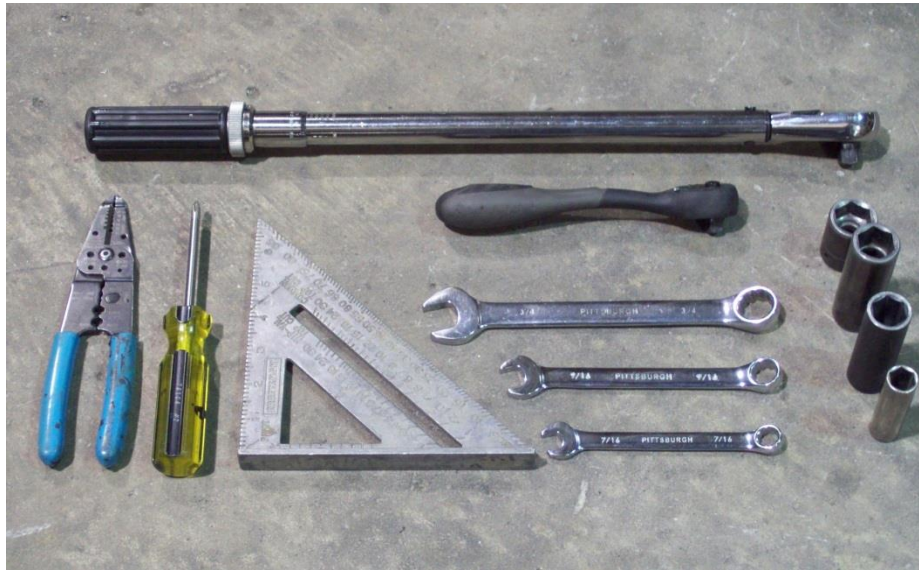


# SUT-350-S



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.**

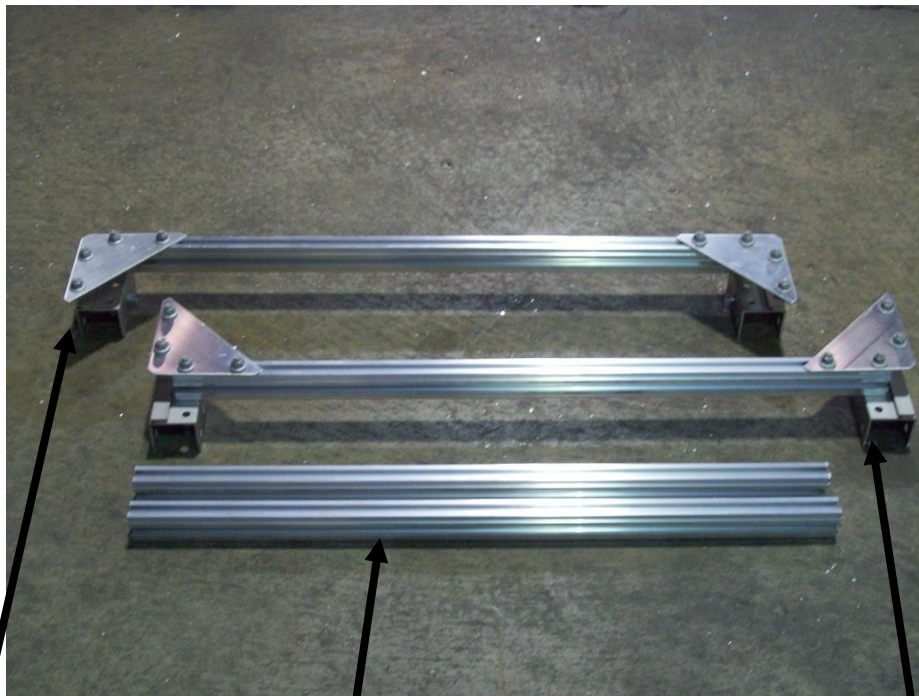
**Incorrect assembly or modifications to your trailer will void any specific or implied warranty.**

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

**UNPACK AND IDENTIFY THE FOLLOWING PARTS.**



Rear tongue      Front tongue      Coupler      Splice plates



Front cross member      Side rails      Rear cross member



Axle, spring assemblies and U-bolt hardware.



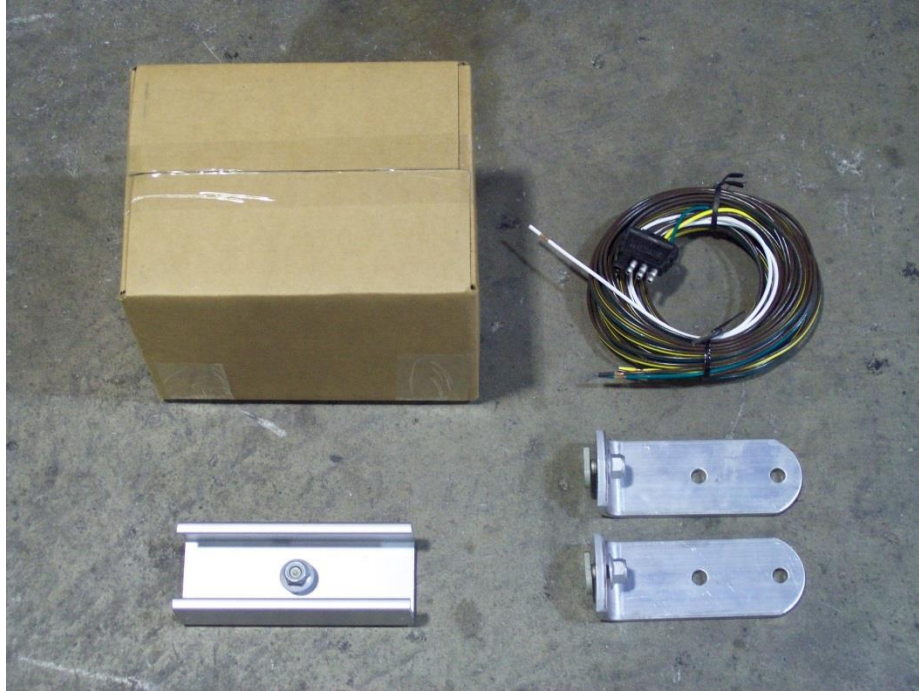
Tires and fenders



Bow stop, roller and skid.



10" padded cradles, front and rear cradle holders.

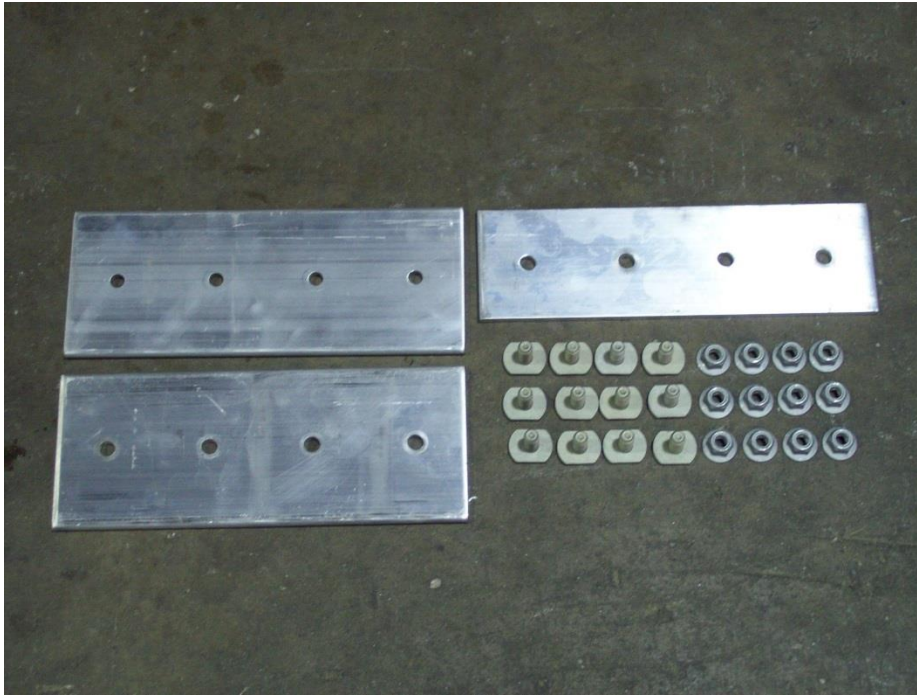


Light kit, harness, marker light bracket and tail light brackets.



Instruction manual, 2) hardware bags, spare parts bag and safety cables.

## Tongue assembly



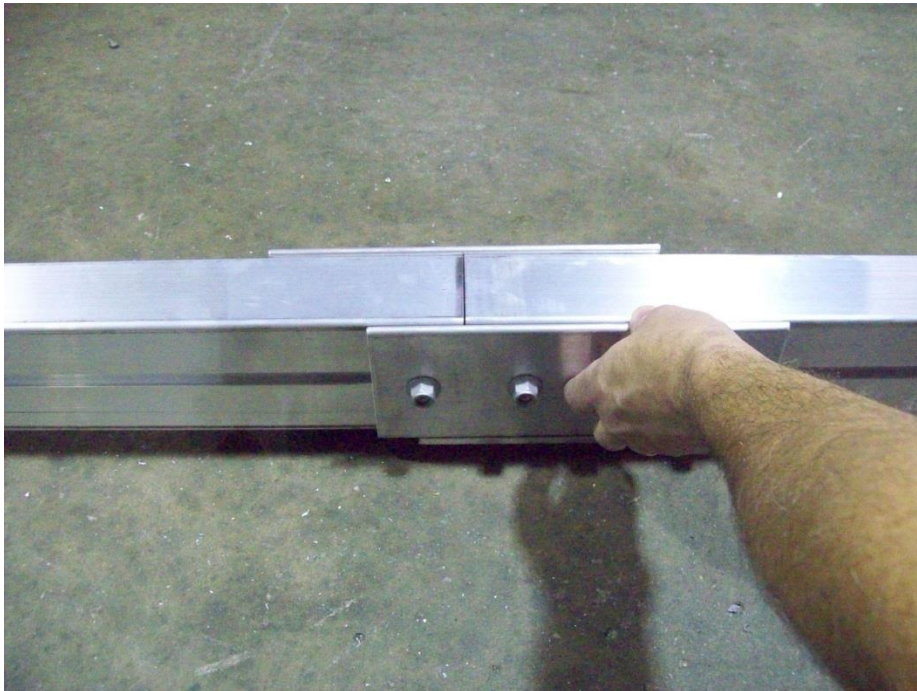
Locate the bag with the splice plates, T-bolts and nuts.



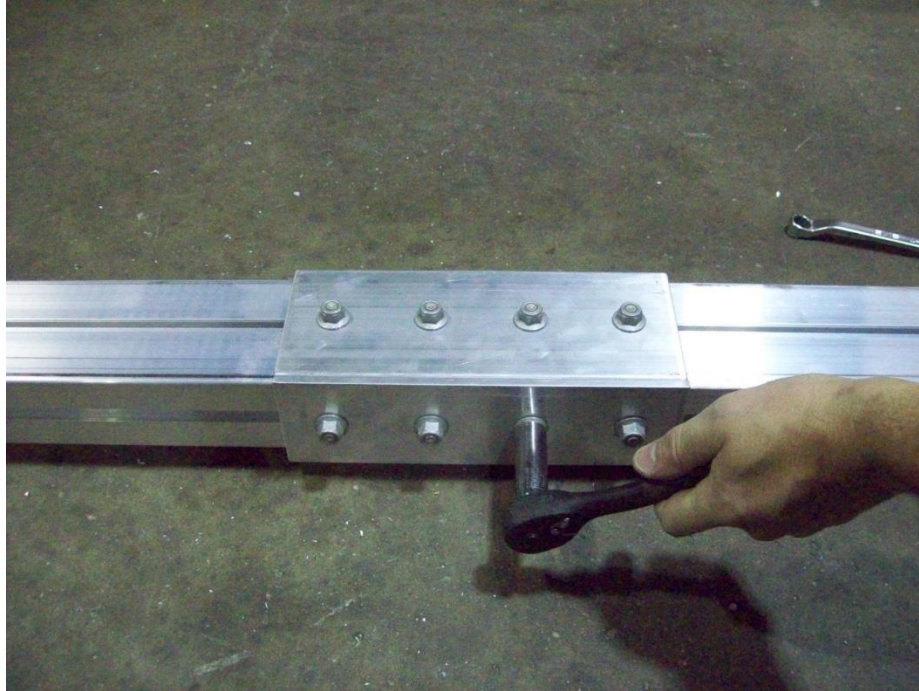
Insert the T-bolts into the splice plates, install nuts, but do not tighten.



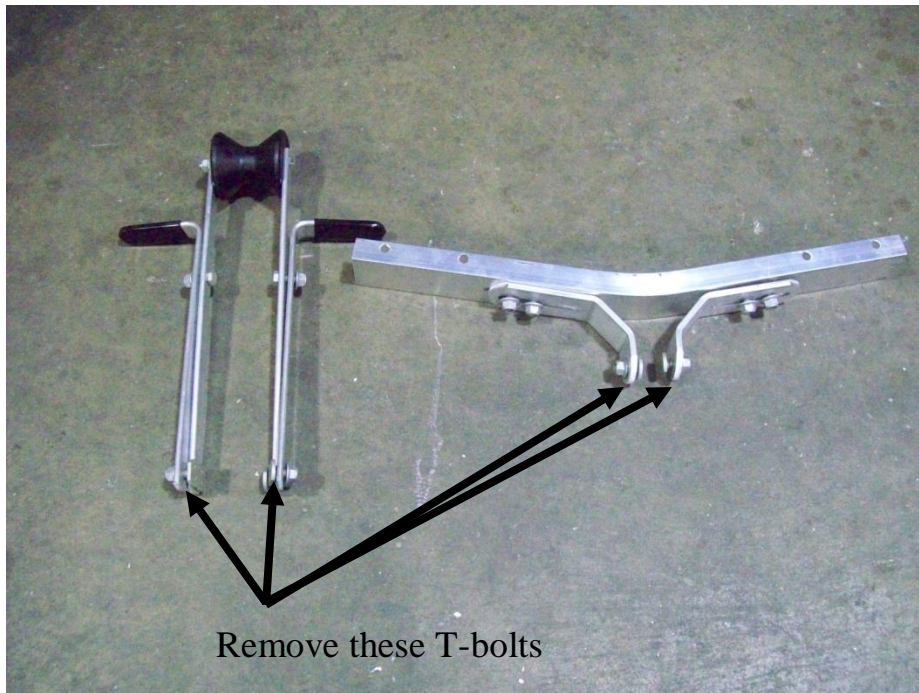
Install the splice plates into the rear tongue section as shown.



Lay tongue sections end to end. Slide 2 side plates over the adjacent tongue section until the plates are centered between the tongue sections. Then tighten nuts.



Slide bottom plate over and align with side plates. Tighten all nuts making sure that the tongue sections are as tight as possible.



Locate the front bow stop and cradle holder. Remove the mounting T-bolts that connect these parts to the tongue section as shown.





Before installing the coupler slide 3 T-bolts on each side of the tongue these will be used later in assembly.



Install coupler on the tongue section with VIN# on it, holes are pre drilled in the tongue.



Install a 3 1/4" bolt through the rear hole of the coupler.



Repair T-bolt

Install the repair T-bolts on the inside of the tongue to go through the front hole in the coupler. Then install nuts and make sure to tighten. Be careful not to over tighten nuts, because this could lead to crushing the tongue inwards.



Locate the safety hitch cables and hardware.



Install the repair T-bolts on the inside of the lower tongue section. Next add the cable over the bolt, then a flat washer and lastly the nut. Then tighten nuts.



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 front 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.



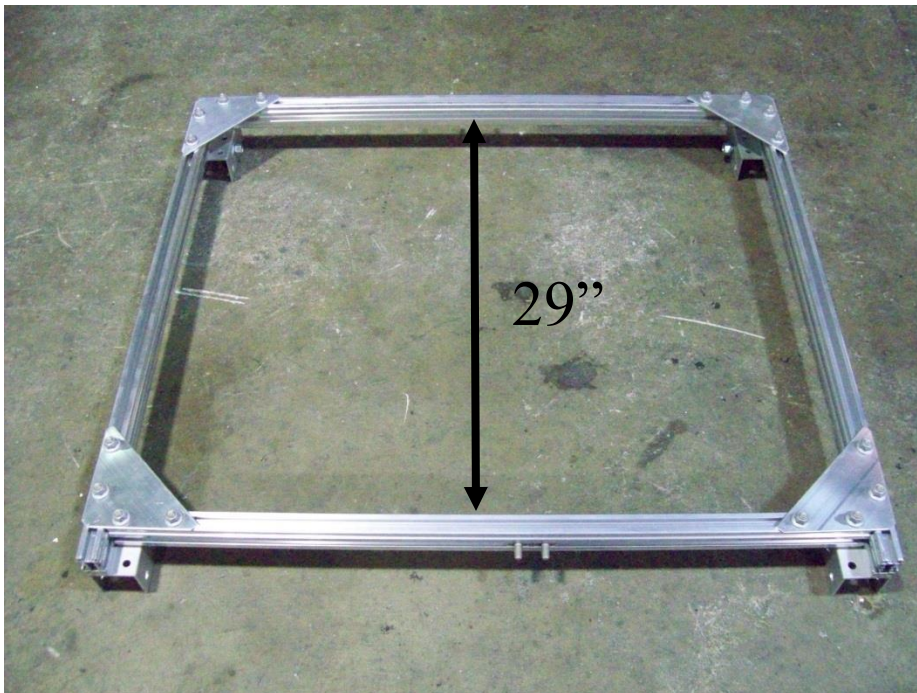
Repeat the process for the other side rail.



