

SUT-450-I



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.

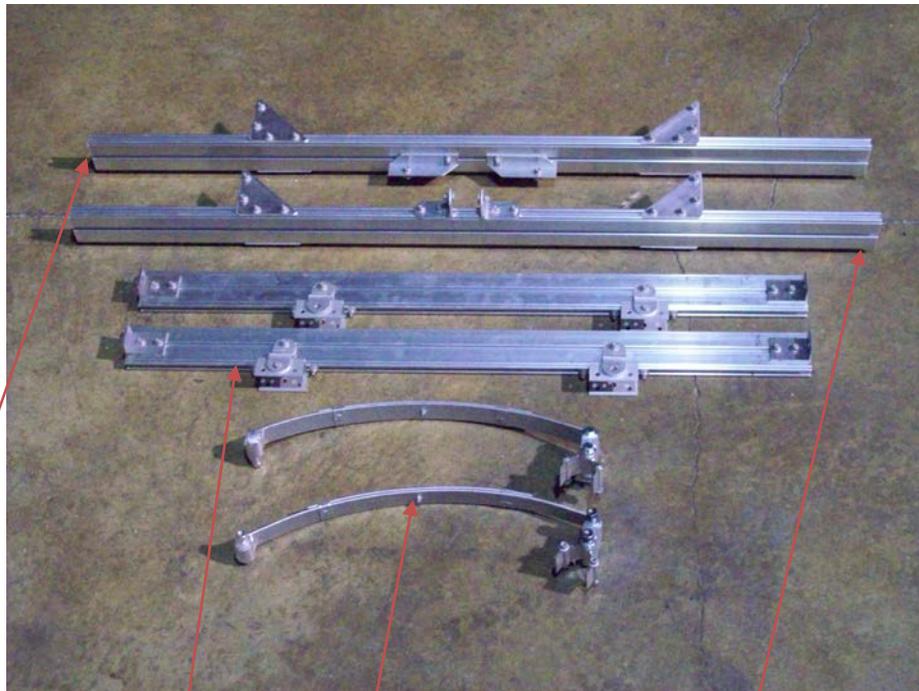
Incorrect assembly or modifications to your trailer will void any specific or implied warranty.

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

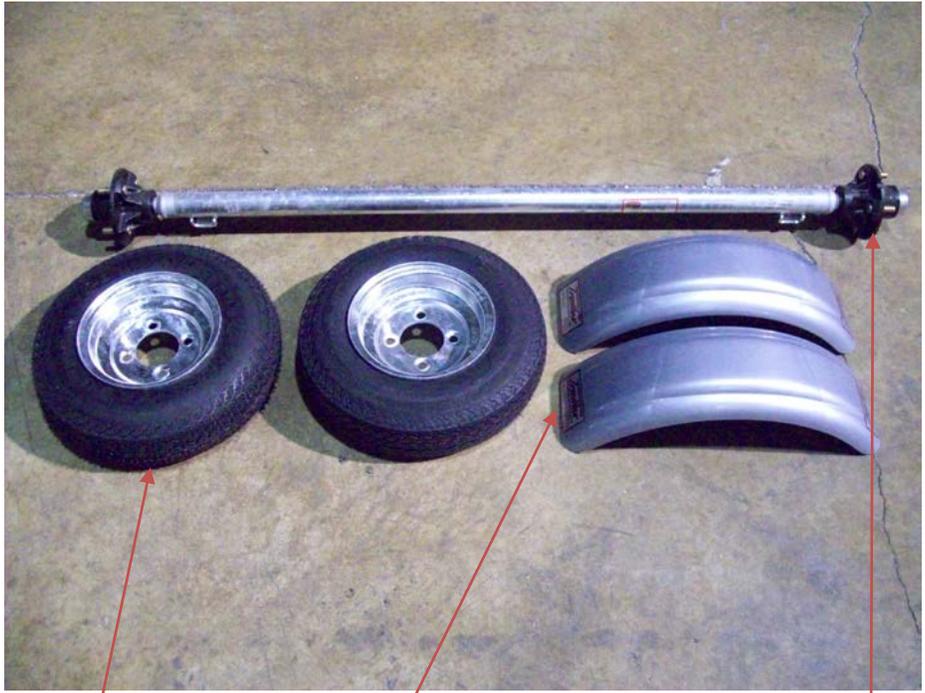
UNPACK AND IDENTIFY THE FOLLOWING PARTS.



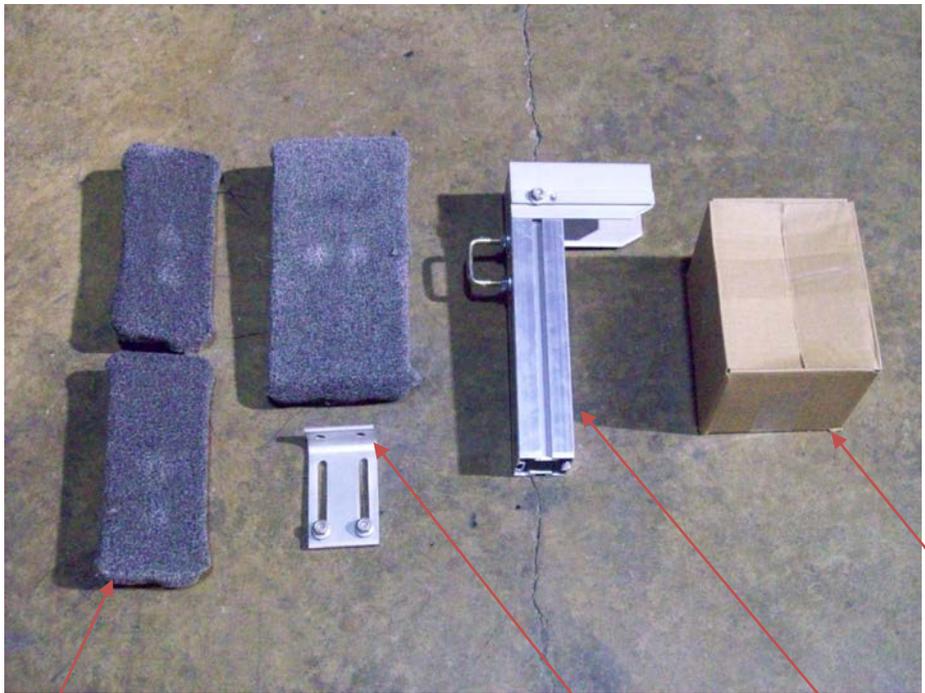
Front tongue splice plate (4) 6' padded cradle rear tongue



Front cross arm side rails spring assemblies rear cross arm



Wheels fenders axle



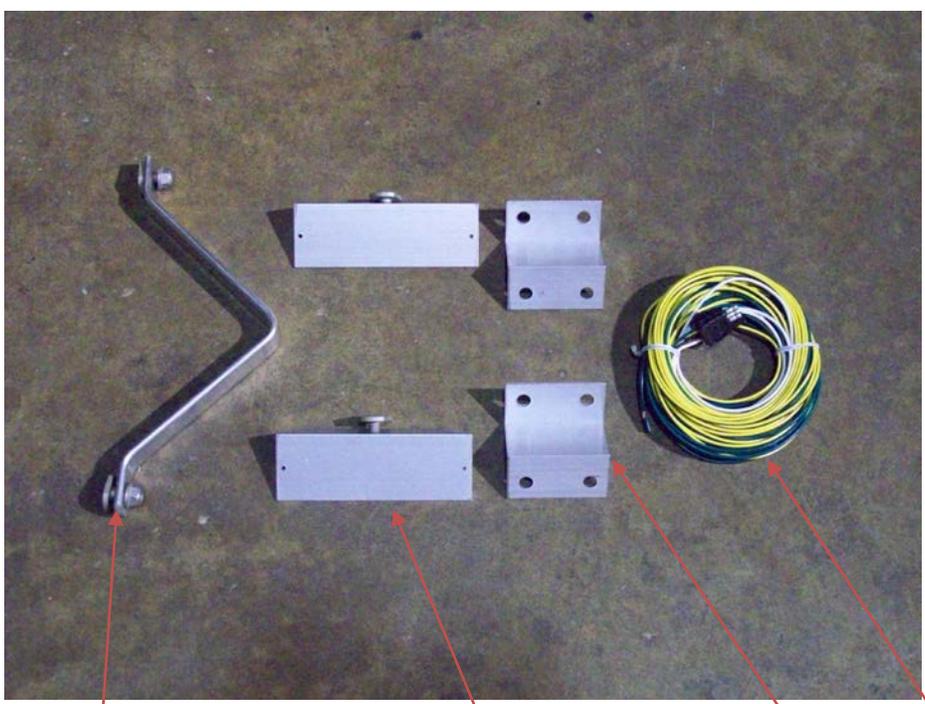
Bow pads transom board & slotted bracket winch post light box



U-bolt kit

hardware bag

spare parts

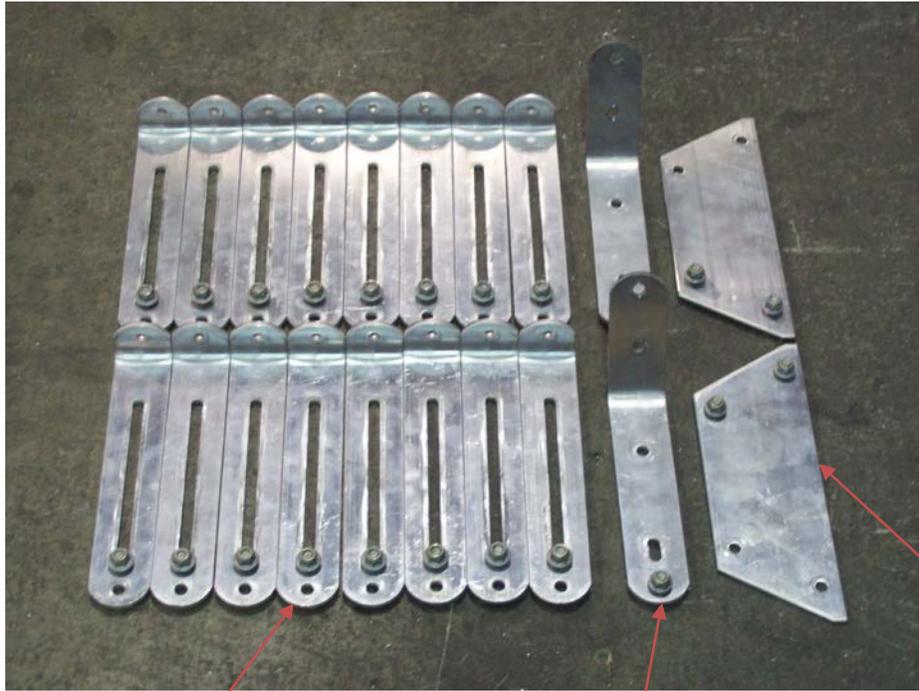


Skid

clearance light brackets

tail light brackets

harness



16) Slotted L brackets — 2) bow mounting brackets — 2) winch post diagonal brace



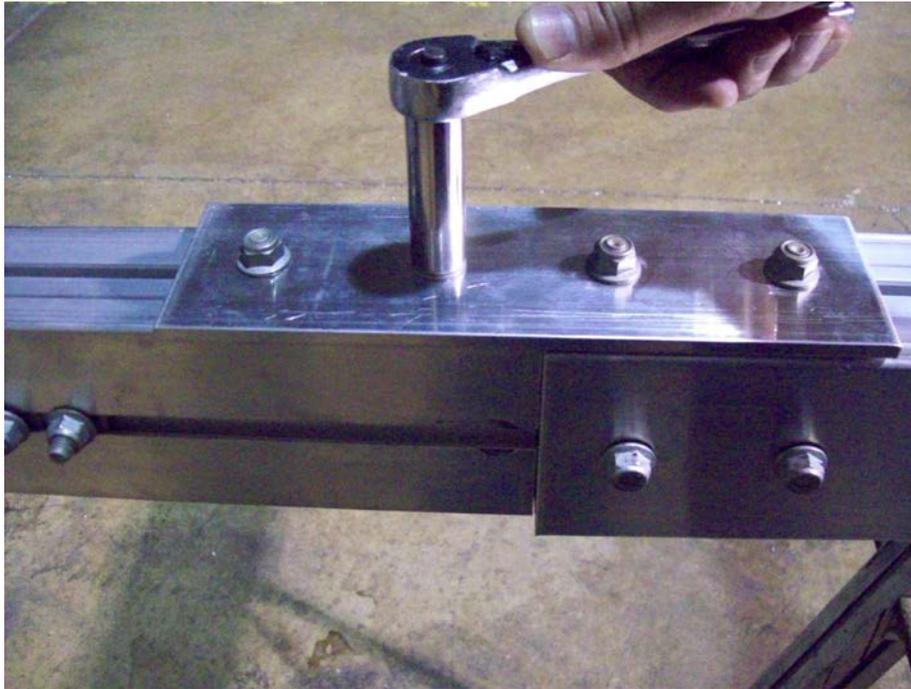
Insert splice plate into the underside of rear tongue section as shown.



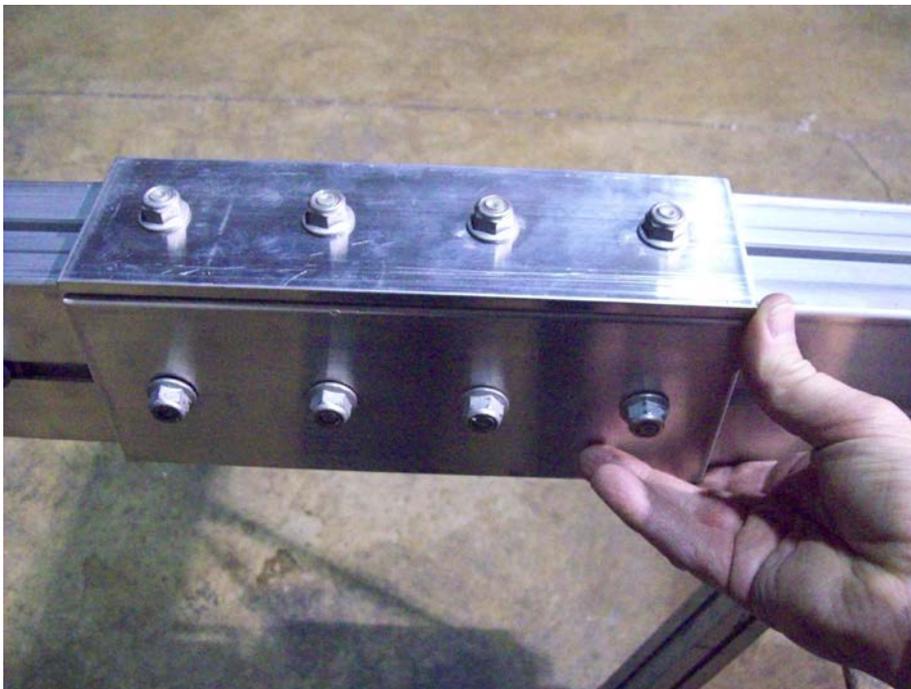
Loosen nuts on both sides of the front tongue section and slide them forward. These will be used later in the assembly process. There should be three on each side.



