



MANUFACTURER OF



**INSTALLATION GUIDE FOR ROLL
MASTER SYSTEMS ON FARM BEDS,
SEMI/GRAIN TRAILERS & END
DUMPS**



WARRANTY

Best Tarps warrants all new tarps and hardware to be free from defects in material and workmanship for a period of 1 year. This warranty is effective if the products is installed properly and used for the intended purpose. Any parts found to be defective will be replaced. The tarps will be repaired or replaced, at our option, if judged to be defective and returned to us Transportation Prepaid. We shall not be liable or responsible to supply or pay labor to replace any part or tarp that was not installed by us. We shall also not be liable for any damages of any kind or nature to person, product, property or downtime. We will not warranty any products that have been repaired, modified, or subjected to misuse, accident or ordinary wear and tear.

ORDERS AND SHIPPING

Orders for in-stock parts and tarps placed by noon CST will normally ship same day (This can vary if size and quantities of order required common carrier). Our standard lead time should never be more than five days unless told otherwise. All orders will be shipped by the most reasonable means in accordance with size and weight of order, unless customer gives specific routing instructions. We ship daily via UPS and common carrier.

NOTE: BEST TARPS HAS NO CONTROL OVER DELIVERY DATES-ONLY SHIP DATES!

Any shortage claim must be made within 10 days. Claim for damages must be made with the delivering carrier! Inspect your packages and contents **BEFORE** signing for delivery. If merchandise is damaged it must be documented on the delivery receipt. Failure to do so releases the carrier of all liability, and any repair or replacement will be the customer's responsibility.

NOTE: BEST TARPS HAS NO CONTROL OVER DELIVERY DATES. ONLY SHIP DATES!!!!

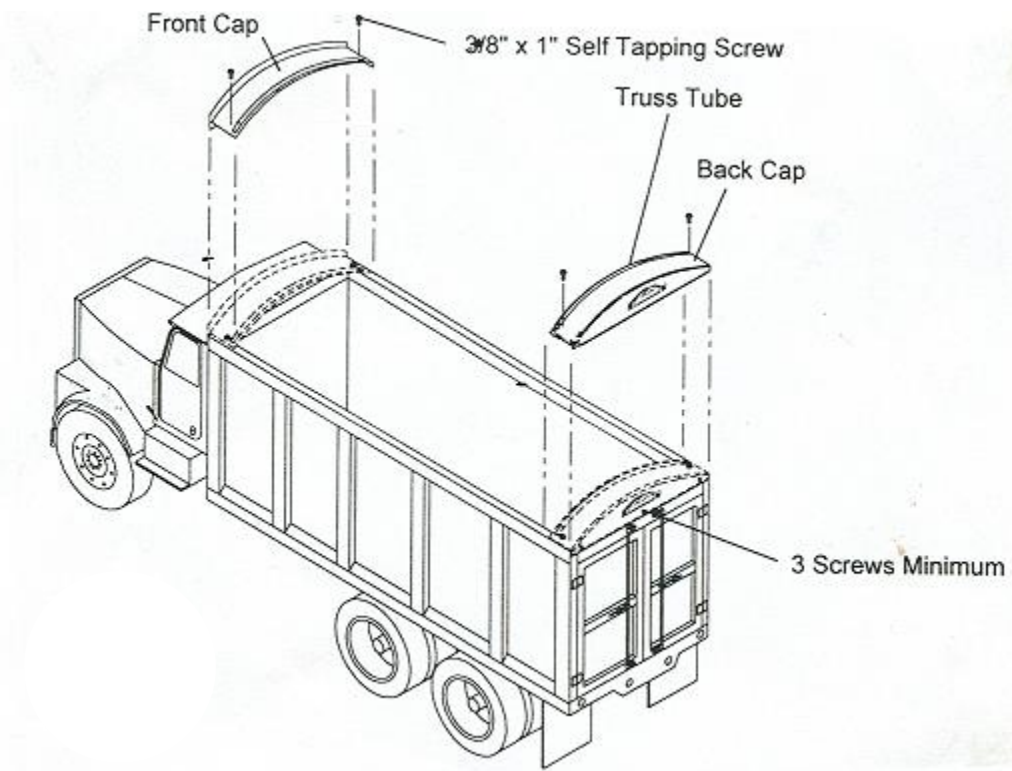
BEFORE YOU BEGIN:

Before installing your new Roll Master System on your trailer, it is important to remove all sharp edges or other objects which may interfere with or damage your tarp.

