

SUT-220-S



Torque wrench, carpenters square, wire cutters, Phillips screwdriver, 7/16, 9/16, and 3/4" combination wrenches, ratchet, 9/16, 3/4, 13/16", and 7/8" sockets.

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.



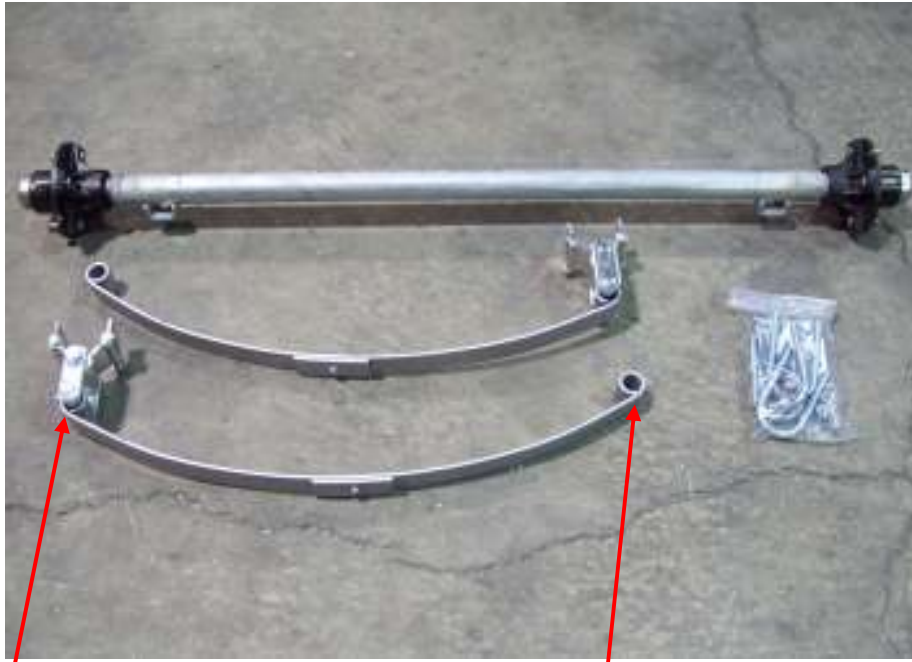
Tongue section



Front cross member

Side rails

Rear cross member



Rear of spring

Front of spring

Axle, spring assemblies and U-bolt hardware.



Tires and fenders



Bow stop, roller and skid.



10'' padded cradles, front and rear cradle holders.



Light kit, marker light bracket, harness, tail light brackets, 2) hardware bags and spare parts bag.

Optional step for spare tire carrier



Spare tire carrier for SUT trailers.



Loosen the T-bolts and nuts on spare tire carrier. Insert into the underside of the front tongue at the rear. Once T-bolts are in channel, slide towards the coupler.



Position carrier about 18" away from the rear of the front tongue section, then tighten nuts.

Tongue assembly



Rear of front tongue section

Loosen the 6 nuts (3 per side) located at the rear of the front tongue section.



Slide all 6 bolts forward toward the coupler. These will be used later to install the front cradle and the bow stand.



Loosen nuts on the front splice plate and remove.



Locate two web strap clips from the hardware bag.



Insert the web strap clips on both sides of the front tongue section at the rear. Slide forward on the tongue. Final position will be made when the boat is on the trailer.



Re-install the splice plate on the tongue section.



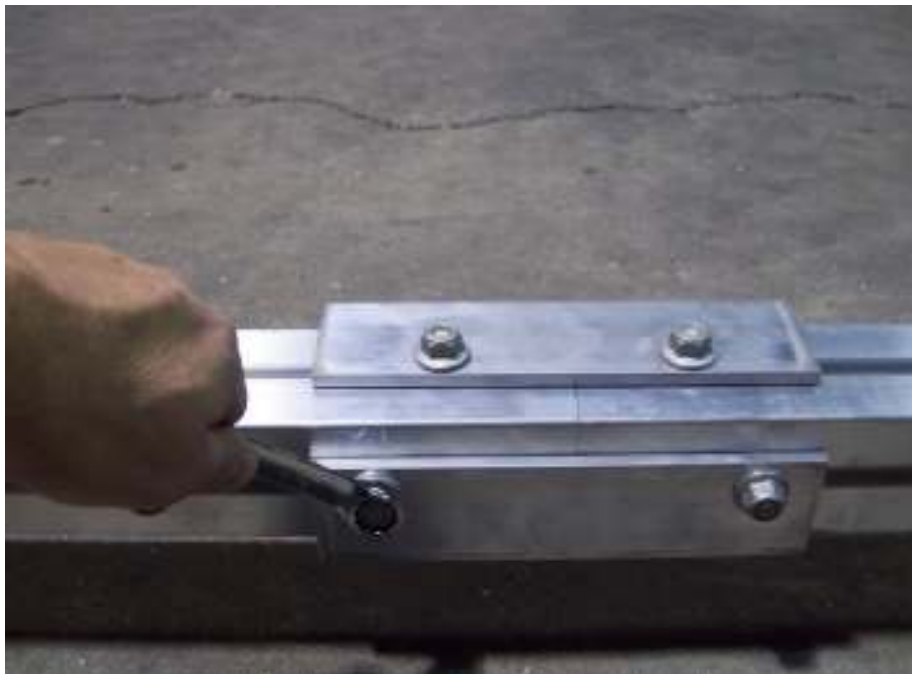
Lay the tongue sections end to end with the splice plates adjacent to each other.



Loosen 4 nuts on the rear splice plate.



Slide each plate over the adjacent tongue section until the plates are centered over the gap between the tongue sections.



Tighten all 8 nuts, making sure that the tongue sections are as tight as possible to one another. Set the tongue aside.

Frame assembly



Locate the side rails, rear cross member and front cross member.



Locate the hardware bag with the angle brackets.



