



INSTALLATION INSTRUCTIONS

Automatic Systems for Arm Sets up to 40 feet

Related Instructions,
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[WEB: Locate a Service Center](#)



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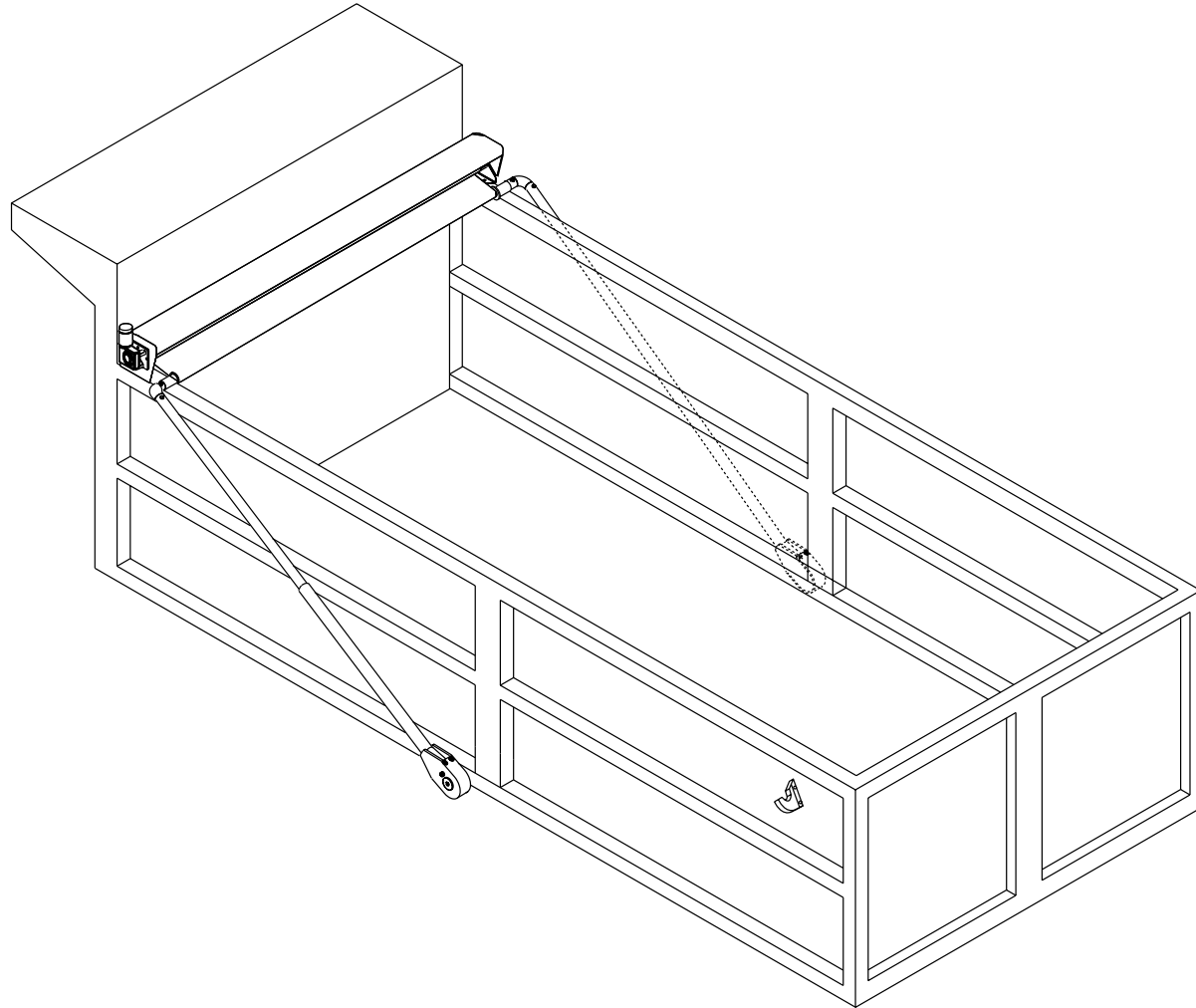


[PDF: High Amp Switch Kit](#)



[VIDEO: SuperShield™ 9500E Operation](#)

Open 9000E (201-0215), Steel Protector +™ (218-0215) & SuperShield™ 9500E(210-0215)



Document #: 607-0027
Revised: 12/14/22 WLH

DURING INSTALLATION, SOME FABRICATION MAY BE REQUIRED.



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Automatic Systems Installation

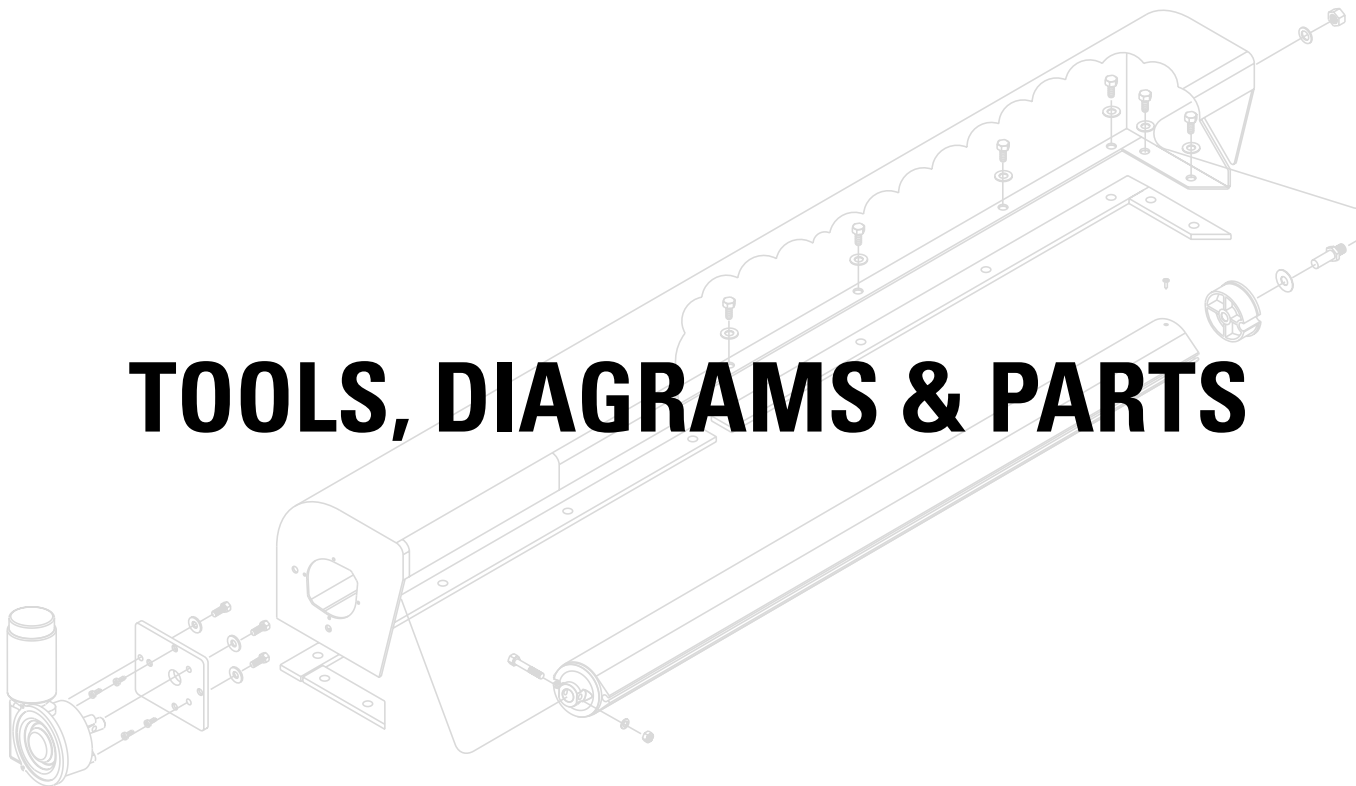
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TOOLS, DIAGRAMS & PARTS







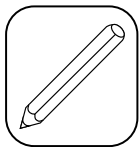






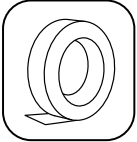

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Automatic Systems for Arm Sets up to 40 feet

Recommended Tools

	Safety Glasses and Gloves		Welding Equipment & Helmet		Pencil or Marker		Metal File
	Hacksaw		Tape Measure		Rubber Mallet		Impact Drill (Optional)
	Adjustable Wrench		Masking Tape		Flathead Screwdriver		



INSTALLATION INSTRUCTIONS

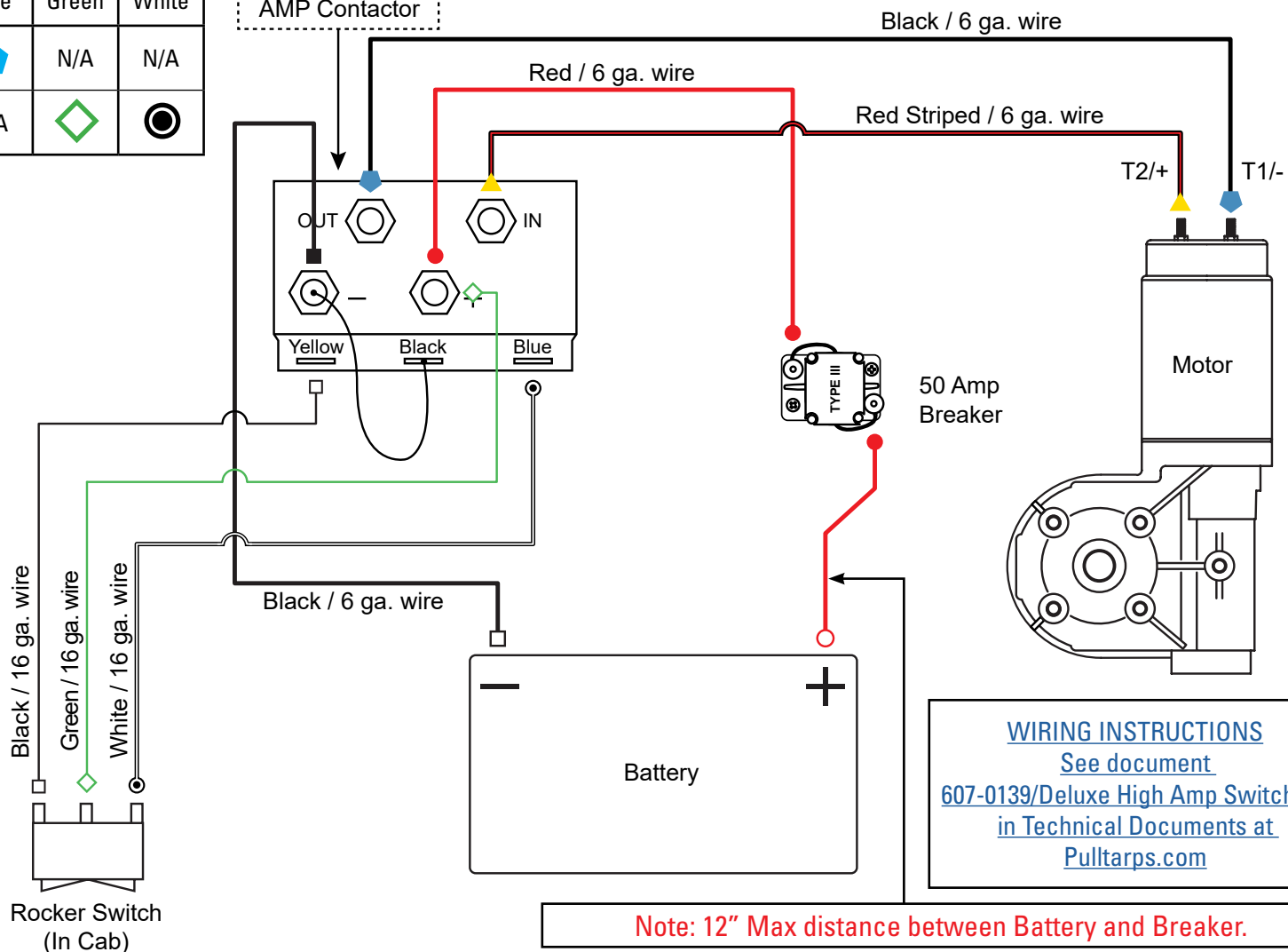
Automatic Systems for Arm Sets up to 40 feet

