

# MALONE

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## Malone MicroSport Trailer™

Model MPG460XT Assembly Instructions



Take a few moments and read through these instructions to familiarize yourself with the step by step assembly process *before you begin turning wrenches*. Unpack and sort the components into groups as shown in the following pages.

Then assemble each group in order. *Lets get started !!*

### Required Tools:

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

Visit us at ***maloneautoracks.com***  
for more fine products and accessories.

Group 1:  
Frame  
Components

Bag 11491

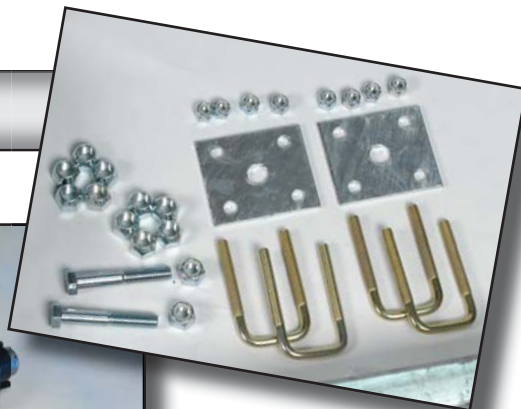


Bag 11462



Group 2:  
Axle / Spring  
Components

Bag 11476





### Group 3: Lighting Components

Bag 11468



### Group 4: Fender Components

Bag 11464



### Group 5: Coupler Components

Bag 11494



## Group 6: Load Bar Components



Bag 11489

## FRAME ASSEMBLY (Group 1)

1. We assemble the frame upside down to make it easier to install the springs and axle. Once the spring 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 all be upside down.

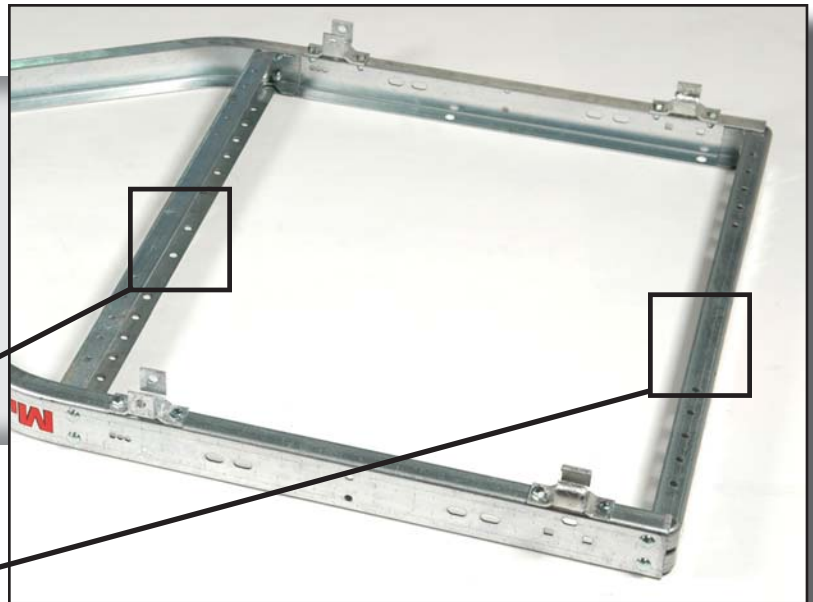




2. Attach the spring hanger brackets to the frame. The U shaped shackle bolt brackets mount to the front and the C shaped "slipper" brackets mount to the rear as shown. Use 3/8" x 1" bolts and nuts. Assemble with the nuts on the inside of the frame rails. Fully tighten all 8 bolts now.

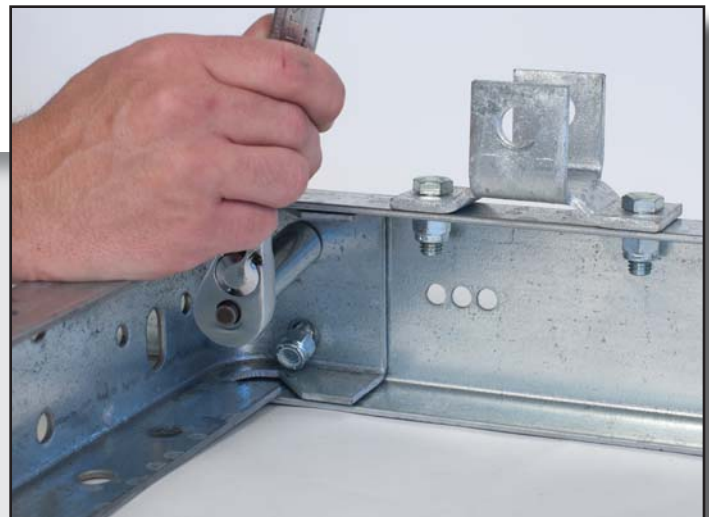


3. Lay the two frame cross members in between the frame rails. The two holes in the middle should face DOWN as shown. Channels face each other.

