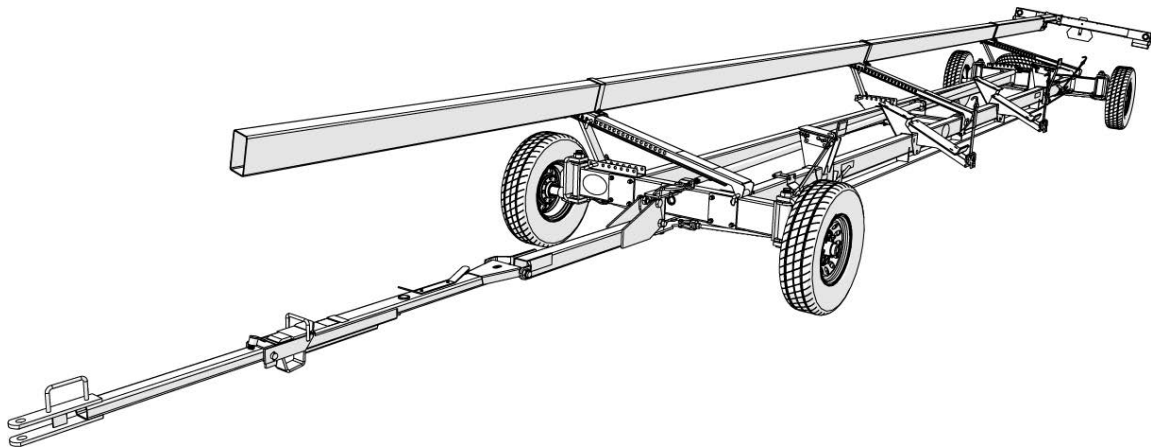




# Manual

## 4WS HD Header Transport

ASSEMBLY MANUAL



Rev. 1.10.2023

**J&M Manufacturing Co, Inc**

284 Railroad Street - P.O. Box 547 | Fort Recovery, OH 45846 | Ph: (419) 375-2376 | Fax: (419) 375-2708

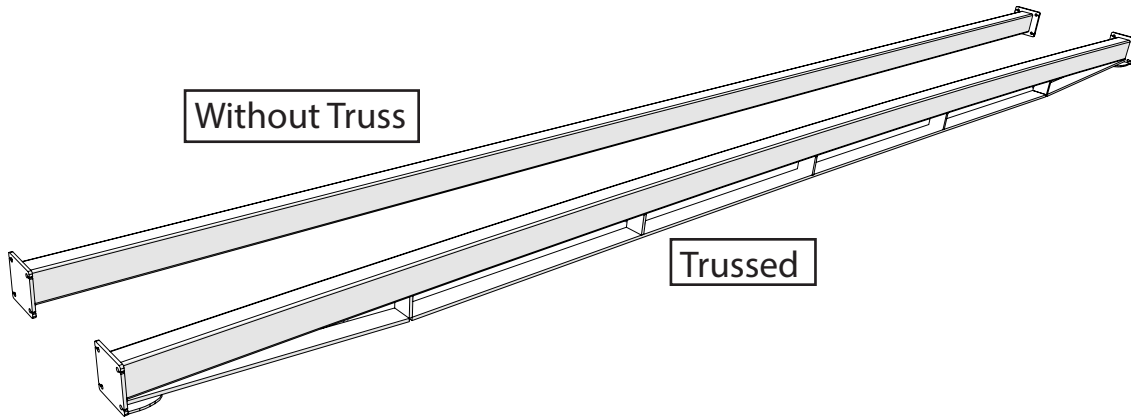
[www.jm-inc.com](http://www.jm-inc.com)

# Set-Up Instructions

## Mounting the Front and Rear axles

- Set both of the bottom frame bars on two sawhorses or blocks.

**NOTE: Place 4" blocks under the small lower bar so the ends are level. The small lower bar is the bar without the truss pictured below.**

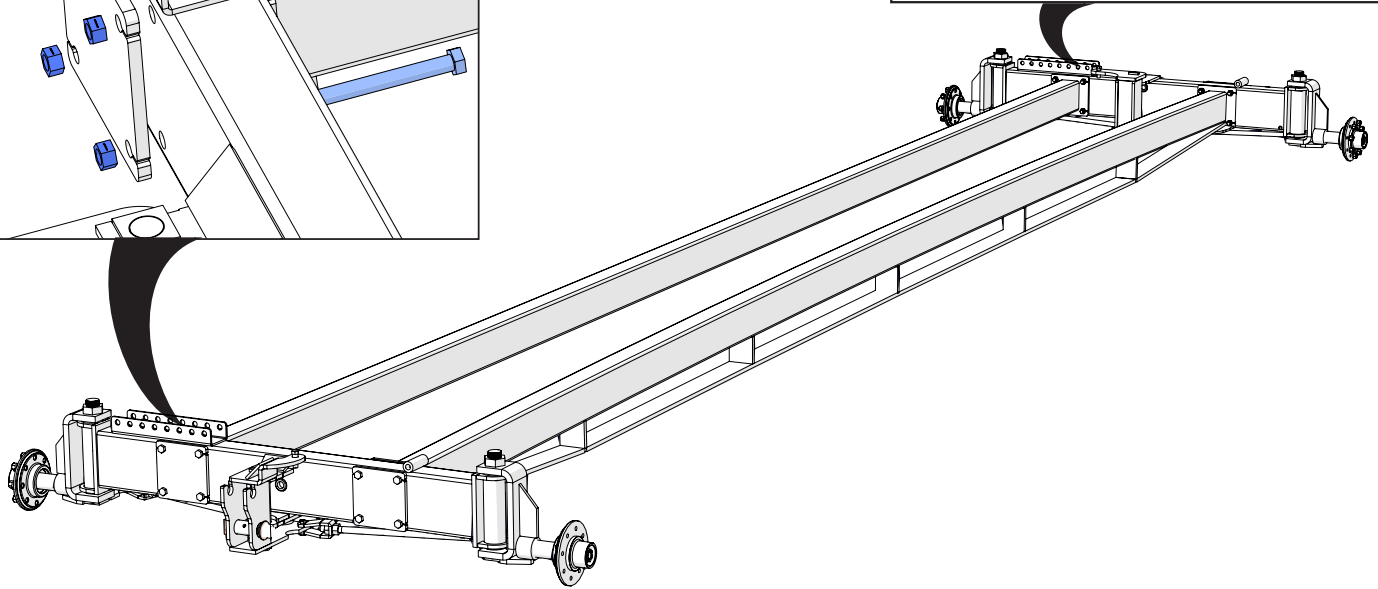
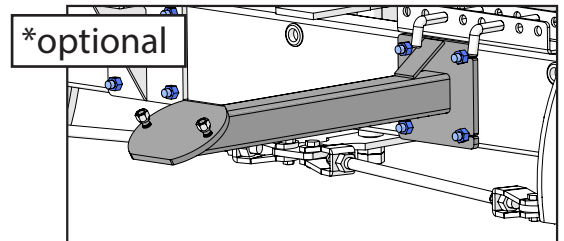
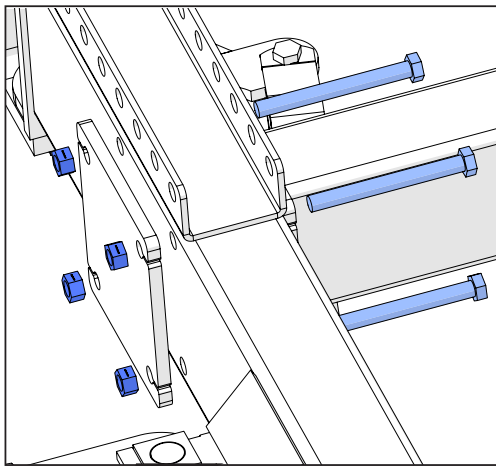


