



**Trike Conversion Kit
GL1800 Goldwing
2001 - Current**

**Installation
Instructions**

REVISED 3 - 2021

**California Sidecar Parts & Technical Support
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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 in installing this trike kit.
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. When working in and around the fuel system, **always** work in a well-ventilated area, free from sparks and open flames.
5. All directional references to the “right side” and the “left side” are as you were seated on the motorcycle.
6. All directional references to “forward” mean to the front of the motorcycle while “back” means the rear of the motorcycle unless otherwise stated.

Recommended Lubricants:

- 1. 80W-90 GL5 petroleum only, no synthetics.**
- 2. Fluorinated grease for splines**
- 3. Thread locking compound (Loctite 242 minimum).**
- 4. High temperature Silicone sealant.**

Core parts to save at disassembly:

- 1. Right and Left swing arm pivot bolts.**

Torque values of fasteners:

- 1. 3/8-24 x 3/4 FHSCS, Sub Frame 25 FT-LBS**
- 2. 3/8-24 x 1 1/4 SHCS, Sub Frame 25 FT-LBS**
- 3. 3/8-16 x 1 BHSCS, Upper Stabilizer Mount 12 FT-LBS**
- 4. 3/8-16 nyloc nut, studs, Sub Frame 12 FT-LBS**
- 5. 1/2-20 x 3 HHCS shock 45 FT-LBS**
- 6. M 8 x 1.25 x 40 HHCS 20 FT-LBS**

HHCS = Hex Head Cap Screw

SHCS = Socket Head Cap Screw

BHSCS = Button Head Socket Cap Screw

FHSCS = Flat Head Socket Cap Screw

Maintenance Schedule: VIPER

Item \ Frequency	Daily	3,000	4,000	8,000	12,000	16,000	20,000	24,000
Brake Pads and Rotors [1&2]			I	I	I	I	I	I
Half Shaft Boots			L	L	L	L	L	L
Drive Shaft		I		I		I		I
Wheel Bearings [4]			I	I	I	I	I	I
Rear End Oil [5]		R					R	
Wheels and Tires			I	I	I	I	I	I
All Lighting	I							
Tire Pressure	I							
Brake fluid			I	I	R	I	I	R
PWR TRAK Head Bearings				T		T		T

I: Inspect and clean, adjust, lubricate, and/or replace if necessary.

R: Replace

L: Lubricate with Silicone Spray

T: Check Torque of Head Bearings (top nut 80 ft.-lbs. adjuster nut 35 ft.-lbs.)

NOTE:

[1] Minimum pad thickness is .04 inches (1.02mm)

[2] Minimum Rotor thickness is .290 inches (7.36mm)

**[3] Rear tire pressure: 15" & 16" wheels 28 PSI
17" wheels 25 PSI**

[4] Wheel bearing torque 200 FT. - LBS.

[5] Rear end oil should be changed after the first 3 months or 3,000miles whichever comes first. Rear end oil should then be changed every 12 months or 20,000miles. Using only NON-synthetic 80W-90 GL-5 gear oil. The differential case should contain no more than 1 quart of gear oil.

This Schedule is in addition to the Honda Maintenance Schedule

At higher odometer readings, repeat at frequency intervals established here.

Disassembly of Motorcycle:

1. Place the motorcycle on the center stand or lift.
2. Set the shock preload to zero.
3. Remove the four SHCS from the passenger handles and remove seat.
4. Remove the rear side covers.
5. Disconnect negative battery terminal.
6. Remove four SHCS and the passenger floorboards.
7. Remove six BHSCS and the foot rest under cover.
8. Remove six BHSCS and the swing arm pivot bolt covers.
9. Remove four flange bolts and the rear crash guards.
10. Remove the Phillips screws from the inside of the trunk to remove the left and right lower trunk covers.
2012-up 6 screws. 2001-2010 8 screws.
11. Remove the Phillips screws and the rear trunk cover.
2012-up 2 screws. 2001-2010 5 screws.
12. Remove five Phillips screws and the trunk opener cover.
13. Remove four BHSCS and the rear fender panel. Disconnect the license plate light and remove cover.
14. Remove the acorn nuts from inside the saddlebags and remove and disconnect the tail light assembly.
2012-up steps 15-17 2001-2010 skip to step 18
15. Remove two BHSCS and the trim above the tail light assembly.
16. Disconnect two saddlebag connectors on the right side. (white 2 pin and grey 2 pin connectors)
17. Disconnect the left and right saddlebag release cables.
18. Remove the right side **GREEN** clip from the trunk opener.
19. Loosen four SHCS on the muffler clamps.
20. Remove six acorn nuts and the top trunk tail lights.
21. Disconnect all top trunk connectors. (front and rear)
22. Remove 8 flange bolts, 2 at the top that are bolts and nuts, 2 at the crash bar area, 2 behind the grommets inside of the saddlebags, and 2 at the top front of the outside the saddlebags.

23. Remove the saddlebag / trunk stay from the bike as an assembly.
24. Remove four flange bolts and the top trunk from the stay.
25. Retain exhaust gaskets for use with new exhaust.
26. **2006-up.** Remove four flange bolts and the amp box from the rear of the saddlebag/trunk stay.
27. **2006-up.** Remove the four flange bolts and spacers from the amp box. Remove amp and the four grommets. Discard box, but save flange bolts, spacers, grommets, and amp for reinstallation.
28. Remove the five lug nuts. Remove and discard the rear wheel.
29. Remove the rear brake caliper from the swing-arm, leaving the lines secured to the caliper. Use a cable tie to keep the caliper from hanging on the lines.
30. Remove two flanged bolts for the brake line and rear wheel speed sensor wire clamps on the swing arm. Remove and discard the clamps.

A.B.S Equipped Motorcycles:

31. Remove the rear wheel speed sensor from the final drive unit.
32. Remove the flange bolt and nut from the lower shock clevis.
33. Remove the flange bolt and nut from the shock link.
34. Cut the lower shock linkage arms off flush with the boss. This will allow the shock to drop thru later.
35. Pull the rubber fuel pump cap up.
36. Disconnect the 5 pin connector from the fuel pump.
37. **Before continuing you must drain the gas tank to lower than a 1/4 of a tank.**
38. Loosen the clamp on the fuel return hose and disconnect the hose.
39. Remove two flange bolts from the fuel feed hose.
40. Cover the fuel feed hose joint with rags. Grip the flats on the fuel feed hose joint and pull the joint straight up.
- WARNING!** **Do not damage the fuel pump joint.**
41. Catch the fuel in an approved gasoline container.

42. Pull the fuel return line and the fuel feed lines outside of the frame.

43. Reroute the preloader line behind the fuel hoses.

WARNING! Do not loosen banjo bolts on shock preloader for any reason.

44. Remove two flange bolts from the Preloader actuator and two connectors.

45. Pull it out from the frame and route the line to the inside or rear of the motorcycle wire harness to allow the shock preload line to be routed rearward.

46. Remove the right lower tank mount flange bolt.

47. Route preload line under the right rear tank mount and reinstall the flange bolt.

48. Remove the flange bolt from the upper shock eyelet.

49. Allow the shock to drop through the shock arm and shock link.

50. Loosen the setscrew on the preloader.

WARNING! Do not loosen banjo bolts on shock preloader for any reason.

51. Compress the spring or cut the coil spring then slide the preloader assembly down to remove the retaining clip. Slide the preloader assembly off the shock. Save the preloader assembly only.

52. Remove white plastic spring seat from the preloader assembly.

53. Remove the left pivot bolt lock ring and save. Remove left and right pivot bolt. Save pivot bolts for core return.

54. Slide the swing arm out of the frame while feeding the preloader up through the swing arm.

55. Remove and discard the swing arm boot.

56. Reinstall the two flange bolts from the Preloader actuator and two connectors.

A.B.S. Equipped Motorcycles:

57. Remove the rear wheel speed sensor wire from the brake line wire clips and the front frame clip all the way to the ABS connector.

58. Route the wire straight back from the connector down the left side of the frame.

***Kits with Auxiliary Fuel Tanks, begin installation here before beginning reassembly. Refer to separate instructions provided.**

Reassembly of the motorcycle:

- 1. Route the fuel tank return line and the fuel feed lines back to the original location.**
- 2. Reconnect the fuel feed line back into the fuel pump joint.
WARNING: Be careful not to damage the fuel feed line joint.**
- 3. Replace the two m6 x 1.0 flange bolts into the fuel pump that holds the fuel feed hose joint.**
- 4. Reconnect the fuel return line and clamp back into place.**
- 5. Reconnect the 5-pin connector to the fuel pump.**
- 6. Replace the two flange bolts in the preload actuator and reconnect the two connectors.**

Modification of Frame:

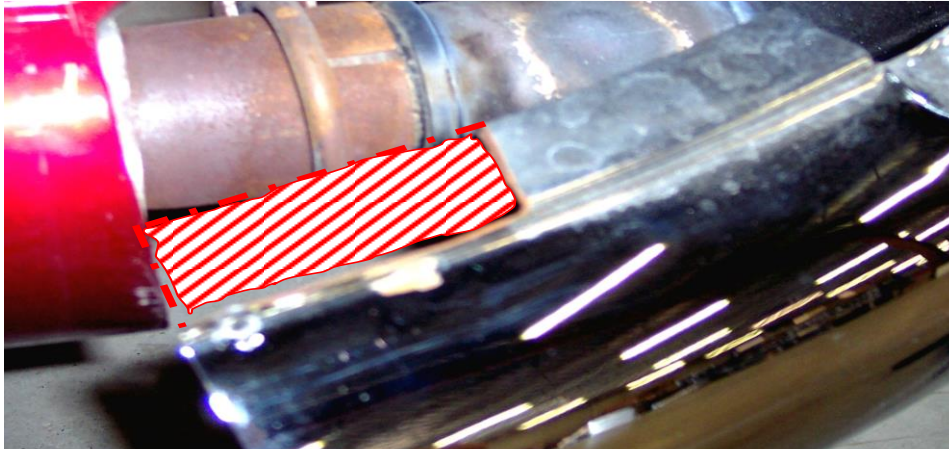
1. Using the picture as a guide, mark the outside of the inner fender to cut out the two sections for the intermediate mount.



2. Mark the top of the inner fender as shown and cut out section for the amp and its mount.

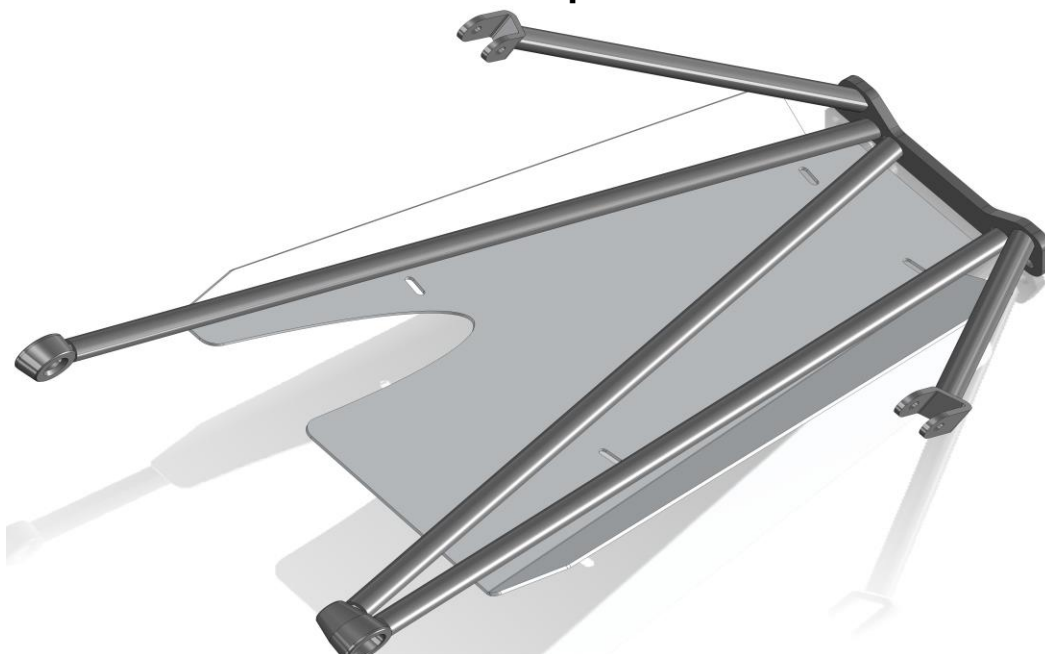


3. Drill the threads out of the two saddlebag/trunk stay frame mounting bosses on each side of frame with a $21/64$ drill. (4 holes total)
4. **2004-up.** This picture is of the rear of the muffler cover still attached to the Motorcycle. This cover must be trimmed as shown below by cross-hatched area. Appox. $1\frac{1}{4}$ " from rear.



Gravel Pan Installation:

1. Install the Gravel Pan as shown below.
2. Install with four rubber P clamps with four $1/4$ HHCS eight flat washers and four $1/4$ -20 nyloc nuts.
3. Install the HHCS from the bottom up.



