

GOLDWING GL-1500/6 RH Mounting Instructions

PREPARATION AND MOUNTING PROCEDURES

NOTE; Reference to **LH** (left hand) and **RH** (right hand) is with rider on bike.

(Fig -A)

LOWER FRONT MOUNT

1. Remove three 5mm screws from the front of the lower front fairing panel and carefully drop down the cover.

2. Pull out the top of the rubber boot at the rear of the engine crash guard bolt, located in front of brake pedal. Insert socket wrench above rubber boot and loosen engine crash guard bolt approximately two turns.

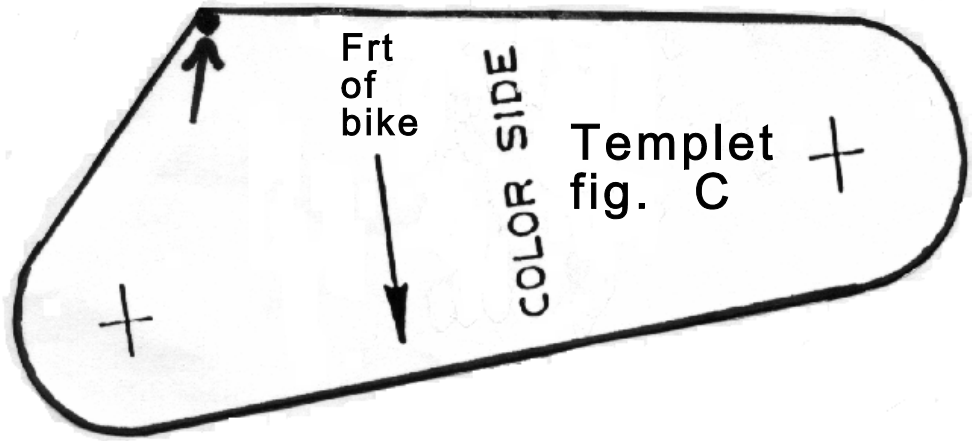
3. Remove the front engine crash guard 8mm bolt and DISCARD!
(Figure A-1)

Replace it with 8mm x 1.25 x 100 bolt, flat washer and lock washer INCLUDED IN MOUNTING KIT.

4. Remove the 10mm frame bolt (Figure A-2) next to this hole

2

for installation later. Position arm assembly so side plate is between the frame and the engine crash guard as shown. (Figure A-1)



(Fig -B)

(CUT OUT
TEMPLLET)

Continued Lower Front

5. Install 8mm x 100mm + flat washer + lock washer as shown and hand tighten. Re-install 10mm frame bolt in original hole.

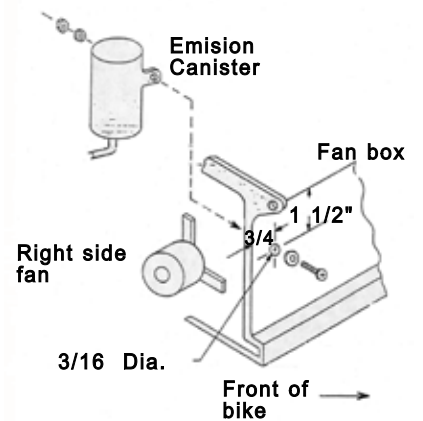
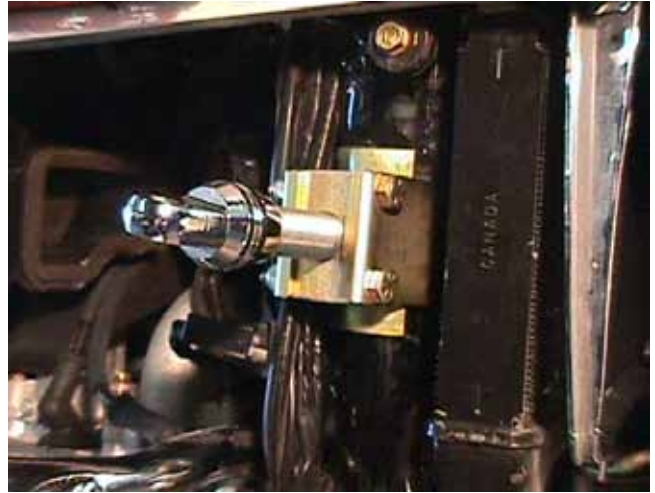
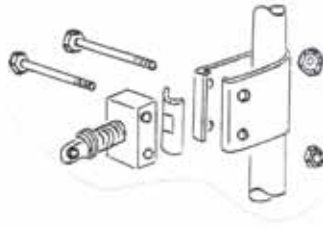
6. Locate the tube clamp on the bike cross member Figure B-1 and secure the end of the arm assembly using the nyloc nuts and torque to 10 ft. Lbs. Torque frame bolt to 20 ft. lbs. and 8mm bolt to 10 ft. lbs. Re-torque rear guard bolt through boot.

