# SUT-220-SNCT

# **SUT-220-SNCT**

# **Suggested Tools:**

(3) Saw Horses

Standard Screwdriver

Phillips Screwdriver

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

Torque Wrench

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

**Pliers** 

Wire Cutters

Square

Measuring Tape

Electrical Tape

Spray Lubricant

Utility Knife

(4) Wheel Chocks

Fish Tape (optional for wiring)

# **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 Section (Part A)



Rear Tongue Section (Part A)



Crossmember Assembly (2) Front and Rear are the same (Part R)



Siderail Assembly (2) Left and Right are the same (Part S)



Axle (Part T)



Fenders (2) (Part N)



12" Tires (2) (**Part V**)



Inner Fender Braces (2) (Part P)



Outer Fender Braces (2) (Part O)







Channel Brackets (2) (Part L) Spacers (if needed) (Part M) Spare Parts (Part I)





Skid (Part D)

Padded Cradles (2) (Part B)



Front Cradle Holder (Part C)



Guide Rails (Part K)



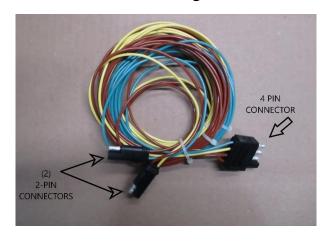


Tail Light Kit (Part Q) Boxed on left, unboxed on right





Tail Light Brackets (2) (Part E)

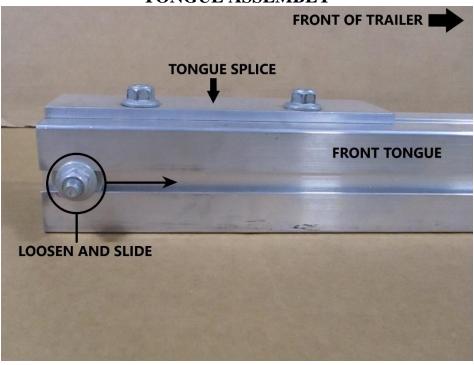


Rear Wiring Harness (Part H)

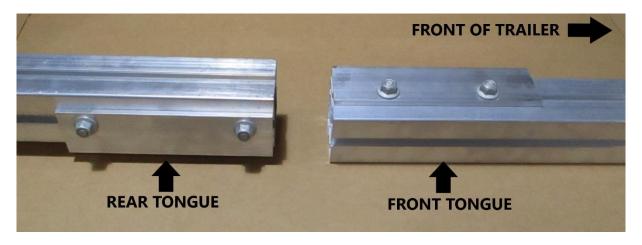


Marker Light Bracket (Part F)

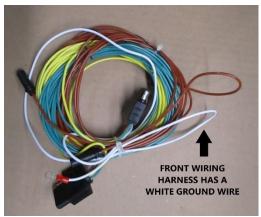
## TONGUE ASSEMBLY

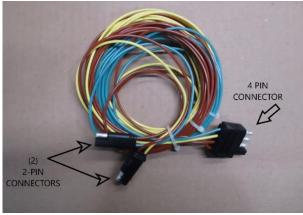


On the back of the front tongue section (**Part A**), loosen the T-bolt and nut on the right-hand side and slide it forward, towards the coupler.



Next, lay the tongue sections (**Part A**) end to end with the splice plates facing each other, as shown above.

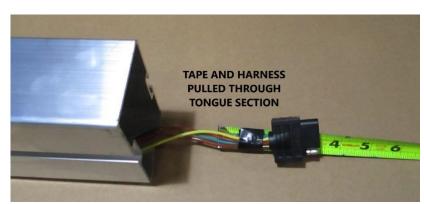


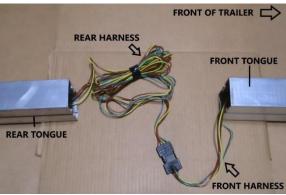


The wiring harness consists of two sections, a Front (**Part G**), and a Rear (**Part H**). Locate the front wiring harness, with the white ground wire, as shown in the left picture above. This end goes at the front of the trailer by the coupler.

