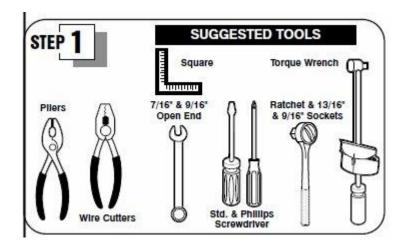
# **SUT-500-2BC**



#### **ASSEMBLY REQUIREMENTS**

\*Torque all T-bolt nuts to 35-40 foot pounds.

\*Check all lights before towing.

\*Tire pressure not to exceed recommendation on serial tag.

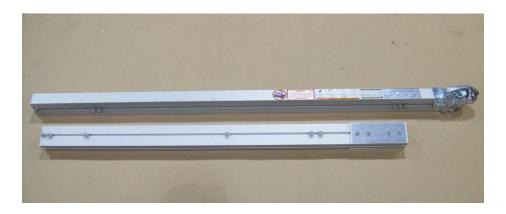
\*Re-torque wheel nuts after first 25 miles to 80 ft pounds and periodically thereafter.

Failure to follow the assembly instructions could result in serious injury or death.

Incorrect assembly or modifications to your trailer will void any specific or implied warranty.

For questions or assistance assembling your trailer call 800-282-5042.

# UNPACK AND IDENTIFY THE FOLLOWING PARTS.



Tongue section and splice plates



Bottom side rails and cross members with mounting angle brackets



Top side rails, cross members and corner posts



Post, handle and triangle plates



Padded cradle holders and rollers complete



Axle assembly, springs and U bolt hardware



Fenders and tires



Skid and side marker light bracket



Diagonal strut

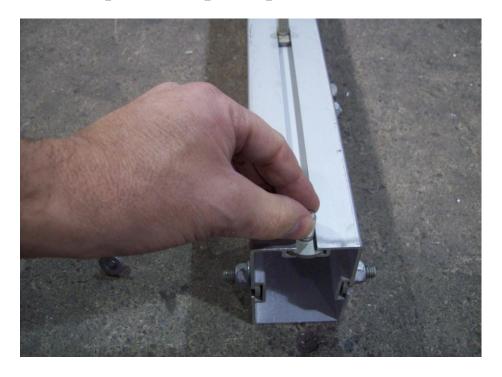


Splice plates, tail light brackets and hardware



Tail lights, running lights, harness, license bracket and hardware

## Optional step for spare tire carrier



Install 2 T-bolts on the underside of the front tongue section that has the serial number on it.



Position carrier about 18" away from the back edge of the tongue section then tighten nuts

Tongue assembly



Locate the bottom splice plate.



Install the bottom splice plate on the under side of the rear tongue section.



Before attaching the tongue sections together make sure the front tongue section has 6 T-bolts on each side. These will be used later.



Loosen side plates.



Slide both plates over the adjacent tongue section and center. Align tongue sections so there are no gaps between them. Tighten all nuts.



Slide the bottom plate over and align with side plates. Tighten nuts.

#### Frame assembly



Locate side rails and front and rear cross members.



Locate four 1 1/8" T-bolts and four web strap clips.



Install two T-bolts in the center of the outside edge of each side rail then add web strap clips to each end of the side rail.



Locate the front and rear cross members and slide two T-bolts to each of the corners on the inside edge and remove the nuts. Make sure you still have two T-bolts in the center of the cross member. These will be used later.



Slide side rail into T-bolts on triangle plate and cross member as shown. Reinstall the nuts on cross member.



At this point your frame should look like this.



Once in place, square up the side rails and cross members. Then tighten nuts.



Install the other cross member and repeat the process. Frame should look like this when finished.

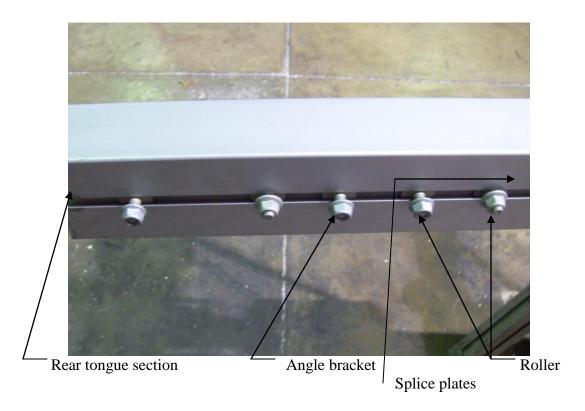
#### Frame Attachment



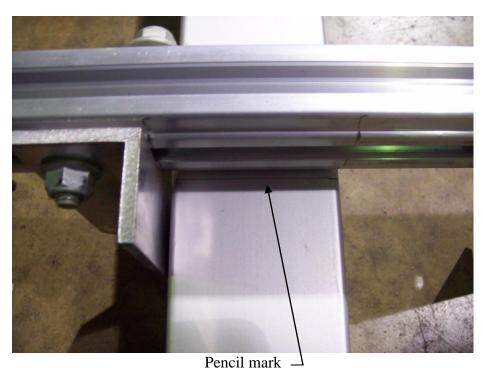
Measure 28 3/4" from the rear of the tongue section going toward the front. Make a mark with a pencil for placement of the rear cross member.



