

VIPER
Cobra & Cobra XL

by **CSC**
TRIKES

2001 - 2017
GL1800 Goldwing

Auxiliary Fuel Tank
Installation Instructions

REVISED 11 - 2018

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Warnings and considerations:

- 1. Disclaimer** - These instructions assume a level of understanding of motorcycle repair and maintenance beyond that of a “beginner” and/or “novice” and California Sidecar cannot be liable for an installer’s failure to understand or follow these instructions as written. Likewise, California Sidecar cannot be responsible if any of the steps are omitted or shortcuts are taken, or parts other than those supplied by California Sidecar are used.
- 2. “WARNINGS”** are all printed in bold type and capitalized. They mean to use extreme care in a given step so as not to damage the part, motorcycle, and/or yourself.
- 3. Always** wear safety glasses when using hand and/or power tools.
- 4.** All directional references to the “right side” and the “left side” are as you were seated on the motorcycle.
- 5.** All directional references to “forward” mean to the front of the motorcycle while “back” means the rear of the motorcycle unless otherwise stated.

When working in and around the fuel system, always work in a well-ventilated area, free from sparks and open flames.

Removal of inner fender:

- 1. Remove two mounting screws that connect relay box to the inner fender. (top)**
- 2. Remove three relays and two solenoids from plastic holder on left side of inner fender.**
- 3. Remove three rivets from the mounting bracket that holds the power control relays on the left side of the inner fender. Removed in Step 2.**
- 4. Remove two bolts that hold inner fender.**
- 5. Cut zip tie on left side and remove inner fender.**

Removal of the OEM fuel pump:

- 1. Remove the top shelter per Honda Service Manual.**
- 2. Drain all fuel from tank.**
- 3. Remove locking ring of fuel pump using Honda tool #07ZMA-MCAA201. Remove base ring and remove fuel pump.**

TIP: Wipe the Green O-ring dry from the fuel pump and place it into the freezer while you install the Aux Tank. This will reduce the amount of swelling to the o-ring.

Warning: Use caution when drilling in steps 9-11. Ensure that the drill is perpendicular to the bottom of the tank.

Installation of fuel feed and vent hoses:

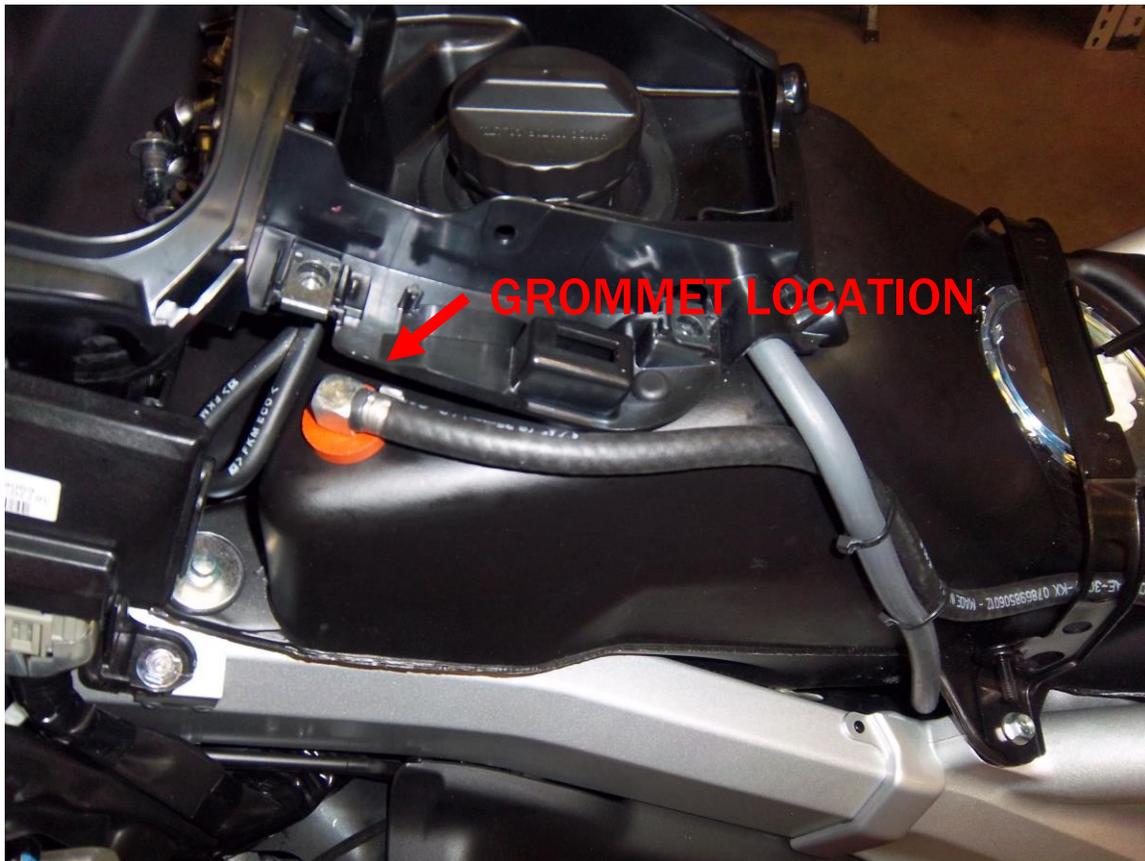
1. Wipe any excess fuel from tank. Place the supplied fiberglass Hole Locating Pattern into position on the OEM fuel tank. The template will conform to the lower right forward bulge on the tank.