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

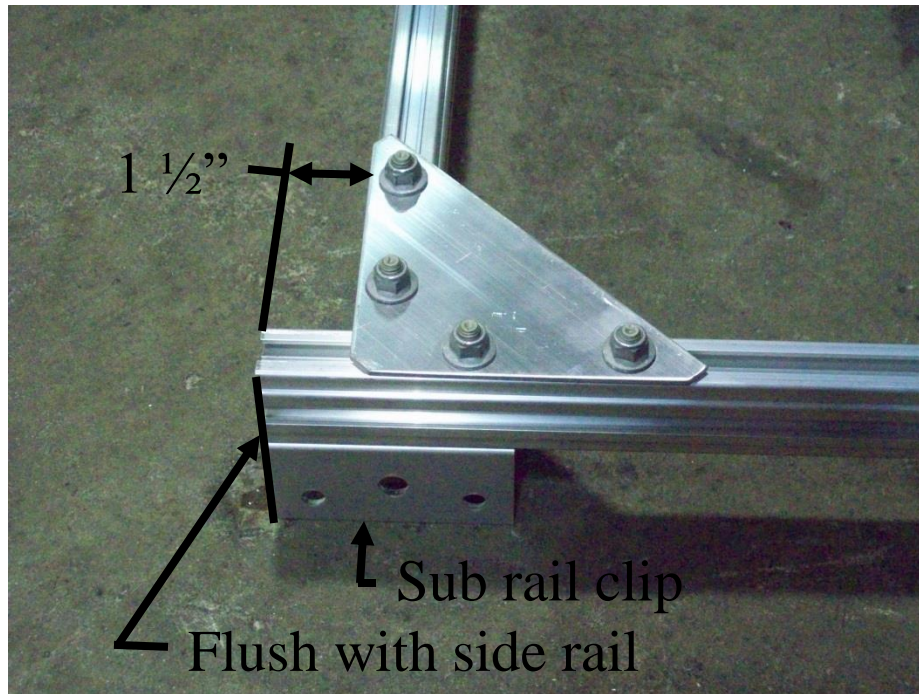


Insert the rear cross member into each of the side rails. Slide the rear cross member forward until the side rails are even with the sub rail clips.

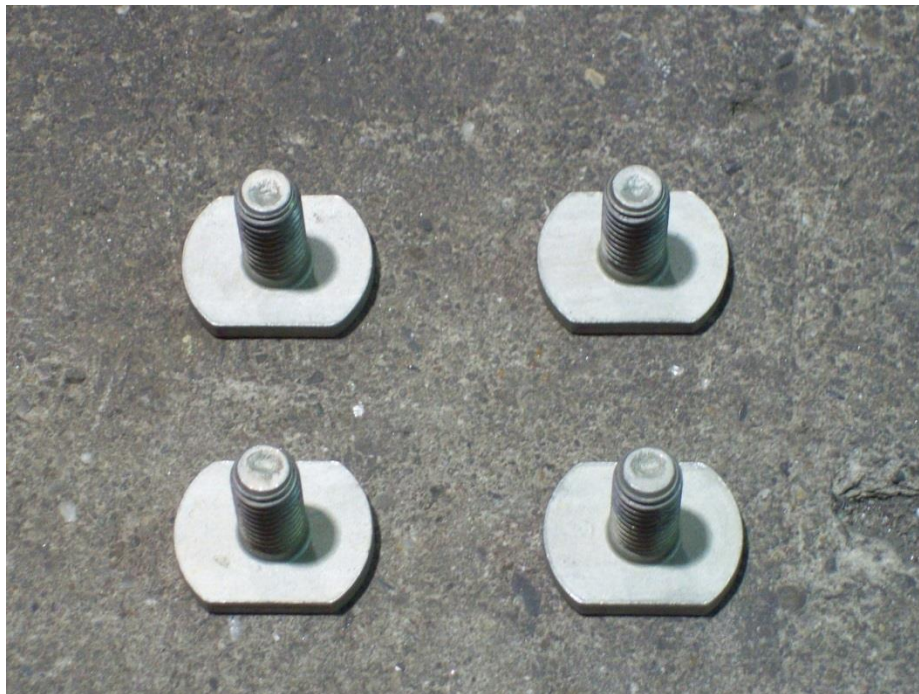


Once rear cross member is in position frame should look like this. From the inside of the front cross member to the inside of the rear cross member the distance should be 29".





The side rail should be flush with the sub rail clip as shown. The side rail should be 1 1/2" past the rear cross member when in position. Square up and tighten nuts. Repeat the process for the other side at this point.



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



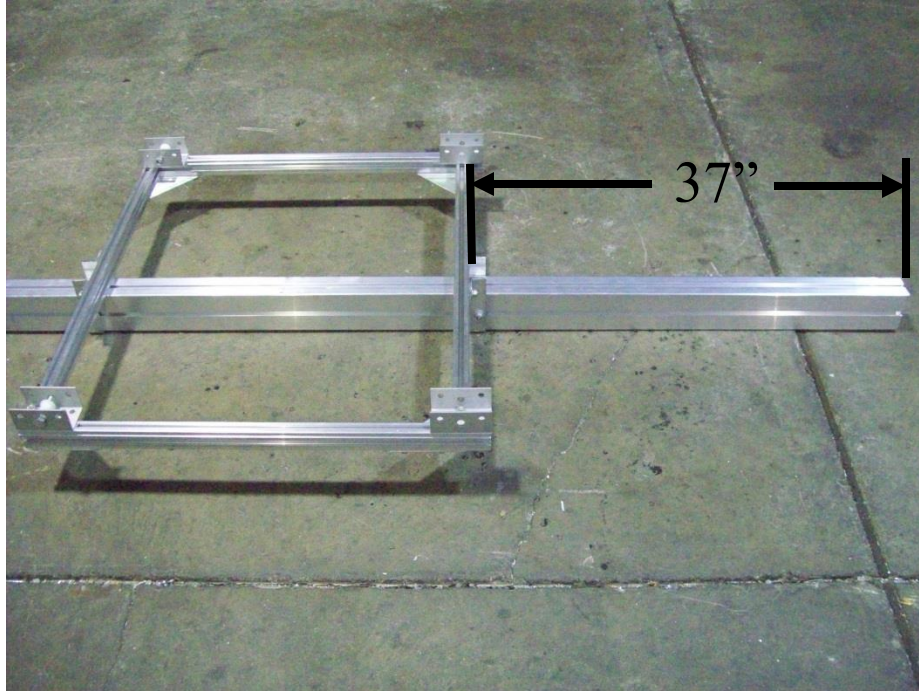
Rear tongue section shown upside down

Slide 2 T-bolts on each side of the tongue section from the back going forwards.



Trailer shown upside down

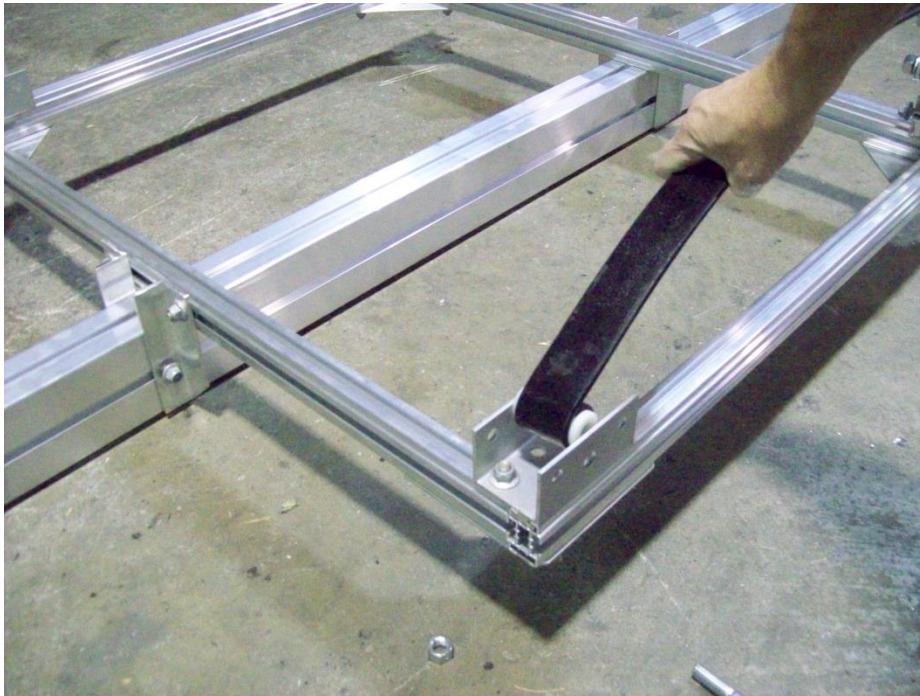
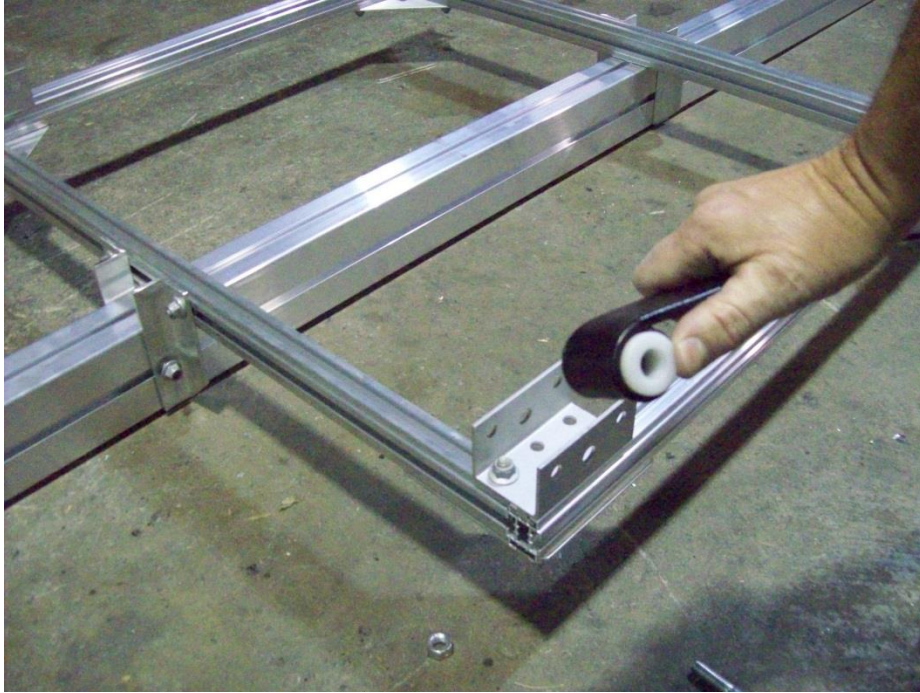
Install angle brackets on cross member and slide over to the tongue section and align with T-bolts on tongue. Check to make sure tongue is centered on pencil marks that are on the cross members. Then tighten all nuts.



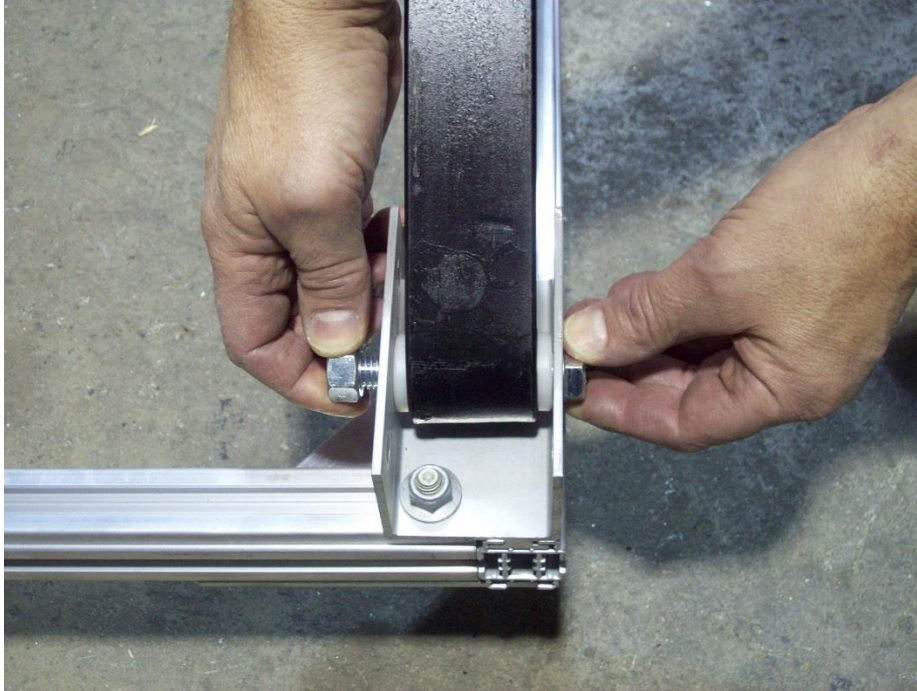
The rear cross member should be 37" away from the rear of the tongue.



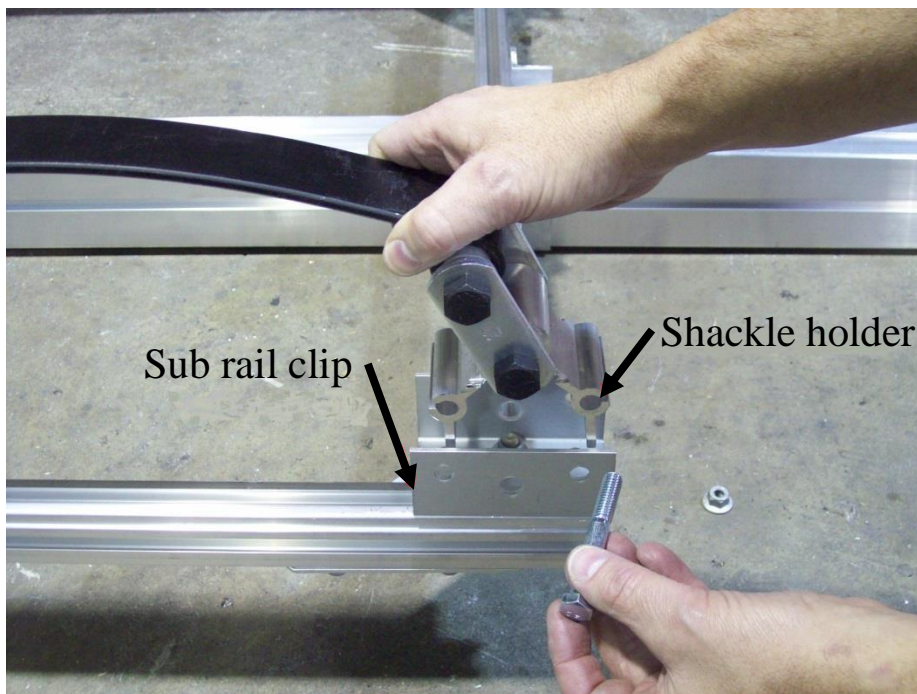
Remove the bolt, bushings and nut from the front sub rail clip.



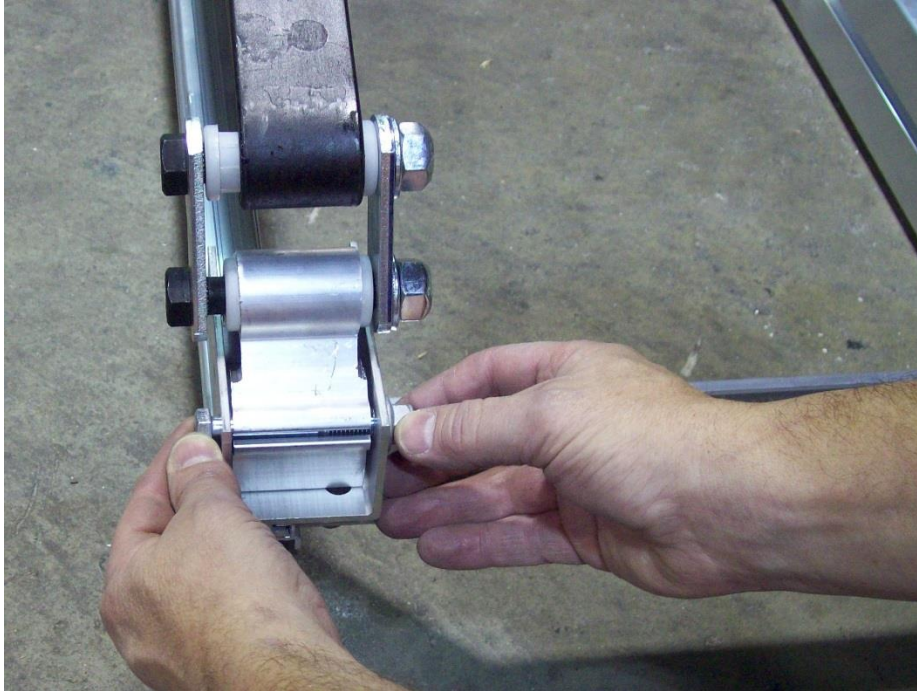
Install bushings into the front leaf spring and insert into the sub rail clip as shown.