Align the rear tongue section with splice plates to the back edge of the front tongue section. Once in position, slide the bottom splice plate over and center it.

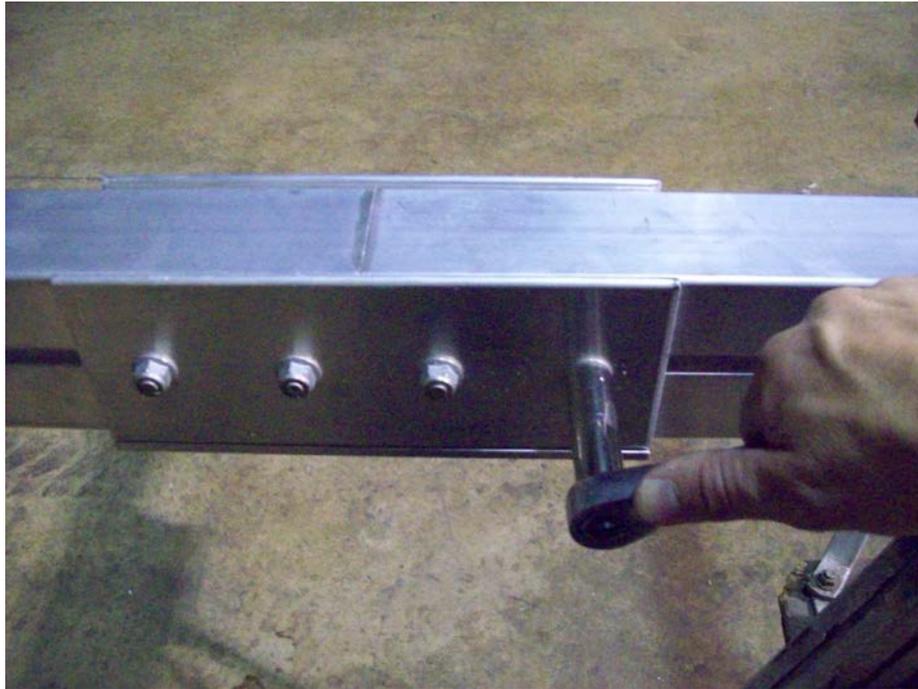


Tighten nuts on the bottom splice plate. Also, make sure there is no gap between the two tongue sections.

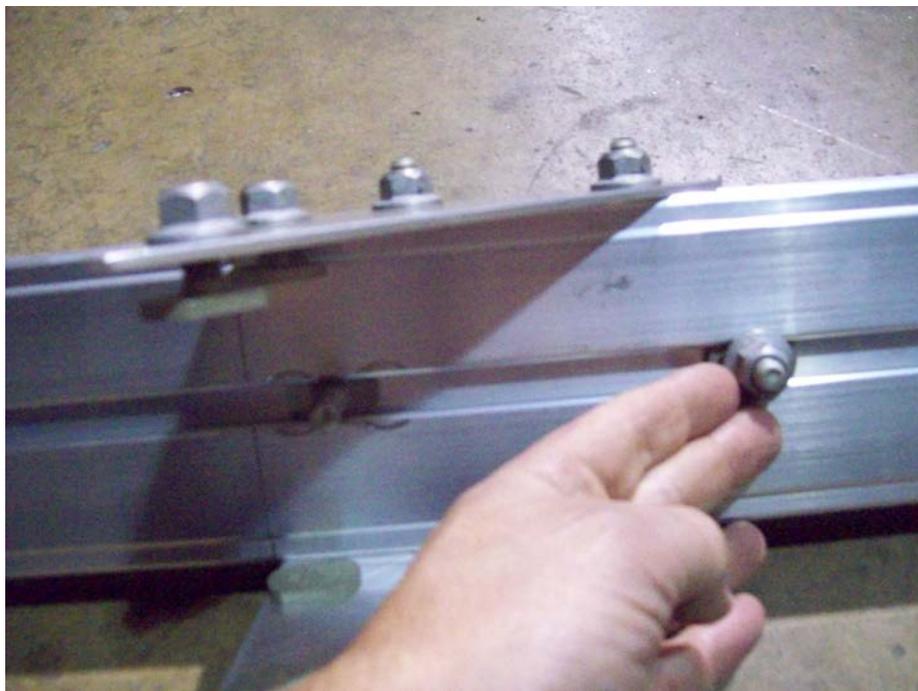


Shown up side down

At this point slide both side splice plates over and center.



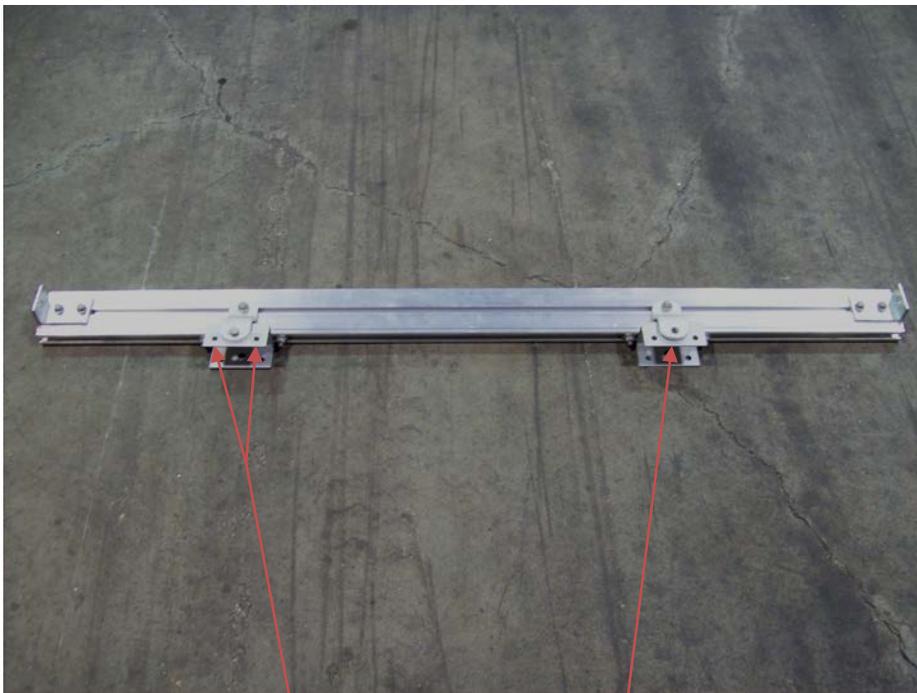
Once plates are in position with no gaps, tighten all nuts.



Locate the rear cross arm. On each side there are two T-bolts and nuts. Remove the outer nuts on both ends. The two inside T-bolts are extra to be used when inner bunk brackets are moved closer together.

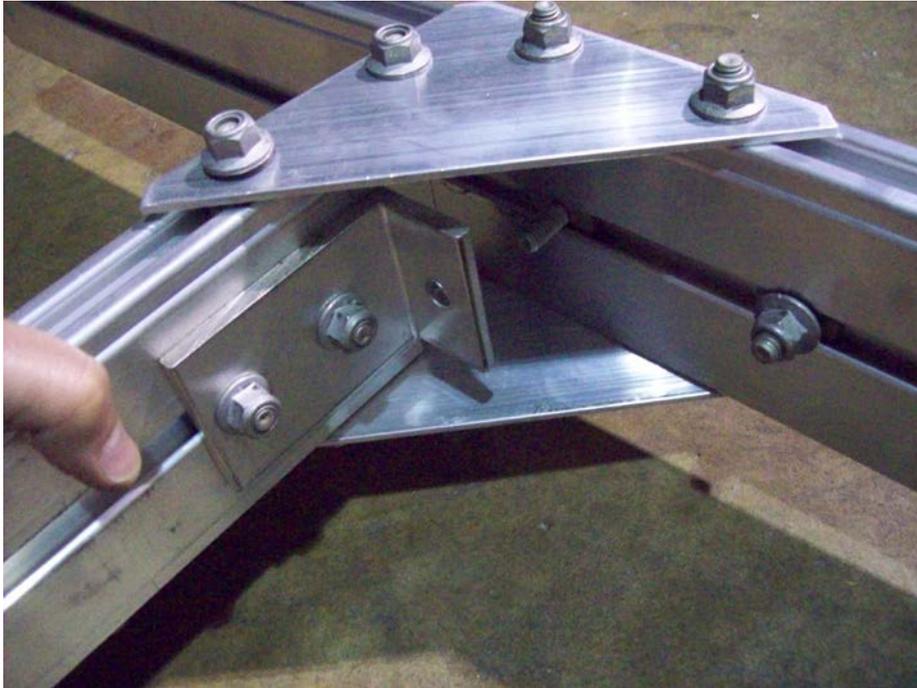


On the outward part of the side rail insert two 1 1/8" T-bolts. These will be used later to install the fenders.

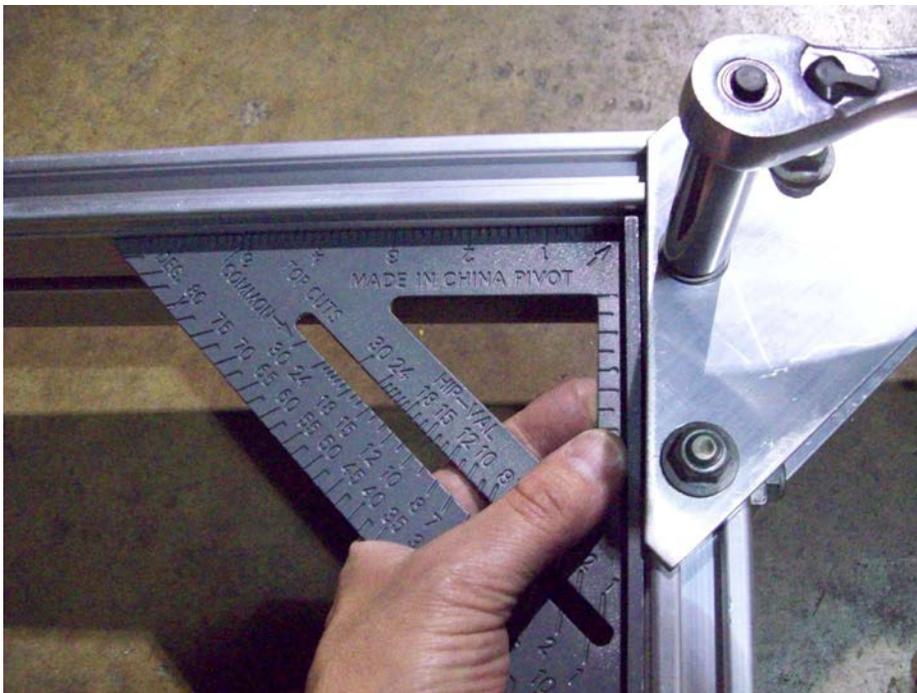


Rear sub rail clip **Inside of side rail shown** **Front sub rail clip**

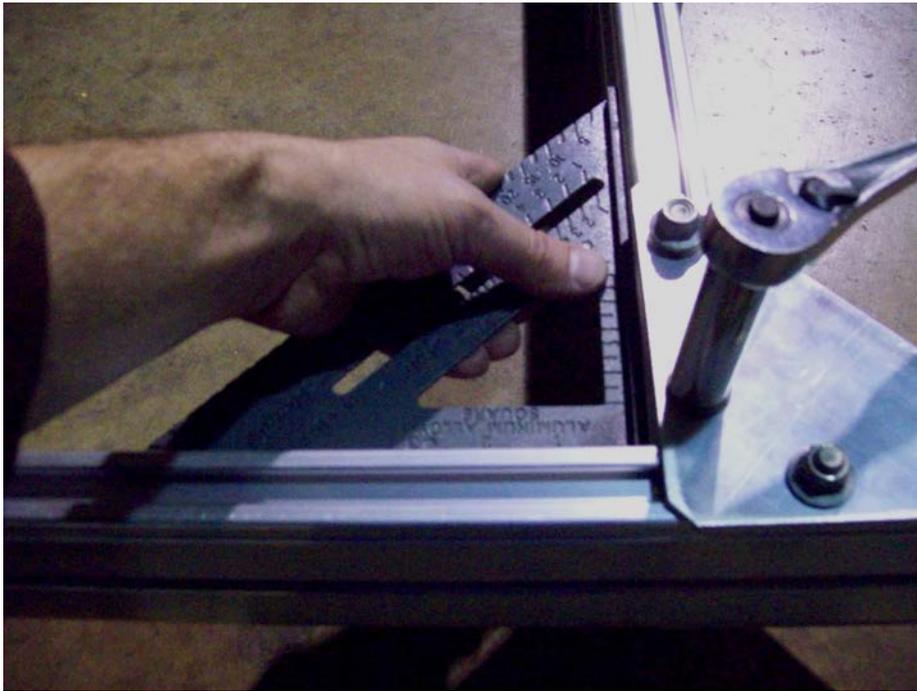
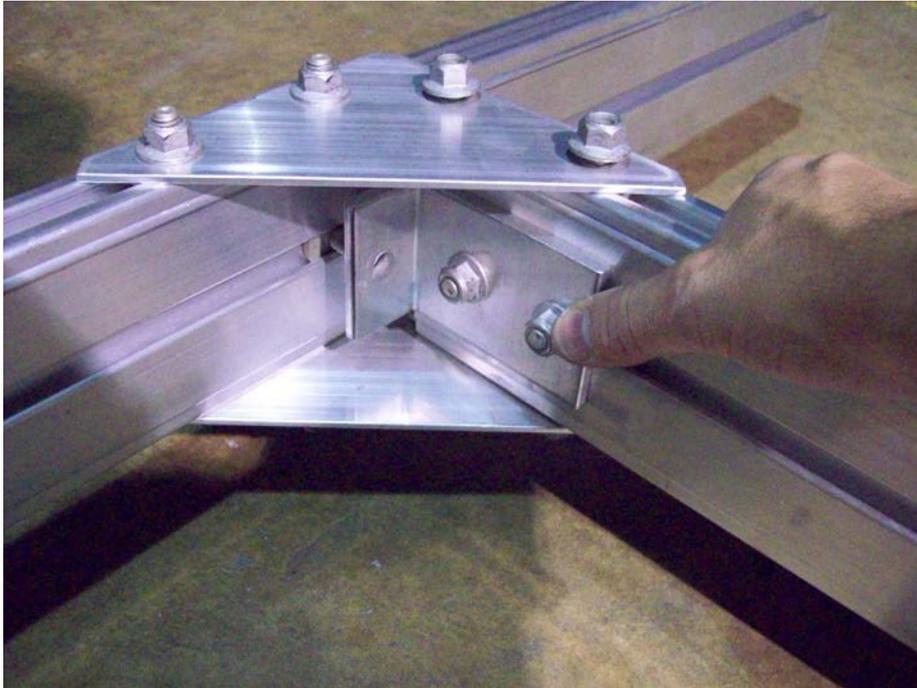
Rear sub rail clip has two outer holes to accept the shackle assembly. In the front sub rail clip, the center hole is open to accept the spring bolt.