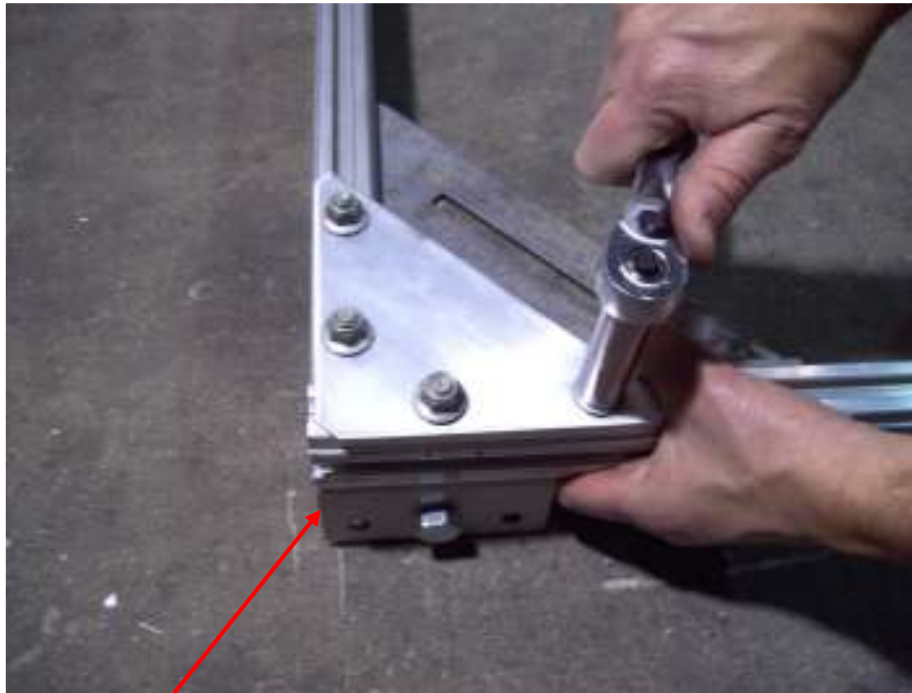
Remove 4 T-bolts from the hardware bag with the angle brackets.



Install 2 T-bolts into the rear side of the front cross member as shown.



Insert the side rail into the front cross member.



Sub rail clip

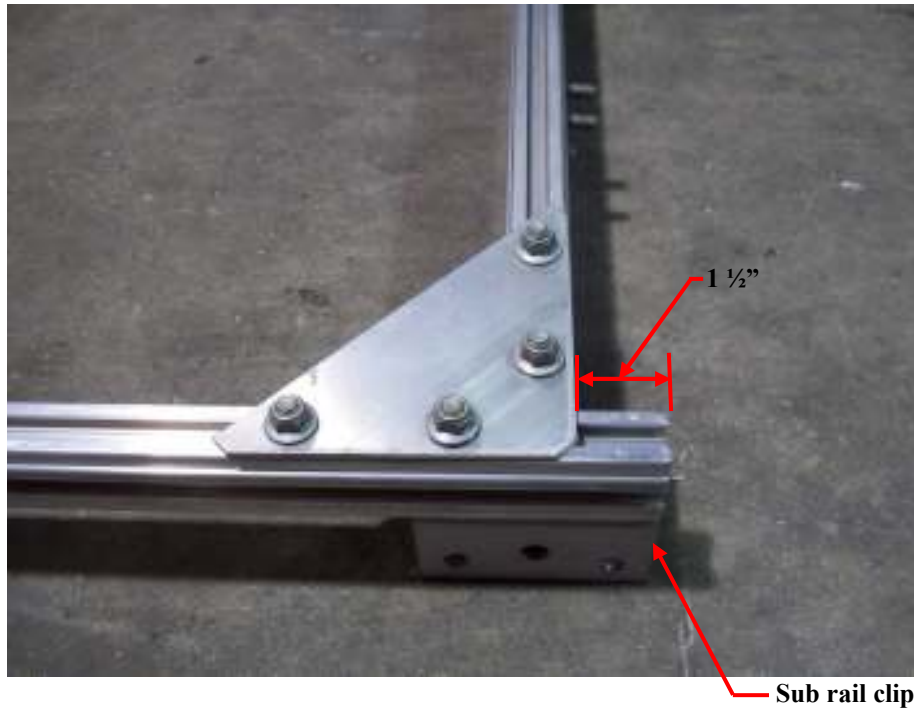
Slide the side rail all the way to the edge of the sub rail clip as shown. Square up assembly and tighten nuts.



Install 2 T-bolts into the rear side of the rear cross member as shown.



Insert the other end of the side rail into the rear cross member.



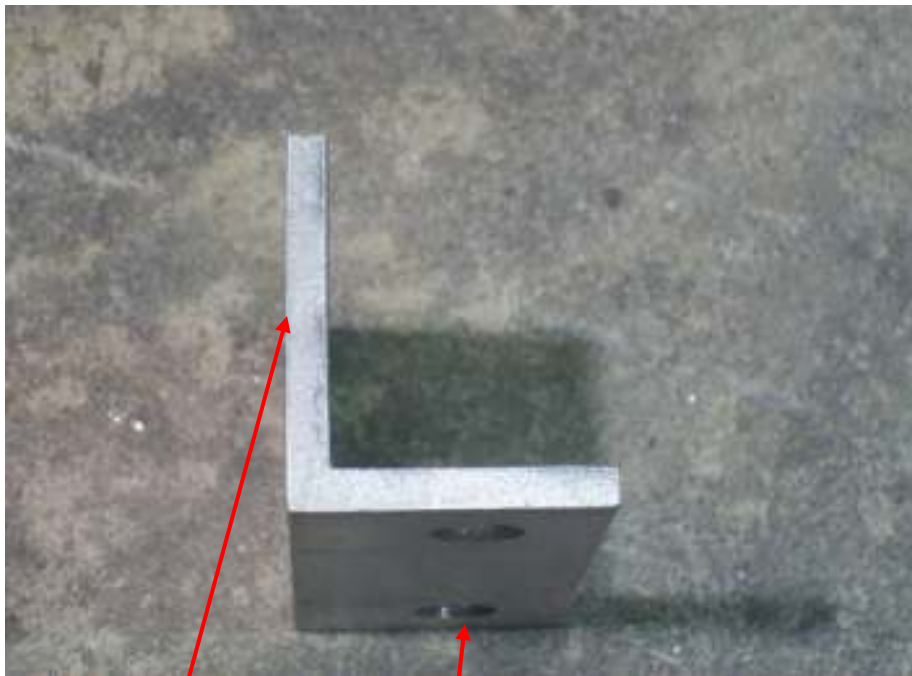
Slide the side rail all the way to the edge of the sub rail clip as shown. The side rail should be about 1 1/2" pass the rear cross member when in position.



