



INSTALLATION INSTRUCTIONS

Aluminator™ 8500E

234-0215

Related Instructions,
How-To Videos & More



[PDF: Optional Tarp Tamer](#)



[PDF: Bolt-On Mounting System](#)



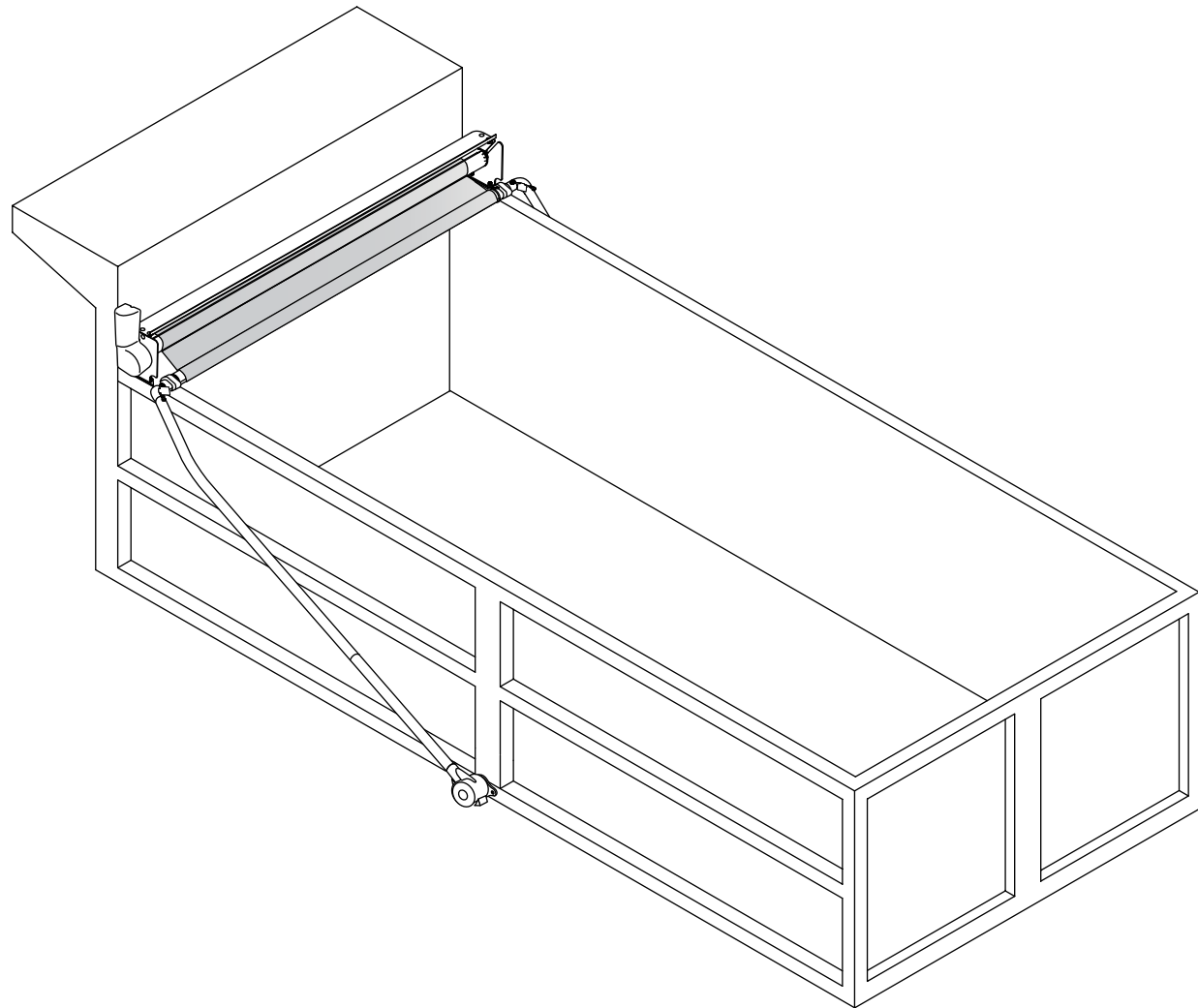
[PDF: Deluxe High Amp Switch - 12Volt](#)



[PDF: Cab External Switch - 12 Volt](#)



[PDF: 12V Smart Switch w/ External Switch](#)



Document #: 607-0154
Revised: 09/11/25 WLH

DURING INSTALLATION, SOME FABRICATION MAY BE REQUIRED.



INSTALLATION INSTRUCTIONS

Aluminator™ 8500E

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Aluminator 8500E Installation

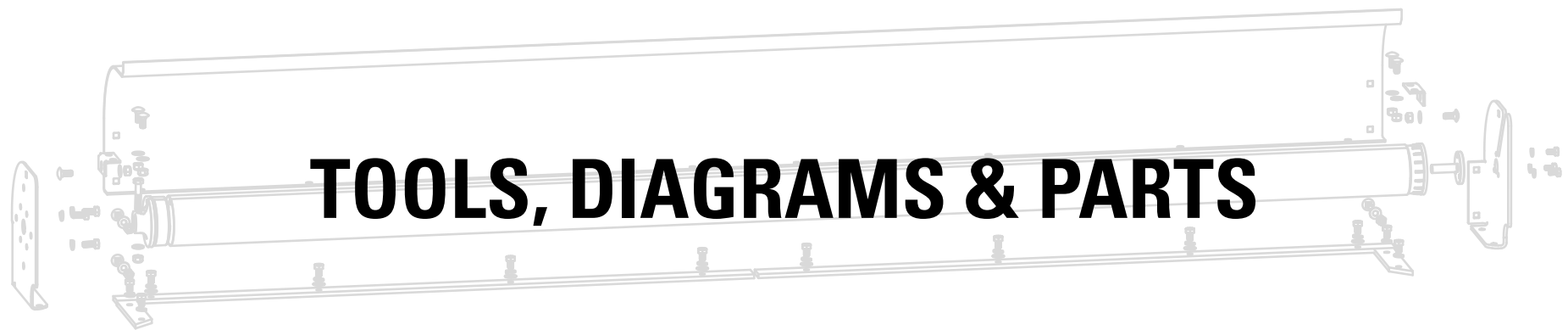
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Wind Tray Kit

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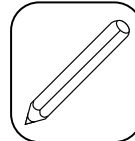
Recommended Tools



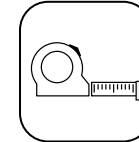
Safety Glasses and Gloves



Welding Equipment & Helmet



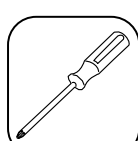
Pencil or Marker



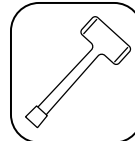
Tape Measure



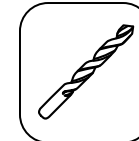
Step Drill Bit (Optional)



Philips Screwdriver



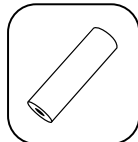
Mallet or Deadblow Hammer



5/16" Drill Bit



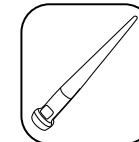
Socket Wrench



1/2" Socket



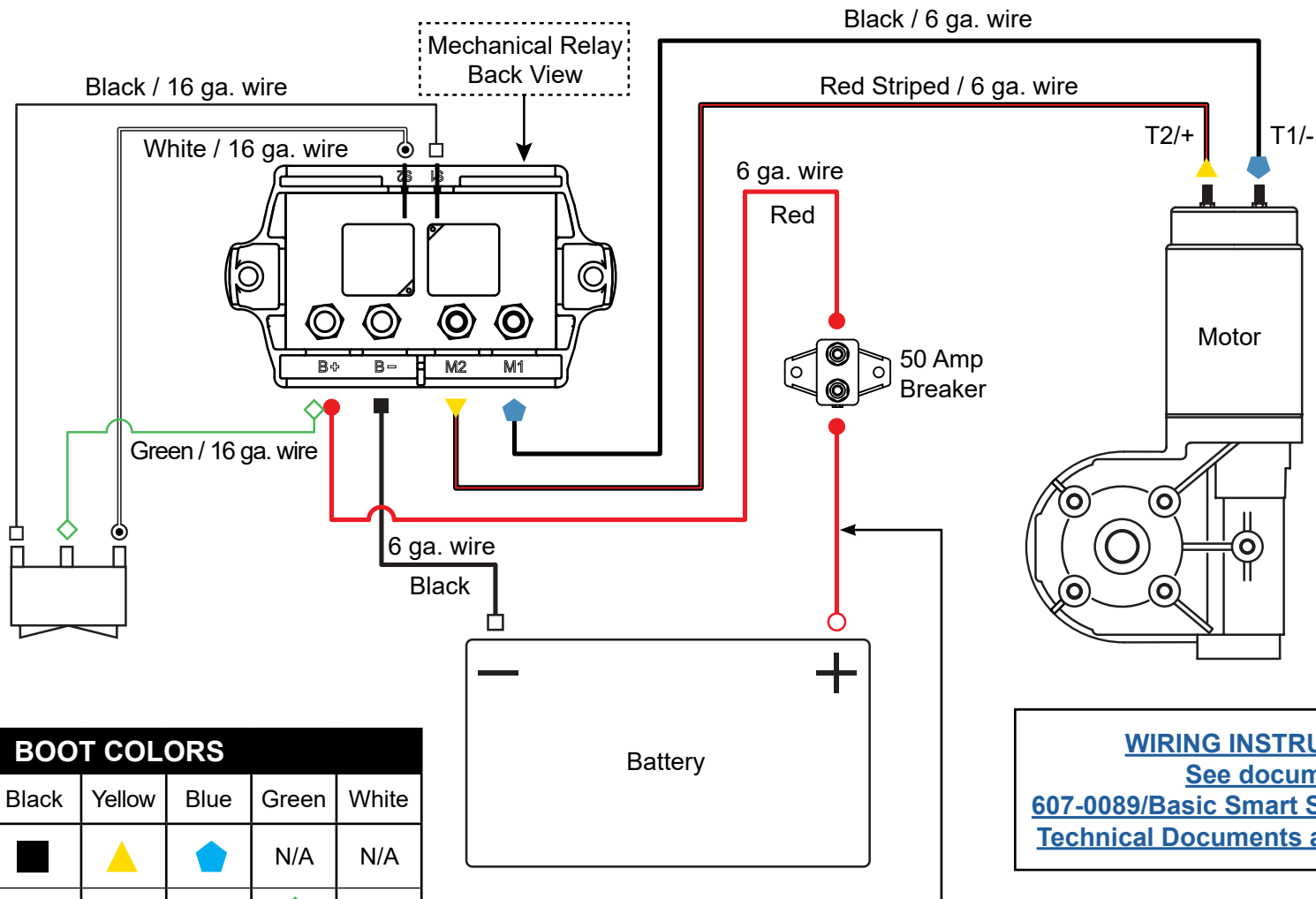
Power Drill



Bullpin



Smart Switch Basic Kit - Wiring Diagram #514-0114



BOOT COLORS						
	Red	Black	Yellow	Blue	Green	White
With Boot					N/A	N/A
No Boot			N/A	N/A		

WIRING INSTRUCTIONS
 See document
[607-0089/Basic Smart Switch-12 Volt in Technical Documents at Pulltarps.com](#)

Note: 12" Max distance between Battery and Breaker.