BOOT COLORS

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

Top View of
Reversing High
AMP Contactor

Deluxe High Amp Switch Kit - 12 Volt #514-0139 (Recommended)



WIRING INSTRUCTIONS

See document
607-0139/Deluxe High Amp Switch Kit
in Technical Documents at
Pulltarps.com

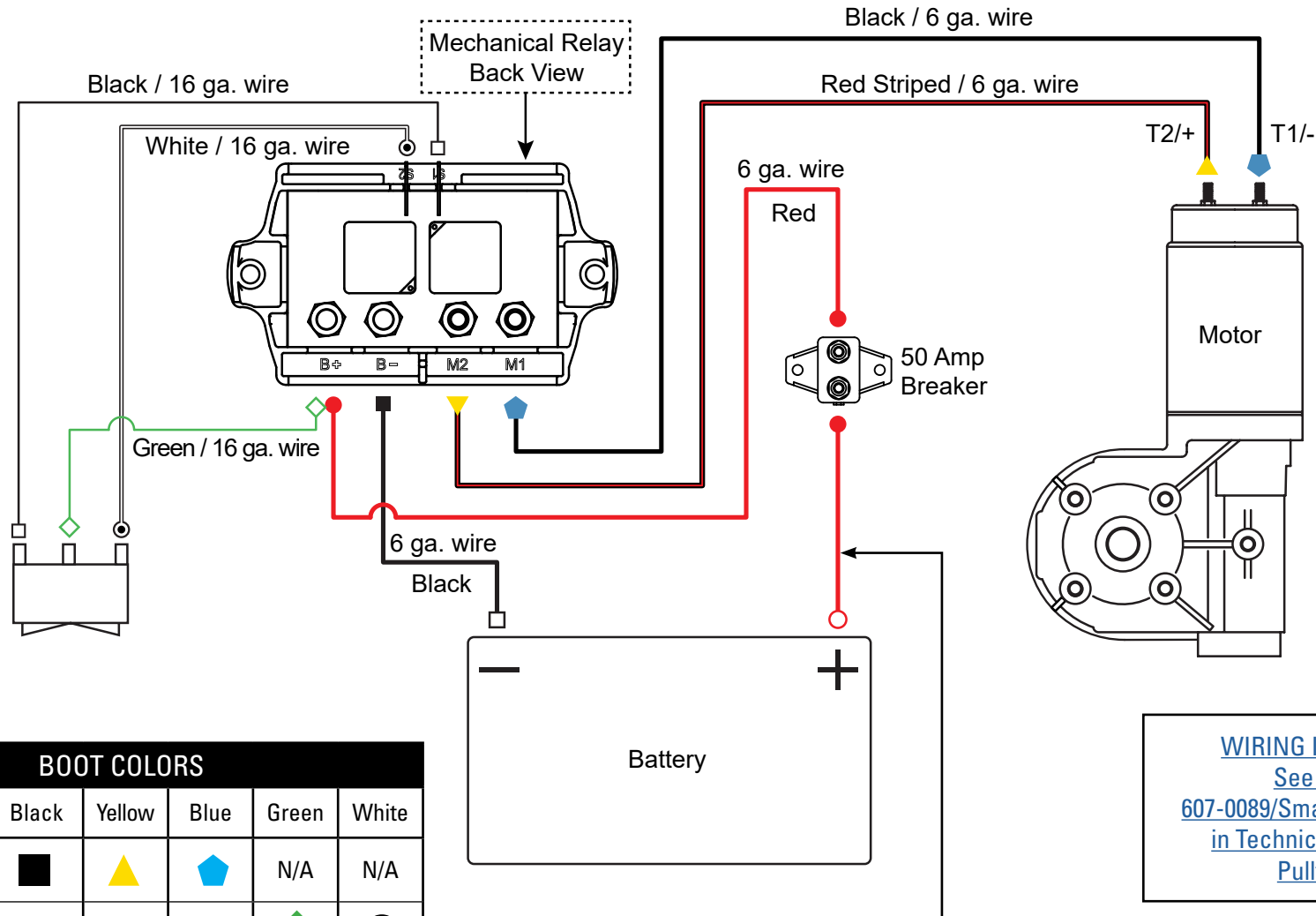
Note: 12" Max distance between Battery and Breaker.











INSTALLATION INSTRUCTIONS

Automatic Systems for Arm Sets up to 40 feet

Smart Switch Basic Kit - Wiring Diagram #514-0114 (Optional)



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/Smart Switch Basic Kit
in Technical Documents at
Pulltarps.com

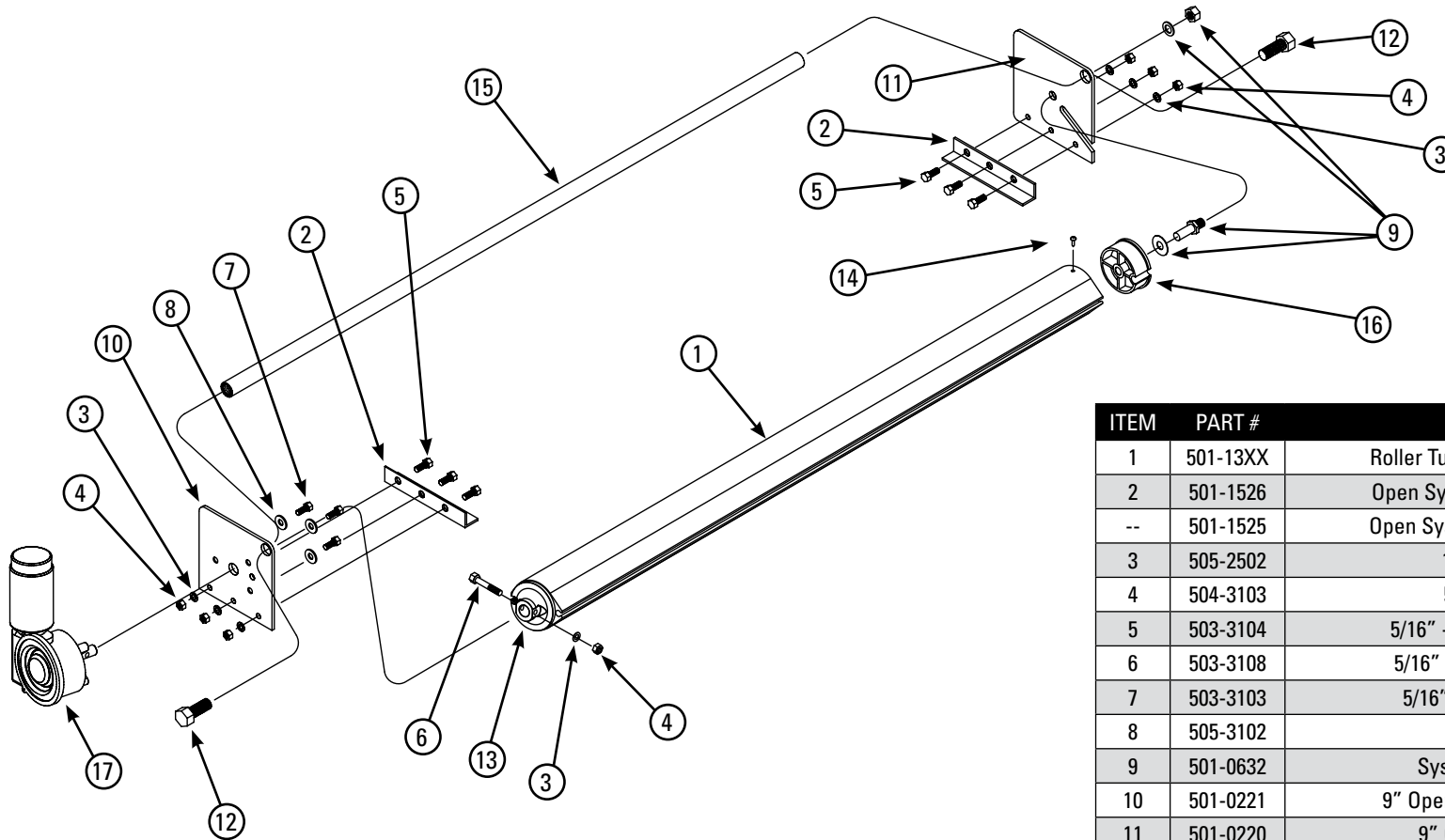
Note: 12" Max distance between Battery and Breaker.



