



INSTALLATION INSTRUCTIONS

Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

501-0715, 501-0719, 501-0725, 501-0736
(230-0215 Configuration)

Related Instructions,
How-To Videos & More



PDF: 25 AMP Switch Kit



PDF: Bolt-On Mounting System



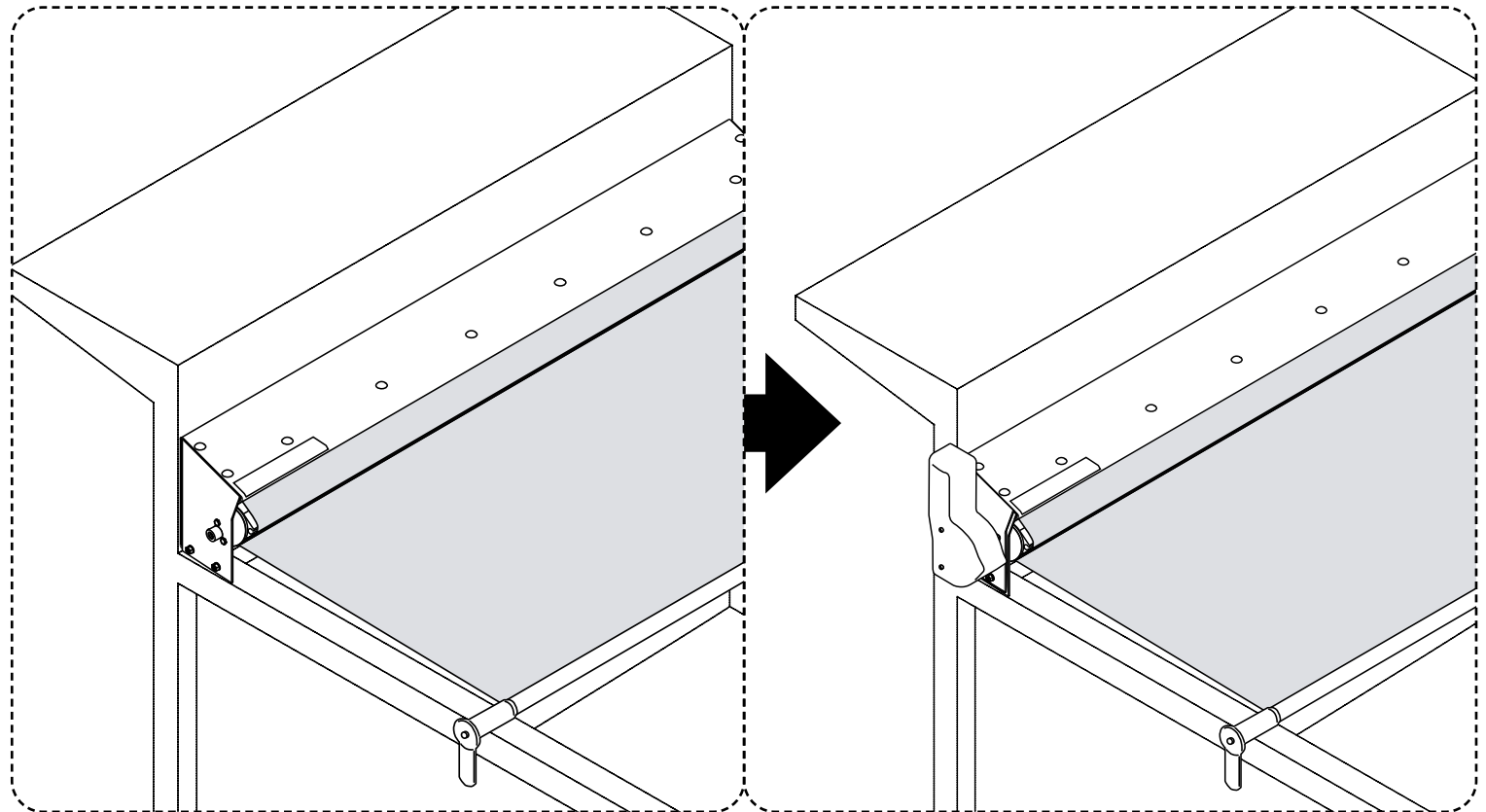
PDF: Smart Switch Basic Kit



PDF: High Amp Switch Kit



Video: Electric Drive Unit Operation



DURING INSTALLATION, SOME FABRICATION MAY BE REQUIRED.

