

**CHAMPION SIDECARS  
DAYTONA 2+2 AND ESCORT  
OWNERS MANUAL  
General Instruction for GL-1500**



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## TABLE OF CONTENTS

	PAGE
<b>SPECIFICATIONS</b> -----	3
Information on tire size, wheel bearings, brake pads T.I.L.T. actuator and information regarding the removal and re-installation of your sidecar.	
<b>GENERAL</b> -----	4
Drawing of frame and suspension parts inc frame and suspension parts list	
<b>ELECTRICAL</b> -----	5
Wiring harness pin location and color call out for wiring harness installation to motorcycle.	
Wiring of fuse link, ground, clock and accessories. brake lights, running lights, right turn signal, and back up light.	6
wiring of canopy switch (Daytona Sidecar) T.I.L.T. electrical installation.	
<b>INSTALLATION OF LOWER FRONT MOUNT</b> -----	7
Continued installation of lower front mount including templet and instructions for cutting plastic	8
<b>INSTALLATION OF UPPER FRONT MOUNT</b> -----	9
Continued installation of upper front mount including diagrams for fairing modification.	10
<b>INSTALLATION OF REAR SUB FRAME</b> -----	11
Continued installation of rear sub frame	12
<b>BRAKES</b> -----	13
<b>PREPARATION AND MOUNTING OF SIDECAR TO MOTORCYCLE</b> -----	13
This section covers all aspects of installing the sidecar to the motorcycle including helpful hints for pre installation.	
Mounting of sidecar continued. This section includes instructions on wheel lead, toe in, and torque specs.	14
Mounting of sidecar continued. Diagrams showing hardware used in the installation of the Daytona and Escort sidecar.	15
Mounting of sidecar continued to include diagram showing the correct frame height and location of measurement points for the Daytona and Escort sidecar installation.	16
<b>STEERING DAMPER</b> -----	17
Drawings showing installation of steering damper for the GL-1500.	
Drawing showing reinstallation of Markland Backrest	
<b>DRIVING A SIDECAR</b> -----	18

Helpful hints and safety precautions for the first time sidecar rider and sidecar passenger. Also information regarding what to expect when you take your sidecar for it's first ride.

## **SPECIFICATIONS**

TIRE	-----	145SR13 DUNLOP
WHEEL	-----	#22-3511 4 x 100 modified to 4 x 4
WHEEL BEARINGS	-----	#L44643 bearings L44610 race
WHEEL BEARING SEAL	-----	#AD7128EO
BRAKE PADS	-----	#220018 Brembo
SHOCK Progressive	-----	Escort#6602-007 Daytona#6602-011
T.I.L.T. ACTUATOR	-----	20A at 1500 lbs.

## **CARE AND MAINTENANCE**

**PAINT** Champion uses only PPG paint products for maximum quality and finish. Your sidecar is painted using only base coat/clear coat urethane finishes. This finish is hand polished at the factory and requires very little maintenance except normal wash and wax. It is advisable not to wax your sidecar for roughly three to four weeks after receiving it in order for the paint to cure thoroughly.