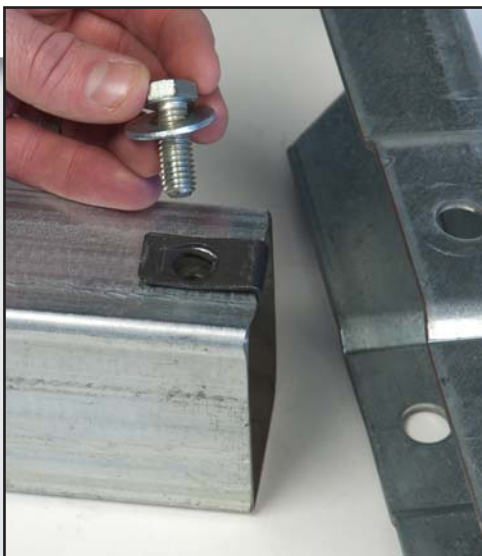


4. Bolt the frame rails to the cross members using 3/8" x 1" carriage bolts and nuts, (no washers). The square carriage heads go to the outside with the square holes in the frame rails.

Leave the nuts loose until after all bolts are installed. You will tighten everything at once in a later step.



5. Slide the clip nut onto the hole in the top of the short tongue. Note, these two parts are symmetrical so it doesn't matter which way they are turned. Slide the short tongue inside the tongue support and install a bolt and washer hand tight only. Flip the assembly over so the bolt is on the bottom.



6. Set the assembly inside the frame and slide it forward in between the frame rails until the holes all come into alignment.



7. Push the retractable tongue box onto the frame and slide it rearward to engage its notch inside the tongue support. Install 1/2" bolts with washers on both sides, the forward 1/2" bolt getting a crush preventer tube inside the short tongue. Hand tight both 1/2" bolts with washers on both sides.





8. Bolt the tongue support to the frame rails using 3/8" x 1" carriage head bolts. Assemble with washers and nuts on the inside. Don't fully tighten.



9. FRAME BOLT TIGHTENING: Starting at the rear of the frame fully tighten each bolt, working to the front, fully tighten all frame bolts ending with the 1/2" bolts.

You don't have easy access to tighten the rear tongue support bolt until after you flip the trailer over.

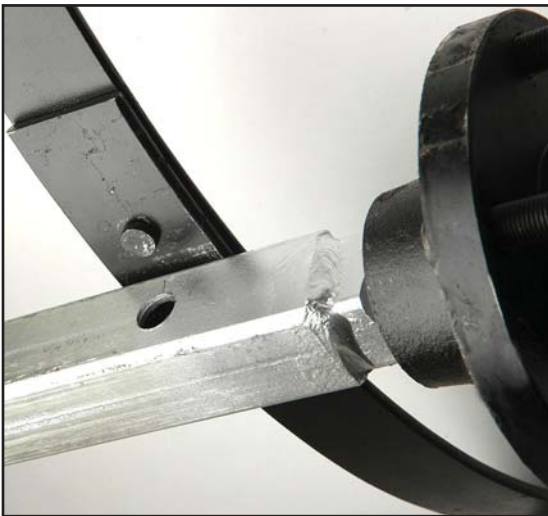


## SPRING AND AXLE ASSEMBLY (Group 2)

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

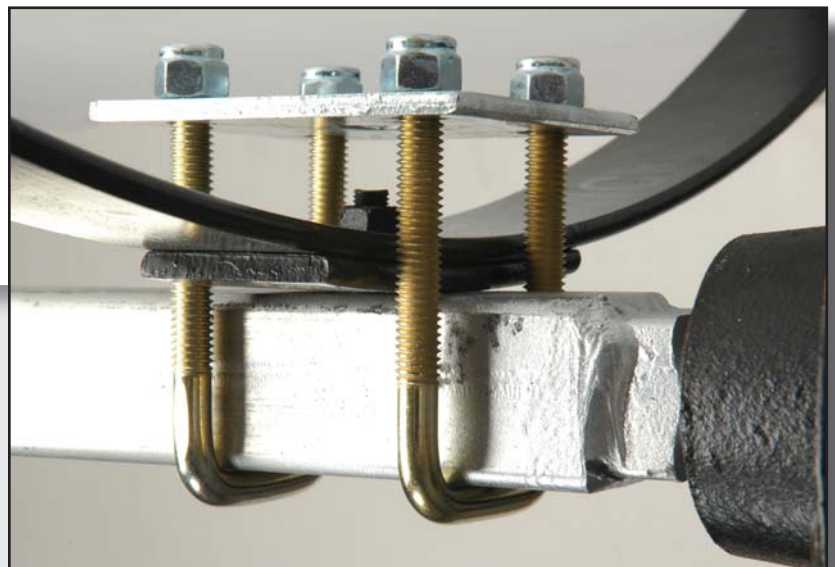


2. Spin the axle to find the side with the spring centering holes. These holes mate with the spring center stud (shown to the left)



