

# **SUT-450-AID**

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

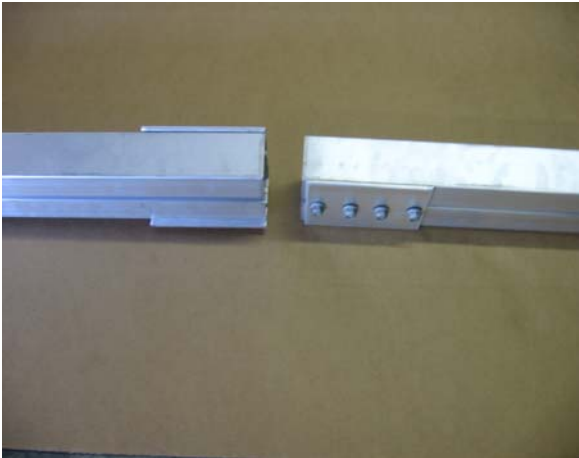
**Incorrect assembly or modifications to your trailer will void any specific or implied warranty.**

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

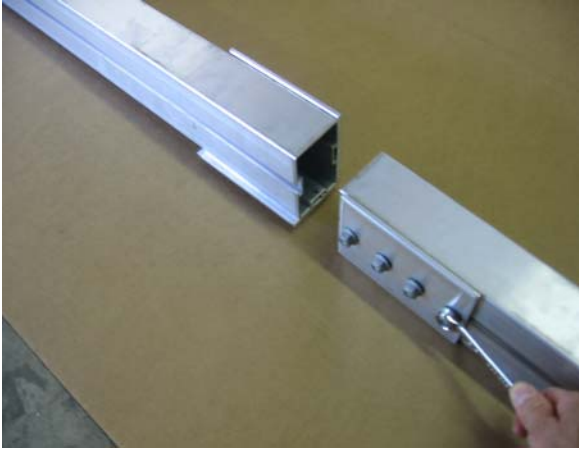
## Tongue Assembly



Locate the tongue assembly.



Lay the two tongue section adjacent to each other as shown. The splice plates should be positioned on the sides and bottom.



Loosen all 12 nuts and slide the splice plates over the adjacent tongue section making sure the tongue sections are tight against each other.

Set the tongue assembly aside.

## Frame Assembly



Locate the cross member assemblies.



Lay them up side down approximately 60" apart.



The screws for the three light bar on the rear cross member should be toward the top.



The front cross member must be placed as shown.



Locate the two side rails.



Place the side rails onto the cross members with the spring hangers toward the rear of the trailer.



The spring hangers should be to the inside of the trailer.



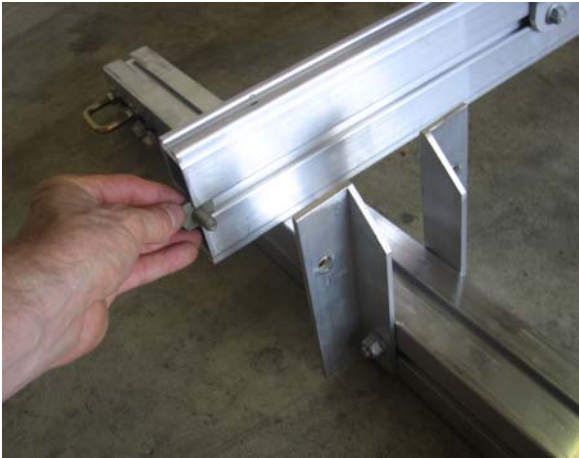
Remove the T-bolts from the side rail attaching angles on the cross members.



Loosen the angle brackets from the cross members enough to allow them to rotate.



Rotate them upward making sure to align the brackets with the pencil marks on the cross members.



Install the T-bolts removed previously into the slot on the side rail.



Attach the side rail to the brackets making sure the bracket is flush with the end of the side rail.



The side rail should be 16 1/2" from the end of the cross member.



Align the rear edge of the front cross member with the pencil mark on the side rail.  
Repeat the procedure to attach the brackets to the side rail.

Repeat the procedure to install the other side rail.





At this point your trailer should look like this.

## **Spring and axle assembly**



Locate the spring assemblies.



Remove the bolts from the shackle holder.