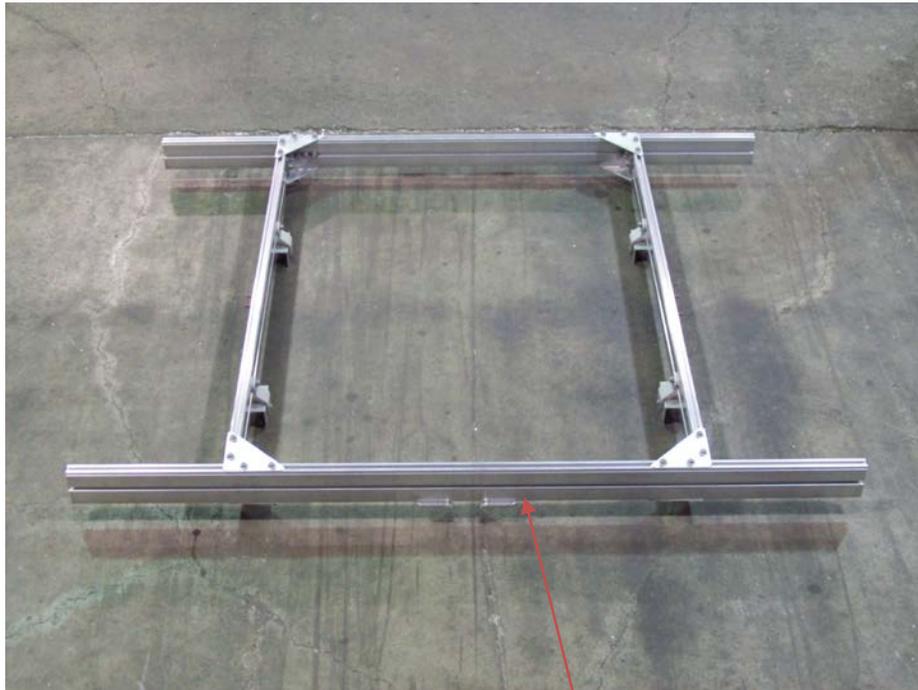
Insert the side rail into the T-bolts on the triangle plate and the cross arm. Once inner angle bracket is over T-bolt, reinstall nut.



Square up the side rail and rear cross arm then tighten all the nuts. Repeat this process for the other side.

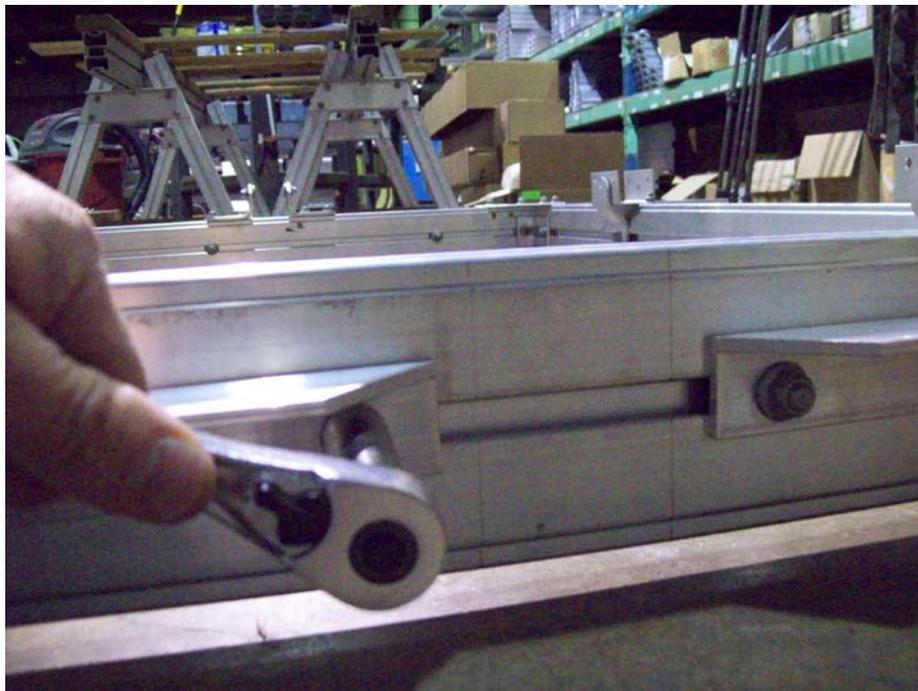


Insert the front cross arm into both of the side rails. Make sure the side rail and front cross arm are square and tighten nuts.



Rear cross arm

At this point, the frame should look like this.

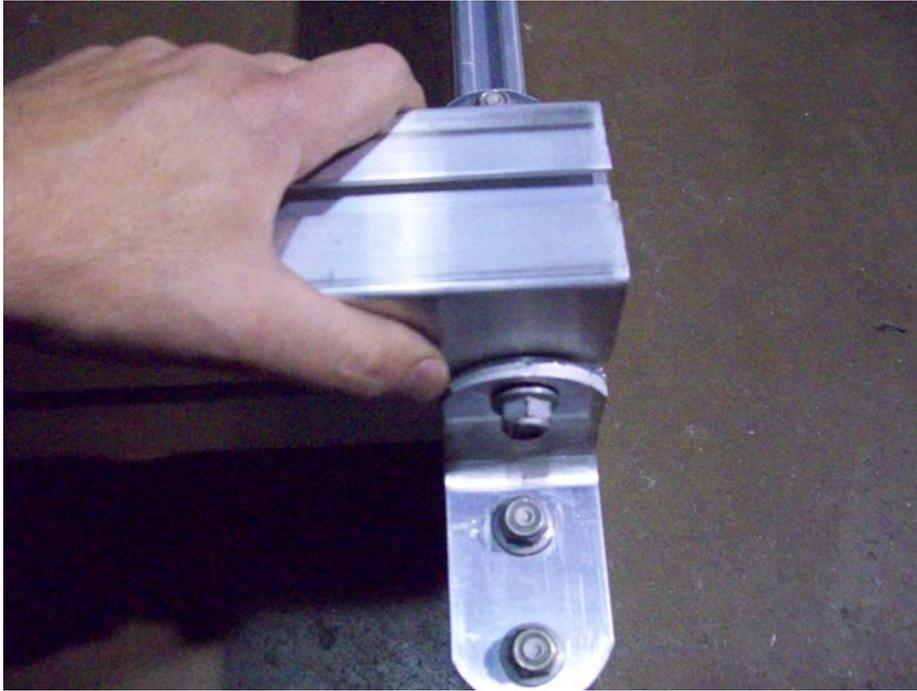


Frame shown upside down

Turn frame upside down and loosen angles on front cross arm.



Align back edge of angle with pencil mark on cross arm. Square up angle and tighten. Leave the other angle down at this point.



Insert rear tongue section into the angle brackets on the rear cross arm as shown.



Rear tongue section should protrude 1 1/4" past the rear cross arm.



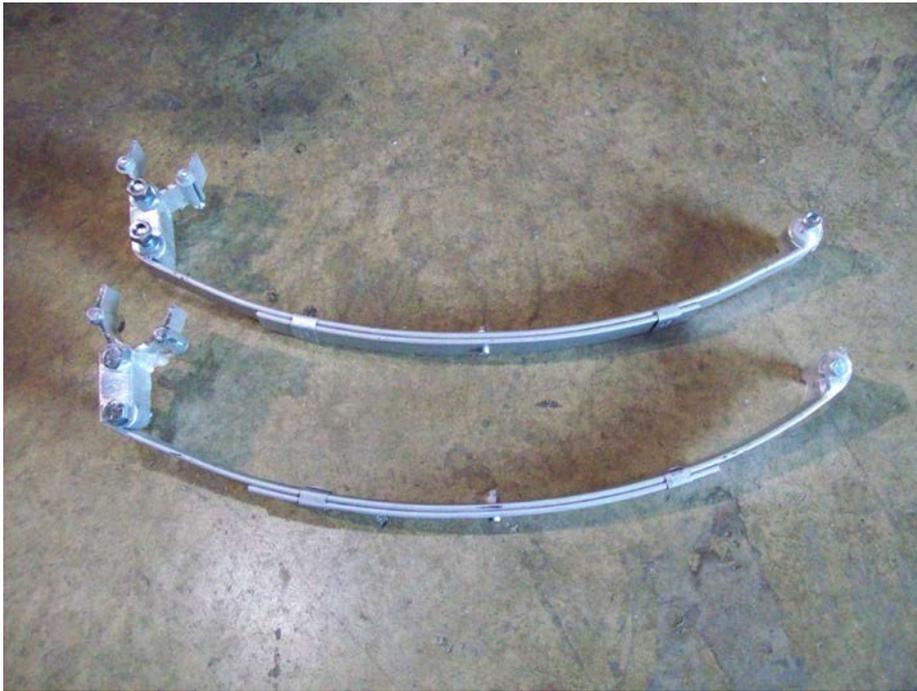
Remove the rearmost nut in the front tongue section and insert the T-bolt into the angle bracket. Reinstall nut and tighten.



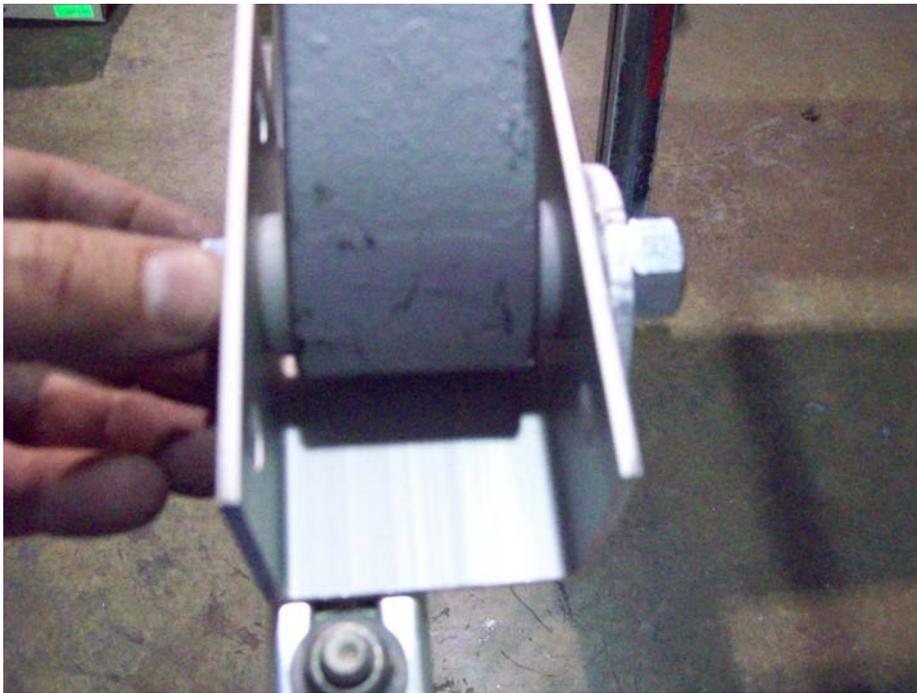
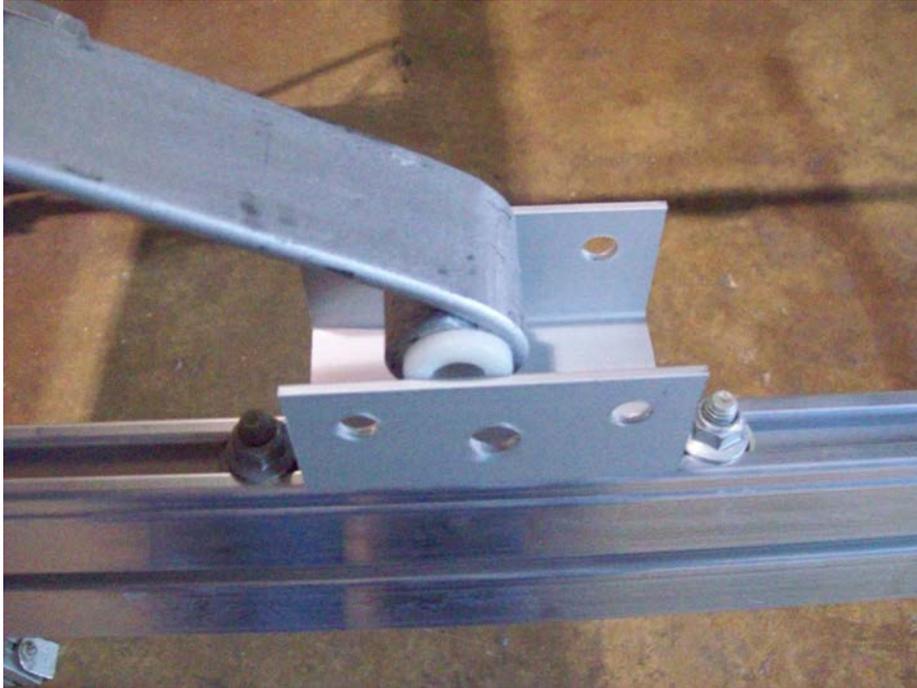
Loosen the other angle bracket, slide over and install on tongue section. Square up and tighten nuts.



