

# ECONO FLIP TARP DUMP BODY SYSTEMS

# **INSTALLATION INSTRUCTIONS**



Congratulations on your purchase of a Mountain Tarp Econo Flip tarping system. With tarping systems for dump bodies, transfer trailers, scrap trailers, landscaping trucks and roll-offs, Mountain Tarp offers the most complete line of tarping systems and parts in the industry.

### Note:

Please read through instructions for entire system and follow instructions thoroughly to ensure your system will work properly. It is important that you inspect your trailer and prepare it for installation by removing any sharp edges or any thing that will cause damage to your tarp.

For further technical assistance, contact our corporate headquarters at (800) 248-7717 or email us at sales@ mountaintarp.com. For parts and service, visit us at one of our locations in Kentucky, Texas, or Ohio, or contact one of our many dealers nationwide. To learn more about Mountain Tarp and the products we offer, visit us online at www.mountaintarp.com.

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# **TABLE OF CONTENTS**

Step 1: Head Roller Assembly	3-4	Step 5: Tarp	7
Step 2: Underbody Assembly	4-5	Step 6: Crossover	7
Step 3: Gear Box and Chain	6	Wiring	8
Step 4: Connecting the Arms	6		

2 Revision 1

### STEP 1: INSTALLING ROLLER HEAD ASSEMBLY

#### 1A:

Mounting the roller assembly. The roller assembly can be mounted to the cab protector using one of two methods.

- Through the cab protector
- On top of the cab protector using end plates and a wind shield

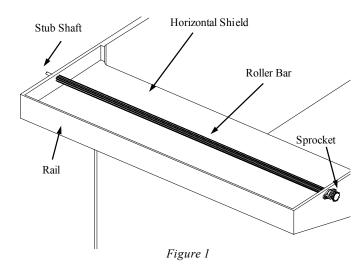
Choose the method you wish to use and follow the instructions below for that particular method.

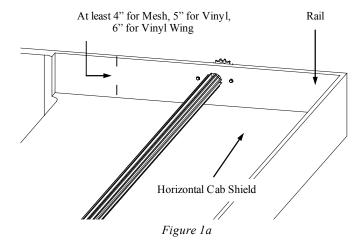
#### 1B:

Mounting the roller assembly through the cab protector, see figure 1. To use this mounting method there must be a distance of at least four inches between the top of the rail on the outside of the cab protector and the horizontal shield plate, see figure 1a. If this distance is available and the "through the cab protector" mount is desired, then follow these instructions.

The first step is to choose the proper location on the cab protector to install the assembly. Note: The assembly should be located at a position on the cab protector so that when the system is in the uncovered position the tarp arms do not interfere with either the doors or the loading process. When the proper location is achieved, measure down at that position two inches from the top of the rail on the cab protector and, using a 1-1/2" hole saw, cut a hole in the side of the rail on both sides of the cab protector. Next, mount two flange bearings on the outside of the rail on both sides of the dump body by centering the bearing hole with the previously drilled hole in the rail and, using a 3/8" drill bit, drill holes in the rail to match the mounting holes in the bearing. Then, using 3/8" x 1/1/2" hex bolts, 3/8" flat washers and 3/8" nuts, mount the bearing firmly to the rail.

Next, place the roller bar inside the cab protector and insert the stub shaft with sprocket welded in through the bearing on the driver side of the body and then into the end of the roller bar. Slide the shaft in so that the sprocket is two to three inches from the outside of the cab protector, see figure 1b, then using a 3/8" drill bit, drill a hole in the roller bar to match the pre-drilled hole in the stub shaft. Then, using 3/8" x 2" hex bolts, 3/8" flat washers and 3/8" nuts provided, fasten the shaft to the roller bar. Repeat this step on the other side using the stub shaft only provided.





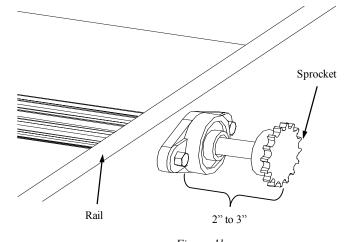


Figure 1b

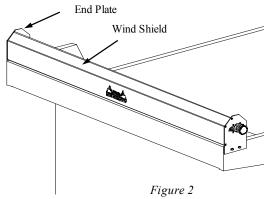
### STEP 1: INSTALLING ROLLER HEAD ASSEMBLY CONT.