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Open 9000E #201-0215



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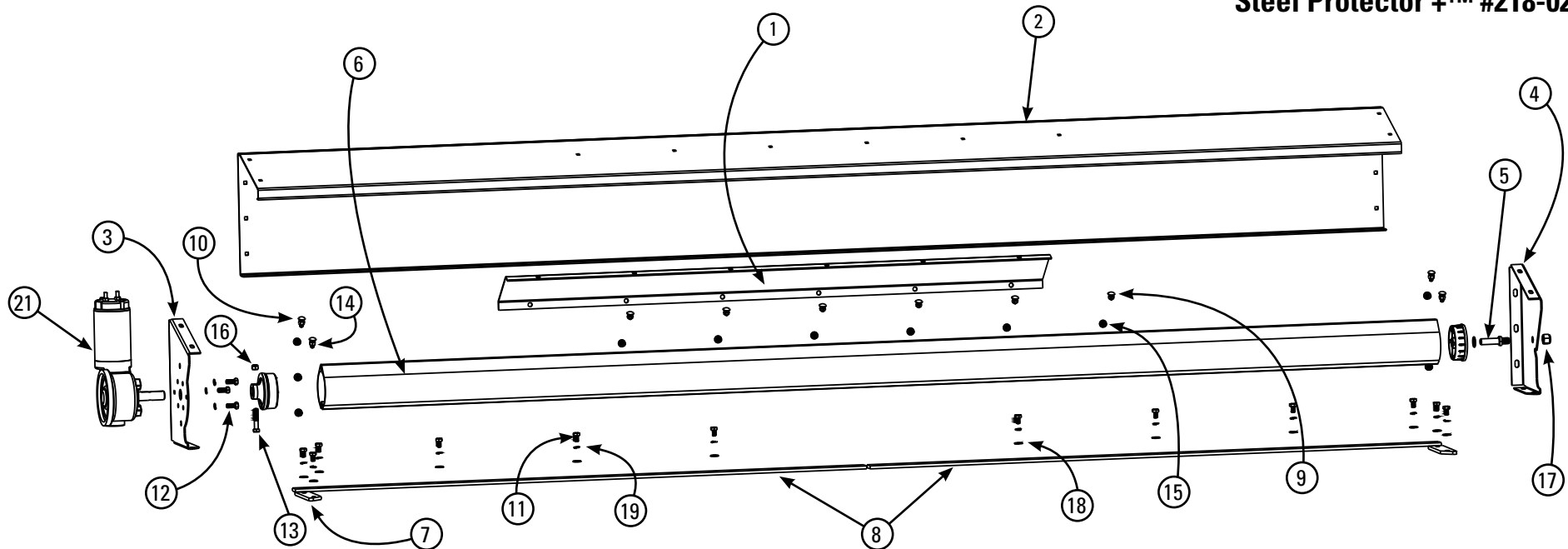
ITEM	PART #	DESCRIPTION	QTY
1	501-13XX	Roller Tube 80, 84, 87, 89, 93, 96, 100"	1
2	501-1526	Open System Mount Bracket (Steel)	2
--	501-1525	Open System Mount Bracket (Alum.)	2
3	505-2502	1/4" Flat Washer USS	7
4	504-3103	5/16" - 18 Nyloc Nut	7
5	503-3104	5/16" - 18 x 3/4"lg. Carriage Bolt	6
6	503-3108	5/16" - 18 x 1-3/4"lg. HHCS Bolt	1
7	503-3103	5/16" - 18 x 3/4"lg. HHCS Bolt	3
8	505-3102	5/16" Lock Washer	3
9	501-0632	System End Plate Stud Kit	1
10	501-0221	9" Open End Plate, Electric (Drvr.)	1
11	501-0220	9" Open End Plate (Pass.)	1
12	503-7501	3/4" - 10 x 1"lg. HHCS Bolt	2
13	501-9915	Roller Drive Aluminum End Cap	1
14	506-9916	Screw #8 - 18 x 3/4" Self Drilling	1
15	501-980X	Spacer Rod 7/8" - 80, 84, 87, 89, 93, 96, 100"	1
16	517-0102	Flanged End Cap	1
17	517-5909	Pulltarps® 1.3 HP 12V DC Electric Motor	1



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Automatic Systems for Arm Sets up to 40 feet

Steel Protector +™ #218-0215



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ITEM	PART #	DESCRIPTION	QTY
1	501-0138	Galvanized Insert	1
2	501-0190	87" Galvanized Steel Protector + Housing	1
3	501-0282	Protector + Electric End Plate	1
4	501-0281	Protector + End Plate Passenger	1
5	501-0801	System End Plate Stud 2.4"	1
6	501-1312	87" Roller Assembly for Electric Drive	1
7	501-1506	6" Large Steel Mounting Bar	2
8	501-1509	43.5" Mounting Bar Steel	2
9	503-2501	1/4" - 20 x 1/2" USS Carriage Bolt	12
10	503-2505	1/4" - 20 x 3/4" USS Carriage Bolt	10
11	503-3101	5/16" - 18 x 1/2" Hex Bolt	12

ITEM	PART #	DESCRIPTION	QTY
12	503-3103	5/16" - 18 x 3/4" HHCS Bolt	3
13	503-3108	5/16" - 18 x 1-3/4" HHCS Hex Bolt G2	1
14	504-2503	1/4" - 20 USS Nylock Nut	10
15	504-2506	1/4" Hex Lock Nut "Thin" L/N Steel Zinc	12
16	504-3103	5/16" - 18 Nylock Nut Steel Zinc	1
17	504-5001	1/2" Crimp Nut	1
18	505-2502	1/4" USS Washer 5/16" Hole	35
19	505-3102	5/16" Lock Washer	15
20	505-5001	1/2" AN Washer 1/16" Thick (Not Shown)	1
21	517-5909	Pulltarps® 1.3 HP 12V DC Electric Motor	1



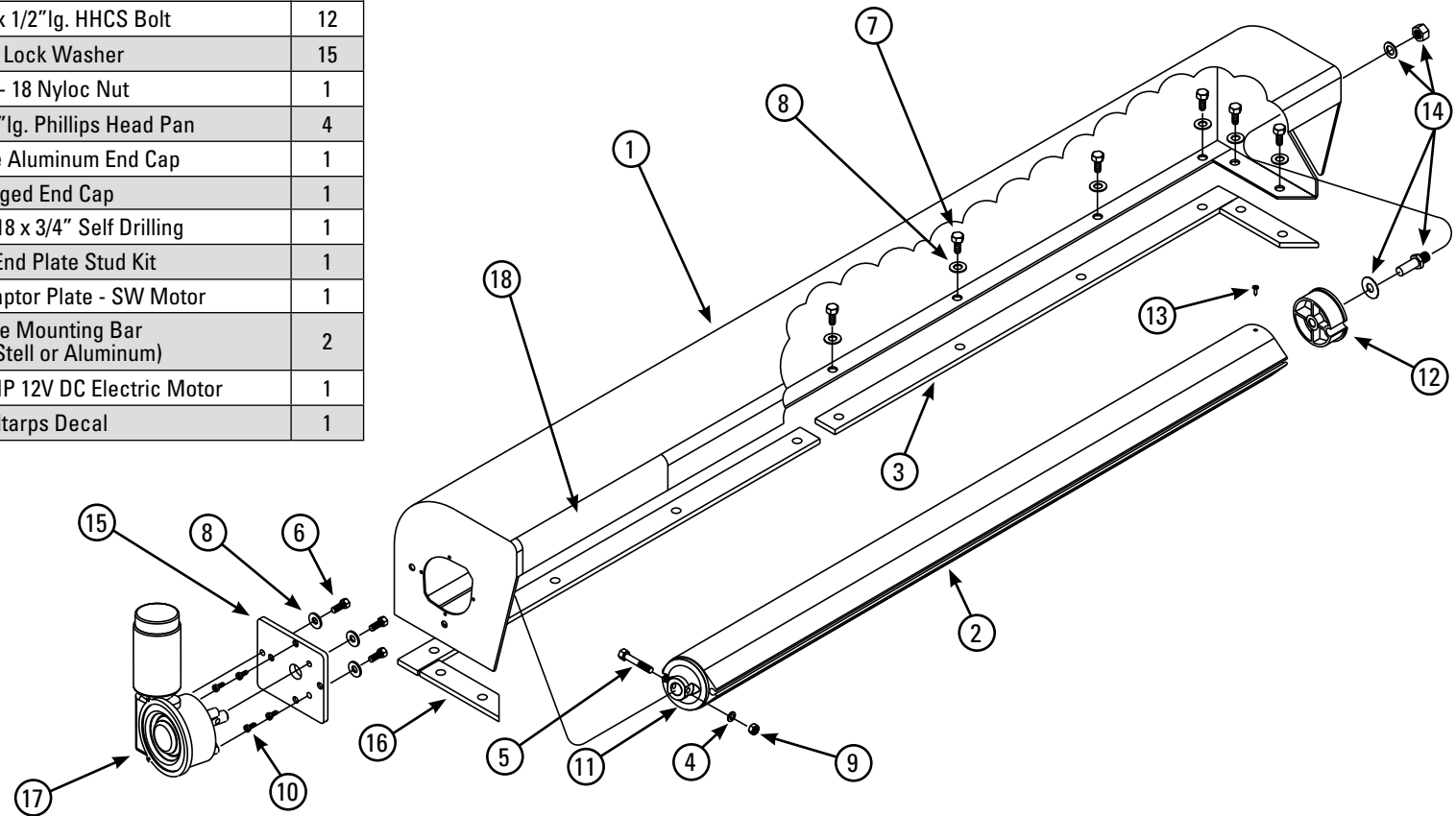
INSTALLATION INSTRUCTIONS

Automatic Systems for Arm Sets up to 40 feet

SuperShield™ 9500E #210-0215

ITEM	PART #	DESCRIPTION	QTY
1	501-01XX	9.5" Super Shield Hsg. 80, 84, 87, 89, 93, 96, 100"	1
2	501-13XX	Roller Tube Assy. 80, 84, 87, 89, 93, 96, 100"	1
3	501-15XX	Mounting Bar 40, 42, 43.5, 44.5, 46.5, 48, 50" (Specify Steel or Aluminum)	2
4	505-2502	1/4" Flat Washer USS	1
5	503-3108	5/16" - 18 x 1-3/4"lg. HHCS Bolt	1
6	503-3105	5/16" - 18 x 1"lg. HHCS Bolt	3
7	503-3101	5/16" - 18 x 1/2"lg. HHCS Bolt	12
8	505-3102	5/16" Lock Washer	15
9	504-3103	5/16" - 18 Nyloc Nut	1
10	506-9905	#10 - 32 x 1/2"lg. Phillips Head Pan	4
11	501-9915	Roller Drive Aluminum End Cap	1
12	517-0102	Flanged End Cap	1
13	506-9916	Screw #8 - 18 x 3/4" Self Drilling	1
14	501-0632	System End Plate Stud Kit	1
15	501-1235	Aluminum Adaptor Plate - SW Motor	1
16	501-150X	6" Large Mounting Bar (Specify Steel or Aluminum)	2
17	517-5909	Pulltarps® 1.3 HP 12V DC Electric Motor	1
18	607-0061	Pulltarps Decal	1

