Installation Instructions - Steel 4 Spring Arm Kits

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For technical support call us at (800) 368-3075

607-0106
Step 1. Determining the Pivot Points and Mounting Locations on each side

Careful measurement must be taken to insure that the arm and pivot assemblies are mounted square and parallel to the truck or trailer body. Locate the proper mounting positions by determining Point “A” and Point “B” and insuring measurement “D” and “E” are equal (Fig. 1) Point “C” must be located as low as possible and be the same on both sides.

Step 2. Arm Preload

Install Arm and Pivot assemblies with Arm indexed as shown in Fig 2. Arms must be indexed with no spring load on pivots. Index Arm at 180 degrees of travel from the Roller Mechanism for proper preload of the spring. The dotted lines represent proper 180 degree preload position for applications with Bent Arms. Mark pivot pin location on box.

Step 3. Mounting the Pivot

Locate the Pivot pin with marks made in step 2. Bolt or weld in place (Fig. 3).

Step 4. Pivot and Spring Assembly

Assemble the springs and pivot assembly as shown in Fig. 4. Make sure assembly moves freely.
Step 5a. Correct Alignment of arm to truck.
Arms and pivots must be square and parallel to truck (Fig. 5a).

Step 5b. Adjust the Arms on both sides to be the same length.

Dimension “A” must equal “B”  
Dimension “C” must equal “D”  
Dimension “E” must equal “F”

Note: Tarp must be retracted when dumping.

Step 6. Tarp Installation
Slide Tarp into Groove on roller tube and center (Fig. 6).

Fig. 5a

Fig. 5b

Equal Distance on Both Sides

Fig. 6

Step 7. Installing The Pull Bar.
Cut the pull bar to length making sure the arms remain parallel and square to the body.

Slide the tarp into groove in the pull bar and center the tarp.

Roll the tarp up on the pull bar two revolutions. Fig. 7

Fasten the tarp in place by sliding the two urethane bumpers on to the pull bar far enough to touch the edges of the tarp. Lock in place by installing a 1 1/2” long (506-9933) self drilling screw through the bumper and into the hem tube groove of the pull bar. (Fig. 8)
Step 9. Optional Flap Tarp, Rope and Hook Installation

Parts:  Tie Down Hooks (Steel or Alum.)  
Pull Down Hook

The Location Of The Tie Down Hooks Is Critical!

Flip the braided rope over the corner so that the flaps and tie down ropes hang over each side of the box. The number of tie down hooks vary depending on the length of your tarp. One pull down hook is included with your Pulltarp system. If needed. Use the hook to pull the braided rope and flaps over the side of the box.

The tie down hooks must be positioned so that:

a. The tie down rope can be reached from the ground.
b. The bungee cord has to be stretched to reach the last hook (see step 10).
c. The rope has no slack.
d. The tie down hooks are level with one another.

To ensure proper hook placement, first duct tape the rope to the box in place of the tie down hooks. Start with hook closest to the cab.

1. Position the first hook 6” (15.24cm) down and 12” (30.48cm) forward (toward the cab) from the first grommet (Fig.9).
2. Position 2nd hook straight down from 1st grommet. This hook should be reached from ground (Fig.10).
3. Place middle hooks equal distances from grommet (Fig.11). These hooks should be placed at the same height as the second hook.
4. Position last hook (closest to the tailgate) below the last grommet at the same height as the others (Fig.12).
5. Weld hooks in place.
Step 10. Bungee Cord Installation

After side hooks are installed, the tie down rope must be installed and cut to proper length. It is important to get all of the slack out of the rope to prevent blowing and rubbing of flaps in windy conditions.

**Parts:**
- 2 Bungee Cords,
- 2 Oval Compression sleeves,
- 1 Snap Clip

**Connect Bungee Cord to Rope**

1. Thread braided rope through Oval Compression Sleeve.
2. Feed rope through the eye of the bungee cord.
3. Thread the rope back through the oval compression sleeve. Adjust for proper length. Crimp compression sleeve.

**Tarps with Tie Downs**

To tighten, pull loose end of rope through the Oval Compression Sleeve (Fig.13). Stretch the bungee cord making sure all slack is taken out of the rope, crimp compression sleeve (Fig.14).

