



TARP SYSTEMS, PARTS & TARPS

P/N 1809533 Rev. C

# OWNER'S MANUAL



## Arm System for Belly Dumps, End Dumps, Dump Bodies & Pups

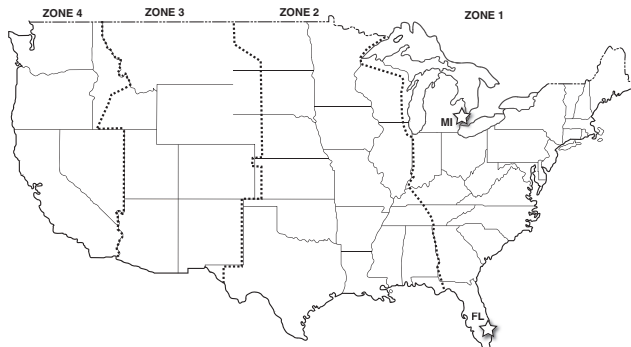
*READ BEFORE INSTALLING*

3353 SE GRAN PARK WAY ■ STUART, FL 34997  
PHONE 1-800-327-8287 ■ FAX 772-287-0431  
[www.donovan-tarps.com](http://www.donovan-tarps.com)

**PREPAID FREIGHT POLICY.** Shur-Co<sup>®</sup>, LLC will prepay freight on eligible orders\* of Florida-manufactured Donovan products and tarp items shipped from our FL and MI branches that meet the dollar requirements for the shipping destinations specified below.

\*Valid within the continental 48 states only. Applies to products purchased at standard pricing; any special pricing will void standard prepaid freight policy and will be addressed on a case-by-case basis. Does NOT apply to Bedliners or Shur-Co<sup>®</sup> Flatbed products.

**INTO FL/MI:** Freight prepaid on orders of \$2,500 or more or tarp-only orders of \$1,500 or more. **INTO ZONES 1 & 2:** Freight prepaid on orders of \$3,000 or more or tarp-only orders of \$2,500 or more. **INTO ZONES 3 & 4:** Freight prepaid on orders of \$6,000 or more or tarp-only orders of \$3,000 or more.



**WARRANTY.** We warrant all new products are free of defects in materials and workmanship.\* This warranty is effective if products are properly installed and used for the purpose for which they were intended and applies to the original buyer only. Except as set forth above or in any product-specific warranty documentation, we make no other warranties, express or implied, including but not limited to warranties of merchantability of fitness for a particular use.

Returns of a product for warranty must be accompanied by a Return Merchandise Authorization number (RMA#), obtained by calling Customer Service at 800-327-8287, and sent, freight paid by us, to Donovan, 3353 SE Gran Park Way, Stuart, FL 34997. All products returned without an RMA# will be refused. When we issue the RMA#, we will also issue a call tag to have U.P.S. (or other freight company) pick up the product. C.O.D. returns not accepted.

We will pay no storage fees for a warranty product return prior to pick by us or the freight company. If a warranty product return is scheduled to be picked up by us, we will pick up the product at our earliest convenience. If a product returned is found, in our judgement, to be defective in material or workmanship, our obligation under this warranty is limited to the repair or replacement of the product, which will be made by us. Repair or replacement will be at our discretion, with replacements being made using current products performing in the equivalent function. Labor charges, other than those incurred at our factory, including, but not limited to, any labor to install a repaired or replacement product, are not covered under this warranty. All expenses associated with delivering defective products to our factory and delivering repaired or replacement products from our factory to the owner will be paid by us.

If the product returned is found, in our judgement, to be non-warrantable, the owner will be contacted to authorize repair work, purchase of a replacement product or return of the product, all of which will be at the owner's expense. Payment authorization must be received by us before any non-warrantable product is repaired, replaced or returned. All expenses associated with delivering the repaired non-warrantable product, a replacement product or the non-warrantable product from our factory to the owner will be paid by the owner.

In no event will we be liable for any damages of any kind to person, product or property, including but not limited to indirect, incidental, special, consequential or punitive damages, or damages for loss of profits or revenue, even if we have been advised of the possibility of such damages. There are no warranties for used products or products that have been repaired, altered, modified or subjected to misuse, negligence or accident. We will not repair or replace products that fail or malfunction due to ordinary wear and tear, except as expressly noted in a product-specific warranty. Use of non-Shur-Co<sup>®</sup>, LLC parts in conjunction with Shur-Co<sup>®</sup>, LLC products will void this product warranty.