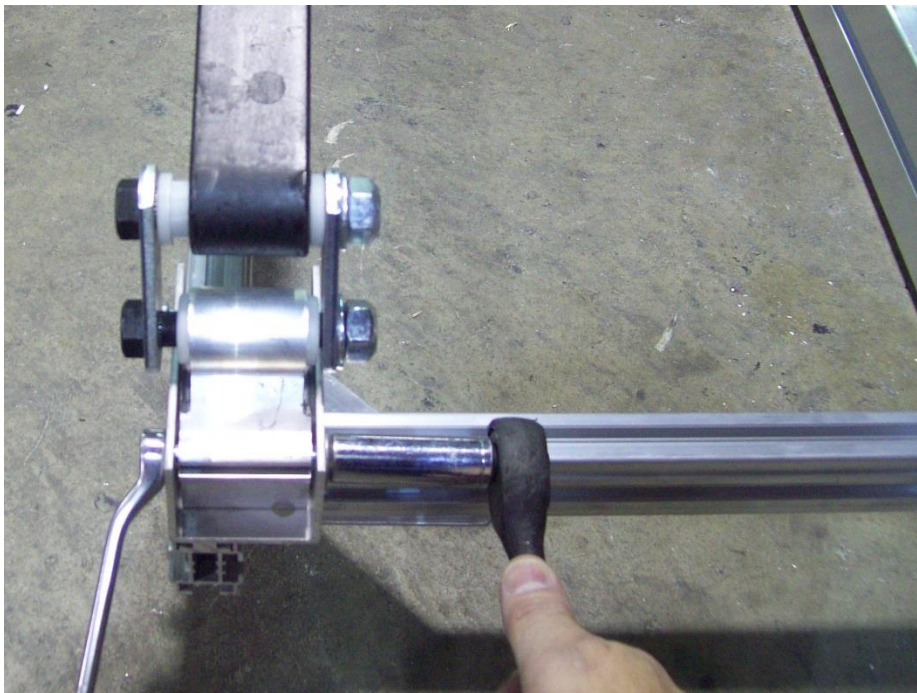
Reinstall bolt and nut, but leave loose for now.



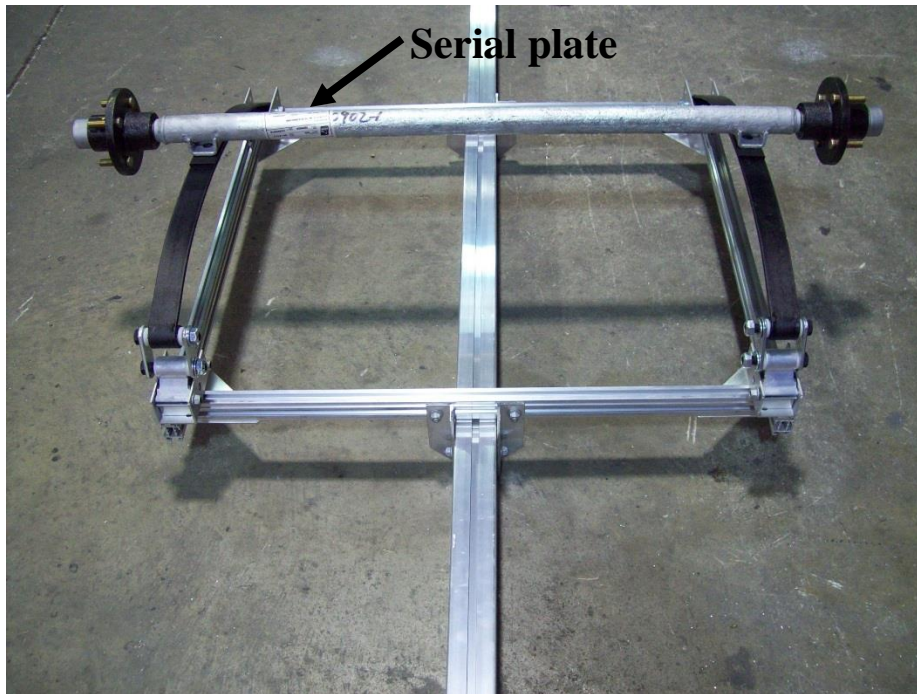
Remove the two bolts from the shackle holder at the rear of the spring.



Install the shackle holder into the rear sub rail clip, with the nuts toward the inside of the trailer.



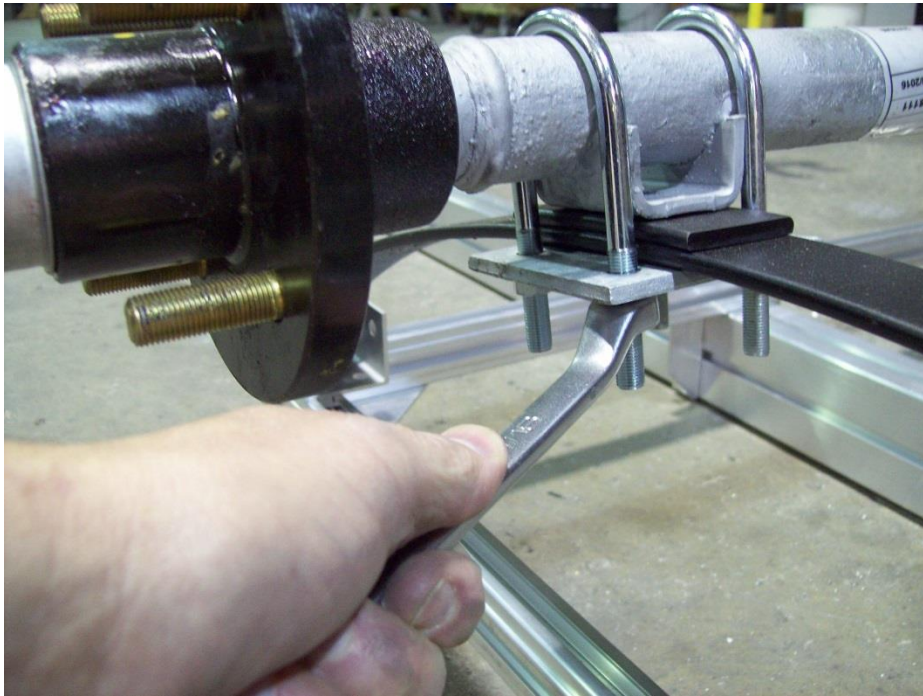
These nuts can be tightened at this time. **Do not torque these nuts.**



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.

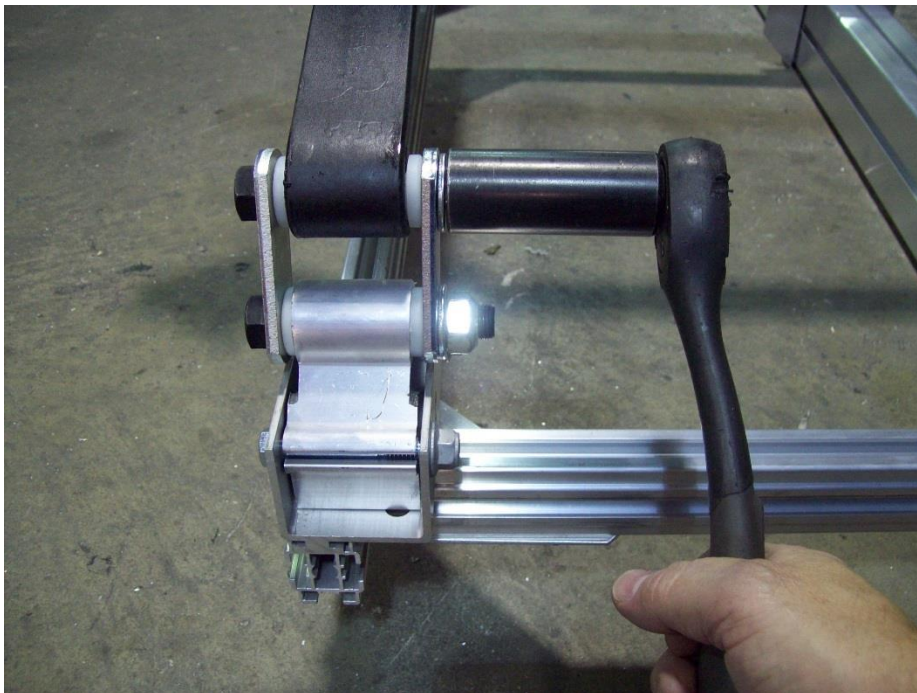


Install the U-bolts and tie plates and nuts. Tighten nuts evenly as shown.

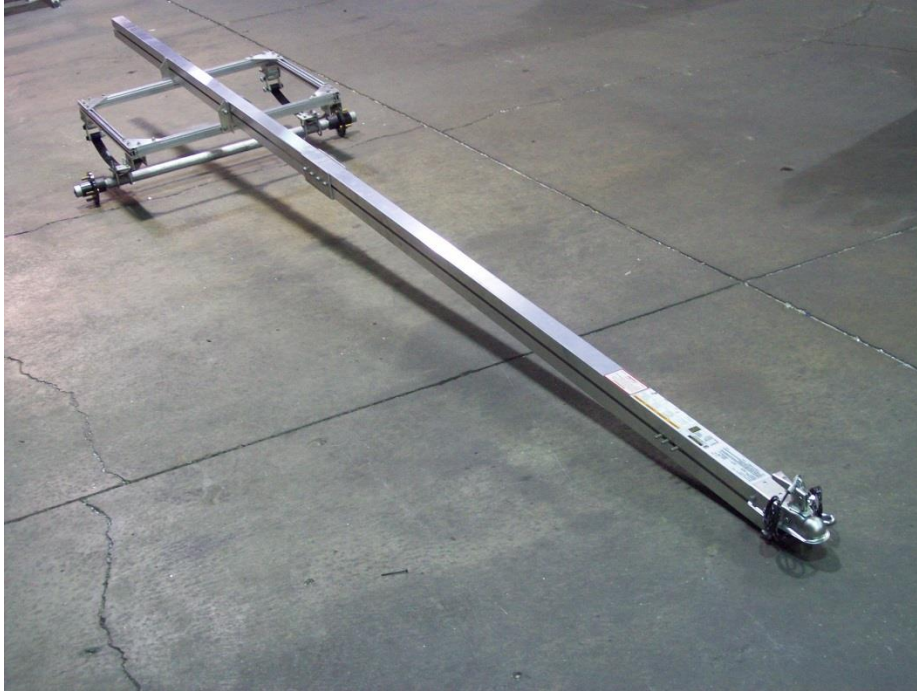




Go back and tighten all the spring mounting nuts that were left loose previously. **Do not torque these nuts.**



On the rear shackle, do not over tighten as this will not allow the suspension to move properly. **Do not torque these nuts.**



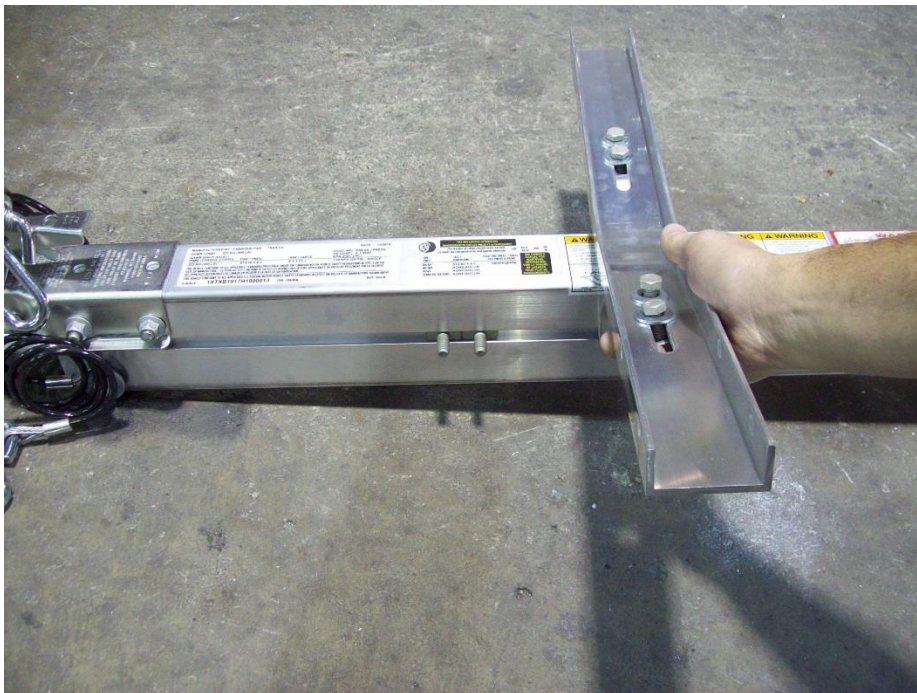
Your trailer should look like this at this point.



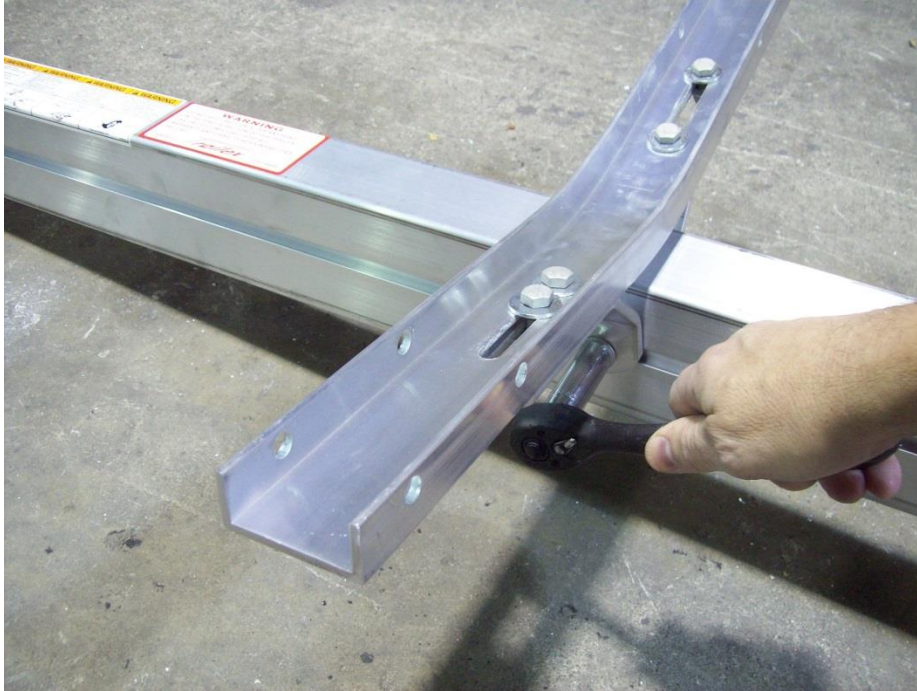
Locate the front cradle holder with the brackets installed (the short one).