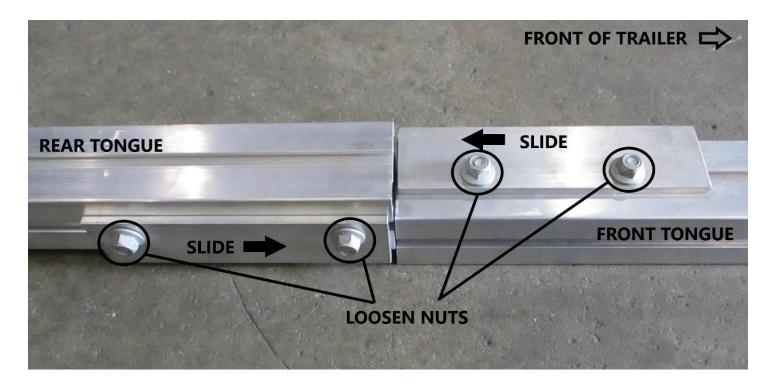




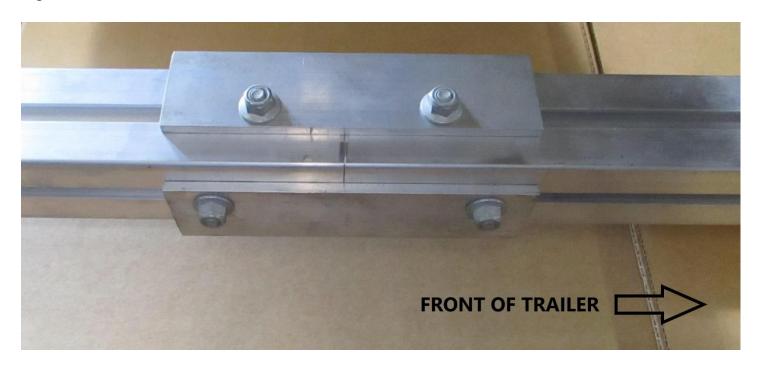




Trailex recommends using a tape measure to pull the wiring harness through the tongue sections. Feed the tape measure through the tongue section and attach the tape measure to the harness with electrical tape. Then, retract the tape measure through the tongue. Repeat for both tongue sections, as shown above. Once the harness is through the tongue sections, plug in the 4-pin connectors. (**This is a universal harness and there will be excess wire**) Pull the rear harness forward leaving enough room at the back to connect the tail lights. Gather any excess wire and tape it, as shown. Then, tuck the wire and 4-pin connectors inside the tongue and slide the sections together.



Once the tongue sections are slid together, loosen the nuts holding the splice plates, 8 total, 4 are not seen in this picture. Slide one plate back, and the other forward to join the tongue together.



Center the splice plates over where the tongue sections join together and tighten the nuts securely. Then, look down the length of the tongue to make sure it is straight.

#### FRAME ASSEMBLY



Crossmember Assembly (2) Front and Rear are the same (Part R)



Siderail Assembly (2) Left and Right are the same (Part S)

Locate the crossmember and siderail assemblies, there will be 2 of each

The frame will be assembled upside down



NOTE: Crossmember shown **UPSIDE DOWN** 



Loosen the nuts on the L-plates, both top and bottom, and slide them out slightly so the siderail will be able to slide into them and sit next to the crossmember.

Repeat for the other 3 corners.



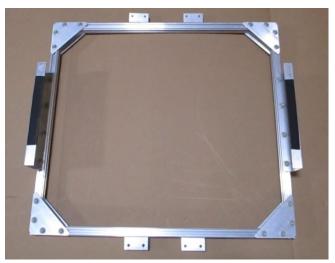
Next, slide the siderail, into the L-plates and make sure it is flush with the crossmember, as shown.





Complete one corner at a time starting with the front crossmember. Square that corner, and tighten the nuts on the top and bottom L-plates before moving on to the other side of the same crossmember. Repeat this process with each corner.



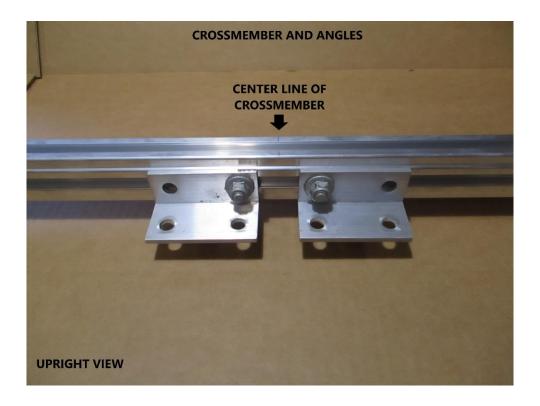


(Upside down view shown)

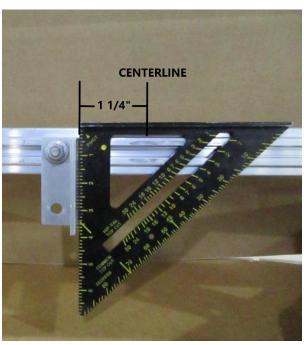
Both siderails attached to the crossmember.