## Non-Trussed Lower Bar

- Attach the front and rear axles to the frame bar using (8) 5/8" x 6" hex bolts, (8) 5/8" centerlock hex nuts and (2) frame tube end plates. Tighten all hex nuts.
- If your header transport includes the optional spare tire mount, the spare tire mount replaces the rear frame tube end plate.

## Trussed Lower Bar

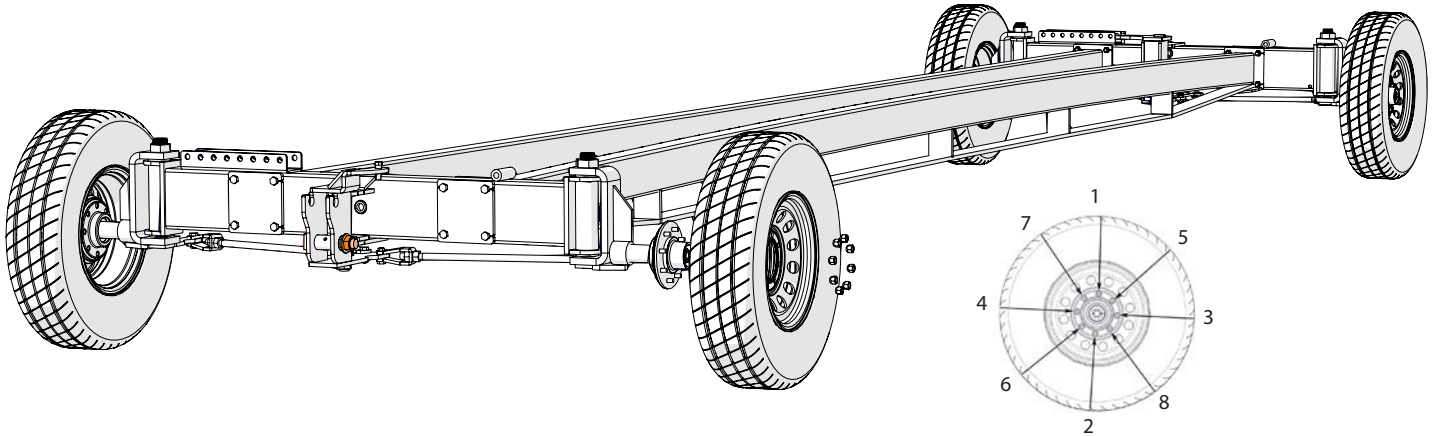
- Attach the front and rear axles to the frame bar using the wing saddle lower bases, (8) 5/8" x 6" hex bolts, and (8) 5/8" centerlock hex nuts.



# Set-Up Instructions

## Installing Tires

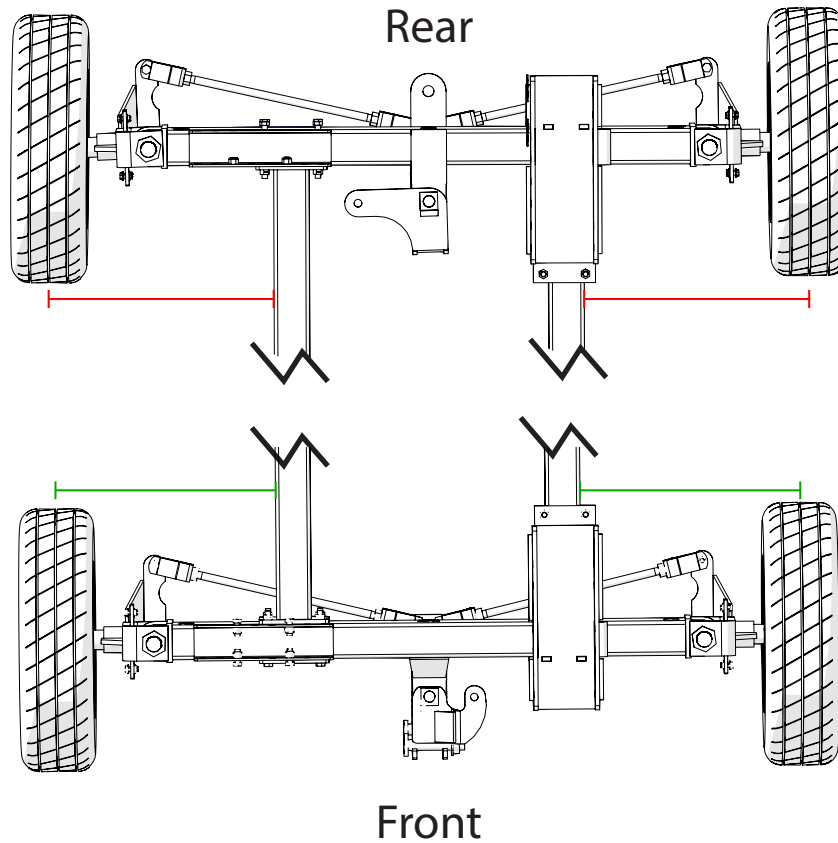
- Attach the four wheels. Use (8) 9-16" - 18 lug nuts to install the tires. Tighten lug nuts in a star pattern.