Document #: 607-0138
Revised: 03/10/22 WLH



A Safe Fleet Brand



INSTALLATION INSTRUCTIONS

Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

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TOOLS, DIAGRAMS & PARTS



INSTALLATION INSTRUCTIONS

Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

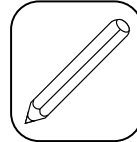
Recommended Tools



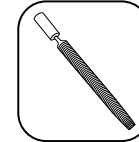
Safety Glasses and Gloves



Welding Equipment & Helmet



Pencil or Marker



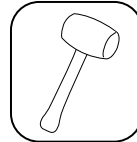
Metal File



Hacksaw



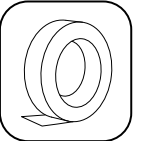
Tape Measure



Rubber Mallet



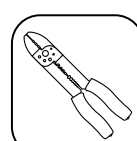
Adjustable Wrench



Masking Tape



Flathead Screwdriver



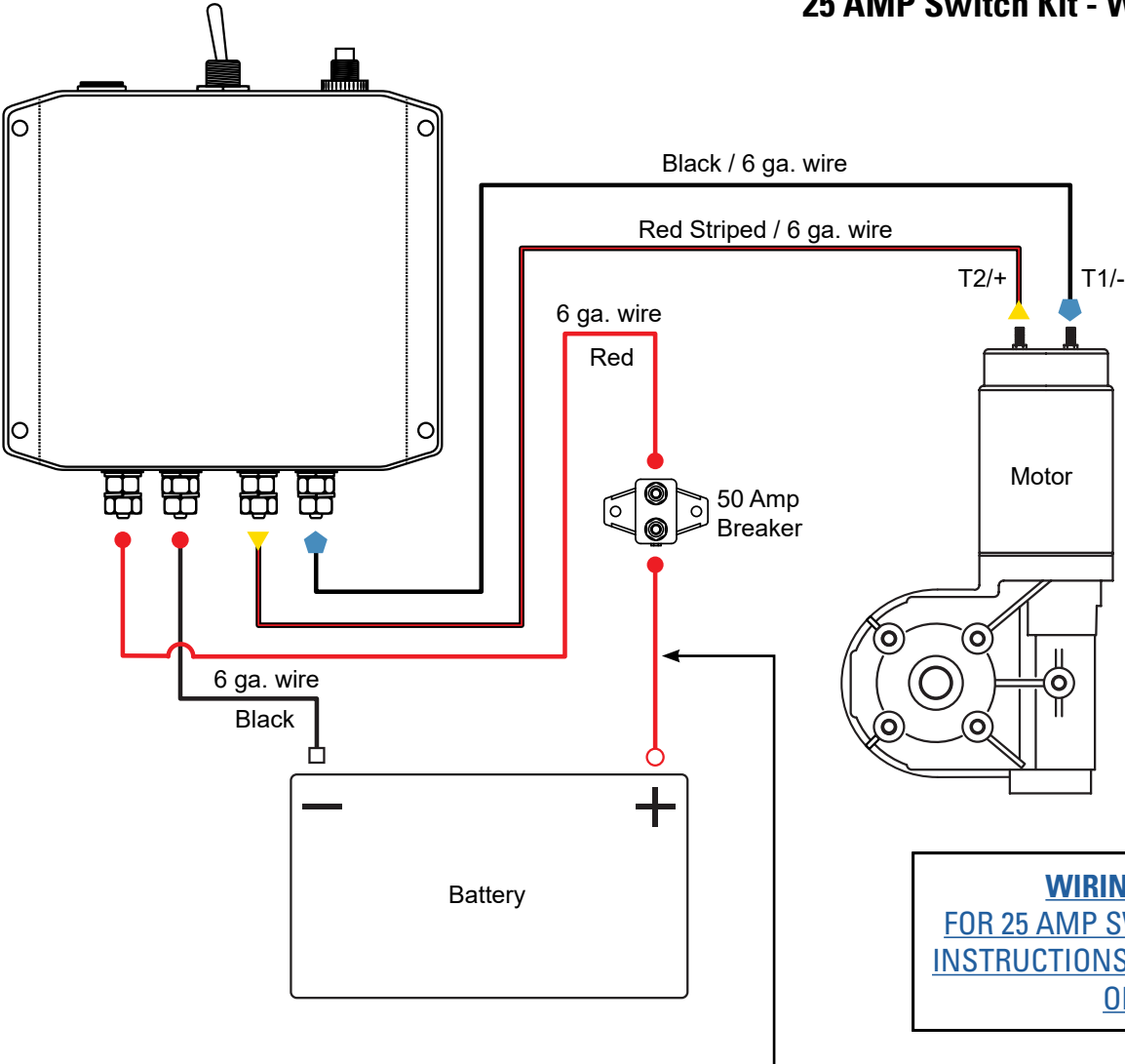
Wire Cutters







5/16" Wrench



25 AMP Switch Kit - Wiring Diagram #514-0101



BOOT COLORS			
	Red	Yellow	Blue
With Boot			
No Boot		N/A	N/A

WIRING INSTRUCTIONS

FOR 25 AMP SWITCH KIT INSTALLATION

INSTRUCTIONS, SEE DOCUMENT 607-0059

OR [CLICK HERE](#)

Note: 12" Max distance between Battery and Breaker.



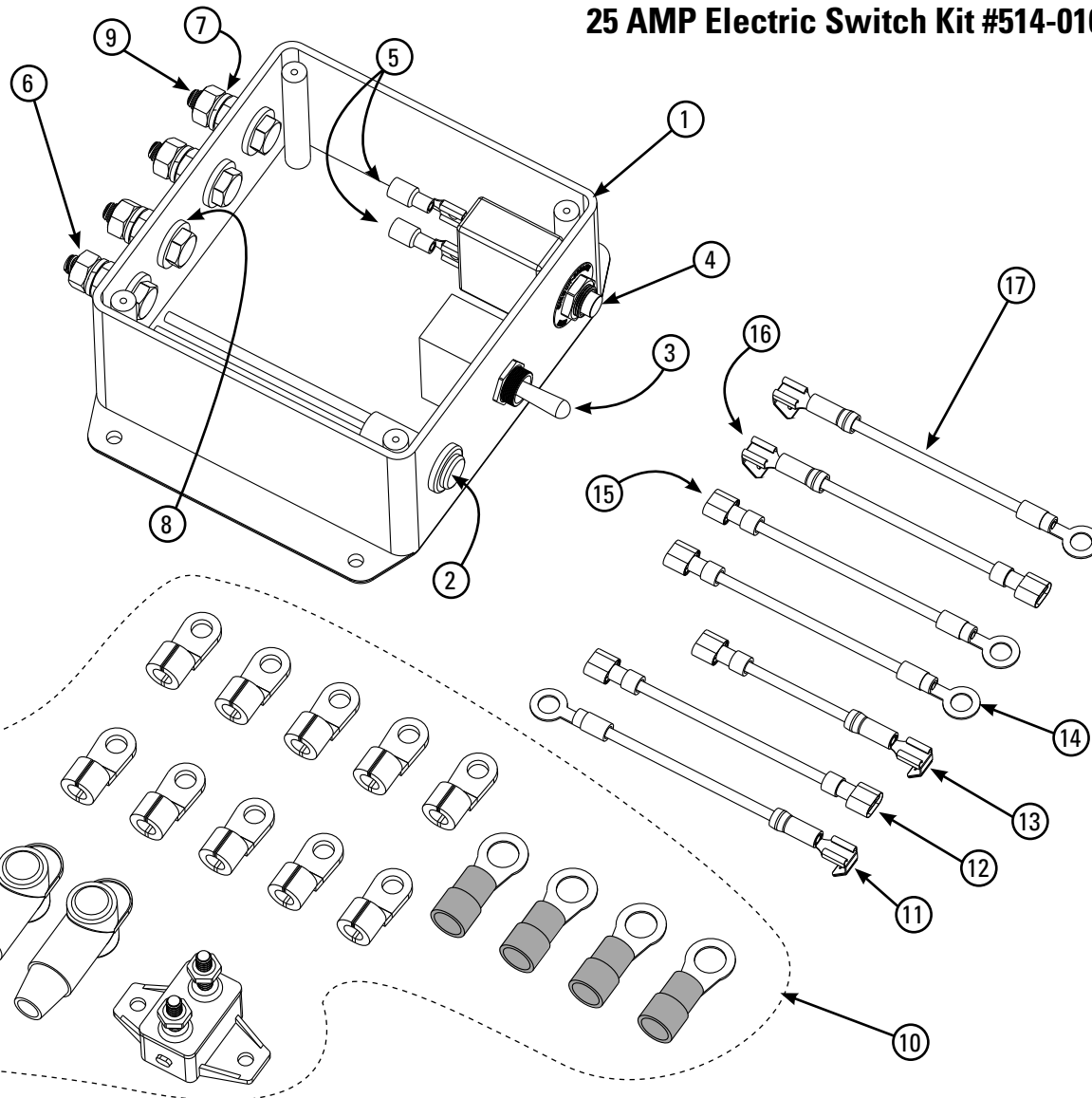
INSTALLATION INSTRUCTIONS

Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

25 AMP Electric Switch Kit #514-0101

ITEM	PART #	DESCRIPTION	QTY
1	514-9991	Enclosure for Electric Pulltarp	1
2	514-9904	Red Lamp - 12V	1
3	514-0102	15A Switch for Electric Pulltarp	1
4	514-0402	25 AMP "Push to Reset" Breaker	1
5	514-0332	Push-OnspadeTerm. 22-18 1/4"	2
6	504-2502	1/4" - 20 Brass Nut	8
7	505-2503	1/4" Lockwasher (Shown in Flattened State)	8
8	505-2501	1/4" Washer	8
9	503-2508	1/4 - 20 x 1 HHCS GR5	4
10	106870	Breaker and Connector Kit	1
11	514-9923	10GA Black Wire Assy., 3" Long Stacked .25" Male Spade, .25 Ring Term	1
12	514-9924	10GA Black Wire Assy., 3" Long .25" Female Spade, Insulated both ends	1
13	514-9928	10GA Black Wire Assy., 2" Long Stacked .25" Male Spade, .25" Female Spade, Insulated	1
14	514-9929	10GA Orange Wire Assy., 3" Long .25" Ring Terminal, .25" Female Spade, Insulated	1
15	514-9959	10GA Red Wire Assy., 3" Long .25" Female Spade, Insulated, .25" Ring Term	1
16	514-9960	10GA Blue Wire Assy., 3" Long Stacked .25" Male Spade, .25" Female Spade, Insulated	1
17	514-9961	10GA Blue Wire Assy., 3" Long Stacked .25" Male Spade, .25" Ring Terminal	1