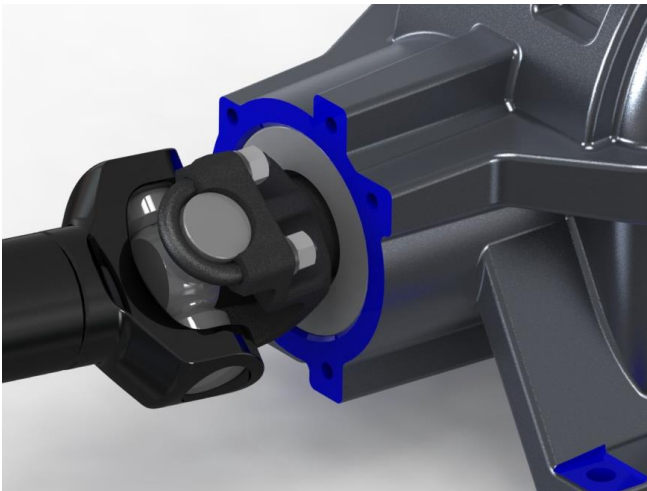
Lower Sub Frame Installation:

- 1. Start the modified right and left pivot bolts supplied with the hardware kit, into their position in the motorcycle frame.**
- 2. Position the lower sub frame into the motorcycles frame.**
- 3. Thread the right pivot bolt into the spud on the sub frame and torque to 80 ft/lbs.**
- 4. Loosely install a 3/8-24 x 3/4 FHSCS with thread locking agent into the right side.**
- 5. Thread the lock ring onto the left pivot bolt until flush with the outside. Using thread locking agent.**
- 6. Thread the modified left pivot bolt into the motorcycle frame then into the spud on the sub frame and torque the lock ring to 80 ft/lbs.**
- 7. Loosely install a 3/8-24 x 1 1/4 SHCS with thread locking agent.**
- 8. Install two M8 x 1.25 x 40 bolts with washers into the upper holes of the sub frame from the outside in.**
- 9. Tighten the two 3/8-24 fasteners. Torque to 25 FT-LBS.**
- 10. With two M8 x 1.25 nyloc nuts and two m8 washers tighten the M8 x 1.25 x 40 HHCS. Torque to 20 FT-LBS.**
- 11. Replace the swing arm pivot bolt covers and the six m5 x .80 BHCS.**

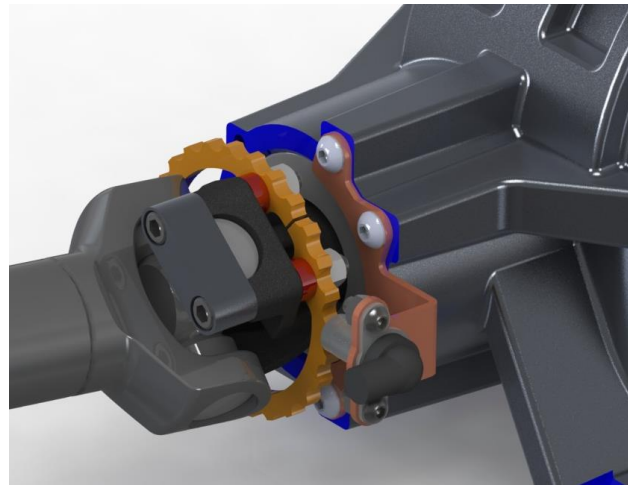
Rear Suspension Unit / Driveshaft Installation:

1. Remove the two 3/8-16 x 1 BHCS and four washers from the upper stabilizer mount, and set aside for later installation.
2. Place the rear suspension unit onto a floor jack.
3. Using the moly grease provided (grey) grease the front mating splines (front of the driveshaft and transmission output shaft).

Standard



ABS



4. Place the driveshaft into the rear yoke and secure with two u bolts, lock washers and nuts.

ABS Equipped Motorcycles:

5. Install the ABS sensor mount with three 5/16 BHCS.
6. Install the driveshaft with two u- joint girdles, 5/16 SHCS, the abs ring then secure with nyloc nuts. Secure wire to sub frame.
7. Slide rear suspension unit forward behind prepared motorcycle frame.
8. If auxiliary tank is installed, install brake lines now. Refer to Brake Line Installation.
9. Moving the rear end forward. Align the driveshaft to the output shaft. Align the studs with the holes in the lower sub frame.
10. Loosely install two 3/8 - 16 nyloc nuts and gr. 8 washers onto the studs.

- 11. Rotate the rear suspension unit upward to align the intermediate mount onto the frame holes that were previously drilled out.**
- 12. Temporarily hold the mount in place with two 5/16 alignment punches.**
- 13. Remove one punch and install one m8-1.25 x 40 HHCS with m8 washers from the outside in. Repeat for opposite side.**
- 14. Install two flat washers and m8-1.25 nyloc nuts and torque to 20 FT-LBS.**
- 15. Torque the two 3/8-16 nyloc nuts to 12 FT-LBS.**
- 16. Loosen the four 3/8 HHCS from underneath the lower tray that secure the differential.**
- 17. Slide the rear differential and driveshaft assembly all the way forward onto the transmission output shaft.**
- 18. With the right front engine side cover removed confirm that the driveshaft is forward and fully seated on the transmission output shaft.**
- 19. Tighten the four 3/8 HHCS and nyloc nuts that secure the differential to the lower suspension tray.**
- 20. Check that the differential is full with exactly one quart of specified gear oil. See Maintenance Schedule, p. 5. DO NOT OVERFILL.**

A.B.S. Equipped Motorcycles:

1. Install the rear wheel speed sensor to the ABS sensor mount on the differential with two 1/4-20 BHCS and nyloc nuts.
2. Secure the ABS sensor wire to the left side of the sub frame with zip ties.

Brake Line Installation:

1. Remove the two brake lines from the caliper and two m10 x 1.25 banjo bolts. Save the banjo bolts for later use. Discard the used crush washers.
2. Install the brake line with the **straight** post to the **rear** hole in the distribution block. Use the Honda O.E.M. banjo bolt and two new crush washers.
3. Install the brake line with the **bent** post to the **front** hole in the distribution block. The **post must point downwards**. Use the Honda O.E.M. banjo bolt and two new crush washers.
4. If needed loosen compression fittings on the brake lines to allow the twist to be removed from the rubber brake lines.

Brake Bleeding Procedure:

1. Using a vacuum bleeder remove all brake fluid from the rear brake reservoir and wipe clean with a **CLEAN** towel.
2. Fill reservoir with new DOT4 brake fluid from a **SEALED** container.
3. Remove front fender A and the chrome caliper covers.
4. Using a vacuum bleeder, be sure to **Thoroughly** flush the brake system of **all** old fluid while following this procedure **carefully**.