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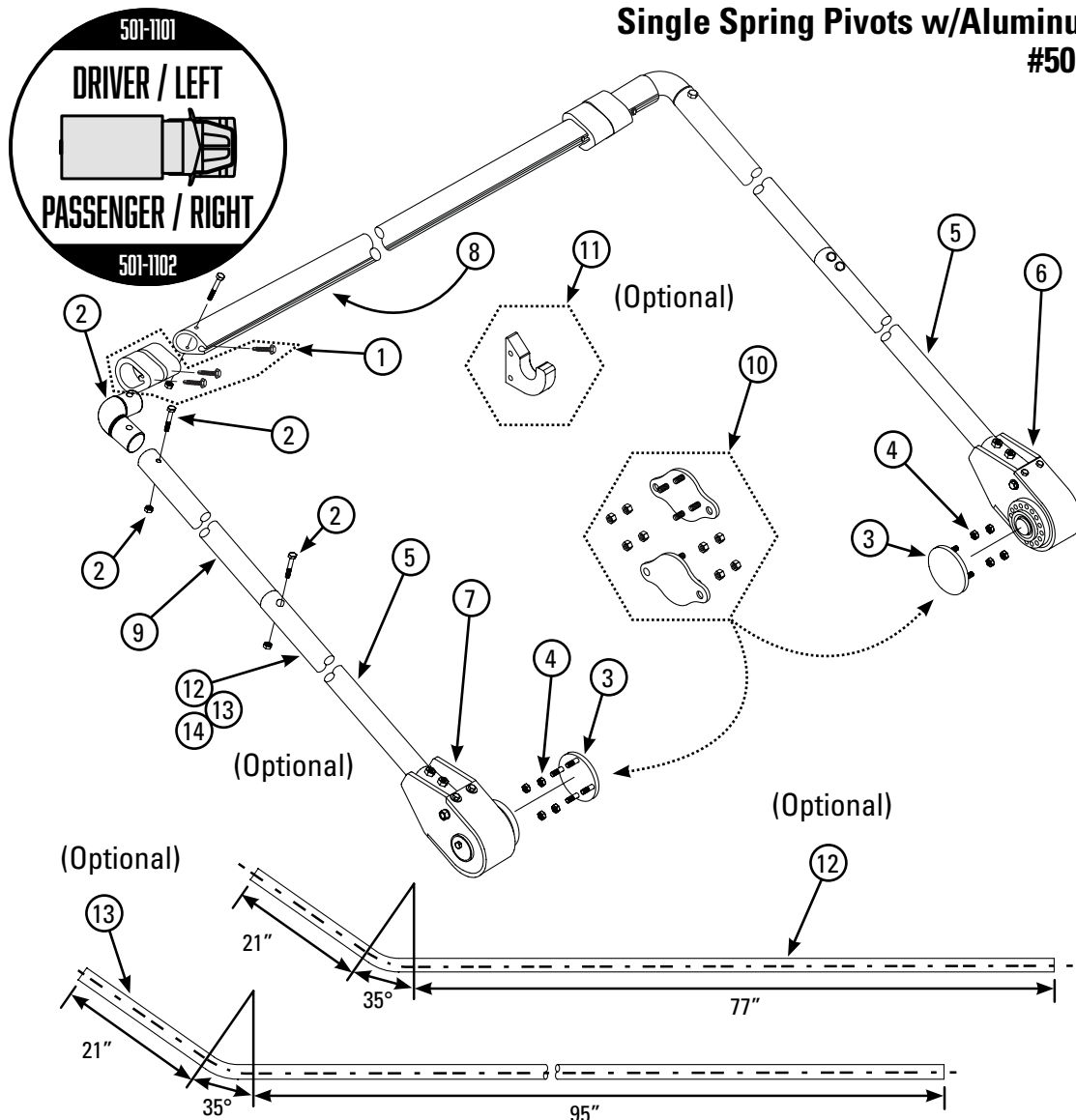




INSTALLATION INSTRUCTIONS

Automatic Systems for Arm Sets up to 40 feet

Single Spring Pivots w/Aluminum Arms #501-0714, 501-0731, 501-1764, 501-1765 (No Wire) #501-0764, 501-0765, 501-0785, 501-0786 (With Wire 90' & 100')



ITEM	PART #	DESCRIPTION	QTY
1	501-1293	Teardrop Bumper Kit	1
2	501-0791	Elbow Kit (For Alum. with Teardrop)	1
3	501-2237	4" Arm Adaptor Plate Assembly	2
4	504-3705	3/8" - 16 Nyloc Nut (Thin)	8
5	501-1209	Aluminum Lower Arm Tube	2
6	501-1101	Single Spring Housing (Driver)	1
7	501-1102	Single Spring Housing (Passenger)	1
8	501-0430	Universal Teardrop Pullbar	1

Options

ITEM	PART #	DESCRIPTION	QTY
9	501-1211	Aluminum Upper Arm or Pullrod	2
10	501-2235	EZ-Mount Assembly	2
11	501-1247	Arm Catcher Assembly (Optional)	1
12	501-1214	Upper Arm Tubing, Drilled and Bent	2
13	501-1216	Aluminum Upper Arm Tube Bent - 10'	2
14	501-1212	Aluminum Upper Arm Tube - 10'	2

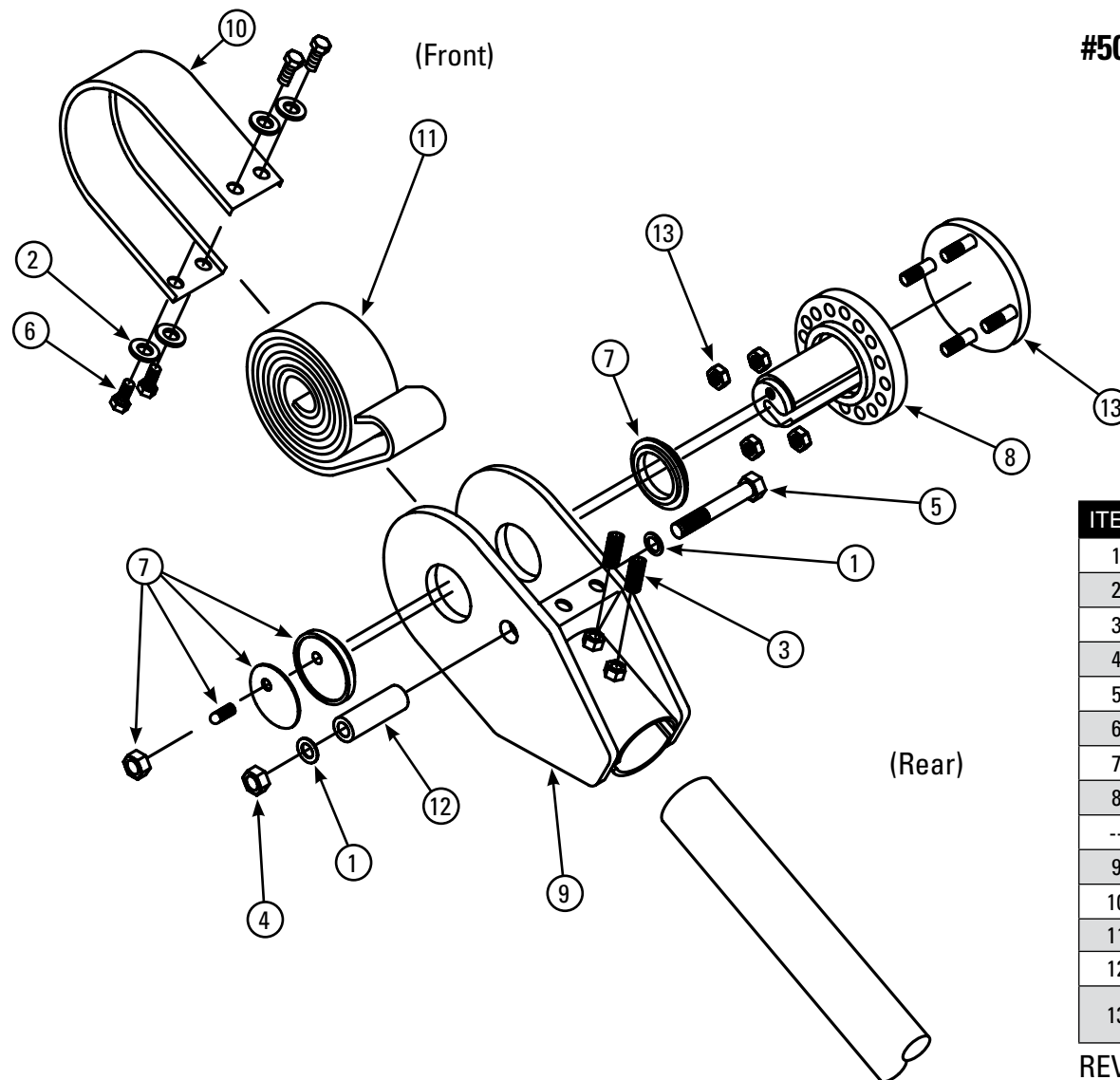
REV. 12/20/21 WLH



INSTALLATION INSTRUCTIONS

Automatic Systems for Arm Sets up to 40 feet

Single Spring Housing Assembly #501-1101 (Driver-Shown), #501-1102 (Pass.-Opposite)



ITEM	PART #	DESCRIPTION	QTY
1	505-5001	1/2" AN Flat Washer	2
2	505-2502	1/4" Flat Washer USS	4
3	506-5008	1/2" - 13 x 3/4" Set Screw	2
4	504-5004	1/2" - 13 Nyloc Nut	1
5	503-5011	1/2" - 13 x 3-1/4"lg. HHCS Bolt	1
6	503-2503	1/4" - 20 x 1/2"lg. HHCS Bolt	4
7	501-1181	Bushing Kit	1
8	501-1119	Pivot Assembly (Driver)	1
--	501-1120	Pivot Assembly (Passenger-Not Shown)	1
9	501-1109	Spring Side Plate Assembly	1
10	501-1151	Arm Dust Cover	1
11	501-1156	Rolled Spring Assembly with Strip	1
12	501-1158	Spring Connection (Arm System)	1
13	501-2237	4" Arm Adaptor Plate Assembly (Not part of Kit - Must be ordered separately.)	1