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!**

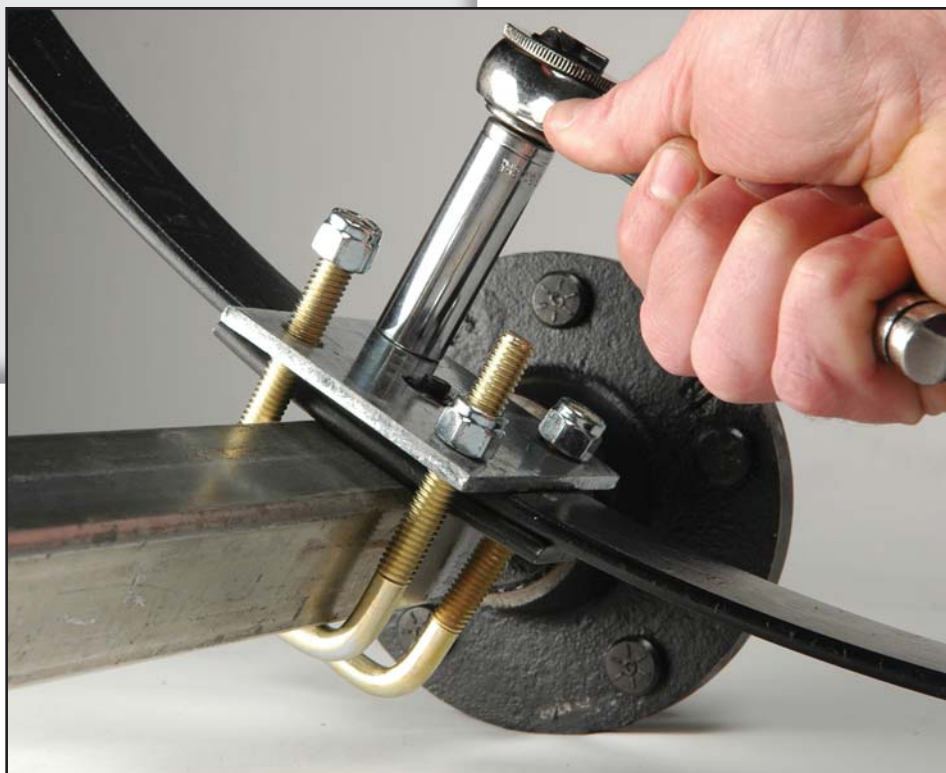




4. Run each nut down but,

**ONLY UNTIL THE NUTS  
ALMOST TOUCH  
THE PLATE !!**

*You will need lots of wiggle in  
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. Then lower the axle resting the spring eyes on the front brackets however they land.



6. Wiggle the spring eyes into the front hanger brackets and bolt using 1/2" x 3" bolts and self locking nuts. Nuts to the inside. Tighten the shackle bolts ONLY until they grip the sides of the brackets. Remember, this is a hinge. The bolt should remain still in the bracket allowing the spring eye to move freely.



7. Now that the axle assembly is attached to the frame, tighten the axle plate U-bolts evenly until there is a slight bend in the tie plates. Don't over tighten.

8. Slip the hub caps through the wheels from the back then mount the wheels onto the hubs. Hand tighten the lug nuts.



9. Grasp the front of the trailer, lift with your knees and step around the trailer when it balances on the rear of the frame, then let it down onto the tires.

ALWAYS BEND FROM YOUR KNEES WHEN LIFTING.

IF THE TRAILER IS TOO HEAVY FOR YOU TO LIFT SAFELY, STOP, GET SOME FRIENDS TO ASSIST YOU.