Completed frame assembly.

Once this is finished, it is installed on the tongue assembly.



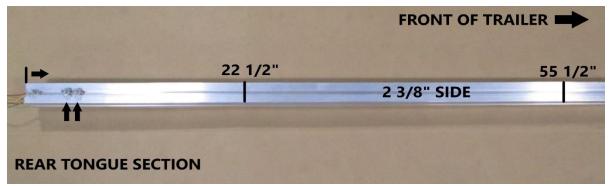
Turn the frame right side up and locate the center line on the top of the crossmember.



(Upright View)

Loosen the nut one of the angles and move it 1 1/4" from the center line towards the outside of the frame, then square and tighten. Repeat on the other crossmember.

Leave the other angle in the "up" position for ease of assembly on the tongue.



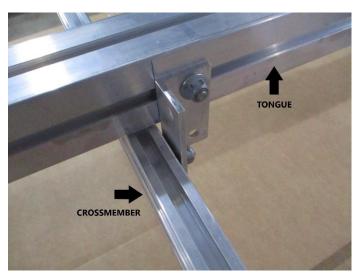
On the rear tongue section, remove the nuts on the 2 T-bolts closest to the front of the trailer and slide them forward to the marks at 22 1/2" and 55 1/2", as shown in the pic below. Repeat on the other side. These bolts will be used to mount the frame to the tongue assembly.

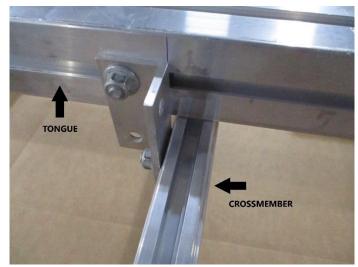




FRONT OF TRAILER

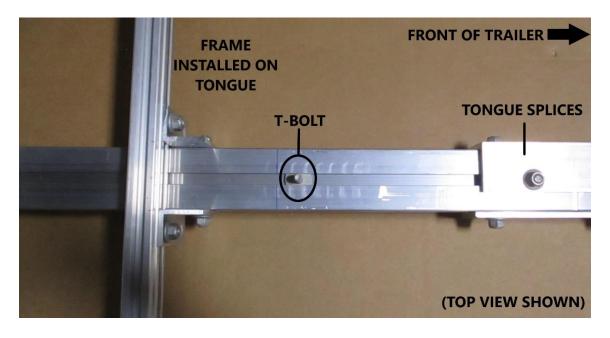
Locate a T-bolt from the hardware bag and install it into the slot on **top** of the rear tongue section. Slide it up to the splice plates **before** installing the frame on the tongue.





(Upside down view shown)

Mount the angles from the previous step on the marks on the tongue, as shown. Repeat for the opposite side of the tongue as well.



When mounting the frame to the tongue, make sure the T-bolt is between the frame and the tongue splices, as shown above.



At this point, the trailer should look like this, with the frame mounted and the trailer upside down.

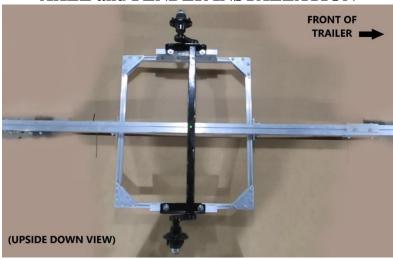


Locate the axle (Part T).

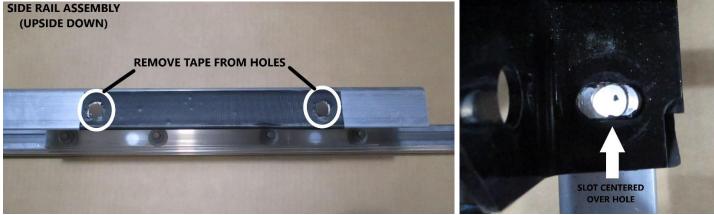


Also, locate the hardware bag, as this contains the hardware for mounting the axle, fenders, and other assorted nuts and bolts for the trailer. (**Part J**)