Remove the bolt from the front spring eye.



Install the spring assembly with the shackle holder to the rear of the trailer and the nuts to the inside.



Tighten the nuts for the shackle holder.



Tighten the shackle link nuts until there is a slight restriction in the movement of the shackle link. Do not over tighten as this will not allow the suspension to move properly.



Note: The threads on the shackle link will not protrude through the shackle nut when it is properly installed. This is normal. The indentations on the flat sides of the nuts are the locking mechanism.



Install the bolts in the front spring eye.

Repeat the spring installation procedure for the other side.



Locate the axle and bag containing the U-bolts, nuts, and tie plates.



Lay the axle between the springs and the side rails with the axle's serial number plate toward the rear of the trailer.



Raise the axle up and align the hole in the spring seat with the bolt in the spring.



Install the U-bolts as shown. Make sure the stud on the spring aligns with the hole in the middle of the tie plate. Do not tighten the nuts yet.



Repeat for the other side then tighten all the nuts evenly.

## Tongue installation



Remove 4 T-bolts from the tongue attaching brackets on the cross members..



Loosen the brackets and rotate them upward leaving them somewhat loose.



Slide the 4 T-bolts that were removed from the brackets into the tongue section from the rear (2 per side).



Lay the tongue onto the frame (remember the trailer is still upside down) making sure the rear of the tongue is flush with the back of the rear cross member.



Align the tongue with the pencil marks on the front and rear cross members.



Attach the brackets to the tongue and tighten.



At this point your trailer should look like this. Turn the trailer over before proceeding.

## Wheels and fenders



Locate the bag containing 8 lug nuts, 4 T-bolts, and fender washers.



Install the wheels with the valve stems facing out. Install the lug nuts with the tapered side facing the wheel. Tighten to 80 foot pounds in a crossing pattern. Re-tighten after 25 miles.



Install 2 T-bolts in the side rail and slide them forward until they are located over the tire.



Install 2 rubber washers onto the T-bolts.



Install the fender.



Install 2 more rubber washers.





Install the steel washers and nuts. Center the fender over the tire and tighten the nuts. Repeat for the other side.

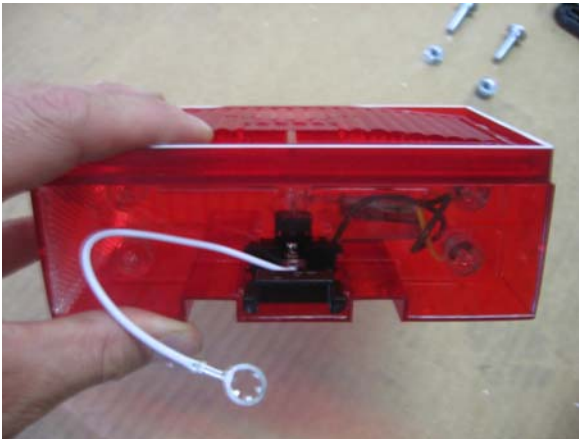
## Lights and skid



Locate the tail lights (inside the light kit box), tail light brackets, and license plate holder.



Install the brackets onto the T-bolts located in the rear cross member. Do not tighten.



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.



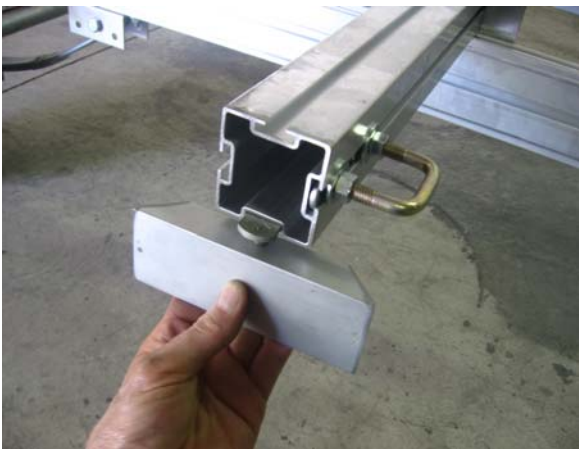
Bring the white wire around to the rear of the tail light and install it on the bolt. Do not over tighten the nuts.



