2000SR



Installation Instructions May 2003



Donovan Enterprises • 3353 S.E. Gran Park Way • Stuart, Florida 34997 1-800-327-8287

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2000SR Tarp Housing Installation Instructions

STEP #1

Required Parts:

1 Fully assembled housing and tarp roller

2 Mounting angles

Before beginning installation:

- Check parts bags for correct contents. Contact your dealer if parts are missing. THE LAST PAGE CONTAINS THE REFERENCE GUIDE FOR THE HARDWARE YOU WILL NEED TO INSTALL YOUR SYSTEM.
- 2) Read through instructions for entire system to get a general idea of how each component is mounted and how the components fit together.

Choosing the Mounting Location

In general, the tarp housing should be mounted on top of the trailer and as far forward as possible so that the housing will be less likely to be damaged by loaders. Tarp housing should be mounted in a position to allow the pull bar to roll freely along the top rails of the sidewalls.

Installing the housing

- 1) Once the mounting location has been determined, install the 2 mounting angles by welding or bolting on to the body. Position the mounting brackets such that the side of the bracket with the 2 holes is vertical and even with the outside width of the body. The side with no holes is cut on an angle so as not to catch on the tarp. The angle must be facing the rear of the body.
 - NOTE: mounting brackets have slotted holes for slight adjustments to square system and tarp with body.
- Adjust the width of the housing by loosening the 5/16" carriage bolts in the slots located on the top and front of the tarp housing.
- 3) Extend or compress the housing to the outside width of the mounting brackets. Align the holes in the bracket with the holes in the housing and secure with 3/8" x 1" bolts, lock nuts, and flat washers, or by welding in place.

NOTE: the tarp housing is adjustable in width from 84" to 96" without modification. If narrower or wider tarp housing is needed, it will be necessary to remove the bolts and re-drill the housing.

2000SR Tarp Installation Instructions

STEP

Contents of Kit:

- 1 Tarp
- 1 Extruded aluminum pull bar
- 1 Pull rope with clip

- 1 Assembled and installed housing
- 1 Hardware kit
- 2 Steel cable ramps, 18 1/4"

Roller bar Pre-Loading

Before installing the tarp, the roller bar must be pre-loaded. To pre-load, rotate the roller bar in the direction indicted by the arrow sticker located on the left hand side of the roller bar. Ensure the lock pawl is engaged. Insert a phillips head screwdriver in to the tarp slot on the roller bar so that it locks against the housing, preventing the roller bar from rotating and losing the pre-load.

Pre-Loa	Pre-Load Recommendations	
<u>Tarp Length</u>	Number of Turns	
12'-16'	24/28	
18'-22'	30-34	
24'-28'	36-40	
30'-33'	42-45	

Number of turns is approximate. Add 3-5 turns at a time until the tarp retracts completely.

For tarps with flaps use the next increment of turns for the given length of tarp being used.

WARNING: Pre-loading the roller bar opposite the direction of the arrows will damage the spring. Do not exceed fifty turns of pre-load.

Note: We recommend that you you do not exceed the blow chart for tarp length. Using a longer tarp than recommended may cause the unit to fail and will void the warranty on the internal spring.

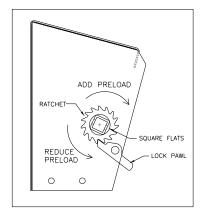
Tarp Material	Max Length	
Vinyl tarp with drop flaps	16'	
Regular vinyl tarp	20'	
Heavy duty mesh	26'	
Light mesh	33'	

Installing the tarp

- 1) Lay the tarp out flat ensuring the top of the tarp is facing up and the 4" pocket is to the rear. To help identify the top side of the tarp, ensure the side hems fold underneath and the 4" pocket is sewn with hem facing up.
- 2) Install the tarp into the roller bar by inserting the tarp spline into the tarp slot of the roller bar through the center void where there is a gap between the left hand roller bar outer and the right hand roller bar outer. If the void is not large enough to allow the tarp to be installed from the center void, clamp the roller bar in place, remove the phillips head screw driver from right hand side of the roller bar. Insert tarp spline into the right hand side of the roller bar. NOTE: when clamping roller bar in place, place the clamp within the first 2" of the driver's side of the roller bar. This will help prevent having to remove the clamp while installing the tarp.

Adjusting roller bar spring tension

- 1) After the tarp is installed, it may be necessary to adjust the spring tension applied during the pre-load. To increase spring tension: use a 1" wrench on the square flats and rotate the ratchet clockwise while counting each full rotation.
 - **WARNING:** Lock pawl must be fully engaged before wrench is removed to prevent injury.
- 2) To decrease spring tension: while holding a 1" wrench on the square flats, lift lock pawl to disengage it from ratchet. Rotate ratchet counterclockwise while counting each full rotation.
 WARNING: Lock pawl must be fully engaged before wrench is removed to prevent injury.



Assembly of the pull-bar

- 1) Slide the 1" shaft collar to the middle of the pull bar and secure in place by tightening the set screw.
- 2) Insert the pull bar into the 4" pocket on the rear of the tarp.
- 3) Slide a 1" shaft collar onto each end of the pull bar; leave the set screw loose for final adjustment later.
- 4) Slide a 3" fender washer onto each end of the pull bar.
- 5) Slide a 1" x 6" PVC roller onto each end of the pull bar.
- 6) Slide the 5" fender washer onto each end of the pull bar.
- 7) Slide a 1" shaft collar onto each end of the pull bar; leave the set screw loose for final adjustment later.
- A small slot must be made in the rear pocket of the tarp to attach the center pull rope to the pull bar. Measure the distance across the rear pocket of the tarp and mark the center point at the rear most edge of the pocket. Cut a small slot (approx 1/4") in the tarp at the center point. Align the slot with the center shaft collar on the pull bar. Remove the set screw in the shaft collar. Insert the eye bolt through the slot in the tarp pocket and into the shaft collar. Tighten eye bolt to secure shaft collar to pull bar. Clip the pull rope onto the eye bolt.

