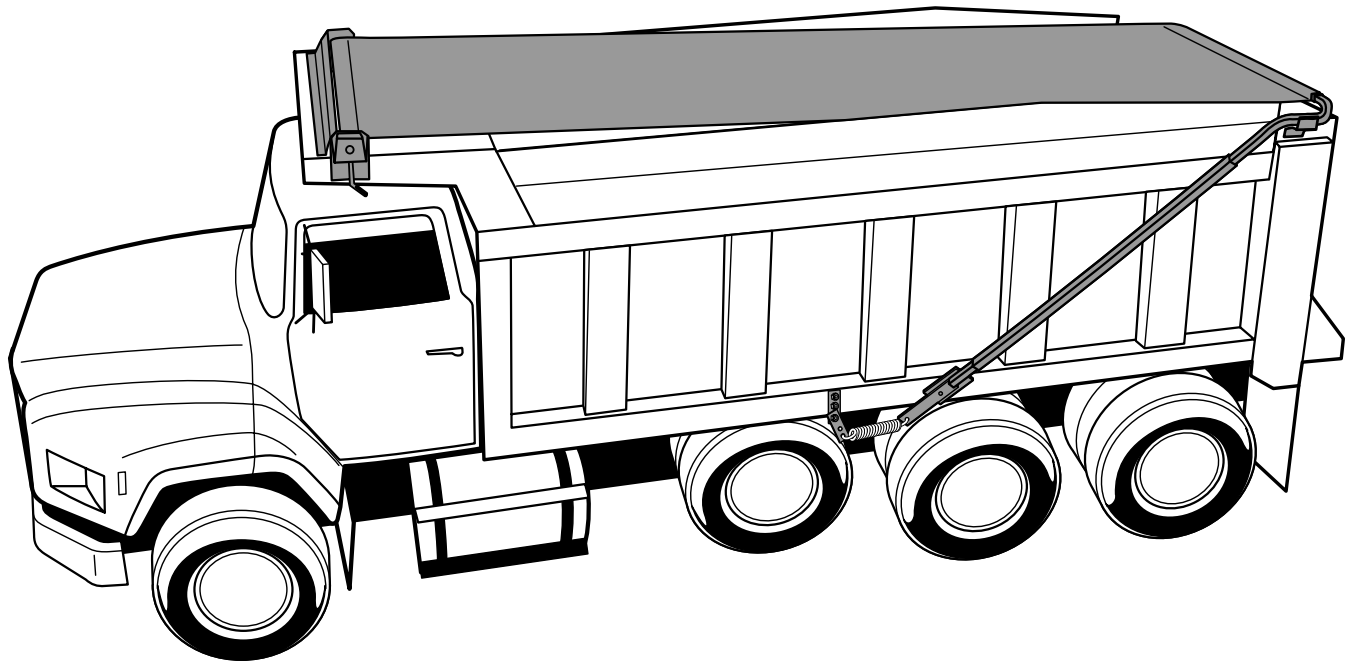


Economy Easy Cover

Model 20 VI.0

Installation, Maintenance,
and Safety Instructions



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

Indianapolis, IN • Omaha, NE • Hamburg, PA • Streetsboro, OH • Burlington, Ontario (800) 535-9545

 **Aero**
Industries, Inc.

Economy Easy Cover



Economy Easy Cover

Important: This manual explains how to install, operate, and maintain the model 20 Economy Easy Cover. 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.

STEP 1

How to Install the Crank Assembly and Driver's Side Roll-up Bar

Parts you will need:

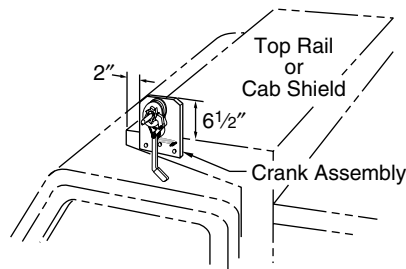
Crank assembly (1)
 $\frac{3}{8}$ " x 1 $\frac{1}{2}$ " bolts (3)
 $\frac{3}{8}$ " nylon insert nuts (3)
 $\frac{3}{8}$ " flat washers (3)

Note: If the crank assembly 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 crank assembly, 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 the rear edge of the crank assembly.