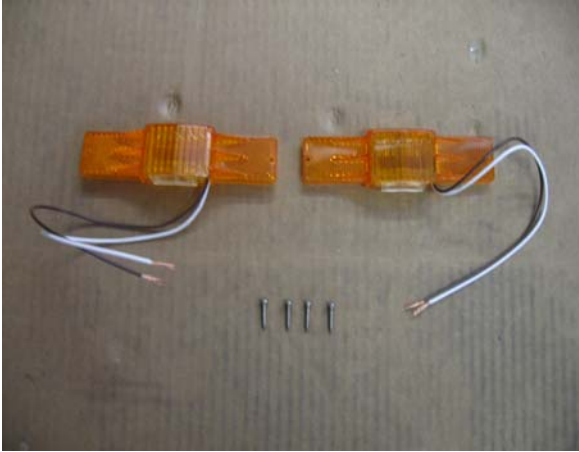
Tighten the tail light in this position. Repeat for the other side.



Locate the running light brackets.



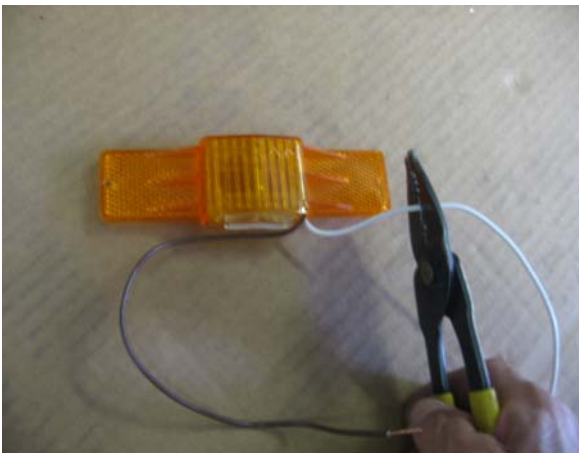
Install them 1" from the end of the front cross member as shown.



Locate the two amber running lights and four small Philips screws.



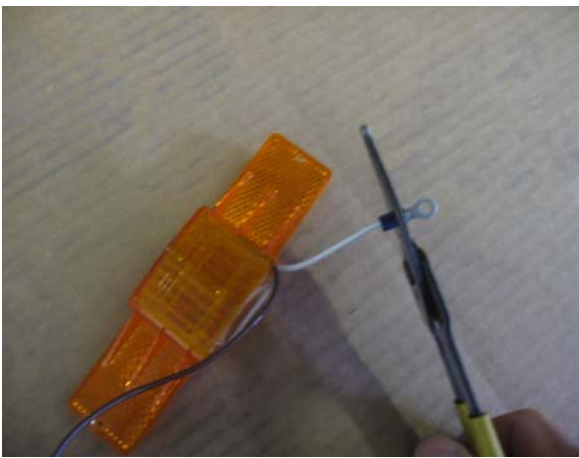
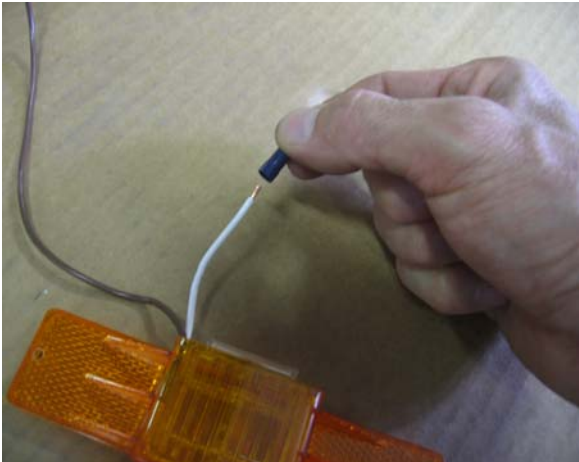
Locate the two ring terminals.