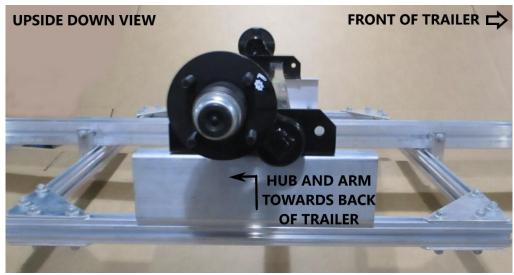
#### **AXLE and FENDER INSTALLATION**



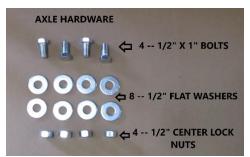
Axle set on frame. Upside down view shown



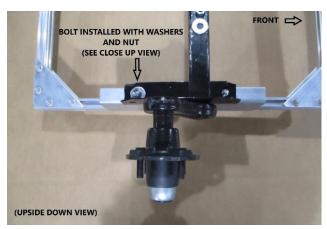
Using a utility knife, remove the tape **only** from the holes in the brackets, as shown. Center the slots on the axle over the holes on the bracket, repeat for all 4 holes.

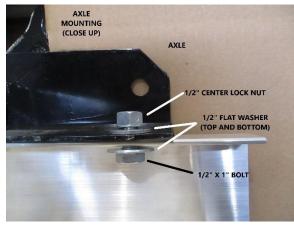


When putting the axle on, make sure that the hub and arm are pointing towards the back of the trailer, as shown in the pic above.



Locate the axle hardware from the hardware bag (**Part J**).





With the axle sitting on the brackets, install the hardware. The bolt goes through from the top of the trailer down with 2 washers and a center lock nut, as shown above. Repeat for the other 3 axle mounting locations.

# Be sure the axle is centered on the brackets before tightening. Tighten in an X-pattern.

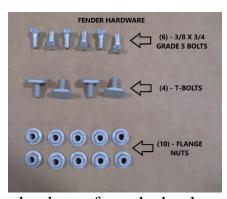
Locate the parts for the fenders:



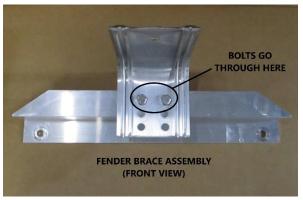
Inner fender braces (2) (Part P)

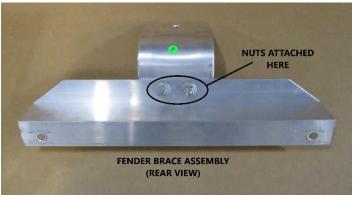


Outer fender braces (2) (Part O)

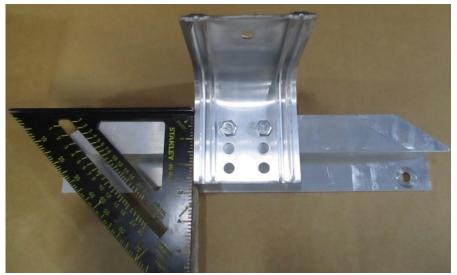


Fender hardware from the hardware bag.

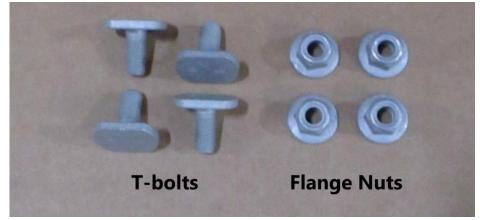




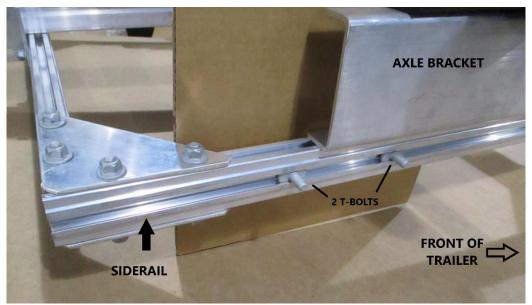
Mount the outer fender brace (**Part O**) to the inner fender brace (**Part P**) using the 3/4" bolts and flange nuts from the hardware bag. Put the bolts through the top holes as shown above.



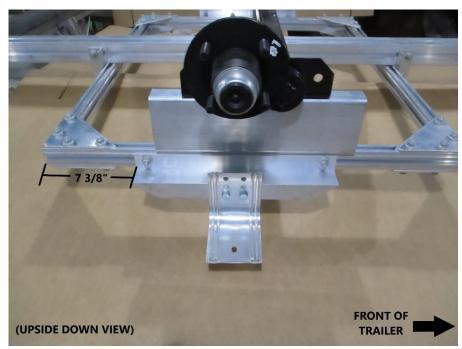
Before installing on the frame, square and tighten the fender braces together.



