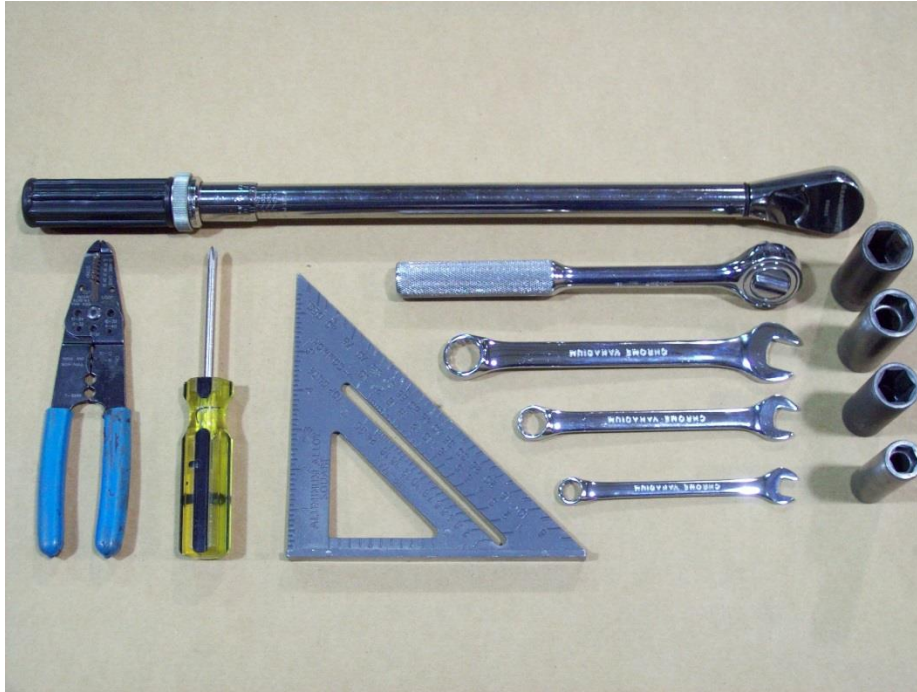


# SUT-250-S



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 foot pounds.**

**\*Check all lights before towing.**

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

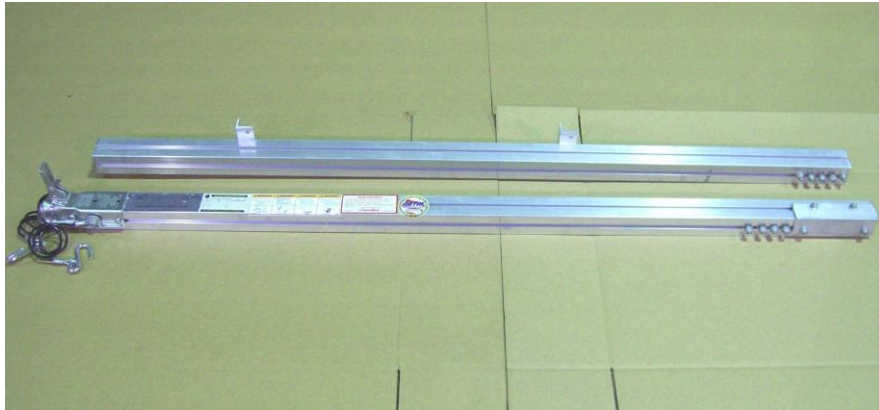
**\*Re-torque wheel nuts after first 25 miles to 80 ft. pounds and periodically thereafter.**

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

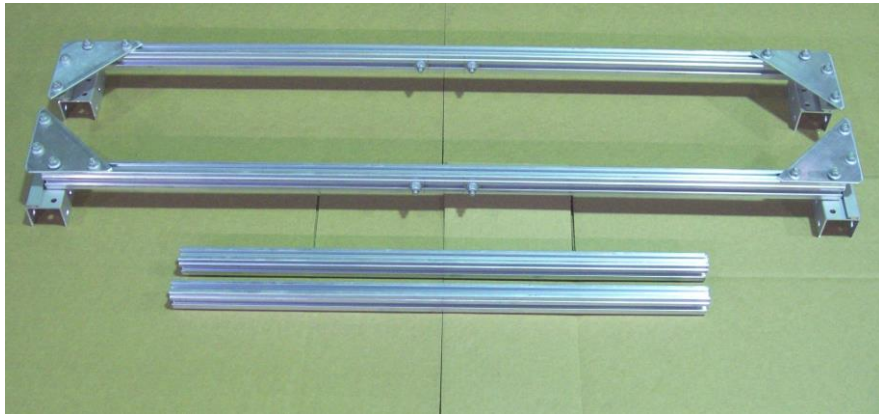
**Incorrect assembly or modifications to your trailer will void any specific or implied warranty.**

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

**UNPACK AND IDENTIFY THE FOLLOWING PARTS.**



Tongue section and angle bracket for cross members.



Side Rails and cross members



Axle assembly, springs and U bolt hardware.



Fenders and tires



Rollers winch post and braces.

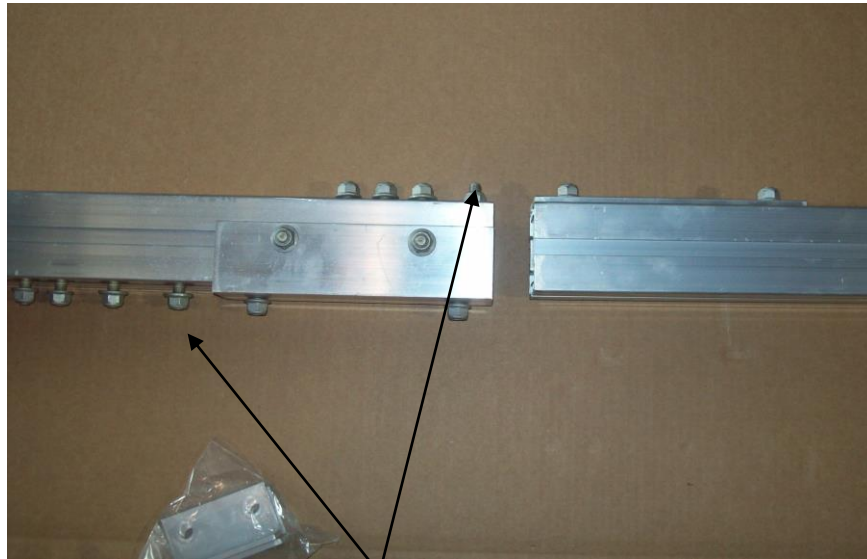


Lights, brackets, harness, and hardware



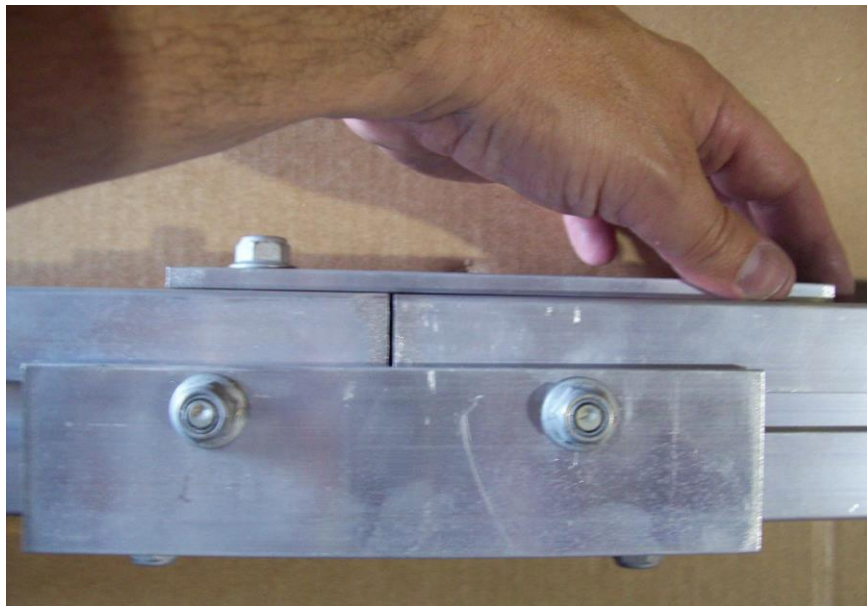
Skid and side marker bracket

## Tongue assembly



T-bolts

Unwrap the two tongue sections and loosen the nuts on the splice plates. Also make sure that the front tongue section has 4 T-bolts on each side before the tongue sections go together.

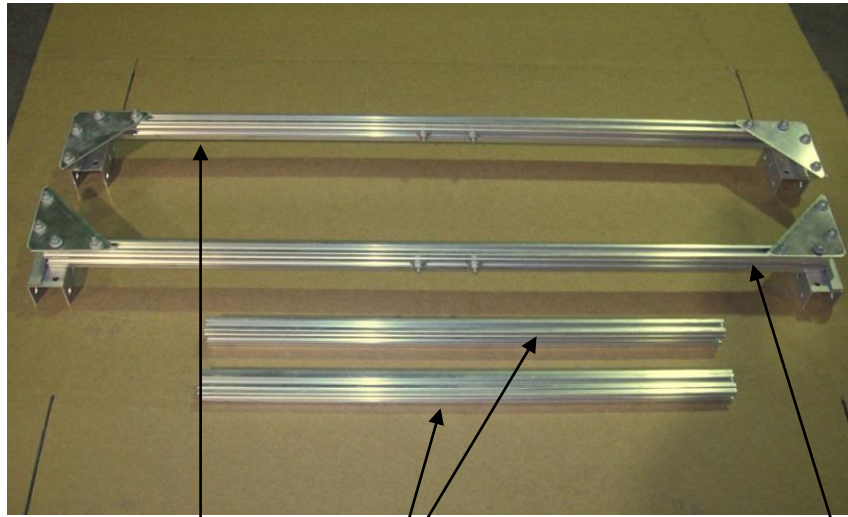


Slide splice plates over the adjacent tongue section until the plates are centered between the tongue sections.



Tighten nuts.

## Frame Assembly



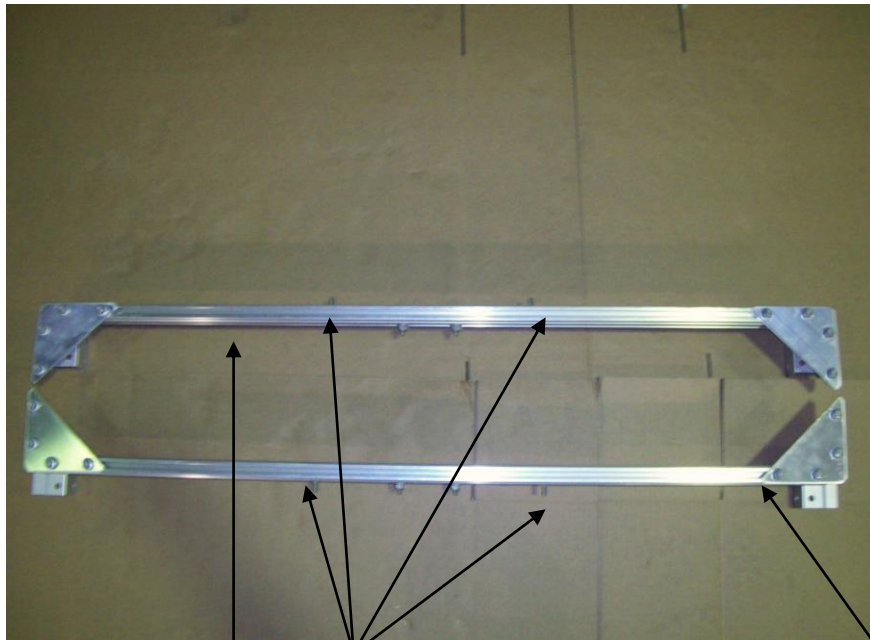
Front cross member

Side rails

Rear cross member



Locate four T-bolts



Front cross member

T-Bolts

Rear cross member

Install two T-bolts on the back side of the rear cross member. Then two T-bolts on the forward side of the front cross member.

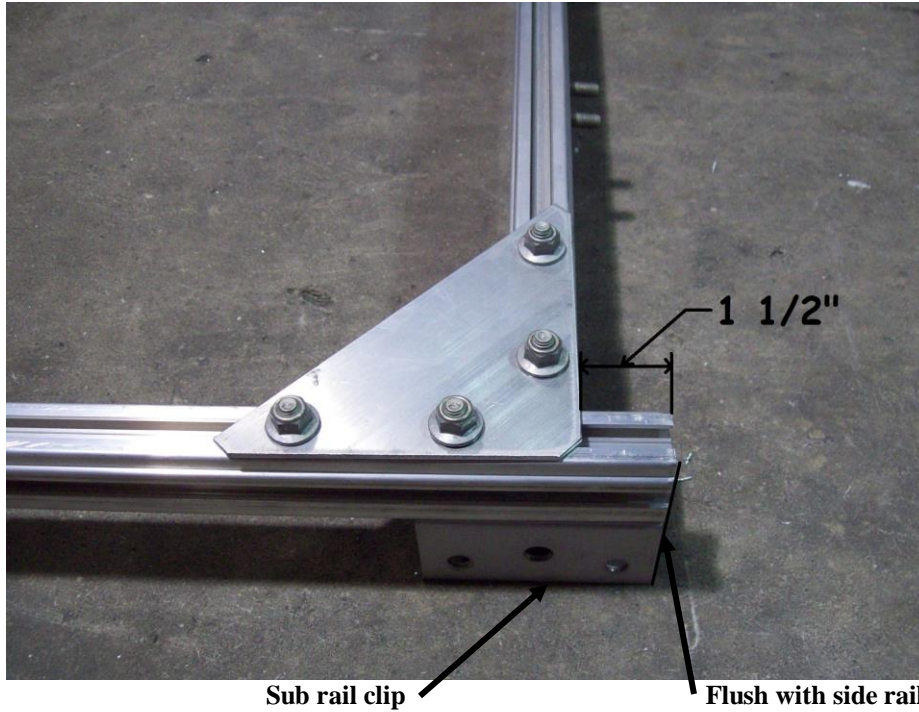


Locate the front cross member and slide it into the front of the side rail.

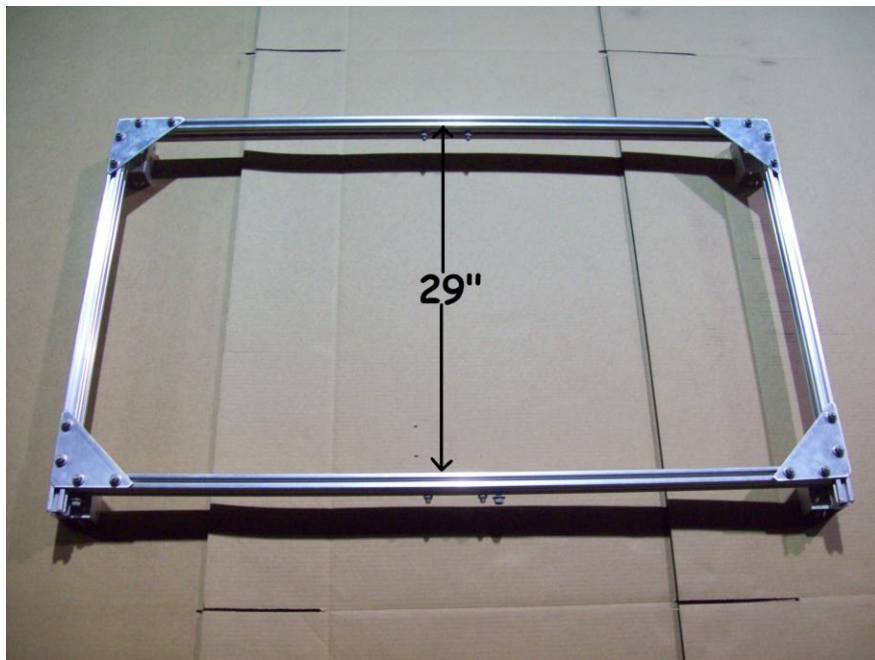


Add the rear cross member to the side rail. Then attach the other side rail to the cross members.