## Prepping for the 4-wheel Steer Tie Rod

- Measure from the frame tube to the center of each tire of the back of the unit and adjust the tires so that both sides measure equal distance. Repeat for the front end.

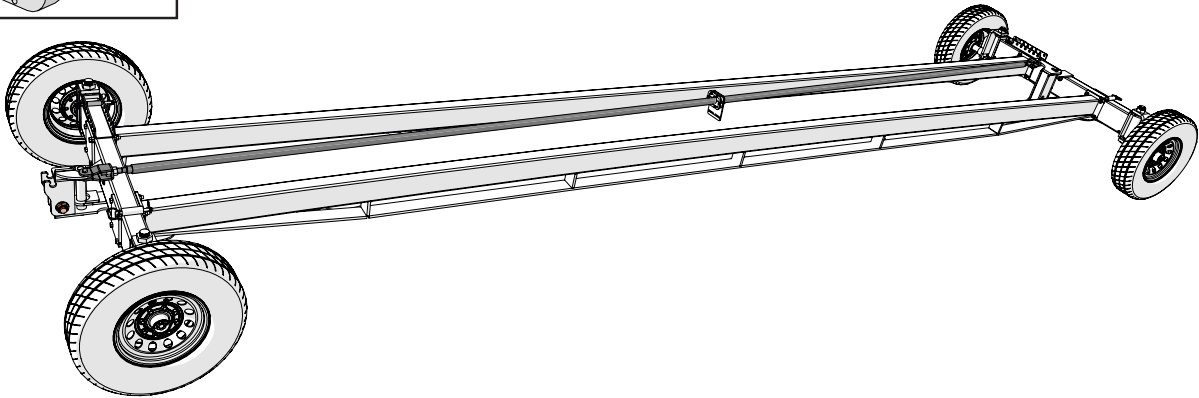
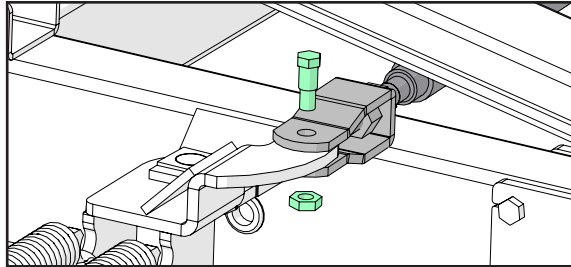
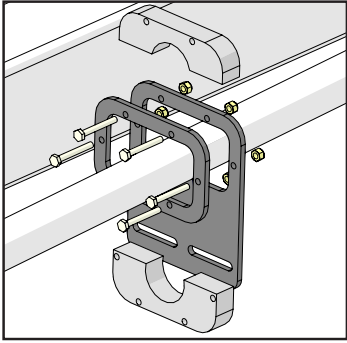
**NOTE: Once the tires are adjusted, DO NOT MOVE them.**



# Set-Up Instructions

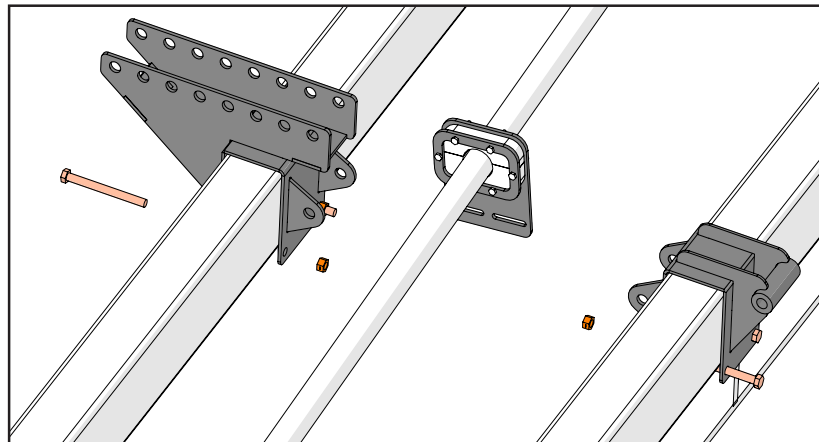
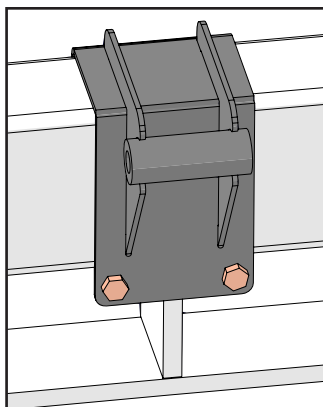
## Install the Tie Rod

- Before installing the tie rod, slide the two center support brackets pictured below onto the bar. Slide the larger brace towards the rear of the header transport and the smaller brace towards the front. Insert the guide blocks and secure using the hardware. While inserting the guide blocks, ensure all holes line up. The guide blocks are two different parts and must line up correctly.
- Adjust both clevis ends so that the holes in the clevis ends line up with the holes in the hitch top plate.
- Use (2) 3/4" shoulder bolts and (2) 3/4" shoulder bolt nuts to attach both ends of the push pull rod.



## Install the Center Support Brackets

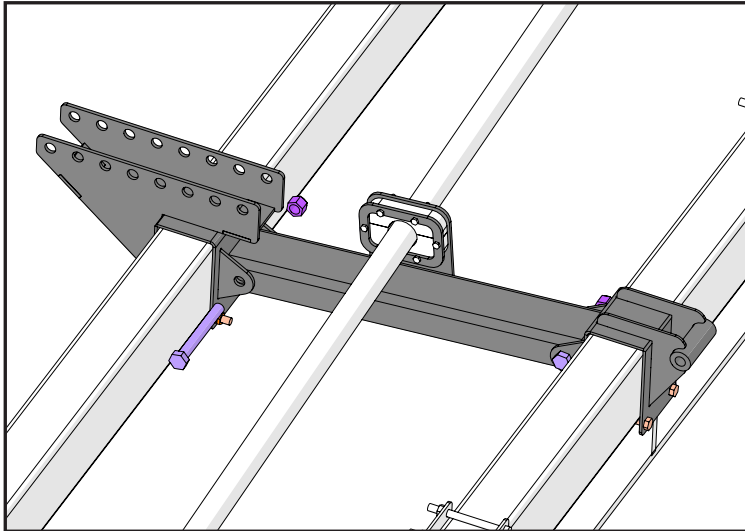
- Place the upper bar center support brackets on the header transport. The small bracket will straddle the support in the middle of the header transport (as shown below). Place the large bracket on the corresponding bar so they are aligned. Put the 1/2"-13 x 5" hex bolts and 1/2"-13 centerlock hex nuts into place and leaving loose until the next step.