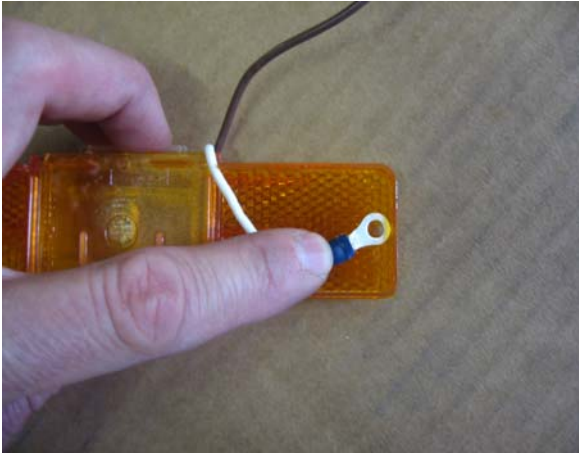
Cut approximately 8 1/2" off of the white wires on both running lights.



Strip 1/4" of insulation from the wire.



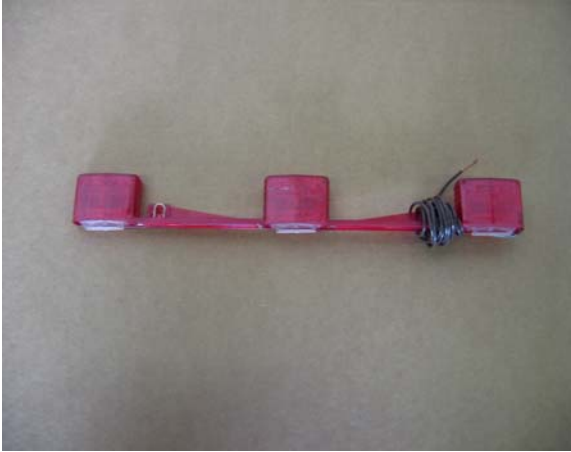
Install the ring terminals by crimping the terminal onto the bare wire.



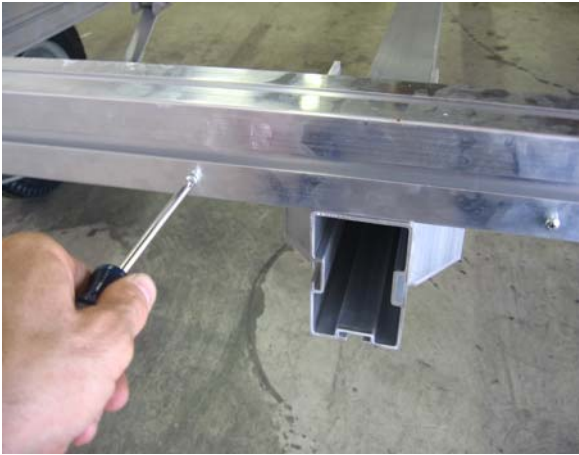
Align the ring terminals with the screw hole nearest the wire on the back of the running light. Make sure the wire is routed through the gap on the back of the light so it does not become pinched when the light is installed.



Install the running light on the bracket making sure the screw goes through the ring terminal on the white wire.



Locate the three light bar.



Install the three light bar using the screws located on the rear cross member.



Locate the skid.



Install the skid into the slot in the bottom of the tongue.

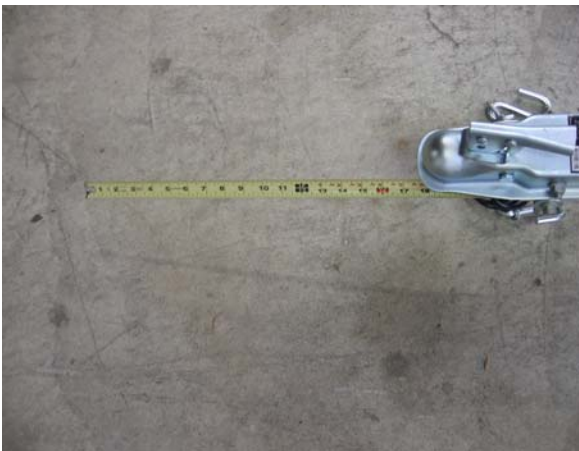


Rotate the safety cables so they point straight down and tighten.