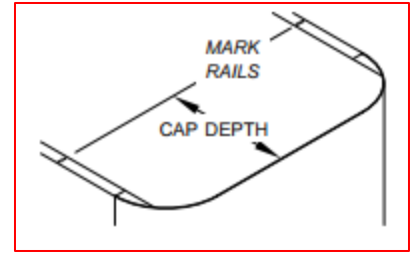
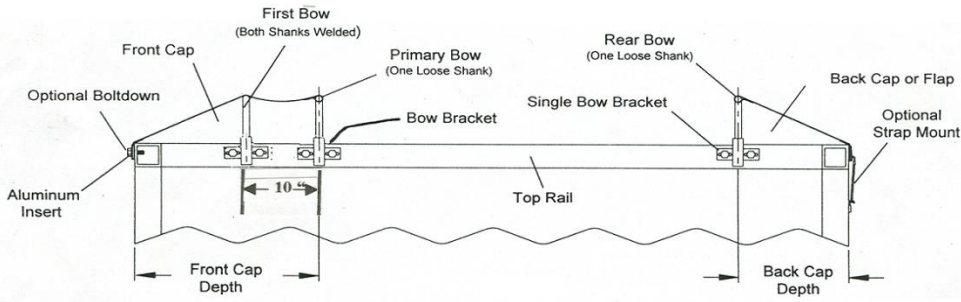
The pictures shown in the installation procedures may not show the type of bed you are installing your Roll Master System on. Due to the various styles of farm trucks, semi trailers, and end dumps, it is not possible to show all the different variations. Because of this, we have shown a generic model in our diagrams for installation instructions. All installation procedures should apply to most styles of boxes with only minor modifications required.

ALUMINUM END CAPS

The end caps supplied with your Roll Master System are universal fitting and may need slight modifications to fit your bed. If you wish to open your tarp from the passenger side to driver's side, the 2" drop on the passenger side of the tarp caps must be cut off. Set the caps on the truck to see if modifications are necessary. The illustration below should explain installation.

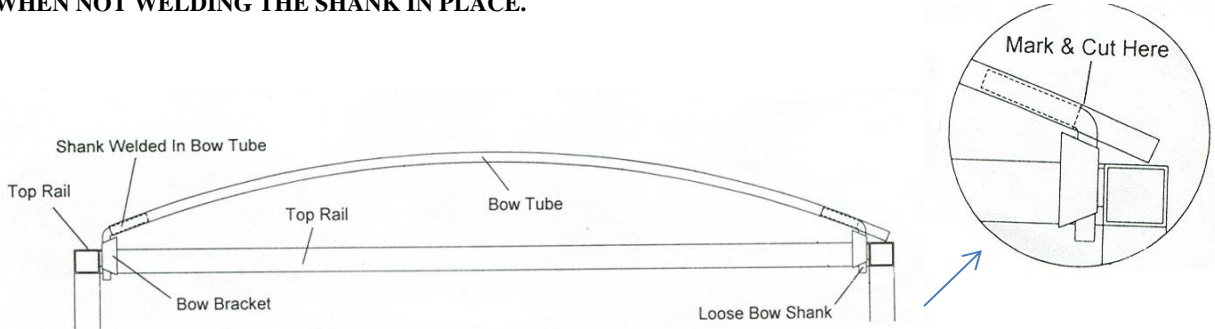


FABRIC END CAPS The first step in installing the front fabric cap is to find the cap depth which will be the distance from the outside of the front top rail to the center of the front bow. This measurement is where you will be mounting the center of the front bow bracket. Cap depth is marked with tag on front and rear caps.



Measuring from the front of box, mark cap depth on both top rails per cap depth listed on cap. Repeat this step for rear cap.

Next, mount the bow brackets to the inside of the box and place the bow, with the shank welded in place, into the 1st bow bracket. Next place a loose shank on the other side in the bow bracket. Hold the bow tube up to the shank and mark as close as possible to where the bend starts on the shank. See picture and note below. **Note: THE BOW MUST BE CUT TO THIS EXACT LENGTH TO PREVENT FLATTENING OF THE BOWS WHEN NOT WELDING THE SHANK IN PLACE.**



Now mark another bow (two bows are used for the front cap) and cut the bow tubes & weld a loose shank in only one of the bows. The bow with the loose shank is the fabric bow. Mount the brackets in place using 3/8" x 1" self tapping bolts. Slide the fabric bow through the pocket on the front fabric cap. Then place the loose shank in the end of the bow and put the bow in the bow brackets. Let the cap hang over the edges of the top rail until later instructions. Trimming around the bow pockets to achieve a better fit is permitted as long as no stitching is cut & that all cuts are smooth & consistent.

Fabric Back Cap: Back cap depth is the distance from the outside of your back gate to the center of the rear bow. The center of the rear bow is where you want to locate the center of the rectangular tube of the single bow bracket. Mount the brackets using the 3/8"x1" self threading bolts.