REV. 10/13/16 WLH



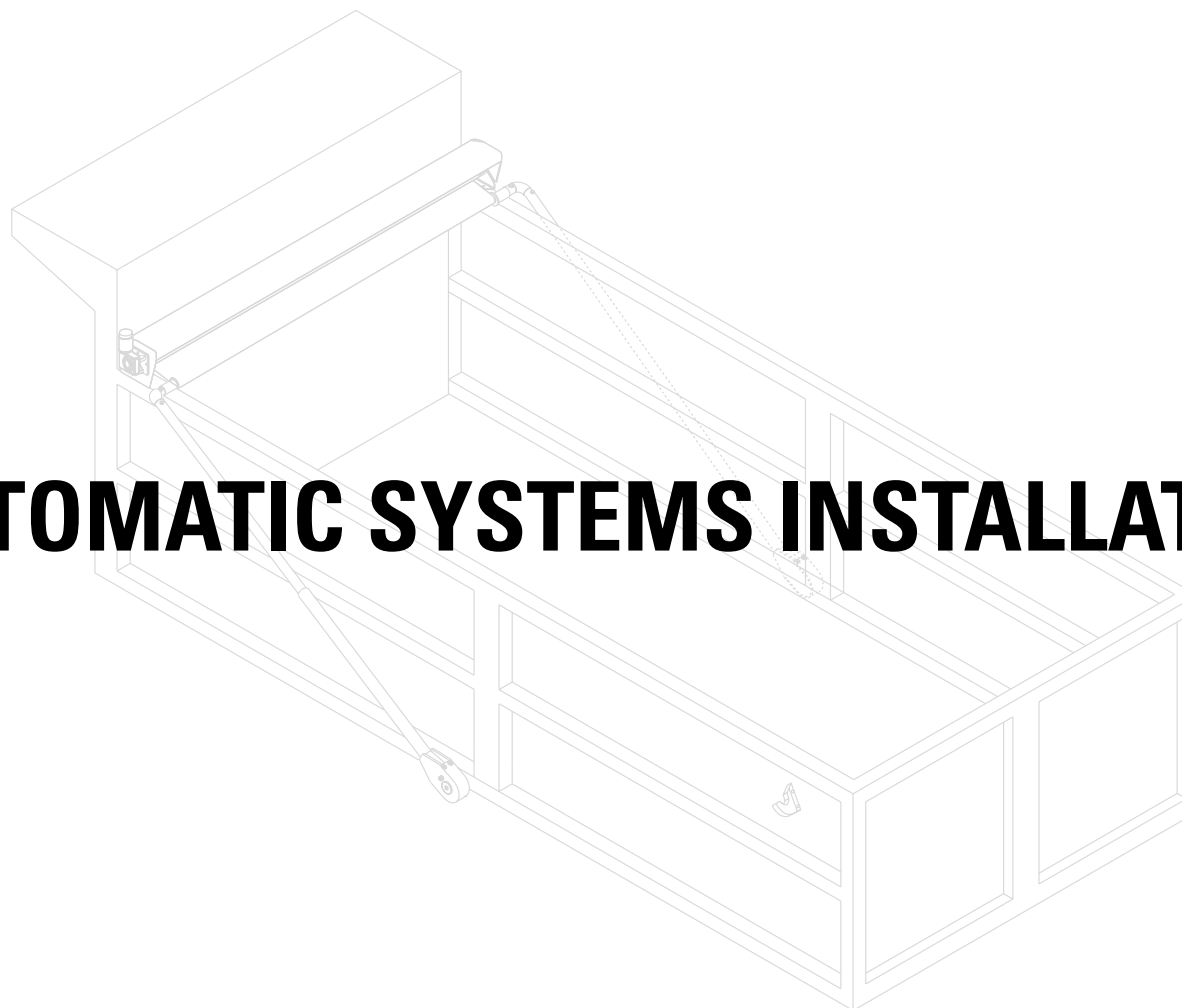
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Automatic Systems for Arm Sets up to 40 feet

AUTOMATIC SYSTEMS INSTALLATION



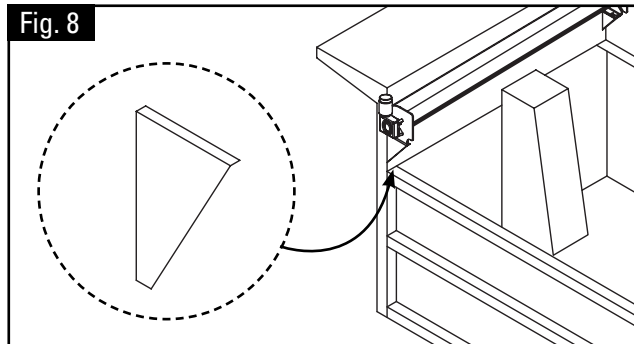
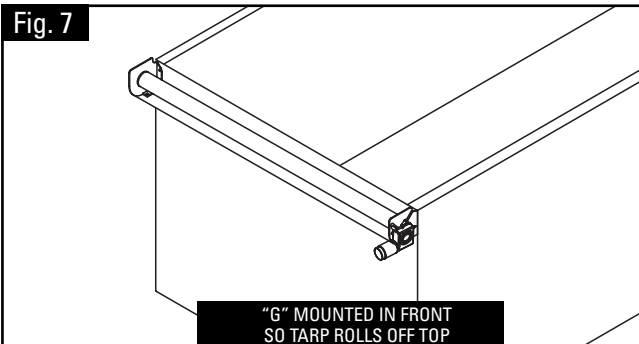
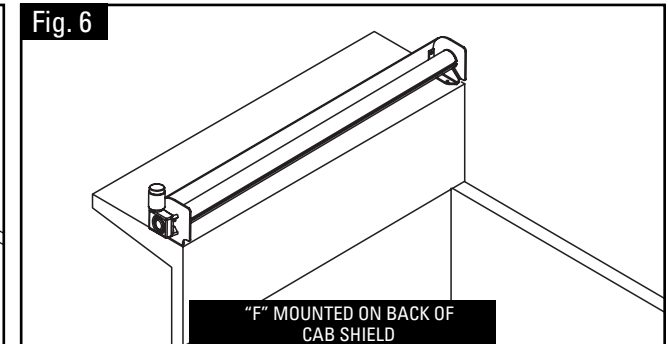
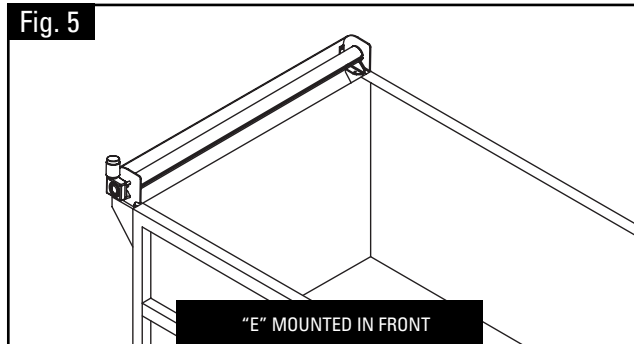
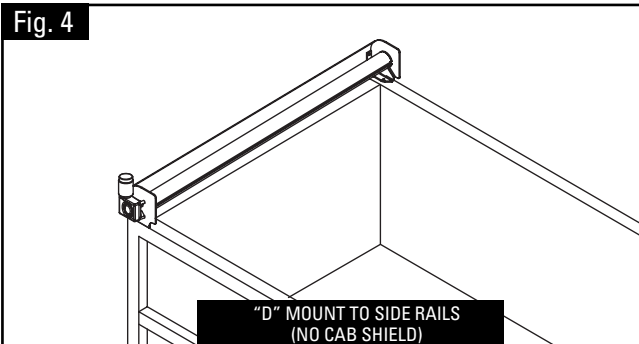
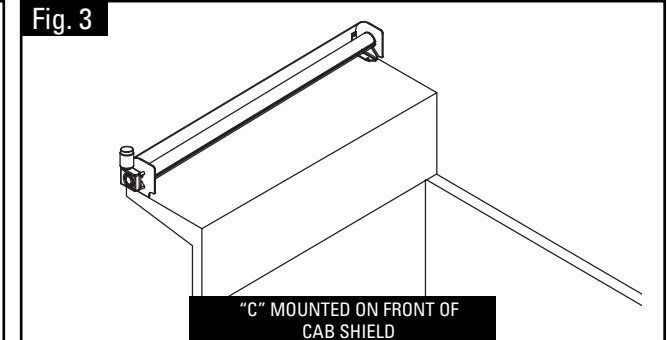
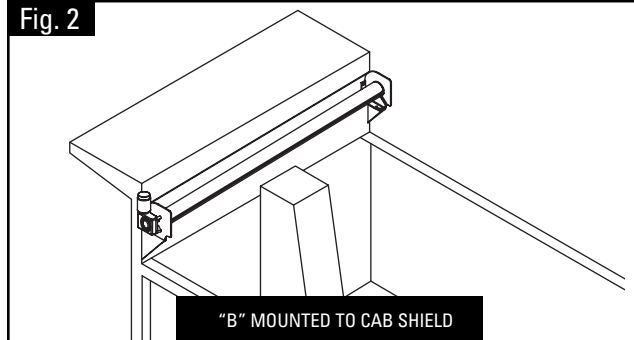
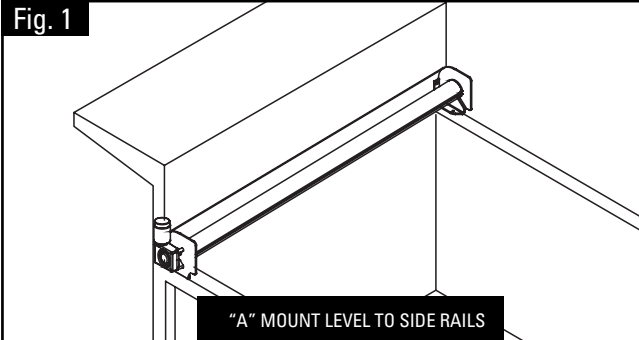


INSTALLATION INSTRUCTIONS

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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).



INSTALLATION INSTRUCTIONS

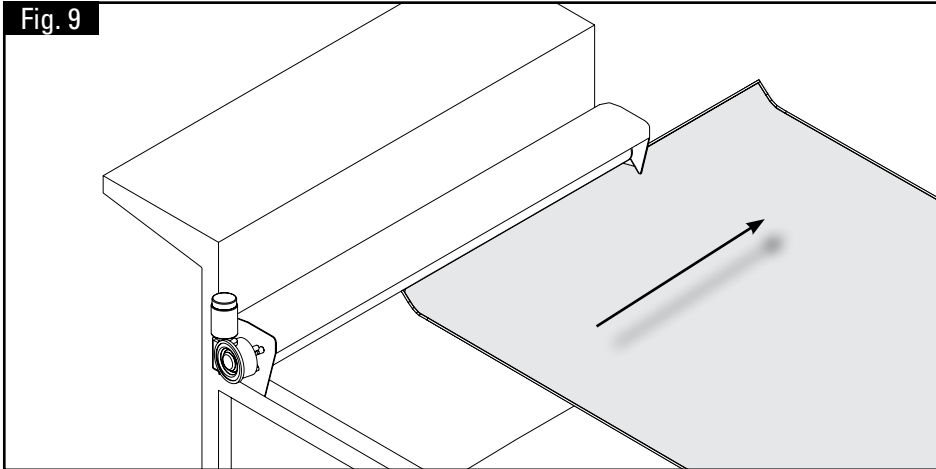
Automatic Systems for Arm Sets up to 40 feet

Welding System to Truck

Step 2: Before welding remove tarp to avoid damage (Fig. 9). To remove tarp slide the tarp out of the slotted end of the housing and remove from work area.