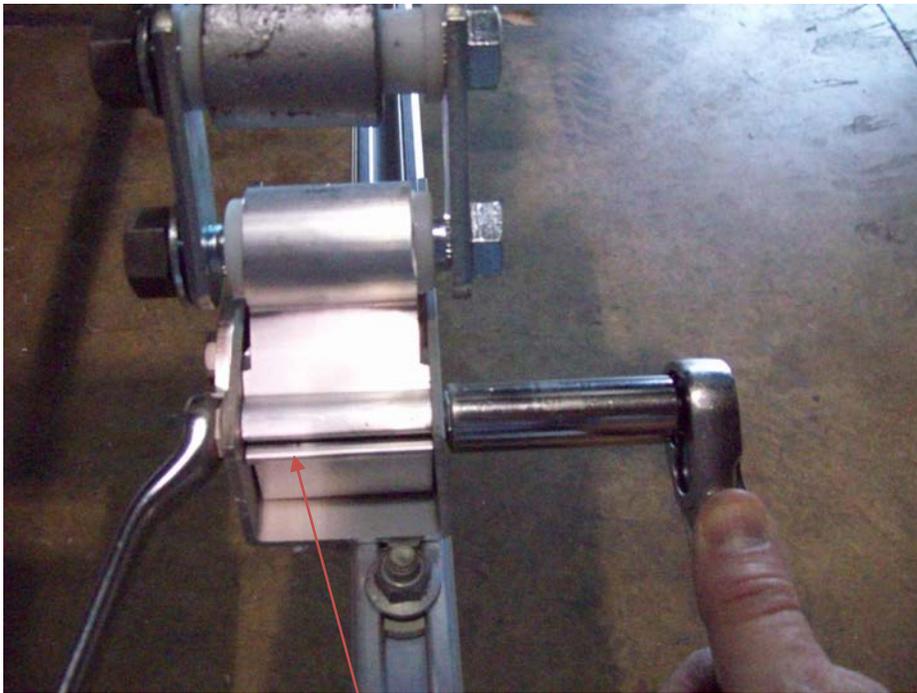
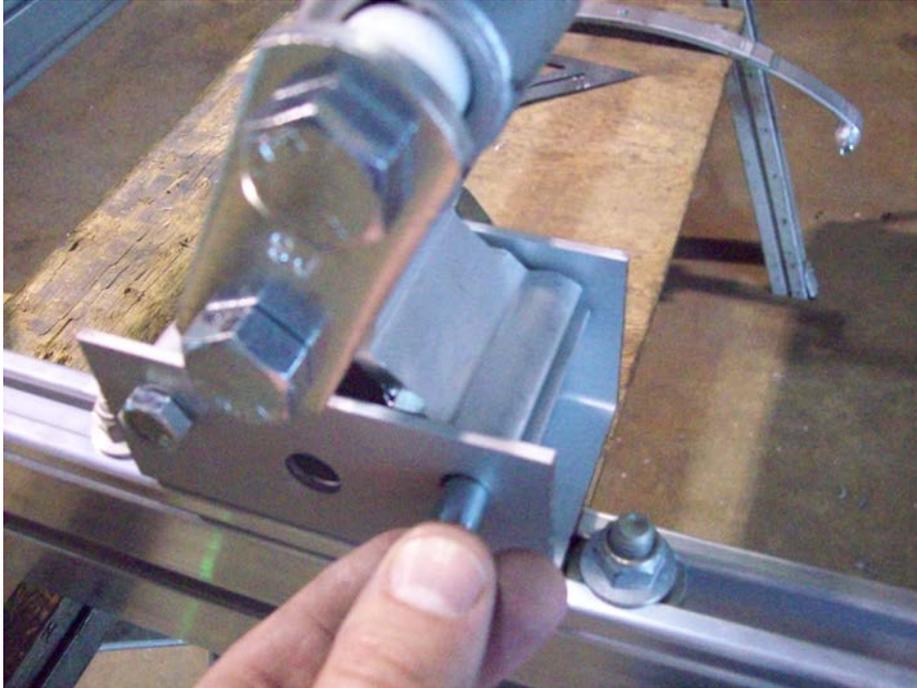
Your frame should look like this at this point (shown upside down).



Locate the spring assemblies.

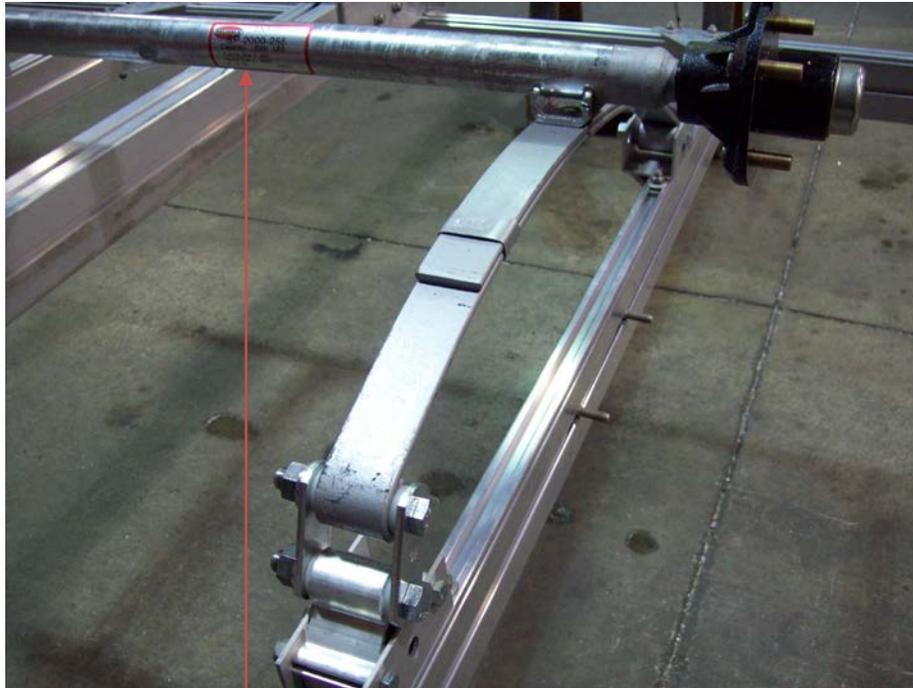


Remove the bolt from the front spring eye and install the spring into the spring hanger in the center hole with the nut toward the inside of the trailer. Do not tighten yet.



Shackle holder

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.

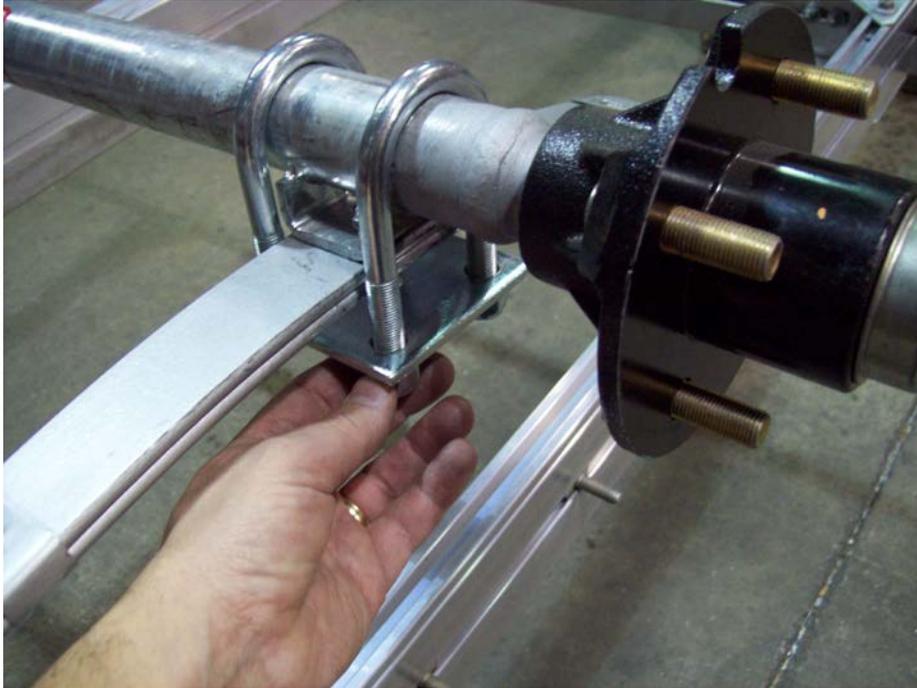


Serial plate

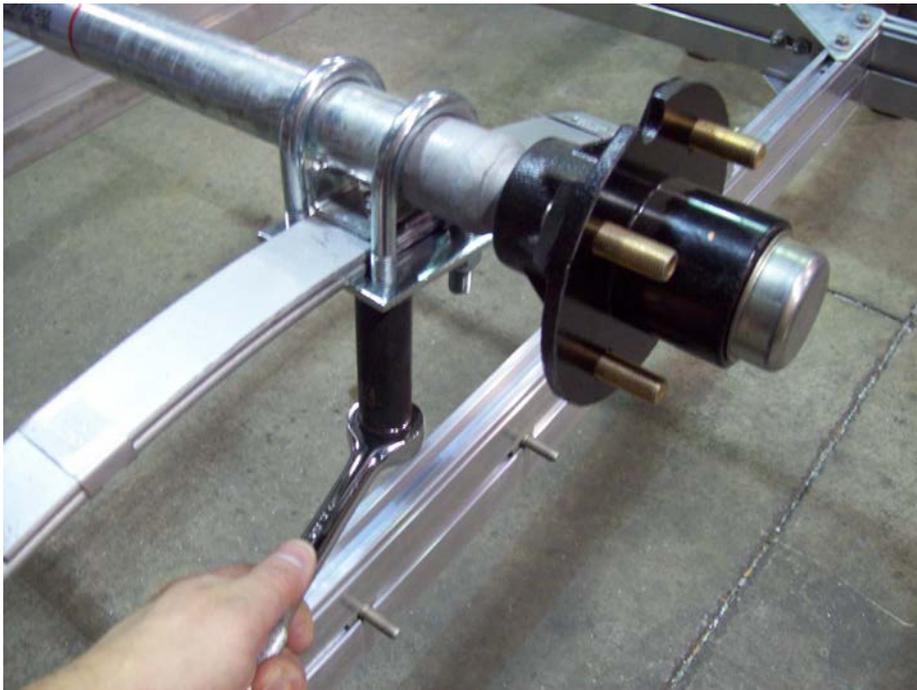
Locate the axle and install it on the springs as shown. Make sure the locating studs on the springs are in the holes on the axle's spring seat. Face the axle's serial plate toward the rear of the trailer to protect it from debris.



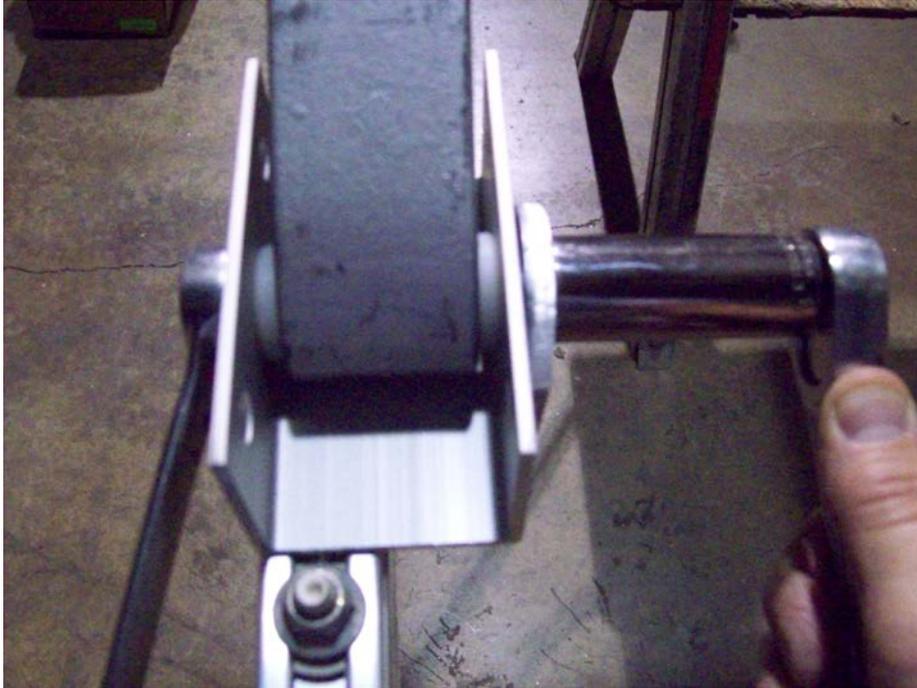
Locate the U-bolts and tie plates.



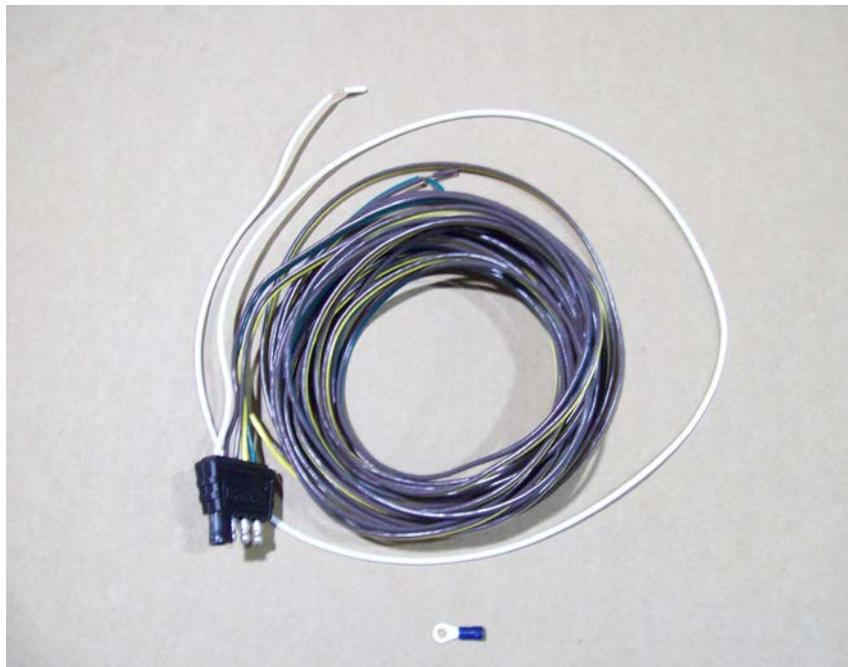
Install the U-bolts and tie plates as shown.