The side rail should be flush with the sub rail clip as shown. The side rail should be about 1 1/2" past the rear cross member when in position. Square the frame and tighten all the corner brackets.



Your frame should look like this. From the inside of the front cross member to the rear cross member the distance should be 29". If not assembled properly, the spring assembly will not have enough arch to work correctly.

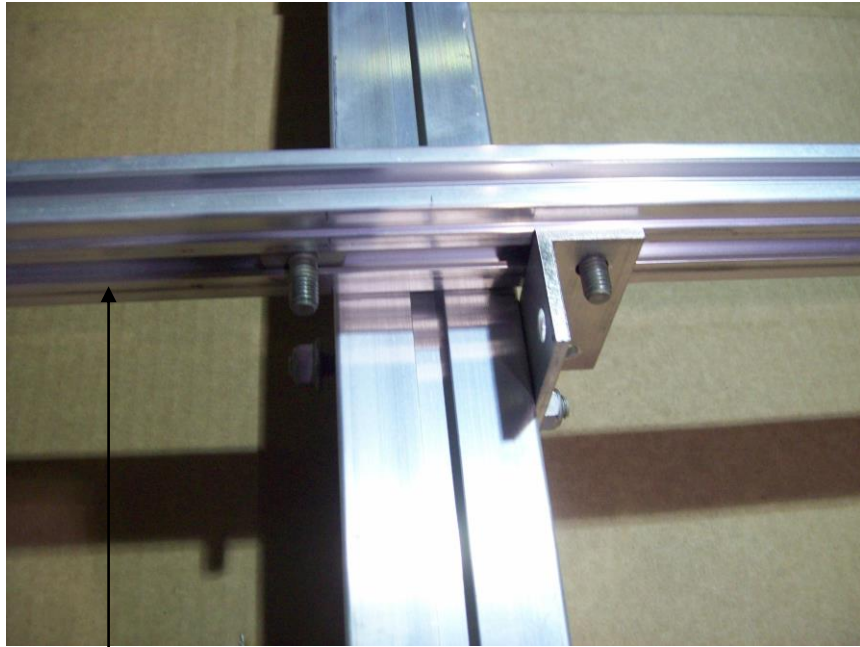
## Frame Attachment



Locate the two angle brackets to install the frame to the tongue.

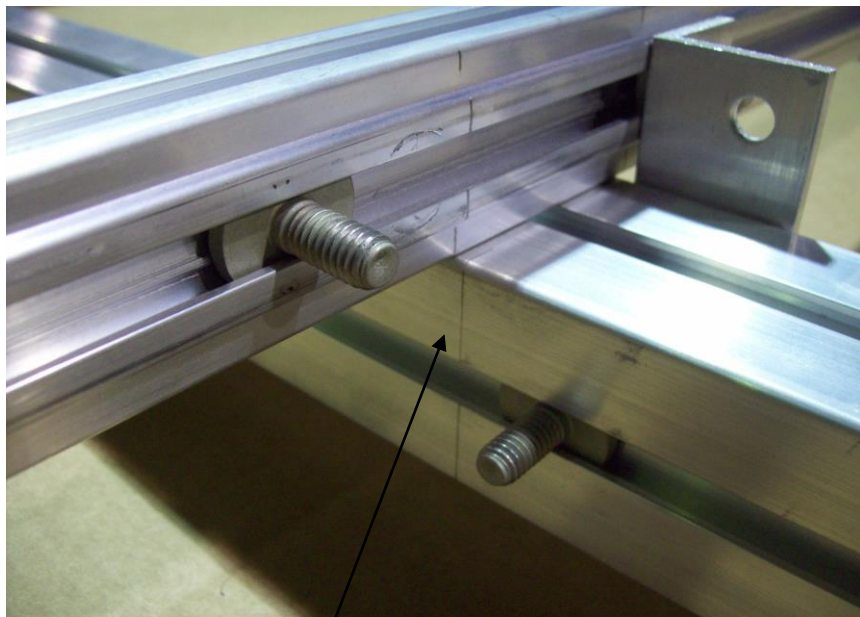


Slide two T-bolts forward from the left side of the rear tongue section to be used to mount the angle brackets to the frame.



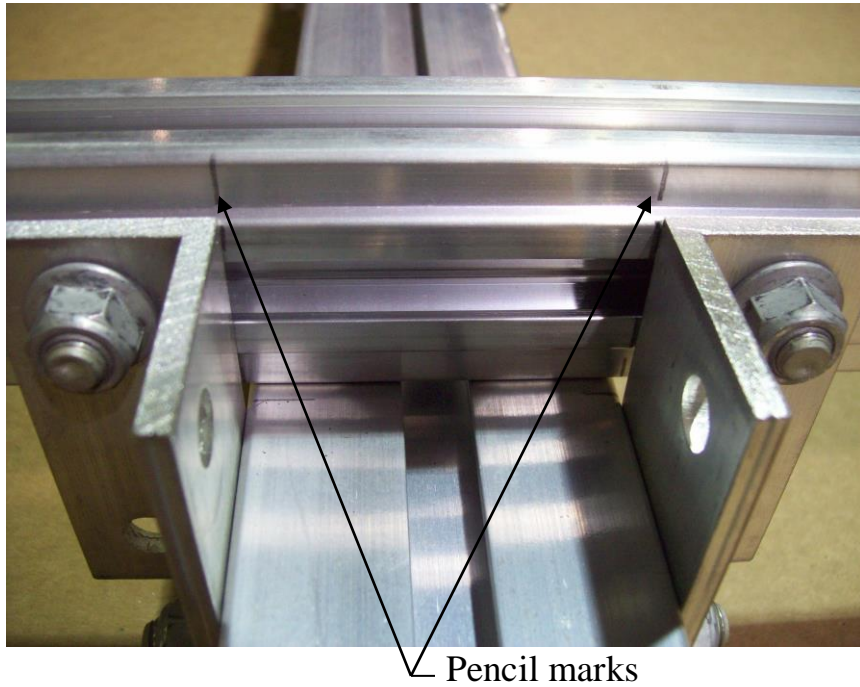
└ Rear cross member shown

Set the frame assembly on top of the tongue with the attaching brackets behind the cross members.



└ Pencil marks

Take the angle brackets and install them on the tongue and front and rear cross members. Line up the back edge of the brackets with the pencil marks on the tongue.

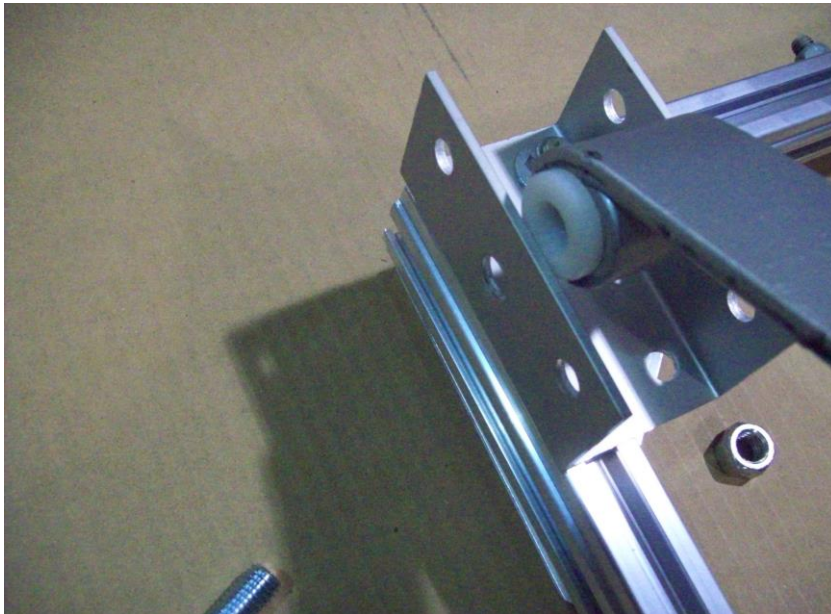
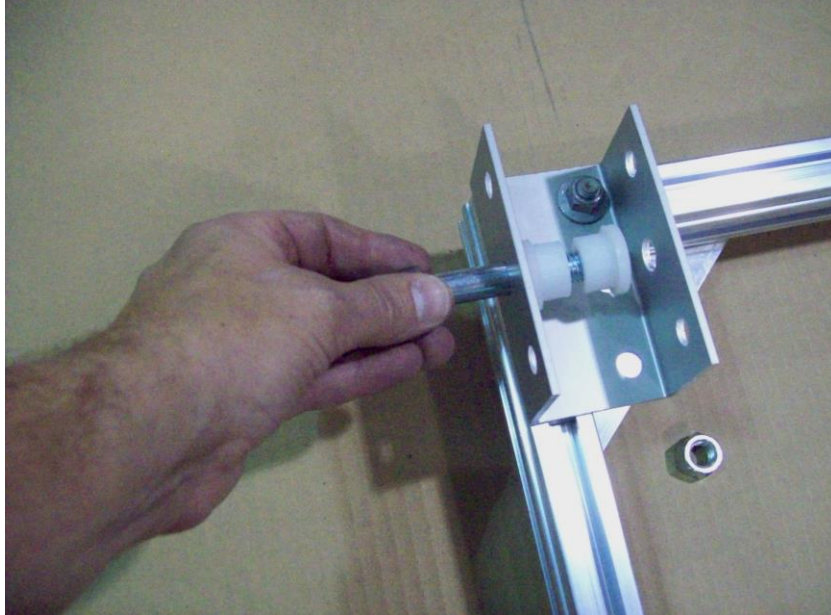


Line up the tongue with the pencil marks on the cross members. Tighten nuts.

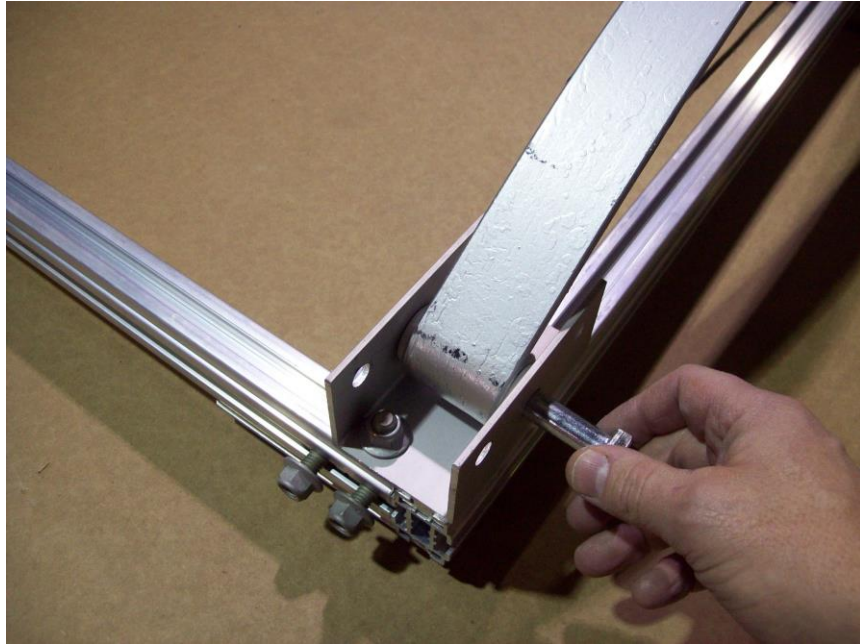


Your trailer should look like this at this point.

## Spring Installation



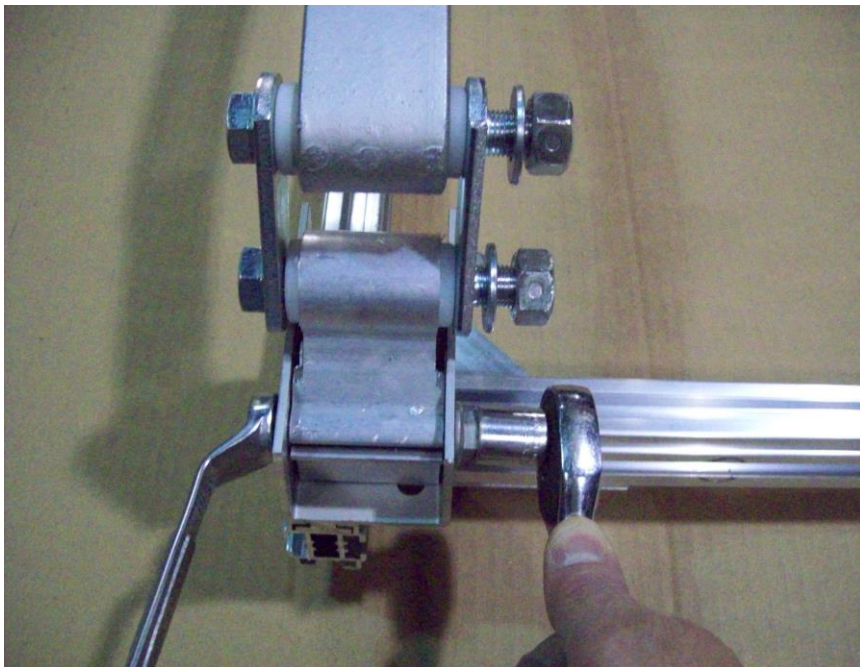
Remove the bolt, nut and bushings from the front sub rail. Take the two bushing and install them into the eye of the leaf spring as shown. Insert the spring and bushing back into the sub rail.



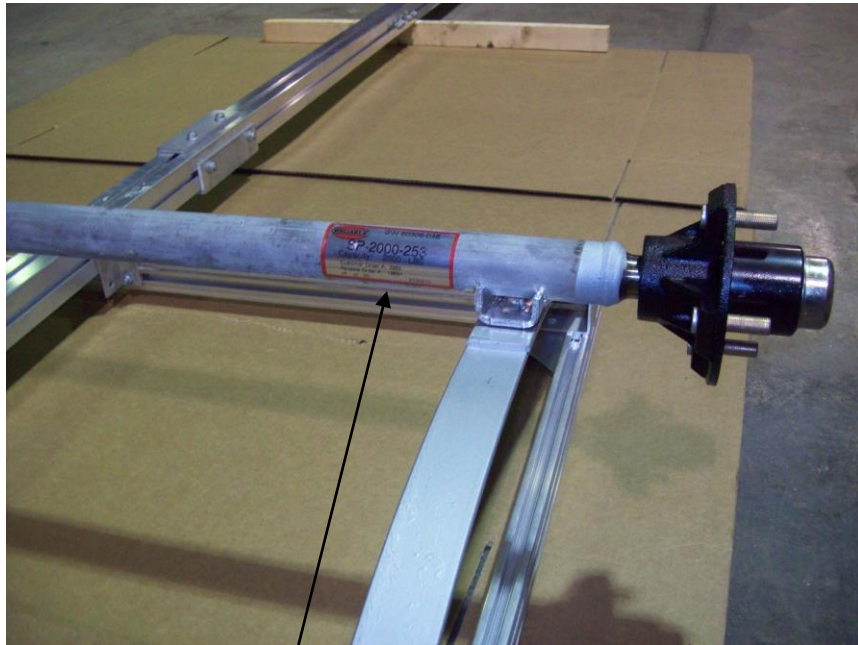
Frame is shown up side down



Reinstall the nut and bolt into the center hole of the sub rail with the nut towards 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.