Back cap bow: follow the same procedure as the front cap fabric primary bow. **DO NOT** weld the loose shank in place. Slide the bow through the bow pocket on the front of the fabric piece then place the loose shank in the end of the bow and put the bow in the bow brackets.

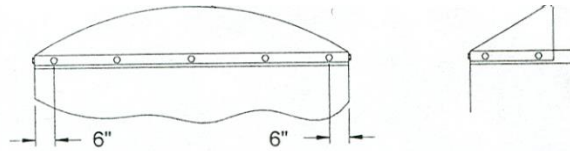
Fabric cap aluminum inserts: The aluminum inserts should be cut approximately 1/2" shorter than the length of each pocket. Slide the inserts into each pocket around the bottom edge of the fabric piece. On radius front corners, shape the insert to the same radius as the box.

FABRIC CAP ALUMINUM INSERTS CONTINUED: THERE IS NO BEST WAY FOR THESE INSERTS TO BE ARRANGED, HERE ARE SOME SUGGESTIONS.

1. The side insert & the radius insert may be one piece.
2. Always keep the insert across the straight portion at the front of the cap one piece.
3. Try to use as few inserts as possible.
4. Remember to create a nice even tension on the fabric cap, that will not only hold it in place, but keep it looking good.

The fabric caps can be held in place two ways. They can be bolted in place or they can be held in place by stretch straps. Best Tarps, Inc. recommends holding your Roll Master System end caps in place using the bolting method. Using 3/8"x1" self threading bolts. Use two on each side of the caps and 5 across the front. See picture below. If you prefer to use the strapping method the install procedures will be discussed later in the manual.

Fabric Cap Optimal Bolt Down Arrangement



Note: There are many different bow styles and makes of bulkheads on the market, and they may change without notice, so it's important that you have the proper fabric cap pattern for the style of bulkhead and that it fits properly. Also due to tolerances & inconsistencies beyond our control, it is not possible to achieve a perfect fit for each installation. Reasonable variations should be acceptable.

INTERMEDIATE BOWS

The bows provided in your Roll Master System are not designed for or intended to be used as a structural or side wall support mechanism in any box or trailer. The bows for your box or trailer may or may not have been ordered with the kit. It is the installer's responsibility to ensure that there is sufficient support structure to maintain proper tarp support.

The diagram below shows the type of bow recommended for supporting your Roll Master Tarp System and should be used in conjunction with a 1" or 2" ridge strap for the best support.



Standard kit orders on farm trucks and end dumps include galvanized steel bows. Semi/Grain trailer kits do not come with bows, but can be purchased separately.

RECOMMENDED MINIMUM BOW QUANTITIES USED W/ RIDGE STRAP

(EXCLUDING BOWS USED WITH FABRIC CAPS)

FARM BOX SIZE	QTY.	SEMI BOX SIZE	QTY.	BOX SIZE	QTY
10-14'	2	26-30'	6	43-46'	10
14-18'	3	30-34'	7	46-50'	11
18-22'	4	34-38'	8	50-54'	12
22-26'	5	38-43'	9		

FIXED TARP TUBE : 1-1/8"

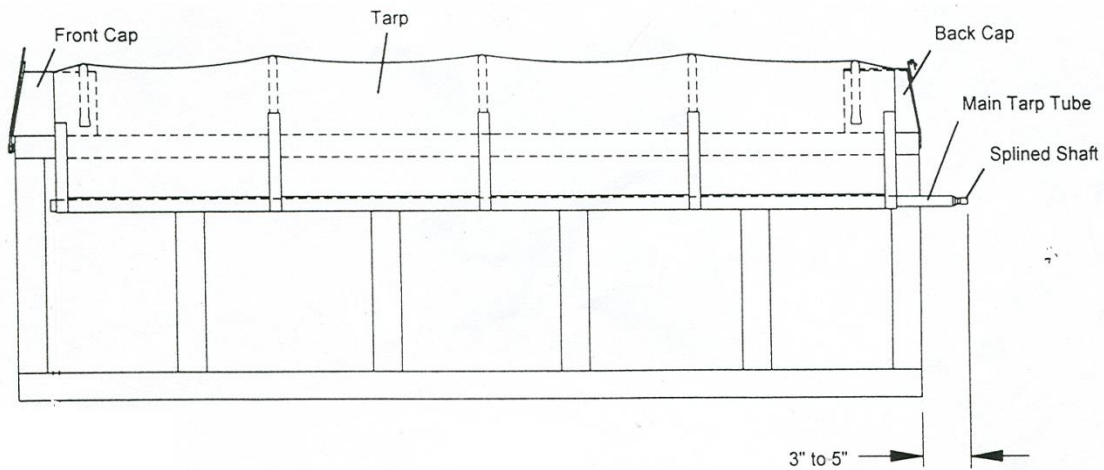
Cut the fixed 1-1/8" tarp tube to the same length as the tarp. **NOTE:** Units over 24' refer to the note below. Grind off all rough edges to prevent tearing the tarp and insert the tube into the 3" pocket of the tarp. Insert end plugs.