Install the nuts and tighten them evenly.



Go back and tighten all of the spring mounting nuts that were left loose previously. Do not over tighten the bolt on the rear shackle as this will not allow the suspension to move properly.



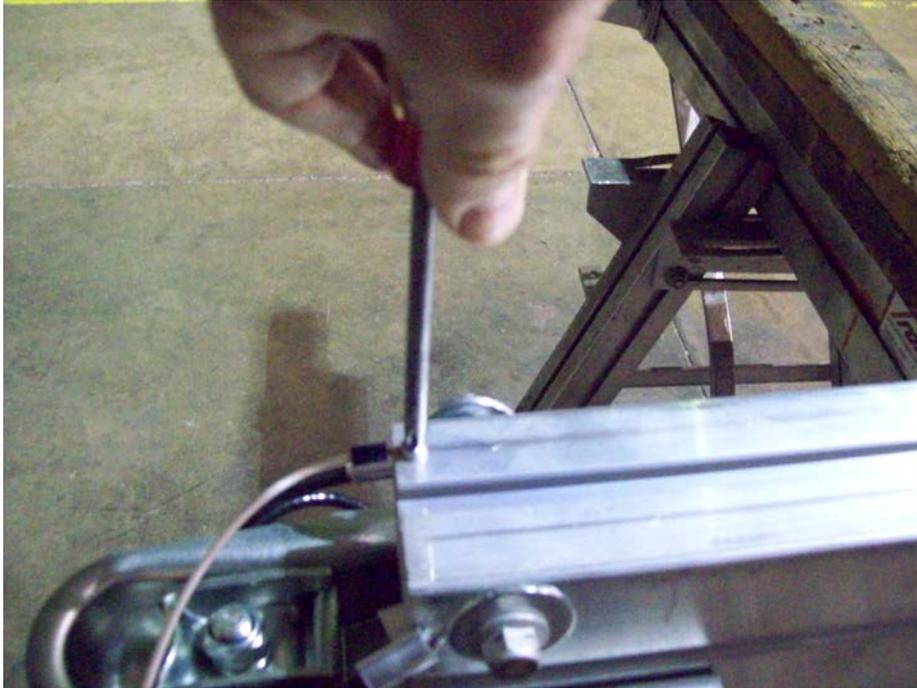
Locate harness and ring terminal.



Take the white ground wire and strip it and install ring terminal.



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



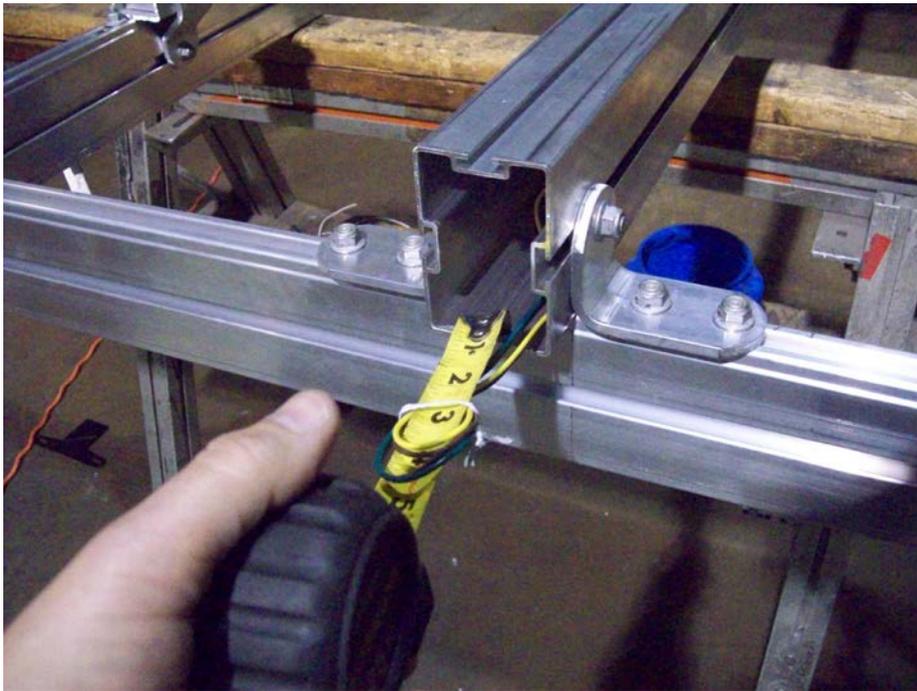
Install Philips screw through the ground wire into the pre-drilled hole located under the tongue just behind the coupler.



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.



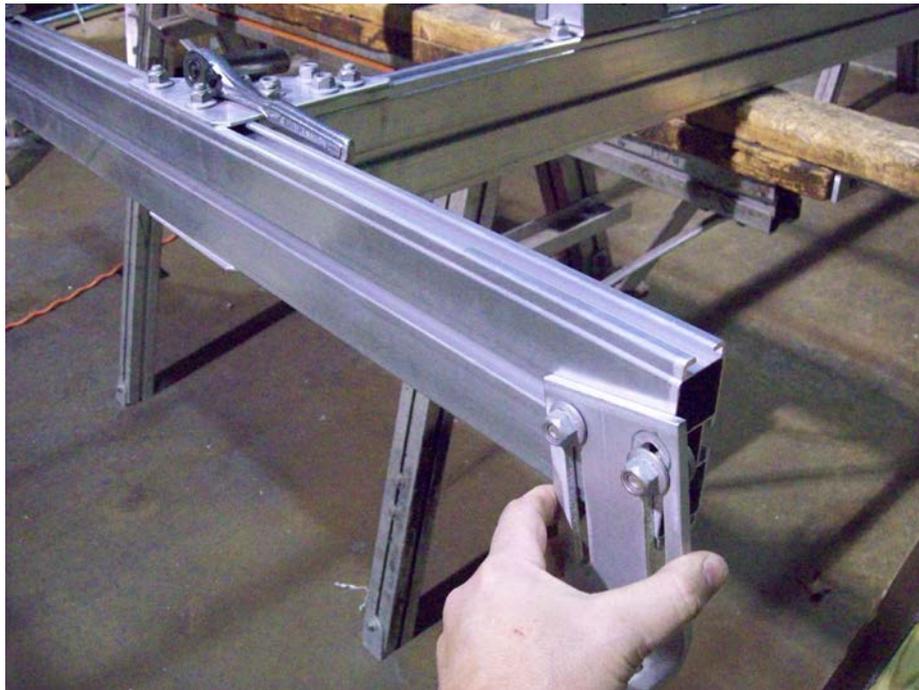
Attach both wires of the harness to the end of the tape measure with either tape or a tie.



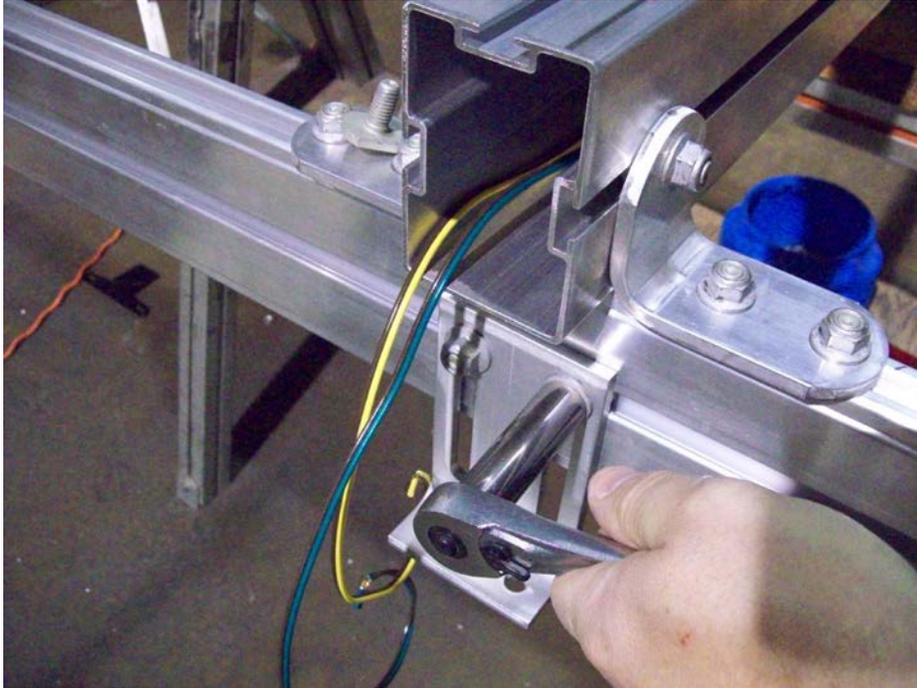
Retract the tape measure until it comes out the back of the tongue with both wires attached. The wiring will be completed later. Trailer is still upside down.



Locate the slotted bracket for the transom.



Install the slotted bracket into the back side of the rear cross arm.



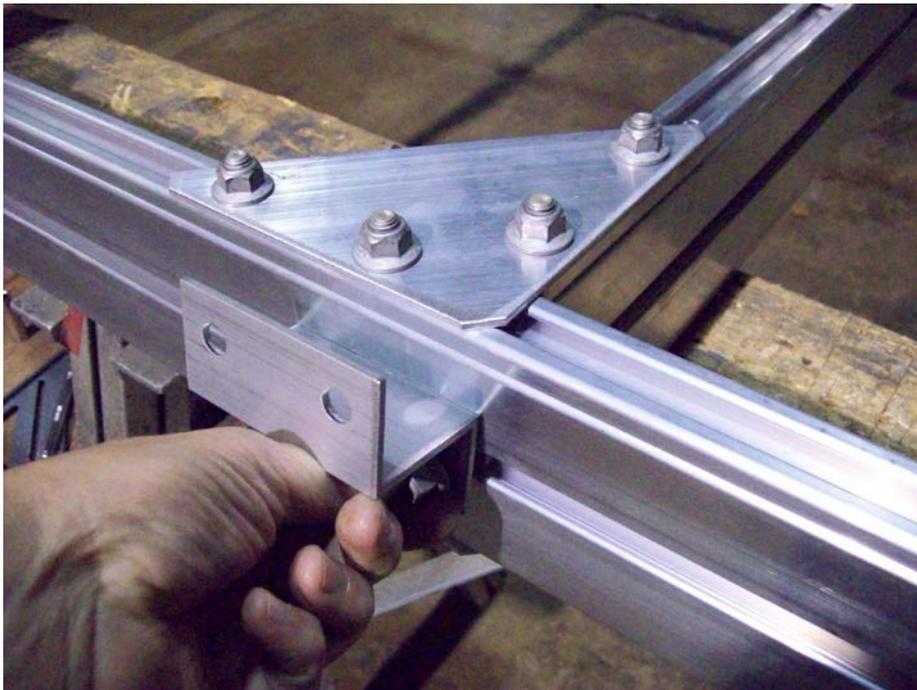
Center the slotted bracket under the tongue section and tighten nuts.



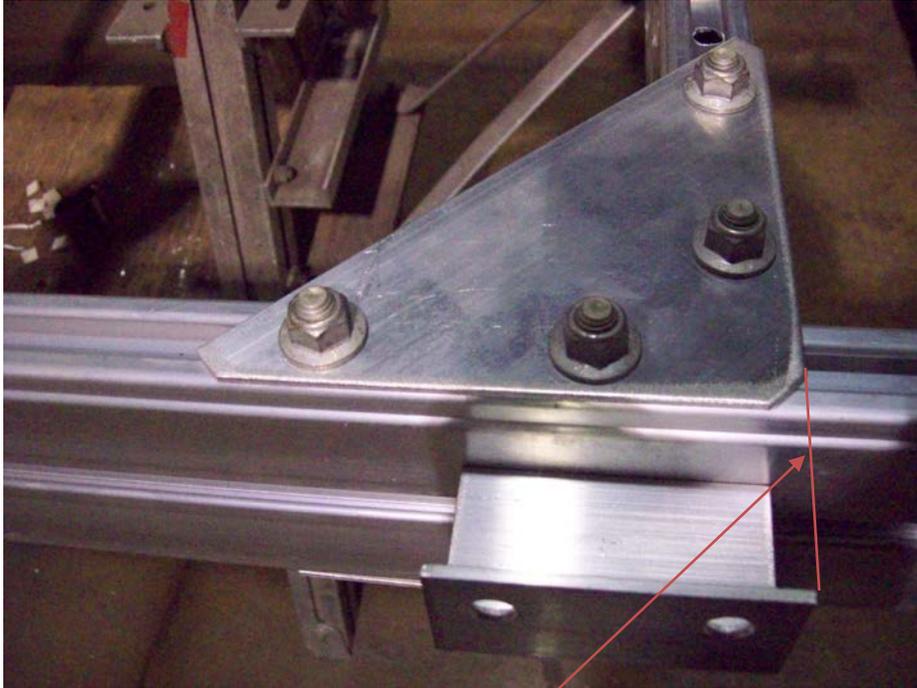
Install two T-bolts on each side of the back side of the rear cross arm.



Locate the tail light brackets.

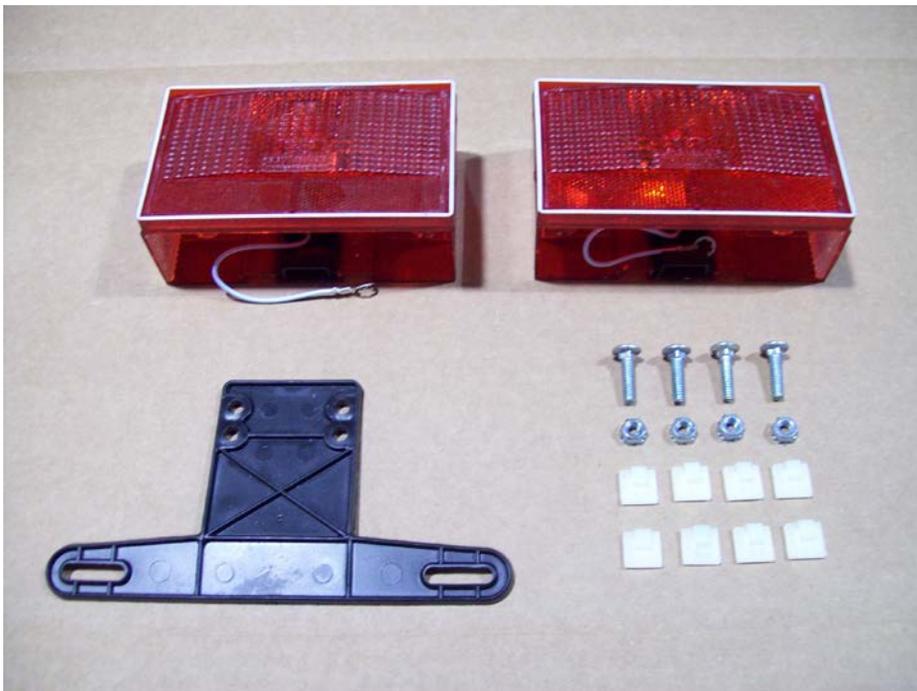


Insert the tail light brackets over the two T-bolts and install nuts.