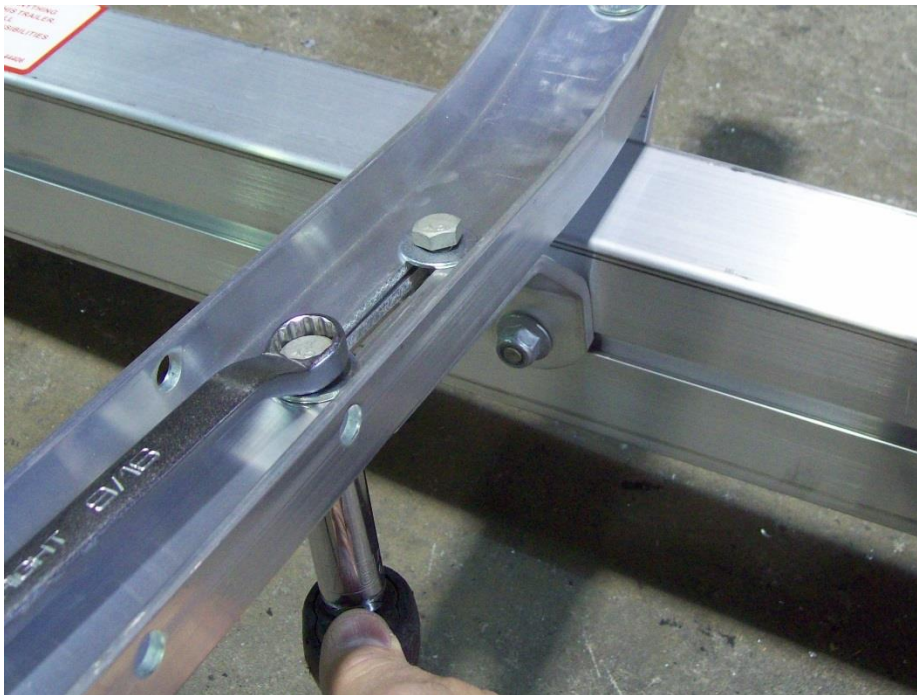
Using the rearward most T-bolts out of the three that are installed by the coupler



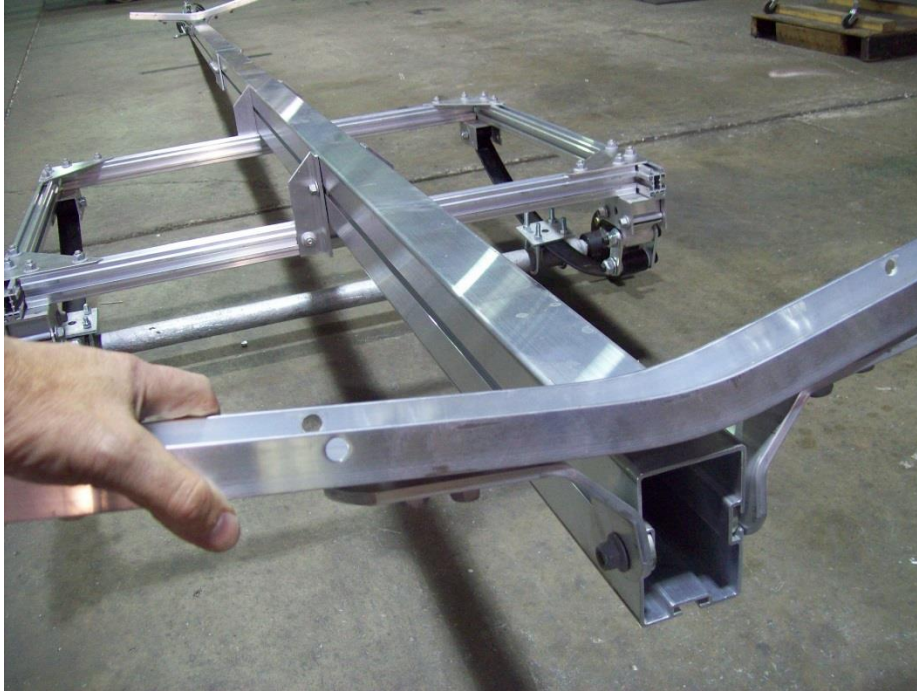
Attach the front cradle holder assembly and move it approximately 36" from the front of the tongue. Final location of the front cradle holder will be determined when the boat is fitted to the trailer.



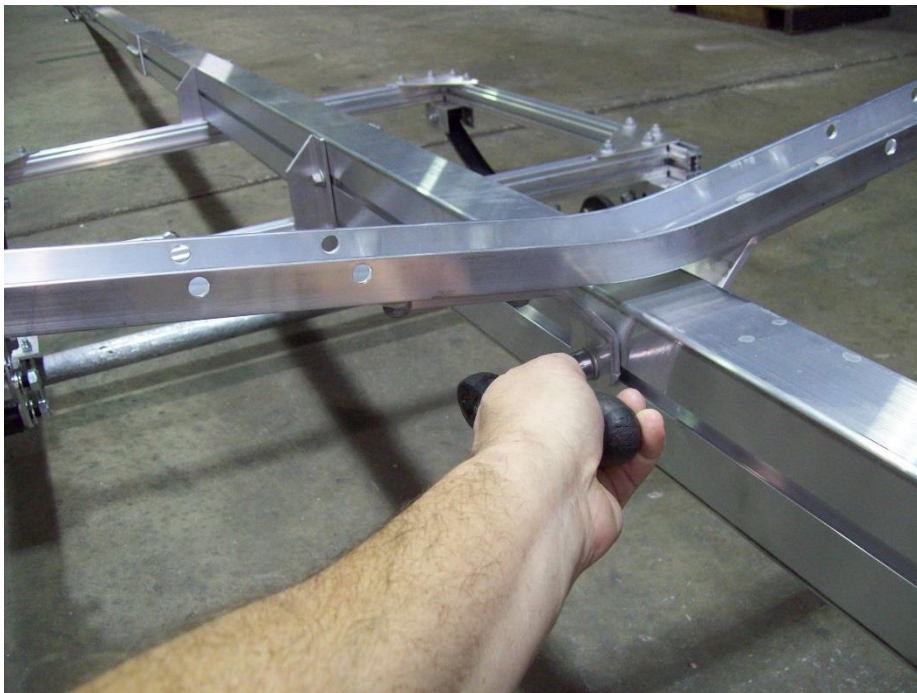
Tighten the nuts making sure the cradle holder brackets are perpendicular to the tongue.



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.



Insert the T-bolts on the rear cradle into the back of the tongue and slide forward on the tongue section.



Position the rear cradle 12" from the rear of the trailer. Tighten nuts on cradle brackets.



Repeat the process for tightening the nuts on the rear cradle holder. Final position will be determined when the boat is fitted to the trailer.



Locate the padded cradles.



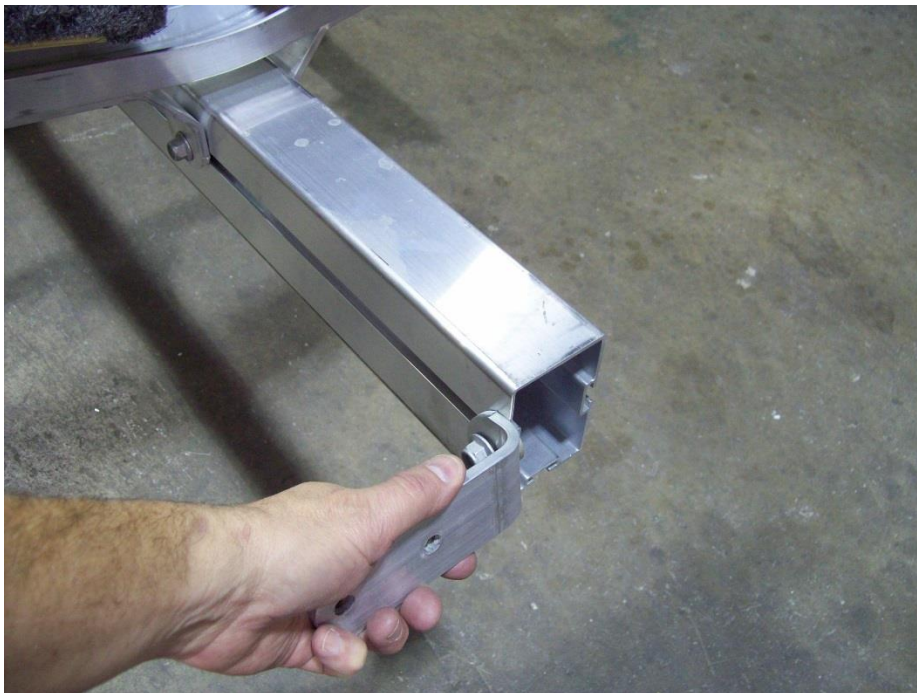
Remove the bolt from the pivot plate.



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



Locate the two tail light brackets.



Insert the tail light bracket with the T-bolt into the rear of the tongue section and slide forward.

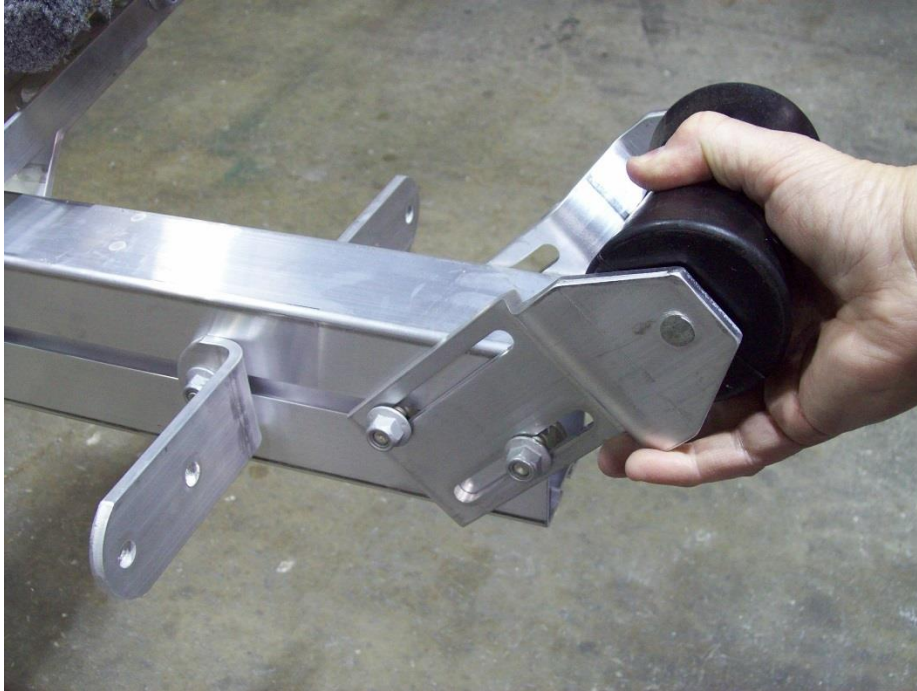




Position the T-bolts at 6 ½” on each side of the tongue and tighten nuts.



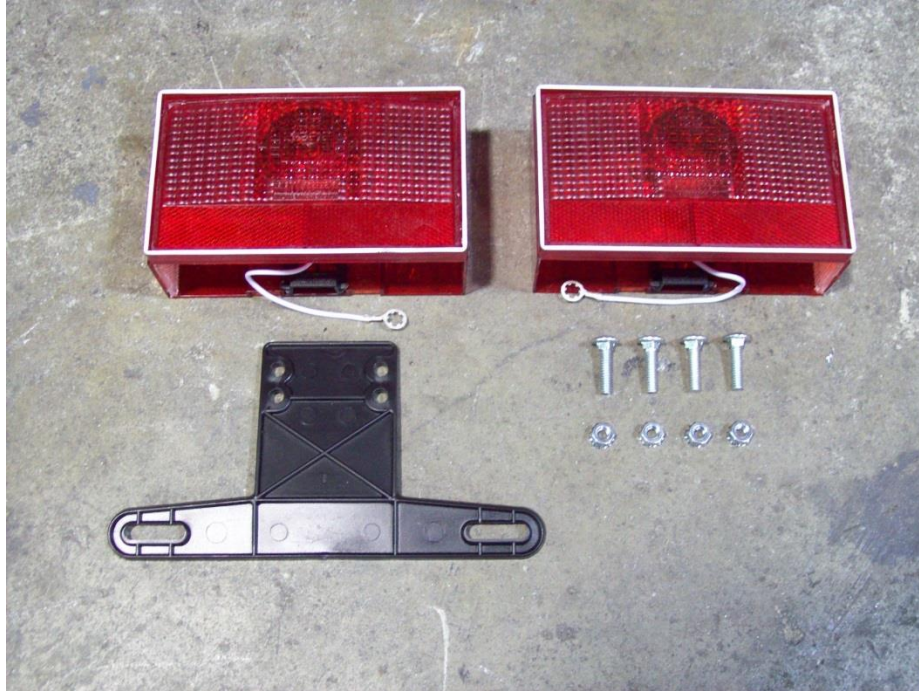
Locate the rear roll assembly.



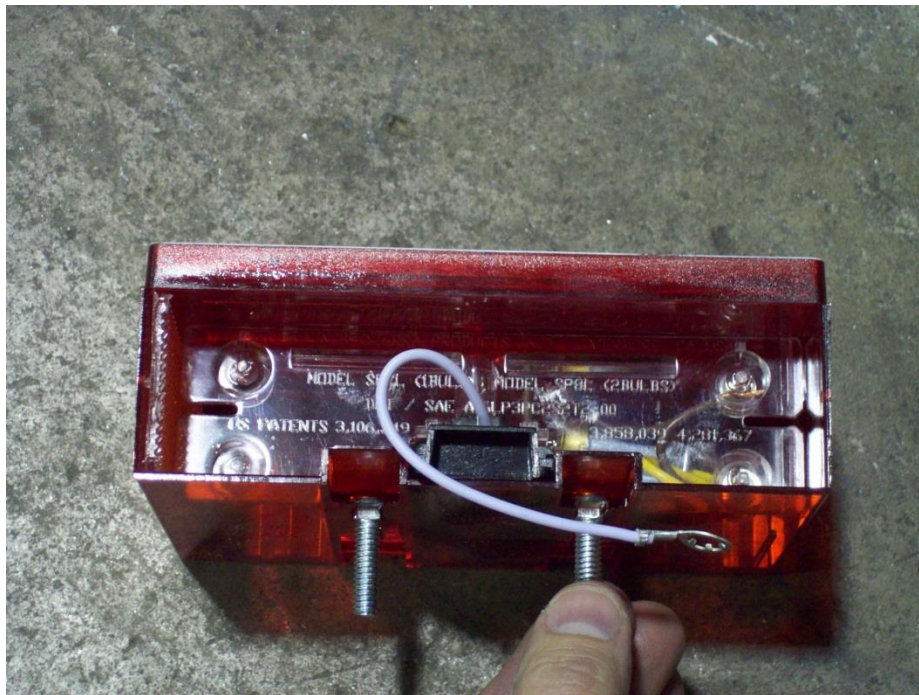
Slide the bolts into the rear tongue section.



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.



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

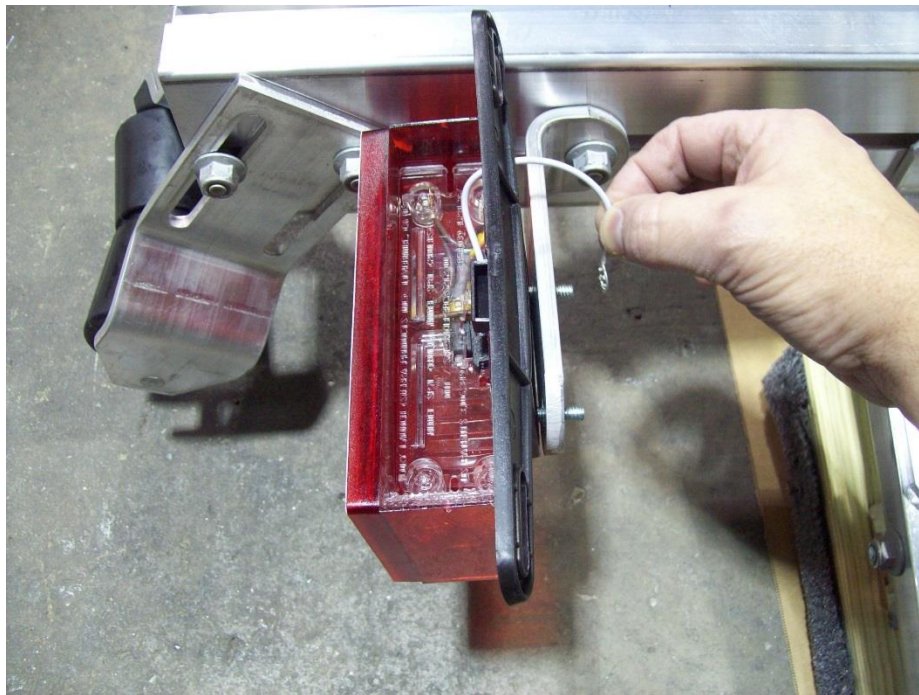


The light with the yellow wires is for the left driver's side of the trailer. Slide carriage bolts into the slots on the back of the tail lights.

