

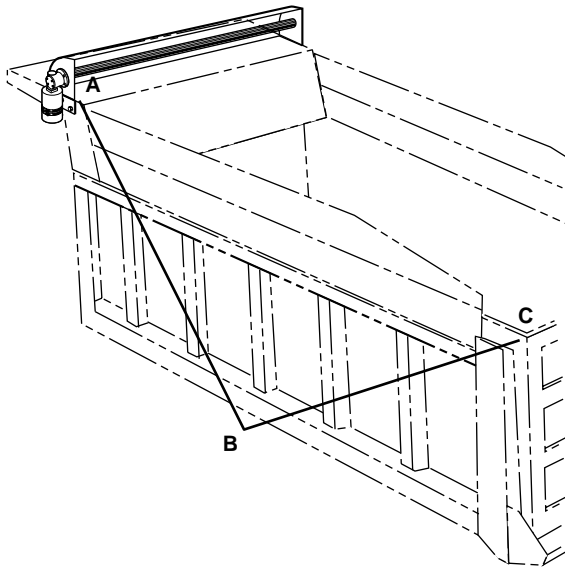
How to Install the Enclosed Sidemount Tension Spring Assembly

Parts you will need:

- Mounting brackets (2)
- Male arm casting (2)
- Female arm casting (2)
- External retaining ring (2)
- Plastic bushing (4)
- 1 1/4" flat washer (4)
- 3/8" x 2" self tapping bolts (4)
- 1/2" x 1 3/4" flat head bolts (4)
- 1/2" nuts (4)

Note: Refer to figure 1. Notice that the tension spring assembly (B) is one point of a triangle. The other two points (A and C) are on the 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.

Figure 1



1. Mark the rear edge of the crank assembly 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. Find a point at the side of the box that is the same distance from A and C. This is point B, where the

tension spring assembly will be mounted. Mark this point on both sides.

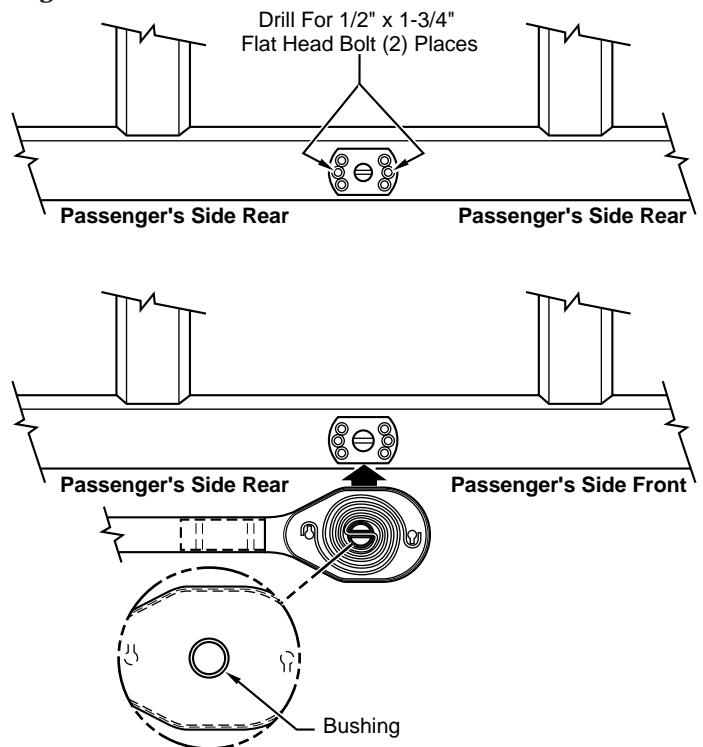
4. Install the mounting bracket so the groove in the shaft is parallel with bottom rails using the 1/2" x 1 3/4" flat head bolts. The bolts are installed by drilling a 1/2" hole through the two middle holes and installing the bolts. Shaft should lie on point B.
5. Place springs in castings in the position shown in Figure 2.

Note: If you wish to install the arm with the flat side to the rear, the castings may be swapped. The spring must be positioned as shown (open end of rear hook down).

CAUTION: It is extremely important that you install the springs as indicated in Figure 2. If springs are installed incorrectly, springs will be damaged beyond repair and **spring warranty will be void.**

6. Press plastic bushings in center holes, both sides.
7. On the mounting bracket shaft, in this order, place a 1 1/4" flat washer, then the arm assembly, another 1 1/4" flat washer, and then fasten with an external retaining ring.

Figure 2



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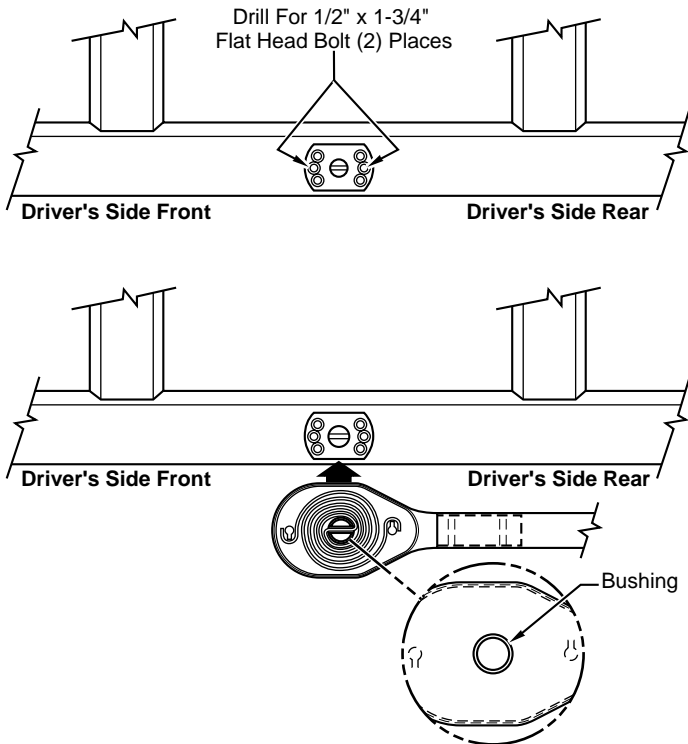
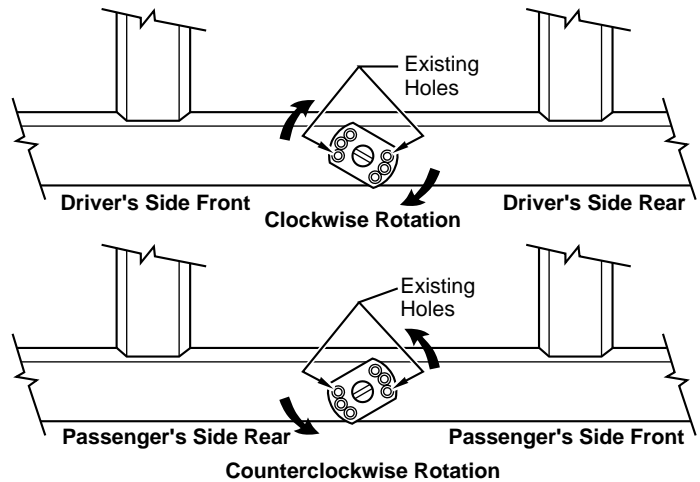


Figure 3



- Fit the end of the swing arm with the untapped holes over the end of the casting assembly. Align the holes in the arm and the casting.
- Insert the self tapping bolts through the holes in the arm. Drive the self tapping bolts into the casting assembly with an air wrench to lock the arm to the casting.
- If more spring tension is desired, remove bolts from mounting brackets on driver's side of truck, rotate bracket 30° clockwise, so next set of holes lines up with existing holes in truck body. Then, re-install bolts. See Figure 3. Repeat procedure for passenger's side **except** rotate bracket counter-clockwise.

WARRANTY

Aero products come with a one year warranty on all parts. It's another example of our ongoing commitment to customer satisfaction and quality.

CUSTOMER SERVICE

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Our customer service technicians are trained to help you. Whether it's ordering, installation, or just general information on our products, you can count on expert advice from Aero.

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Patent Pending

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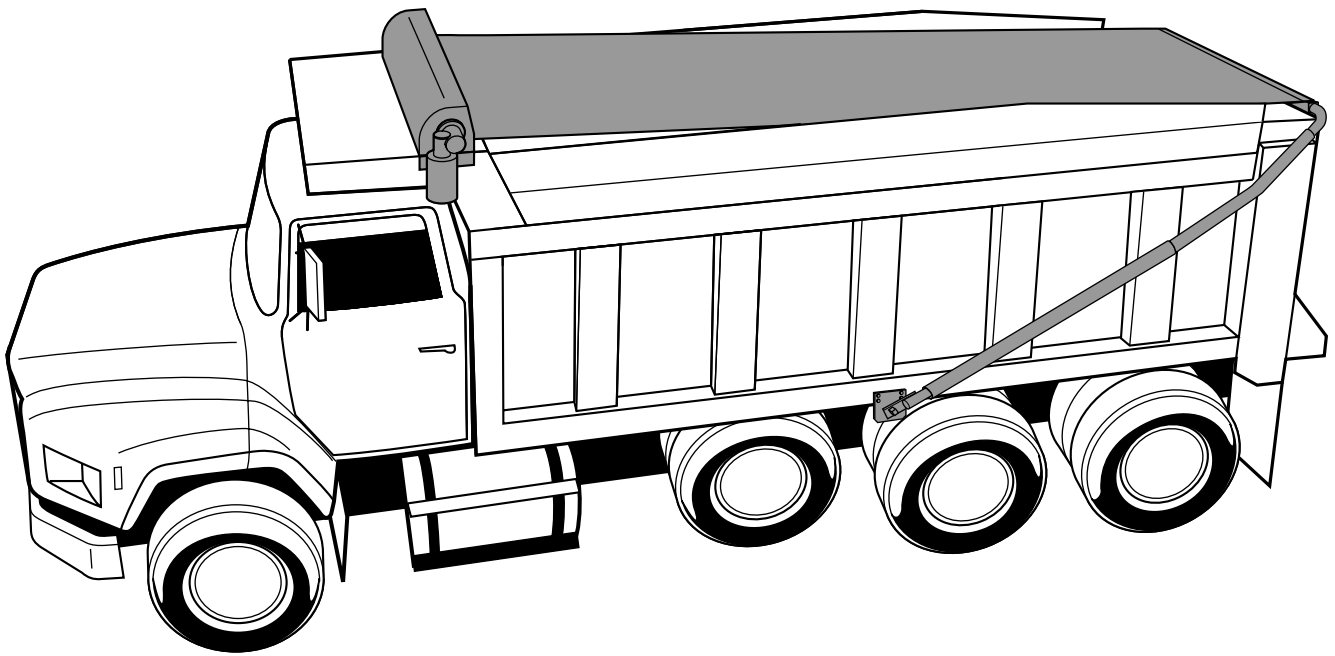
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Easy Cover 500/550

500 Series
(Model 500 V6.0 and Model 550 V6.0)

Installation, Maintenance,
and Safety Instructions



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

Easy Cover 500/550



Easy Cover 500/550

Important: This manual explains how to install, operate, and maintain models 500 and 550. Before installing or operating the Easy Cover, read the entire manual.

Three kinds of special explanations will appear throughout the manual. These are Warning, Caution, and Note. Be sure to read and follow them.

Warning: Possible danger to the operator or a bystander. The operator or bystander could be injured if you ignore this information.

CAUTION: Risk to the product. If you ignore this information, the Easy Cover or the truck could be damaged.

Note: Contains additional information about a feature or step critical to the operation of the cover.

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If You Have Wind Deflector Go To Step 2

STEP 1

How to Install Tarp Housing

Parts you will need:

Aluminum housing angles

3/8" x 1" hex bolts (6)

3/8" hex nuts (6)

3/8" lock washers (12)

5/16" x 1" carriage bolts (4)

5/16" split lock washers (4)

5/16" nuts (4)

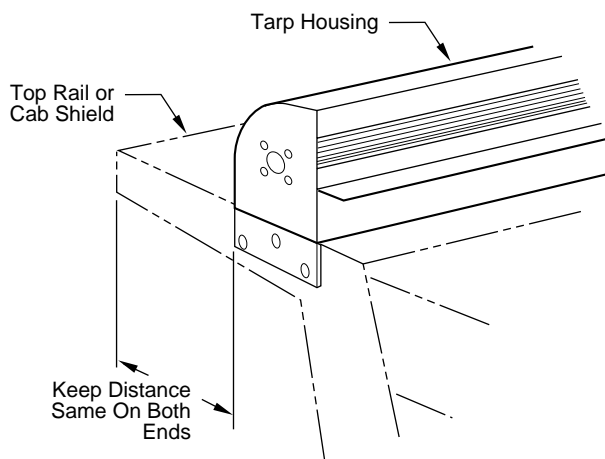
5/16" screws (2)

Note: If an aluminum mounting angle does not set squarely against the top rail, use shims to square the plate. Shim material is not included in the assembly package.

Warning: Before installing the electric motor visually check the path of the swing arms so they do not obstruct the door or create a hazard to the operator. The swing arms will come to within 9" of the electric motor.