NOTE: Units over 24' long utilize two tubes that will have to be welded together. One end of each of the provided tubes is swaged. The swaged end of the 1st tube is to be inserted into the full end of the 2nd tube. Insure a straight alignment & weld the tubes together (weld all around). File or grind smooth the splice after welding.

MAIN TARP TUBE: 2" DIAMETER ROLL TUBE

Units over 24' long, follow the same procedure listed in the note above for splicing the fixed tubes. As for splicing the main tarp tubes together:

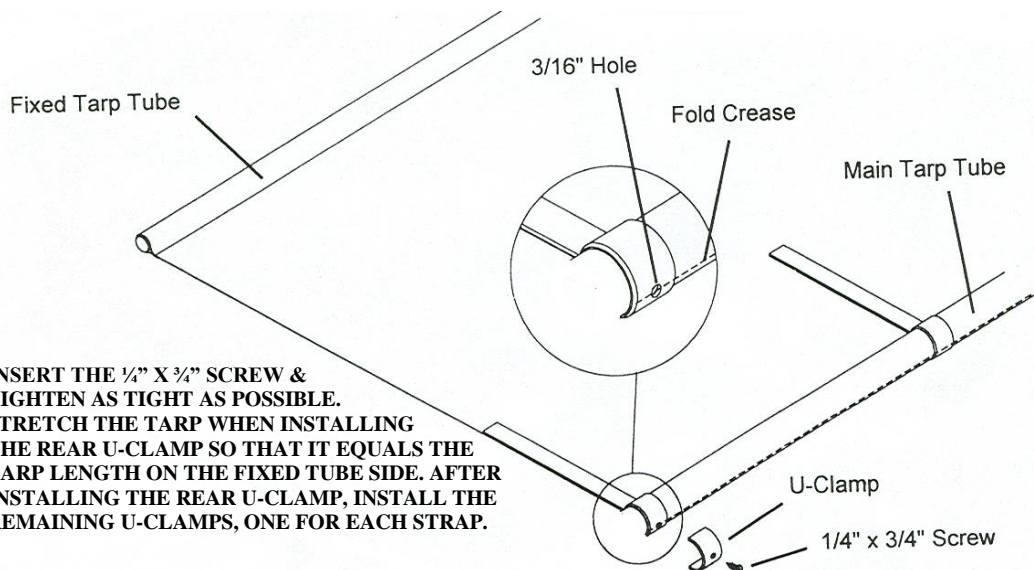
To determine the correct length of the main tarp tube, two dimensions need to be accounted for. The 1st is at the back of the box. The spline shaft must protrude 3 to 5" from the back of the box. The 2nd dimension is the main tarp tube. It is installed flush with the front of the tarp.



Now with the length of the main tarp tube figured out, cut the tube and grind off any rough edges. With the tarp lying on the ground, slide the main tarp tube into the 5" pocket of the tarp.

U-CLAMPS

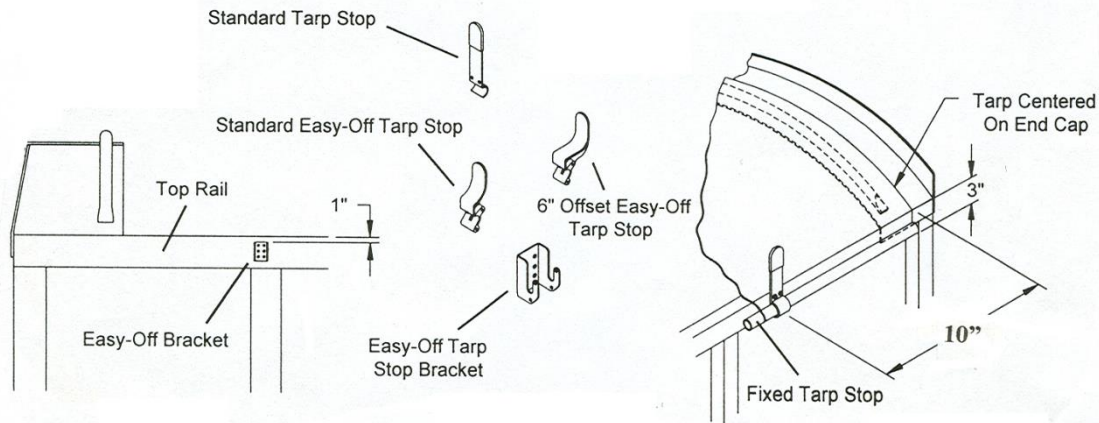
With the tarp lying on the ground you should notice that on the 5" pocket there should be a crease from the tarp being folded. This crease will act as a guide for installing the U-clamps. Place a u-clamp on the front strap and align the crease with the hole in the U-clamp. Drill a 3/16" hole through the strap, tarp and into the roll tube.