Loosen one angle bracket on each cross member.



Before attaching the frame, move 2 T-bolts on each side towards the splice plates. These will be used later for the roller brackets.



Attach frame to tongue section and align rear cross member with pencil mark on tongue section.



Slide angle bracket over and align with the pencil marks on the cross member. Repeat this process for the front cross member. Then tighten nuts.

## Spring installation



Locate the spring assembly.





Remove the bolt from the front spring eye and install the spring into the spring hanger in the center hole with the nut toward the inside of the trailer. Do not tighten yet.



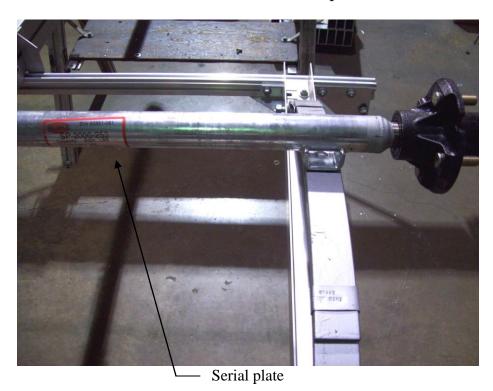


Remove the two bolts from the shackle holder at the rear of the spring and install the shackle holder into the rear spring hanger with the nuts toward the inside of the trailer. These nuts can be tightened at this time.

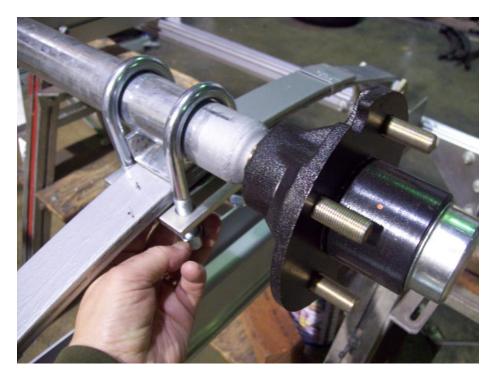
#### Axle Installation



Locate axle, U-bolts and tie plates.



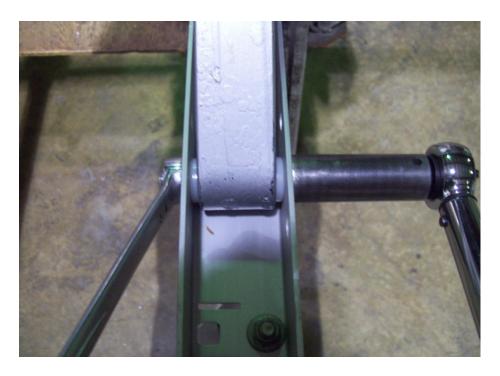
Install the axle on the spring as shown. Make sure the locating studs on the springs are in the holes on the axle's spring seat. Face the axle's serial plate toward the rear of the trailer to protect it from debris.



Install the U-bolts and tie plates as shown.



Install the nuts and tighten them evenly.



Go back and tighten all of the spring mounting nuts that were left loose previously.

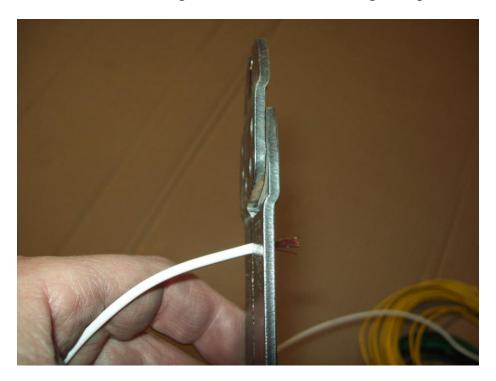


Note: The threads on the shackle link will not protrude through the shackle nut when it is properly installed. This is normal. The indentations on the flat sides of the nuts are the locking mechanism. Do not over tighten as this will not allow the suspension to move properly.

# Wiring



Locate the harness, ring terminal and the 3/4" long Philips screw.



Strip a ¼ inch of insulation off the white ground wire.