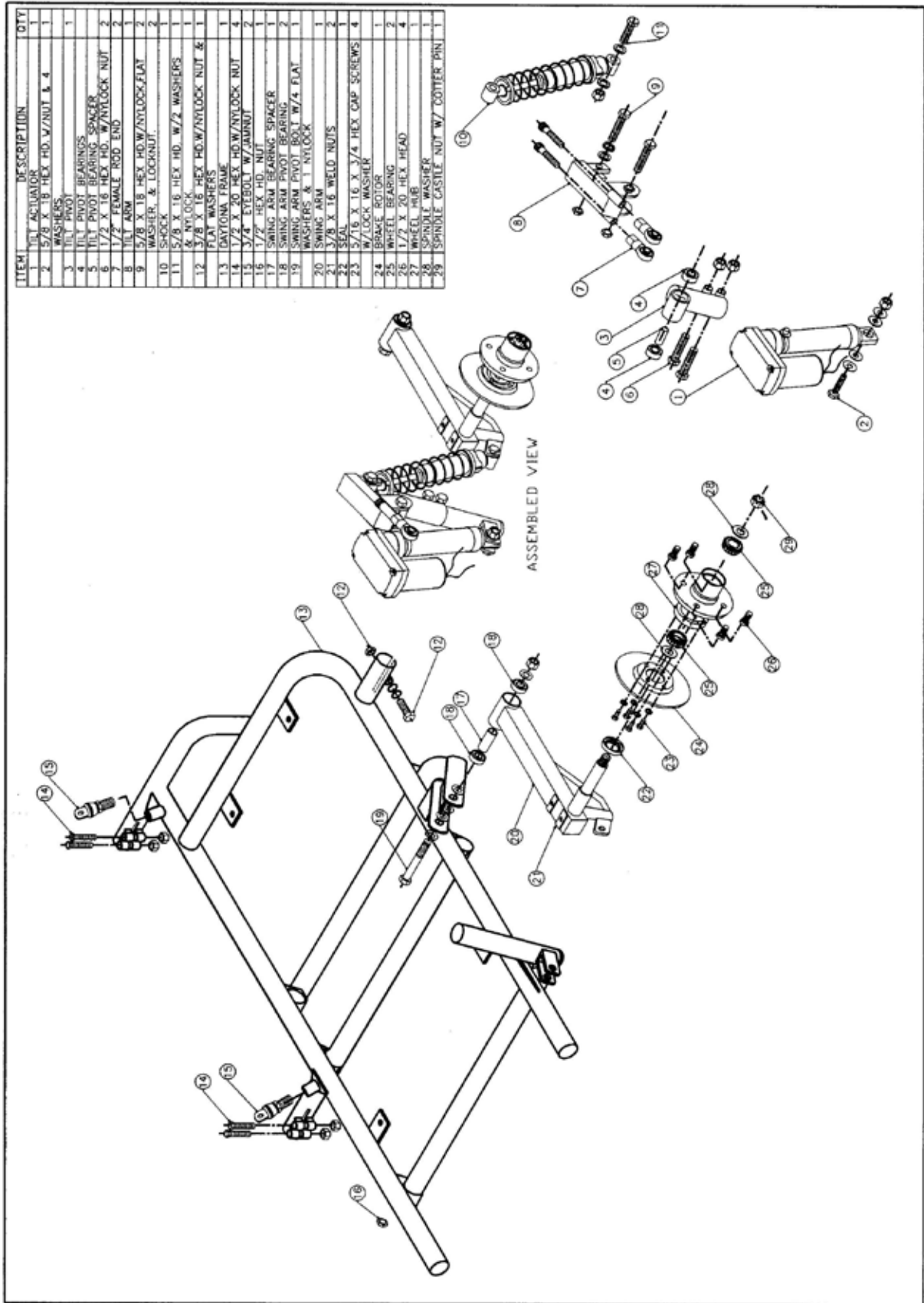
**WHEEL BEARING MAINTENANCE** The wheel bearings used on your sidecar are automotive grade tapered wheel bearings. It is advisable to check the wheel bearing adjustment periodically, and to clean and re-pack the bearings roughly every 3000 miles. These bearings and seals are available at most automotive part stores.

**TIRE AND TIRE AIR PRESSURE** The tire used on your Daytona or Escort sidecar is manufactured by the Dunlop Tire Co. and is available at most tire centers. This tire is manufactured to automotive stress and wear factors that are much higher than those you will ever experience with your sidecar. There is a good chance that through normal use of your sidecar you will never wear out the tire tread, but you must inspect the tire periodically for air pressure, dry rot and sidewall damage. The manufacturer recommended air pressure for this tire is 28 lbs. psi but because of the light duty application this tire is being used for you may want to experiment with the tire pressure to enhance the suspension comfort.

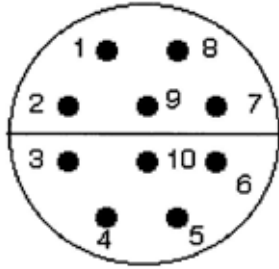
**SHOCK SUSPENSION** The shock suspension used on the Daytona and the Escort sidecar are manufactured by Progressive Suspension. Progressive Suspension has a reputation for manufacturing high quality aftermarket motorcycle shocks and springs. Although the sidecar is shipped to you from the factory with the shock spring set at it's softest setting, there are a total of five performance adjustments you can set your shock spring at.

**SIDECAR REMOVAL AND REINSTALLATION** To remove the sidecar from the motorcycle first remove the two ½" bolts connecting the struts to their upper eye mounting positions. Be sure to have someone support the motorcycle as you remove the last of the ½" bolts. Now with the side stand in it's down position lean the motorcycle to the left so it rests on the side stand. Now with the sidecar frame supported with a jack or dolly remove the two lower 5/8" bolts connecting the lower mounting positions.

Disconnect the wiring harness plug, brake quick coupler, and steering damper if you are using one. Now slide the sidecar away from the motorcycle. (**IMPORTANT NOTE**)( **UNLESS IT IS YOUR INTENT TO RE-ALIGN THE SIDECAR DO NOT LOOSEN ANY OF THE JAM NUTS OR PINCH BOLTS DURING REMOVAL OF THE SIDECAR**) To reinstall the sidecar reverse the process.



## 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	TILT	Yellow	14
10	TILT	Pink	14

TILT Switch Wiring Colors

Positive Battery (+)	Red	14
Negative Battery (-)	Black	14
Harness Yellow 14	Yellow	14
Harness Pink 14	Purple	14

Wiring Description (Most applications require the removal of the seat.)

- \* **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 occurs.
- \* **Ground** The ground wire should be connected directly to the battery ground or negative terminal or to another 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 Station 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.

**\* TILT** There are a total of 6 wires involved in the TILT 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.

## 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 faring 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  
a socket wrench above  
the rubber boot and  
loosen engine crash  
guard bolt  
approximately two  
turns.