Locate the 4 T-bolts and flange nuts, from the hardware bag, to install the fender braces onto the siderails.



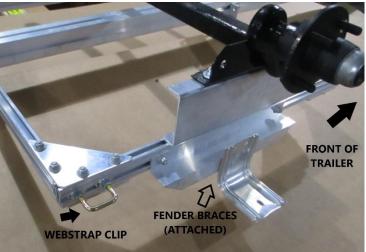
Slide 2 T-bolts into the siderail and attach the fender brace assembly from the previous step.



Measure 7 3/8" from the rear of the siderail and mount the fender brace. Repeat for the other side.

NOTE: The fender braces will be off-center towards the back of the frame, and trailer. This allows the most movement of the tire and axle within the fender.





Locate the two webstrap clips from the hardware bag, and slide one on each siderail behind the fender braces and tighten.





Locate the fenders (Part N), and peel the plastic film off before installation.

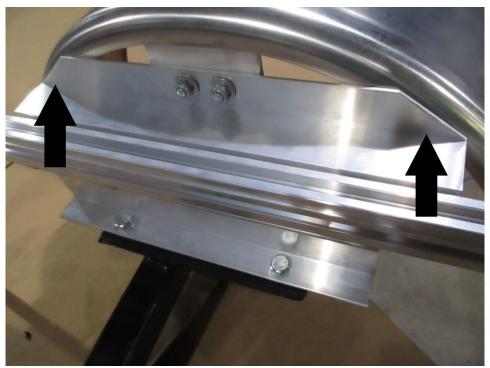


Locate (2), 3/4" bolts, and 2 flange nuts from the hardware bag. These will be used to attach the fenders to the braces.





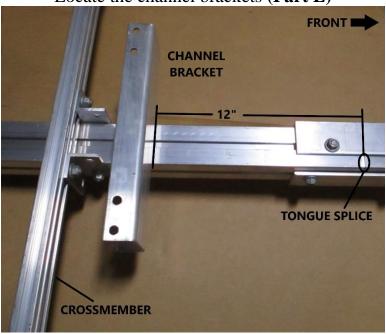
Mount the bolt through the fender and brace as shown.



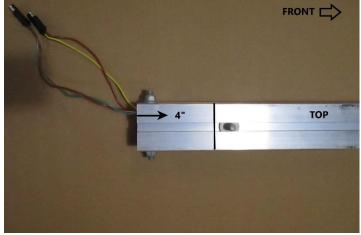
Before tightening, make sure the fender is on the **outside** of outer fender brace. Repeat for the other side.



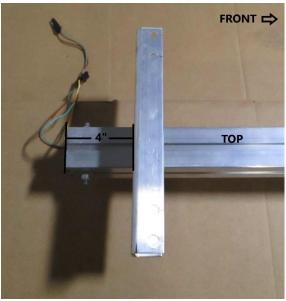
Locate the channel brackets (Part L)



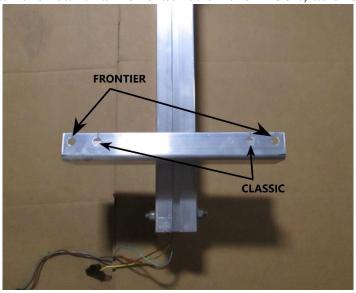
Install the front channel bracket onto the T-bolt installed when mounting the frame. Install 12" from the tongue splice, as shown.



Slide a T-bolt, from the hardware bag, into the top slot, 4" from the back of the trailer.



Install the rear channel bracket on the T-bolt, as shown.

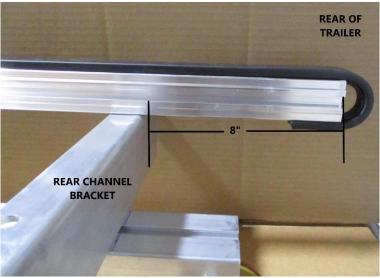


The boat you have purchased will determine which holes to use on the channel brackets. The Frontier uses the two outer holes, front and back. The Classic uses the inner holes.



Locate the guide rails (Part K), and remove the nuts on the underside.

