

TX-416HC-16-04



Suggested Tools:

(3) Saw Horses

Standard Screwdriver

Phillips Screwdriver

Ratchet with 13/16", 9/16", 3/4", 7/8" Sockets

Torque Wrench

7/16", 9/16", 3/4", 7/8" Open End Wrench

Pliers

Wire Cutters

Square

Measuring Tape

Electrical Tape

Spray Lubricant

Utility Knife

(4) Wheel Chocks

Fish Tape

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.

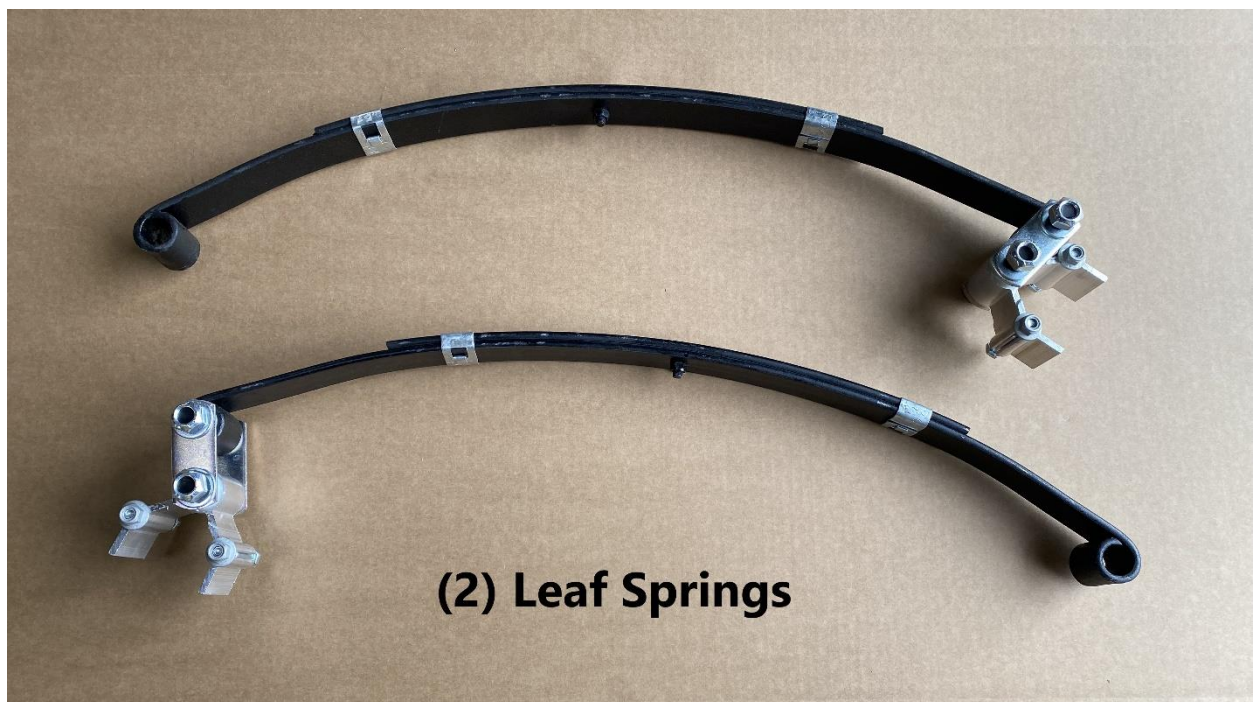
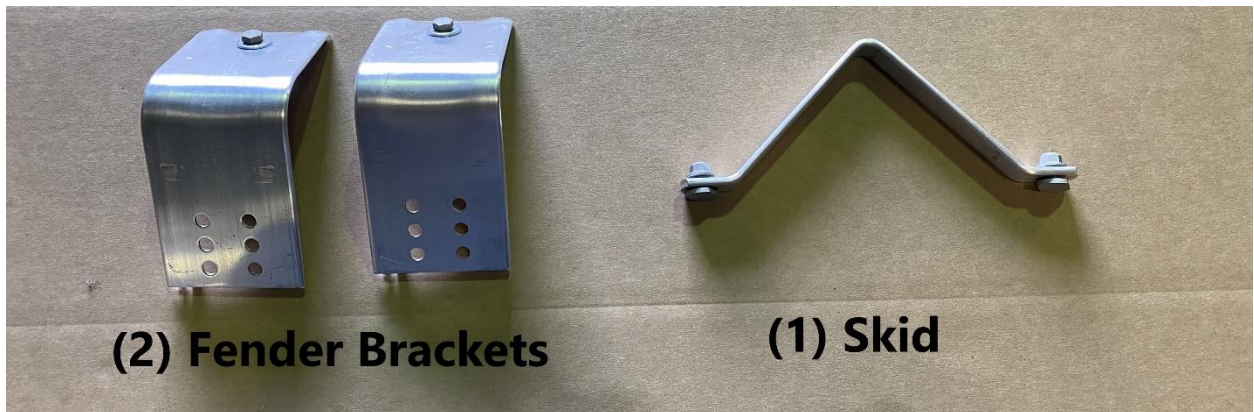
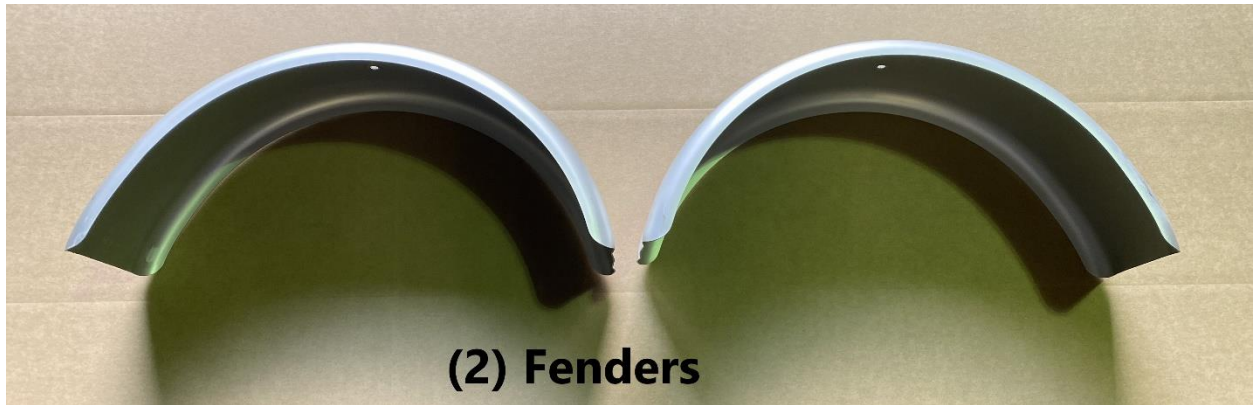
Failure to follow the assembly instructions could result in serious injury or death.

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





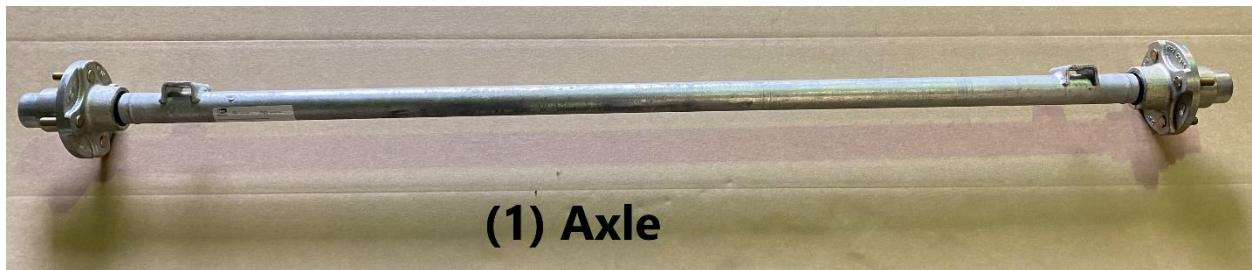
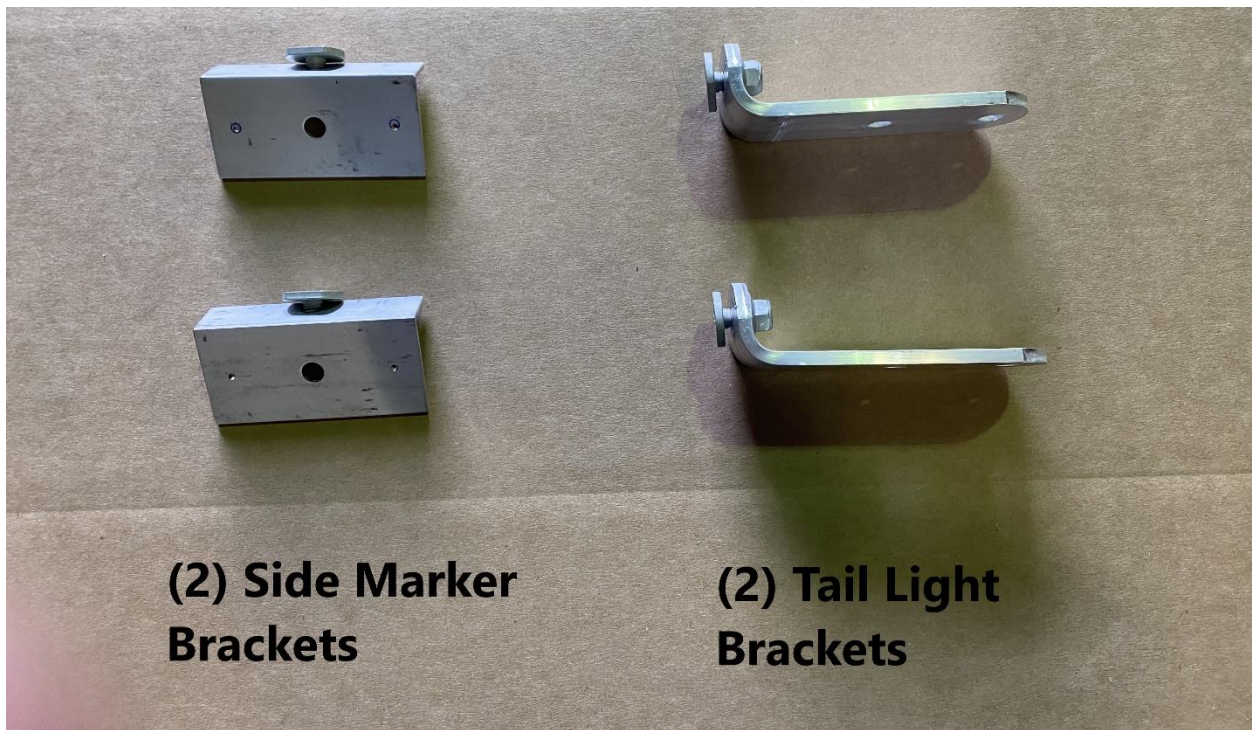
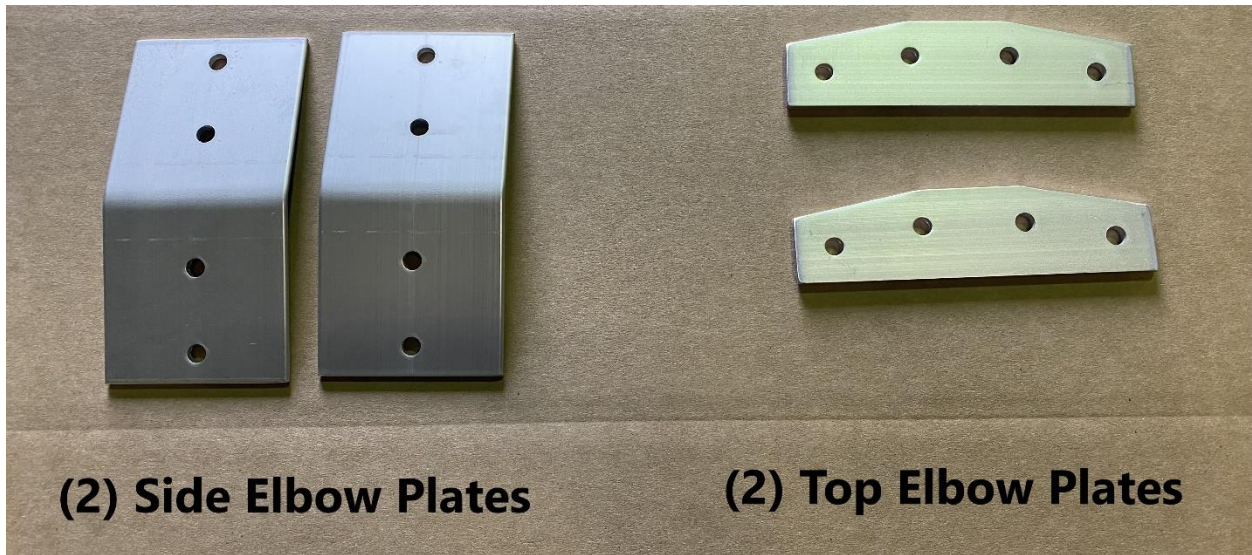


(2) 12" Tires



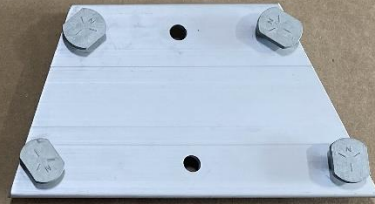
LED Light Kit

**U-Bolts / Web
Strap Clip Bag**





**Top Apex
Plate**



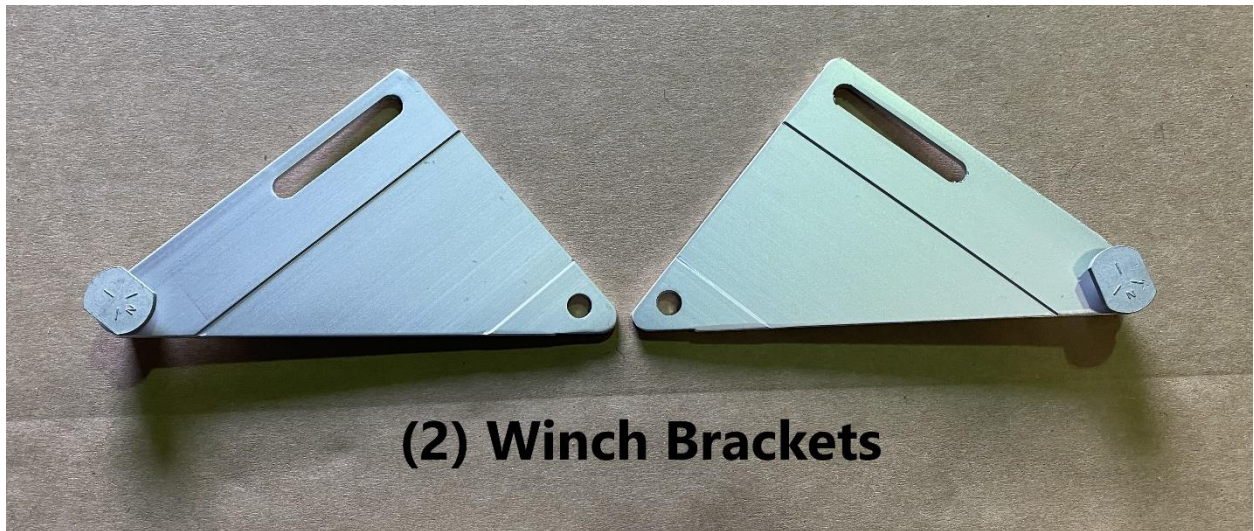
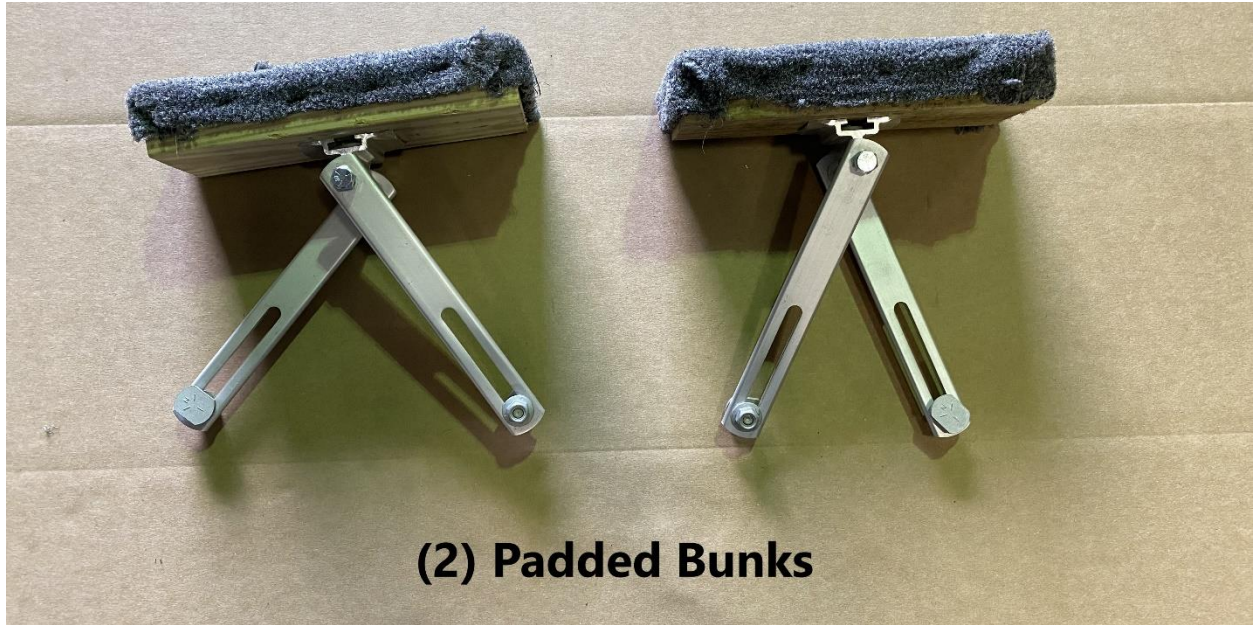
**Bottom Apex
Plate**

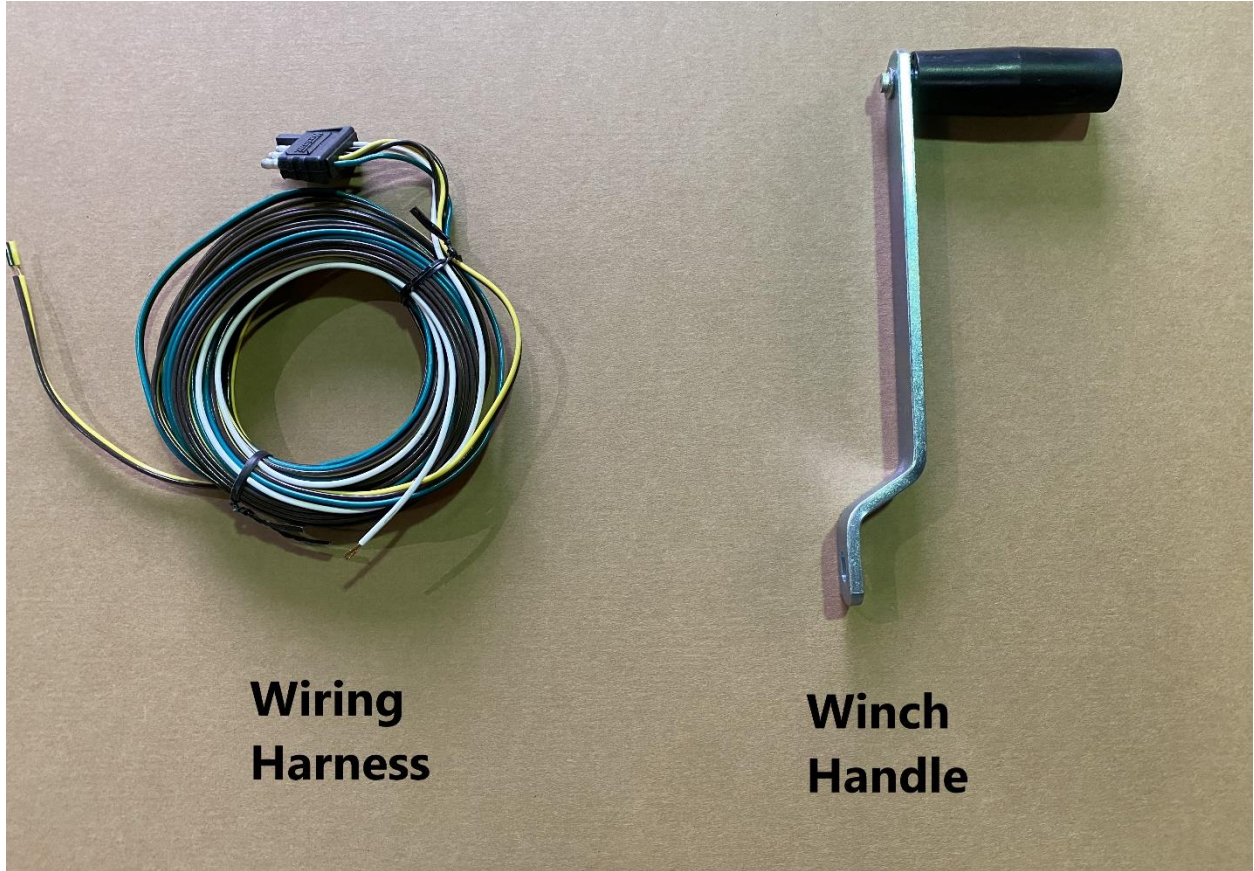


(4) Rollers



Winch Stand





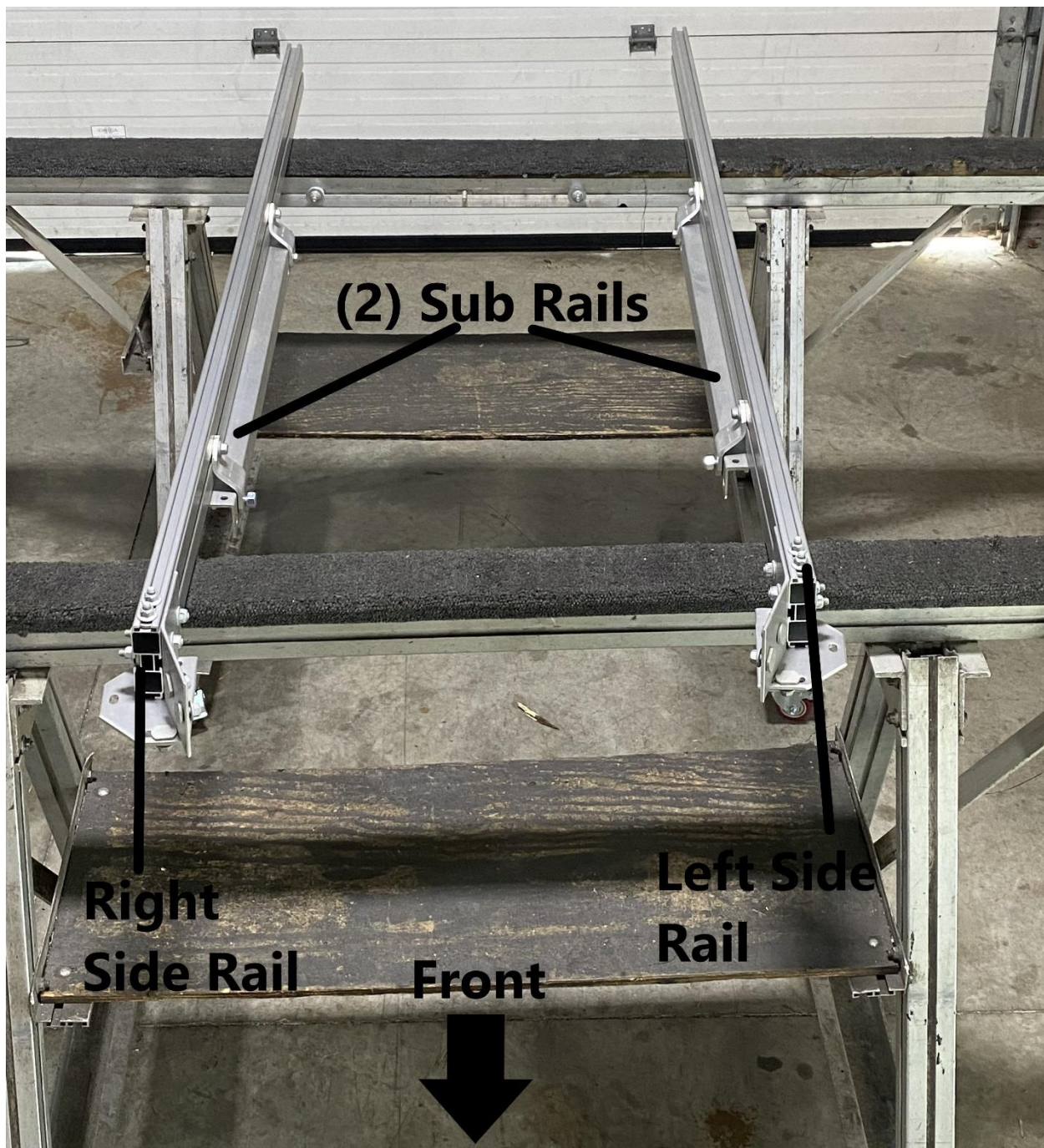
Assembly – Frame



Locate the left side rail. The left side rail will have a vehicle identification sticker. Note that the left and right designations would be as viewed from the rear of the trailer.



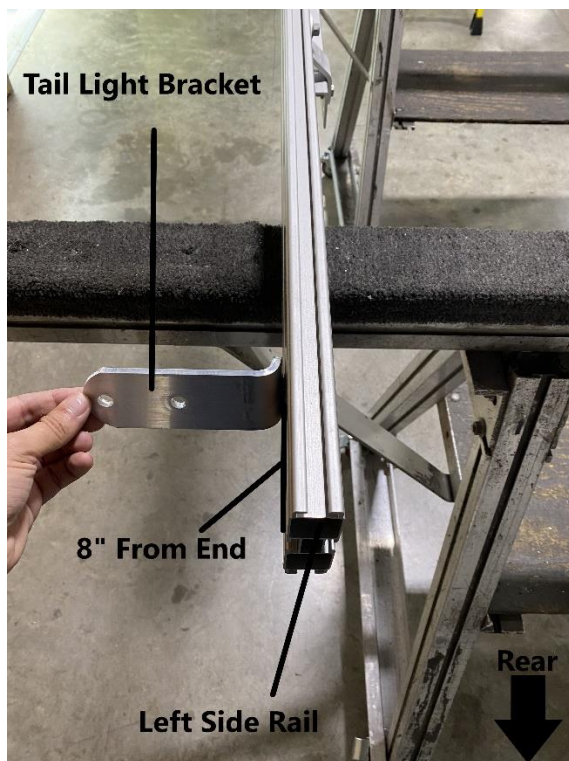
Locate the right side rail.



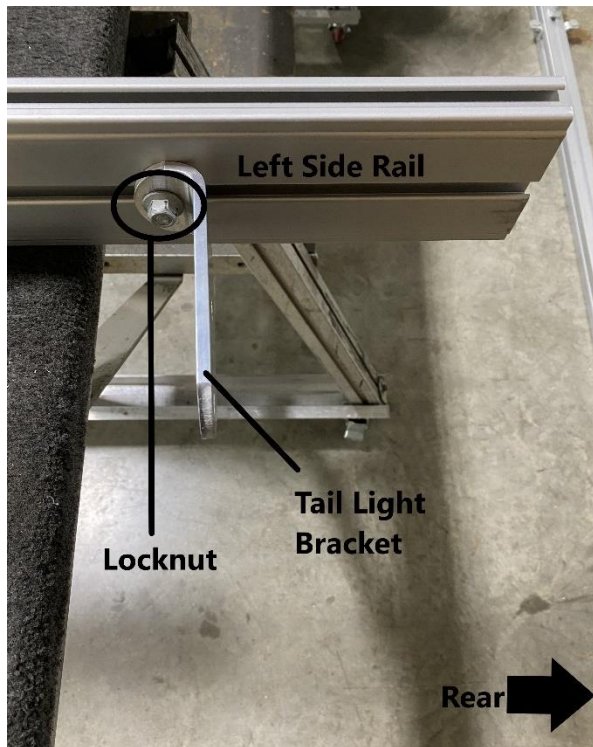
Place the left and right side rails on (2) saw horses as shown. Note that the vehicle identification sticker on the left side rail will be facing towards the outside of the trailer. Also note that the sub-rails offset towards the inside of the trailer.



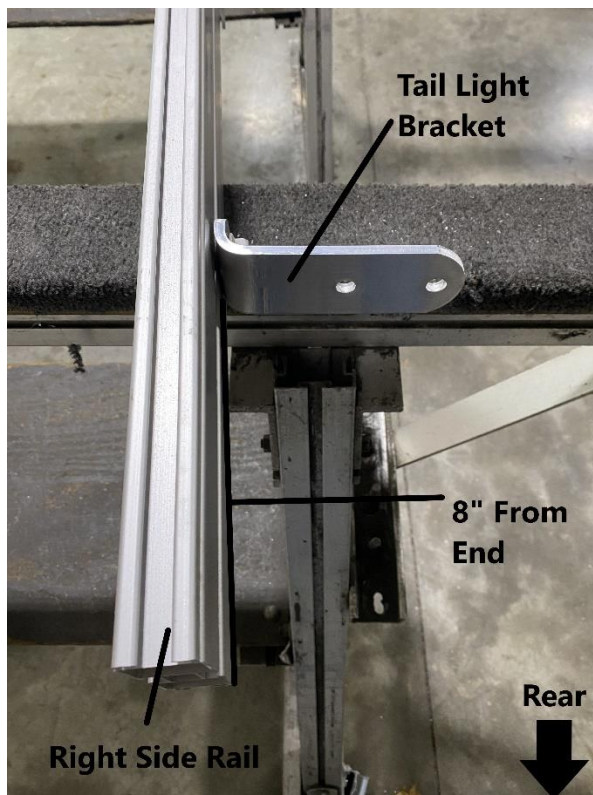
Locate the (2) tail light brackets.



Move to the rear of the trailer. Install a tail light bracket into the outside groove of the left side rail, using the T-bolt installed on the tail light bracket. Move the tail light bracket until it is 8" from the end of the left side rail.



Tighten the locknut installed on the tail light using a 9/16" wrench.

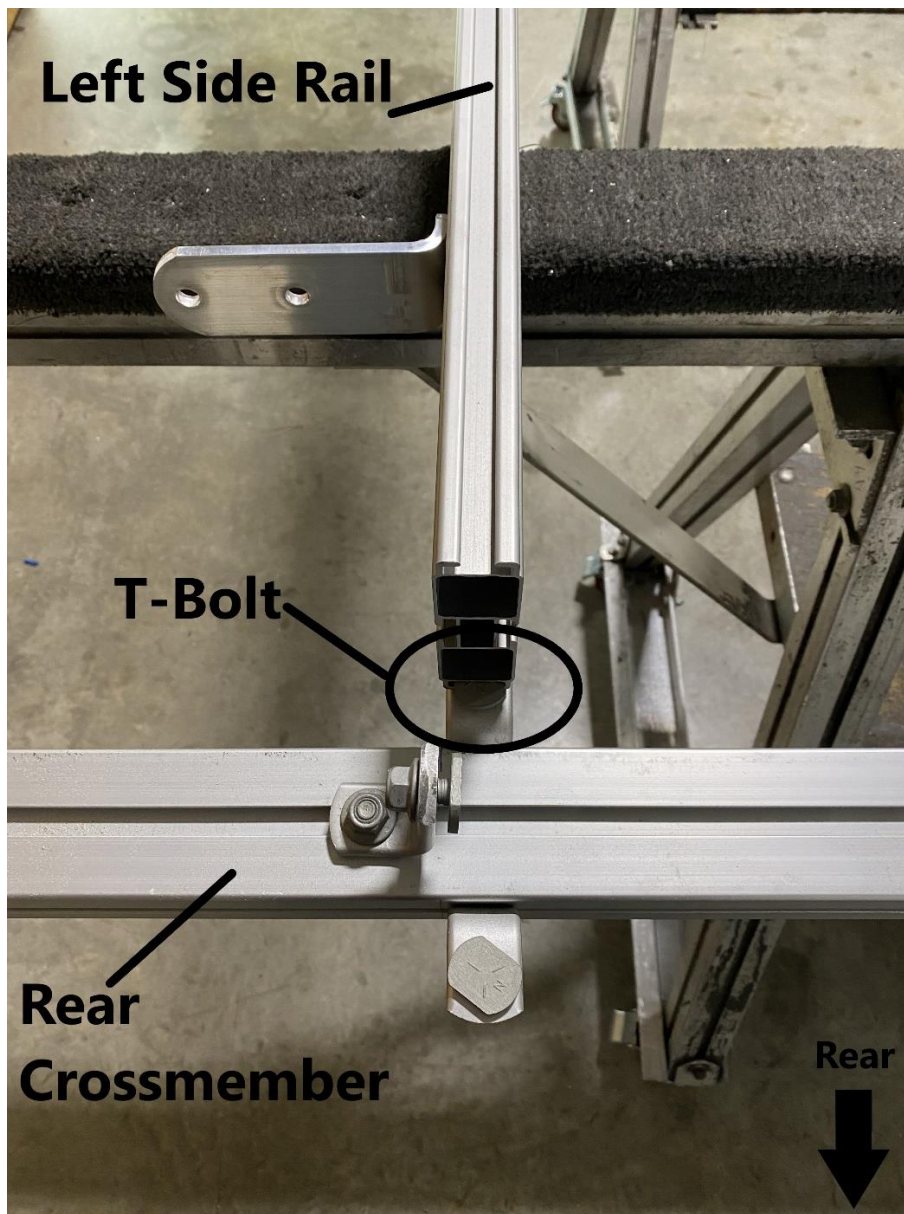


Repeat this process to install a tail light bracket to the right side rail.