INSTALLATION INSTRUCTIONS

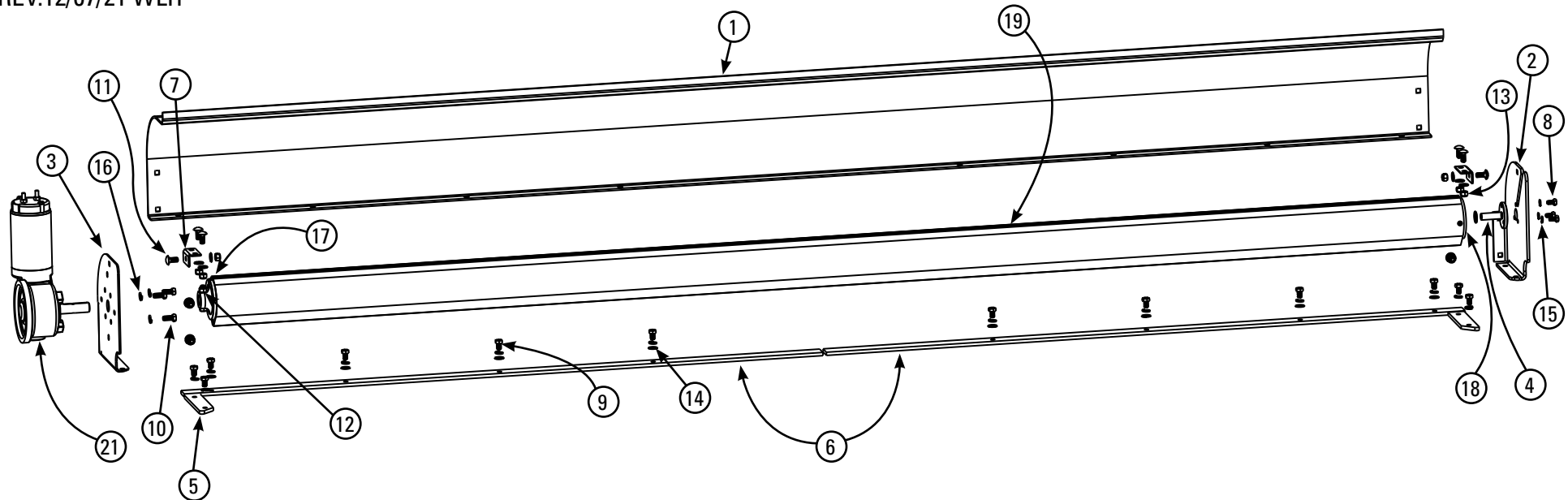
Aluminator™ 8500E

Aluminator™ 8500E #234-0215

ITEM	PART #	DESCRIPTION	QTY
1	501-0175	80" Aluminum 8.5" Housing	1
2	501-1051	8.5" Right Aluminum End Plate	1
3	501-1052	8.5" Electric Aluminum End Plate	1
4	501-0805	Universal Bolt in Stud	1
5	501-1506	6" Large Steel Mounting	2
6	501-1507	40" Mounting Bar-Steel	2
7	501-9934	Galvanized Steel Bracket	2
8	503-2503	1/4" - 20 x 1/2" HHD Bolt	3
9	503-3101	5/16" - 18 x 1/2" Hex Bolt	12
10	503-3103	5/16" - 18 x 3/4" HHCS Bolt	3
11	503-3104	5/16" - 18 x 3/4" Carriage Bolt	10

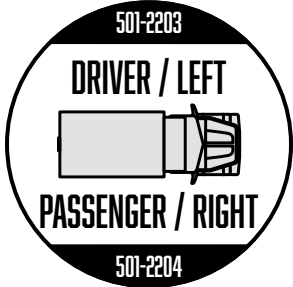
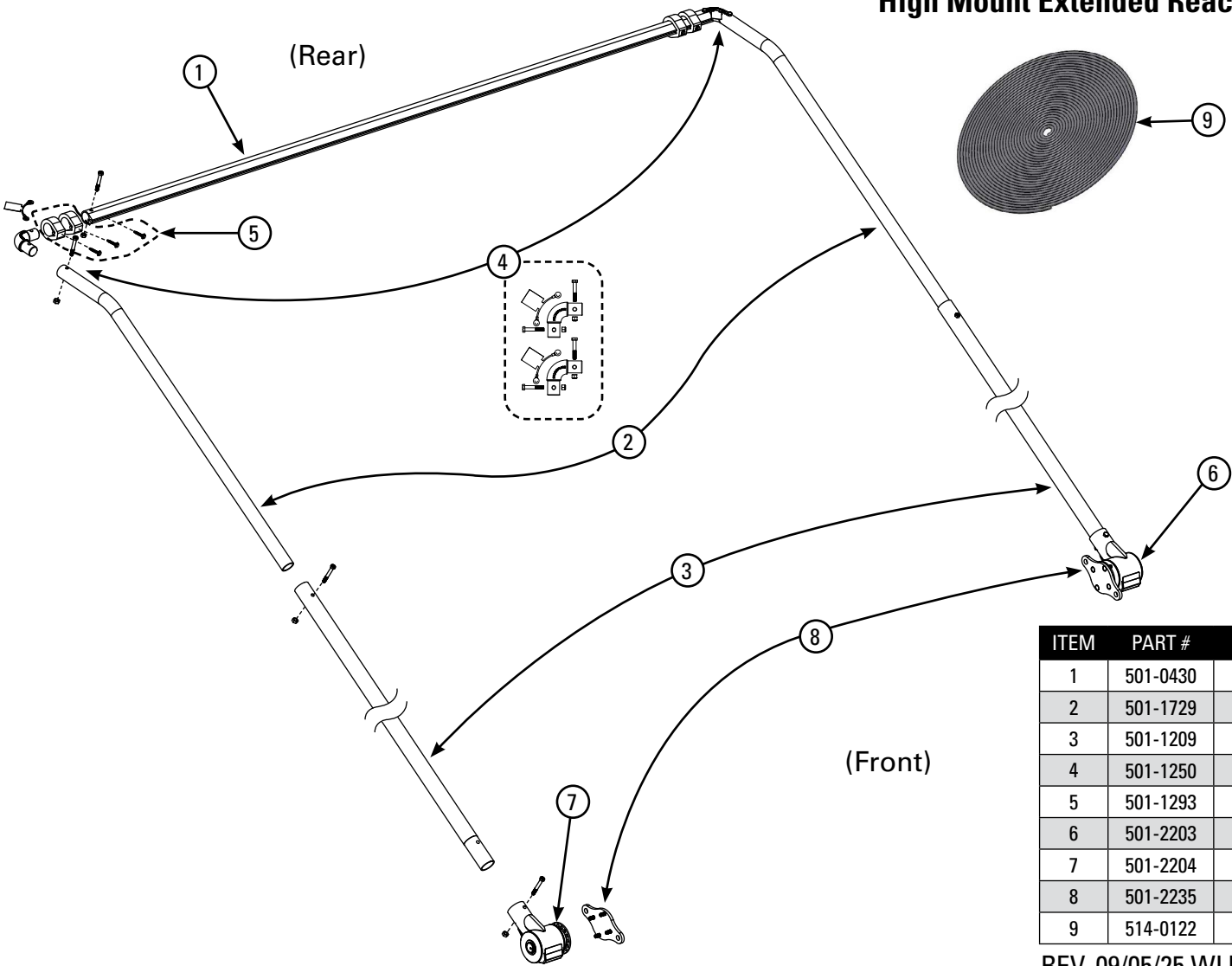
ITEM	PART #	DESCRIPTION	QTY
12	503-3108	5/16" - 18 x 1-3/4" HHCS Hex Bolt	1
13	504-3103	5/16" - 18 Nylock Nut Steel	11
14	505-2502	1/4" USS Washer 5/16"	19
15	505-2503	1/4" Lock Washer - Plated	3
16	505-3102	5/16" Lock Washer	15
17	501-9915	Roller Drive Aluminum End Cap	1
18	517-0102	Flanged End Cap	1
19	517-0502	78mm Roller Tube Galvanized	1
20	506-9916	Screw, #8 - 18 x 3/4" Self (Not Shown)	1
21	517-5909	Pulltarps® 1.3 HP 12V DC Electric Motor	1

REV.12/07/21 WLH





**High Mount Extended Reach Arm System #501-1766 (With Wire)
#501-1767 (No Wire)**



ITEM	PART #	DESCRIPTION	QTY
1	501-0430	103" Teardrop Pull Bar	1
2	501-1729	51" Aluminum Bent Upper Arm	2
3	501-1209	103" Aluminum Lower Arm	2
4	501-1250	Aluminum Elbow & Upper Connection	2
5	501-1293	Teardrop Bumper Kit	1
6	501-2203	4 Spring Enclosed Housing Assembly (Left)	1
7	501-2204	4 Spring Enclosed Housing Assembly (Right)	1
8	501-2235	EZ-Mount Assembly	2
9	514-0122	6GA. Wire 80' Long (For 501-1766)	1

REV. 09/05/25 WLH



1

(Rear)

5

4

2

3

7

6

(Front)

8

9

501-2203

DRIVER / LEFT

PASSENGER / RIGHT

501-2204

ITEM	PART #	DESCRIPTION	QTY
1	501-0430	103" Teardrop Pull Bar	1
2	501-1205	103" Steel Upper Arm Bent	2
3	501-1229	Lower Connection Arm Tube	2
4	501-0791	Steel/Aluminum Elbow & Upper Connection	2
5	501-1293	Teardrop Bumper Kit	1
6	501-2203	4 Spring Enclosed Housing Assembly (Left)	1
7	501-2204	4 Spring Enclosed Housing Assembly (Right)	1
8	501-2235	EZ-Mount Assembly	2
9	514-0121	6GA. Wire 70' Long (For 501-1768)	1

6

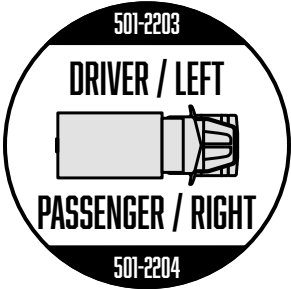
1404 N. Marshall Ave. El Cajon CA. 92020 • For technical support call us at (877) 861-6265 or visit at Pulltarps.com.

Clarence

TECHNOLOGIES

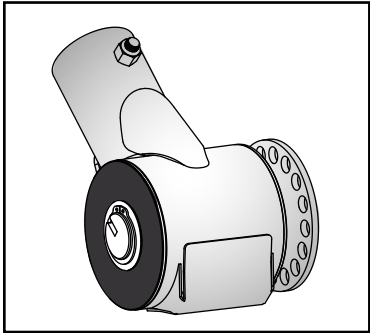
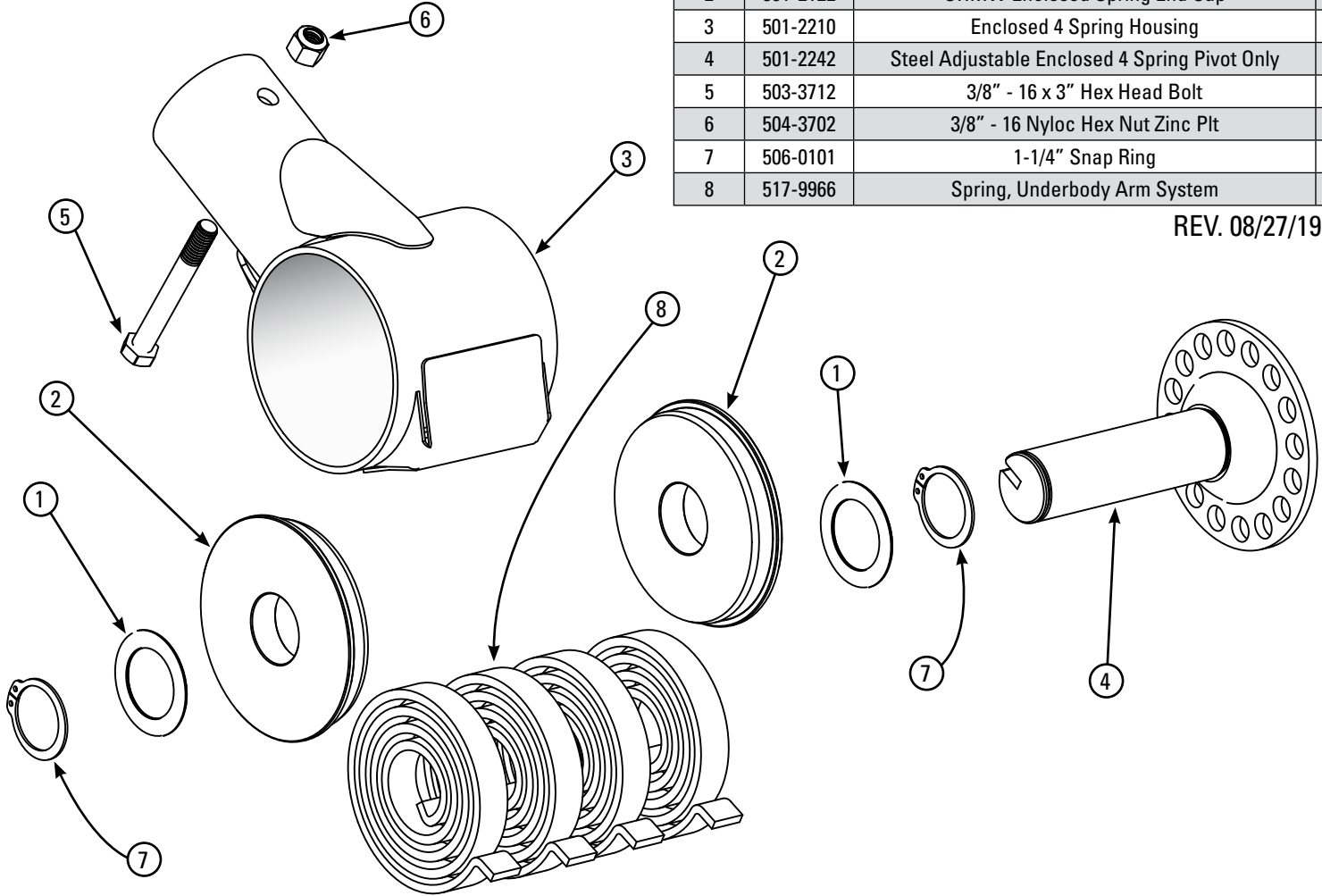


4 Spring Enclosed Housing Assembly Right #501-2204 (not shown) & Left #501-2203 (shown)



ITEM	PART #	DESCRIPTION	QTY
1	501-1162	Washer 1-7/8" x 1-1/4" Narrow Rim Bushing	2
2	501-2122	UHMW Enclosed Spring End Cap	2
3	501-2210	Enclosed 4 Spring Housing	1
4	501-2242	Steel Adjustable Enclosed 4 Spring Pivot Only	1
5	503-3712	3/8" - 16 x 3" Hex Head Bolt	1
6	504-3702	3/8" - 16 Nyloc Hex Nut Zinc Plt	1
7	506-0101	1-1/4" Snap Ring	2
8	517-9966	Spring, Underbody Arm System	4

REV. 08/27/19 WLH



Assembled View of 501-2203



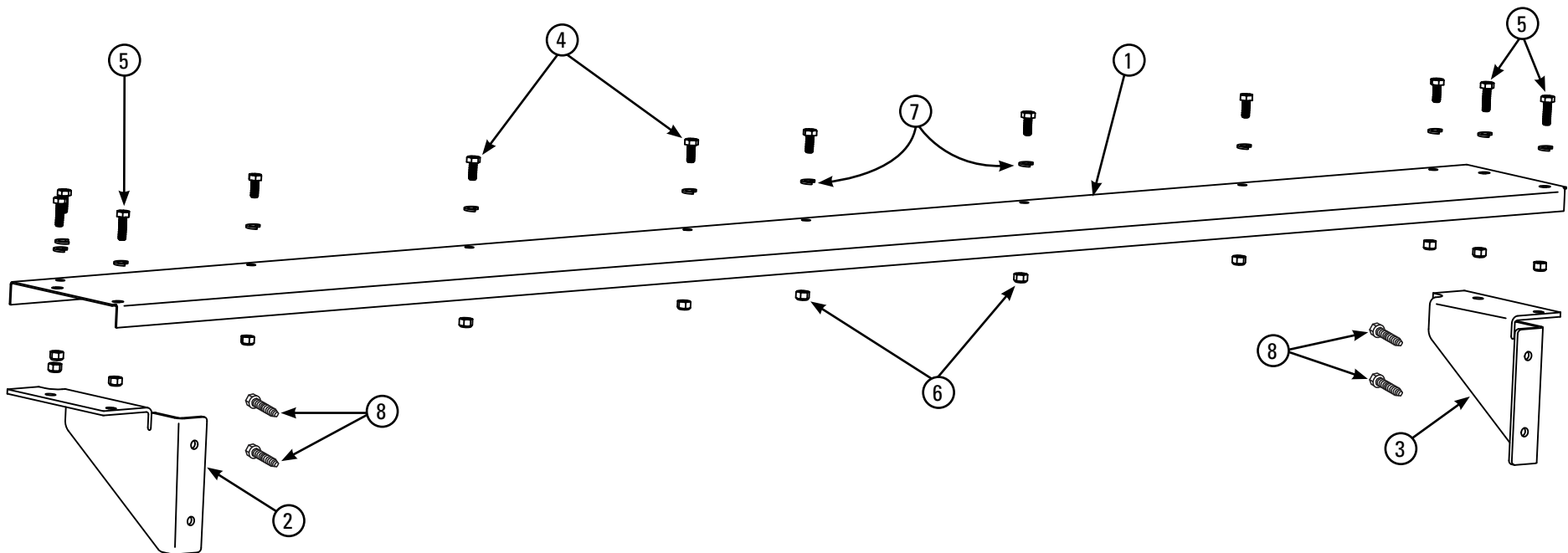
80" Wind Tray Kit / Aluminator 8500 Housing #501-1030 (Shown)

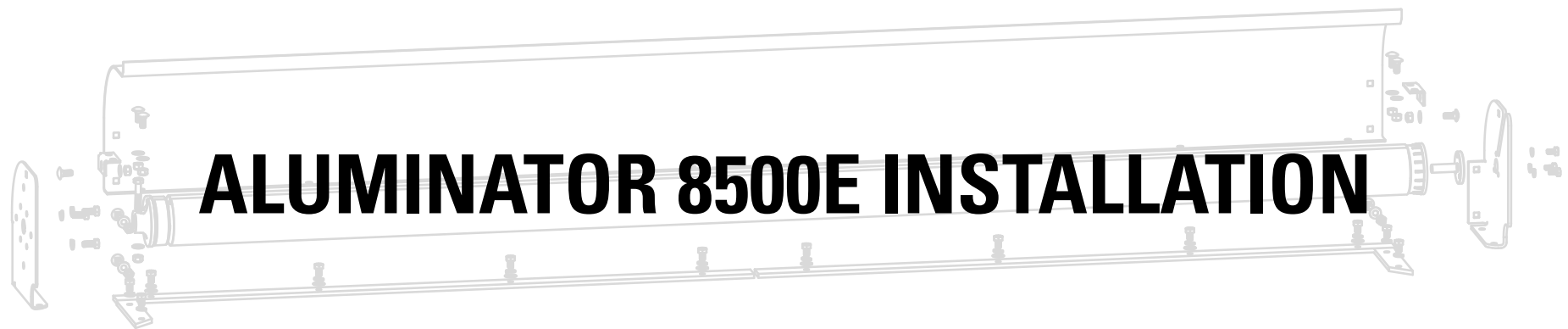
Width Options: #501-1031 (84"), #501-1032 (87"), #501-1033 (89"), #501-1034 (93"), 501-1035 (96") & 501-1036 (100")