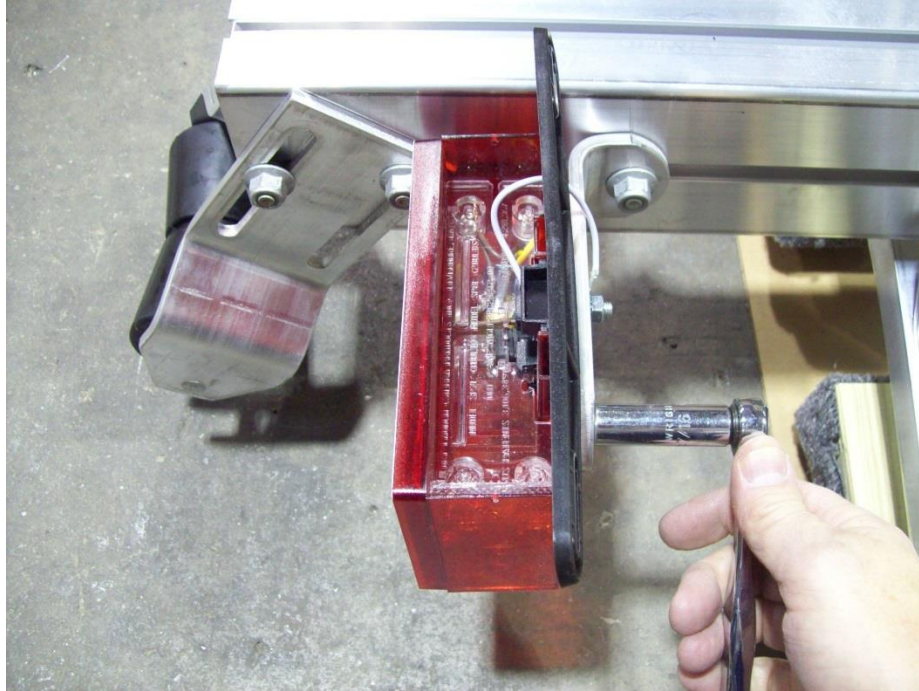


Trailer shown upside down

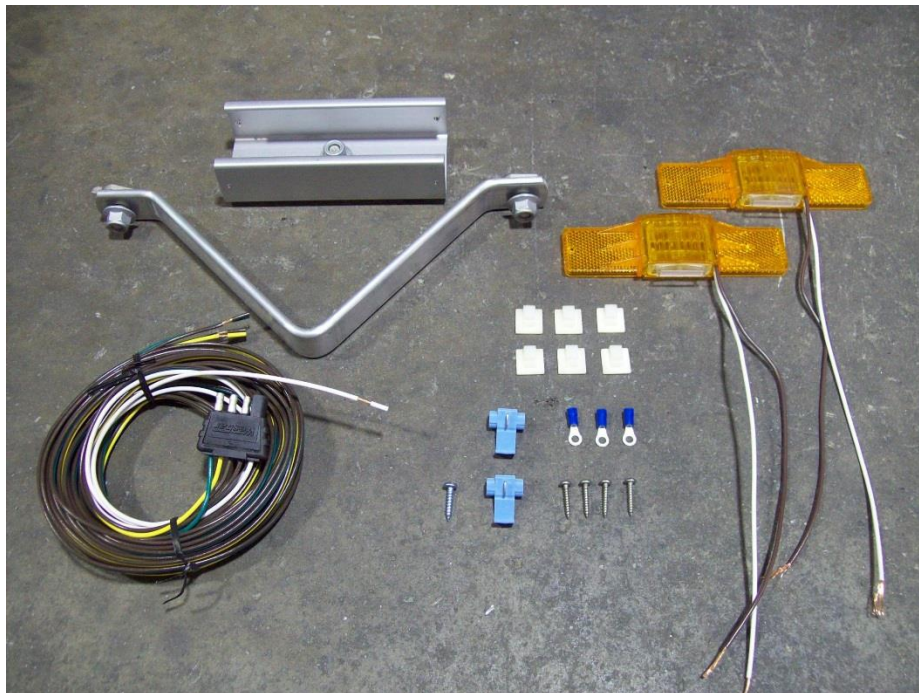
Install the license plate bracket and left tail light onto the tail light bracket.



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



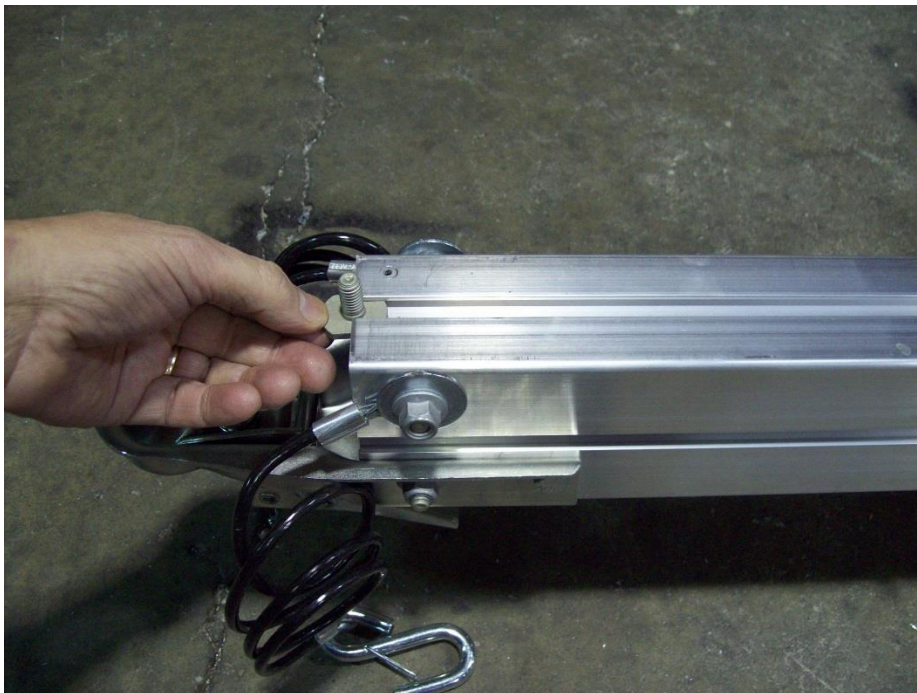
Install nuts and tighten. Repeat this process for the right side tail light.



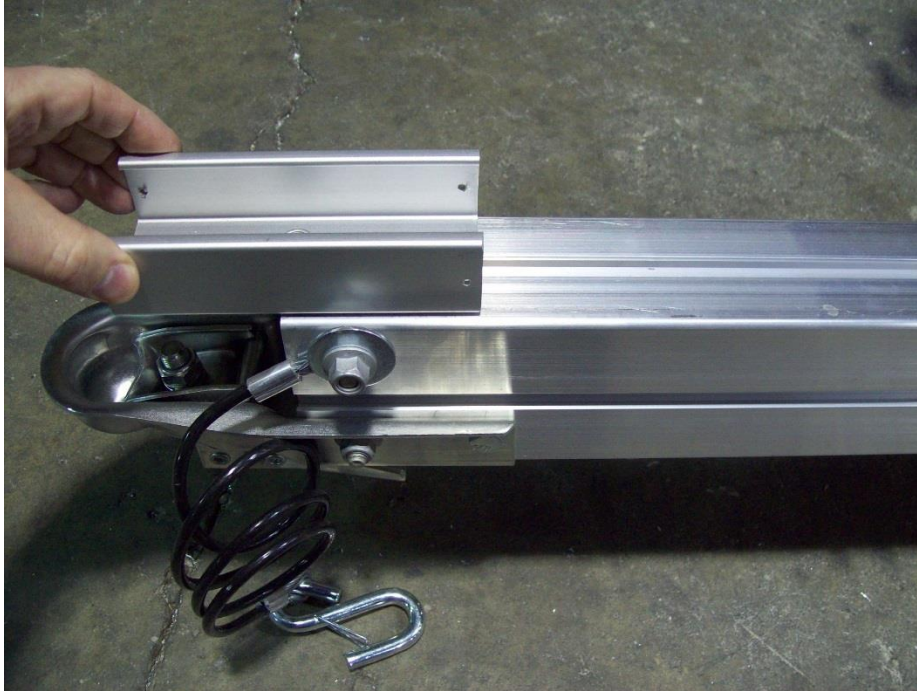
Locate the harness, skid, running light bracket holder, 2) amber running lights, adhesive backed clamps, 1) Phillips screw, 2) scotchlok connectors, 3) ring terminals and 4) small Phillips screws.



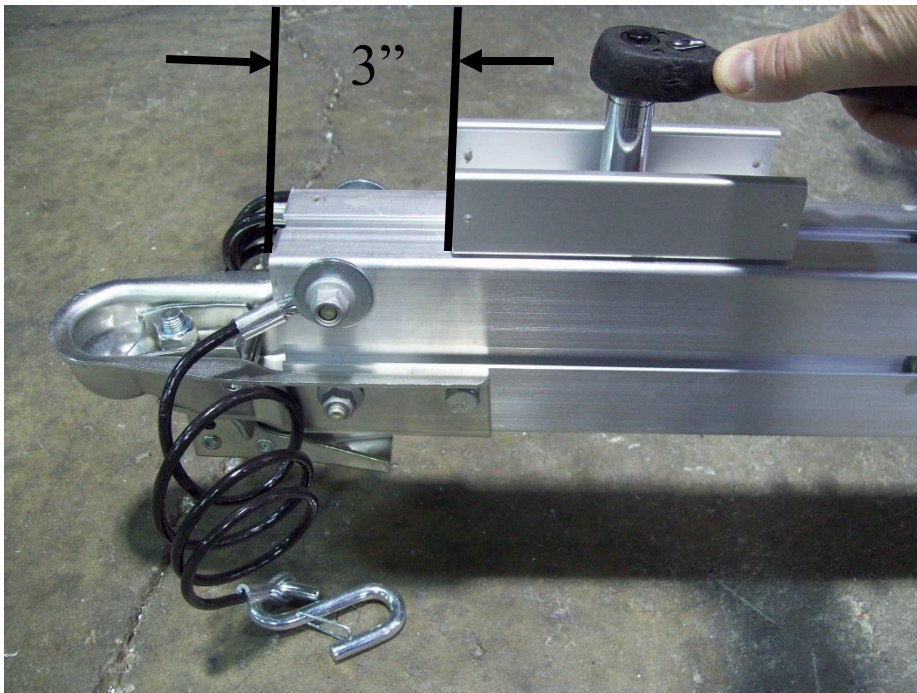
Remove one T-bolt from the skid as shown.



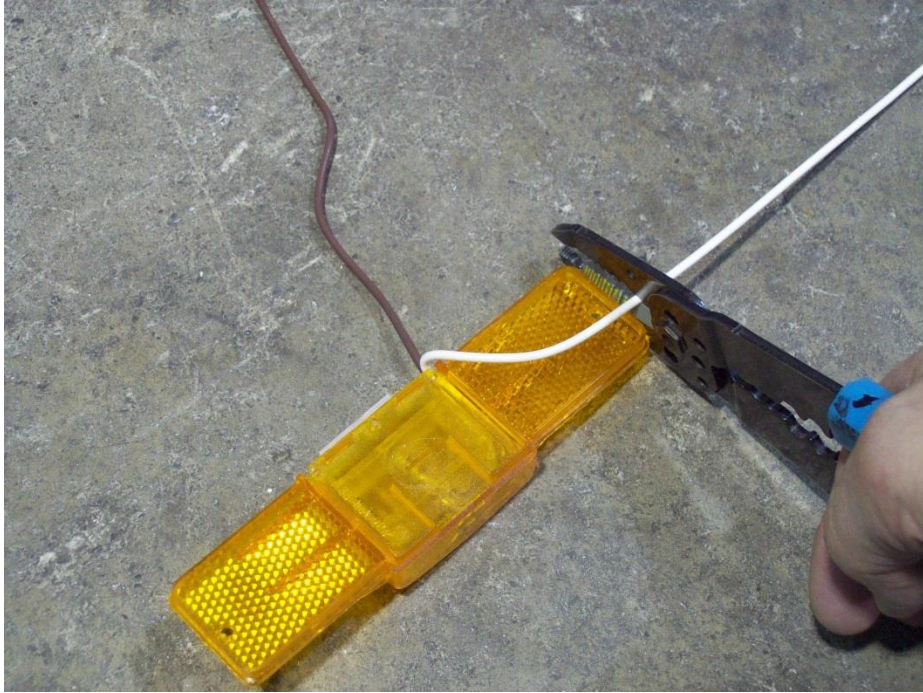
Insert the T-bolt into the slot at the front of the tongue section and slide out of the way. This will be used later to install the skid.



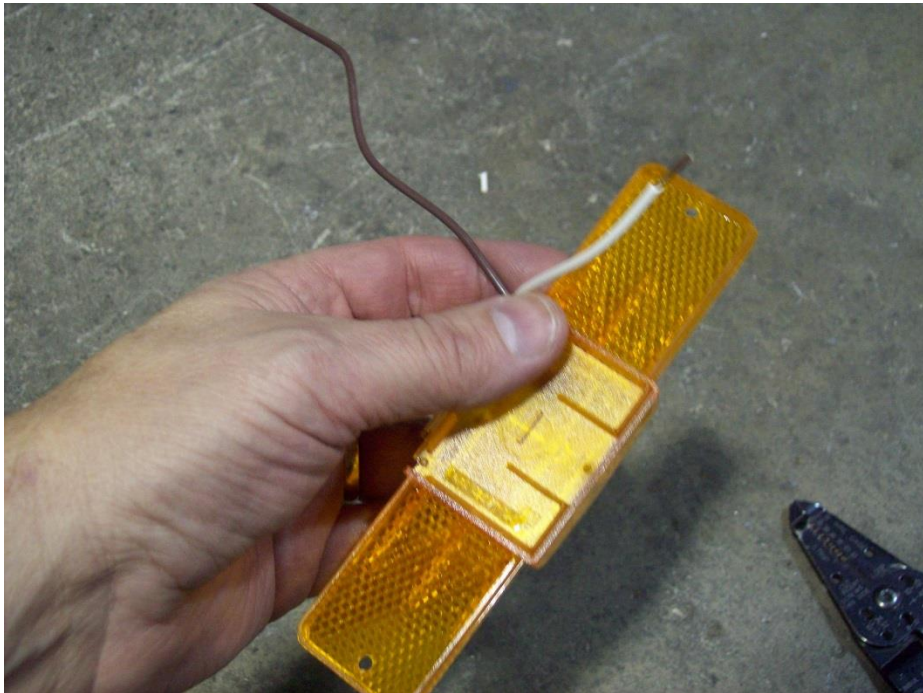
Slide the running light bracket into the slot in the front tongue section.



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

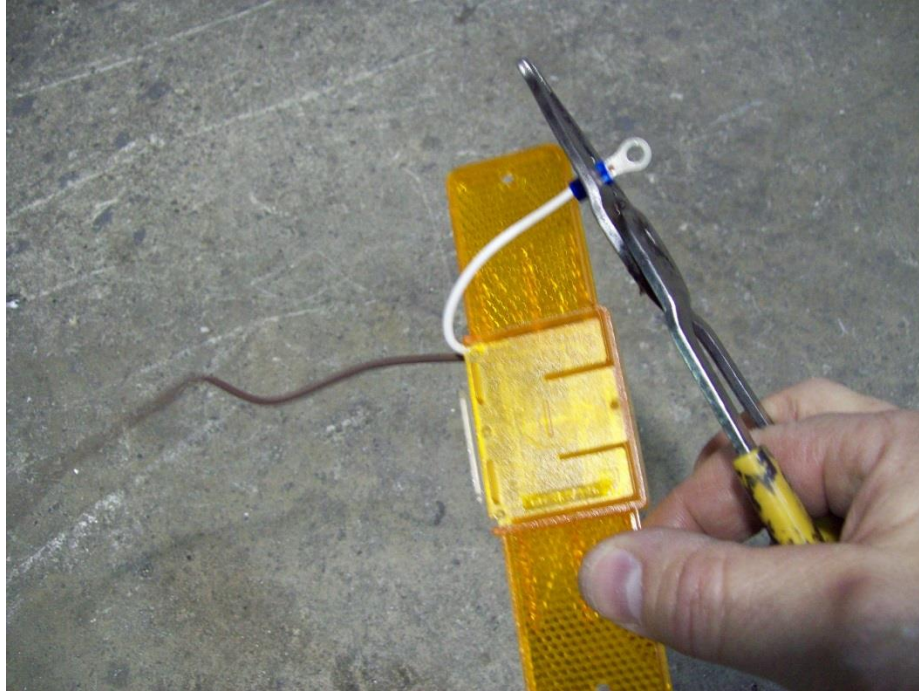


Cut approximately 8 ½” off of the white wires on both running lights.

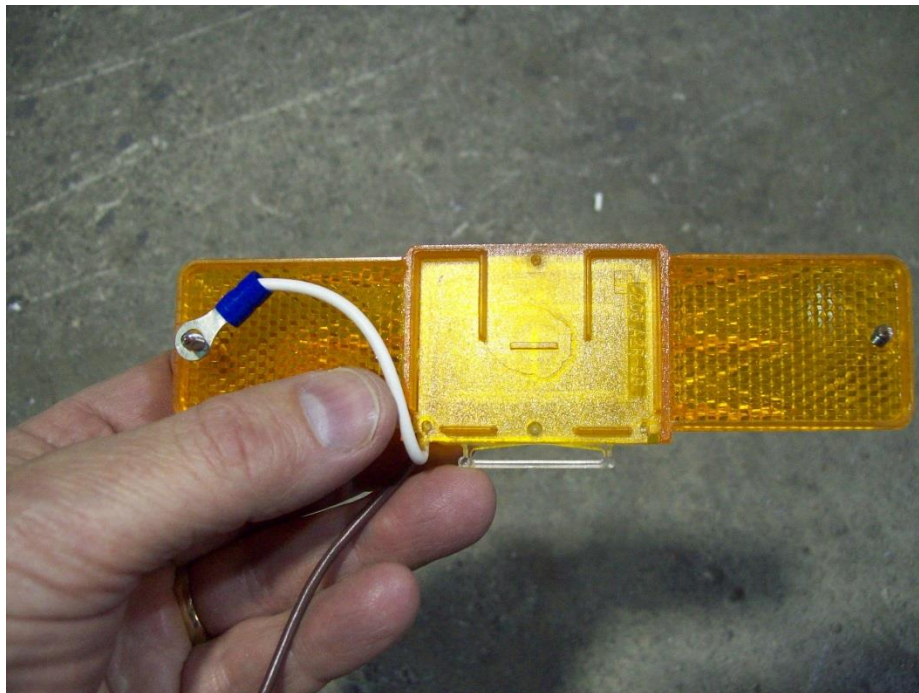


Strip ¼” of insulation from the wire.

