



Malone MicroSportTM Trailer

Model MPG460G Assembly Instructions



Take a few moments now and read through these instructions. Familiarize yourself with the step by step assembly process *before* you begin turning wrenches. Un-pack and sort the components into groups as shown in the following photos. Then you will assemble each group in order.

Lets get started !!

Required Tools:

- 3/4" wrenches (2)
- Large flat blade screw driver
- Razor knife
- Wire stripping tool
- Lug wrench
- 9/16" wrenches (2) a 9/16" deep socket is very handy.
- 7/16" wrench (1)
- Pliers
- Electrical connector crimping tool
- Small hammer

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maloneautoracks.com
for more fine products and accessories.

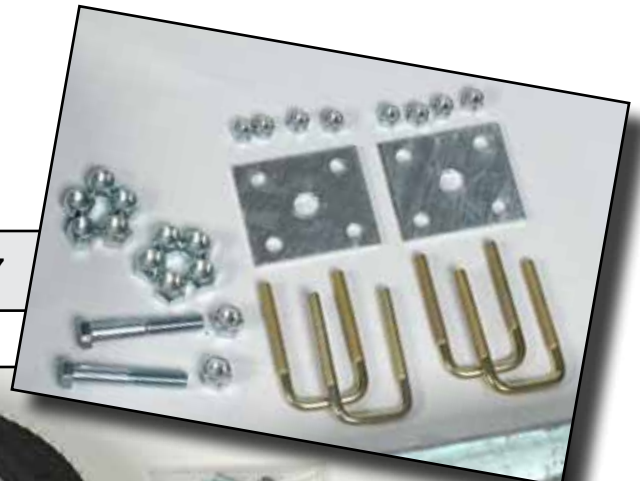
Group 1:
Frame
Components

Bag 11462



Group 2:
Axle / Spring
Components

Bag 11467



Group 3: Lighting Components

Bag 11468



Group 4: Fender Components

Bag 11464

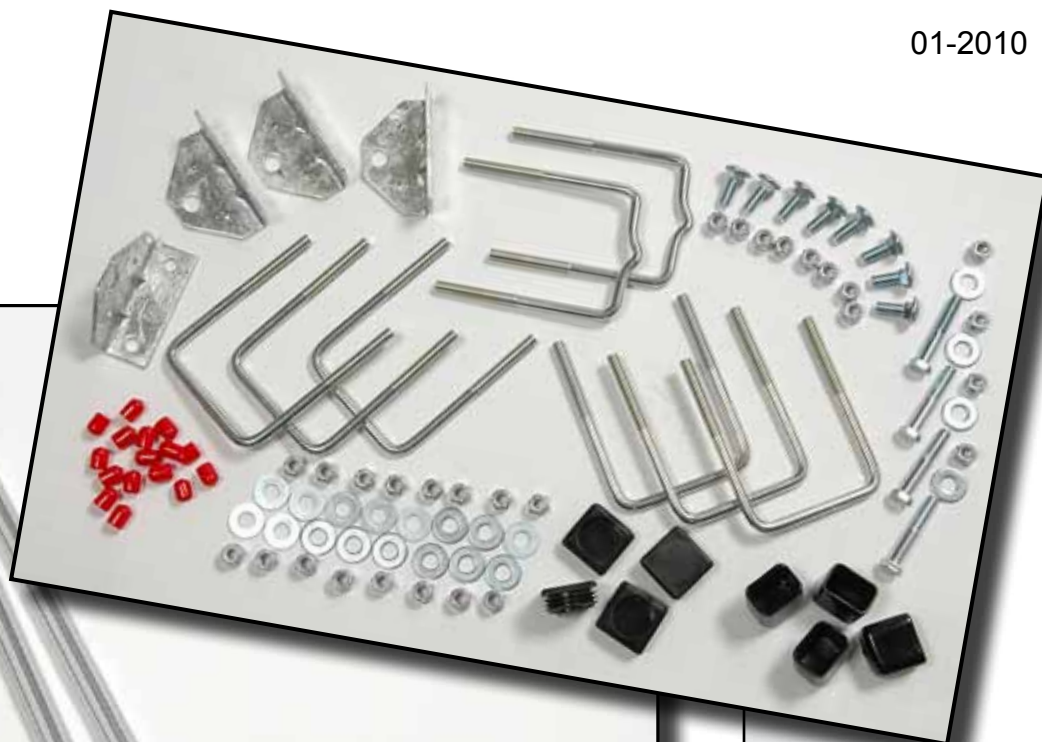


Group 5: Coupler Components

Bag 11494



Group 6:
Load Bar
Components



Bag 11497

FRAME ASSEMBLY (Group 1)

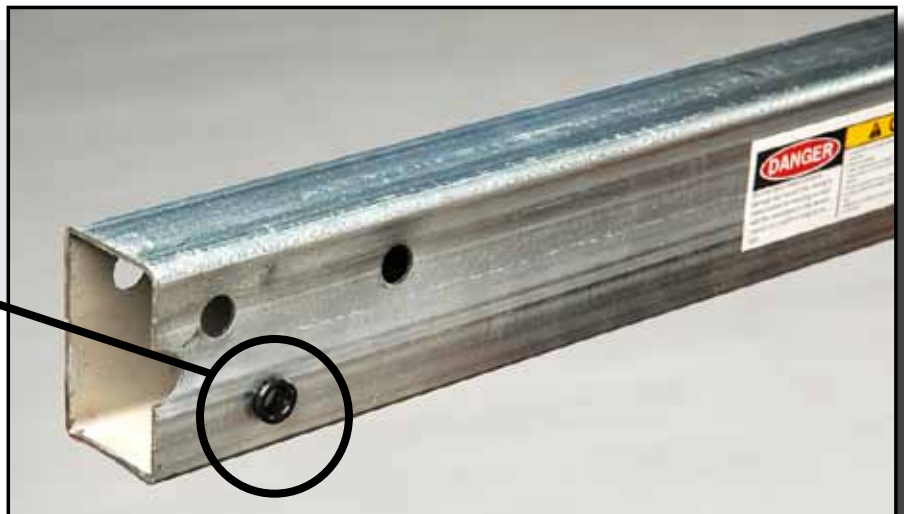
1. We assemble the frame **on its back** to make it easier to install the springs and axle. Once the springs and axle assembly is installed we will flip the trailer over to complete the assembly. So first, layout the frame components upside down as shown. The spring bracket mounting holes should be facing up. All the decals should be upside down.