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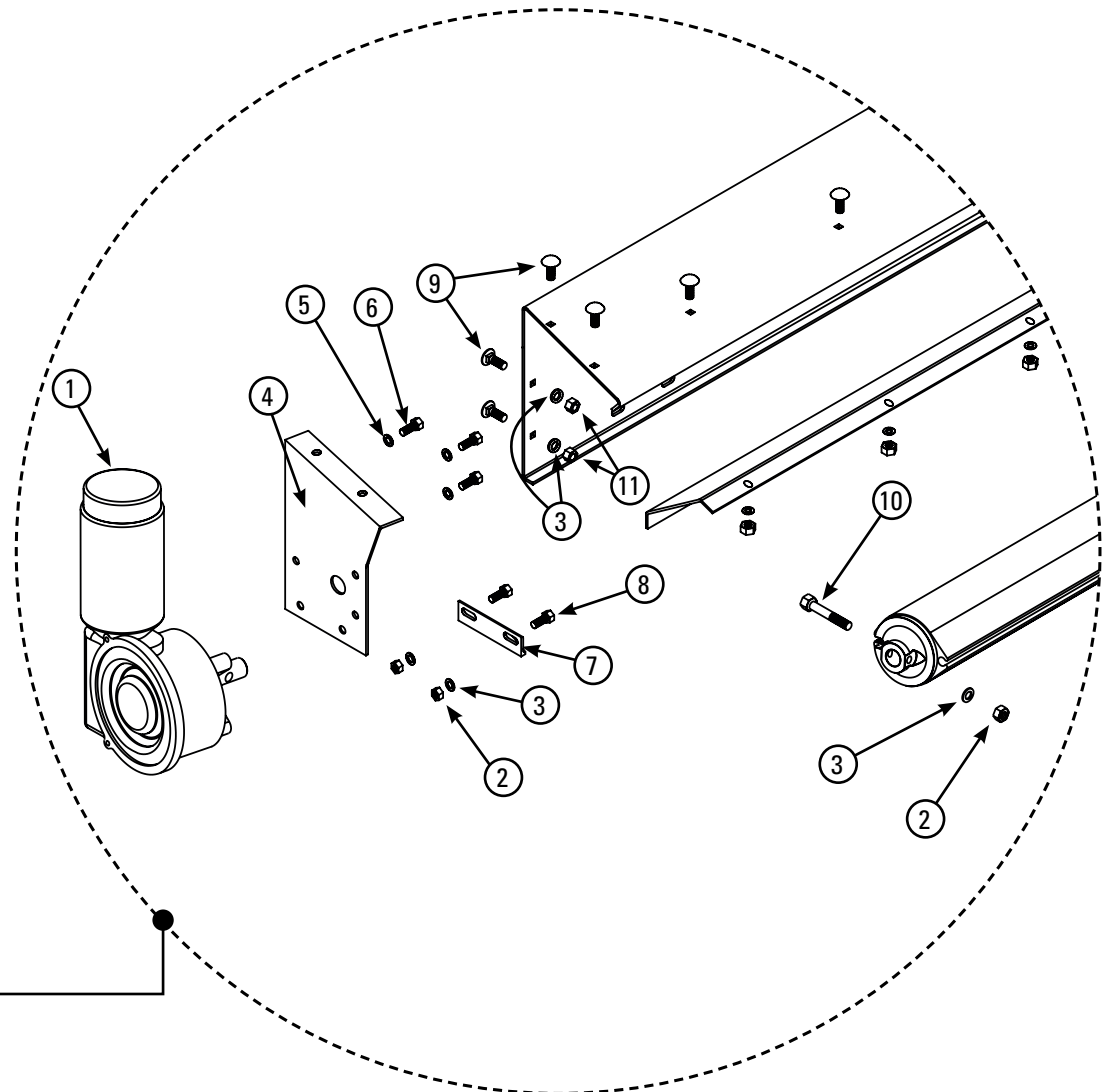
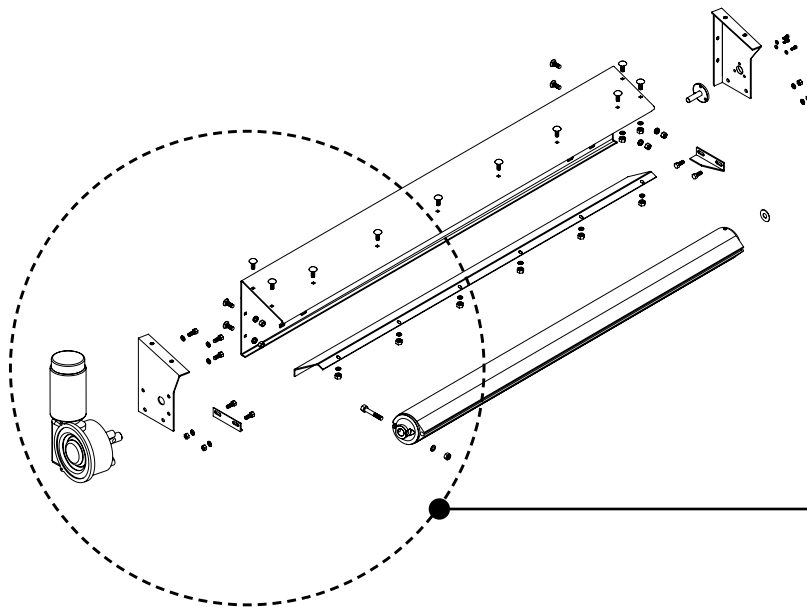
INSTALLATION INSTRUCTIONS

Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

Steel Protector Conversion Kit: 501-0715

ITEM	PART #	DESCRIPTION	QTY
1	517-0909	12V DC Electric Motor 1.3 HP	1
2	504-3103	5/16" - 18 Nyloc Nut	3
3	505-2502	1/4" Flat Washer USS	5
4	501-0214	Electric End Plate "N" System	1
5	505-3102	5/16" Lock Washer	3
6	503-3105	5/16" - 18 x 1"lg. HHCS Bolt	3
7	501-1521	System Mount Bracket (Left)	1
8	503-3104	5/16" - 18 x 3/4"lg. Carriage Bolt	2
9	503-2505	1/4" - 20 x 3/4"lg. Carriage Bolt	4
10	503-3108	5/16" - 18 x 1-3/4"lg. HHCS Bolt	1
11	504-2506	1/4" - 20 x Nyloc Nut (Thin)	2

