





Installation Instructions

Attention Dealers: Please give this owners manual to the customer when the product is delivered.

Call 800-535-9545 | www.aeroindustries.com

Indianapolis, IN I Omaha, NE I Kent, OH I Valley, NE



Installation Directory

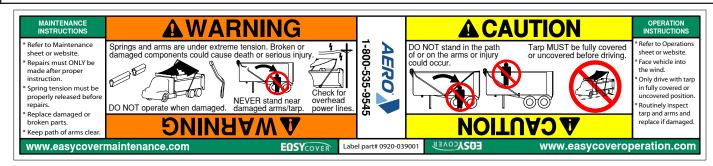
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Safety Messages

- **A WARNING**: Read this entire manual and all instructions before installation, operation, maintenance or repairs to this product. Refer to the website for an explanation of safety labels and symbols.
- **WARNING**: Be sure that your working platform is secure. Use OSHA approved ladders or scaffolding to work above ground level.
- **A WARNING**: Always wear safety glasses during installation and operation.
- ▲ WARNING: The Easy Cover® arms move with the help of springs which must be properly released before any repairs. All spring tension must be properly released before any repairs. On website see "Properly Releasing Spring Tension" instruction before any repairs.
- **WARNING**: Springs and arms are under extreme tension. Broken or damaged components could cause death or serious injury. Follow instruction on releasing spring tension.
- ▲ WARNING: Never stand near damaged arms/tarp. Always check to make sure that no one is at the rear of the box or in the immediate area while repairing. Arms could come loose allowing the arm to rotate to the rear with tremendous force.
- **A WARNING**: DO NOT operate when damaged. If the arms are damaged or fail to rotate freely under normal operation for any reason, discontinue use until repairs can be made.
- **A WARNING**: Routinely inspect tarp and arms for wear and/or damage. Replace all worn or broken parts immediately.
- **A** WARNING: Keep all clothing clear of moving parts.
- ▲ WARNING: Check for overhead power lines. Always check for overhead obstructions before covering and uncovering. DO NOT operate under low hung power lines.
- **CAUTION**: Tarp MUST be fully covered or uncovered before driving. If it is not, could result in being over height and risk of hitting overhead obstructions.
- **A** CAUTION: DO NOT stand in the path of or on the arms, or injury could occur.



Explanation of Signal Words

A WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

A CAUTION: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE: Risk of product or vehicle being damaged.





This manual explains how to install and maintain the Easy Cover® tarping system.

Customer: If you have any concerns or questions prior to the installation of this product, please call our Customer Service at 1-800-535-9545.

Tools Required for Installation

Marker or Felt Pen

Tape Measure

Black Electrical Tape

Awl

Hammer

1 1/8" hole saw

Drill Bits: .257" (F drill), 9/32", .316" (O drill), 13/32", 17/32"

Sockets: 7/16", 9/16"

Open End or Box Wrenches: 7/16", 9/16", 3/4"

Vice Grip Pliers (2 pair)

Electric or Air Drill





Step 1a

Installing End Plates and Wind Deflector

NOTE: On manual crank installations, before installing the end plates, visually check the path from the mounting plate to the crank assembly. Make sure when the chain cover is assembled it does not obstruct the door or create a hazard to the operator.

NOTE: If end plate does not set squarely against the top rail, use shims to square the plate. Shim material is not included in assembly package.

Index	Description	Qty	Index	Description	Qty
1	End Plates (DS & PS)	2	4	3/8-16 x 1 Hex Bolt	6
2	Wind Deflector	1	5	3/8-16 Nylon Hex Nut	10
3	3/8-16 x 1 Carriage Bolts	4	6	3/8 Lock Washer	6

1) Figure 5-1. Install 3/8-16 x 1 carriage bolts (3) and 3/8-16 nylon hex nuts (5) in the driver's side and passenger's side mounting plates (1). Do not tighten.

- 2) Slide end plates (1) into wind deflector's extrusion. Do not tighten.
- **3)** Carefully place assembly onto the cab shield or top rail and position at the farthest point forward. This will keep the air from coming in under the wind deflector (2) to a minimum.
- **4) Figure 5-2.** Move the end plates inward until they are against the cab shield or top rail. Lift rear of assembly until the aligning notch is even with the top rail. Clamp driver's side end plate into place.
- 5) Using the end plate as a template, drill three 13/32" holes through the top rail where square holes reside.
- **6)** Secure driver's side end plate with 3/8-16 x 1 hex bolt (4), 3/8 lock washer (6), and 3/8-16 nylon hex nut (5).
- 7) Repeat Steps 1a.5–1a.6 for passenger's side end plate (1).
- **8)** Tighten nuts on carriage bolts holding the wind deflector (2).

▲ IMPORTANT: Do NOT allow any gap below the wind deflector. This can cause the tarp to sail and let the cross arm slam down causing damage.

Square Holes referred to in Step 1a.5

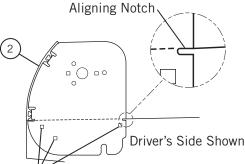


Figure 5-2

Figure 5-1



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Step 1b

Installing Tarp Housing Inside Cab Shield

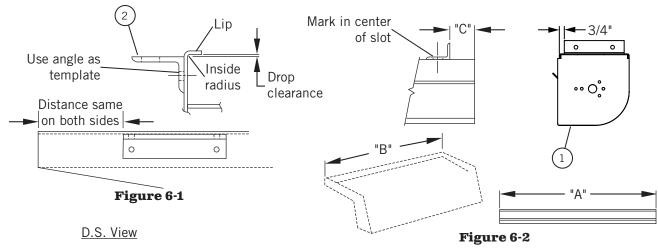
NOTE: On manual crank installations, before installing the tarp housing, visually check the path from the mounting plate to the crank assembly. Make sure when the chain cover is assembled it does not obstruct the door or create a hazard to the operator.

Index	Description	Qty	Index	Description	Qty
1	Tarp Housing	1	4	1/2-13 x 2 Hex Bolt GR5	8
2	Mounting Bracket	4	5	1/2 Flat Washer	8
3	Rubber Bushing	4	6	1/2-13 Nylon Hex Nut	8

NOTE: Angle will be mounted on inside of cab shield. If cab shield has a lip, make sure you drop the angle far enough to compensate height of angle for any lip or radius that may interfere with placement. If cab shield is large enough to allow drilling from the inside, place angles on inside of cab shield.

NOTE: If cab shield has a lip, make sure you drop angle far enough to compensate for inside radius of the lip.

- 1) Figure 6-1. Hold mounting bracket (2) up to the cab shield. With angles as far forward as possible, and level with top edge of cab shield, trace through holes with permanent marker. Repeat on other side of cab shield.
- 2) Figure 6-2. Measure width of housing dimension "A". Measure width inside of cab shield dimension "B". Subtract B from A and divide by two to get dimension "C". Turn tarp housing (1) upside down and position steel angle until dimension C is maintained on both ends and mark in center of slotted hole. The slotted holes allow the tarp housing to be moved 1/2" (once mounted) to the left or right if measurements are not exact. Drill marked holes using 17/32" drill bit.
- IMPORTANT: Do NOT allow any gap below the tarp housing. This can cause the tarp to sail and let the cross arm slam down causing damage.







Step 1b (cont.)

- **3) Figure 7-1.** Attach mounting bracket (2) to cab shield using 1/2-13 x 2 hex bolt (4), 1/2 flat washer (5), and 1/2-13 nylon hex nut (6).
- **4) Figure 7-1.** Set housing with rubber bushings (3) onto mounting bracket (2) and fasten securely through slotted holes using 1/2-13 x 2 hex bolt (4), 1/2 flat washer (5), and 1/2-13 nylon hex nut (6). Rubber bushings should compress to about 3/8" to 1/2".

NOTE: All tarp housing nuts and bolts must be checked for tightness every 3 months. Tighten as needed.

NOTE: Tarp housing should not touch any part of the cab shield in order to minimize vibration.

