and the (2) 6x1.25x45 bolts from the side rails. Remove rail trunk hardware and set to one side. It will be reinstalled later.
- D. Remove the 10x30mm bolt from the right passenger's foot peg (the rest are already loose). Remove the right saddle bag hardware. Neither the right saddlebag or hardware will be reinstalled.
- E. Reinstall the tail trunk hardware.
- F. Install the (2) 14mm spacers on the 6mm bolt between the frame and the tail trunk hardware, on the right side.
- G. Install the supplied special 10x32mm long nut onto the tail trunk hardware and tighten securely.

**note:** Three of the four U-bolts are flattened. The one not flattened is used on the lower rear bracket.

2. Position the U-bolt behind the frame, holding it in place with one hand.
3. Place the mounting bracket against the frame and over the U-bolt. Install a flat washer and lock nut on both studs protruding through the plate. Do not tighten yet. (Illus. 3 and 3A)
4. Install the 10x20mm bolt with lock and flat washer, through the upper hole and into the shock nut. (Illus. 3A) Tighten the U-bolt and upper bolt securely.

**note:** If you wish to reinstall the side cover, it must be modified.

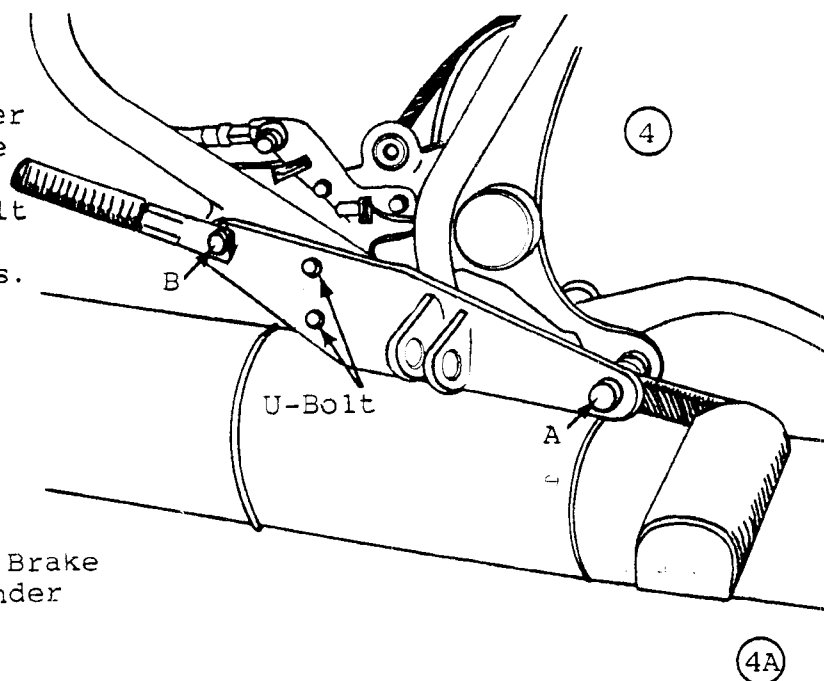
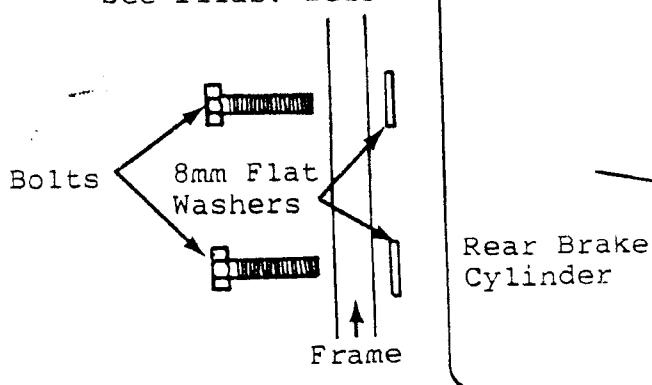