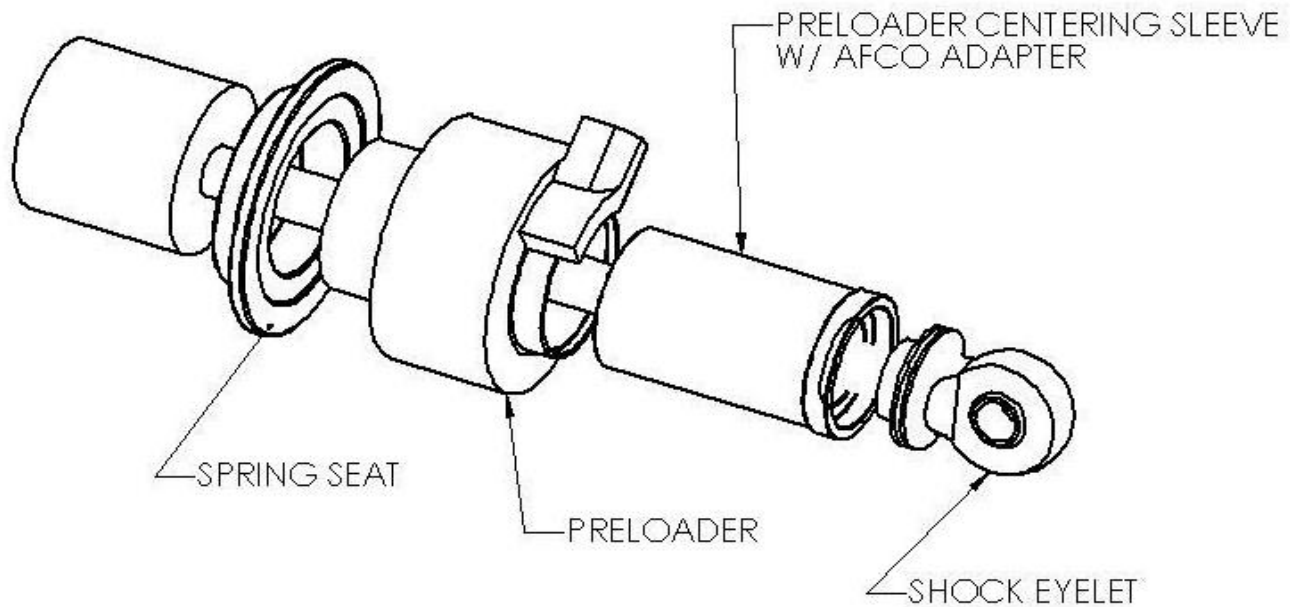
This is the same bleeding procedure that is in the Honda service manual for the GL1800 Goldwing.

- a. Front Wheel: Left front upper bleed valve.
- b. Front Wheel: Right front lower bleed valve.
- c. Rear caliper rear bleed valves outsides first then insides on each side.
- d. Front Wheel: Anti-dive bleed valve. **When bleeding the Anti-dive. Pump the pedal then open the bleed valve, with the bleeder open push the left front caliper up in order to operate and flush the secondary master cylinder. Close the bleeder and repeat this until you get clean fluid.**
- e. Rear caliper front bleed valves outsides first then inside on each side.



5. Hand bleed the system using the above sequence. Until all air is removed from the lines.
6. Allow the bike to set for a minimum of 20 minutes and recheck.
7. If there is excessive pedal travel on the first pump, repeat steps 1 through 3.

Preloader Installation:



1. Loosen the jam nut on the shock shaft.
 2. Remove the 1/2-20 x 3 HHCS, 1/2-20 nyloc nut, and 1/2 washer. Discard the 1/2-20 nyloc nut.
- Steps 3-7, refer to figure 6.**
3. Remove the shock eyelet, jam nut, and shock preloader centering sleeve.
 4. Install the preloader centering sleeve through the top of the preloader by leaving the flange on the preloader centering sleeve towards the top as it is slid in from the top.
 5. Slide the assembled preloader and preloader centering sleeve onto the shock shaft with the top facing the right.
 6. Ensure that the spring seat engages the preloader on the larger diameter.
 7. **Reinstall the jam nut and shock eye using thread locking agent.** Be sure they are **FULLY** threaded on shock shaft.
 8. Replace the 1/2-20 x 3 HHCS and 1/2 washer and a new 1/2-20 nyloc nut. Torque to specification.
 9. **TIGHTEN** the shock eye jam nut.

Suspension Setup:

Use this chart to select the correct spring preload. Rotate the adjuster nut on the shock until the spring is set to the desired length. Now tighten the set screw on the adjuster nut or tighten the lock nut on the fully adjustable shock.

Load: Typical weight the customer adds to the stock trike. This includes riders, luggage, and weight of a trailer tongue. When in doubt assume a higher weight than actual.

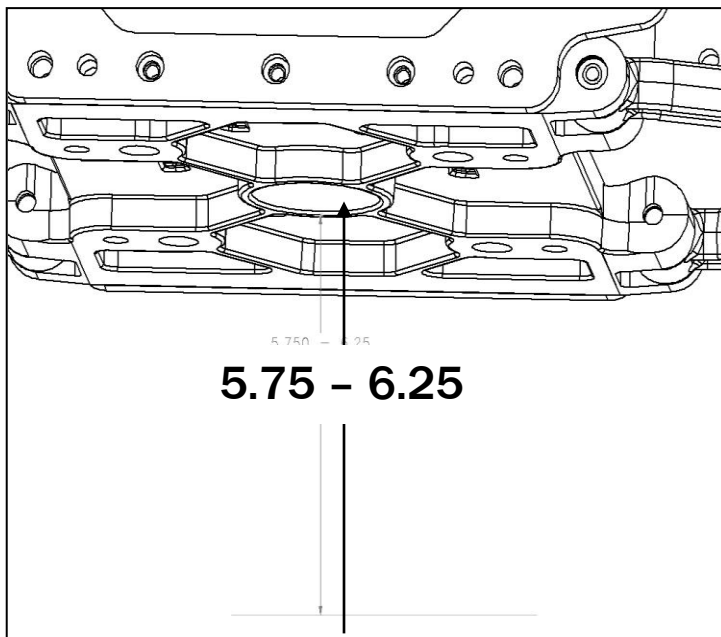
Length: Suggested length the spring should be adjusted to with the suspension completely unloaded and the preloader set to zero.