INSERT THE 1/4" X 3/4" SCREW & TIGHTEN AS TIGHT AS POSSIBLE. STRETCH THE TARP WHEN INSTALLING THE REAR U-CLAMP SO THAT IT EQUALS THE TARP LENGTH ON THE FIXED TUBE SIDE. AFTER INSTALLING THE REAR U-CLAMP, INSTALL THE REMAINING U-CLAMPS, ONE FOR EACH STRAP.

TARP STOPS: Before installing your tarp stops, keep in mind that your Roll Master System is designed to open from the driver's side to the passenger side. This means that the tarp stops will be mounted on the passenger side of the truck. If you decide to have your system open from the passenger side, you will need to mount your tarp stops on the driver's side of the truck.

Set the tarp up on the trailer or box and let the fixed tube (1-1/8" diameter) side of the tarp hang over the edge about 3". Position the tarp so that it is centered on the front and back caps. Making sure that the fixed tube is flush with tarp. Bolt a tarp stop approximately 10" back from the edge of the tarp using the 3/8" x 1" self threading bolts. See the note and diagram below.



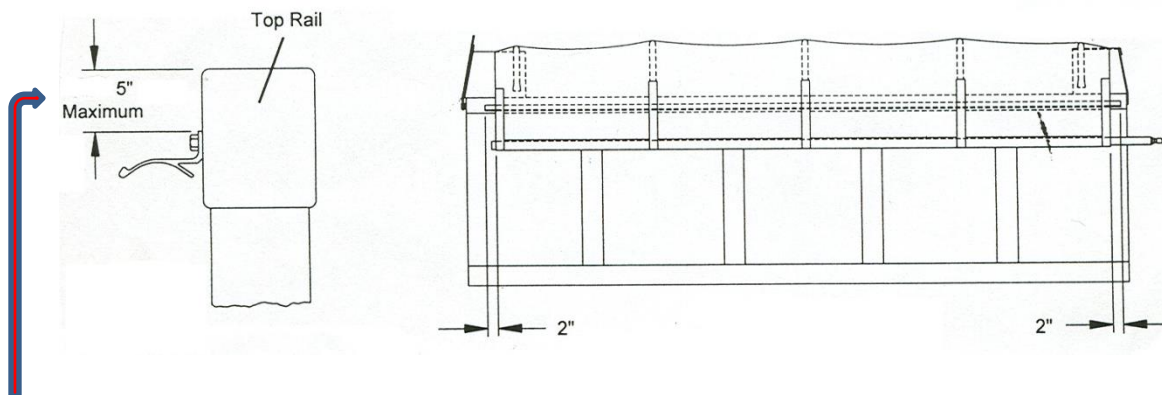
ALUMINUM LOK-RAIL

Allow the tarp to hang over the edge of the truck. The lok-rail must extend beyond the tarp at each end approximately 2". See note and diagram below.

Note: If your box has a rear swinging tailgate which folds back to where the lok-rail will be mounted, and any interference occurs, the lok-rail will have to be moved upward.

The lok-rail will be installed from the rear, proceeding to the front. Bolt in place approximately every 24" using the 3/8" x 1" self tapping bolts, starting no more than 6" in from each end of all lok-rail sections.

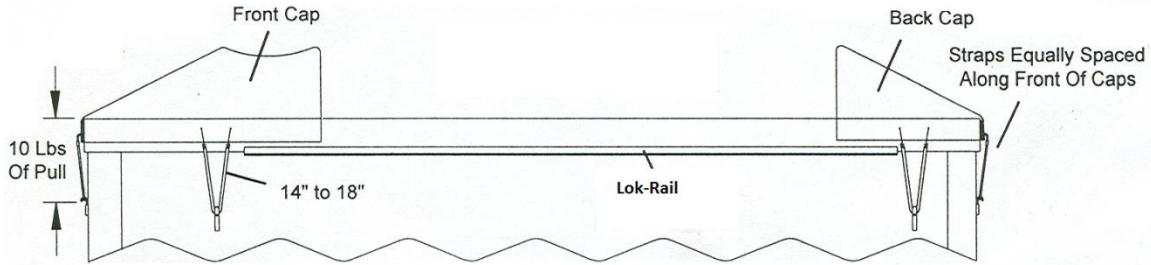
Note: The following installation procedure will complete the installation of your fabric end caps. If your application uses aluminum caps OR if you are using the bolting method, move to the next procedure (CRANK ASSEMBLY)



Note: if this system is being installed on a dump bed with wood side cheater boards, the latch plate will be installed below the 5" maximum to bolt direct to trailer. You will need a tarp wider than standard width.