Square up and tighten nuts. Repeat the process for the other side at this point.



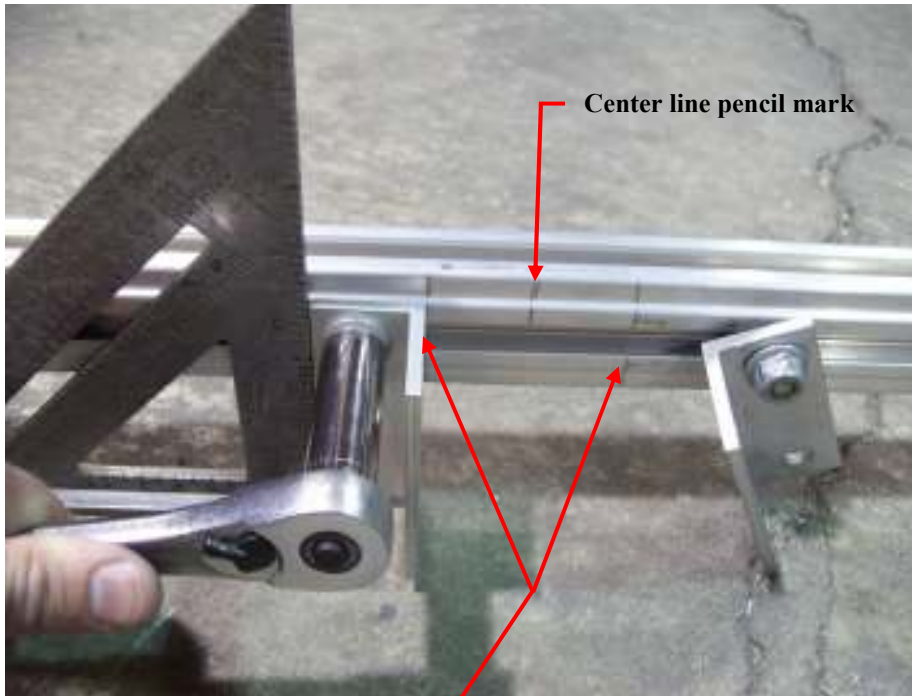
Your frame should look like this. Notice that the side rail extends past the rear cross member. If not assembled properly, the spring assembly will not have enough arch to work correctly.



When attaching the angle brackets to the cross member, the short side should go against the cross member and the long side against the tongue section.



Install the angle brackets on the T-bolts, already in the cross members as shown.



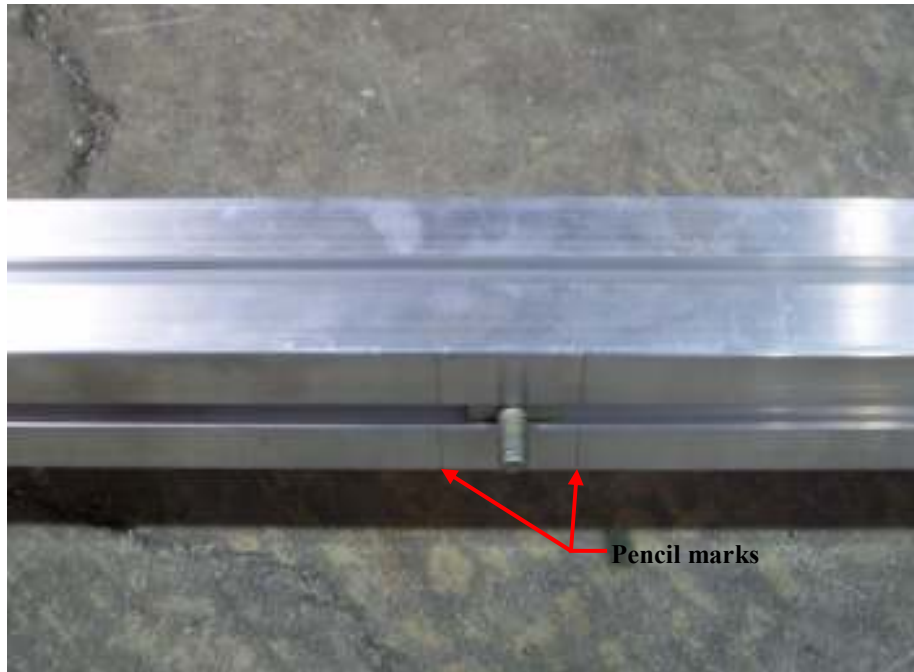
Align the front and rear left side angle brackets with the pencil marks on the frame. Square up angle brackets and tighten nuts. Leave brackets on the other side loose at this point.



Your frame should look like this, with the angle brackets attached to the rear side of each cross members.



Remove the nuts from the two forward most T-bolts located on either side at the end of the rear tongue section. Slide them forward to the pencil marks on the tongue.



Center the T-bolts between the pencil marks on the tongue. These will be used to attach the frame to the tongue.



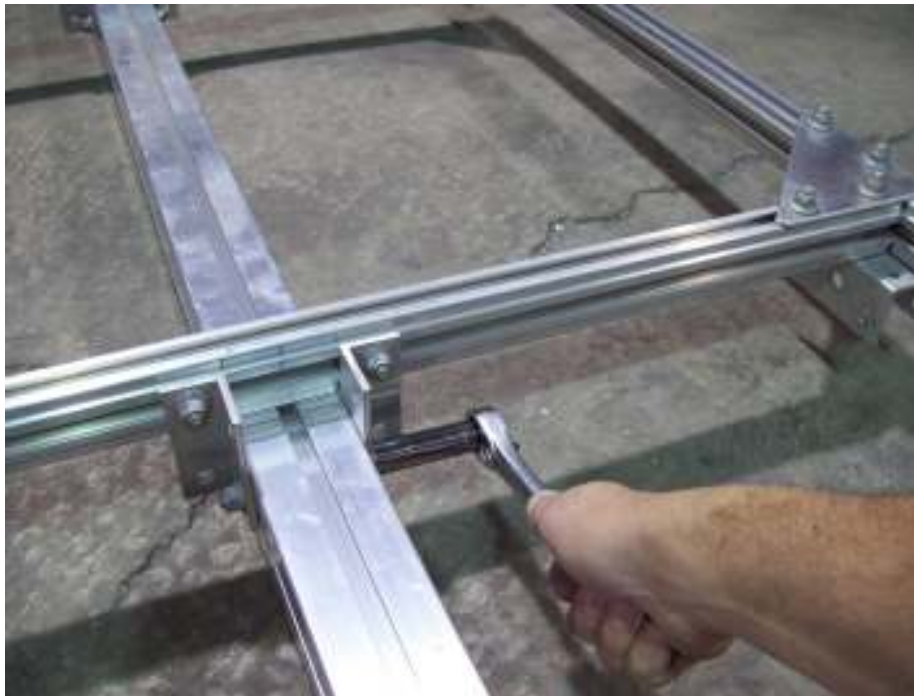
Install angle brackets over top of the T-bolts in the tongue.