VIPER								
SHOCK with RED SPRING								
	LOAD	LENGTH		LOAD	LENGTH		LOAD	LENGTH
250 LB/IN SPRING	100	13 1/16	300 LB/IN SPRING	100	13 1/4	350 LB/IN SPRING	100	13 7/16
	200	12 7/8		200	13 1/16		200	13 1/4
	300	12 5/8		300	12 7/8		300	13 1/8
	400	12 5/16		400	12 5/8		400	12 15/16
	500	12 1/8		500	12 7/16		500	12 3/4
			600	12 1/4	600	12 5/8		
						700	12 1/2	
						800	12 3/8	

1. Align the preloader so that the banjo bolt is pointing up.
2. Tighten the setscrew on the preloader against the preloader centering sleeve and on the spring locking nut.

These lengths are only estimates. If you would like to confirm a correct setting, load the completed trike to the customers typical riding situation and measure from the ground to the middle of the lower suspension plate. The center hole should be 5.75" – 6.25" from the ground.

Attention: This is the only suspension adjustment needed. All other settings are factory set and should not be tampered with. There is no need to remove trike from the lift to check camber, toe, or the drop links.

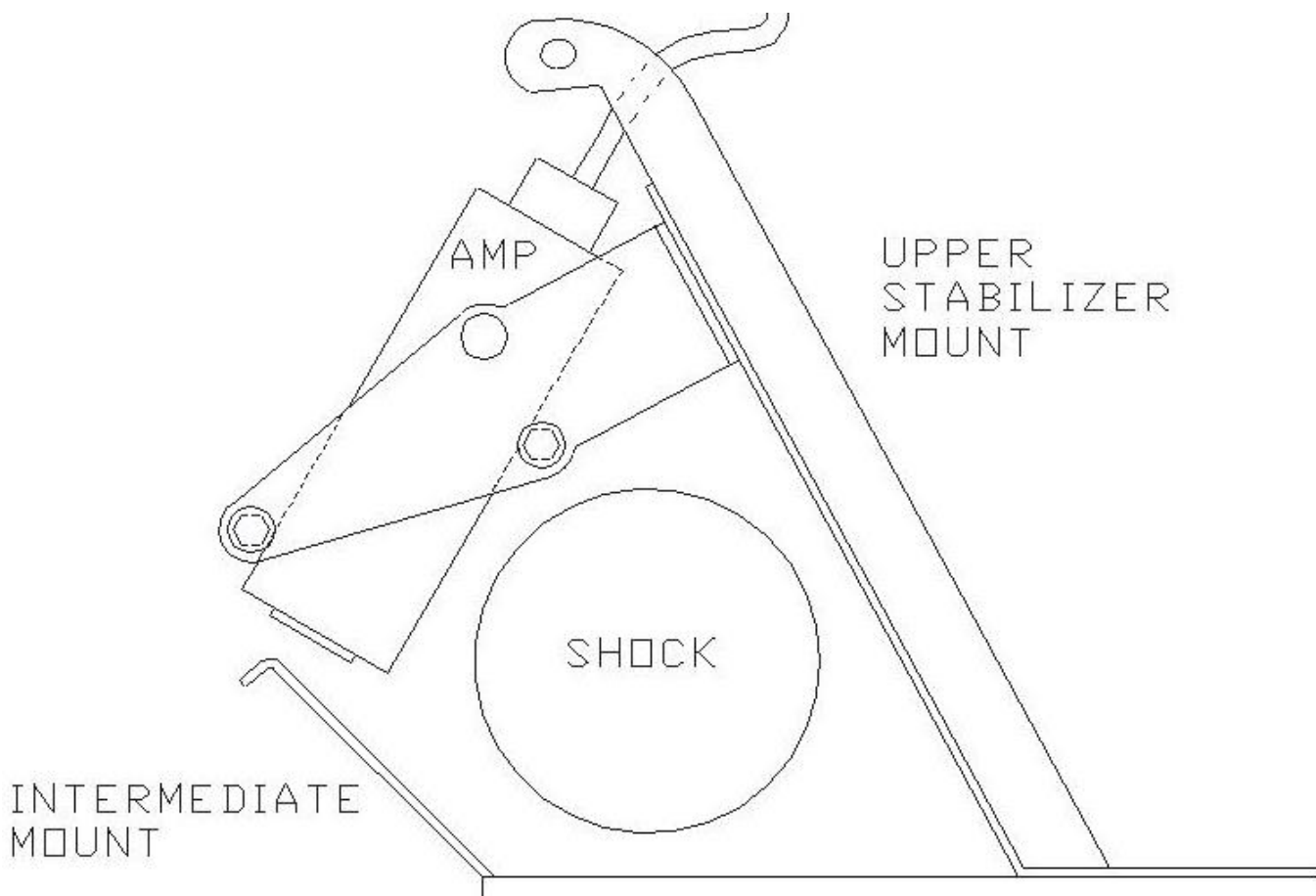


Upper Stabilizer Mount Installation:

1. Align the upper stabilizer mount with the upper frame holes and holes in the upper tray.
2. Install two m8-1.25 x 40 HHCS with washers into the upper frame holes from the outside in.
3. Install two 3/8-16 x 1 BHCS with a 3/8 gr. 8 washer and a 1/2 gr. 8 washer on bottom. Using thread locking agent screw into the upper tray and torque to specification.
4. Install two m8-1.25 nyloc nuts and flat washers. Torque to spec.

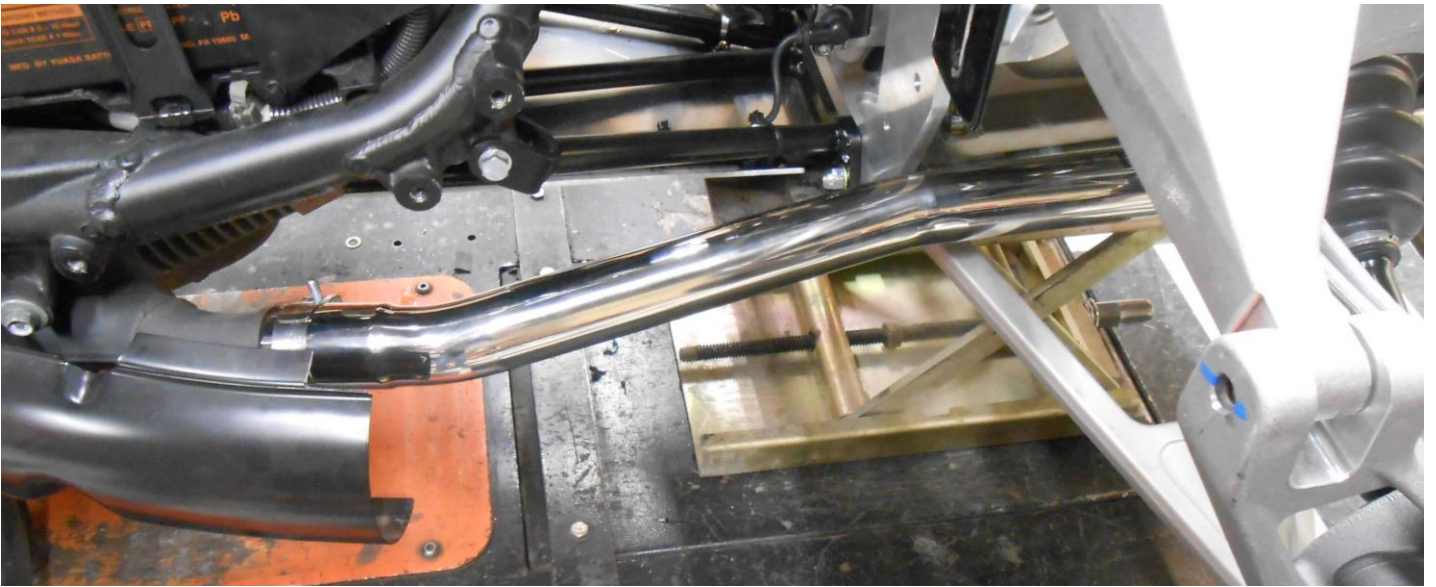
2006-up Amp Installation:

1. Install O.E.M. grommets into the amp brackets, thick side towards the amp. As it was from the factory.
2. Install lower O.E.M. bolts and spacers into amp.
3. Lower the amp into place. Install the four 1/4 - 20 x 3/4 HHCS eight flat washers and four 1/4 -20 nyloc nuts. Refer to Figure 7.
4. Install upper O.E.M. bolts and spacers into amp.

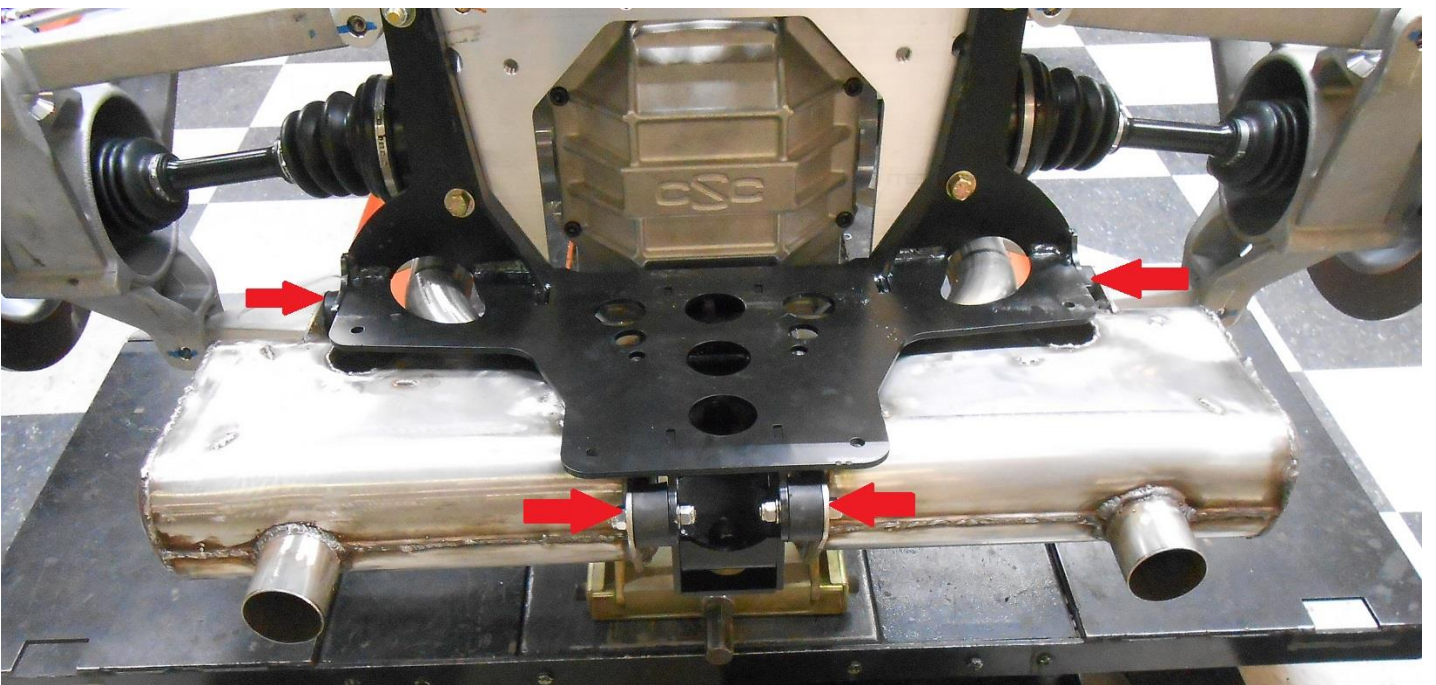


Exhaust Installation:

1. Install left and right tailpipes over OEM gaskets with new clamps.



2. Loosely install the 4 rubber sandwich mounts with flat washers and nyloc nuts to the Body Frame. Refer to **RED ARROWS**.



3. Install 2 rubber sandwich mounts onto the front inner tabs on the mufflers and tighten.
4. Slide 2 clamps onto the rear of the tailpipes.
5. Install the mufflers on to the studs of the sandwich mounts and the tailpipe. Refer to previous picture.
6. Secure mufflers with flat washers and nyloc nuts.
7. Make sure muffler is flat and square to the body then tighten the 4 exhaust clamps.
8. Install the muffler tips using 2 clamps.
9. Adjust so they look even in the body cutout and tighten clamps.

Body Installation:

1. Lightly pull the chrome muffler protectors away from the bike so the body can slide in between without damage to the painted surface.
2. Lower the body onto the trike with the front of the body pointing slightly downward until it comes to rest onto the upper tray and body frame.

Top Trunk Installation:

1. With the top trunk still set aside, install the CSC top trunk sub harness.
2. Take the 3 pin white CSC plug with a **BLUE** wire and plug it into the Right side outer bulb socket.
3. Take the 3 pin white CSC plug with an **ORANGE** wire and plug it into the Left side outer bulb socket.
4. Route the rest of the harness to the left front of top trunk. It will plug into the body.
5. Plug in the OEM white plug with 3 wires into the middle bulb socket and the white CSC sub harness plug into the outer bulb socket.