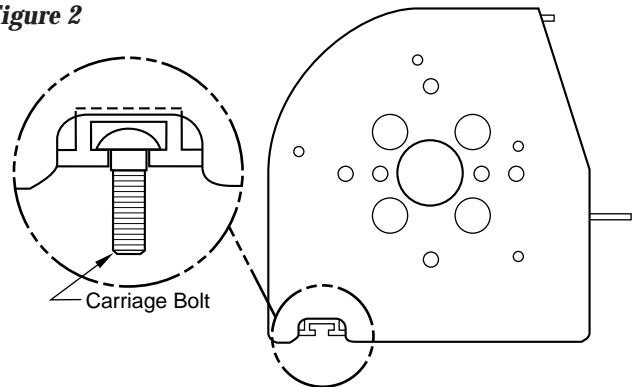
1. Refer to figure 1. Set tarp housing on top of cab shield and as far forward as possible. Measure the distance from front edge of cab shield to front edge of housing. Make sure this distance is the same on the passenger side of cab shield.

Figure 1



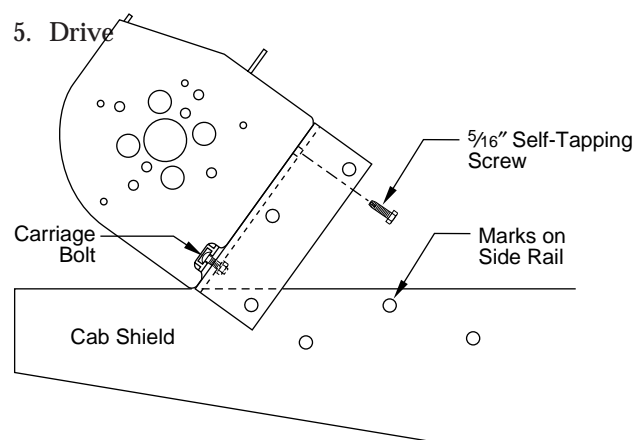
2. Slide aluminum angle under tarp housing so the three holes in the angle are facing out. Lift housing carefully and slide the 5/16" carriage bolt in slot. (See figure 2) Align carriage bolt to fit down into the forward hole in the angle. Apply carriage bolt, washer and nut. Secure loosely.

Figure 2



3. Repeat STEP 2 on passenger side of cab shield. Mark the three holes in the aluminum angle onto the side rail of the cab shield on both sides. Measure distance from front of cab shield to front of housing once more to insure accuracy. (See Figure 1)
4. Remove angles and drill 13/32" holes through the side rail where marked. Tighten angle to housing with the carriage bolts, nuts, and washers. Tip tarp housing up and drill 9/32" hole in housing through remaining hole in angle. (See Figure 3)

Figure 3



screws in housing to secure angle. Set housing back down in place. Align hole in angle with holes in side rail and fasten with bolts, nuts, and lock washers.

Optional Mounting Instructions

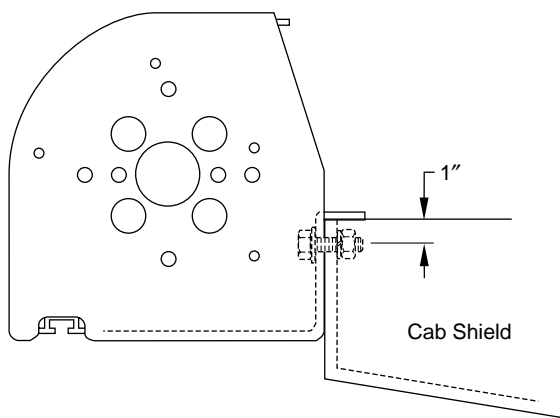
Parts you will need:

- Tarp housing
- 3/8" x 1" hex bolts (6)
- 3/8" hex nuts (6)
- 3/8" lock washers (6)

Note: If housing does not fit squarely against cab shield, use shims to square the housing. Shim material is not included in the assembly package.

- Refer to figure 4. Center the housing on the front edge of the cab shield and clamp in place. Drill one hole about 2" from each end (and about 1" down) of the housing and space remaining four bolts evenly in between.

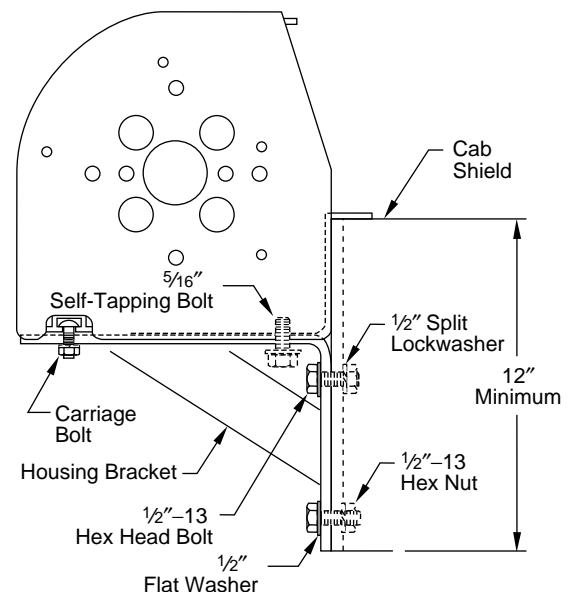
Figure 4



Optional Bracket Installation

- Refer to figure 5. Slide four 5/16" x 1" carriage bolts into housing slot, two on each end of housing. Align carriage bolts so they fit into the two holes in the mounting bracket. Apply washers and nuts, secure loosely. Slide each bracket approximately 12" from each end of trailer body or cab shield. Drill 1/2" holes through holes in brackets and secure tight with 1/2"-13x5" bolts, washers, and nuts. Tighten nuts on carriage bolt. Drill 9/32" holes through remaining holes in bracket and drive 5/16" self-tapping screws into housing to secure the back of the housing to the bracket.

Figure 5



(Now Go To Step 6)

STEP 2

How to Install the Mounting Plates and Electric Motor

Parts you will need:

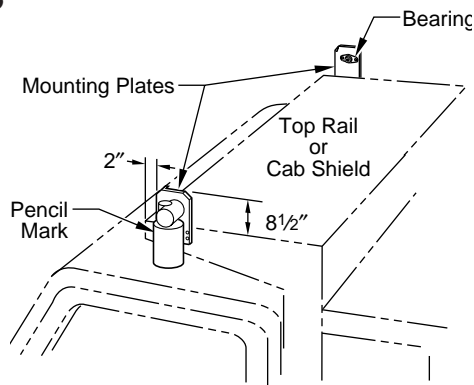
- Side mounting plates (2)
- 3/8" x 1" hex bolts (6)
- 3/8" hex nuts (6)
- 3/8" lock washers (6)

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

Warning: Before installing the electric motor visually check the path of the swing arms so they do not obstruct the door or create a hazard to the operator. The swing arms will come to within 9" of the electric motor..

1. Refer to figure 6. Make a pencil mark 2" back from the front of the top rail (or cab shield).

Figure 6



2. Align the forward edge of the driver's side mounting plate with the pencil mark, and position its top edge 8 1/2" above the top rail. The bearing on the mounting plate should face inward, make sure the tab on top faces forward.
3. Mark the three mounting holes on the top rail. Remove the plate.
4. Drill three 13/32" holes through the top rail where marked.
5. Bolt the mounting plate in place with the bolts, nuts, and lock washers.

STEP 3

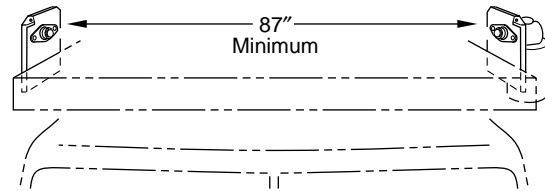
How to Install the Roll-up Bar

Parts you will need:

- Roll-up bar (1)
- 1/4" hex nut (1)
- 1/4" x 2 1/4" bolt (1)

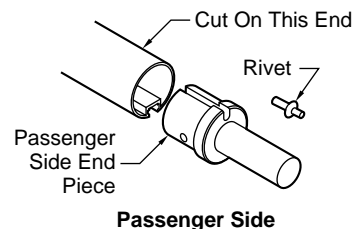
1. Align the passenger's side plate with the driver's side plate as suggested in Step 2.1–2.2. Clamp the passenger's side plate in place. Refer to figure 6.
2. Refer to figure 7. Measure the distance between the driver's side and passenger's side plates. It must be at least 87". If it is not, place shims equally on both sides between the cab shield and the mounting plates to create this distance. Measure the final distance and remove the passenger's side plate.

Figure 7



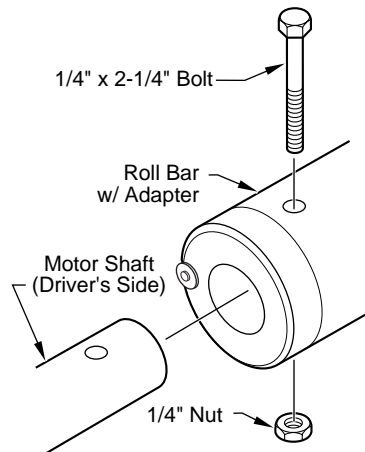
3. Refer to figure 8. Pull the passenger's side end piece out of the roll bar (it's the end with a short shaft sticking out). If the expansion rivet is holding the passenger's side end in place, the nail in the expansion rivet can be unscrewed from the rest of the expansion rivet. This allows the end to be removed. The expansion rivet and nail can be reused. Cut the roll bar 3 1/2" less than the distance between the plates by cutting the extra length from the passenger's side. This dimension includes the driver's side end which should still be in place. Insert the square nuts into the channel. Reassemble the roll up bar.

Figure 8



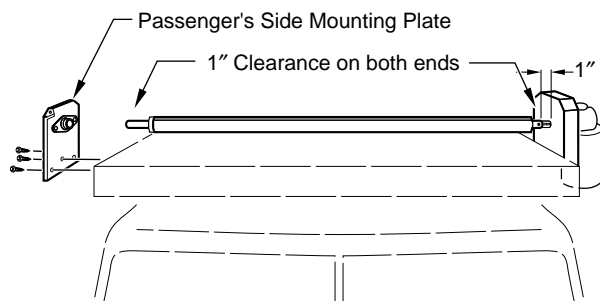
4. Refer to figure 9. Slide the driver's side of the roll bar onto motor shaft. Align the holes in the shaft and the roll bar. Attach the roll bar to the motor with the $\frac{1}{4}$ " x 2 $\frac{1}{4}$ " bolt and $\frac{1}{4}$ " nut.

Figure 9



5. Refer to figure 10. Slide the passenger's side plate over the passenger's side shaft of the roll bar. Install the passenger's side end plate on the cab shield by copying Steps 2.3-2.5. Tighten the set screws on the passenger's side bearing. There should be 1" of clearance between the roll bar and the bearings.

Figure 10



STEP 4

How to Install the Wind Deflector

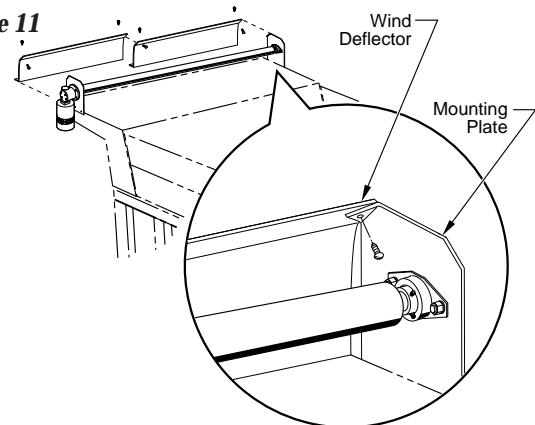
Parts you will need:

- Wind deflectors (2)
- $\frac{1}{4}$ " x $\frac{3}{4}$ " machine screws (4)
- $\frac{1}{4}$ " Keps nuts (4)
- $\frac{5}{16}$ " self-tapping screws (5)
- $\frac{5}{16}$ " lock washers (5)

Note: If you are mounting the deflector somewhere other than across the front edge of the cab shield, you will have to place a support under the wind deflector to support the center of the deflector as well as possible to prevent air from getting under the tarp. Support is not included in the assembly package.

1. Refer to figure 11. Place one deflector on the passenger side mounting plate. Align the top hole in the deflector with the hole in the tab of the mounting plate.

Figure 11



2. Fasten the deflector to the tab with a $\frac{1}{4}$ " screw and nut. The screw head must be on the back (tarp side) of the deflector.
3. Place the other deflector on the driver's side mounting plate. Align the top deflector hole with the tab on the mounting plate. (The two deflector plates will overlap.)
4. Secure the driver's side deflector plate with a screw and nut. The screw head must be on the back (tarp side) of the deflector.
5. Where the two deflector plates overlap, drill a $\frac{9}{32}$ " hole through both plates. Fasten with a $\frac{1}{4}$ " screw and nut.
6. Drill at least three $\frac{9}{32}$ " holes in the top rail or cab shield using the holes in the bottom flange of the deflector plates as a guide. Fasten the deflector plates to the top rail or cab shield with $\frac{5}{16}$ " self-tapping screws and lock washers.