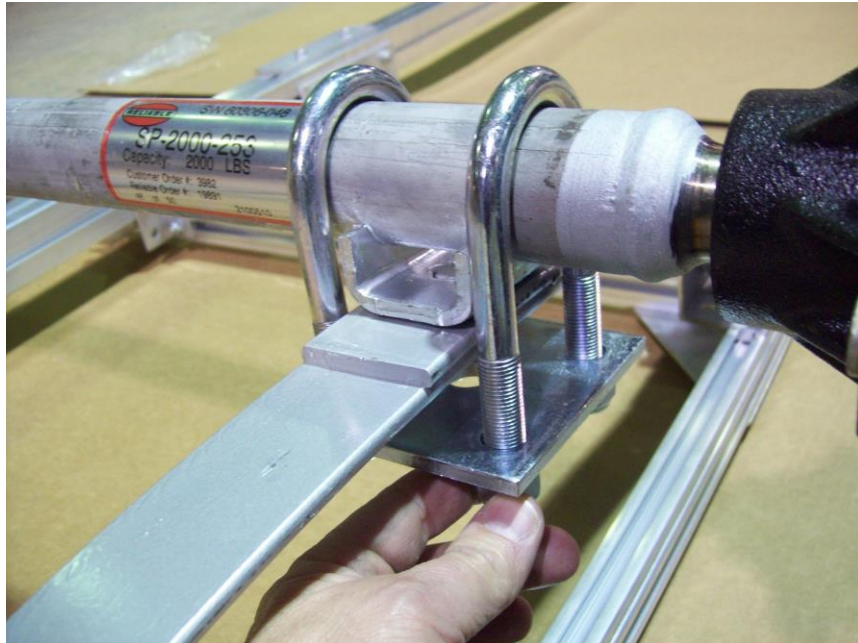
Serial plate

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 and tie plates.

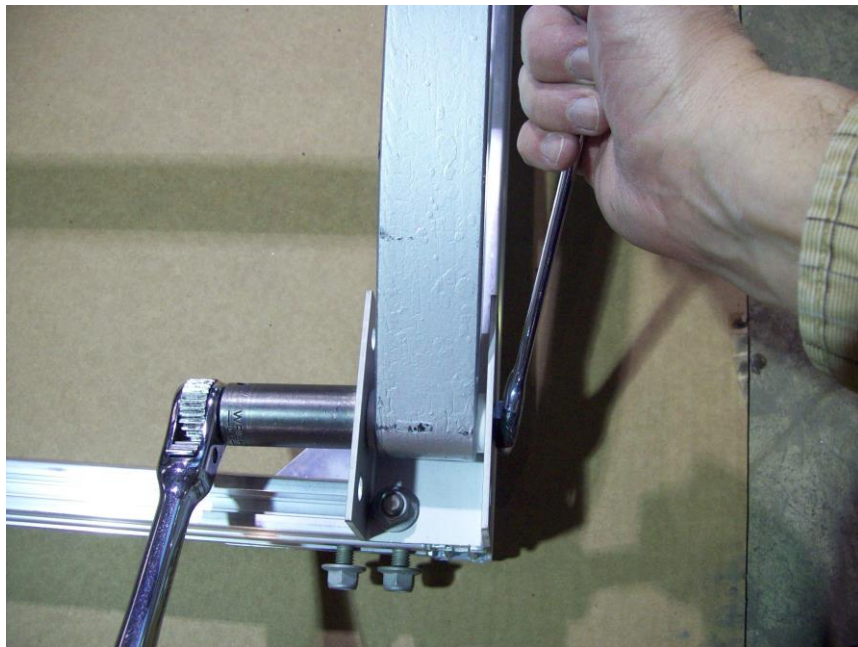




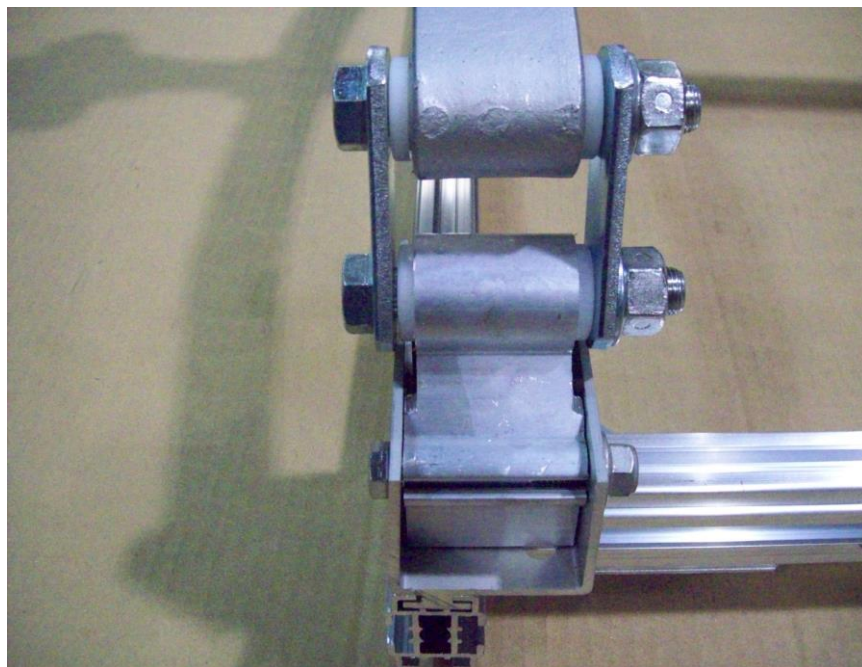
Install the U-bolts and tie plates as shown.



Install the nuts and tighten them evenly.



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

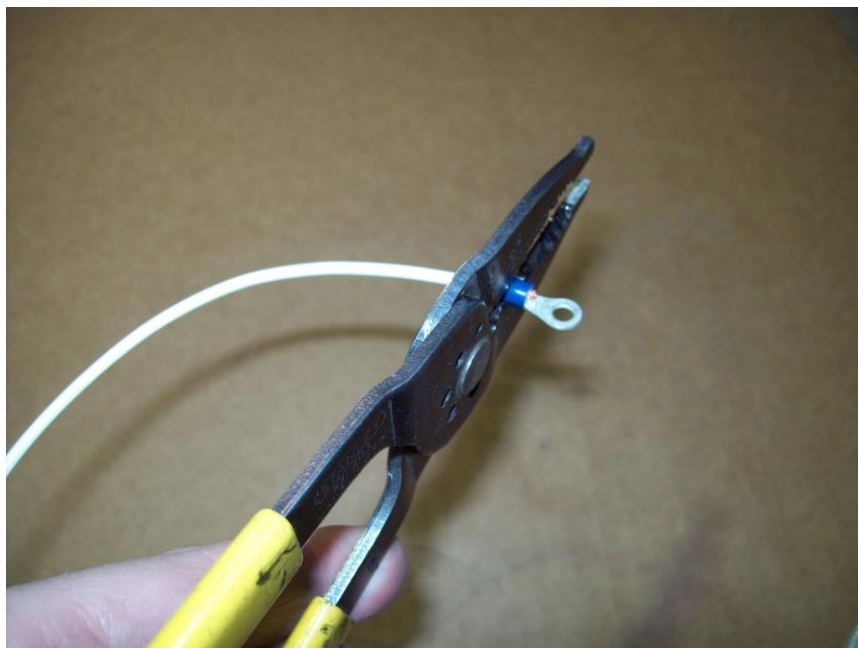


On the rear shackle, do not over tighten as this will not allow the suspension to move properly.

## Wiring



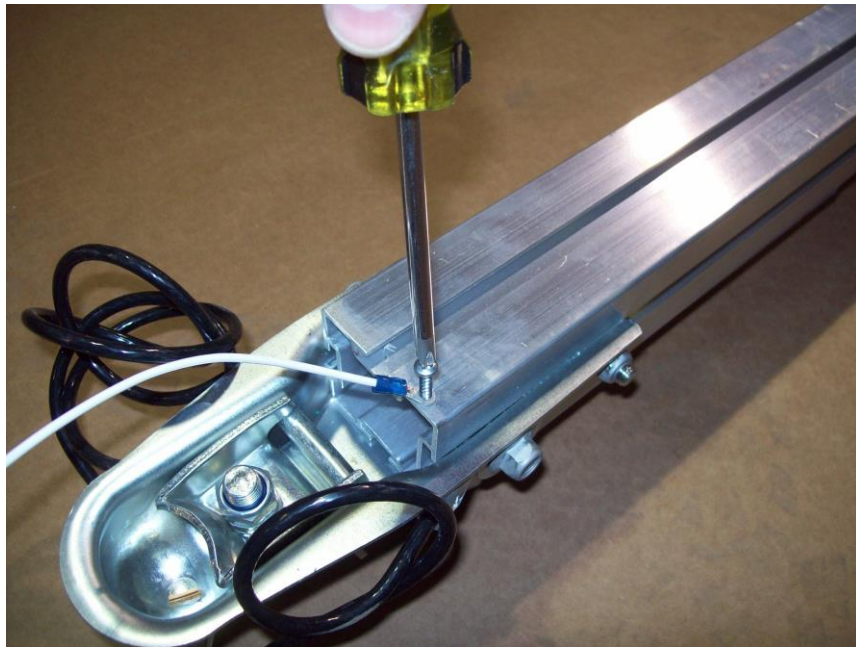
Locate harness and ring terminal.



Cut the white ground wire to 24" long. Strip the casing from the wire and install the ring terminal.



Locate the  $\frac{3}{4}$ " long Philips screw.



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.

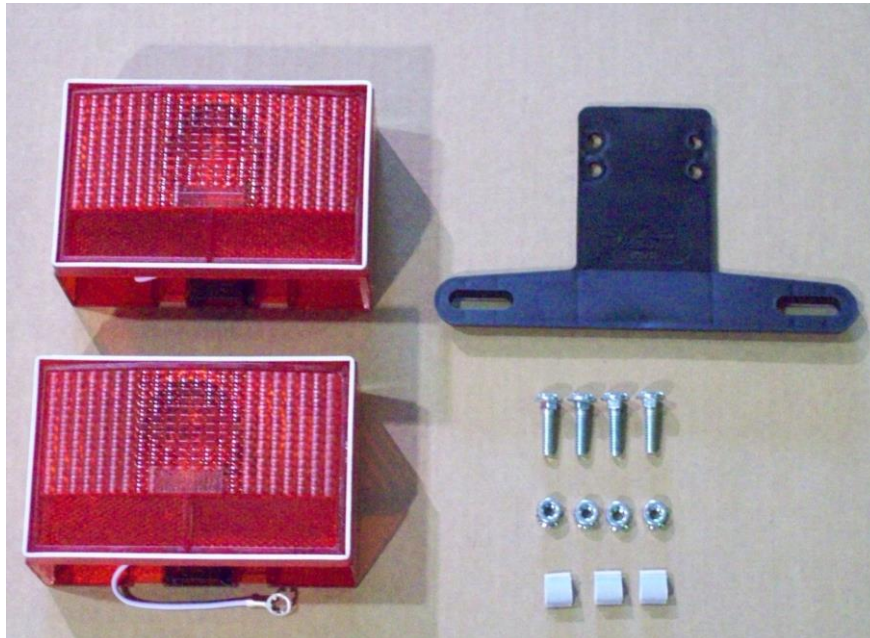


Attach both wires of the harness to the end of the tape measure with either tape or a tie. Retract the tape measure until it comes out the back of the tongue with both wires attached.

## Tail light brackets, tail lights



Locate the tail light brackets.



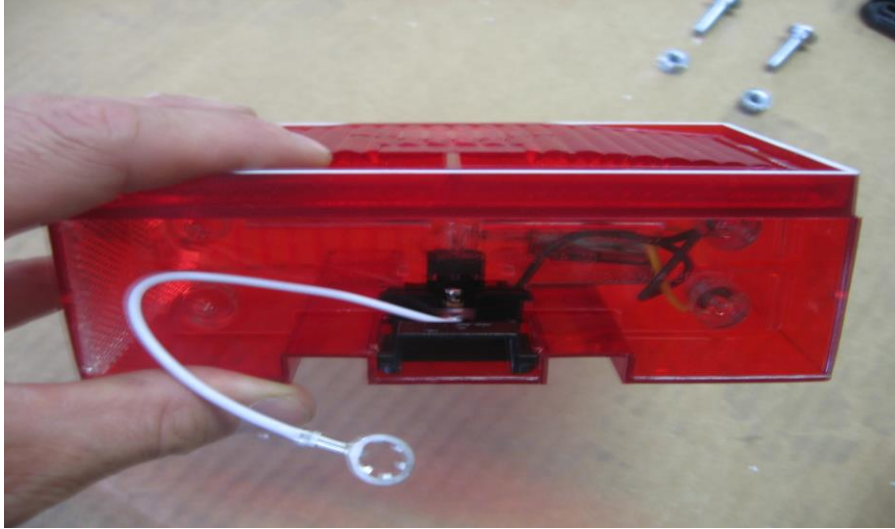
Locate the tail lights, carriage bolts, nuts and license plate bracket.



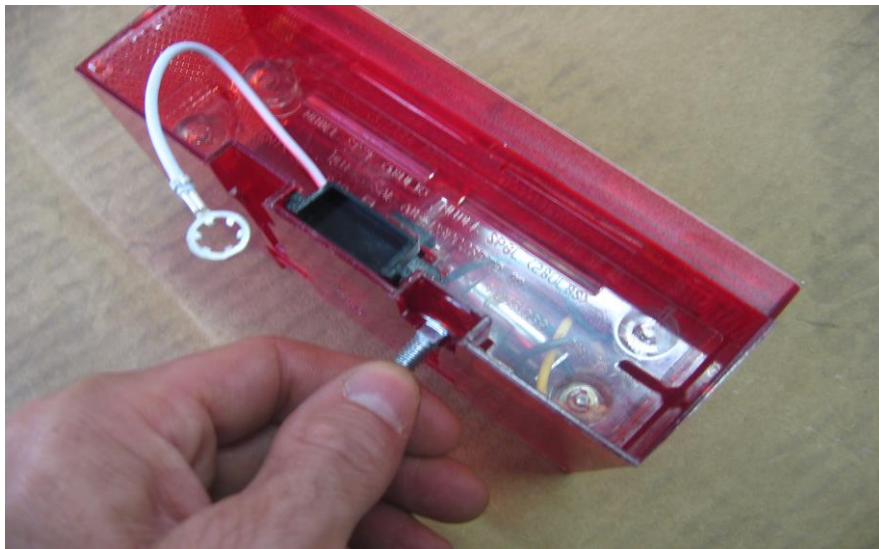
Slide one T-bolt from each side of the rear tongue section towards the front of the trailer. Install tail light brackets and position them 8" from the rear of the tongue.



Once tail light brackets are in position tighten nuts.