7. Position the template supplied on the lower front fairing panel as shown Figure C and using reference

point(Figure C - 1)line up the templet to the existing hole in panel and cut out the lower mount

clearance hole to the same shape as the templet. You may want mark position 2 and 3 of Figure C and cut out with a hole saw. This will assist you with the cutting of the Clarence hole. For ease of assembly

replace this panel at the same time as the panel for the upper front mount.



(Fig C -1)

(Fig D -1)

(Fig D -2)



UPPER FRONT MOUNT

(Fig E)

1.Remove the right side of the fairing panel

using screws behind the side marker black trim and at the lower trailing edge behind the plastic snap cap. The tabs locate adjacent panels together so each panel helps hold the other during final assembly.

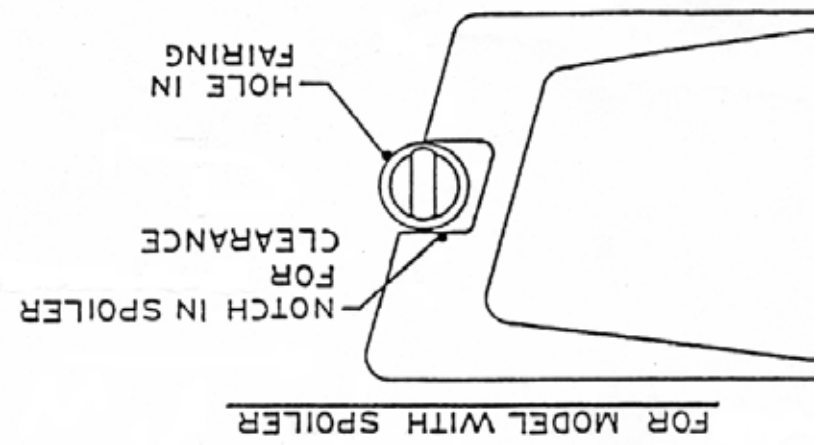
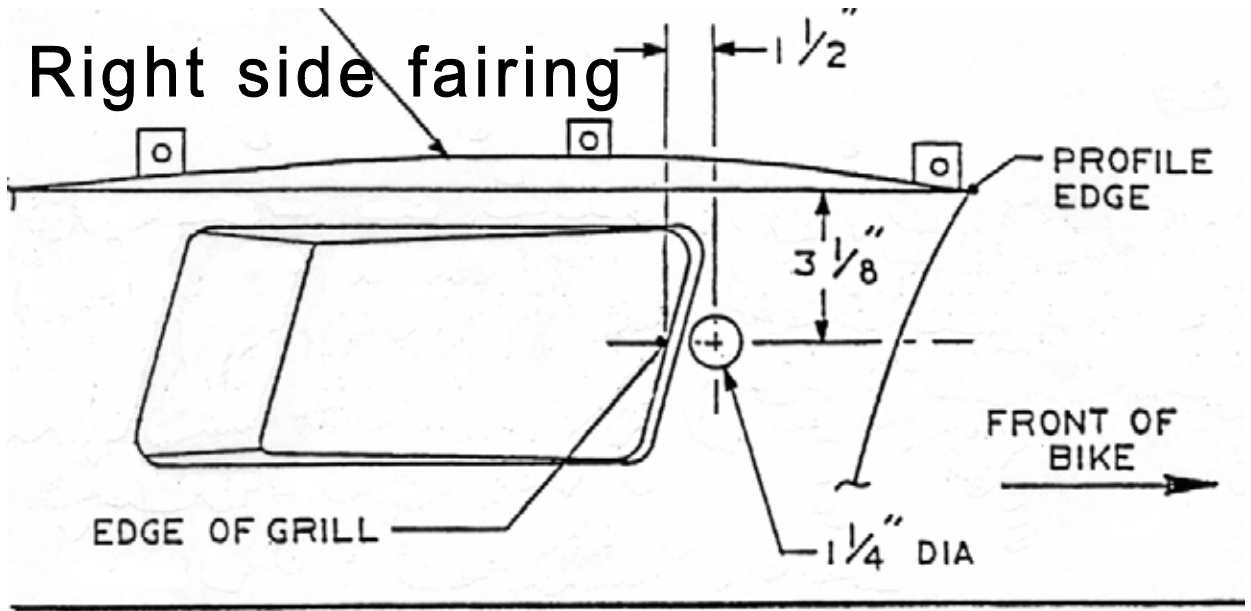
2. Remove the plastic grill from the radiator and if necessary relocate the emission canister (fig E). The emission canister can alternately be located inside the lower front fairing panel just in front of the oil filter. This is the easiest method but may require the purchase of a longer vacuum hose to reach the new location. Loosen the fan box bolt and top radiator bolt to gain clearance around (Fig F) the frame tube for the eye clamp. Spread clamp over tube (Figure D -1) and rotate for assembly. Torque clamp bolts to 10 ft. lbs. with nuts positioned toward rear of motorcycle.