STEP 5

How to Install the Electric Motor and Roll-up Bar

Parts you will need:

Electric motor/mounting plate assembly (1)

3/8" x 1 1/4" screw (4)

3/8" hex nut nyloc (4)

3/8" flat washer (4)

Flange bearing (1)

3/8" x 1" bolt (2)

3/8" hex nut (2)

3/8" washer (2)

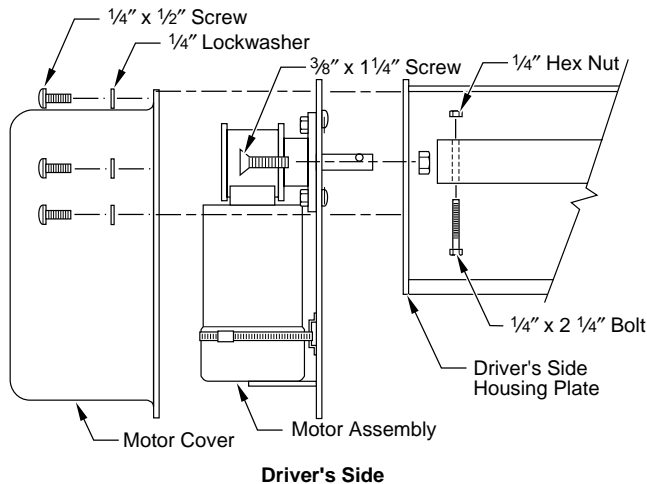
1/4" x 2 1/4" bolt (1)

1/4" hex nut (1)

Key (1)

1. Take motor cover off of the electric motor assembly by removing the five screws on the outside of the cover. Lay screws aside for Step 6.
2. See Figure 12. Fasten the motor assembly to the driver's side housing plate using the 3/8" screw screws provided.

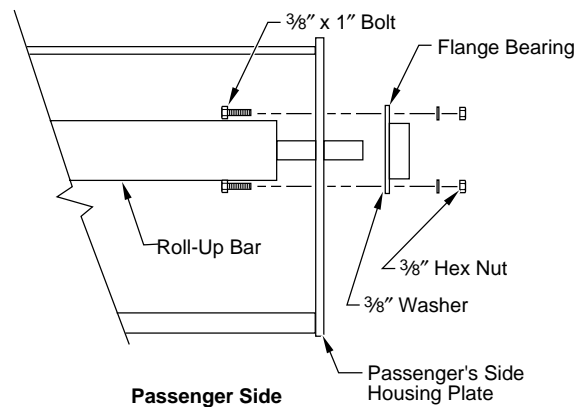
Figure 12



3. Remove the end of the roll bar as described in Step 3.3. Insert the square nuts into the channel. Reassemble the roll bar. The bar is already cut to fit the housing

4. Insert passenger side end of the roll-up bar into the passenger's side of the tarp housing. Now slide driver's side end of roll-up bar over motor shaft and line up hole in roll-up bar with hole in motor shaft. Fasten securely with 1/4" x 2 1/4" bolt and 1/4" nut. (Refer to Figure 12)
5. See Figure 13. Slide bearing over roll-up bar shaft on passenger side. Fasten with 3/8" x 1" bolts, washers and nuts. Tighten both set screws on the bearing collar.

Figure 13



6. Replace cover on motor with the five 1/4" screws.

STEP 6

How to Install the Electrical Controls

Parts you will need:

Rotary switch (1)

Circuit breaker (1)

Metal loom plastic clamps (12)

#6 to #10 wire butt connectors (4)

#6 x #10 ring connectors (6)

#6 x 3/8" ring connectors (2)

Mounting bracket (1)

Rotary switch decal (1)

1/4 x 3/8 PPH S/T screws (12)

1/4-20 x 3/4 HHCS bolts (2)

1/4" flat washers (4)

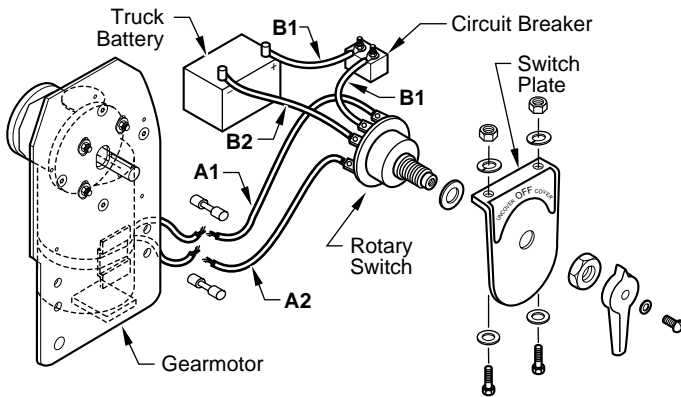
1/4-20 x 3/4 screws (2)

1/4-20 hex nuts (2)

Wiring diagram (1)

1. Refer to figure 14. Peel decal and place on the switch plate.

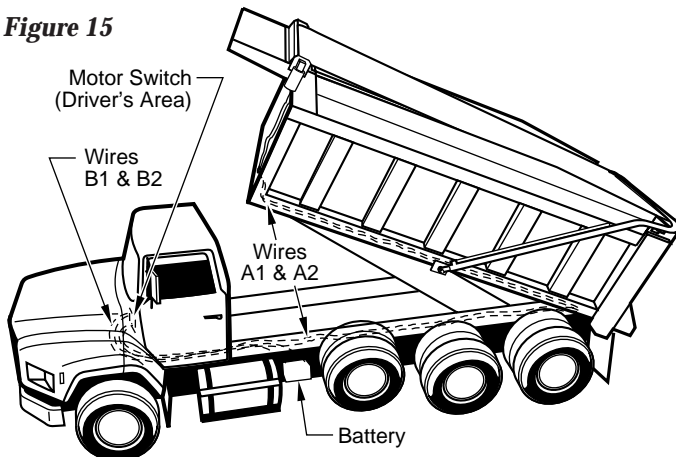
Figure 14



Note: Reference wiring diagram for additional information on wiring.

2. Find a convenient place, on the driver's side under the dashboard, to mount the switch plate. Using the switch plate as a template, mark and drill two holes for the $\frac{1}{4}$ " bolts.
3. Mount the switch plate using the $\frac{1}{4}$ " x $\frac{3}{4}$ " bolts, nuts and washers.
4. Remove the switch handle and fastening nut from the rotary switch. Pass the rotary switch's operating shaft through the hole in the switch plate from behind the plate. Replace the nut and tighten it to secure the switch to the plate. Replace the switch handle.
5. Refer to figure 15. Measure the wiring distance from the gearmotor to the pivot of the box, then from the pivot point through the truck body to the switch in the cab. If possible, run the wiring along an existing wiring harness.

Figure 15



6. Run the wiring from the gearmotor to the rotary switch. (See figure 15) Secure wire using metal loom clamps and screws provided. Run wire to protected locations avoiding pinch points and sharp objects.
7. Fasten the two gearmotor leads to the ends of wire. (See figure 14) This connection should be made with two butt connectors.
8. Fasten #6 x #10 ring terminals to the ends of wire A1 and A2, at the switch, attach these two ring terminals to the marked terminals of the rotary switch.
9. Measure the wiring distance between the rotary switch and the truck's battery. If possible, run the wiring along an existing wiring harness.
10. Run wiring to the truck's battery.
11. Fasten #6 x #10 ring terminals to the ends of wire B1 and B2, at the switch, connect these ends to the marked terminals on the rotary switch.

CAUTION: Incorrect wiring can cause failure to the Easy Cover system and possible harm to the operator.

12. Separate wire at battery approximately 12" back.
13. Fasten a #6 x $\frac{3}{8}$ " ring terminal to both wires B1 and B2.
14. Pick a convenient location to install circuit breaker along wire B1. (See figure 14)
15. Cut wire B1 and attach circuit breaker using two butt connectors.
16. Connect wire B1 to positive terminal and connect wire B2 to negative terminal.

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

Note: Test wiring by moving the rotary switch handle to "Cover" and "Uncover." If operation is reversed, reverse polarity at A1 and A2.

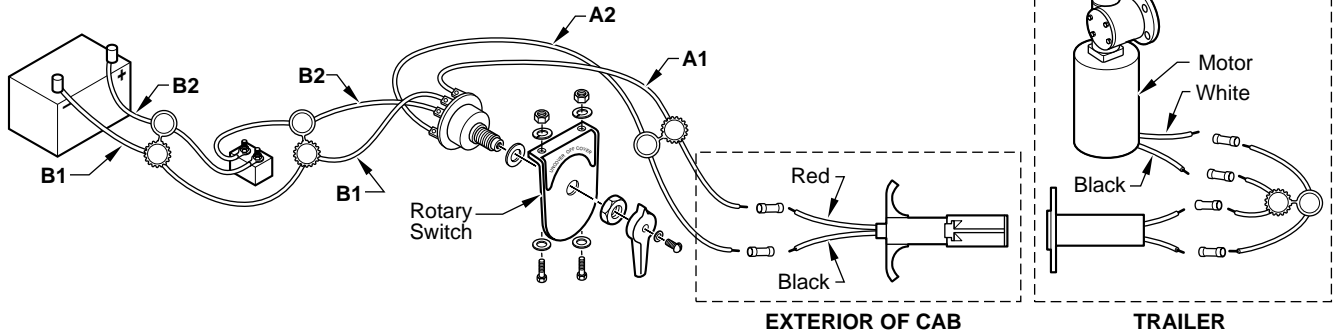
Easy Cover 500/550

STEP 7

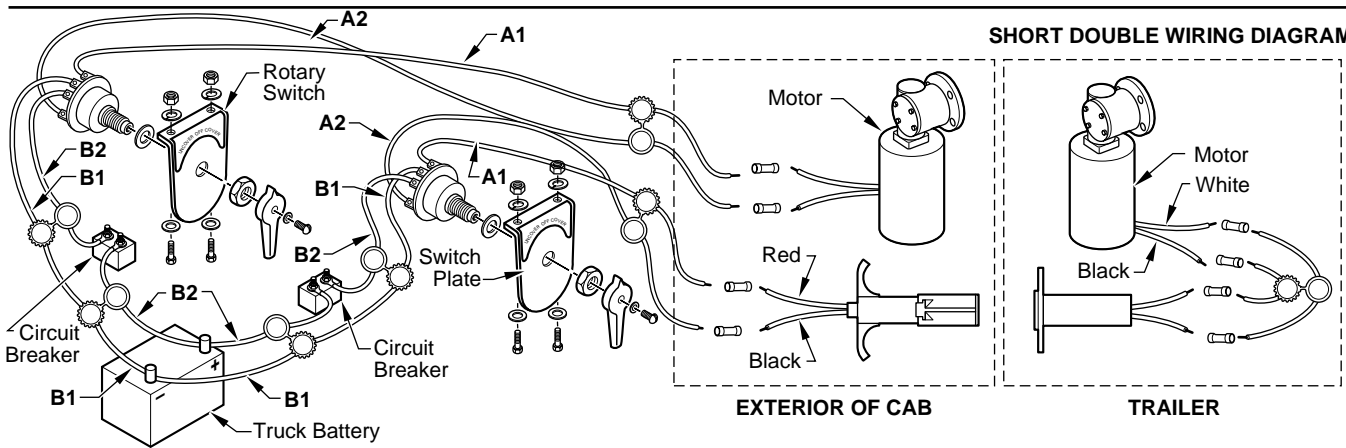
How to Install Optional Electrical Controls