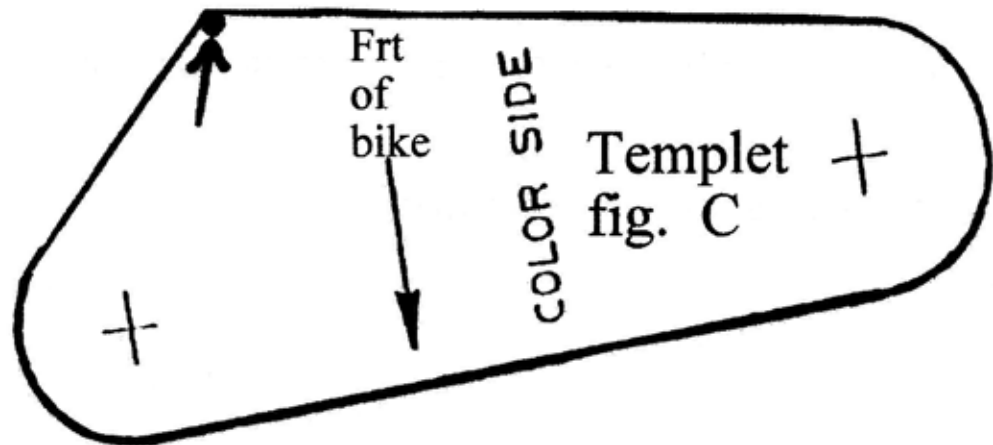
3. Remove the front  
engine crash guard  
bolt (figure A #1) and  
DISCARD! This bolt

(Fig

A-1)

will be replaced later  
with an 8mm x 1.25 x  
100 bolt, flat washer  
and lock washer  
INCLUDED IN THE  
MOUNTING KIT

4. Remove the 10mm frame bolt (Figure A #2) next to this hole for installation later. Position the arm assembly so the side plate is between the frame and the engine crash guard as shown.(Figure A #1)

**(CUT OUT TEMPLET)****CONTINUED LOWER FRONT MOUNT**

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

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

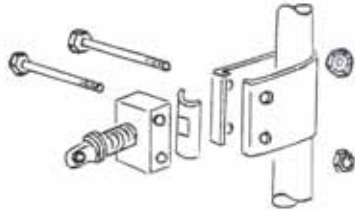
7. Position the templet supplied (Figure C) on the lower front fairing panel as shown and using reference point (Figure C-1 #1) and line up the templet to the existing hole in the panel. Now cut out the lower mount clearance hole to the same shape as the templet. You may want to mark position



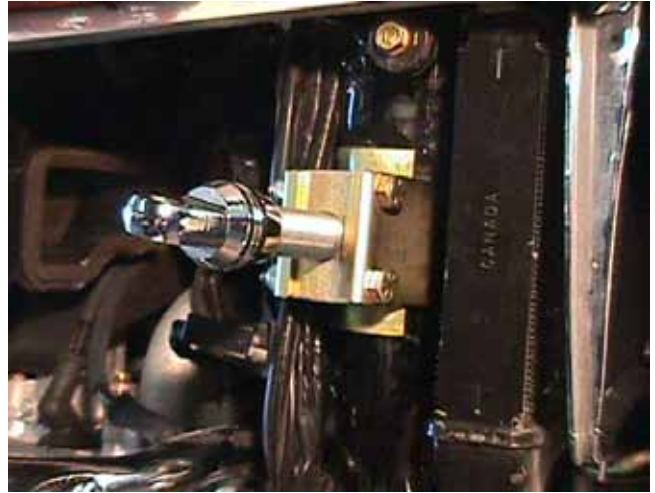
2 and 3 of (Figure C-1) and cut out with a hole saw. This will assist you with the cutting of the clearance hole. For ease of assembly replace this panel at the same time as the panel for the upper front mount.



( Fig D -1)



(Fig D -2)



(Fig E)

### UPPER FRONT MOUNT

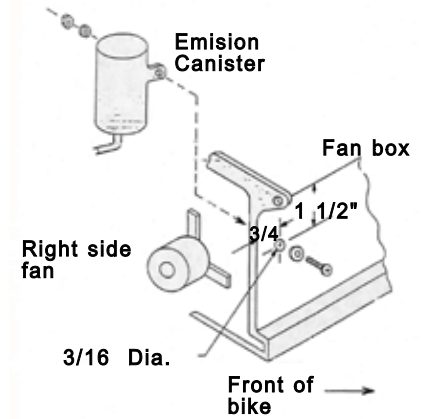
1. Remove the right side fairing panel by removing the screws behind the side marker black trim and at the lower trailing edge behind the plastic snap cap. The tabs locate adjacent panels together so each panel helps hold the other during final assembly.