Align the angle brackets inside the pencil marks on the tongue. Re-install nuts and tighten, once in position.



Slide the angle brackets from the right side over and install nuts.



Once brackets are aligned with pencil marks tighten all nuts.

Axle and spring assemblies



Locate the axle, spring assemblies and U-bolt kit.



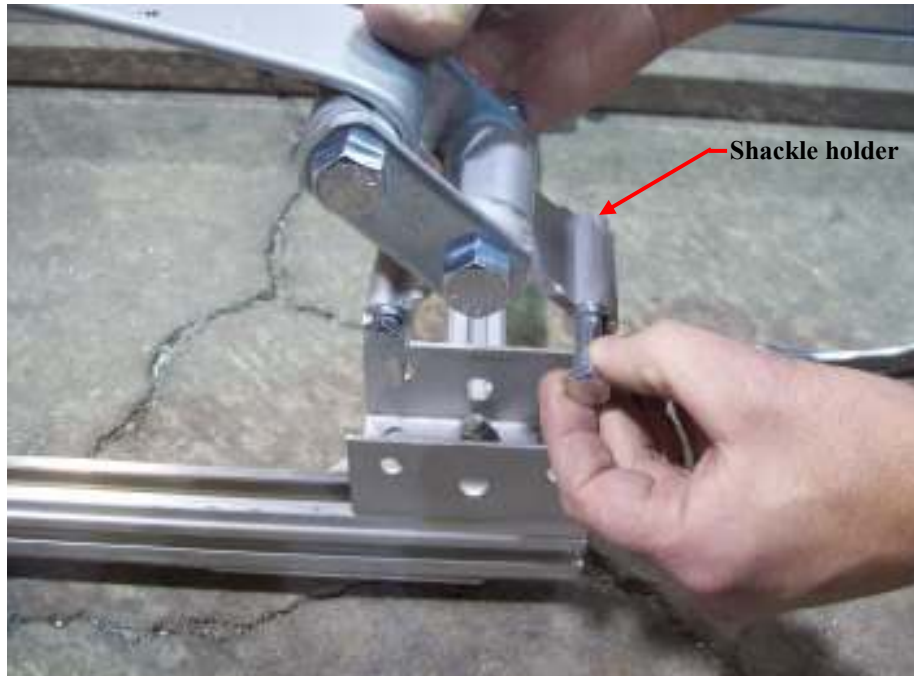
Remove the bolt, bushings and nut from the front sub rail clip.



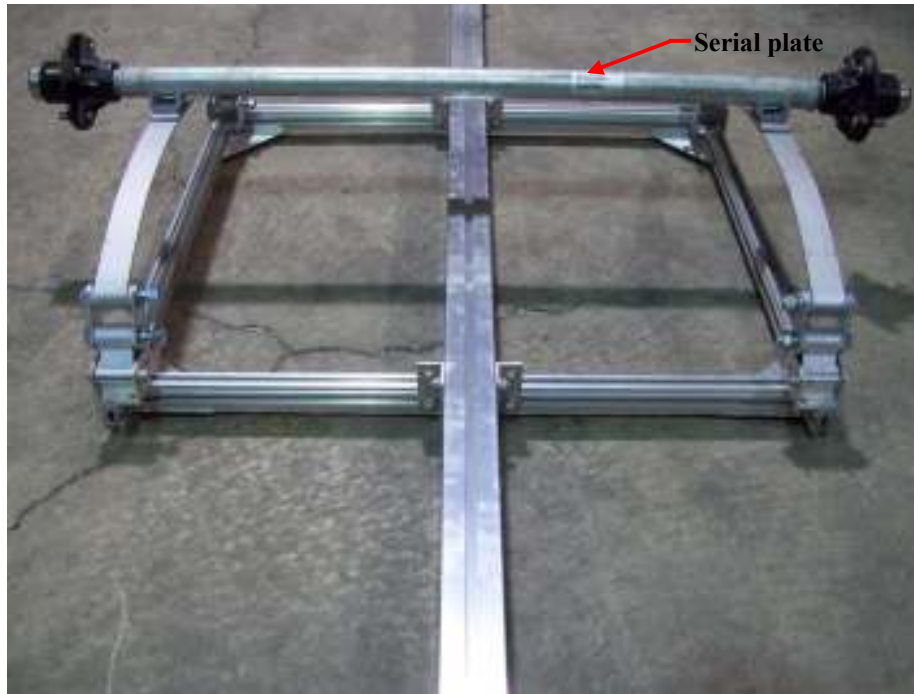
Install bushing into the front leaf spring and insert into the sub rail clip as shown.



Reinstall nut and bolt, but leave loose for now.



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



Locate the axle and install it on the springs 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.



Locate the U-bolts, nuts and tie plates.



Install the U-bolts and tie plates and nuts. Tighten nuts evenly as shown.



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



On the rear shackle, do not over tighten as this will not allow the suspension to move properly.



Your trailer should look like this at this point.

Cradle holders



Locate the front cradle holder with the brackets installed (the short one).



Using the rearward most bolts of the three that were moved toward the coupler during tongue assembly, attach the front cradle holder assembly approximately 36" from the front of the tongue. Final location of the front cradle holder will be determined when the boat is fitted to the trailer.



Tighten the nuts making sure the cradle holder brackets are perpendicular to the tongue.



Make sure the slots in the cradle holder line up with the slots in the holder bracket.