Fiberglass template shown below:



2. Locate hole in template and drill $1/8$ " pilot hole in OEM fuel tank. Remove template and discard.
3. Using a $3/8$ " drill bit enlarge $1/8$ " pilot hole to $3/8$ ".
4. Using a **$1\ 1/4$ "** knockout punch
CAUTION: MAKE SURE THAT YOU WILL BE MAKING AN $1\ 1/4$ HOLE, NO BIGGER, PLEASE MEASURE THE PUNCH BEFORE YOU USE IT. DON'T MAKE A HOLE THAT'S TOO BIG!!!!
enlarge the $3/8$ " hole, to $1\ 1/4$ " and then deburr.

5. Using the grommet as a guide place it on the top left side of the OEM fuel tank. Approximately 1/8" from vent and from splash tray. Drill 1/8" hole then enlarge it to 33/64". Refer to picture for location.



6. Wipe out tank with a clean cloth to eliminate drilling chips and dirt.

Installation of Aux Fuel Tank:

1. Place two tank mount frame clamps on the left and right side of the motorcycle frame just above saddlebag crash guard mounts.
2. Orient the clamp so the flat part is to the inside of the motorcycle frame.

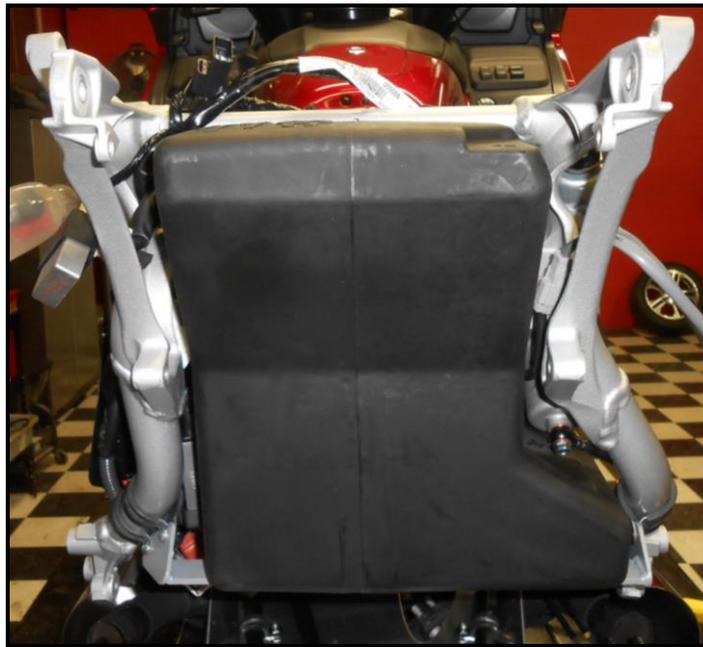
Left side of tank



Right side of tank