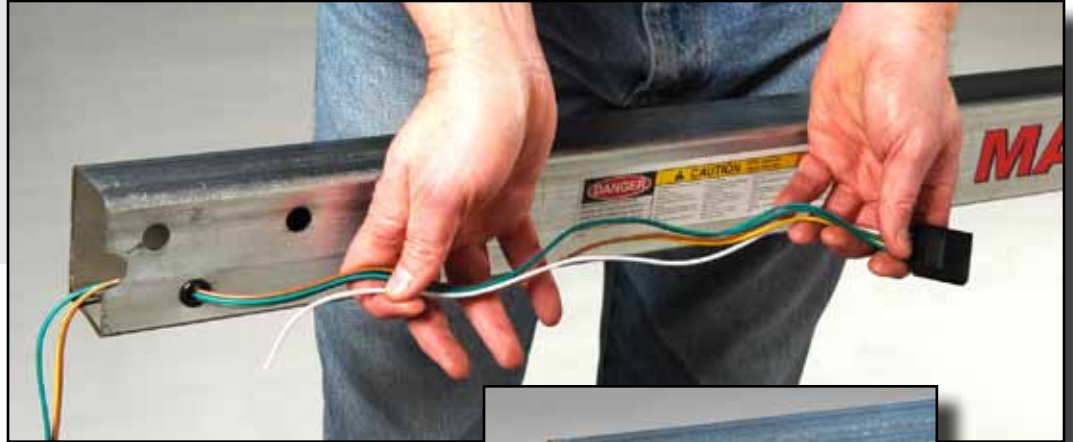
2. Attach the spring hanger brackets to the frame. The U shaped shackle bolt brackets mount to the front and the C shaped "slipper" brackets mount to the rear as shown. Use 3/8" x 1" bolts and nuts. Assemble with the nuts on the inside of the frame rails. Fully tighten all 8 bolts now.



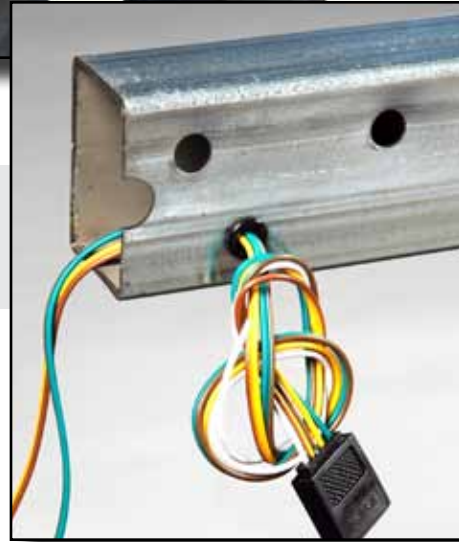
3. Identify the hitch end of the tongue by the 3 holes on the left side. Insert the small wire protection grommet into the lower hole where shown, then push it all the way in till it snaps in place.



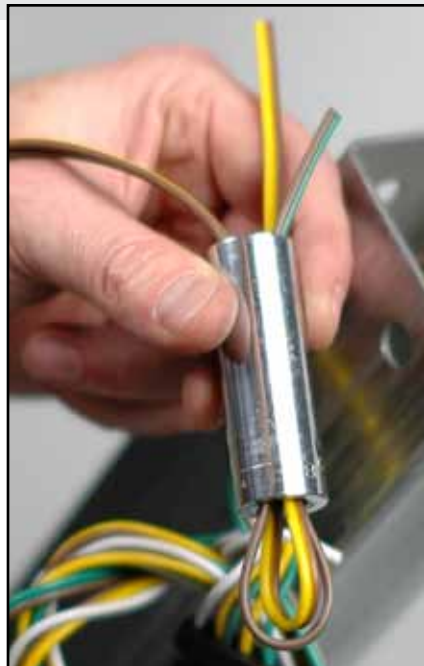
4. Pass the wiring harness into the grommet and out the front end of the tongue as shown. Stretch out the white wire and leave an equal length of the green/brown/yellow wire outside the grommet as shown. This length of wires will be the connector to your tow vehicle.



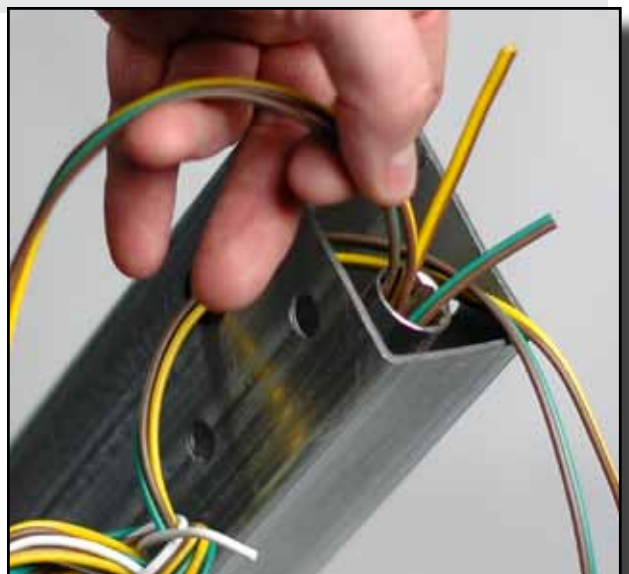
5. Roll this wire so it doesn't get accidentally pulled inside the tongue.