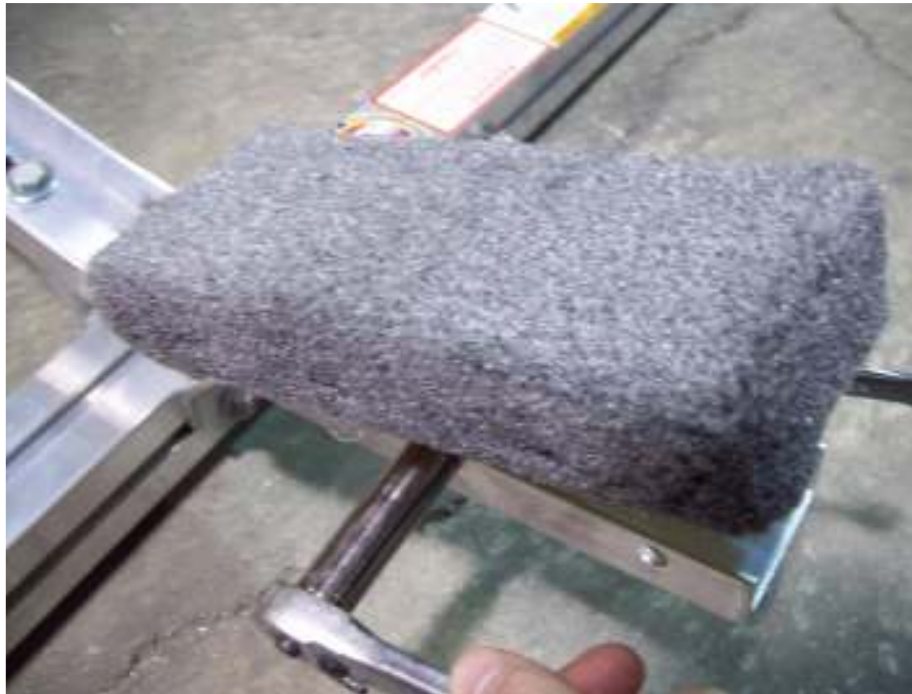
Slide the bolts out to the ends of the slots and tighten the nuts.



Locate the padded cradles.



Remove the bolt from the pivot plate.



Install the padded cradle (inner position shown- this may vary depending on the width of the hull). Final position will be determined when trailer is fitted to the boat.



Remove the nuts from the forward most bolts located on either side of the back of the rear tongue section.



Slide the T-bolts forward, approximately 12" from the rear of the tongue section.



Install the rear cradle holder assembly onto the bolts located 12” from the rear and repeat the steps to install the padded cradles. Final position will be determined when trailer is fitted to the boat.

Tail light brackets and rear roll



Remove the nuts from the forward most T-bolts located at the end of the rear tongue section.



Locate the two taillight brackets.



Position the T-bolts at 6 ½” on each side of the tongue. Install tail light brackets and tighten nuts.



Remove the remaining two nuts and bolts from both sides of the rear tongue section.



Locate the rear roll assembly. Install the bolts into the rear roll brackets with the threads facing outward. Install nuts, but leave them loose.



Slide the bolts into the rear tongue section.



Once the rear roll is in position, tighten the nuts. **NOTICE:** The final position of this roller is such that it never touches the hull during transport-only during launch and retrieval.

Wiring and lights



Locate the tail lights, license plate bracket, 4) carriage bolts and 4) nuts inside the light kit box.



The light with the yellow wires is for the left (drive's side) of the trailer. Slide the carriage bolts into the slots in the back of the tail lights.



Trailer shown upside down
Install the license plate bracket and left tail light onto the tail light bracket.



Install the white ground wire from the tail light onto the carriage bolt.



Trailer shown upside down

Install nuts and tighten. Repeat this process for the right side tail light.



Locate the skid, running light bracket holder, 2) amber running lights, 4) small Philips screws and 2) ring terminals.



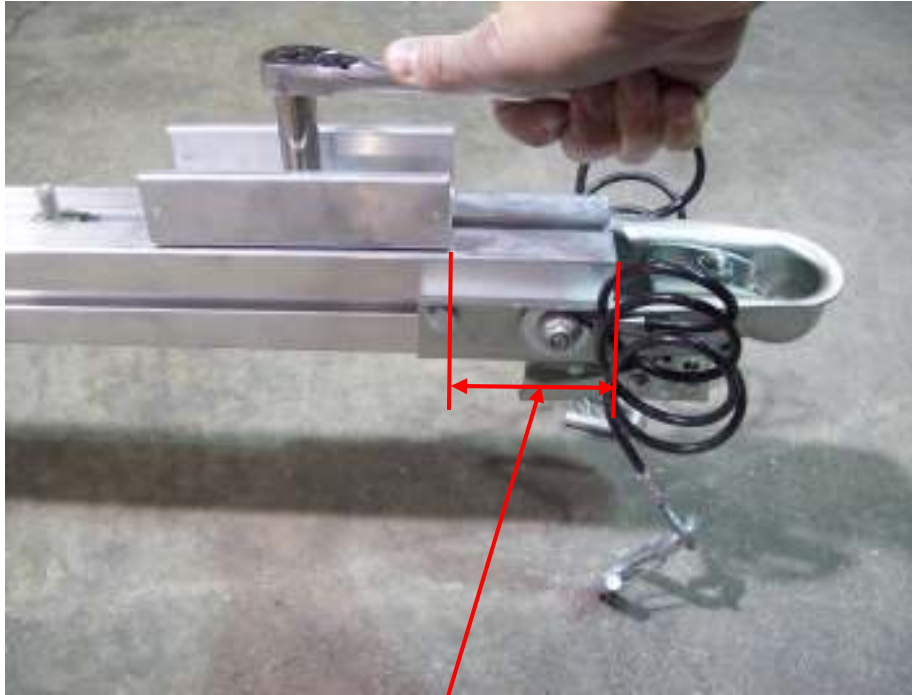
Remove one T-bolt from the skid as shown.



Insert the T-bolt into the slot at the front of the tongue section and slide out of the way. This will be used later to install the skid.



Slide the running light bracket into the slot in the front tongue section.



3" from the front

Position the running light bracket about 3" from the front of the tongue section and tighten the nut.