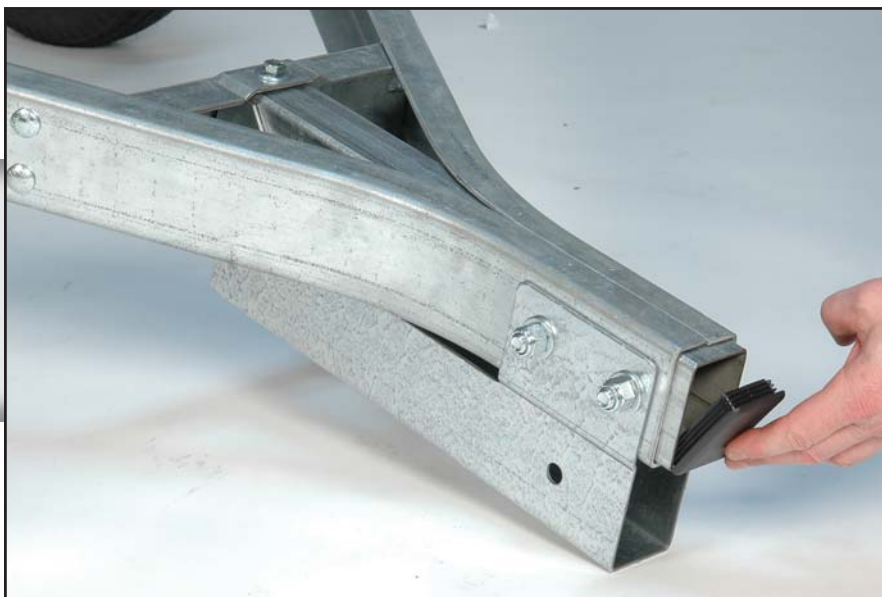




10. Tighten the lug firmly to 75 to 85 foot pounds of torque.



12. Install the 2" x 3" plastic hole plug into the end of the frame as shown. Use your hammer to tap it in.



13. Fully tighten the bolt in the top of the tongue support



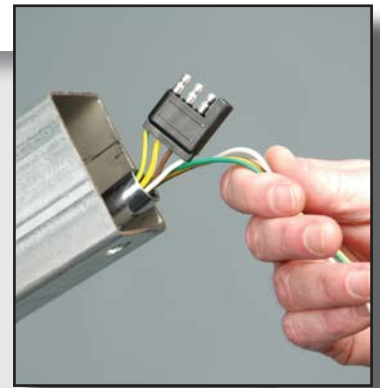
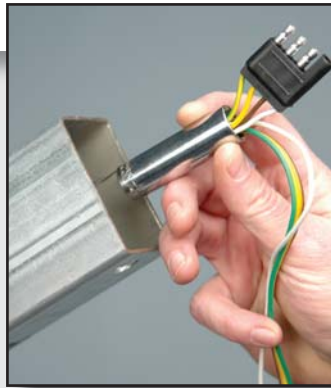
13. Attach the two rubber stand-up feet to the rear of the frame. Tighten until snug only.



14. Cut two slits for the bolts to pass through the decal. Attach the retractable tongue retainer bracket to the inside of the rear frame crossmember with a washer under the bolt head.

15. Install the wiring harness extension through the tongue.

The easiest way is to let gravity pull the harness through. Make a fold in the harness near the end with the white ground wire. Push the fold into a heavy socket (or tape any heavy object to the fold). Feed the weight into the tongue and let gravity pull the harness through. Remove the weight.



16. Slide the rear end of the tongue into the retractable receiver box until the pin hole in the box aligns with one of the 2 pin holes in the sides of the tongue. Pass the hitch pin through and install the ring clip.





## LIGHT ASSEMBLY (Group 3)

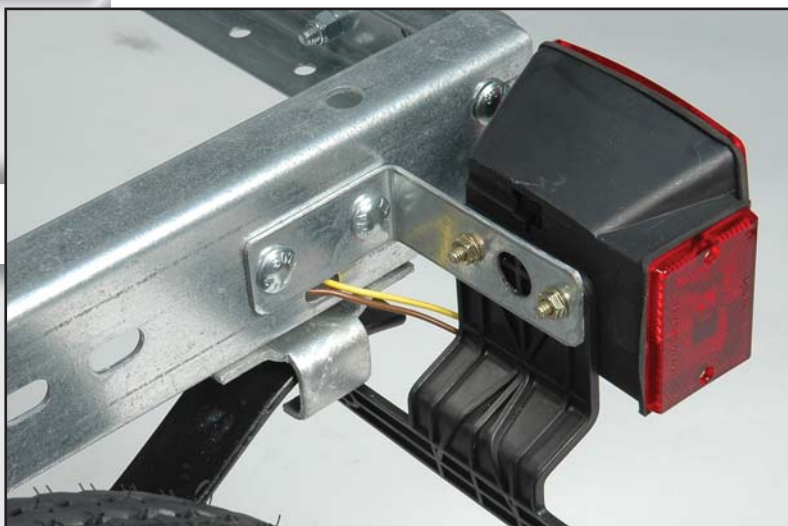
### REFERENCE:

#### Trailer Wiring Color Code

- Brown = running lights
- Yellow = driver side stop / turn
- Green = passenger side stop / turn
- 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.



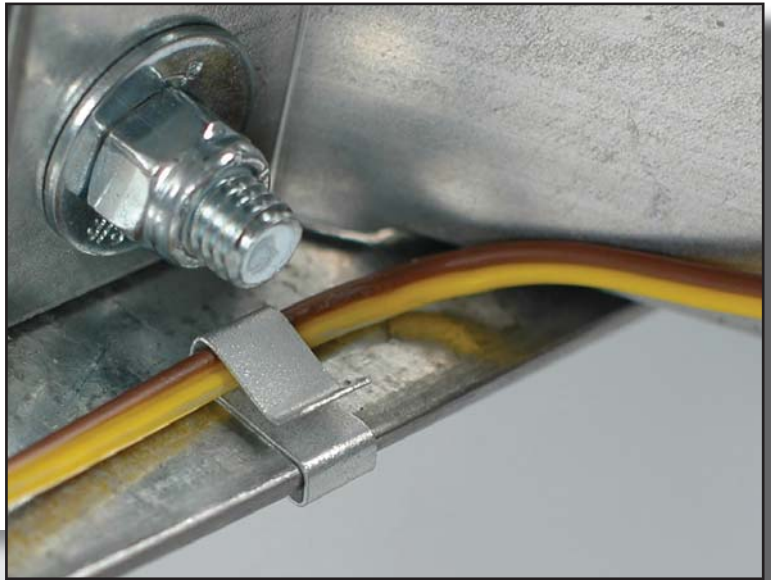
2. Sandwich the license plate mounting bracket between the driver side lamp and the driver side tail lamp bracket. Attach the tail light using the nuts provided with the lamp kit. Then mount the passenger side lamp.