LOWER REAR HARDWARE INSTALLATION

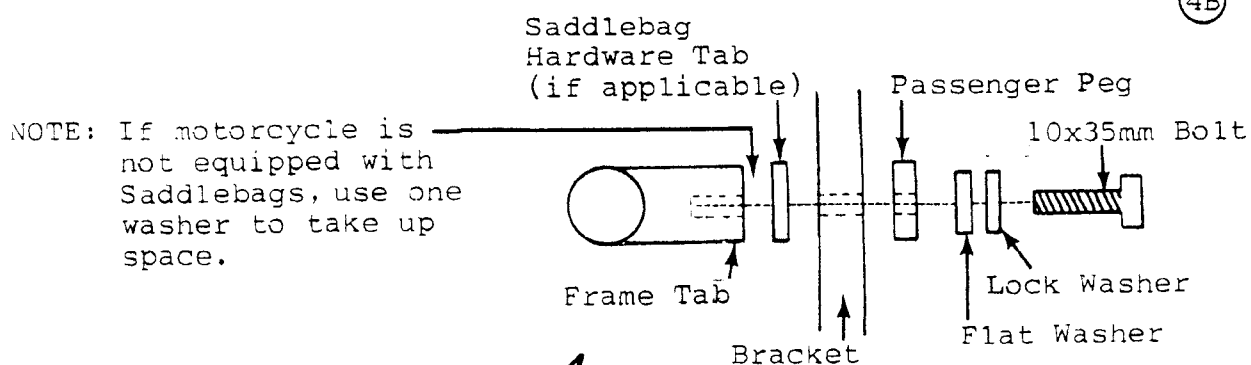
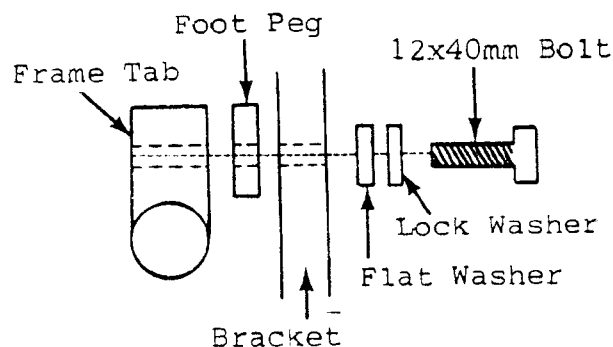
1. Remove rider foot pegs.
2. Place supplied, nonflattened, U-bolt around the frame tube. While holding with one hand, put mounting bracket over U-bolt and loosely install flat washer and lock nut on both studs to hold mounting bracket in place. (Illus. 4)

**'82 GL1100 ONLY:**

Install an 8mm flat washer on each bolt to space the rear brake cylinder away from the frame. The U-bolt will then have clearance to line up with the holes. See Illus. below.



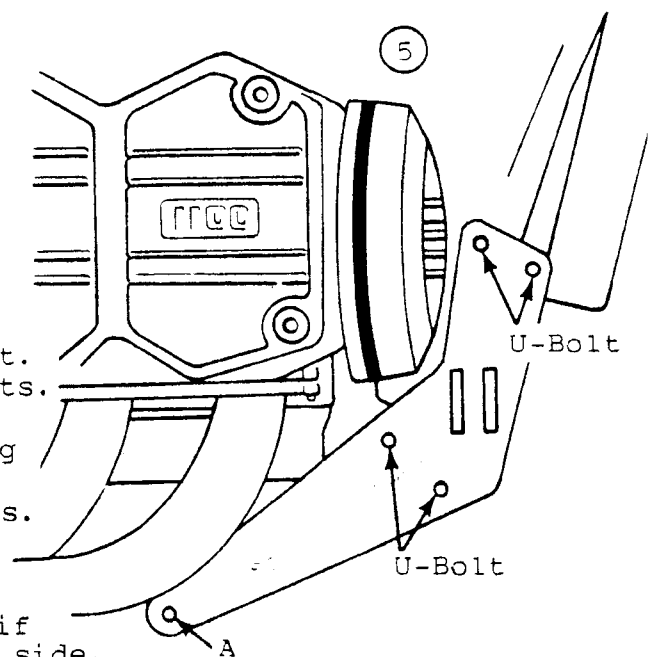
3. Place the front riders foot peg in its original position. Install the supplied 12x40mm bolt, lock washer and flat washer. Do not tighten yet. (Illus. 4A)
4. Place the rear passenger foot peg on the outside of mounting plate rear hole and insert the supplied 10x35mm bolt, lock washer and flat washer through the bracket. Tighten all fasteners using torque specifications given on the first page of these instructions. (Illus. 4B)



