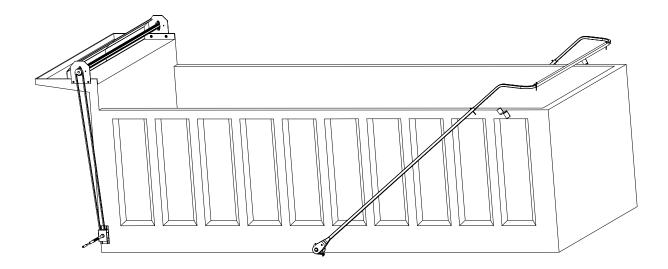


5000XEL, 5000XGL, 5000XCL TARPING SYSTEMS



OWNER'S MANUAL

JULY 2008

Donovan Enterprises, 3353 SE Gran Park Way, Stuart FL 34997 800-327-8287 www.donovan-ent.com

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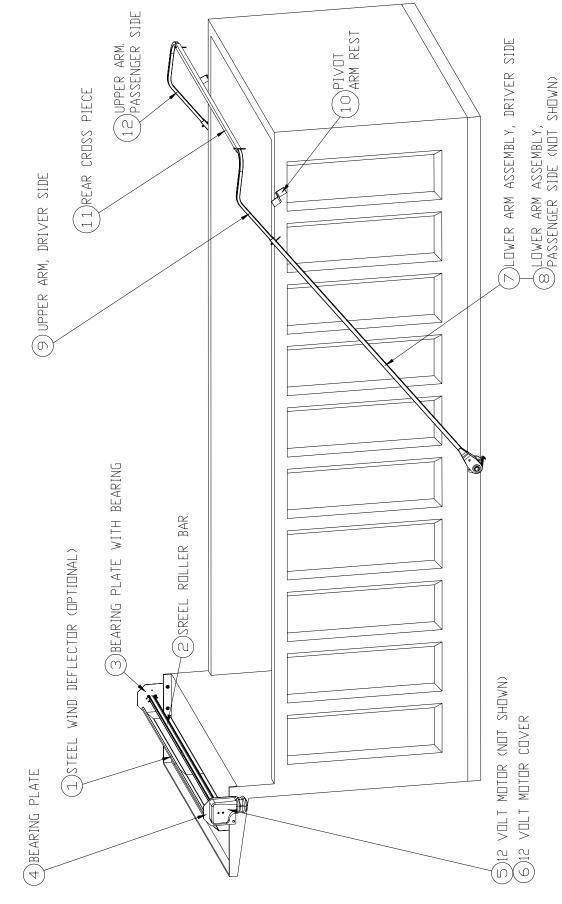
DESCRIPTIONPAGE NO.5000XEL PACKING LIST3OVERVIEW OF 5000XEL SYSTEM45000XGL & 5000XCL PACKING LIST5OVERVIEW OF 5000XGL SYSTEM6OVERVIEW OF 5000XCL SYSTEM85000X SERIES INSTALLATION INSTRUCTIONS9-17

BEFORE INSTALLATION BEGINS

- READ AND UNDERSTAND OWNER'S MANUAL.
- UNPACK SYSTEM AND CHECK ALL PARTS AGAINST PACKING LIST. (PAGE 3 & 5)