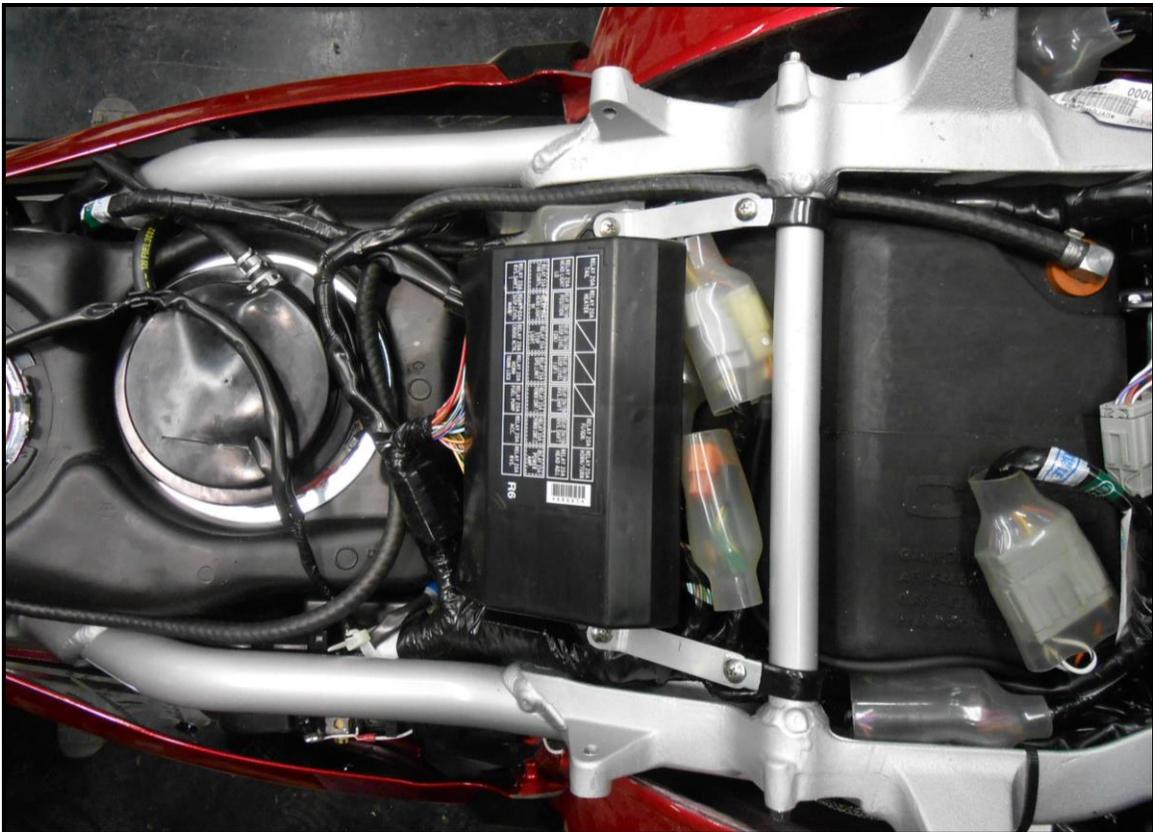


3. Apply 1-3/4" x 1-3/4" neoprene strip to front tab of tank mount. Slide auxiliary tank mount into position by inserting front tab of auxiliary fuel tank mount into slot where inner fender was removed. The slot is located on the back of the battery box or main tank strap.
4. Install four 1/4-20 x 5/8 BHCS through the frame mount clamps and through fuel tank mounting bracket, sandwiching the tank mount. Make sure the auxiliary fuel tank is all the way forward.
5. Secure mount with nyloc nuts and flat washers.



6. Lubricate all of the fittings and grommets with dish soap before installation.
7. Install the two 1 1/4" grommets into the bottoms of both tanks.
8. Install the assembled 1" fuel line into the two tanks by pushing the 90° fittings into the grommets. A slow steady pressure works best.

9. Install the two 1/4" grommets in the tops of both tanks.
10. Install the assembled 1/4" vapor return line into the two tanks by pushing the 90° fittings into the grommets. Refer to pictures for routing.