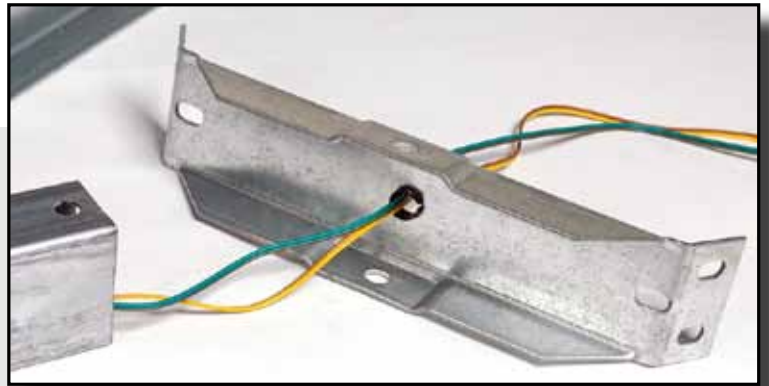
6. Now its time to pass the wire ends thru the tongue. Make sure the wires are tangle free, then attach a weight to the end of the wires. A large socket works great as shown or you could tape a big bolt to the wires. Tip the tongue up and let



gravity work for you. Feed the wire and let the weight slide through the tongue pulling the wires with it.



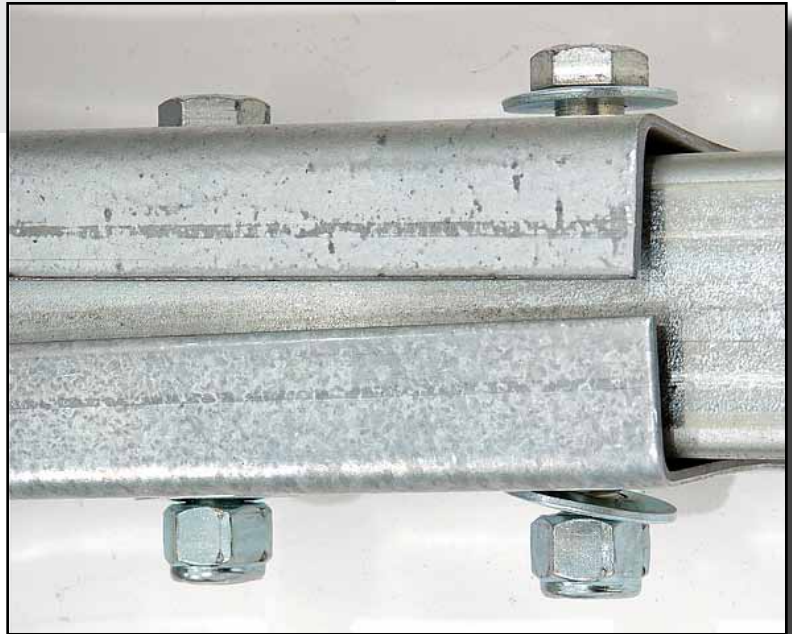
7. Installing the rear tongue support bracket. First we lay the tongue back in its place making sure its upside down. Push the large wire protection grommet into the rear tongue support bracket hole, then pass the wires through the grommet. Install the 4-1/2" long x 1/2" bolt up from the bottom through the tongue support and tongue. Be careful not to pinch the wires. Add a washer and nut. Hand tighten only.



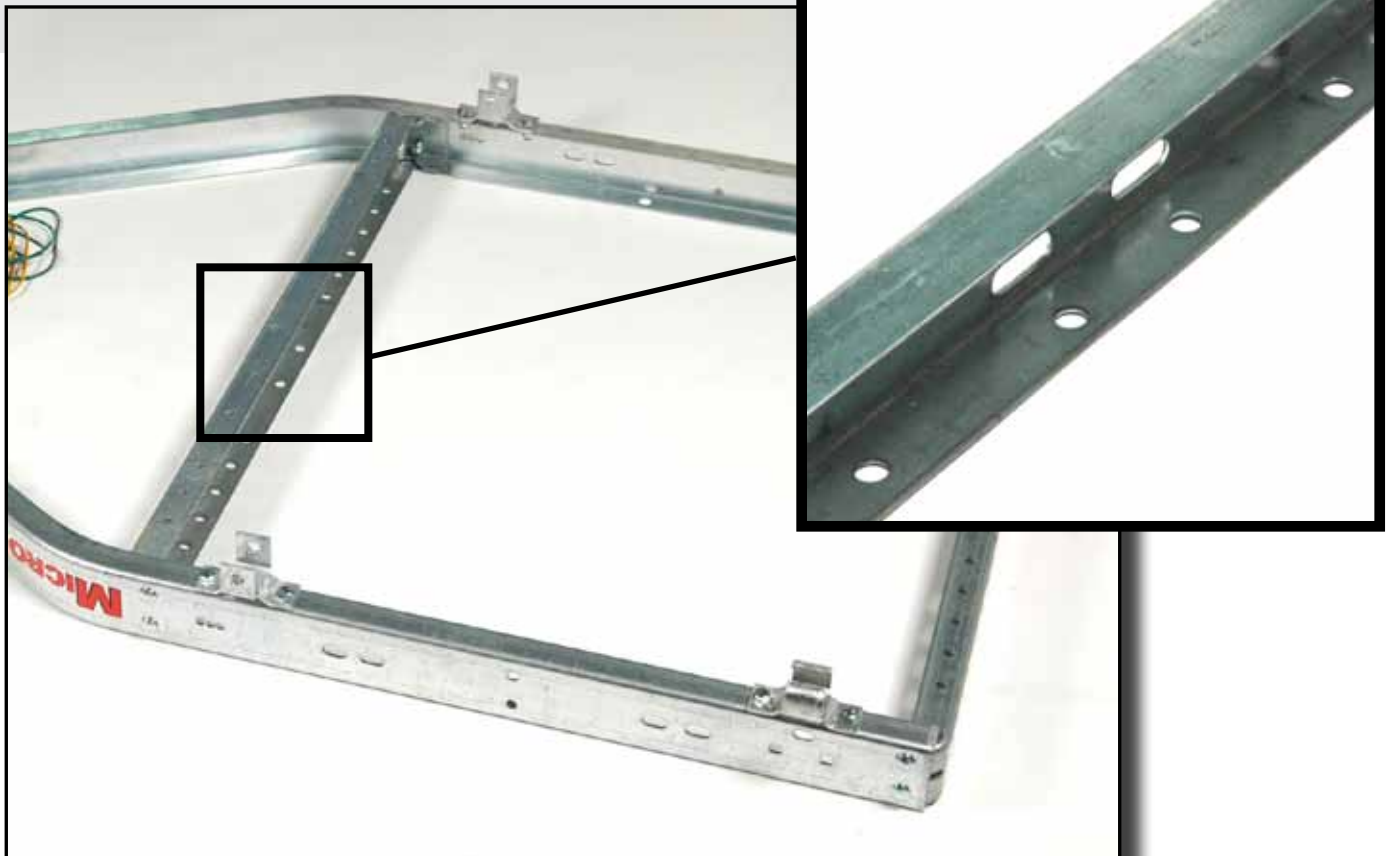
8. Bolt the tongue support to the frame rails using 3/8" x 1" carriage head bolts. Note the square heads go on the outside with the square holes in the frame. Assemble with washers and nuts on the inside. Hand tighten only.