1C:

Mounting the roller assembly on top of the cab protector, see figure 2. The first step is to choose the proper location on the cab protector to install the assembly. Note: The assembly should be located at a potion on the cab protector so that when the system is in the

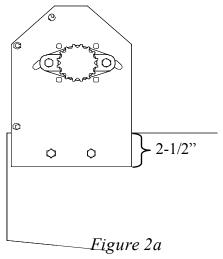
uncovered position the tarp arms do not interfere with either the doors or the loading process. When the proper location is achieved the next step is to mount the end plates.

With the center of the end plate at the previously determined position, hold the end plate so that the bottom is 2-1/2" below the top of the rail on the cab protector, see figure 2a. Then, using a 3/8" drill bit, drill two holes near the bottom of the end plate, through the end plate and the rail. Then using 3/8" x 1-1/2" hex bolts, 3/8" flat washers and 3/8" nuts, mount the end plate firmly to the cab protector. Repeat this on the other side of the body.



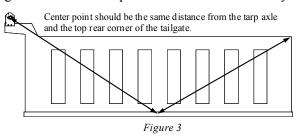
The next step is to install the wind shield. First, measure from the inside of one end plate to the inside of the other and if necessary cut the wind shield to this length. Next,

place the shield so that the mounting slots at the end match up with the holes in the end plates. Then, using the 3/8" machine bolts provided, fasten the shield to the end plates. After the wind shield is installed, the next step is to mount the roller bar assembly. The first step is to mount the flange bearings on the outside of each end plate. Using, 3/8" x 2" hex bolts, 3/8" flat washers and 3/8" nuts, mount the bearings to the plates using the pre-drilled holes. Next, place the roller bar between the end plates and insert the stub shaft with sprocket welded through the bearing on the driver side and into the end of the roller bar. Slide the shaft in so that the sprocket is two to three inches from the outside of the end plate, see figure 1b, and then using a 3/8" drill bit drill a hole in the roller bar to match the pre-drilled hole in the stub shaft and connect them using 3/8" by 2" hex bolts, 3/8" flat washers and 3/8" nuts. Repeat this for the opposite side of the body using the stub shaft only provided.



### **STEP 2: INSTALLING UNDERBODY ASEMBLY**

Finding the placement for the underbody assembly (pivot point). See Figure 3. To find the placement for the underbody assembly you must find the center point of the dump body. Using two tape measures, hook the end of one to the tarp axle and the end of the other to the very top rear corner of the tailgate and measure toward the center at the bottom of the body. At the distance where the tape measures cross reading the same measurement is the center point of the system. (Note: the pivot point must be at least 3-1/2" from nearest horizontal standard, adjust forward to fall short of tailgate, adjust rearward to fall short of roller box.) At the center point, mea-

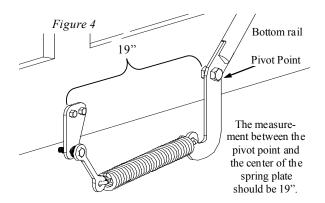


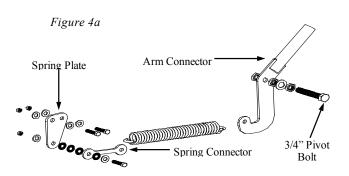
sure up from the bottom of the bottom rail one and three quarter inches, or appropriate distance, see figure 3a, then using a three quarter inch dill bit, drill a hole in the bottom rail. This is the pivot point of the system.

### STEP 2: INSTALLING UNDERBODY ASEMBLY CONT.

#### 2B:

Installing the spring assembly, see figure 4. After drilling the hole for the pivot point the next step is to install the spring assembly. First install the arm connector at the pivot point and then assemble the components as shown, see figure 4a. Note: underbody should be installed so that the 3/4" pivot bolt is mounted at the previously drilled hole at the pivoting point of the system.





#### 2C:

Installing the optional clock spring assembly, see figure 3 for establishing pivot point. After marking the pivot point place the pivot pin as shown in figure 4b and mark holes to be drilled, once holes have been marked, drill 1/2" holes and bolt pivot to body using the supplied bolts, (or weld) insuring that the spring notch is pointed down.

### 2D:

Install the spring assembly connector as shown. See figure 4c. Note: pivots are directional, rotate pivots so that the spring hooks will clip over the inside pin as shown in figure 4d.