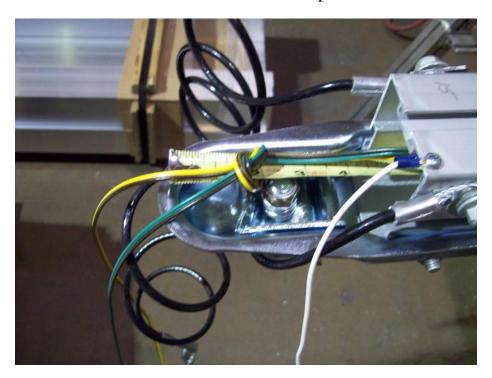
Install the ring terminal on the white ground wire.



Install Philips screw through the ground wire into the pre-drilled hole located under the tongue just behind the coupler.

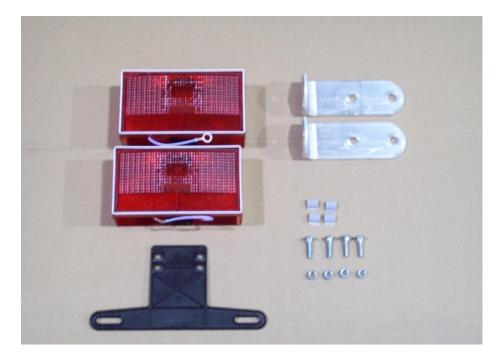


Extend a tape measure inside the tongue from the rear of the trailer until it protrudes at the front of the trailer under the coupler.



Attach both wires of the harness to the end of the tape measure with either tape or a tie. Retract the tape measure until it comes out the back of the tongue with both wires attached.

Tail light brackets, tail lights



Locate the tail lights, carriage bolts, nuts, license plate bracket, tail light brackets and adhesive clips.



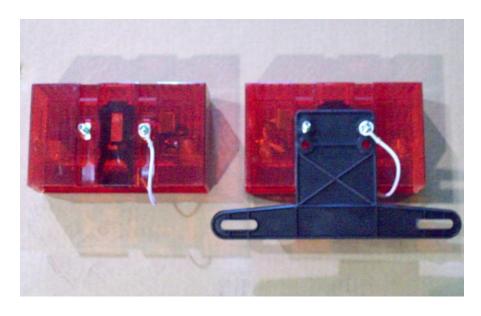
Install tail light brackets on T-bolts and position them 8" from the rear of the tongue section.



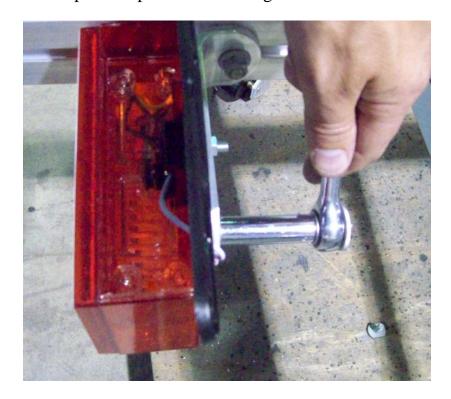
Tighten both brackets.



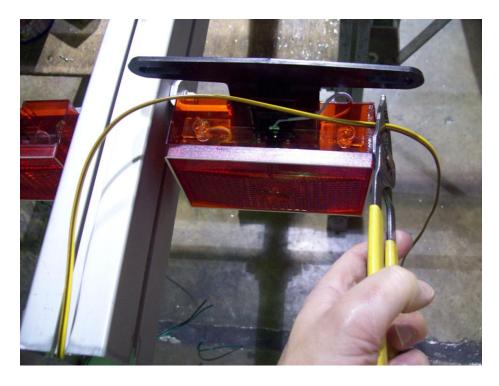
Slide the carriage bolts into the slots in the back of the tail lights.



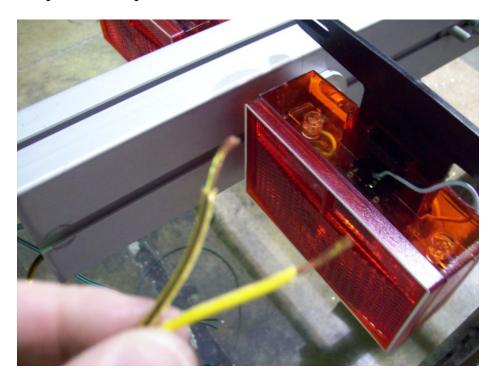
Repeat the process for the right side as shown.