Rear Crossmember

Locate the rear crossmember. The rear crossmember will have a LED 3 Light Bar installed in the center. Note that the LED 3 Light Bar will face the outside of the trailer.



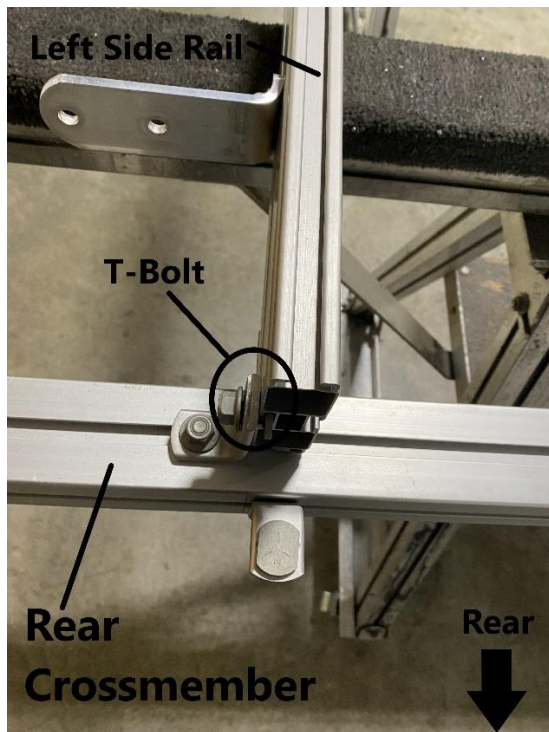
Left Side Rail

T-Bolt

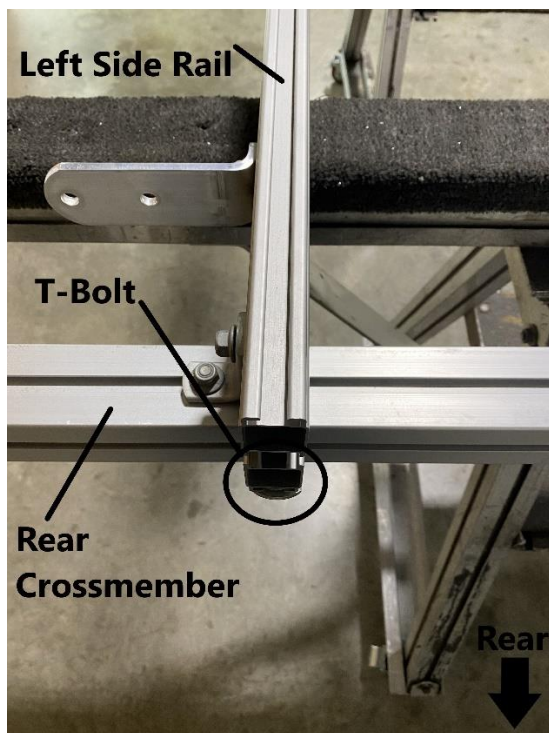
Rear
Crossmember

Rear

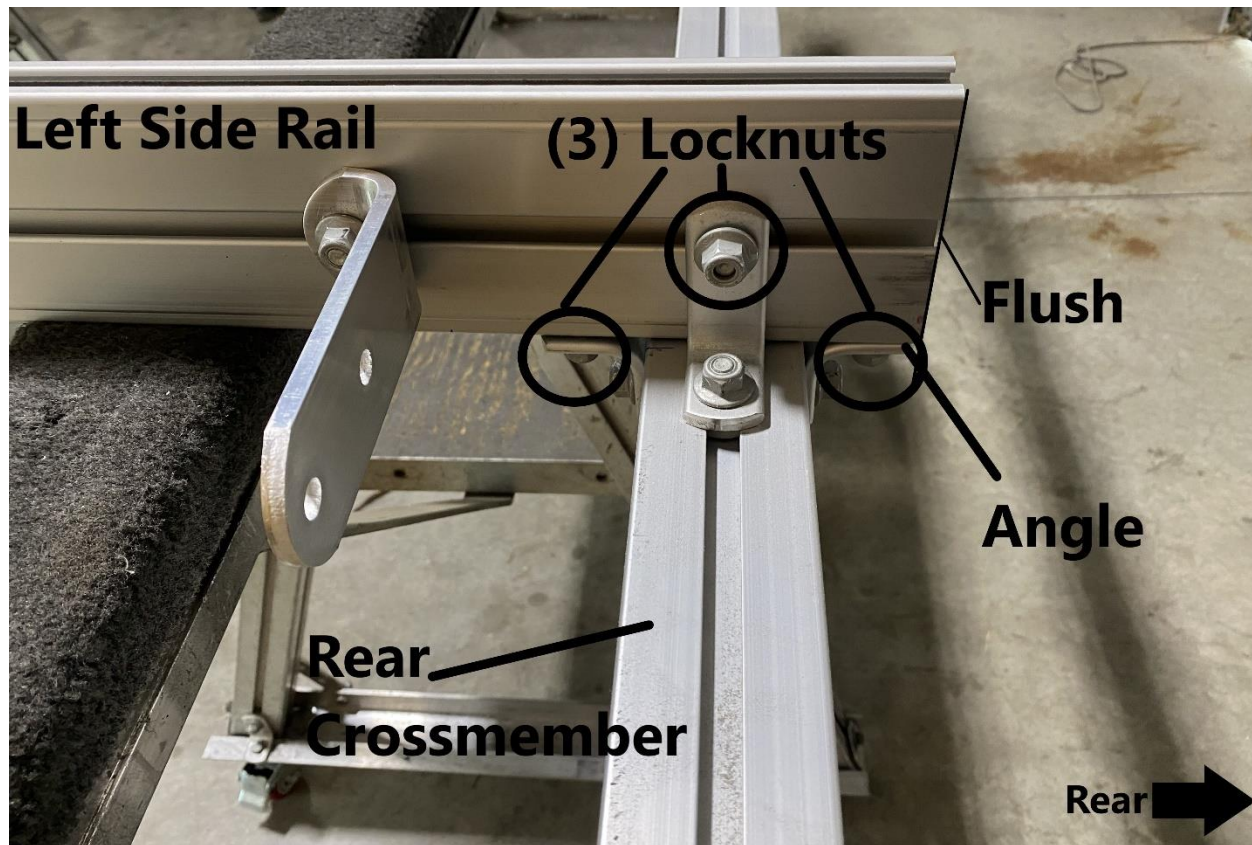
Move to the rear of the trailer. Install the T-bolt shown into the bottom groove of the left side rail. Repeat this process for the right side rail.



Continue sliding the rear crossmember to install the T-bolt into the outside groove of the left side rail. Repeat this process for the right side rail.



Continue sliding the rear crossmember to install a second T-bolt into the bottom groove of the left side rail. Repeat this process for the right side rail.



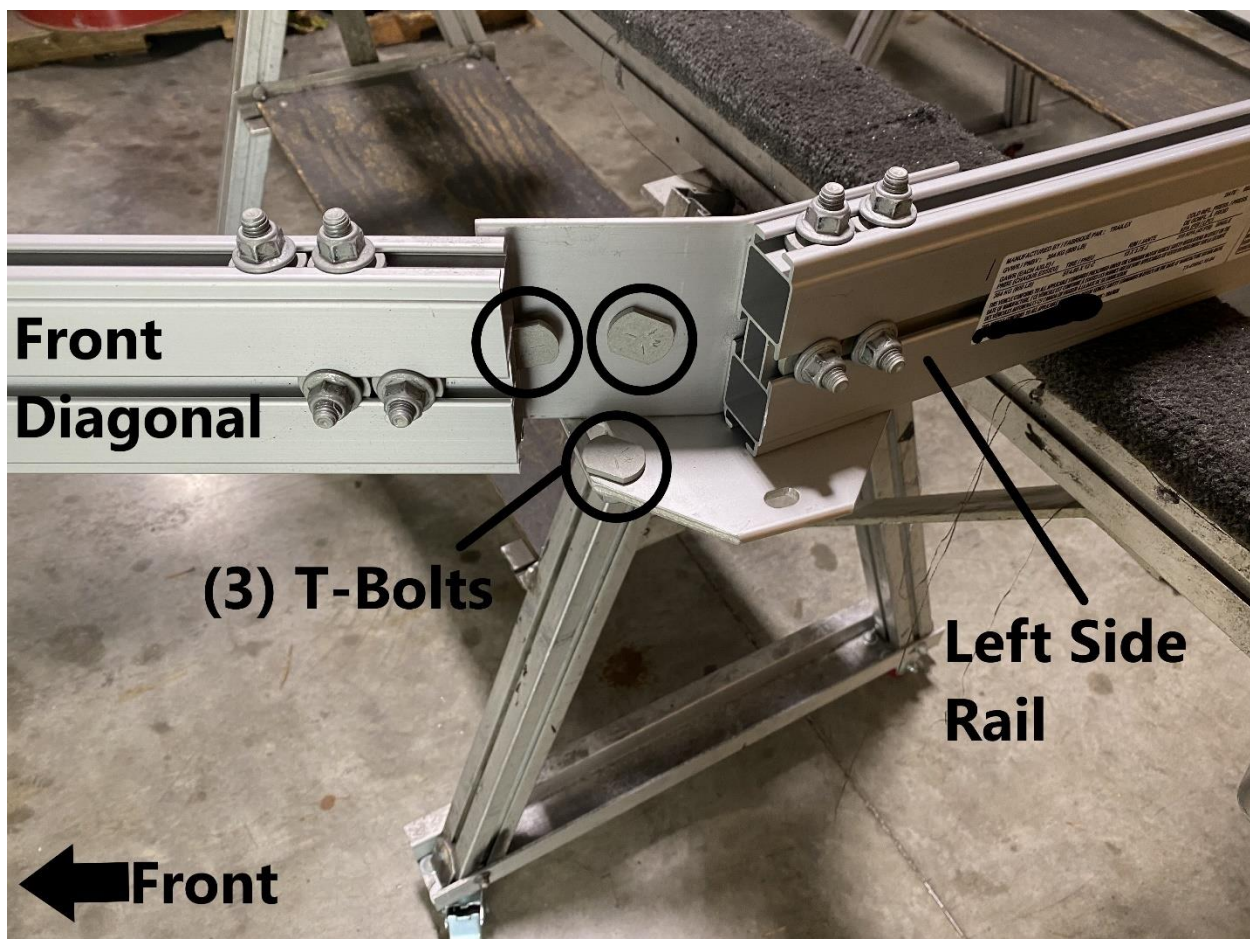
Note the angle in the above picture. The end of this angle should be flush with the end of the left side rail. Once the angle is flush, tighten the (3) locknuts shown using a 9/16" wrench. Repeat this process for the right side rail.



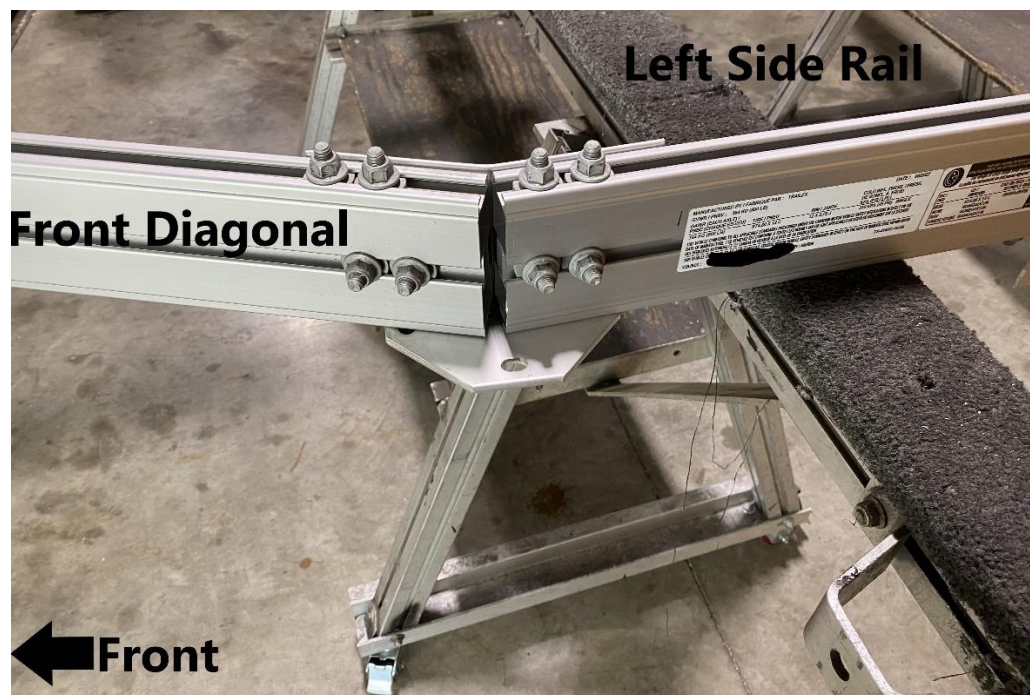
At this point the trailer will look like this.



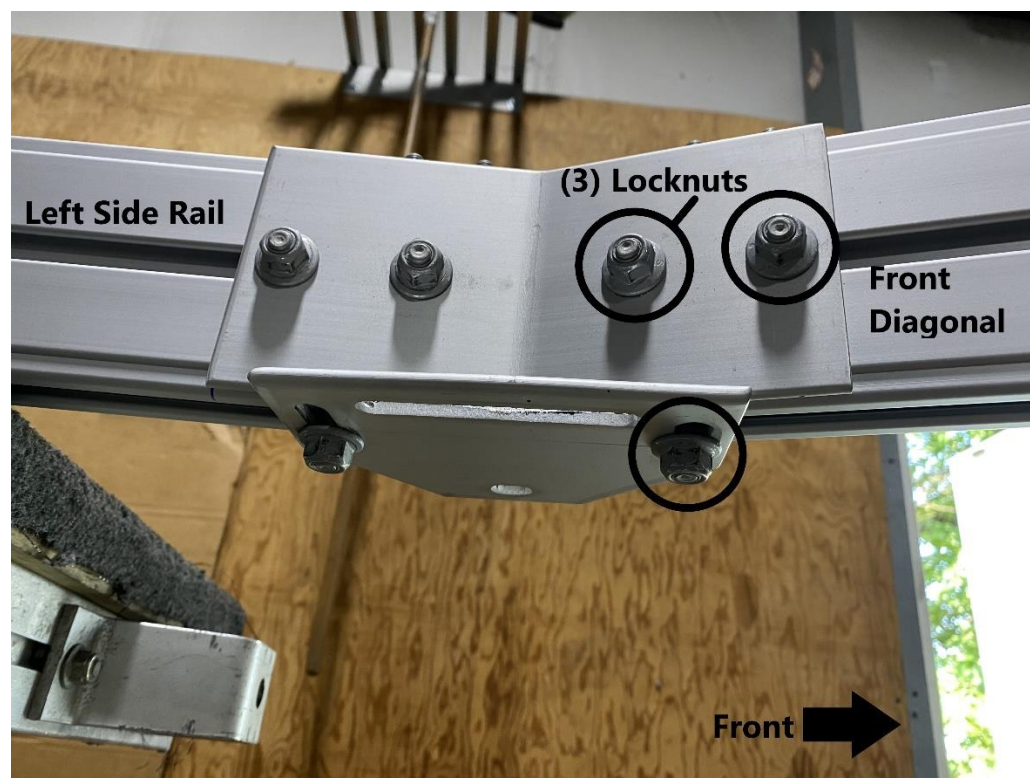
Locate the (2) front diagonals. Note that each front diagonal will have a bracket installed on one side. This bracket will face the inside of the trailer. Also note that one front diagonal will have a stamped plate installed. The front diagonal with the stamped plate will be installed to the right side rail, with the stamped plate facing towards the outside of the trailer.



A third saw horse will be necessary to install the (2) front diagonals. Note that this is not the end of the front diagonal with a bracket installed. Install the front diagonal to the left side rail as shown. Slide the (2) T-bolts installed on the left side rail into the inside groove of the front diagonal. Install (1) T-bolt into the bottom groove of the front diagonal.



Continue sliding the front diagonal until it is touching the left side rail as shown.



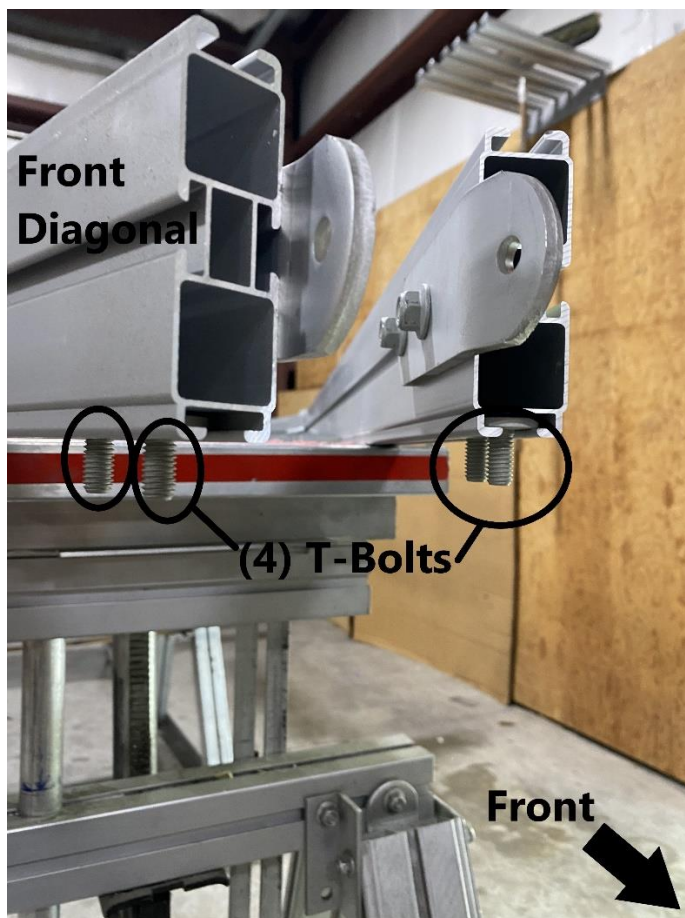
Tighten the (3) locknuts shown using a 9/16" wrench. Repeat this process to install a second front diagonal.



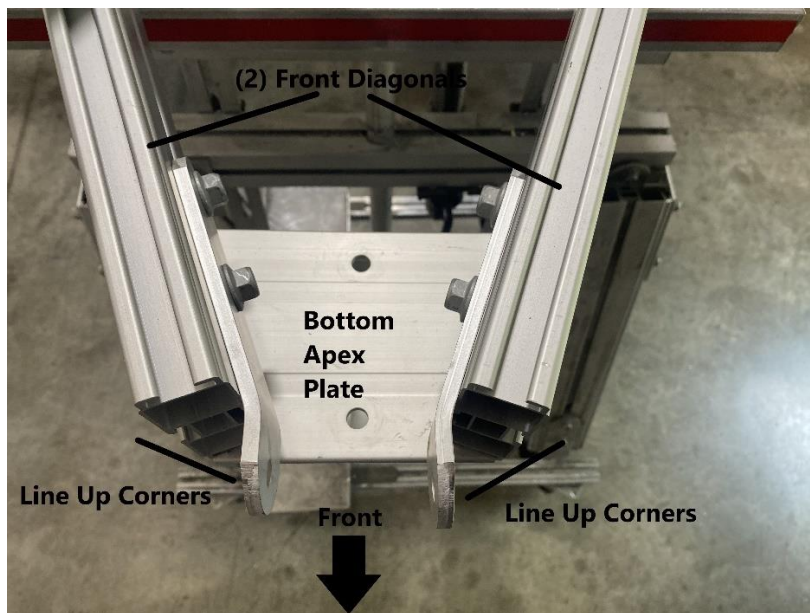
At this point the trailer will look like this.



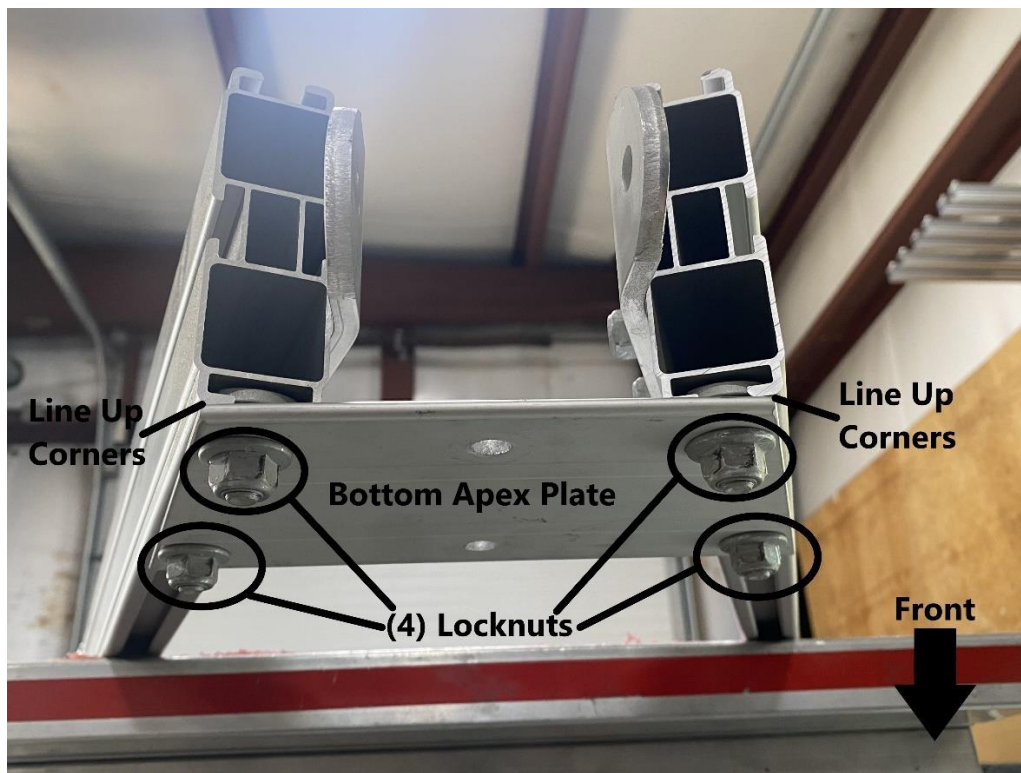
Locate the bottom apex plate. Remove the (4) T-bolts and (4) locknuts using a 9/16" wrench.



Install (4) T-bolts into the bottom grooves of the front diagonals as shown. (2) T-bolts will be installed in each front diagonal.



Using the (4) T-bolts installed in the bottom grooves of the front diagonals, install the bottom apex plate as shown. Install (4) locknuts to the (4) T-bolts but do not tighten yet. Note the corners shown in the above picture. Line up the corners of the front diagonals with the corners of the bottom apex plate.



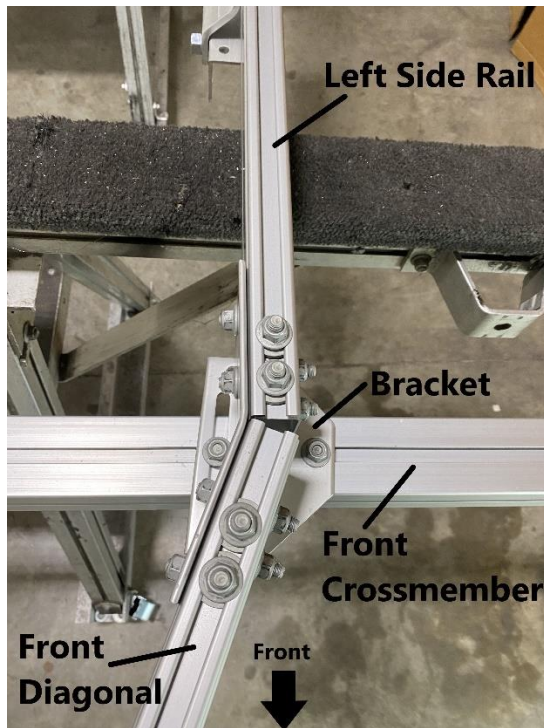
With the corners of the front diagonals and the bottom apex plate lined up, the (4) locknuts will now need to be tightened. Tighten the (4) locknuts shown using a 9/16" wrench.



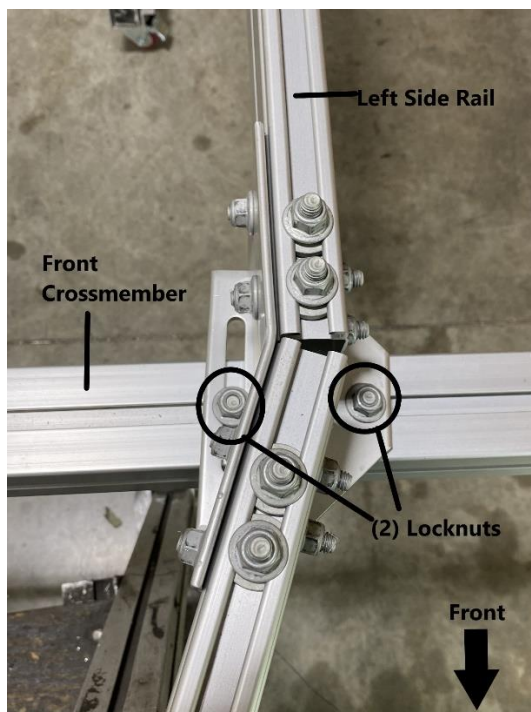
Locate the front crossmember. The front crossmember will have (4) T-bolts and (4) locknuts installed as shown. Remove the (4) locknuts using a 9/16" wrench. Note that the front crossmember will have angles installed in the center of the crossmember. These will be facing upwards during installation.



Locate the bracket shown. This will be used to install the front crossmember to the trailer.



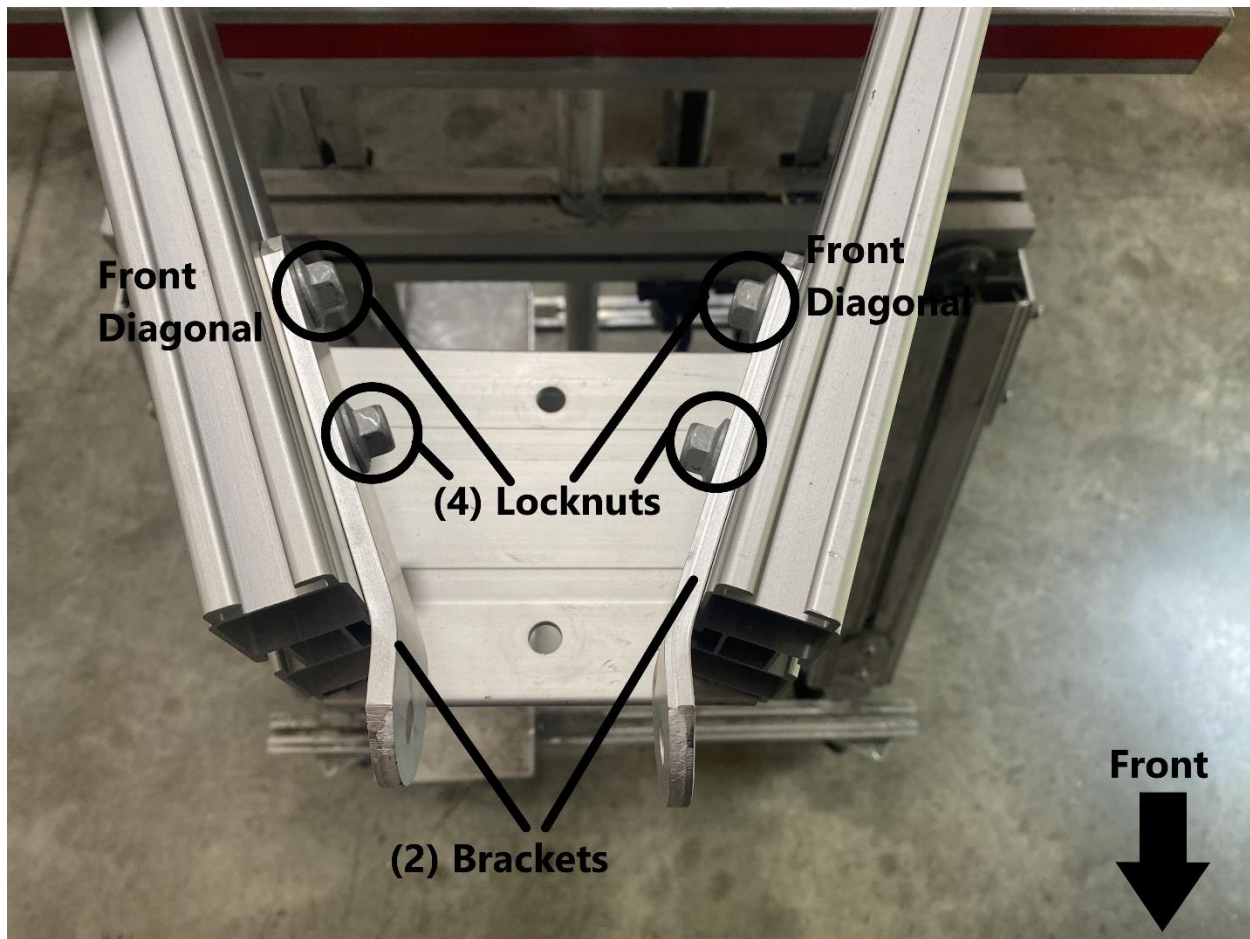
Two people will be necessary to install the front crossmember. Install the front crossmember to the bracket as shown, using the (4) T-bolts installed on the front crossmember. *Note that the front crossmember will have (2) brackets installed in the middle. These brackets will need to lineup with the bottom apex plate to install the tongue section.*



Tighten the (2) locknuts shown using a 9/16" wrench. Repeat this process for the other side.



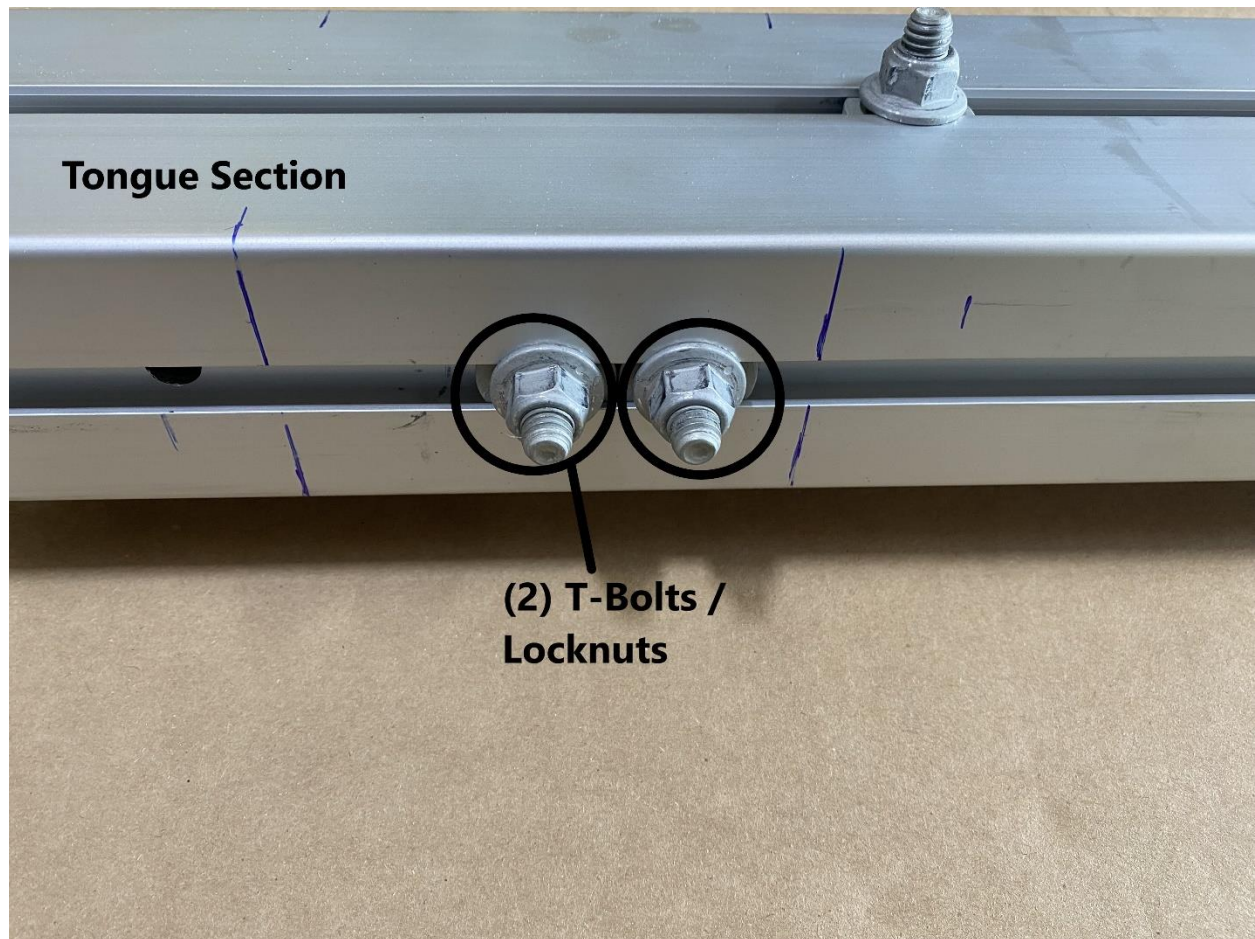
At this point the trailer will look like this.