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 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 the eye 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 the lower panel is remounted and located correctly allowing for alignment to the hole cut in the fairing (Figure F #1). For

(Fig F)

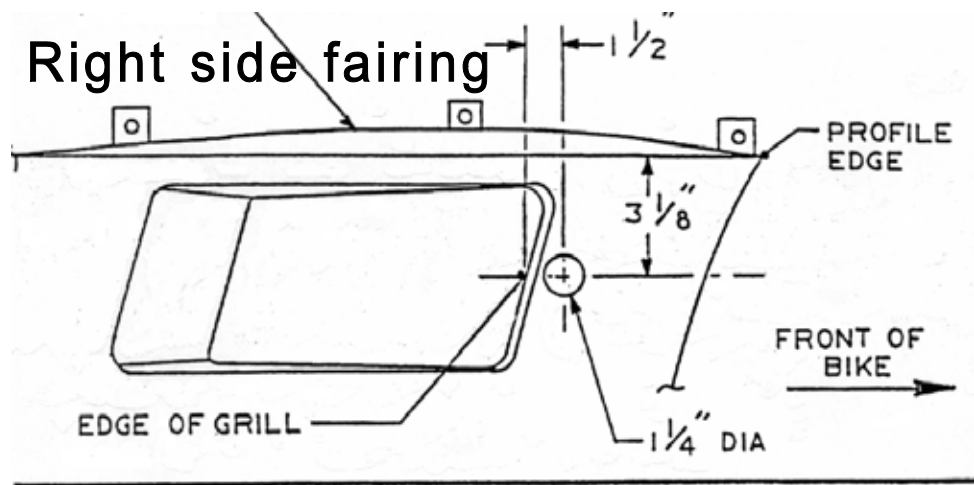
ease of front strut alignment, leave the eye clamp



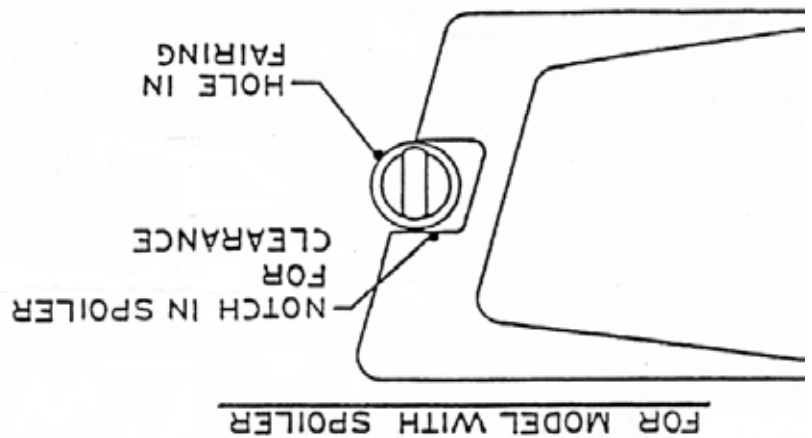
hand tight at this time, but will be torqued to 55ft.lbs. during the front strut installation.

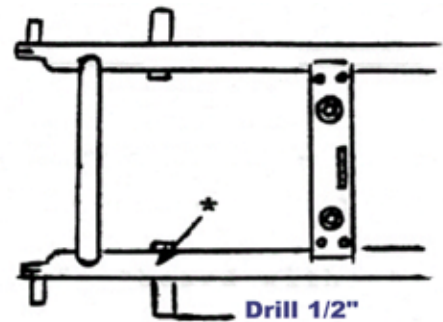
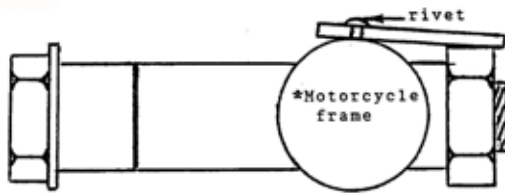
4. Place the fairing panel on a flat surface and mark the position of the hole using dimensions shown (Figure G). If required, trim the corner of the grill inside the fairing to clear the top of the canister.
5. Reassemble panels with care.

(Fig G)



(Fig H)





(Fig I)

**REAR MOUNT TO MOTORCYCLE**

Remove the seat. There are no provisions for re-mounting the right

(Fig J)

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 to accept a 1/2" bolt, (Figure I). **CAUTION:** Do not damage the wiring when the drill passes through the motorcycle frame.

Insert the 1/2" bolt through the large flanged spacer supplied and install into the motorcycle frame. Install the captive nut and tighten as shown. Figure J #1 #2 #4 #5

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

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.

**(Fig K)**

With wiring complete to the motorcycle and the plug positioned so it can not be pulled apart easily when it is installed. **(Recheck wiring before installing the seat)** 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 mount onto the motorcycle. **\*Caution:** Protect the saddlebag so as not to scratch it during installation of the mount. Align and start the 1/2" bolt (Figure K #1) and the 3/8" bolt (Figure K #3) through the mount. Ensure that the seat spacer is aligned. Do not tighten until both bolts are started.