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

Figure 1



3. Align the forward edge of the crank assembly with the pencil mark, and position its top edge 6 $\frac{1}{2}$ " above the top rail.
4. Mark the three mounting holes on the top rail. Remove the crank assembly.
5. Drill three $\frac{13}{32}$ " holes through the top rail where marked.
6. Bolt the crank assembly in place with the bolts, nuts, and washers.
7. Replace crank assembly cover.

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STEP 2

How to Install the Passenger Side Mounting Plate and Roll-up Bar

Parts you will need:

- Passenger side mounting plate (1)
- Roller bar (1)
- $\frac{3}{8}$ " -x 1 $\frac{1}{2}$ " bolts (3)
- $\frac{3}{8}$ " nylon insert nuts (3)
- $\frac{3}{8}$ " flat washers (3)
- $\frac{1}{4}$ " bolt (1)
- $\frac{1}{4}$ " nylon insert nut (1)

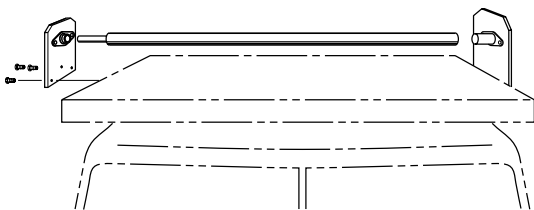
Note: If a mounting plate does not set squarely against the top rail, use shims to square the plate. Shim material is not included in the assembly package.

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

Note: Make sure the center of the bearing on the passenger side mounting plate is the same distance from the front of the cab shield as the center of the crank assembly shaft.

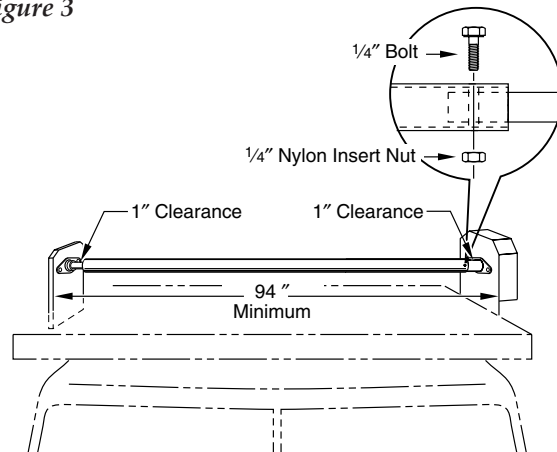
2. Align the forward edge of the passenger side mounting plate with the pencil mark, and position its top edge 6 $\frac{1}{2}$ " above the top rail. Make sure the bearing is facing inward.
3. Mark the three mounting holes on the top rail. Remove the mounting plate.
4. Drill three $\frac{13}{32}$ " holes through the top rail where marked.
5. Measure the distance between the inside of the crank plate and the inside of the passenger side mounting plate. It must be a minimum of 94". If it is less than 94", cut tube to length on open end of roll-up bar.
6. Refer to figure 2. Insert the passenger side roll-up bar through the bearing on the passenger side mounting plate. Slide this roll-up bar into the driver's side shaft until the passenger side mounting plate can be bolted on to the truck.

Figure 2



7. Bolt the passenger side mounting plate to the truck. Be sure to maintain a 1" clearance from the bearing. Drill $\frac{1}{4}$ " hole through roll-up bar and crank shaft. Fasten with $\frac{1}{4}$ " nut and bolt. (See Figure 3)

Figure 3



STEP 3

How to Install the Tension Spring Assembly

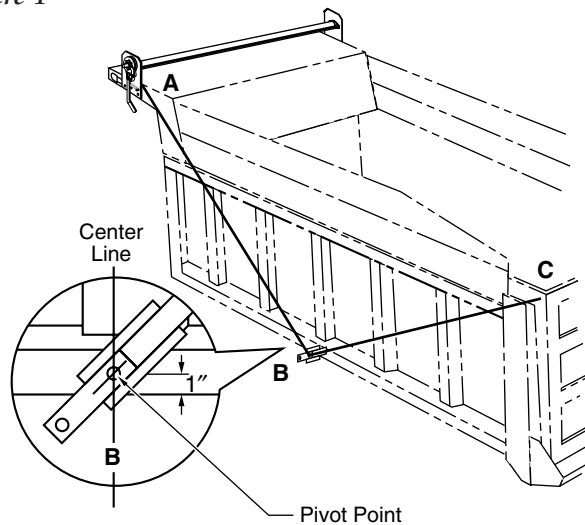
Parts you will need:

- Lower swing arms (2)
- Swing arm inserts (2)
- Extension brackets (2)
- Spring mounting brackets (2)
- Tension springs (2)
- $\frac{1}{2}$ " x 2 $\frac{1}{2}$ " bolts (2)
- $\frac{1}{2}$ " nylon insert nuts (2)
- $\frac{1}{2}$ " flat washers (6)
- $\frac{3}{8}$ " x 1 $\frac{1}{2}$ " bolts (6)
- $\frac{3}{8}$ " nylon insert nuts (6)
- $\frac{3}{8}$ " flat washers (6)

Note: Refer to figure 4. 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.

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Figure 4

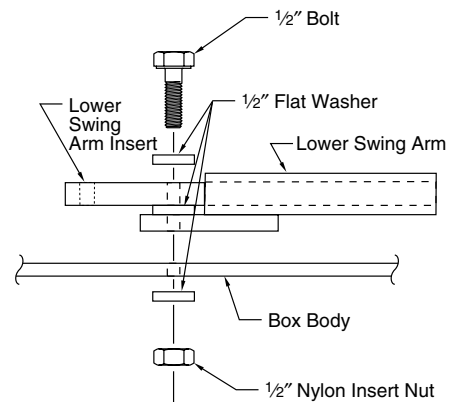


1. Mark the rear edge of the crank assembly or mounting plate in line with the tarp roll-up bar on the driver's side and passenger side. Mark these points and call them A.
2. Determine where you want the rear of the tarp to be when it fully covers the box. Mark these points on both sides of the box and 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. Once point B center line is marked, measure 1" up from box body and mark.

Note: If box body construction does not allow you to thread nuts on from the interior wall, refer to alternate instructions on figure 7.

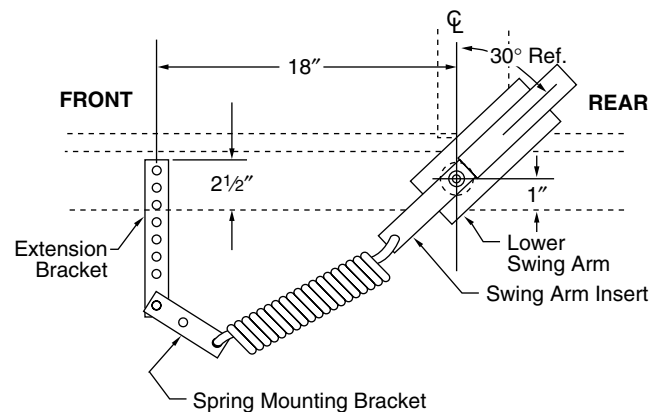
4. Drill $\frac{1}{2}$ " hole where center line (point B) and 1" mark intersect. Position the driver's side lower swing arm assembly to the point marked on the driver's side ("B"). Clamp the lower swing arm so the $\frac{1}{2}$ " hole (on the arm) is at point B and up 1" from bottom of the box. Drill $\frac{1}{2}$ " hole through. (See figure 4)
5. Refer to figure 5. Position one $\frac{1}{2}$ " washer in between swing arm insert and lower swing arm. Insert one $\frac{1}{2}$ " bolt into arm and through $\frac{1}{2}$ " hole. Use washer on each side of bolt. Thread $\frac{1}{2}$ " nylon insert nut on other side and secure tightly.

Figure 5



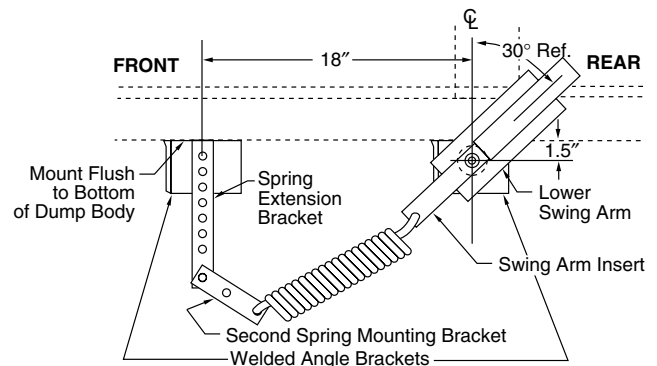
6. Refer to figure 6. Place extension bracket into position and clamp. Mount bracket as low as possible. (Leave clearance for tires.) Drill two $\frac{3}{8}$ " holes and use nuts, bolts and washers to fasten tightly.