3. Position clamp assembly to point straight out from bike and as high as possible (Figure D -1) and (Figure -F). Snug eye bolt by hand until panel is remounted and located correctly. Then torque eye bolt to 55 ft. lbs. with eye bolt positioned vertically. Tightening eye bolt after installation of fairing lower panel allows for positioning in the hole cut in the fairing.

4. Place fairing panel on flat surface and mark position of hole using dimensions shown (Figure G). If required, trim corner of grill inside fairing to clear the top of the canister.

5. Reassemble panels with care. Ensure Eye bolt is torque to 55 ft. lbs.

(Fig G)



(Fig H)

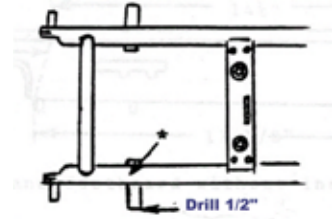


Fig I)

REAR MOUNT TO MOTORCYCLE

Remove the seat. There are no provisions for mounting the right side seat grab handle with a sidecar installation due to limited space. Drill out the threaded insert in the front right handle mounting boss, of the motorcycle frame. Drill to accept a $\frac{1}{2}$ " bolt, (Figure I). **CAUTION:** Do not damage wiring when drill passes through motorcycle frame.

Insert $\frac{1}{2}$ " bolt through large flanged spacer supplied and install into motorcycle frame. Install captive nut and tighten as shown. Figure J #1 #2 #4 #5

Drill captive nut plate and frame using a $\frac{13}{64}$ th (Fig J) drill as shown on (Figure J-#1) * **Note** The hole should be drilled off center to clear the $1\frac{1}{2}$ " bolt. Using a pop rivet tool install rivet. Remove bolt and check to see that bolt will easily restart into captive nut. Drill the right seat grab handle holes in the seat base to accept the flanged spacer provided Figure J-2. The $\frac{3}{4}$ " spacer goes in the front seat hole. Be careful not to damage the seat vinyl while drilling the holes.

The wiring harness should be installed onto the motorcycle while the seat is off. Refer to the sidecar wiring diagram supplied and the Honda shop manual for wiring information.

*Note If the accessory terminal on your motorcycle is already being used it may be necessary to install a relay into the system so as not to overload the accessory fuse on your motorcycle. The relay would be activated by an ignition/accessory circuit and supply power directly from the battery via the switched relay contacts using in line fuses sized for your accessories.

Remove the right side panel/battery cover if you have not already done so. Also at this time remove the right passenger floor board and filler panel as shown to allow access to the saddle bag guard bolt. Remove the saddlebag guard bolt. Drill the saddle bag guard bolt hole oversize to 3/8" for clearance.

With wiring complete (**Recheck**) to the motorcycle and the plug positioned so it cannot be pulled apart easily when it is installed, replace the seat onto the motorcycle using the stock bolts and grab handle on the left side. Do not tighten securely until the opposite side is installed and aligned. Ensure the two flanged spacers in the seat holes you have drilled out on the right side of the seat are still inserted. You are now ready to install the rear

(Fig K)

mount onto the motorcycle. *Caution: Protect the saddlebag so as not to scratch it during installation of the mount. Align and start the five bolts through the mount. Ensure that the seat spacer is aligned. Do not tighten until all five are started.

Tighten subframe mounting bolts refer to diagram

If your sidecar is equipped with brakes route the brake line through the right side of the dummy gas tank and up to the front master cylinder. Caution: Protect your motorcycle from possible brake fluid spills with a piece of plastic or heavy absorbent rags. Drain the master cylinder. Then remove the single banjo bolt holding your front brake line to the master cylinder. Using the double banjo bolt supplied and the three new crush washers attach the sidecar brake line closest to the master cylinder and the motorcycle brake line over it. Be sure to use a new crush washer between each banjo ring surface; three washers supplied. Install replacement fluid and bleed the brake system before riding the sidecar combination.