Figure 16

TRACTOR TRAILER WIRING DIAGRAM



SHORT DOUBLE WIRING DIAGRAM



LEAD & PUP WIRING DIAGRAM

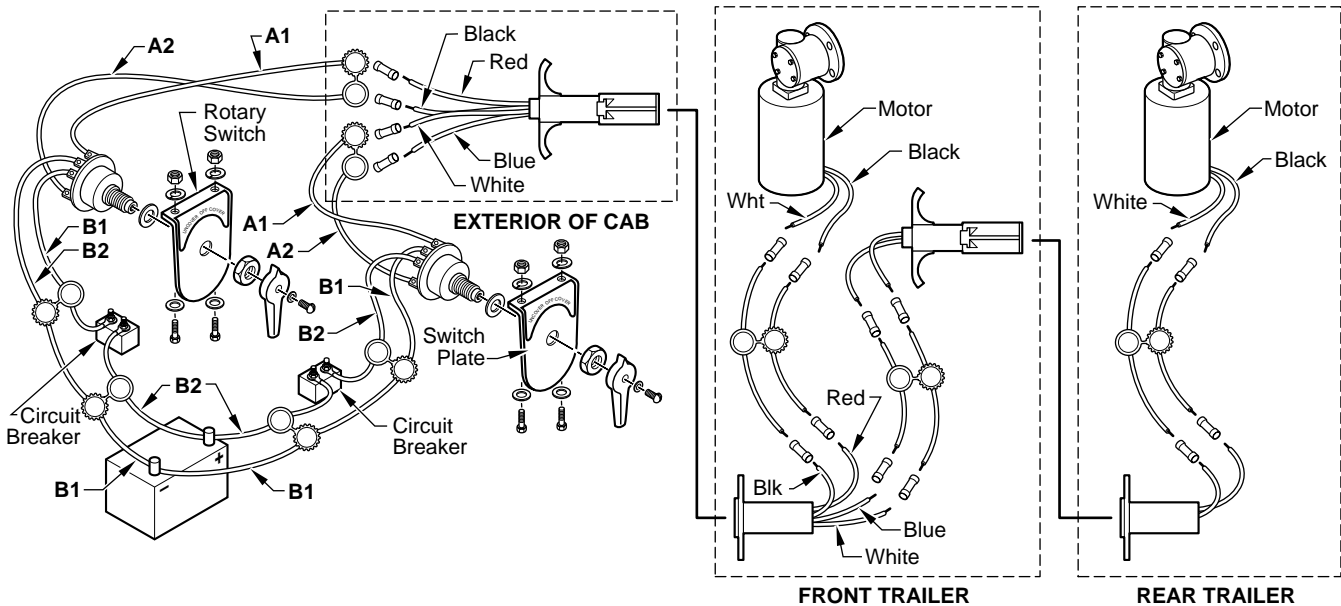
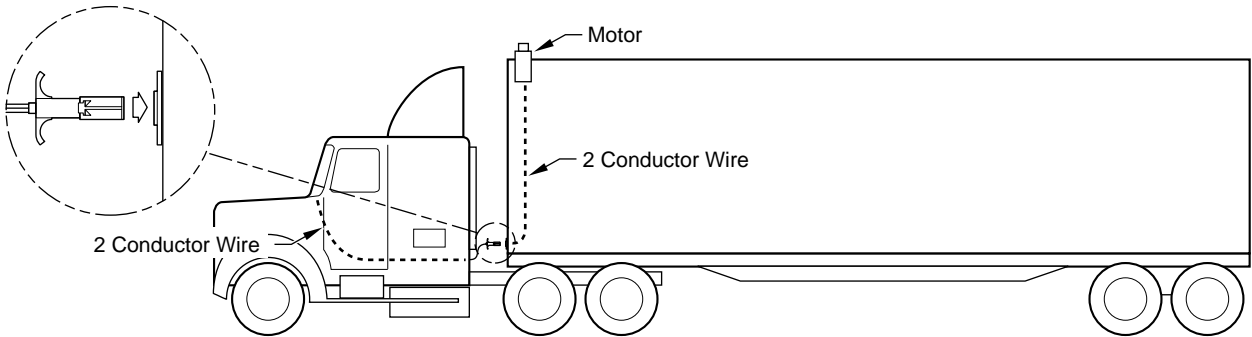
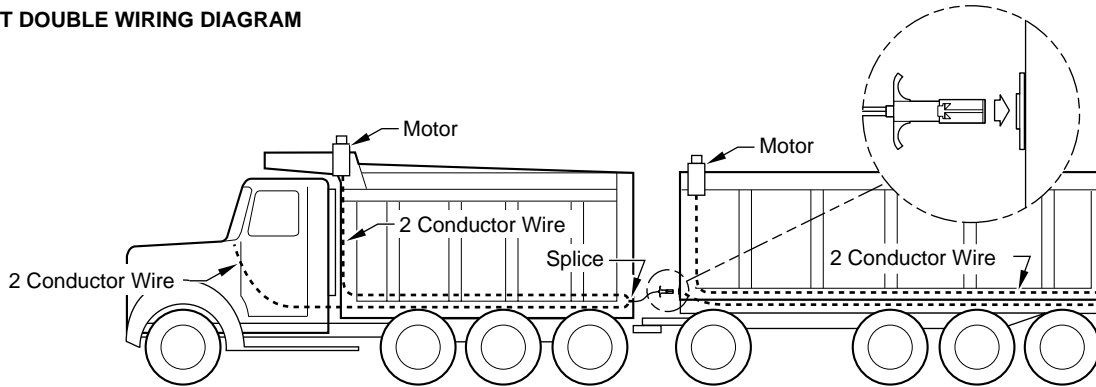


Figure 17

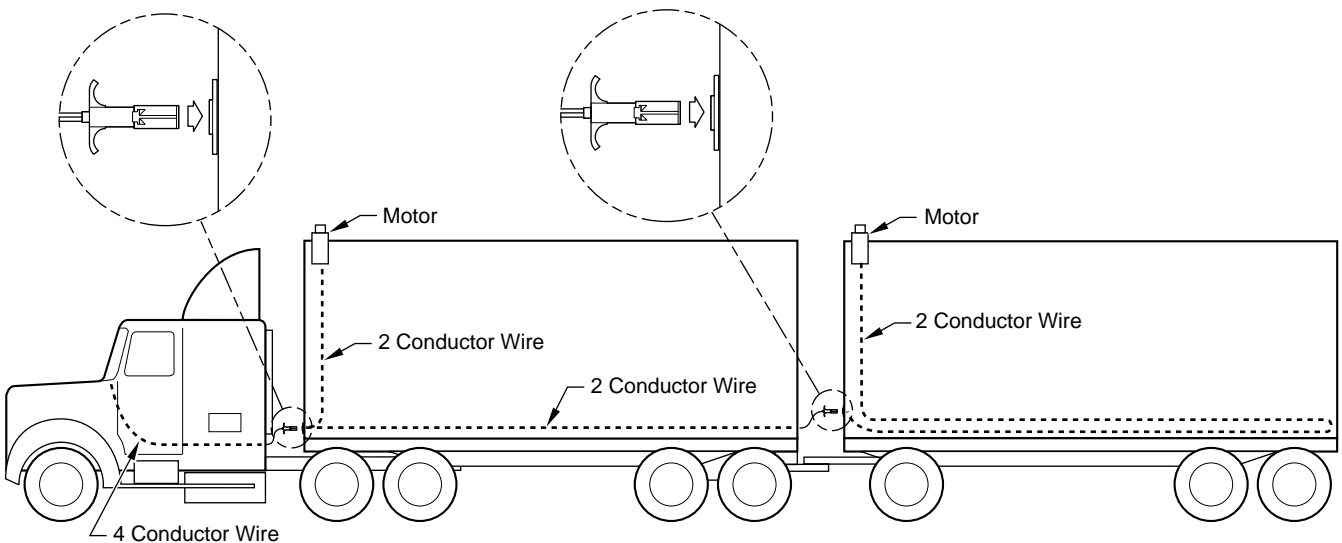
TRACTOR TRAILER WIRING DIAGRAM



SHORT DOUBLE WIRING DIAGRAM



LEAD & PUP WIRING DIAGRAM



If You Have An Undermount Spring Assembly, Go to Step 8.

If You Have An Underbody Spring Assembly, Go To Step 9.

If You Have A Sidemount Spring Assembly, Go To Step 10.

STEP 8

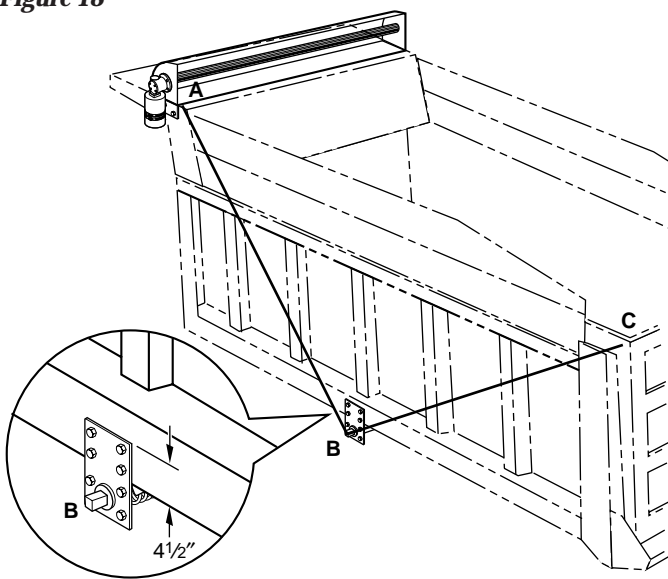
How to Install the Undermount Tension Spring Assembly Option

Parts you will need:

- Tension spring assembly (driver's side) (1)
- Tension spring assembly (passenger side) (1)
- 3/8" x 1" hex bolts (4)
- 3/8" hex nuts (4)
- 3/8" lock washers (4)
- Mounting Plate D.S. (1)
- Mounting Plate P.S. (1)

Note: Refer to figure 18. Notice that the tension spring assembly (B) is one point of a triangle. The other two points (A and C) are on the 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.

Figure 18

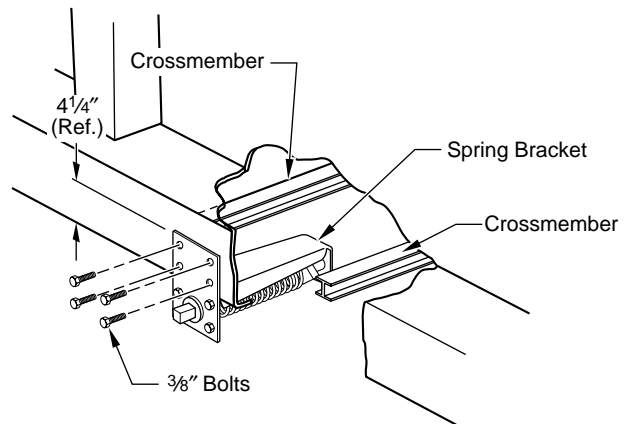


1. Mark the rear edge of the crank assembly or the mounting plate in line with the tarp roll-up bar on the driver's side and passenger's side. Mark these points and call them A.
2. Determine where you want the rear of the tarp to be when it fully covers the box. Mark these points and call them C.
3. Find a point at the side of the box that is the same distance from A and C. This is point B, where the tension spring assembly will be mounted. Mark this point on both sides.

Note: The tension spring assembly mounting plate 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 tension spring assembly 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 4 1/4" above the bottom of the box. (See Figure 18)
5. Drill two 13/32" holes.
6. Bolt the tension spring assembly to the box or rail, using the 3/8" bolts. (See Figure 19)

Figure 19



STEP 9

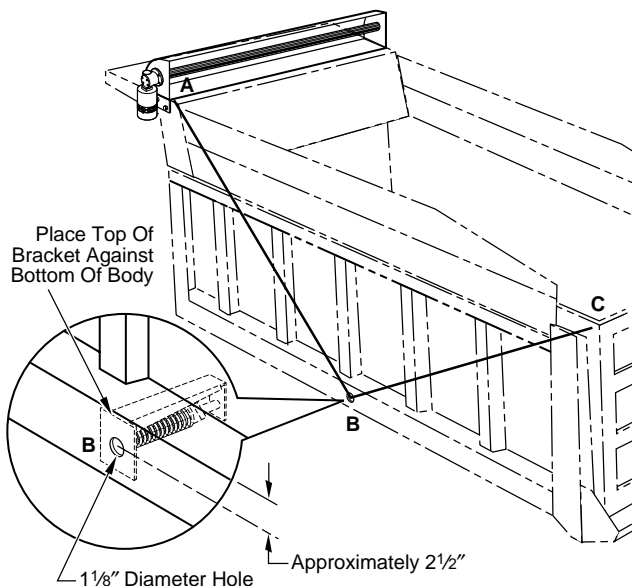
How to Install the Underbody Spring Assembly Option

Parts you will need:

- 1 1/8" diameter hole saw
- Tension spring assembly (driver's side) minus mounting plate (1)
- Tension spring assembly (passenger side) minus mounting plate (1)
- 3/8" x 1" hex bolts (4)
- 3/8" hex nuts (4)
- 3/8" lock washers (4)

Note: Refer to Figure 20. Notice that the tension spring assembly (B) is one point of a triangle. The other two points (A and C) are on the 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.

Figure 20



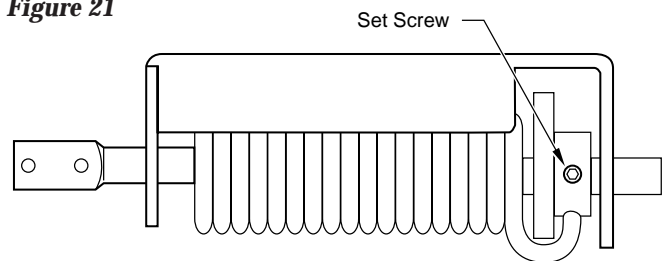
1. Mark the rear edge of the crank assembly or the mounting plate in line with the tarp roll-up bar on the driver's side and passenger's side. Mark these points and call them A.
2. Determine where you want the rear of the tarp to be when it fully covers the box. Mark these points and call them C.

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

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

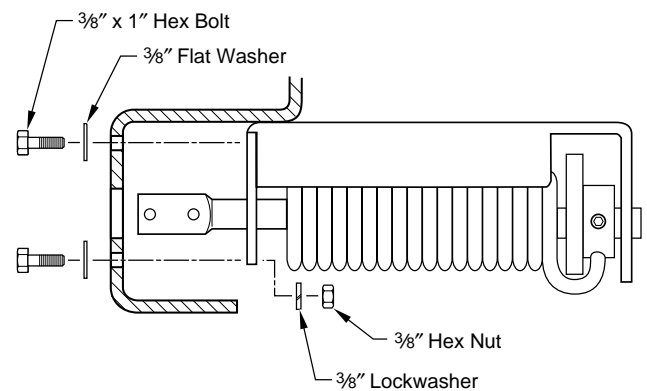
4. Loosen set screw at rear of assembly. (See Figure 21) Pull spring support shaft out from the front of the assembly.

Figure 21



5. Place tension spring assembly housing up underneath the dump body aligned at point B. Rest the top edge of the tension spring housing assembly against the bottom of the dump body. (See Figure 22) Once in position, trace the holes in the spring housing onto the dump body.

Figure 22



6. Drill four 13/32" holes and the 1 1/8" diameter hole with the hole saw.

CAUTION: When drilling through an aluminum body with hole saw, apply medium pressure to drill, if too much pressure is applied, hole saw will grab and twist drill.