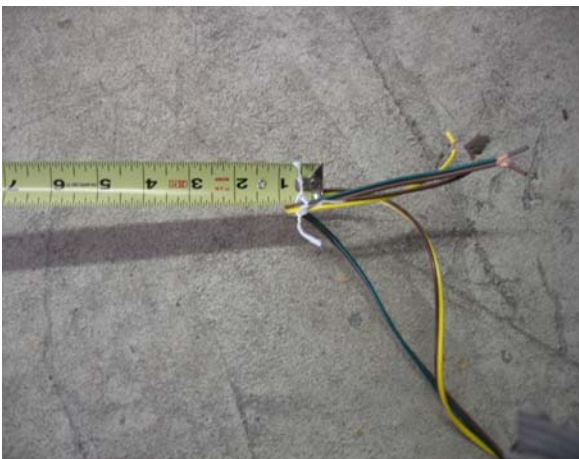
## Wiring



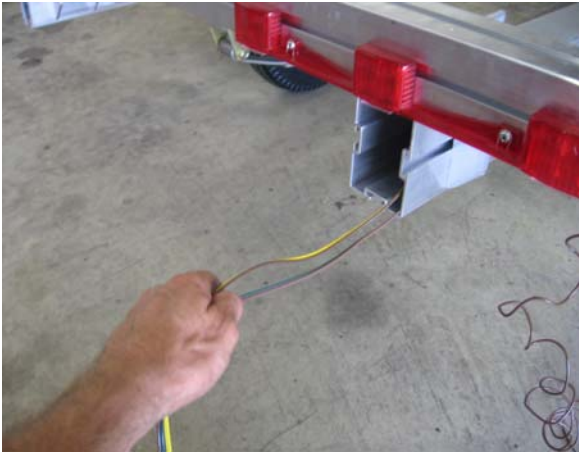
Locate the wiring harness.



From the back of the trailer extend a tape measure through the tongue until it protrudes out of the front under the coupler.



Attach the end of the harness to the tape measure using the tie wrap from the wire harness.



Retract the tape until the harness comes out of the back of the tongue.



Locate the Philips screw.



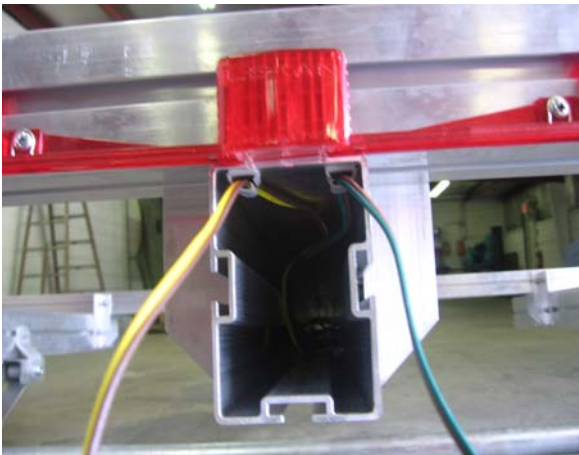
Crimp a ring terminal onto the white wire at the front of the trailer and install it into the pre-drilled hole located under the coupler.



Pull the wires from the back of trailer until approximately 30" of wire is protruding at the front.



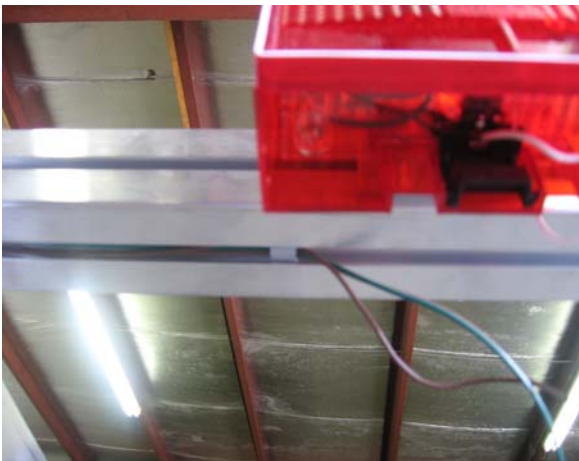
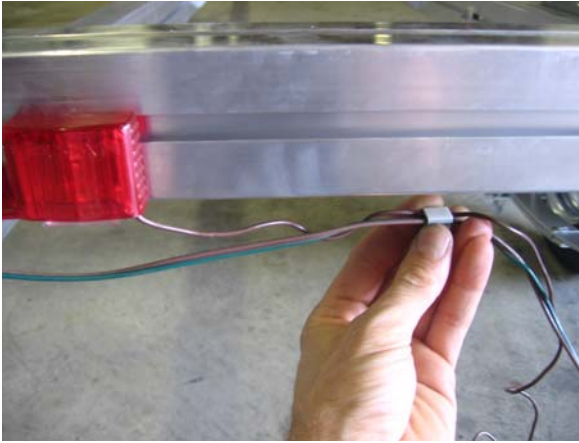
Locate the adhesive clamps.