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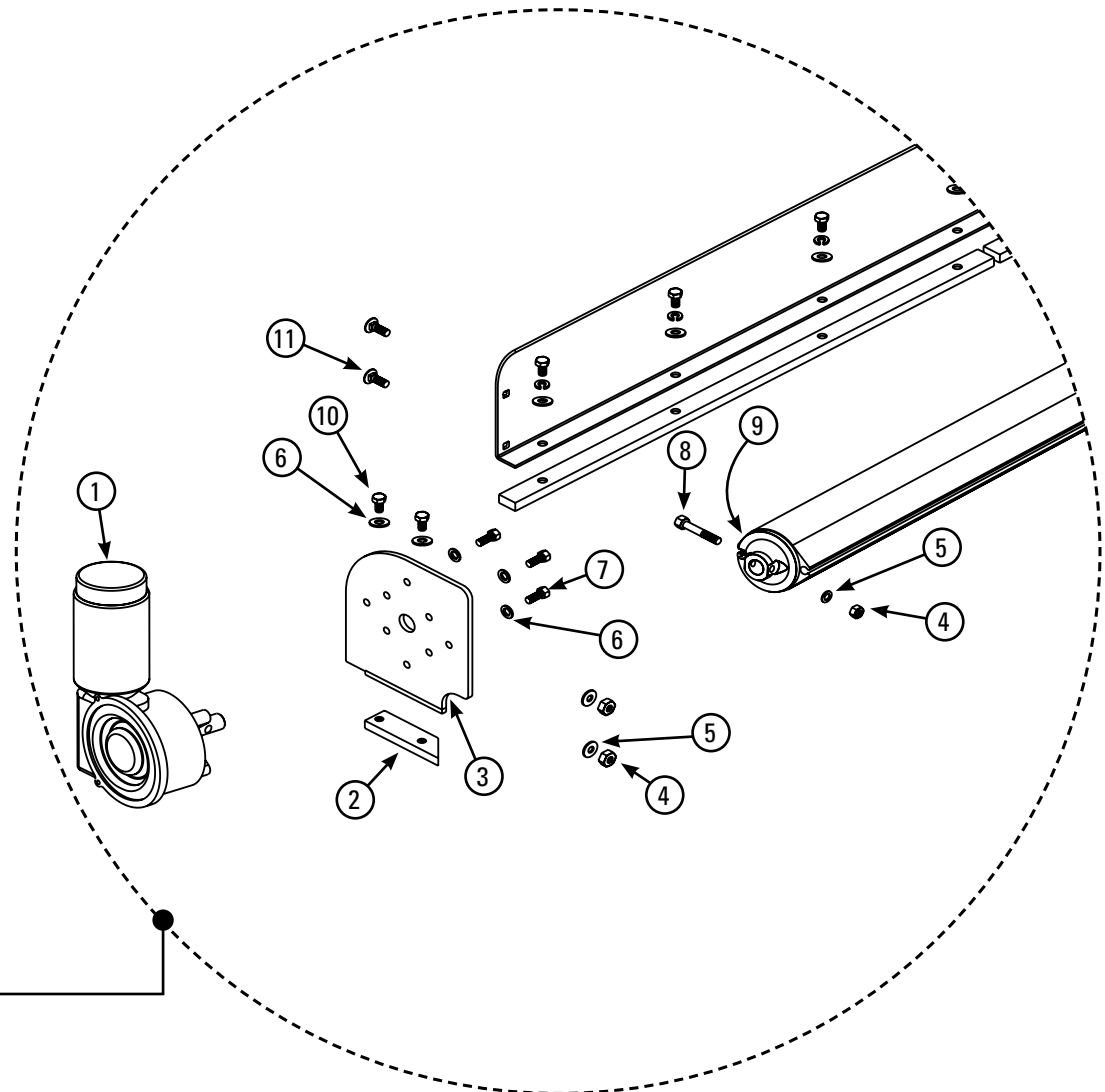
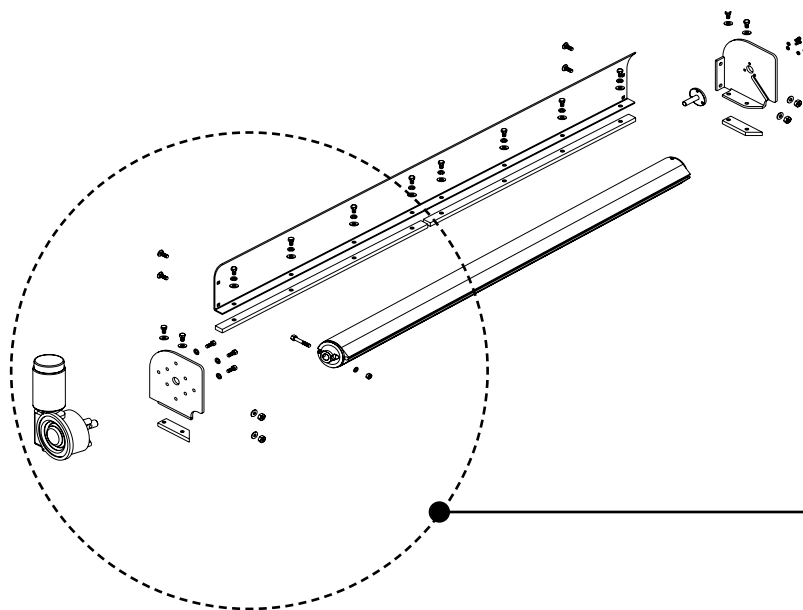
INSTALLATION INSTRUCTIONS

Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

Aluminator 7000M Conversion Kit: 501-0719

ITEM	PART #	DESCRIPTION	QTY
1	517-0909	12V DC Electric Motor 1.3 HP	1
2	501-150X	5" Mounting Bar (Steel or Aluminum)	1
3	501-0209	7.5" Folded Ele. Alum. End Plate (Drvr.)	1
4	504-3103	5/16" - 18 Nyloc Nut	3
5	505-2502	1/4" Flat Washer USS	3
6	505-3102	5/16" Lock Washer	5
7	503-3103	5/16" - 18 x 1"lg. HHCS Bolt	3
8	503-3108	5/16" - 18 x 1-3/4"lg. HHCS Bolt	1
9	501-9915	Aluminum Driver End Cap	1
10	503-3102	5/16" - 18 x 5/8"lg. HHCS Bolt	2
11	503-3104	5/16" - 18 x 3/4"lg. Carriage Bolt	2

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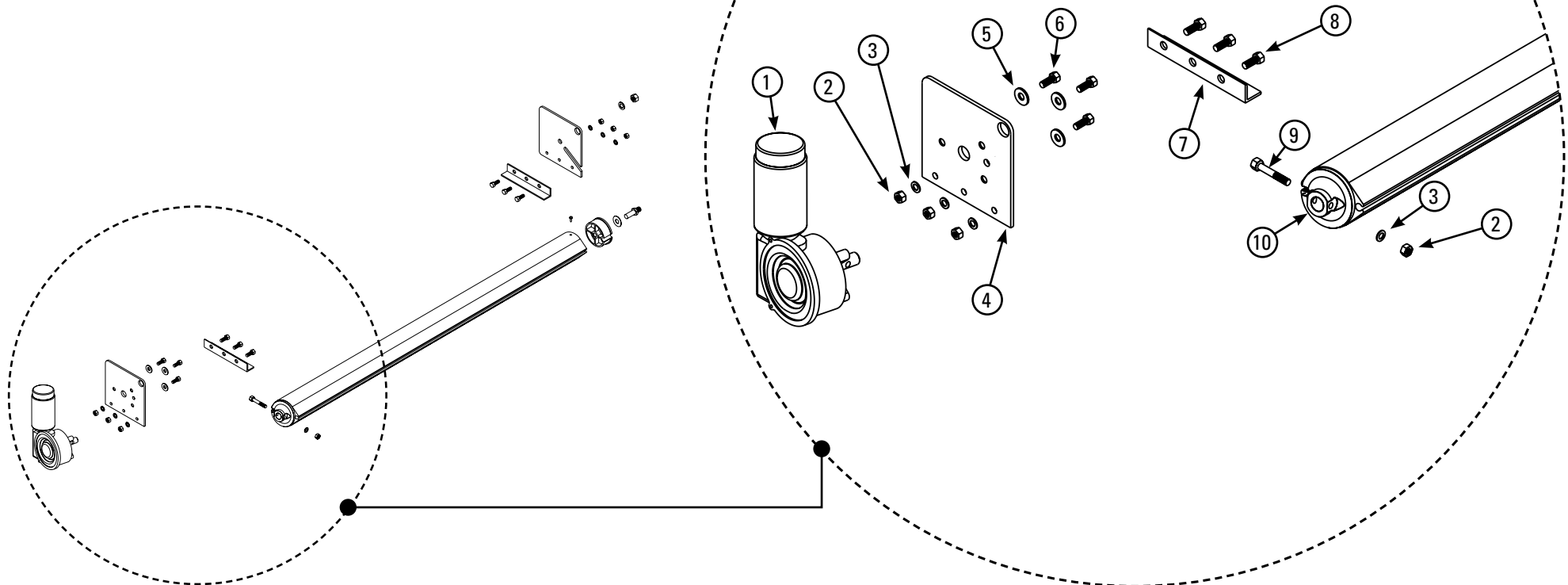
INSTALLATION INSTRUCTIONS

Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

Open 9000M Conversion Kit: 501-0725

ITEM	PART #	DESCRIPTION	QTY
1	517-0909	12V DC Electric Motor 1.3 HP	1
2	504-3103	5/16" - 18 Nyloc Nut	4
3	505-2502	1/4" Flat Washer USS	4
4	501-0221	9" Open End Plate, Electric (Drvr.)	1
5	505-3102	5/16" Lock Washer	3
6	503-3103	5/16" - 18 x 3/4" Ig. HHCS Bolt	3
7	501-1526	Open System Mount Bracket (Steel)	1
8	503-3104	5/16" - 18 x 3/4" Ig. Carriage Bolt	3
9	503-3108	5/16" - 18 x 1-3/4" Ig. HHCS Bolt	1
10	501-9915	Roller Drive Aluminum End Cap	1