Figure 6



7. Bolt second spring mounting bracket loosely to first spring mounting bracket using $\frac{3}{8}$ " nuts, bolts and washers.
8. Position tension spring as shown.
9. Repeat on passenger side.

Figure 7



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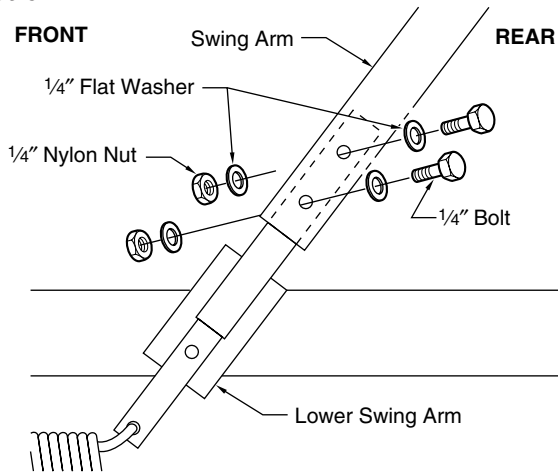
STEP 4

How to Install the Swing Arms

Parts you will need:

- Swing arms (2)
- $\frac{1}{4}$ " x 2" bolts (4)
- $\frac{1}{4}$ " nylon insert nuts (4)
- $\frac{1}{4}$ " flat washers (8)

Figure 8



1. Refer to figure 8. Place a swing arm on the driver's lower swing arm assembly shaft. Be sure that the arm is in the rear position.
2. Insert $\frac{1}{4}$ " x 2" bolts, nuts, and washers into holes as shown and tighten.
3. Repeat steps 1 & 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, increase distance from pivot point to spring mounting bracket to 18".

STEP 5

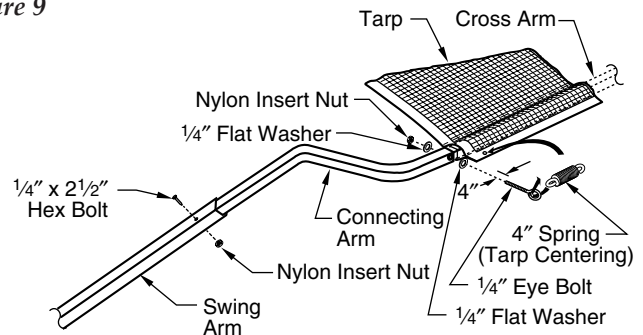
How to Install the Tarp, Cross Arm, and Connecting Arms

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)
- $\frac{1}{4}$ " x $2\frac{1}{2}$ " hex bolts (2)
- $\frac{1}{4}$ " x $\frac{3}{4}$ " self-tapping Phillips screws (6)
- $\frac{1}{4}$ " eye bolts (2)
- $\frac{1}{4}$ " nylon insert nuts (4)

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).

Figure 9

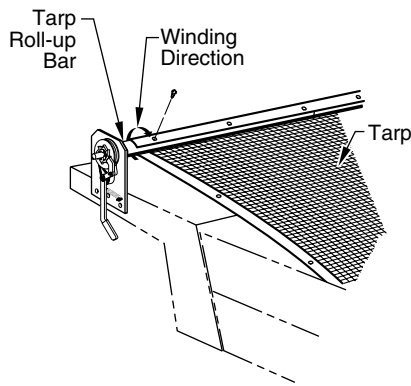


1. Refer to figure 9. Feed the cross arm through the pocket in the end of the tarp.
2. Raise the swing arm to the top of the tailgate and slide the ends of the connecting arms onto the swing arm.
3. Slide both connecting arms onto the swing arms.
4. Square the tarp and the rear cross bar with the top of the tailgate.