ITEM	PART #	DESCRIPTION	QTY
1	501-1037	8.5 Aluminum Tray 80"	1
---	501-1038	8.5 Aluminum Tray 84" (Option)	1
---	501-1039	8.5 Aluminum Tray 87" (Option)	1
---	501-1040	8.5 Aluminum Tray 89" (Option)	1
---	501-1041	8.5 Aluminum Tray 93" (Option)	1
---	501-1042	8.5 Aluminum Tray 96" (Option)	1
---	501-1043	8.5 Aluminum Tray 100" (Option)	1

ITEM	PART #	DESCRIPTION	QTY
2	501-1044	Left Aluminum Tray Support	1
3	501-1045	Right Aluminum Tray Support	1
4	503-3103	5/16"-18 x 3/4" HHCS Bolt	8
5	503-3105	5/16"-18 x 1" HHCS Bolt G2	4
6	504-3103	5/16"-18 Nylock Nut	12
7	505-3102	5/16" Lock Washer	12
8	506-3703	3/8" - 16 x 1-1/4" Full Thread Stud	4

REV. 02/04/20 WLH

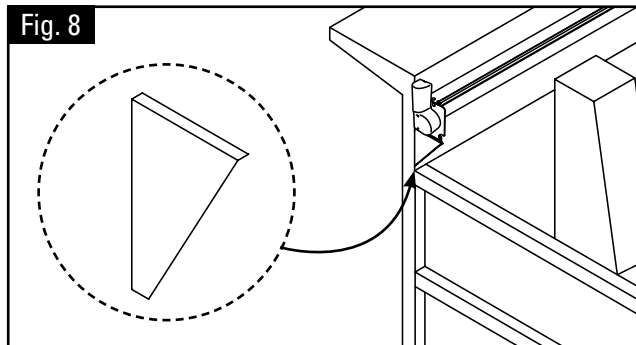
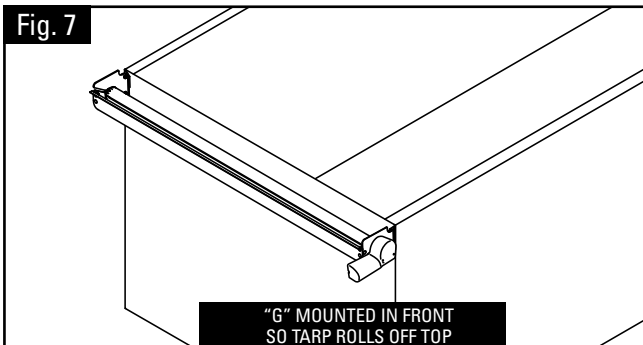
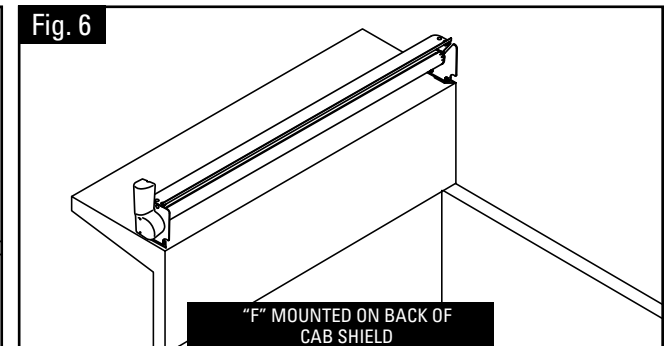
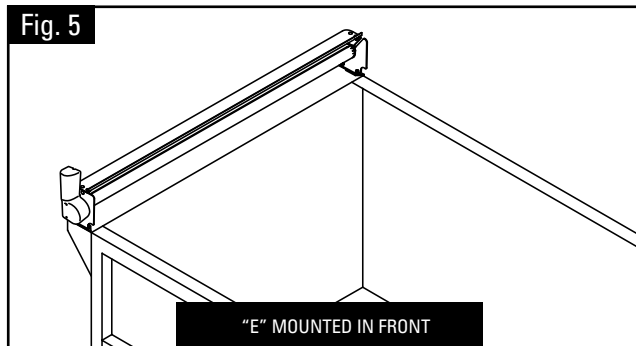
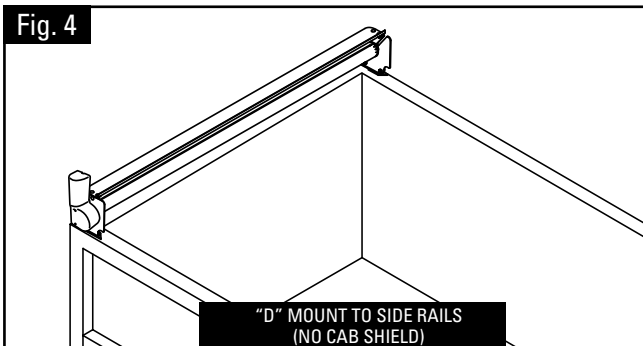
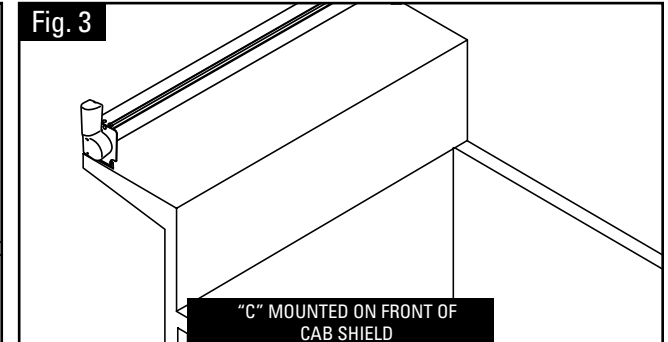
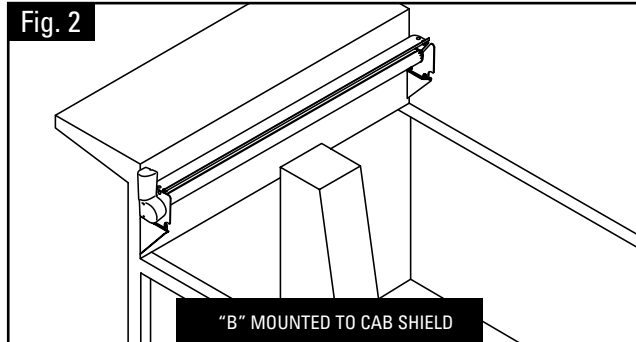
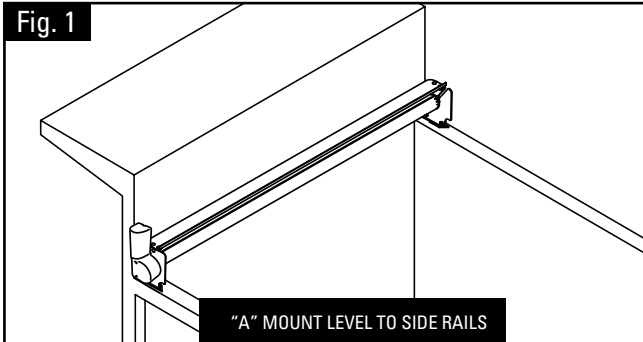






Mounting Positions

Step 1: Determine the mounting position for your truck Fig. 1 - 7.



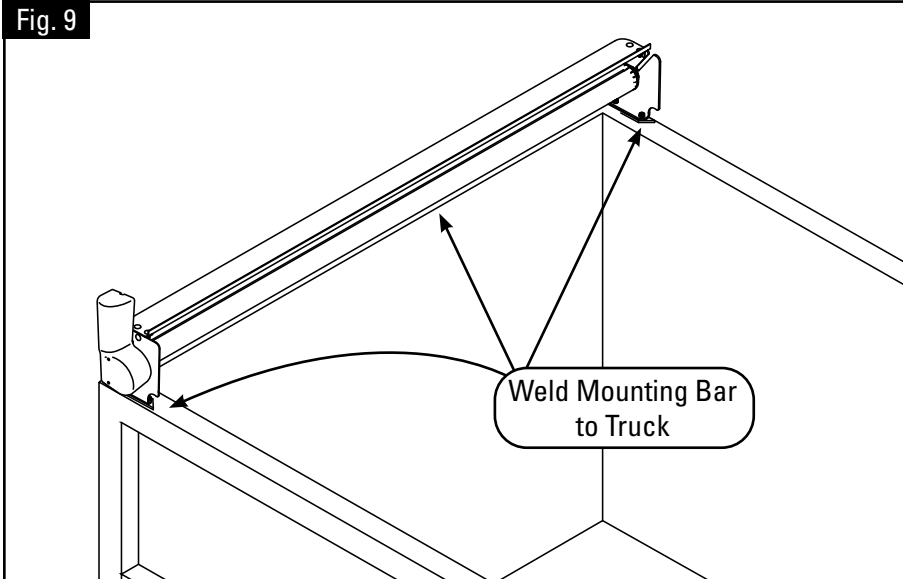
"B" BRACKETS

NOTE: Use optional "B" brackets when mounting in position "B" and "E" (Fig. 8).



Mounting the System (Standard)

Fig. 9

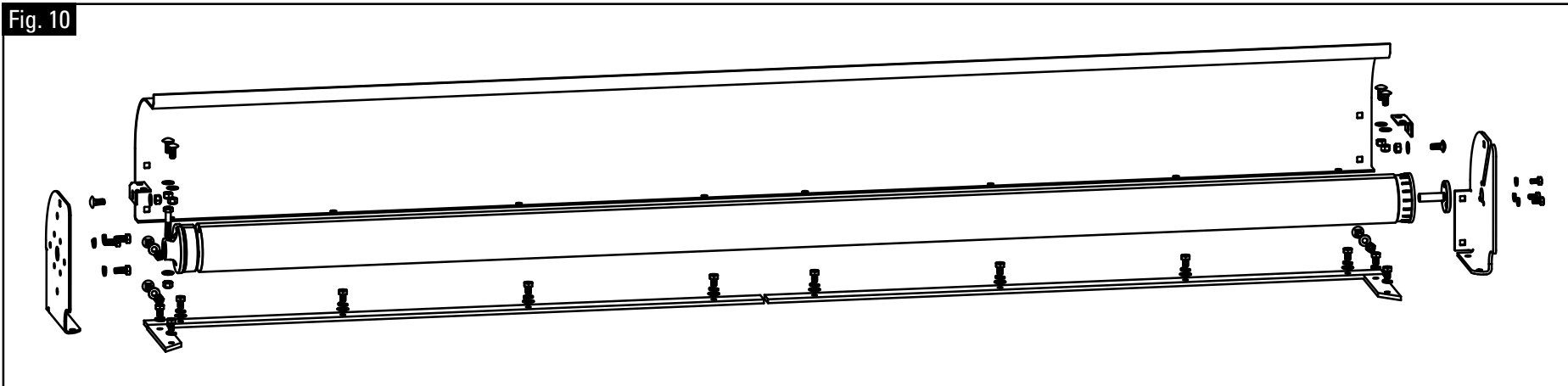


Step 2: Weld System To Truck

Stitch weld system mounting bar to truck every 6" as shown in Fig. 9.