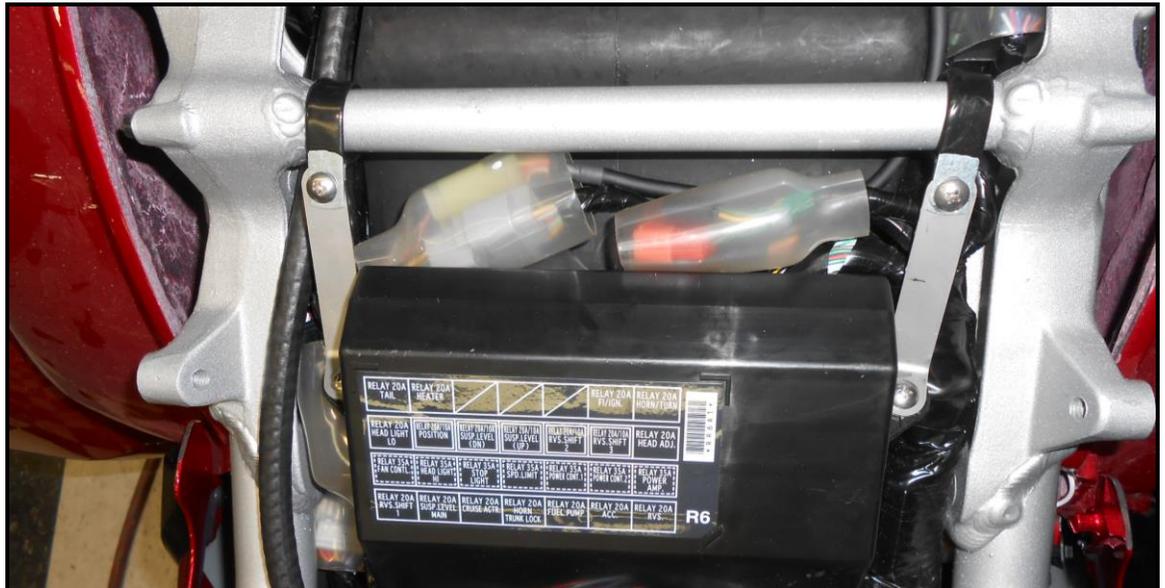
Relay box relocation:

1. Install two P-clamps to the frame cross over tube.
2. The flat of the P-clamp is on top.

Orient the P-clamp as shown.



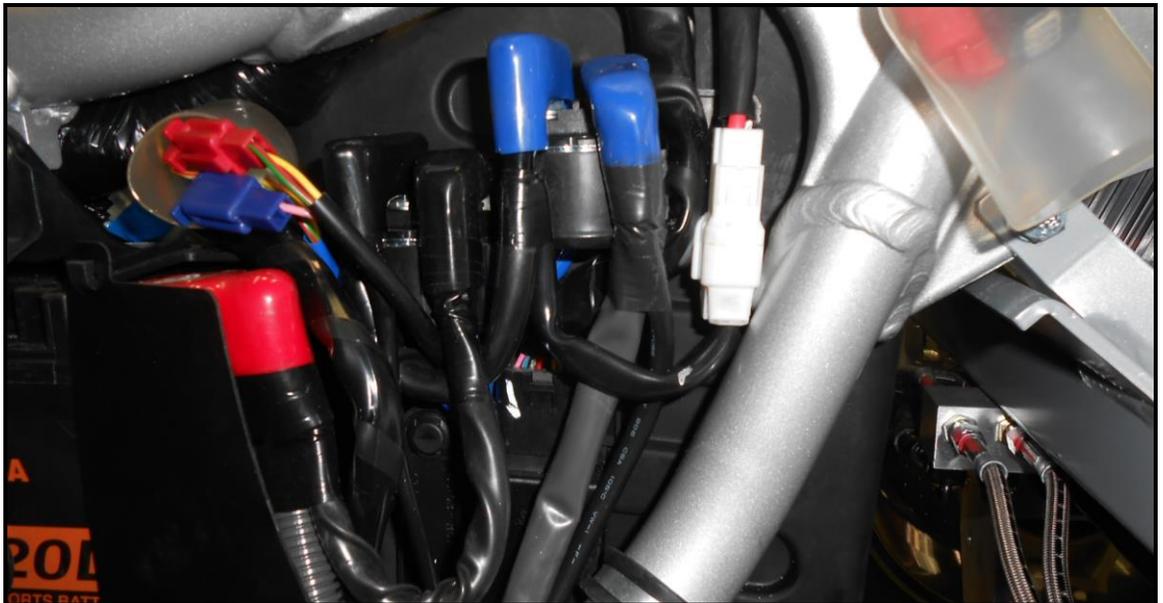
Orient the Relay Box as shown.



3. Secure with phillips screws, flat washers with nyloc nuts as shown.

Reinstallation of fuel pump:

1. Add fuel to OEM tank and check all fittings **thoroughly** for any leaks.
2. Reinstall fuel pump in reverse order as it was removed. Don't forget the **green** O-ring.
3. Install solenoid and plastic relay holder to left side of auxiliary fuel tank with two 6-32 x 3/8 truss head Phillips machine screws with washers and tighten screws.



4. Install top shelter in reverse order it was removed.
5. Make sure the vapor return line is not pinched after installing top shelter.

NOTE: The Auxiliary Fuel Tank will fill and drain directly off the OEM fuel tank. When filling the tanks, there may be a slight delay in the transfer of fuel from the OEM tank to the Auxiliary tank. Allow the fuel to migrate to ensure a complete fill-up.

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