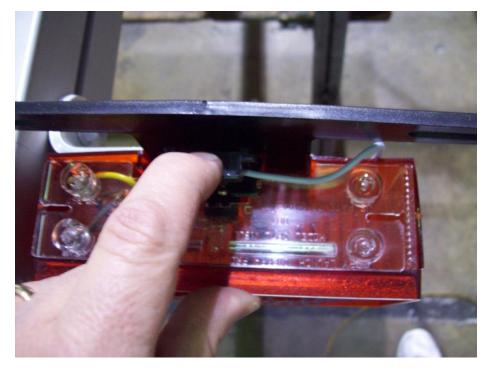
Install the left tail light with the license plate holder between the light and the bracket. Repeat for the other side. Then make sure to tighten nuts but don't over tighten them.



Measure from the end of the harness and cut approximately 48" of the harness. Repeat this step for other side.

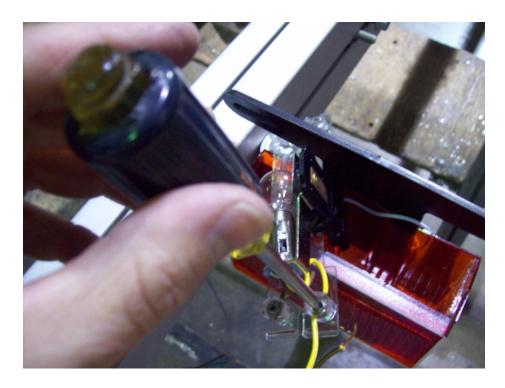


Separate the brown wire from the yellow wire then strip 1/4" of insulation from the wire.





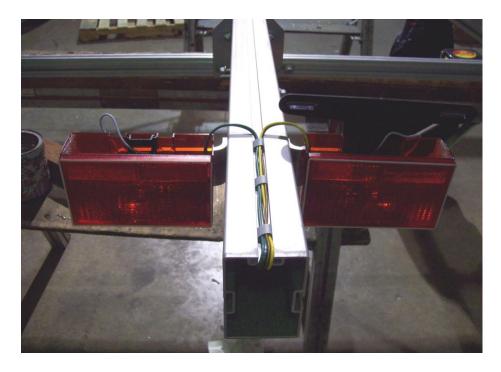
Locate the black tab at the bottom of the tail light. Pull the tab towards the rear of the trailer and pull up releasing the bulb assembly from the light housing.



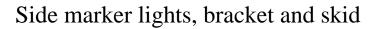
Loosen the wire retaining screws and install the color matching wires from the wire harness onto the corresponding retaining screws.

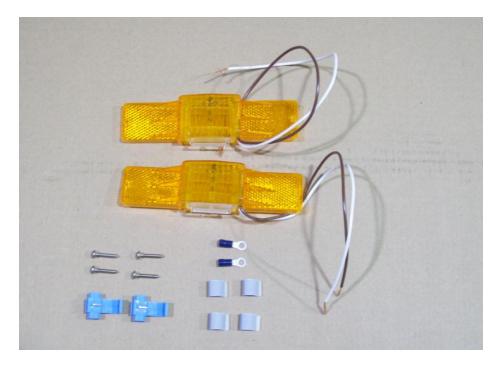


Re-install the bulb assembly into the light housing making sure to route the wires through the slot in the base of the bulb assembly.

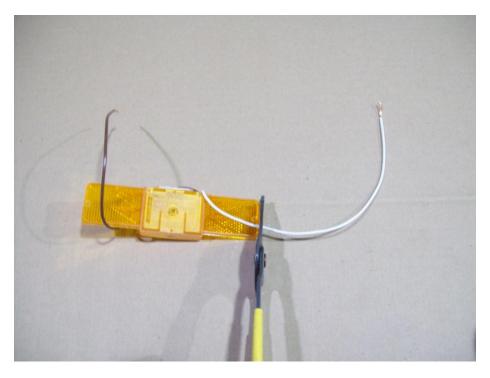


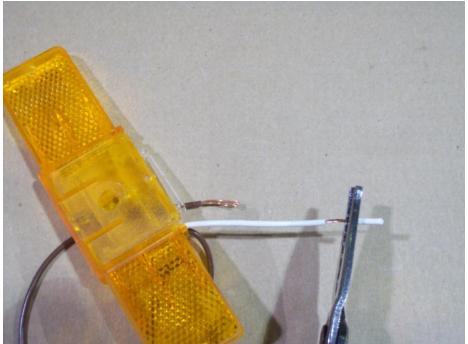
Install adhesive backed clamps in the locations shown and route the wires through them.