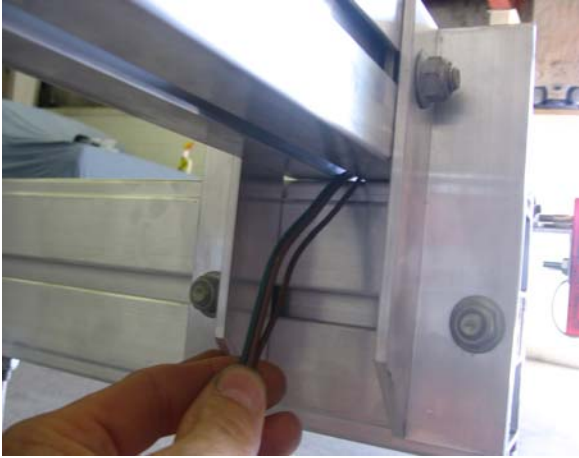
Install 2 clamps in the rear of the tongue as shown. Route the yellow wire through the left (driver's side) clamp, and the green wire through the right (passenger side) clamp.



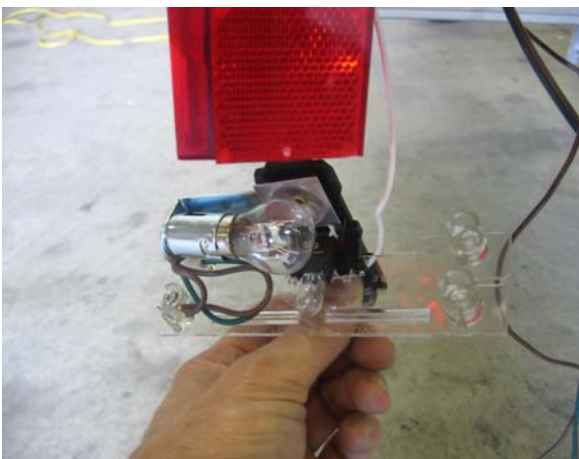
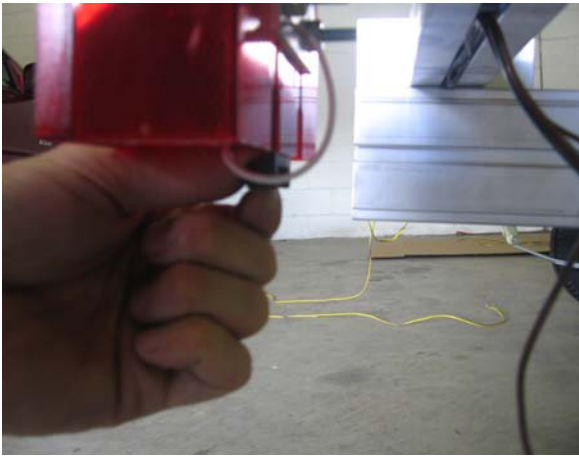
**Illustration: Adhesive clamp installed in slot.**



Route the green/brown wire together with the wire from the three light bar in the slot at the bottom of the rear cross member to the right tail light using adhesive clamps as shown.



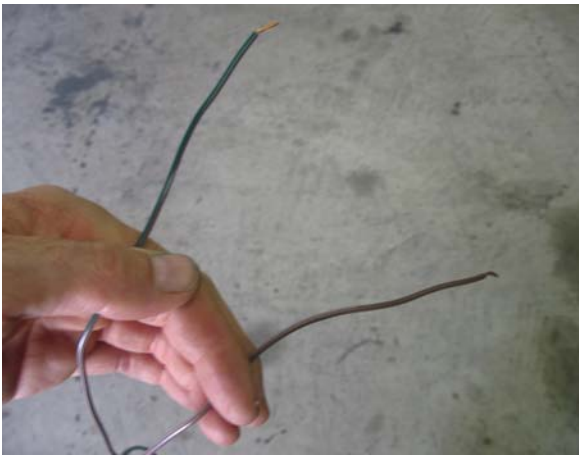
Route the wires between the rear cross member and the side rail.