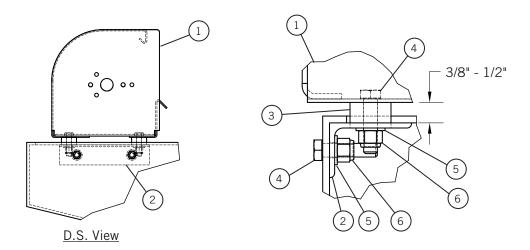


Figure 7-1



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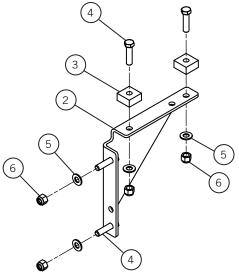
Step 1c

Installing Tarp Housing with Trailer Mounting Bracket

NOTE: On manual crank installations, before installing the mounting plates, visually check the path from the mounting plate to the crank assembly. Make sure when the chain cover is assembled it does not obstruct the door or create a hazard to the operator.

Index	Description	Qty	Index	Description	Qty
1	Tarp Housing	1	4	1/2-13 x 2 Hex Bolt GR5	8
2	Mounting Bracket Trailer	2	5	1/2 Flat Washer	8
3	Rubber Bushing	4	6	1/2-13 Nylon Hex Nut	8

- 1) Figure 8-2. Turn tarp housing (1) upside down and position mounting bracket trailer (2) 12" in from each end and flush with the back of the tarp housing (1) (not the end plates). Keeping brackets straight and parallel with end plates, mark holes through brackets
- 2) Drill marked holes using 17/32" drill bit.
- **3) Figure 8-1.** Attach mounting brackets with rubber bushings (3), 1/2-13 x 2 hex bolt (4), 1/2 flat washer (5), and 1/2-13 nylon hex nut (6). Tighten until bushings compress to approximately 3/8" to 1/2".
- **4) Figure 8-2.** Hold housing up to trailer firmly, center on trailer and trace holes in mounting brackets. Drill marked holes using 17/32" drill bit.
- 5) Attach with 1/2-13 x 2 hex bolt (4), 1/2 flat washer (5), and 1/2-13 nylon hex nut (6).





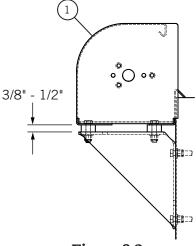


Figure 8-2





Step 2a

Installing Manual Fixed Roll Up Bar

 Index	Description	Qty
1	Fixed Manual Roll Up Bar	1

- 1) Figure 9-1. Unbolt and remove the shafts from both ends of fixed manual roll up bar (1).
- 2) On the driver's side align the fixed manual roll up bar (1) with the bearing, insert the shaft with the keyway through the bearing.
- 3) Bolt the shaft using the 1/4-20 x 2 1/4 hex bolt and 1/4-20 nylon hex nut removed in **Step 2a.1**.
- **4)** On the passenger's side align the fixed manual roll up bar (1) with the bearing and insert shaft through the bearing.

NOTE: Make sure there is clearance on the outside of end plate or tarp housing to allow shaft to stick out far enough.

5) Bolt the shaft using the 1/4-20 x 2 1/4 hex bolt and 1/4-20 nylon hex nut removed in **Step 2a.1**.

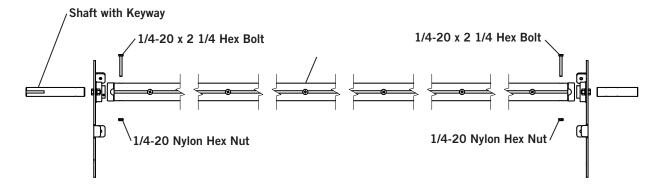


Figure 9-1



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Step 2b

Installing Electric Motor and Fixed Roll Up Bar

Index	Description	Qty
1	Motor RA/SWB	1
2	Fixed Electric Roll Up Bar	1
3	Motor Cover	2
4	5/16-18 x 7/8 FHCS	3
5	#10 x 1 Self-drilling Pan Head	2

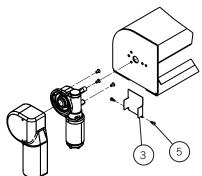
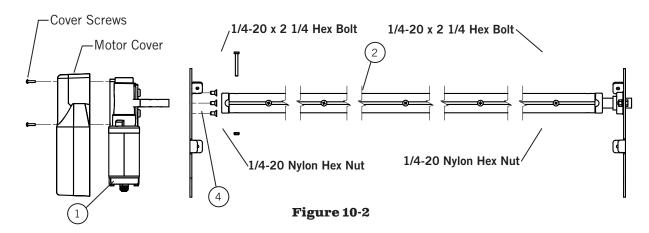


Figure 10-1

- 1) Figure 10-2. Fasten motor RA/SWB (1) to the end plate or tarp housing with three 5/16-18 x 7/8 FHCS (4).
- 2) With screws provided with the motor, attach the cover to the motor. (Cover will need to be removed for wiring.)
- **3) Figure 10-1.** When installing on a tarp housing use the motor cover (3) with two #10 x 1 self-drilling pan head screws (5).
- 4) Figure 10-2. Unbolt and remove the shaft from end of fixed electric roll up bar (2).
- 5) One end does not have a shaft. Remove the nut and bolt from that end. Insert end onto shaft of motor RA/SWB (1), line up hole in roll up tube with hole in motor shaft, and with previously removed nut and bolt secure roll up bar to shaft.
- **6)** On the opposite end line up the fixed electric roll up bar (2) with the bearing and insert shaft through the bearing.

NOTE: Make sure there is clearance on the outside of end plate or tarp housing to allow shaft to stick out far enough.

7) Bolt the shaft using the 1/4-20 x 2 1/4 hex bolt and 1/4-20 nylon hex nut removed in Step 2b.4.







Step 2c

Installing Manual Adjustable Roll Up Bar

NOTE: Hardware pack is taped to roll up bar.

Index	Description	Qty
1	Adjustable Manual Roll Up Bar	1
2	1/4-20 x 2 1/4 Hex Bolt	2
3	1/4-20 Nylon Hex Nut	2

- 1) Remove hardware package and tape from center of adjustable manual roll up bar, one end is loose and can slide off. Place hardware package to the side.
- 2) One end of adjustable manual roll up bar has a shaft with a hole, insert this end through the bearing on the driver's end of tarp housing.
- 3) Make sure driver's end of roll up bar is against bearing. Extend other end of roll up bar out and insert shaft through the bearing on the passenger's end of tarp housing.

NOTE: Make sure there is clearance on the outside of tarp housing to allow shaft to stick out far enough.

- **4) Figure 11-1.** With passenger's end of roll up bar within 1/4" 1/2" of bearing, drill two .257" (F drill) holes through both tubes as shown.
- 5) Secure outside tube to inside tube with two 1/4-20 x 2 1/4 hex bolts from hardware pack.

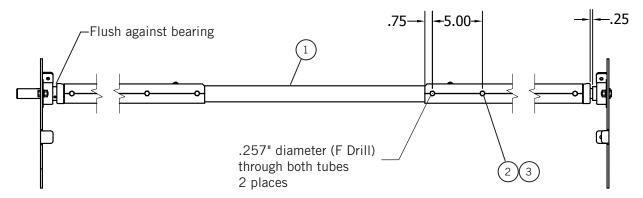


Figure 11-1



11



Step 2d

Installing Electric Motor and Adjustable Roll Up Bar

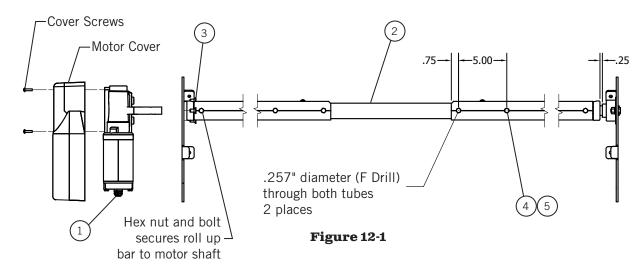
NOTE: Use hardware pack taped to roll up bar.

Index	Description	Qty
1	Motor Winch "B"	1
2	Adjustable Electric Roll Up Bar	1
3	5/16-18 x 5/8 FHCS	3
4	1/4-20 x 2 1/4 Hex Bolt	2
5	1/4-20 Nylon Hex Nut	2

- 1) Figure 12-1. Fasten Motor Winch "B" (1) to driver's side end plate with 5/16-18 x 5/8 FHCS (3).
- 2) With screws provided with the motor, attach the cover to the motor. (Cover will need to be removed for wiring.)
- 3) Remove hardware package and tape from center of adjustable electric roll up bar (2), one end is loose and can slide off. Place hardware package to the side.
- **4)** One end does not have a shaft. Remove the nut and bolt from that end. Insert end onto shaft of motor winch "B", line up hole in roll up bar with hole in motor shaft, and with previously removed nut and bolt secure roll up bar to shaft.
- **5)** Extend other end of roll up bar out and insert shaft through the bearing on the passenger's end of tarp housing.