# **Guide rail installation for the Classic**



Install the guide rail, in the **inner** holes, 8" away from the rear of the rear channel bracket. Repeat for the other side, then tighten the guiderails to the front and rear channel brackets.

#### **Guide rail installation for the Frontier**



Locate the spacer bag and hardware (Part M).

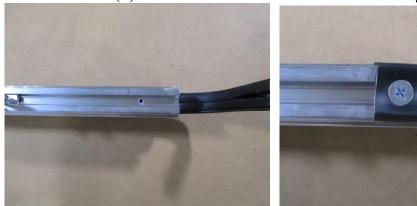




Using a Phillips screwdriver, remove the screw holding the vinyl down from one end of the guide rail and remove both T-bolts.



Install (2) 1 3/4" T-bolts into the bottom of the guide rail.

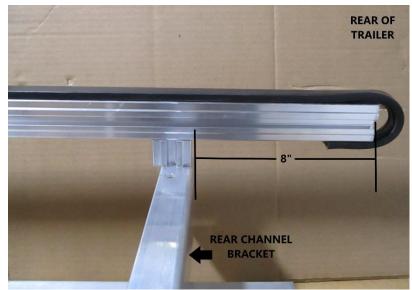


Re-install the vinyl, line up the hole, and re-install the screw. **Do not overtighten**. Repeat for the other guide rail.





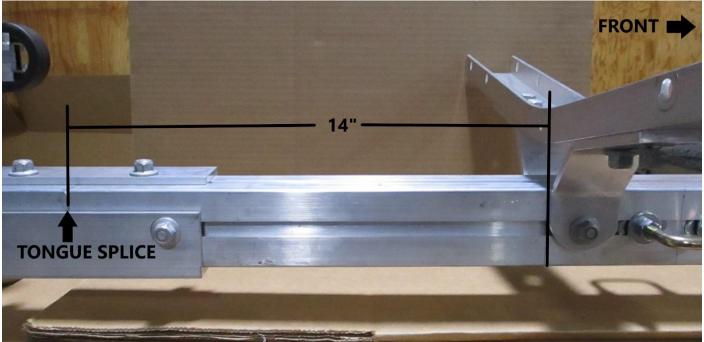
Install the spacers over the 1 3/4" T-bolts, as shown.



Install the guide rail, in the **outer** holes, 8" away from the rear of the rear channel bracket. Repeat for the other side, then tighten the guiderails to the front and rear channel brackets.



Locate the front padded cradle holder (**Part C**), the padded cradles (**Part B**), and (2) 2 3/4" bolts and flange nuts from the hardware bag.



Install and square the front padded cradle holder 14" from the tongue splice.





On the top of the cradle holder, make sure the slot is lined up with the bracket underneath.





Slide the bolts out to each end of the slot, and tighten them. Repeat for both sides.



Install the padded cradle inside the cradle holder, slide the 2 3/4" bolt through the cradle holder and the pivot plate on the padded cradle, install the nut and tighten. (Shown mounted to the inner position. The final position will be determined when the boat is fitted to the trailer.)

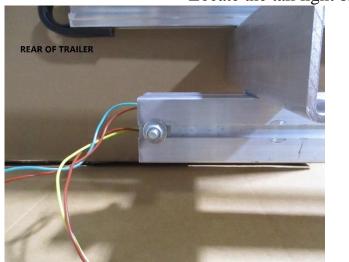


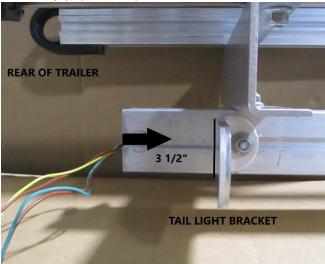
Front padded cradle holder assembly installed. (Top view shown)

# Wiring and lights



Locate the tail light brackets (2) (Part E)



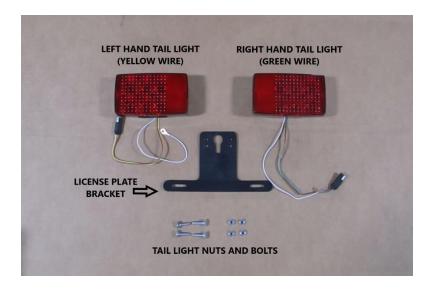


Remove the nut from the T-bolt on both sides of the rear tongue and install the tail light brackets 3 1/2" from the rear of the trailer.