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



4. Routing the wiring harness.

- Route the GREEN/BROWN wire along the RIGHT side of the frame.
- Route the YELLOW/BROWN wire along the LEFT side of the frame.



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

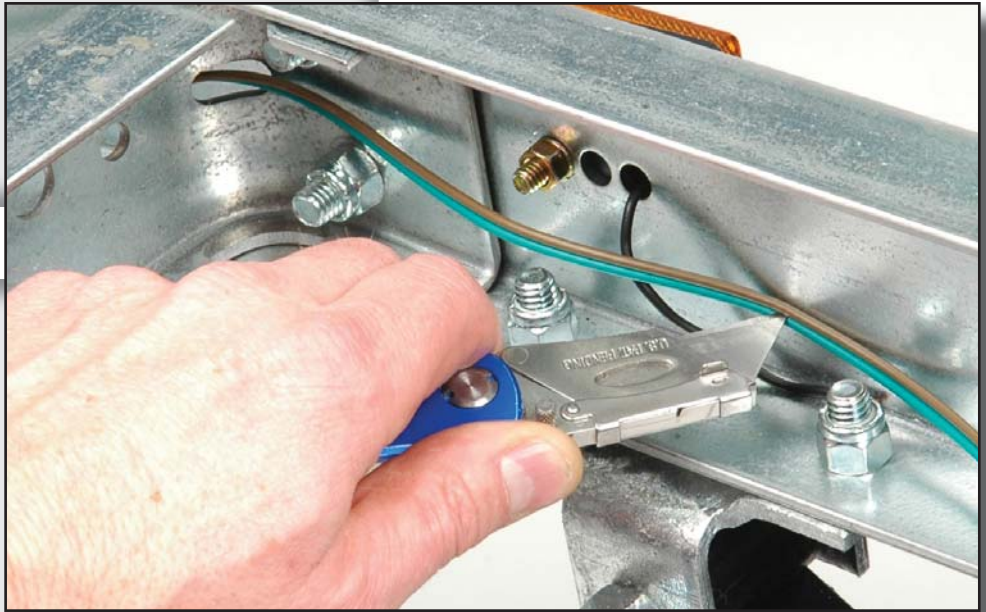
6. Position the harness connector off center close to a frame rail as shown. This holds the connector up at the frame during trailering.



7. The white wire on the connector is not needed at this location on the trailer. Clip it off flush with the connector.



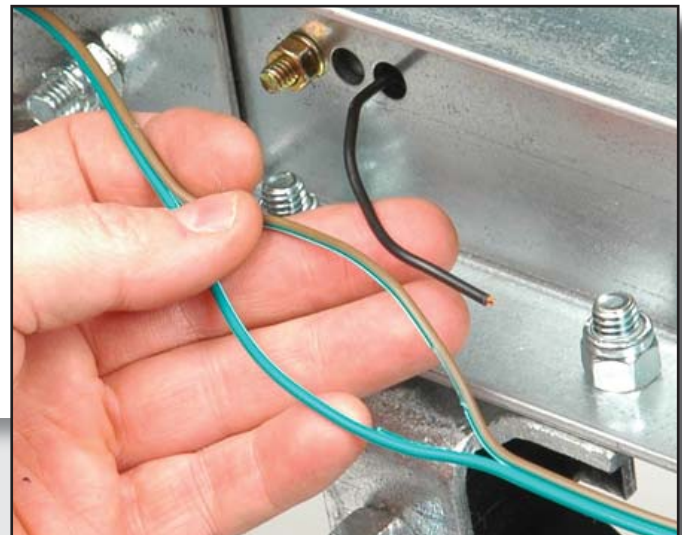
8. Route the wires thru the mid cross member as shown then secure the harness in place using the frame clips provided.



9. Connecting the side lamps.

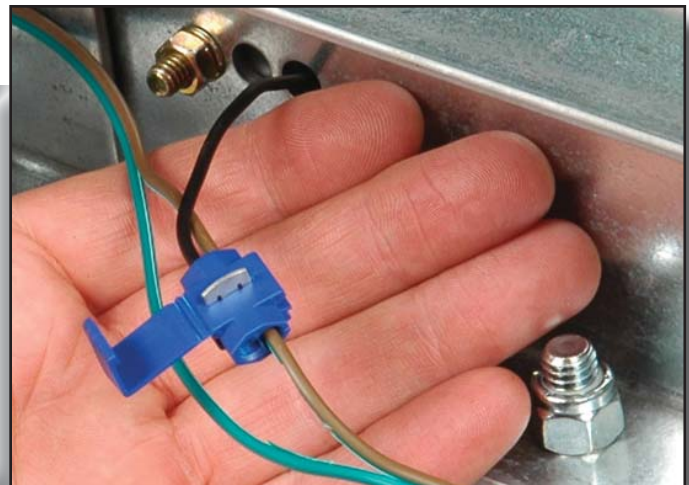
To control cutting between two conductors without damaging the wire or yourself, press the wire flat against the frame then squarely push the blade tip between the conductors until it hits the frame. Then with the knife tip still held firmly against the frame, pull the wire gently away from the frame so the blade cuts between the wires. This way you don't get cut and the risk of cutting too much is greatly reduced.