The light with the yellow wires is for the left (driver's side) of the trailer.

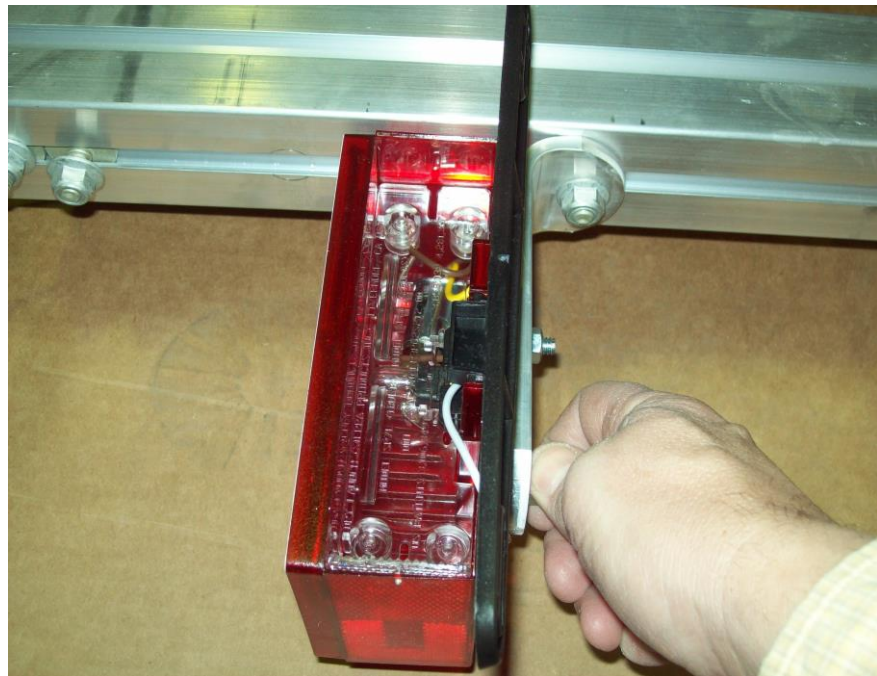


Slide the carriage bolts into the slots in the back of the tail lights.





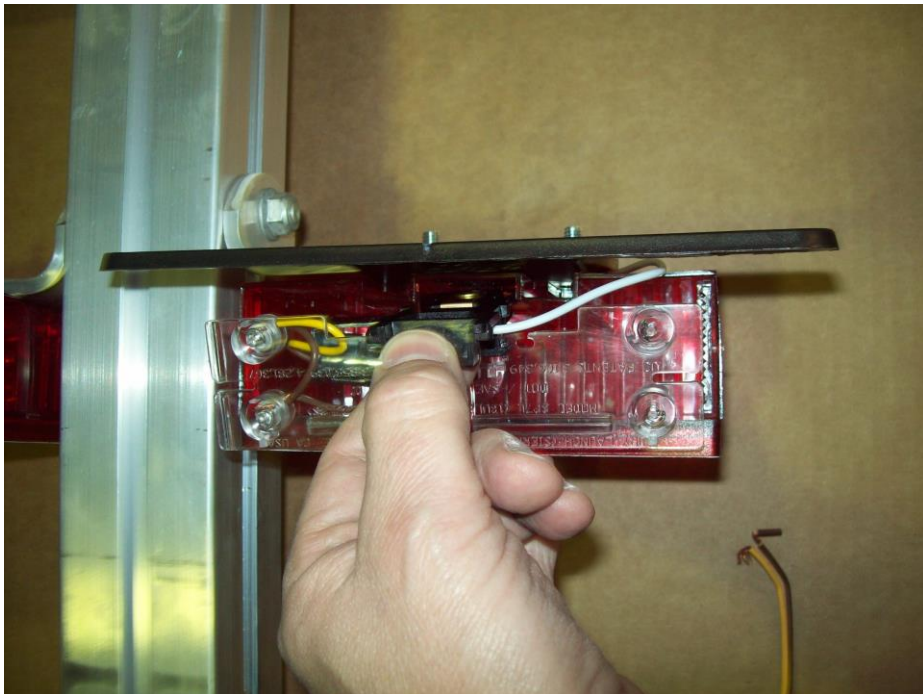
Repeat the process for the right side as shown.



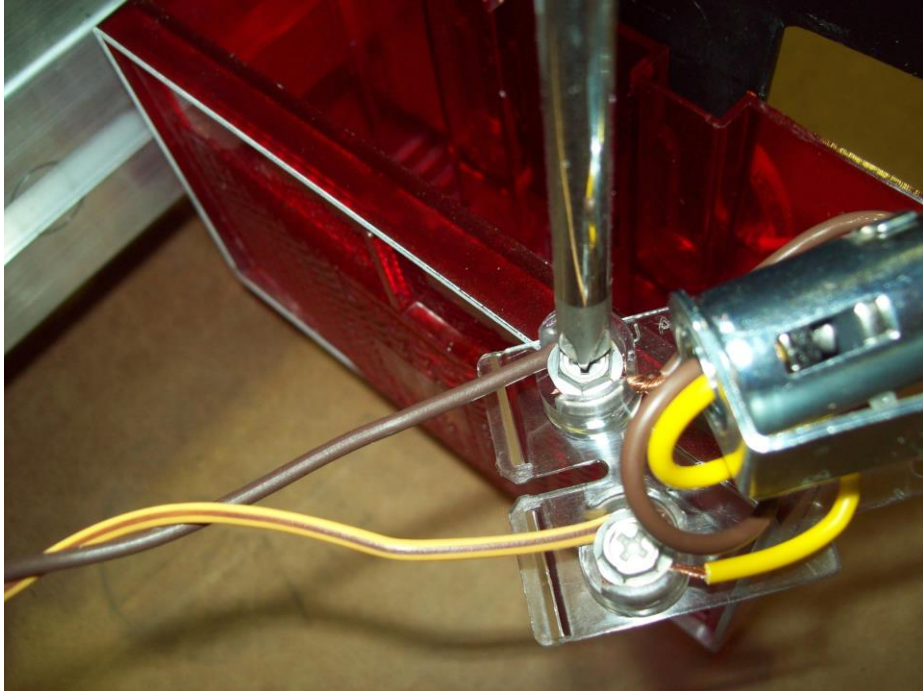
Install the left tail light with the license plate holder between the light and the bracket. Repeat for the other side. Tighten nuts but don't over tighten them.



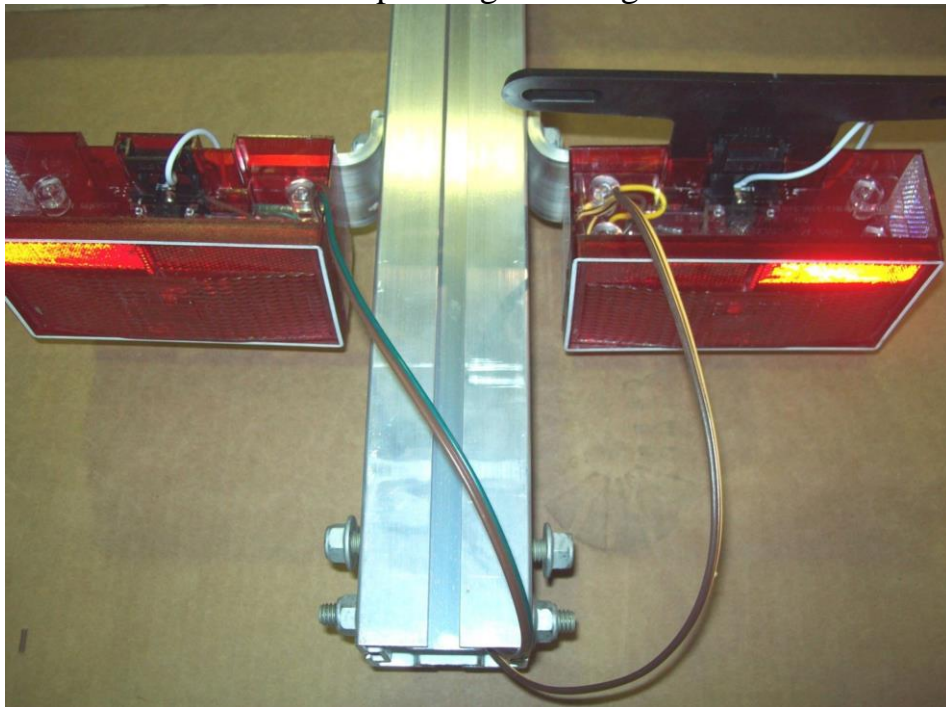
Shown up side down



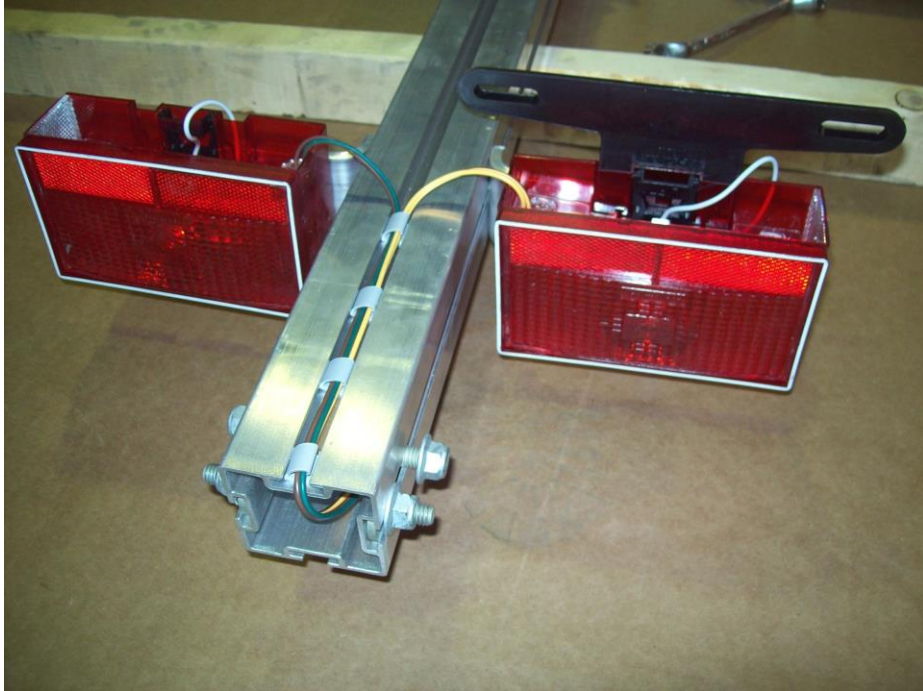
Locate the black tab on the underside of the tail light. Move the tab toward the rear of the trailer and pull up releasing the bulb assembly from the light housing.



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

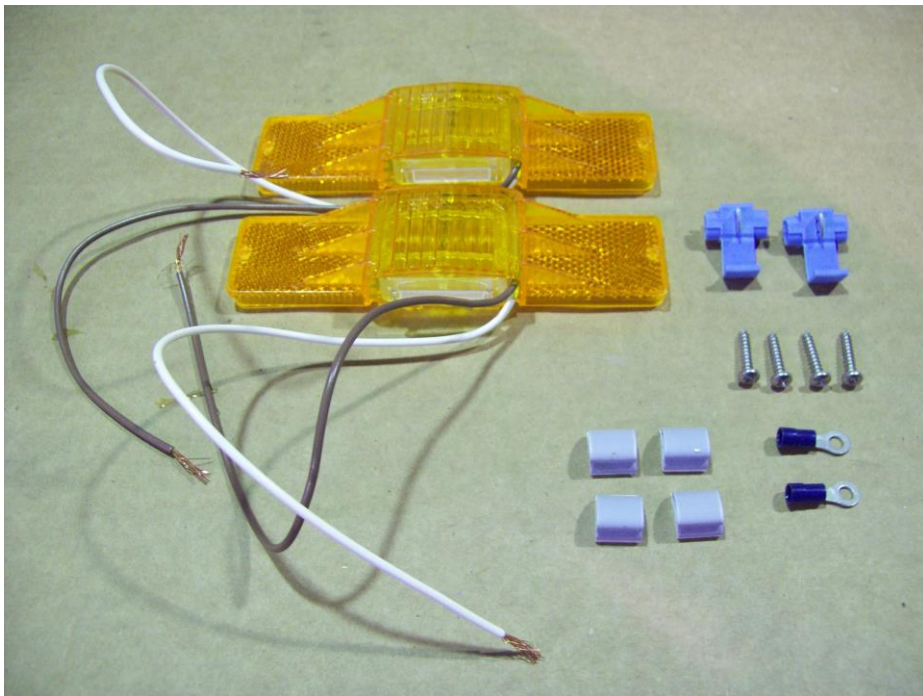


Re-install the bulb assembly into the light housing making sure to route the wires through the slot in the base of the bulb assembly.

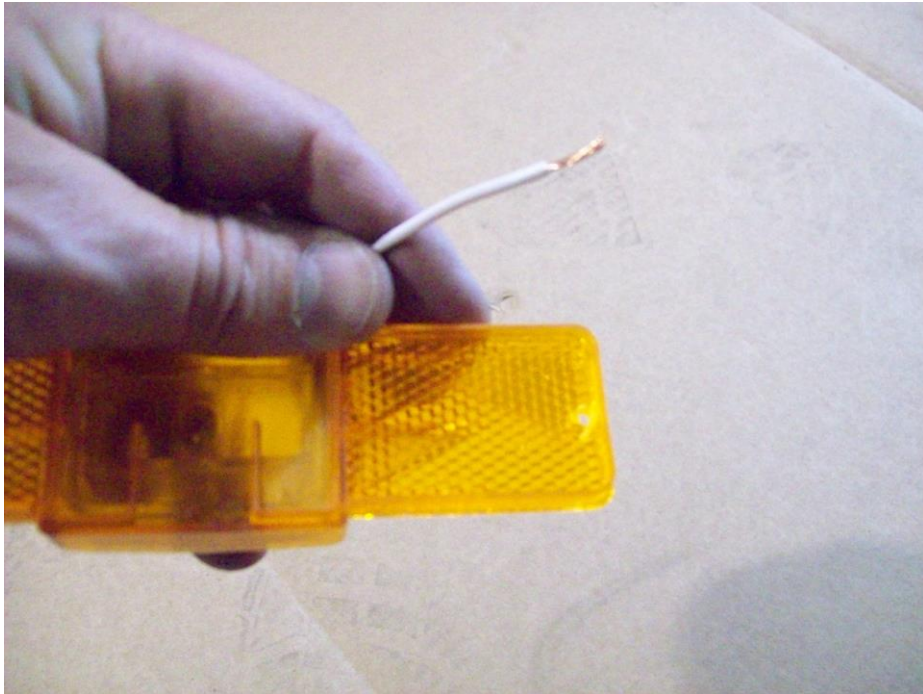
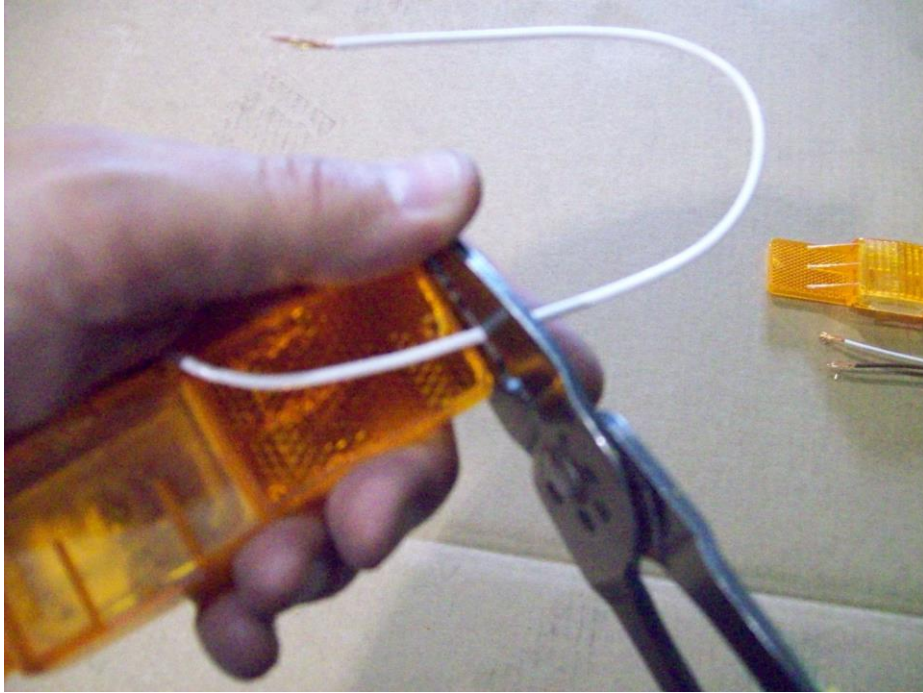


Install adhesive backed clamps in the locations shown and route the wires through them.

