

Tarping Systems, Inc.

TERMINATOR

External Mount 4 Spring Premium Aluminum Tarp System Installation Instructions



We would like to congratulate you on your purchase of your new Tarping System, Inc. tarp system. Our products are constructed of the highest quality materials. If you need support at any time through the installation process feel free to contact your rep at **888-838-3229**.

WARNING:

- Never operate tarp system under power lines, this may cause injury due to electrocution.
- Never operate tarp system while moving.

CAUTION:

- Read through instructions for entire system and follow directions thoroughly to ensure the system functions properly.

TOOLS REQUIRED:

- Ratchet
- 3/8", 1/2", 9/16", and 3/4" Sockets and Wrenches
- Pipe Wrench
- Welder- Steel and Aluminum
- Screw Driver
- Drill
- 3/8" and 1/2" Drill
- 1-1/2" Hole Saw

CONTENTS – EXTERNAL TERMINATOR



INSTALLATION INSTRUCTIONS

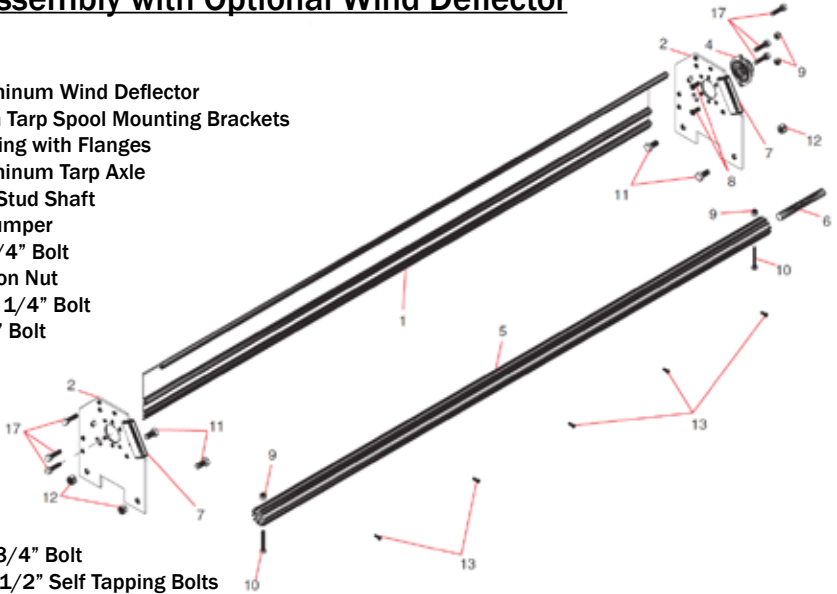
INCLUDED PARTS:

* = OPTIONS

QTY	Part #	Description
Long Box		
2	T-BA10	Unbreakable Terminator Arms
1	T-TSCT *T-TSCT	One Piece Terminator Steel Cross Tube for Terminator Three Piece Terminator Steel Cross Tube
1	T-ATA103	Aluminum Tarp Axle
Small Box		
2	T-TPP4SP	Terminator 4 Spring Pivot Pin
2	T-TERMC4SPC	Terminator Pivot Casting
*2	T-TERMPCC	Terminator Pivot Casting Debris Cover
8	T-ST5	Spiral Torsion Springs
1	T-ABWF	Axle Bearing With Flange
2	T-ATSMB	Aluminum Tarp Spool Mounting Brackets
2	T-STCF	Stealth, Plastic Tarp Centering Flange
1	T-SS	Steel Stud Shaft
1	T-THWK	Hardware Bag for Terminator System
*2	T-S90C	Steel 90 Degree Corners for 3 piece cross tube
Electric Contents		
1	T-APACHE	Tarp Motor
1	T-W8G	Roll of 8 Gauge Dual Connector Wire
1	T-RSK *T-RPS2	Rotary Switch Kit Weatherproof Reverse Polarity Super Switch
Manual Contents		
1	T-CBGL	Crank Box, Ground Level
1	T-C#40	#40 Chain
1	T-SB14	Sprocket bar with 14" shaft
1	T-ABWF	Axle Bearing With Flange