System Assembly (Fig. 10).

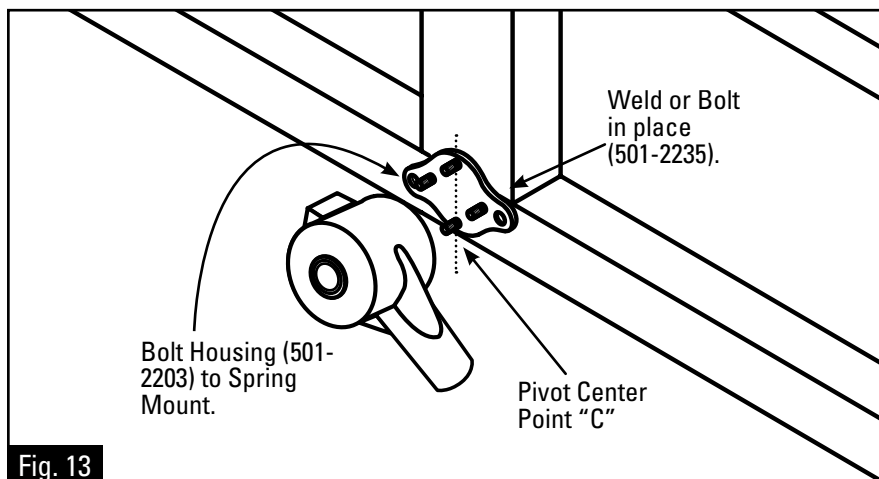
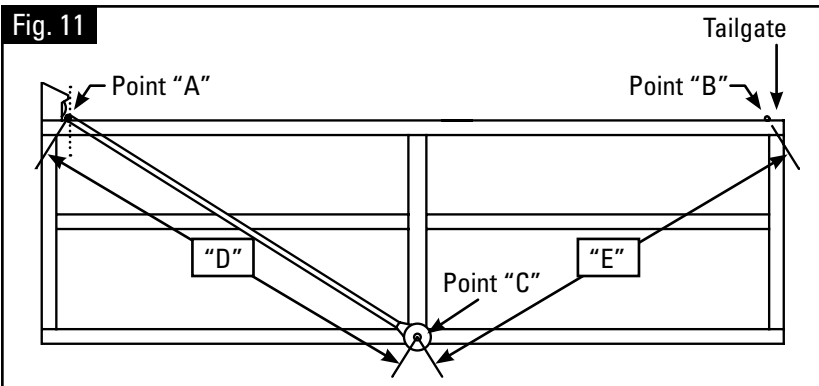
Fig. 10



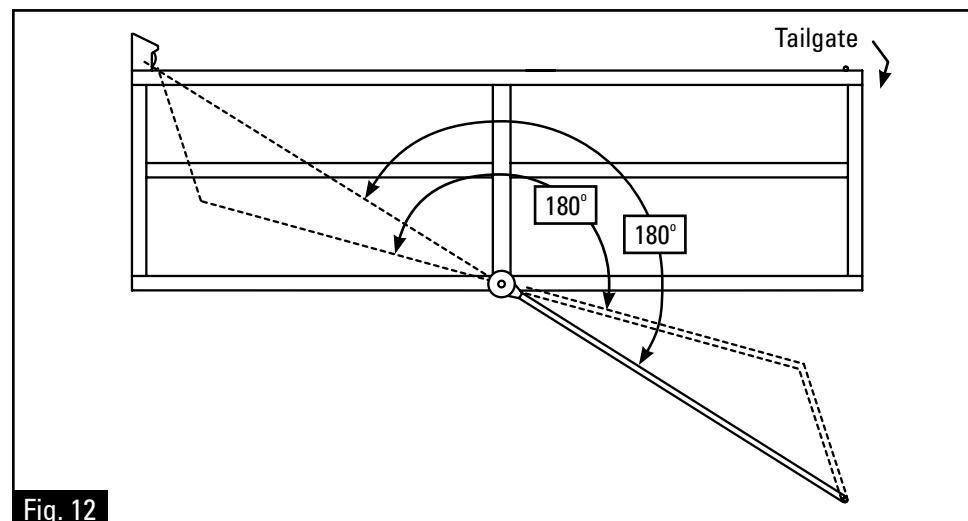


Pivot Points and Mounting Locations (Low Mount)

Step 3: 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. 11). Point "C" must be located as low as possible and be the same on both sides.



Step 4 - Arm Preload: Install Arm and Pivot assemblies with Arm indexed (Fig. 12). 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 5 - Mounting the Pivot Mount:

Locate the 4 Spring Housing with marks made in Step 5. Weld the Spring Mounting in place and then bolt on the Spring Housing 180° from Housing Location (Fig. 13).

Note: Applies to Lower Mounting.



Pivot Points and Mounting Locations (High Mount)

Step 6: Careful measurements 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. 14). The pivot "C" should be 1/2 way between Point "A" and Point "B" and 7" below the top rail on both sides (Fig. 5).

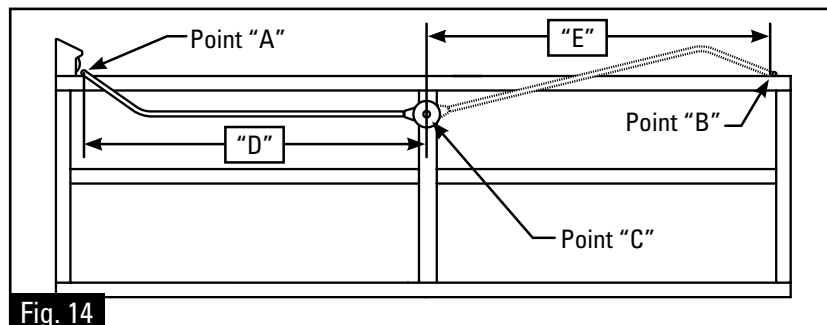


Fig. 14

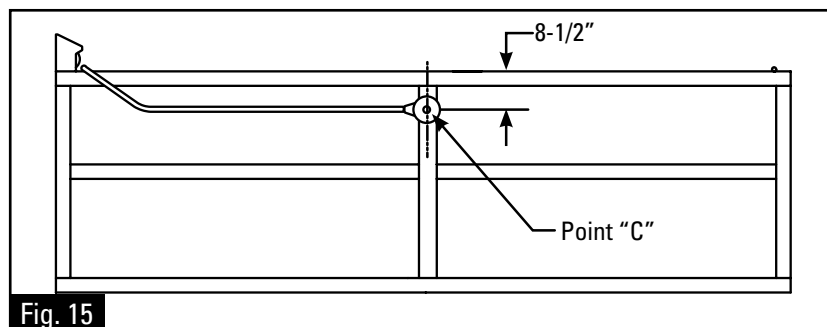


Fig. 15

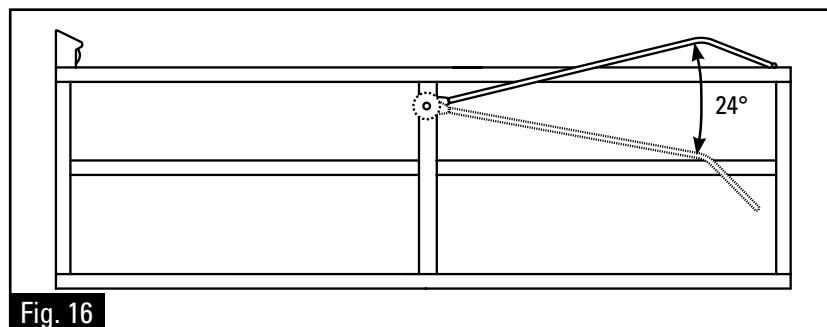


Fig. 16

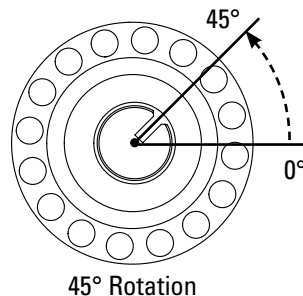
Step 7 - Arm Preload:

Arm must be indexed with no load at 24 degrees to top rail for proper preload of springs (Fig. 16).

Step 8 - Setting the Index for EZ-Mount System (High Mount Only):

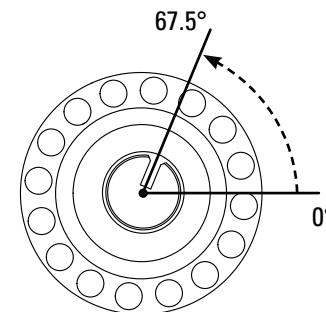
Indexing illustrations are for DRIVER SIDE index (Fig 17A, B, & C).