STEP 10

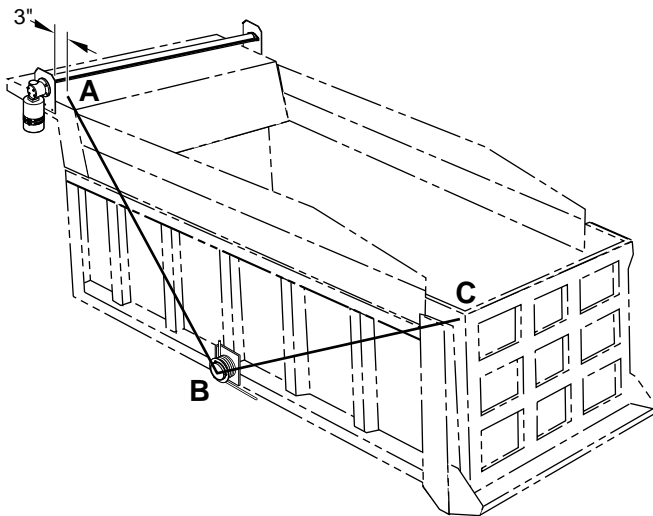
How to Install the Sidemount Spring Assembly Option

Parts you will need:

- Spring mounting plate (driver's side) (1)
- Spring mounting plate (passenger side) (1)
- Spring (driver's side) (1)
- Spring (passenger side) (1)
- Retainer rings (2)
- 1/4" Spring pins (6)

Note: Refer to figure 23. Notice that the tension spring assembly (B) is one point of a triangle. The other two points (A and C) are on the 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.

Figure 23



1. Mark the rear edge of the crank assembly or the mounting plate in line with the tarp roll-up bar on the driver's side of the cab. 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 on both sides of the box, and call them C.

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

Note: You may either weld or bolt the tension spring assembly to the box. Aero Industries recommends welding, but the mounting plate can be bolted if necessary. No bolts are included for mounting.

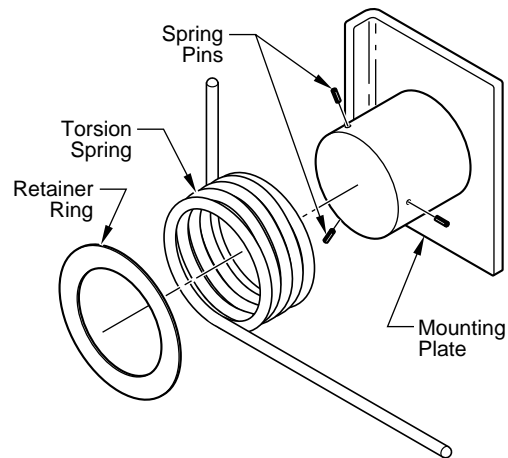
CAUTION: If the plate is bolted, use at least 1/2" bolts to secure the plate to the box.

4. Visually check that the arms will clear the box if the mounting plate is welded at point B. Weld the mounting plate to the box.

Note: Because of dents and other box distortions, the mounted tension spring assembly may point the arms in an incorrect direction. If this is the case, shim the assembly before final welding to correct the direction in which the arms travel.

5. Refer to figure 24. Slide a torsion spring on the shaft of each mounting plate. The innermost arm of the spring must point upward, while the outermost arm should point toward the back of the truck.

Figure 24



6. Place a retainer ring over the outside of each spring.
7. Drive three spring pins into each shaft to hold both spring and retainer ring. Leave about 1/2" of each pin extending outside of the shaft.

If You Have Aluminum Or Steel Swing Arms With An Undermount Or Underbody Spring, Go To Step 11. If You Have A Sidemount Spring Assembly, Go To Step 12.

STEP 11

How to Install the Swing Arms

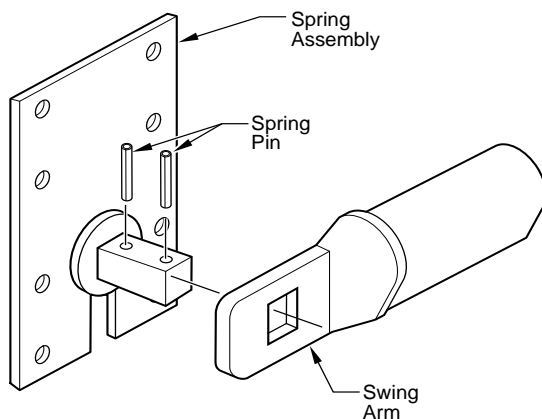
Note: This step is the same for aluminum or steel arms with undermount or underbody spring.

Parts you will need:

Swing arms (2)
1/4" spring pins (2)

1. Refer to figure 25. Place a swing arm on the driver's side tension spring assembly shaft. Be sure that the arm is in the rear position. If the arm and shaft do not line up, rotate the square shaft slightly counter-clockwise until they do line up.

Figure 25



2. Drive a roll pin into the shaft to hold the swing arm.
3. Repeat instructions 1 and 2 on the passenger 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, take the arms apart and preload the tension spring assemblies by turning the shafts 1/4 turn towards the front and then reattaching the swing arms.

STEP 12

How to Assemble the Swing Arms to the Sidemount Spring Assemblies

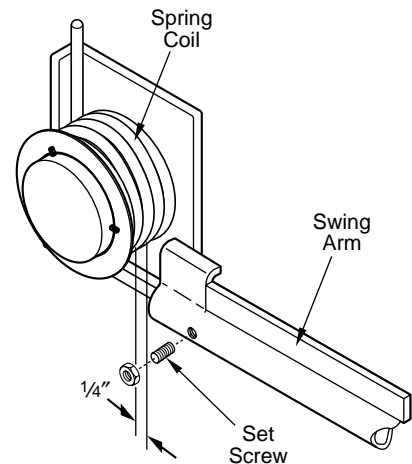
Parts you will need:

Swing arm, driver's side (1)
Swing arm, passenger side (1)

Note: During this phase of installation, swing arms must be in the rear position, pointing toward the back of the truck.

1. Refer to figure 26. Push each swing arm onto the outermost arm of the spring until the swing arm angle is 1/4" from the retainer ring.

Figure 26



(Driver's side)

2. Tighten the Allen set screws on each arm. Do not overtighten. Tighten lock nut onto set screw.

If You Have Aluminum Swing Arms, Go To Step 13.

If You Have Steel Swing Arms, Go To Step 14.

If You Have Steel Swing Arms With Sidemount Spring, Go To Step 15.

STEP 13 Aluminum

How to Install the Cross Arm and Connecting Arms

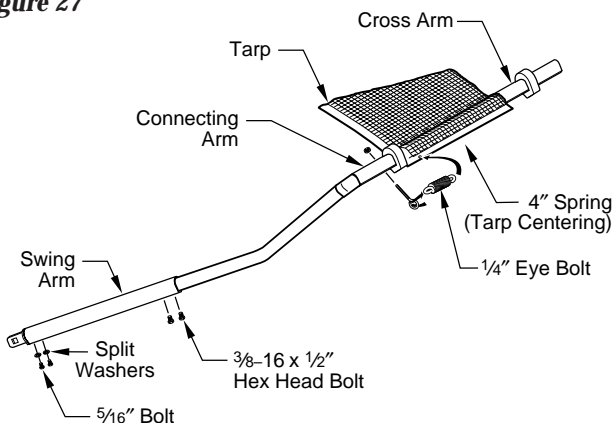
Parts you will need:

- Tarp (1)
- Cross arm (1)
- Lower swing arm (2)
- Upper swing arm, driver's side (1)
- Upper swing arm, passenger's side (1)
- 4" tarp-centering springs (2)
- 1/4" eye bolts (2)
- 1/4" Nyloc nuts (4)
- 5/16" split lock washers (8)
- 5/16" hex bolts (4)
- ArmGuard Rubber Bumpers (2)
- Mild soap and water mixture (optional)

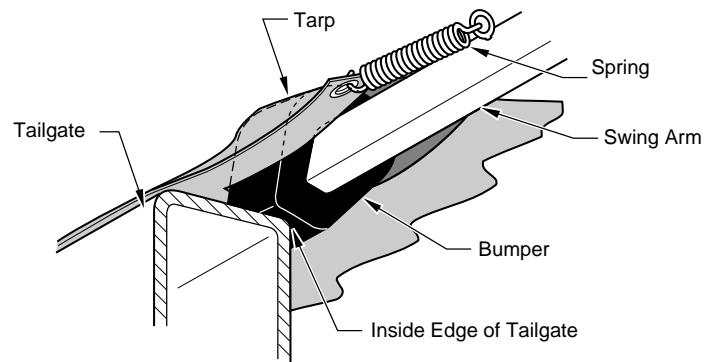
Note: The driver's side and passenger side arm assemblies can be interchanged to provide greater clearance with the box. Each connecting arm has a different part number. Before ordering replacement parts, double-check the part number. (See the assembly drawing at the back of the manual.)

1. Refer to figure 27. Feed the cross arm through the pocket in the end of the tarp.

Figure 27



2. Slide both upper arms onto the cross arm.
3. Raise the swing arm to the top of the tailgate and slide the ends of the upper arms over the lower arm.
4. Square the tarp and the rear cross bar with the top of the tail-gate.
5. Fasten the lower arms to the upper arms with 3/8" x 1/2" hex bolts.
6. Center the tarp from side to side on the rear cross bar.
7. Measure 3" from the edge of the tarp on both sides. Drill a 9/32" horizontal hole through the connecting arm and the cross arm. *Do not drill through the tarp.*
8. Before installing eyebolts and springs, slide rubber bumper over each end of cross arm and position inside of notch in tarp. Use a solution of mild soap and water for lubrication if necessary. Position bumpers to rest on tailgate as shown below.



CAUTION: Use only mild soap and water mixture to install ArmGuard rubber bumpers. Mild soap and water evaporate quickly allowing the rubber bumper to clamp down on the cross arm. Use of common lubricants (oil, silicon, etc.) will prevent ArmGuard rubber bumpers from gripping the cross arm.

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.

9. Fasten the cross arms with eye bolts and nyloc nuts.
10. Attach the spring to the grommet in each corner of the tarp and to the eye bolt. Crimp the ends of the springs.

STEP 14 Steel

How to Install the Cross Arm and Connecting Arms

Parts you will need:

Tarp (1)

Cross arm (1)

Connecting arm, driver's side (1)

Connecting arm, passenger side (1)

4" tarp-centering springs (2)

1/4" x 2 1/2" hex bolt (2)

1/4" x 3/4" self-tapping Phillips screws (6)

1/4" eye bolts (2)

1/4" Keps nuts (4)

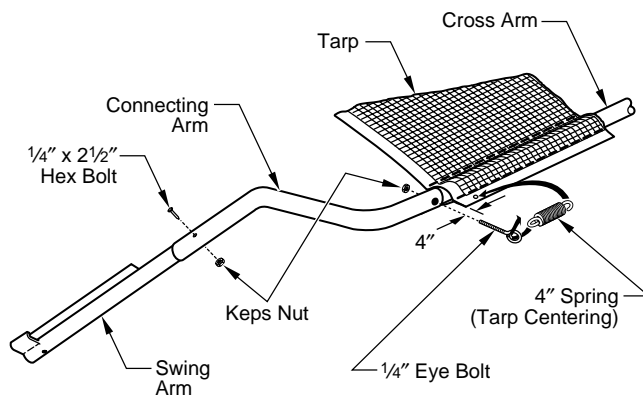
ArmGuard Rubber Bumpers (2)

Mild soap and water mixture (optional)

Note: The driver's side and passenger 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. (See the assembly drawing at the back of the manual.)

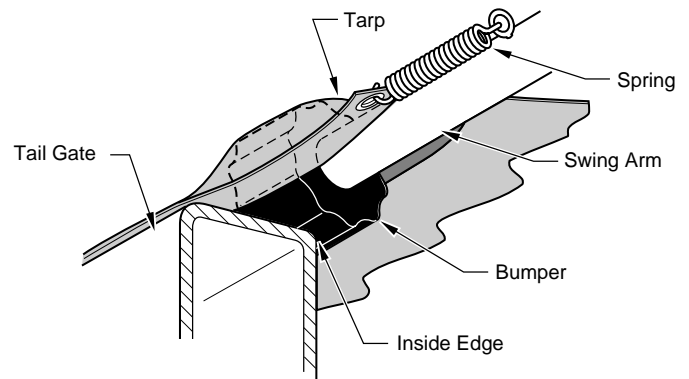
1. Refer to figure 28. Feed the cross arm through the pocket in the end of the tarp.

Figure 28



2. Slide both connecting arms onto the cross arm.
3. Raise the swing arm to the top of the tailgate and slide the ends of the connecting arms over the swing arm.
4. Square the tarp and the rear cross bar with the top of the tail-gate.

5. Drill a 9/32" hole through each swing arm using the holes in the connecting arms as guides.
6. Fast the swing arms to the connecting arms with 1/4" x 2 1/2" hex bolts.
7. Center the tarp from side to side on the rear cross bar.
8. Measure 4" from the edge of the tarp on both sides. Drill a 9/32" horizontal hole through the connecting arm and the cross arm. *Do not drill through the tarp.*
9. Before installing eyebolts and springs, slide rubber bumper over each end of cross arm and position inside of notch in tarp. Use a solution of mild soap and water for lubrication if necessary. Position bumpers to rest on tailgate as shown below.