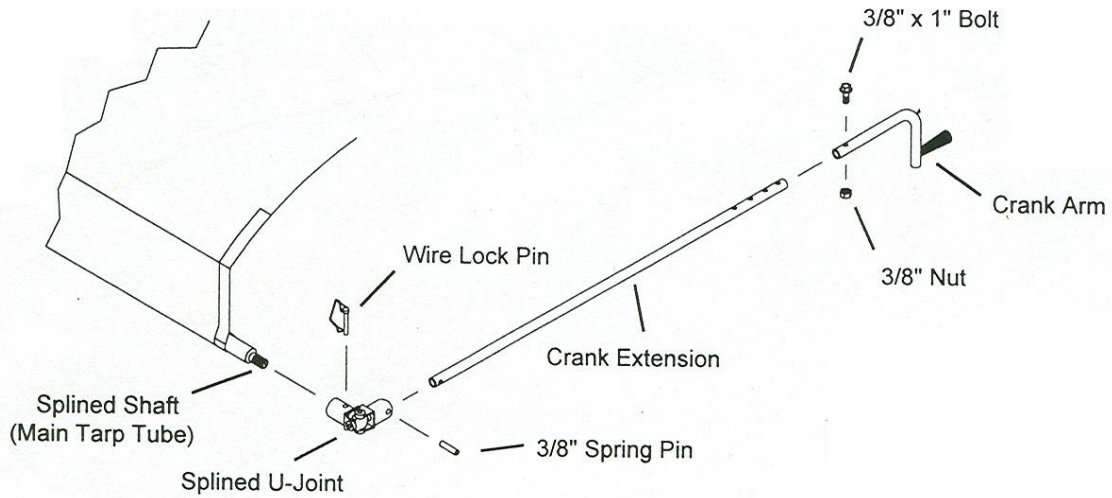
RUBBER STRAP AND J-HOOKS:

Locate the rubber strap on each side of the front and rear caps, as close to the center without touching the lok-rail. Drill 3/16" holes in the aluminum inserts for the rubber strap hooks. Mount the J-hooks to the box so that the straps have at least 10 lbs of pull forced on them. See diagram below. Equally space the remaining rubber straps across the front of the front and back caps.



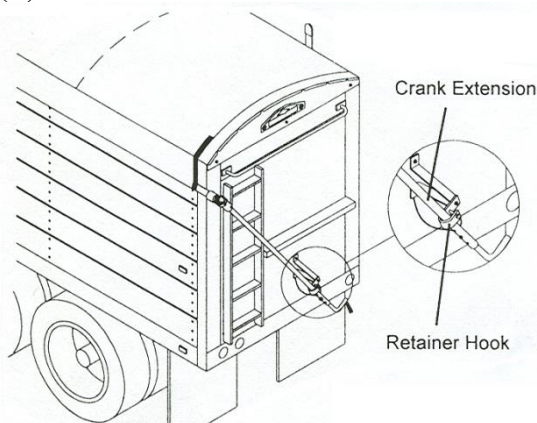
STANDARD CRANK ASSEMBLY

Slide the crank arm into the crank extension and finger tighten the 3/8" x 1-3/4" bolt and nut (crank arm can be adjusted after the tarp is open and closed once). Next place the crank extension into the spline u-joint and tap the 3/8" spring pin into the place. Then place the splined u-joint on the splined shaft and insert the 3/8" snap pin. See diagram below.

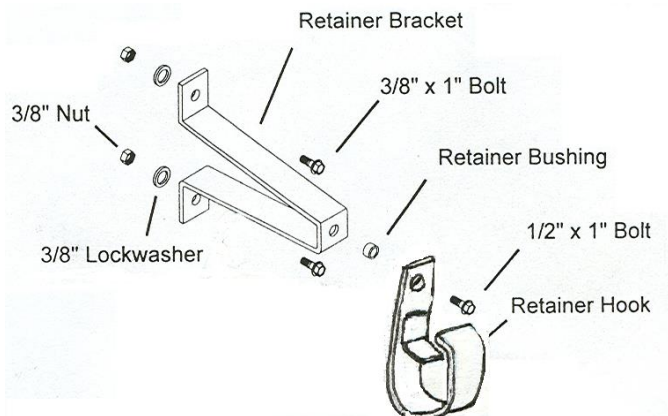


Now that the crank assembly has been assembled, roll the tarp under the lok rail and find the location you want to mount the crank extension portion of the crank assembly. See figure (A) below. The crank arm might be adjusted at this time. Once the location of the crank retainer has been determined, bolt the retainer in place. See figure (B) Now that everything is in place make sure that the bolt for the crank arm is tightened.

