

Cobra & Cobra XL

by **cSc**
TRIKES

**2001 - 2010
GL1800 Goldwing**

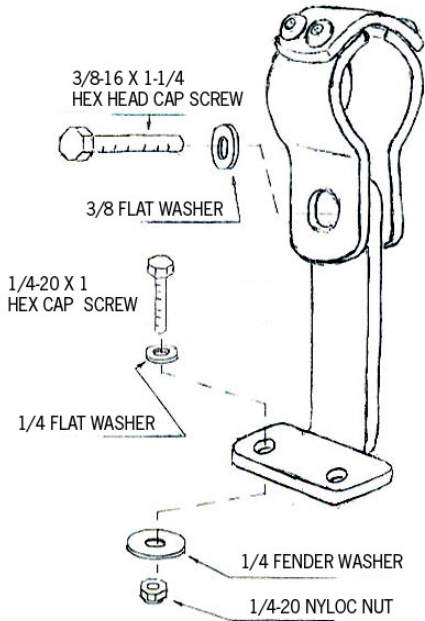
Ground Effects

Installation Instructions

REVISED 1 - 2015

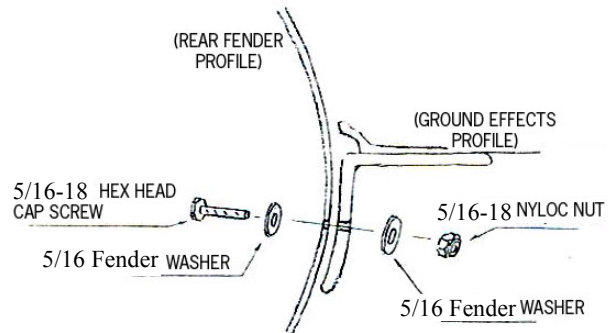
**California Sidecar Parts & Technical Support
434.263.8866**

FRONT MOUNT CLAMP



2006 COMFORT PACKAGE MODELS

REAR MOUNT



.For installation assistance, call Parts & Service @ 434.263.8866

IMPORTANT

The California Sidecar *Ground Effects* are designed to fit the California Sidecar Cobra Trike Conversion Kit only.

Wiring Installation:

- 1. Remove the seat and passenger grip handles with the four M8 x 1.25 SHCS.**
- 2. Plug the four pin GRD EFX harness into the four pin connector at the body connectors (2 red and 2 blue connectors).**
- 3. Secure the GRD EFX box to the motorcycle frame or inner fender.**
- 4. Route the purple and black wires to the left side and the brown and black wires to the right side.**
- 5. Replace the seat and passenger grip handles with the four M8 x 1.25 SHCS.**

Ground Effects Installation:

- 1. Disconnect the three pin connector at the sidestand switch.**
- 2. On the sidestand side of the connector cut 2 inches from the connector.**
- 3. Strip the two green wires and connect them together with a butt connector.**
- 4. Tape or shrink tube all three wires.**
- 5. Remove the side stand.**

Front mounts – (left & right)

2006 & UP Comfort Package Models Only

Refer to picture above. Cut opening in rubber boot 1/2" wide and 1 3/8" long. Insert the two clamp halves through opening in rubber boot with weld nut facing forward. It is not necessary to install top of clamp or the 4 button head cap screws.

- a. Install clamp on rear tube of engine guard, with weld nut facing forward.
- b. Tighten four 6mm button head cap screws.
- c. Compress clamp flats with pliers allowing enough gap to insert lower front mount with foot facing rear.
- d. Align holes and install 3/8-16 x 1 1/4 hex head cap screw. Do not tighten.

Middle Mount:

1. Remove the center stand. (Right side HHCS is left hand threads and the left side SHCS is right hand threads).
2. Install the middle mount reusing the OEM SHCS on the left side and a new M10 left hand SHCS on the right side. Install a flat washer on each SHCS. Get both SHCS snug but not tight leaving the mount rotated down.

Lay ***Ground Effects*** into place, aligning to fender ensuring that the rear mating edge is level and the fiberglass bracket is contoured to the fender. Clamp bracket to fender (Vise-Grip®6-sp works well).

Note: In order to achieve optimum fit, you may find it necessary to grind slightly where the ***Ground Effects*** meet the fender.

1. Adjust front of ***Ground Effects*** so there is $\frac{1}{4}$ " or less gap between ***Ground Effects*** edge and lower cowl.
2. Holding this position, mark location of two lower front mount holes to the ***Ground Effects***.
3. Remove clamp at rear and remove ***Ground Effects***.
4. Drill two $\frac{1}{4}$ "holes at marked location.
5. Remove lower front mount from clamp and attach to ***Ground Effects*** (foot to rear) with two $\frac{1}{4}$ -20 x 1 hex head cap screws with $\frac{1}{4}$ washers. Use $\frac{1}{4}$ x 1 $\frac{1}{4}$ fender washers and $\frac{1}{4}$ -20 nyloc nuts on the underside.
6. Using super glue affix rubber strips to rear of the ***Ground Effect*** where they meet the fender.
7. Place ***Ground Effect*** in position and clamp rear to fender as in step 3.
8. Insert lower front mount between flats of clamp and install $\frac{3}{8}$ -16 x 1 $\frac{1}{4}$ hex head cap screw and $\frac{3}{8}$ washer. Adjust ***Ground Effect*** location as in step 4, and tighten.

Rear mounts:

- a. With clamp still in place, drill two 5/16" holes 3" up from bottom edge of fender ensuring holes go through fiberglass bracket approximately 1" from each side of bracket.
- b. Install two 5/16-18 x 1 hex head cap screws, pointing forward, with the bolt head on the inside of the trike body fender well. **DO NOT INSTALL the bolt with the threads inside the fender well.** Secure with 5/16 fender washers and 5/16-18 nyloc nuts. Do not over tighten. Remove clamp.

Middle mount:

1. Rotate the mount up until it touches the *Ground Effect*.
2. Pull up the rubber mat where you are about to drill.
3. Using a 1/4 drill bit with an angle drill, drill up though the *Ground Effect* using the middle mount as a guide.
4. Install two 1/4-20 elevator bolts into the drilled holes and secure with nyloc nuts and washers on each side.
5. Reglue the rubber mats.
6. Now tighten the two SHCS for the Middle Mount.

Finishing the installation:

1. **Ensure free movement of foot brake lever and gear shift lever.**
2. Drill a 5/16" hole on each side of the trike body, above the mufflers but underneath the *Ground Effect*, to run the wiring harness with relays through.
3. Connect the left *Ground Effect* wiring harness to the installed wiring harness. The black wire to the black wire, and the purple wire to the purple wire with butt connectors.
4. Connect the right *Ground Effect* wiring harness to the installed wiring harness. The black wire to the black wire, and the brown wire to the brown wire with butt connectors.
5. Test the cornering lights to ensure that the lights operate with the appropriate turn signal, and the light remains illuminated until the turn signal is cancelled.

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