### Running lights, bracket and skid.



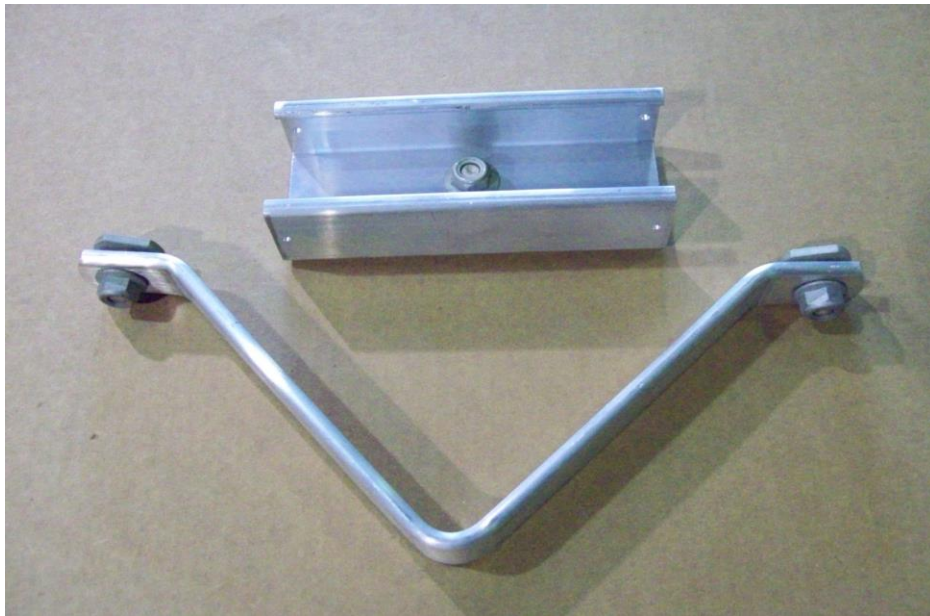
Locate the two amber running lights, four small Philips screws, adhesive backed clamps, two ring terminals, and two blue connectors.



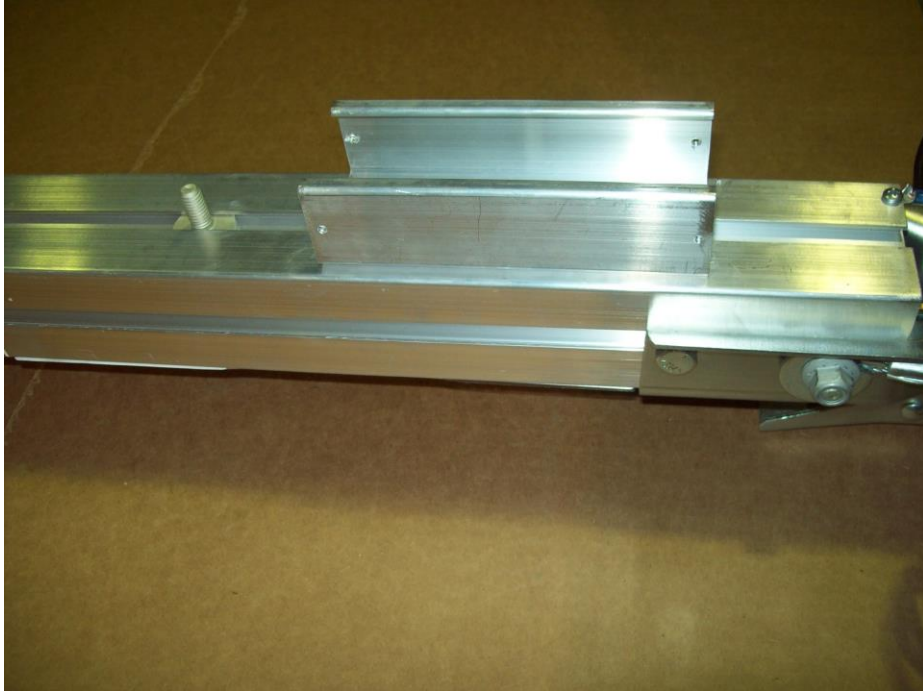
Cut approximately 8 ½” off of the white wires on both running lights. Strip ¼” of insulation from the wire.



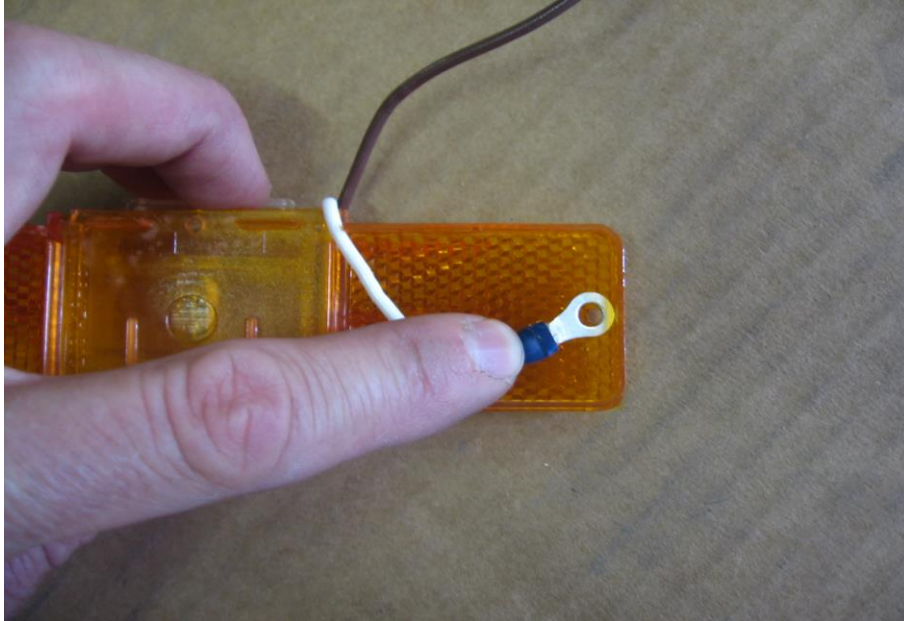
Install the ring terminals by crimping the terminal onto the bare wire.



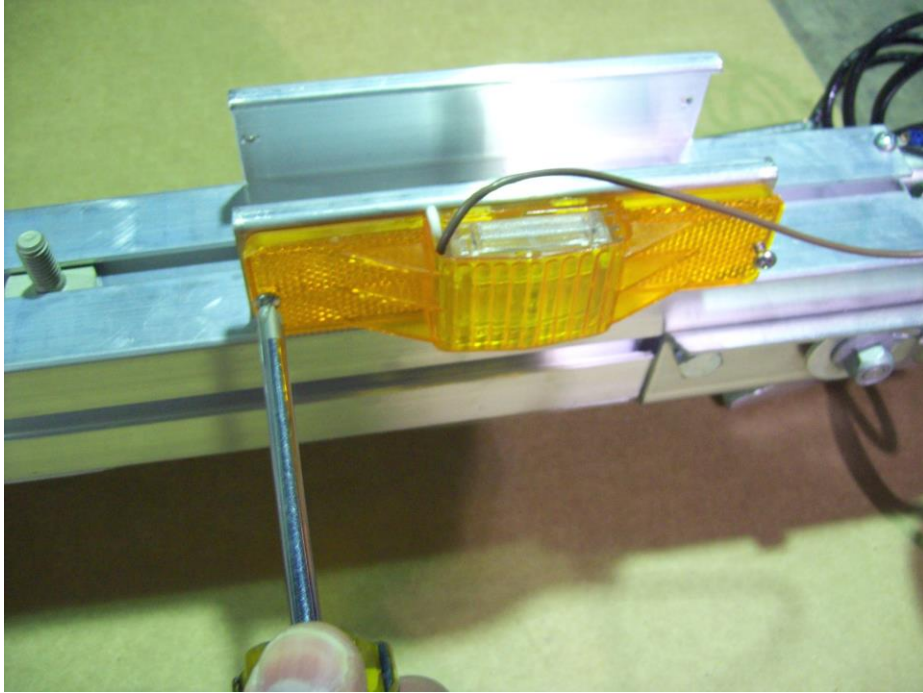
Locate the skid and light bracket.



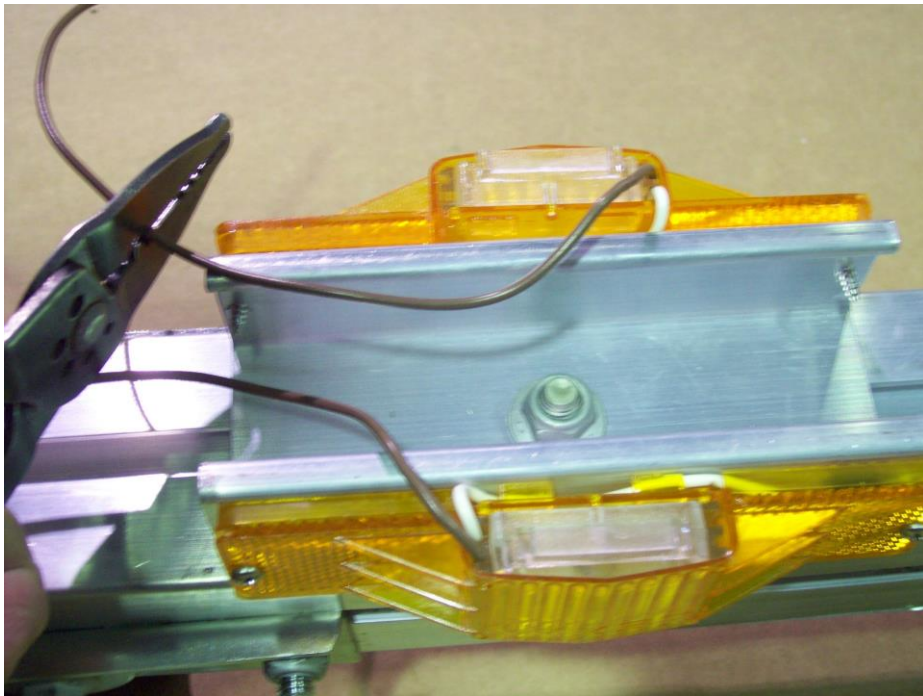
Take one T-bolt off the skid and slide it in the bottom of the tongue. Set the skid aside for now. Install the bracket for the lights and position as shown.



Align the ring terminals with the screw hole nearest the wire on the back of the running 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.

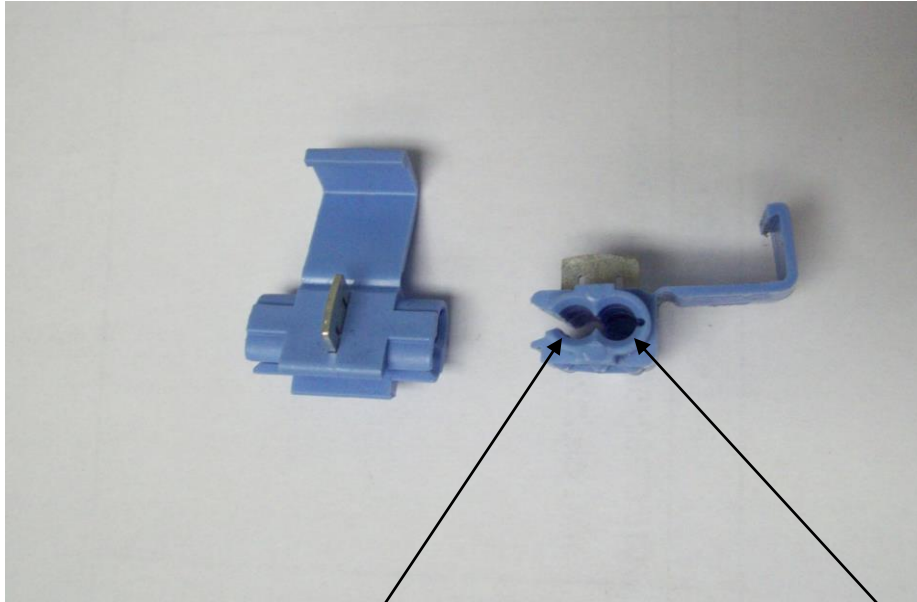


Install the running lights into the pre-drilled holes in the running light bracket using a Philips screwdriver. Be sure the screw is through the ring terminal on the back side of the lights. This will supply a ground to the lights. DO NOT OVER TIGHTEN



Cut 6" off of the brown wire on the left (driver's side) running light. Do not strip the wire.