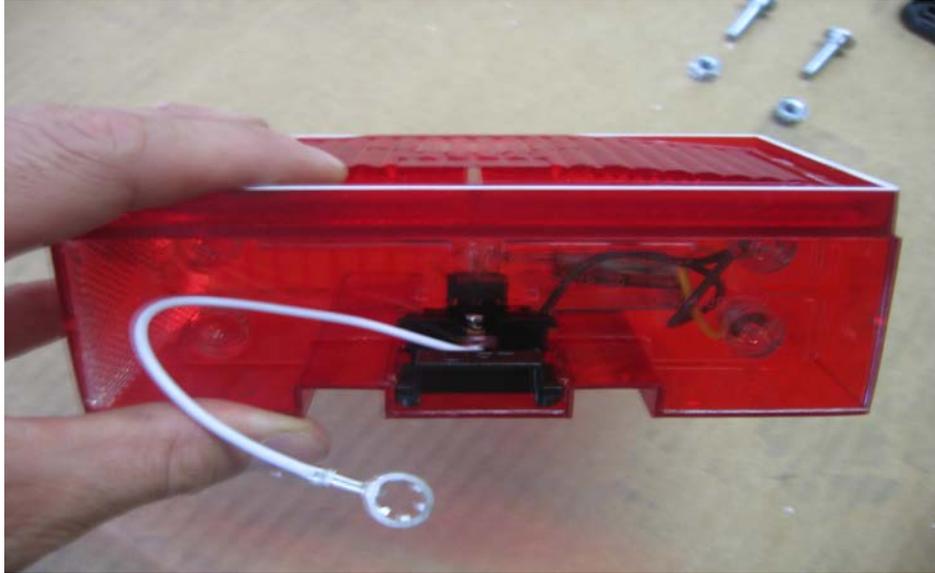


Outer edge

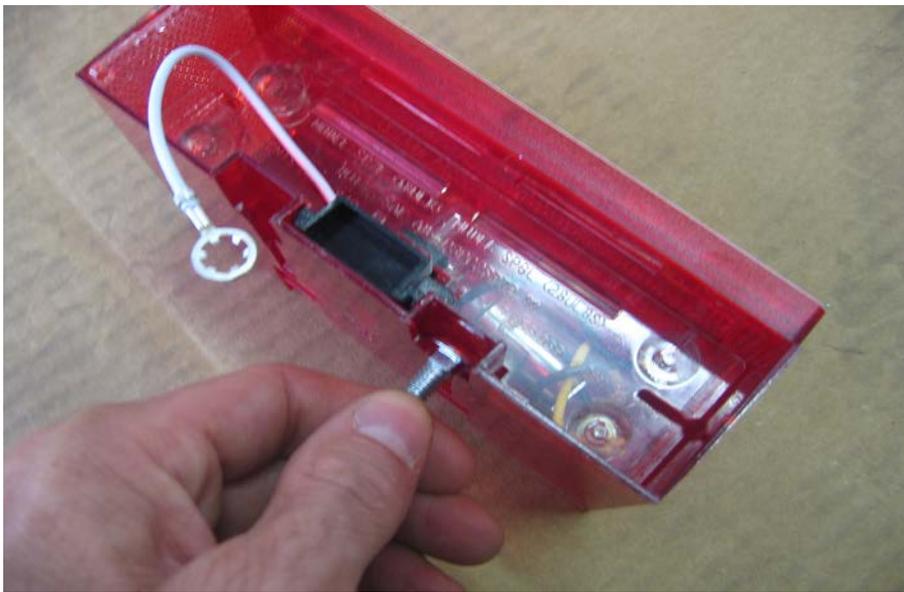
Align the outer edge of the tail light bracket with the outer edge of the triangle plate. Position the bracket and tighten nuts. Repeat the process for the other side.



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



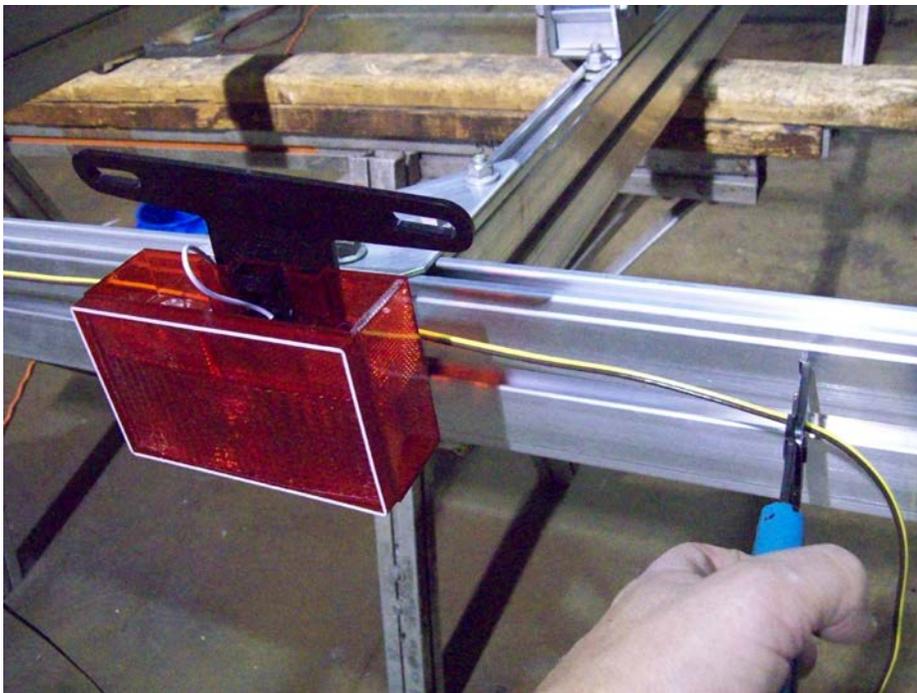
The light with the yellow wires is for the left (driver's side) of the trailer.



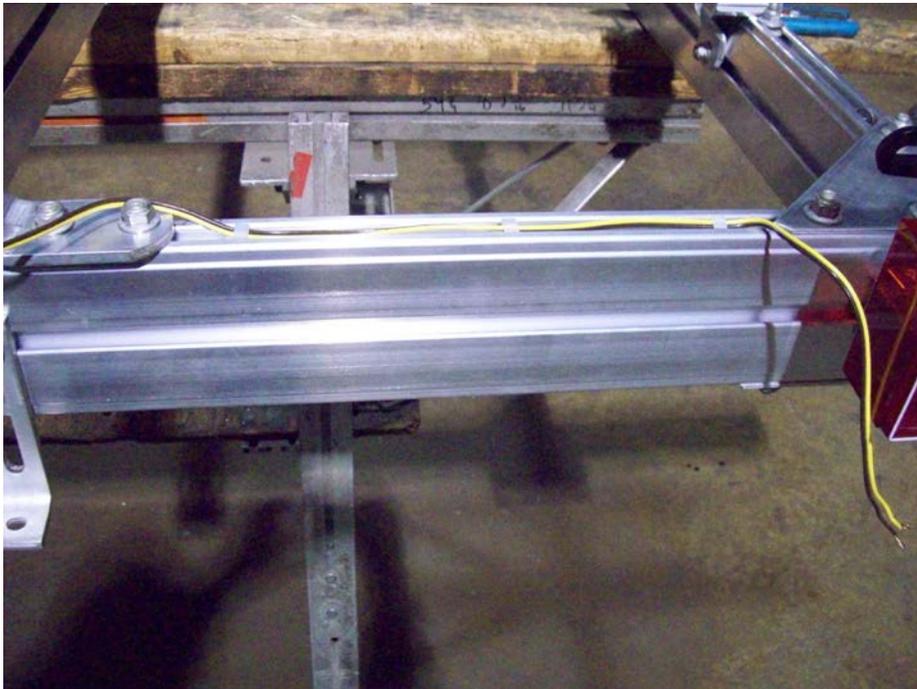
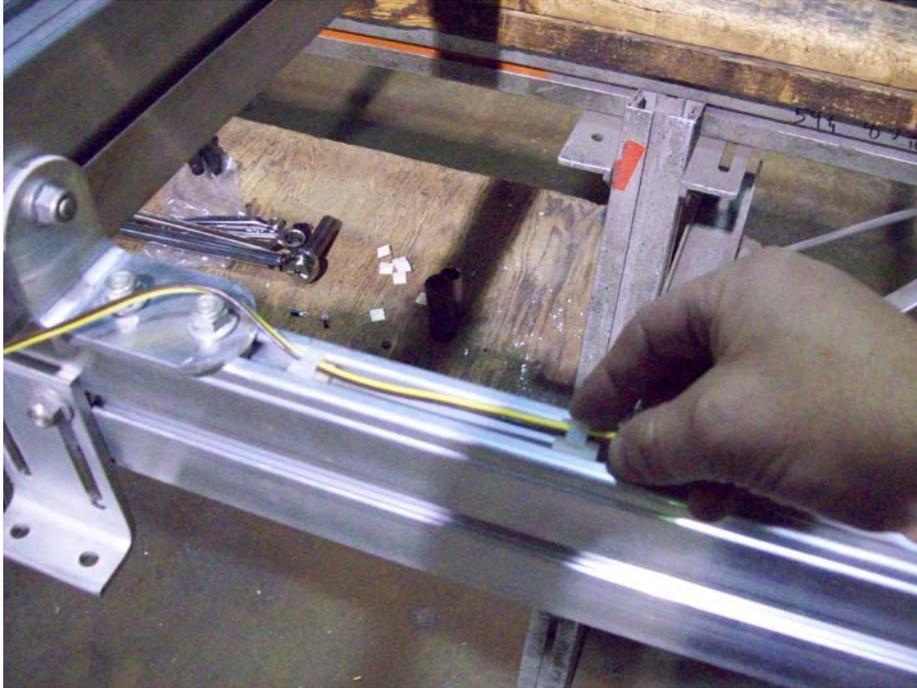
Slide the carriage bolts into the slots in the back of the tail lights.



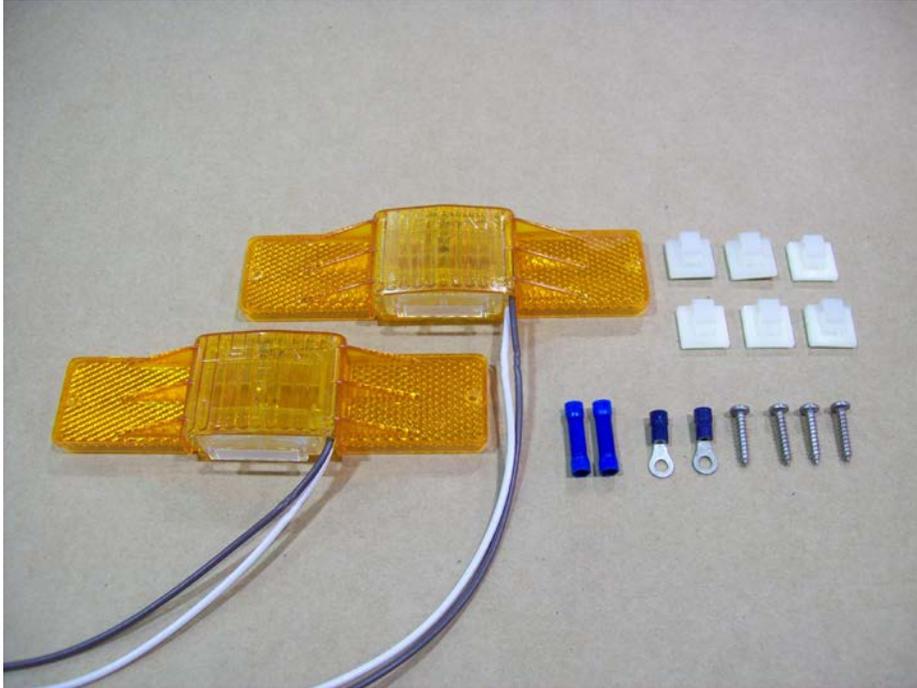
Install the left tail light with the license plate holder between the light and the bracket. Repeat for the other side. Make sure to tighten nuts but don't over tighten them. (Pictured from the bottom)



Trim off excess wire leaving some for adjustment. Keep the excess wire. It will be used later to connect the clearance lights.



Insert adhesive clips in the rear cross arm as shown, and run harness towards the light. Repeat the process for other side.



Locate the two amber running lights, adhesive backed clamps, two butt connectors, two ring terminals, and four Phillip screws.



Cut approximately 8 1/2" off of the white wires on both running lights.



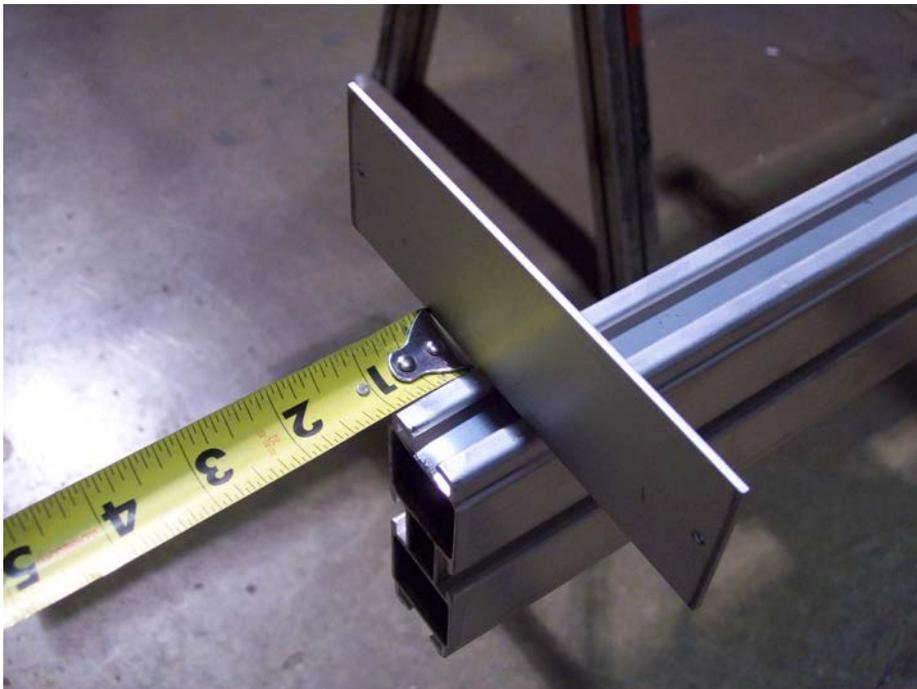
Strip 1/4" of insulation from the wire.