* Note we strongly recommend that a Champion large volume front brake master cylinder is installed to compensate for fluid volume feeding to the sidecar brake. This item may be purchased on an exchange basis with the purchase of your sidecar.

Once your seat, wiring, brake lines, and mounts are securely installed you are then ready for the installation of the sidecar to the motorcycle.

PREPARATION AND MOUNTING PROCEDURES

ATTACHING THE SIDECAR

Mounting the sidecar should be done on a level even floor surface. The sidecar frame should be supported at the front and rear cross member on 4x4 blocks or stands adjusted to a length of six and a half inches for the rear and seven and a half inches in the front. If you have TILT installed on the sidecar, retract the wheel and ensure the wheel does not support the weight of the sidecar. Slide the front and rear clamps into the sidecar frame. The front uses the 45 degree boss and 45 degree clamp while the rear uses the 70 degree boss and curved clamp. To ease adjustments, excess powder coat may have to be trimmed off the leading edge of the tubes before being inserted into the frame tubes. Refer to diagram

The motorcycle ride height should be adjusted with the compressor to suit your current riding height. This usually can be done by sitting on the bike and having a helper use large tie wraps to keep the rear springs compressed. When you get off the suspension will stay compressed. Alternately removing all the air from your rear shocks may be a close enough approximation.

Wheel the motorcycle alongside the sidecar in preparation for an average 60 inch MC wheel to SC wheel to wheel measurement. Use two jack stands to balance the motorcycle. One should be placed under each rear bag guard and adjusted to just balance the motorcycle not support it as full weight should be on the suspension. A false setting of the frame or MC suspension will require you to readjust the alignment settings just when you think everything is completed.

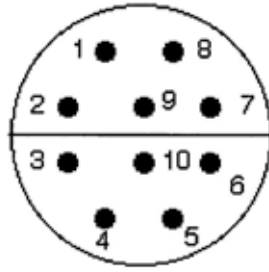
The wheel lead should be set as per the diagram. The toe in measurement should be made using a long straight edge supported off the ground about 5" to 6". Refer to the sidecar handbook for details. The motorcycle should be set up so that it leans away from the sidecar. ie the upper part of the rear wheel should be about 1/4" further away from the SC than the bottom of the MC wheel.

Engage the lower rear mount insert then snug up the through bolt. Do the same for the front lower mount. Attach the rear strut and snug up for your initial adjustment of toe in. Adjust the lower mounts as appropriate to obtain one and a half inches of toe in with regular steering. If an Easy steer front end has been installed then use three quarters of an inch of toe in. All the half inch fasteners should be final torque to 80 ft. lbs.

The Spare fuel system switch must be checked before filling the reserve tank to ensure the auxiliary pump is not activated. Turning the pump on while you have a full main tank will cause fuel from the auxiliary tank to be pumped into the main tank. This condition will overflow the main tank and vent raw gasoline out of the main tank overflow causing a potential severe fire hazard.

RE-Check

Ensure that all fasteners correct values. Do not struts or frame mounts! check SC brake operation the ground. ---Enjoy!---



have been torque to the forget the jam nuts in the Bleed the brake system and with the SC wheel lifted off

ELECTRICAL

**SIDECAR POWER CONNECTOR (sidecar side)
Motorcycle Wiring Diagram Code**

Pin #	Description	Color	Gauge
1	Clock	Green	22
2	Accessory	Red	18
3	Ground	Black	18
4	Brake Light	Red	22
5	Running Light	White	22
6	Right Turn Signal	Yellow	22
7	Backup Utility	Blue	22
8	Canopy Switch on Bike	Orange	22
9	T.I.L.T	Yellow	14
10	T.I.L.T.	Pink	14
<u>T.I.L.T Switch Wiring Colors</u>			
	Positive Battery (+)	Red	14
	Negative Battery (-)	Black	14
	Harness Yellow 14	Yellow	14
	Harness Pink 14	Purple	14

Wiring Description

* **Fuse link** when connecting wires directly to the positive terminal of the battery always use a fused connection to prevent fire or damage to motorcycle and sidecar if a short accrues.

* **Ground** The ground wire should be hooked directly to the battery ground or negative terminal or to other suitable frame ground. The

ground connection on the sidecar is not connected to the sidecar frame; however, the sidecar frame is connected to the motorcycle frame.

* **Clock** The clock signal is used for supplying constant power to the backup circuit of a stereo. This should be connected directly to the positive terminal of the battery or any other wire that is always live . IF you are not installing a stereo in the sidecar this wire can be left disconnected.