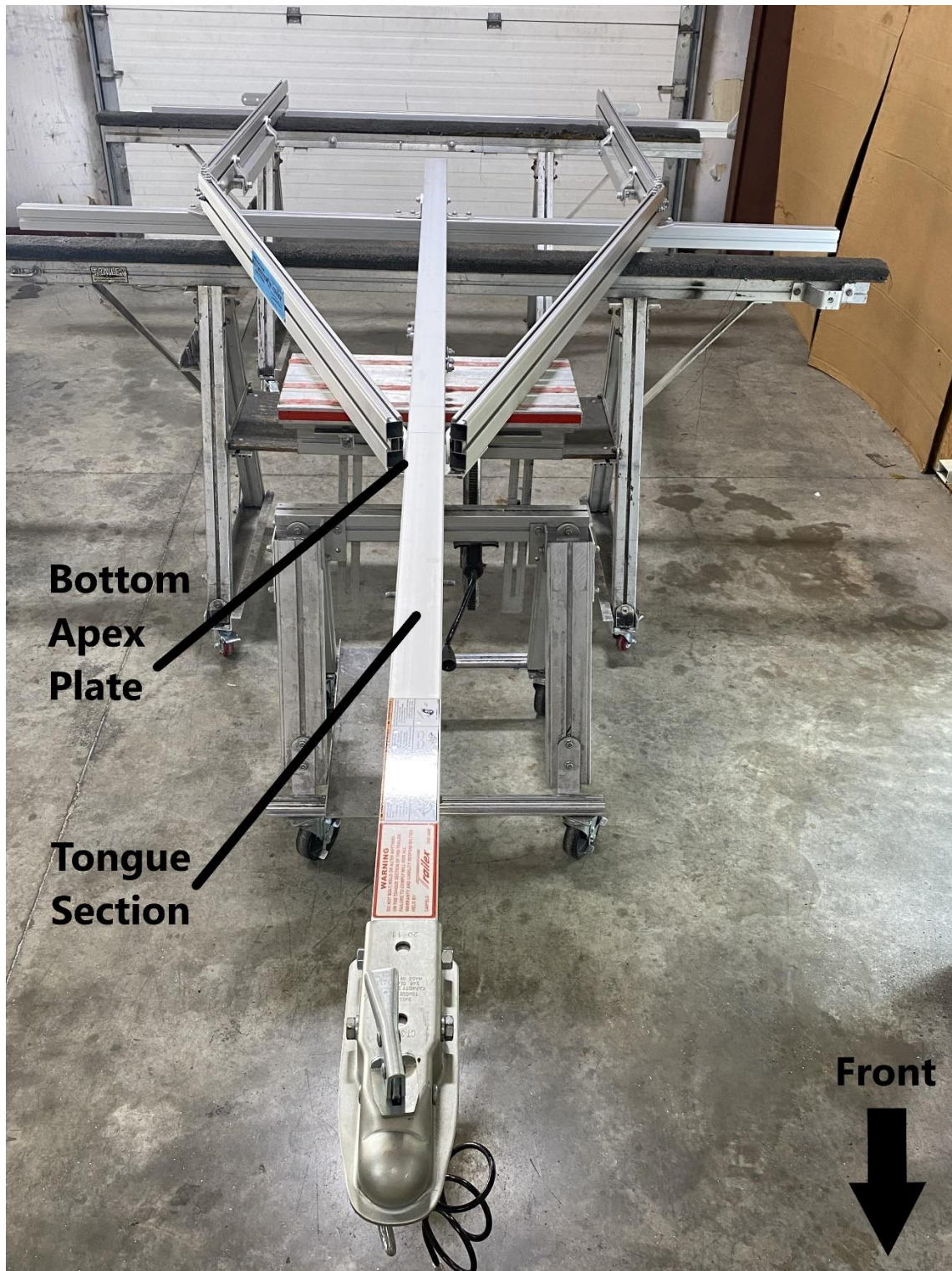
Locate the (2) brackets installed on the front diagonal. Remove the (4) locknuts shown using a 9/16" wrench. Remove the (2) brackets, leaving the (4) T-bolts installed in the inside grooves of the (2) front diagonals. These brackets will be re-installed once the tongue section has been installed to the trailer.



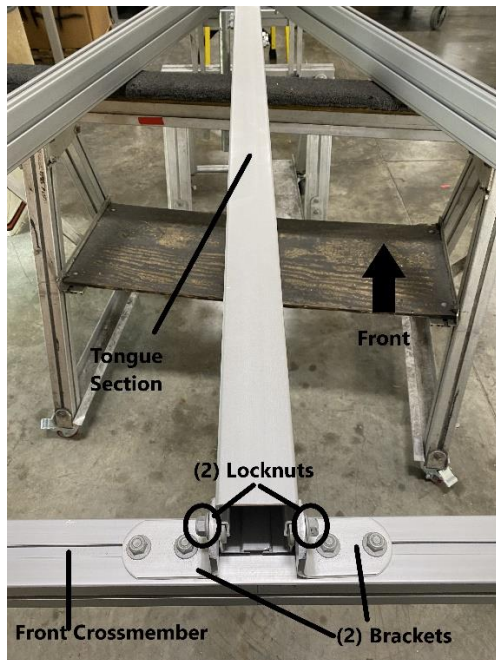
Locate the tongue section.



The tongue section will have (2) T-bolts and (2) locknuts installed in the bottom groove. Remove the (2) locknuts using a 9/16" wrench. The (2) T-bolts will be used to install the tongue section to the bottom apex plate.



Two people will be necessary to install the tongue section. Install the tongue section to the bottom apex plate as shown, using the (2) T-bolts installed in the bottom groove of the tongue section. Place the (2) T-bolts through the (2) center holes of the bottom apex plate. Replace the locknuts but do not tighten yet.



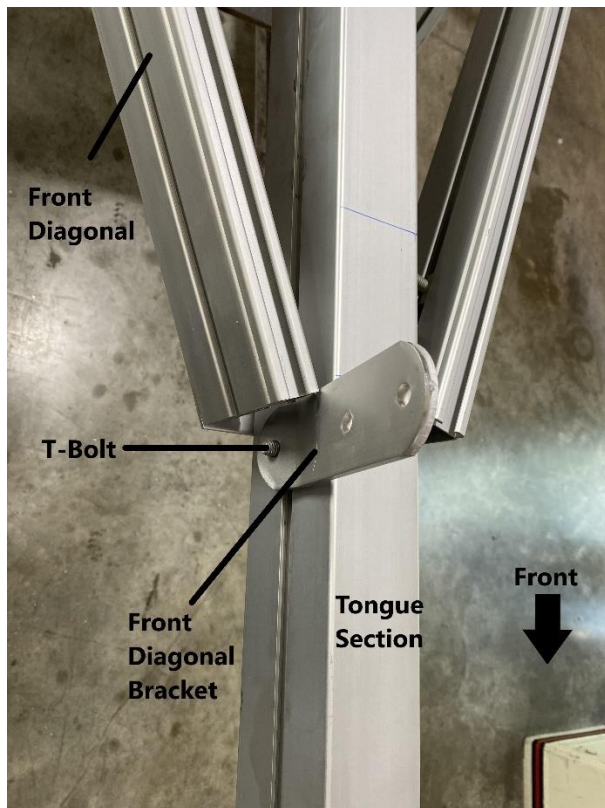
Slide the tongue section through the (2) brackets installed in the center of the front crossmember. Slide the tongue section until the end of the tongue section is flush with the end of the front crossmember. Tighten the (2) locknuts shown using a 9/16" wrench.



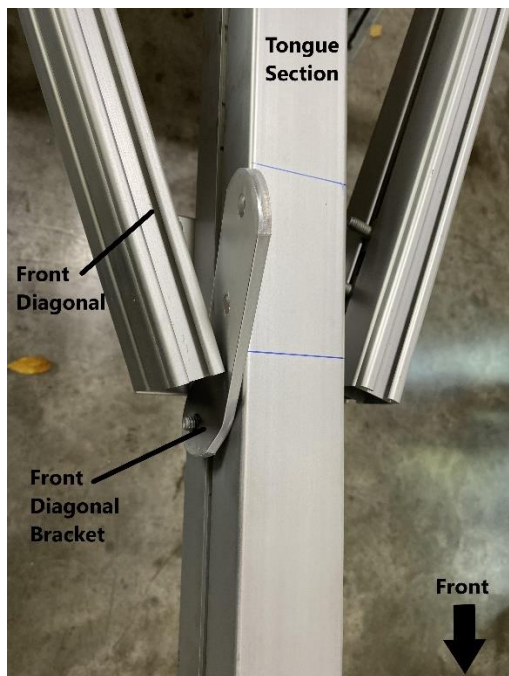
With the tongue section now installed to the front crossmember, the (2) locknuts shown can now be tightened. Tighten the (2) locknuts shown using a 9/16" wrench.



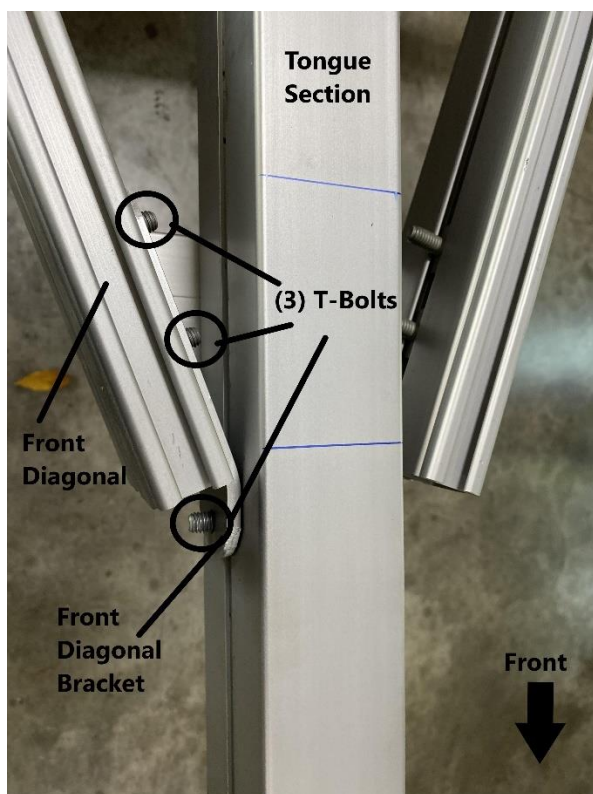
Locate the (2) front diagonal brackets that were removed earlier from the (2) front diagonals).



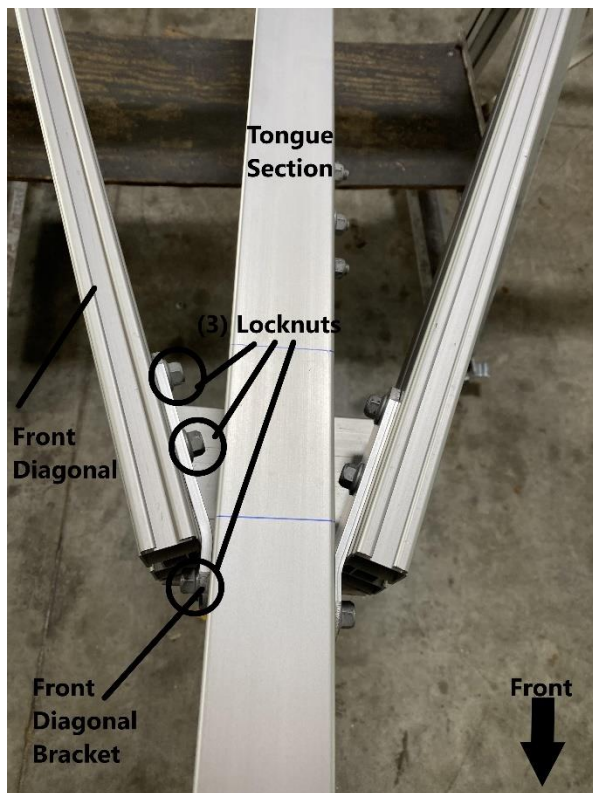
The tongue section will have a T-bolt installed in the outside groove. Remove the locknut using a 9/16" wrench. Install the front diagonal bracket to the T-bolt as shown.



Slide the front diagonal bracket through the small space between the front diagonal and the tongue section. Note that the front diagonal bracket will need to be close to the front diagonal before sliding.



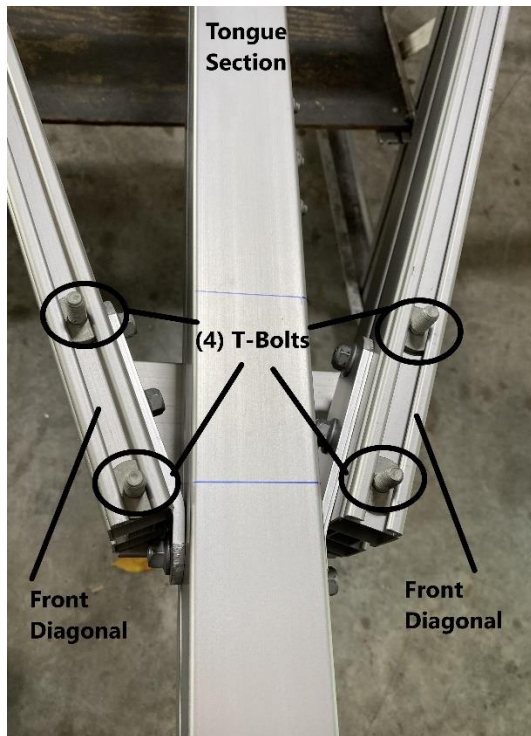
Slide the front diagonal bracket until it is installed on the (3) T-bolts shown.



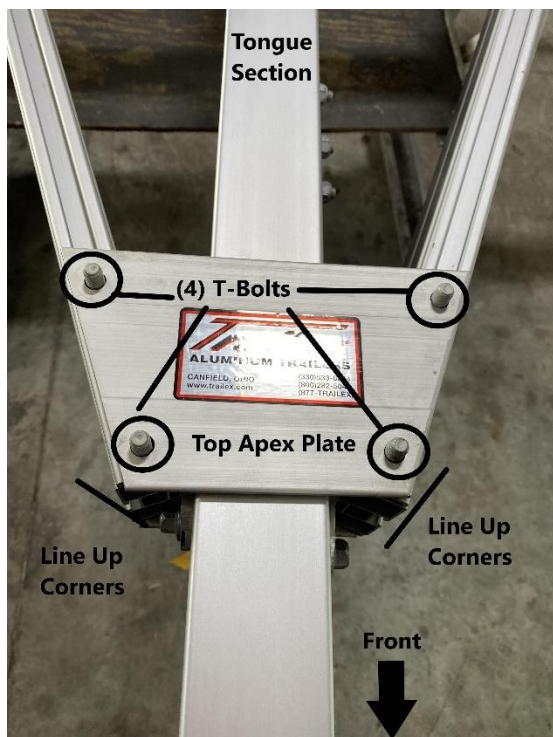
Replace the (3) locknuts and tighten using a 9/16" wrench. Repeat this process for the other side to install both front diagonal brackets.



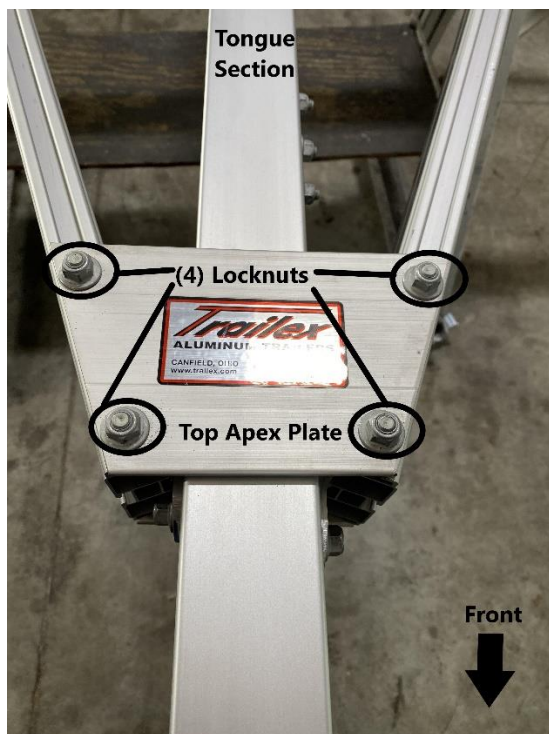
Locate the top apex plate. Remove the (4) T-bolts and (4) locknuts.



Install the (4) T-bolts removed from the top apex plate into the top grooves of the (2) front diagonals as shown.

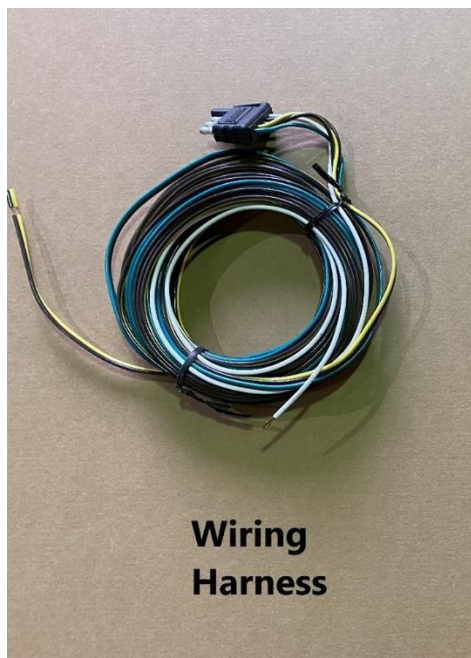


Install the top apex plate to the (4) T-bolts as shown. Line up the corners of the top apex plate with the corners of the front diagonals.

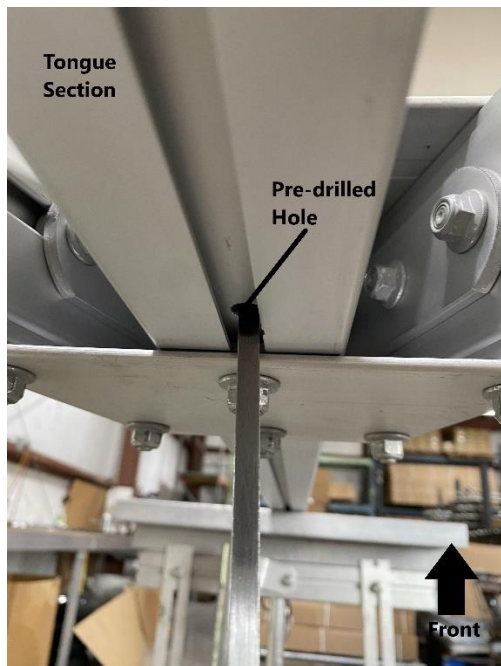


Replace the (4) locknuts and tighten using a 9/16" wrench.

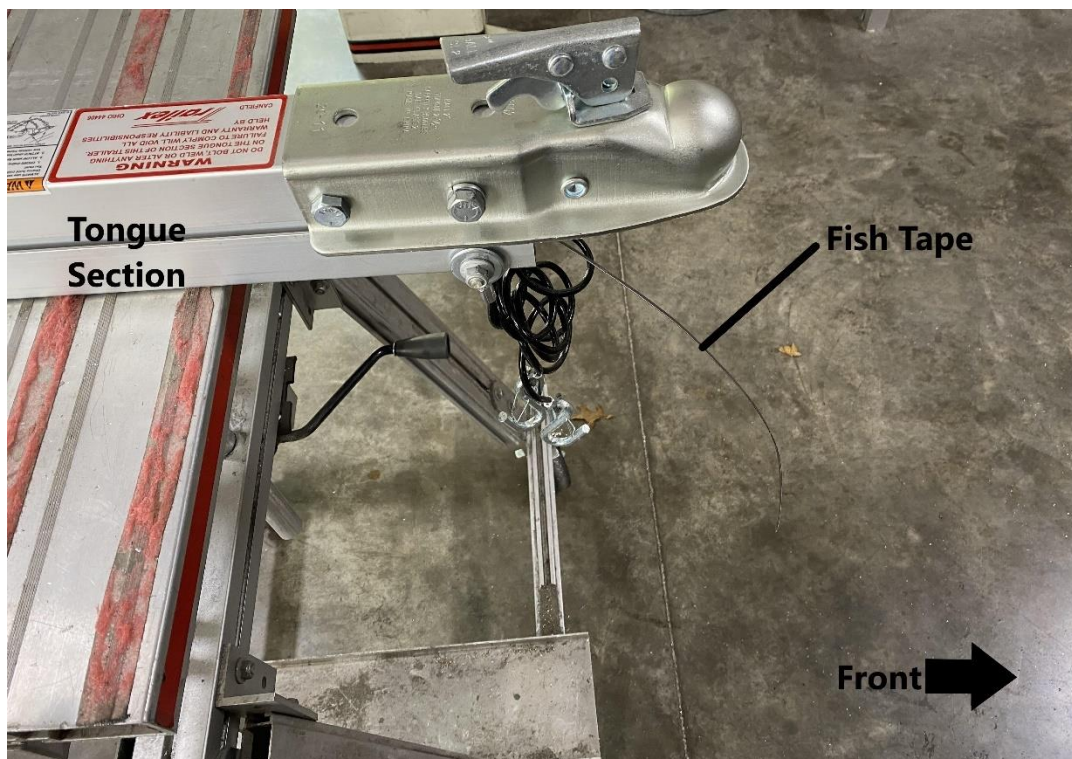
Wiring Instructions



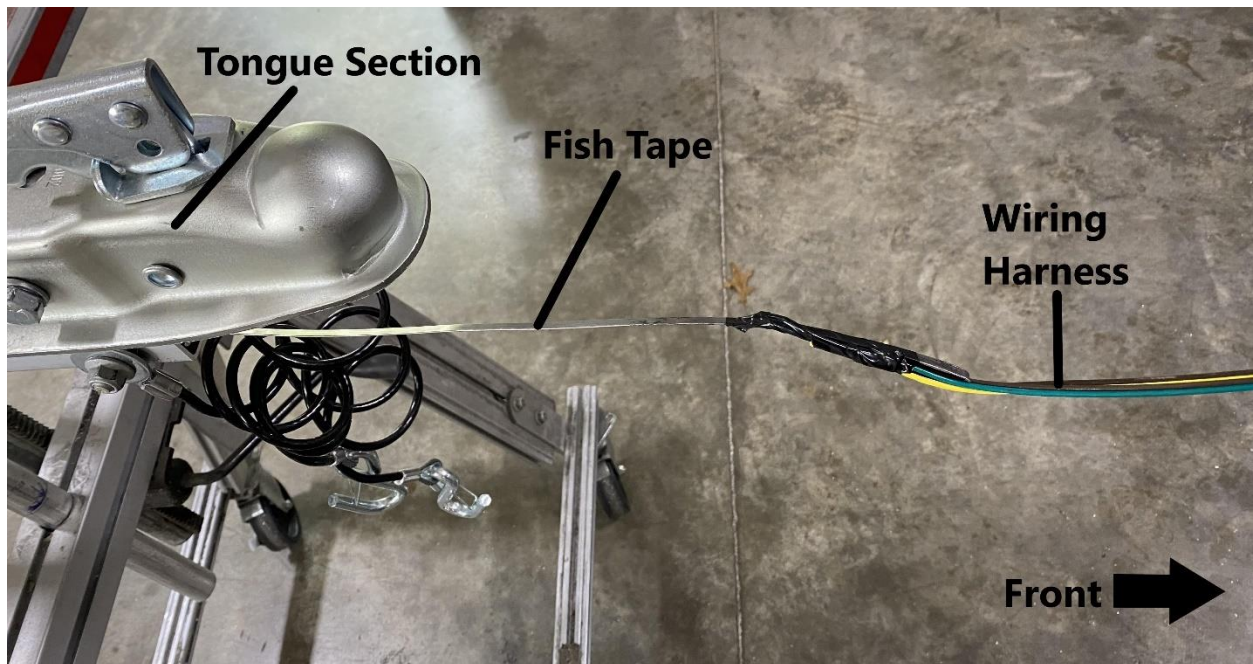
Locate the wiring harness.



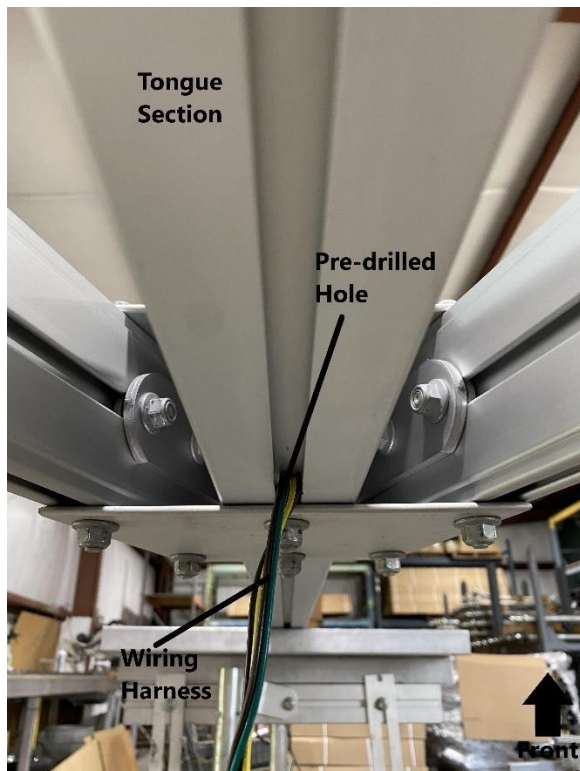
Locate the pre-drilled hole on the bottom of the tongue section. Run fish tape through the pre-drilled hole towards the front of the trailer.



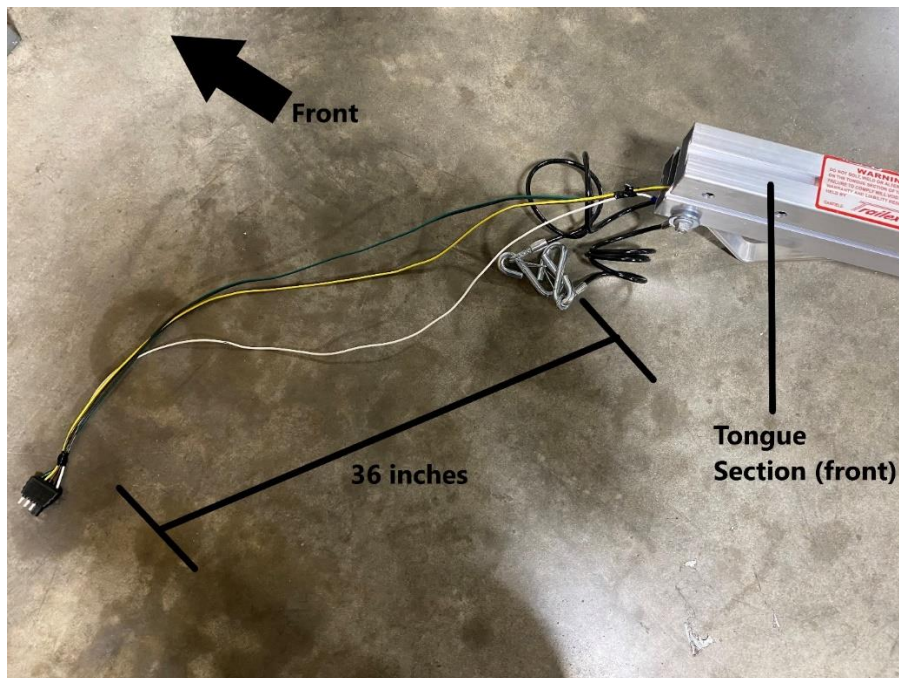
Continue running the fish tape until it reaches the front of the tongue section.



Using electrical tape, tape the end of the wiring harness to the end of the fish tape. *Do not tape the end of harness with the flat four plug.* This will stay at the front of the trailer.



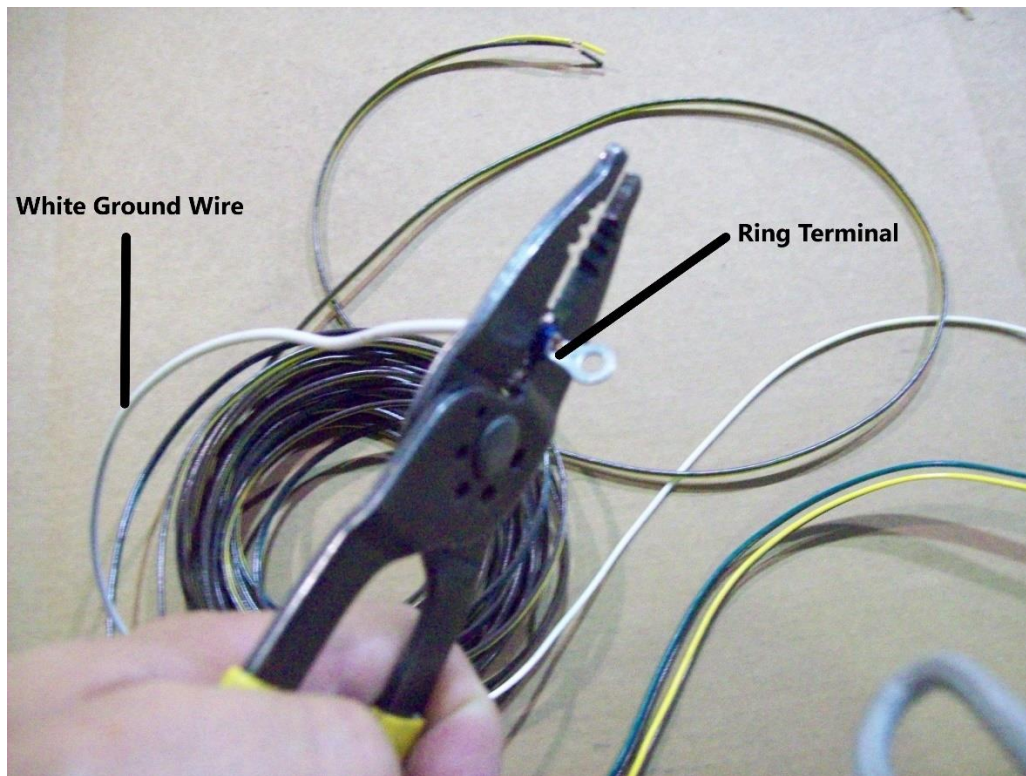
Retract the fish tape, pulling the wiring harness through the tongue section and out through the pre-drilled hole.



Leave 36 inches of wiring at the front of the tongue section. This will be used to connect the trailer to the tow vehicle. *Note that the above picture shows the coupler removed. The TX-416HC-16-04 will have the coupler installed.*



Locate the ring terminal. This will be found in the LED Light Box.