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



Locate the two clearance light brackets.



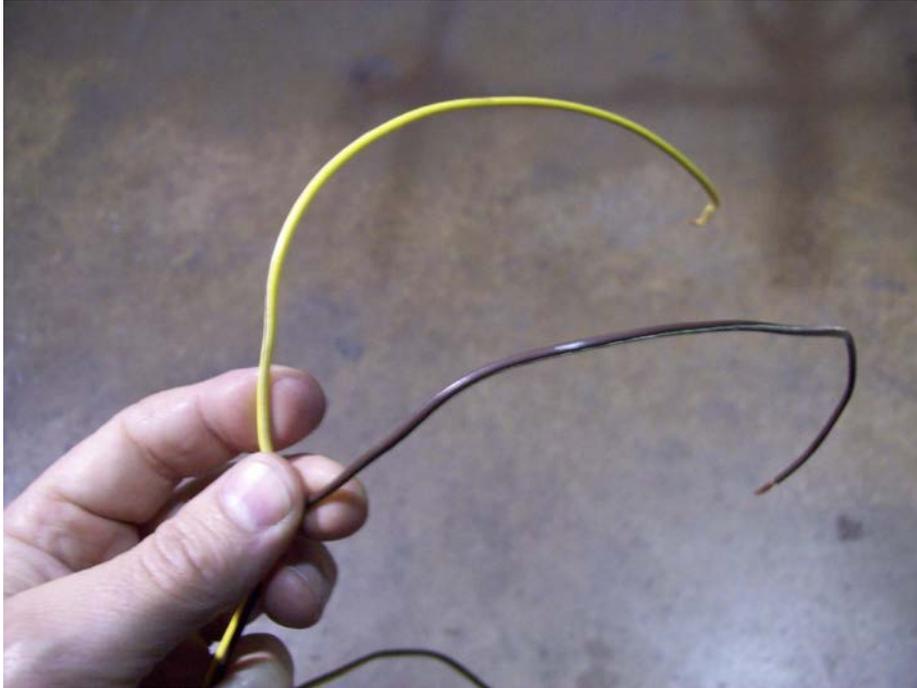
Insert bracket into front cross arm and position 1" from the end



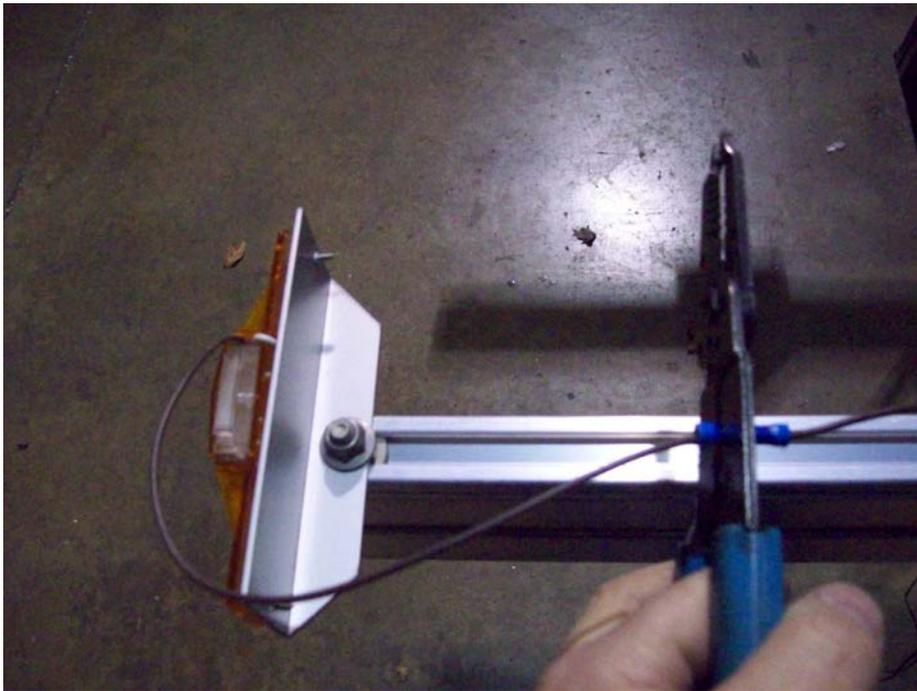
Align the ring terminal with the screw hole nearest the wire on the back of the running light. Make sure the wire is routed through the gap on the back of the light so it does not become pinched when the light is installed.



Install the running lights into the pre-drilled holes in the 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.



Take the left over wire from the harness that was cut off and separate the two wires. The brown wire will be used to connect the clearance light to the tail light.



Before attaching the brown wire to the running light make sure it will reach the rear tail light. Trim a 1/4" of casing off both ends of the wires and crimp a butt connector on.



Locate the four snap bushing.



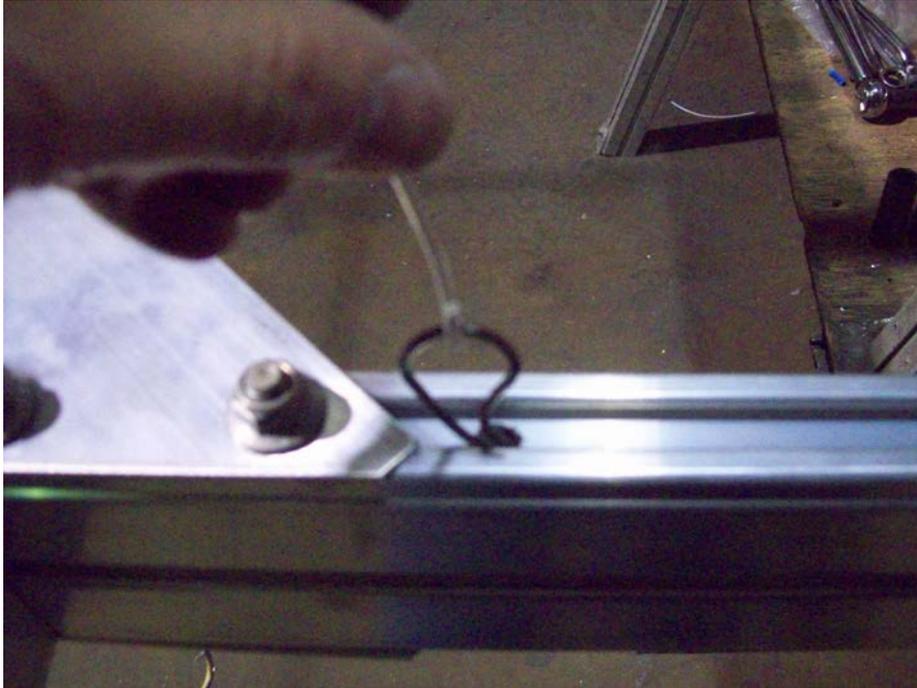
Insert the snap bushing in the hole at the front of the side rail.



Run the wire from the clearance light down the cross arm to the side rail. Insert the wire into hole in the side rail and push wire towards the rear hole.



Using scrap wire, make a hook to pull the wire through the rear hole.



Hook the wire at the rear hole and pull it through.



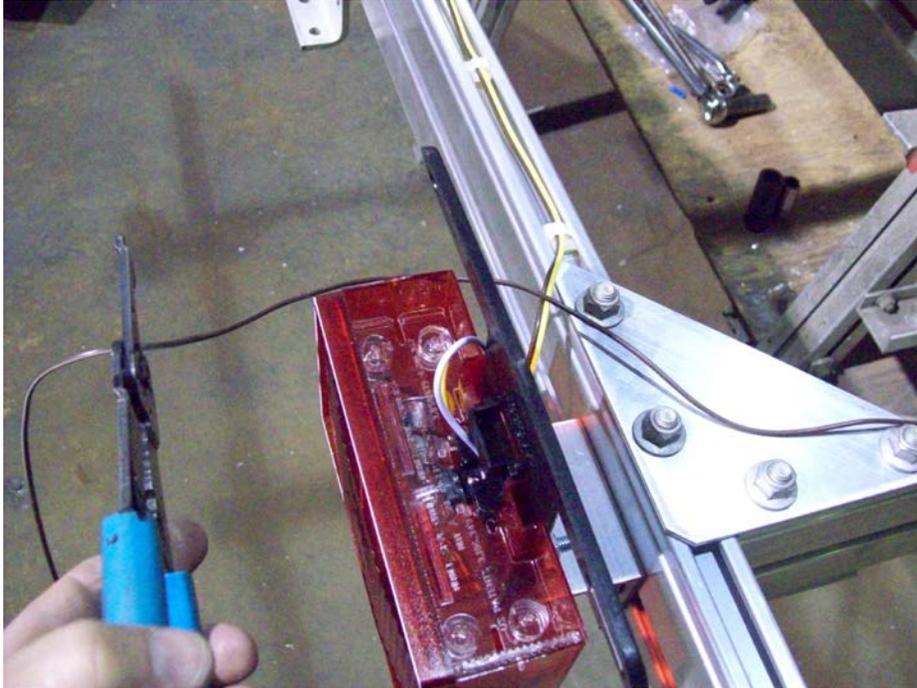
Insert wire through snap bushing and push into hole.



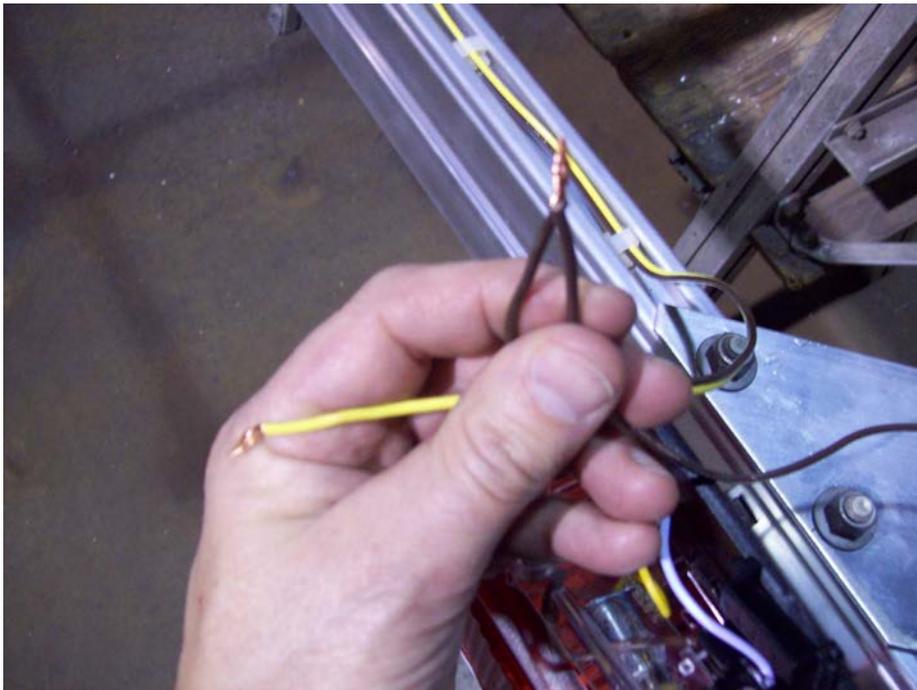
Once bushing is in place run wire towards the tail light.



Insert adhesive clips into the cross arm and run harness through them as shown.



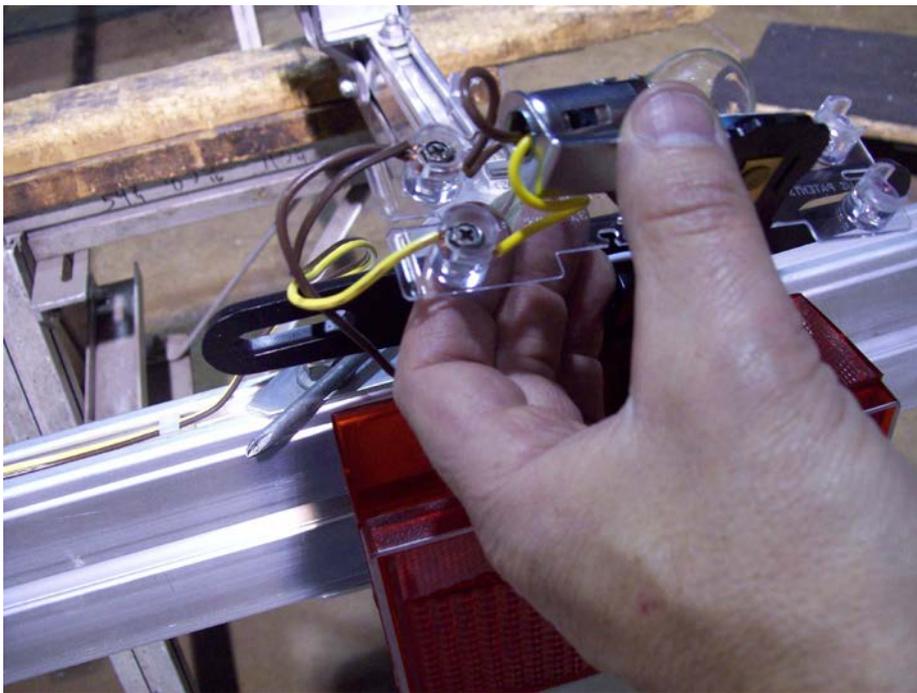
Remove excess wire for the clearance light, and trim off a ¼” of casing.