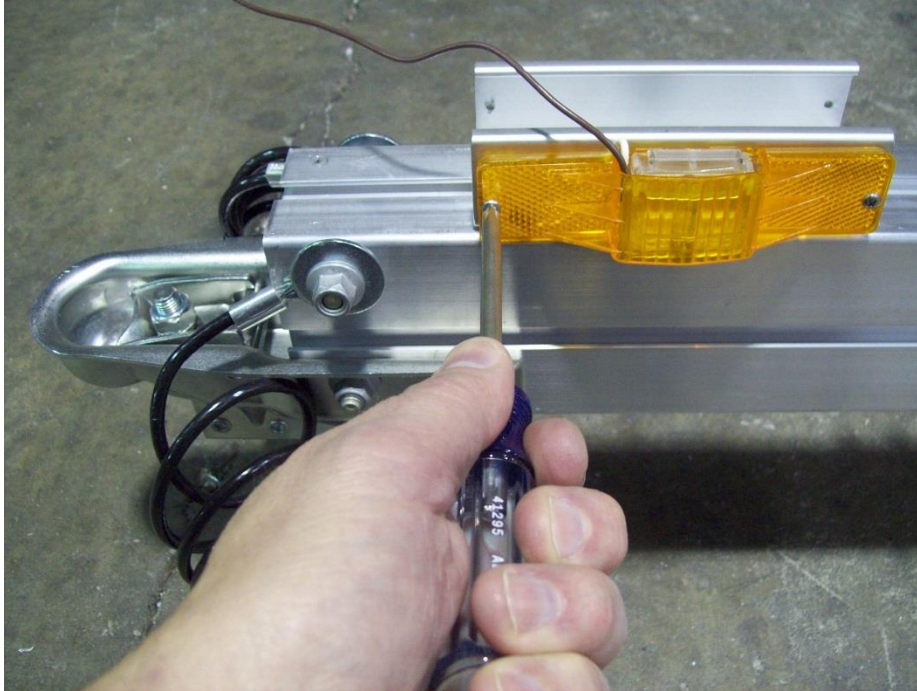




Install the ring terminals by crimping the terminal on to the bare wire.



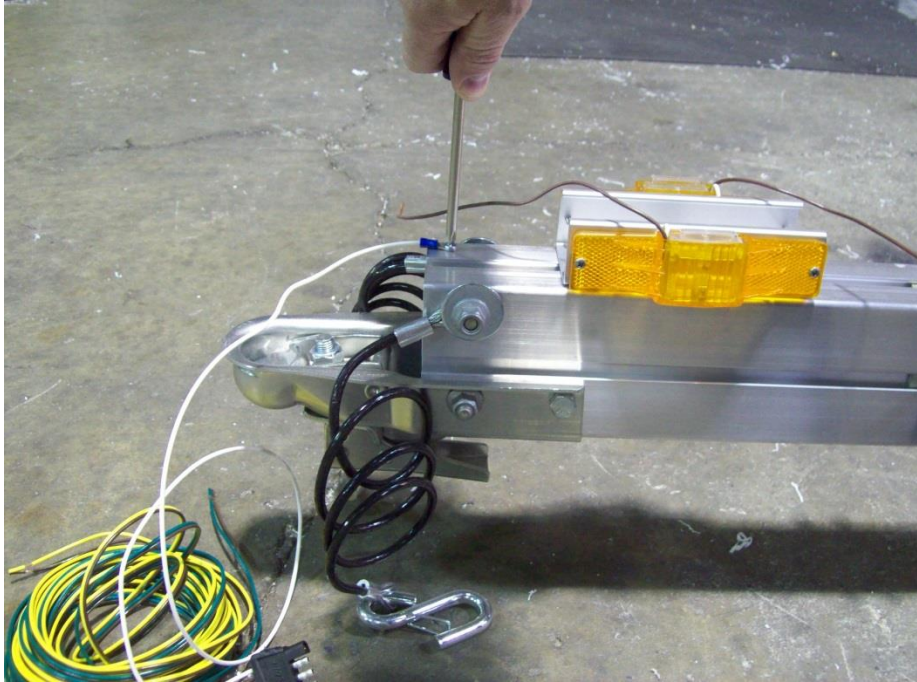
Align the ring terminals with the screw hole nearest the wire on the back of the running lights. Make sure the wire is routed through the gap on the back of the light so it does not become pinched when the light is installed.



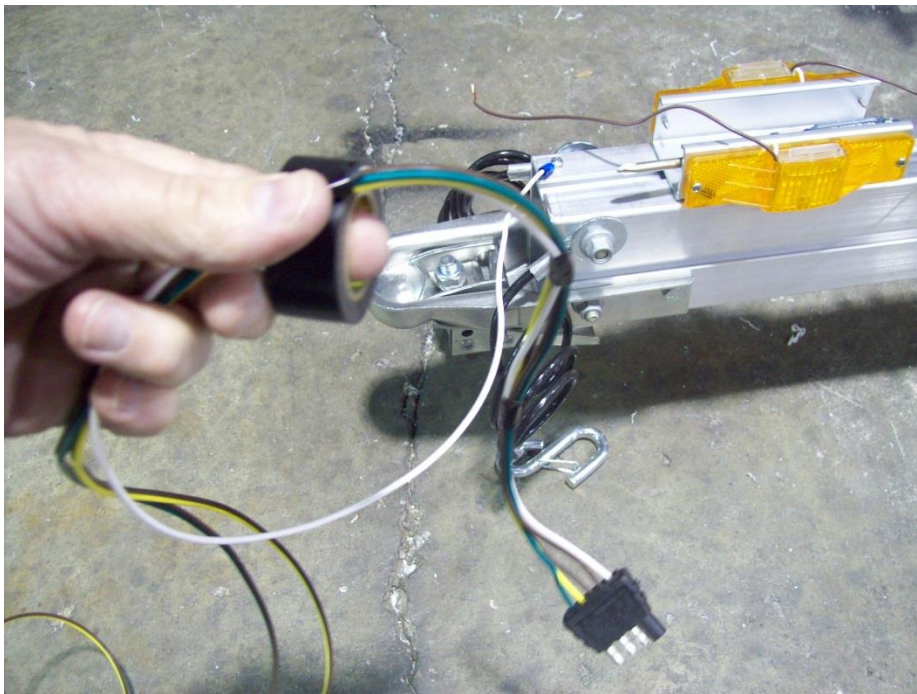
Install the running lights into the pre-drilled holes in the running light bracket using a Phillips screwdriver. Be sure the screw is through the ring terminal on the back side of the lights. This will supply a ground to the lights.



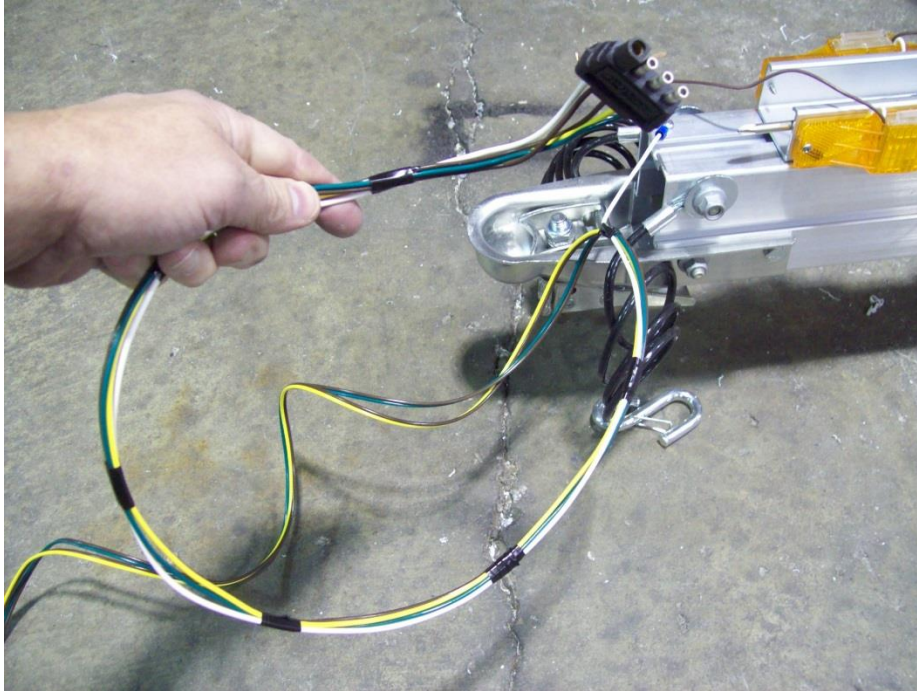
Take the white wire from the harness and strip a 1/4" of the insulation from the wire. Install ring terminal by crimping onto the bare wire.



Locate the  $\frac{3}{4}$ " long Phillips screw. Install Phillips screw through the ground wire into the pre-drilled hole located under the tongue just behind the coupler.



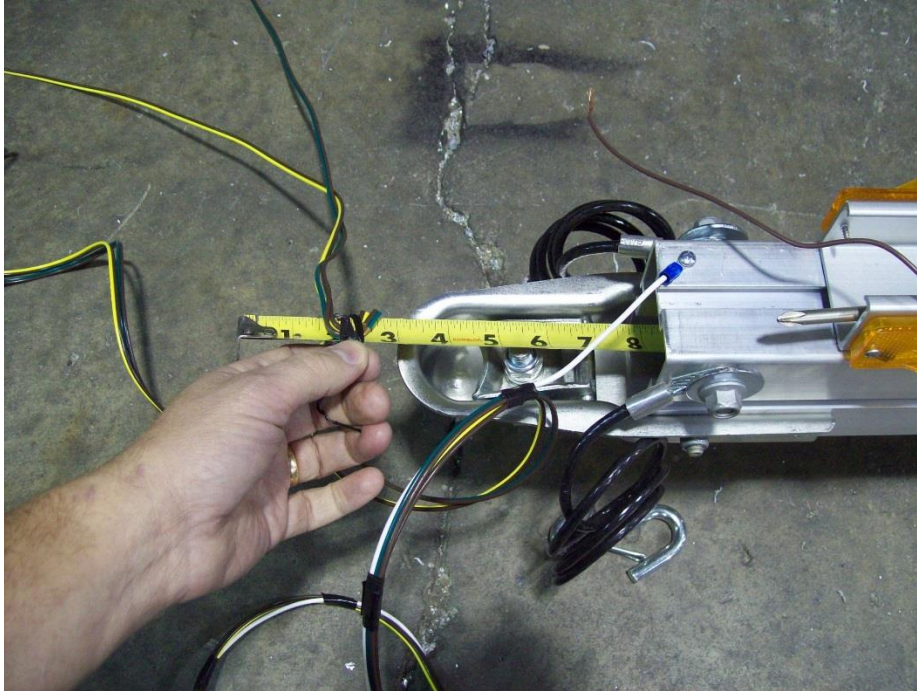
Tape wiring as shown.



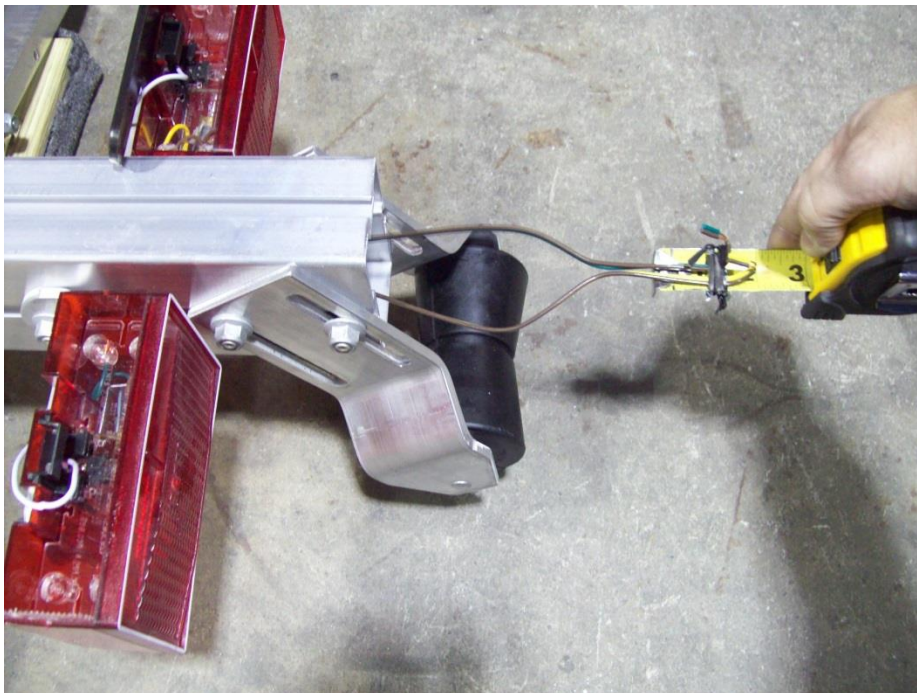
Your wiring harness should look like this when finished.



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.



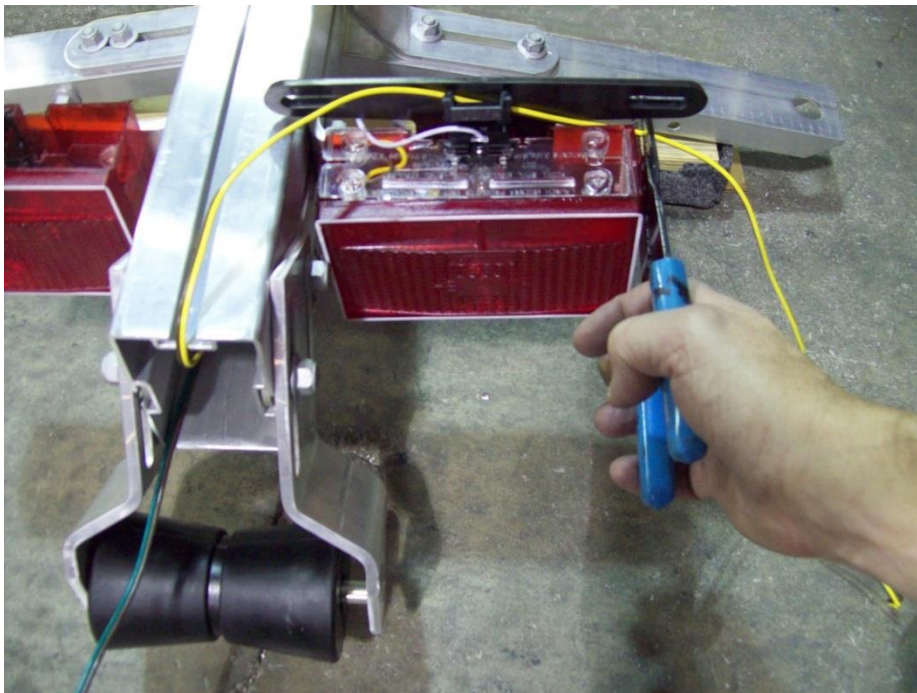
Attach both wires of the harness to the end of the tape measure with either tape or a tie.



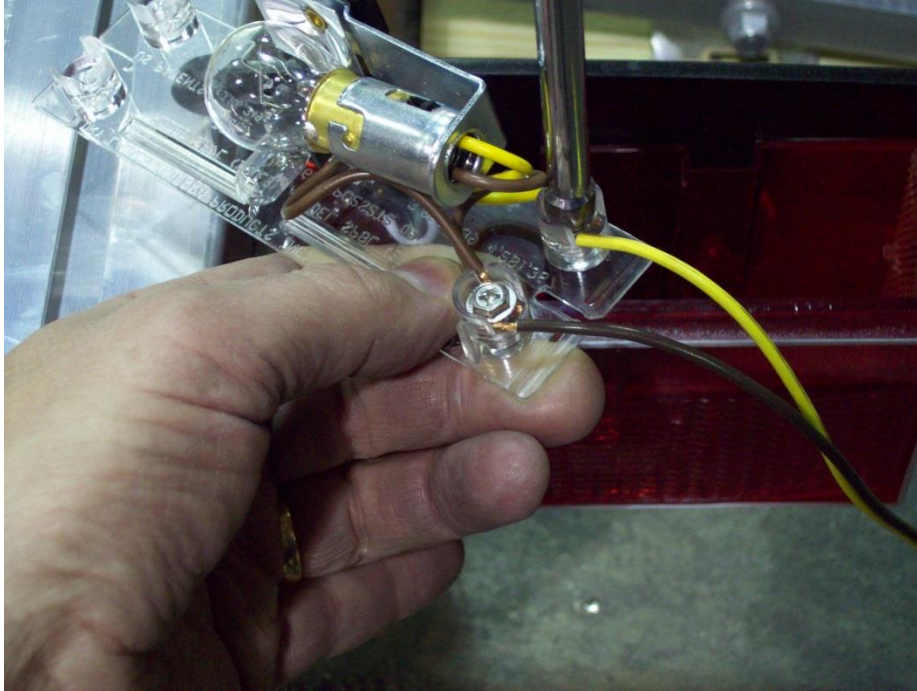
Retract the tape measure until it comes out the back of the tongue with both wires attached.