9. Clamp the frame rails around the tongue as shown using two 1/2" x 3-1/4" bolts. Use a washer on both sides. Hand tighten only.



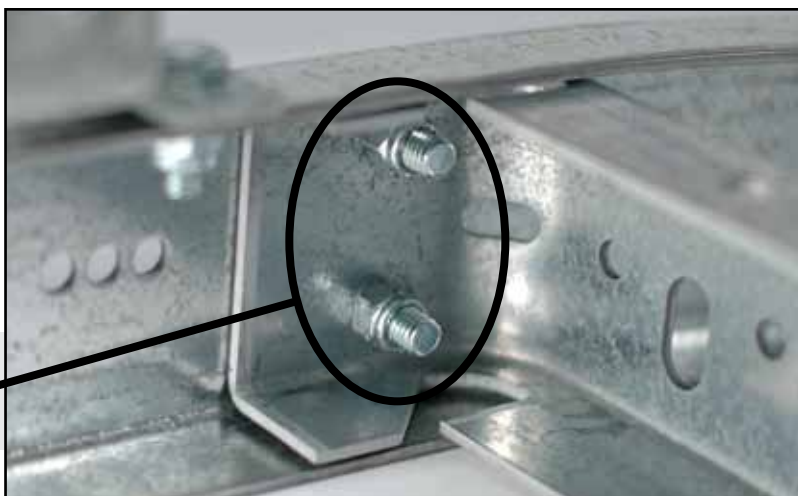
10. Lay the two frame cross members in between the frame rails. The two holes in the middle should face DOWN as shown. Bolt the frame rails to the cross members using 3/8" x 1" carriage bolts and nuts, (no washers). The square carriage heads go to the outside with the square holes in the frame rails. Hand tighten only.



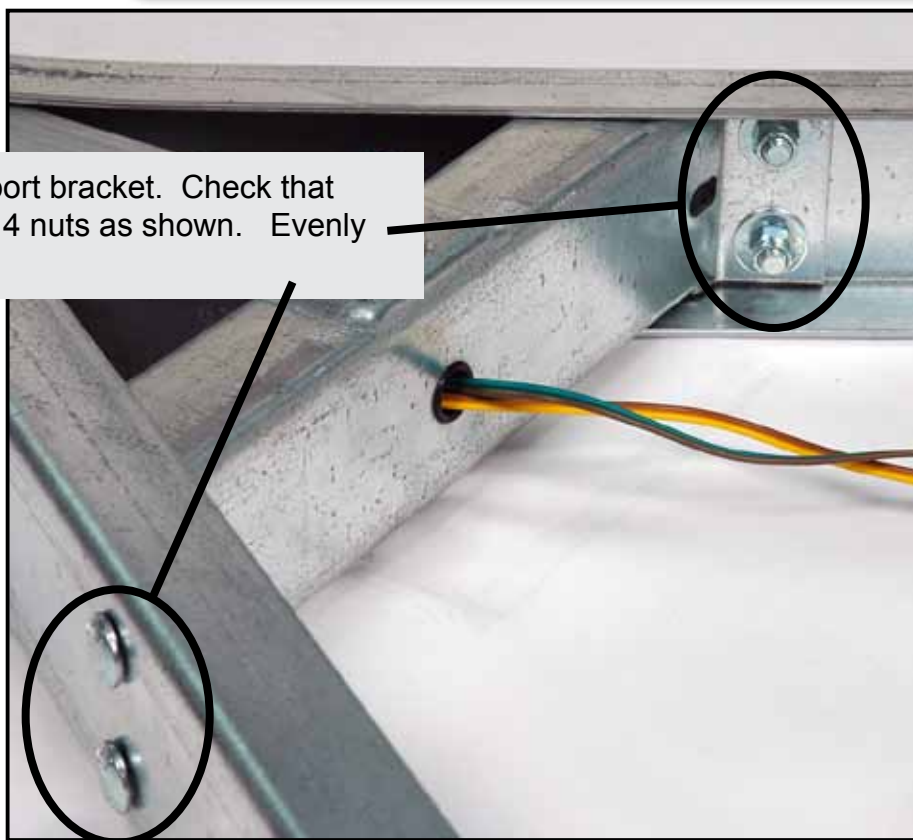
11. **TIME TO TIGHTEN**

FRAME BOLTS: Its important to follow this tightening sequence in order to insure the trailer will be straight after everything is tight.

A) Tighten the 8 nuts holding the ends of the two cross members.



B) Tighten the rear tongue support bracket. Check that you installed washers under the 4 nuts as shown. Evenly tighten the 4 nuts.