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ELECTRIC DRIVE CONVERSION KIT INSTALLATION

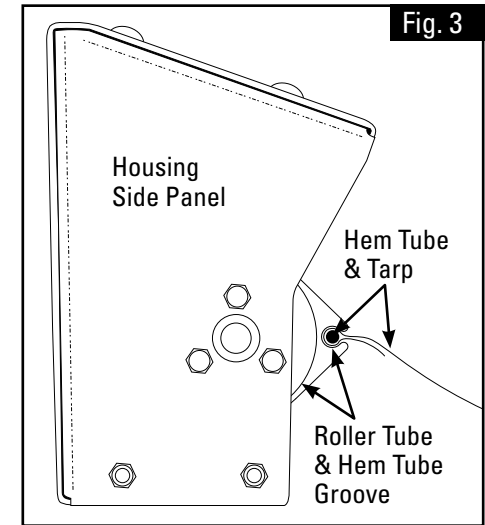
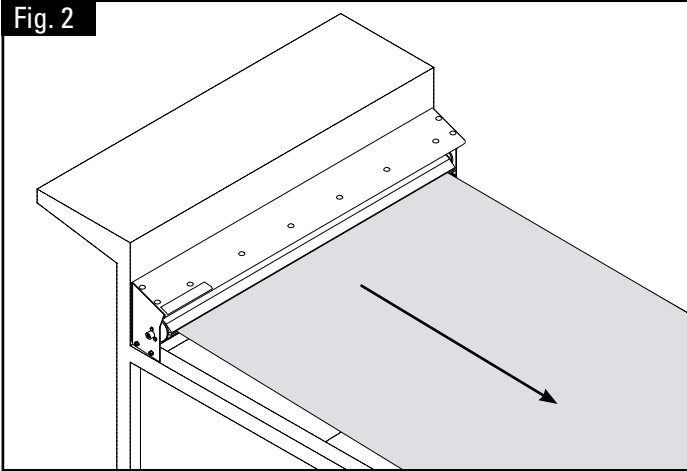
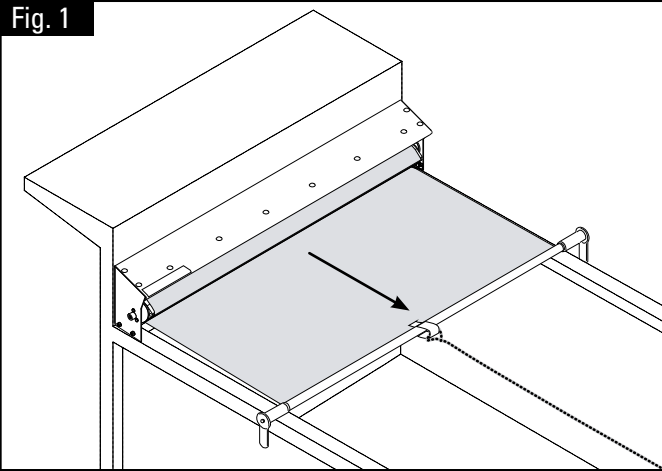


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Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

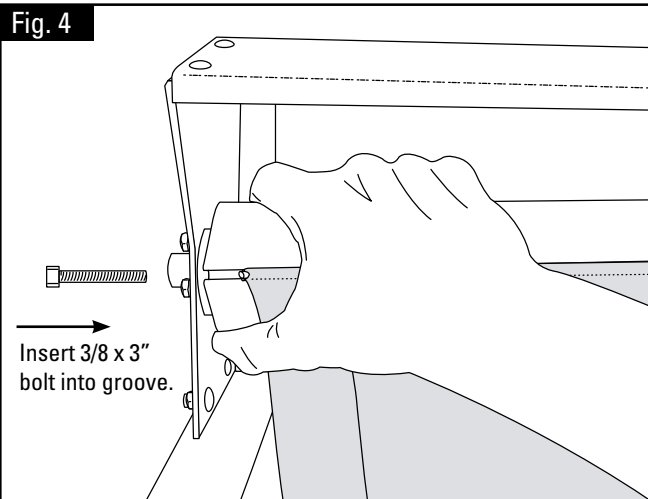
Securing Roller and Removing Tarp

Step 1: Extend tarp until it is completely unrolled from the roller tube (Fig. 1 & 2) and over the tail gate. Once tarp is fully extended, tie off at the end of the tail gate, so tarp will not roll back.

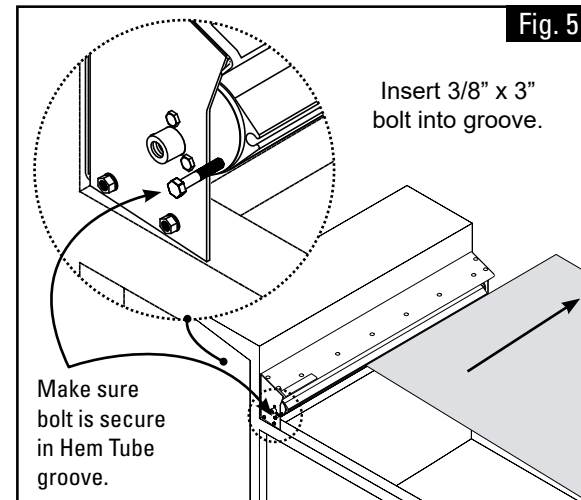


Side View (Fig. 3).

Note: The Steel Protector is to remain on box during entire conversion.



Step 2: Roll the roller tube hem tube groove to allow for insertion of the included 3/8" bolt. When the two are aligned, hold the tube in place and insert the bolt into the hole and roller tube. This will assure that the roller tube will not rotate as the tarp is removed (Fig. 4).



Step 3: Once roller tube is secure, remove tarp from groove through slot on the right side of the Steel Protector (Fig. 5) and set aside.



INSTALLATION INSTRUCTIONS

Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

Removing Roller Tube

Fig. 6A

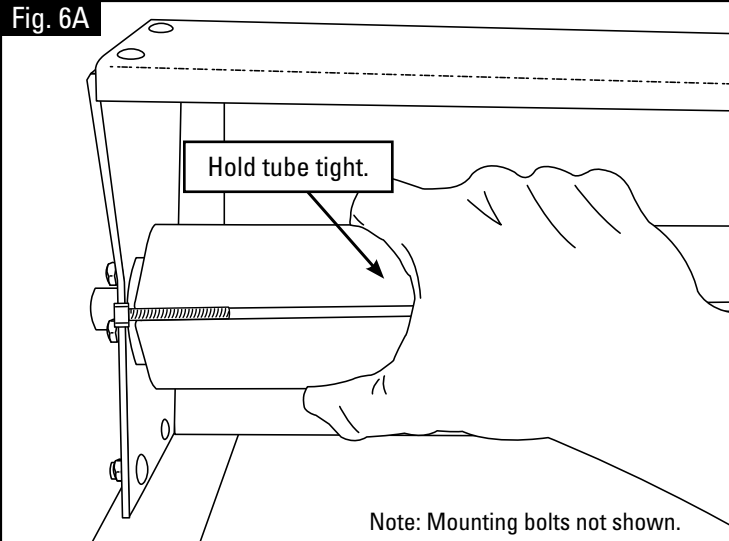
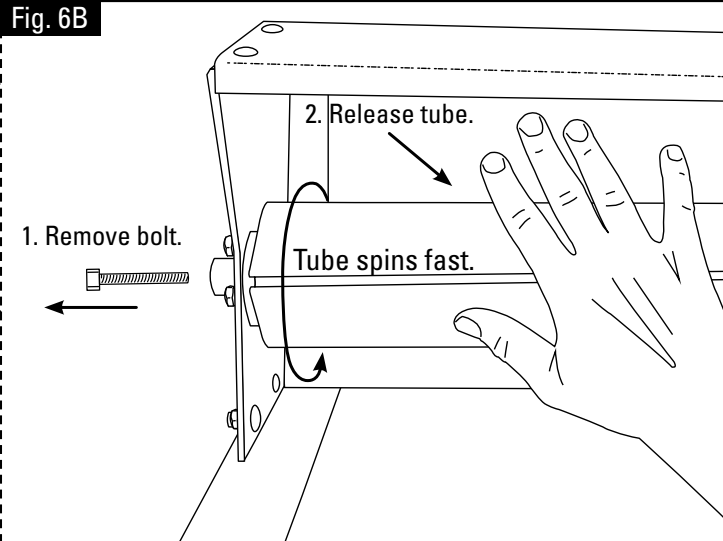