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5. Drill a $\frac{9}{32}$ " hole through each swing arm and connecting arm.
6. Fasten the swing arms to the connecting arms with $\frac{1}{4}$ " x 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 $\frac{9}{32}$ " horizontal hole through the connecting arm and the cross arm. *Do not drill through the tarp.*
9. Fasten the arms with eye bolts, washers, and nylon nuts. (See figure 9)
10. Attach the spring to the grommet in each corner of the tarp and to the eye bolt. Crimp the ends of the springs.

Figure 10



11. Refer to figure 10. 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.

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

12. Mark the tarp roll-up bar for screw placement using the grommets in the tarp as a guide.
13. Drill six $\frac{7}{32}$ " holes.
14. Fasten the tarp to the roll bar with self-tapping Phillips screws.

STEP 6

How to Install the Swing Arm Brackets

Parts you will need:

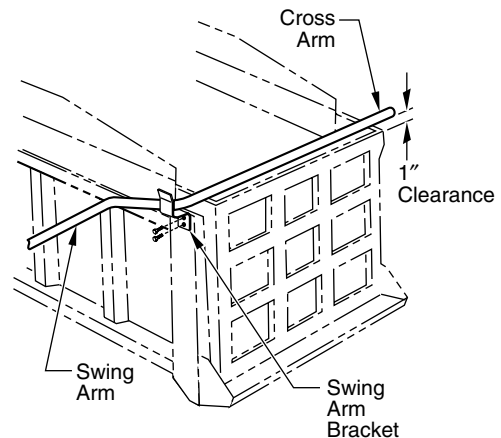
Rear swing arm brackets (2)

$\frac{5}{16}$ " x 1" self-tapping screws (4)

$\frac{5}{16}$ " lock washers (4)

Note: The swing arm rear brackets keep the tarp from striking or rubbing the rear of the box when the tarp covers the load.

Figure 11



1. Refer to figure 11. Decide where to place the swing arm brackets by using the brackets to push the cross arm slightly upward off of the box (approximately 1"). Mark the location of the bracket.
2. Drill two $\frac{9}{32}$ " holes. Fasten the bracket in this location using $\frac{5}{16}$ " self-tapping screws and lock washers. Swing the cross arm down to double-check that the tarp is clear of the box.

CAUTION: Do not allow the cross arm to rest on the box or extend over the rear of the box. This will cause premature failure of the tarp.

STEP 7

How to Install the Wind Deflector (Optional)

Parts you will need:

Wind deflectors (2)

1/4" x 3/4" machine screws (4)

1/4" keps nuts (4)

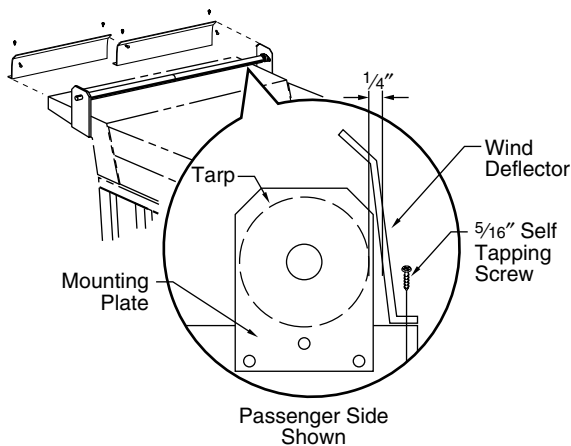
5/16" self-tapping screws (5)

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 to prevent air from getting under the tarp. Support is not included in the assembly package.

1. Refer to figure 12. Make sure dump is uncovered and tarp is wound around roll-up bar. Place one deflector on the passenger side mounting plate. Position deflector so there is 1/4" gap between deflector and tarp. Back the deflector up until it rests against the passenger side mounting plate (this provides support to the deflector). Fasten to cab shield with screws provided.

Figure 12



2. Place the other deflector on the driver's side mounting plate and fasten to the cab shield maintaining a 1/4" clearance between tarp and deflector. Where the two deflector plates meet, fasten the two deflectors together to support the center.

How to Operate the Tarp System

How to Uncover the Load

1. Insert the hand crank on the crank assembly, and turn clockwise. The tarp will roll up. You can stop at any point. The mechanism will hold the tarp in place.
2. Stop cranking when the tarp is completely rolled up.
3. Remove the hand crank and place in the cab for future use.

How to Cover the Load







1. Quickly pull the brake handle to the farthest-down position. The tarp will fly back a short distance and then stop. As long as you hold the handle down, the tarp will not move.