# Set-Up Instructions

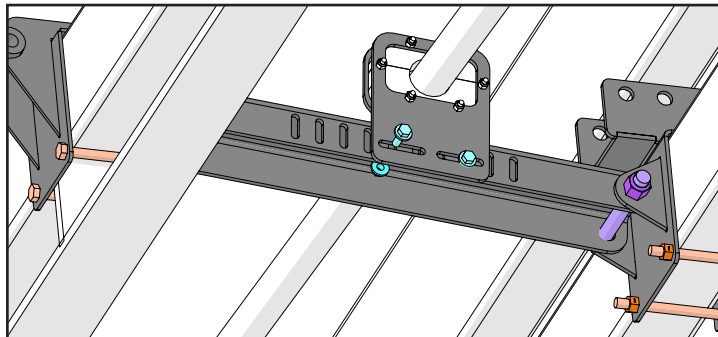
## Center Support Brace

- Bolt the center support brace to both support brackets using 3/4"-10 x 6" hex bolts and 3/4"-10 nylon locking hex nuts. Ensure the center support brace is attached with the holes for the guide blocks facing the rear of the header transport. Tighten the 1/2"-13 hardware used in the previous step.



## Tie Rod Support Brackets

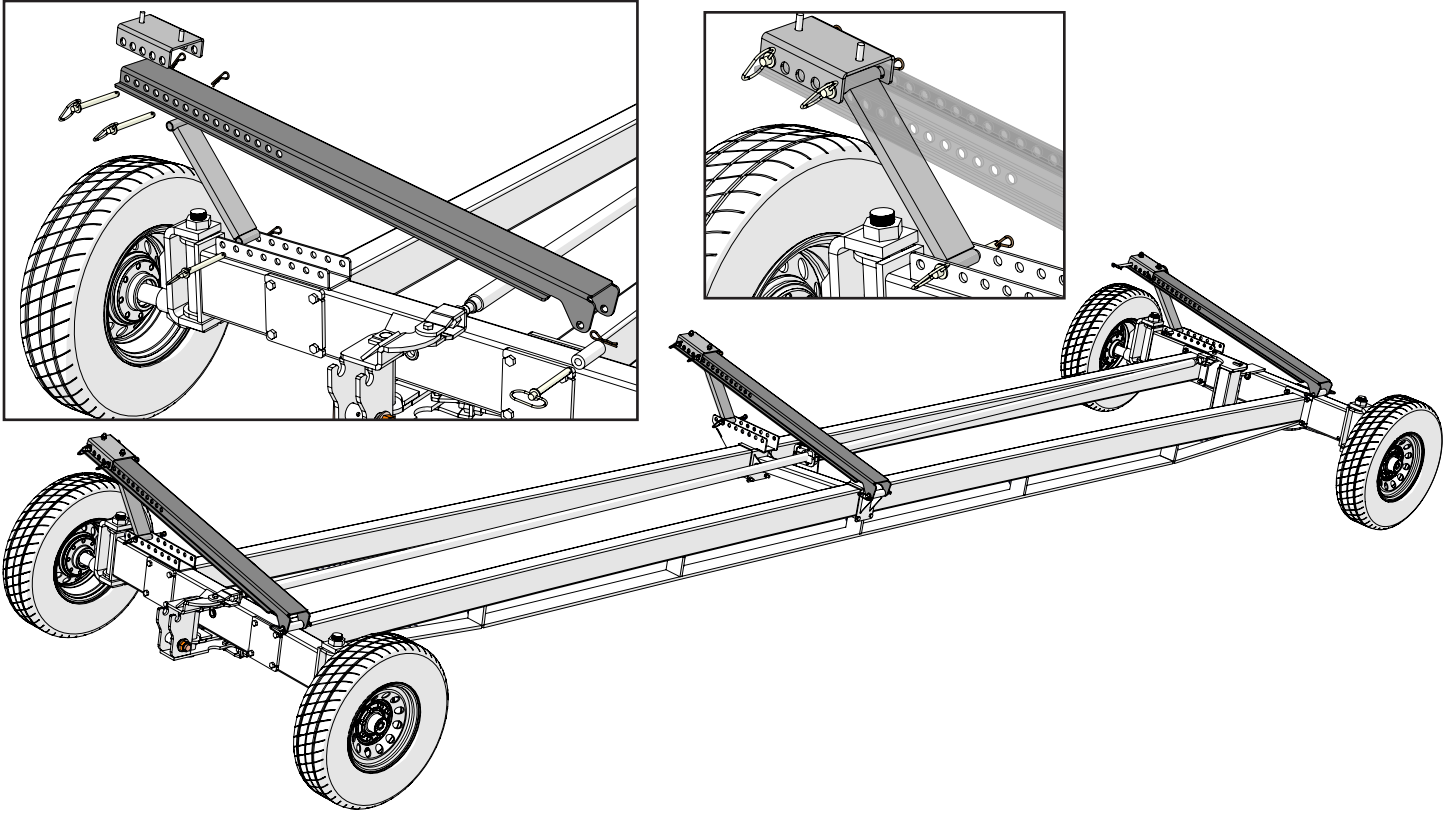
- Secure the tie rod support brackets to the rear of the upper bar center support brace using 3/8"-16 x 1" SF hex bolts and 3/8"-16 SF hex nuts. Before tightening nuts, push bracket up so that the guide blocks support the tie rod to remove sag in the tie rod.