NOTE: Make sure there is clearance on the outside of tarp housing to allow shaft to stick out far enough.

- **6)** With passenger's end of roll up bar within 1/4" 1/2" of bearing, drill two .257" (F drill) holes through both tubes as shown.
- 7) Secure outside tube to inside tube with two 1/4-20 x 2 1/4 hex bolts from hardware pack.





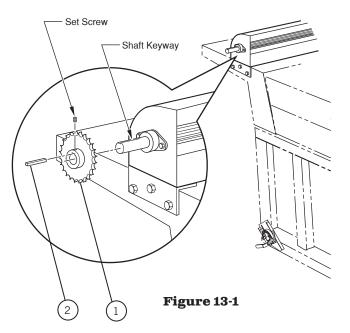


Step 3a

Installing Sprocket

Index	Description	Qty
1	Sprocket	1
2	Key	1

- 1) Figure 13-1. Slide the sprocket (1) over the outside of the shaft of the driver's side roll up bar. Position sprocket so that it aligns with the crank assembly sprocket.
- 2) Lightly tap the key (2) into the shaft keyway.
- 3) Tighten the Allen set screw on the sprocket until it begins to feel tight. Make sure the screw engages the key (2). Do not over tighten.



Step 3b

Installing Manual Crank Assembly

I	ndex	Description	Qty
	1	Crank Assembly	1
	2	3/8 x 1 Self Tapping Hex Bolt	1

NOTE: If you need to mount in a space where you cannot use bolts and nuts, use self-tapping bolts and lock washers. Not included in the package.

- 1) Remove the cover (if installed) on the crank assembly and lay cover aside until after the chain is installed.
- 2) Figure 13-2. Place the crank assembly at or near the bottom front corner of the box on the driver's side. Rotate the crank assembly so that it angles toward the tarp roll up bar.
- 3) Mark the mounting holes on the box. Drill marked holes using 13/32" drill bit.
- **4)** Fasten the crank assembly to the box with bolts, washers, and nuts. Make sure to bolt the assembly in the highest upward position.

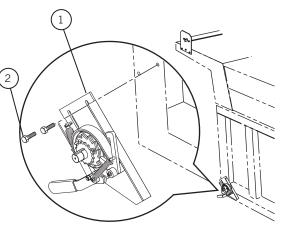


Figure 13-2





Step 3c

Installing Chain and Chain Cover(s)

Index	Description	Qty	Index	Description	Qty
1	Chain	1	5	Guard Mounting Brackets	6
2	Master Link	1	6	#14 x 1/2 Self Drilling Screw	6
3	Chain Cover Aluminum	1	7	#14 x 1 Self Drilling Screw	6
4	Chain Cover Lower Aluminum	1	8	Crank Handle	1

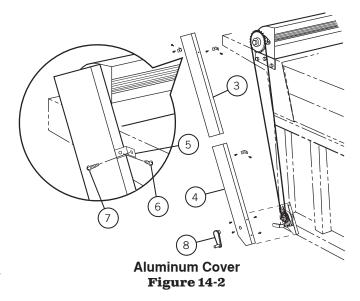
- 1) Figure 14-1. Wrap chain (1) around both sprockets and remove the excess links.
- 2) Wrap the shortened chain around the sprockets and fasten the two ends with the master link (2).

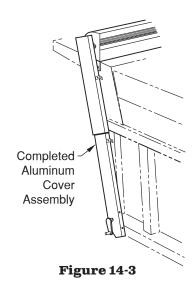
NOTE: To remove any slack in the chain, loosen the crank assembly mounting bolts and slide the crank assembly away from the tarp roll up bar. The chain should be snug but not overly tight. Retighten the mounting bolts.

Aluminum Cover

- 3) Figure 14-2. Install chain cover lower aluminum (4) with the guard mounting brackets (5) to the body with #14 x 1/2 self drilling screws (6) and #14 x 1 self drilling screw (7).
- Figure 14-1
- **4) Figure 14-3.** Position the chain cover aluminum (3) so that it lays over the top edge of chain cover lower aluminum (4). Adjust the chain cover aluminum (3) so that it clears the chain and sprocket evenly on both sides and clears the top by 1".

NOTE: The crank handle is used to move the tarp forward. The crank handle should be removed once the tarp is properly positioned.







Step 4a

Installing Standard Electrical Controls with Rocker Switch

NOTE: Use hardware pack Motor Kit #0311-963317 & Tractor Kit #0311-963318

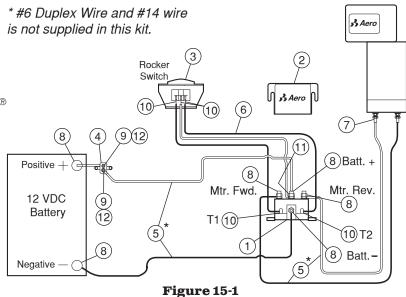
Wire NOT included in kit.

Index	Description	Qty	Index	Description	Qty
1	Reverse DC Contactor	1	12	10-32 Hex Nut	2
2	DC Contactor Cover	1	13	1/4 x 3/4 Pan Head Phillips	12
3	Switch Rocker Assy for DC Contactor	1	14	1/4-20 x 1 Hex Head Bolt	2
4	Circuit Breaker 40 Amp	1	15	1/4-20 x 2 Hex Head Bolt	2
*5	Wire #6 Duplex	Varies	16	1/4 Flat Washer	8
*6	Wire #14ga 3 Conductor Type SJ	20'	17	1/4-20 Nylon Hex Jam Nut	4
7	Wire End #6 x 1/4 Ring Term.	2	18	5/16-24 Hex Nut	4
8	Wire End #6 x 3/8 Ring Term.	5	19	5/16 Lock Washer	4
9	Wire End #6 x #10 Screw Ring Terminal	2	20	Clamp Metal Loom Plastic Coated	12
10	Wire End #14 x 1/4 Push on	6	21	Wiring Diagram Reverse Contactor	1
11	Wire End #14 x 3/8 Ring Term.	1			

⚠ IMPORTANT: Switch is not rated for outdoor use.

- 1) Open and lay out all electric hardware parts.
- 2) Find a convenient place on the driver's side under the dashboard to mount the rocker switch. Using the switch as a template, mark and drill two 9/32" holes.
- 3) Mount rocker switch (3) using (2) 1/4-20 x 1 hex bolts (14), (4) 1/4 flat washers (16), and (2) 1/4-20 nylon hex nuts (17).
- **4)** Find a secure location at or near the back of the cab to mount the reversing DC contactor (1). Mount the reversing DC contactor (1) using (2) 1/4-20 x 2 hex bolts (15), (4) 1/4 flat washers (16), and (2) 1/4-20 nylon hex nuts (17). Do not tighten at this time.
- 5) Measure the wiring distance from the gearmotor to the pivot box, then from the pivot point through the truck body to the DC contactor in the cab.

 *#6 Duplex Wire and #14 wire is not supplied in this kit.
- ▲ CAUTION: Incorrect wiring can cause failure to the Easy Cover® system and possible harm to the operator.





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Step 4a (cont.)

- 6) Secure the #6 wire (5) along the vehicle frame using clamp metal looms (20) and 1/4 x 3/4 pan head Phillips (13) being sure to avoid any exhaust, moving parts, or sharp edges that could damage the wire's protective coating. The wire should have a loop at the hinge point where the bed pivots on the frame. A good rule of thumb is to match the loop of factory installed wires and lines or hoses. This will allow sufficient flex during bed cycling operation. Insufficient or improper loop can result in wire damage when the bed is raised.
- 7) Measure distance between rocker switch (3) and reverse DC contactor (1). Wire switch (3) and reversing DC contactor (1) according to diagram with #14 wire (6).
- 8) Measure distance between battery and reverse DC contactor (1); run #6 wire (5) between the two.
- 9) Install a circuit breaker (4) at or very near the battery's positive terminal. Secure circuit breaker in place with a zip tie, if possible, to prevent movement.
- 10) Place the DC contactor cover (2) on the reversing DC contactor (1) and tighten the 1/4-20 bolts and nuts.