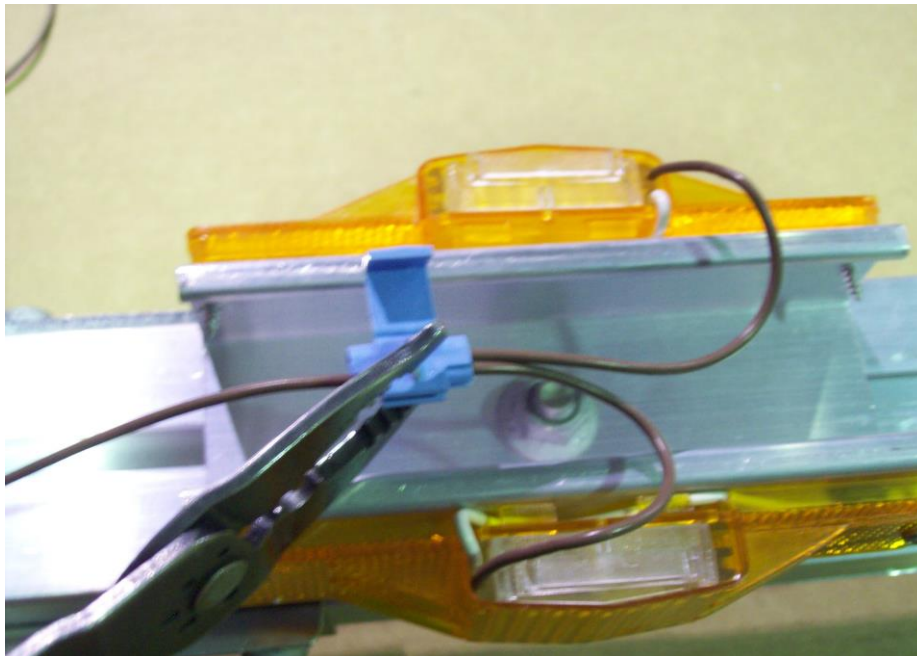




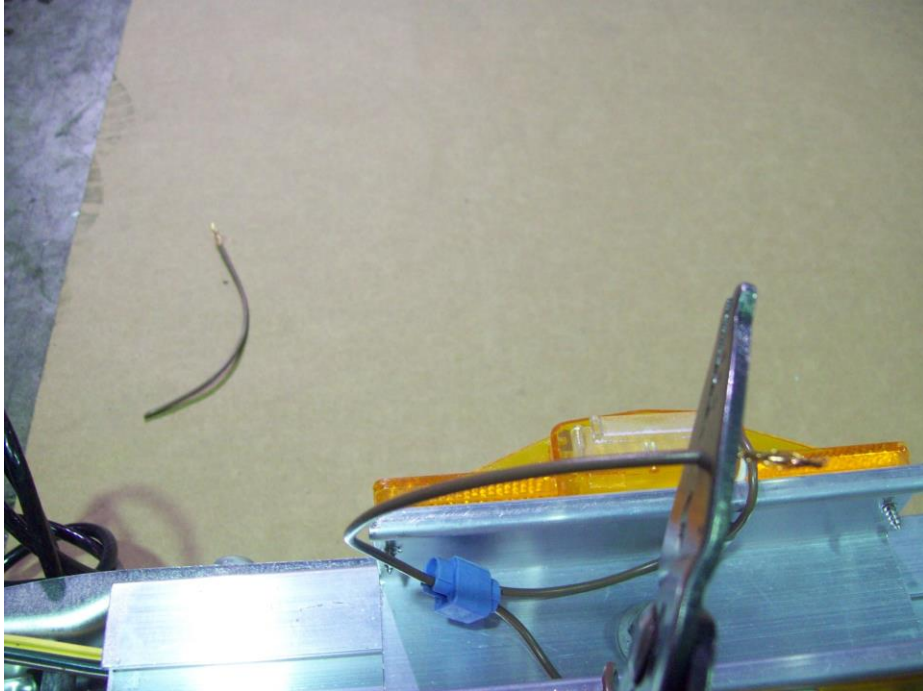
Harness passes through open hole.

Cut wire goes into closed off hole.

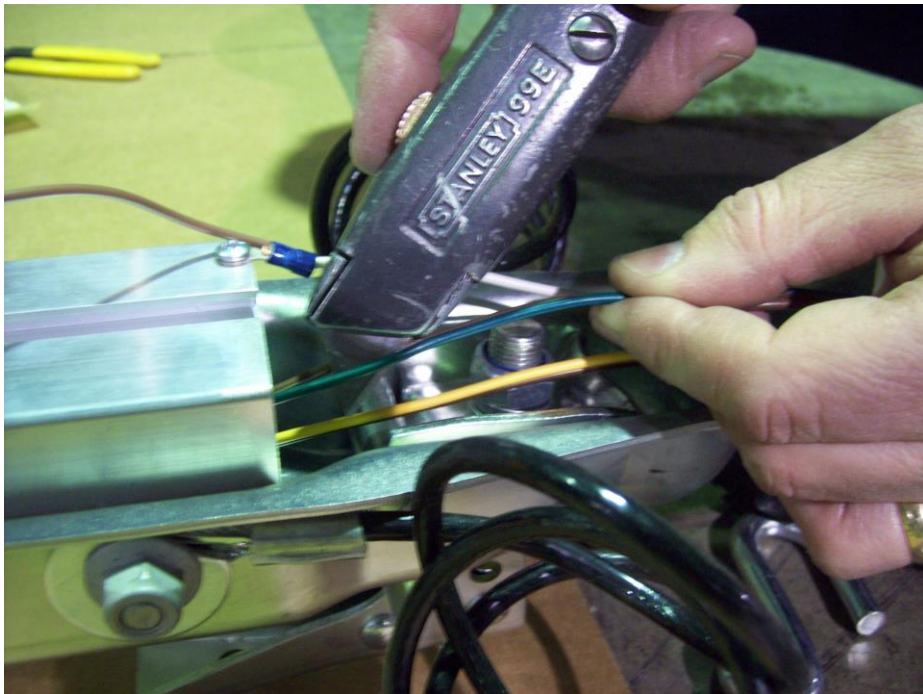
Insert brown wire that has been cut into the hole in the connector closest to the hinge. This hole does not pass all the way through. The wire should go in about  $\frac{1}{2}$ ". Pass the other wire through the remaining open slot in the connector at a point close to the running lights.



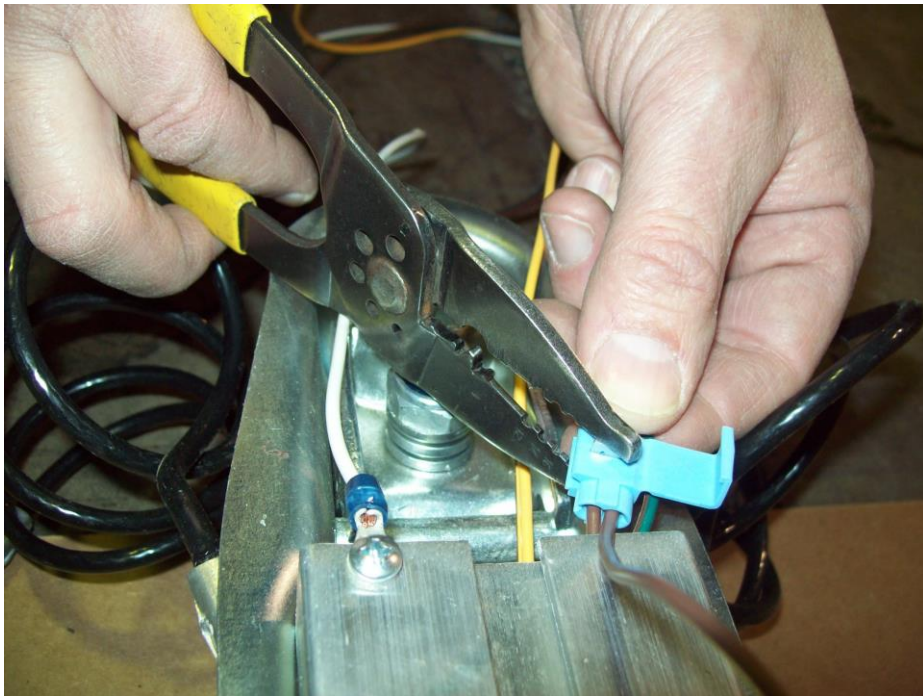
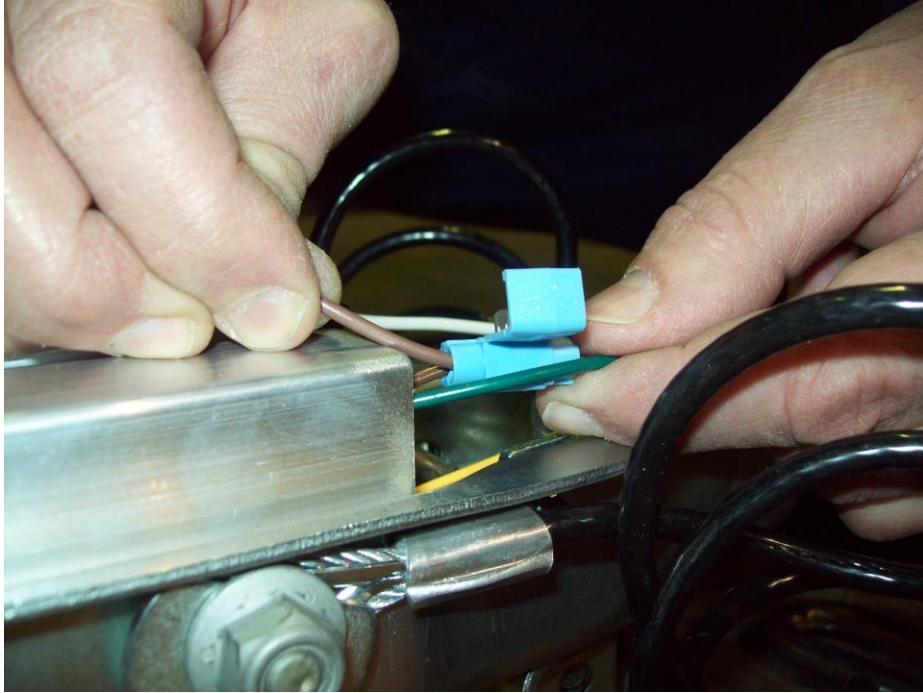
Use pliers to push the metal spade down until it is flush with the plastic. This is what makes the electrical connection between the two wires. Close the plastic cover of the connector over the spade until it snaps into position.



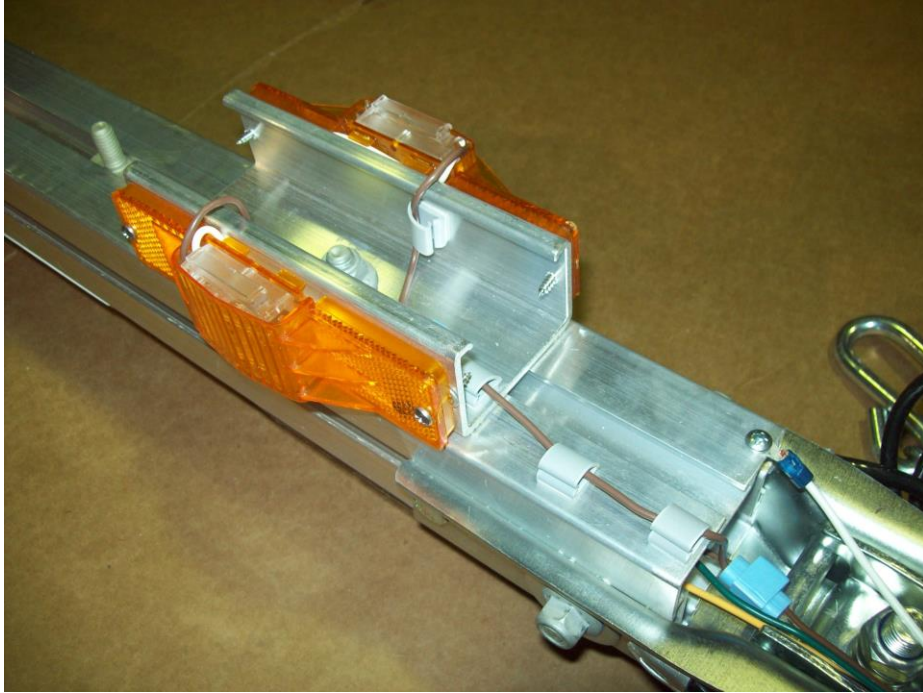
Cut the exposed strands of wire off of the end of the brown wire on the right (passenger side) running light.



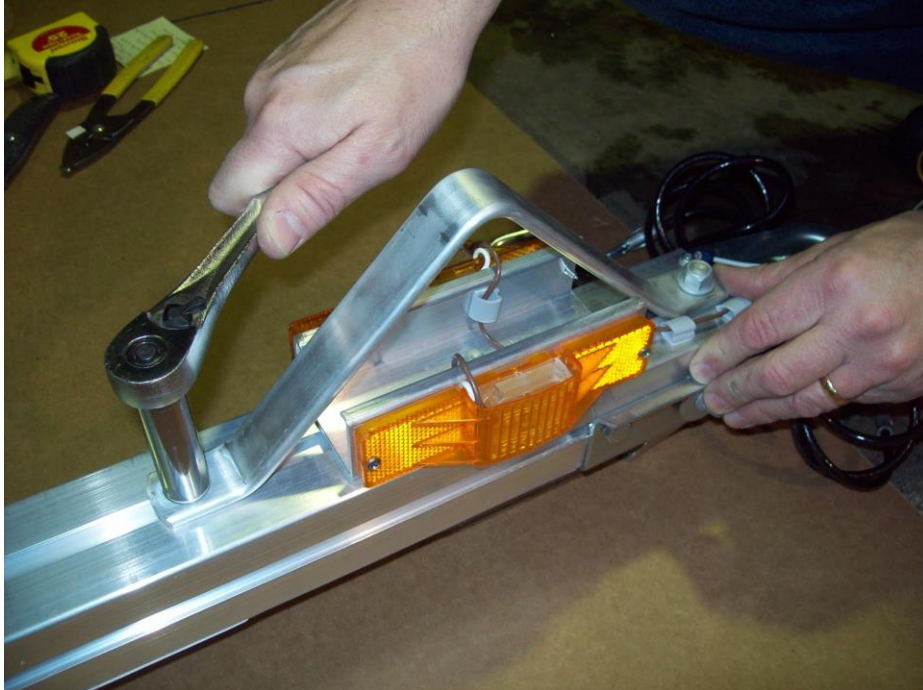
Cut the brown/green harness so it can be separated to accommodate the connector. Be care full not to cut through the wires. Also cut as close to the front of the tongue section as possible.



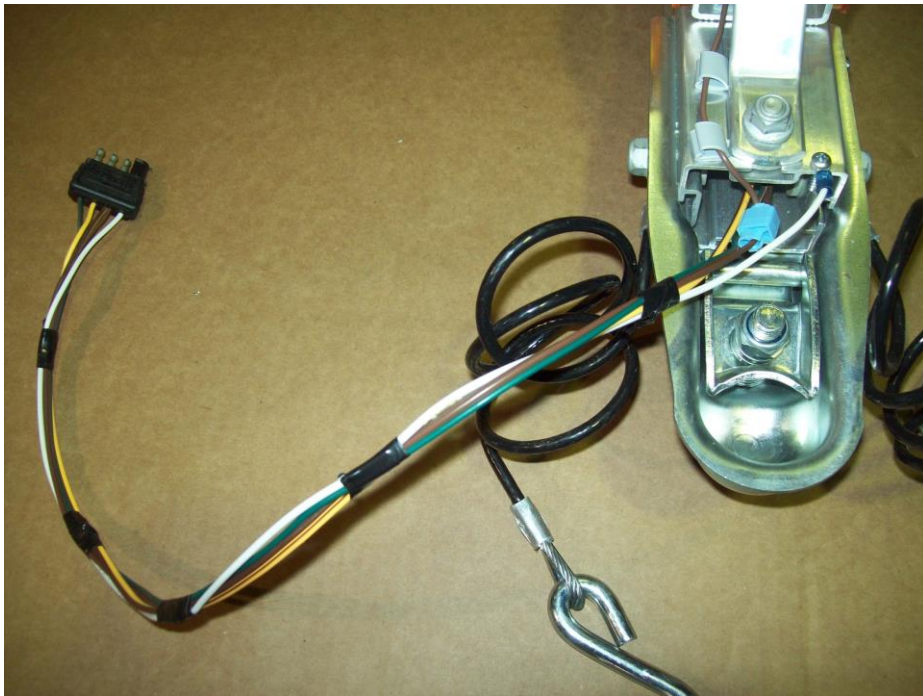
Pass the brown wire from the harness through the open slot in the connector at this location. The green wire will rest just outside the connector. Insert the brown wire from the running lights into the closed side of the connector and close the spade and cover as previously described. This will make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



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



Install the skid on the front tongue section now. Tighten the nuts for the skid in the location as shown.