# Set-Up Instructions

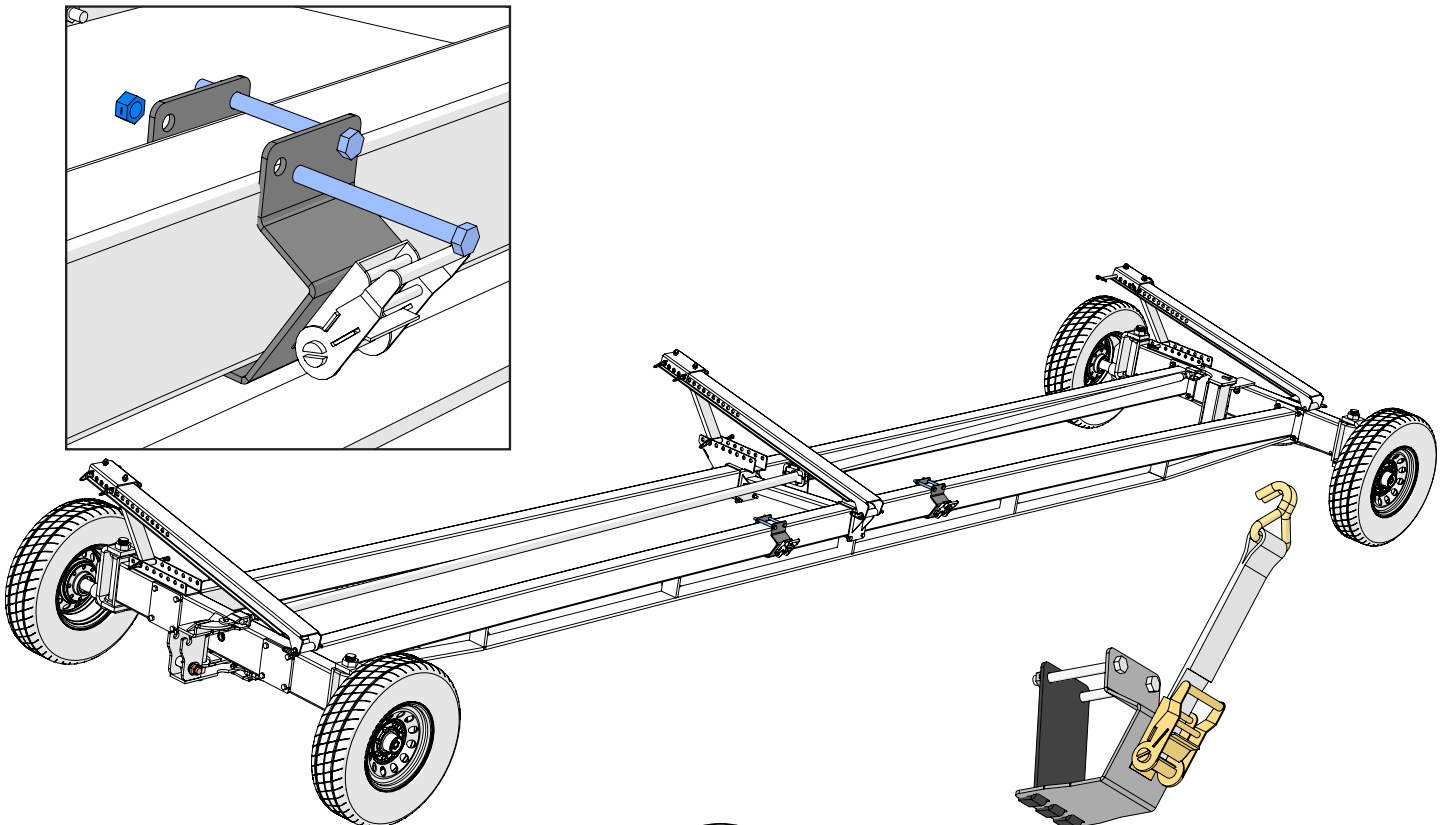
## Install the Adjustable Support Arms

- Use (4) 3/4" x 9-1/2" pins to attach the adjustable header mount to the frame. Install the 3/4" pins from the front. Secure the pins using 3/4" cotter pins. Repeat this procedure for the front, rear, and middle adjustable support arms.



## Install Ratchet Strap Weldments

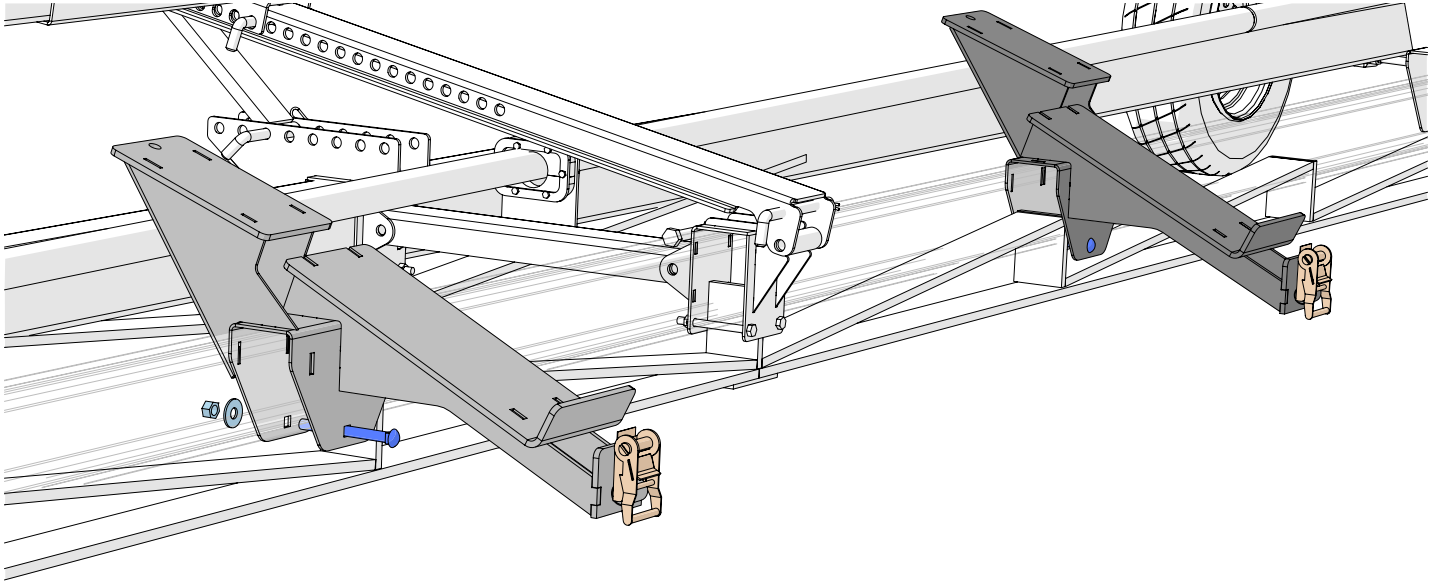
- Position ratchet strap weldments to hold your header from moving in transit using (2) 1/2" x 5" hex head bolts and (2) 1/2" centerlock hex nuts. There are four ratchet strap weldments total.



# Set-Up Instructions

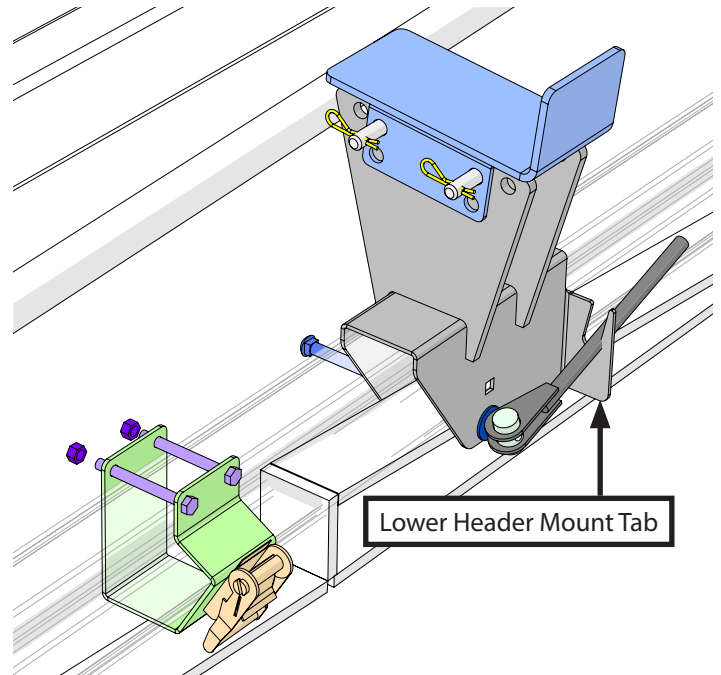
## Install the Header Center Mounts

- Set the mounts on the trussed lower bar. Run the 5/8" x 5-1/2" carriage bolt through the bottom of the mounts.
- Slide the 5/8" washer over the carriage bolt and secure using a 5/8" hex nut.



## Install the Header Mounts

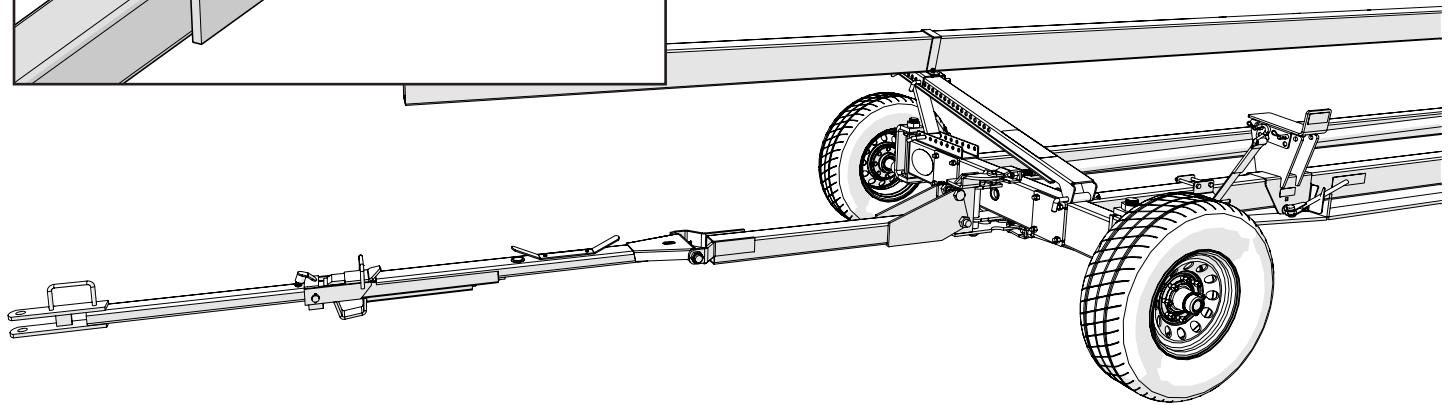
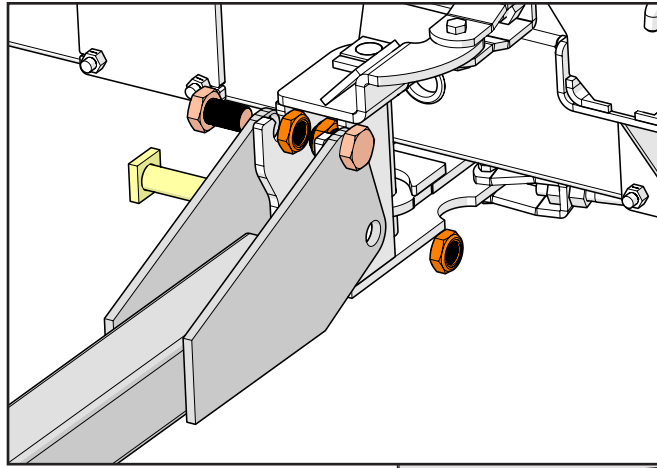
- Set the mount on the truss bar. Run the 5/8" x 6-1/2" carriage bolt through the bottom of the bottom header mount.  
**NOTE: The tab on the lower header mount will point away from the center of the frame.**
- Place the bottom header mount bolt coupler between the ends of the clamp handle assembly. Next, place the washer against the mount. Line up the holes on the washer and mount bolt coupler and thread the carriage bolt onto the coupler.
- Install the upper header mount bracket to the bottom header mount. Attach the header position gusset using (2) 3/4" L Pins (10-9/32" length). Secure the L pins with (2) 3/4" cotter pins.



# Set-Up Instructions

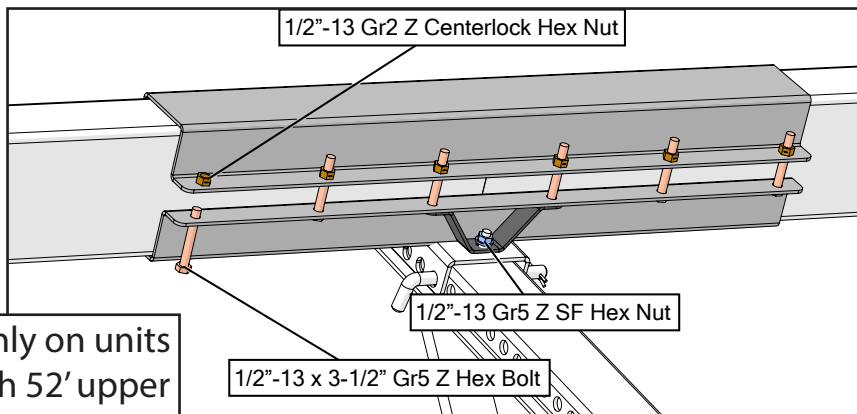
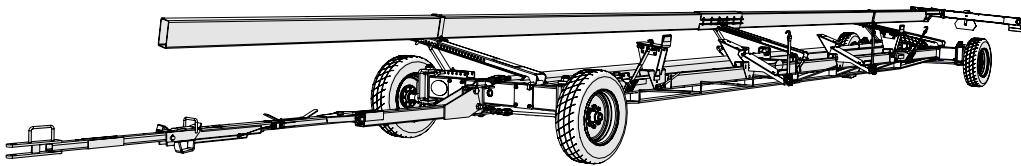
## Attach the Tongue to the Header Transport

- The tongue extension and tongue will be shipped fully assembled.
- Attach the tongue extension to the front axle using a 6-1/2" x 1-1/4" kingpin pin and 1-1/4" hex jam nut.
- Attach the (2) 1-1/4"-12 x 2" Hex Bolts and (2) 1-1/4" hex jam nuts to the top part of the tongue.

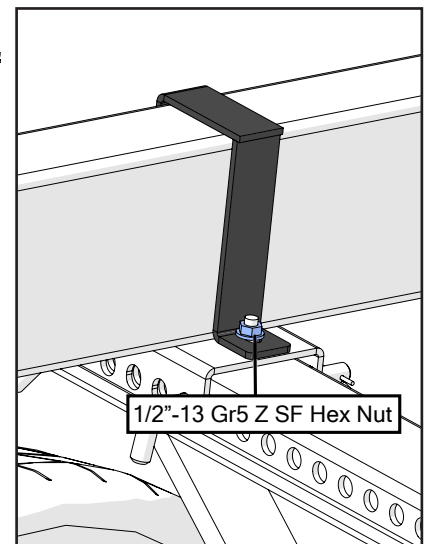


## Install the Upper Bar

- Using (3) upper bar clamps and (6) 1/2" SF hex nuts attach the upper bar to the upper bar support mounts.
- If your header transport uses a 52' upper bar, connect the upper bars using the center splice and middle mount strap.



\*Only on units with 52' upper bar.

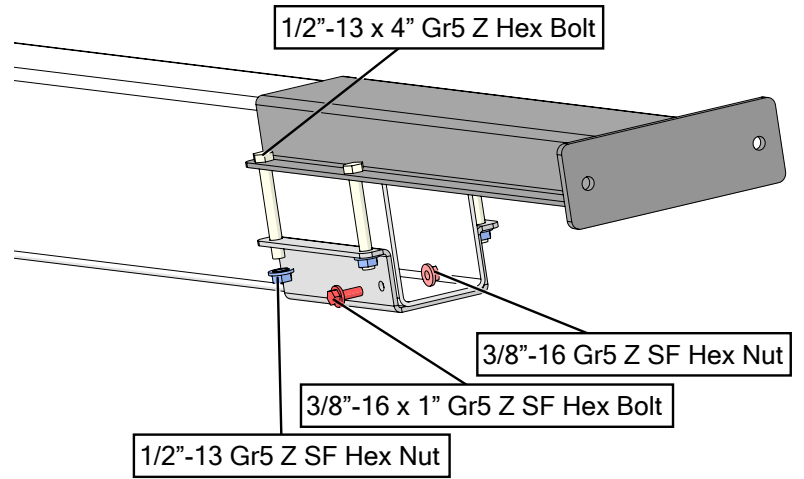




# Set-Up Instructions

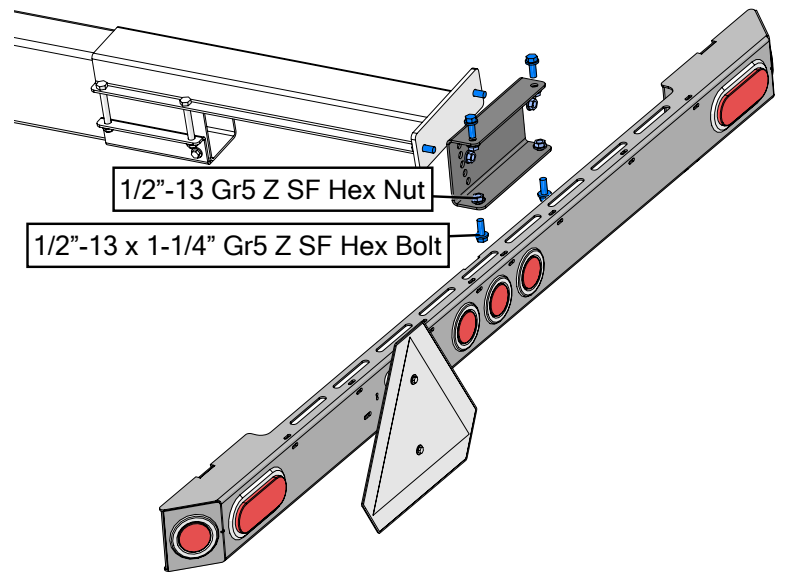
## Install the Extension Bracket

- Attach the extension bracket to the upper bar using (4) 1/2" x 4" hex bolts and (4) 1/2" SF hex nuts. Add the 3/8" x 1" SF hex bolt and the 3/8" SF hex nut keeper to the bottom bracket as shown below.



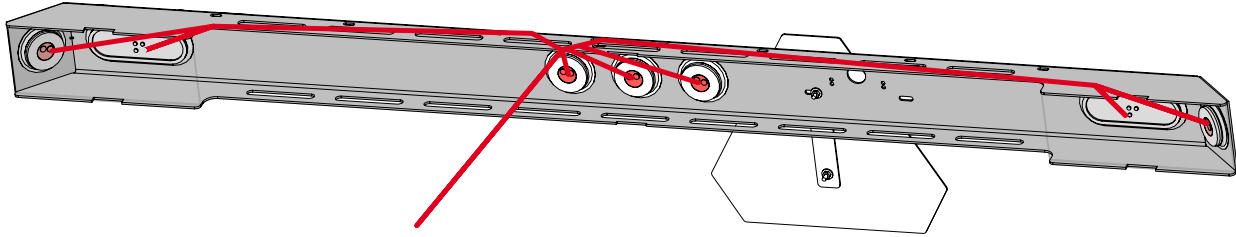
## Install the Light Bar

- Mount the light mount adapter bracket to the extension bracket using (2) 1/2" x 1-1/4" hex bolts and (2) 1/2" SF hex nuts.
- Mount the light bar to the adapter bracket using (4) 1/2" x 1-1/4" hex bolts and (4) 1/2" SF hex nuts.
- Mount the SMV sign using the mounting bracket, (2) 1/4" x 3/4" hex bolts, (2) washers, and (2) 1/4" centerlock hex nuts.