Fig. 17A



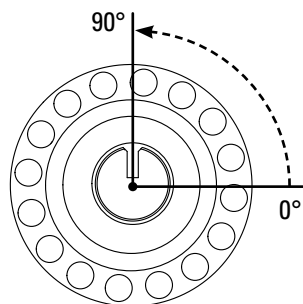
45° Rotation
(Highmount starting rotation to front of cab body)

Fig. 17B

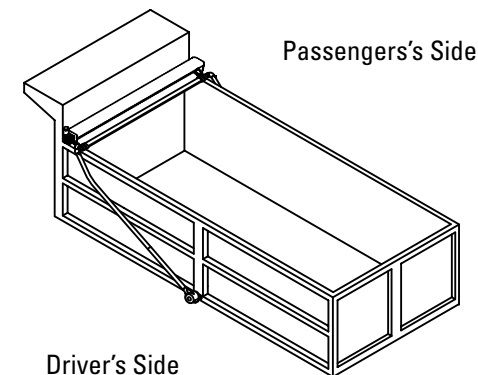


67.5° Rotation

Fig. 17C



90° Rotation
(Maximum rotation point to front of cab body)





Arm Alignment, Tarp and Pullbar Installation

Fig. 18

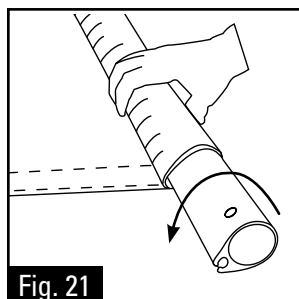
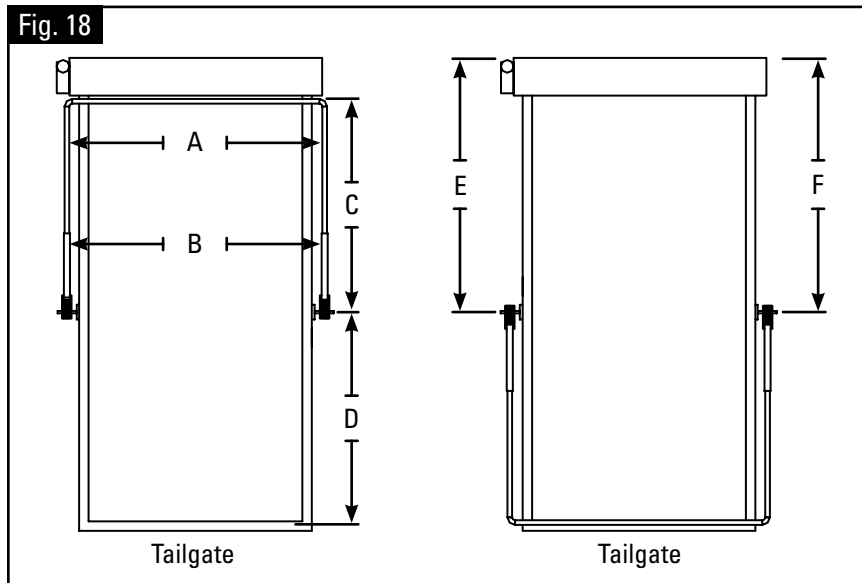


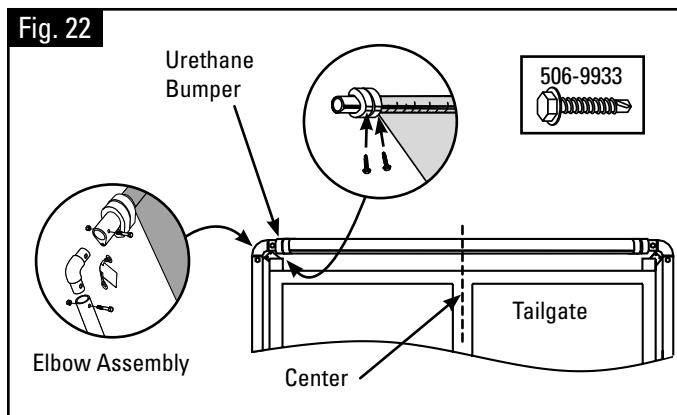
Fig. 21

Step 12 - Installing The Pullbar:
Cut the pullbar to length making sure the arms remain parallel and square to the body.

Slide the tarp into groove in the pullbar and center the tarp.

Roll the tarp up on the pullbar two revolutions (Fig. 21).

Fig. 22



Step 13: Fasten the tarp in place by sliding the two urethane bumpers on to the pullbar 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 pullbar (Fig. 22).

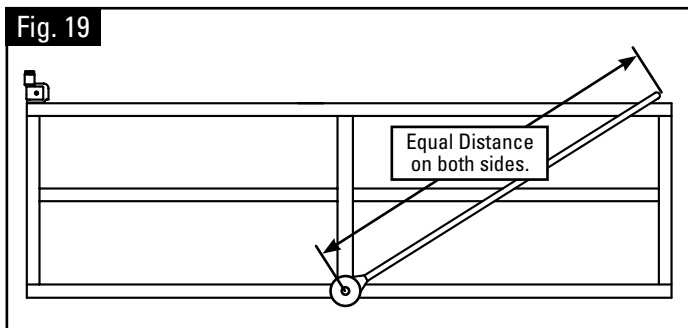
For elbows, use the long bolts provided in the kit, when deployed to catch the rope on flap tarps. Install tether onto elbows as shown.

Step 9 - Correct Alignment of arm to truck:

Arms and pivots must be square and parallel to truck (Fig. 18).

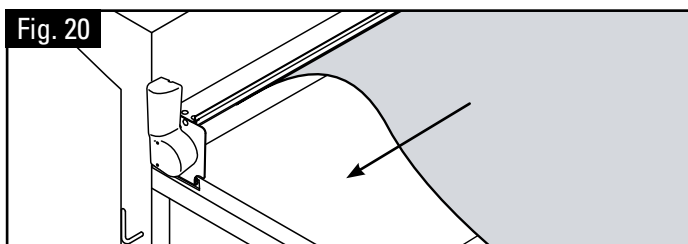
(Dimension "A" must equal "B" - Dimension "C" must equal "D" - Dimension "E" must equal "F")

Fig. 19



Step10: Adjust the Arms on both sides to be the same length (Fig.19).

Fig. 20



Step 11 - Tarp Installation:
Slide Tarp into Groove on roller tube and center (Fig. 20).

Note: Tarp must be retracted when dumping.



INSTALLATION INSTRUCTIONS

Aluminator™ 8500E

Quick Disconnect Plug Assembly

Step 14: Assemble the Quick Disconnect (Fig. 23, 24, & 25).

Option #1, Plug Assembly - Part # 514-0505.

Fig. 23

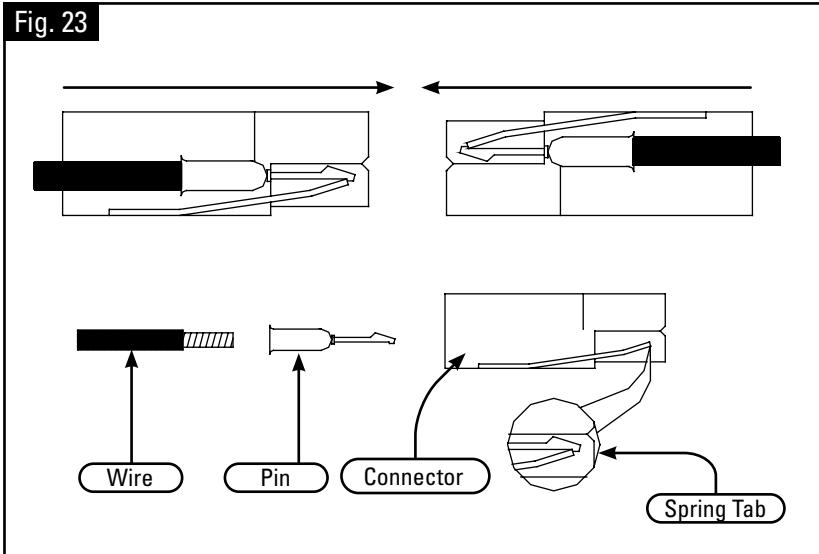
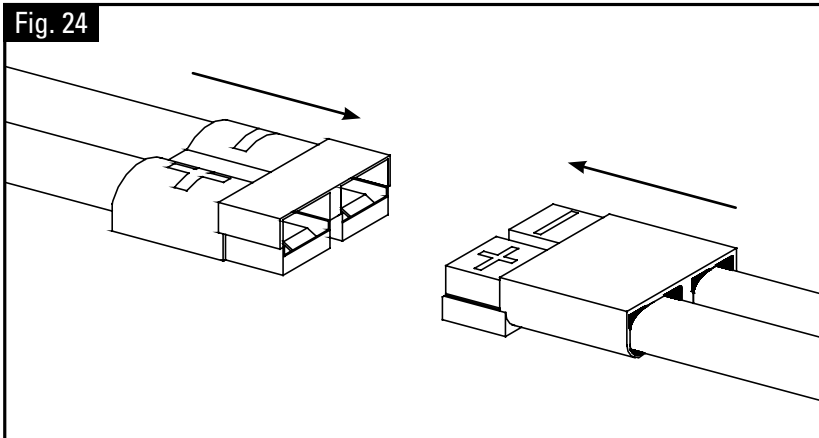
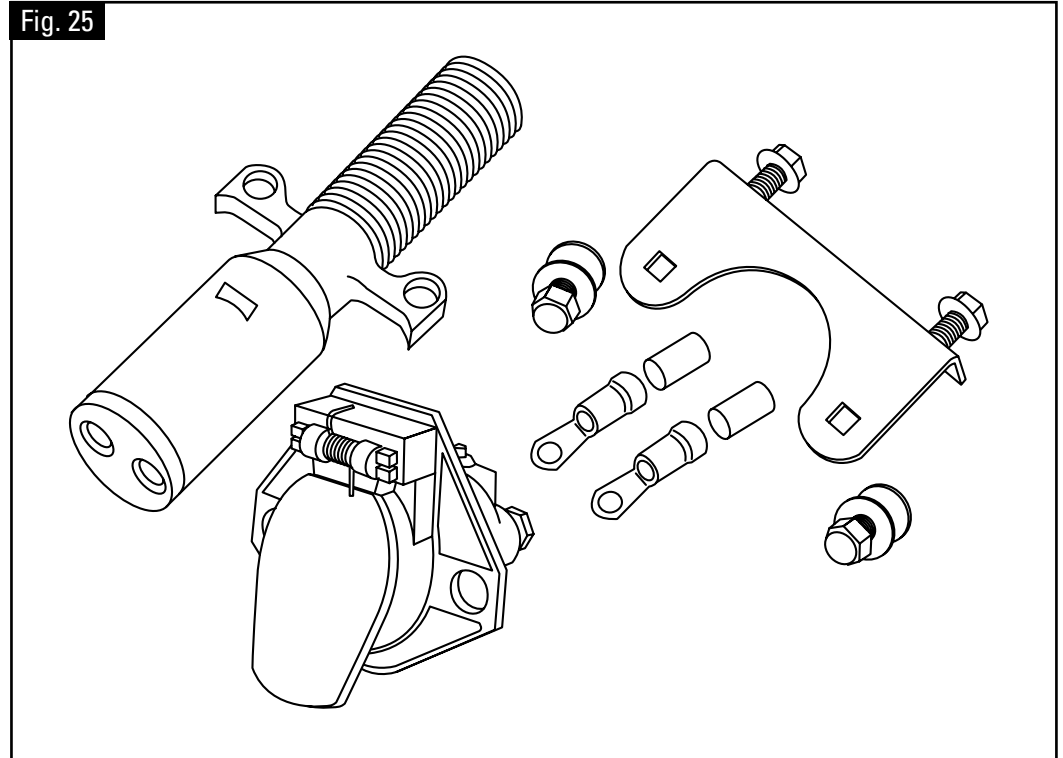


Fig. 24



Option #2, Plug Assembly - Part # 514-0501.