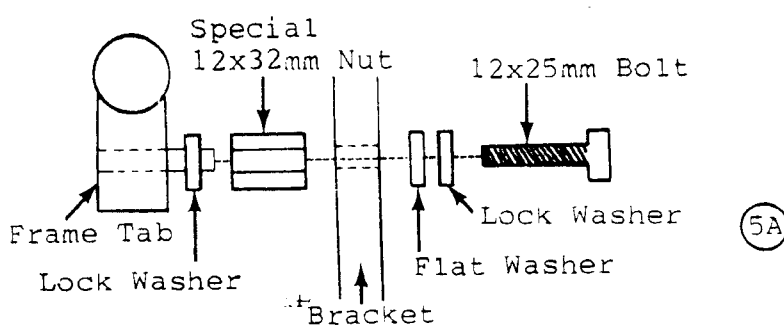
FRONT MOUNTING BRACKET INSTALLATION**Interstate only:**

A. Remove the right lower from the fairing.

1. Remove the nut from the lower front engine mount, leaving the lock washer in place. Replace the nut removed with the special supplied 12x32mm long nut. Tighten it in place using the torque specifications given on the first page of these instructions.
2. Install the upper, flattened U-bolt. Place the front mounting bracket over the U-bolt studs and install the two flat washers and locknuts finger tight. (Illus. 5)
3. Holding the bracket in place, insert the supplied 12x25mm bolt, lock washer and flat washer. Tighten finger tight. (Illus. 5A)
4. Insert the second flattened U-bolt into the center holes of the bracket. Install the flat washers and locknuts.
5. Tighten the fasteners securely using the torque specifications given on the first page of these instructions.

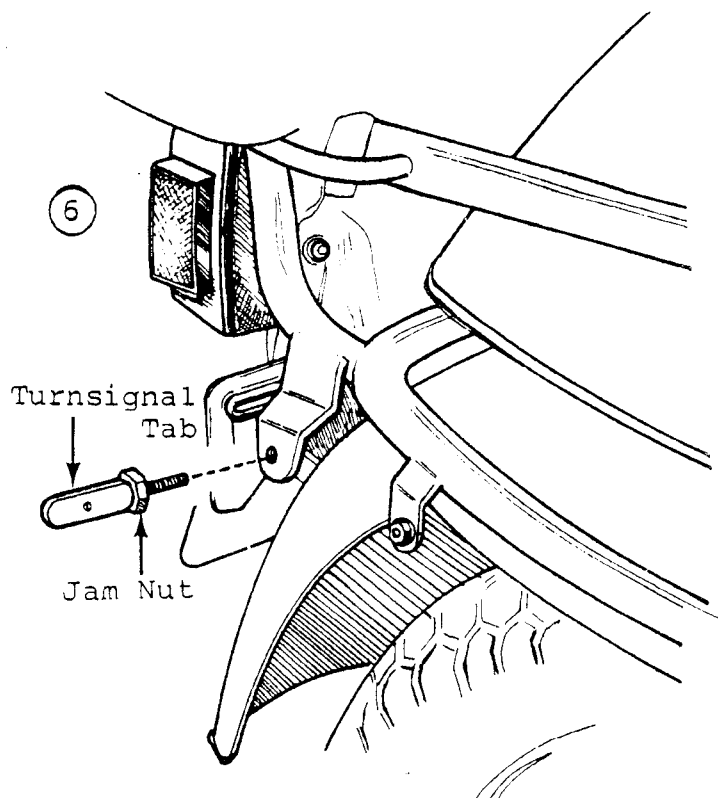
**Interstate only:**

A. Lower will have to be modified if you wish to reinstall the right side.

**Turnsignal****Interstate only:**

- A. Remove the turnsignal from the right saddle bag by removing the (2) phillips head-screws from the inside of the saddlebag. Remove the phillips head screw from the bottom of the saddlebag. It will not be reused.

