Manual Arm Kits (Straight / Bent)
Steel #113-2214 / #113-2215  Aluminum #113-2224/ #113-2225

Manual Arm Kit
Step 1A. Determining the Pivot Point
Measure from Point “A” to a point close to where you estimate the center to be. Record the measurement “D” and mark the box (Fig. 1).

Step 1B. Determining the Pivot Point
Measure from Point “B” using the same measurement from step 1A and mark it.

Step 1C. Determining the Pivot Point
Measure from the first mark “D” to second “E” at the same height, take 1/2 of that measurement and that will determine the pivot (Point C) (Fig. 3).

Step 2. Measure from the back of the box to the pivot point.
Transfer this measurement to the other side of the truck to establish the pivot point.

CAUTION: Some applications may require the pivot to be located above the lower edge of the body.
Step 3.
Measure from Point “A” to Point “C”. This measurement = “F”. Refer to the chart below to determine if the pivot must be moved up towards the top rail. CAUTION: If the pivot is mounted too low, the arms will become too short to cover the body.

<table>
<thead>
<tr>
<th>PART #</th>
<th>18’ Tarp Application</th>
<th>“F” Measurement Can Not Exceed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>108-0235</td>
<td>9” Universal Super Shield</td>
<td>130”</td>
</tr>
<tr>
<td>107-0235</td>
<td>8” Super Shield</td>
<td></td>
</tr>
<tr>
<td>106-0235</td>
<td>Steel Protector System</td>
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<tr>
<td>101-0235</td>
<td>6” Open System</td>
<td></td>
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<tr>
<td>105-0235</td>
<td>9” Open System</td>
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<tr>
<td>103-0235</td>
<td>7” Aluminum Open System / Wind Guard</td>
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NOTE:
Relocate pivot higher up on the body as necessary and find the new pivot center point by repeating steps # 1 - 2.
**Step 4. Mounting the Pivot Point**
The pivots (501-1124) can either be bolted or welded in place, making sure to mount directly over point “C” (Fig. 7). (refer to page 2 & 3).
Insert arm into pivots. Using the holes as a guide, drill and bolt in place.

**Step 5. Installing the Pullbar**
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.
Fasten the tarp in place by installing two 1 1/2" long self drilling screws (506-9933), through the hem tube at each corner of the tarp and into the groove in the pull bar as shown in (Fig. 8). Slide 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. Install elbows and connect to arms as shown.

**Note:** Tarp must be retracted when dumping.
1. Uncoil the rope from the storage hooks and start the arms over the load with the rope or by hand.

2. Flip the rope over the corner of the tailgate. From the center of the tailgate, pull the tarp out over the load.

3. Pull the tarp to the tailgate and secure the rope on the hooks provided. (If tarp has side-flaps secure as well).

4. To retract, untie the rope and pull the rope around the corner of the truck body. Start the arms back by hand until the spring tension in the roller takes over to retract the tarp completely. Maintain tension on the rope to prevent the tarp from retracting too quickly.
Manual Pullarm Operation

**Step 1**
To retract the tarp, untie the rope and pull the rope around the corner of the truck body OR wrap the rope around a hook on the back of the truck. Walk toward the arms while keeping tension on the rope. Start the arms back by pushing upward on the arm.

**Step 2**
The spring tension will take over and begin to retract the tarp. Maintain tension on the rope to prevent the tarps from retracting too quickly.
STEEL MANUAL ARM KIT

#113-2214 Straight Arms
#113-2215 Bent Arms

ITEM PART# DESCRIPTION
1 501-1251 ELBOW KIT (STEEL ARMS) 1
2 501-0430 UNIVERSAL TEAR DROP PULL BAR 1
3 501-1195 PIVOT ASSEMBLY 1
4 501-1202 STEEL UPPER ARM TUBING 2
5 501-1229 LOWER CONNECTION ARM TUBE 2
6 501-1293 TEAR DROP BUMPER KIT 1

ARM OPTIONS
ITEM PART# DESCRIPTION QTY
7 501-1230 UPPER ARM EXTENSION, BENT-35° 2
8 501-1231 UPPER ARM EXTENSION, BENT-25° 2
9 501-1232 UPPER ARM EXTENSION, BENT-45° 2
10 501-1205 UPPER ARM TUBING-DRILLED-BENT 2

REV: 10/29/08 BAB
ALUMINUM MANUAL ARM KIT

#113-2224 Straight Arms
#113-2225 Bent Arms

### Upper Arm Tubing (Order Separately)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART#</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>6</td>
<td>501-1211</td>
<td>ALUMINUM UPPER ARM</td>
<td>2</td>
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<tr>
<td>7</td>
<td>501-1214</td>
<td>ALUMINUM UPPER ARM WITH BEND</td>
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### lumber

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<tr>
<td>1</td>
<td>501-0791</td>
<td>ELBOW KIT FOR ALUMINUM WITH TEAR DROP</td>
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<tr>
<td>2</td>
<td>501-0430</td>
<td>UNIVERSAL TEAR DROP PULLBAR</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>501-1195</td>
<td>PIVOT ASSEMBLY KIT</td>
<td>2</td>
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<tr>
<td>4</td>
<td>501-1217</td>
<td>ALUMINUM LOWER ARM TUBE</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>501-1293</td>
<td>TEAR DROP BUMPER KIT</td>
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GR REV: 11/21/12