Divide only about 1/2" of wire. Set the knife aside.



10. Grasp either side of the cut with your fingernails and pull to separate 3" of wire as shown.

11. 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 through the insulation. The blade cuts through the insulation and connects the wires inside. Flip the cover to lock the connector. Repeat on the other side again using the brown wire.

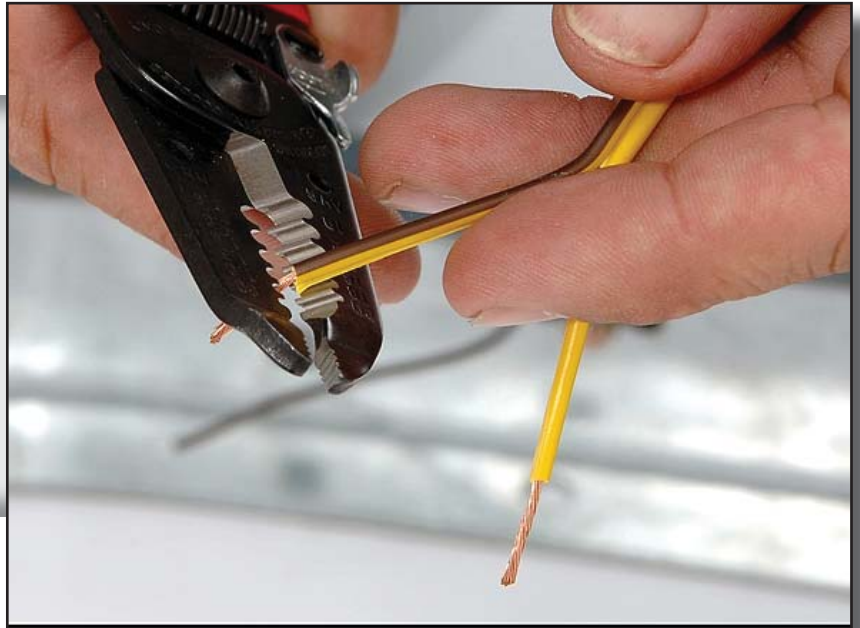


12. Route the harness wires to the tail lights along the frame. Use wire clips to secure the wires.

13. Pass the lamp wires inward through the hole under the tail lamp mounting bracket.

14. Cut the harness wires off with 10" extra working length at the tail lamp wires.

15. Strip 1/2" of insulation off the ends of all tail light wires.



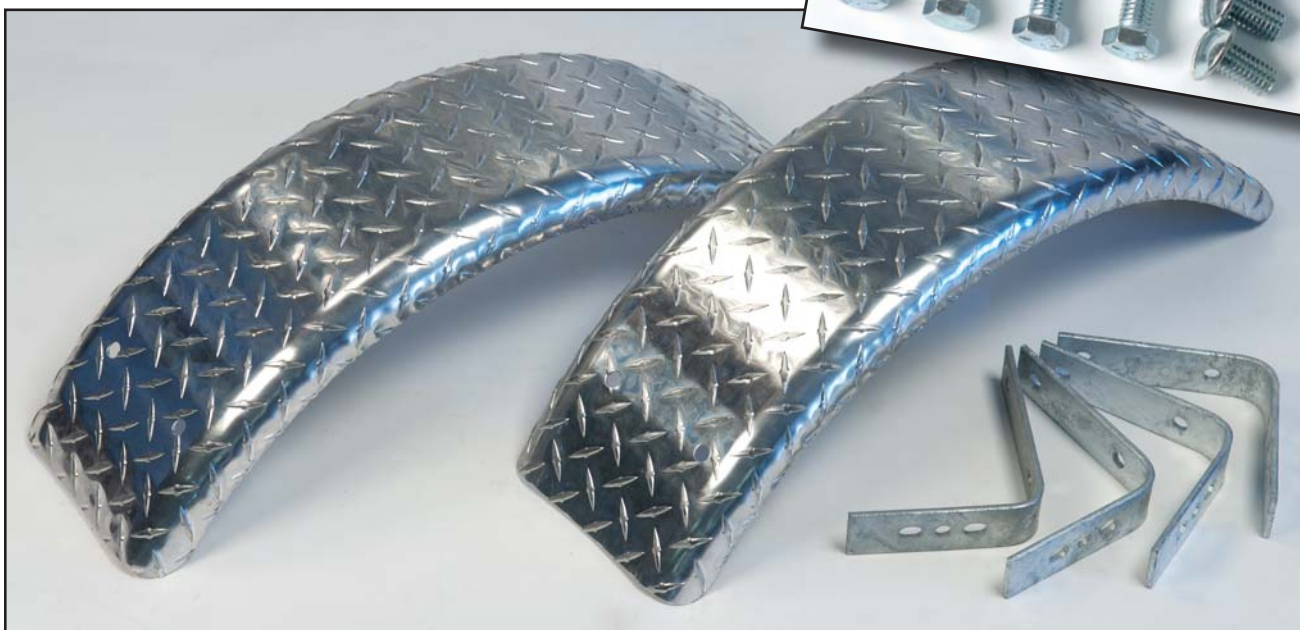
16. Using your fingers, twist together in a clockwise motion the lamp wire and harness wire, of the the same color. Carefully screw the wire nut over the twisted copper in a clockwise rotation. The threads inside the wire nut will grip the wires together. Repeat for all four wires.