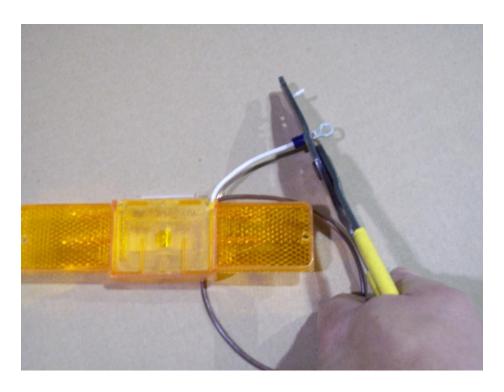


Locate the two amber side marker lights, four small Philips screws, adhesive backed clamps, two ring terminals, and two blue connectors.





Cut approximately  $8\frac{1}{2}$ " off of the white wires on both side marker lights. Strip 1/4" of insulation from the wire.



Install the ring terminals by crimping the terminal onto the bare wire.



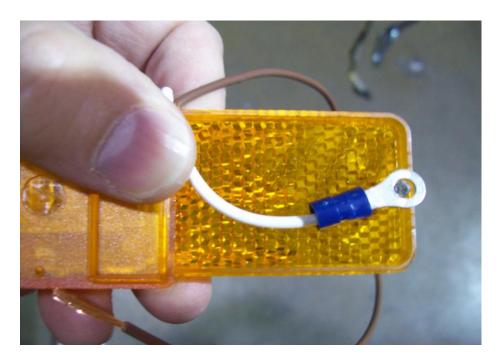
Locate the skid and light bracket.



Take one T-bolt off the skid and slide it in the bottom of the tongue.



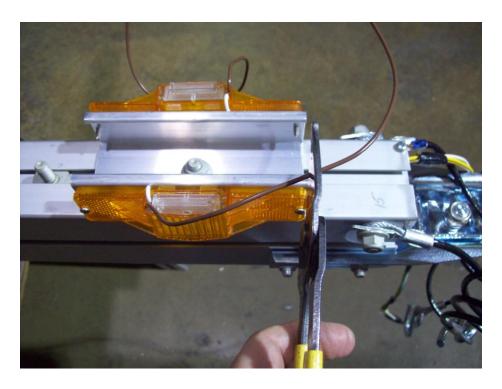
Install the bracket for the lights and position it 3" from the end of the tongue as shown. Then tighten the nut.



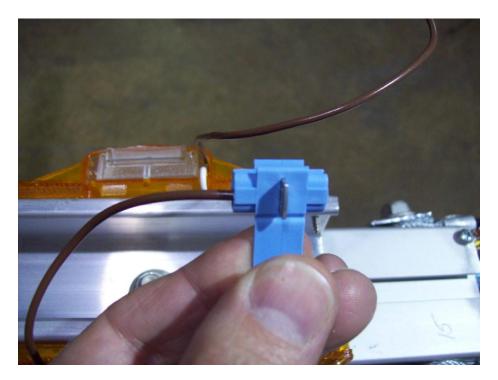
Align the ring terminals with the screw hole nearest the wire on the back of the side marker light. Make sure the wire is routed through the gap on the back of the light so it does not become pinched when the light is installed.



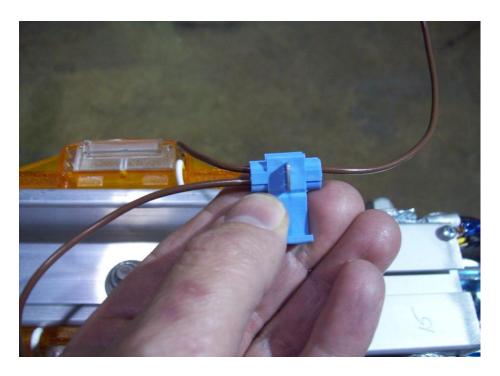
Install the side marker lights into the pre-drilled holes in the light bracket using a Philips screwdriver. Be sure the screw is through the ring terminal on the back side of the lights. This will supply a ground to the lights. <u>DO NOT OVER TIGHTEN</u>



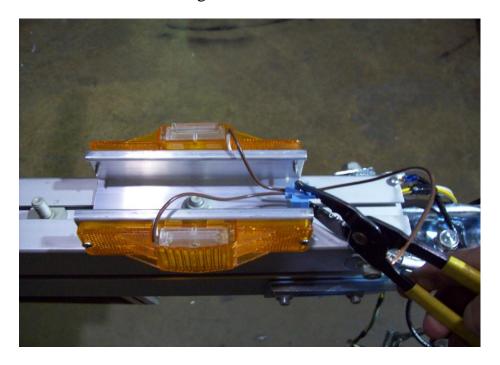
Cut 6" off of the brown wire on the left (driver's side) marker light. <u>Do not strip the wire.</u>