PACKING LIST 5000XEL TARPING SYSTEM PARTS AND HARDWARE

ITEM#	BALLOON	DESCRIPTION	QTY
1647	1	STEEL WIND DEFLECTOR - (OPTIONAL)	2
2464		3/8"-16 HEX HD BOLT, 1 1/2" LG	6
2875		3/8" WASHER	6
2874		3/8"-16 LOCKNUT	6
121 146 2802 2867 2868	2	STEEL ROLLER BAR 1 1/2" HOSE CLAMP 5/16"-18 HEX HEAD BOLT, 1 1/2" LG 5/16" WASHER 5/16"-18 LOCKNUT	1 4 1 1
3678	3	BEARING PLATE WITH BEARING	1
2464		3/8"-16 HEX HD BOLT, 1 1/2" LG	2
2875		3/8" WASHER	2
2874		3/8"-16 LOCKNUT	2
3270	4	BEARING PLATE	1
2464		3/8"-16 HEX HD BOLT, 1 1/2" LG	2
2875		3/8" WASHER	2
2874		3/8"-16 LOCKNUT	2
61L 4278 1495 1898	5 6	12 VOLT MOTOR 12 VOLT MOTOR COVER DURABUILT SWITCH KIT 60' ROLL OF WIRE	1 1 1 1
614	7	LOWER ARM ASSY, DRIVER SIDE	1
1309		1/2"-13 CARRIAGE BOLT, 2" LG	2
2878		1/2" WASHER	2
2877		1/2"-13 LOCKNUT	2
615	8	LOWER ARM ASSY, PASSENGER SIDE	1
1309		1/2"-13 CARRIAGE BOLT, 2" LG	2
2878		1/2" WASHER	2
2877		1/2"-13 LOCKNUT	2
4668	9	UPPER ARM, DRIVER SIDE	1
2475		1/4" X 2 1/2" COTTER PIN	1
952	10	PIVOT ARM REST	2
4667	11	REAR CROSS PIECE	1
2475		1/4" X 2 1/2" COTTER PIN	2
4669	12	UPPER ARM, PASSENGER SIDE	1
2475		1/4" X 2 1/2" COTTER PIN	1



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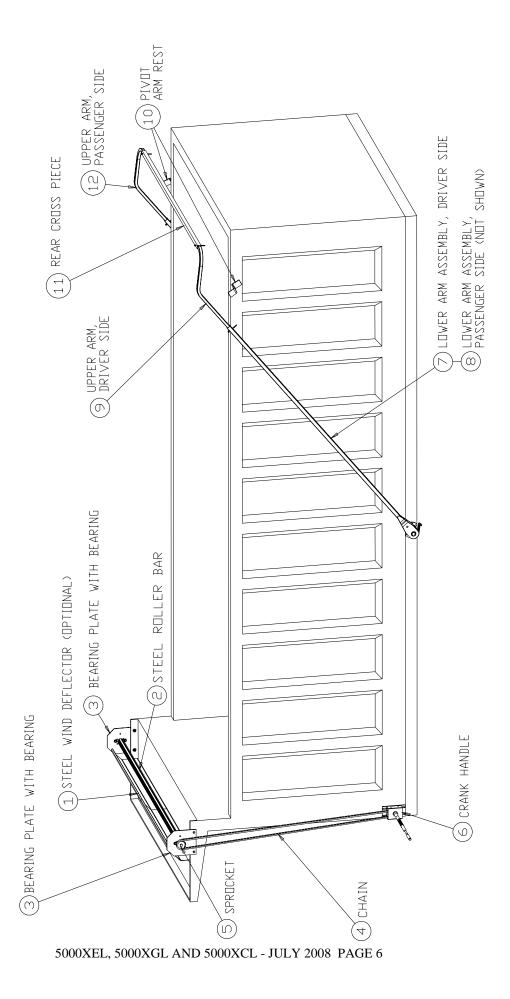
OVERVIEW OF 5000XEL TARPING SYSTEM

PACKING LIST

5000XGL AND 5000XCL TARPING SYSTEM PARTS AND HARDWARE

ITEM#	BALLOON	DESCRIPTION	QTY
1647	1	STEEL WIND DEFLECTOR - (OPTIONAL)	2
2464		3/8"-16 HEX HD BOLT, 1 1/2" LG	6
2875		3/8" WASHER	6
2874		3/8"-16 LOCKNUT	6
121 146 2802 2867 2868 148	2	STEEL ROLLER BAR 1 1/2" HOSE CLAMP 5/16"-18 HEX HEAD BOLT, 1 1/2" LG 5/16" WASHER 5/16"-18 LOCKNUT 3/4" SHAFT COLLAR	1 4 1 1 2
3678	3	BEARING PLATE WITH BEARING	2
2464		3/8"-16 HEX HD BOLT, 1 1/2" LG	4
2875		3/8" WASHER	4
2874		3/8"-16 LOCKNUT	4
614	7	LOWER ARM ASSY, DRIVER SIDE	1
1309		1/2"-13 CARRIAGE BOLT, 2" LG 1 1/2	2
2878		1/2" WASHER	2
2877		1/2"-13 LOCKNUT	2
615	8	LOWER ARM ASSY, PASSENGER SIDE	1
1309		1/2"-13 CARRIAGE BOLT, 2" LG 1 1/2	2
2878		1/2" WASHER	2
2877		1/2"-13 LOCKNUT	2
4668	9	UPPER ARM, DRIVER SIDE	1
2475		1/4" X 2 1/2" COTTER PIN	1
952	10	PIVOT ARM REST	2
4667	11	REAR CROSS PIECE	1
2475		1/4" X 2 1/2" COTTER PIN	2
4669	12	UPPER ARM, PASSENGER SIDE	1
2475		1/4" X 2 1/2" COTTER PIN	1

OVERVIEW OF 5000XGL TARPING SYSTEM



5000XGL (Ground Level Crank) The following additional hardware is for ground level (5000XGL) kit:

		giedne ie ie giedne ie ie (
ITEM#	BALLON	DESCRIPTION	QTY	
793	4	Chain, #40 x 10'	1	5 SPREICKET
1202	5	Shaft Sprocket Assembly	1	
187 287 1913 2875	6	10" Rubber Strap 3/8" Lock Nut 3/8" x 1 1/2" Bolt 3/8" Flat Washer	1 4 4 8	4 CHAIN
114 NOT 3 1398 1402 1412	SHOWN - GL	Chain Guard Kit (Optional) Chain Guard Upper Chain Guard Lower Chain Guard Bracket	1 1 1 1	6 CRANK HANDLE

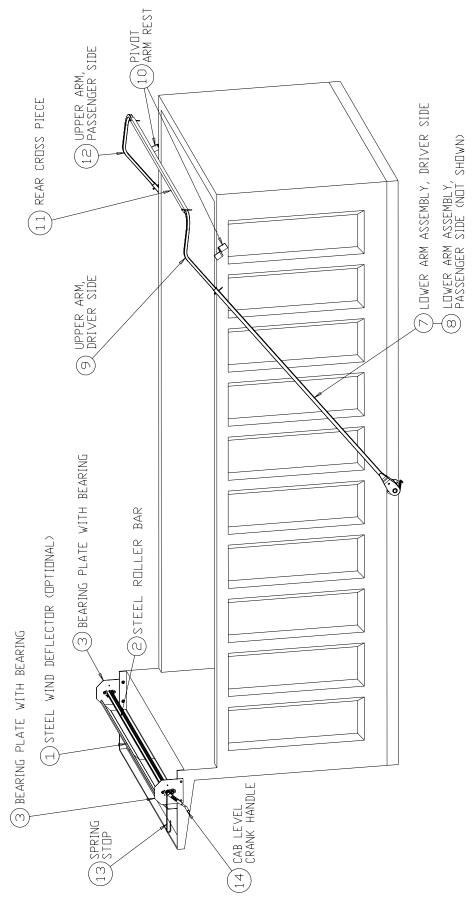
5000XCL (Cab Level Crank) The following additional hardware is for cab level (5000XCL) kit:

ITEM#	BALLON	DESCRIPTION	QTY	(13) SPRING STOP
122	14	Crank Handle	1	
1202	13	Spring Stop	1	
187 NOT	SHOWN	15" Rubber Strap w/hook	1	

(14) CAB LEVEL

CRANK HANDLE





5000XEL, 5000XGL AND 5000XCL - JULY 2008 PAGE 8

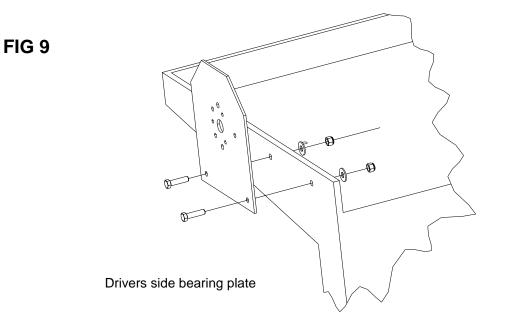
5000X SERIES INSTALLATION INSTRUCTIONS

Choosing the mounting location

- In general, the rollerbar should be mounted on top of the cab shield and as far forward as possible so that the pivot arms will be less likely to be damaged by loaders. However, if head assembly is mounted too far forward the pivot arms may interfere with the truck's doors.
- 2. Exceptions: <u>Trucks with vertical stacks.</u> Vertical stacks may be in the way of the pivot arms if the rollerbar were to be mounted forward of the stack(s). Simply shortening or re-aligning the stack(s) may solve the problem. If the stack(s) still get in the way, it may be necessary to mount the rollerbar to the rear of the stack(s). If there is not room to mount the rollerbar on the cab shield behind the stacks, it will need to be mounted on top of the side board pockets to the front of the body.

Installing the Bearing Plates (Optional)

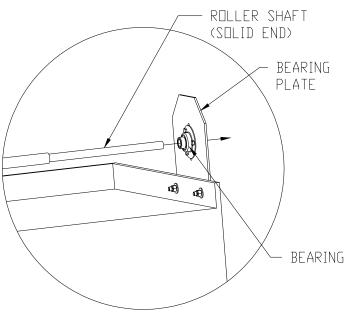
- Once the mounting location has been determined, you may install the included bearing plates using the 3/8" x 1-1/2" bolts, flat washer, and locknuts. (see Fig. 9) You can also use the bearing plates as templates to drill the necessary mounting holes directly into the cab shield sides or other suitable location.
- 2. If you chose to use the bearing plates as templates and mount system directly to the cab shield, remove the 3/4" bearing from the bearing plates and bolt them in place on the cab shield. **Note:** The bearing plates or cab shield holes should be exactly opposite of each other to avoid the tarp rolling up unevenly.
- 3. Be sure there is enough clearance between the rollerbar and the cab shield to rollup the entire tarp.



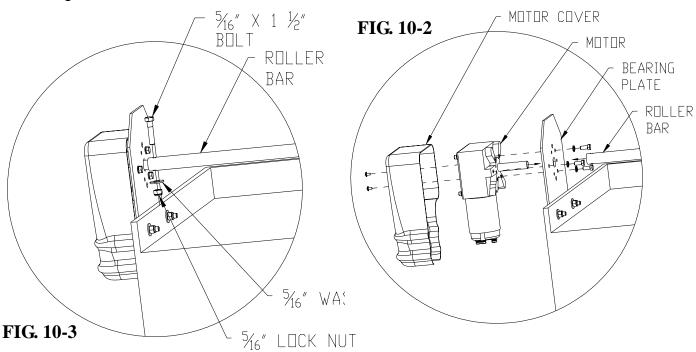
5000XEL MODELS ONLY

Mounting the Direct Drive Motor and Rollerbar

- 1. Measure from the inside of one bearing plate to the inside of the other. Cut the roller bar one inch longer than this length.
- 2. Drill a 5/16" hole, ½" from the end of the rollerbar (tube end) .
- **NOTE**: It may be necessary to remove bearing and slide it on shaft and then reinstall bearing on bearing plate to install roller bar.
- Slide the solid end of roller bar thru bearing and bearing plate (opposite bearing plate where direct drive motor will be mounted). See figure 10-1.
- 4. Mount the DD motor to the bearing plate or cab shield. Install cover onto motor. See figure 10-2.
- 5. Slide rollerbar over the DD motor output shaft and secure with a 5/16" bolt, washer, and nut. See figure 10-3.







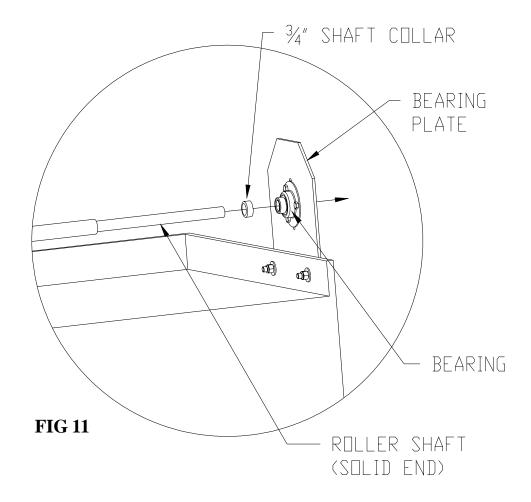
WIRING THE CONTROL BOX

• Follow the instructions that are supplied with your electrical switch kit.

5000XGL / 5000XCL MODELS ONLY

Mounting the Rollerbar

- 1. Measure from the inside of one bearing plate to the inside of the other. Cut the roller bar the length you just measured.
- 2. Drill a 5/16" hole, 1/2" from the end of the rollerbar (tube end) .
- <u>NOTE</u>: It may be necessary to remove bearing and slide it on shaft and then reinstall bearing on bearing plate to install roller bar.
- 3. Slide a 3/4" shaft collar onto the solid end of roller shaft (see Fig. 11).
- 4. Slide the solid end of roller bar thru bearing and bearing plate (opposite side of where crank will be installed). See Figure 11 below.

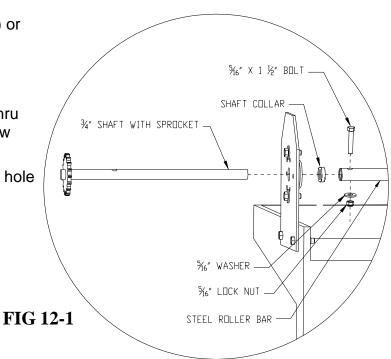


Mounting the Rollerbar (Continued)

5. Install shaft with sprocket (XGL system) or crank handle (XCL system).

XGL System: (See Figure 12-1)

- Slide the 3/4" shaft with sprocket through the bearing plate, then thru the shaft collar and into the hollow end of roller bar.
- 2. Line up the hole in roller bar with hole in shaft.
- 3. Attach with 5/16" x 1 1/2" bolt, washer, and lock nut.



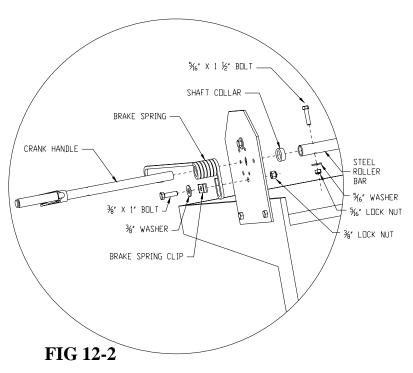
XCL System: (See Figure 12-2)

NOTE: The bearing should be on the inside of bearing plate and brake spring.

- 1. Remove the bottom nut on the bolt that attaches the 3/4" bearing to the bearing plate.
- Attach the brake spring to the bearing plate using the bolt, washer, and nut removed in step 1 plus the spring clip.

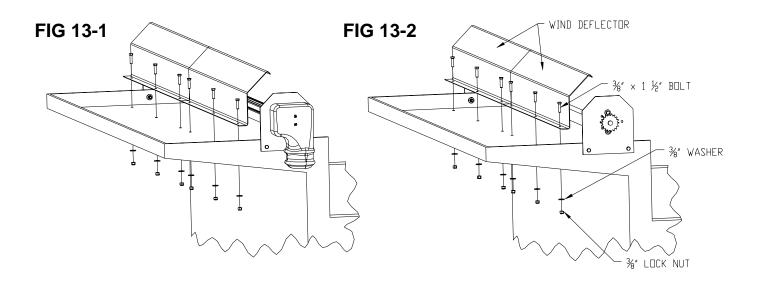
NOTE: It may be necessary to pull up on brake to allow crank handle to slide through.

- Slide crank handle shaft through the spring brake, bearing plate, shaft collar, and into roller bar.
- 4. Line up the hole in roller bar with hole in crank handle.
- 5. Attach with 5/16" x 1 1/2" bolt, washer, and lock nut.



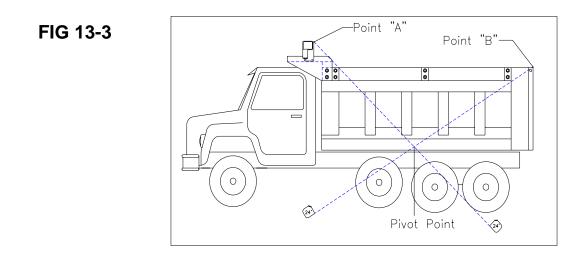
Installing the Wind Deflector (Optional)

- Install the two wind deflector pieces to the cab shield using the 3/8 x 1-1/2" bolts, flat washers & lock nuts. (See fig. 13-2) Mount the wind deflector forward of the rollerbar allowing enough space between the wind deflector and the rollerbar for the tarp when it is fully rolled up.
- 2. One or both halves may need cutting to fit the width of the cab shield. It may also be necessary to cut notches in the wind deflector for the cab shield support braces.



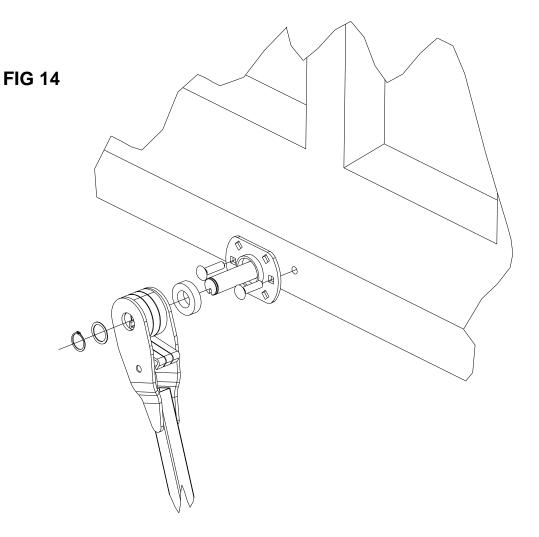
Pivot Mount and Lower Arm Installation

1. To find the pivot point, pull one tape measure from point "A" and a separate tape measure from point "B". Next cross the tape measures at the bottom-middle of the truck body where the two measurements are equal – mark the spot beneath where they cross. This is your pivot point. (See fig. 13-3)



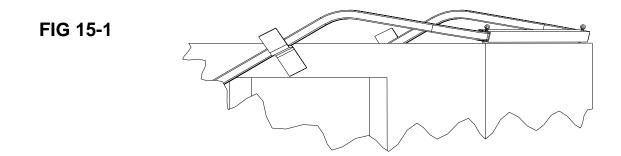
Pivot Mount and Lower Arm Installation (Continued)

- Disassembly of the pivot mount and lower pivot arm assembly is an option to ease installation. Simply unclip the spring clip at the end of the pivot mount shaft and work the lower pivot arm assembly off the shaft. <u>Remember how the pivot assemblies come apart so you can</u> <u>reassemble them the same way.</u>
- 3. If you are welding on your pivot mounts, skip to step #4. Using the pivot mount as a guide to determine the hole position for mounting, ensure the center of the mounting plate is aligned with the pivot point as determined in step 1. Drill two 9/16" holes in line with the center holes on the pivot mount on each side of the box.
- 4. Weld or bolt the pivot mounts to the box using the included ½" carriage bolts, flat washers, and lock nuts (the head of the bolt must be on the outside, and the washer and nut on the inside). (See fig. 11) Note: The pivot mounts are directional (see Figure 14 for drivers side spring assembly). CAUTION: Failure to comply with the above instructions could cause severe damage to the system.

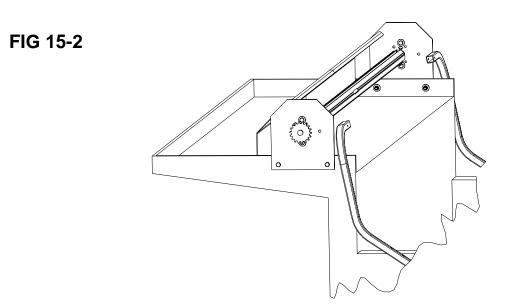


Upper Pivots Arms and Rear Cross piece installation

- 1. Install the lower pivot arms on the pivot mounts without the flat torsion springs. This will simplify the rest of the installation because the pivot arms may now be moved without spring tension. (see Fig. 14, page 14)
- 2. Slide the upper pivot arms into the lower arms. Adjust the arm length until the upper arm rests on the desired landing point at the back of the box (see Fig. 11, page 11).
- 3. If the upper arms are too long, cut both upper arms, however, do not cut them too short. Leave at least 2 feet of upper pivot arm sticking into the lower pivot arm.
- 4. Temporary clamp the upper pivot arms where they enter the lower pivot arms to hold them in place.

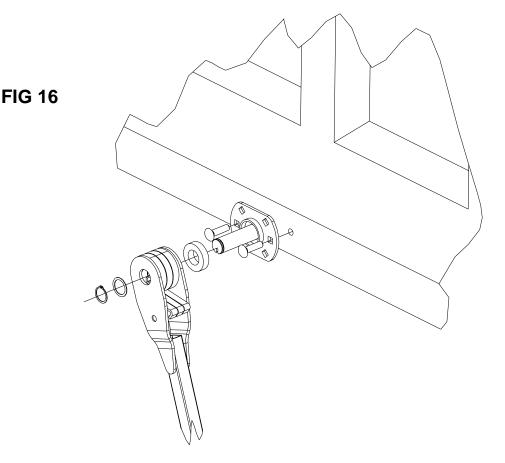


5. Swing the complete pivot arm assembly forward until it rests on the head assembly. The 90 degree bend on the upper arm should be resting in the center of the head assembly opening. (see Fig. 15-2) If the bend is not landing in the center of the opening, unclamp the upper arms, adjust their position, and then re-clamp the arms.



Upper Pivots Arms and Rear Cross piece installation (Continued)

- 6. Swing the pivot arm assembly back to the rear of the truck and check the landing position. If it appears that the rear cross piece (RCP) will interfere with the operation of the tailgate, the pivot point may need to be moved or mount the pivot arm rests (discussed later) so that the RCP remains clear of the tailgate.
- 7. Check for binding or rubbing of the pivot arms against the sides of the box. Check both sides of the box, and adjust the pivot mounts or arms as necessary for clearance.
- 8. Mark both upper arms where they slide into the lower arms. This will allow you to reassemble the arms without re-measuring.
- 9. Remove the lower and upper arms so that you may install the flat torsion springs.
- 10. Remount the lower pivot arms with the flat torsion springs (3 per side). Make sure the hook ends of the springs have clipped over the pin in the spring guard. Place the plastic spacer and 1-1/4" ID shim over pivot mount shaft and hold in place with the spring clip. (see Fig. 16)
- 11. Slide the upper arms into the lower pivot arms to the marks made earlier.
- 12. Drill and bolt the upper arms to the lower arms.



Upper Pivots Arms and Rear Cross piece installation (Continued)

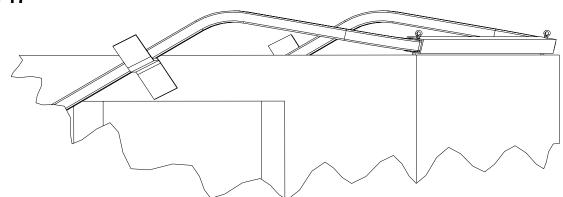
- 13. Insert the rear cross piece into the bent arm extensions and ensure pivot arms remain parallel to the sides of the body. If necessary, the rear cross piece can be cut shorter to fit on narrower bodies.
- 14. Drill the rear cross piece and the bent arm extensions and secure with bolts, nuts & washers provided.
- 15. Remove RCP so you can install tarp. Note how RCP was installed so holes will align when reinstalled.

Installing the Tarp

- 1. Attach front edge of tarp to under side of roller bar using hose clamps threaded through the four leading edge grommets and around roller bar.
- 2. Slide the RCP into the tarp pocket (sewn into the tarp).
- 3. Center the tarp on both steel roller bar and rear cross piece.
- 4. Reinstall RCP and secure it to upper arms using cotter pins through holes drilled earlier.
- 5. Check all mechanism bolts and screws for security.

Installing the Pivot Arm Rests

- 1. Unwind the tarp so that the system in the "covered" configuration.
- 2. Position the pivot arm rests so that upper arms are as level as possible and do not make contact with the tailgate or any other part of the dump body. (see Fig. 17)
- 3. Weld or bolt pivot arm rests into place.



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5000XEL, 5000XGL AND 5000XCL - JULY 2008 PAGE 17

FIG 17