## FENDER ASSEMBLY (Group 4)

MPG460XT

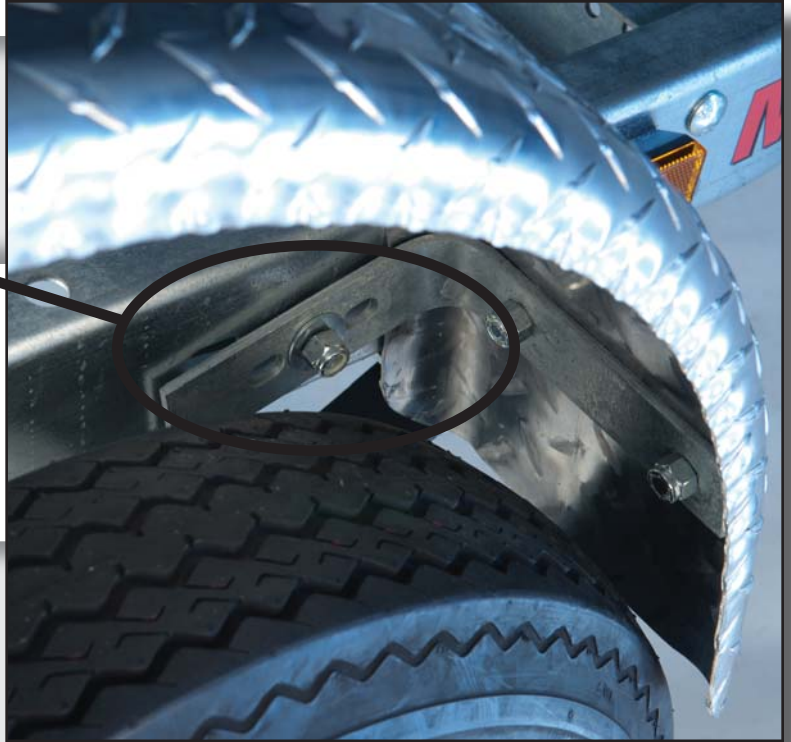


1. Connect all 4 fender brackets to the fenders using 3/8" x 3/4" slot head screws and nuts. Assemble with the nuts to the inside of the fenders as shown. No washers here. Fully tighten all 8 screws and nuts.

**Note:** fenders are symmetrical and 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.



2. 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.



3. Tighten bolts fully and repeat for other side.



# COUPLER ASSEMBLY (Group 5)

MPG460XT



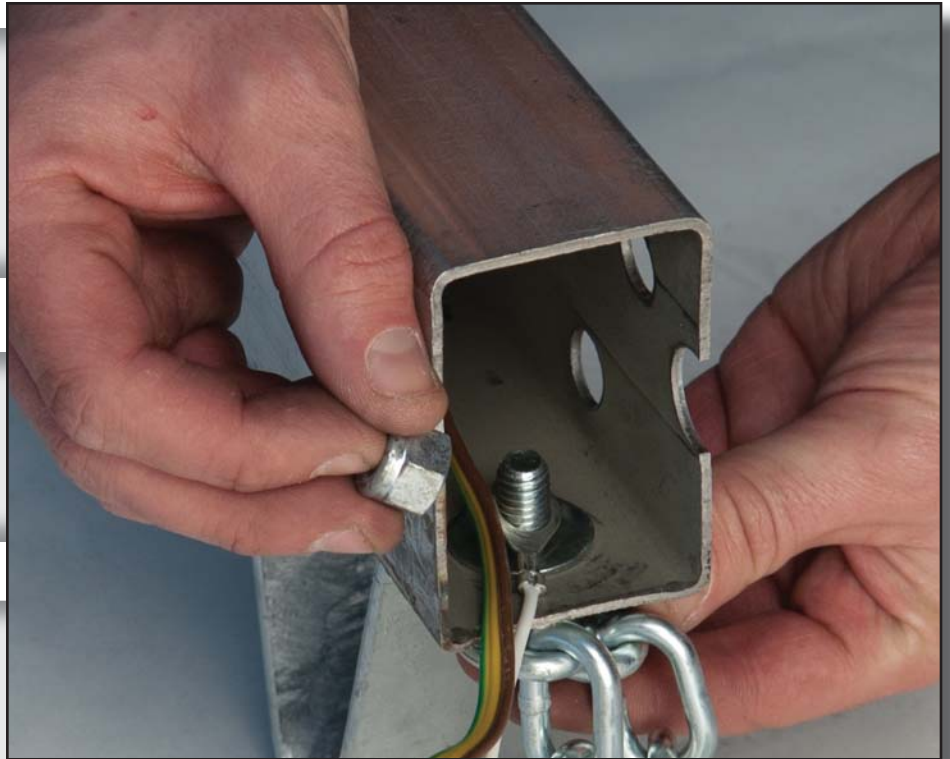
1. Assemble the tongue skid and safety chain assembly with a 3/8" x 1-1/2" bolt as shown. Use washers above and below the chain ends.