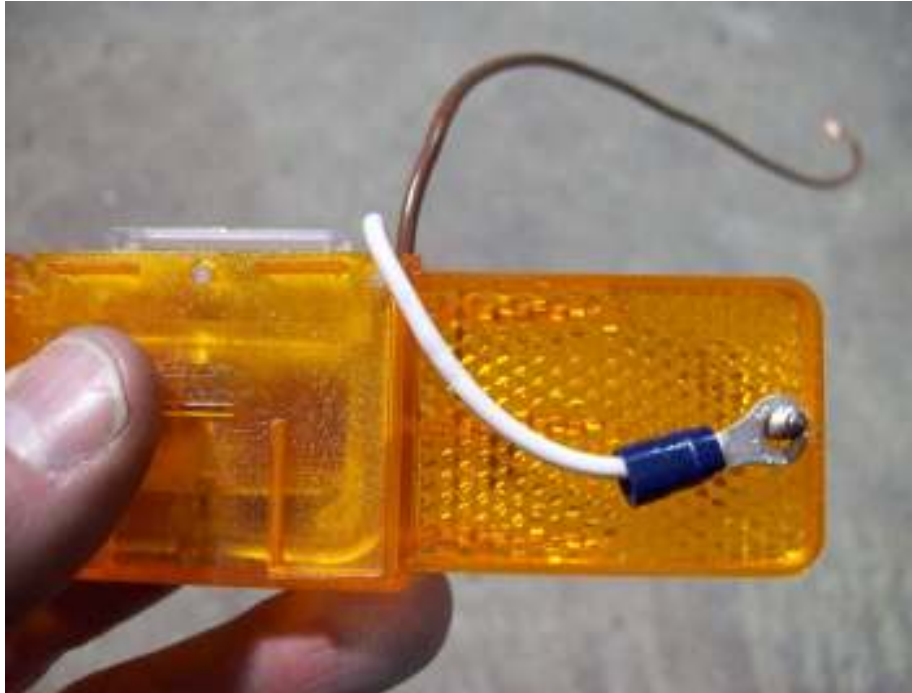
Cut approximately 8 ½" off of the white wires on both running lights.



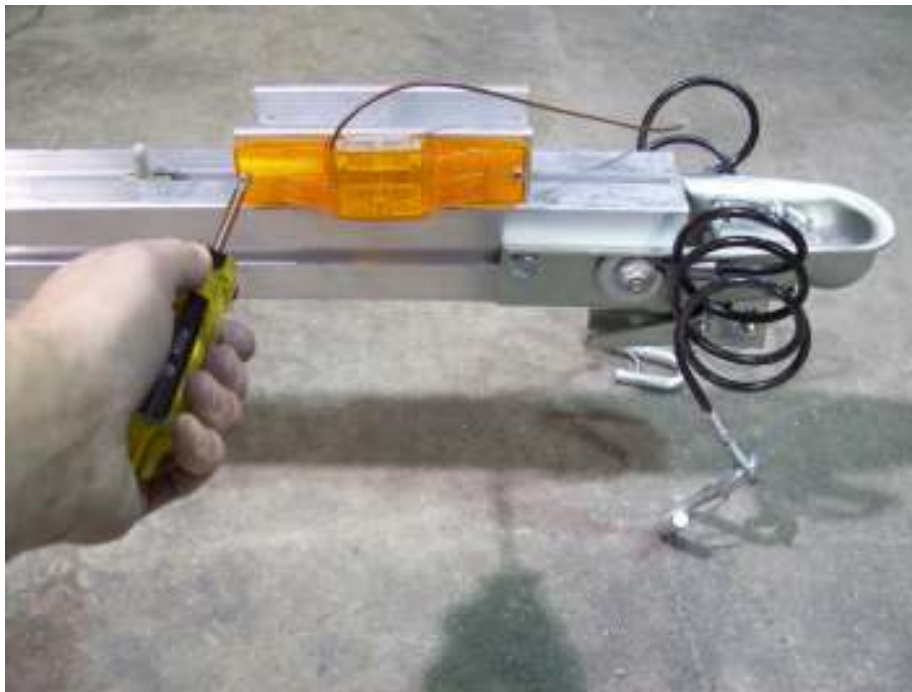
Strip $\frac{1}{4}$ " of insulation from the wire.



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



Align the ring terminals with the screw hole nearest the wire on the back of the running lights. 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 running lights into the pre-drilled holes in the running 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.



Locate the wire harness, ring terminal, Philips screw, adhesive backed clamps, and two blue connectors.



Take the white wire from the harness and strip a ¼" of the insulation from the wire. Install ring terminal by crimping it onto the bare wire.



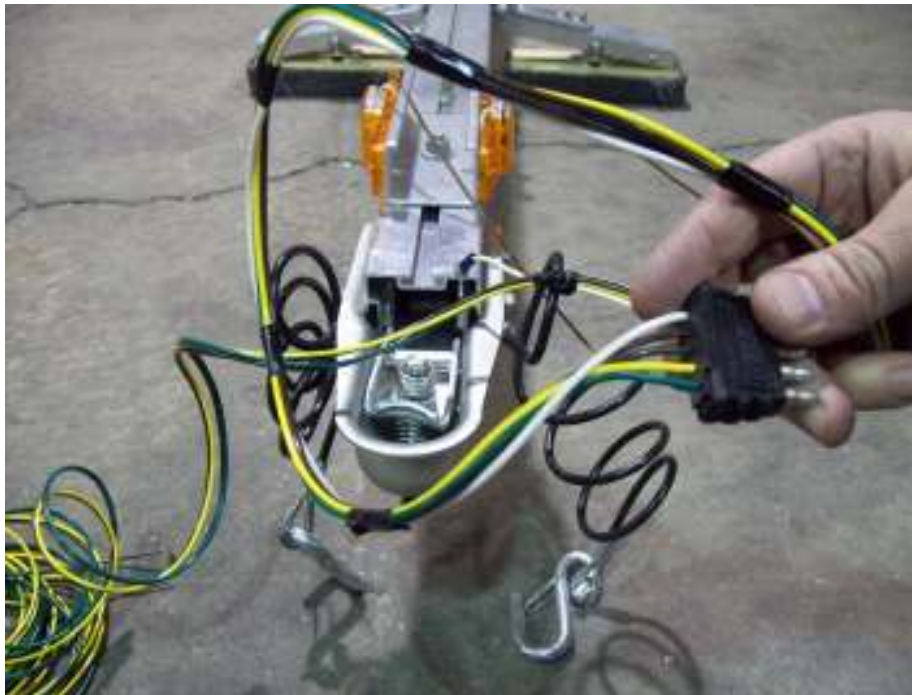
Locate the ¾" long Philips screw.