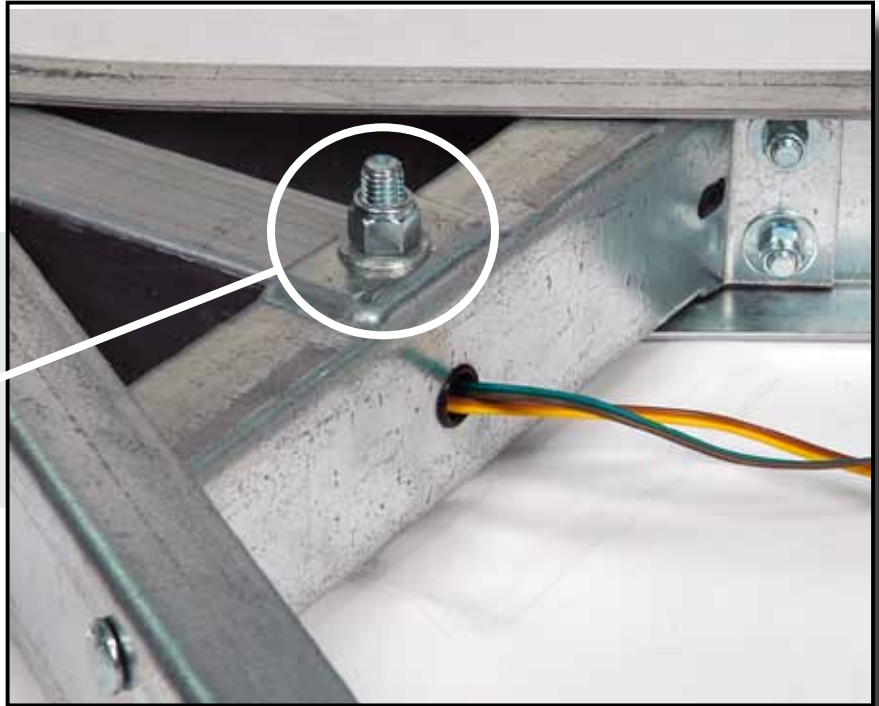


C) Tighten the two tongue bolts snug to the frame rails.

DON'T overtighten, you will just crush the tongue.



D) Tighten the big bolt thru the rear of the tongue and tongue support. Not too tight, don't crush the tongue.

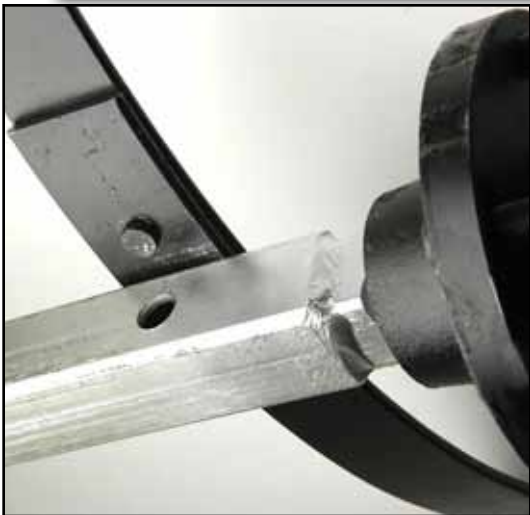


Your frame assembly is now complete and should look like this.



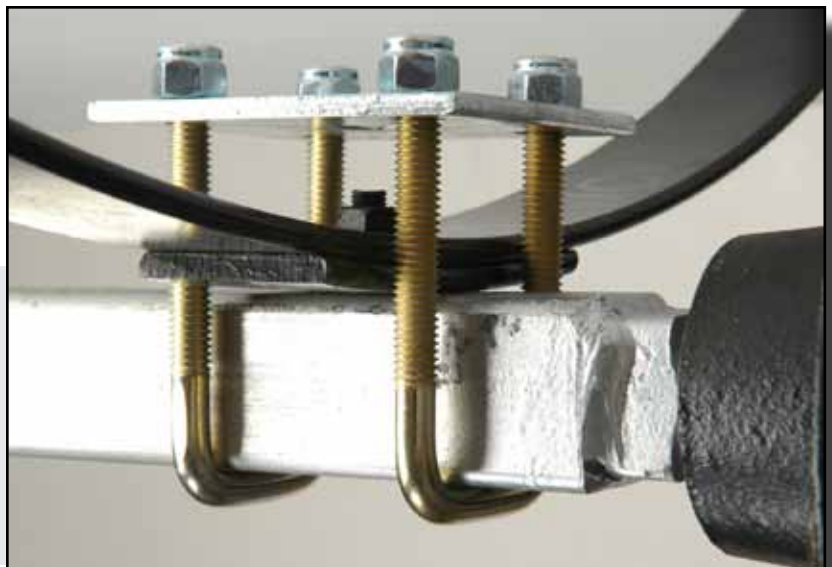
SPRING AND AXLE ASSEMBLY (Group 2)

1. Set the envelope containing the manufacturer's certificate of origin (MCO) and VIN labels aside in a safe place.



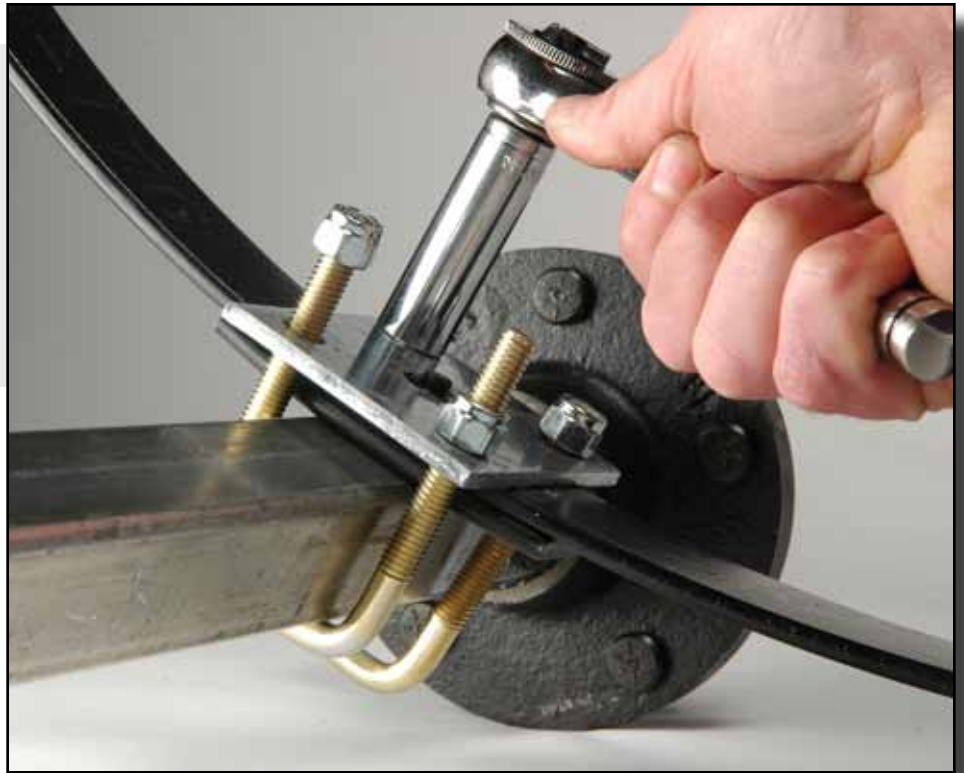
2. Spin the axle to find the side with the spring centering holes. These holes mate with the spring center stud as shown to the left.