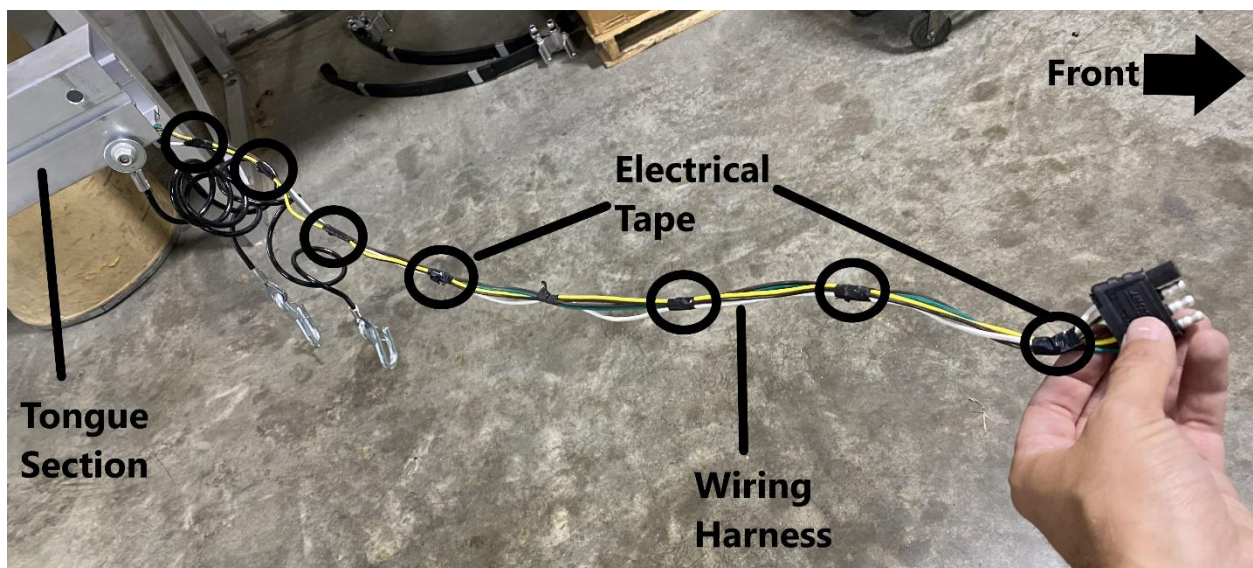
Install the ring terminal to the white ground wire of the wiring harness as shown. Strip the end of the white ground wire, place the ring terminal on the end of the white ground wire and crimp the two together.



Locate the $\frac{3}{4}$ " long Phillips screw that is found in the LED Light box.



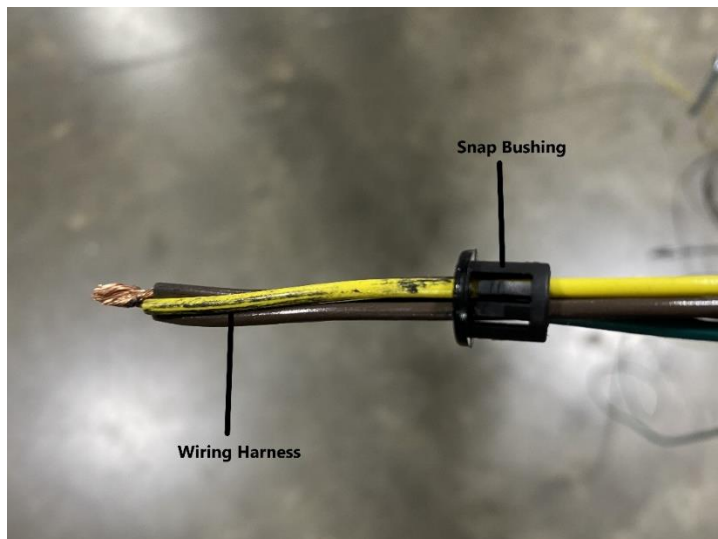
Using a Phillips screwdriver, install the Phillips screw through the ring terminal on the white ground wire into the pre-drilled hole. The pre-drilled hole is located at the bottom of the front tongue section by the safety cables.



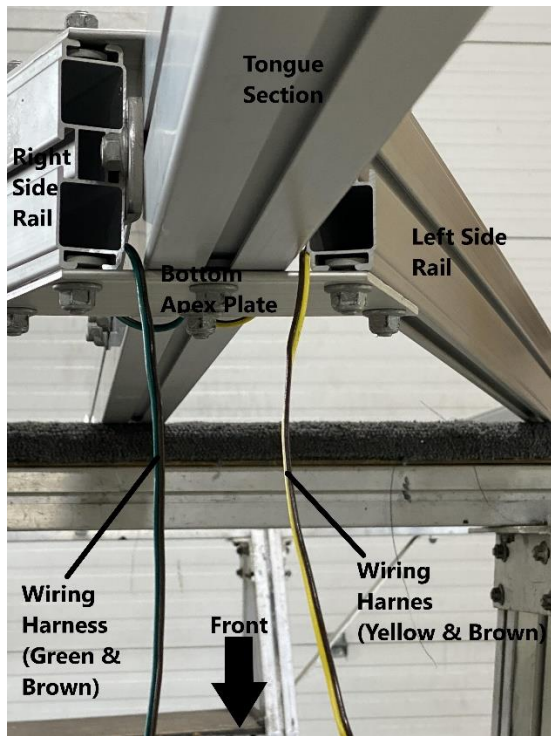
The front of the trailer will have 36 inches of wiring harness that is used to connect the wiring harness to the tow vehicle. Tape these wires together using electrical tape.



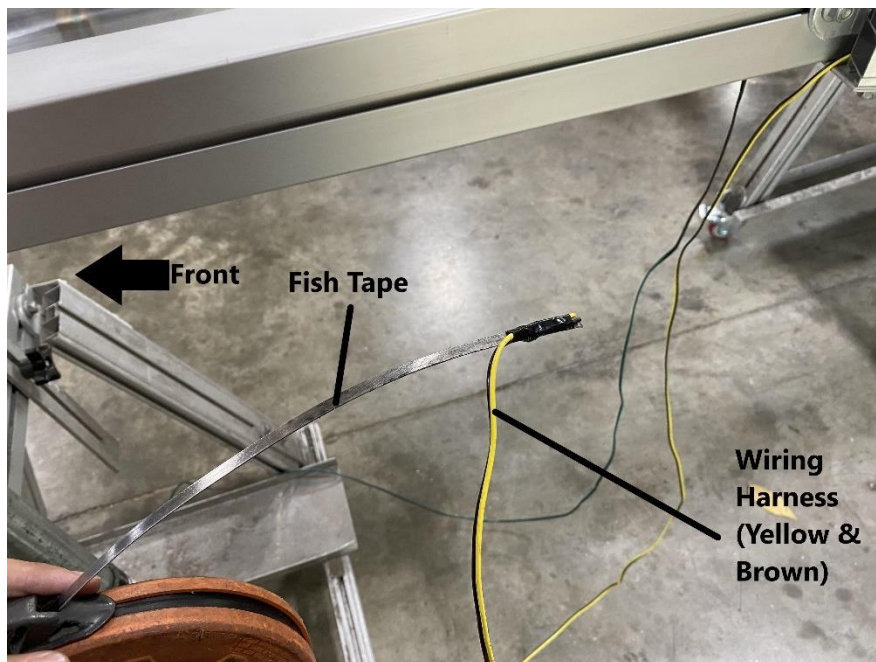
Locate the snap bushing found in the LED Light Kit.



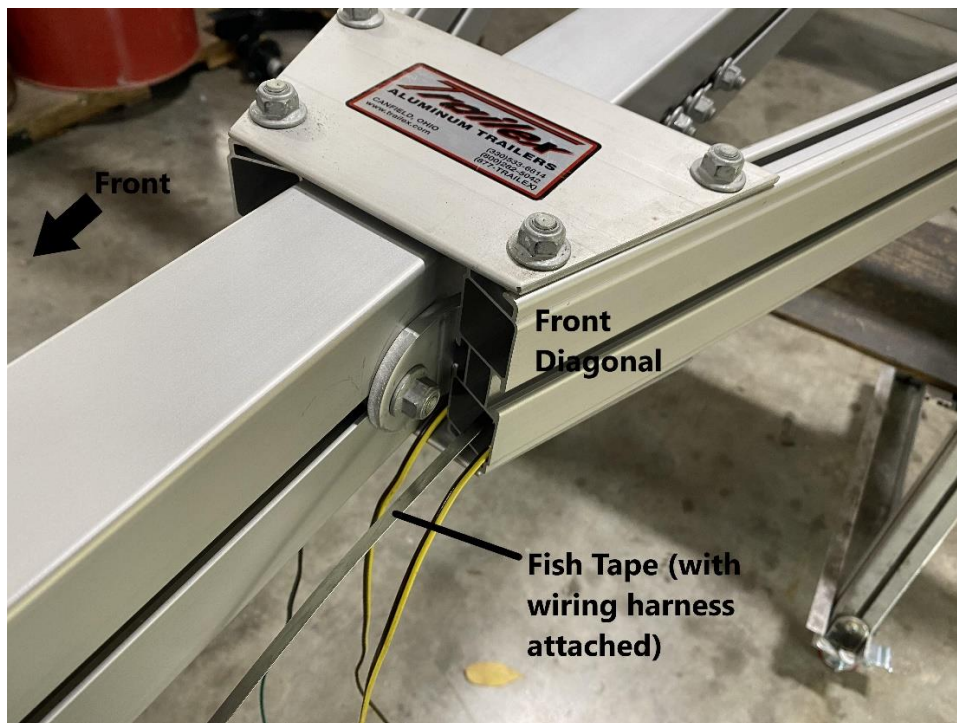
Install the snap bushing on the wiring harness. This will be the end of the wiring harness that was pulled through the tongue section and out through the pre-drilled hole. Run the snap bushing up the wiring harness and press the snap bushing into the pre-drilled hole. A standard screwdriver can be used to press the snap bushing into place.



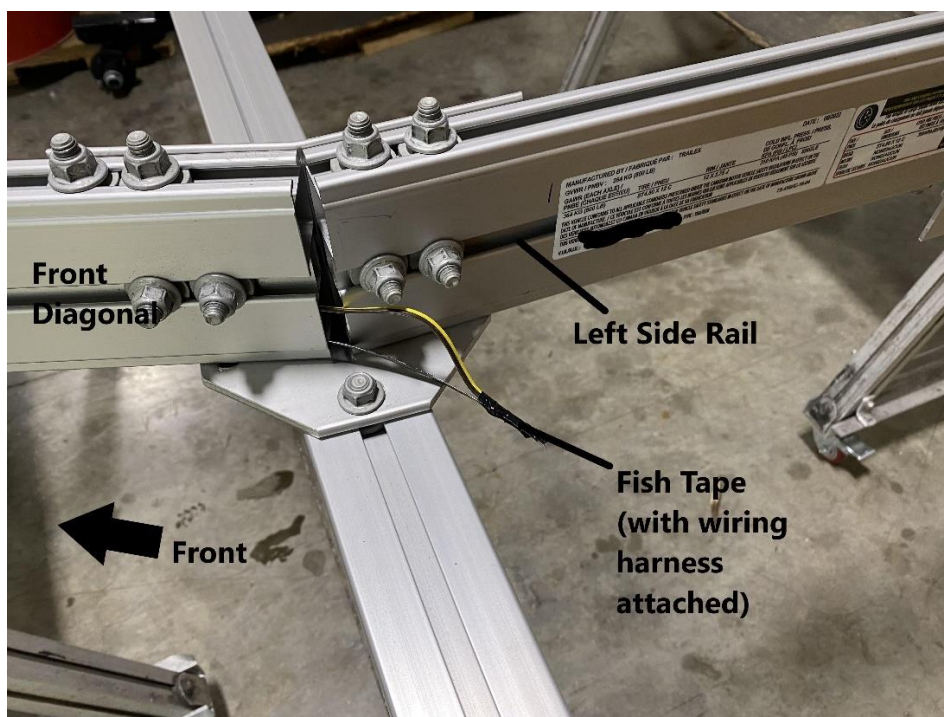
Separate the wiring harness into two parts: 1 green and 1 brown wire, and 1 yellow and 1 brown wire. Move the wires so that they are hanging over the bottom apex plate as shown.



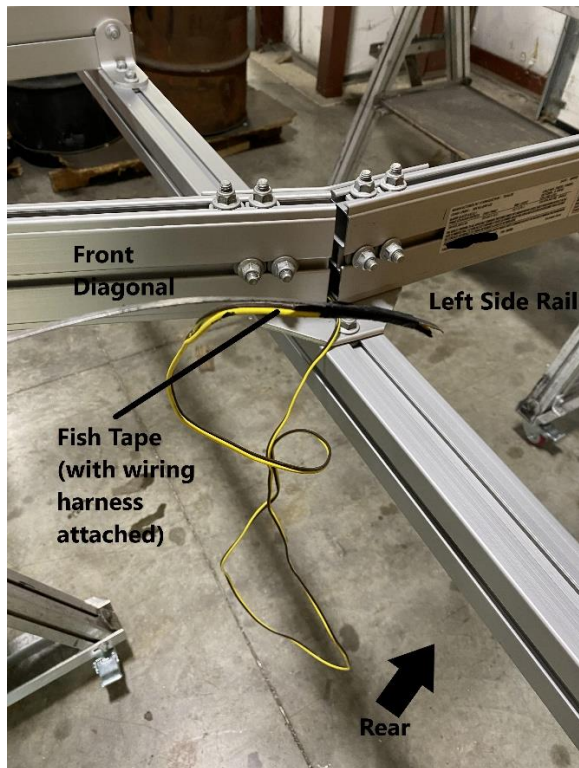
Use electrical tape to connect the yellow and brown wires of the wiring harness to the fish tape as shown.



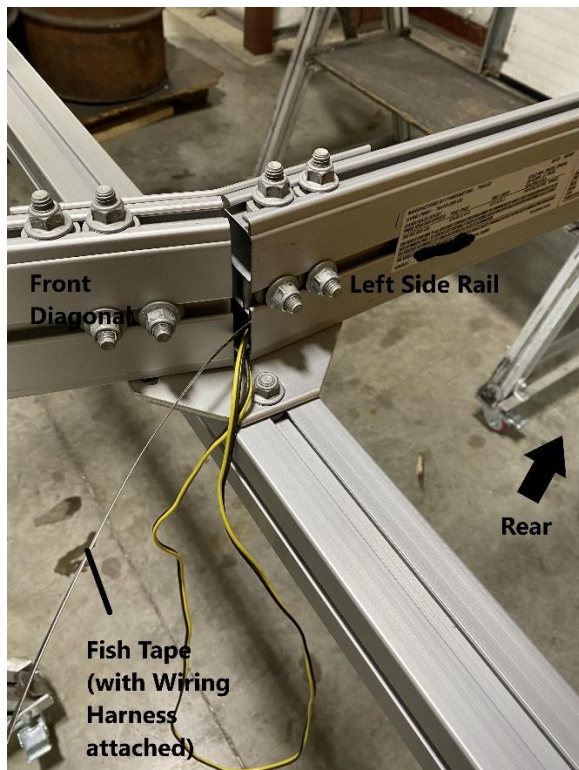
Run the fish tape and the attached wiring harness through the front diagonal towards the rear of the trailer.



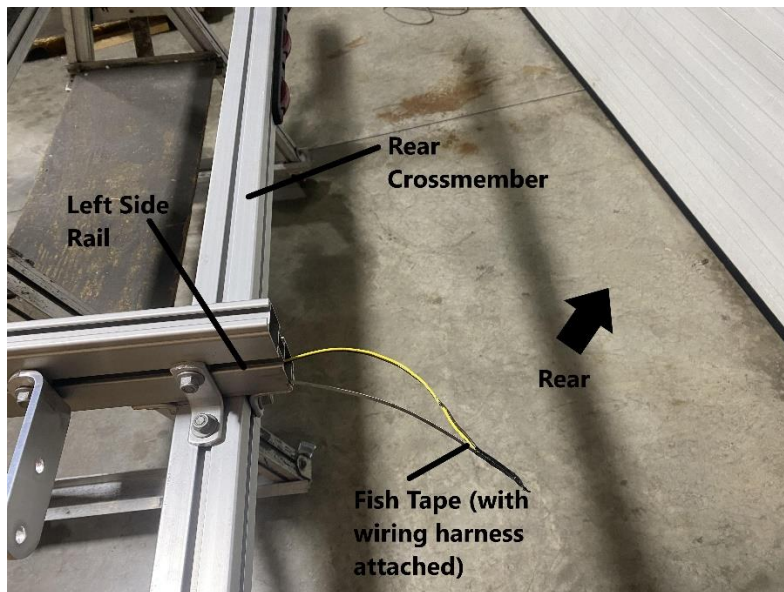
Run the fish tape and the attached wiring harness until it reaches the opening by the front diagonal and left side rail. Remove the electrical tape and retract the fish tape, leaving the wiring harness at the opening.



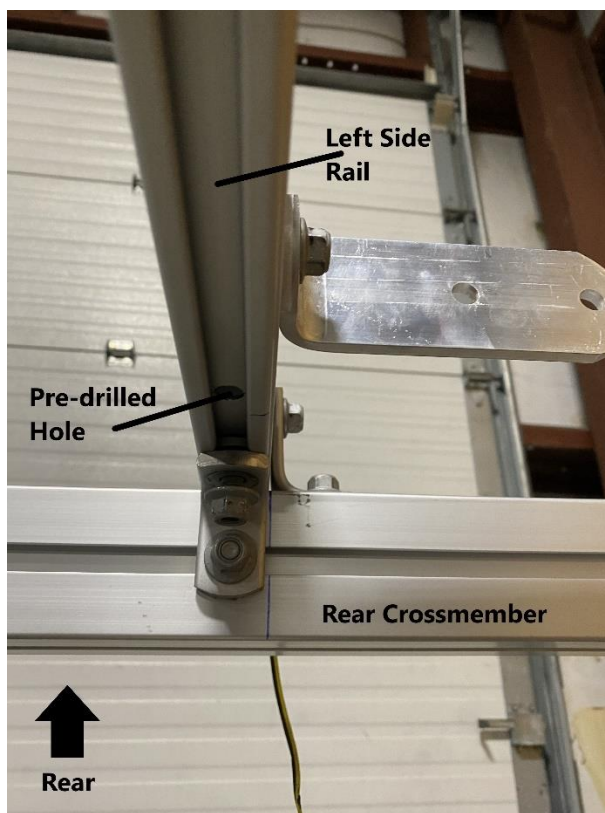
Using electrical tape, reattach the wiring harness to the fish tape.



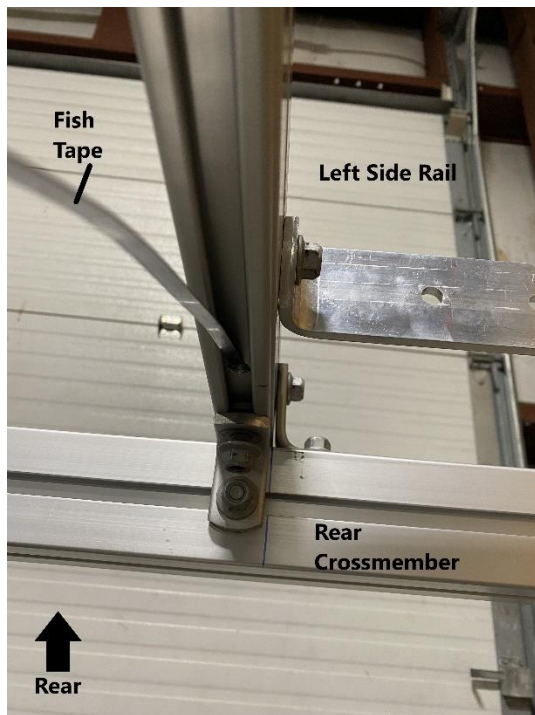
Run the fish tape with the wiring harness attached through the left side rail toward the rear of the trailer.



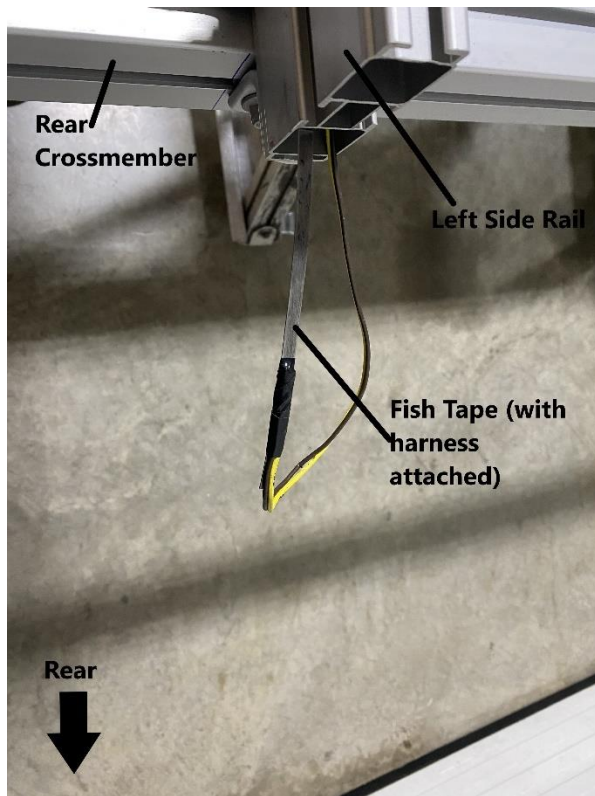
Run the fish tape through the left side rail until it reaches the rear of the trailer. Remove the electrical tape and retract the fish tape, leaving the wiring harness at the rear of the trailer.



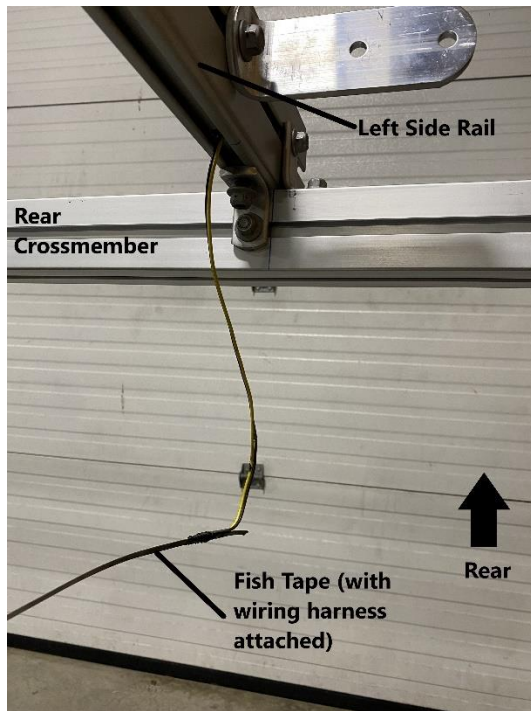
Locate the pre-drilled hole in the bottom groove of the left side rail, towards the rear of the trailer.



Run the fish tape through the pre-drilled hole towards the rear of the trailer.



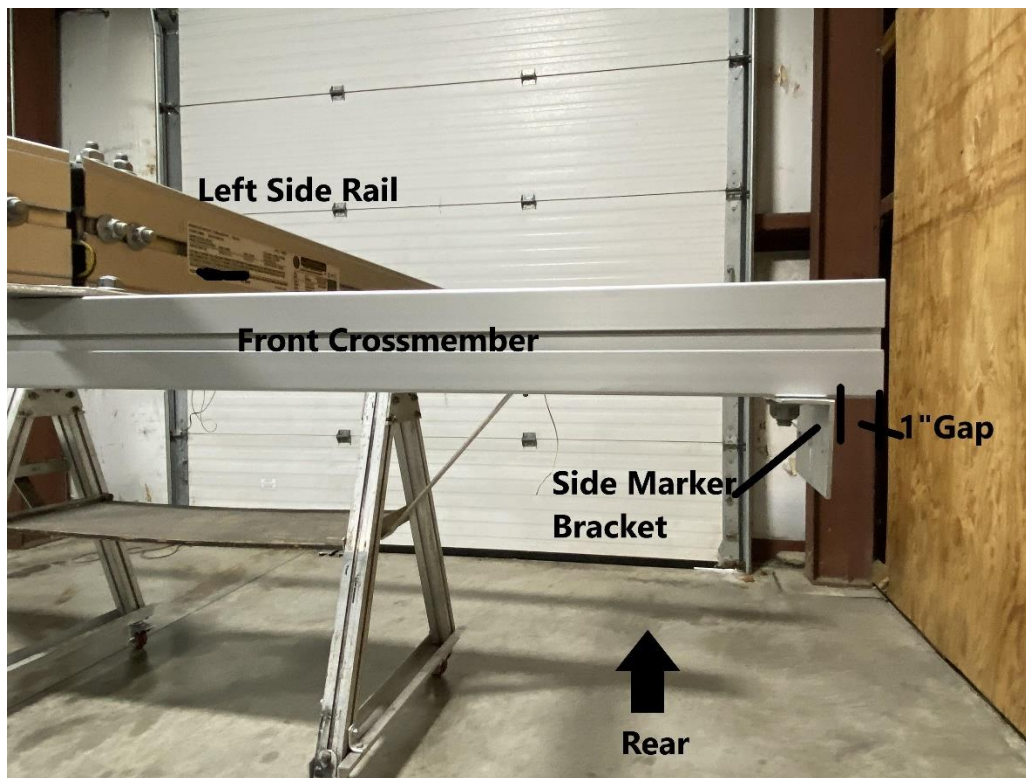
Using electrical tape, connect the fish tape to the wiring harness.



Retract the fish tape, pulling the wiring harness through the pre-drilled hole. Remove the electrical tape. Repeat this process to run the green and brown wires of the wiring harness through the right side rail.



Locate the (2) side marker brackets.



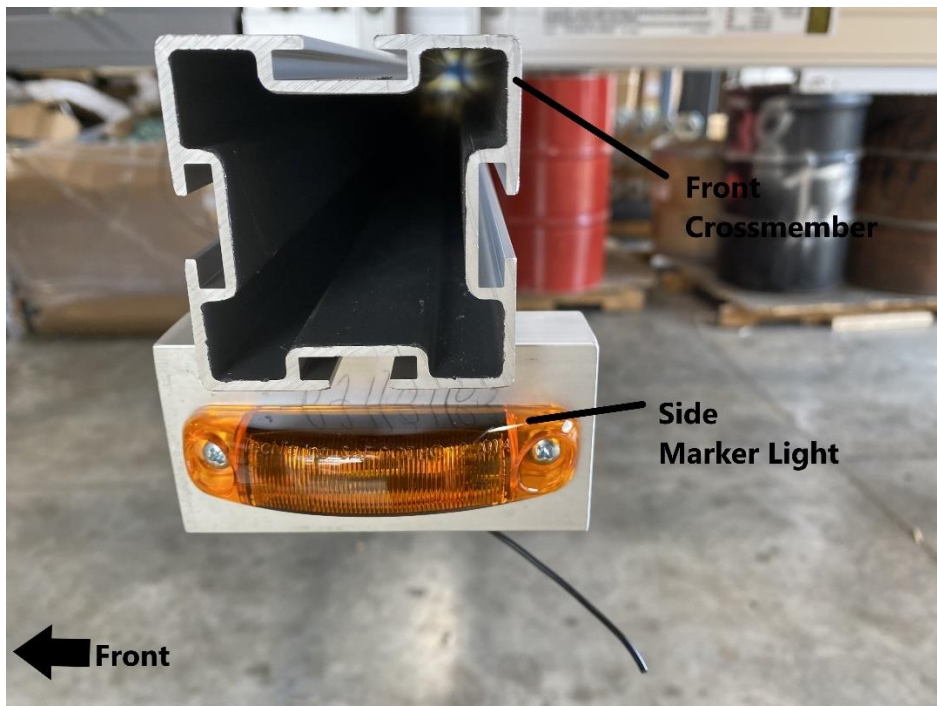
Install the side marker bracket to the bottom groove of the front crossmember. Leave a 1" gap from the end of the front crossmember. Tighten the locknut using a 9/16" wrench.



Locate the (2) amber market lights found in the LED Light Kit.



Strip the end of the amber marker light wire.



Using a Phillips screwdriver, install the side marker light to the side marker light bracket as shown using 2 Phillips screws found in the LED light kit. The wire will go through the large hole in the center of the bracket. Repeat this process for the other side.

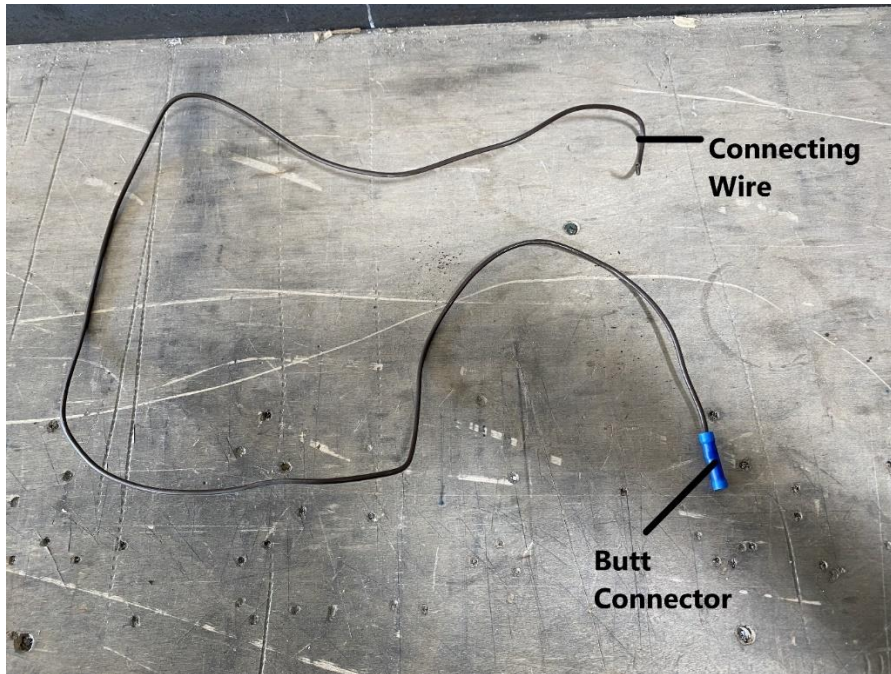


Pull Wires

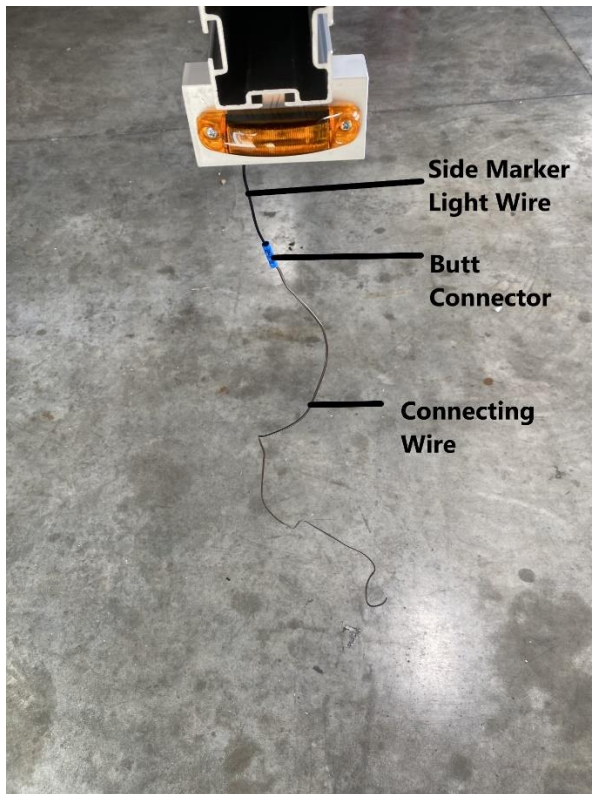
Locate a connecting wire found the pull wire bag.



Locate a butt connector found in the LED Light Kit.



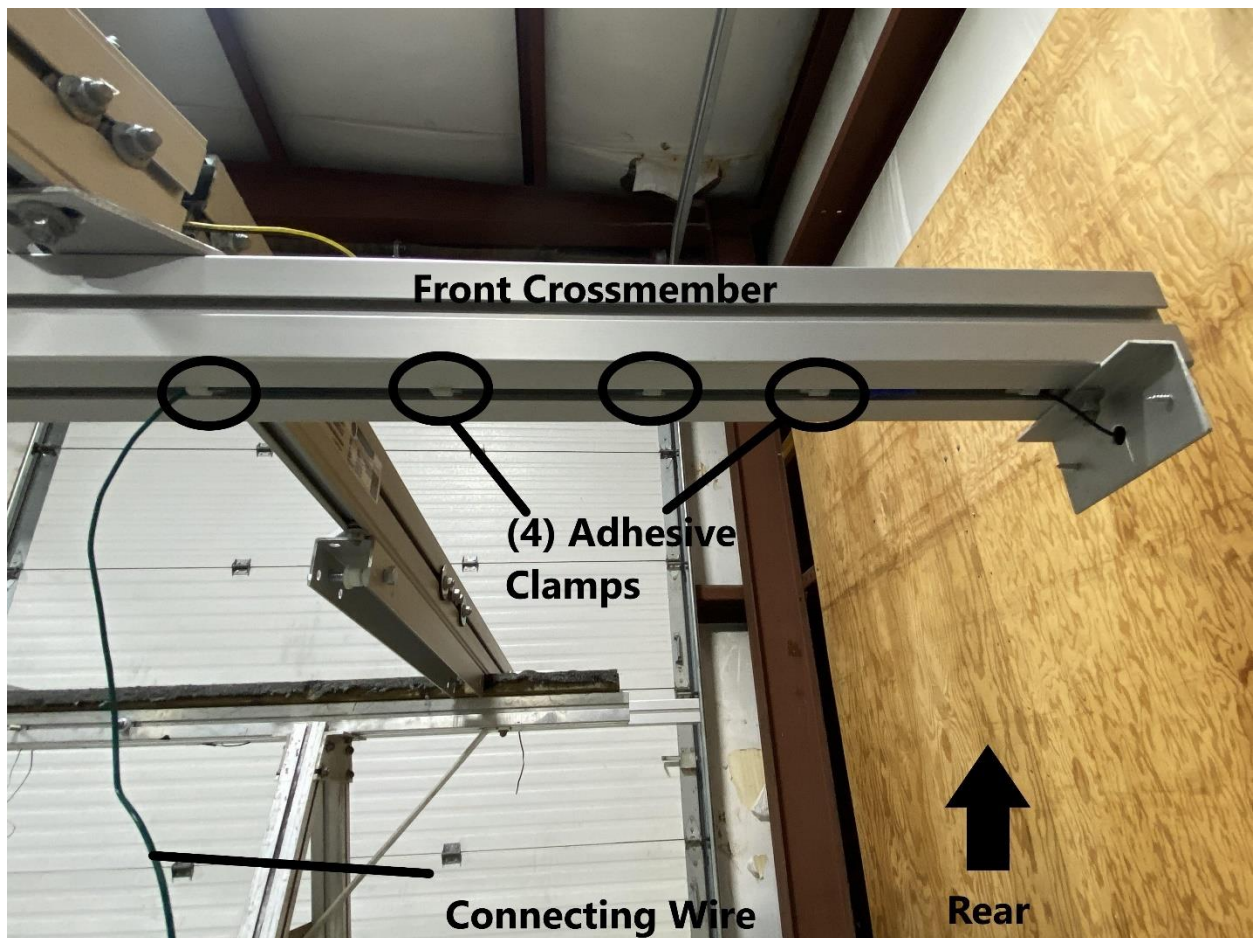
Strip an end of the connecting wire and crimp a butt connector to the connecting wire.