NOTE: If needed, remove Tarp before welding.

Fig. 9



Step 3: Weld system mounting bar to truck as shown in Fig. 10.

Fig. 10

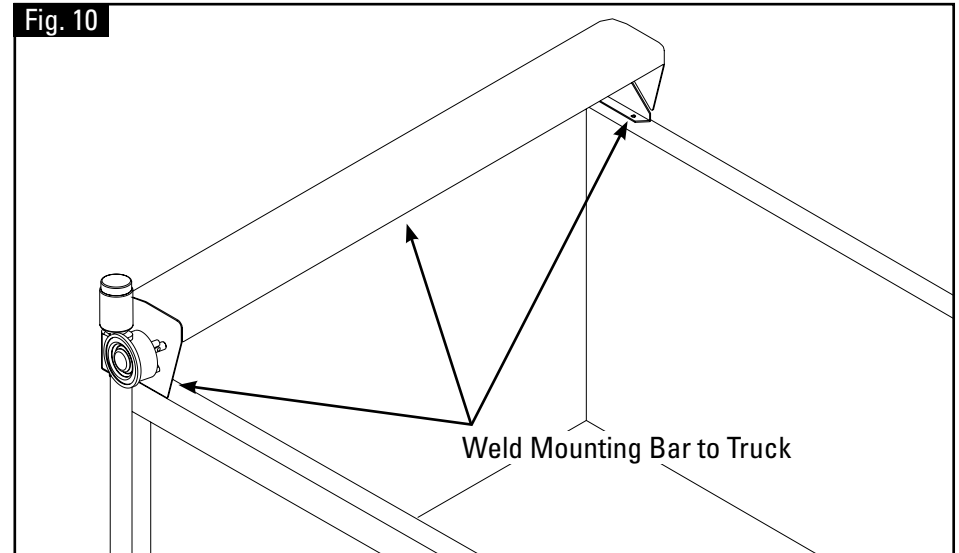
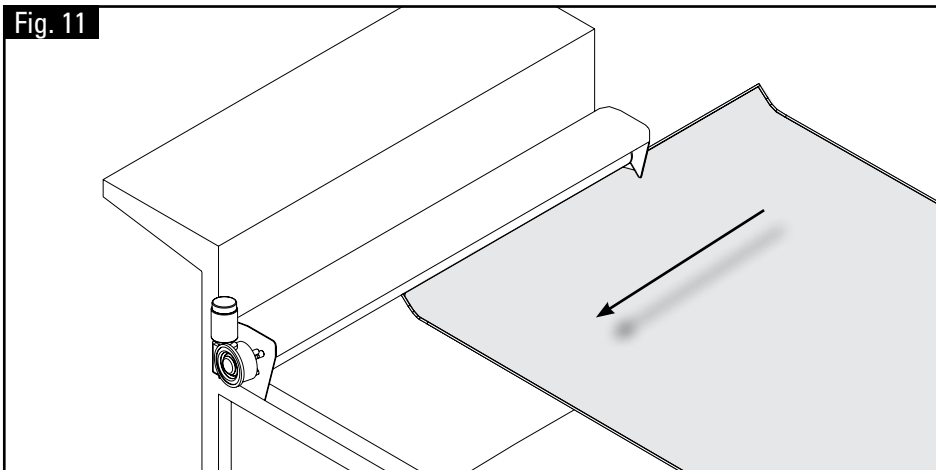


Fig. 11



Step 4. Reinstall Tarp

Slide the front end of tarp (with beaded rod) into the slot of the roller from the opposite side of the locking bolt. If needed, lubricate the edge of the tarp with soapy water so it will slide into the roller slot easy (Fig. 11).

After the tarp is in place, make sure that it is centered on the roller with an equal amount of space on each end, and that the bead tubing is also equally spaced. If the tarp rolls up consistently off to one side or the other, you can offset the tarp to the opposite side on the roller to start with, this way the tarp will roll up as centered as possible.

TARP MUST BE RETRACTED WHEN DUMPING!

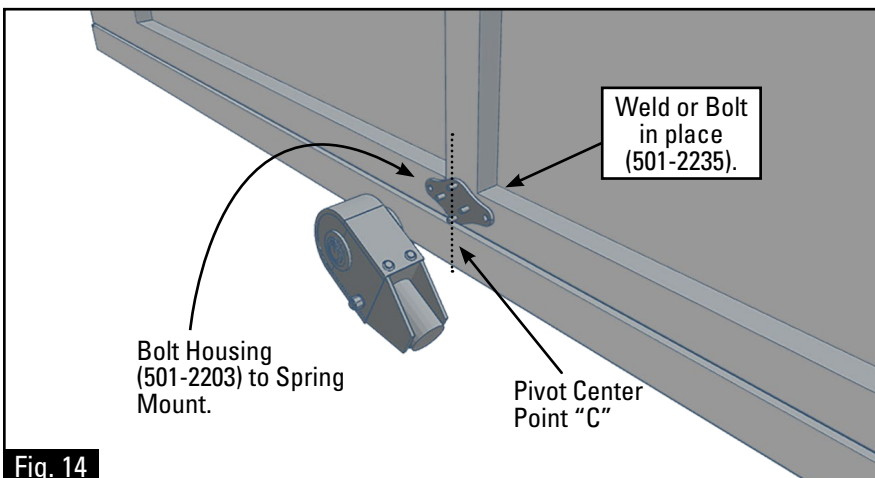
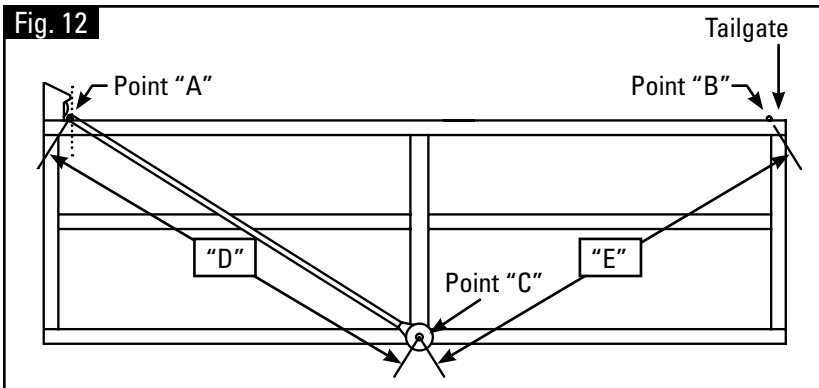


INSTALLATION INSTRUCTIONS

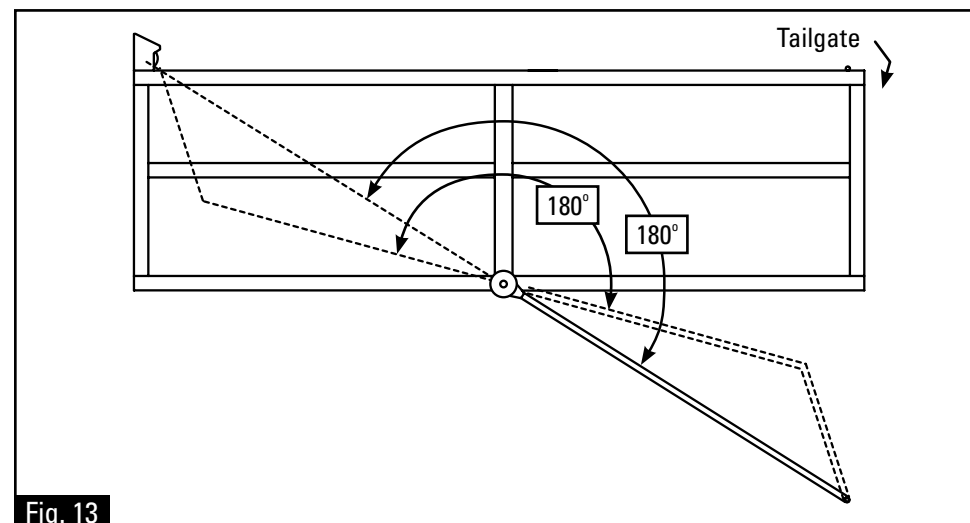
Automatic Systems for Arm Sets up to 40 feet

Pivot Points and Mounting Locations (Low Mount)

Step 5: 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. 12). Point "C" must be located as low as possible and be the same on both sides.



Step 6 - Arm Preload: Install Arm and Pivot assemblies with Arm indexed (Fig. 13). 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 7 - 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. 14).

Note: Applies to Lower Mounting.

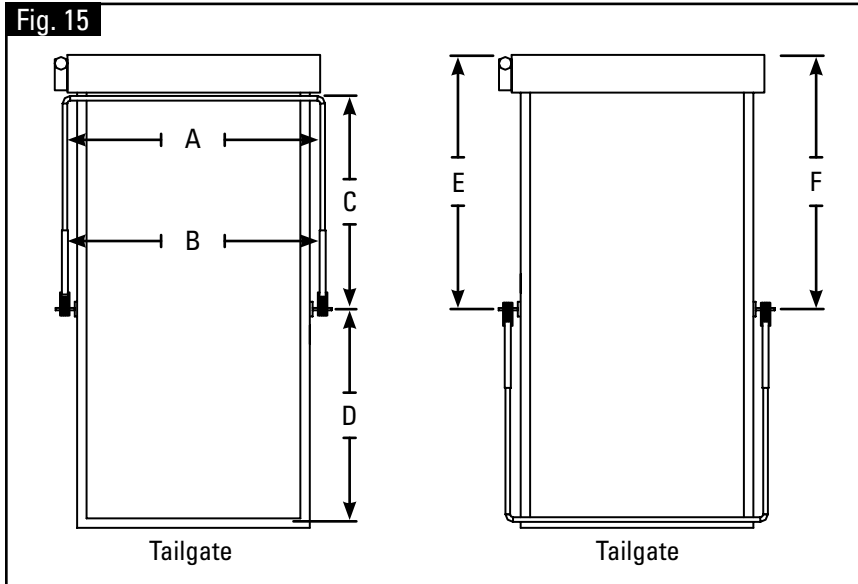


INSTALLATION INSTRUCTIONS

Automatic Systems for Arm Sets up to 40 feet

Arm Alignment, Tarp and Pullbar Installation

Fig. 15

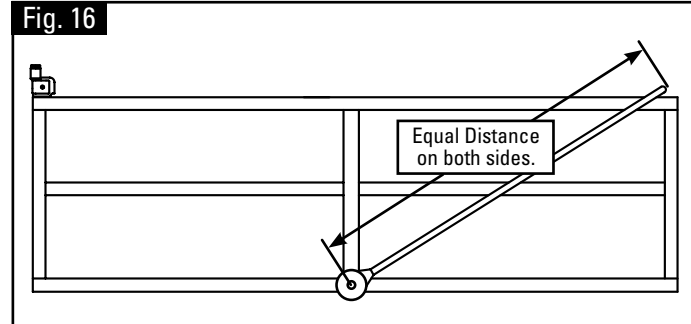


Step 8 - Correct Alignment of arm to truck:

Arms and pivots must be square and parallel to truck (Fig. 15).