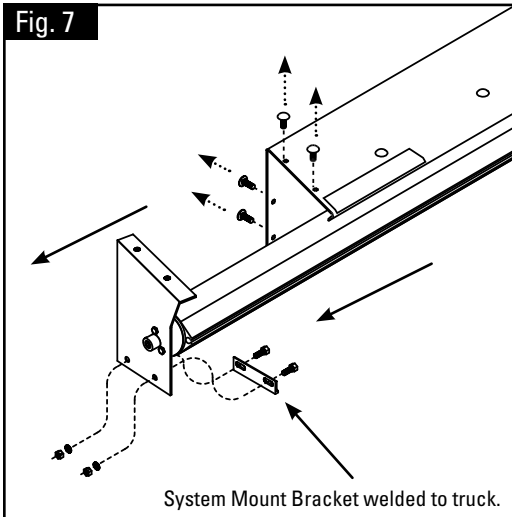
Fig. 6B



Note: Mounting bolts not shown.

Step 4: With bolt in roller groove, hold roller tight with hand then use other hand to remove bolt (Fig 6a). Once the bolt is removed, let go of the roller to release the spring tension (Fig. 6b-1 & 2). When released, the roller tube will spin rapidly until all tension is released.

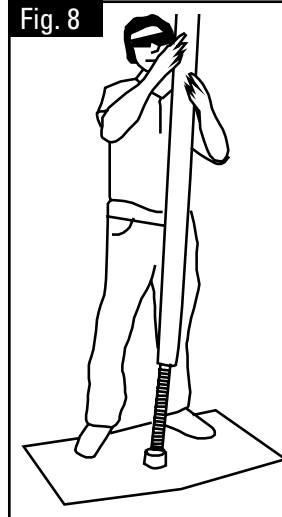
Fig. 7



Step 5: Remove the end plate and roller tube from the housing (Fig. 7).

Note: The mounting bracket will need to be reused with the new end plate.

Fig. 8



Step 6: Remove the screw that retains the End Cap (Shaft End). Place a piece of cardboard on the ground and hold the roller assembly vertically, with the end plate towards the ground. Shake the roller assembly up and down above the cardboard to pop the end cap and spring assembly free from the roller tube (Fig. 8).

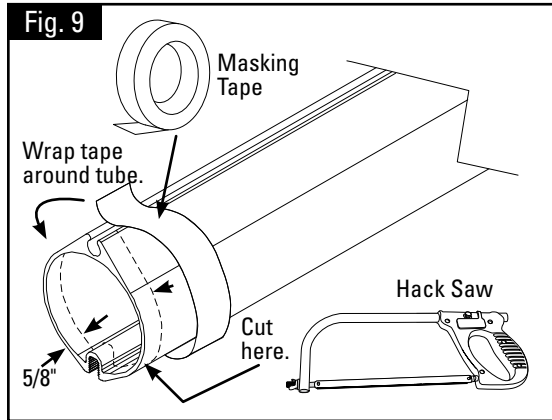
Note: The cardboard is to protect the end of the spring shaft when it breaks free.



INSTALLATION INSTRUCTIONS

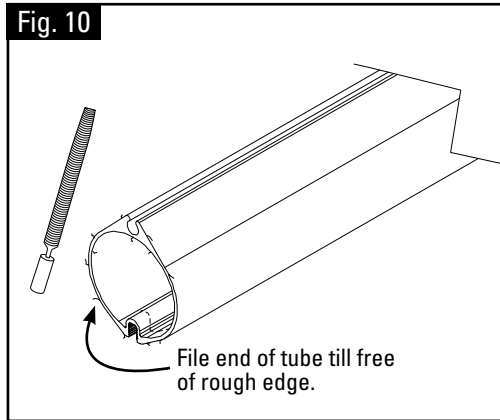
Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

Roller Tube End Cap Installation

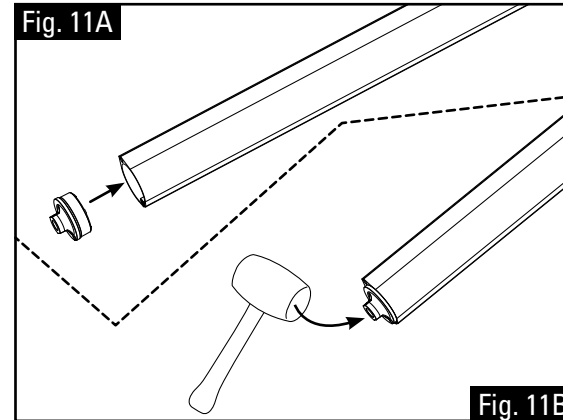


Step 7: Position the roller tube on a flat surface. Cut roller tube 5/8" from end using a hack saw (Fig. 9).

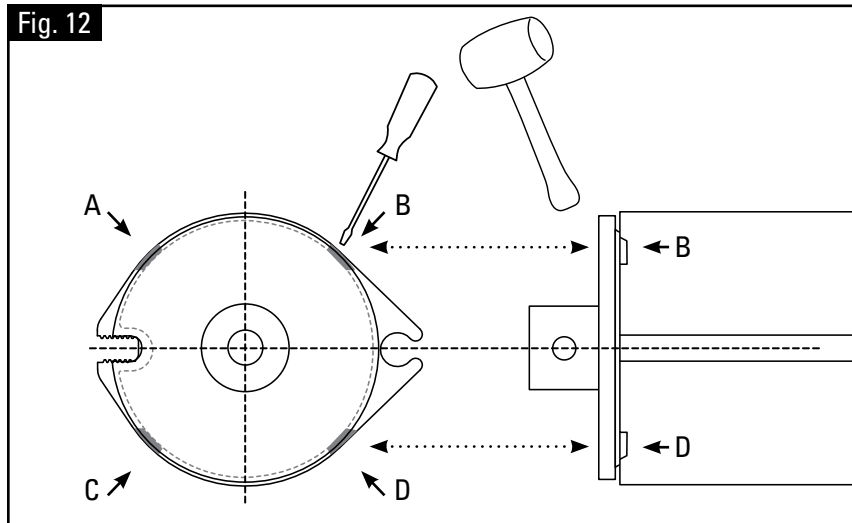
Note: Use masking tape wrapped around tube as a cutting guide.



Step 8: After cutting off the 5/8" section and removing the masking tape (Fig. 10), file the edges to smooth out end of tube and provide a better fit for the end cap.



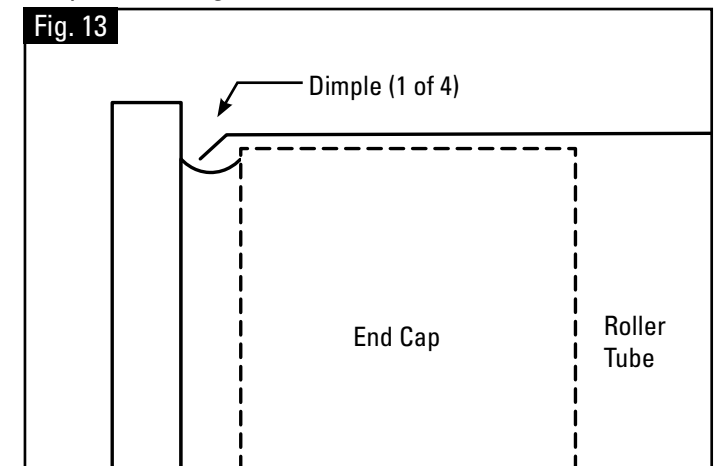
Step 9: Insert end cap into roller tube. Use a rubber mallet to tap the edges of the end cap lightly to ensure that it has been seated properly (Fig. 11A & 11B).