CAUTION: Use only mild soap and water mixture to install ArmGuard rubber bumpers. Mild soap and water evaporate quickly allowing the rubber bumper to clamp down on the cross arm. Use of common lubricants (oil, silicon, etc.) will prevent ArmGuard rubber bumpers from gripping the cross arm.

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.

10. Refasten the arms with eye bolts and keps nuts.
11. Attach the spring to the grommet in each corner of the tarp and to the eye bolt. Crimp the ends of the springs.

STEP 15 *Steel Sidemount*

How to Install the Cross Arm and Connecting Arms

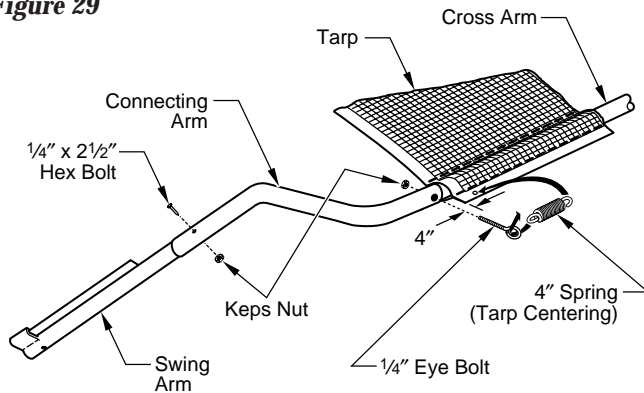
Parts you will need:

- Tarp (1)
- Cross arm (1)
- Connecting arm, driver's side (1)
- Connecting arm, passenger side (1)
- 4" tarp-centering springs (2)
- 1/4" x 2 1/2" hex bolts (2)
- 1/4" x 3/4" self-tapping Phillips screws (6)
- 1/4" eye bolts (2)
- 1/4" Keps nuts (4)
- ArmGuard Rubber Bumpers (2)
- Mild soap and water mixture (optional)

Note: The driver's side and passenger 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. (See the assembly drawing at the back of the manual.)

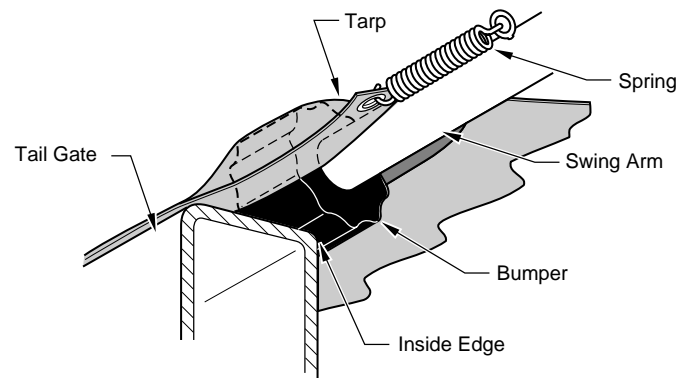
1. Refer to figure 29. Feed the cross arm through the pocket in the end of the tarp.

Figure 29



2. Slide both connecting arms onto the cross arm.
3. Raise the swing arm to the top of the tailgate and slide the ends of the connecting arms over swing arm.
4. Square the tarp and the rear cross bar with the top of the tailgate.
5. Drill a 9/32" hole through each swing arm using the holes in the connecting arms as guide.

6. Fasten the swing arms to the connecting arms with 1/4" x 2 1/2" hex bolts.
7. Center the tarp from side to side on the rear cross bar.
8. Measure 4" from the edge of the tarp on both sides. Drill a 9/32" horizontal hole through the connecting arm and the cross arm. *Do not drill through the tarp.*
9. Before installing eyebolts and springs, slide rubber bumper over each end of cross arm and position inside of notch in tarp. Use a solution of mild soap and water for lubrication if necessary. Position bumpers to rest on tailgate as shown below.



CAUTION: Use only mild soap and water mixture to install ArmGuard rubber bumpers. Mild soap and water evaporate quickly allowing the rubber bumper to clamp down on the cross arm. Use of common lubricants (oil, silicon, etc.) will prevent ArmGuard rubber bumpers from gripping the cross arm.

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.

10. Fasten the arms with eye bolts and keps nuts.
11. Attach the spring to the grommet in each corner of the tarp and to the eye bolt. Crimp the ends of the springs.

STEP 16

How to Install the Tarp

Parts you will need:

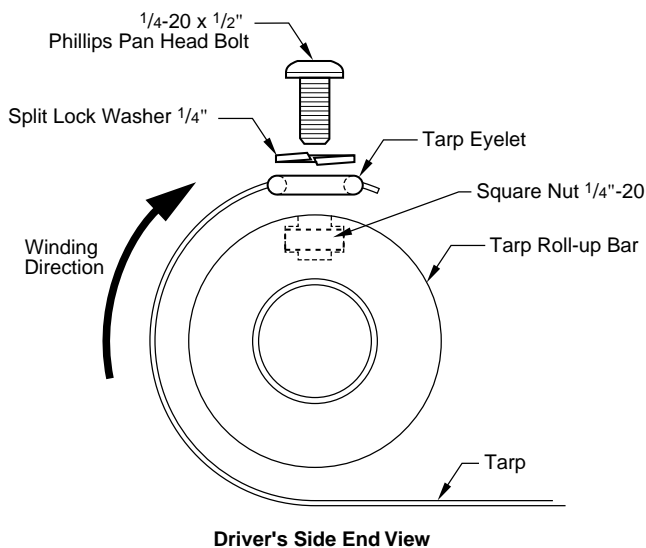
$\frac{1}{4}$ " pan head bolts (6)

$\frac{1}{4}$ " nut squares (6)

$\frac{1}{4}$ " split lock washers (6)

1. Refer to figure 30. Pull the loose end of the tarp under the tarp roll-up bar, winding from the underside. Make sure the tarp is centered from side to side.

Figure 30



CAUTION: The tarp must be rolled from underneath for the cranking system to operate.

2. Mark the tarp roll-up bar for fastener placement using the grommets in the tarp as a guide.
3. Apply fasteners as shown in Figure 30.

How to Operate the Tarp System

How to Uncover the Load

1. Turn the switch to roll up the tarp. Release the switch when the tarp reaches the front of the truck.

How to Cover the Load

1. Turn the switch to roll out the tarp. Release the switch when the tarp reaches the tailgate.

Safety Considerations

- ⚠ Warning: Never operate the tarp system under obstructions, such as trees or power lines.
- ⚠ Warning: Always check to make sure that no one is at the rear of the box or in the immediate area of the tarp as it operates. Keep everyone clear of the area.
- ⚠ Warning: Make sure that all safety guards are in place before operating the tarp system.
- ⚠ Warning: Keep all clothing clear of moving parts.
- ⚠ Warning: Make sure the hand crank is removed before covering the load.
- ⚠ Warning: Be sure that your working platform is secure as you work on the truck. Use OSHA approved ladders or scaffolding to work above ground level.

How to Maintain the Easy Cover

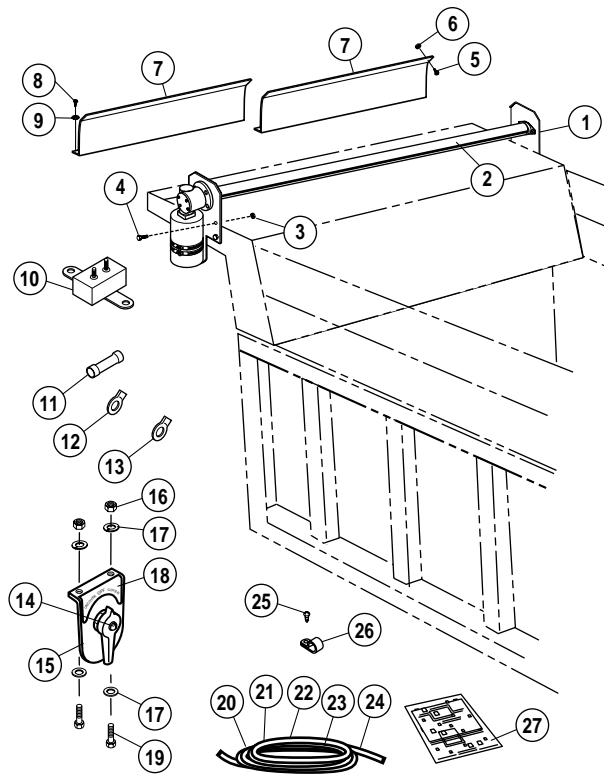
Minimal maintenance is required for the Easy Covers. Individual usage and operating conditions will determine when to check the Easy Cover. Aero Industries recommends a weekly inspection of the following items:

- 🔧 Bearings: Pull the shafts from side to side and in and out. If there is excessive play, replace the bearings. Lubricate as often as necessary with penetrating oil. Operating conditions will determine how often to lubricate. Do not use an excessive amount of lubricant.
- 🔧 Chain and Springs: Check the chain for a broken master link and for excessive stiffness. Lubricate the chain regularly with a penetrating oil. Examine springs for breakage or stretching. Lubricate the tension springs with penetrating oil as often as conditions dictate.
- 🔧 Screws: Make sure that all mounting bolts and screws are in place and tight and that no parts are worn or damaged.
- 🔧 General: Replace all worn or broken parts immediately.

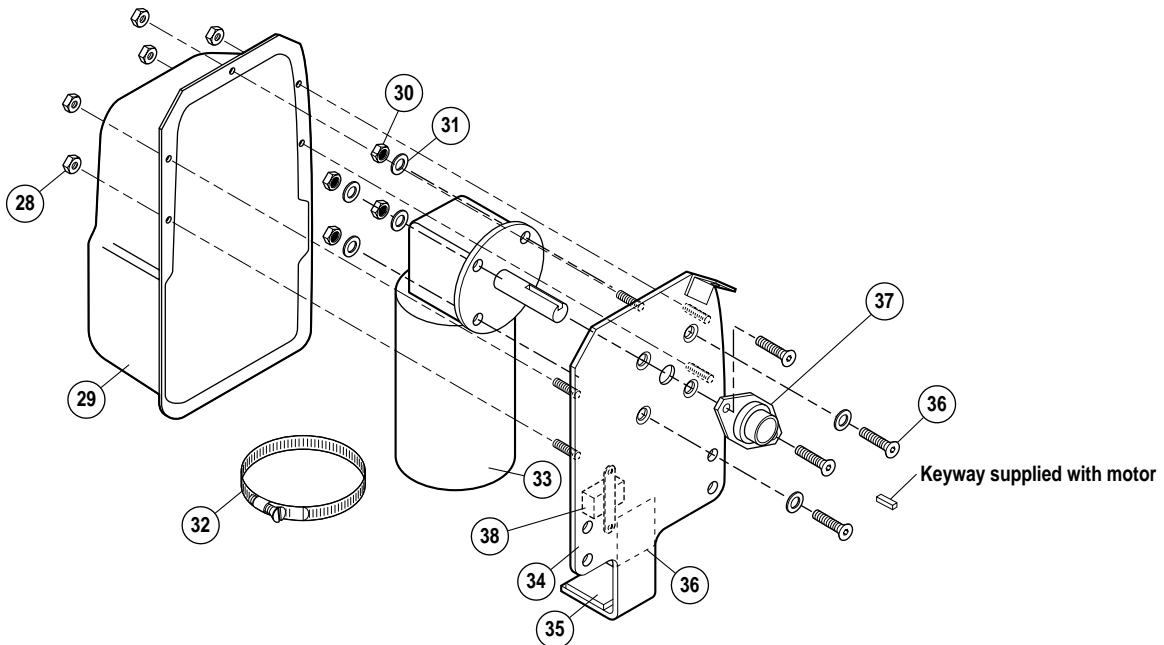
Replacement parts may be obtained from the dealer or by contacting Aero Industries.