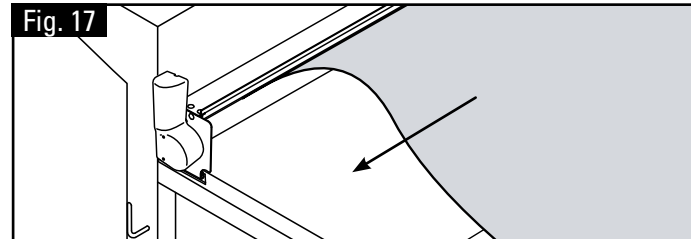
(Dimension "A" must equal "B" - Dimension "C" must equal "D" - Dimension "E" must equal "F")

Fig. 16



Step 9: Adjust the Arms on both sides to be the same length (Fig. 16).

Fig. 17



Step 10 - Tarp Installation: Slide Tarp into Groove on roller tube and center (Fig. 17).

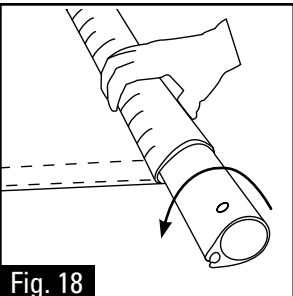


Fig. 18

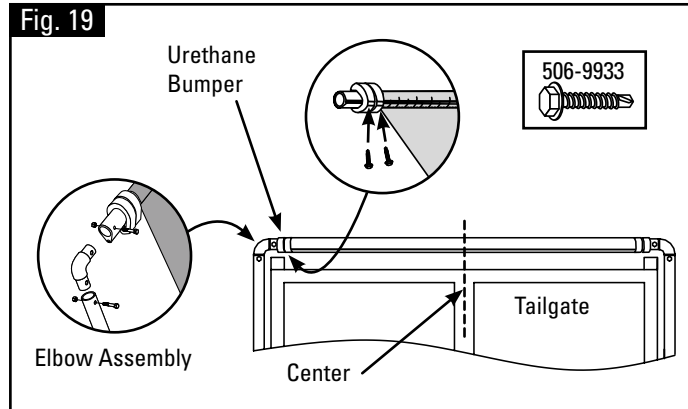
Step 11 - Installing The Pullbar:

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. 18).

Fig. 19



Step 12: 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. 19).

For elbows, use the long bolts provided in the kit, when deployed to catch the rope on flap tarps.

Note: Tarp must be retracted when dumping.



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Quick Disconnect Plug Assembly

Step 13: Assemble the Quick Disconnect (Fig. 20, 21 & 22).

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

Fig. 20

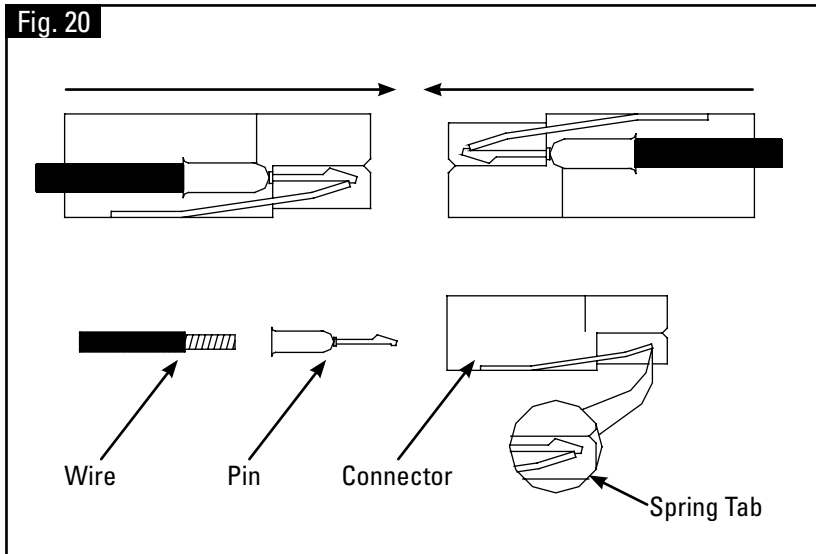
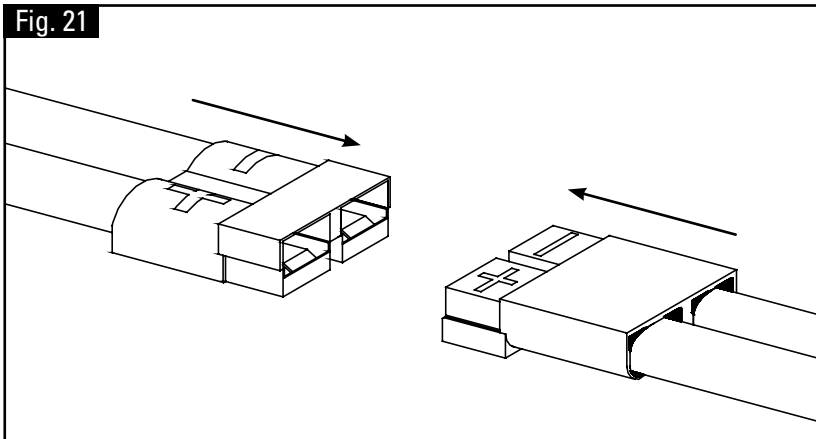
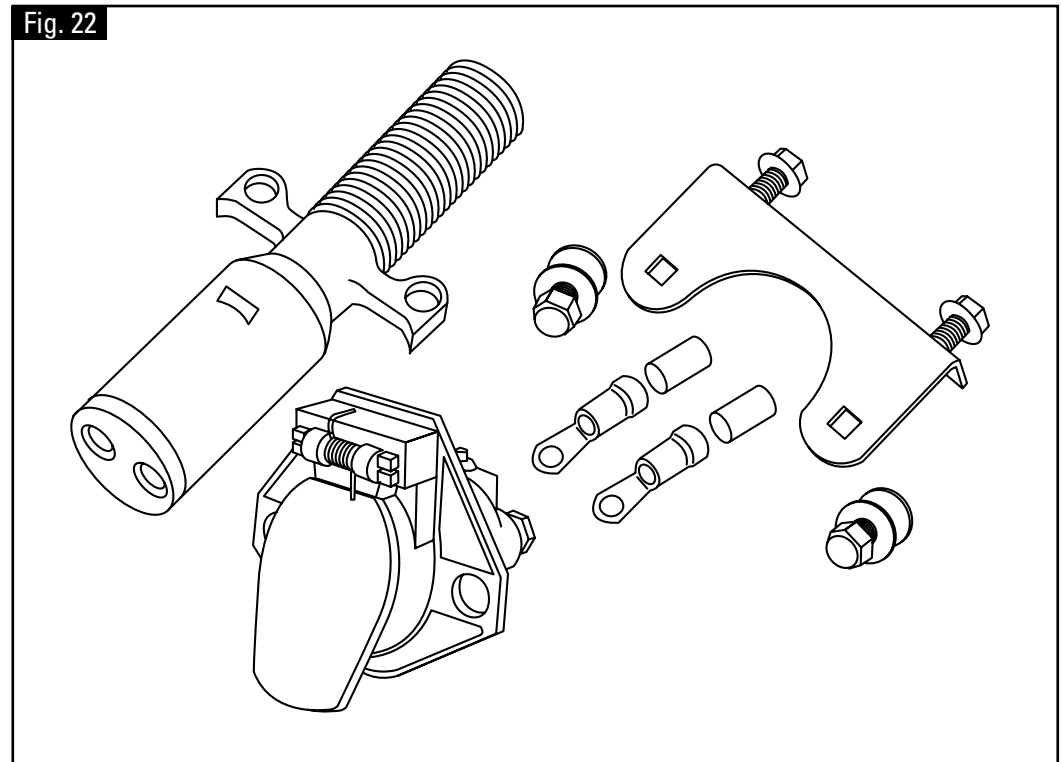


Fig. 21



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

Fig. 22





FLAP TARP, ROPE & HOOK INSTALLATION



INSTALLATION INSTRUCTIONS

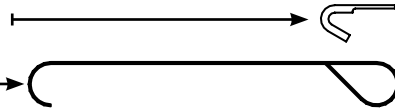
Automatic Systems for Arm Sets up to 40 feet

Optional Flap Tarp, Rope and Hook Installation

Parts:

Tie Down Hooks (Steel or Alum.)

Pull Down Hook



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

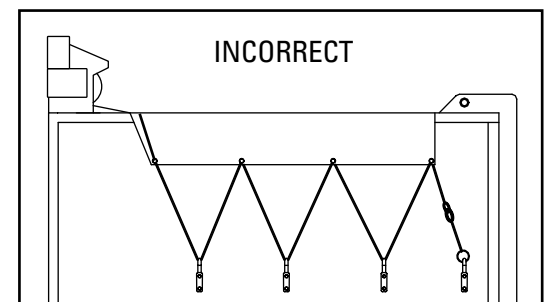
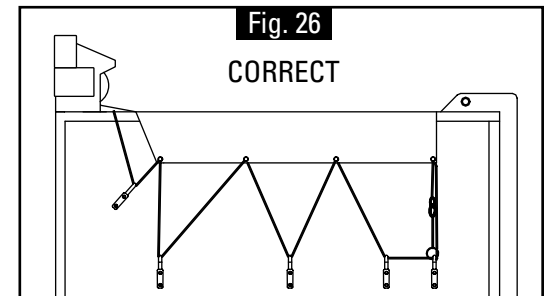
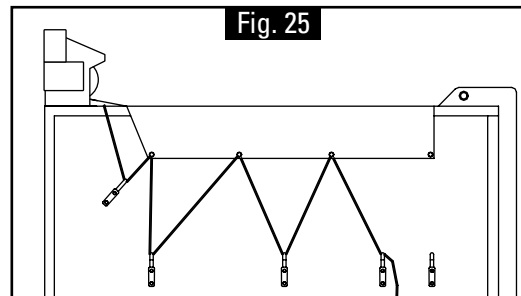
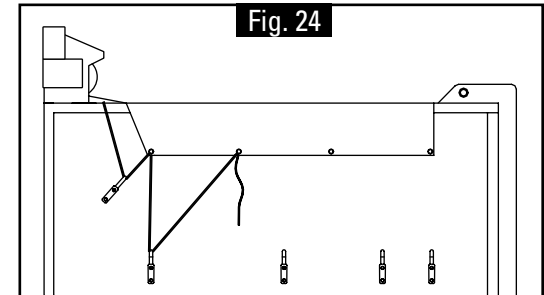
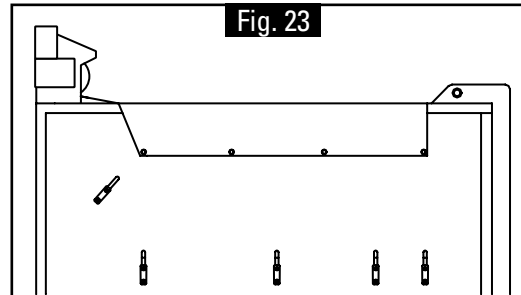
Step 1: Flip the braided rope over the corner so that the flaps and tie down ropes hang over each side of the box. The number of tie down hooks vary depending on the length of your tarp. One pull down hook is included with your Pulltarp system. If needed. Use the hook to pull the braided rope and flaps 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**).
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. 23).
2. Position 2nd hook straight down from 1st grommet. This hook should be reached from ground (Fig. 24).
3. Place middle hooks equal distances from grommet (Fig. 25). 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. 26).
5. Weld hooks in place.