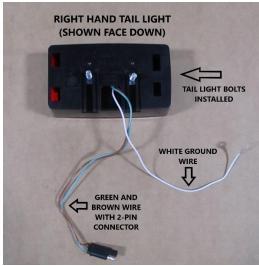




Locate the tail light kit box (**Part Q**), two tail lights, two marker lights, a license plate bracket, and a bag of electrical parts. NOTE: This is a universal tail light kit, some parts in the bag may not be used on your trailer.

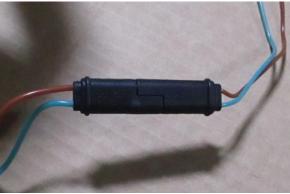


Locate the tail lights, the license plate bracket, and the nuts and bolts from the kit.

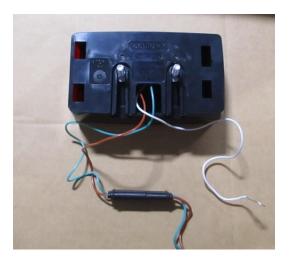


Install the tail light bolts into the back side of the right hand tail light in the slots. Slide them all the way to the top of the slots.



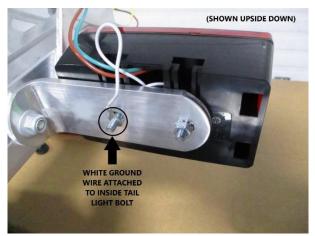


Connect the 2-pin connector for the right hand light with the connector on the wiring harness coming from the rear of the tongue. The green and brown connector from the light will plug into the green and brown connector from the harness.





Carefully push the connector and the excess wire into the light before mounting, leave some slack so the wiring harness can go into the tongue once the lights are installed.

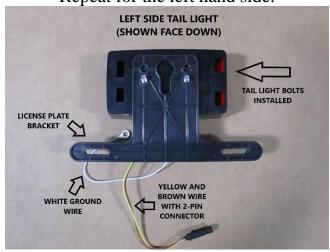




**NOTE:** Trailer shown upside down

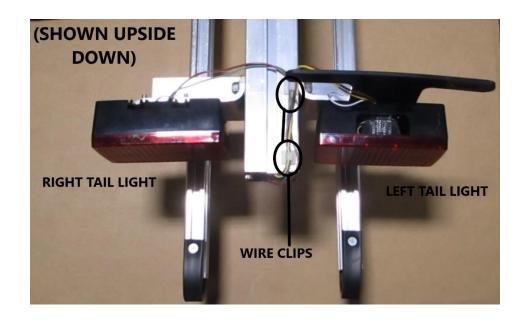
Install the tail light onto the bracket and install the white ground wire on the inside bolt, as shown. Install the nuts and tighten.

Repeat for the left hand side.





As with the right side, install the white ground wire and tighten the bolts.



**NOTE:** Trailer shown upside down



Adhesive wire clips (Colors may vary)

Run the wires from each light to the bottom side of the tongue. Locate 2 wire clips from the tail light kit bag, and install the wires inside the clip. Feed them towards the back of the tongue section. Any extra wire can be tucked inside the tongue.



Locate a web strap clip from the hardware bag and install and tighten into the bottom slot of the tongue next to the wires.

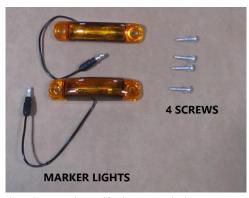
To continue with the lighting, locate the following parts:





Skid (Part G)

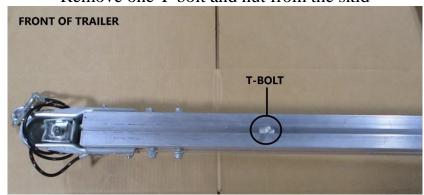
Marker light bracket (Part I)



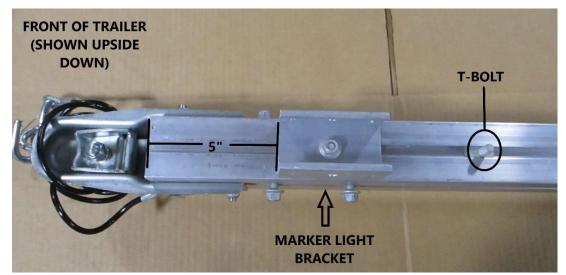
From the tail light kit, locate the 2 marker lights and 4 screws, from the electrical parts bag.



Remove one T-bolt and nut from the skid



Slide the T-bolt removed from the skid into the slot on the underside of the tongue.