Spool Assembly with Optional Wind Deflector

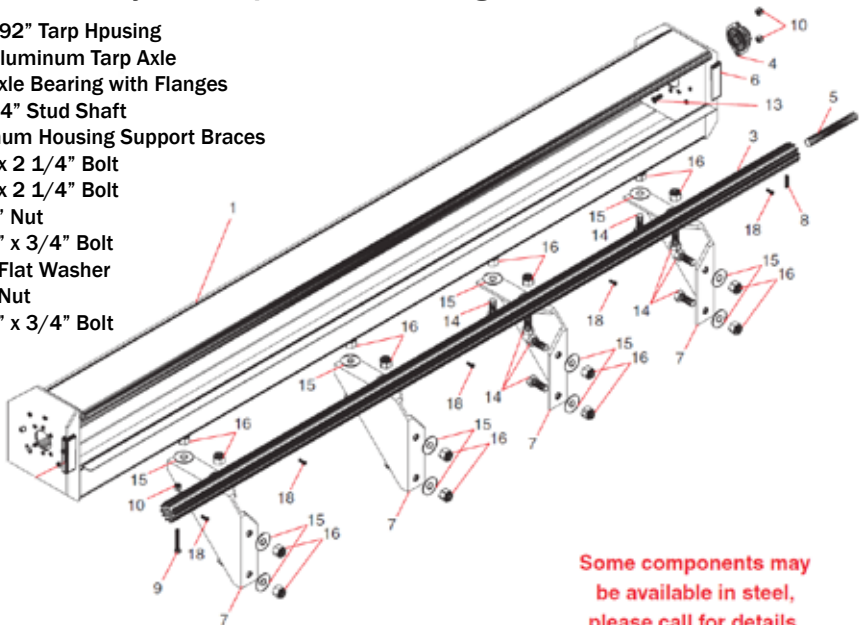
- 1 - 103" Aluminum Wind Deflector
- 2 - Aluminum Tarp Spool Mounting Brackets
- 4 - 3/4" Bearing with Flanges
- 5 - 103" Aluminum Tarp Axle
- 6 - 5" x 3/4" Stud Shaft
- 7 - Rubber Bumper
- 8 - 5/16" x 3/4" Bolt
- 9 - 5/16" Nylon Nut
- 10 - 5/16" 2 1/4" Bolt
- 11 - 1/2" x 1" Bolt



- 12 - 1/2" Nut
- 13 - 5/16" x 3/4" Bolt
- 17 - 3/8" x 1 1/2" Self Tapping Bolts

Spool Assembly with Optional Housing

- 1 - 98" or 92" Tarp Hpusing
- 3 - 103" Aluminum Tarp Axle
- 4 - 3/4" Axle Bearing with Flanges
- 5 - 5" x 3/4" Stud Shaft
- 7 - Aluminum Housing Support Braces
- 8 - 5/16" x 2 1/4" Bolt
- 9 - 5/16" x 2 1/4" Bolt
- 10 - 5/16" Nut
- 13 - 5/16" x 3/4" Bolt
- 14 - 5/8" Flat Washer
- 16 - 6/8" Nut
- 18 - 5/16" x 3/4" Bolt

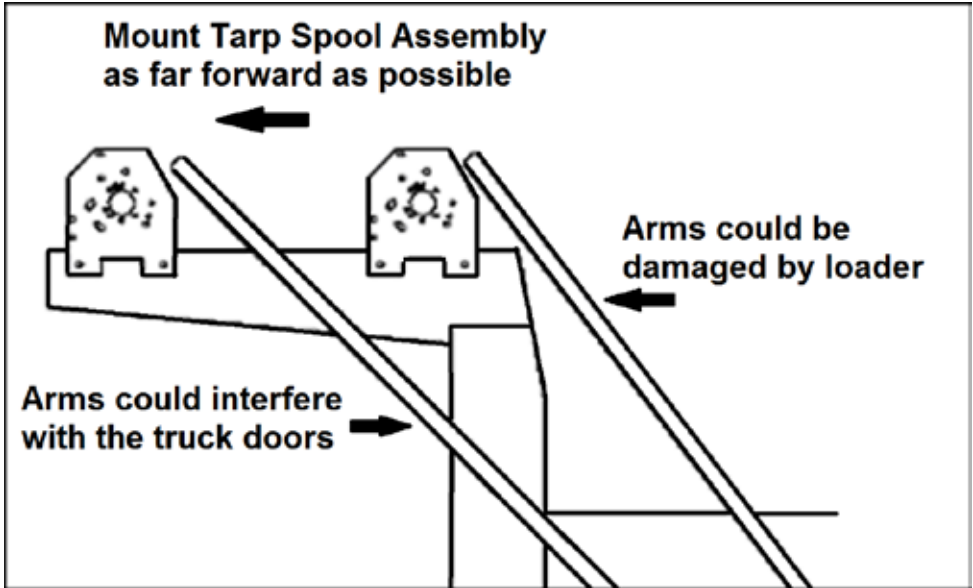


Some components may be available in steel, please call for details.

INSTALLATION INSTRUCTIONS

STEP 1: CHOOSING THE MOUNTING LOCATION OF THE TARP SPOOL KIT

The Tarp Spool Kit (T-SKMP) and Tarp motor should be mounted on top of the cab guard and as far forward as possible to avoid damage by loaders. **Note: If it is mounted too far forward, it may interfere with the truck doors.** (See Figure 1) The ideal location is determined by placement of the pivot arms from the Tarp Spool Kit to the pivot point on the dump body. See the Pivot Mounting instructions for determining the pivot point on dump or trailer body.



Exceptions: Trucks with vertical stacks may be in the way of the pivot arms if the Tarp Spool Kit (T-SKMP) and motor were mounted ahead of the stack(s). You can either realign or shorten the stack(s) to solve this problem. Otherwise, the Tarp Spool Kit and motor should be mounted towards the rear of the stacks. If there is no room to mount the Tarp Spool Kit and motor towards the rear, they will need to be mounted on top of the side board pockets to the front of the body.

STEP 2: INSTALLING THE MOUNTING BRACKETS

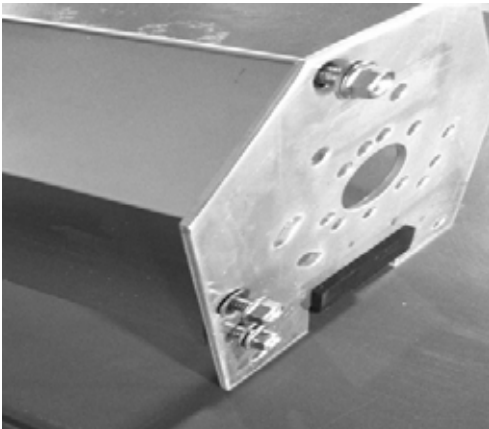
Once you have determined your mounting location, you may either install the included Tarp Spool Mounting Brackets (T-ATSMB) using the enclosed hardware or use the brackets as a template to drill the necessary holes into the cab guard sides or other secure location. **Note: If you use the brackets as template, please ensure that there is enough clearance between the tarp spool and the cab guard to roll-up the entire tarp.**

STEP 3: MOUNTING THE SPROCKET BAR AND TARP SPOOL

Mount the Tarp Spool Mounting Brackets (T-ATSMB). Measure from inside of one bracket to the inside of the other. Cut the Aluminum Tarp Axle (T-ATA103) on the end without the pre-drilled hole 1" shorter than its length. Drill a 5/16" cross hole through the Aluminum Tarp Axle, 3/4" in from the end that was just cut off. Start the hole in one of the round bottomed slots, not one of the threaded slots. Slide one end of the tarp axle over the sprocket bar output shaft and secure with a 5/16" carriage bolt, washer, and nut. Slide the Stud Shaft (T-SS) through the Axle Bearing (T-ABWF) into the tarp axle. Line up the holes in the tarp axle to the hole in the Stud Shaft and secure with 5/16" carriage bolt, washer, and nut. **(If you received new adjustable tarp axle, T-ATA93, no cutting and no drilling required. Slide outside ends out evenly between tarp spool mounting brackets and reinsert pan head stabilizing screw.)**

***STEP 4: INSTALLING THE OPTIONAL WIND DEFLECTOR**

Cut the Aluminum Wind Deflector (T-AWD) to the proper length and attach it to the Tarp Spool Mounting Brackets (T-ATSMB) using the included six (6) each self threading bolts. (See **Picture**)



Option Wind Deflector With Aluminum Mounting Bracket

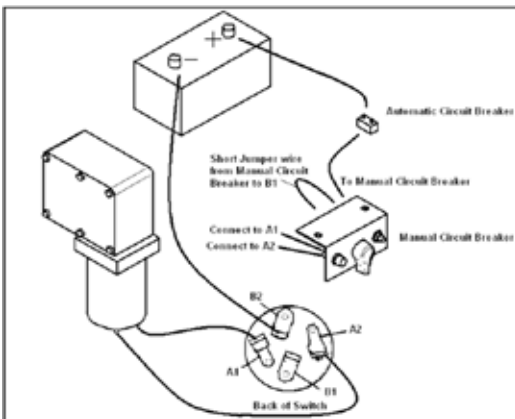
***STEP 4: INSTALLING THE OPTIONAL TARP HOUSING**

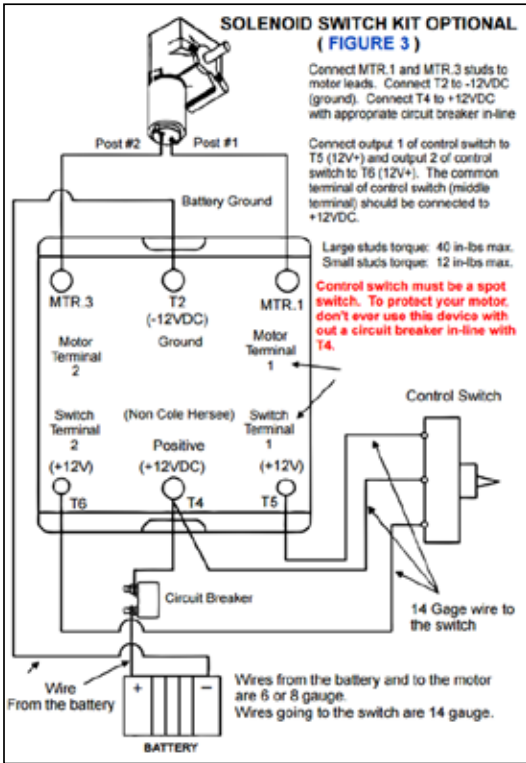
Create a pattern template using cardboard of the bottom of the tarp housing. Mark the location of bolts on the headboard of the truck. Securely fasten the Tarp Housing to the headboard of the truck using provided bolts. If you are using the optional Housing Support Brackets; use a chalk line and level to designate the position of the bottom of the housing and secure the support brackets to the front of the dump trailer. Securely fasten the Tarp Housing to the support brackets.

STEP 5: WIRING THE TARP MOTOR

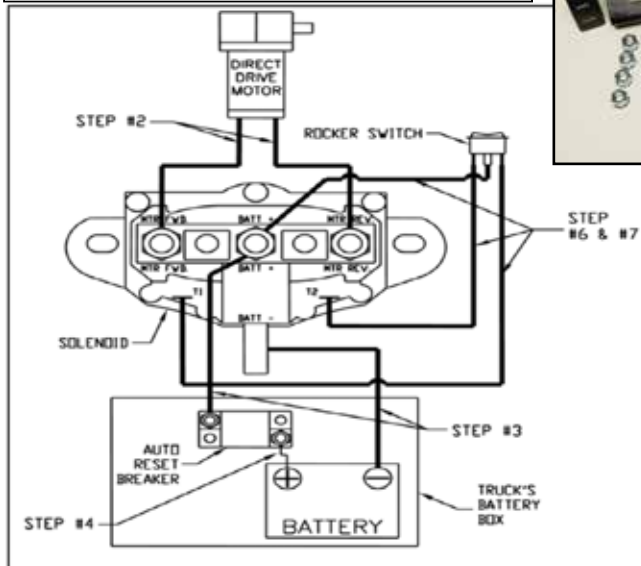
The motor must be wired with the provided 6 / 8 Gauge Wire. Use of smaller wire will cause your tarp system to operate slowly and possibly overheat. **Suggestion: Running ¾" EMT conduit down the front of the body and back along the frame rail provides a safe place to run the wires as well as adding a clean look to your system installation.**

1. Mount the included switch bracket in a convenient location making sure that nothing will fall or rest against the bracket that could hold the switch in the "On" position or prevent the circuit breaker from popping. Either situation could damage the motor and the motor **will not be covered under warranty.**
2. Connect the switch, circuit breaker, and indicator light in the bracket as shown in **Figure 2 and 3** [full size images in following page] using the included terminals and jumper wire.
3. Unroll the included 6 / 8 gauge wire. Run the wire down the front of the body from the tarp motor, back along the bottom of the box, around the hinge (leaving enough slack to avoid binding or pinching during the operation of the lift) and into the cab where the switch is mounted. For tractor-trailer or lead-pup combinations, a plug set rated to 50 amps or higher should be used between the truck and the trailer(s).
4. Cut off the extra lengths of wire, leaving enough to easily connect to the switch. Set aside one of the pieces of left-over wire to later run from the cab to the positive (+) post of the battery or starter. **WARNING: DO NOT CONNECT AT THIS TIME!** Run another piece of wire from the cab to a ground screw on the firewall or other suitable grounding location using the included terminal.
5. Connect the wires leading from the switch to the motor using from the cab to the ground terminal of the battery and connect using the included terminal.
6. Connect the positive wire to the battery terminal marked (+) and check to see that the system is operating as indicated on the switch bracket. To wind-up the tarp, the tarp roller bar should spin counter-clockwise viewing it from the driver's side of the cab. If not, swap the two wires connected to the motor. If the roller bar rotates clockwise, any debris on the tarp will be rolled up in it and possibly cause damage.





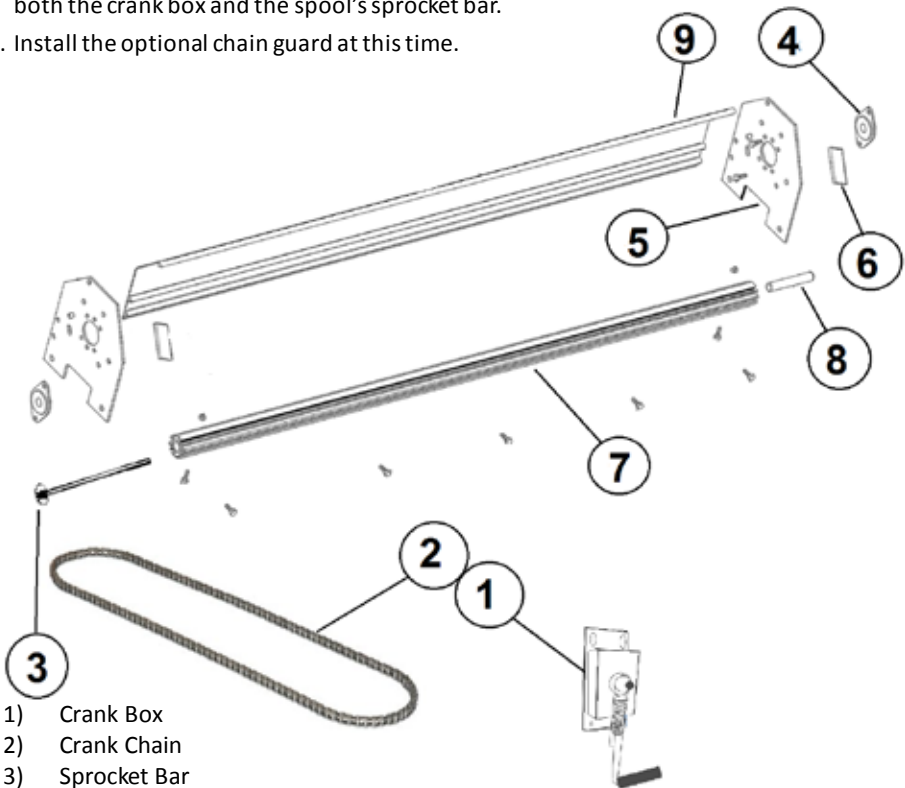
RPSS2



RPSS

STEP 5: ATTACHING THE CRANK BOX AND CHAIN

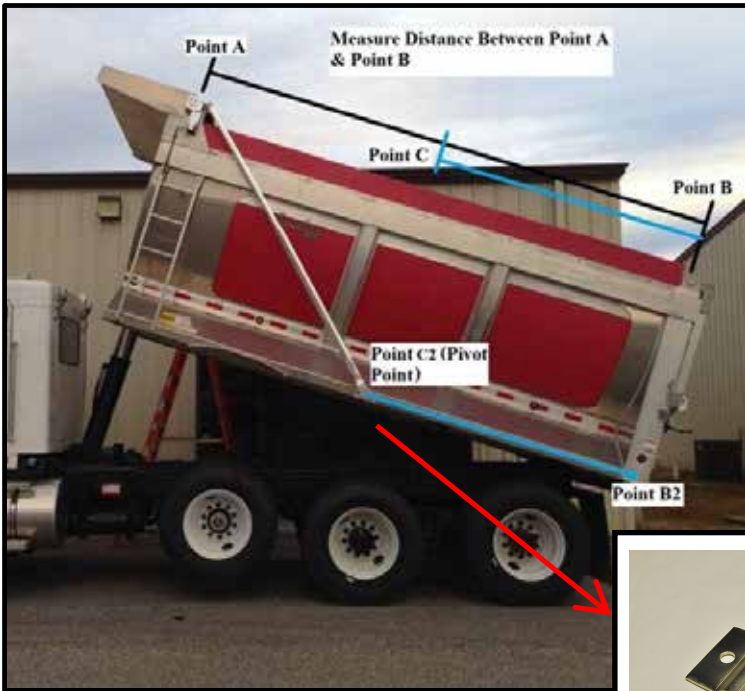
1. Choose a comfortable position that the crank handle can be operated from the ground. Mark this location. **Note: The crank box does not need to be directly below the sprocket.**
2. Wrap the #40 chain over the sprocket of the tarp spool and pull it through the center point of the area you marked as the location for the crank box. Trace a 6" line along the edge of the chain from the center point of the crank box toward the tarp spool.
3. Place the crank box back over the center point and angle it so the line is exiting the top of the box. **Note: If the box cannot be mounted because it extends past the edge of the box, repeat step 5-1 and 5-2.** Drill and mount the crank box.
4. Release the master link of the #40 chain, adjust the length of the chain, install the chain on both the crank box and the spool's sprocket bar.
5. Install the optional chain guard at this time.



- 1) Crank Box
- 2) Crank Chain
- 3) Sprocket Bar
- 4) Axle Bearing
- 5) Spool Mounting Bracket
- 6) Bracket Rubber Bumper
- 7) Tarp Axle
- 8) Stub Shaft
- 9) Aluminum Wind Deflector

STEP 6: POSITIONING THE PIVOT PINS

1. Measure your dump body from **Point A** to **Point B**. (See [Figure 4](#)) Divide that number by 2 and make a mark at the top of the bed for **Point C**.
2. Measure from **Point B** to **Point C**.
3. Bring measurement from **Point C** down to the bottom of your bed. Starting from **Point B2**, Measure out toward the cab until you reach the same measurement from step 2. This will be **Point C2**. (Your Pivot Point).
4. Repeat steps 1 through 3 on other side of bed to make sure pivot points are equal.
5. Before moving on to step 6, double check your measurements by measuring from **Point A** (Center Point of Motor Shaft) to **Point C2**. Next, measure from **Point B** to **Point C2**. Both measurements should be the same. This will be center point of pivot pin.
6. Hold pivot pin on center mark and mark holes for pivot pin placement ([Figure 4a](#))



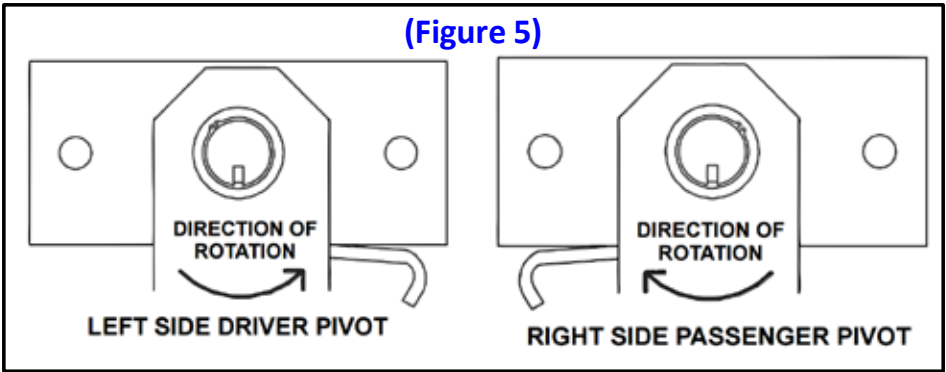
(Figure 4)



(Figure 4a)

STEP 6 [CONTINUED]: POSITIONING THE PIVOT PINS

7. Bolt or weld the pivots pins to the box using the 5/8 x 1 ½ bolts included in hardware bag. (The head of the bolt must be on the outside, and the washer and nut on the inside).
Note: The pivots are directional (See **Figure 5**) below to determine which is the driver and passenger side pivots).
8. To load the Spiral Torsion Springs (T-STs), rotate the pivots so that the hooks on the springs will clip over the pin inside the pivot casting, as shown in **Figure 5** below.