(A)



(B)

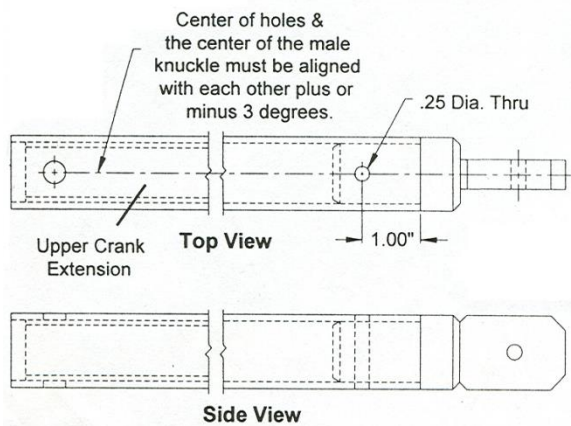


BREAK AWAY CRANK ASSEMBLY

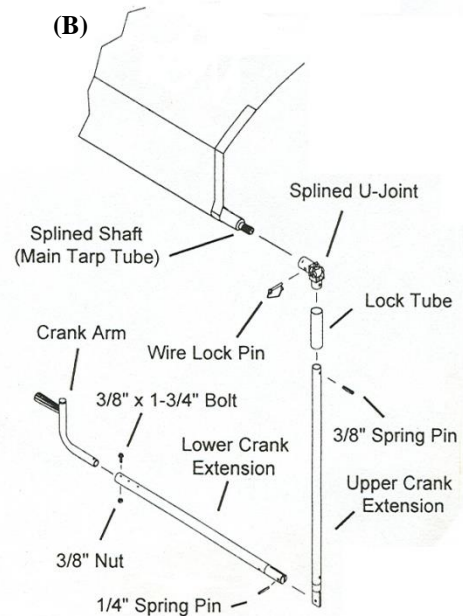
Assemble the upper crank extension to the splined u-joint using the 3/8" spring pin. Next bolt the crank arm to the lower extension using the 3/8" x 1-3/4" bolt and lock nut. Now attach the upper crank extension to the splined shaft on the main tarp tube with the snapper pin. Next attach the lower extension to the upper extension using the 1/4" spring pin making sure the lock tube will slide onto the upper crank extension. See Diagram (A) below and see note.

Note: Your breaking crank assembly may have come without the knuckles assembled. This was done so that the upper extension can be cut to suit your sidewall height. The details in diagram (B) must be followed when reassembling the upper crank extension.

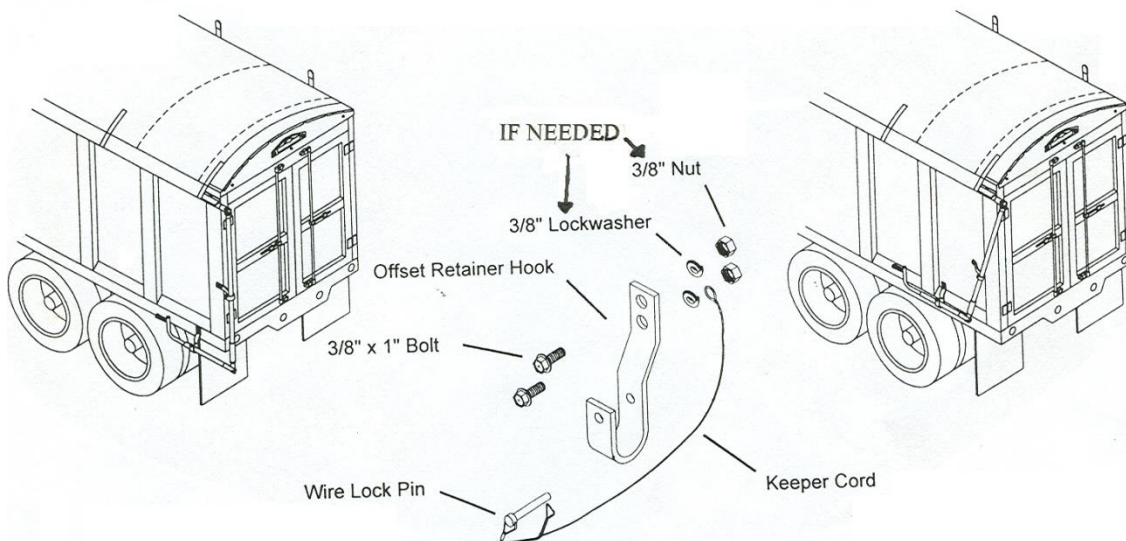
(A)



(B)



With the break away crank assembled, find the location for the offset retainer hooks. Make sure you allow enough room for the lock tube to slide up allowing the knuckles to bend. Once you have found a suitable location, mount retainers in place. See diagram below.