6. You will not use the 3 pin, 2 wire OEM plug.
This makes the top trunk and the Viper body lights function the same.
All lights are now running lights, the inner lights are brake and the outer lights are turn signals.
7. Install the lights with six acorn nuts removed from before.
8. Remove the two top trunk rubber bumpers from the OEM saddlebag, trunk stay and install them into the CSC top trunk mount plate on the body.
9. If installing GND EFX, plug in the harness now.
10. Place a small bead of silicone around the front mounting holes in the body for the top trunk, **if not sealed will not be water tight!**
11. Lower the top trunk into place. Be aware of the wire harness and the release cable.
12. Route the right and left trunk wiring harnesses in between the trunk and the top trunk mount.
13. Reconnect all the top trunk connectors.
14. Route the release cable to the trunk opener and install.
NOTE: It may be necessary to adjust the release cable for proper opening and indicator light function. If so refer to Cable Adjustment at the end of these instructions.
15. Install four new m6-1.0 HHCS into the top trunk, two 25MM in rear, two 50MM in the front reusing the OEM flat washers.
16. Secure with two flat washers and nyloc nut on the inside up front and threaded into the mount plate in the rear. Tighten all four fasteners.
17. Reinstall the rear trim with two #2 Phillips screws.
18. Reinstall the right and left trunk trim moldings with six #2 Phillips screws.
19. Reinstall the trunk opener cover with five screws.
20. Remove the right tour box pocket. Route the black antenna ground wire forward through the tour box following the antenna wire and down to the upper saddlebag threaded hole in the frame.

21. Remove the lower antenna bolt. Install the large eyelet onto this bolt and reinstall. Cut the wire to length then crimp on the provided eyelet.
22. Use a file and remove the paint to make a good contact to the frame. Using an OEM bolt, fasten the eyelet to the frame. Reinstall the pocket.
23. Using the large bare ground strap do the same on the left for the CB radio antenna even if it isn't installed.
It will be there when its needed.

NOTE: If the CB radio ground strap is not connected.
The CB radio will function and receive but may not transmit.

Trike body alignment:

1. Remove the black side cover section from the painted section and discard.
2. Install the CSC Viper side cover to the Honda side panel reusing the same screws.
3. Install the rear side covers onto the mounts on the body. Make sure that the upper and lower pins in the side cover are into position.
4. If install CSC chrome foot rest under covers skip step 5.
5. Trim the left and right foot rest under covers 3-1/2 inches from the rear edge, to be flush with the rear boss on the back side. While trimming, use a gradual taper from the rear to the front as shown,

BEFORE



AFTER



6. Install the left and right footrest under covers to the **outside** of the body, using two front m5 x .80 BHSCS.
7. The trike body can move left, right, forward, backward, up, down, and angled. Shimming with the provided 1/4 and 1/8 rubber washers may be required to get the trike body into alignment.
8. Initial trike body fitting: First raise the front of the body to obtain the vertical location of the rear side covers front pinhole on the passenger floor board under cover.
9. With the body temporarily held into place, raise the adjustable 90° body support brackets until they seat against the body's inner liner.

For the next two steps you can measure or install the rear wheels and us them for alignment. At the Factory we align with the wheels.

10. Center the trike body left to right using a square and measuring off of the rotors.
11. Adjust the body so that wheel hub is centered in the wheel opening by measuring from the wheel opening to the center of the axle shaft. It should be the same measurement for the front of the opening and the rear.

Securing the trike body:

Note: A small section of trike body carpet has not been glued at the location of the trike body frame mounting tabs to allow removal of the bolts used in shipping, and installation of the trike body mounting hardware. The predrilled bolt holes may need to be enlarged or relocated for trike body attachment to the trike body frame mounting tabs. If relocation is necessary, the preexisting holes will need to be **sealed** with silicone sealant.

1. Thread two 5/16-18 x 1- 1/4 HHCS, two 5/16 fender washers through the predrilled holes in the rear of the body into the threaded body frame holes.

2. Confirm that the body is still aligned where you want. It may be necessary to grind the holes bigger for alignment.
3. Using a 5/16 twist drill, drill up through the trike body at the 90° body support brackets.
4. Insert two 5/16-18 x 1- 1/4 HHCS, two 5/16 fender washers through the holes and secure with Nyloc nuts.
5. Remove the rear 2 bolts and use silicone sealant under the washer area and reinstall and secure bolt, and carpet.
6. Place the chrome muffler cover into the corresponding corner of the trike body.
WARNING! Take extreme caution steps 7-11 with using drill around painted parts
7. Using a 3/32 twist drill, drill through the chrome muffler covers upper flange under the trim molding into the trike body.
8. Install two 4 x 1/2 Phillips flat head sheet metal screws into the body.
9. Using a 1/8 twist drill, drill through the chrome muffler cover 1/4 from the rear edge as close to the bottom as possible to go through the trike body and chrome muffler cover.
10. Install and tighten two 6-32 x 5/8 truss head machine screw, two 6 flat washer, and 6-32 nyloc nuts through the chrome muffler cover and trike body.
11. Install two m5 x .80 x 20mm BHCS into the rear hole of the footrest under cover. Secure with a large m5 flat washer and nyloc nut on the inside of the body.

Wiring:

- 1. Route the three wires for the reverse lights from the body to the left side of the motorcycle frame towards the battery box.**
- 2. Locate the black boot above the starter solenoid. There will be a red two pin connector that has a yellow wire with a red tracer and a brown wire with a red tracer.**
- 3. Disconnect this plug and connect the CSC T plug in place.**
- 4. Route the red wire with the fuse holder to the (+) POSITIVE side of the battery.**
- 5. Route the white wire in the trike body wiring harness to the (-) NEGATIVE side of the battery.**
- 6. Plug in the 4 pin T harness from the top trunk tail lights into the Ground Effects plug on the body.**
- 7. Plug in the body harness.**

Cable Adjustment:

- 1. With the trike body door open. Locate the cable adjuster barrel and jam nut.**
- 2. If the door won't open with the right side saddlebag finger. You will need to remove the opener cover inside the top trunk and release the cable manually.**
- 3. Adjust the cable barrel until the door latch opens properly and the saddlebag indicators function as well.**
- 4. Tighten the jam nut and reinstall the opener cover.**

2009-up TPMS CONNECTOR INSTALLATION:

1. Remove the right side shelter trim.
2. Remove the right side pocket cover.
3. Locate the TPMS connector.
4. Refer to the **RED ARROW** below.
5. Unplug the TPMS connector.
6. Plug in the harness provided.
7. Secure with a zip tie and reassemble.



Final Reassembly of the motorcycle:

- 1. Reinstall the wheel and tire assemblies with ten m12 x 1.5 ET conical lug nuts. Torque to 75 ft/lbs.**
- 2. Recommended tire pressure**
 15" & 16" wheels – 28 psi
 17" wheels – 25 psi
- 3. Replace the seat and passenger grip handles using the four m8 x 1.25 SHCS**
- 4. Replace the chrome front fender covers using the four m5 x .80 BHCS**
- 5. Replace front fender A using the four m6 x 1.0 BHCS and two rubber washers.**

Refer to the Maintenance Schedule on p. 5 for details regarding future service inspections and maintenance.