3. Lay the springs on top of the axle with the centering studs in the holes in the axle. Then assemble the U-bolts, tie plates and nuts as shown. **Make sure both springs are turned with the ends facing the same way!!!**



4. Run each nut down **UNTIL IT TOUCHES THE PLATE ONLY! DON'T TIGHTEN !!**

You will need to wiggle the springs to fit them into the spring brackets in the next step.



5. Lift the axle/spring assembly to the trailer frame and slide the slipper spring ends into the slipper spring brackets as shown



8. Wiggle the spring eyes into the front hanger brackets and bolt using 1/2" x 3" bolts and self locking nuts. Tighten the shackle bolts ONLY until they grip the sides of the brackets. This is a hinge, the spring needs to move freely.

9. Now that the axle assembly is attached to the frame, tighten the axle U-bolts evenly until there is a slight bend in the tie plates.



10. Slip the hub caps thru the wheels from the back then mount the wheels onto the hubs and hand tighten the lug nuts.



11. From behind the trailer, lift the rear cross member and roll the trailer over onto the tires.

ALWAYS BEND FROM YOUR KNEES WHEN LIFTING. IF THE TRAILER IS TOO HEAVY FOR YOU TO FLIP SAFELY FIND FRIENDS TO ASSIST YOU.



12. Tighten the lug firmly to 75 to 85 foot pounds of torque.

LIGHT ASSEMBLY (Group 3)

REFERENCE:

Trailer Wiring Color Code

- Brown = running lights
- Yellow = left turn / left brake
- Green = right turn / right brake
- White = ground



1. Attach the tail lamp brackets to the frame as shown using 3/8" x 1" carriage head bolts and nuts. No washers are needed.

2. Sandwich the license plate mounting bracket between the left side lamp and the left side tail lamp bracket. Attach the tail light using the nuts provided with the lamp kit. Then mount the right side lamp.



3. Use the 3 holes just above the spring bracket to mount the amber side lamps. Put the stud through the forward hole and the wire through the rear hole. Tuck the wire so the lamp sits flush on the frame. The middle hole is unused.



4. Check the coil of wiring harness outside the tongue grommet.

5. Route the GREEN/BROWN wire along the RIGHT side of the frame.
Route the YELLOW/BROWN wire along the LEFT as shown.



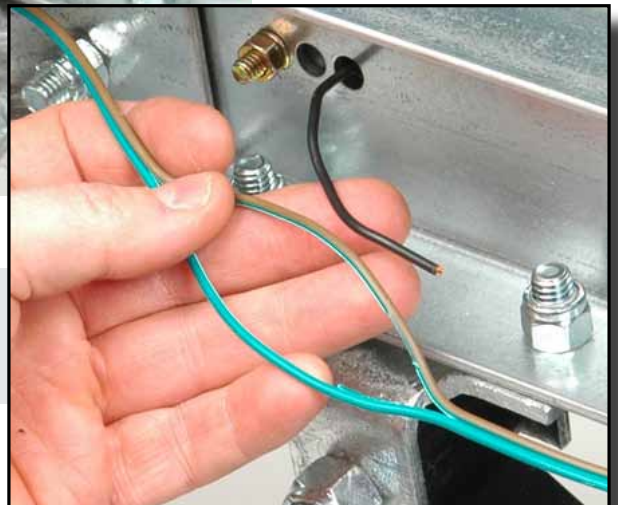
6. Use the clips provided to secure the wire to the inside of the frame channel as shown



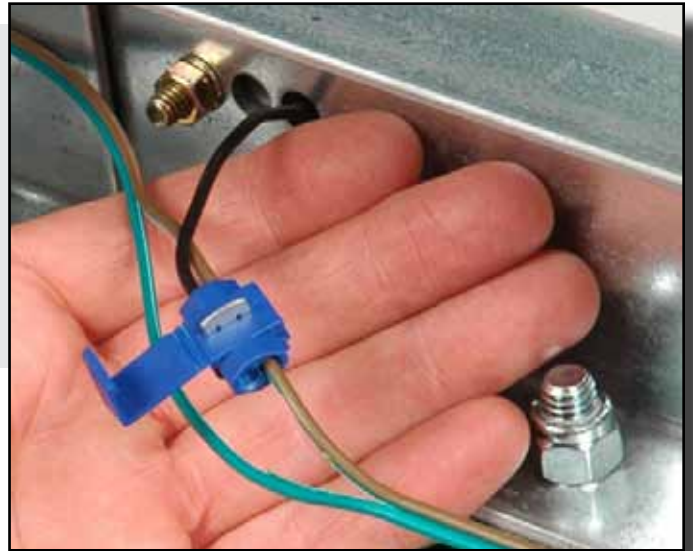
7. Route the wires thru the mid cross member as shown then secure the harness in place using the frame clips provided. Use your knife to CAREFULLY divide 1/2" of the green/brown wire and the yellow brown wire just below the side lamp as shown.