On the G1-1500 it will be necessary to trim the floor board cover as shown to allow access to the right saddlebag guard bolt and clearance of the mount.(figure K-1).

**(NOTE)** For clearance of the rear mount assembly it may be necessary to grind the right rear adjustable floor board.

Tighten sub-frame mounting bolts at this time.

(Fig k-1)

**BRAKES (IF EQUIPPED)** With the exception of Harley Davidson the sidecar brakes on most bike applications are integrated into the front brake master cylinder. This connection is accomplished by removing the existing banjo bolt and replacing it with a longer double banjo bolt supplied by Champion. The double banjo bolt will go through both the new brake cable banjo end and the existing brake cable banjo end. (**be sure to use new crush washers between all banjo fittings and 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. The sidecar is shipped without any brake fluid so it will be necessary to replace the fluid with DOT 4 brake fluid and bleed the brake system before riding the sidecar combination. Also at any time the front brake lever feels spongy or softer than normal, the sidecar brake line should be bled and checked. (**NOTE**) It is recommended to bleed the brakes every 3<sup>rd</sup>. or 4<sup>th</sup> time the sidecar is removed.

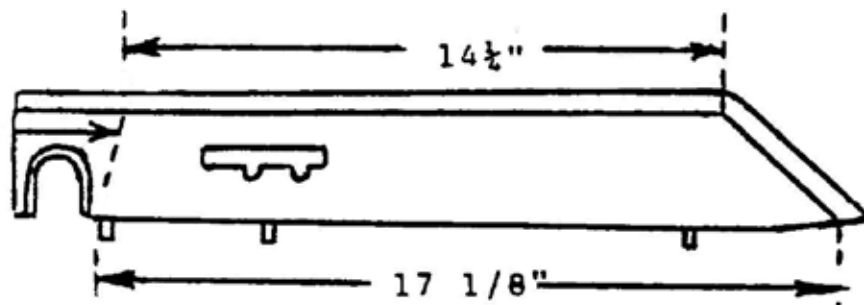
\* **GL 1500 Note** we strongly recommend that a Champion large volume front brake master cylinder be installed to compensate for fluid volume feeding to the sidecar brake. This item may be purchased after you receive your sidecar by sending your front master cylinder including brake lever to Champion Sidecars and Champion will upgrade the unit you send to us.

#### 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 for the Daytona and Escort (Figure L). If you have T.I.L.T. installed on the sidecar, retract the wheel to ensure the wheel does not support the weight of the sidecar. Slide the front and rear mounting hardware into the sidecar frame. 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. For the **Escort** installation the front uses the 45 degree boss and 45 degree clamp while the rear uses the 70 degree boss and curved 70 degree clamp. The **Daytona** installation uses a 45 degree clamp and 45 degree boss in the front and a 90 degree boss in the rear. The use of the 90 degree boss on the Daytona sidecar is one of our newest upgrades. When installing the 90 degree

boss into the rear position of the sidecar frame it is necessary to locate the collar on the 90 degree boss and slide it all the way into the frame until the collar hits the frame tube. By sliding the 90 degree up to the collar it will preset the rear toe in measurement (Figure M location A) to factory specifications.

The motorcycle ride height should be adjusted to simulate your current riding height. This can usually be accomplished by removing all the air from your rear shocks to a close approximation of bike height with a rider on it.

Wheel the motorcycle alongside the sidecar in preparation for an average 60 inch MC wheel to SC 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 (Figure M location C). The toe in measurement should be made using a long straight edge supported off the ground about 4" and resting against the sidecar tire. The straight edge should be 5' to 6' long. If you do not have a long straight edge, a 6' fluorescent bulb will work fine.

Engage the lower rear mount insert then snug up the 5/8" through bolt. Do the same for the front lower mount. For the G1-1500 adjust the lower mounts as appropriate to obtain 1 1/4" 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. at this time.

After you have torqued the half inch pinch bolts to 85 ft. lbs., you should now install the rear strut and front strut from the sidecar frame eye to

the upper rear mount eye. It may be necessary to rotate the eyes on the frame and the upper mounts slightly for strut installation (only turn the top front frame eye clockwise for this adjustment). **After the pinch bolts have been torque and struts installed, you should remove the supports holding the sidecar at its correct height. This will assure that the sidecar remains level after installation.** 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. The lean out or lean in of the motorcycle is accomplished by adjusting the struts only. If you have the optional **TILT (trimming device)** it is a good idea to first lower the sidecar to it's full down position and then raise it one inch to do the final strut adjustment. This will allow three inches of up adjustment and one inch of down adjustment. **NOTE** If the sidecar does not drift left or right at a cruising speed of approximately 50 mph and with the passenger weight that would normally be in the sidecar, you have adjusted the lean of the motorcycle correctly. If the motorcycle drift's to the right and the toe in has been checked and found to be correct adjust the struts and lean the motorcycle to left in small increments and vice-versa if it pulls to the left.

