

RYCA CS-1 BODY PARTS INSTALLATION GUIDE

[The CS-1 installation guides should be used as supplements to the videos found on our [Youtube Channel](#). There is no strict order to the build process, but it is highly recommended that you read through all of the [guides](#) and watch all the videos before beginning your project. The Clymer manual for the Suzuki S40/Savage is also a good reference, and can be used in the future for service and maintenance. Another great resource is the [Suzuki Savage forum](#).]

In this section, you will be test fitting all the body parts. Viewing the “Body Panel and Parts” video series at youtube.com/rycamotors is highly recommended before beginning.

Slide the stock rubber tank mount caps onto the ends of the CS-1 tank mount:



Use the stock ignition coil standoffs and stock screws to mount the CS-1 tank mount. The screws go through the left side of the bike and the standoffs are on the right. The tank mount holes are slotted to allow for minor adjustments when fitting your tank:



The screws go through the left side and the standoffs on the right:



Cut the $\frac{3}{8}$ " thick neoprene rubber strip into two sections, one about 5" and the other about

4". CAREFULLY peel the adhesive backing from the strips and install them in the battery box. Place the longer strip on the bottom and the shorter strip on the front. This will help isolate the battery from vibration:



Install the battery box with the **M6 x 35mm hex cap screws** at the front and the stock fender bolts at the rear. Screw the M6 cap screws in from the bottom. The velcro strap included in the kit is used to secure the battery:



Place the bottom half of the tank rubber grommets over the M6 cap screws:



Fit the tank onto the tank mount and lower it into place. **Fit the tank without the fuel valve attached.** Add the top half of the rubber grommets:



Note: You can adjust the tank fitment with the CS-1 tank mount. This may be necessary due to slight variations in tanks and frames. Use the slotted holes in the tank mount to adjust vertically. You can also twist the mount by hand to get the tank to fit perfectly on your frame.

Use sandpaper to scuff the back of the metal side cover mounts. Attach them to the battery box with **#6-32 thumbscrews** at the front and bottom:



The rear of the belt guard attaches at the frame tab shown below. The hole in the tab must be drilled out slightly to accept a $\frac{3}{8}$ " cap screw:



Install the belt guard. It attaches to the stock battery box mount at the front with a stock battery box bolt. It attaches at the rear with a $\frac{3}{8}$ "-16 cap screw and $\frac{3}{8}$ " split ring lock washer:



Insert the $\frac{3}{4}$ " x 6" neoprene strip in the seat mount. Align the holes in the seat mount and rubber with the weld nuts of the seat pan. Use **M8 x 25mm cap screws** and **M8 washers** on the underside of the seat assembly to sandwich the rubber between the metal plates. **Do not over-tighten the cap screws. They don't need to be very tight.** The edges of the seat pan and mount should be separated by the rubber on all sides. You can use thread lock to keep the screws from vibrating loose:



Place the seat on the frame and attach the rear tabs with **M6 x 10mm cap screws** and **M6 split lock washers**. Attach the front of the seat to the **M6 x 35mm hex cap screws** with **M6 locknuts**.



Attach the LED tail light and optional license plate mount (if you are using a centered mounted plate) to the CS-1 tail light bracket. You may have to drill holes in the license plate mount for your license plate. If you're using a side-mounted license plate, you can omit the license plate mount and attach the tail light directly to the tail light bracket:



Note: Make sure to check the clearance between your choice of rear tire and the tail light/ license plate when your shocks are fully compressed before determining the exact position of the tail light on the seat. Tire radius and shock travel distance will determine how much clearance there is between the tire and tail light/license plate. You can adjust the angle of the tail light assembly before you glue it into place, or slightly bend the license plate mount to fine tune the clearance.

Set the fiberglass seat on the metal seat pan. Use sandpaper to scuff the ends of the tail light bracket and position the tail light bracket under the fiberglass seat. You can use clothes pins to lightly clamp it into place. Also, remove any primer or paint on the surface of the underside of the fiberglass where the tail light bracket will attach. Sand it down to the fiberglass and use rough sandpaper to scuff it up:



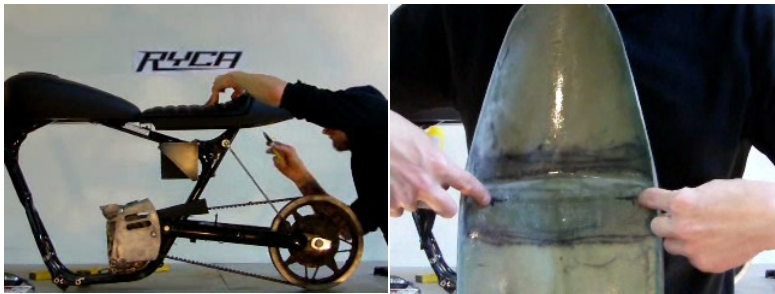
Check the fitment of the tail light and license plate, and then mark the outline of the tail light bracket on the underside of the fiberglass seat:



Set the upholstery pan on the fiberglass seat. With the tank and belt guard installed, test fit the seat and side panels. Leave a slight gap between the seat upholstery and the tank to avoid rubbing. Center the back edges of the side covers along the frame tubes and make sure there is an even gap along the top between side cover and seat. There should also be space between the bottom of the left side cover and the belt guard:



When you are satisfied with the fitment, double check to make sure the seat is centered left to right, and mark the position of the fiberglass seat on the metal seat pan:



In the next steps, you will be fitting the upholstery pan to the fiberglass seat, and the seat to the metal seat pan. **It's important to follow the steps of this section in order.**

Mark the fiberglass seat in three spots along the back as shown below. The locations don't need to be extremely precise -- just space them evenly about 2 inches from the top of the seat:



Drill holes at the three spots with a 5/32" drill bit. You could mark and drill the spots from the other side if it's easier:



Set the seat upholstery pan onto the seat and center it left to right. Use the holes you drilled to mark the three corresponding positions on the upholstery pan. Note: the upholstery pan is shown without upholstery for demonstration purposes:





In the next step, you must drill holes in the underside of the upholstery pan. To prevent accidentally drilling too far and puncturing the upholstery, wrap your drill bits with masking tape. Only the tip of the drill bit needs to go through the fiberglass:



Drill pilot holes at the three spots you marked in the upholstery pan with a 5/32" drill bit. **Be extremely careful while drilling, taking care not to puncture the upholstery.**

Double check that they line up with the holes in the seat.

Next, drill out the *upholstery pan pilot holes* (not the seat pan holes!) with a 5/16" drill bit so the rubber rivet nuts can be inserted. **Again, be extremely careful while drilling:**



Insert the **rubber insulated rivet nuts** in the holes in the upholstery pan:



Insert **#8-32 x 1/2"** machine screws with **#8 washers** through the backside of the seat and into the rivet nuts of the upholstery pan. As you tighten the machine screws, the rivet nuts expand and hold the upholstery pan against the seat. Here's a photo of an expanded rivet nut (top) in an un-upholstered pan:



Now the upholstery pan will be held solidly into place while you do the next steps. Mark two pairs of drill holes along the flat sections on the underside of the fiberglass seat at approximately 2 inches and 7 inches from the front edge. The positions don't have to be extremely precise:



With the upholstery pan still attached to the rear of the seat, drill 5/32" pilot holes at the four marked positions. You must drill through both the seat and upholstery pan. **Again, be extremely careful!** Wrap masking tape around the drill bit at the proper depth to avoid puncturing the upholstery:



Unscrew the three screws attaching the upholstery pan to the back of the seat and remove the upholstery pan.

Drill out the *upholstery pan pilot holes* (not the seat pan holes!) with a 5/16" drill bit so the rubber rivet nuts can be inserted. **Again, be extremely careful while drilling:**



Insert the **rubber insulated rivet nuts** in the holes in the bottom of the upholstery pan:



With the metal seat assembly attached to the frame, set the fiberglass seat on the metal seat pan. Use the reference marks on the bottom of the fiberglass seat that you made previously to help position the seat:



Use the four pilot holes in the fiberglass seat to make corresponding marks on the underlying metal seat pan. You can use a marker or a drill bit.

Remove the fiberglass seat and drill holes in the metal with a 5/32" drill bit:



Re-attach the upholstery pan to the back of the fiberglass seat with the three rivet nuts and washers as before. Insert **#8-32 x 5/8" screws with lock washers** through the four holes in the bottom of the metal seat pan and fiberglass seat, and into the rubber rivet nuts in the bottom of the upholstery pan. When you tighten the screws, the rivet nuts expand, and all three layers of the seat assembly are sandwiched together:



Mount the tail light bracket to the seat in the position you marked previously using adhesive in the **adhesive syringe**. **Do not use regular epoxy from the hardware store.** The adhesive supplied with the kit is designed to bond metal and fiberglass. It will remain slightly flexible without cracking over a large range of temperatures.

Make sure the area of the fiberglass where the bracket will attach has been scuffed with rough sandpaper -- there should be no paint or primer. Don't use any liquid cleaners -- just sand down to the fiberglass and wipe the dust off with a towel. Make sure the metal surface of the bracket

is free of dirt and grease.

There is only a few minutes of working time once the adhesive has been mixed, and once set, it creates an extremely strong bond, so be prepared. Double check that the tail light position is correct. You can also bend the tabs by hand to make them fit the contours of the inner sides of the seat.

Mix the adhesive and spread a thick layer on the tabs of the tail light bracket. Hold it into place by hand or with clothes pins until the adhesive sets. It doesn't need to be clamped very tightly -- you don't want all the adhesive to be squeezed out:



Install the tank and seat assembly on the bike and tighten the seat bolts.

With the metal side cover mounts still attached to the battery box with thumbscrews, pull them out far enough to make contact with the side covers, and do another quick test fit:



Remove any paint or primer from the back side of the side covers with sand paper. Don't use any liquid cleaners -- just sand down to the fiberglass and wipe the dust off with a towel.



Make sure the metal surface of the bracket is free of dirt and grease.

Mix up enough adhesive for one side and spread a thick layer on the side cover mount:



Hold the side cover in place. You can make slight adjustments to the fitment while the adhesive sets. After a few minutes, you can remove the side cover and let the adhesive fully cure:

