

Cable Tarp System

Electric Cable – Gear Reduction

INSTALLATION INSTRUCTION MANUAL

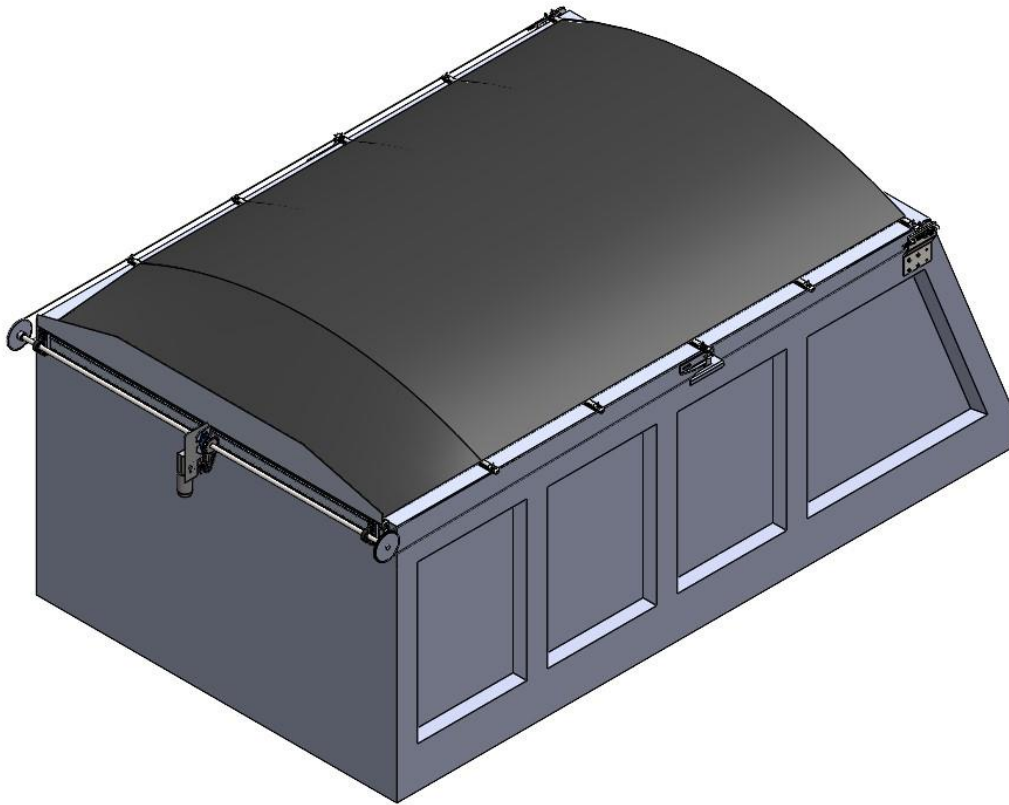


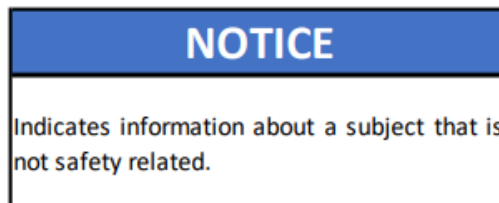
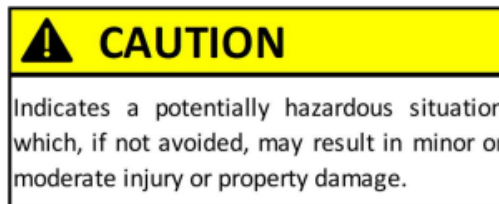
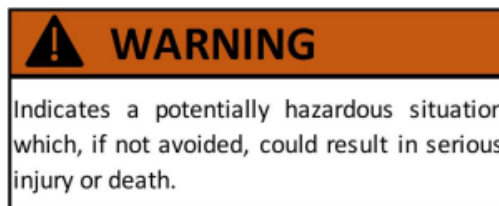
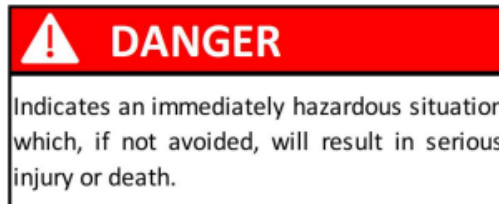
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SAFETY

Read this section carefully before proceeding. The following symbols may appear prior to certain safety related assembly and installation steps described in this manual.

FAILURE TO OPERATE AND INSTALL THIS UNIT AS INSTRUCTED MAY RESULT IN SERIOUS INJURY OR DEATH.



Step 1: Assembling the Front Pulley System

Attach the three pillow block bearings to the three bearing mounting brackets using the supplied 1/2"-13x1-1/2" hex bolts, and hex nuts.

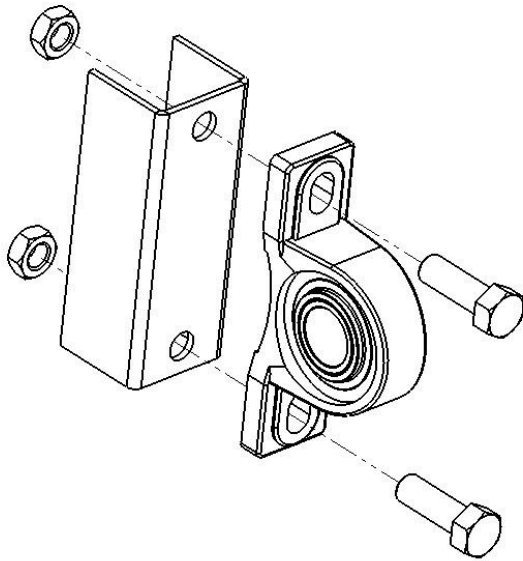


Figure 1.1

Place a pulley on the left end of the shaft. Then slide two of the bearing assemblies onto the shaft followed by the large 18-tooth sprocket. Finally slide the last bearing assembly onto the shaft and place the remaining pulley onto the right end of the shaft.

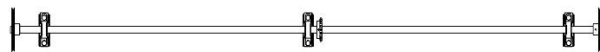
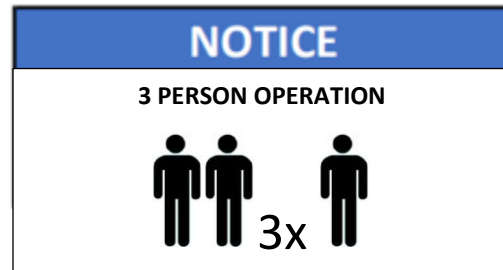


Figure 1.2

Step 2: Mounting the Front Pulley System



Mark a line across the front of the trailer that is 2-5/8" from the top rail of the trailer. This line is where the center of the shaft must be for the pulleys to be positioned at the correct height.

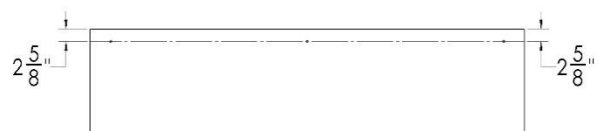
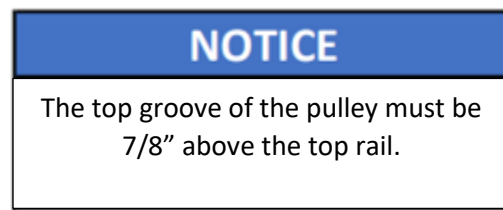


Figure 2.1

Have two people, one on each end of the front pulley system, hold the system level along the marked line. Slide the bearing assemblies to a position where they can be easily welded to the front of the trailer. Make sure that the 18-tooth sprocket is near the center of the shaft. Mark the position of the bearing mounting brackets.

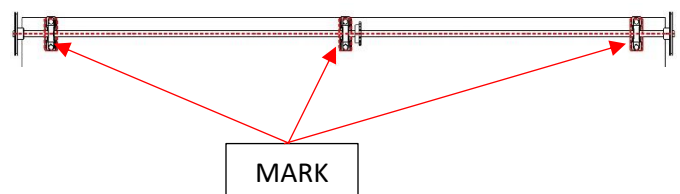


Figure 2.2

Remove the bearing mounting brackets from the front pulley assembly. Weld the bearing mounting brackets to the front of the trailer at their marked positions.

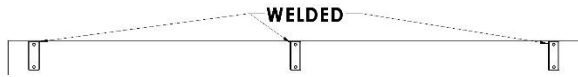


Figure 2.3

Reassemble the front pulley system on the now mounted bearing mounting brackets.

Adjust the pulleys so that their inside face is $\frac{11}{16}$ " from the edge of the trailer. Mark the shafts at the outside edge of their respective pulleys.

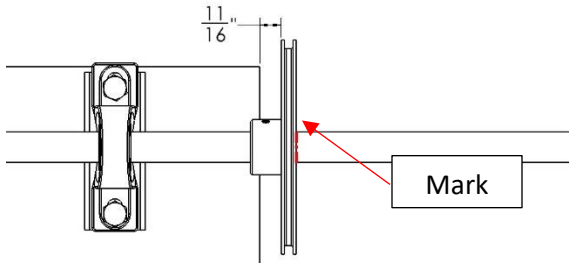


Figure 2.4

Remove the shaft from the front pulley assembly and cut them $\frac{1}{4}$ " outside of the mark.

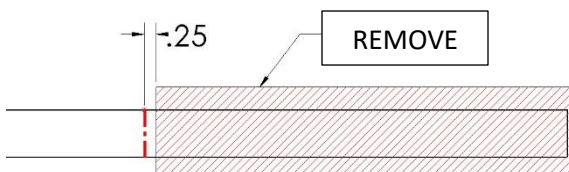


Figure 2.5

Reassemble the front pulley system, this time adding the heat shrink wrapping in between the bearings to prevent rusting. Attach the front pulley system to the front of the trailer.

Step 3: Installing the Motor

Mount the motor onto the motor mounting plate using the supplied M8-1.25X25 hex bolts. Then slide the small 10-tooth sprocket onto the motor shaft.

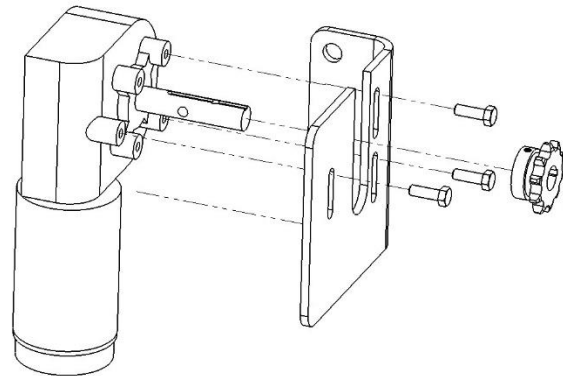


Figure 3.1

Hold the motor assembly under the pulley assembly so that the 10-tooth sprocket is in line with the 18-tooth sprocket. Mark the position of the bracket and mounting holes.

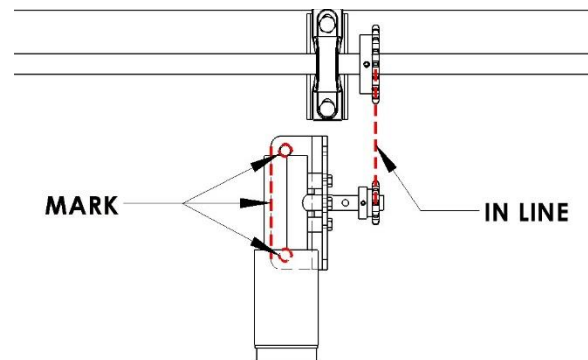


Figure 3.2

Remove the motor from the mounting plate. You can either weld the motor mounting plate to the trailer or you can

mount it using the 1/2"-13 x 4.5" hex bolts and hex nuts.

If you choose to mount the motor mounting plate with the hex bolts use a 33/64" drill bit and drill out the mounting holes that were marked on the trailer. Secure the motor mounting bracket to the trailer using the 1/2"-13 x 4.5" hex bolts and hex nuts.

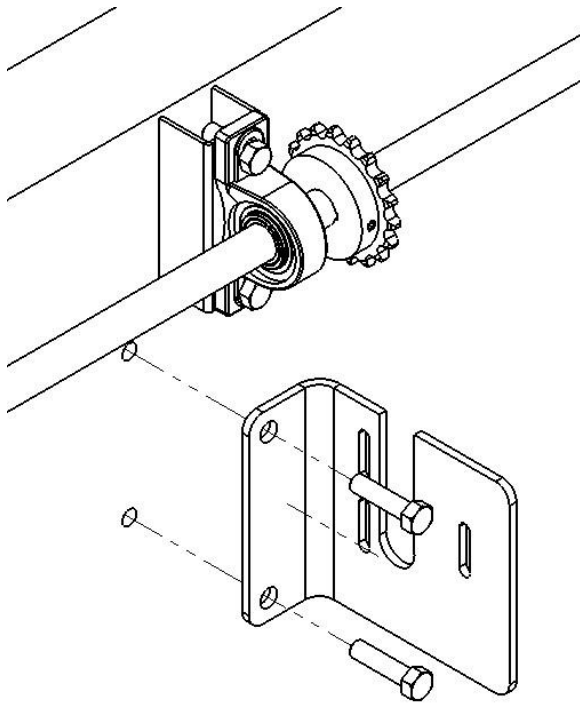


Figure 3.3

Reinstall the motor. Check again that the sprockets are in-line with each other. Once they are aligned tighten the set screws on the sprockets and insert the key into the keyway of the 10-tooth sprocket.

Wrap the #50 chain around both sprockets. If the chain is too long mark the chain and break it to an appropriate length. Connect the chain using the supplied master link. Tighten the chain by sliding the motor down on the motor mounting bracket.

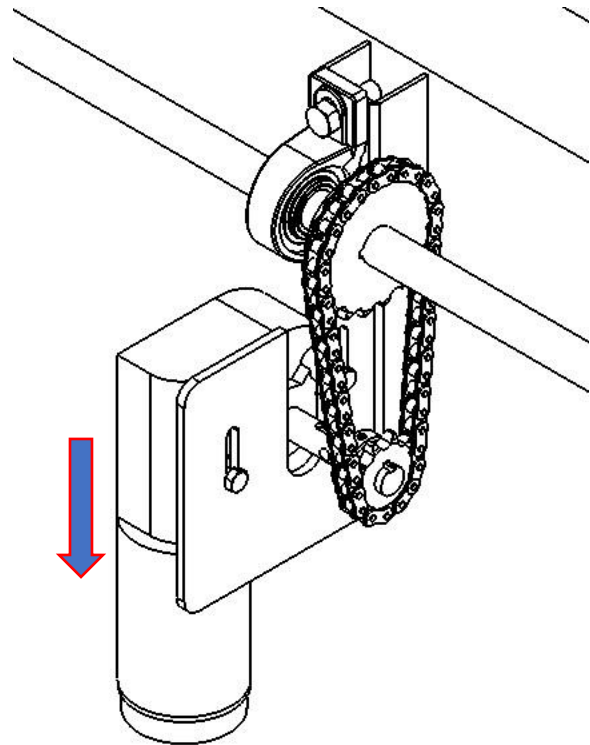


Figure 3.4

Step 4: Installing the Wind Deflector & Tarp Bar.

Set the wind deflector and 1" square tarp bar on the front rail of the trailer and position them so they are centered. Mark the position of the mounting holes on the front rail. Remove the wind deflector and tarp bar.

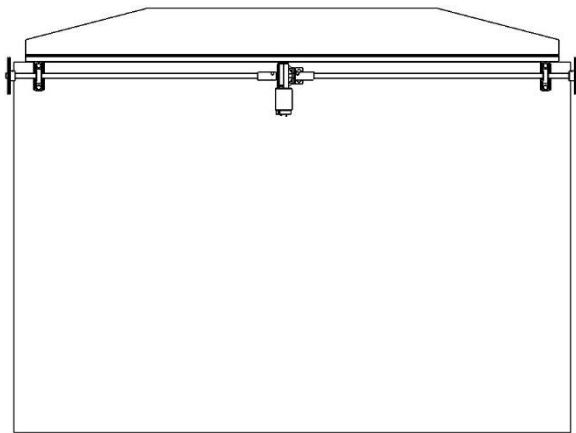


Figure 4.1

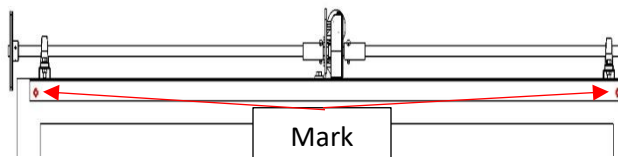


Figure 4.2

Cut the head off two 1/2"-13 x 2" hex bolts. Weld each headless bolt vertically at the marked locations.

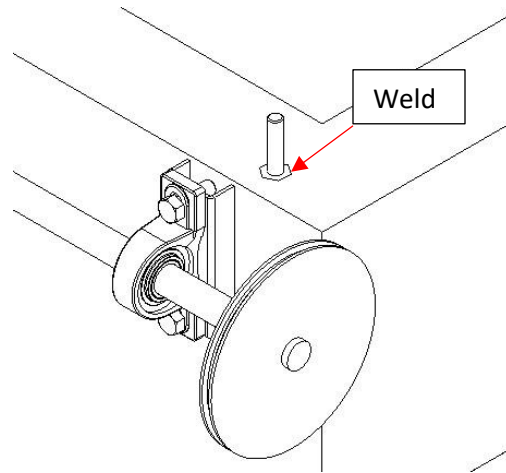


Figure 4.3

Place the tarp bar and wind deflector on the now welded bolts. Make sure that the wind deflector is sitting on the tarp bar. Secure them using 1/2"-13 hex nuts.

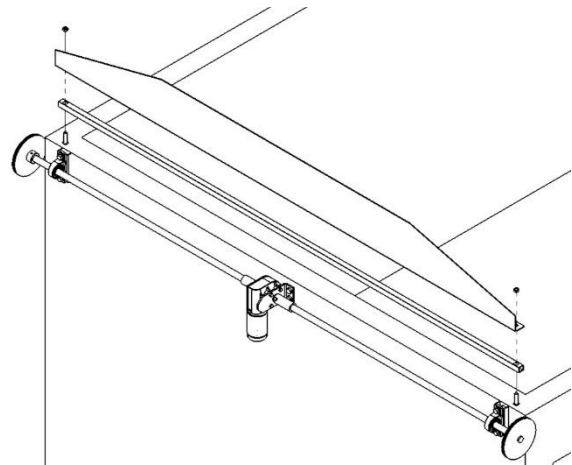


Figure 4.4

Step 5: Installing the Rear Idlers

The placement of the rear idler assembly is influenced by the tailgate style on the body or trailer. If there is not a tailgate or the tailgate swings up and down, the idler assembly should be mounted as close to the rear as possible, while still allowing for at least 4 bolts to be installed in the mounting holes on the assembly (Figure 5.1). If the swing door swings side to side then the rear idler assembly must be mounted slightly closer to the front of the body or trailer, to not interfere with the opening or closing of the swing door. (Figure 5.2).

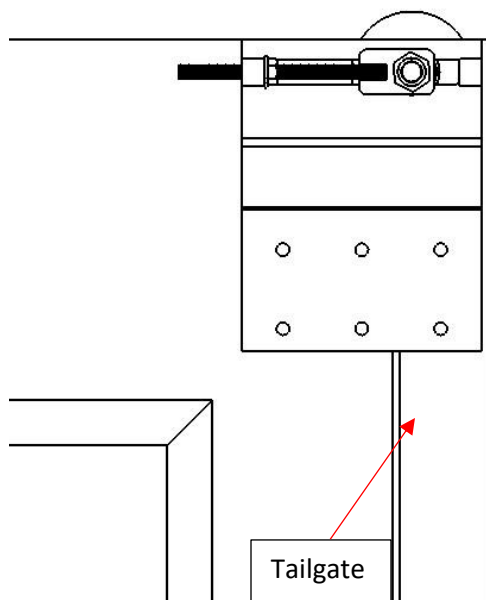


Figure 5.1

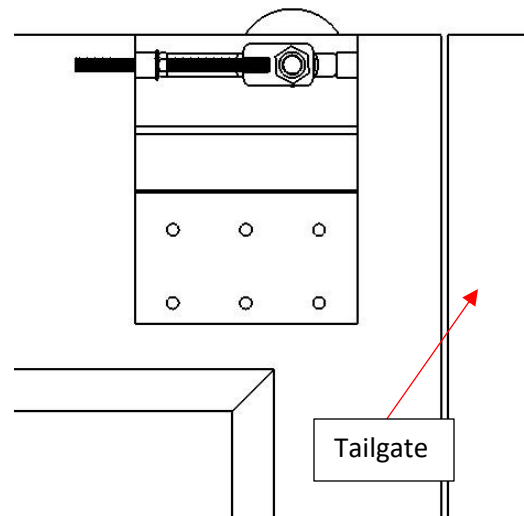


Figure 5.2

Clamp the driver side idler assembly to the body or trailer so that the top of the mounting bracket is flush with the top rail of the body/ trailer. Mark the position of at least 4 of the mounting holes. Remove the assembly and drill out the mounting holes using an 11/32" drill bit. Use the supplied 3/8" x 1-1/2" self-tapping bolts to secure the idler assembly to the body/ trailer.

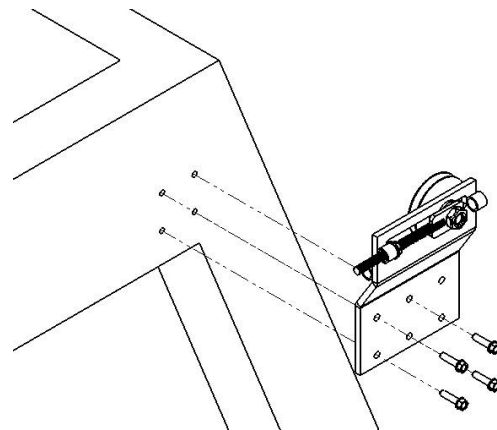


Figure 5.3

Measure the distance from the rear of the body or trailer to the front of the driver side idler mounting bracket. Mark this distance on the other side of the body/ trailer. Align the front of the passenger side idler assembly mounting bracket with this mark, clamp it to the body and repeat the mounting instructions that were given for the driver side idler assembly.

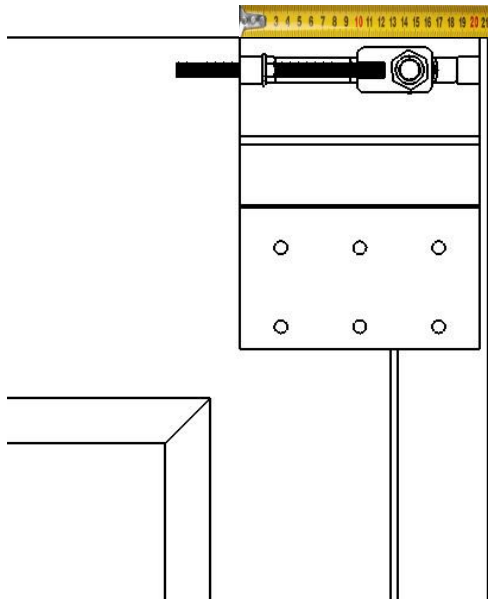


Figure 5.4

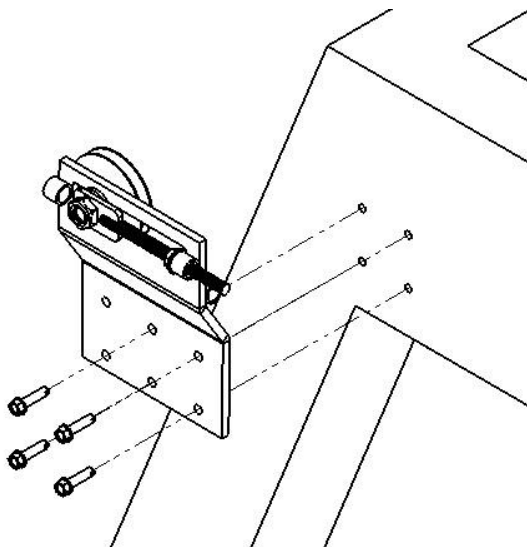


Figure 5.5

It is necessary for the rear idlers to be square and in line with the front pulleys.