**RE-Check** Ensure that all fasteners have been torqued to the correct values. Do not forget the jam nuts in the struts or frame mounts! Bleed the brake system and check SC brake operation with the SC wheel lifted off the ground. ---Enjoy!---

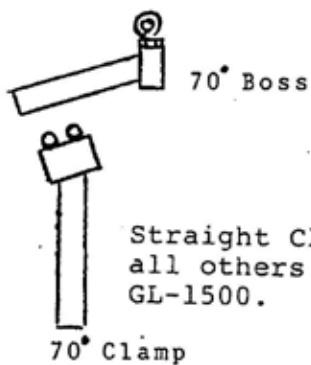
**Chrome Struts**

Push the outer sleeve downward with a slight twisting

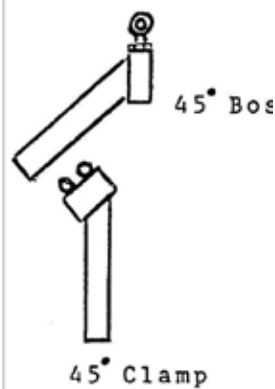
70 degree curved  
Clamp for Escort on  
GL-1500 only



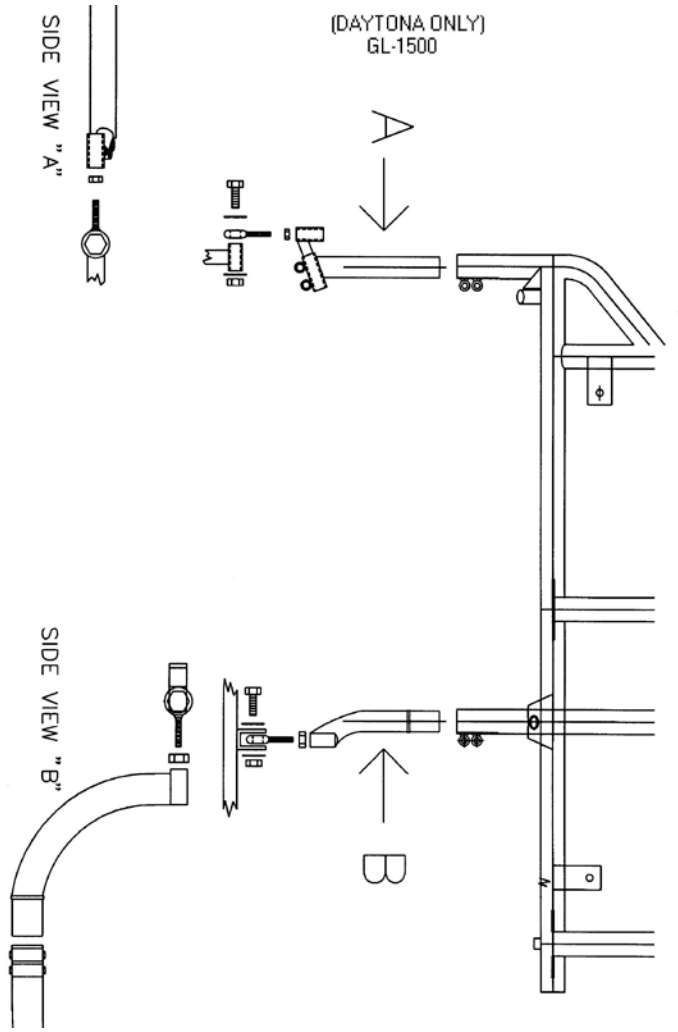
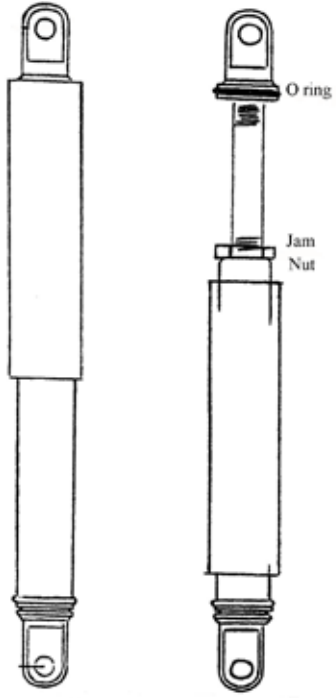
(Rear Hardware)



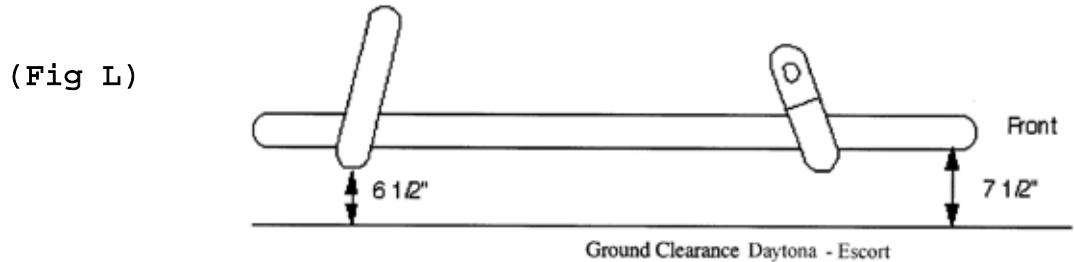
(Front Hardware)



to free it from the retaining O Ring. This will allow access to the jam nut. (keep O ring lubricated)



**Figure L**, is showing the correct frame height and location of measurement points for the Daytona and the Escort sidecar installation.