**Tarps with Side Flaps**

To tighten, pull loose end of rope through the Oval Compression Sleeve (Fig.15). Stretch the bungee cord making sure all slack is taken out of the rope, crimp compression sleeve (Fig. 16).

**Note:** Check for proper placement of rope through the last two hooks.

**Snap Clip installation**

Flip the rope back on top of the tarp, making sure to hold the bungee at all times. The first snap clip is factory installed 5'-6" from the pullrod. Open the clip and enclose the rope. Weave the second clip through the main pullrope where the ends of the bungee cords meet the main pullrope. Make sure the rope is taught when clipped. **NOTE: First snap clip should not be used on long wheel base belly dumps.**

**Excess Rope**

You may need extra rope to keep the side flap system ground operated. If your application requires extra rope, the slack needs to be taken up by attaching the end of the bungee cord to an alternate hook. (pictured below)
Step 11. Flap / Tie Down Rope Placement and Installation (Fig. 17).

Step 12. Rope Hook Placement
Weld rope storage hook on the top of the arms approx. 32” apart (Fig. 18)

Step 12. Rope Hook Placement For Aluminum Arms
Use Self Drilling screws (part #506-9933) to install Hooks (Fig. 19)
Option #1. Plug Assembly - Part # 514-0505
Assemble the Quick Disconnect as shown in Fig. 21 and Fig. 22.

Option #2. Plug Assembly - Part # 514-0501
STEEL ARMS TO 22'  # 501-0709, 501-0749, 501-0750, 501-0751, 501-0782

ILLUSTRATION VIEW SHOWN LOOKING FROM PASSENGER SIDE TO REAR OF VEHICLE.

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<tr>
<th>ITEM</th>
<th>PART#</th>
<th>DESCRIPTION</th>
<th>QTY</th>
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<tr>
<td>1</td>
<td>501-1202</td>
<td>STEEL UPPER ARM TUBING</td>
<td>2</td>
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<tr>
<td>2</td>
<td>501-1293</td>
<td>TEAR DROP BUMPER KIT</td>
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<td>3</td>
<td>501-1251</td>
<td>ELBOW KIT (FOR STEEL)</td>
<td>1</td>
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<tr>
<td>4</td>
<td>501-1103</td>
<td>4-SPRING HOUSING-DRIVER SIDE</td>
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<tr>
<td>5</td>
<td>501-1104</td>
<td>4-SPRING HOUSING-PASSENGER SIDE</td>
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<tr>
<td>6</td>
<td>501-0430</td>
<td>UNIVERSAL TEAR DROP PULLROD</td>
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<tr>
<td>7</td>
<td>501-5008</td>
<td>1/2&quot;-13 x 3/4&quot; SET SCREW</td>
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<tr>
<td>8</td>
<td>501-1205</td>
<td>UPPER ARM TUBING, DRILLED AND BENT</td>
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<td>9</td>
<td>501-1207</td>
<td>OFFSET UPPER ARM TUBE</td>
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<td>10</td>
<td>501-1230</td>
<td>UPPER ARM BENT EXTENSION-35°</td>
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GR REV. 8/2/12
4-SPRING HOUSING ASSEMBLY
(# 501-1103 LEFT) OPPOSITE
(# 501-1104 RIGHT) SHOWN

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<tr>
<td>1</td>
<td>501-1121</td>
<td>PIVOT ASSEMBLY, 4-SPRING ARM SYSTEM</td>
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<td>2</td>
<td>501-1110</td>
<td>4-SPRING SIDE PLATE ASSEMBLY</td>
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<td>3</td>
<td>501-1162</td>
<td>WASHER, 1 7/8&quot; x 1 1/4&quot; NARROW RIM</td>
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<td>4</td>
<td>506-0101</td>
<td>1 1/4&quot; SNAP RING</td>
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<td>503-5008</td>
<td>1/2&quot;-13 x 3/4&quot; SET SCREW</td>
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<td>6</td>
<td>517-9921</td>
<td>SMALL SPRING FOR ARM SYSTEM</td>
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