2. 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.

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

4. 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.



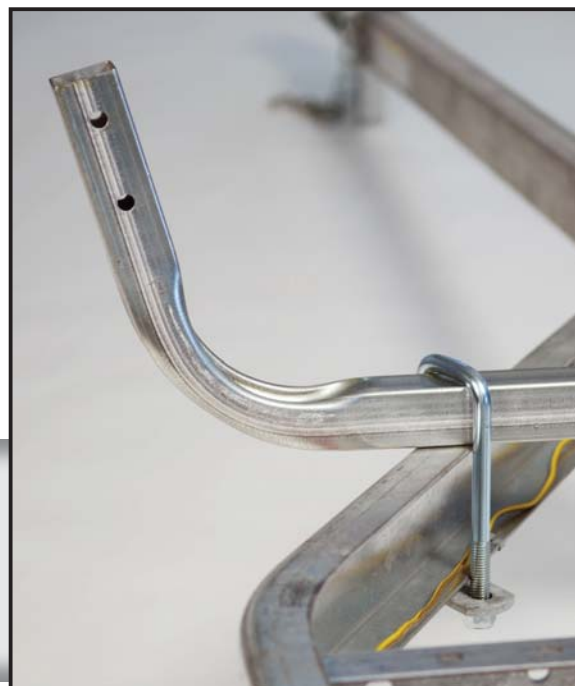
5. Install the coupler and coupler handle onto the tongue as shown. Then tighten until the coupler firmly grips the tongue. Don't over tighten and crush the tongue.



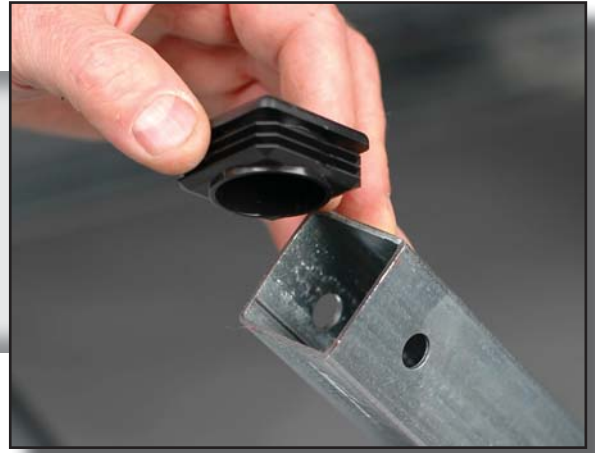


1. Attach a load bar support tube onto the rear cross member. Center the support tube on the trailer and tighten.

2. Attach the second support tube 48 inches forward. Measure 48 inches on both sides of the trailer to be sure the load bar is on straight and centered, then tighten the U-bolts.



3. Use your hammer and carefully pound the end plugs into the ends of the support tubes.



4. Slip the load bar brackets over the load bars (as shown) and loosely install the two small carriage bolts / nuts through each bracket trapping the load bars inside the brackets.



5. Install and hand tighten the bolts holding each bracket to the support tube.





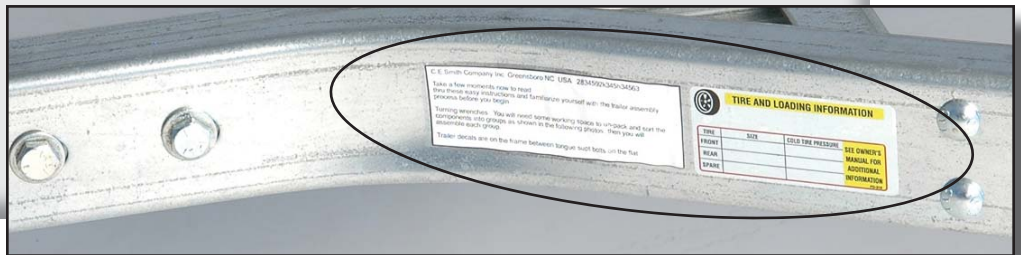
6. Center the load bars to the trailer, then tighten all 12 bracket bolts.



7. Go back now and recheck that all nuts and bolts on the ENTIRE trailer are securely tightened.

## DECALS, REGISTRATION & TITLING

Apply the TIRE AND LOADING Decal and the VIN Decal onto the left side of the frame. Be sure to clean the frame 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.**



To use the retractable tongue.

1- Disconnect the extension harness from the frame harness and tuck the harness into the rear of the tongue.

2- Remove the hitch pin from the frame.

3- Slide the tongue into the frame until the end of the tongue aligns with the retainer bracket as shown to the right.

4- Install the hitch pin and retainer ring.



When retracted, the trailer may stand up on end, either against a wall, tree or post for reduced footprint storage as shown. When standing, always secure the trailer so it cannot fall over.



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