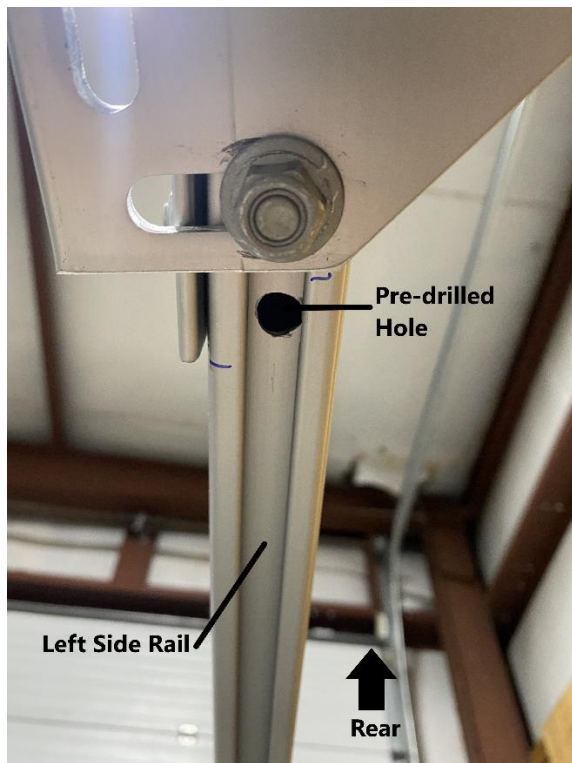
Strip the end of the side marker light wire, insert the end into the butt connector and crimp. At this point the side marker light will look like this.



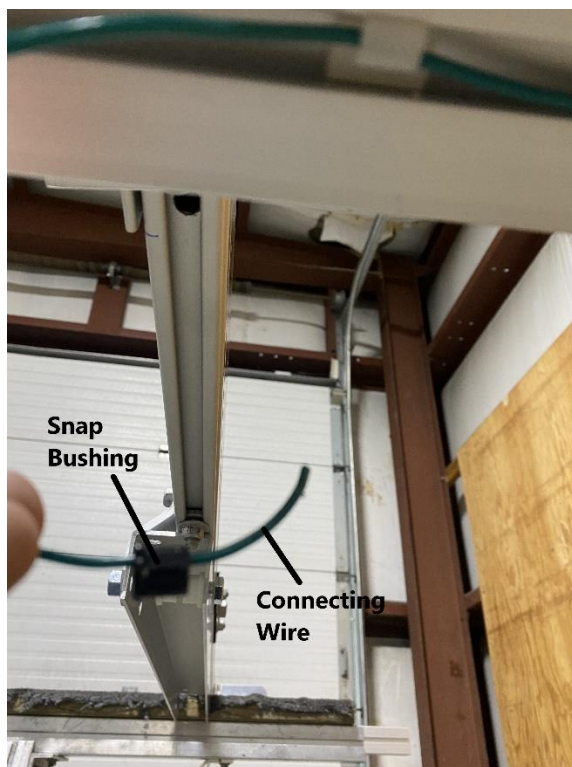
Locate the adhesive wire clamps located in the LED Light kit.



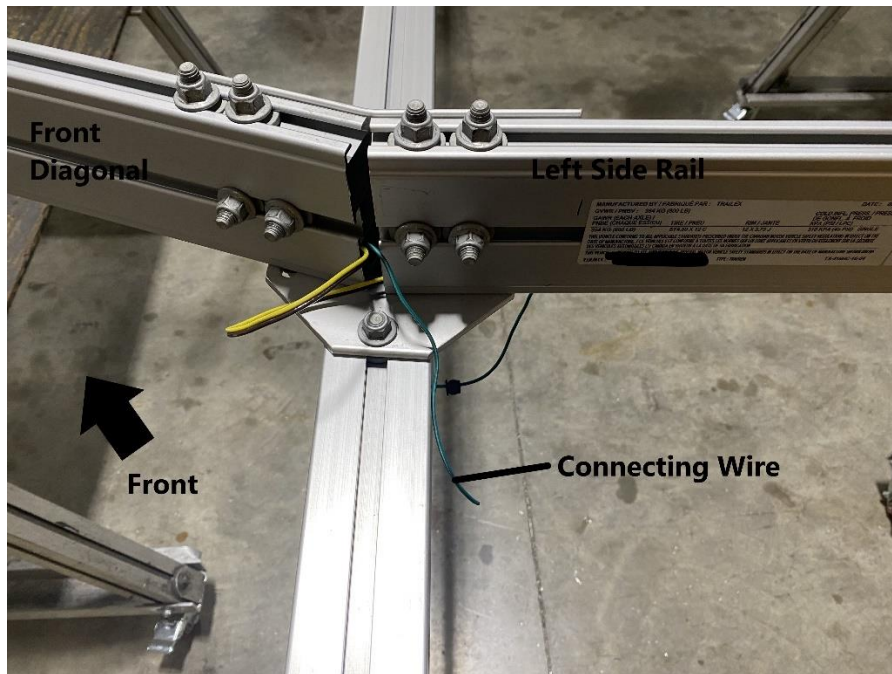
Install (4) adhesive clamps into the bottom groove of the front crossmember. A flat screwdriver can be used to press the clamp into place. Run the connecting wire through the adhesive clamps towards the inside of the trailer.



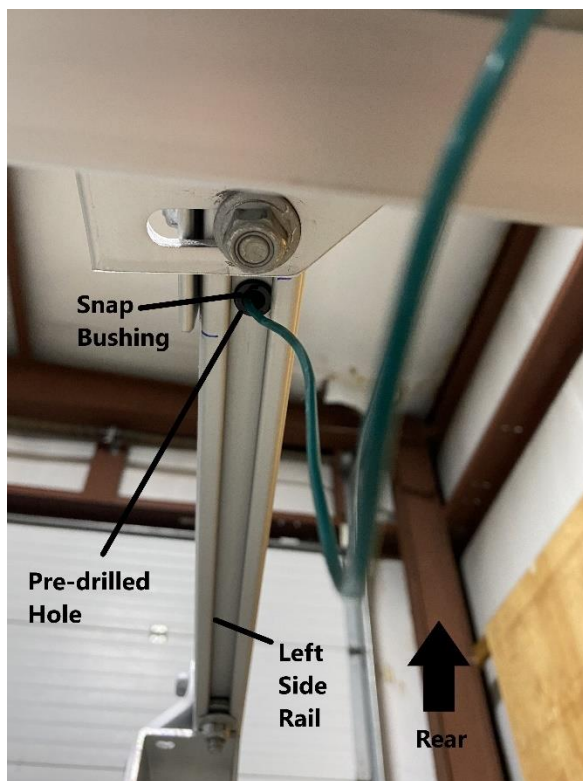
Locate the pre-drilled hole on the bottom groove of the left side rail.



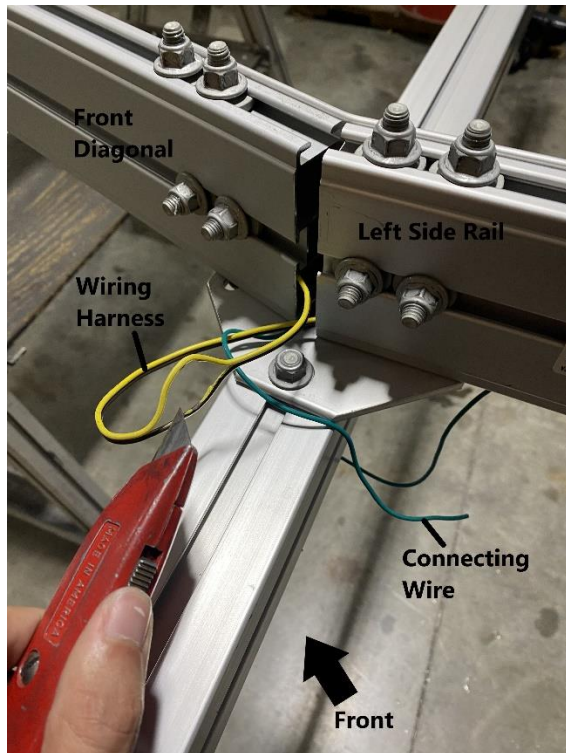
Place a snap bushing at the end of the connecting wire.



Run the connecting wire to the opening between the front diagonal and the left side rail.

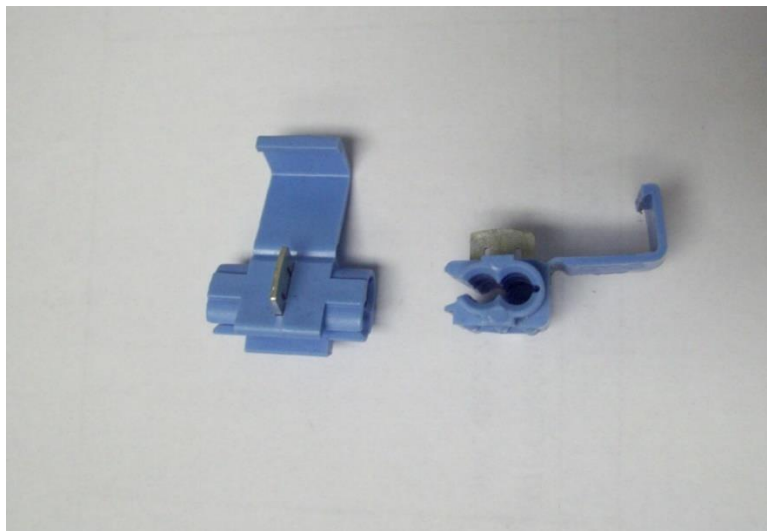


Press the snap bushing into the pre-drilled hole in the bottom groove of the left side rail.

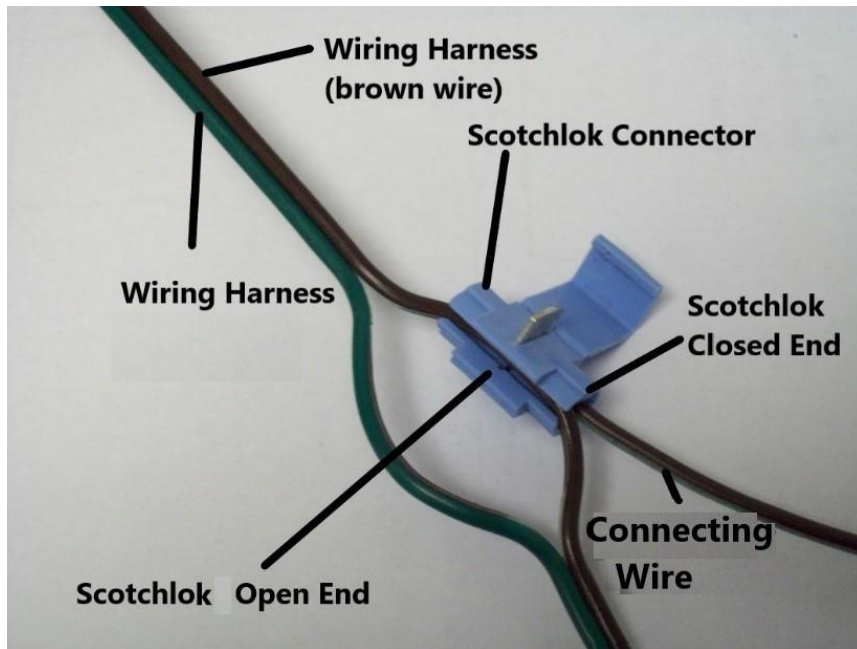


Use a utility knife to separate the yellow wire from the brown wire. **Do not cut through the wires.** The following instructions will explain how to use a scotchlok connector to connect the amber marker light wire/connecting wire to the wiring harness.

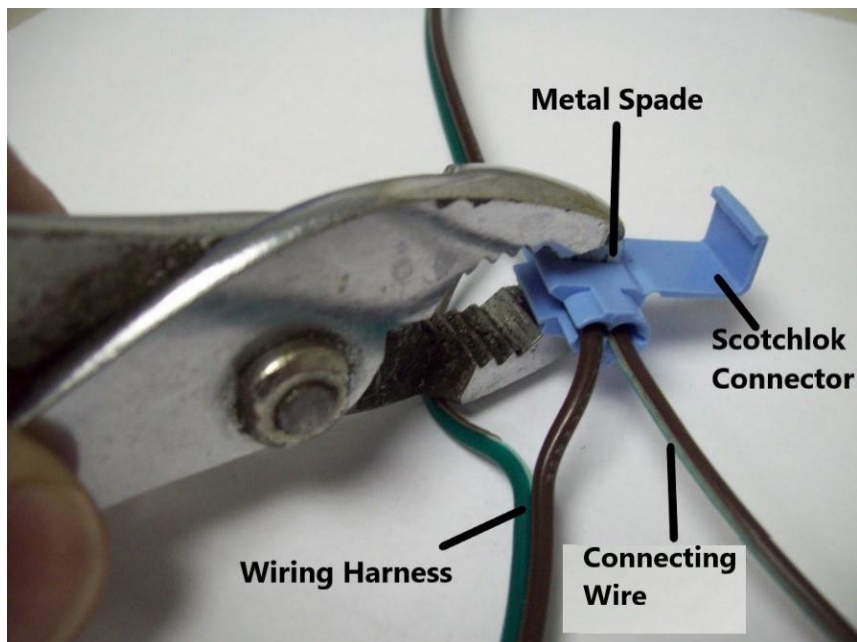
Scotchlok Connector Instructions



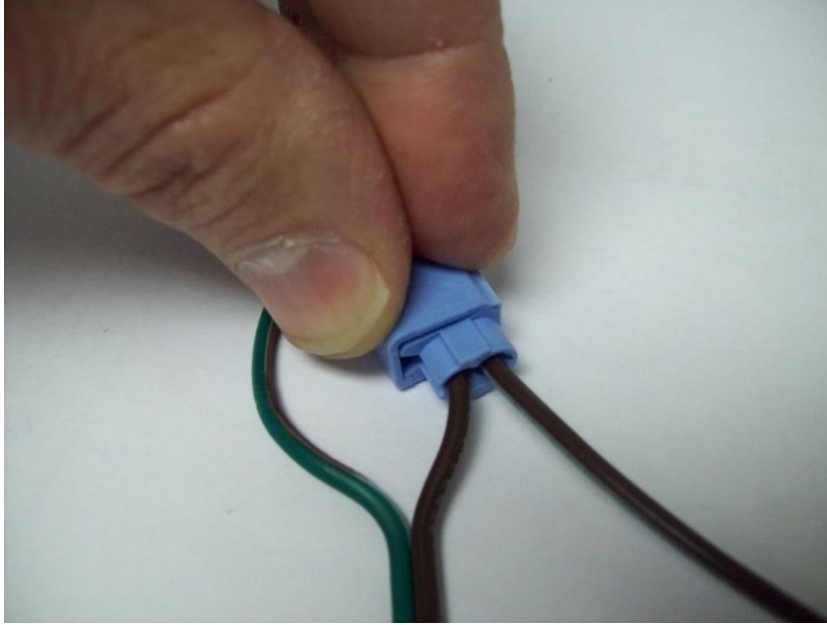
Locate (2) Scotchlok connectors. These will be found in the LED Light Kit. This will be used to attach the connecting wire to the wiring harness.



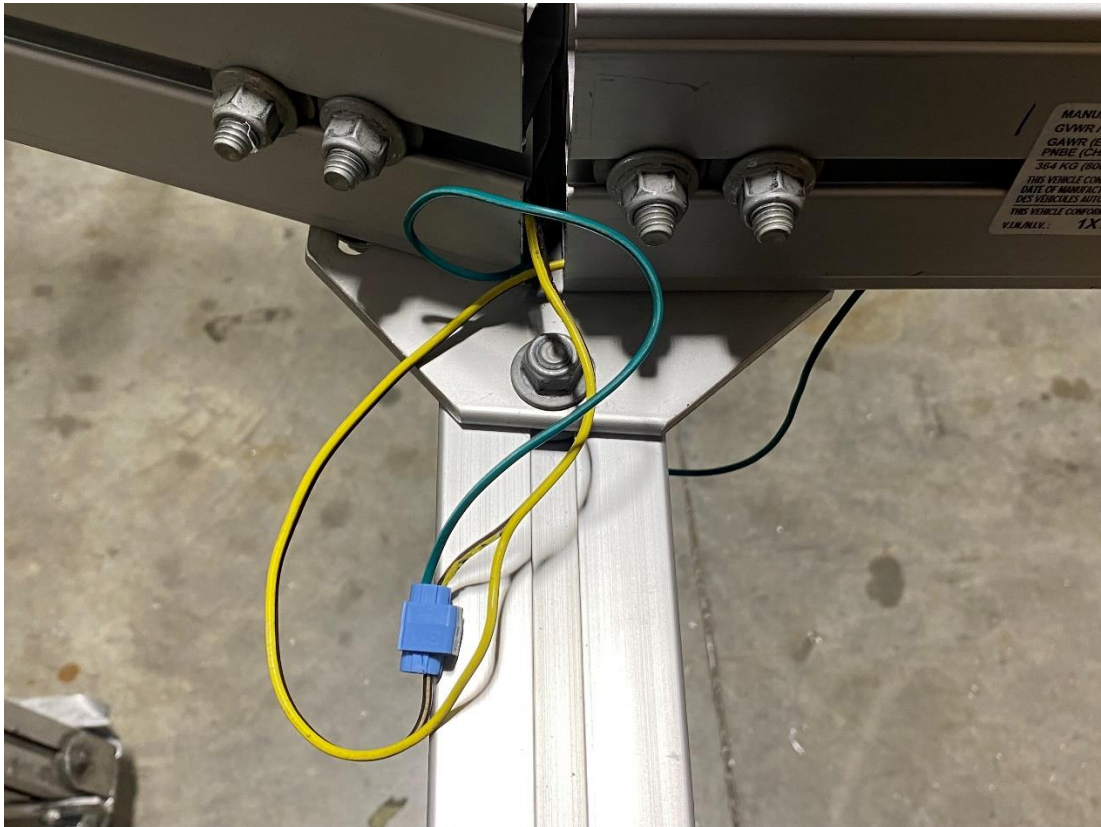
The above image shows how the wiring harness will connect to the connecting wire. Insert the connecting wire into the Scotchlok connector. This hole does not pass all the way through. The wire should go in about $\frac{1}{2}$ ". Pass the brown wire of the wiring harness through the remaining open slot in the connector.



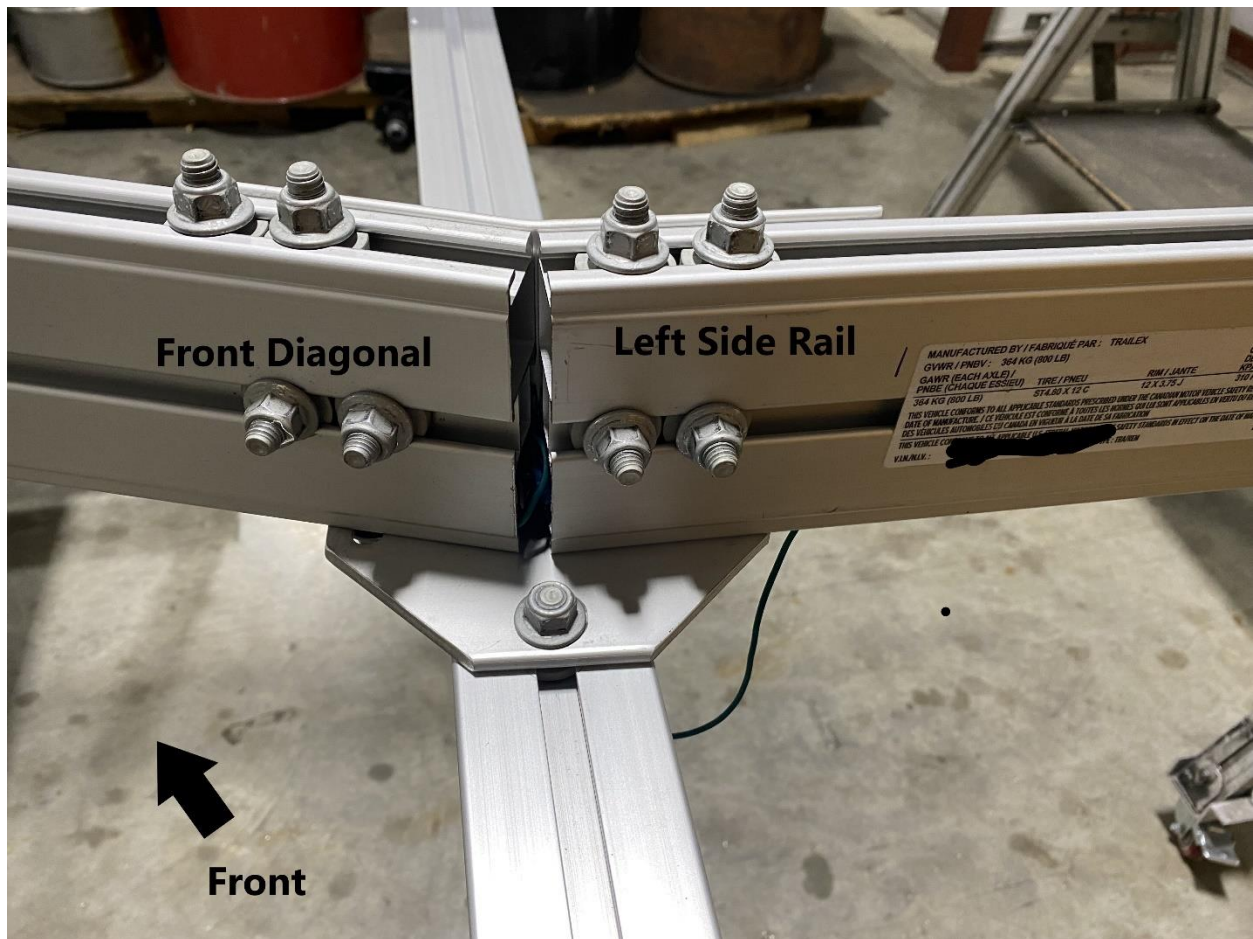
Use pliers to push the metal spade down until it is flush with the plastic of the Scotchlok Connector. This is what makes the electrical connection between the two wires.



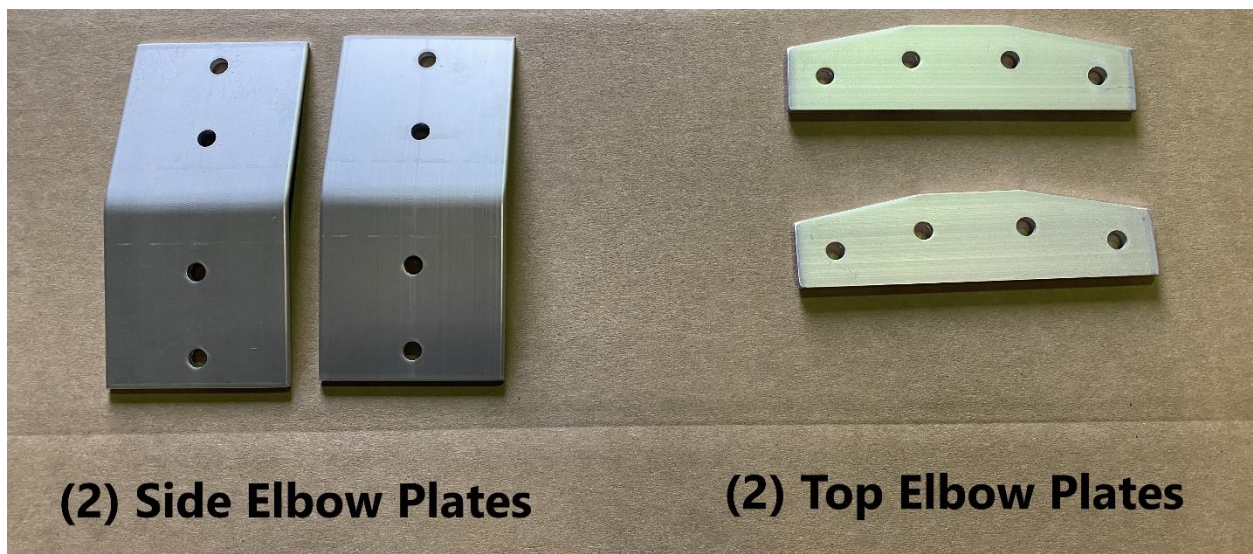
Close the hinge cover on the Scotchlok Connector.



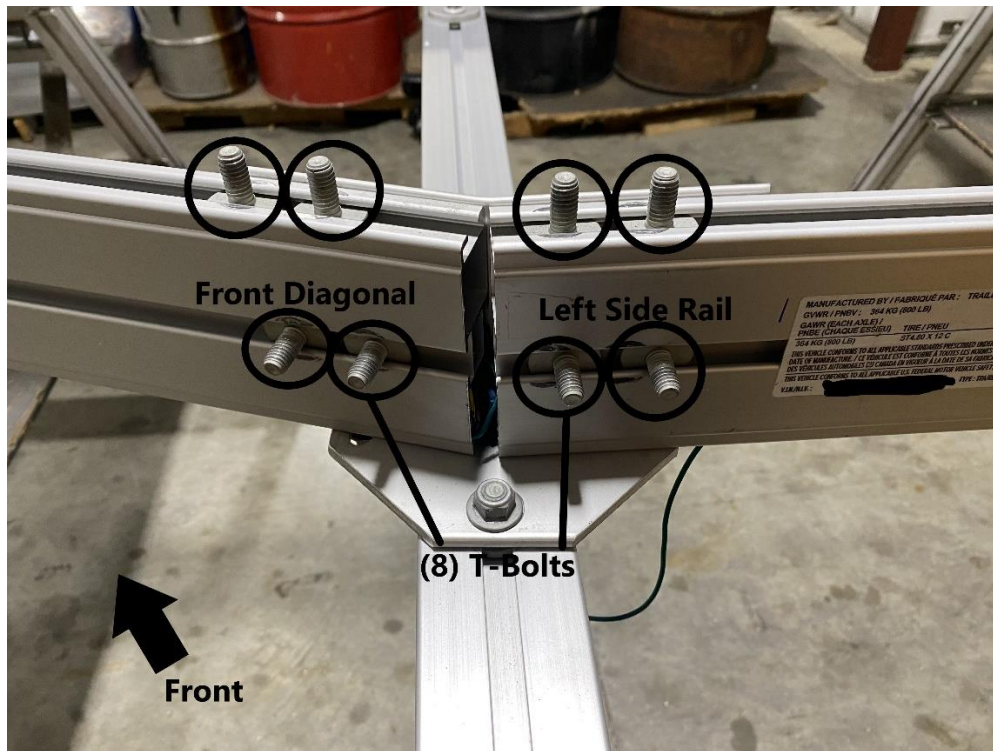
At this point the wiring harness will look like this.



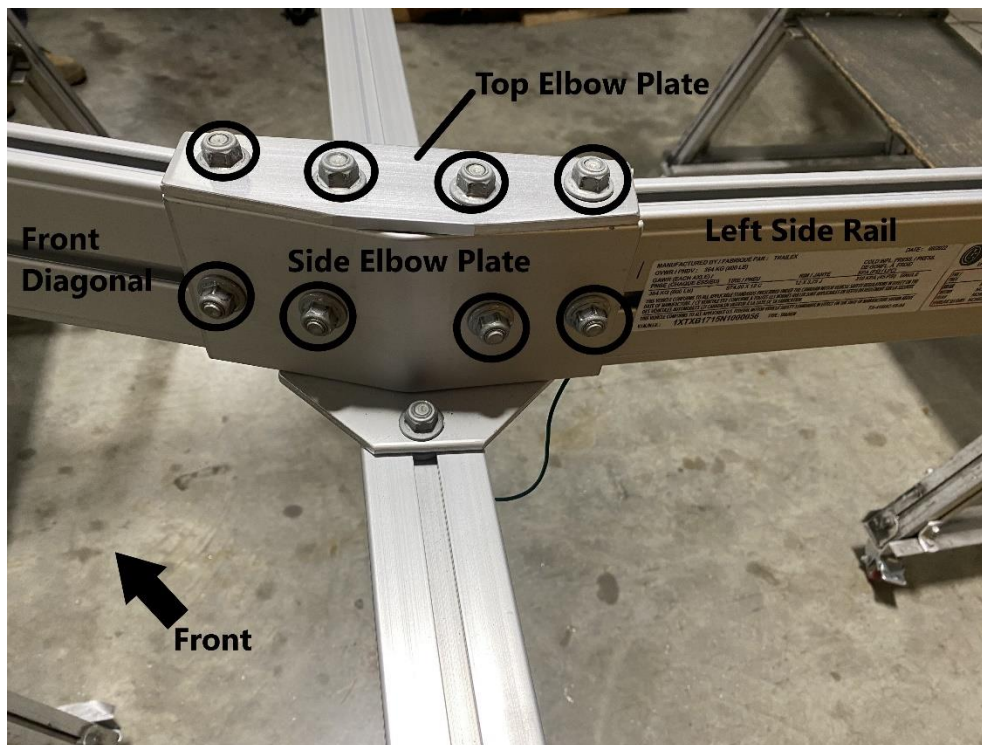
Carefully push the wiring harness into the front diagonal. Repeat this process on the other side of the trailer to connect both amber marker lights to the wiring harness.



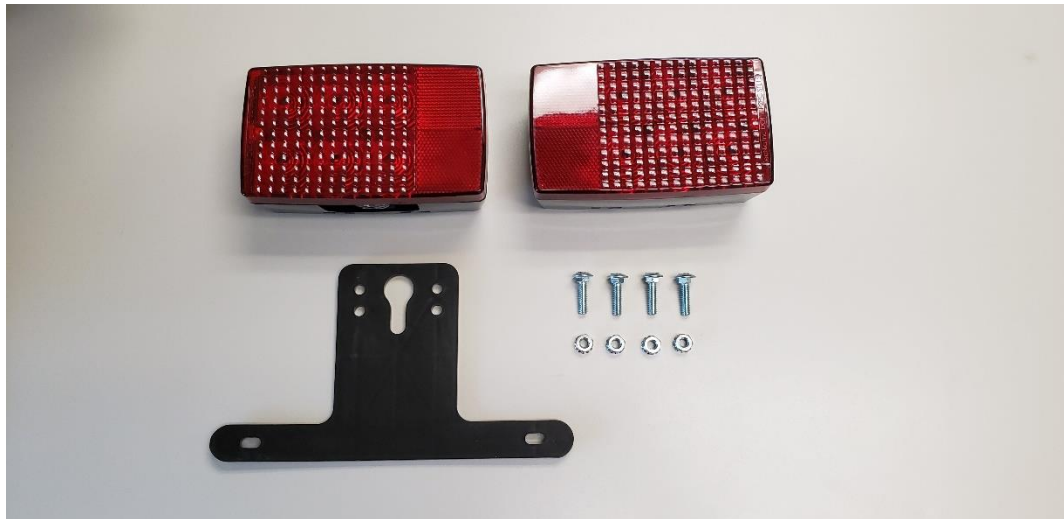
Locate the (2) side elbow plates and (2) top elbow plates.