To check if the idler assemblies are square measure the distance of the idler assemblies from the driver side front corner to the passenger side rear corner (X), and then from the passenger side front corner to the driver side rear corner (Y). These distances should be the same.

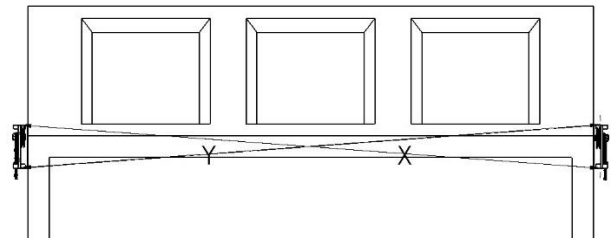


Figure 5.6

To check if the idler assemblies are in line with the front pulleys measure the distance between the front pulleys and measure the distance between the rear idlers. These distances should be the same. Additionally use line of sight from the rear of the body/ trailer to ensure they are in line.

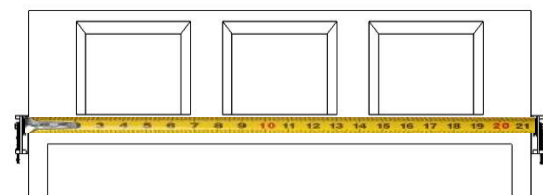


Figure 5.7

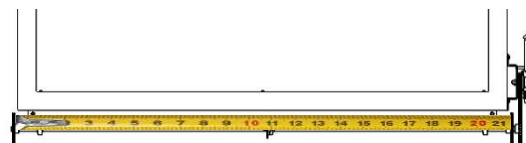


Figure 5.8

If the rear idlers are not square it may be necessary to use shims to achieve the proper orientation. If the idlers and the pulleys are not in line with each other adjust the positioning of the pulleys at the front of the body/ trailer.

Step 6: Installing the Cable Tarp and Bows

The tarp and bows should come preassembled and held together by shipping rods. If this is not the case, slide one bow through each pocket and orient them so that the pocket side of the tarp faces down when installed.

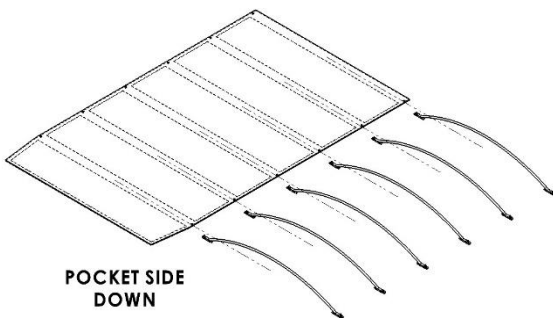


Figure 6.1

Detach the 1/4" hex nut and washer that links the slider to the bow. Attach the tarp to each bow by placing the grommet over the bolt located at the end of the bow. Attach the tarp to the bow by replacing the 1/4"-20 hex nut and washer.

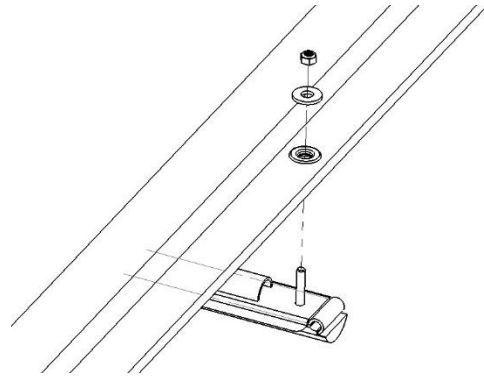


Figure 6.2

Once your tarp and bows are assembled pack them tightly together and secure them using a ratchet strap or something similar. For the preassembled tarp, leave the shipping rods in place. Set the tarp and bow assembly on the front of the body or trailer. Starting with the driver side, thread the cable down and around the idler on the rear idler assembly.