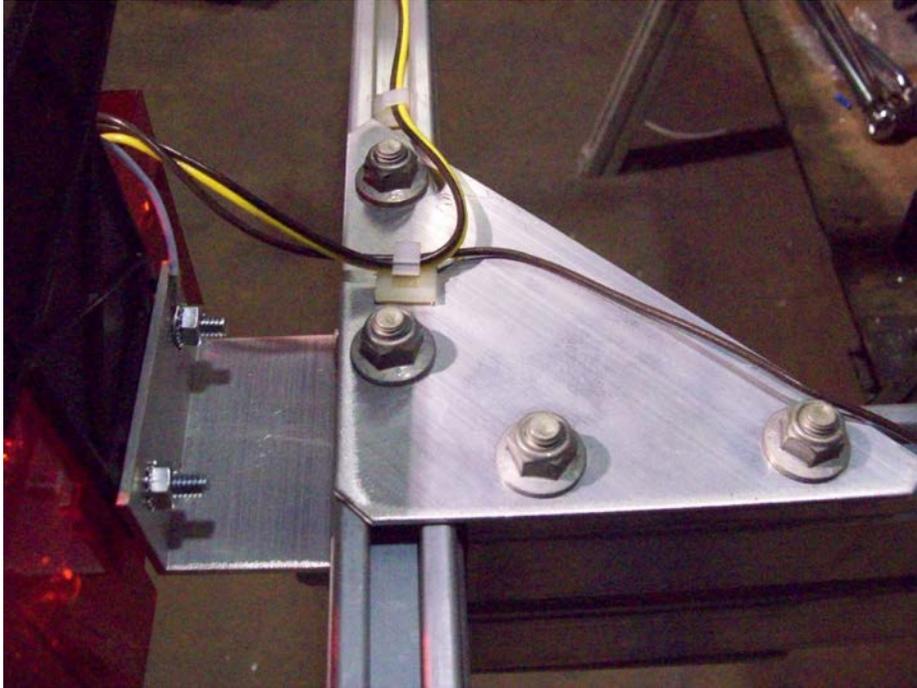
Twist the brown harness wire and the brown clearance light wire together.



Pull black tab on the underside of the light towards the back of the trailer and up. This will release the internal portion of the light assembly.



Once out of housing, color match wires with the ones on the terminals as shown.



Reinsert housing and tuck wires in. Add adhesive clip to hold wires down on triangle plate.



Locate 2) fenders, 8) rubber washers, 4) steel washers, and 4) nuts.



Return the trailer right side up. Slide the 1 1/8" T-bolts installed previously on page 9 into position over the axle and install two rubber washers as shown.



Install the fender, rubber washer, steel washer, and nut, over each bolt. Center the fender over the axle.



Tighten the nuts and repeat process 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.



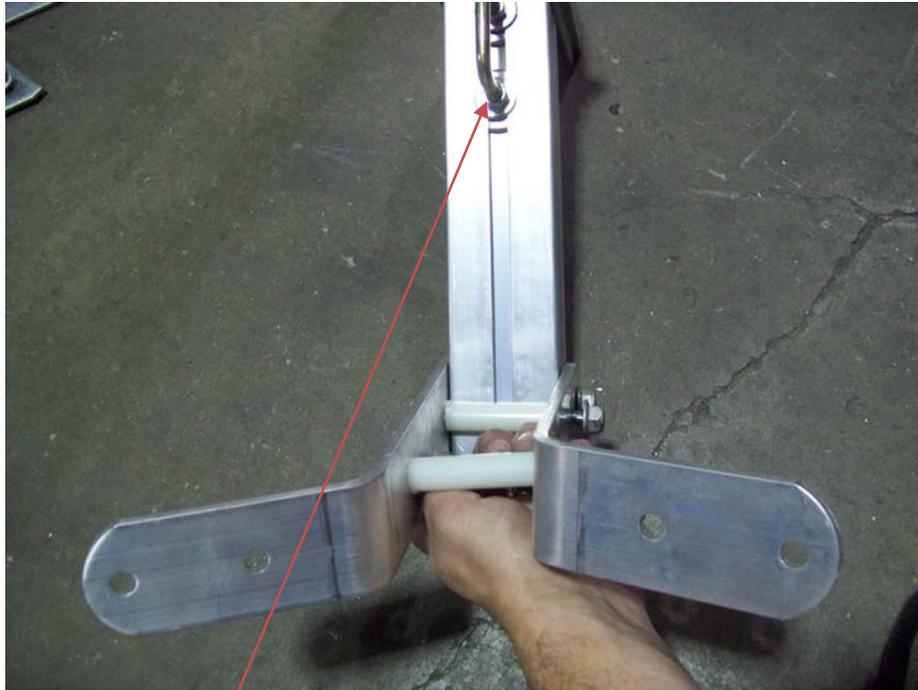
Locate 1) 3/8"-16 x 4" bolt, 1) 3/8"-16 3 1/2" bolt, 1) 3/8" flat washer, 2) large flange nuts, and 2) plastic sleeves.



Locate 2) bow mounting brackets, 2) bow pads, 2) winch post diagonal braces, and winch post.

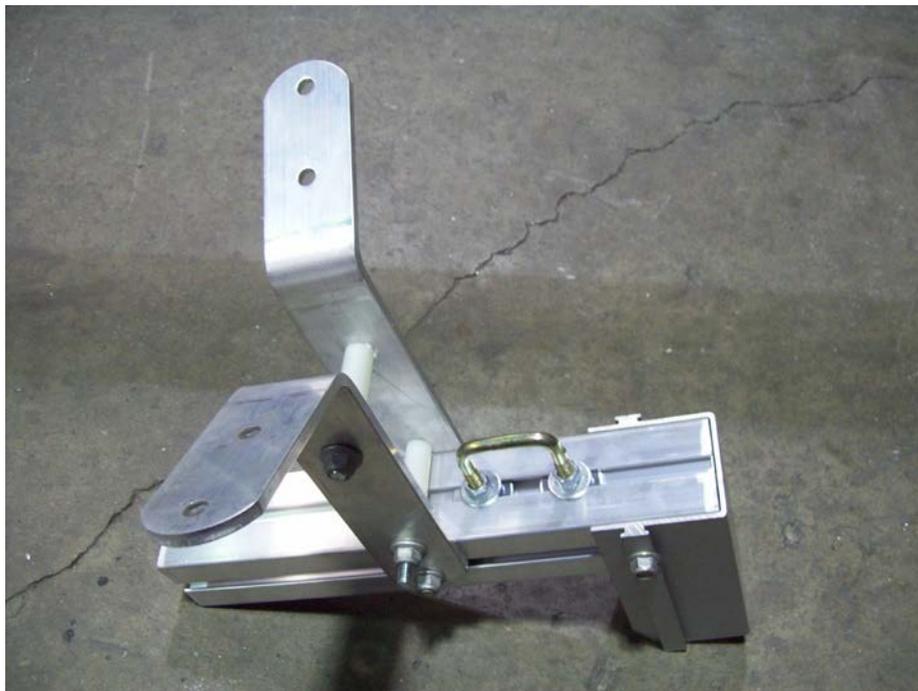


Insert the 4" bolt, flat washer, plastic sleeve, and nut in the bottom of the bow mounting brackets. Install the 3 1/2" bolt, plastic sleeve, and nut in the top hole of the bracket as shown.



Web strap clip

Insert bow mounting bracket at the bottom of the winch post and slide it up toward the web strap clip.



Bow stop should look like this when installed on the winch post.



Remove the nuts and lock washers from the bow stop.



Install the bow pads on the mounting brackets. Reinstall nuts and lock washers and tighten nuts.



Winch post assembly should look like this.



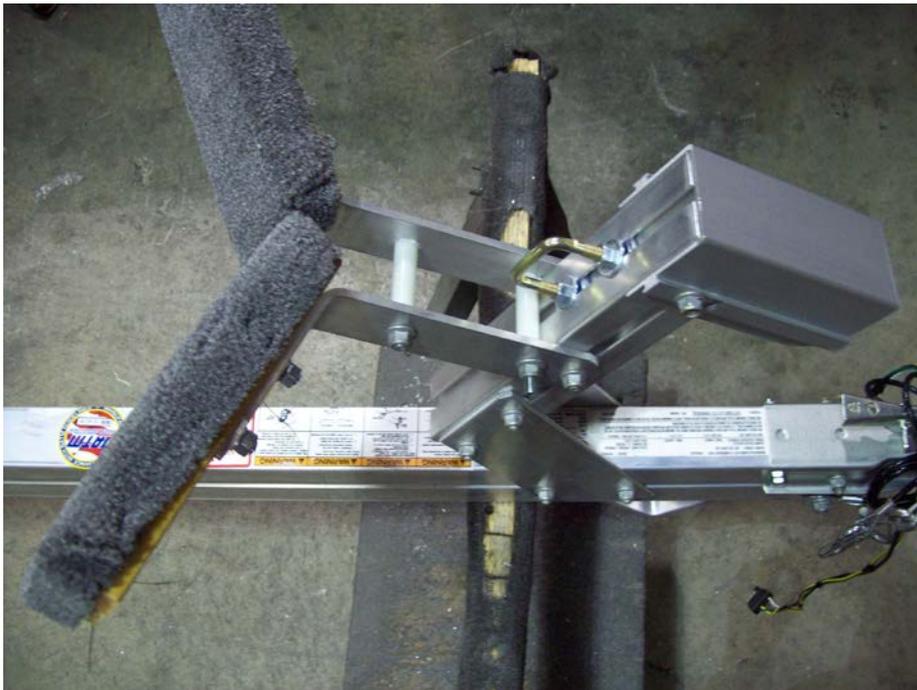
Slide the two remaining T-bolts on each side of the tongue section towards the coupler. Remove nuts on both sides.



Install winch post diagonal braces on each side of the tongue section. Reinstall nuts and tighten. Final positioning will be made later to accommodate your boat.



Insert winch post assembly into the T-bolts in the diagonal braces as shown.



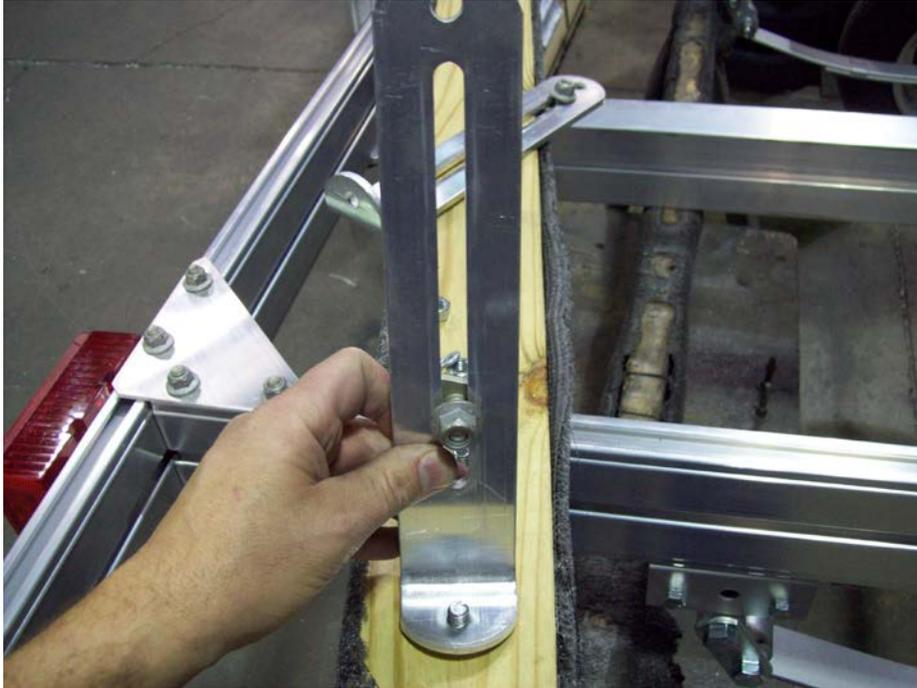
Once in position tighten nuts.



Locate the slotted L brackets.



Locate the 6' padded cradles and remove nuts and lock washers.



Install slotted brackets on the underside of the 6' padded cradle as shown. Reinstall nuts and lock washers, then tighten nuts. Repeat the process for the other cradles.



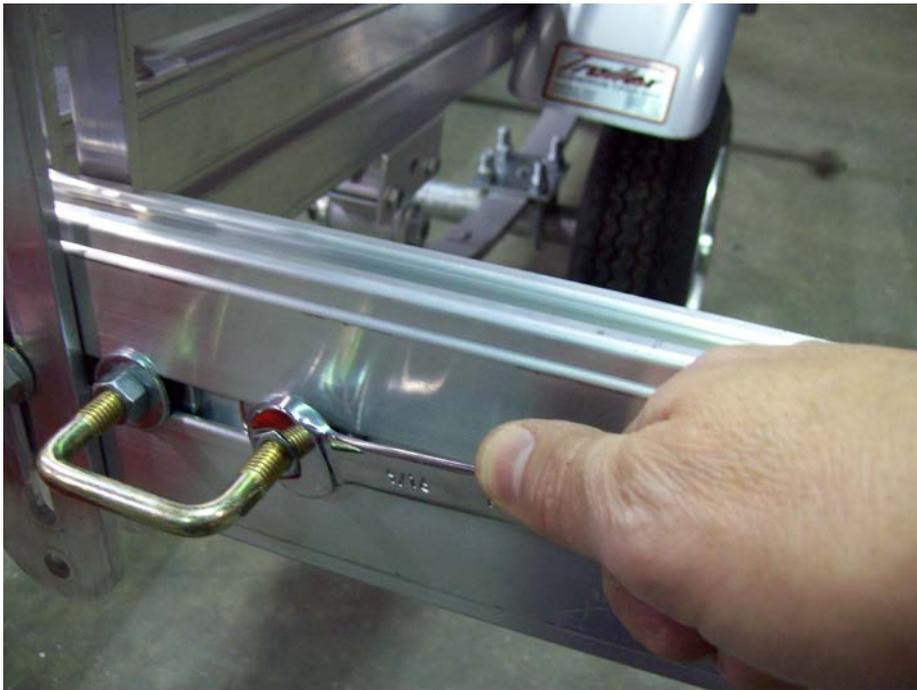
Insert T-bolt from slotted bracket into the front and rear cross arm. Slide cradle assembly towards the side rails.



Locate the two web strap clips.



Insert web strap clips on each side of the rear cross arm.



Slide all the way over to the slotted bracket, and tighten nuts.



Install the outer cradle assembly, position and tighten nuts. Final adjustments will be made when the boat is fitted to the trailer.



Locate the transom board and remove nuts and lock washers.



Install transom board on slotted bracket, reinstall hardware and tighten nuts.



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

Finished Trailer





KJM 11/21/12