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



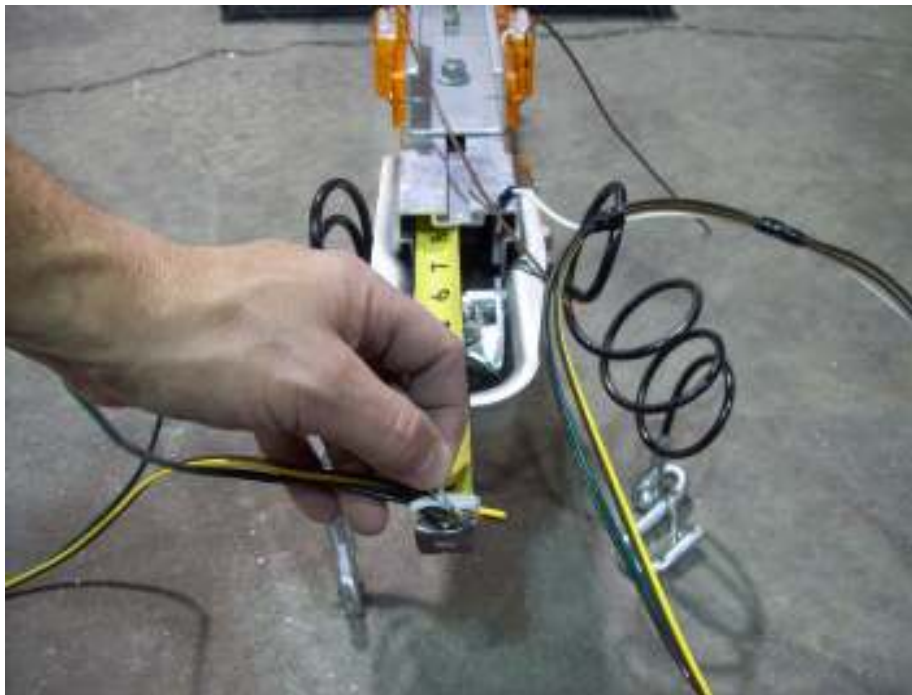
Tape wiring as shown.



Your wiring harness should look like this when finished.



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.



Locate the black tab at the bottom of the tail light.



Move the tab toward the rear of the trailer and pull up, releasing the bulb assembly from the light housing.



Trim off excess wire, leaving some for adjustment. Strip about a ½" of casing from the harness.



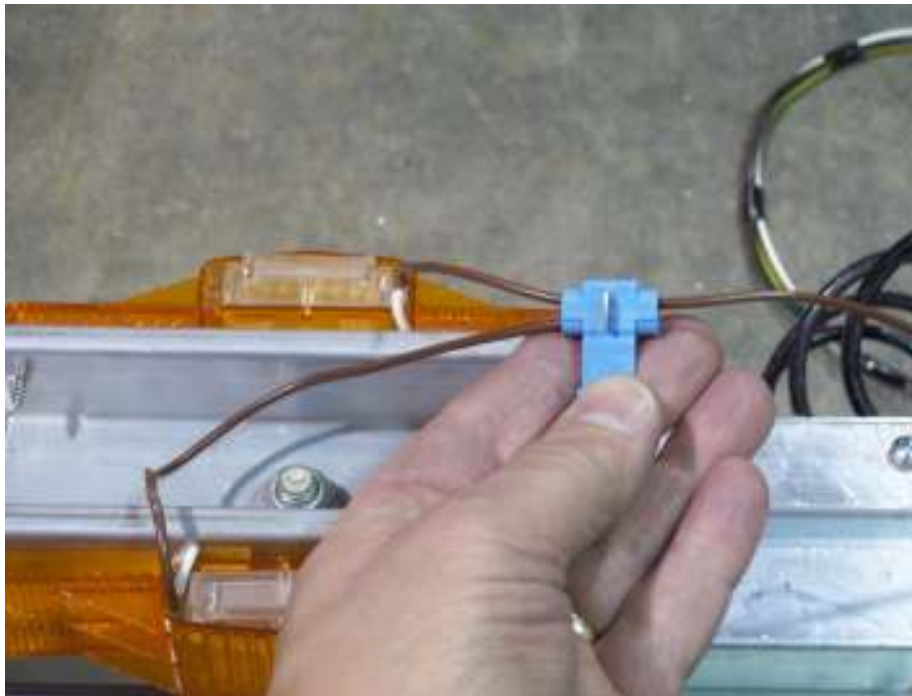
Loosen the retaining screws and install the color matching wires from the harness onto corresponding retaining screws. Tighten screws.



Reinstall 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.



Cut about 2" off the brown wire on the left (driver's side) running light. Do not strip the wire.



At a point close to the running lights, insert the brown wire that has been cut, into the hole in the blue 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.



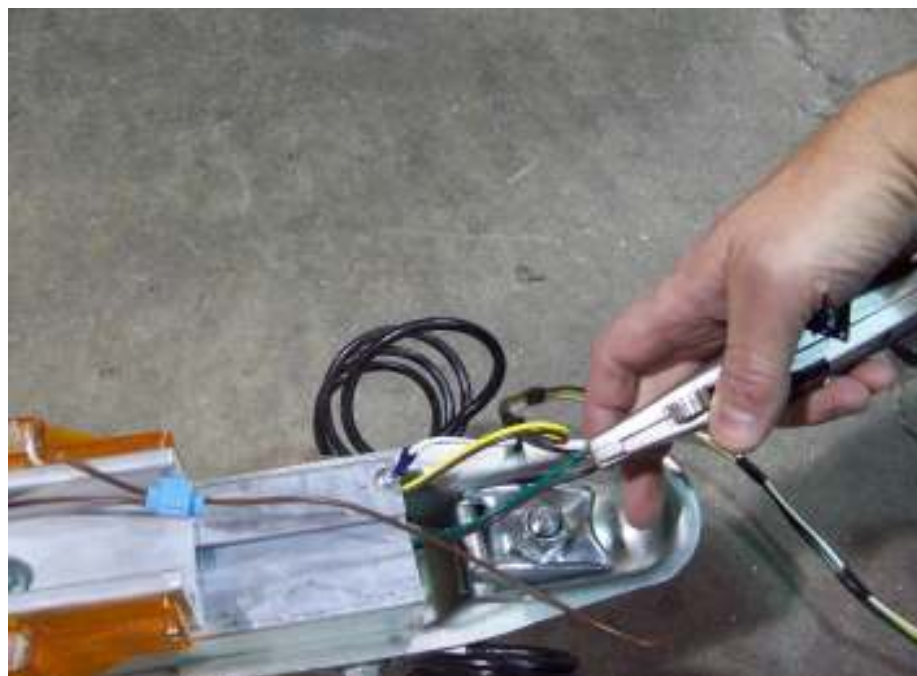
Use pliers to push the metal spade down until it is flush with the plastic. This is what makes the electrical connection between the two wires.