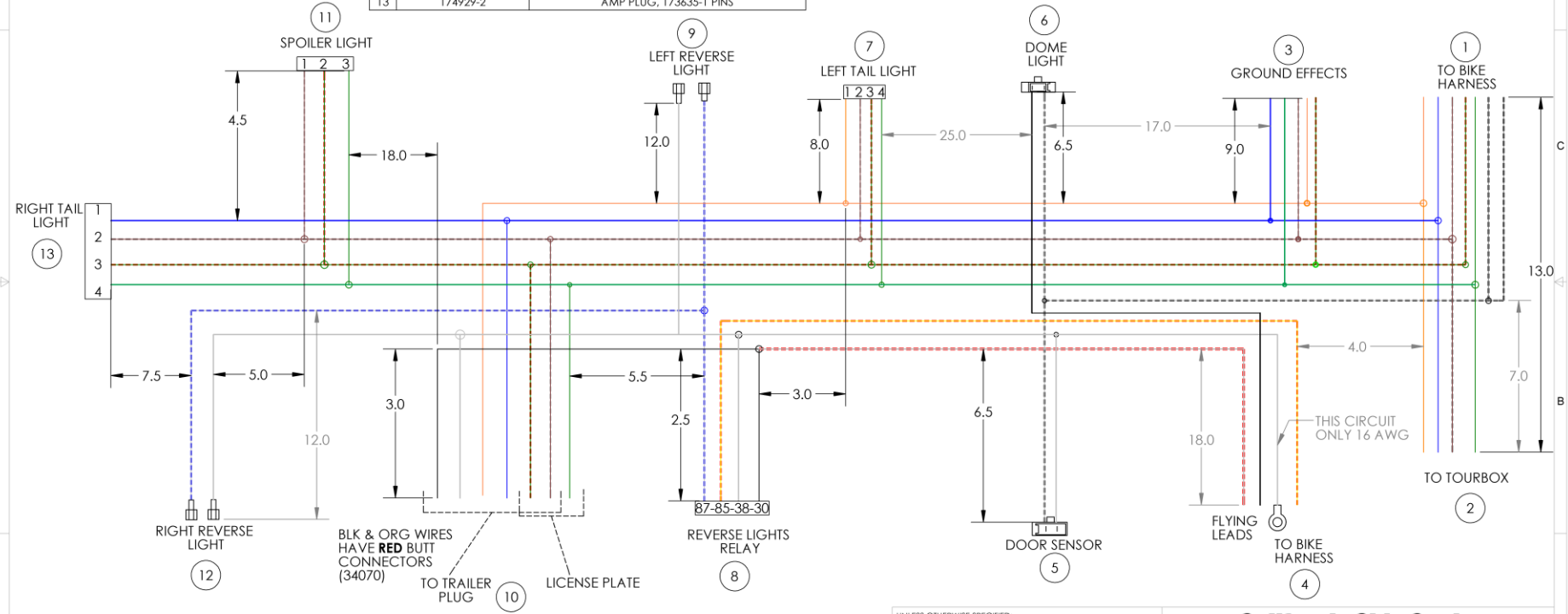
**From all of us at California Sidecar.
Enjoy the ride!**

WIRE COLORS:

BROWN/WHITE - TAIL LIGHT
 BLUE - RIGHT SIGNAL
 ORANGE - LEFT SIGNAL
 GREEN/RED - BRAKE LIGHT
 GREEN - GROUND HARNESS
 WHITE - GROUND BATTERY
 BLACK - 12V FUSED
 WHITE/RED - 12V FUSED
 WHITE/BLUE - REVERSE LIGHT POWER
 YELLOW/RED - REVERSE SIGNAL
 WHITE/BLACK - DOOR SENSOR

ITEM #	PART NUMBER	DESCRIPTION
1	8240-4412	SUMITOMO FEMALE PIN
2	8240-4272	SUMITOMO MALE PIN
3	173631-1	AMP FEMALE PIN
4	130054	AMP M6 (1/4") RING TERMINAL
5	6040-2111	SUMITOMO RECEPTACLE, PINS 8240-4092
6	6030-2981	SUMITOMO PLUG, PINS 1500-0071
7	174929-2	AMP PLUG, 173635-1 PINS
8	3334485007	BOSCH RELAY RECEPTACLE
9	696366-1	AMP QUICK DISCONNECT, FULLY INSULATED
10	34071	AMP BLUE BUTT CONNECTORS
11	174928-2	AMP PLUG, 173635-1 PINS
12	696366-1	AMP QUICK DISCONNECT, FULLY INSULATED
13	174929-2	AMP PLUG, 173635-1 PINS

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	INITIAL ISSUE	N/A	
B	UPDATED AS BUILT, ADDED PART NUMBERS & DESCRIPTIONS, ADDED WIRE TYPE, UPDATED LENGTHS	4/12/2013	J.BALL
C	UPDATED TO CORRECT SUMITOMO P/N'S	6/6/2013	J.BALL



WIRE TYPE: E56702 18 AWG UL AWM STYLE 1007 OR STYLE 1569 EXCEPT WHERE NOTED

TRAILER PLUG WIRE COLORS:
 BLUE - BRAKE LIGHTS
 GREEN - GROUND
 YELLOW - RUNNING LIGHTS

LICENSE PLATE WIRE COLORS:
 BROWN - RUNNING LIGHTS
 YELLOW - LEFT TURN SIGNAL
 GREEN - RIGHT TURN SIGNAL
 RED - BRAKE
 BLACK - 12V
 WHITE - GROUND

APPROVALS	DATE
DRAWN BY BRYCE WHITE	8/24/11
CHECK	
APPROVED	

UNLESS OTHERWISE SPECIFIED:
 ALL DIMENSIONS ARE IN INCHES. DO NOT SCALE DRAWING.
 ALL THREAD FITS TO BE 2A (EXTERNAL) OR 2B (INTERNAL)

TOLERANCES:
 DECIMAL: X.XXX ± +1 -0
 X.XXXX ± 0.001
 FRACTIONAL: 1/8
 ANGULAR: deg 0.5
 BEND: deg 1.0

THIRD ANGLE PROJECTION

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California Side Car inc.
 100 MOTORCYCLE RUN, ARRINGTON, VA 22922

TITLE			
WIRE HARNESS, VIPER			
SIZE	PART NUMBER	REV	
B	ELC-22625	C	
SCALE	VENDOR DRW NUMBER	SHEET	
1:16	N/A	1 OF 1	