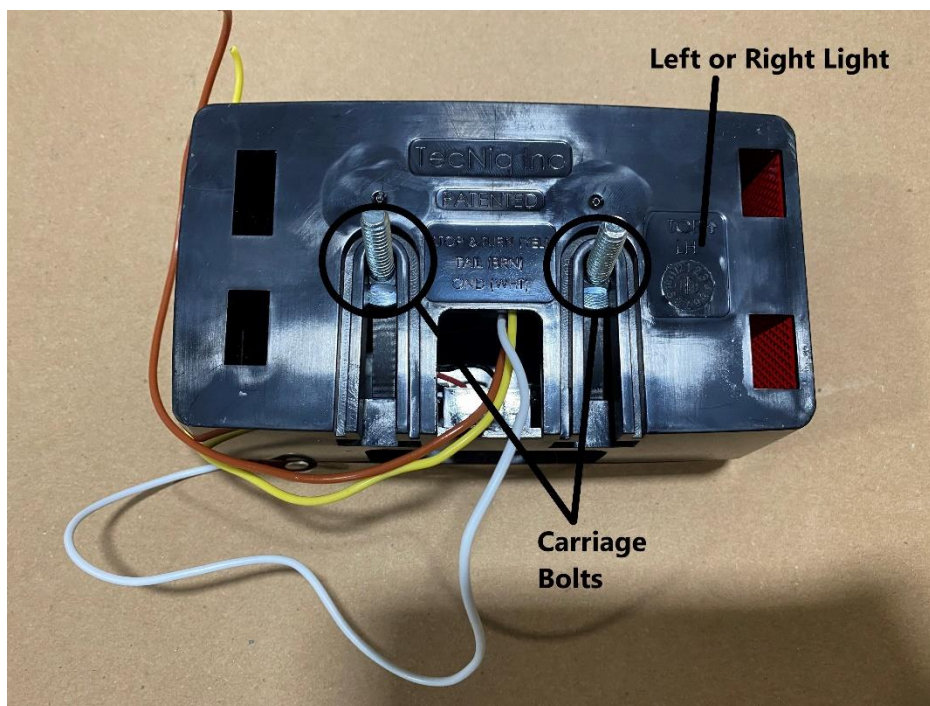
Remove (8) locknuts from the (8) T-bolts shown using a 9/16" wrench.



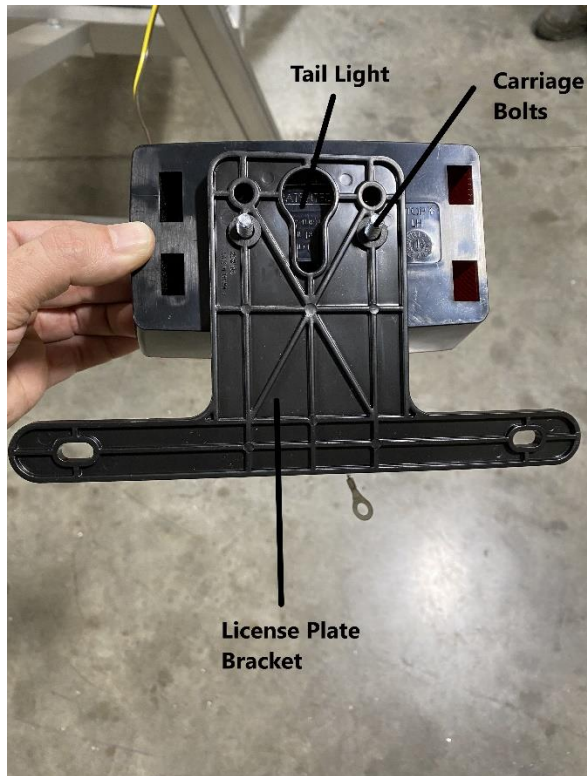
Install the top and side elbow plate as shown. Replace the (8) locknuts and tighten using a 9/16" wrench. Repeat this process for the other side.



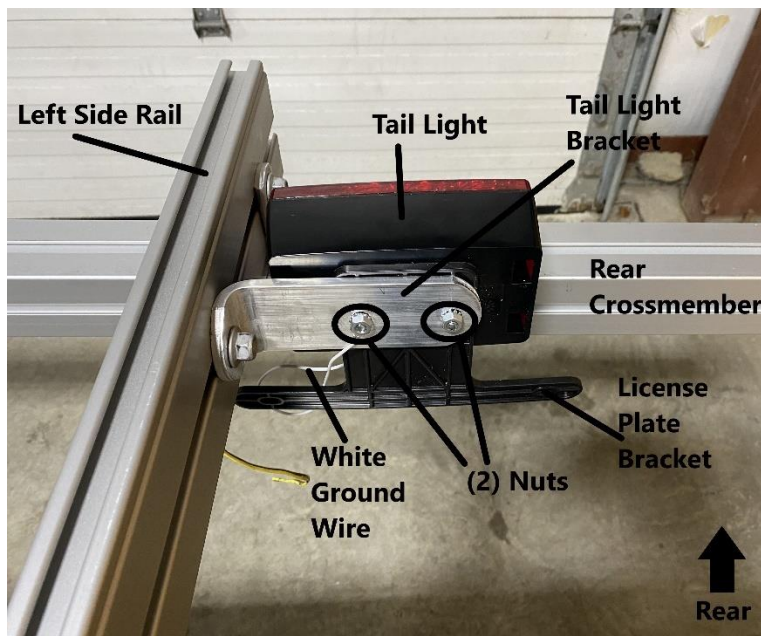
Locate (2) tail lights, (1) license plate bracket, (4) carriage bolts and (4) nuts. These will be inside the LED Light Kit.



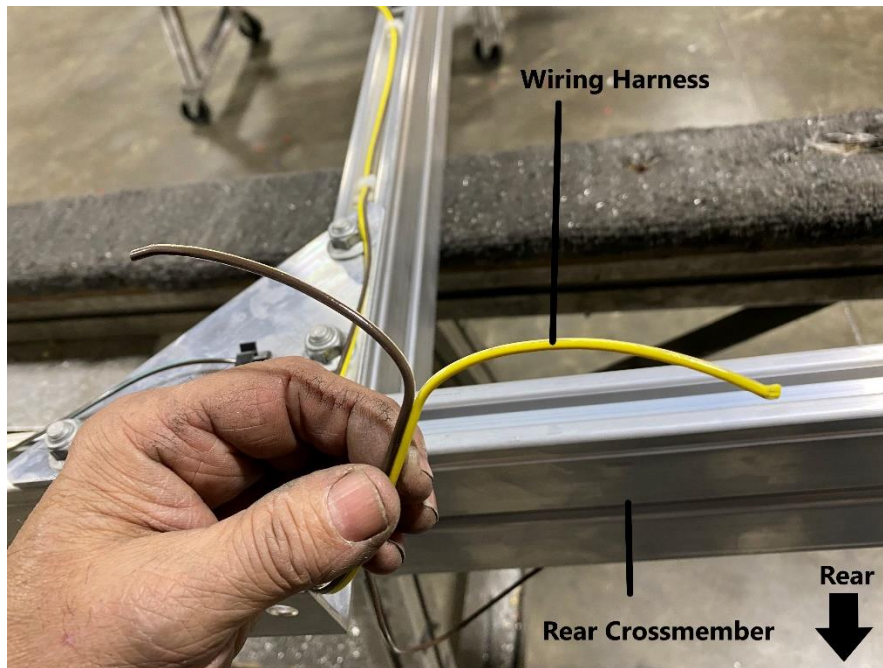
Place the (2) Carriage bolts into the grooves in the tail lights as shown. Note that the back of tail light shows if the light is the left/driver side (LH) or the right/passenger side (RH). It will also show which end is the top of the tail light.



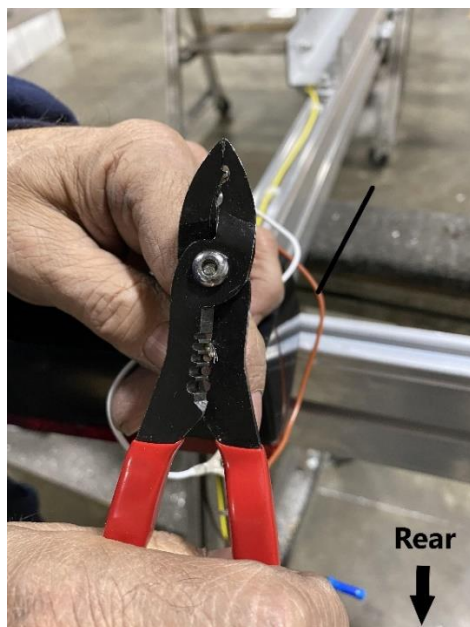
Install the license plate bracket to the tail light as shown. Place the two bottom holes of the license plate bracket on the two carriage bolts installed on the tail light.



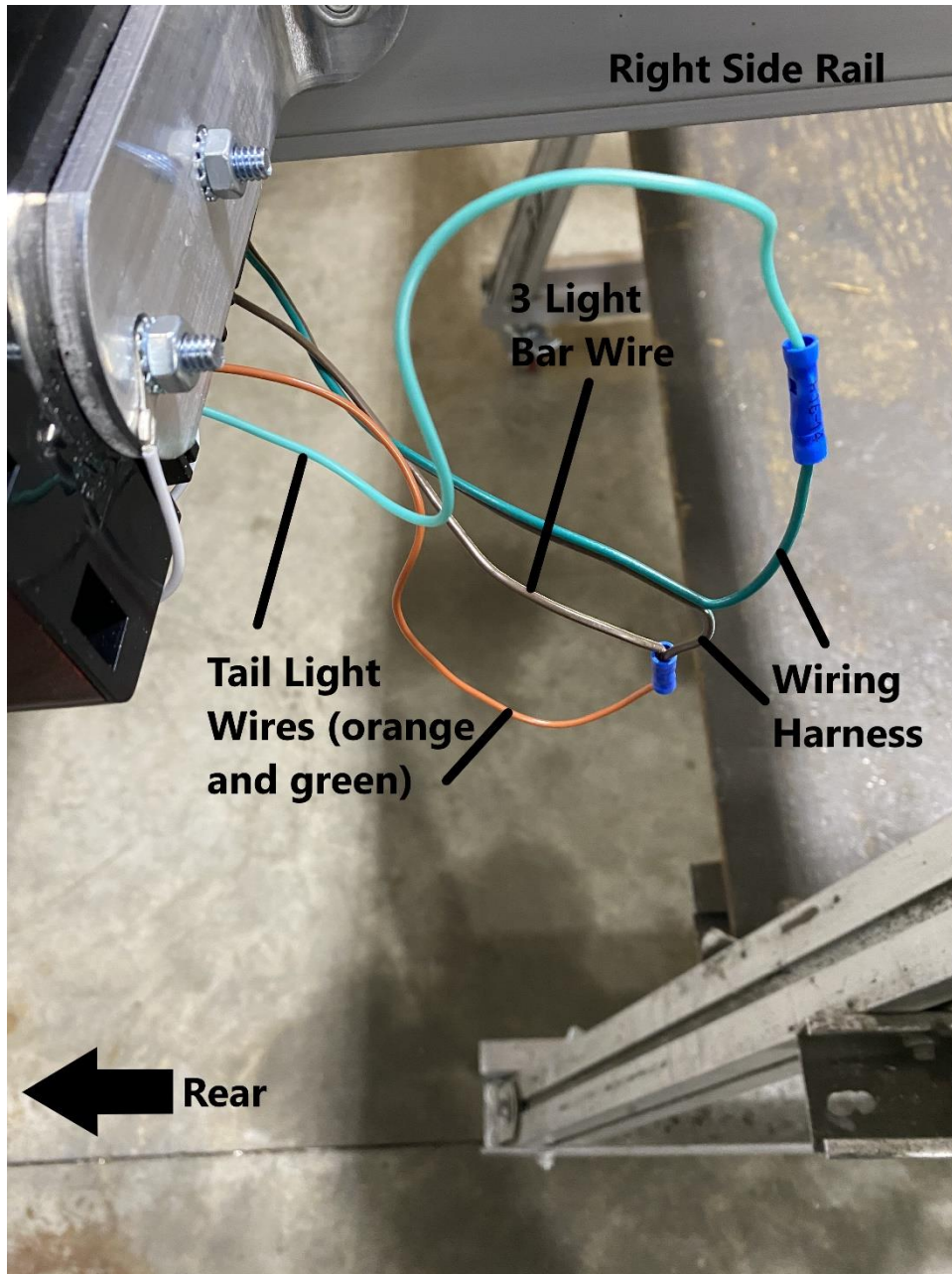
Install the tail light to the tail light bracket as shown. Install the white ground wire of the tail light to the carriage bolt. Install nuts and tighten using 7/16" wrench. Repeat this process on the other side of the trailer to install both tail lights.



Locate the end of the wiring harness that is hanging underneath the left side rail. Use a utility knife to split the two wires of the wiring harness. Repeat this process for the other side.

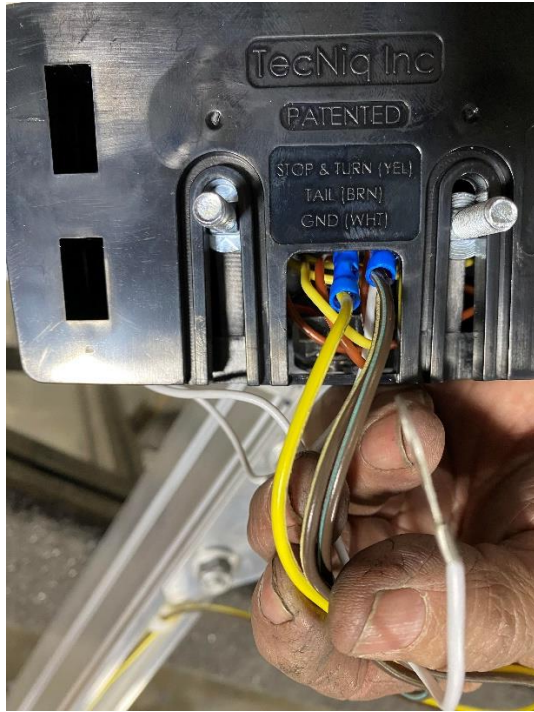


Use a pair of wire cutters to strip the ends of the (4) tail light wires, (4) harness wires and (1) LED 3 Light Bar wire.



Note that the above picture is the tail light installed on the right side rail. The 3 Light Bar wire will be under the rear crossmember and will attach to the right side only.

Use butt connectors to connect the tail light and the LED 3 light bar to the wiring harness as shown. Match the orange wire of the harness with the brown wire of the tail light. Same for the green wires. Note that both the brown LED 3 light bar wire and the brown harness wire will need to be connected together using the same butt connector. Repeat this process for the left side rail using the same process without a 3 light bar wire.

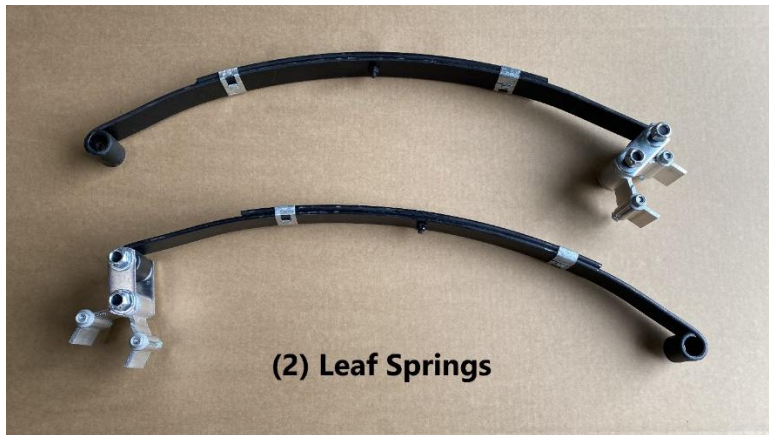


Excess wire can be placed inside the tail light.

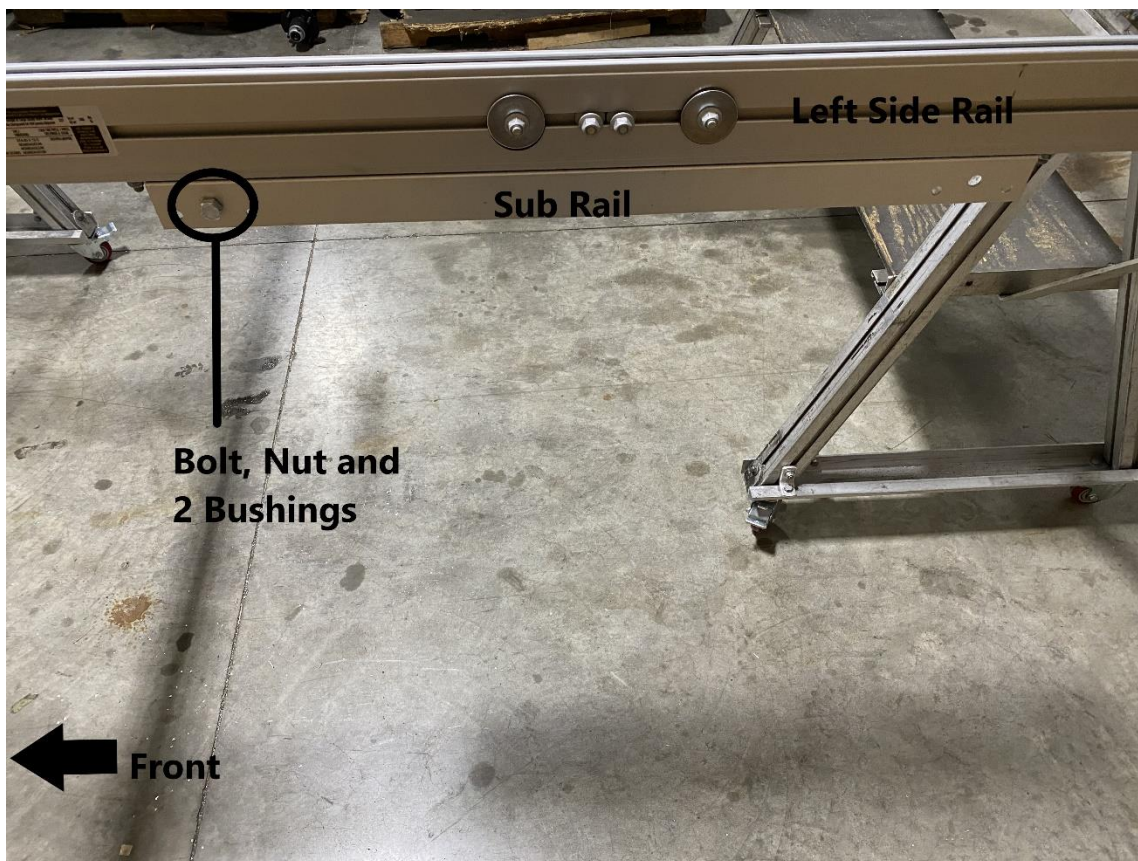


At this point the trailer will look like this.

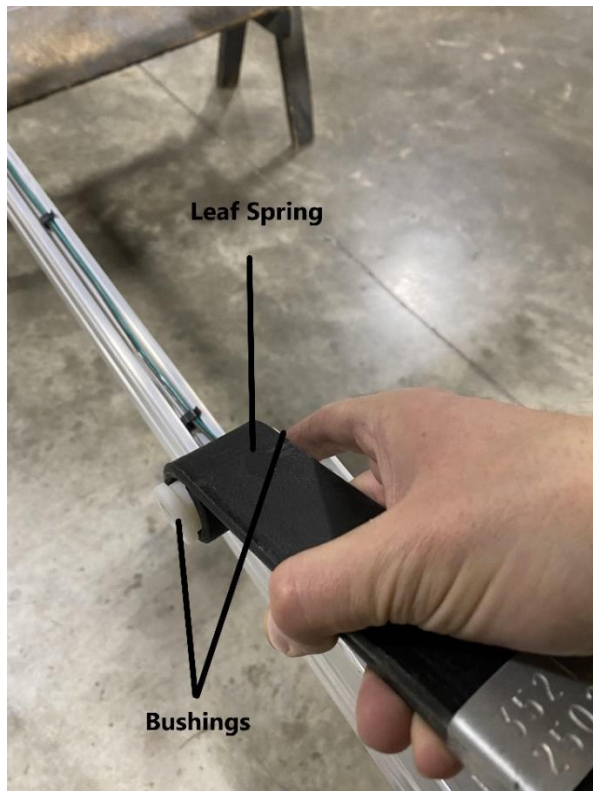
Leaf Spring and Axle Installation



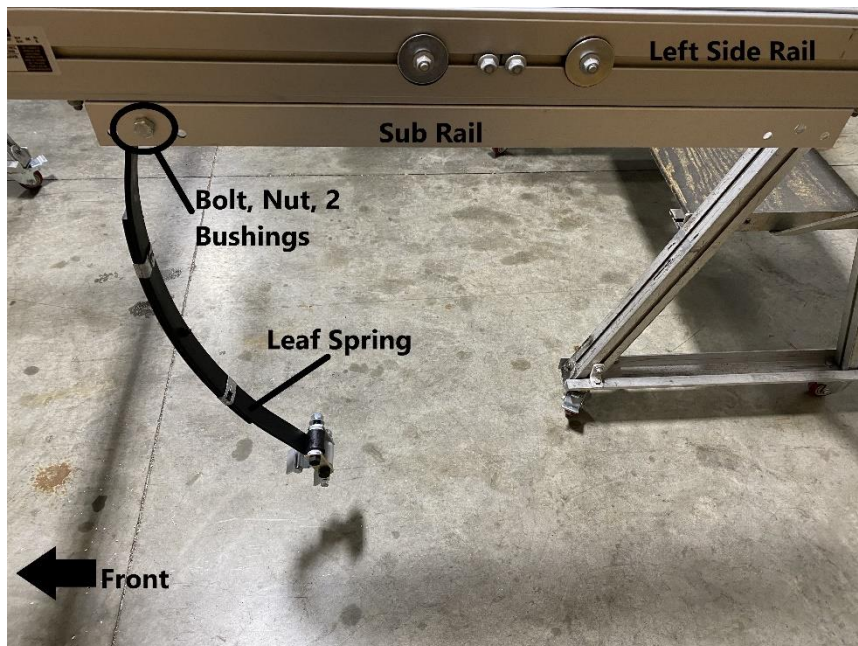
Locate the (2) leaf spring assemblies.



Locate the sub-rail installed on the left side rail. Use a $\frac{3}{4}$ " ratchet and wrench to remove the bolt, nut, and (2) bushings.



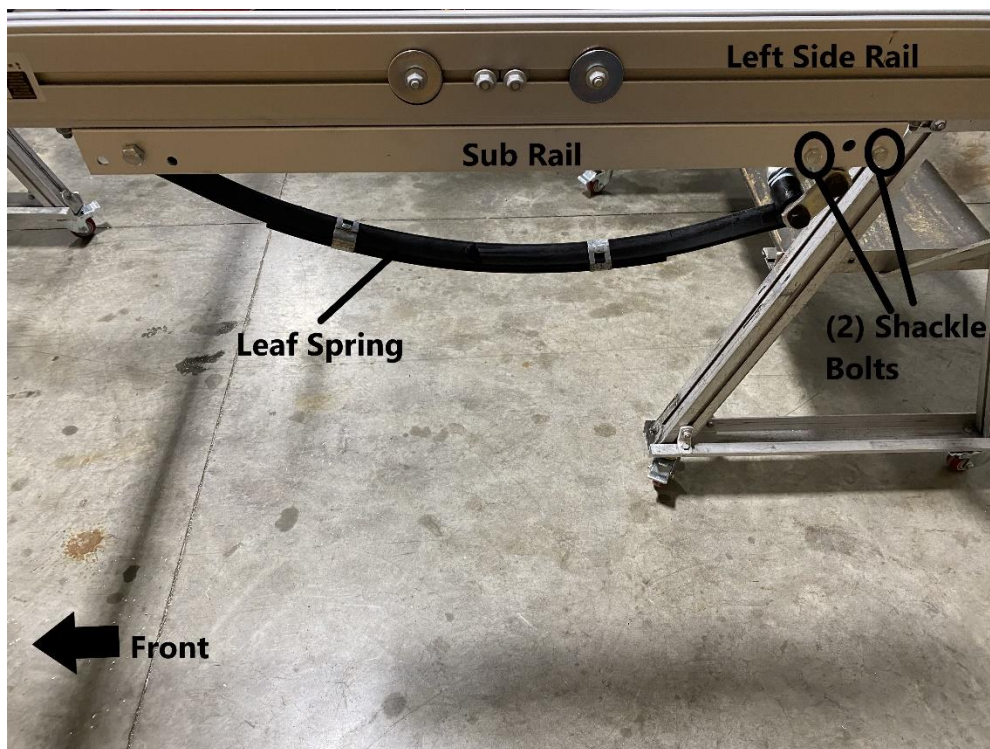
Insert the (2) nylon bushings into the leaf spring.



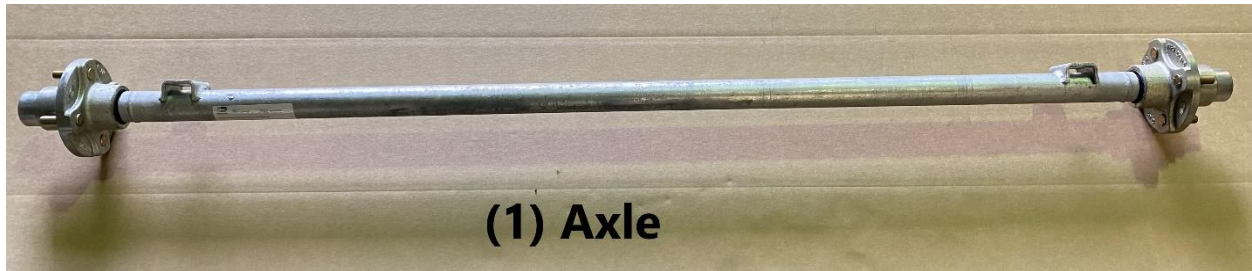
Install the leaf spring to the sub rail as shown. With the (2) bushings in the leaf spring, replace the $\frac{3}{4}$ " bolt through the sub rail, (2) bushings, and leaf spring. Replace the nut but do not tighten yet.



Remove the (2) bolts from the shackle installed on the leaf spring using a 9/16" ratchet and wrench.



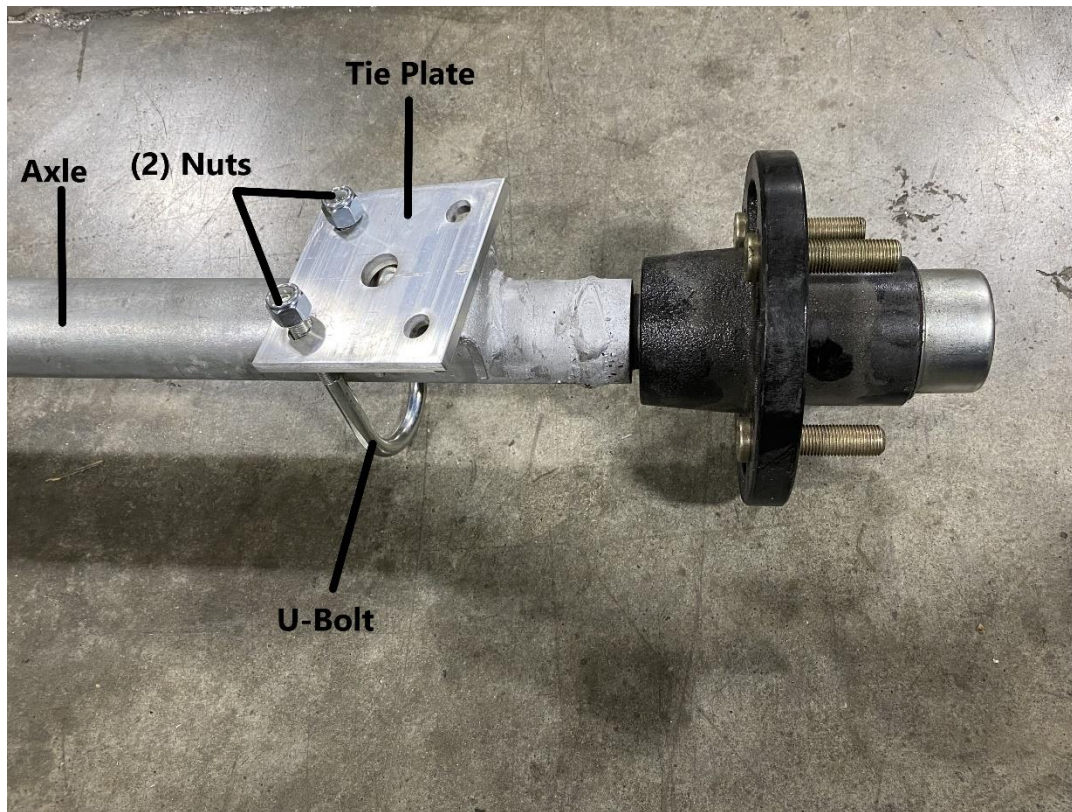
Install the shackle of the leaf spring into the sub rail as shown. Replace the (2) bolts. Replace the nuts but do not tighten yet. Repeat this process to install a second leaf spring on the left side rail.



Locate the axle.



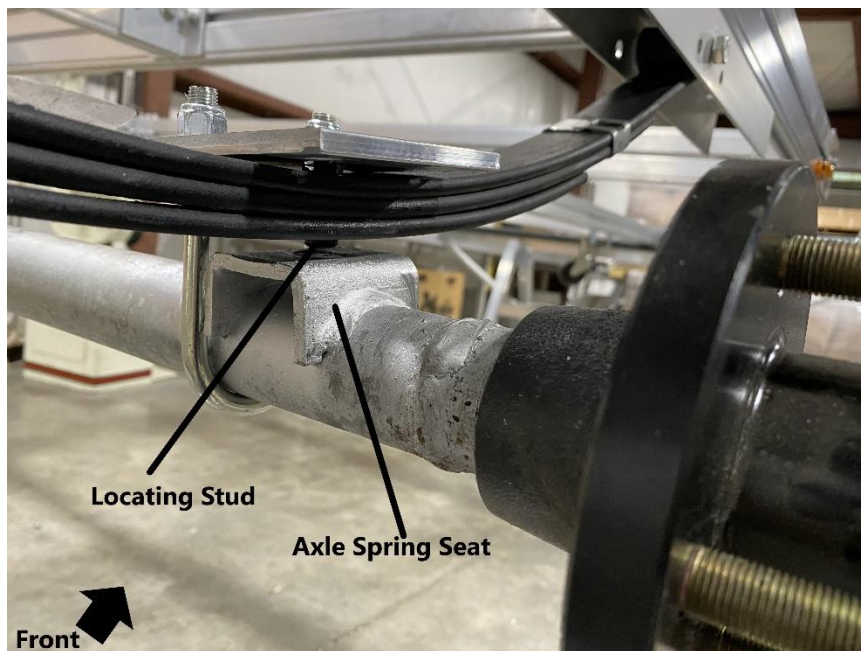
Locate the U-bolt and Web Strap Clip Bag.



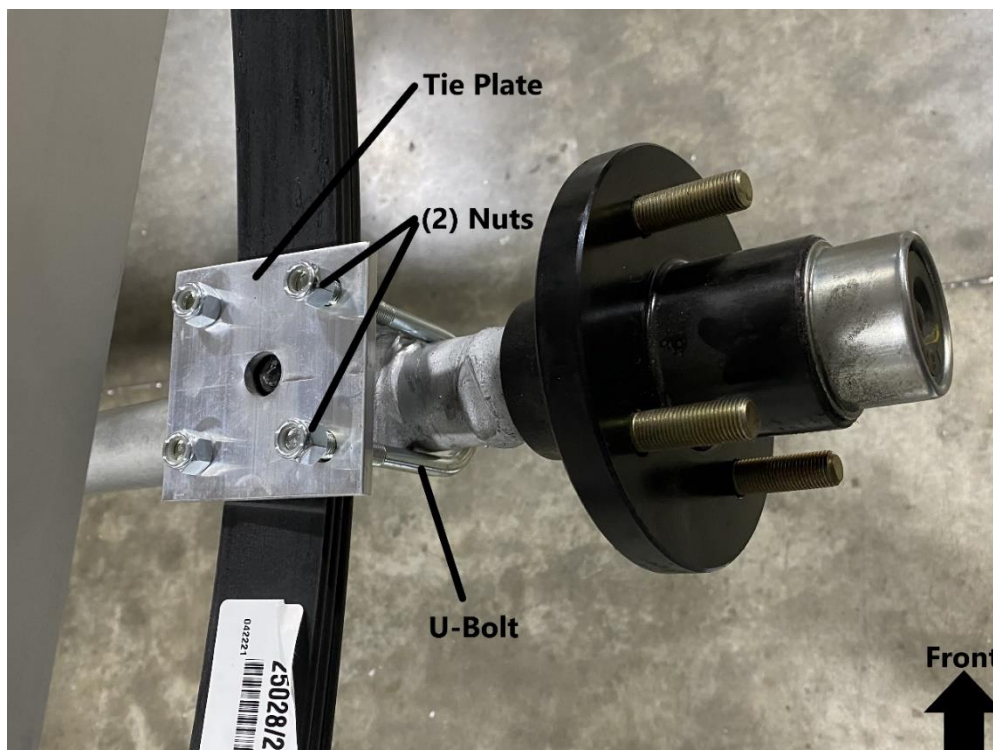
Install the Tie Plate and U-Bolt to the axle as shown. Replace the nuts but do not tighten yet.