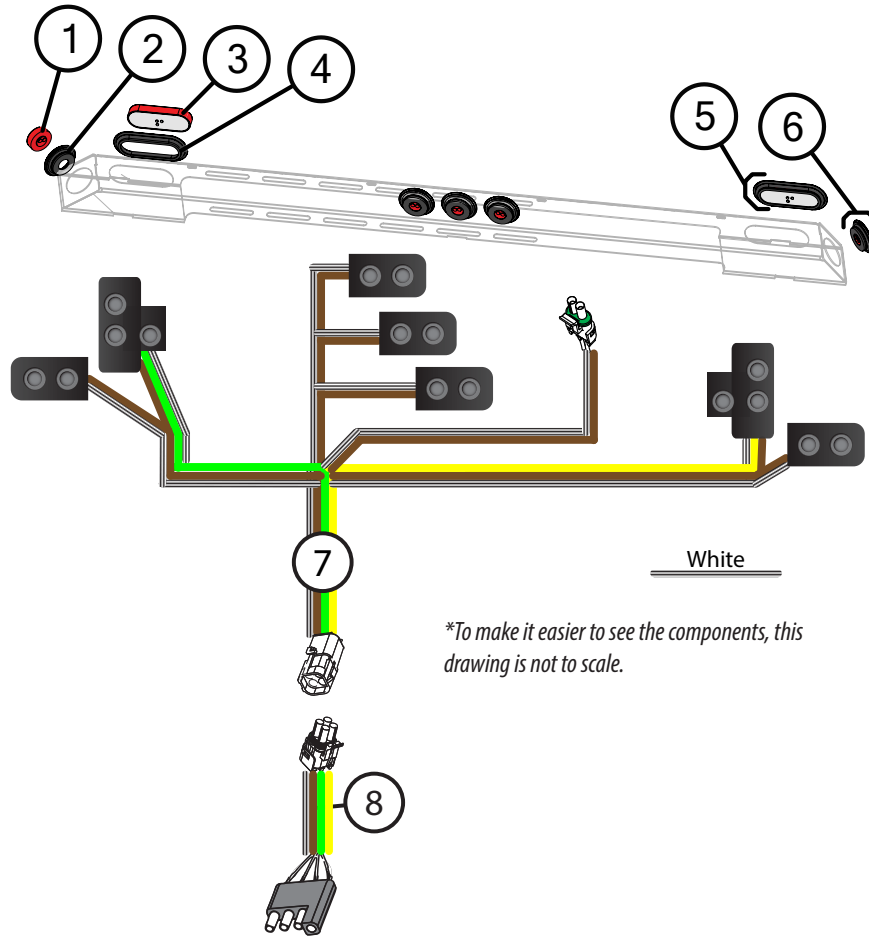


## Installing the Lights

- Run the rear harness, to the light bar zip tying the harness to the top corner of the light bar. Run the left connectors to the left lights and continue zip tying the harness to the top. Do the same to the right side.

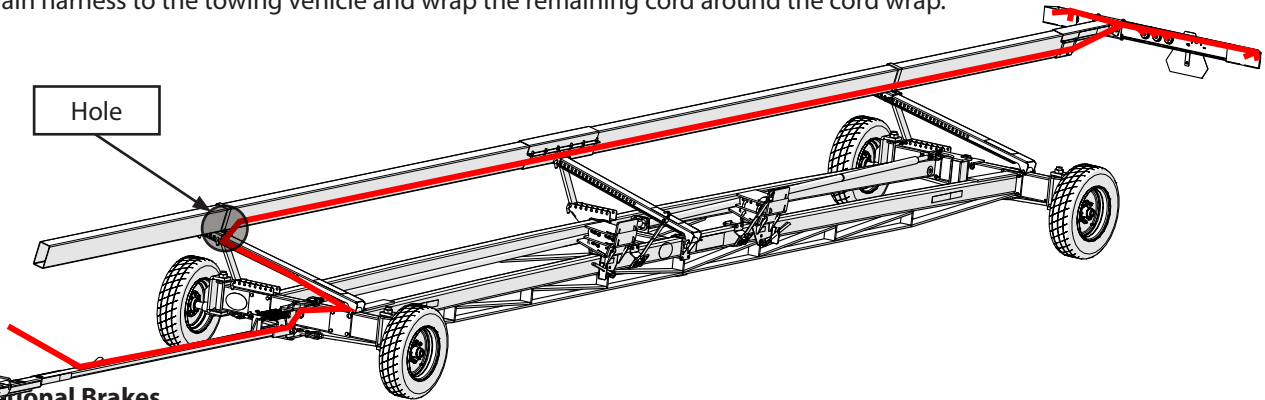


- Connect the stacked four pin of the rear harness to the main harness.



# Set-Up Instructions

- Run the 3 male 1 female flat connector on the main harness to the front of the 4WS through the upper bar. There is a hole for the wire to come out of the bottom of the upper bar near the front of the wagon. Now run it through the front axle from the bottom rear left-hand side to the middle front hole and down the tongue to the cord wrap. During transportation plug the 4-way flat connector on the main harness to the towing vehicle and wrap the remaining cord around the cord wrap.



## Installing Optional Brakes

**NOTE: If there is not a hole in the upper bar behind the rear support arm, cut a 1-3/4" diameter hole in the bottom of the upper bar. Cut the hole 2" behind the rear support arm.**

- Run the brake wiring harness through the center and out the left hole of the front running gear.
- Connect the left front brake and run the two rear connections up the support arm and through the upper bar.
- Drill two holes in support arm and secure brake harness using (2) zip ties.
- Run the right side connector through the axle and out the right side hole. Connect the front right brake.
- Run the brake harness down the rear support arm, drill (2) holes and secure with zip ties.
- Run the harness through the center hole and pull one connector through each of the left and right holes.
- Connect the rear brakes.