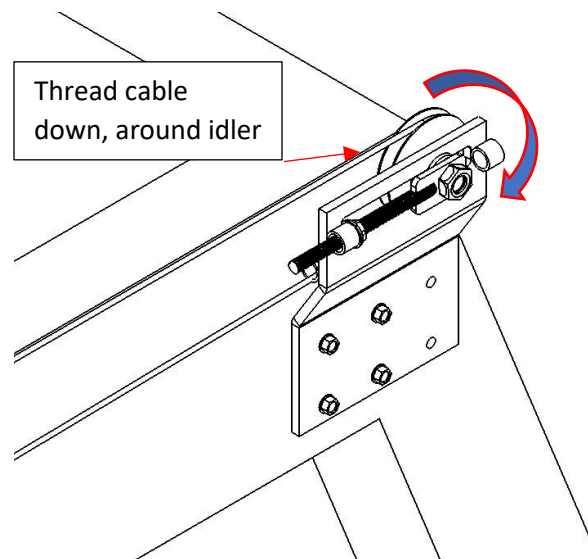


Figure 6.3

Remove the shipping rod, thread the cable up and around the front pulley and then through the holes at the end of the bows beginning with the front bow and working to the rear bow.

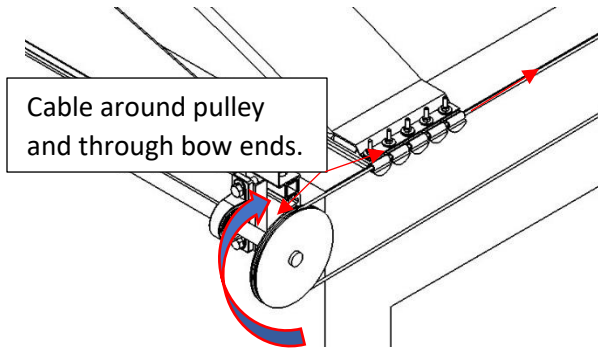


Figure 6.4

After threading through the bows, stop with two to four inches of cable protruding from the rear most bow. Next, bring the other end of the cable forward to meet the previous end at the rear most bow. Using two cable clamps, clamp the ends together placing one clamp in front of and one clamp behind the rear most bow.

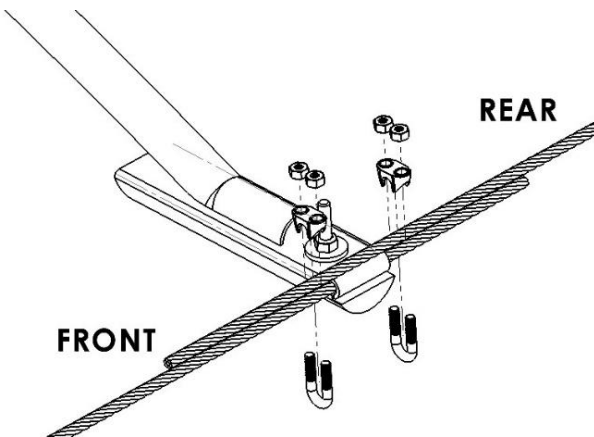


Figure 6.5

Repeat the process of threading the cable and installing the clamps on the passenger side of the trailer.

Once you have secured both sides of the system tension the cable by loosening the sheave nut on the idler bolt and then tightening the nut on the tension bolt to push the pulley toward the rear of the trailer. Once you have achieved an ideal tension retighten the sheave nut on the idler bolt. Repeat this process for the idler on the other side of the trailer.

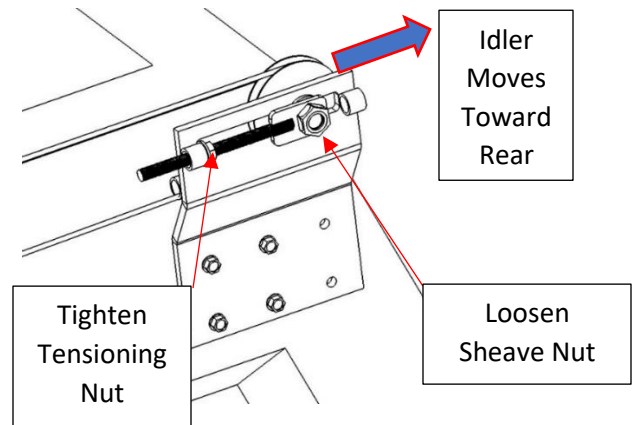


Figure 6.6

NOTICE

Both sides must be under nearly the same amount of tension.

To check if the cable is under the correct tension, move the cable to the uncovered position. When both cables are squeezed together in the middle there should be a 1" gap between them. Recheck the cable tension after the system has sat for a couple of days.

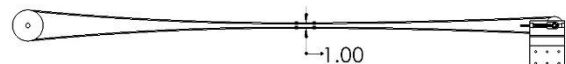


Figure 6.7

Step 7: Fastening the Front of The Tarp.

Extend the tarp out so that the last bow is as close as possible to the rear idler without resting on it. Leave no more than a 4" gap between the idler and the last bow. Clamp the rear bow in position.