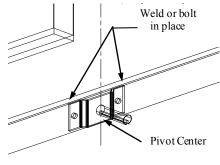
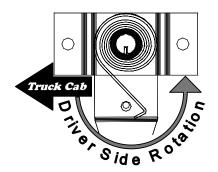
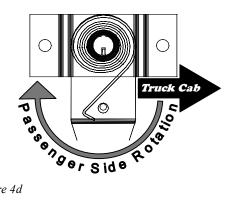


Figure 4b





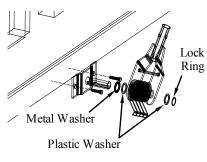


Figure 4c

Figure 4d

# STEP 3: INSTALLING GEAR BOX AND CHAIN

#### 3A:

Install the Econo gear box to the front corner of the body at a convenient height and location. After determining the appropriate location, hold the gear box in place and make a mark on the body at the holes on the mounting flange on the gear box. Drill holes at these marks and install the gear box using the nuts, bolts and washers provided, see Figure 5.

#### 3B:

To install the chain, simply wrap the chain around the sprocket at the end of the roller assembly and around the sprocket on the gear box. Bring the ends together and cut off the excess chain. Connect the ends using the master link provided.

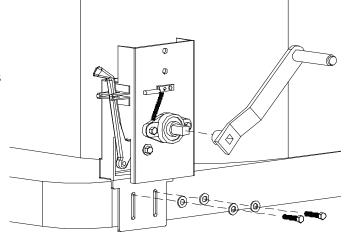


Figure 5

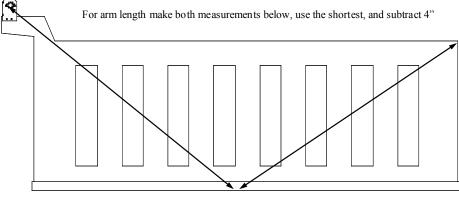
## **STEP 4: CONNECTING THE ARMS**

### 4A:

Connecting the arms to the arm connectors. Before connecting the arms you must first determine the length they need to be. To do this, measure from the center of the pivot bolt to the rear of the tailgate and subtract 10 inches. This will allow for the legs on the crossover and the arm connector (Note: this method of measurement is used if the pivot point of the system is at or less than seven inches from the center of the dump body. If this measurement is greater than seven inches then measure from the center of the pivot bolt to the center of the tarp axle on the roller assembly and subtract 10 inches. This will cause the system to fall just short of the rear of the tailgate), see figure 6.

### 4B:

When the proper length is achieved, cut the arms and scrap the remaining material. After the arms are cut, then connect them to the arm connector.



6 Figure 6

# STEP 5: INSTALLING THE TARP

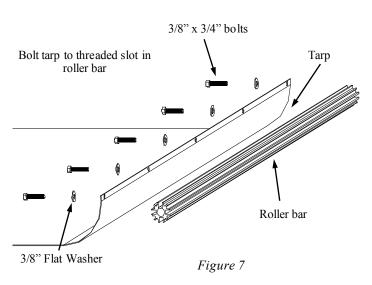
#### 5A:

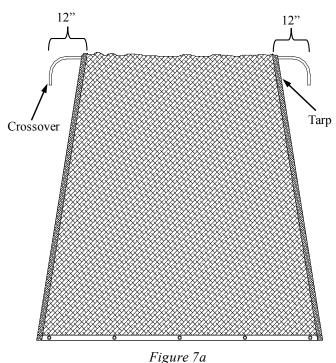
Connecting the tarp to the tarp axle, See Figure 7. Attach the tarp to the roller bar with the 3/8" x 3/4" hex bolts and washers provided as shown in figure 7.

#### 5B:

Connecting the tarp to the crossover. To attach the tarp to the crossover simply thread the crossover through the pocket at the end of the tarp, (Note: It may be helpful to spray a lubricating oil into the pocket on the tarp before threading). Then, using the four hose clamps provided, secure the tarp to the crossover. (Notes: The outside edge of the tarp should be 12" from the outside of the crossover, see figure 7a. You will need to cut small slits in the pocket of the tarp to get the hose clamps around the crossover).

Note: When bolting the tarp to the roller bar, the end bolts on each side should be 5" from the end of the roller bar. The remaining bolts should be spaced evenly across the roller bar.





### **STEP 6: INSTALLING THE CROSSOVER**

### 6A:

Connecting the crossover to the arms. Using a ladder, lift the arms up to the top of the tailgate, with the tarp attached, slide the legs of the crossover into the end of the arm on each side of the trailer. Using a 3/8" drill bit, drill a hole through the arm and crossover leg. Using 3/8" x 2-1/2" hex bolts, 3/8" flat washers, and 3/8" nuts, secure the crossover to the arm.

#### 6B:

Repeat steps for opposite side of trailer.

# WIRING DIAGRAM FOR ELECTRIC OPTIONS