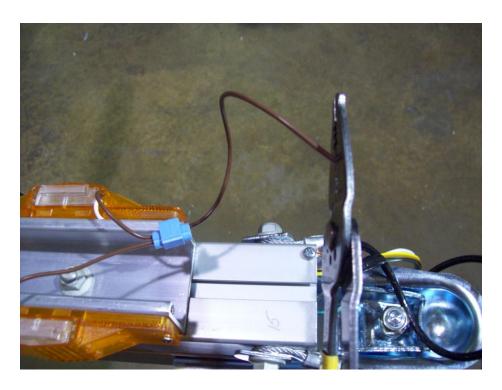
Insert brown wire that has been cut into the hole in the connector closest to the hinge. This hole does not pass all the way through. The wire should go in about  $\frac{1}{2}$ ".



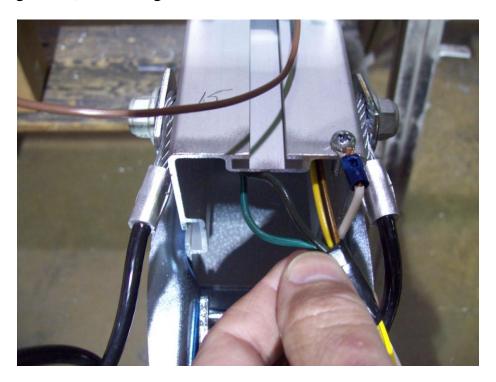
Pass the other wire through the remaining open slot in the connector at a point close to the side marker light.



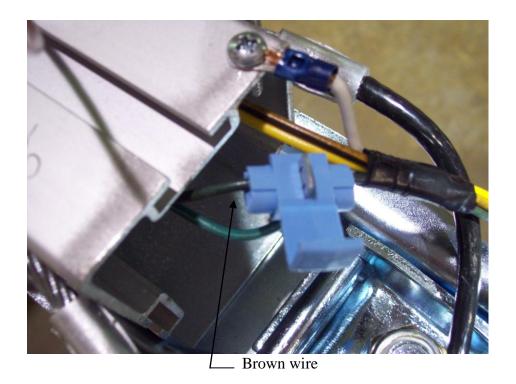
Use pliers to push the metal spade down until it is flush with the plastic. This is what makes the electrical connection between the two wires. Close the plastic cover of the connector over the spade until it snaps into position.



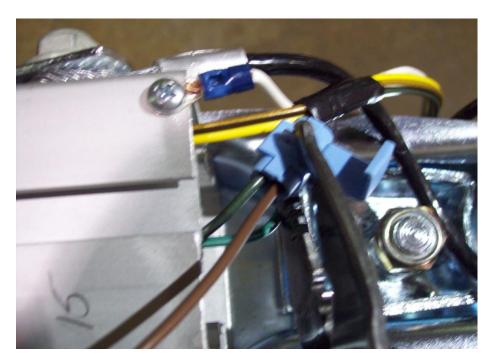
Cut the exposed strands of wire off of the end of the brown wire on the right (passenger side) marker light.



Now separate the brown and green wire on the harness right by the end of the tongue section.



Insert the brown wire from the harness through the open slot in the blue connector.



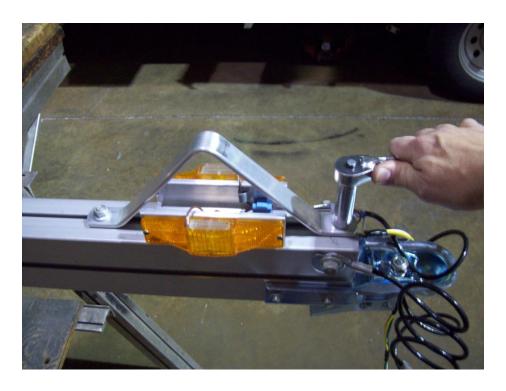
Insert the brown wire from the side marker lights into closed side of the connector. Use pliers to push metal spade down until flush with the plastic. Close the plastic cover of the connector over the spade until it snaps into position.



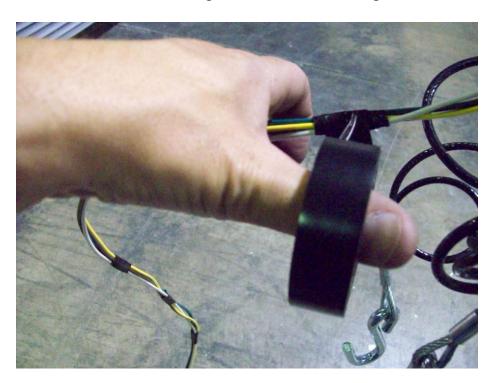
Locate the adhesive backed clamps. Install them as shown and run brown wire from the side marker lights through them.