STEP 7: INSTALLING THE TARP BOW

1. Hold one of the upper arms (T-BA10) up to the side of the dump body with the end against the center of the Tarp Spool or housing opening and with the end of the tube going past the pivot point. If the bow is in the way of the door, or if it will be in the way of a loader, then the bows should be offset. If you have any questions regarding the offset of the bows, please contact your local dealer.
2. Rotate the pivots around toward the front of the truck and back so that the pin inside the pivot casting ends up resting on top of the springs. This will simplify the rest of the installation because the pivots may now be moved without loading the springs. The pivots should now be pointing toward the rear of the body.
3. Slide one of the upper arms (T-BA10) into the Terminator Pivot Casting. Adjust the arm length until the corner rests on the desired landing point at the back of the dump body. (**Point B** from the previous Pivot Installation). If the arm is too long, cut both arms to the correct length.
4. Slide both upper arms (T-BA10) into the Terminator Pivot Castings (make sure that both arms end up the same length) and lightly tighten the two bolts that hold each upper arm in the pivot castings. Final tightening will be done later.

STEP 7 (CONTINUED): INSTALLING THE TARP BOW

5. Slide the ends of the rear cross tube into the upper arms. Ensure that the cross tube is not pushing out on, or pulling in on the arms (this will damage the pivot area).
6. Do not drill or bolt the cross piece to the lower arms at this time.
7. Swing the assembled tarp bow forward until it rests on the tarp spool or housing assembly. The bow should be resting in the center of the tarp spool or housing assembly opening. If the bow is not landing in the center of the opening, adjust the depth of the corners of the cross tube and mark the position (you may want to hold the cross tube in this position using tape).
8. Swing the tarp bow back to the rear of the dump body and check the landing position based on the marks made on the cross tube corners. If it appears that the bow will interfere with the operation of the tailgate, the pivot point may need to be moved.
9. Check for binding or rubbing of the tarp bows against the sides of the dump body. Check both sides of the body, and adjust the pivot brackets or bows as necessary for clearance.
10. Put a final mark on both cross tube corners where they slide into the pivot tubes. This will allow you to reassemble the bows without measuring again.

Terminator Pivot Casting

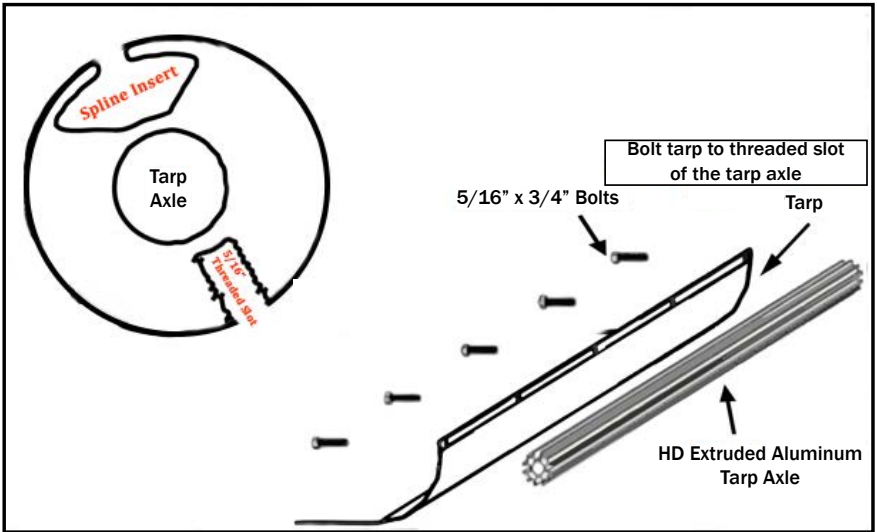


Terminator Side Arm

11. Remove the rear cross tube and upper arms so that you may load the pivot springs again.
12. Rotate both pivot castings forward and down so that they are left hanging straight down.
13. Pre-load the pivot springs by rotating the pivots one at a time toward the front of the body, down and around, and up until you are able to reinstall the tarp bow upper arms. You may need to lift bed to make clearance for the arms. Slide the upper arms down into the pivot castings and tighten the bolts that hold them in place. Make sure that the hook ends of the springs have clipped over the pin in the spring guard.
14. Set the rear cross tube across the back of the body, but do not re-install until you have installed your tarp.

STEP 8: INSTALLING YOUR TARP

1. Line the five (5) grommets on the front edge of the tarp up with one of the threaded grooves in the front of the aluminum tarp axle.
2. Attach the tarp to the front axle with 5/16" x 5/8" button head bolts.
3. Slide the rear cross bar through the pocket in the back of the tarp and center.
4. Slide (1) plastic tarp centering flange included in the system kit on each end of the rear cross bar and then reattach the cross bar to the upper arms.
5. Slide the inside set of plastic tarp flanges up against the tarp and tighten the set screws securely. These flanges will help keep the tarp centered on the rear cross bar.
6. Adjust and secure the set of outside plastic flanges near the upper arms so that they will act as bumpers between the rear cross bar and the dump body and/or tarp spool assembly.