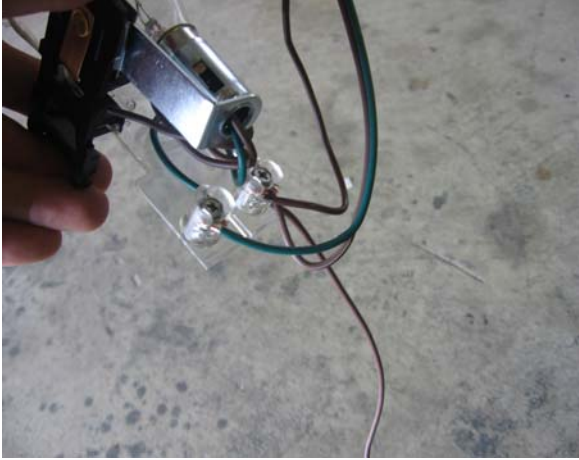
Remove the bulb assembly from the tail light by pulling the black tab toward the rear of the trailer and downward.



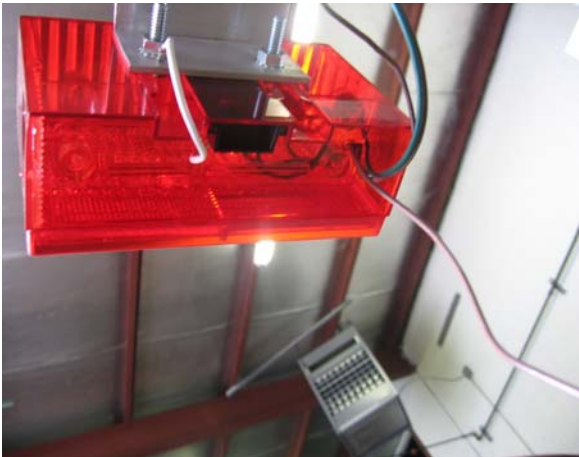
Cut the green/brown wire and three light bar wire at the appropriate length to allow them to be connected to the bulb assembly.



Take the excess green/brown wire that was cut off and separate the green wire from the brown wire. Discard the green wire. The single brown wire will be used to supply the running light.



Strip the wires and install the 3 brown wires and 1 green wire onto the color matching wire terminals on the bulb assembly.



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



Route the remaining brown wire that will power the running light back along the rear cross member, through the adhesive clamps, and into the hole in the bottom slot of the side rail exiting out of the rear as shown.



Extend a tape measure through the side rail and attach the brown wire to it.



Retract the tape measure pulling the wire through the side rail until it comes out at the front.



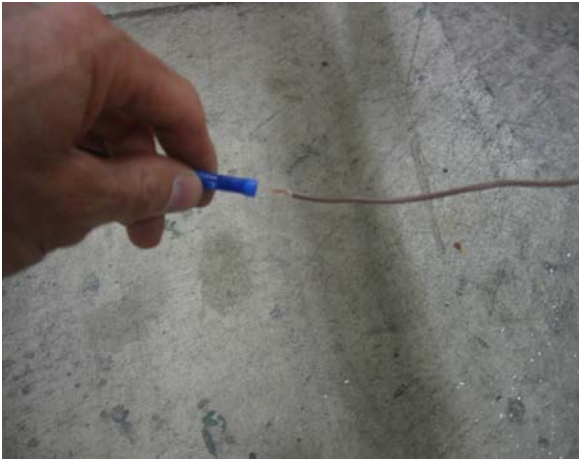
Feed the wire back through the side rail.....



until it comes out of the hole in the bottom of the side rail under the front cross member.



Cut the wire and strip ¼” of insulation from the end.



Install a butt connector by crimping it onto the bare wire.



Install adhesive clamps to secure the wires in the slot on the bottom of the front cross member. Repeat the wiring procedure for the other side.



Please refer to the instructions provided with your Hobie cradles for proper installation.