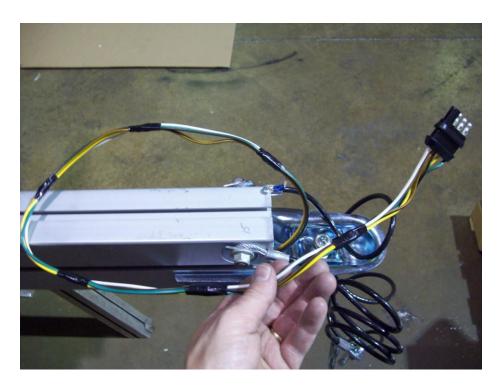
Install the skid on the front tongue section.



Center the skid over the lights as shown. Then tighten the nuts.



Tape wiring as shown.



Harness should look like this when finished.

# Fender Installation



Locate fenders, washers, and nuts.



Slide the (2) 1 1/8" T-bolts to the center of the side rail. Then install two rubber washers and two steel washers as shown.



Install the fender, two more steel washers, and nuts, center the fender over the axle and tighten the nuts. Repeat for the other side.

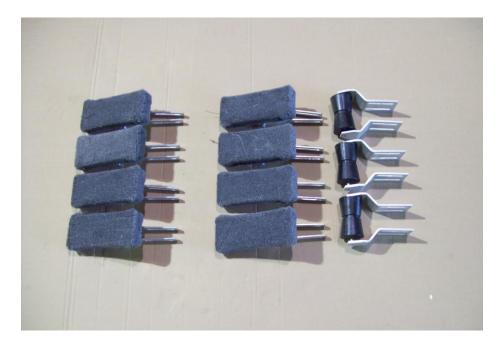


Locate 8 lug nuts, and wheels.



Install the wheels with the valve stems facing out. Install the lug nuts with the tapered side facing the wheel.

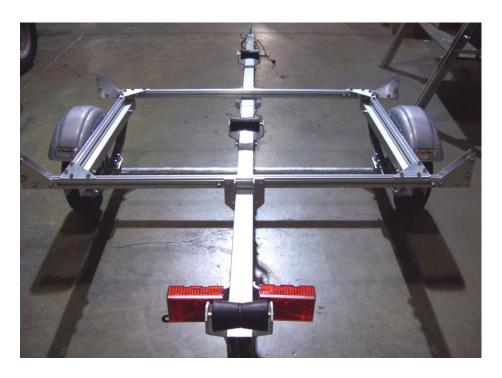
### Roller and padded cradle Installation



Locate the rollers and cradle assemblies.



Install the two front rollers aligned with the T-bolts on the tongue. With the roller bracket tilted, gradually pull it over to the other side and position it. Install nuts and tighten.



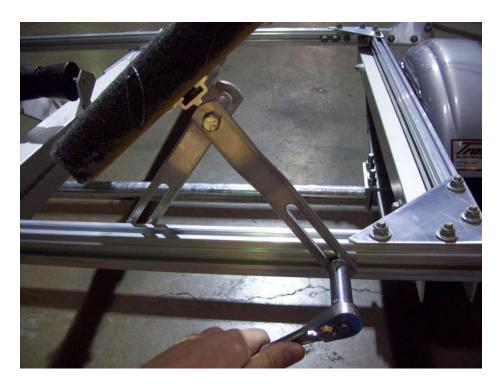
Slide the last roller bracket on over T-bolts and adjust. Install nuts and tighten. At this point your trailer should look like this.



Loosen the T-bolts on each side of the cross member slide them away from the side rail and stagger them as shown.



Position brackets over T-bolts as shown and install nuts.

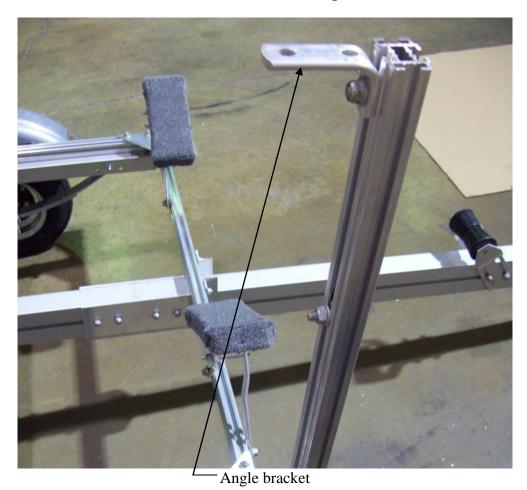


Tighten the nuts to keep brackets from moving. These brackets will have to be adjusted again later when the trailer is finished to accept the boat.