8. Then grasp either side of the cut with your fingernails and pull to separate 3" of wire as shown.



9. Press the brown wire into the quick connector as shown. Then insert the wire from the side marker light fully into the 2nd opening. Use pliers to squeeze the conductor blade down and thru the insulation. The blade cuts thru the insulation and connects the wires inside. Flip the cover to lock the connector. Repeat on the other side again using the brown wire.



10. Route the wires out to the tail lights via the slotted hole under the lamp brackets. Determine how much excess wire to cut off. Be sure and leave yourself a few inches of extra wire. You can always cut away more later if need be.

11. Strip 1/2" of insulation off the ends of all 4 tail light wires. Twist the exposed copper strands to stiffen them.



12. There are holes in the back side of each lamp marked by wire color. Identify which hole is for which color wire. Then carefully push the twisted wire straight into the corresponding hole. You will feel the wire slide under the wire gripper inside the lamp as you push the wire into it. Once the wire is pushed in it will not come back out. Tug gently to check for a good connection. Repeat on the other side.



FENDER ASSEMBLY (Group 4)



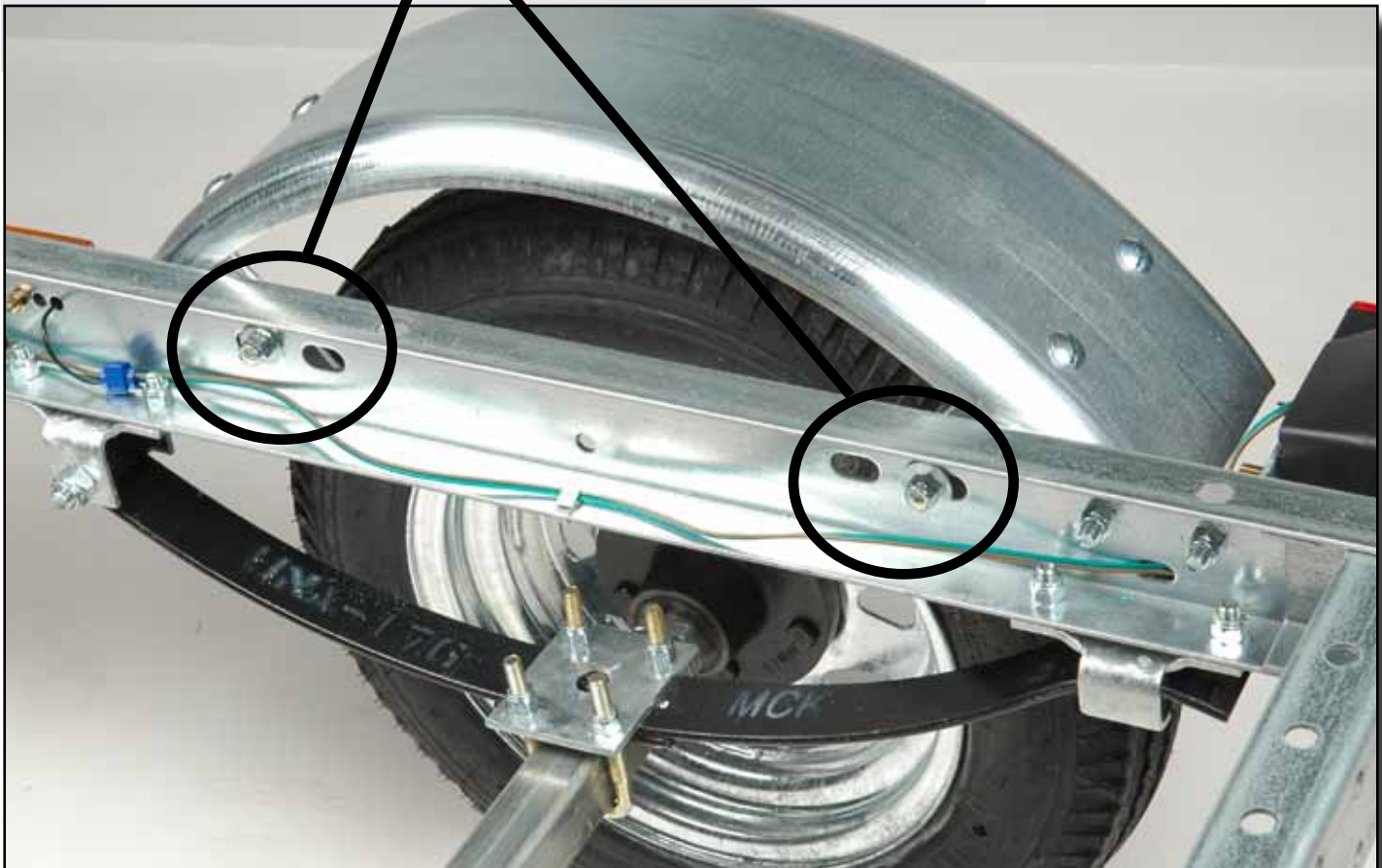
1. Connect all 4 fender brackets to the fenders using 3/8" x 3/4" slot head screws and nuts. Assemble with the nuts to the inside of the fenders as shown. No washers here. Fully tighten all 8 screws and nuts.

Note that fenders are symmetrical and will fit on either side of the trailer.



Note that when bolting the mounting brackets to the frame you will install a washer on both sides, under the head of each bolt and under each nut.

4. Using 3/8" x 1" bolts, washers on both sides, and nuts, attach the fender brackets to the slotted holes in the frame as shown. NOTE you will use the center hole in the bracket and the outside two slotted holes in the frame.