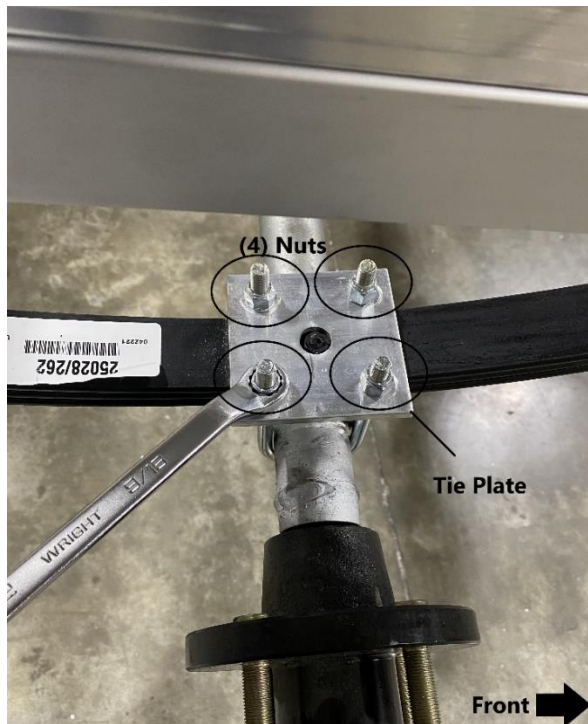
Install the axle to the leaf spring as shown. Slide the tie plate over the leaf spring until the center hole of the tie plate lines up with the locating stud of the leaf spring.



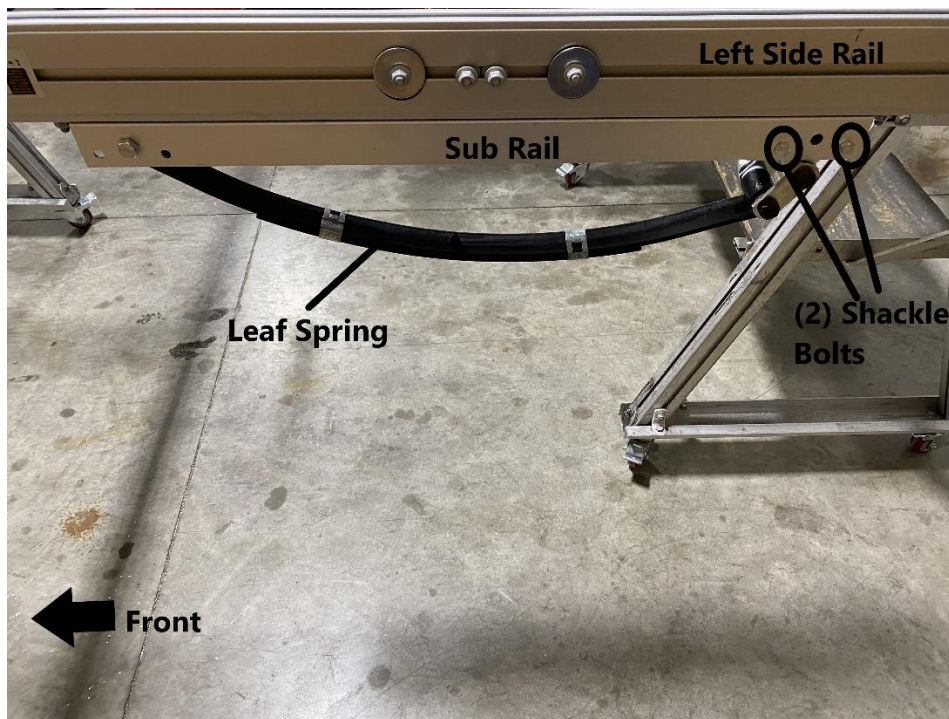
Place the locating stud of the leaf spring into the axle spring seat.



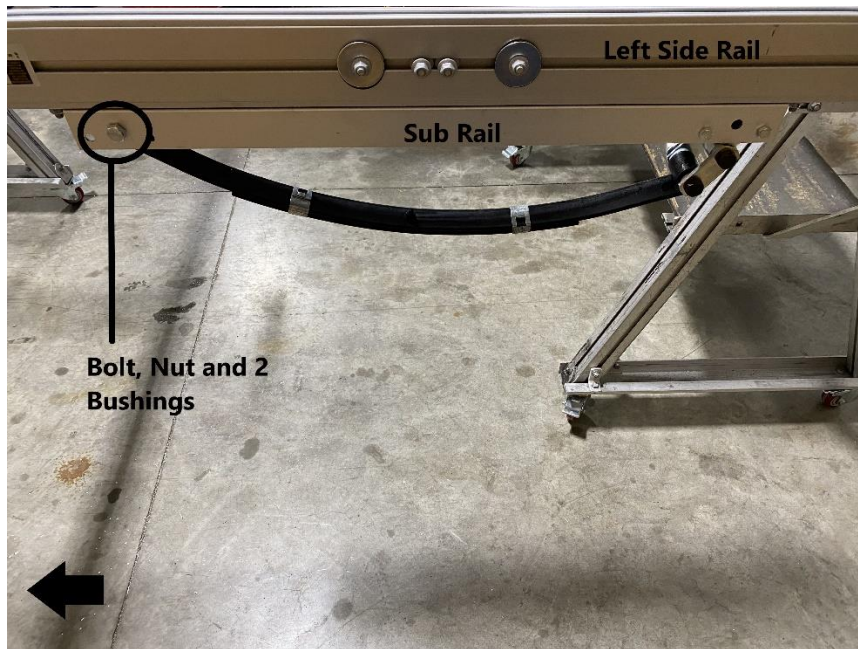
Install the second U-Bolt to the tie plate as shown. Replace the (2) nuts but do not tighten yet. Repeat this process to mount the axle to the leaf spring on the other side of the trailer.



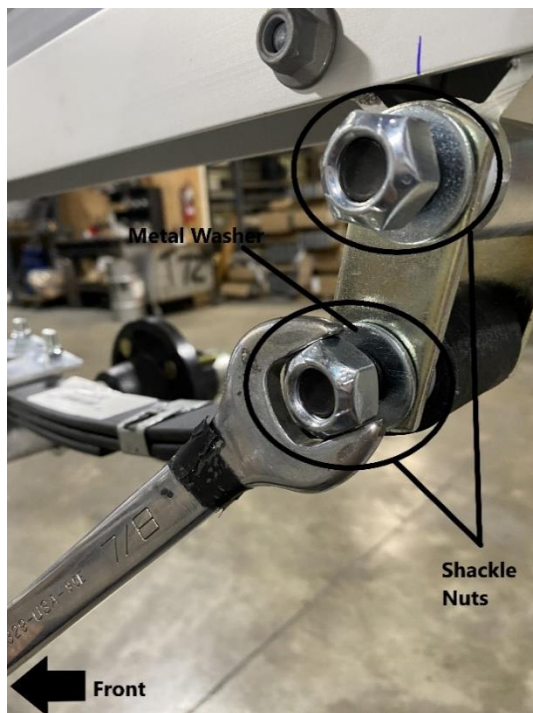
Use a cross pattern to tighten the (4) nuts using a 9/16" wrench. Repeat this process for the other side.



With the axle now installed, the bolts of the leaf spring will now need to be tightened. Tighten the (2) bolts shown using a 9/16" ratchet and wrench. Repeat this process for the other side.



Tighten the bolt shown using a $\frac{3}{4}$ " ratchet and wrench. Repeat this process for the other side.

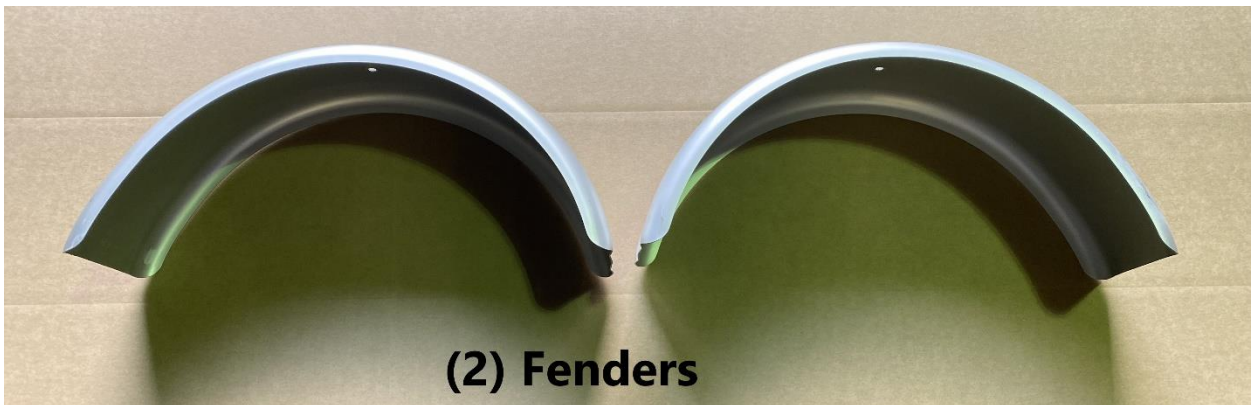


Tighten the rear shackle nuts with $\frac{7}{8}$ " ratchet and wrench. Tighten the nuts until the metal washers can no longer move. However, do not over tighten as this will not allow the suspension to move properly. Repeat this process for the other side.



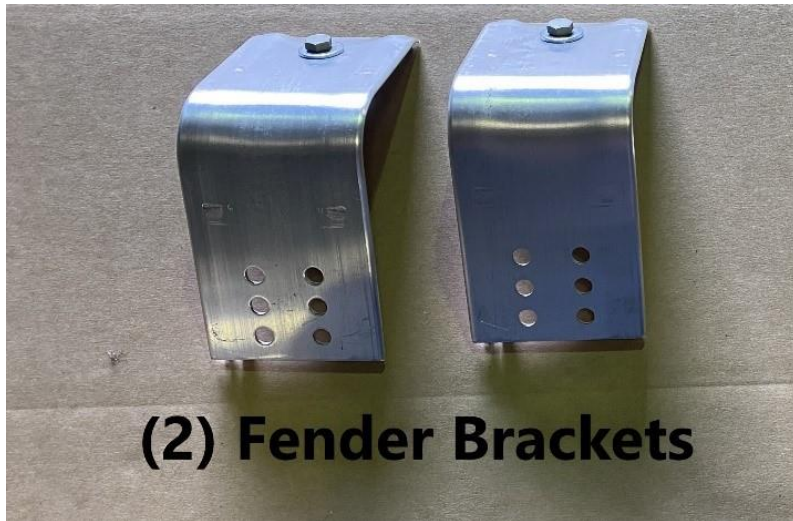
At this point the trailer will look like this.

Fender and Tire Installation



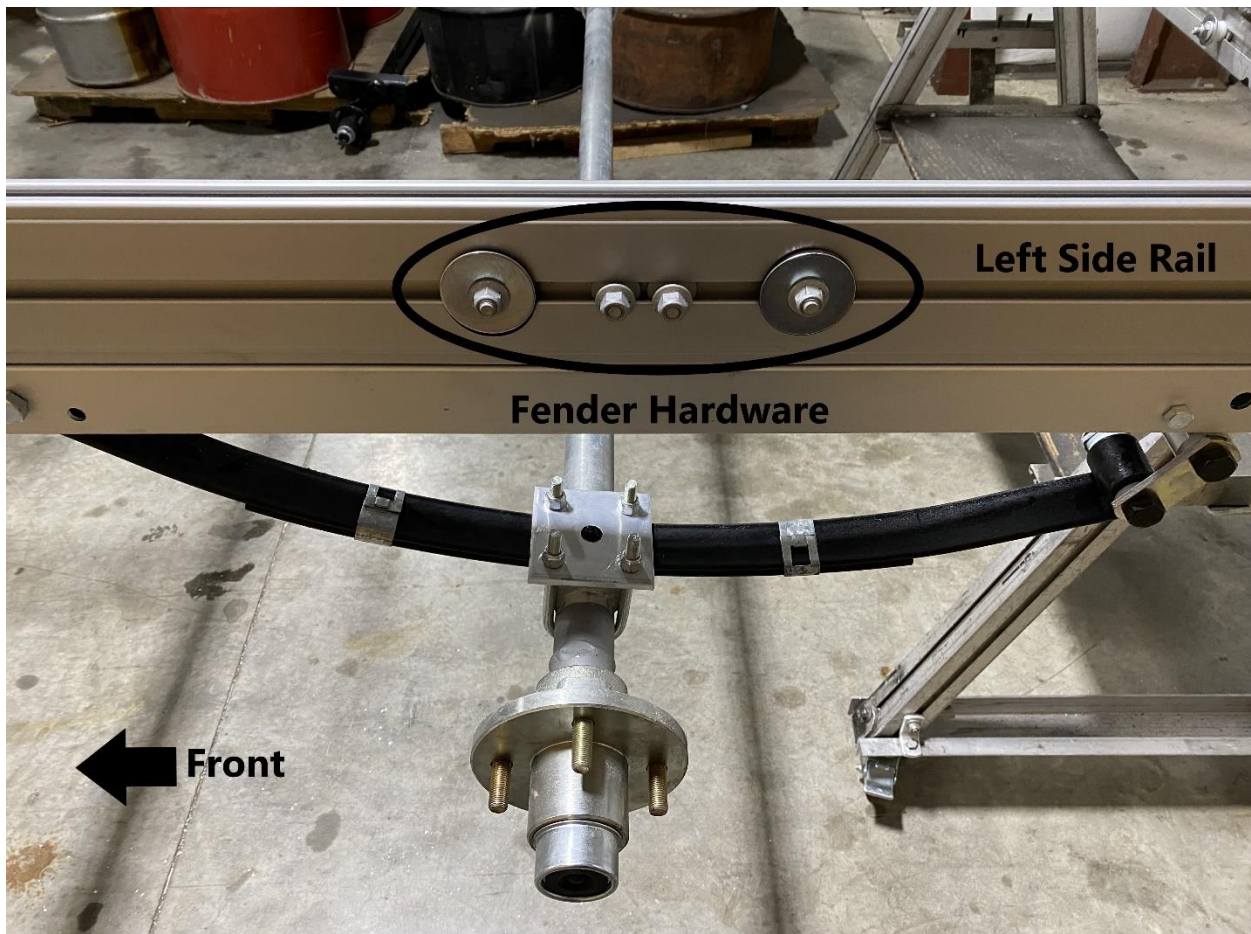
(2) Fenders

Locate the (2) fenders.

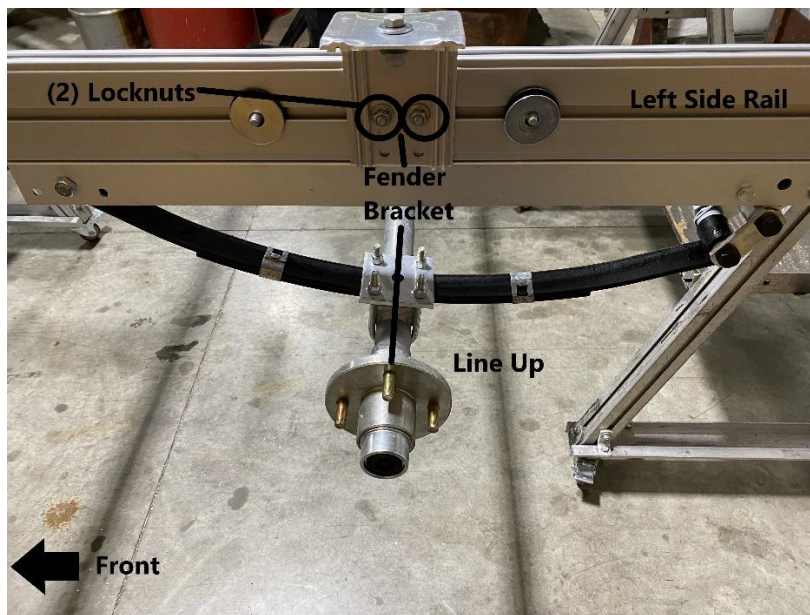


(2) Fender Brackets

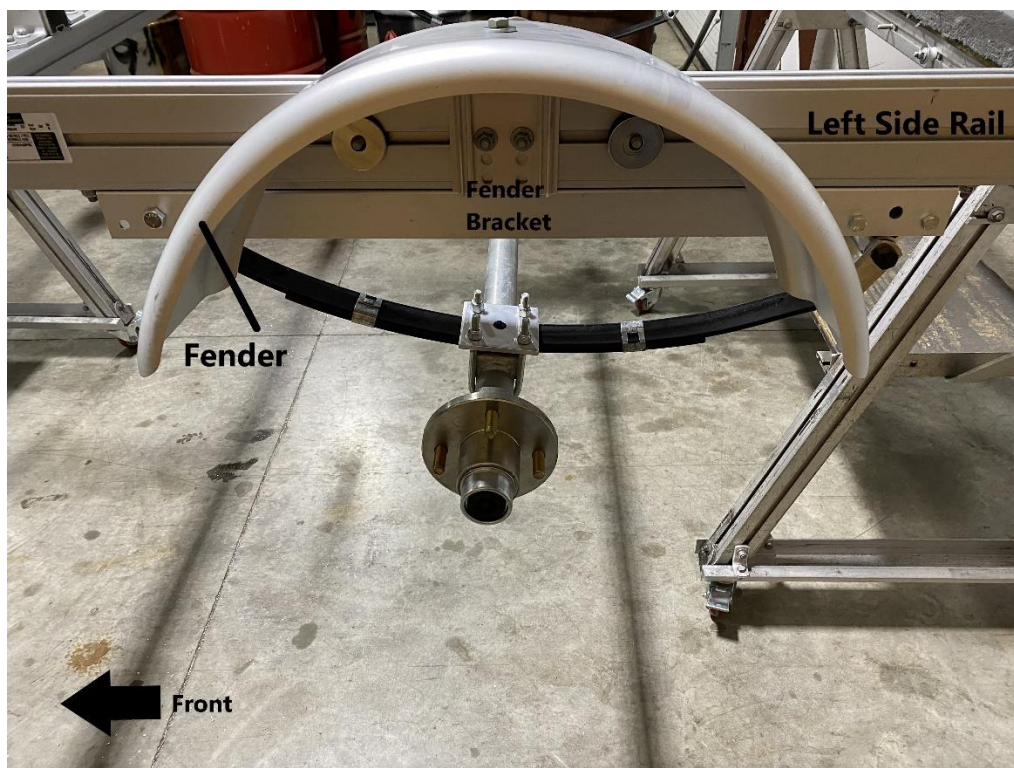
Locate the (2) fender brackets. Remove the Bolt and Nut from each bracket.



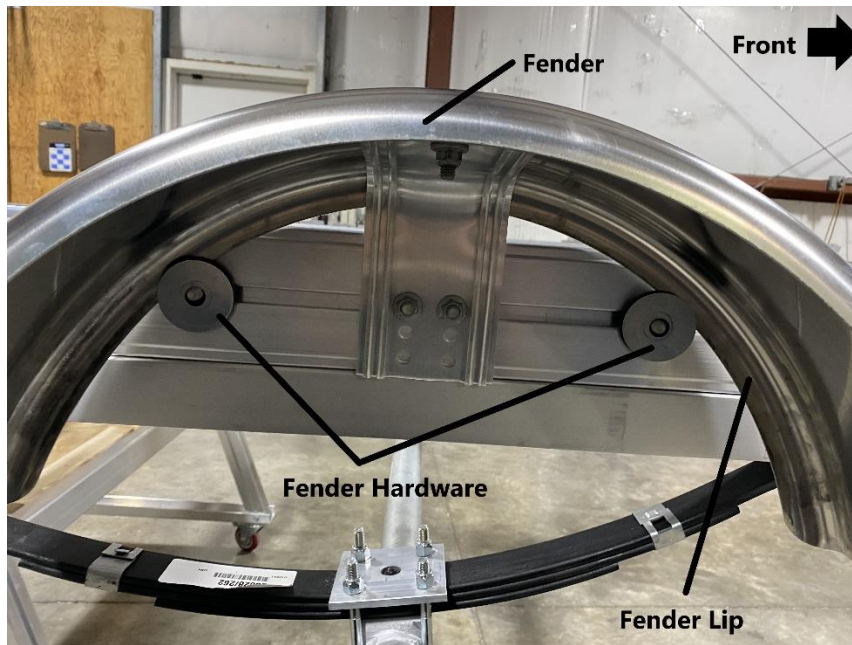
Locate the fender hardware installed in the left side rail. Remove the (4) locknuts using a 9/16" wrench. Remove the (2) metal washers.



Install the fender bracket to the left side rail as shown. Use the (2) center T-bolts to install the fender bracket to the left side rail. Lineup the center of the fender bracket to the axle. Replace the (2) locknuts and tighten using a 9/16" wrench.



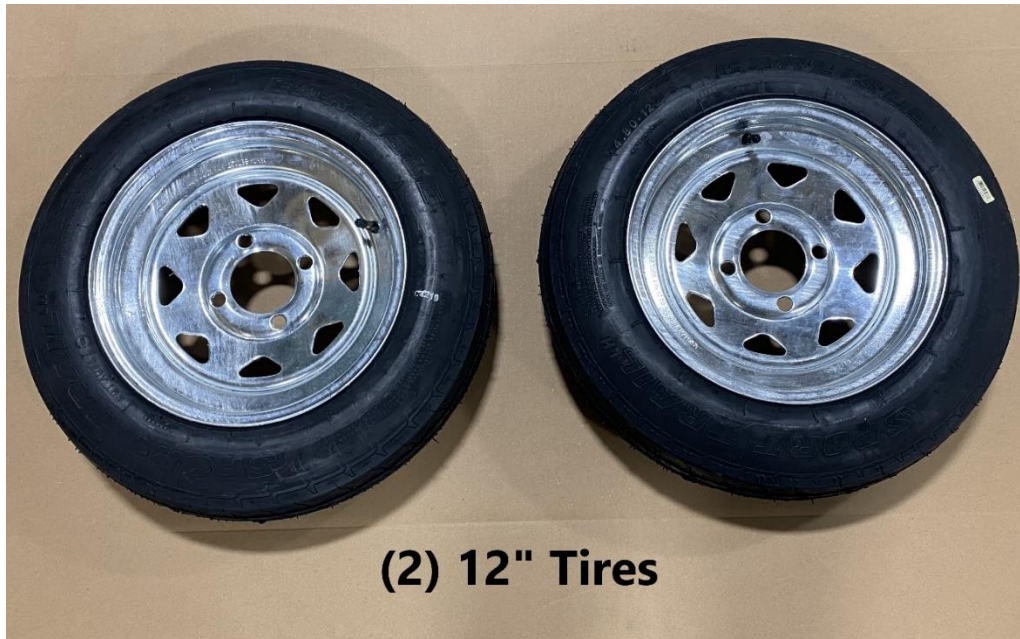
Install the fender to the fender bracket as shown. Replace the bolt and nut that was previously installed on the fender bracket. Tighten using a 9/16" wrench. Do not overtighten as this will damage the fender.



Install the fender hardware as shown, placing a rubber washer behind the fender lip, then a metal washer and locknut in front of the fender lip. Tighten the locknut using a 9/16" wrench. Repeat this process to install both fenders.

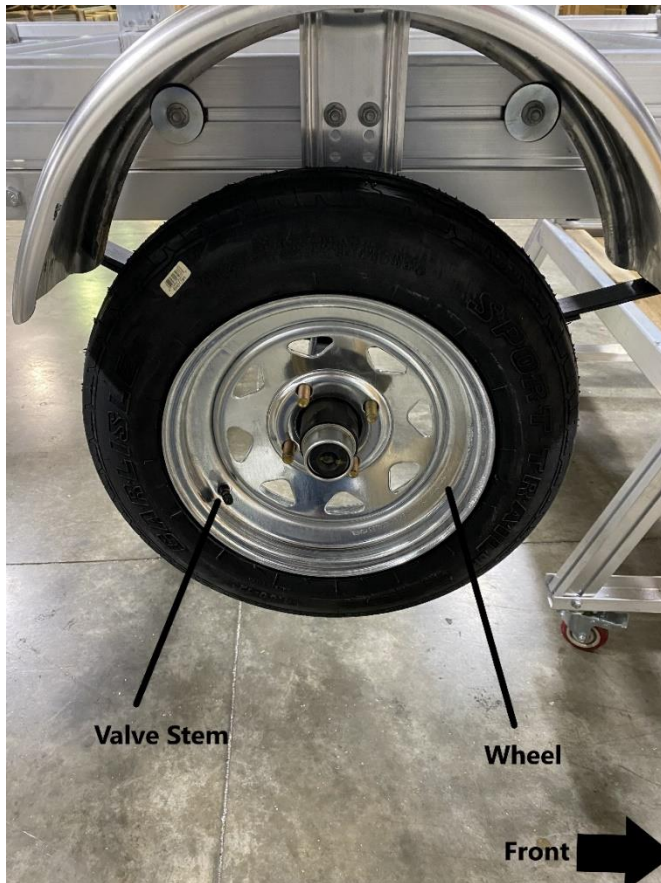


At this point the trailer will look like this.



(2) 12" Tires

Locate the (2) 12" tires.



Install the wheel with the valve stems facing out.

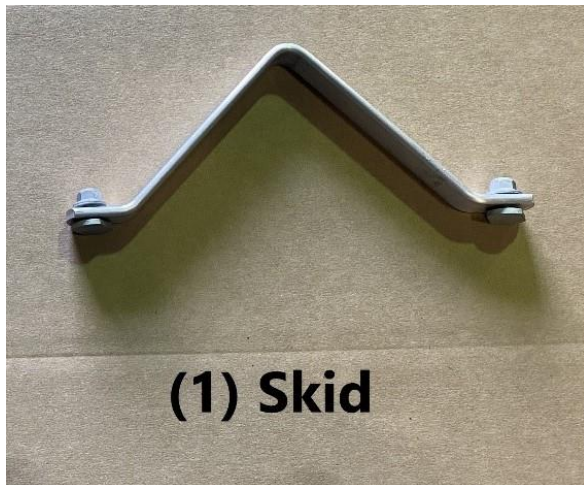


Locate the (8) lug nuts found in the U-Bolt kit.

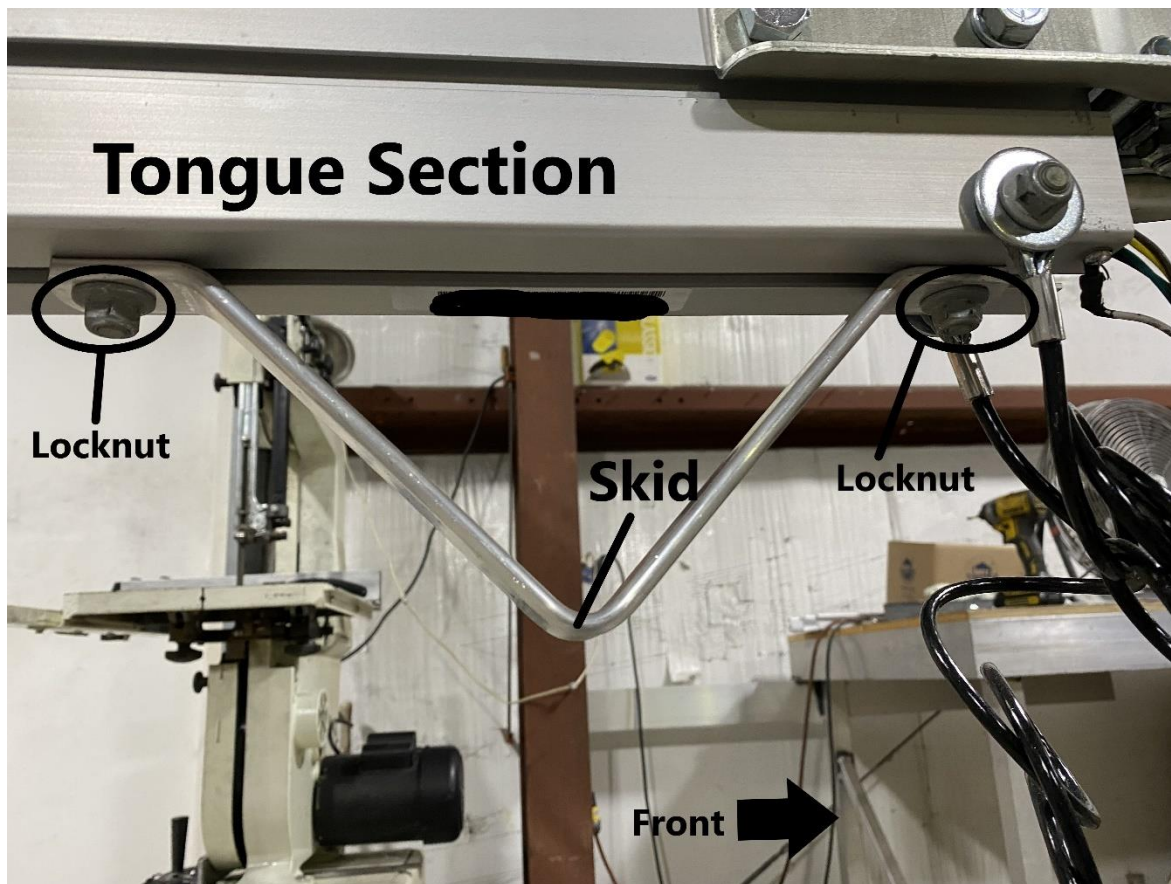


Install the lug nuts with the tapered side facing the wheel.

Skid Installation

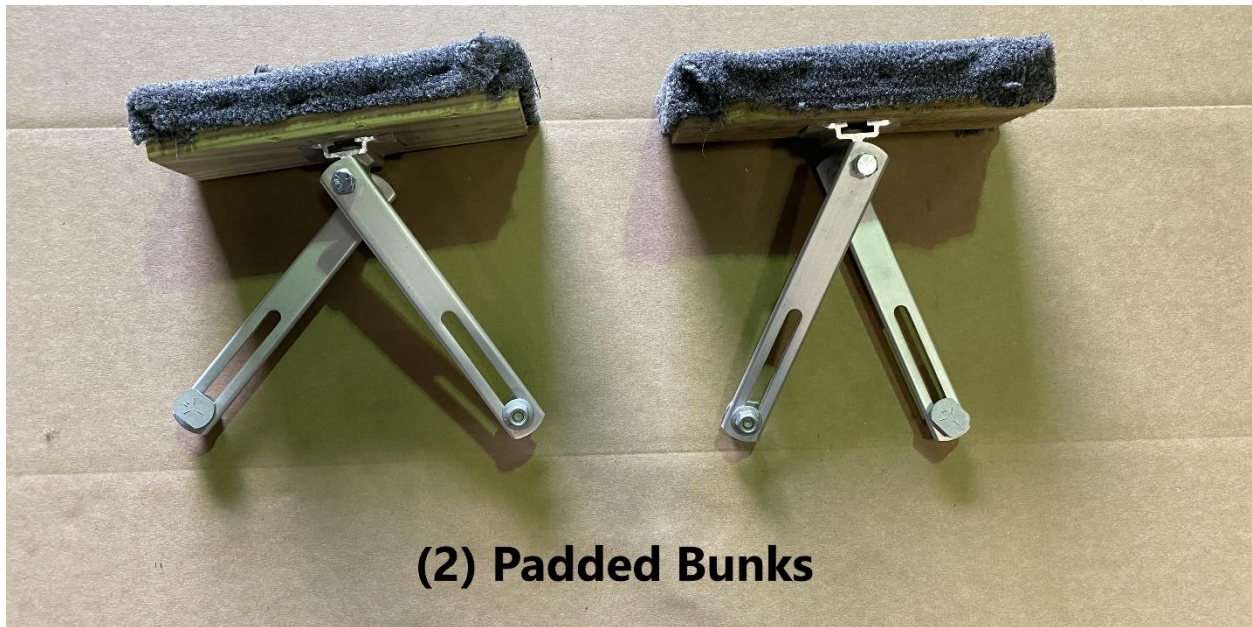


Locate the skid.