NOTICE: Circuit breaker must be properly installed or motor warranty is void.

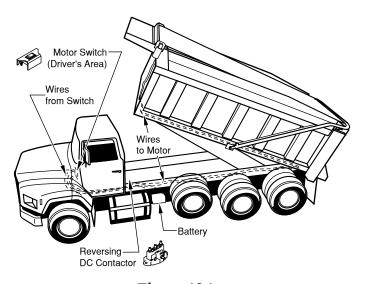


Figure 16-1



16



Step 4b

Install and Wire Motor for Semi-trailer Truck NOTE: Use hardware pack Motor Kit #0311-963317

1) Install receptacle at the front of the trailer. Attach the #6 wire to the butt connectors on the receptacle.



For End Dumps

2a) Figure 17-1. Run #6 wire from receptacle to rear of trailer, onto dump bed, back to the front of the trailer and up to the motor. Secure all wire with clamps.

For Bottom Dumps

(A)

2b) Figure 17-2. Run #6 wire from receptacle up to the motor. Secure all wire with clamps.

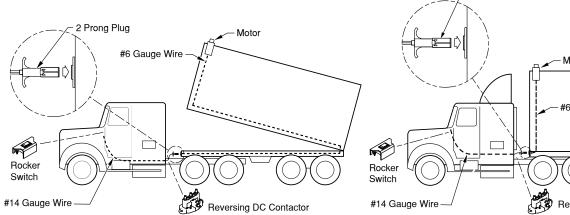


Figure 17-1

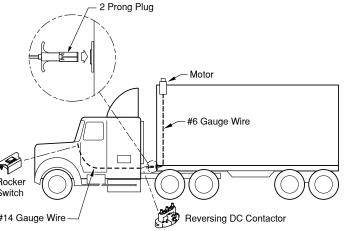
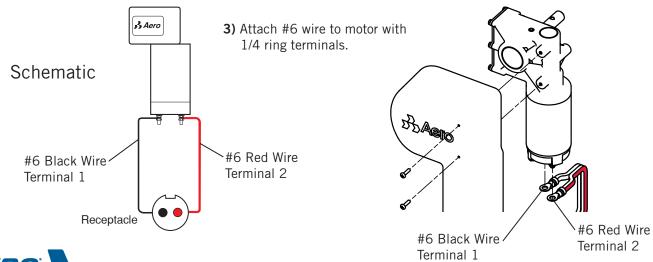


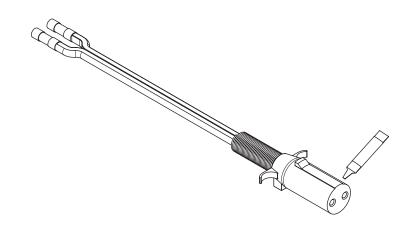
Figure 17-2



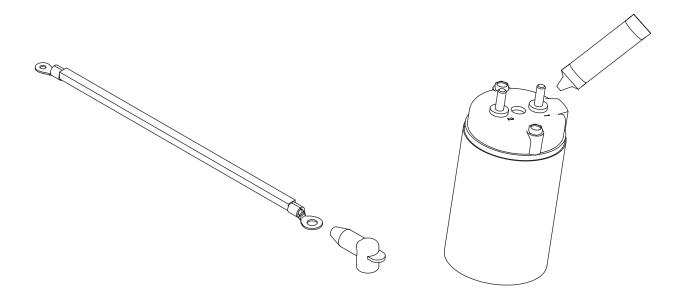


Step 4b (cont.)

NOTICE: Apply conductive grease to all 2 Prong Plug connections.



NOTICE: Install boot caps and apply dielectric grease to all ring terminal connections.



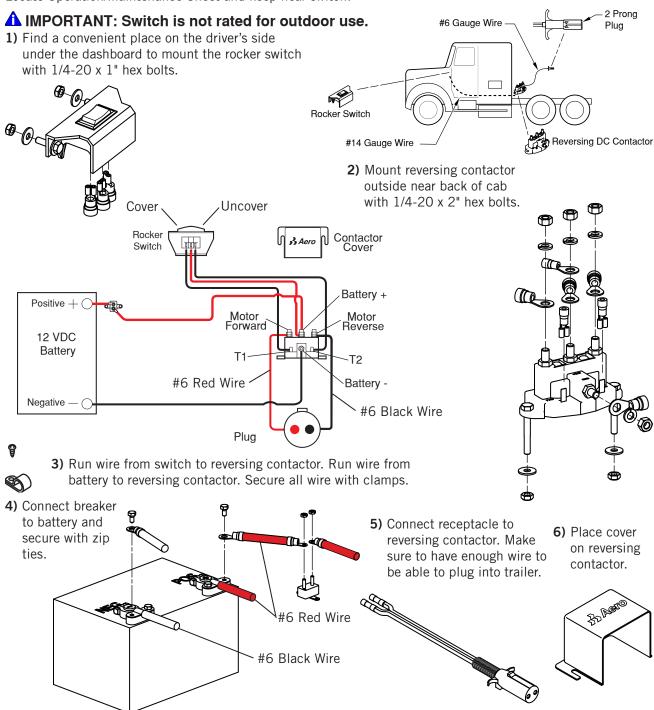




Step 4c

Install Interior Cab Rocker Switch for Semi-trailer Truck

NOTE: Use Tractor Kit #0311-963318 (#6 wire not in kit) Locate Operation/Maintenance Sheet and keep near switch.





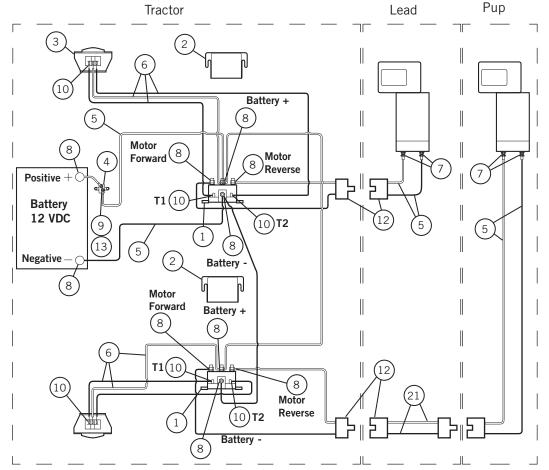
7) Test switch to see if system operates in correct direction. If not, reverse the wires on the motor and retest.



Step 4d

Wiring Diagram for Lead & Pup with Contactors Mounted on Tractor

Index	Description	Qty	Index	Description	Qty
1	Reverse DC Contactor	2	11	Wire End #14 x 3/8 Ring Term.	2
2	DC Contactor Cover	2	12	Plug Quick Disconnect Assembly	2
3	Switch Rocker Assy for DC Contactor	2	13	10-32 Hex Nut	2
4	Circuit Breaker 40 Amp	1	14	1/4-20 x 1 Hex Head Bolt	4
5	Wire #6 Duplex	Varies	15	1/4-20 x 2 Hex Head Bolt	4
6	Wire #14ga 3 Conductor Type SJ	20'	16	1/4 Flat Washer	16
7	Wire End #6 x 1/4 Ring Terminal	4	17	1/4-20 Nylon Hex Jam Nut	8
8	Wire End #6 x 3/8 Ring Terminal	10	18	5/16-24 Hex Nut	8
9	Wire End #6 x #10 Ring Terminal	2	19	5/16 Lock Washer	8
10	Wire End #14 x 1/4 Push on	10	20	Wiring Diagram Reverse Contactor	1
			21	Wire #4 Duplex	Varies







Step 5a

Installing Undermount or Flange Mounted Spring Assembly

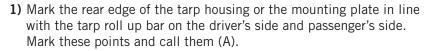
Spring Kit 1/2": 0311-962277 or Spring Kit 5/8": 0311-962278

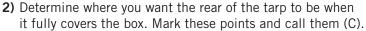
Flange Mounted PowerPack Spring Kit: 0311-960420

NOTE: Use hardware pack #0311-962576

Index Description		Qty	Qty Index Description		Qty	
	1	Flange Mounted Spring (driver side)	1	4	3/8 Flat Washer	16
	2	Flange Mounted Spring (passenger side)	1	5	3/8-16 Nylon Hex Nut	8
	3	3/8-16 x 1 1/4 Hex Bolt	8			

NOTE: Figure 21-2. Notice that the spring assembly (B) is one point of a triangle. The other two points (A & C) are on top of the truck. The two downward-pointing legs of the triangle must be the same length. These steps will make sure that the two legs are equal.