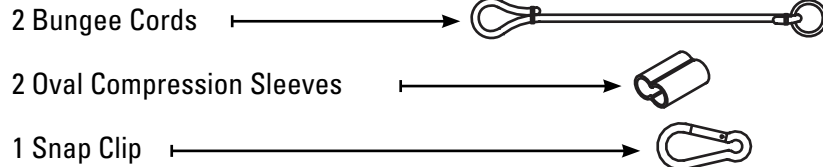


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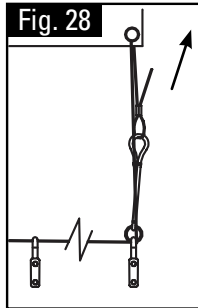
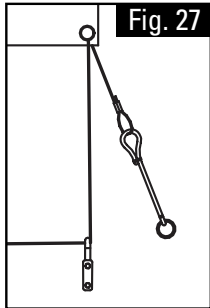
Bungee Cord Installation

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.

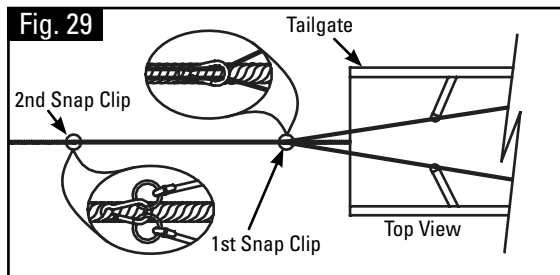
Tarps with Side Flaps



To tighten, pull loose end of rope through the Oval Compression Sleeve (Fig. 27). Stretch the bungee cord making sure all slack is taken out of the rope, crimp compression sleeve (Fig. 28). Be sure to keep flaps even on sides so Tie Down Ropes remain equal in length.

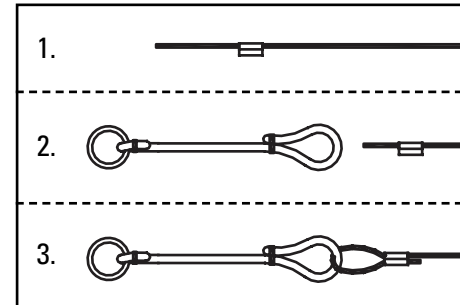
Note: Check for proper placement of rope through the last two hooks.

Snap Clip Installation



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. 29).

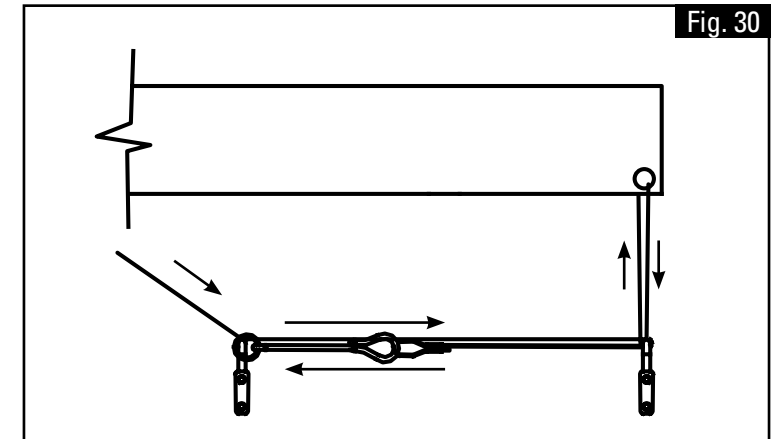
Note: First snap clip should not be used on long wheel base belly dumps.



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 attaching the end of the bungee cord to an alternate hook (Fig. 30).



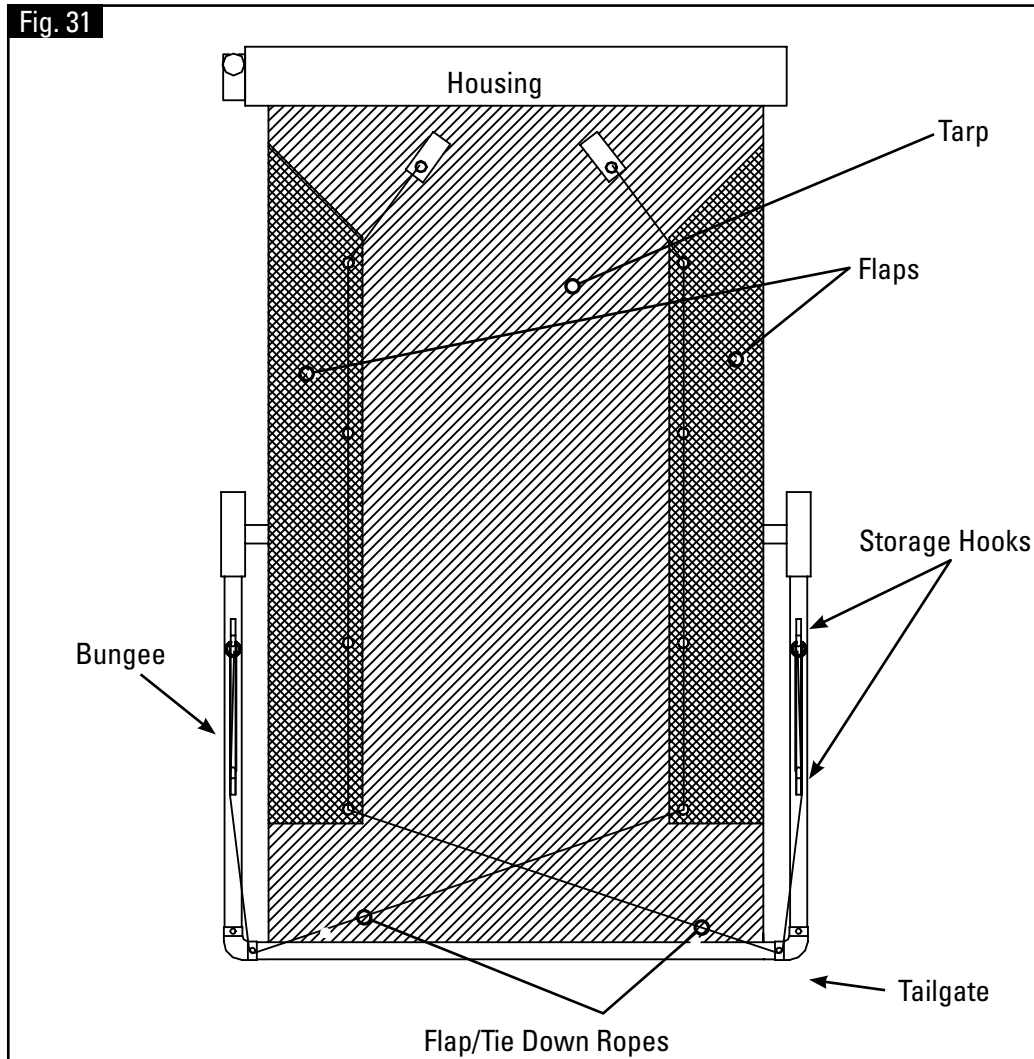
INSTALLATION INSTRUCTIONS

Automatic Systems for Arm Sets up to 40 feet

Flap, Rope and Rope Hook Placement

Step 3: Flap/Tie Down Rope placement and installation (Fig. 31).

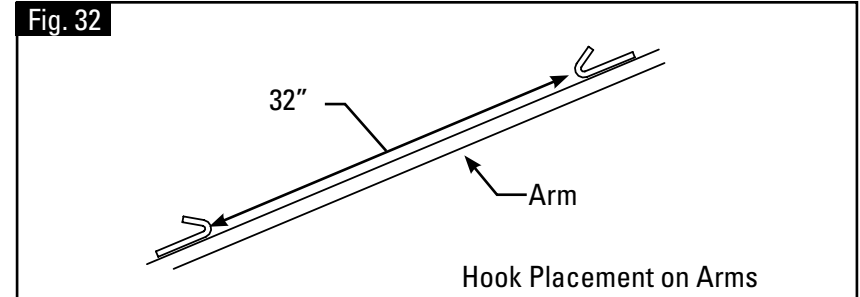
Fig. 31



Step 5: Rope Hook Placement For Steel Arms

Weld rope storage hook on the top of the arms approximately 32" apart (Fig. 32).

Fig. 32



Step 6: Rope Hook Placement For Aluminum Arms

Use Self Drilling screws (part #506-9933) to install Hooks (Fig. 33A & B).

Fig. 33A

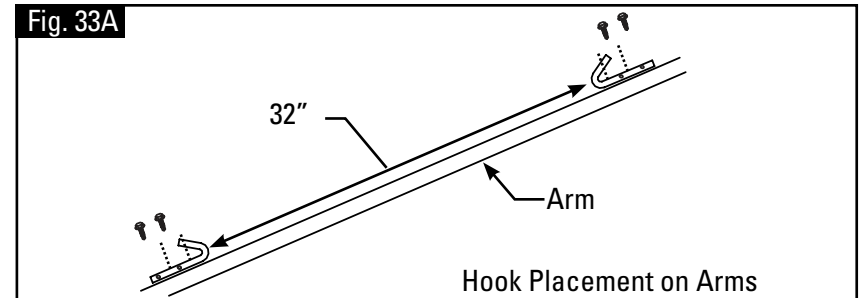


Fig. 33B