Tape the harness as shown.

## Fender Installation



Locate fenders, washers, T-bolts, and nuts.



Locate (2) 1 1/8" T-bolts from the hardware bag and install them into the side rails. Slide them 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.



Locate 8 lug nuts, and wheels.



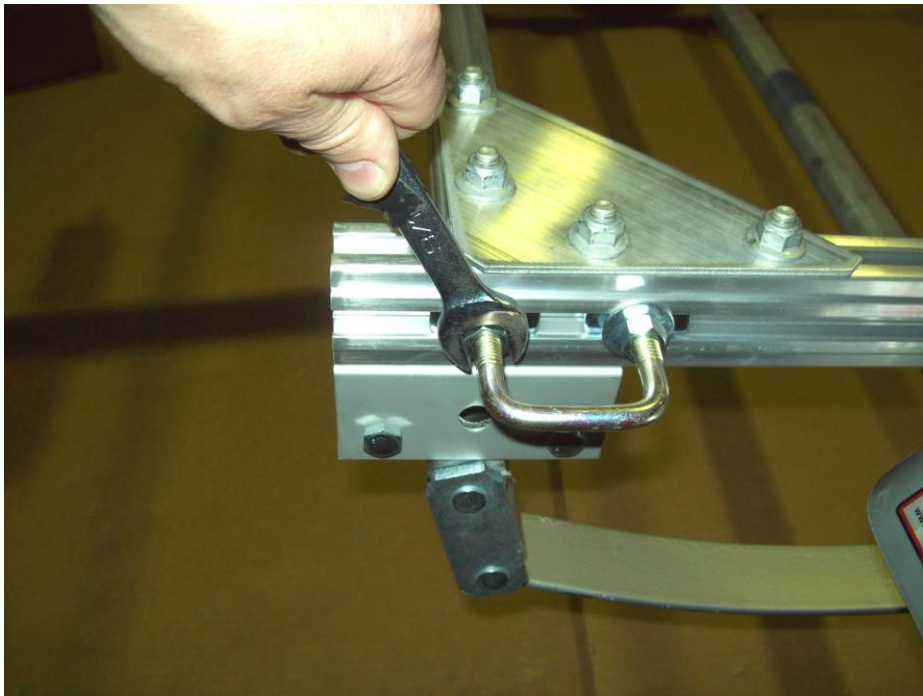
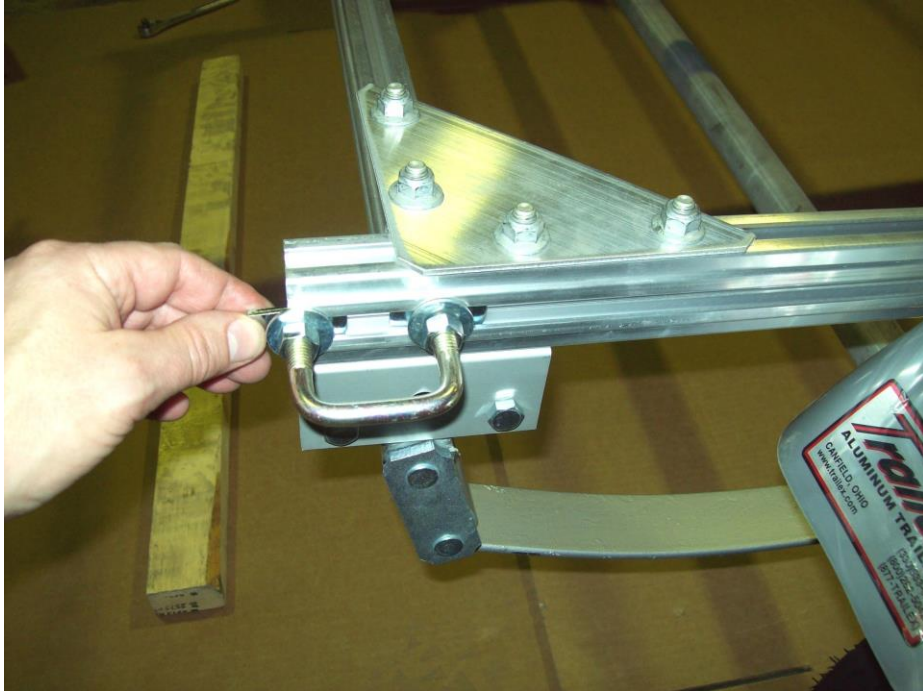
Install the wheels with the valve stems facing out. Install the lug nuts with the tapered side facing the wheel.

### Web strap clip installation



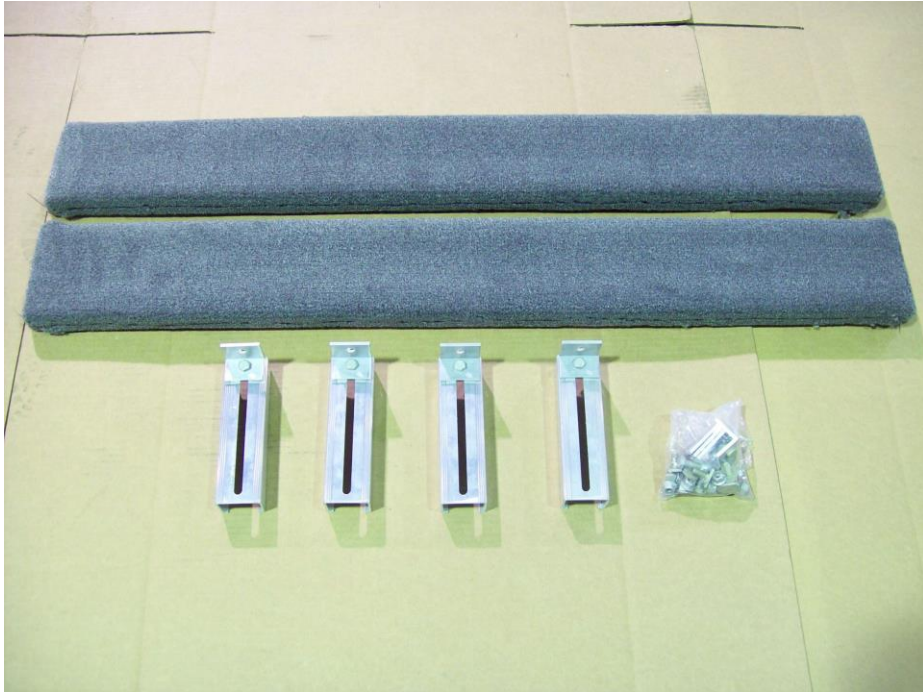
Locate 2 web strap clips



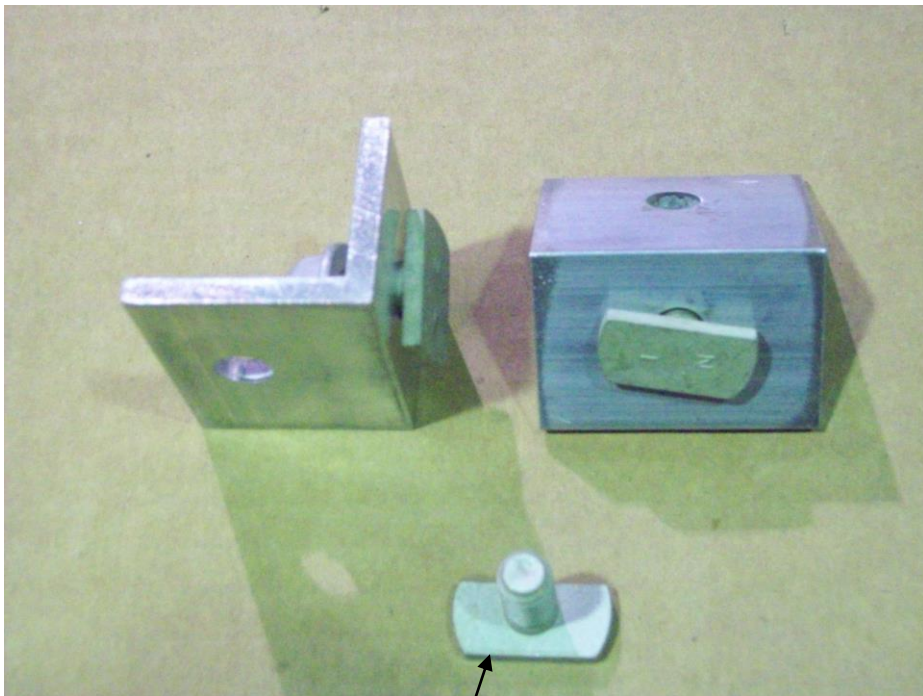


Install a web strap clip on each side rail at the back as shown. Then tighten nuts.

## Padded cradle installation



Locate padded cradles, brackets, and hardware.

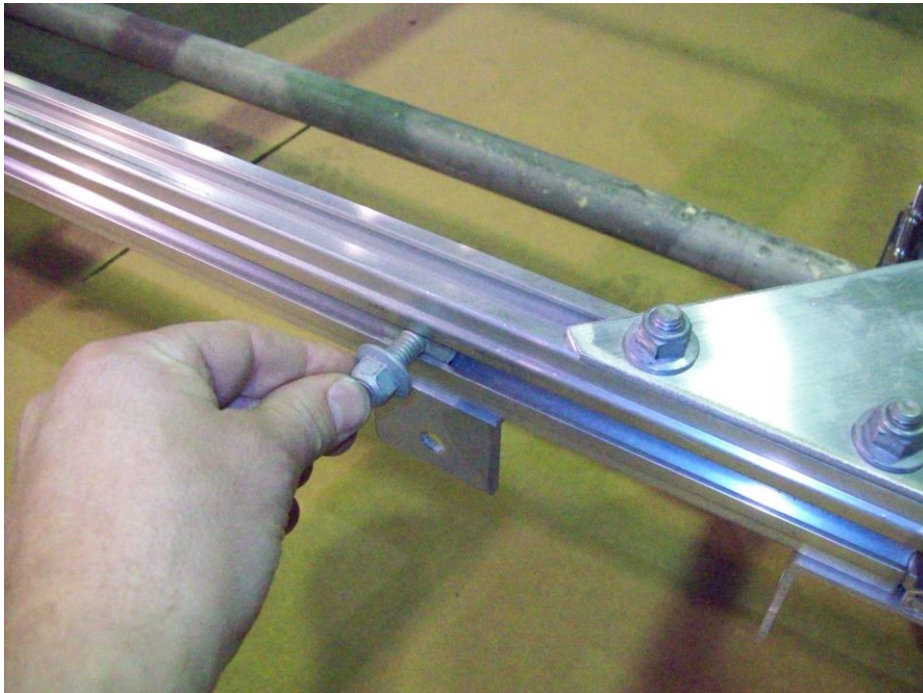


Repair T-bolt

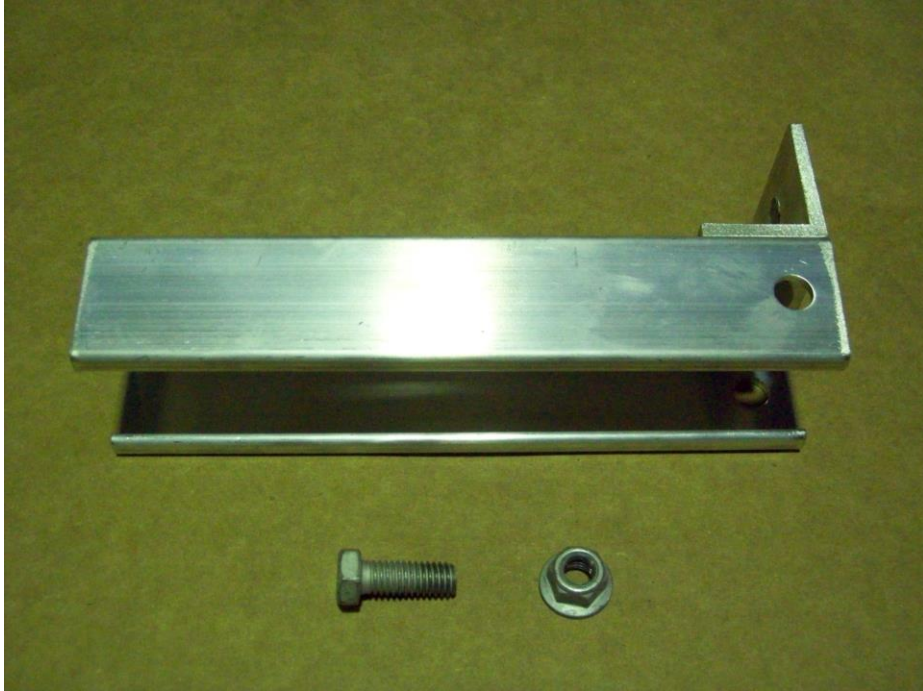
Locate the 4 angle brackets and repair T-bolts. Install the repair T-bolt on the short end of the angle as shown.



Install two of the angle brackets on the front cross member and two on the rear as shown. Also angle brackets can be installed on the top of the cross member as shown below.



Slide T-bolt over on cross member and align them with the angle brackets.



Cradle bracket shown with 1" bolt and nut.