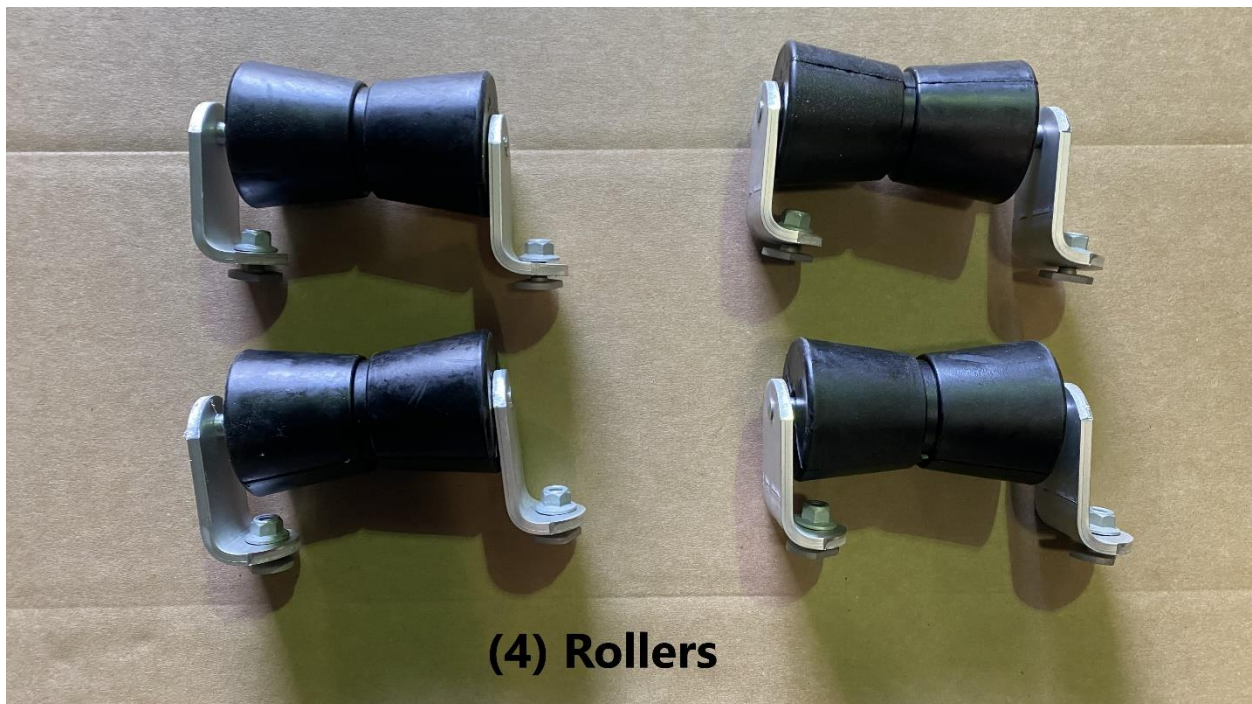


Install the skid into the bottom groove of the tongue section as shown. Tighten the (2) locknuts using a 9/16" wrench.

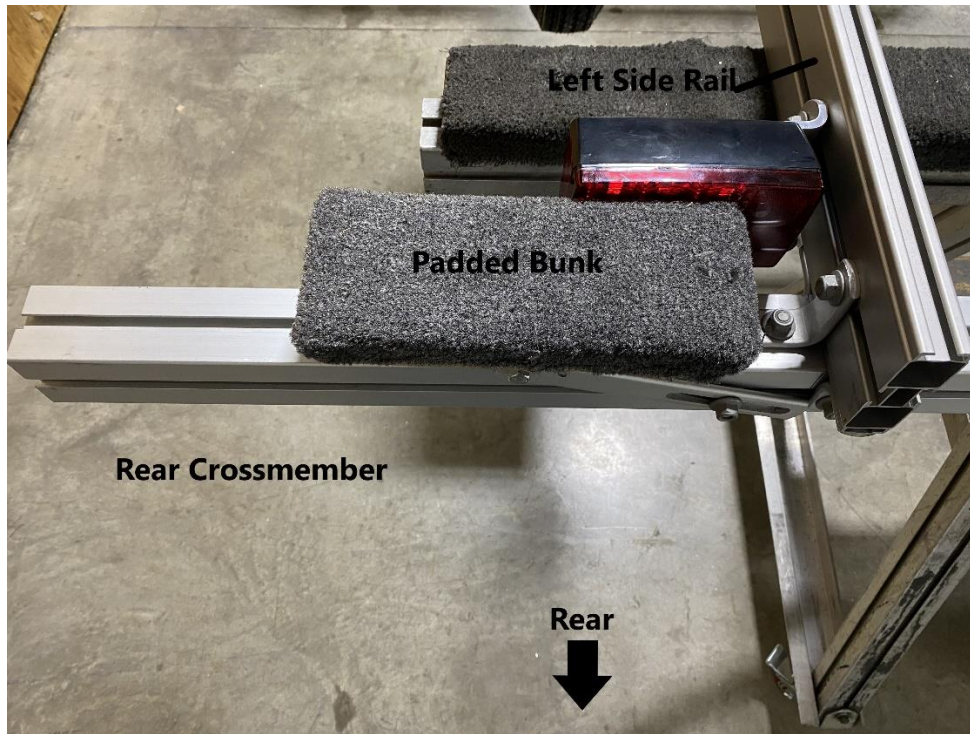
Padded Bunk and Roller Installation



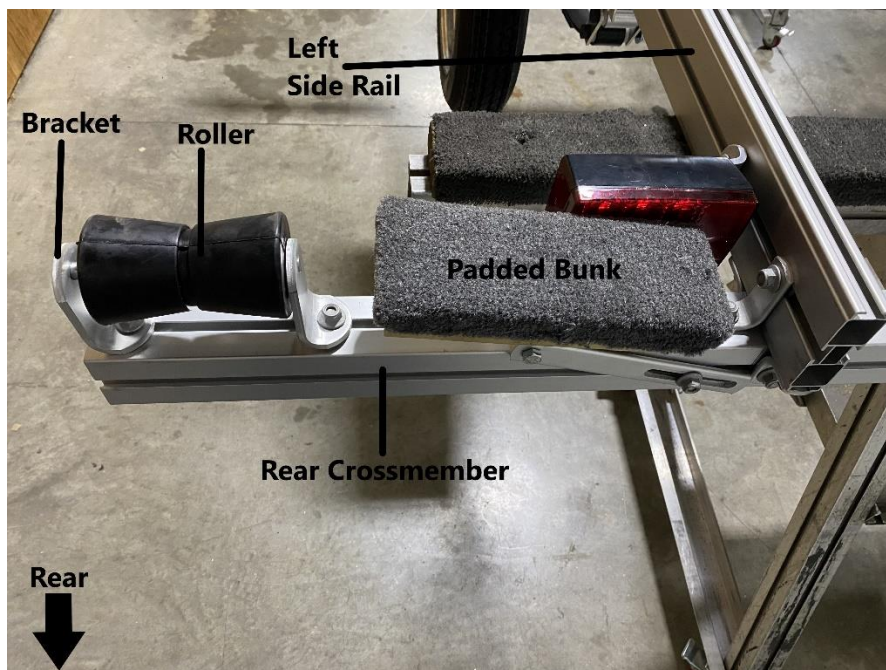
Locate the (2) padded bunks.



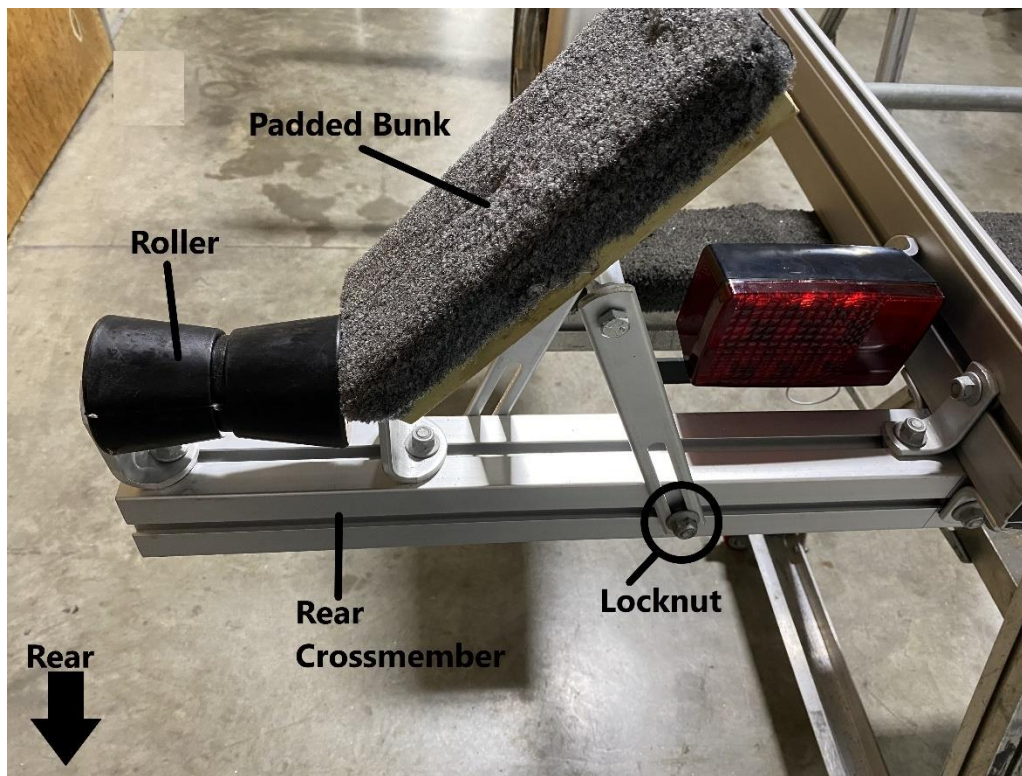
Locate the (4) rollers. Note the brackets installed on the rollers are facing the same direction.



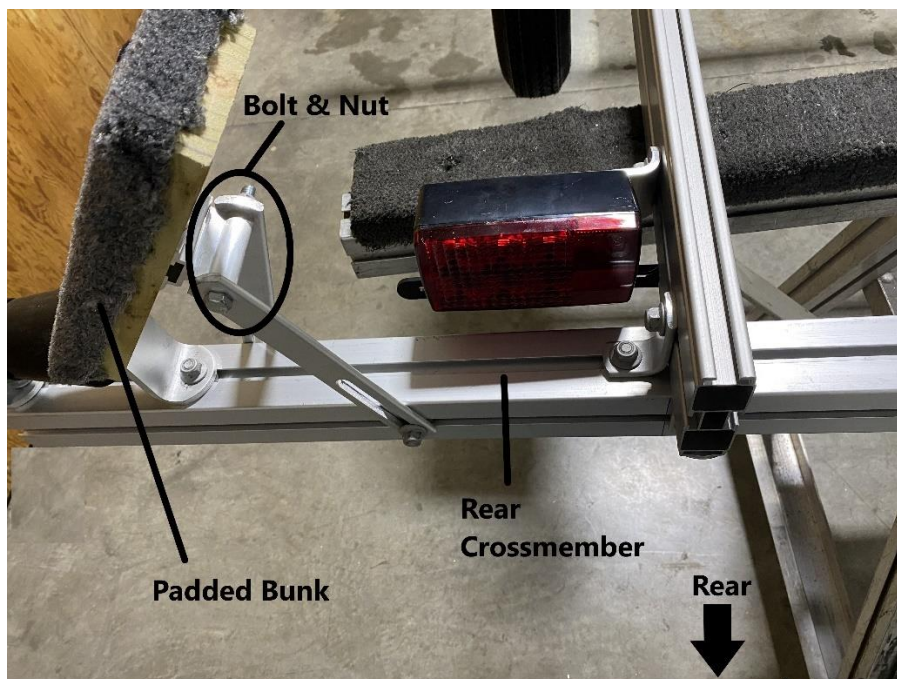
Install a padded bunk to the rear crossmember as shown, sliding the (2) T-bolts installed on the padded bunk into the inside and outside grooves of the rear crossmember. Do not tighten the locknuts yet.



Install a roller to the rear crossmember as shown. Note the direction of the roller brackets in the above picture. The locknuts installed on the roller brackets will always be towards the inside of the trailer. Tighten the (2) locknuts on the roller using a 9/16" wrench.



Position the padded bunk as shown, so that padded bunk is touching the roller. Tighten the (2) locknuts of the padded bunk using a 9/16" wrench.

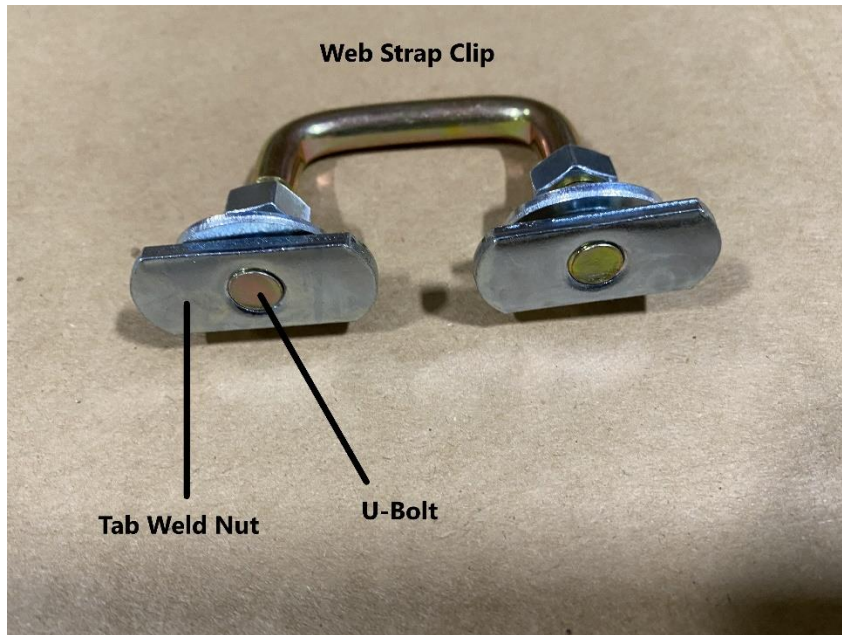


Adjust the padded bunk to the desired angle and tighten the bolt and nut shown using a 9/16" ratchet and wrench. Repeat this process for the other side of the rear crossmember to install a second padded bunk and roller.



Install the remaining (2) rollers to the end of the front crossmember. Tighten the (2) locknuts on each roller using a 9/16" wrench. At this point the trailer will look like this.

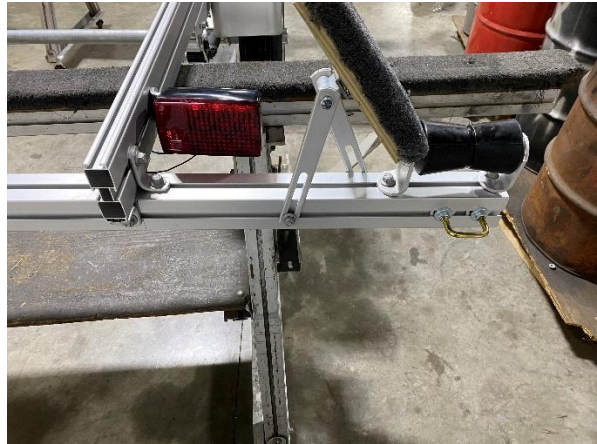
Web Strap Installation



Locate the (4) web strap clips in the U-bolt and Web Strap Clip Bag. Before installing a web strap clip, make sure that the tab weld nut is flush with the end of the U-bolt.



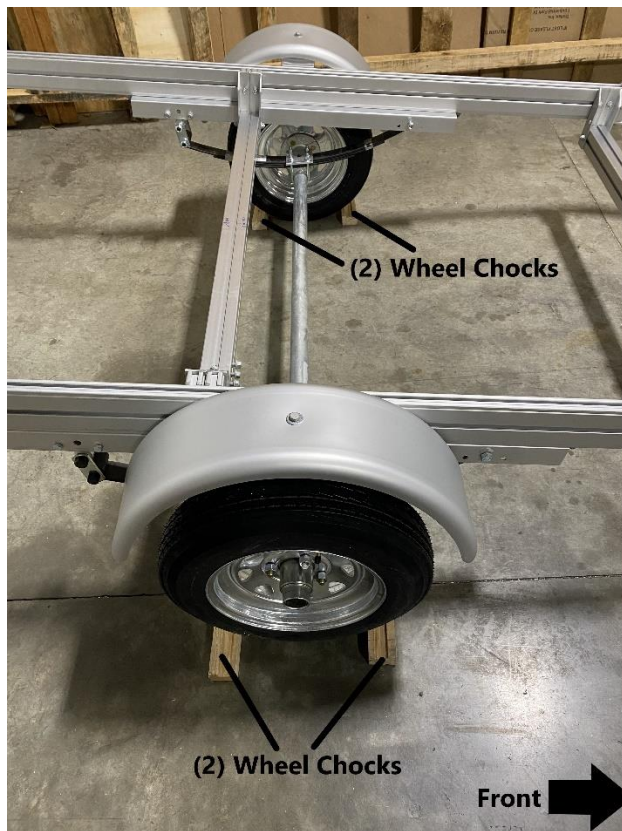
Install (2) web strap clips to the front crossmember as shown. Tighten the nuts on the web strap clips using a 9/16" wrench.



Install (2) web strap clips as shown on the rear crossmember. Tighten the nuts on the web strap clips using a 9/16" wrench.



Remove the trailer from the saw horses. At least two people will be necessary.



Place (4) wheel chocks as shown, (2) on each tire.

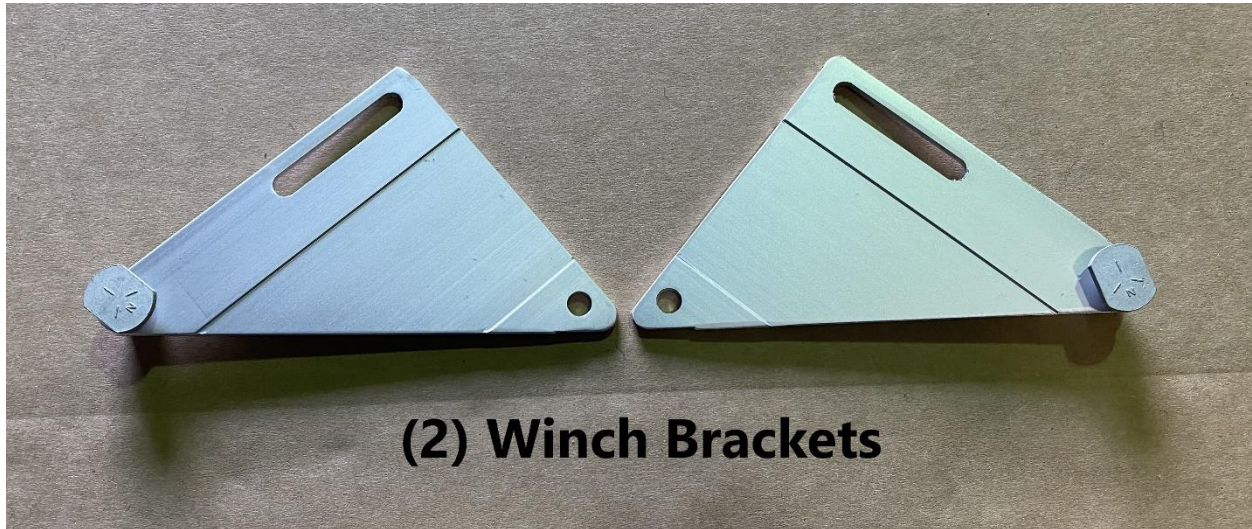


Torque the lug nuts to 80 foot pounds using a X pattern. Repeat the process for the other tire. Note that after 20 miles the lug nuts will need to be re-torqued to 80 foot pounds.

Winch Stand Installation



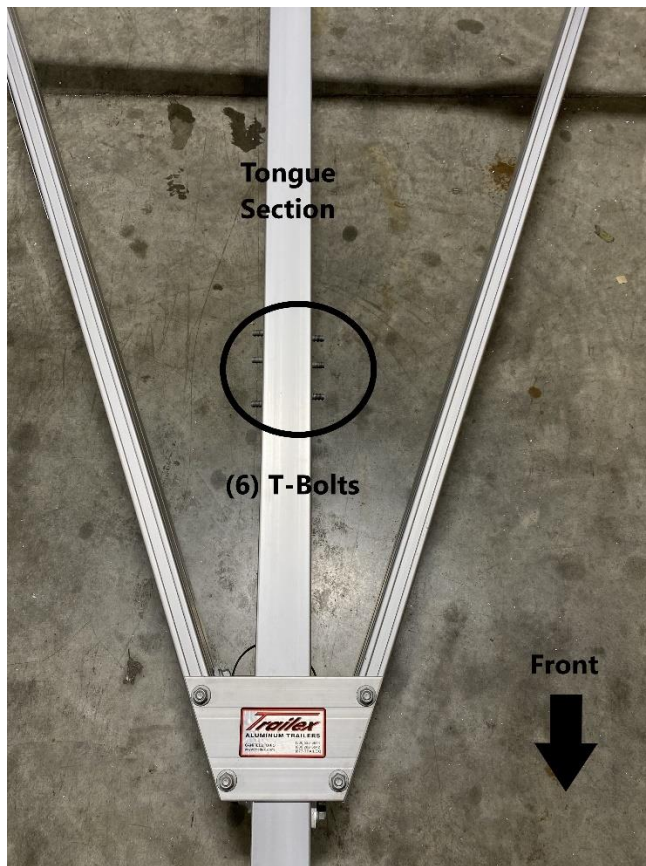
Locate the winch stand.



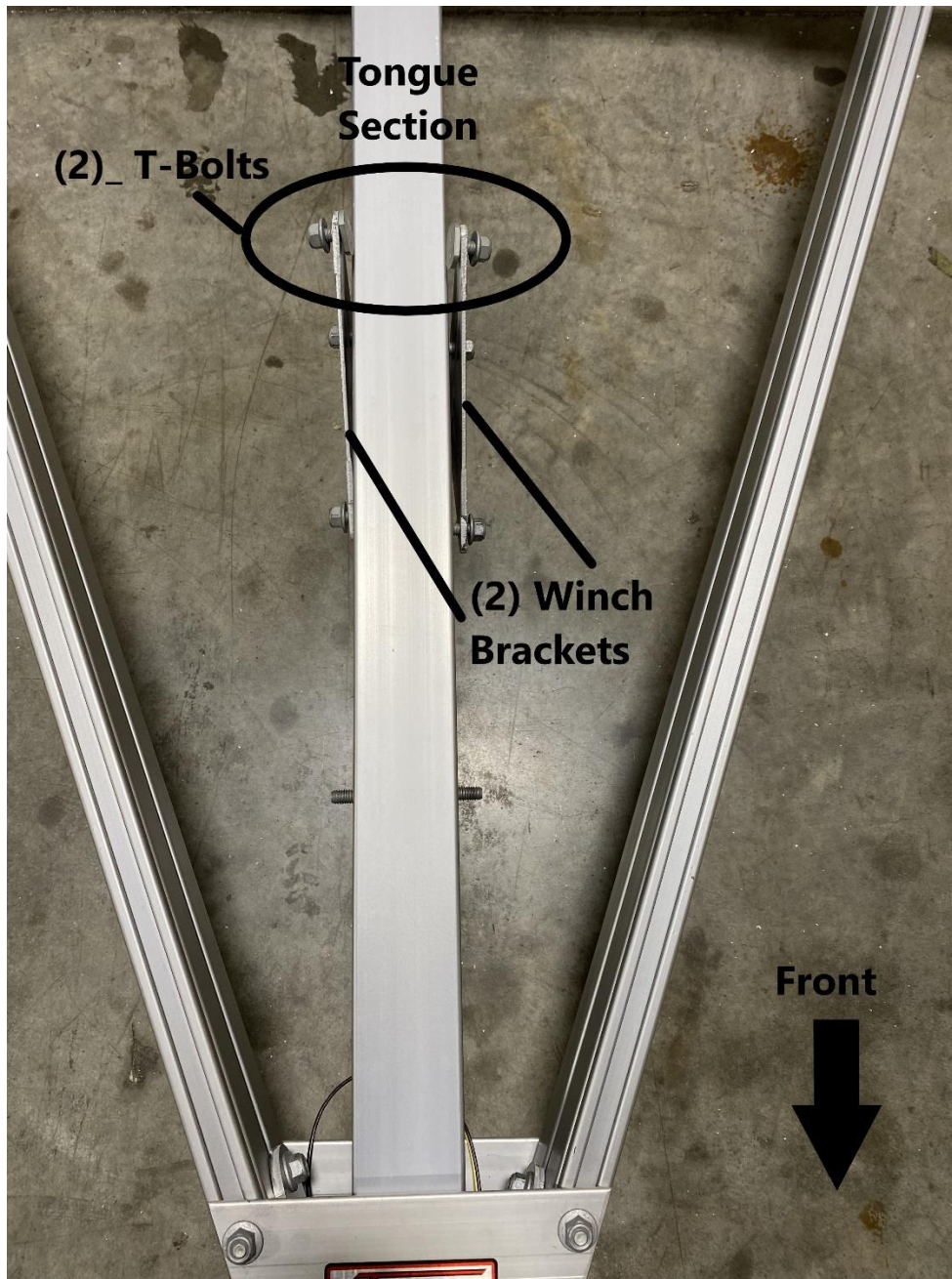
Locate the (2) winch brackets.



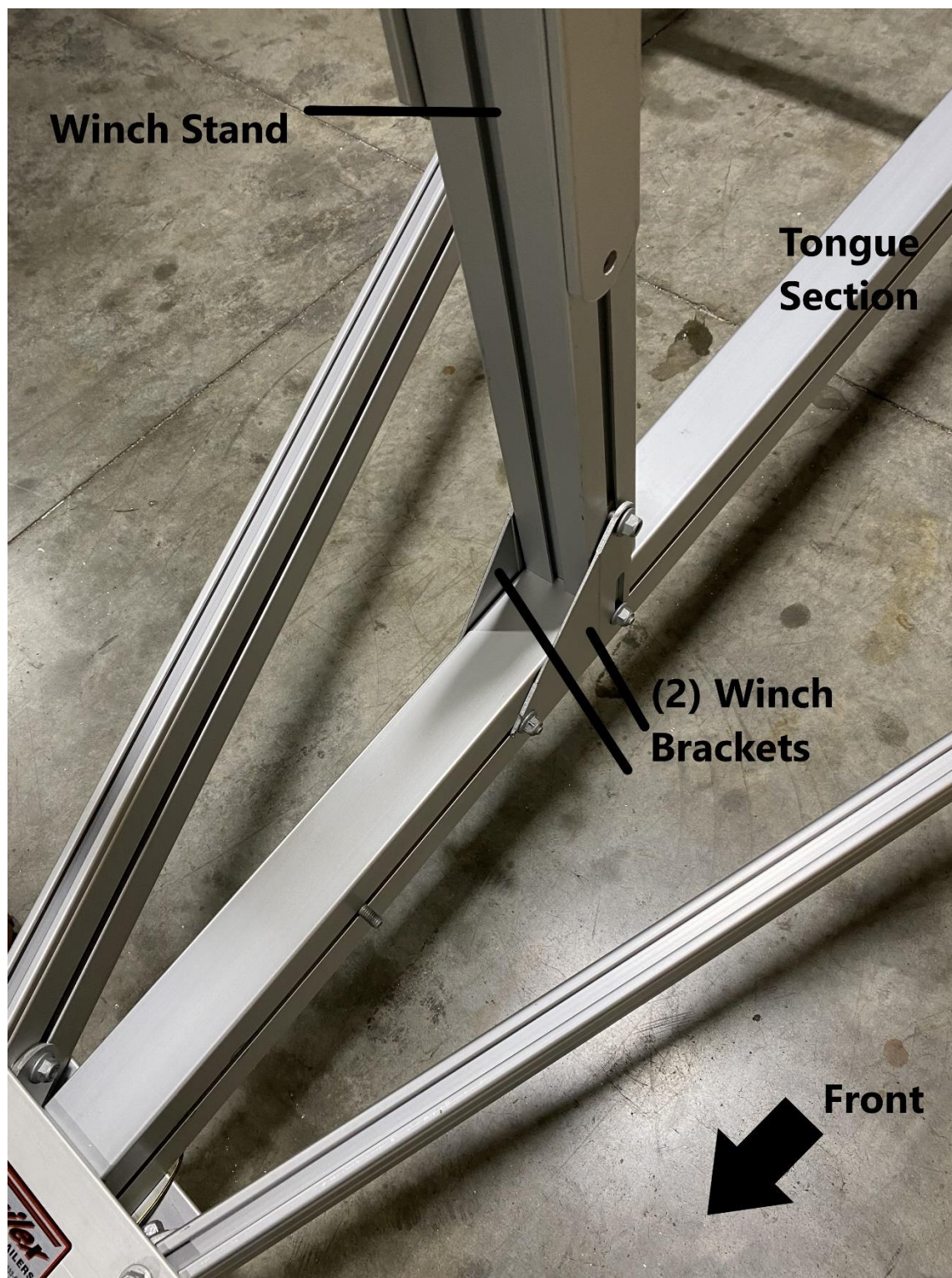
Locate the winch handle.



Locate the (6) T-bolts and (6) locknuts installed in the side grooves of the tongue section.
Remove the (6) locknuts using a 9/16" wrench.



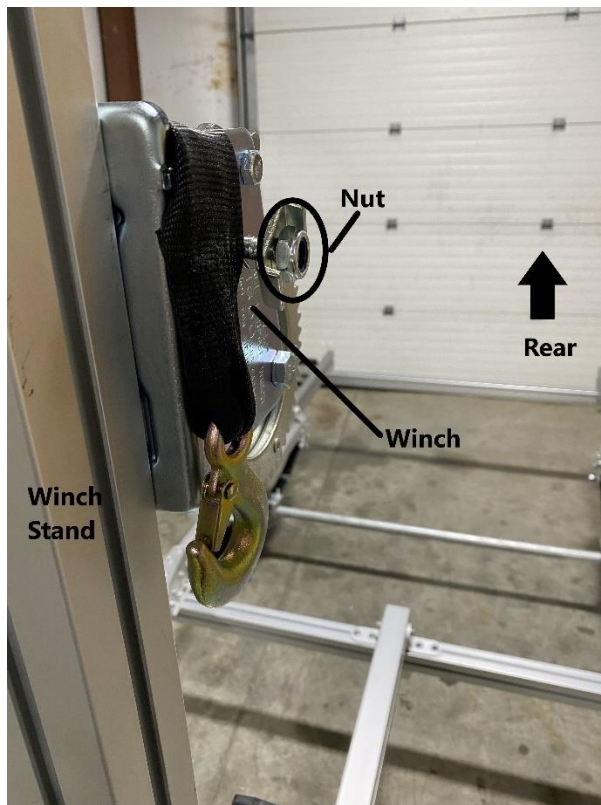
Install the (2) winch brackets to tongue section as shown. Note that (2) T-bolts installed on winch brackets will be on the top and facing towards the inside of the trailer. Tighten replace the (4) locknuts and tighten using a 9/16" wrench.



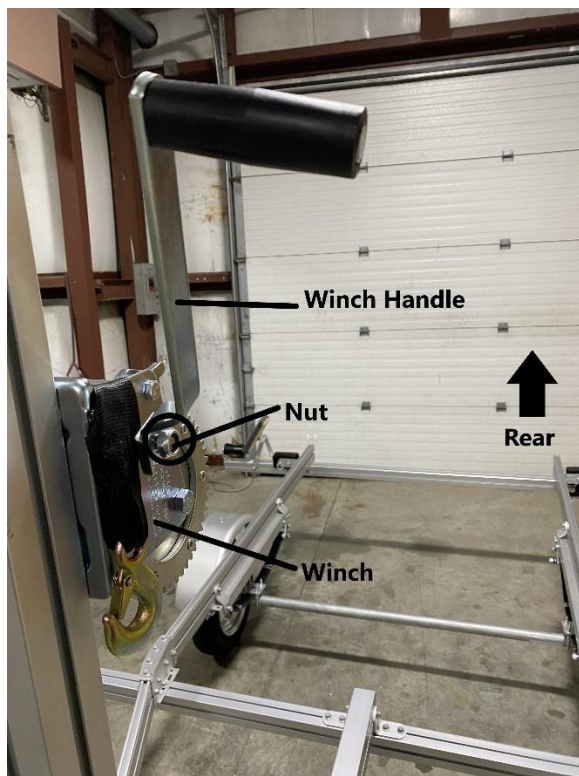
Install the winch stand to the winch brackets as shown. Slide the winch stand through the (2) T-bolts on top of the winch brackets until the winch stand is touching the tongue section. Once the winch stand is in position, tighten the (2) locknuts using a 9/16" winch. Note that the winch will be facing towards the inside of the trailer.



The winch stand will have (2) long brackets installed. Loosen the (2) locknuts holding the (2) long brackets using a 9/16" wrench. This will cause the (2) long brackets to slide down. Install the (2) long brackets on the remaining (2) T-bolts installed on the tongue section. Replace the locknuts and tighten using a 9/16" wrench. Also tighten the (2) locknuts holding the long bracket to the winch stand.



Locate the nut shown on the winch. Remove the nut using a $\frac{3}{4}$ " wrench.



Install the winch handle to the winch. Replace the nut and tighten using a $\frac{3}{4}$ " wrench.



The trailer is now assembled. Connect the flat four prong harness to the tow vehicle and confirm that all lights are in working order. Connect the safety cables to the tow vehicle in a crossing pattern. Connect the coupler to the hitch ball and confirm that the size of the coupler matches the hitch ball. Use a lock to confirm the coupler is locked in place. Torque the lug nuts after 20 miles to 80 foot pounds.