- B. Install the turnsignal tab on the bike using the upper rear saddlebag mount location and provided jam nut, to locate the turnsignal tab correctly. (Illus. 6)
- C. Remove the two wires from the back of the stock turnsignal.
- D. Install the 750 turnsignal on the provided tab using the stock screw.
- E. Reroute the turnsignal wiring and connect the wires and 750 turnsignal together. Check the turnsignals for correct operation before continuing.



## Final Attachment & Alignment

1. Place the motorcycle on it's side stand.
2. Slide the Terraplane into place. It may be necessary to slide the front pylon forward or backward for proper alignment.
3. Insert the two 5/8"x2½" bolts through the two lower mounting points. Place the castle nut on the rear bolt and tighten according to the torque specifications on page 1. Install the cotter key and bend end over.
4. Tighten the four pylon mounting bolts using the torque specifications.

### caution

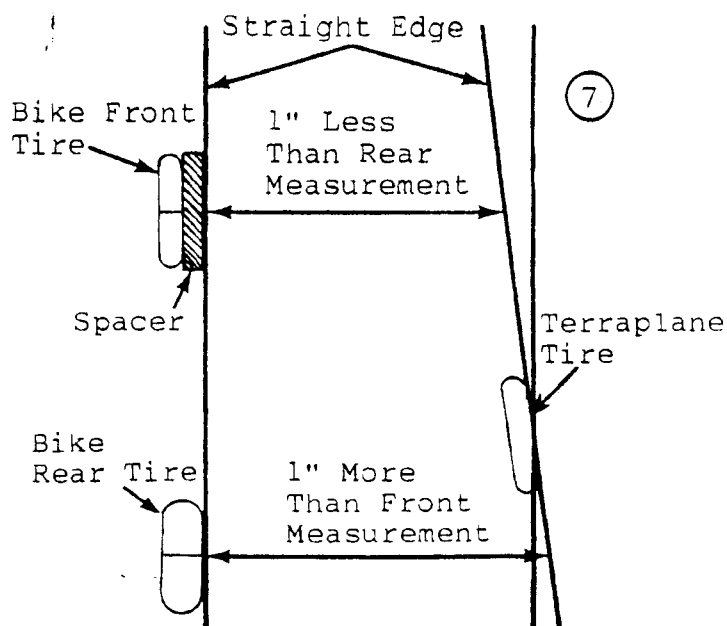
BEFORE PROCEEDING TO THE NEXT STEP, MAKE SURE THERE ARE FOUR THREADS EXPOSED AT BOTH ENDS OF THE TRIM-GRIP.

5. Before securing front pylon bolt, lean bike toward the Terraplane and install the 12x60mm bolt through the Trim-Grip mount. Install the castle nut and tighten to proper torque. Install the cotter key and bend end over.

## ADJUSTMENT OF THE TOE-IN

**note:** Toe-in must be measured at motorcycle axles.

1. Measure the width of the rear and front tires. Taking half of the difference in widths, make a spacer and place it alongside the front tire. Place a straight edge alongside the tires as illustrated. (Illus. 7) This will give you the true center line of the motorcycle for toe-in reference.
2. If adjustment is necessary, remove the 5/8" bolt from the front mount and turn the rod end out for less toe-in or in for more toe-in. When toe-in of 1" is attained, place nut on bolt and tighten to proper torque. Install cotter key and bend end over.
3. Tighten nuts on rod ends on pylons.



**note:** This drawing (Illus. 7), shows the toe-in greatly exaggerated for the purpose of illustration.

## **Wiring**

There are two connections to be made. One for the tail light and one for the brake light. These are to be made to the tail light wires located under the motorcycle seat. Grounding of the Terraplane to the motorcycle is accomplished through the mounting bracketry.

<u>Terraplane Wire Color</u>	<u>Function</u>	<u>Motorcycle Wire Color</u>
Red.....	brake light.....	Green/Yellow
Brown.....	tail light.....	Brown
Orange.....	accessory.....	Direct to Positive(+) Post of Battery

USE THIS SCALE TO CHECK BOLT AND WASHER DIMENSIONS