Easy Cover 500/550

Wind Deflector and Mounting Plates



Electric Motor Assembly #0311-962510

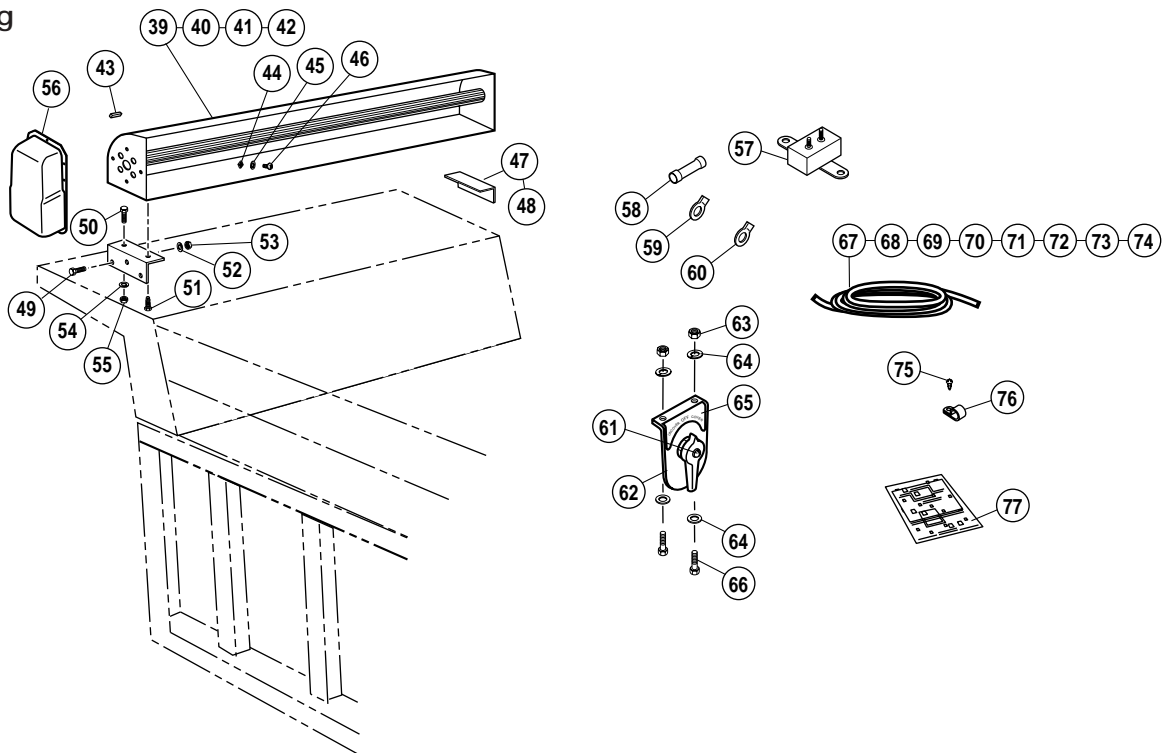


Easy Cover 500/550

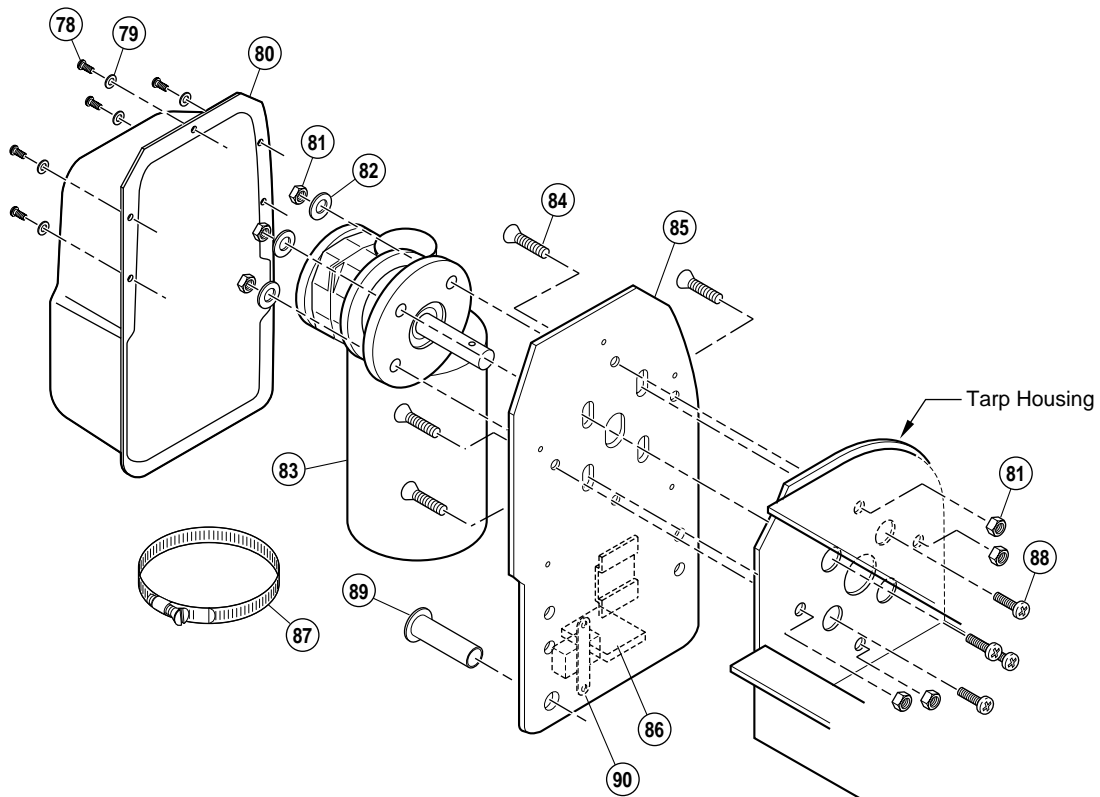
No.	Part No.	Description	Qty.	Electric Motor Assembly Part #0311-962510			
1	0311-960306	Mounting Plate P.S. #400-#500	1	No. Part No.	Description	Qty.	
2	0311-961287	Roll-up Bar #500	1	29	0311-860601	Motor Cover, Plastic	1
3	0815-660660	Nut 3/8"-16 Nylon Insert	7	30	0815-660660	Nut 3/8"-16 Nylon Insert	4
4	0810-670654	Bolt HHCS 3/8" x 1/4" Grade 2 Zinc	7	31	0820-680620	3/8" Flat Washer	6
5	0825-670889	Screw PH Pan Mach 1/4-20 x 3/4" Zinc	4	32	0850-600000	Hose Clamp	1
6	0815-660450	Nut Keps 1/4-20 Zinc	8	33	0755-623430	PowerPro Motor	1
7	0311-860265	Wind Deflector #100-#500	2	34	0311-962511	Mounting Plate w/Studs	1
8	0810-650510	Bolt HWH 5/16" x 1" Type F Self Tapping Zinc	9	35	0765-600001	Rubber 1/8" x 2" x 2"	2
9	0820-680520	Washer Split Lock 5/16" Zinc	9	36	0825-670957	Screw 3/8-16 x 1 1/4"	4
10	0755-623510	Circuit Breaker 25 Amp	1	37	0710-602175	Flange Bearing 3/4" Bore	1
11	0855-626500	Butt Connector #6 Wire to #10	2	38	0755-623510	Circuit Breaker 25 amp	1
12	0755-626507	Ring Terminal #6 Wire to #10 Screw	6				
13	0755-626503	Ring Terminal #6 Wire to 3/8" Screw	2				
14	0755-623456	Switch Rotary	1				
15	0755-619511	Switch Mounting Bracket	1				
16	0815-660451	Nut 1/4-20 Nylon Insert	2				
17	0820-680410	Washer Flat 1/4" Zinc	4				
18	0920-590400	Switch Bracket Decal	1				
19	0810-600004	Screw Hex Head 1/4-20 x 3/4" Zinc	2				
20	0755-626535	#6 Wire - 50 Feet	1				
21	0755-626536	#6 Wire - 60 Feet	1				
22	0755-626537	#6 Wire - 70 Feet	1				
23	0755-626538	#6 Wire - 80 Feet	1				
24	0755-626539	#6 Wire - 90 Feet	1				
25	0825-670551	Screw PH 1/4-20 x 3/4 Type F Zinc	12				
26	0850-603757	Metal Loop Clamp	12				
27	0930-861612	Wiring Diagram	1				
28	0815-660451	Nut 1/4-20 Nylon Insert	5				

Easy Cover 500/550

Tarp Housing



Electric Motor Assembly #0311-961212



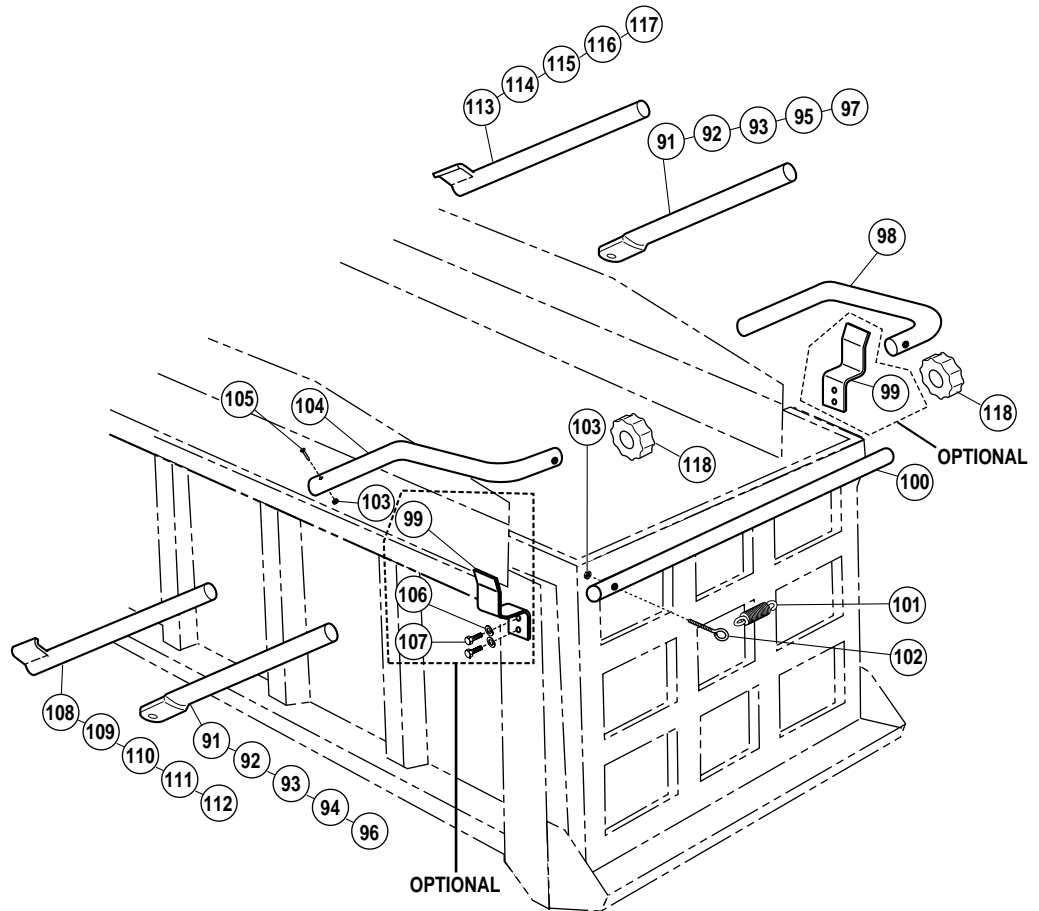
Easy Cover 500/550

No. Part No.	Description	Qty.	Electric Motor Assembly Part #0311-961212				
39	0311-961221	Tarp Housing 9"-92" Long	1				
40	0311-961223	Tarp Housing 9"-96" Long	1				
41	0311-961217	Tarp Housing 6"-92" Long	1				
42	0311-961219	Tarp Housing 6"-96" Long	1				
43	0840-618512	Key 1/4" x 1 1/2" Zinc	1				
44	0815-660702	Nut Square 1/4-20 Zinc	6				
45	0820-680725	Washer Split Lock 1/4" Zinc	6				
46	0810-670905	Bolt Phillips Pan Head 1/4 -20 x 1/2"	6				
47	0311-860482	Top Mounting Bracket 6"	2				
48	0311-860480	Top Mounting Bracket 9"	2				
49	0810-670700	Bolt 3/8"-16 x 1" Grade 5 Zinc	6				
50	0810-650512	Carriage Bolt 5/16" 1"	4				
51	0825-670502	Screw HWH 5/16" -18 x 5/8"	2				
52	0820-680620	Flat Washer 3/8	12				
53	0815-660660	Nyloc Hex Nut 3/8-16 Zinc	6				
54	0820-680520	Washer Split Lock 5/16"	4				
55	0815-650512	Nut 5/16-18	4				
56	0311-961212	Motor Assy. 6" Aluminum	1				
57	0755-623510	Circuit Breaker 25 Amp	1				
58	0855-626500	Butt Connector #6 Wire to #10	2				
59	0755-626507	Ring Terminal #6 Wire to #10 Screw	6				
60	0755-626503	Ring Terminal #6 Wire to 3/8" Screw	2				
61	0755-623456	Switch Rotary	1				
62	0755-619511	Switch Mounting Bracket	1				
63	0815-660451	Nut 1/4-20 Nylon Insert	2				
64	0820-680410	Washer Flat 1/4" Zinc	4				
65	0920-590400	Switch Bracket Decal	1				
66	0810-600004	Screw Hex Head 1/4-20 x 3/4" Zinc	2				
67	0755-626530	#6 Wire - 100 Feet	1				
68	0755-626541	#6 Wire - 110 Feet	1				
69	0755-626542	#6 Wire - 120 Feet	1				
70	0755-626543	#6 Wire - 130 Feet	1				
71	0755-626544	#6 Wire - 140 Feet	1				
72	0755-626545	#6 Wire - 150 Feet	1				
73	0755-626546	#6 Wire - 160 Feet	1				
74	0755-626547	#6 Wire - 170 Feet	1				
75	0825-670551	Screw PH 1/4-20 x 3/4 Type F Zinc	12				
76	0850-603756	Metal Loop Clamp	12				
77	0930-861612	Wiring Diagram	1				
				No. Part No.	Description	Qty.	
				78	0825-670645	Screw 1/4 x 20-1/2	5
				79	0825-680725	Washer Lock 1/4"	5
				80	0311-860601	PowerPro Motor Cover	1
				81	0815-660660	Nyloc Hex Nut 3/8-16 Zinc	8
				82	0820-680620	Washer Flat 3/8	4
				83	0755-623430	PowerPro Motor	1
				84	0825-670957	Screw 3/8-16 x 1 1/4	4
				85	0311-960400	Motor Mount 6"	1
				86	0311-860404	Motor Support Bracket	1
				87	0850-600000	Hose Clamp	1
				88	0825-670957	Screw 3/8"-16 x 1 1/4"	4
				89	0755-624000	Bushing Wire Protector	1
				90	0755-623510	Circuit Breaker 25 amp	1