3) Figure 21-2. Find a point at the side of the box that is the same distance from A and C. This is point B, where the spring assembly will be mounted. Mark this point on both sides.

NOTE: The spring assembly can be either bolted or welded to the box or bottom rail. Aero Industries recommends that the plate be bolted.

- 4) Position the driver's side spring assembly (1) to the point marked on the driver's side (B). Clamp the spring assembly into position centering the mounting plate on point B. The top of the mounting plate should be as high as possible from the bottom of the box.
- **5) Figure 21-3.** Drill four 13/32" holes using the mounting plate as a guide.
- **6)** Bolt the spring assembly to the box or rail with 3/8-16 x 1 1/4 hex bolts (3), 3/8 flat washers (4), and 3/8-16 nylon hex nut (5).
- 7) Repeat Steps 5a.4–5a.6 for passenger's side.

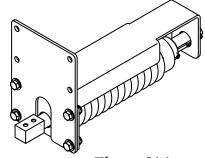
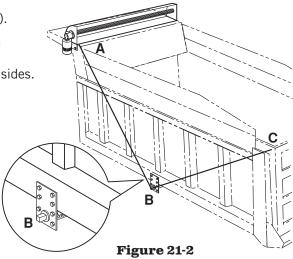
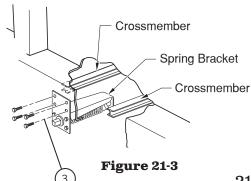


Figure 21-1







Step 5b

Installing Underbody Spring Assembly

Spring Kit 1/2": 0311-962277 or Spring Kit 5/8": 0311-962278

NOTE: Use hardware pack #0311-962576

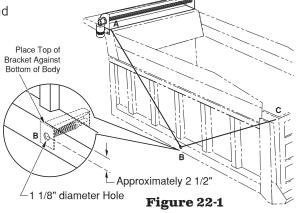
Index Description		Qty	Index	Description	Qty	
	1	Flange Mounted Spring (driver side)	1	4	3/8 Flat Washer	16
	2	Flange Mounted Spring (passenger side)	1	5	3/8-16 Nylon Hex Nut	8
	3	3/8-16 x 1 1/4 Hex Bolt	8	6	Plate Aluminum Cover (optional)	2

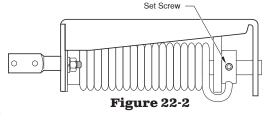
NOTE: Figure 22-1. Notice that the spring assembly (B) is one point of a triangle. The other two points (A & C) are on top of the truck. The two downward-pointing legs of the triangle must be the same length. These steps will make sure that the two legs are equal.

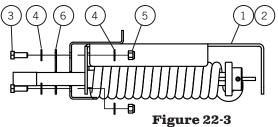
- 1) Mark the rear edge of the tarp housing or the mounting plate in line with the tarp roll up bar on the driver's side and passenger's side. Mark these points and call them (A).
- 2) Determine where you want the rear of the tarp to be when it fully covers the box. Mark these points and call them (C).
- 3) Figure 22-1. Find a point at the side of the box that is the same distance from A and C. This is point B, where the spring assembly will be mounted. Mark this point on both sides.
- **4) Figure 22-2.** Disassemble spring assembly by loosening set screw at rear of assembly. Pull spring support shaft out from the front of assembly.
- 5) Figure 22-2. Place spring assembly housing up underneath dump body aligned at point B. Rest the top edge against the bottom of the dump body. Once in place, trace the holes onto the dump body.
- 6) Drill four 13/32" holes and the 1 1/8" hole with a hole saw.

A CAUTION: When drilling with the hole saw, apply medium pressure to eliminate grabbing and twisting of drill.

- 7) Figure 22-3. Bolt spring assembly housing to the dump body using 3/8-16 x 1 1/4 hex bolt (3), 3/8 flat washer (4), and 3/8-16 nylon hex nut (5). If optional plate aluminum cover (6) is used, place it on the outside of the dump body before bolting in place.
- 8) Re-assemble spring assembly.
- 9) Repeat Steps 5b.4-5b.7 for passenger's side.











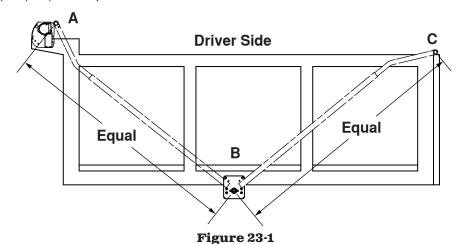
Step 5c

Installing Flange Mounted PowerPack Spring Assembly

Flange Mounted PowerPack Spring Kit: 0311-960420

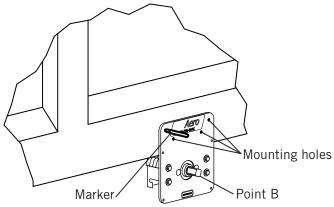
1) Locating the position to install the spring assembly

Figure 23-1. Locate the shaft on the spring at point (B). Point (A) is where the cross arm is located at the tarp housing or end plates and point (B) is where it sits on the tailgate. Make sure that the two distances (AB) & (BC) are equal.



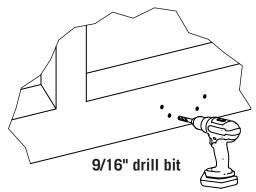
2) Marking the pilot holes

Use mounting holes to mark the hole location. Repeat for opposite side of trailer.

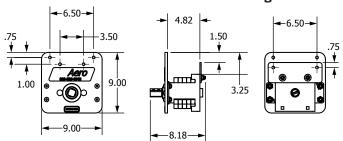


3) Drilling the mounting holes

Using a 9/16" drill bit, drill the mounting holes. Repeat for opposite side of trailer.



Mark and drill both Driver Side and Passenger Side holes.



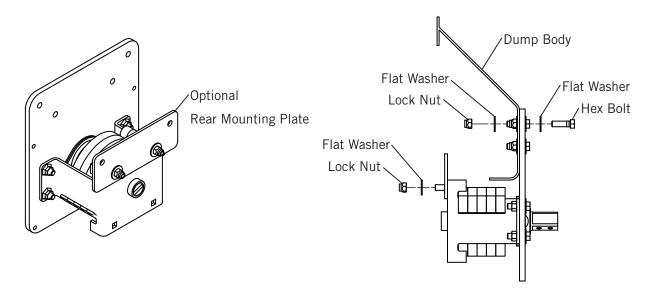




Step 5c (cont.)

4) Mount the spring assembly

Attach the spring assembly to the dump body using 3/8-16 x 1" hex bolts, 3/8 flat washers, and 3/8-16 nylon hex nuts. Repeat for other side of dump body.



5) Attach the Optional Rear Mounting Plate

When extra support is needed the rear mounting plate should be attached. If no structural support is available it will need to be constructed.





Step 5d

Installing PowerPack Spring Assembly

PowerPack Spring Kit: 0311-963233

1) Locating the position to install the spring assembly

Figure 25-1. Locate mounting bracket at point (B). Point (A) is where the cross arm is located at the tarp housing or end plates and point (B) is where it sits on the tailgate. Make sure that the two distances (AB) & (BC) are equal.

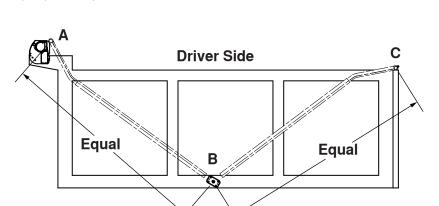
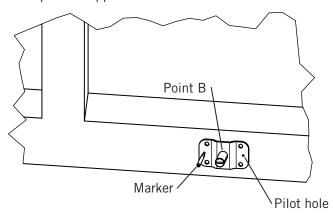


Figure 25-1

2) Marking the pilot holes

Use pilot holes to mark the hole location Repeat for opposite side of trailer.