Fig. 25





FLAP TARP, ROPE & HOOK INSTALLATION



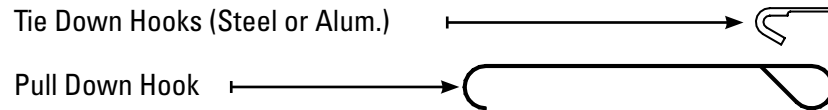


INSTALLATION INSTRUCTIONS

Aluminator™ 8500E

Optional Flap Tarp, Rope and Hook Installation

Parts:



Note: The Location Of The Tie Down Hooks Is Critical!

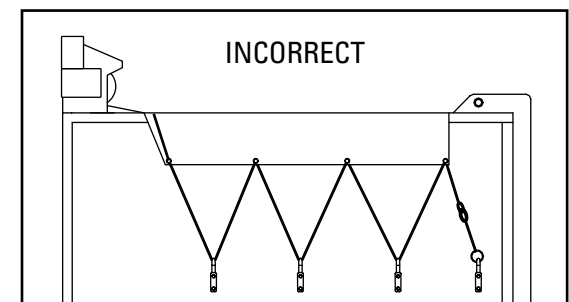
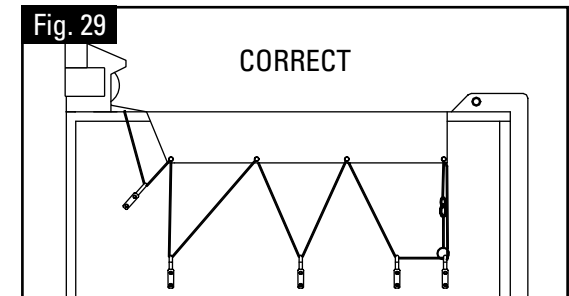
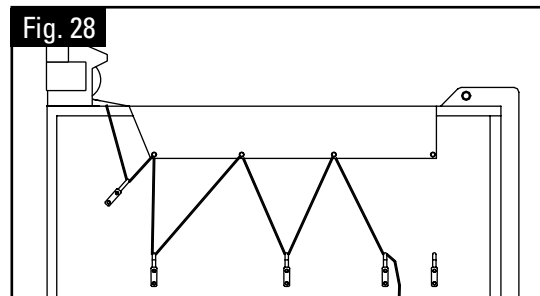
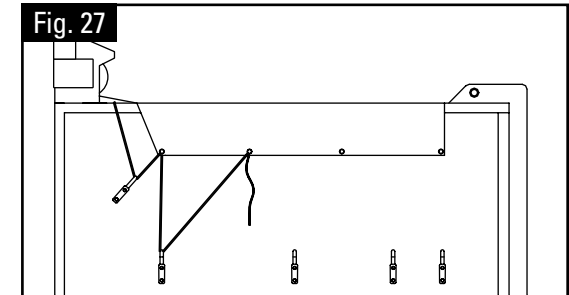
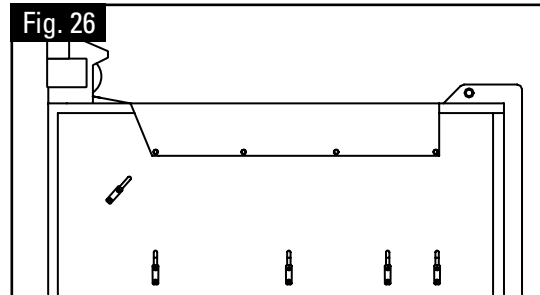
Step 1: Flip the braided rope over the corner so that the flaps and tie down ropes hang over each side of the box. The number of tie down hooks vary depending on the length of your tarp. One pull down hook is included with your Pulltarp system. If needed. Use the hook to pull the braided rope and flaps over the side of the box.

The tie down hooks must be positioned so that:

1. The tie down rope can be reached from the ground.
2. The bungee cord has to be stretched to reach the last hook (see Step 2 in **Bungee Cord Installation** section).
3. The rope has no slack.
4. 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. 26).
2. Position 2nd hook straight down from 1st grommet. This hook should be reached from ground (Fig. 27).
3. Place middle hooks equal distances from grommet (Fig. 28). 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. 29).
5. Weld hooks in place.



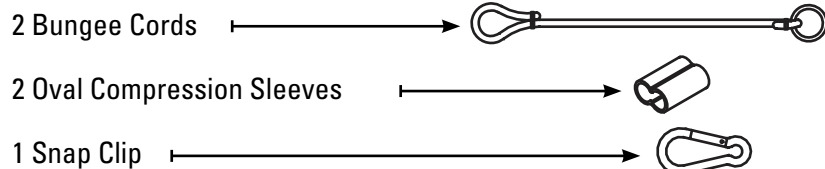


INSTALLATION INSTRUCTIONS

Aluminator™ 8500E

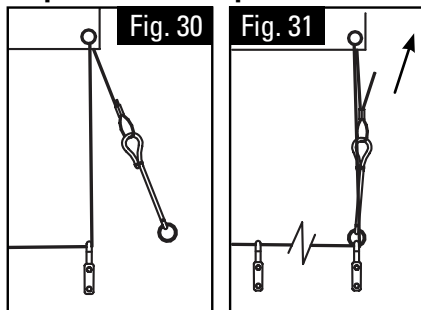
Bungee Cord Installation

Parts:



Step 2: 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.

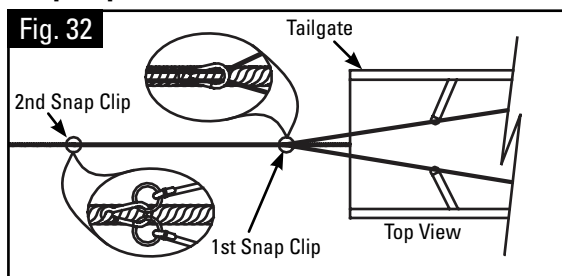
Tarps with Side Flaps



To tighten, pull loose end of rope through the Oval Compression Sleeve (Fig. 30). Stretch the bungee cord making sure all slack is taken out of the rope, crimp compression sleeve (Fig. 31). Be sure to keep flaps even on sides so Tie Down Ropes remain equal in length.

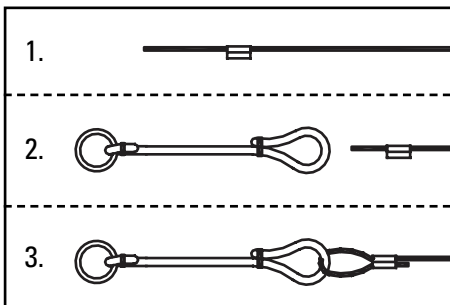
Note: Check for proper placement of rope through the last two hooks.

Snap Clip Installation



Note: First snap clip should not be used on long wheel base belly dumps.

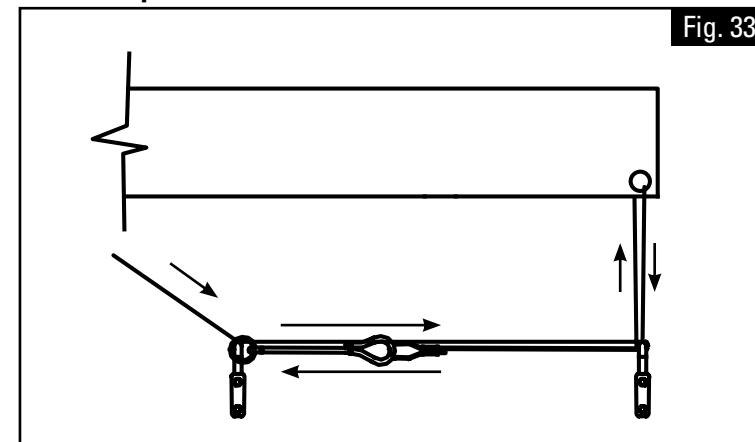
Flip the rope back on top of the tarp, making sure to hold the bungee at all times. The first snap clip is factory installed 5'-6" from the pullrod. Open the clip and enclose the rope. Weave the second clip through the main pullrope where the ends of the bungee cords meet the main pullrope. Make sure the rope is taught when clipped (Fig. 32).



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.

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 tacking the end of the bungee cord to an alternate hook (Fig. 33).



INSTALLATION INSTRUCTIONS

Aluminator™ 8500E

Flap, Rope and Rope Hook Placement

Step 3 - Flap / Tie Down Rope Placement and Installation (Fig. 34).