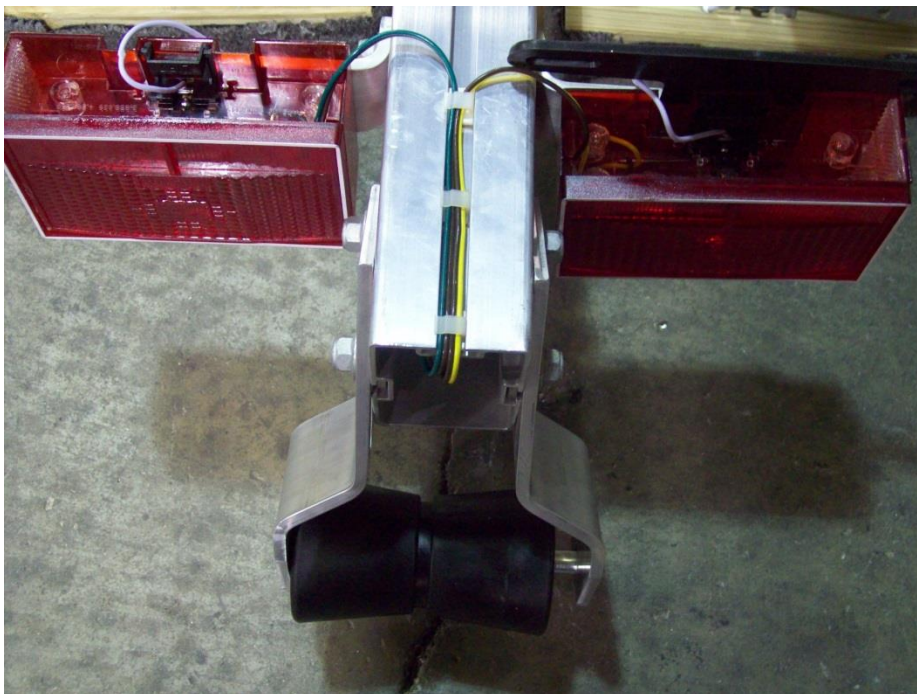
Locate the black tab at the bottom of the tail light. Move the tab toward the rear of the trailer and pull up, releasing the bulb assembly from the light housing.



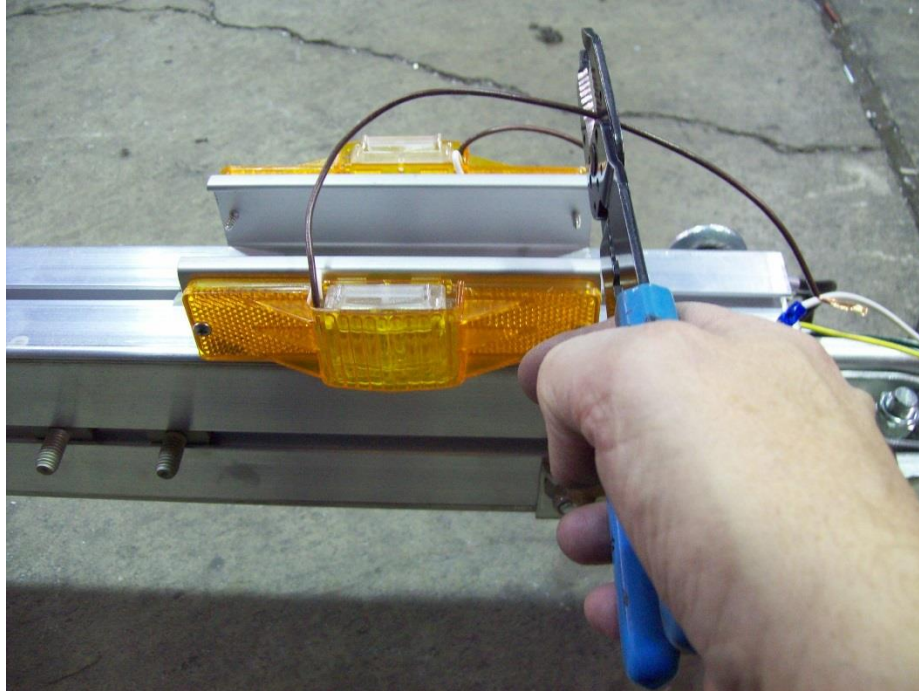
Trim off the excess wire, leaving some for adjustment. Strip about a ½” casing from the harness.



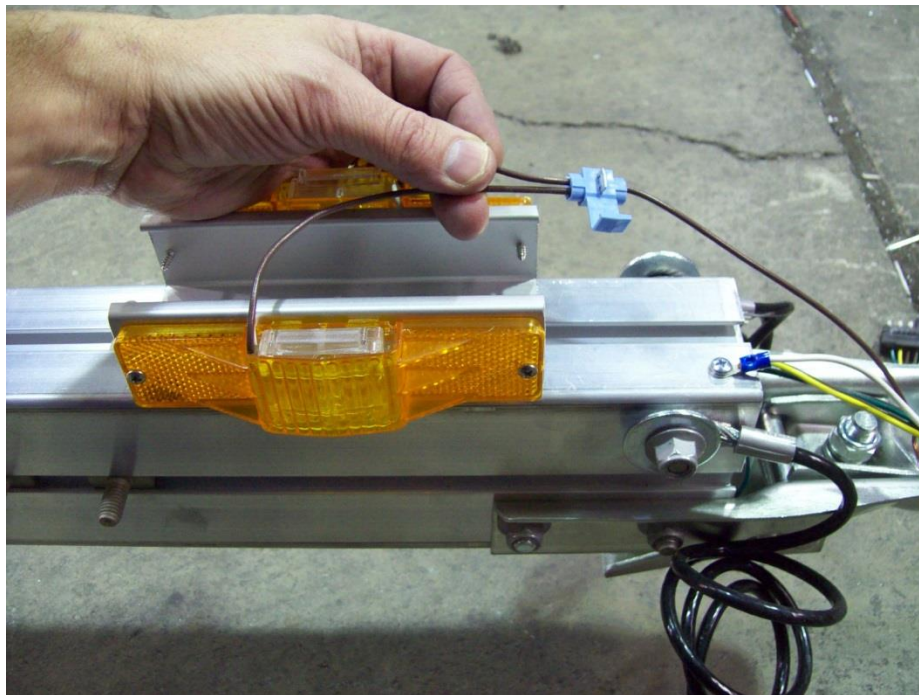
Loosen the retaining screws and install the color matching wires from the harness onto corresponding retaining screws. Tighten screws.



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.

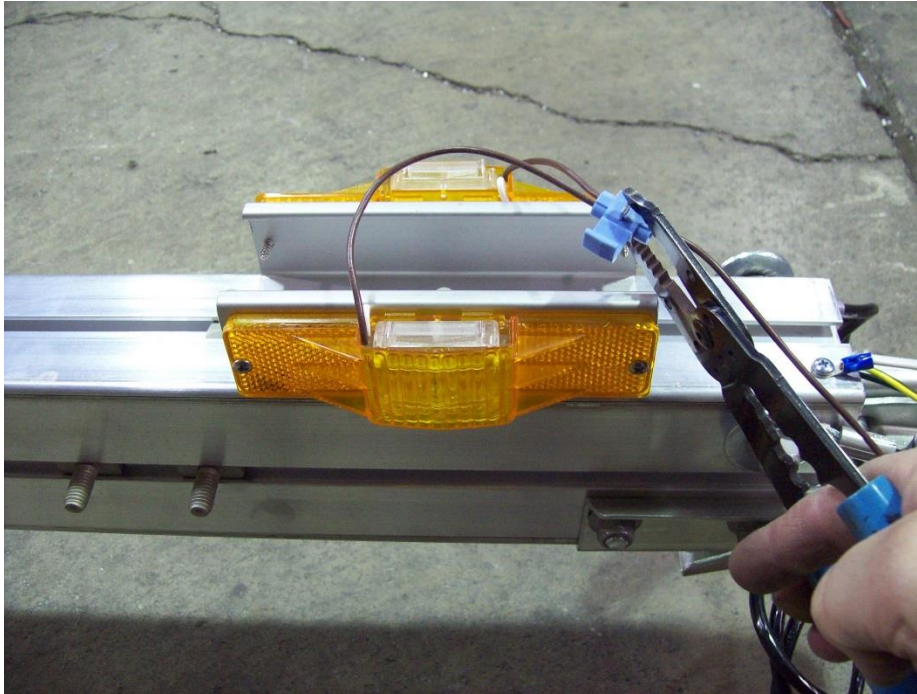


Cut about 2" off the brown wire on the left (driver's side) running light. Do not strip the wire.

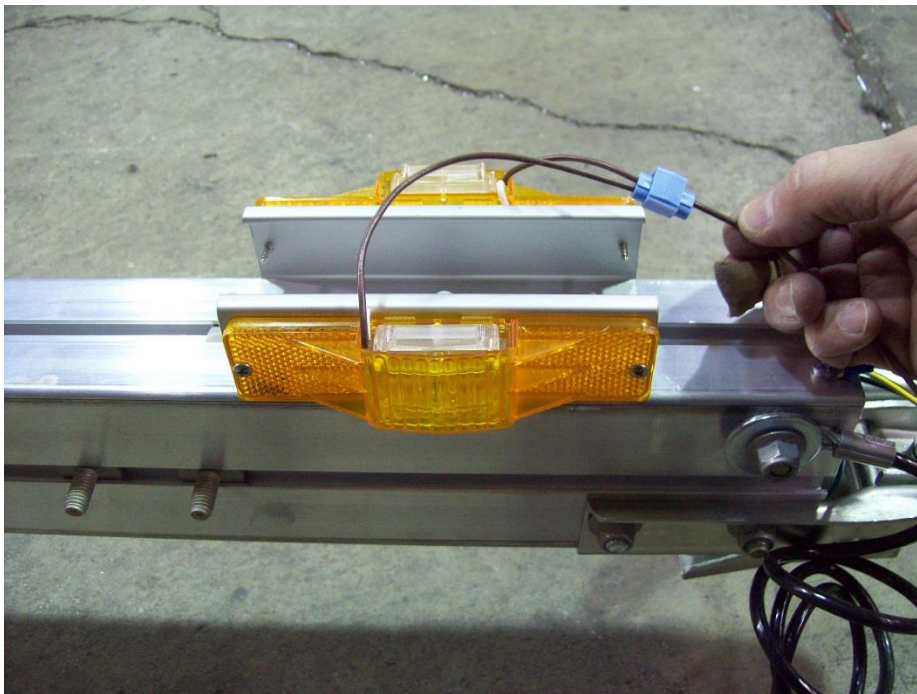


At a point close to the running lights, insert the brown wire that has been cut, into the hole in the blue connector closest to the hinge. This hole does not pass all the way through. The wire should go in about  $\frac{1}{2}$ ". Pass the other wire through the remaining open slot in the connector.





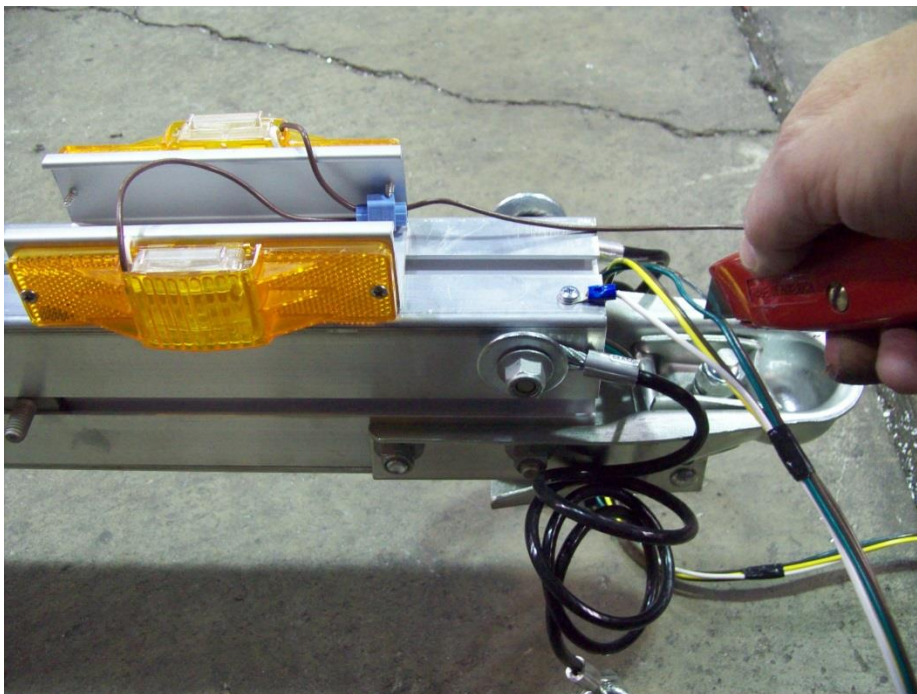
Use pliers to push the metal spade down until it is flush with the plastic. This is what makes the electrical connection between the two wires.



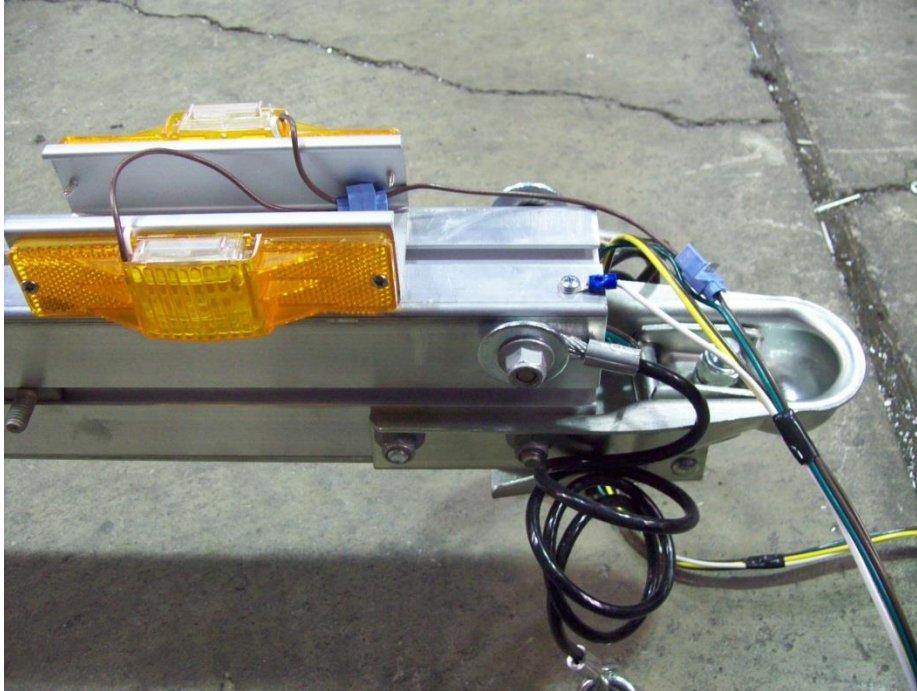
Close the plastic cover of the connector over the spade until it snaps in to position.



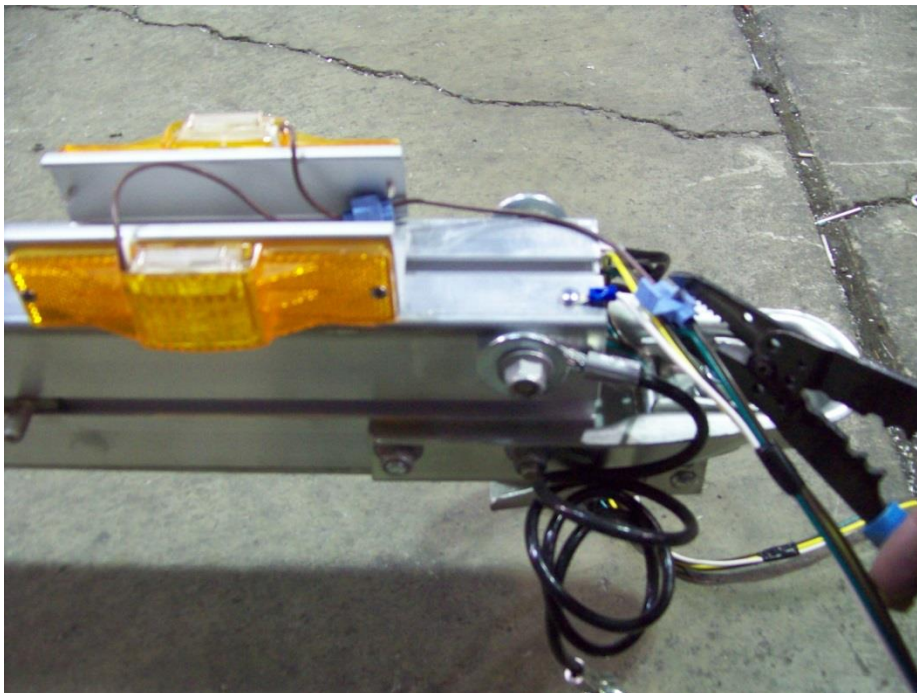
Cut the exposed strands of wire off of the end of the brown wire on the right (passenger side) running light.