**Figure M** is showing the correct measurement points for toe in and wheel lead for the Daytona and Escort sidecar.

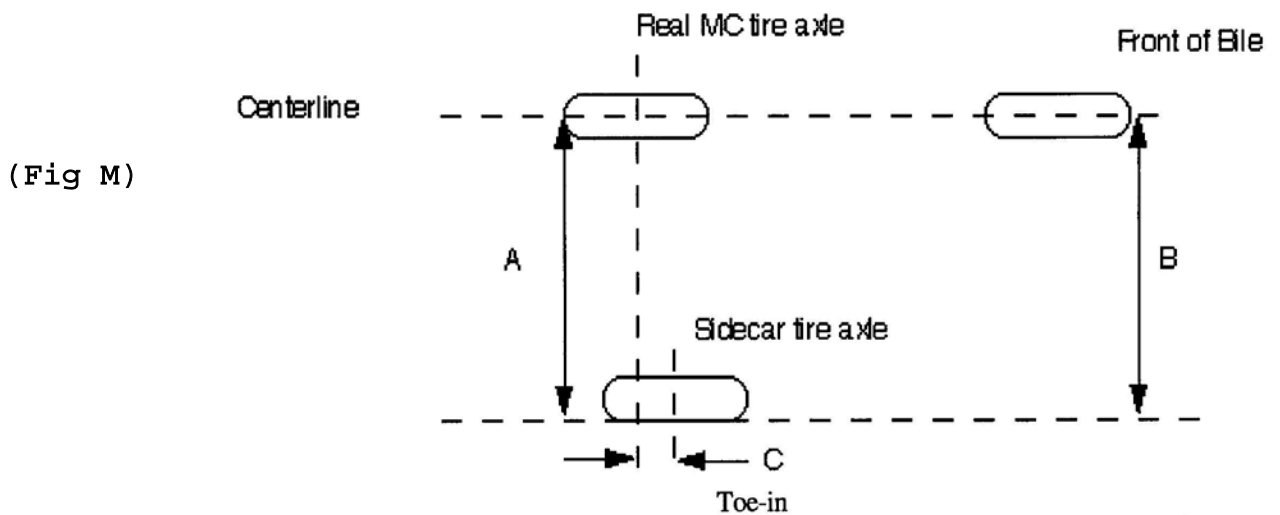
1. Toe in measurement for the Daytona and Escort.

(without E-Z STEER  $1\frac{1}{4}''$ )

(with E-Z STEER  $\frac{3}{4}''$  )

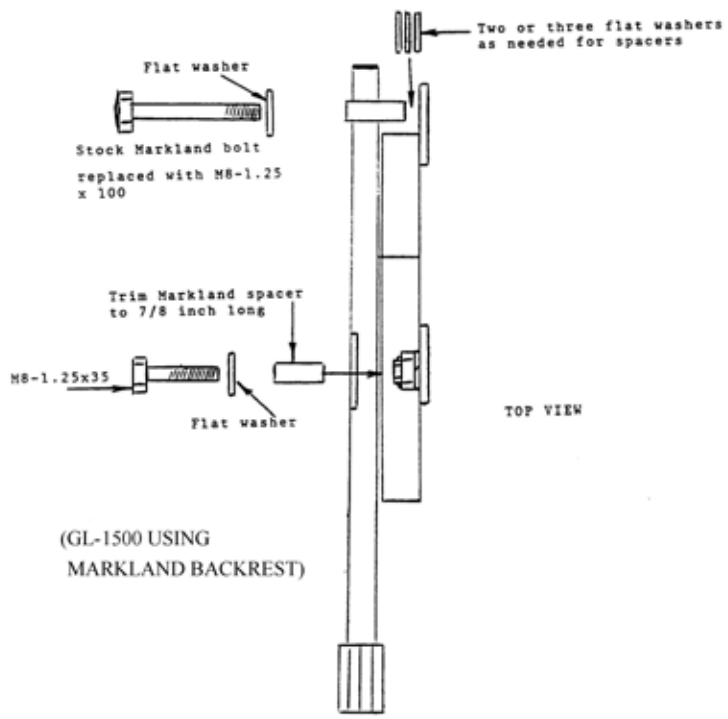
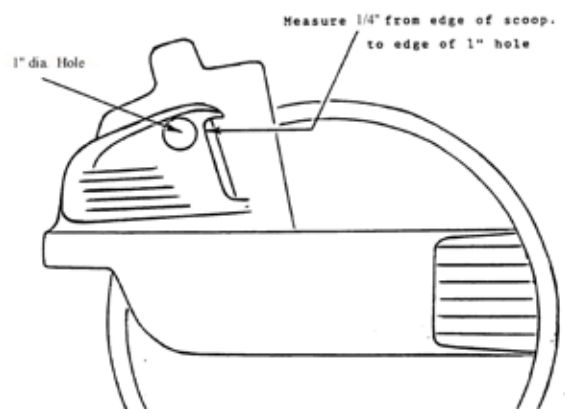
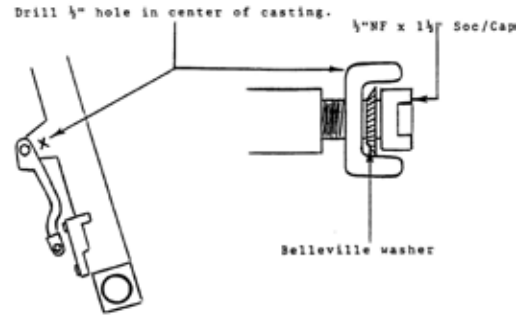
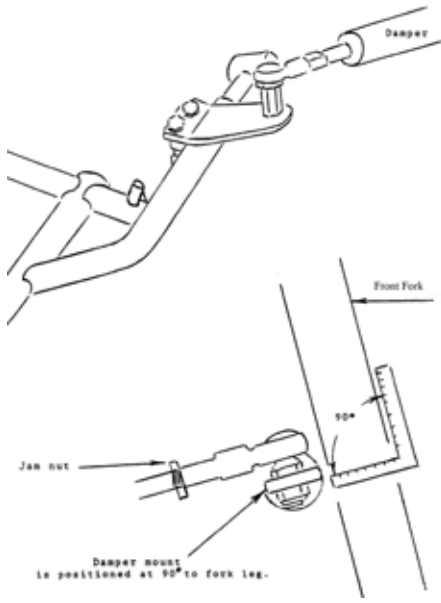
2. Wheel lead measurement for the Daytona and Escort