Step 10: To secure the end cap in the roller tube, make four (4) indentations or dimples to hold the end cap in place. Use a mallet and flathead screwdriver to make the dimples (Fig. 12 - A, B, C & D).

WARNING: Do not make indentation on welded seam.

Dimple detail (Fig. 13).



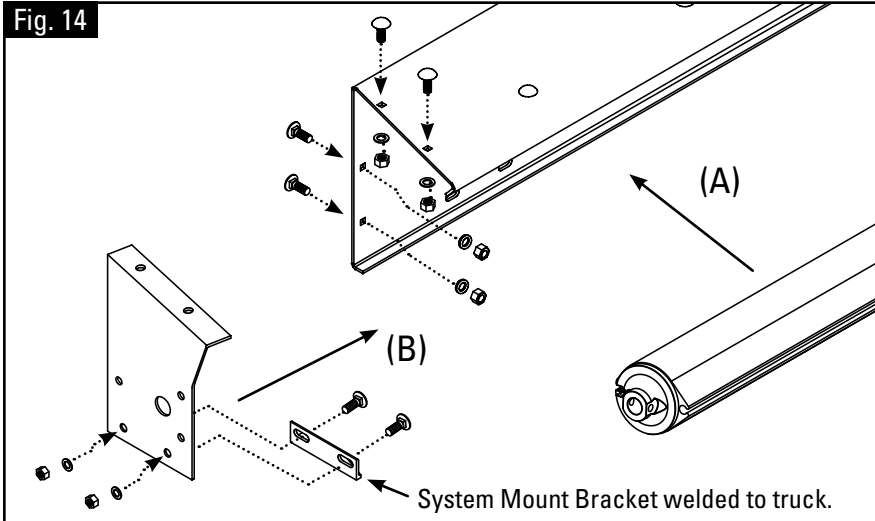


INSTALLATION INSTRUCTIONS

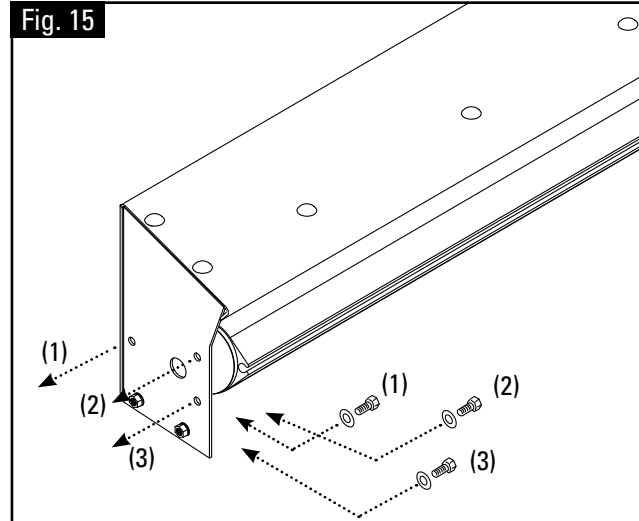
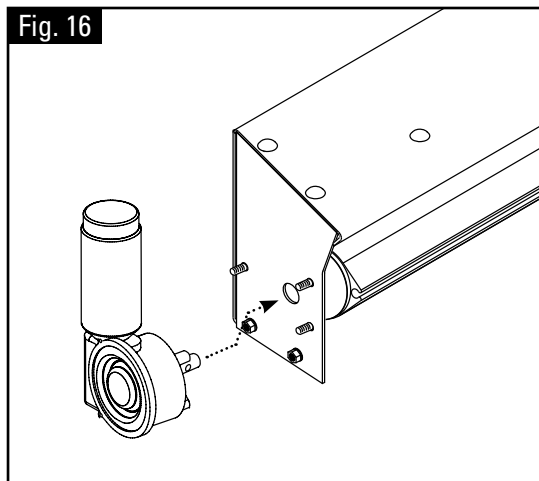
Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

Roller Tube and Electric Motor Installation

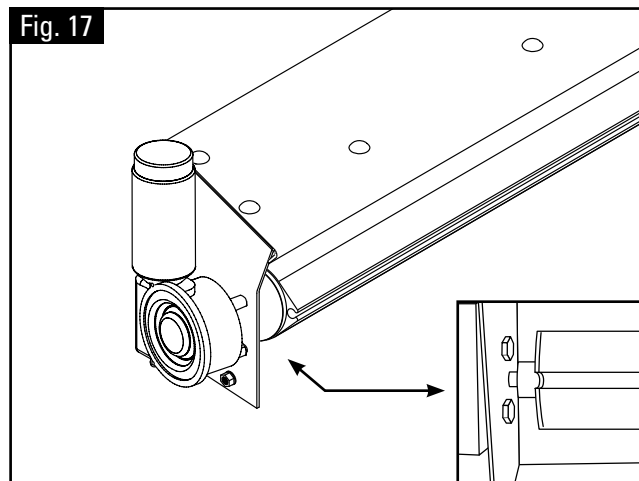
Step 11: Insert Roller tube into Steel Protector Housing (Fig. 14-A) and secure to Electric End Plate (Fig. 14-B) using existing fasteners.



Step 13: With the HHCS bolts in place, attach and secure the Electric Motor (Fig. 16) to the Electric End Plate using a 5/16" wrench.



Step 12: Insert three (3) HHCS bolts (Fig. 15) to allow for the Electric Motor to be mounted on the side of the Steel Protector.



Step 14: With the Electric Motor in place, secure with three (3) HHCS Bolts (Fig. 17).

Note: Make sure the motor shaft is inserted in the roller tube end cap.



INSTALLATION INSTRUCTIONS

Steel Protector, Aluminator 7000M & Open 9000M w/EDU Conversion Kit

Roller Tube and Electric Motor Installation

Fig. 18A

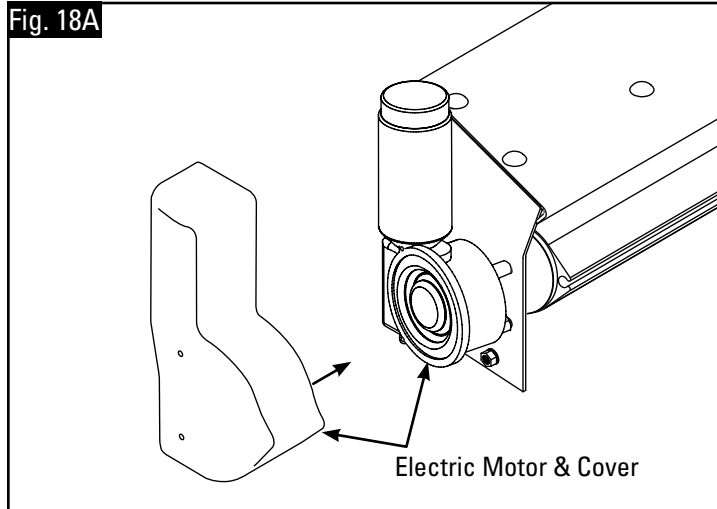
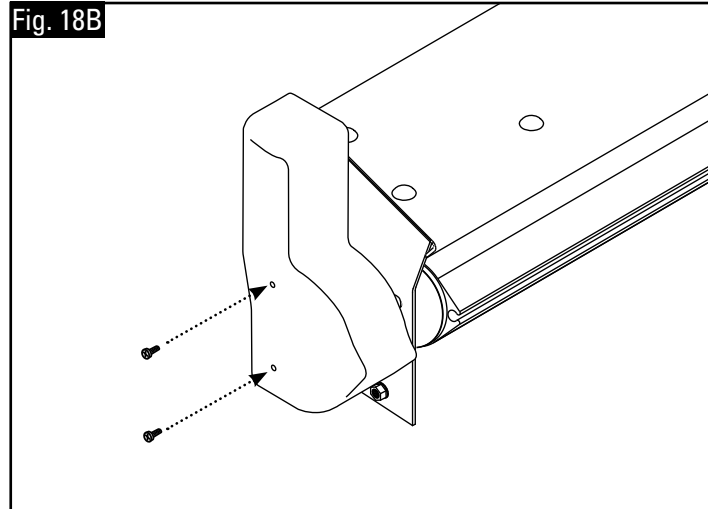


Fig. 18B



Step 15: Wire motor with Switch Kit per instructions on page 7 & 8.