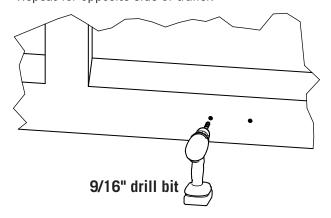


3) Drilling the mounting holes

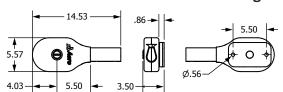
Using a 9/16" drill bit, drill the mounting holes. Repeat for opposite side of trailer.

NOTE: The PowerPack Spring Assembly should be mounted at the bottom of the dump body. If you need to mount it up high, we recommend

using the 565 Series Spring System.



Mark and drill both Driver Side and Passenger Side holes.







Step 5d (cont.)

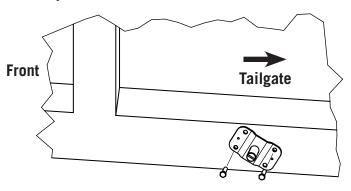
NOTE: Use hardware pack #0311-960528

Index	Description	Qty
1	Mounting Brackets	2
2	1/2-13 x 2" Hex Bolt	4
3	1/2 Flat Washer	4
4	1/2-13 Nylon Hex Nut	4

4) Installing Drive Side Mounting Bracket

⚠ IMPORTANT: Bracket MUST be rotated to the position shown in the figures below to be approved for WARRANTY. System will be damaged beyond repair if brackets are not rotated.

On the driver side, rotate the mounting bracket to the position shown and attach using the $1/2-13 \times 2$ " bolts, 1/2 flat washers, and 1/2-13 nylon hex nuts.

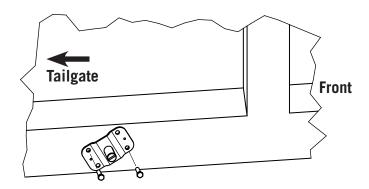


Driver Side of Dump Body

5) Installing Passenger Side Mounting Bracket

⚠ IMPORTANT: Bracket MUST be rotated to the position shown in the figures below to be approved for WARRANTY. System will be damaged beyond repair if brackets are not rotated.

On the passenger side, rotate the mounting bracket to the position shown and attach using the $1/2-13 \times 2$ " bolts, 1/2 flat washers, and 1/2-13 nylon hex nuts.







A IMPORTANT: It is extremely important that you install the springs as indicated in figures below. If the springs are installed incorrectly, springs will be damaged beyond repair

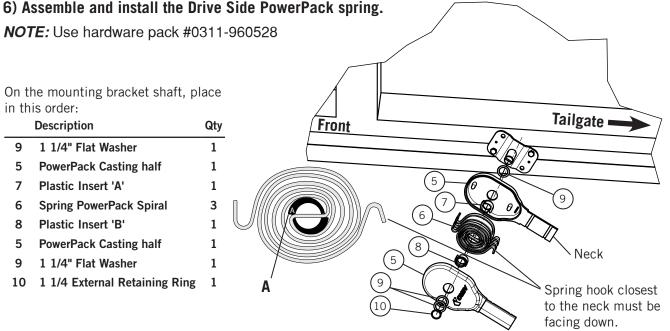
Step 5d (cont.)

and spring warranty will be void.

NOTE: Before installing the powerpack spring assembly, check to see if bend of arm will interfere with operation of truck. Normal position for the bent arm when rotated to the front of the truck is with the elbow facing down (Figure 25-1). To position the elbow facing up, flip the castings around so the flat side is down.

On the mounting bracket shaft, place in this order:

	Description	Qty
9	1 1/4" Flat Washer	1
5	PowerPack Casting half	1
7	Plastic Insert 'A'	1
6	Spring PowerPack Spiral	3
8	Plastic Insert 'B'	1
5	PowerPack Casting half	1
9	1 1/4" Flat Washer	1
10	1 1/4 External Retaining Ring	1



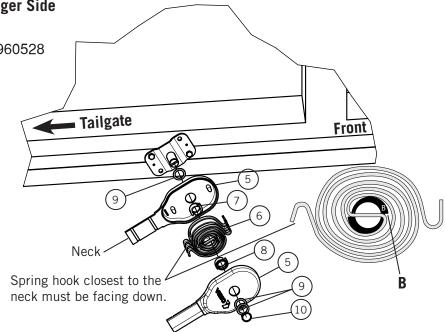
Driver Side of Dump Body

7) Assemble and install the Passenger Side PowerPack spring.

NOTE: Use hardware pack #0311-960528

On the mounting bracket shaft, place in this order:

	Description	Qty
9	1 1/4" Flat Washer	1
5	PowerPack Casting half	1
7	Plastic Insert 'A'	1
6	Spring PowerPack Spiral	3
8	Plastic Insert 'B'	1
5	PowerPack Casting half	1
9	1 1/4" Flat Washer	1
10	1 1/4 External Retaining Ring	1







Step 6a

Installing End Fitting and Steel Lower Swing Arm

NOTE: Use hardware pack #0311-960554

Index	Description	Qty
1	End Fitting	1
2	1/4" Spring Pins	4
3	Swing Arm Lower Steel	2
4	5/16-18 x 2 1/4 Hex Bolt	4
5	5/16-18 Nylon Hex Jam Nut	4

- 1) Figure 28-1. Place swing arm lower (3) onto casting and secure with 5/16-18 x 2 1/4 hex bolt (4) and 5/16-18 nylon hex jam nut (5).
- **2) Figure 28-1.** Place end fitting (1) on the driver's side tension spring assembly shaft so it is facing the rear.

NOTE: Figure 28-2. Before installing the end fitting for the steel arm, check to see if bend of arm will interfere with operation of truck. Normal position for the bent arm when rotated to the front of the truck is with the elbow facing down.

- **3) Figure 28-1.** Drive 1/4" spring pins (2) into the end fitting (1) and through the shaft.
- 4) Repeat for opposite side.

NOTE: On rare occasions, the tension spring assembly may not have enough tension to pull the tarp to the rear of the truck. Test the completed tarp system. If the tension is not sufficient, remove spring pins and pull arm and end fitting off of shaft and preload the tension spring assemblies by turning the shafts 1/4 turn towards the front and reattaching the swing arms.

NOTICE: Release all tension on springs before removing swing arms.

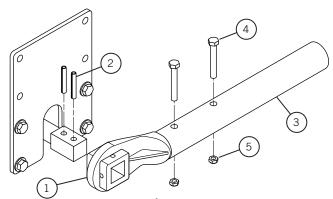


Figure 28-1

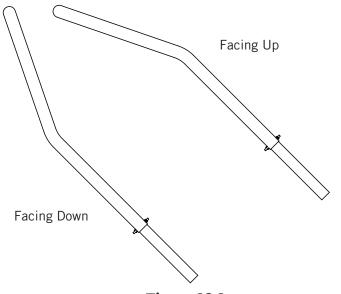


Figure 28-2





Step 6b

Installing End Fitting and Aluminum Lower Swing Arm

_	Index	Description	Qty
	1	End Fitting	1
	2	1/4" Spring Pins	4
	3	Swing Arm Lower Aluminum	2
	4	5/16-18 x 2 HWH Type F	4

1) Figure 29-1. Place end fitting (1) on the driver's side tension spring assembly shaft so it is facing the rear.

NOTE: Figure 29-2. Before installing the end fitting for the aluminum arm, check to see if bend of arm will interfere with operation of truck. Normal position for the bent arm when rotated to the front of the truck is with the elbow facing down.

- **2) Figure 29-1.** Drive 1/4" spring pins (2) into the end fitting (1) and through the shaft.
- 3) Repeat for opposite side.
- **4) Figure 29-1.** Place swing arm lower aluminum (3) onto casting and secure with 5/16-18 x 2 HWH Type F (4).

NOTE: On rare occasions, the tension spring assembly may not have enough tension to pull the tarp to the rear of the truck. Test the completed tarp system. If the tension is not sufficient, remove spring pins and pull arm and end fitting off of shaft and preload the tension spring assemblies by turning the shafts 1/4 turn towards the front and reattaching the swing arms.

NOTICE: Release all tension on springs before removing swing arms.