Fig. 34

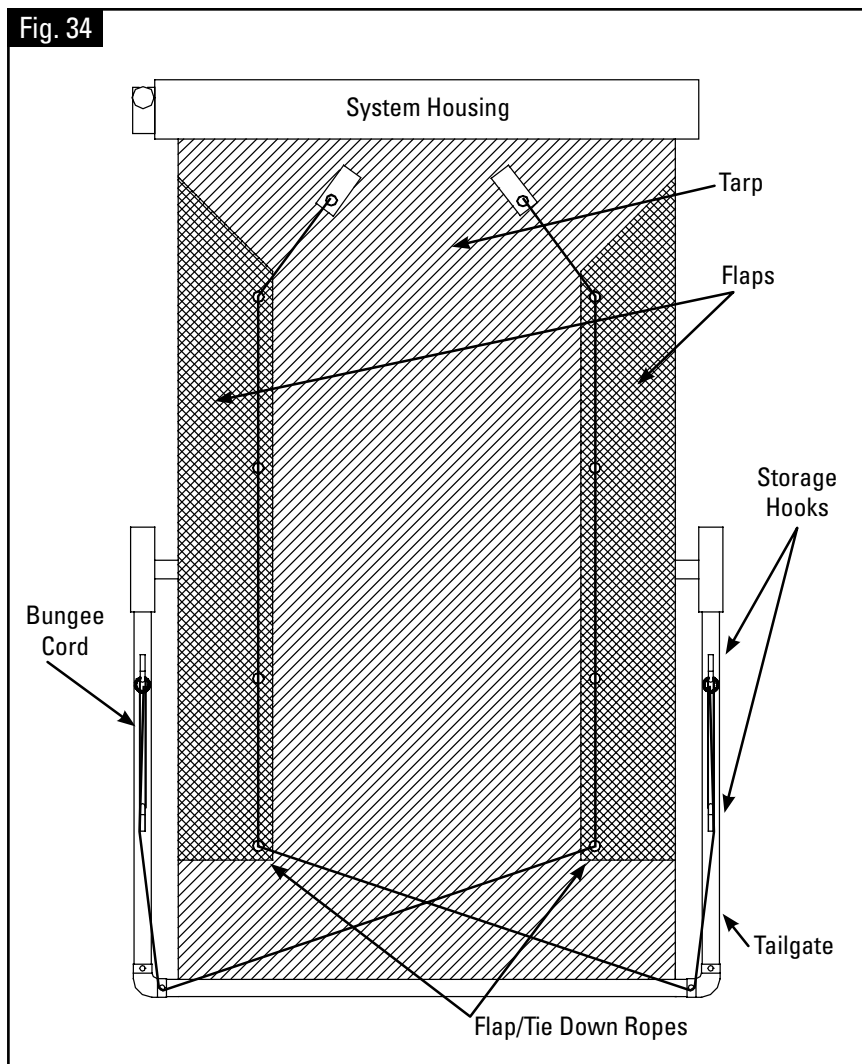
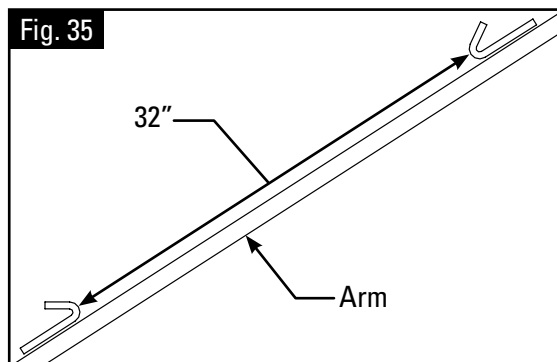
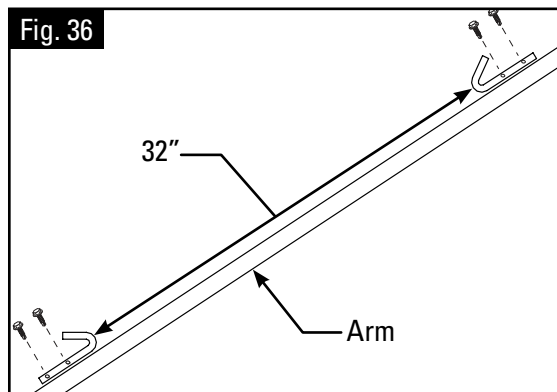


Fig. 35



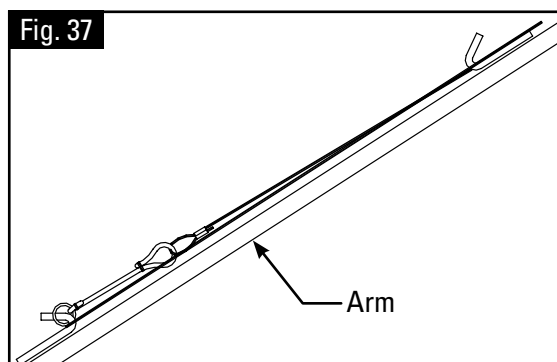
Step 4 - Rope Hook Placement: Weld rope storage hook on the top of the arms approx. 32" apart (Fig. 35).

Fig. 36



Step 5 - Rope Hook Placement For Aluminum Arms: Use Self Drilling screws (part #506-9933) to install hooks (Fig. 36).

Fig. 37



Step 6 - Rope storage on Arms (Fig. 37).





INSTALLATION INSTRUCTIONS

Aluminator™ 8500E

Wind Tray Kit

Step 1: Lay the tray on the ground with flanges facing upward (Fig. 38). Take one bracket, place it on the tray with the large flange on the bracket, facing out. Secure to tray with supplied hardware (Fig. 39A). Do the same on the other side (Fig. 39B).

NOTE: Lay a tarp or sheet on the ground underneath the tray to protect it from scratches.



Fig. 38



Fig. 39A



Fig. 39B



Fig. 40

Step 2: With both brackets hand tightened on the tray, flip the tray over and find the center of the tray (Fig. 40).

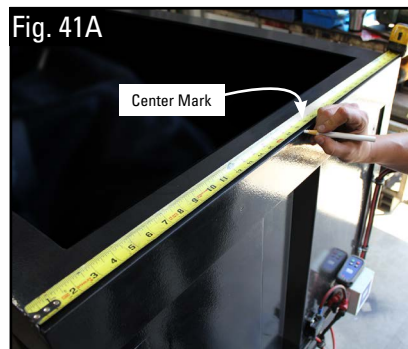


Fig. 41A

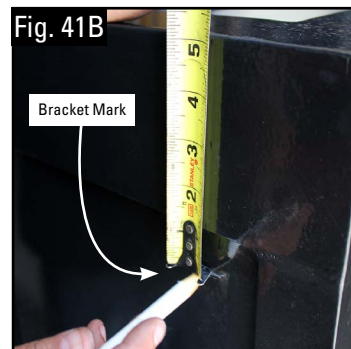


Fig. 41B

Step 3: Measure the width of the box and mark the center to help determine the placement of the Tray (Fig. 41A). Also, mark 5 inches down from the top of the box and about 3-5 inches from each side of the box (Fig. 41B).

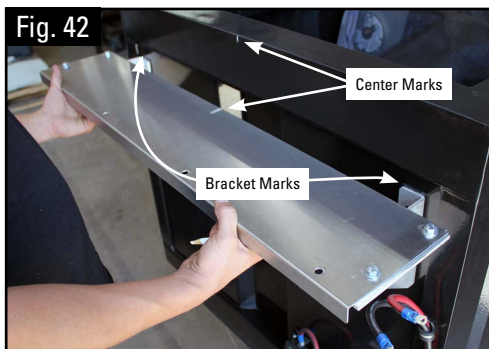


Fig. 42

Step 4: To set the marks for drilling the bracket holes, place the tray and brackets up against the box and center, using the center marks. The top of the bracket should be 5 inches from the top of the box (Fig. 42).



Fig. 43

Step 5: Mark the bracket holes on both sides (Fig. 43). Place the tray back on the tarp and remove brackets from tray (Fig. 38).

NOTE: If available, use a center punch and hammer to make an indentation where you marked the holes.



INSTALLATION INSTRUCTIONS

Aluminator™ 8500E

Wind Tray Kit

Fig. 44



Step 6: Take your power drill with a 5/16" bit and drill holes into the positions marked (Fig. 44).

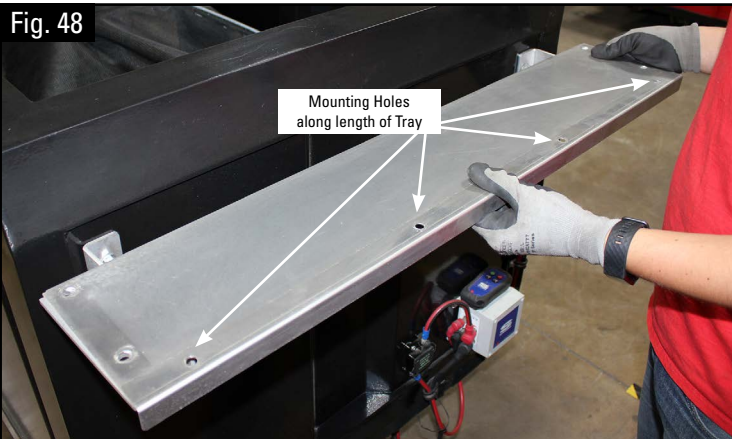
Fig. 45



Step 7: Once the holes are drilled, take the full thread stud and secure in the holes, to prepare the hole for mounting the brackets and remove after insertion (Fig. 45).

Step 9: Place the Tray on top of the brackets and make sure the flange fits in the bracket groove. Make sure that the four (4) mounting holes on the front of tray face out (Fig. 48).

Fig. 48



Step 8: Take each bracket and mount to the holes, with the included hardware (Fig. 46). Verify that the brackets are 5" from the top of the box on both sides (Fig. 47A & B).

Fig. 46



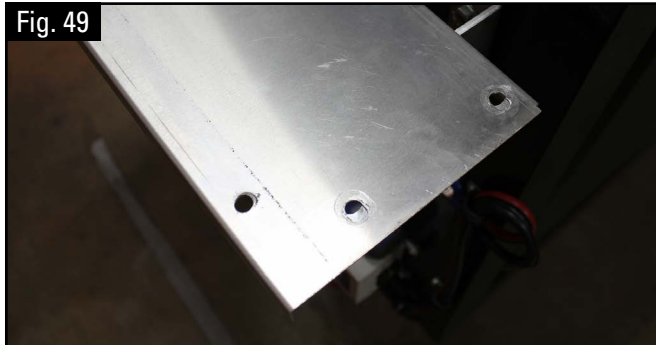
Fig. 47A



Fig. 47B



Fig. 49



Step 10: Align the holes in the Tray with the holes in the brackets. Adjust as needed (Fig. 49).



Wind Tray Kit



Fig. 50A



Fig. 50B

Step 11: With the help of a team member, place the completed housing on top of the tray, with the roller tube side facing the box (Fig. 50A & B).



Fig. 51

Step 12: Position until even with the Tray and align the holes to the mounting tray and brackets (Fig. 51).

NOTE: Use a Bullpin or Phillips screwdriver to help align the holes, before inserting the bolts.



Fig. 54

Step 15: Secure the bolts with the provided hardware (Fig. 54).

NOTE: Verify that the system is level with the box.



Fig. 52

Step 13: Insert Bolts (8) from the inside of the housing with the ends facing down, through the tray and brackets (Fig. 2).

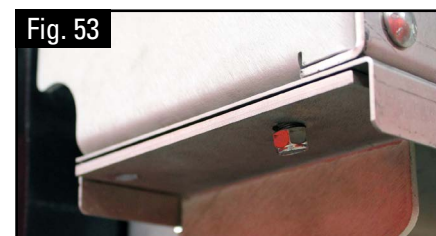


Fig. 53

Step 14: Place the Nylock Nuts on the Bolts and hand tighten (Fig. 53).

NOTE: Verify that the system is level with the box.