CAUTION: Do not let go of the brake handle until the tarp is fully over the load. The handle provides braking action for the tarp swing. If you let go of the handle before the tarp is over the load, it could cause damage to the crank assembly.

2. Carefully release brake handle until the tarp begins to move again. The tarp should move slowly. If the tarp is moving too fast, pull the handle slightly, to apply pressure on the brake.





Economy Easy Cover

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.

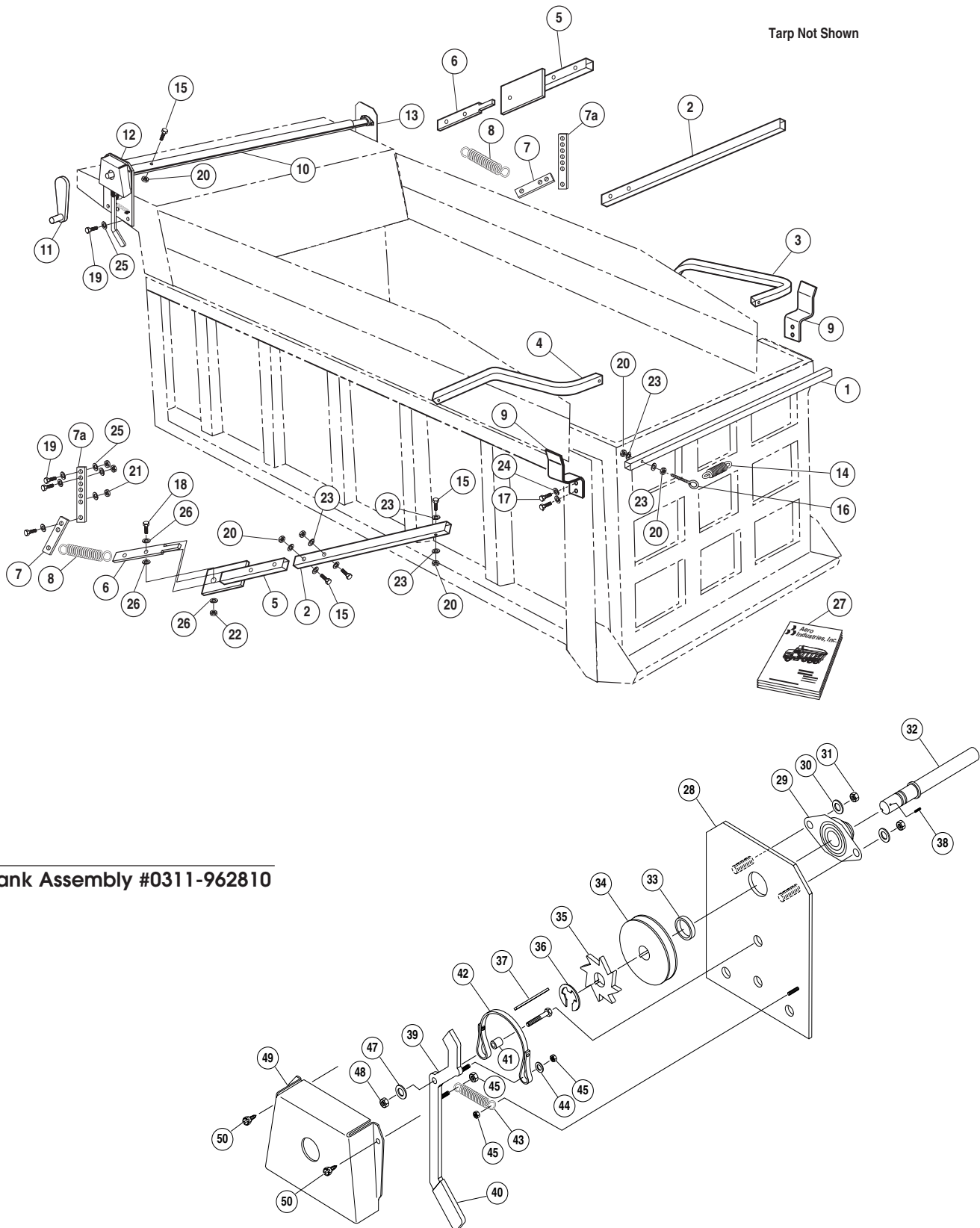
How to Maintain the Easy Cover

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.
-  Springs: 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.