Step 16: Place Electric Motor Cover on the mounted motor (Fig. 18a) and then secure with two (2) mounting screws (Fig. 18b).

Step 17: With the Electric Motor drive shaft inserted into the roller tube end cap, install the HHCS bolt, flat washers and nyloc nut (Fig. 19a & b) and tighten.

Note: Make sure the roller tube is firmly secured to the Electric Motor shaft.

Fig. 19A

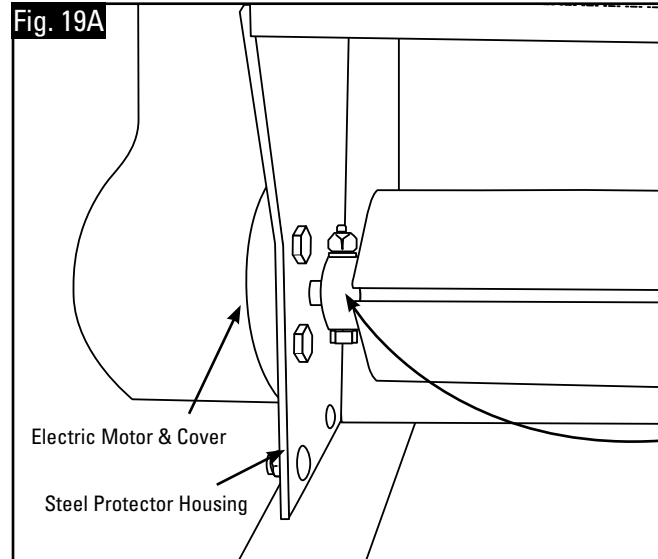
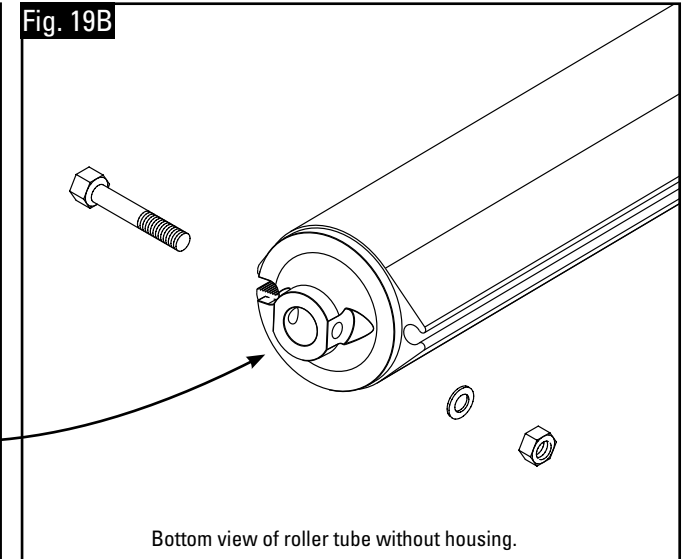


Fig. 19B



Bottom view of roller tube without housing.

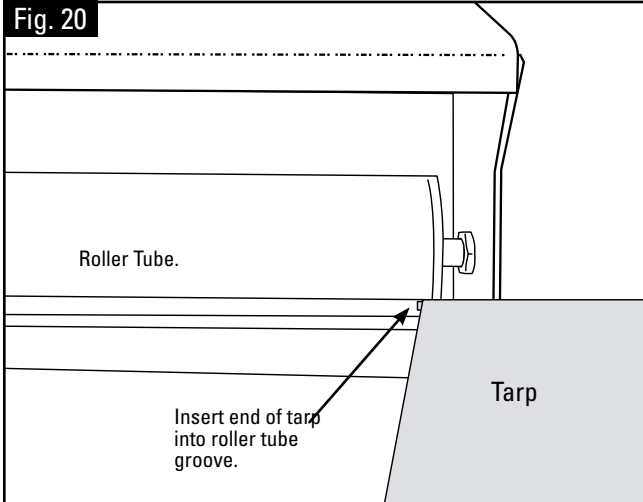


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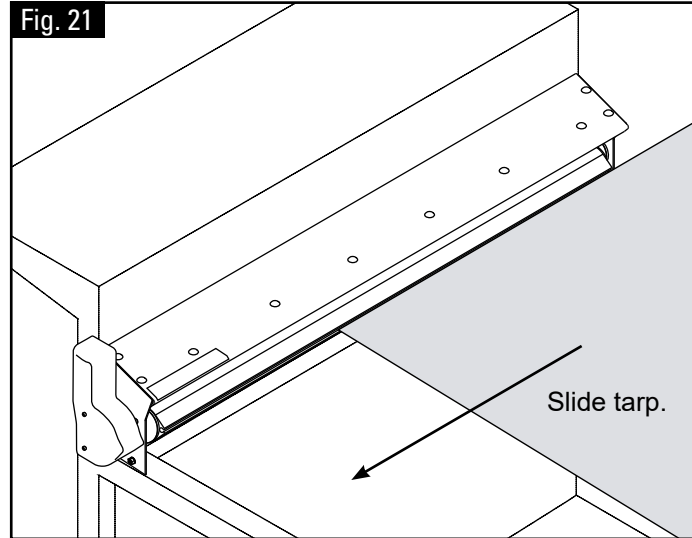
Tarp Reinstallation

Fig. 20



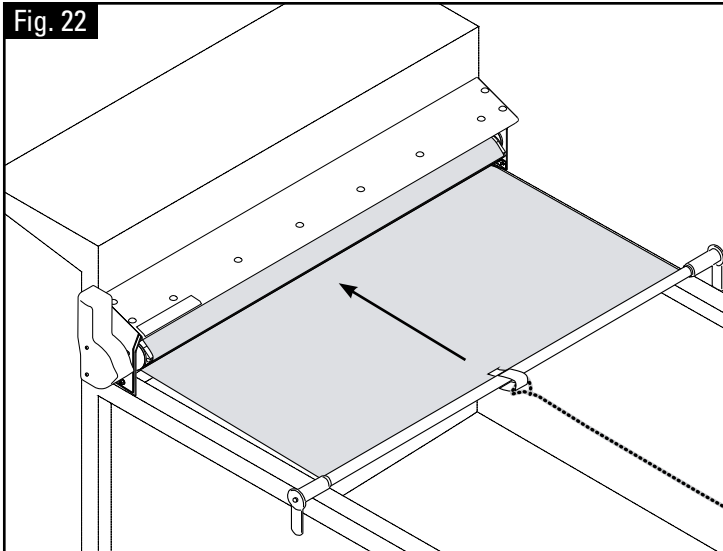
Step 18: Slide the edge of the tarp into the housing and roller tube groove (Fig. 20).

Fig. 21



Step 19: Slide tarp in roller tube groove until it is flush with the other side (Fig. 21).

Fig. 22



Step 20: Once the tarp is installed and square on the box, use the electric motor to retract tarp (Fig. 22).

Note: See electric motor wiring instructions on page 7 & 8.

Special note: If installing an Arm Kit, use Spring Kit instructions from here on.



25 AMP SWITCH KIT / 514-0101 INSTALLATION

[FOR 25 AMP SWITCH KIT INSTALLATION INSTRUCTIONS, SEE DOCUMENT 607-0059 OR CLICK HERE](#)