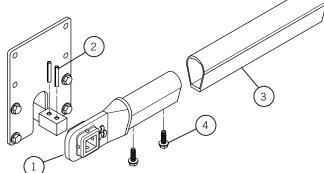


Figure 29-1

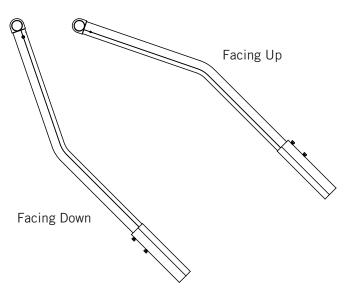


Figure 29-2





Step 6c

Installing Aluminum Lower Swing Arm on PowerPack Spring Assembly

NOTE: Use hardware pack #0311-960528

Index	Description	Qty
1	Swing Arm Lower Aluminum	2
2	3/8-16 x 2 HWH Type F	4

NOTE: Before installing the swing arm lower aluminum, check to see if bend of arm will interfere with operation of truck. Normal position for the bent arm when rotated to the front of the truck is with the elbow facing down.

- 1) Figure 30-1. Slide swing arm lower aluminum (1) onto powerpack spring assembly.
- **2) Figure 30-1.** Secure with 3/8-16 x 2 HWH type F (2).
- 3) Repeat for opposite side.

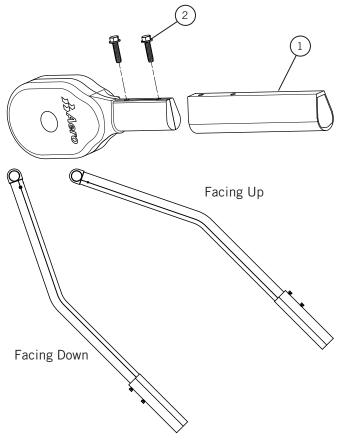


Figure 30-1





Step 7a

Installing Steel Cross Arm and Connecting Arms

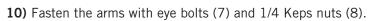
NOTE: Use parts kit #0311-963226 & hardware pack #0311-960554

Index	Description	Qty	Index	Description	Qty
1	Tarp	1	6	1/4-20 x 2 1/2 Hex Bolt	2
2	Cross Arm	1	7	1/4 Eye Bolt	2
3	Connecting Arm D.S.	1	8	1/4 Keps Nut	4
4	Connecting Arm P.S.	1	9	ArmGuard rubber bumpers	2
5	4" Tarp-Centering Springs	2	10	Mild soap and water (optional)	na

NOTE: The driver's side and passenger's side connecting arms can be interchanged to provide greater clearance with the box. Each connecting arm has a different part number. Before ordering replacement parts, double check the part number.

- 1) Figure 31-1. Feed the cross arm (2) through the pocket in the end of the tarp (1).
- 2) Slide both connecting arms (3 & 4) onto the cross arm.
- **3)** Raise the swing arm to the top of the tailgate and slide the ends of the connecting arms (3 & 4) over the swing arm.
- **4)** Square the tarp and the rear cross bar with the top of the tailgate.
- 5) Figure 31-1. Drill a 9/32" hole through each swing arm using the holes in the connecting arms as a guide.
- 6) Fasten the swing arms to the connecting arms with $1/4-20 \times 2 \cdot 1/2$ hex bolts (6) and 1/4 Keps nut (8).
- 7) Center the tarp from side to side on the rear cross bar.
- **8) Figure 31-1.** Measure 4" from the edge of the tarp on both sides. Drill 9/32" horizontal hole through the connecting arm and the cross arm. DO NOT drill through the tarp.
- **9) Figure 31-2.** Before installing eye bolts (7) and springs (5), slide rubber bumper (9) over each end of cross arm and position inside of notch in tarp. Position bumpers to rest on tailgate.

NOTE: ArmGuard rubber bumpers can be used on swing arms as well. ArmGuard rubber bumpers help prevent swing arm and dump body damage during motion.



11) Attach the spring (5) to the grommet in each corner of the tarp and eye bolt (7). Crimp the ends of the springs.

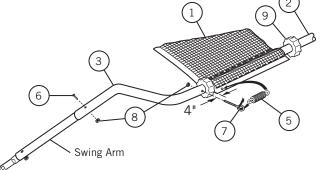


Figure 31-1

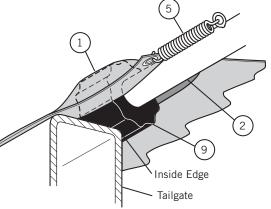


Figure 31-2





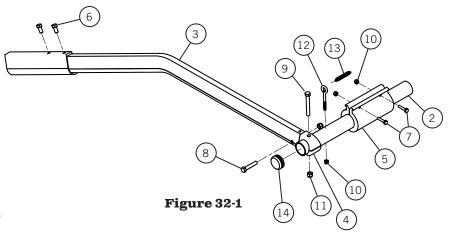
Step 7b

Installing Upper Swing Arms and Cross Arm

NOTE: Use parts kit #0311-963220 or #0311-963221 & hardware pack #0311-963214

Index	Description	Qty	Index	Description	Qty
1	Tarp	1	8	3/8-16 x 2 Hex Bolt	2
2	Cross Arm	1	9	3/8-16 x 3 Hex Bolt	2
3	Upper Swing Arm	2	10	1/4-20 Nylon Hex Jam Nut	6
4	Arm Casting	2	11	3/8-16 Nylon Hex Nut	4
5	Rubber Bumper	2	12	1/4-20 x 2 1/2 Eye Bolt	2
6	3/8-16 x 3/4 Hex Bolt	4	13	4" Tension Spring	2
7	1/4-20 x 1 Hex Bolt	4	14	Plug End	2

- 1) Figure 32-1. Insert arm casting (4) into upper swing arm (3) and secure with 3/8-16 x 2 hex bolt (8) and 3/8-16 nylon hex nut (11). Repeat for second arm casting (4) and upper swing arm (3).
- 2) Figure 32-1. Slide upper swing arm (3) into lower swing arm and insert 3/8-16 x 3/4 hex bolts (6) into the 2 tapped holes of the lower swing arm. Repeat on opposite side.
- **3)** Roll out tarp (1) in bed of truck. Make sure the pocket is at the rear of the truck.
- 4) Insert cross arm (2) through the pocket in the tarp (1) at the tailgate; center and place on the bed.
- 5) Insert 1/4-20 x 1 hex bolt (7) into each rubber bumper and attach 1/4-20 nylon hex jam nut (10).
- **6)** Slide 2 rubber bumpers (5) onto each side of the cross arm (2).
- 7) Lift one swing arm and insert cross arm (2) into arm casting (4). Insert far enough so opposite swing arm can be lifted and inserted through the opposite arm casting (4).
- **8) Figure 32-2.** Adjust cross arm (2) on one side to extend 1/2"-3/4" beyond arm casting (4).



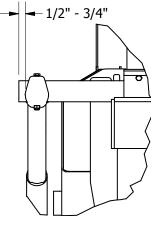


Figure 32-2





Step 7b (cont.)

- 9) With the cross arm (2) resting on the tailgate, drill a 1/4" hole through the tube using the hole in the arm casting (4) as a guide. Secure with 3/8-16 x 3" hex bolt (9) and 3/8-16 nylon hex nut (11)
- **10) Figure 33-1.** Position swing arm to be parallel with the bed. While maintaining that position, slide the opposite swing arm onto the cross arm (2) until it is parallel with the bed.
- 11) Repeat Step 7b.9.
- 12) Figure 33-1. Cut excess cross arm (2) which extends 1/2"-3/4" beyond arm casting (4).
- 13) Insert plug ends (14) into each end of cross arm (2).
- **14)** Position one set of rubber bumpers (5) to sit on tailgate and one set to hit end plates of the tarp housing, then tighten bolts.

OPTIONAL: Figure 32-1. Use eye bolt and spring to keep tarp centered.