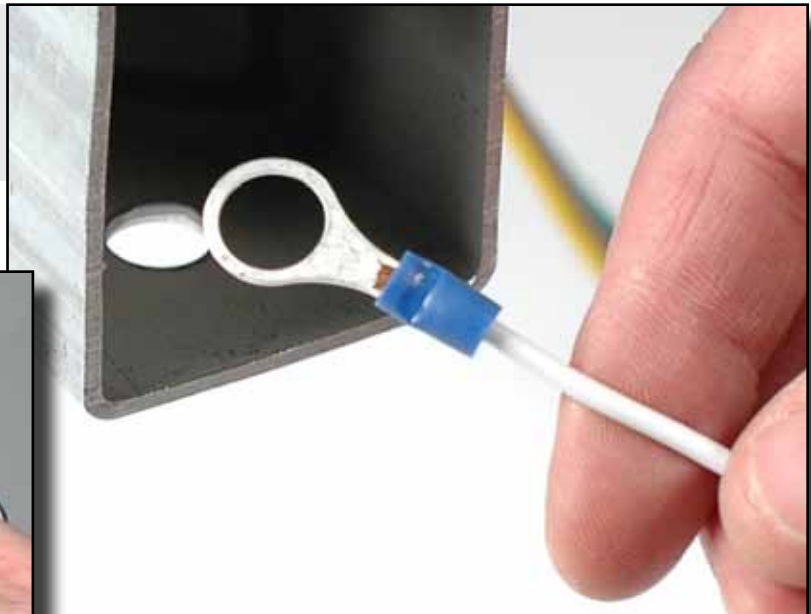


5. Tighten bolts fully and repeat for other side.

COUPLER ASSEMBLY (Group 5)



1. Installing the ground wire connector. Strip 3/8" of insulation off the white ground wire and crimp on the ring connector as shown.

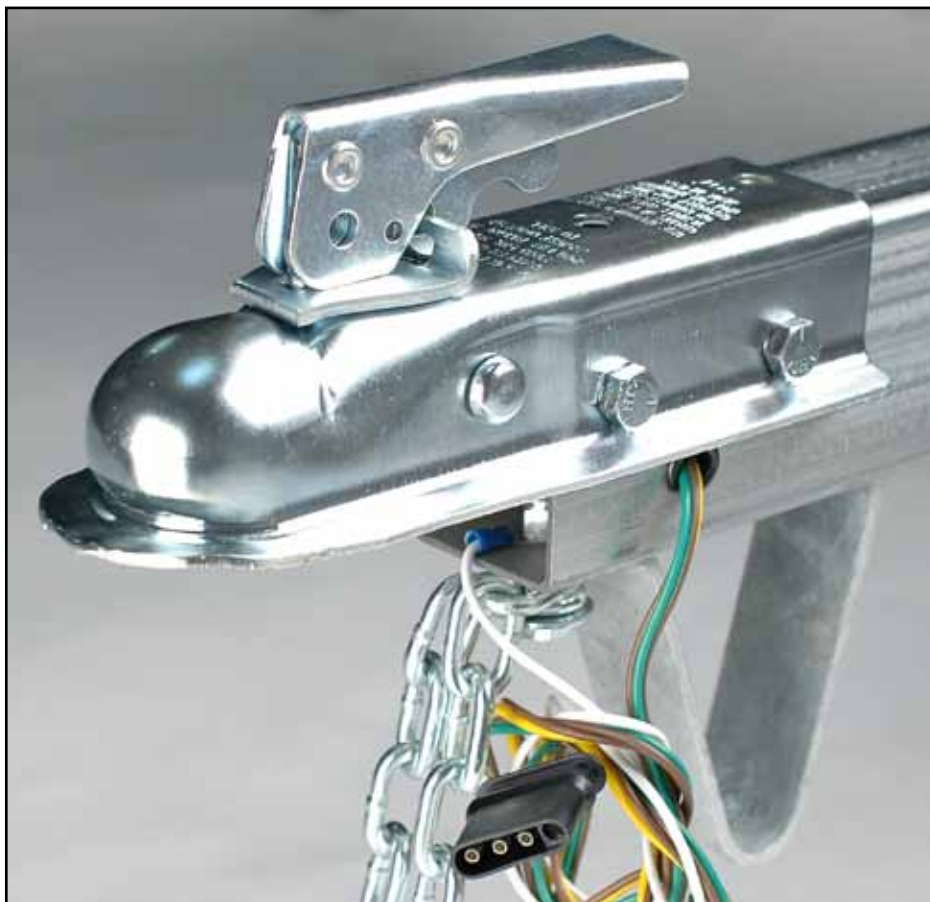


2. Assemble the tongue skid and safety chain assembly with a 3/8" x 1-1/2" bolt as shown. Use washers above and below the chain ends.

3. Place the skid and chain assembly under the tongue and insert the bolt up through the skid bolt hole on the bottom of the tongue as shown.

4. Slip the ring terminal over the bolt and install the nylon lock nut hand tight.

5. Check that the rear end of the skid is still in its hole in the bottom of the tongue. Tighten the bolt while holding the nut stationary. This way the ring terminal remains straight.



6. Install the coupler on the tongue and fully tighten as shown. Tighten until the coupler is tight onto the tongue. Don't crush the coupler and tongue by tightening excessively.

LOAD BAR ASSEMBLY (Group 6)



bag 11497

1. Attach a load bar support tube onto the rear cross member. Cross the U-Bolts. Center the support tube and brackets on the trailer and tighten.



2. Attach the second support tube 48 inches forward. Install these U-bolts parallel, not crossed. Measure 48" on both sides of the trailer to be sure the load bar is on straight, then tighten the U-bolts.



3. Use your hammer and carefully pound the end plugs into the ends of the support tubes. Install the caps onto the ends of the U-bolts.



4. Install the load bar brackets onto the ends of each tube and turn the bracket so the 2 hole flange is level. Snug the mounting bolt.



5. Slip 2 carriage bolts into the end of each load bar.



6. Flip the load bar over and insert the carriage bolts into the load bar brackets. Add nuts, center the bar and tighten.



7. Install the end caps on the load bars

8. Go back now and re-check that all nuts and bolts on the entire trailer are securely tightened.



Apply the supplied VIN Decal and TIRE AND LOADING Decal as shown below, onto the left side of the towing tongue near the coupler on either side of the CAUTION Decal. Be sure to clean the frame well before applying the decals.



**Your MicroSport Trailer is now complete and ready to register and title !
Contact your local DMV office for specific procedures in your State.**



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