RETURN ASSEMBLY:

Slide the return rope through the PVC pipe so that it extends out of each end. Put a flat washer on the end of the rope opposite the plastic end plug and tie a knot. See diagram (A) below. Place the roll return into the main roll tube and press the roll return end plug into the tube. Approximately 1-1/2" past the end of the tarp, drill a 1 1/32" hole into the aluminum lok-rail. See Diagram (B) below. Place the eyebolt in the hole from the top side and secure. Let the tarp hang over the edge of the box and pull the return rope until all the slack has been removed from the return assembly. Thread the return rope through the eyebolt and pull until the main roll tube just starts to lift up and tie a knot. Cut the excess rope and melt any frayed ends.

Diagram (A)

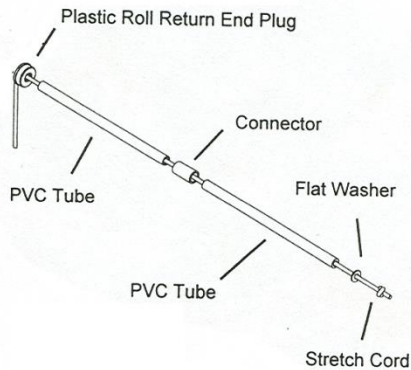
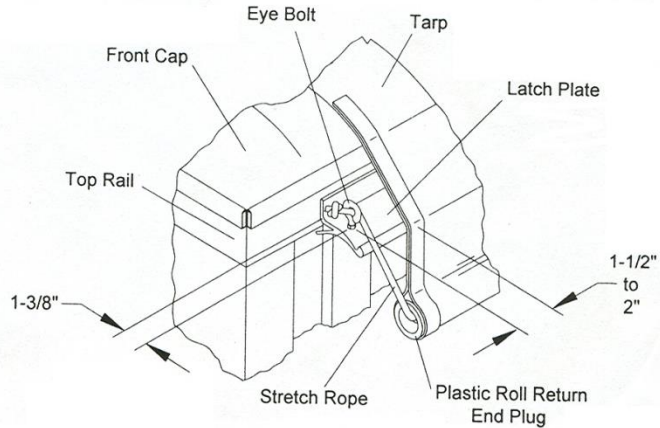
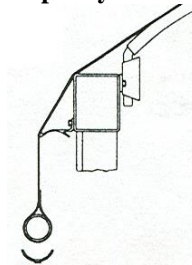


Diagram (B)

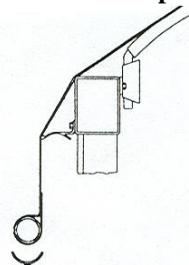


FINAL ADJUSTMENTS

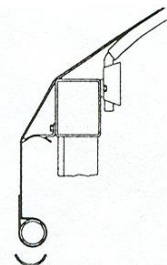
TARP TENSION: Tighten the tarp by holding the crank firmly with both hands and roll the main tarp tube up under the lok-rail. Next bring the crank handle down perpendicular to the ground. Continue tightening by lifting it up into the crank retainer. Then place the snapper pin into place. Repeat this procedure while adjusting the splined shaft and u-joint one tooth at a time to achieve to 40 to 60 pounds of tension at the handle end of the crank. Another method to measure tension is to adjust the tension until you see a slight deflection or a gradual bend in the crank extension of approximately 1/8". After the proper tension has been set on the crank, make sure that the tarp is in the locked position. Check to see that the tarp has equal tension on the front and back end caps and also the bows. For any reason that the tarp tension is not the same along the length of the tarp (I.E. tarp twist, u-clamps not aligned, box width varies from the front to the back), the u-clamps and the tarp may be readjusted in the loose area of the tarp.



Normal



Twist pocket outward & reinstall the u-clamp to decrease tarp tension in that area.



Twist pocket inward & reinstall the u-clamp to increase tarp tension in that area.

NOTE: IT IS VERY IMPORTANT THAT YOU MONITOR THE TARP TENSION DAILY TO AVOID PREMATURE TARP WEAR.

IF YOU HAVE ANY QUESTIONS CONCERNING THE INSTALLATION OR MAINTENANCE OF YOUR ROLL MASTER SYSTEM, PLEASE CONTACT YOUR LOCAL DEALER OR IF UNAVAILABLE, BEST TARPS, INC. AT 800-765-6127