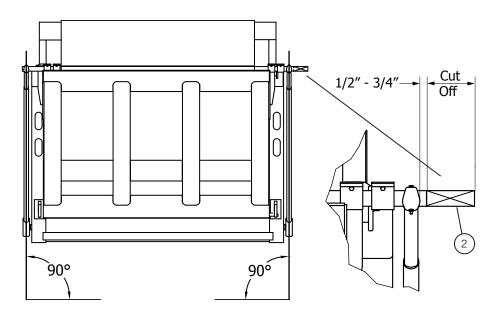


Figure 33-1



33

Step 8a

Installing Tarp to Roll Up Bar, Roll Under (Standard)

NOTE: Hardware taped to roll bar

Index	Description	Qty	Index	Description	Qty
1	Tarp	1	3	1/4-20 Square Nut	6
2	1/4-20 x 1/2 Pan Head	6	4	1/4 Split Lock Washer	6

- 1) Figure 34-1. Pull the loose end of the tarp (1) under the roll up bar, winding from the underside. Make sure the tarp is centered from side to side.
- 2) Mark the tarp roll up bar for fastener placement using the grommets in the tarp as a guide.
- 3) Secure tarp (1) with 1/4-20 x 1/2 pan head (2), 1/4-20 square nuts (3), and 1/4 split lock washers (4).

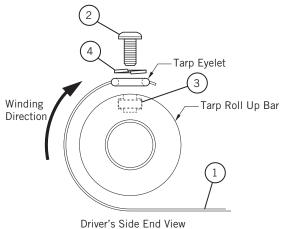


Figure 34-1

Step 8b

Installing Tarp to Roll Up Bar, Roll Over (Optional)

NOTE: Hardware taped to roll bar

Index	Description	Qty	Index	Description	Qty
1	Tarp	1	3	1/4-20 Square Nut	6
2	1/4-20 x 1/2 Pan Head	6	4	1/4 Split Lock Washer	6

- 1) Figure 34-2. Pull the loose end of the tarp (1) over the roll up bar, winding from the topside. Make sure the tarp is centered from side to side.
- 2) Mark the tarp roll up bar for fastener placement using the grommets in the tarp as a guide.
- 3) Secure tarp (1) with 1/4-20 x 1/2 pan head (2), 1/4-20 square nuts (3), and 1/4 split lock washers (4).

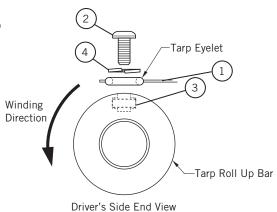


Figure 34-2

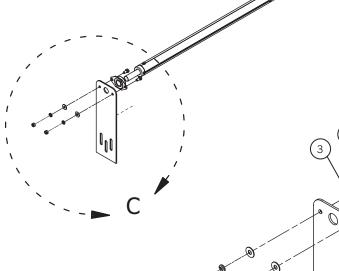




Step 9

Roll Bar Mounting

1) Figures 35-1 & 35-2. Assemble the roll bar mounting assembly.



2) Figure 35-3. Set the width of the two mounting plates to the width of where they will be mounted on the bed.

Index	Description	Qty
1	BRACKET, ROLL BAR MOUNTING	2
2	ROLL UP BAR ASSY	1
3	BEARING TWO BOLT FLANGE	2
4	3/8-16 UNC - 0.75 - BOLT HHCS	4
5	3/8-16 HEX FINISH NUT	4
6	WASHER FLAT 3/8"	4
7	3/8 - SPLIT LOCK WASHER	4

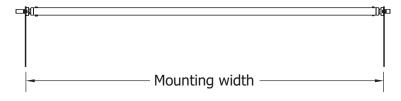


Figure 35-1

Figure 35-2

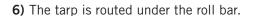
Figure 35-3

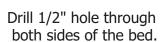




Step 9 (cont.)

- **3) Figure 36-1.** Mount roll bar assembly to the bed. Clamp the assembly to the bed. Make sure the roll bar is level to the bed.
- **4) Figure 36-2.** Drill six 1/2" holes through the bed, using the slots in the mounting brackets as a guide.
- **5)** Attach using the 1/2-13 x 5" bolts, 1/2 flat washers, and 1/2-13 nylon hex nuts. Remove clamps holding assembly to bed.





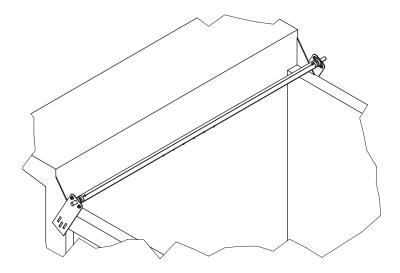


Figure 36-1

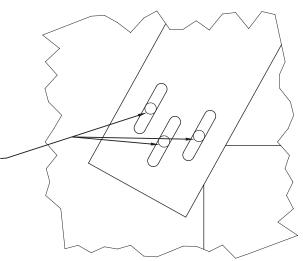


Figure 36-2





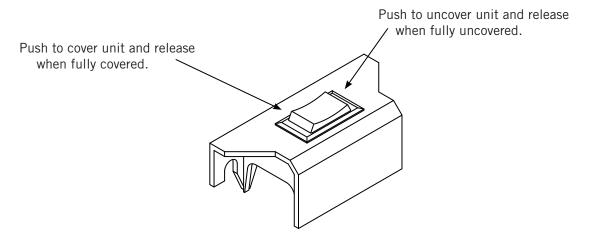
Easy Cover® Electric Model

Operation Instructions

NOTICE Face vehicle into the wind during operation. Wind may cause tarp to sail and damage system.

NOTICE NOT releasing the switch when in the covered or uncovered position is reached may cause the motor to burn out.

Direction switch operation depends on how it is wired.



Maintenance Recommendations

Aero Industries recommends a weekly inspection of the following items:

MPORTANT: Replace all worn or broken parts immediately.

Repairs must ONLY be made after proper instruction.

- Inspect Tarp for wear and tears.
- Inspect Arms for damage (cracked, dented or bent).
- Nuts & Bolts: Make sure all mounting bolts and nuts are in place and tight and that no parts are worn or damaged.
- Bearings: Pull the shafts from side to side and in and out. If there is excessive play, replace the bearings. Apply penetrating oil lightly as needed.
- Springs: Examine springs for breakage or distortion. Apply a light coat of penetrating oil to tension springs as needed.
- Electrical Connections: Check all electrical connections and tighten any loose connections.
- Safety Labels: Clean labels with soap and water. Replace if damaged and/or difficult to read.

Replacement Parts and instructions may be obtained from your Aero dealer or by contacting Aero Industries.

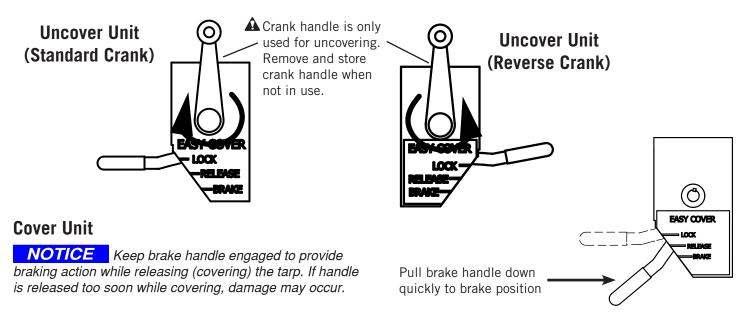




Easy Cover® Manual Model Operation Instructions

ACAUTION Crank handle is only used for uncovering. Remove and store crank handle when not in use.

NOTICE Face vehicle into the wind during operation. Wind may cause tarp to sail and damage system.



Maintenance Recommendations

Aero Industries recommends a weekly inspection of the following items:

- ⚠ IMPORTANT: Replace all worn or broken parts immediately. Repairs must ONLY be made after proper instruction.
- Inspect Tarp for wear and tears.
- Inspect Arms for damage (cracked, dented or bent).
- **Bearings:** Pull the shafts from side to side and in and out. If there is excessive play, replace the bearings. Apply penetrating oil lightly as needed.
- Springs: Examine springs for breakage or distortion. Apply a light coat of penetrating oil to tension springs as needed.
- Fasteners: Make sure all mounting bolts and nuts are in place and tight and that no parts are worn or damaged.
- Chain: Check the chain tension, that links move smoothly, and make sure the master link is on. Lubricate the chain regularly with penetrating oil.
- **©** Electrical Connections: Check all electrical connections and tighten any that have become loose.
- Safety Labels: Clean labels with soap and water. Replace if damaged and/or difficult to read.

Replacement Parts and instructions may be obtained from your Aero dealer or by contacting Aero Industries.











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