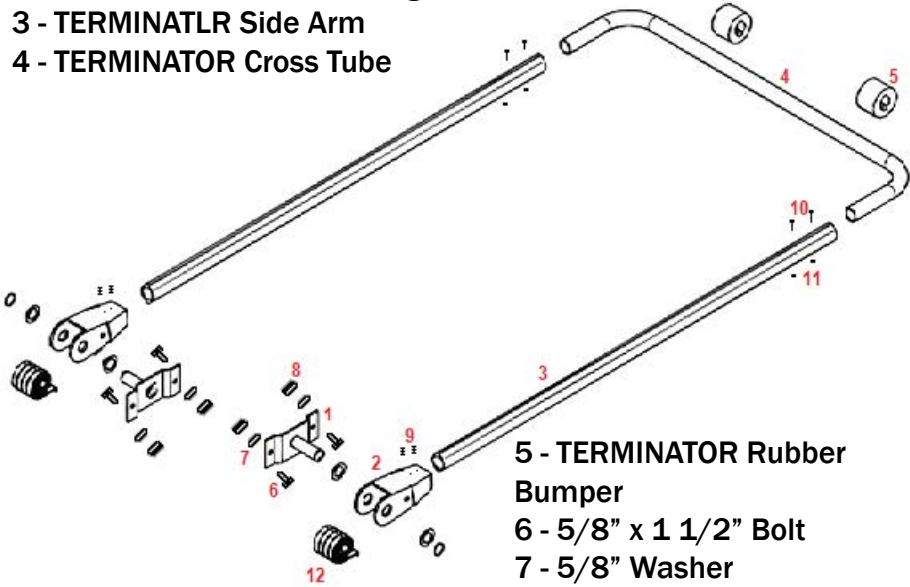


Congratulations on installing your new

---TARPING SYSTEMS, INC.---
tarp system. We appreciate your
business!

TERMINATOR ARM SET

- 1 - TERMINATOR Pivot Pin
- 2 - TERMINATOR Pivot Casting
- 3 - TERMINATOR Side Arm
- 4 - TERMINATOR Cross Tube



- 5 - TERMINATOR Rubber Bumper
- 6 - 5/8" x 1 1/2" Bolt
- 7 - 5/8" Washer
- 8 - 5/8" Nut
- 9 - 5/16" x 1/2" Set Screw
- 10 - 5/16" x 2 1/2" Bolt
- 11 - 5/16" Bolt
- 12 - Spiral Torsion Springs

Ask About our Other Products

PREMIUM TARP MOTORS

12v and 24v Tarp Motors

We offer **Premium Tarp Motors** to meet any need from small dump bodies to large trailers. As shown to the right, our motor comes with a chrome cover, its 5 bolt pattern makes it compatible with any **Tarping System** currently in use from any manufacturer using a 3, 4, or 5 bolt pattern. Our **Premium Tarp Motors** will replace your existing motor.



GROUND LEVEL

Front to Back Secondary Arm

Our manual ground level kit is a ground operated **Tarping System** that comes with polished aluminum, premi-um aluminum, or galvanized steel pivot arms for dump bodies of all sizes. Kits ordered with this part number variation can be easily converted to an electric system!



INDUSTRIAL GRADE TARPAULIN

Standard Dump Truck and Custom Tarps

VINYL

HOT TOP

PRO-GRADE
TEVLAR

BLACK MESH

MULTI-MESH

SUPER MESH



“ASSASSIN”

Standard Side Roll Setup

The **ASSASSIN** offers dependable, watertight protection to cover your load. Seat belt webbing and reinforced stitching along edges increase tear resistance and helps the tarp withstand the stresses of highway speeds. The standard galvanized steel crank arm lets you operate the **Tarping System** safely from the ground.



“SLINGSHOT™”

Self Retracting Pull Style Kit

The **SlingShot™** is a modern front to back dump truck **Tarping System**. It is a semi automatic and easy to use kit with a simple pull feature. Use the rope to pull the tarp over the load, and when you're finished release the rope and the spring loaded tarp axle will retract the tarp for you. The spring loaded axle is adjustable to fit dump bodies up to 98" wide.