Easy Cover 500/550

Steel Swing Arms

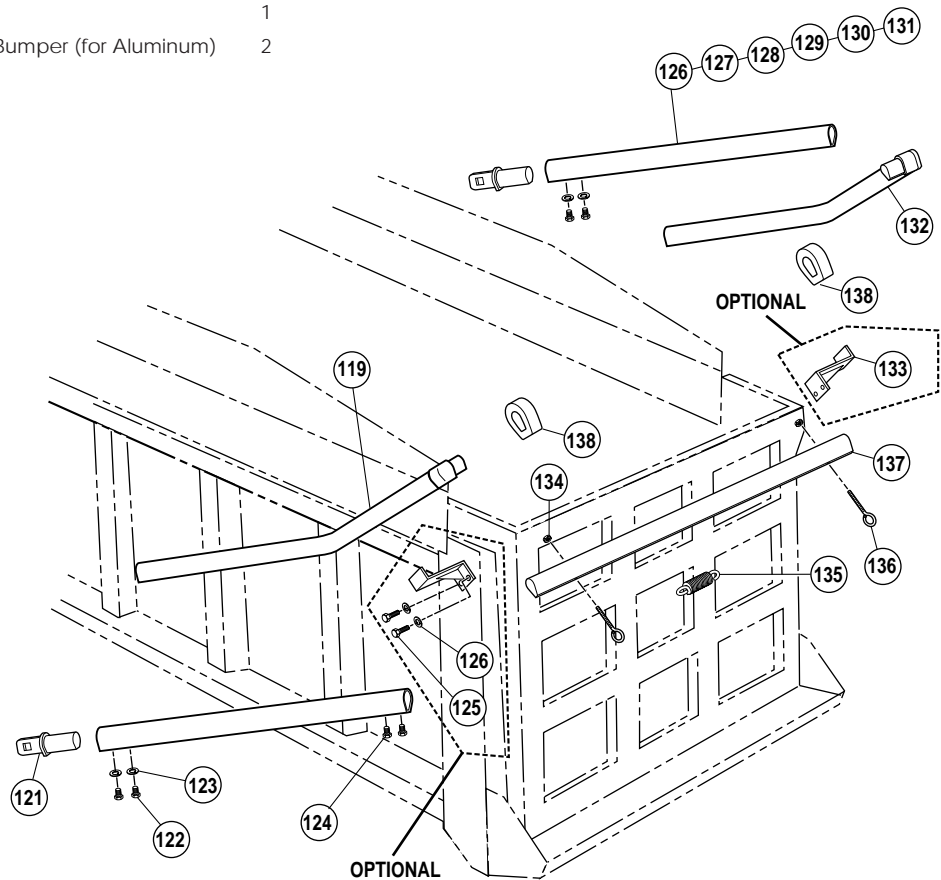
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92	0311-960281	1	109	0311-960289	1
93	0311-960282	1	110	0311-960290	1
94	0311-960283	1	111	0311-960291	1
95	0311-960232	1	112	0311-960292	1
96	0311-960284	1	113	0311-960294	1
97	0311-960233	1	114	0311-960295	1
98	0311-860590	1	115	0311-960296	1
99	0311-960249	2	116	0311-960297	1
100	0311-860591	1	117	0311-960298	1
101	0715-619601	2	118	0311-862260	2
102	0810-670904	2			
103	0815-660450	8			
104	0311-860589	1			
105	0810-670454	4			
106	0820-680520	9			
107	0810-650510	9			



Easy Cover 500/550

Aluminum Swing Arms

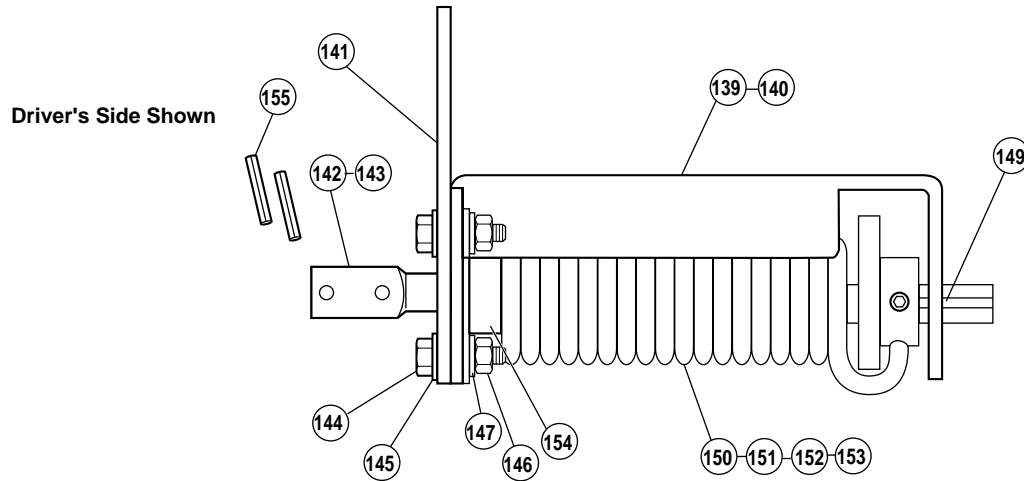
No.	Part No.	Description	Qty.
119	0311-961200	Swing Arm Assy. Upper D.S. Short	1
120	0311-864100	Swing Arm Undermount End Fitting	2
121	0810-650101	Bolt HHCS 5/16"-18x3/4	4
122	0820-680520	Washer Split Lock 5/16"	4
123	0810-650617	Bolt 3/8"-16x1/2" Grade 5 Zinc	4
124	0810-650510	Screw 5/16"x1" Self-Tapping	4
125	0820-680520	Washer Split Lock 5/16"	4
126	0311-861402	Swing Arm Lower 62"	2
127	0311-861413	Swing Arm Lower 88-5/8"	2
128	0311-861403	Swing Arm Lower 123"	2
129	0311-861414	Swing Arm Lower 150"	2
130	0311-861404	Swing Arm Lower 187"	2
131	0311-861415	Swing Arm Lower 215"	2
132	0311-961201	Swing Arm Assy. Upper P.S. Short	1
133	0311-960249	Swing Arm Saddle	2
134	0815-660450	Nut Keps 1/4"-20 Zinc	2
135	0715-619601	Spring Tension 4" Zinc	2
136	0810-670904	Bolt Eye 1/4"-20 x 2 1/2"	2
137	1350-148017	Cross Arm	1
138	0311-862268	Arm Guard Rubber Bumper (for Aluminum)	2



Easy Cover 500/550

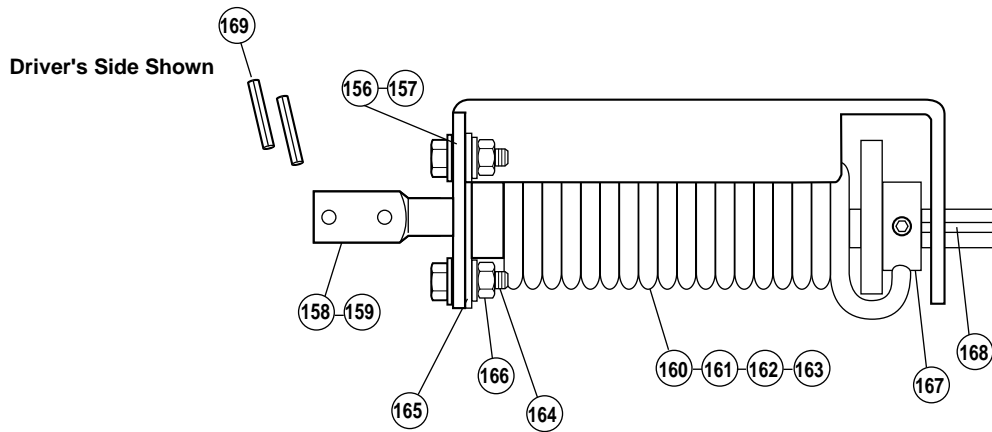
Undermount Spring Assembly D.S. 1/2 " #0311-960344
 Undermount Spring Assembly D.S. 5/8 " #0311-960346

Undermount Spring Assembly P.S. 1/2 " #0311-960345
 Undermount Spring Assembly P.S. 5/8 " #0311-960347

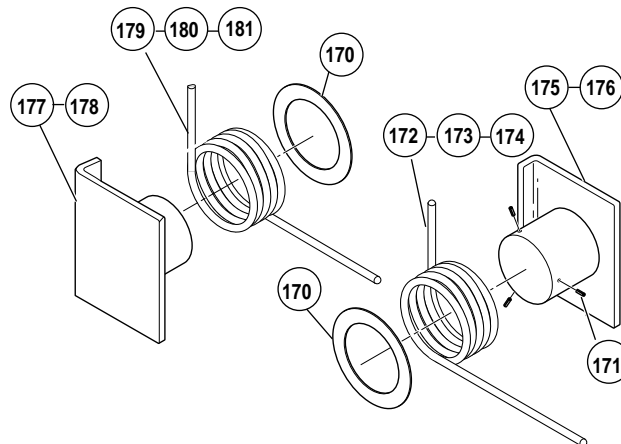


Underbody Spring Assembly D.S. 1/2 " #0311-960340
 Underbody Spring Assembly D.S. 5/8 " #0311-960342

Underbody Spring Assembly P.S. 1/2 " #0311-960341
 Underbody Spring Assembly P.S. 5/8 " #0311-960343



Sidemount Spring Assembly



Easy Cover 500/550

Undermount Spring Assy D.S. 1/2" #0311-960344
 Undermount Spring Assy P.S. 1/2" #0311-960345
 Undermount Spring Assy D.S. 5/8" #0311-960346
 Undermount Spring Assy P.S. 5/8" #0311-960347

No.	Part No.	Description	Qty.
139	0311-960330	Spring Underbody Bracket 1/2"	2
140	0311-960350	Spring Underbody Bracket 5/8"	2
141	0311-860461	Mounting Plate Steel UM Spring	2
142	0311-860451	Shaft Spring for 1/2" Spring	2
143	0311-860452	Shaft Spring for 5/8" Spring	2
144	0810-670650	Bolt HHCS 3/8"-16x1/2" Grade 2	8
145	0820-680620	Washer Flat 3/8"	16
146	0815-660660	Nut Hex 3/8-16	12
147	0820-680510	Washer Flat 5/16" Zinc	4
148	0311-960587	Bar Spring Grab Assy.	2
149	0840-618513	Keystock 6mm x 2 1/4"	2
150	0715-619562	Spring Undermount D.S. 1/2"	1
151	0715-619564	Spring Undermount P.S. 1/2"	1
152	0715-619565	Spring Undermount D.S. 5/8"	1
153	0715-619563	Spring Undermount P.S. 5/8"	1
154	0710-602157	Bearing Two Flange 1" Bore	2
155	0835-691700	Spring Pin	2

Sidemount Spring Assy

No.	Part No.	Description	Qty.
170	0311-860593	Spring Sidemount Retainer Ring	
171	0835-691700	Pin Spring 1/4" x 3/4"	
172	0715-619701	Spring Sidemount 10'-13' D.S.	
173	0715-619567	Spring Sidemount 14'-21' D.S.	
174	0715-619568	Spring Sidemount 22'-28' D.S.	
175	0311-960286	Spring Sidemount Base 10'-21' D.S.	
176	0311-960287	Spring Sidemount Base 22'-28' D.S.	
177	0311-960235	Spring Sidemount Base 10'-21' P.S.	
178	0311-960236	Spring Sidemount Base 22'-28' P.S.	
179	0715-619702	Spring Sidemount 10'-13' P.S.	
180	0715-619569	Spring Sidemount 14'-21' P.S.	
181	0715-619552	Spring Sidemount 22'-28' P.S.	

Underbody Spring Assy D.S. 1/2" #0311-960340
 Underbody Spring Assy P.S. 1/2" #0311-960341
 Underbody Spring Assy D.S. 5/8" #0311-960342
 Underbody Spring Assy P.S. 5/8" #0311-960343

No.	Part No.	Description	Qty.
156	0311-860468	Spring Underbody Bracket 1/2"	2
157	0311-860469	Spring Underbody Bracket 5/8"	2
158	0311-860451	Shaft Spring for 1/2" Spring	2
159	0311-860452	Shaft Spring for 5/8" Spring	2
160	0715-619562	Spring Undermount D.S. 1/2"	1
161	0715-619564	Spring Undermount P.S. 1/2"	1
162	0715-619565	Spring Undermount D.S. 5/8"	1
163	0715-619563	Spring Undermount P.S. 5/8"	1
164	0810-670650	Bolt HHCS 3/8"-16x1/2" Grade 2	4
165	0820-680510	Washer Flat 5/16" Zinc	4
166	0815-660660	Nut Hex 3/8-16	4
167	0311-960587	Bar Spring Grab Assy.	2
168	0840-618513	Keystock 6mm x 2 1/4"	2
169	0835-691700	Spring Pin	2

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