Close the plastic cover of the connector over the spade until it snaps into position.



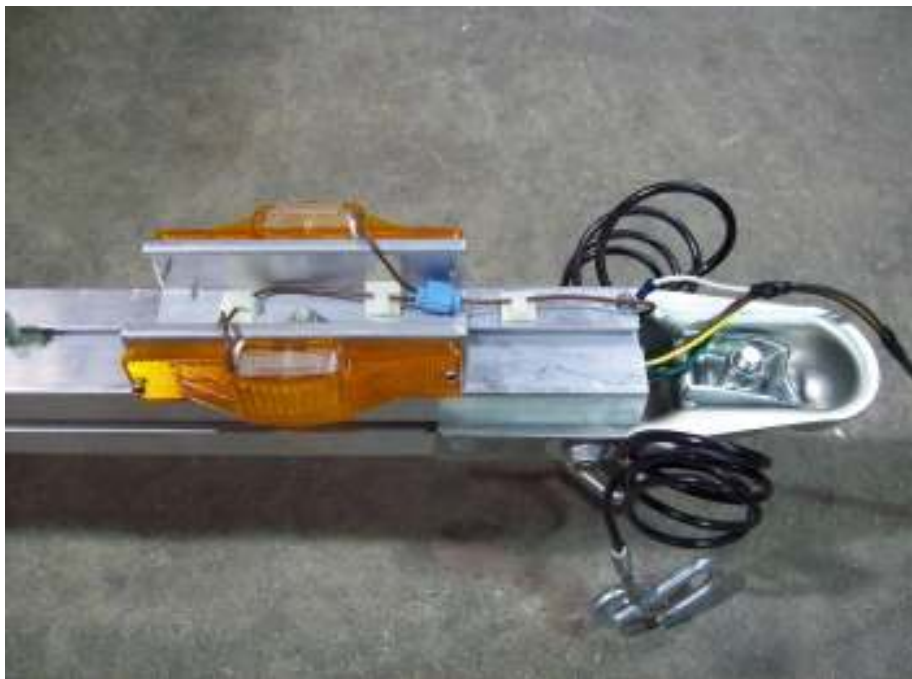
Cut the exposed strands of wire off of the end of the brown wire on the right (passenger side) running light.



Measure 34" back from the front plug on the green/brown wire and separate the wires with a knife. Be sure not to cut through the casing.



Pass the brown wire through the open slot in the second blue connector at this location. The green wire will rest just outside the connector. Insert the brown wire from the running lights into the closed side of the connector and push the spade down and close cover as previously described. This will make the connection from the main harness to both running light.



Locate the adhesive backed clamps. Install them as shown and run the brown wire from the running lights through them. Tuck the excess harness inside the tongue.



Insert skid with T-bolt into tongue section and over top of the other T-bolt already there. Re-install nut and tighten in position.

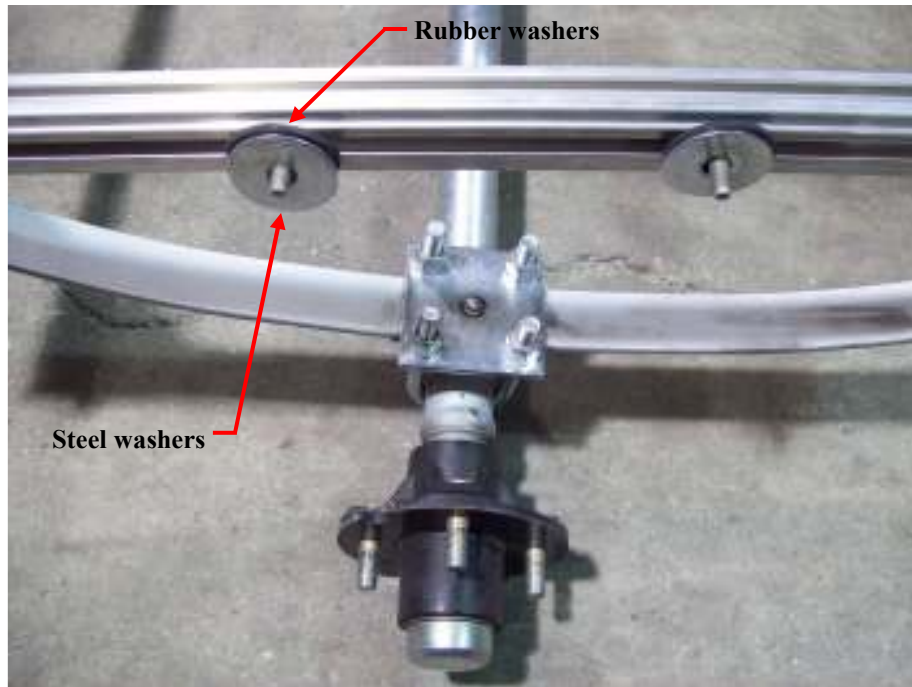
Fenders



Locate the fenders, 8) large steel washers, 4) rubber washers, 4) 1 1/8" T-bolts and 4) nuts.



Insert two 1 1/8" T-bolts into the side rail.



Slide the T-bolts into position over the tire and 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.

Bow stand



Locate the bow stand. Bow stand handles are mounted on the outside of the bow roll for shipping purposes only.



Unbolt the handles and move them to the inside as shown.



Remove the two remaining nuts on either side of the front tongue section.



Install the bow stand with the roll facing the rear of the trailer and the handles facing forward as shown. Re-install nuts and tighten. Final location of the bow stand will be determined when the boat is fitted to the trailer.

Wheels



Locate the wheels and the 8) lug nuts.



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



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

Web strap clips



Locate the last two web strap clips.



Install a web strap clip on each side rail at the back as shown. Then tighten nuts.

Finished trailer



KJM 12/18/13 REV:2/18/14