* **Accessories** This should be attached to the switched accessory terminal of your bike. If you are already using this circuit, it would be advisable to use the accessory terminal to control a relay that feeds this. This will prevent overloading the accessory circuit on your bike.

* **Brake Lights**

Running Lights

Right Turn Signal

Backup

These wires need to attach to the corresponding signal from the motorcycle. There are several ways to do this. The first method is to remove the seat and locate the corresponding wires with the use of a test light. The second method although more expensive is to install a StarTron 9 from Kriss Industries, where most of the wires to the sidecar can be isolated and fused. On motorcycles that have a reverse gear such as the GL1500 you can locate the reverse wire using a test light and by engaging the reverse gear lever. **(This wire on most GL1500 motorcycles is white with a blue stripe.)**

If you do not have a reverse gear on your motorcycle the sidecar backup light makes a very useful utility light when wired to a positive battery connection and to a switch.

We suggest that you remove the right turn signal bulbs from your motorcycle and cover the appropriate terminals with a small piece of electrical tape; then replace the bulbs. This will prevent any confusion by following motorists that could result from having two signals flashing, especially at night when the extra signal appears to be in the center of the vehicle. If you remove the sidecar, remember to put the bulbs back to their original condition.

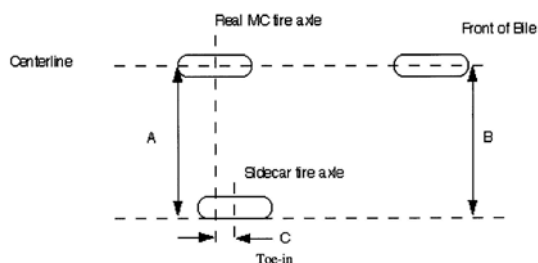
* **Canopy Switch on Bike** (Daytona Sidecar) This goes to a momentary switch installed anywhere on the bike to open the canopy latch. It is recommended that the power to this switch comes from switched power on the bike, thus only allowing the canopy to be opened when the bike is switched on.

* **T.I.L.T** There are a total of 6 wires involved in the T.I.L.T. system. The red and black wires of the second harness need to go to

the positive and negative terminal of the battery respectively.. This is because of the high current draw. The switch is momentary only and therefore cannot cause unnecessary drain on the battery. You must run the power for this through a 20 amp fuse. The yellow and purple wires from the switch are connected directly to the yellow and pink wires from the harness using the butt connectors provided.

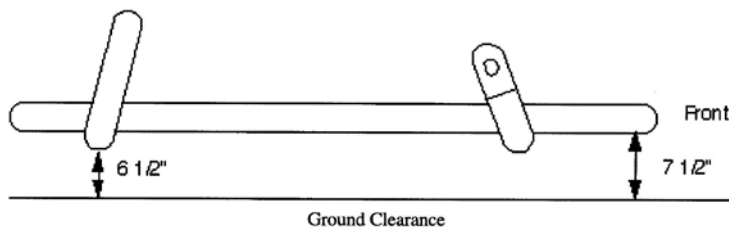
Mount the switch in a convenient location on the left side of your fairing. The switch should be mounted so that moving it to the left or away from the sidecar causes the sidecar to lift and the motorcycle to lean to the left. Moving the switch to the right or toward the sidecar should cause the sidecar to lower and cause motorcycle to lean to the right

BRAKES The brakes on the sidecar are tied into the front brake master cylinder. The tie in is done by removing the existing banjo bolt and replacing it with a longer one going through both the new brake cable and the existing brake cable (use new crush washers between all connecting surfaces). On the GL1500 the brake line should run from the front master cylinder under the gas tank plastic and with the female quick coupler ending up under the battery cover. **(Be sure to insulate the metal brake line from the positive battery terminal)** This can be done by placing a piece of hose around the brake cable in the area of the battery. The brake cable to the sidecar is aircraft quality steel



braided hose with a quick disconnect coupler. This coupler is sealed in both directions to prevent any brake fluid from leaking out. It is recommended to bleed the brakes ever 3rd. or 4th. time the sidecar is removed. Also at any time the front brake lever feels spongy or softer

than normal, line should be checked hooking up system. You fully bleed the sidecar. shipped



the front brake be bled and immediately After the brake will need to the brakes to The sidecar is without any

brake fluid so it will be necessary to replace the fluid and bleed the brake system before riding the sidecar combination.

*** GL 1500 Note** we strongly recommend that a Champion large volume front brake master cylinder is installed to compensate for fluid volume feeding to the sidecar brake. This item may be purchased after you receive your

sidecar by sending your front master cylinder including brake lever to Champion Sidecars and Champion will upgrade the unit you send to us.