( GL1500 approx.  $6.50''$  )



**STEERING DAMPER INSTALLATION**

(1988 TO 1998)



**MARKLAND BACKREST INSTALLATION**  
 (There are no provisions from Champion for the re-mounting of other backrests)

(GL-1500 USING MARKLAND BACKREST)

## DRIVING A SIDECAR

### NEW OWNER DRIVING AND SAFETY PRECAUTIONS

It is important to know that driving a sidecar will be nothing like riding a solo motorcycle. So take my advice and forget most of the twenty years of experience you have spent riding motorcycles and be prepared to spend some time to change habits and learn some new tricks.

First of all **forget leaning the motorcycle** into a turn (it will not happen) so remember if you do not turn the handlebars into a turn the motorcycle will go straight. This may sound funny but many times old habits are very strong and hard to break.

Remember also that there is a sidecar attached to the right hand side of you motorcycle and you must make a mental note to stay to the left side of your lane. It is no longer necessary and is **unsafe** to lower your feet from the foot pegs when the vehicle is moving, except when you want to push the rig in reverse.

It is very possible that on a fast or tight right hand turn the sidecar wheel will lift off the ground. For the first time rider it is a good idea to avoid this maneuver until you become more familiar with your sidecar. The lifting of the sidecar wheel can be avoided in a number of ways. The first and most common method is simply slow down on right hand turns until you become familiar with your sidecar. The second method is to make sure that there is always a passenger or additional weight in the sidecar and to avoid having a passenger on the back of the bike when the sidecar is empty. (but still watch your speed on right turns). After you become more familiar with your sidecar you may want to take the rig into an empty parking lot with no obstructions for the following maneuver. Put the sidecar rig into a right hand turn and slowly increase the speed and the tightness of the turn until the sidecar wheel comes off the ground. This maneuver will allow you to safely experience what it feels like to have the wheel off the ground and will avoid the unknown if it happens by accident while driving the rig. **Because it will put unnecessary stress on the sidecar mounting hardware the raising of the sidecar should only be for learning purpose.**

It is normal to feel the rig want to pull slightly to the right when accelerating because of the pull of the sidecar and a slight pull to the left when backing off the throttle. This is a normal reaction of attaching a sidecar to a motorcycle and after you have some riding experience with your sidecar you will hardly notice it. Some motorcycle sidecar applications will experience what we call low speed (wheel-wobble) and it usually occurs between first and second gear at about twenty or thirty MPH. If you are experiencing intolerant wheel-wobble and you are sure the toe in measurement and wheel lead settings are correct you may want to install a steering damper (available from Champion) to the front fork of your motorcycle.

It is also normal if you do not have a brake on your sidecar to feel a slight pull to the right when stopping you rig. This is because the sidecar

wants to come around the motorcycle when stopping. If you are stopping and you do not have a brake you may want to counter steer into the sidecar in order for the rig to stop straight. ( A brake at the sidecar wheel is a safety benefit and should be installed especially when driving on wet or slick roads.