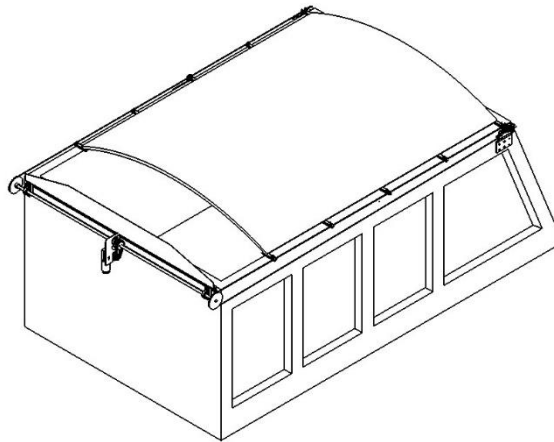


Figure 7.1

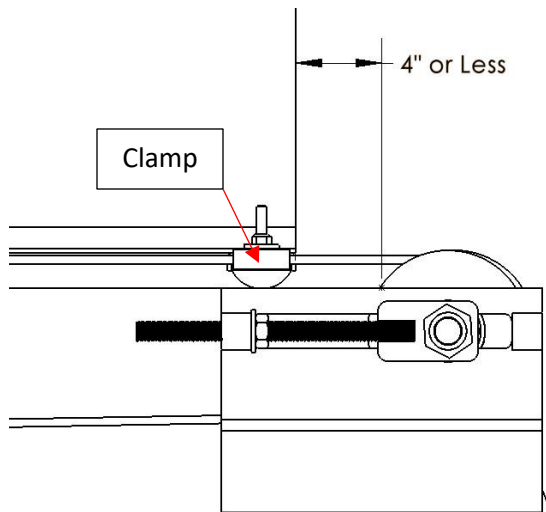


Figure 7.2

Remove the wind deflector and tension bar.

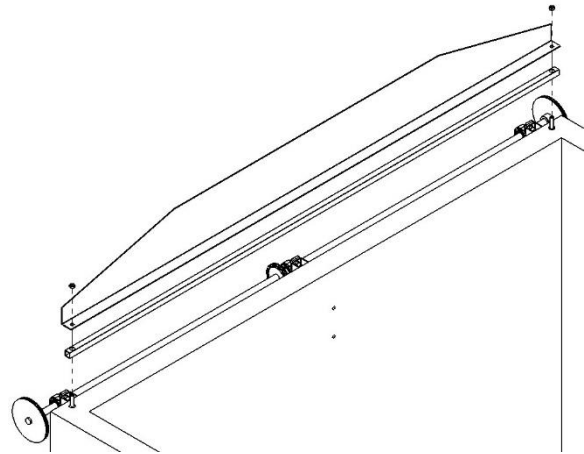


Figure 7.3

Fasten the front of the tarp to the tension bar using the supplied #12 x 1" Pan Head Phillips Self Tapping Screws.

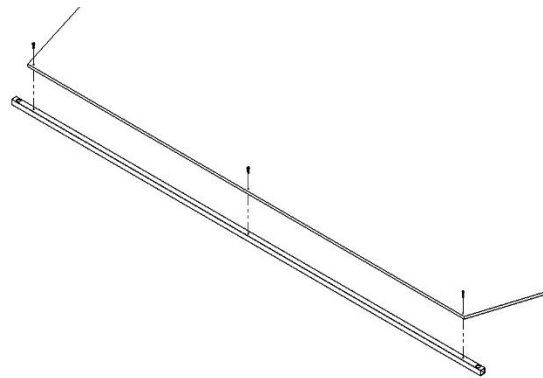


Figure 7.4

Roll the bar under the tarp until the tarp is taut.

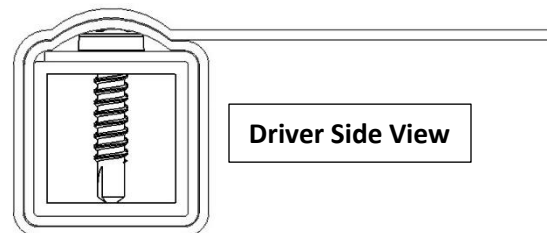


Figure 7.5

Remount the tension bar and wind deflector. The system should look like the one depicted in Figure 7.6.

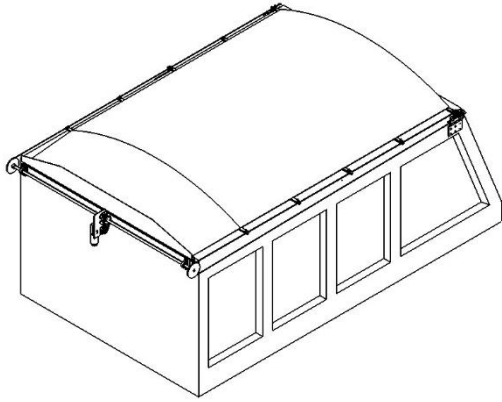


Figure 7.6

Run the system in and out a few times to make sure the system is operating correctly. Adjust the system as necessary.