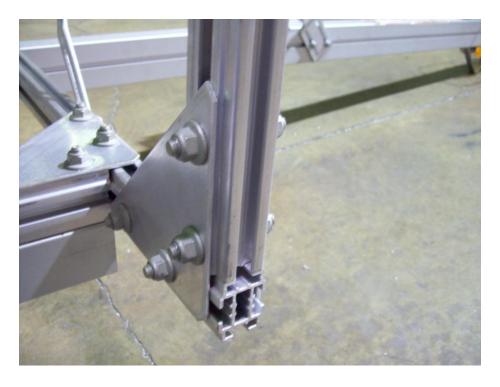
# Installation of upper structure



Locate the four corner post.



Make sure the angle brackets are facing each other before installing the post into the triangle plates as shown.



Slide post into triangle plates on each corner of the trailer. Then tighten nuts.



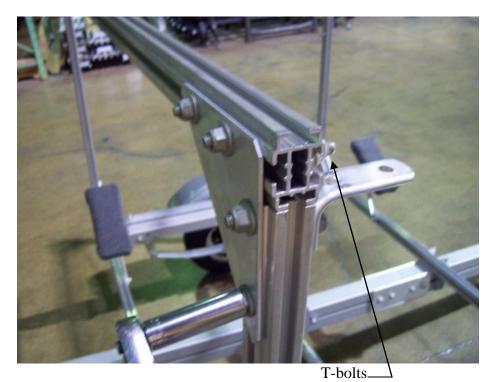
At this point the post should look like this facing each other.



Locate the top side rails and cross members.



Loosen T-bolts on triangle plates of the cross member and slide into the top of the corner post. Repeat this process for the front cross member and then tighten nuts.



Top cross members should look like this. Loosen the T-bolts on the inside edge of the cross member and slide towards the middle. These will be used later for the padded cradles.



Remove the nuts from the bottom of the side rail on each corner but keep two T-bolts at each end. These will go into the angle brackets on the post. Then remove the T-bolts on the triangle plates. These will go into the top of the cross member.



Locate the four web strap for the top side rail.

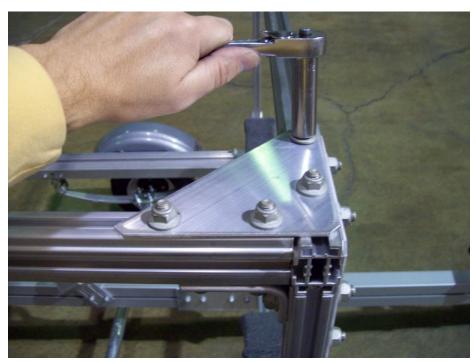


Install two web strap clips on the outside edge of each of the side rails. These can be adjusted later to accommodate the boat



Install 2 T-bolts on each corner

Install two T-bolts into each corner of the top cross member. Move the T-bolts to align with the angle brackets and triangle plates as shown.



Once in place, reinstall nuts and tighten.

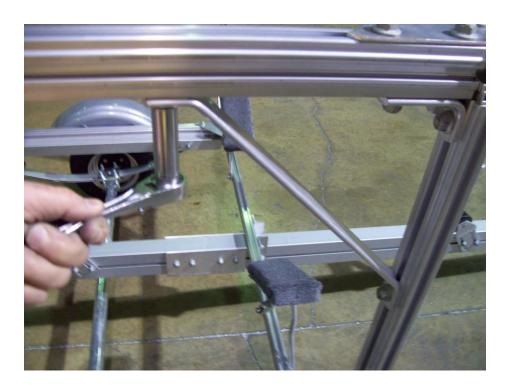


Locate the diagonal struts.



Remove these nuts

Remove the nuts from the underside of the cross member and from the side post. These will be used to attach the diagonal struts.



Install diagonal strut as shown then reinstall nuts and tighten. Repeat this process for the other struts



The top of the trailer should look like this when together.



Locate the front post, handle and triangle plates.



Attach triangle plates to both sides of the tongue section as shown then tighten nuts.



Install post into triangle plates and tighten nuts.



Loosen support struts and attach to tongue then reinstall nuts and tighten.



Remove the 1" bolt from the handle and insert into the bracket on the post.



Install the handle on the bolts, install nuts and tighten.



Loosen the T-bolts on each side of the cross member. Slide them away from the side rail and stagger them just like the bottom cross member.



Install the cradle brackets to the top cross member as shown. Repeat this process for the rest.

# Torque lug nuts



Tighten to 80 foot pounds in a crossing pattern. Re-tighten after 25 miles.

### Finished trailer











KJM 12/09