Mark 5" back from the front of the tongue, and install the marker light bracket. **NOTE:** Make sure the T-bolt installed from the previous step is toward the back of the trailer, as shown above.

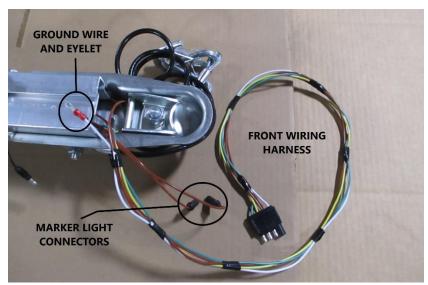




Install the marker light with the screws, as shown. Repeat for the other side.

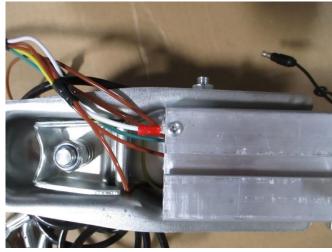


(Underside view of marker lights installed)



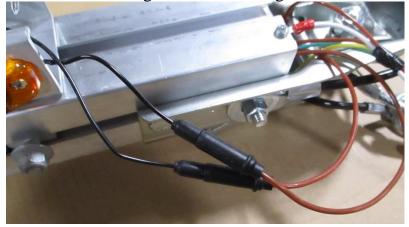
Tape the front wiring harness together from the 4-pin connector on the end along the white ground wire. Space the tape about every 6-8" along the harness. Do not tape the wires for the marker light connectors in with the harness.



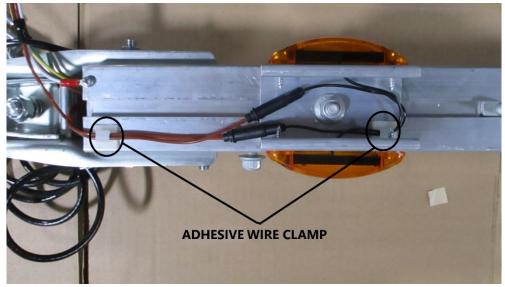


Use one of the remaining screws in the electrical parts bag and install it through the eyelet on the white wire of the harness into the pre-drilled hole for the ground on the tongue.

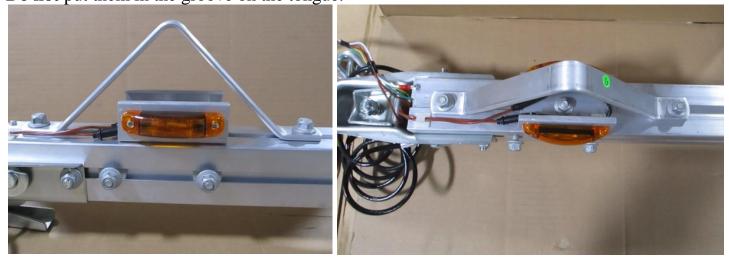




Connect the 1-pin connectors from the marker lights into the 1-pin connectors from the wiring harness.



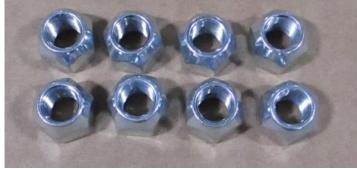
Locate 2 more adhesive wire clamps from the electrical parts bag and install as shown above. **Do not** put them in the groove on the tongue.



Next, mount the skid onto the tongue. Use the T-bolt installed from the previous step, and the one remaining on the skid. Center it over the marker light bracket, being careful to avoid the wires, and tighten.

## Wheels

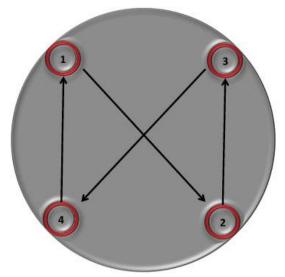




Locate the tires and wheels (Part V), and the 8 lug nuts from the hardware bag.



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



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

# **Finished Trailer**





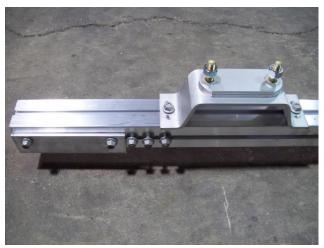
#### OPTIONAL STEP FOR SPARE TIRE CARRIER



Spare Tire Carrier for SUT Trailers



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



FRONT OF TRAILER →

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