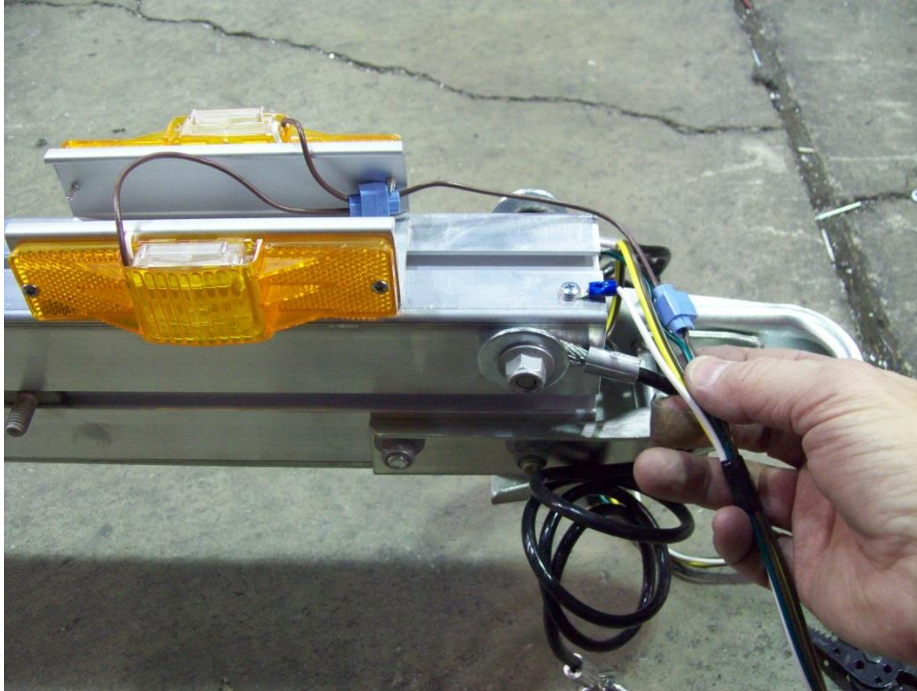
Measure 34" back from the front plug on the green/ brown wire and separate the wires with a knife. Be sure not to cut through the casing.



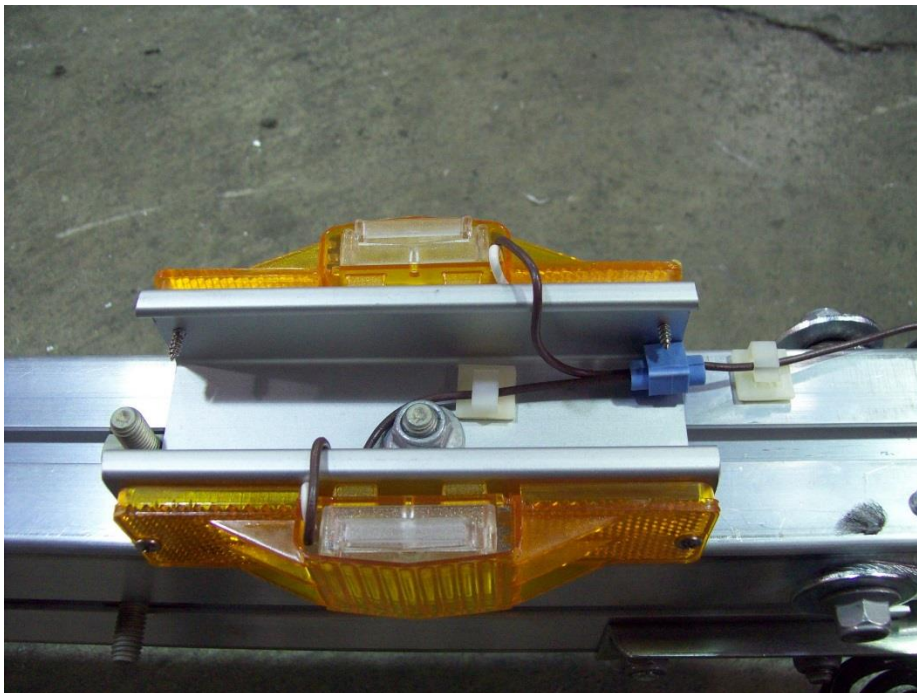
Pass the brown wire through the open slot in the second blue connector at this location.



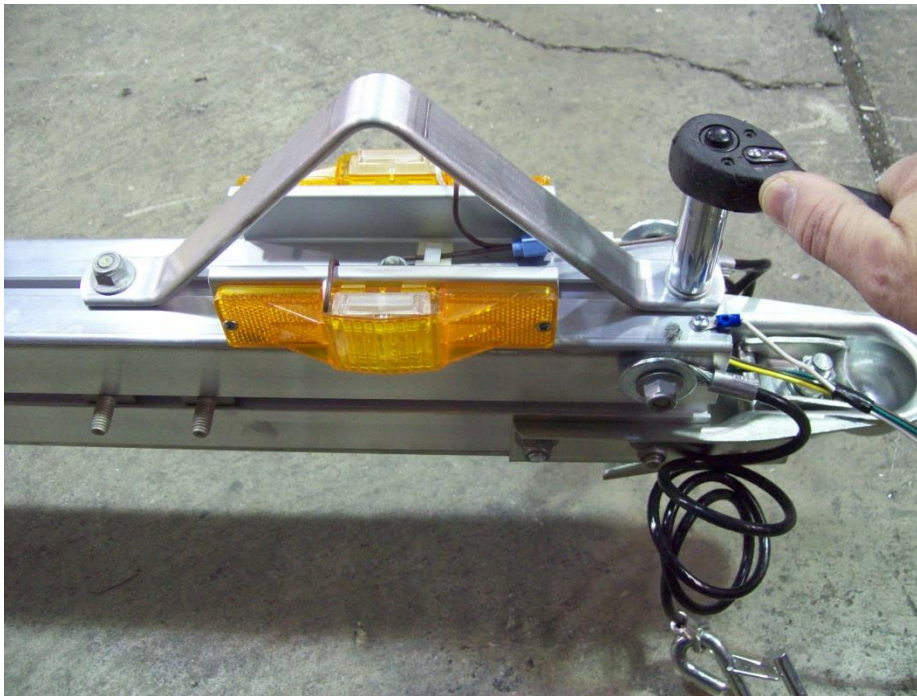
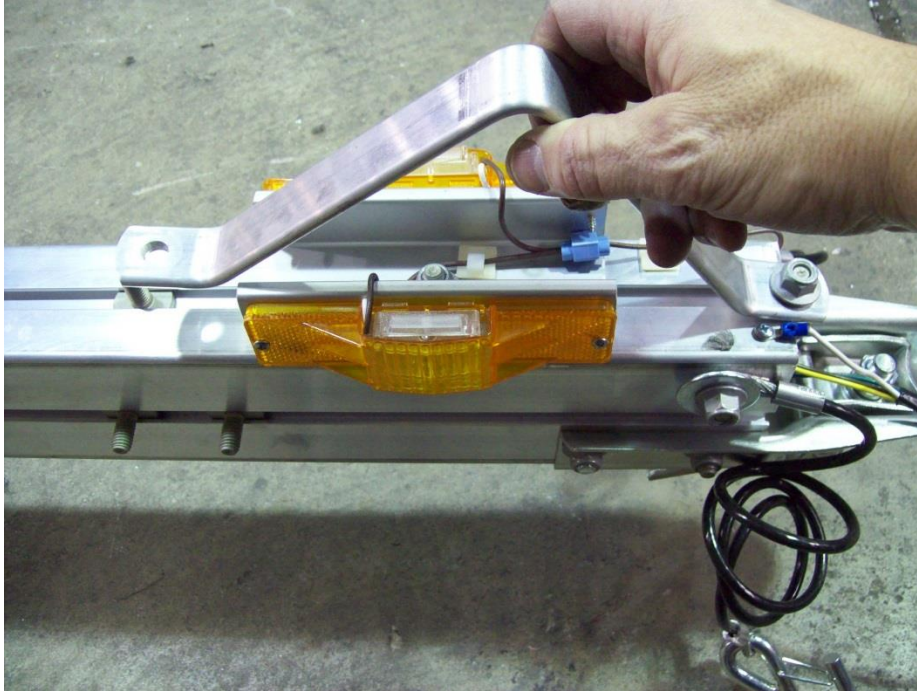
Use pliers to push the metal spade down until it is flush with the plastic. This is what makes the electrical connection between the two wires.



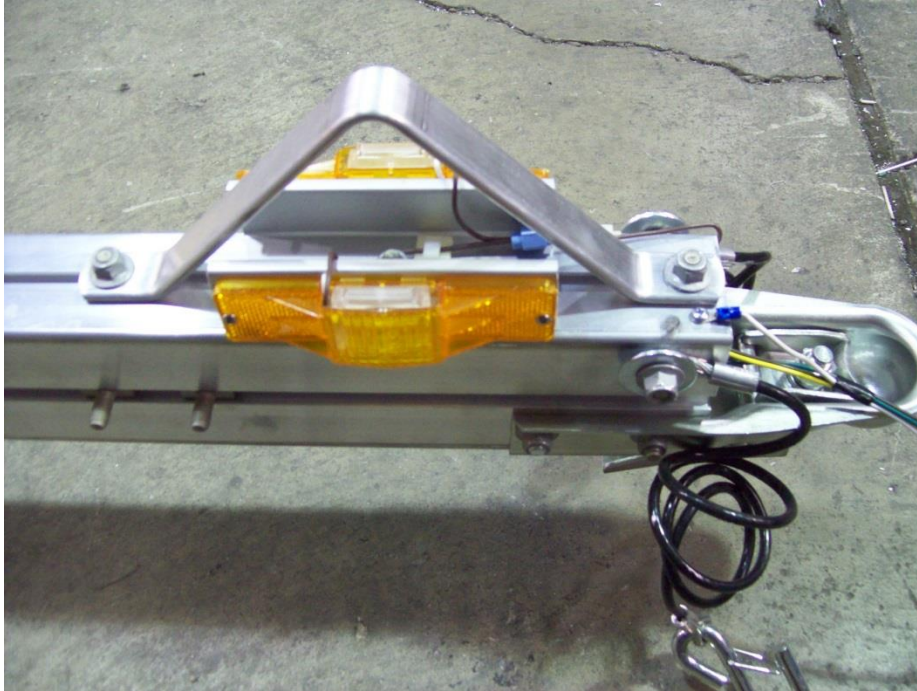
Close the plastic cover of the connector over the spade until it snaps in to position.



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.



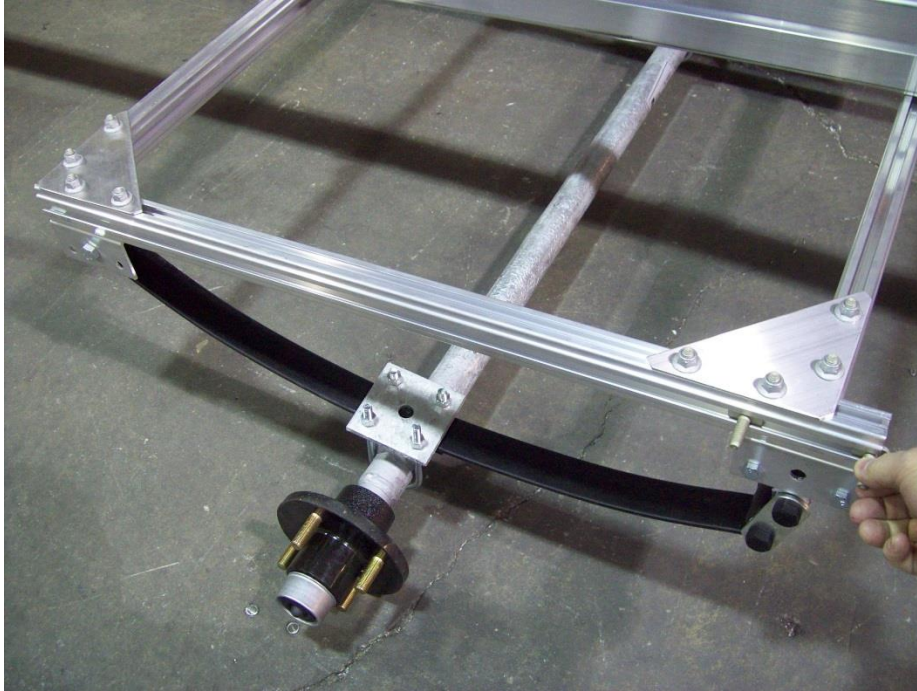
Insert skid with T-bolt into tongue section and over top of the other T-bolt already there. Reinstall nut tighten in position.



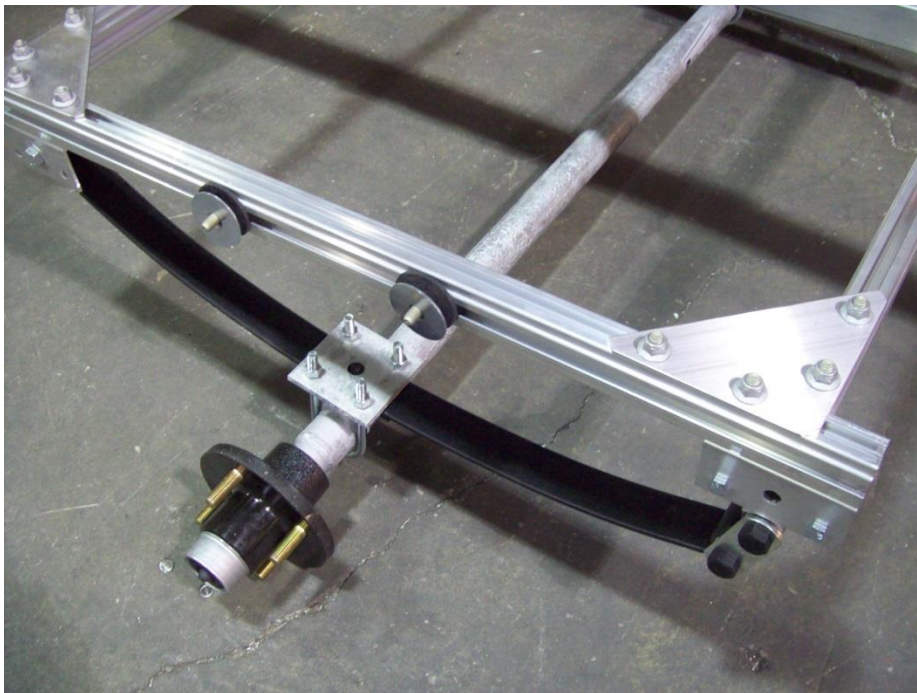
Skid should look like this when finished.



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.

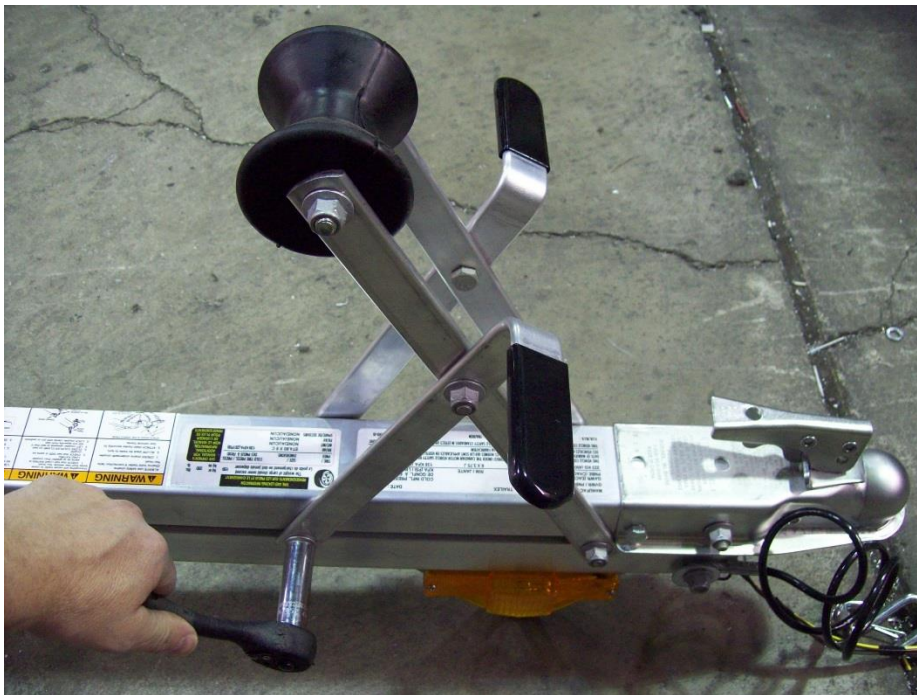


Locate the bow stand.





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.



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.



Locate the two web strap clips.



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



Finished trailer



KJM 5/5/17