Economy Easy Cover



Crank Assembly #0311-962810

Economy Easy Cover

No.	Part No.	Description	Qty.	Crank Assembly Parts #0311-962810			
1	0311-862822	Cross Arm	1	No. Part No.	Description	Qty.	
2	0311-862823	Swing Arm	2	28	0311-962811	Mounting Plate w/Studs	1
3	0311-862828	Connecting Arm P.S.	1	29	0710-602175	Bearing 2 Bolt Flange	1
4	0311-862829	Connecting Arm D.S.	1	30	0820-680620	Washer Flat 3/8 Zinc	2
5	0311-962800	Lower Swing Arm	2	31	0815-660660	Nut Hex 3/8-16 Nylok Zinc	2
6	0311-862801	Swing Arm Insert	2	32	0311-860754	Shaft Crank Direct Drive	1
7	0311-862830	Spring Mounting Bracket	2	33	0311-862819	Spacer Crank Shaft Econo	2
7a	0311-862860	Spring Mounting Bracket	2	34	0311-860245	Brake Hub Economy E/C	1
8	0715-619305	Underbody Spring	2	35	0311-860750	Ratchet Economy E/C	1
9	0311-960249	Swing Arm Saddle	2	36	0840-618525	Snap Ring E-Style 3/4"	1
10	0311-962521	Roll-up Bar	1	37	0840-618528	Keystock 3/16" x 2 1/8"	1
11	0311-962801	Crank Handle	1	38	0835-619610	Pin Spring 1/8" x 3/4"	1
12	0311-962810	Crank Assembly	1	39	0311-962807	Handle/Pawl w/Studs	1
13	0311-962805	Mounting Plate	1	40	0765-618839	Rubber Brake Handle Grip	1
14	0715-619601	Spring Tension 4" -2	2	41	0311-862820	Spacer Brake Handle Econo	1
15	0810-650473	Bolt HHCS 1/4" -20 x 2"	10	42	0311-962808	Brake Belt Assembly Econo	1
16	0810-650915	Bolt Eye 1/4 -20 x 1 1/2"	2	43	0715-619810	Spring Extension Econ E/C	1
17	0810-650510	Bolt 5/16" x 1" Type F	12	44	0820-680410	Washer Flat 1/4 Zinc	1
18	0810-650602	Bolt HHCS 1/2" -13 x 2 1/2"	2	45	0815-660451	Nut 1/4-20 Nylon Insert	3
19	0810-670660	Bolt HHCS 3/8" -16 x 1 1/2"	16	46	0810-650102	Bolt HHCS 5/16-18 x 20 GR8	1
20	0815-660451	Nut Hex Nylon Lock 1/4" -20	12	47	0820-680510	Washer Flat 5/16 Zinc	1
21	0815-660660	Nut Hex Nylon Lock 3/8" -16	16	48	0815-660550	Nut Hex 5/16-18 Nylon	1
22	0815-660855	Nut Hex Nylon Lock 1/2" -13	2	49	0311-960758	Crank Cover #020	1
23	0820-680410	Washer Flat 1/4"	24	50	0825-670459	Screw HH #14 x 1/2" Type F	2
24	0820-680520	Washer Split Lock 5/16"	4				
25	0820-680620	Washer Flat 3/8"	32				
26	0820-680810	Washer Flat 1/2"	6				
27	0930-861806	Installation Manual	1				

You're Covered With Aero!

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

1-800-535-9545

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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0930-861806

03/12/02



INDIANAPOLIS, IN
3010 W. Morris Street
Indianapolis, IN 46221
(800) 535-9545
FAX (317) 244-1311

OMAHA, NE
10308 South 144th St.
Omaha, NE 68138
(800) 535-8552
FAX (402) 895-6129

HAMBURG, PA
2nd & Grand
Hamburg, PA 19526
(800) 535-3665
FAX (610) 562-0340

STREETSBORO, OH
8540 St. Rt. 14, Suite A
Streetsboro, OH 44241
(888) 237-2262
FAX (330) 626-3277

BURLINGTON, ONTARIO
AERO-KIT INDUSTRIES
3474 Mainway Drive
Burlington, Ontario
L7M 1A8
(905) 335-2012
FAX (905) 335-8499