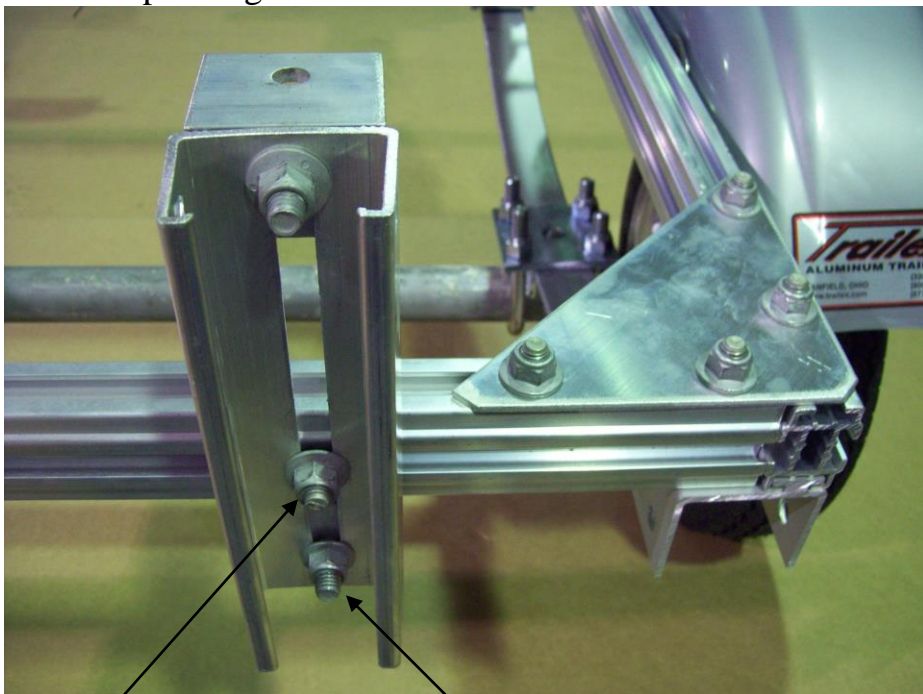


Shown on the bottom



Shown on the top

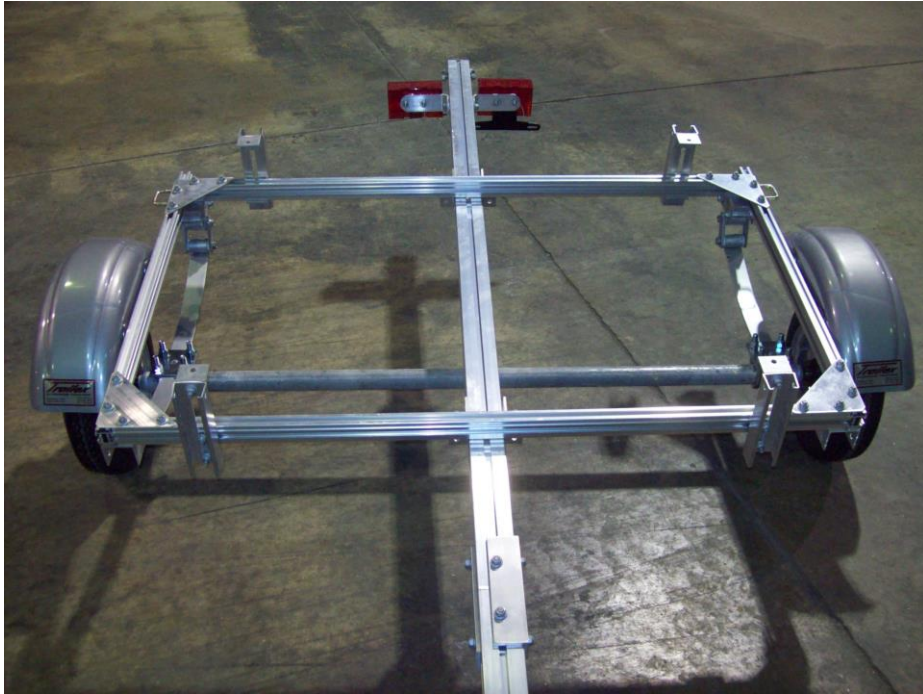
The angle bracket can be mounted either on the bottom or the top of the cross member depending on the hull of the boat.



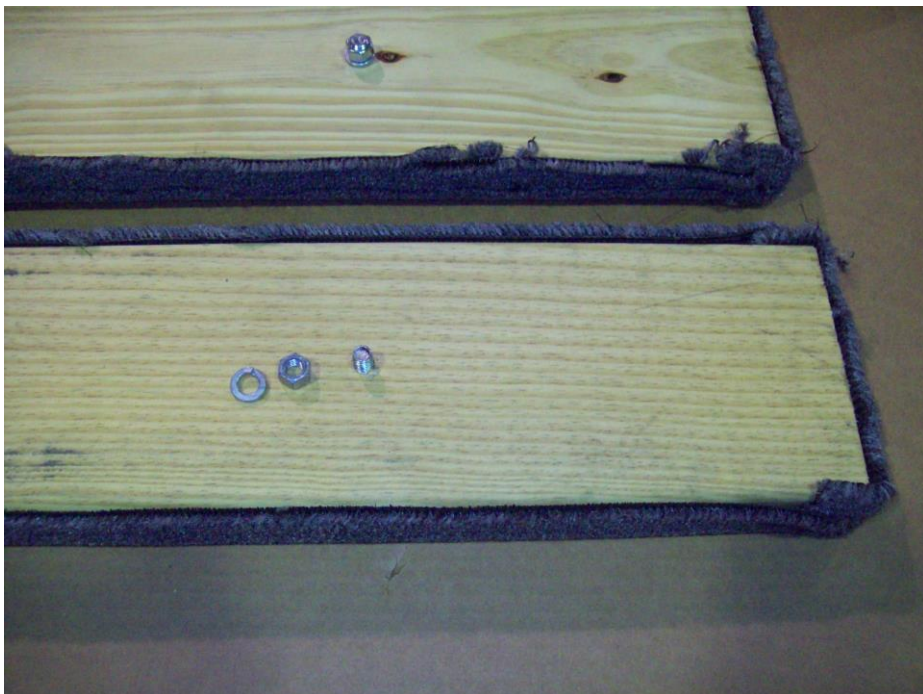
T-bolt

1" bolt

Install cradle bracket onto T-bolts on the front and rear cross members. Then install a 1" bolt through the angle bracket at the bottom. Position brackets and then tighten nuts.



Your trailer should look like this at this point.



Take the nuts and lock washers off the bottom of the padded cradles so they can be installed on the angle brackets.



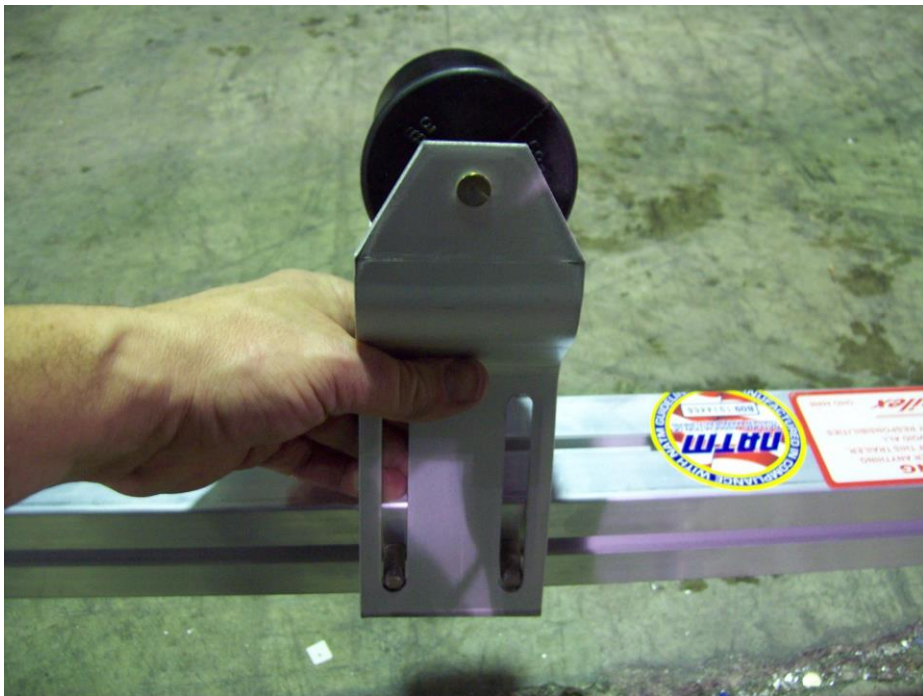
Install the padded cradles on the brackets as shown. Next reinstall the lock washers and nuts then tighten.



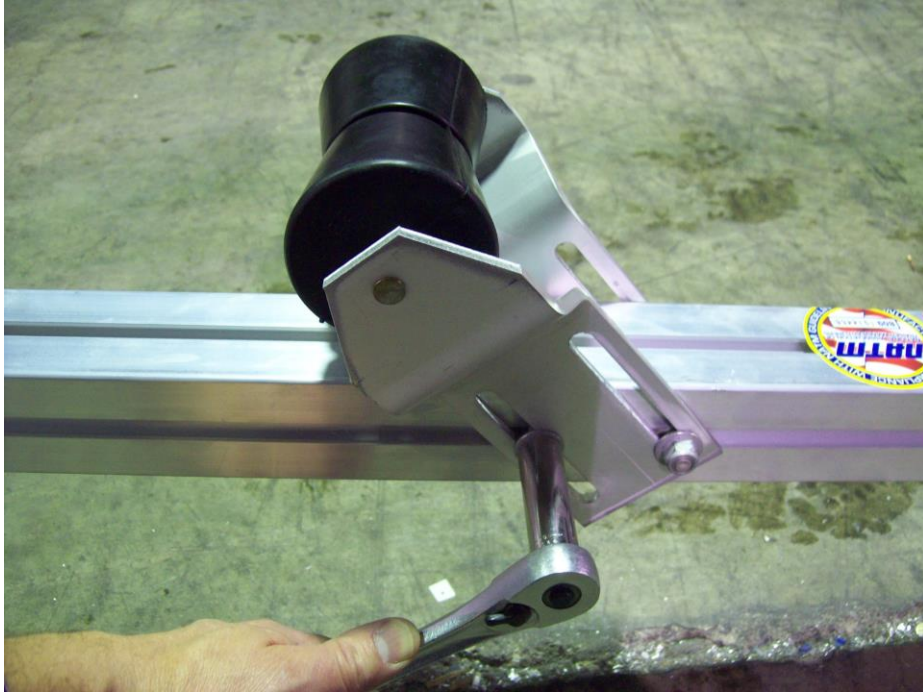
The padded cradle holders will have to be adjusted for the boat after the trailer is finished.



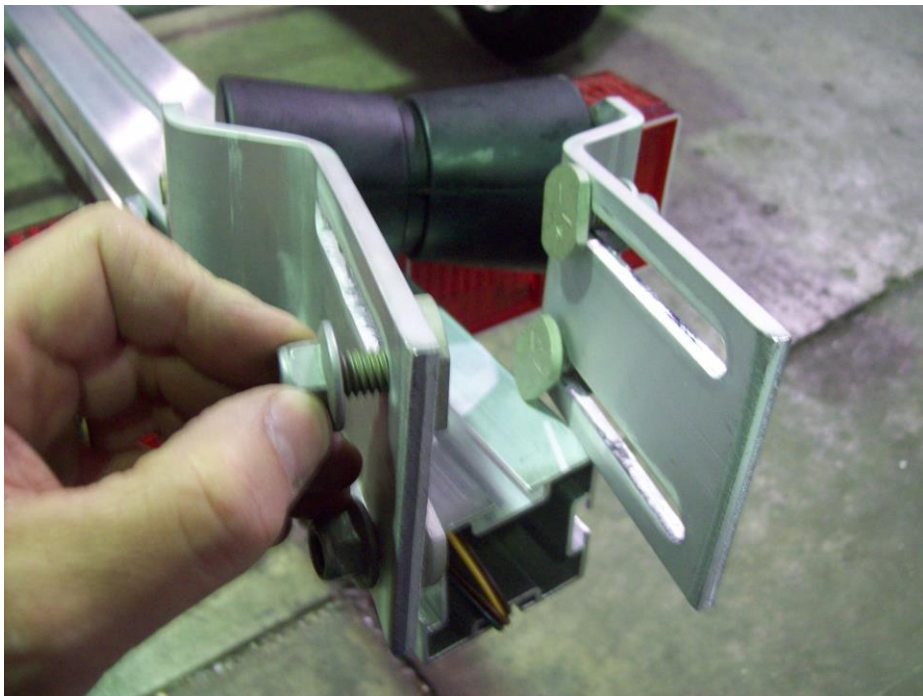
Locate the two roller assemblies.



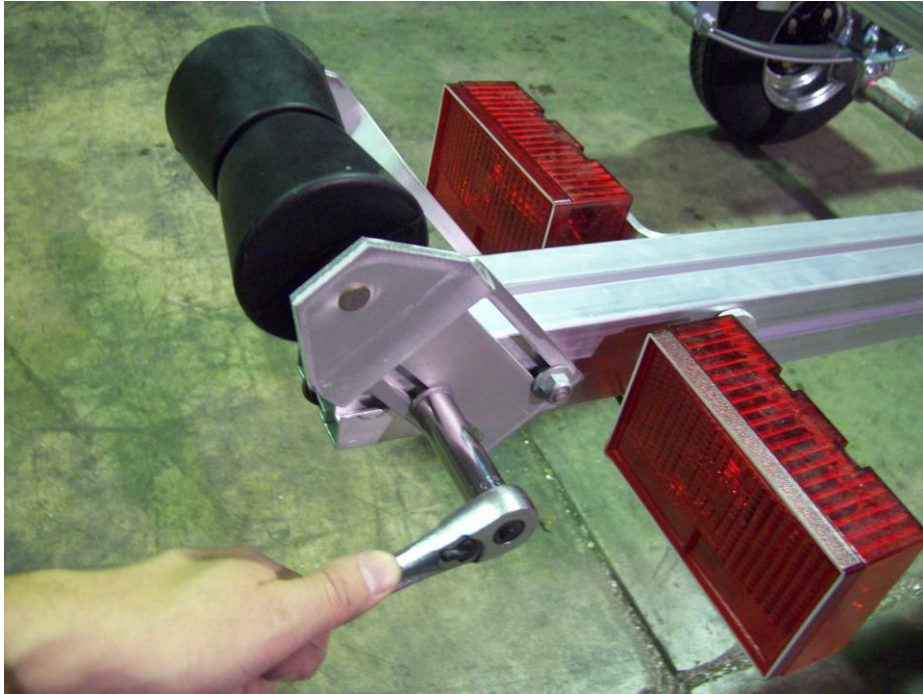




Align the roller bracket with the two rear T-bolts on the front tongue section. With the roller bracket tilted, gradually pull it over to the other side and position it. Install nuts and tighten.



Remove the four T-bolts from the rear tongue section and install them into the roller brackets as shown.

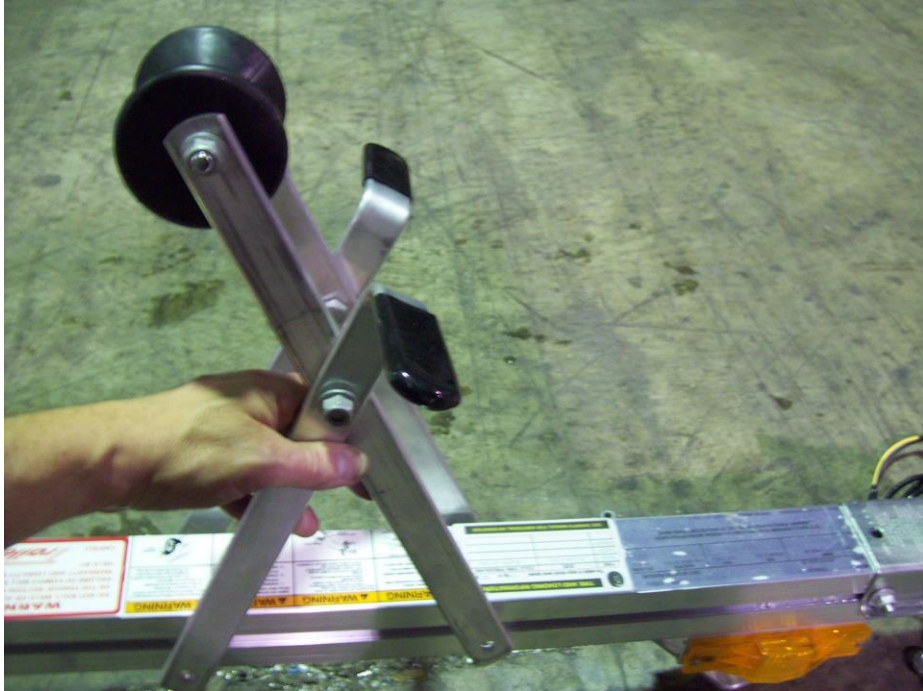


Now install the roller assembly on the rear tongue section as shown. Then position and tighten nuts.

### Bow Stand Assembly



Locate the bow stand.



Install the bow stand as shown. Final adjustments will be made when boat is on the trailer. Be sure to go back and tighten all the nuts.

# Finished trailer





KJM 1/5/11 REVISED 10/31/13, 9/7/17