Adjusting the pull bar width

- 1) The pull bar may require an adjustment in width due to variations in body width and side wall thickness. PVC Rollers on the pull bar should be centered over top rail of each side. If roller positioning needs adjustment, it is only necessary to adjust one side.
- Slide the passenger side outer shaft collar to within 1" of the end of the pull bar. Apply included Loc Tite on shaft collar set screw and secure in place. Slide all remaining passenger side hardware against the outer shaft collar (5" fender washer, PVC roller, 3" fender washer, 1" inner shaft collar), and secure the inner shaft collar by applying Loc Tite and tightening the set screw. Ensure the PVC roller is centered on the passenger side top rail.
- Align the driver's side PVC roller on the center of the rail and secure the shaft collars as in step 2 above. Cut off any excess pull bar ensuring that you leave at least 1" of pull bar extending beyond the outer shaft collar.
- 4) Loosen the center eye bolt and adjust as necessary to center the tarp on the pull bar.

Side wall modifications

It may be necessary to build up or modify sides of body to allow the pull bar to roll smoothly from the tarp housing along the top rail of the body and over the tailgate latch. This may be done using wood or metal to raise the entire side height or act as a ramp to transition the pull bar over obstacles such as tailgate hinges. NOTE: using steel wire cable is an excellent way to fabricate a ramp for the rollers to transition over. Weld or bolt one end of the cable to the top rail and one end to the top of the obstacle to transition over. If the obstacle is the tailgate hinge, cable will flex out of the way when the tailgate is raised.

2000SR
Tailgate Latches and Rope Hooks

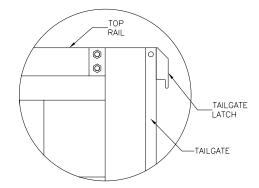
Contents of Kit:

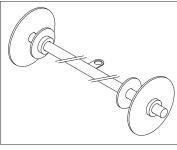
2 Steel tailgate latches
1 Pull rope

4 "J" hooks

Installing the tailgate latches

1) Mount (weld or bolt) the tailgate latch to the top edge of the tailgate in a location that allows the pull bar to transition smoothly over the tailgate and latch under the tailgate latch. Spring tension in the roller bar will lock the pull bar snugly against the tailgate latch.





Installing the rope hooks

- 1) Weld or bolt each "J" hook to the tailgate in a position that allows the entire length of the pull rope to be stored when the tarp is fully extended.
- Mount another set of "J" hooks to the front driver's side of the body or trailer in a position that allows the entire length of tarp rope to be stored when the tarp is fully retracted.

2000SR Hardware Kit

Description	QTY	Part#
Mounting angle bracket hardware 3/8" x 1" bolt 3/8" Lock nut 3/8" Flat washer	4 4 4	2883 2868 2867
Pull bar hardware Eye bolt with nut 5/16" x 1 1/4"	1	2454
Fender washer, 1" x 3" Fender washer, 1" x 5" Shaft collar, 1" Loc Tite, small tube	2 2 5 1	92 N/S 40 N/S
PVC roller 1" x 6"	2	2451

Any Questions?.....Call us at 1-800-327-8287.

HEAVY DUTY TRUCK DIVISION WARRANTY

SATISFACTION GUARANTEE

Donovan Enterprises, Inc. guarantees customer satisfaction of all Donovan Covering Systems. Customer satisfaction will be assured as outlined in Donovan's Warranty Statement.

WHAT IS COVERED?

- Donovan Enterprises, Inc. warrants for a period of 90 days from date of delivery, all Covering System parts against defects in material and operation, and for a period of one year against defects in workmanship.
- This warranty is effective if the product is installed according to Donovan's published installation instructions and used for the systems intended purpose.
- Tarps are warranted for a period of 90 days against defects in workmanship.
- Donovan Enterprises' obligation to customer satisfaction under this warranty begins with repair, or at its option, replacement of any part under warranty. If within the first 90 days of delivery, every option to satisfy the customer's needs has been exhausted, the distributor's original purchase price will be refunded upon return of undamaged products that have not been altered, modified, or subjected to misuse or negligence.

WHAT IS NOT COVERED?

- Donovan Enterprises, Inc. shall not be liable or responsible to supply or pay labor to replace any part found defective, nor shall it be liable for damages of any kind or nature to person, product, property, or other consequential damages.
- This warranty does not apply to non-standard covering system designs or applications
- Damage caused by improper installation, operation, or abuse is not covered
- Damage caused by chemical or environmental exposure
- Damage due to the lack of the proper circuit breaker
- Consequential losses or damage to equipment or materials.
- Consequential expenses such as labor, delays, vehicle downtime, loss of revenue, etc.

REPAIR / REPLACEMENT PROCEDURE

- All returns for warranty purposes must be assigned a return authorization number prior to return of
 defective product and shipping must be prepaid by the distributor / customer to Donovan
 Enterprises, Inc., Stuart, Florida, or other Donovan shipping point. Donovan will pay return freight
 to distributor upon receipt of defective part. If express freight is requested, customer will pay the
 additional freight charge above the ground rate.
- Donovan Enterprises, Inc. retains final judgment that a product under warranty is, in fact, defective.
- Donovan Enterprises, Inc's products are sold without any express or implied warranty except as set forth above.
- No person is authorized to modify the preceding warranty in any manner.

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Thank you for your purchase



May 2003

Donovan Enterprises

3353 S.E. Gran Park Way, Stuart FL. 34997

1-800-327-8287

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