\*Certain products have specific warranties that differ from this warranty, for example motors and electronics. Product-specific warranty documentation is available for these items. In the event of a conflict between this warranty and a product-specific warranty, the product-specific warranty will govern.

**RETURN POLICY.** All sales final. See WARRANTY above for return details.

**OTHER.** All prices, product listings, sizes, weights and manufacturing details are subject to change without notice. No person is authorized to modify the foregoing conditions of sale whatsoever.

## SHUR-CO<sup>®</sup>, LLC SERVICE AND DISTRIBUTION CENTERS

### Corporate HQ and Outlet Store

#### SHUR-CO<sup>®</sup> of SOUTH DAKOTA

2309 Shur-Lok St., PO Box 713, Yankton, SD 57078  
Ph 800.474.8756 | Fax 605.665.0501

#### SHUR-CO<sup>®</sup> of FLORIDA

3353 SE Gran Park Way, Stuart, FL 34997  
Ph 800.327.8287 | Fax 772.287.0431

#### SHUR-CO<sup>®</sup> of IDAHO

610 N. 16th Ave., Caldwell, ID 83607  
Ph 208.455.1046 | Fax 208.455.1046

#### SHUR-CO<sup>®</sup> of ILLINOIS

3993 E. Mueller Ave., Decatur, IL 62526  
Ph 866.356.0246 | Fax 217.877.8270

#### SHUR-CO<sup>®</sup> of IOWA

3839 Midway Blvd., Ft. Dodge, IA 50501  
Ph 866.356.0245 | Fax 515.576.5578

### Preferred Donovan-Brand Seller

#### SHUR-CO<sup>®</sup> of MICHIGAN

5100 Lakeshore Dr., Lexington, MI 48450  
Ph 800.327.8287 | Fax 772.287.0431

#### SHUR-CO<sup>®</sup> of NORTH DAKOTA

1746 4th Ave. NW, West Fargo, ND 58078  
Ph 877.868.4488 | Fax 701.277.1283

#### SHUR-CO<sup>®</sup> of OHIO

4676 Lynn Rd.  
Rootstown, OH 44266  
Ph 866.356.0242 | Fax 330.297.5599

#### SHUR-CO<sup>®</sup> UK, Ltd.

Unit 41 Rochester Airport Estates  
Laker Rd., Rochester, Kent ME1 3QX  
Ph +44 (0)179.547.3499  
Fax +44 (0)871.272.8278

### ShurTite<sup>™</sup> Service Centers

#### SHUR-CO<sup>®</sup> of CANADA

490 Elgin St., Unit #1  
Brantford, Ontario N3S 7P8  
Ph 800.265.0823 | Fax 519.751.3997

#### SHUR-CO<sup>®</sup> of IDAHO

Ph 208.455.1046 | Fax 208.455.1046

#### SHUR-CO<sup>®</sup> of ILLINOIS

Ph 866.356.0246 | Fax 217.877.8270

#### SHUR-CO<sup>®</sup> of OHIO


Ph 866.356.0242 | Fax 330.297.5599

For more information, log on to our website:

[www.donovan-tarps.com](http://www.donovan-tarps.com)

**MESSAGE TO OWNERS**

Thank you for buying this tarping system from Shur-Co®. We appreciate your confidence in our products. Please read and thoroughly understand this manual before installing and/or operating this system.

Pay particular attention to important safety and operating instructions, as well as warnings and cautions. The hazard symbol  is used to alert users to potentially hazardous conditions and is followed by caution, warning or danger messages.

Failure to READ AND FOLLOW INSTRUCTIONS could result in failure of your tarping system and/or personal injury. Your trailer requirements may, however, call for minor variations to these instructions.

Please inspect your tarping system periodically. Repair or replace worn or damaged parts to your system.

QUESTIONS? CALL OUR HELP LINE:

**1-800-327-8287**

MON-FRI 8 AM-5 PM EASTERN TIME

**SAFETY**

We at Shur-Co® are concerned with your safety and the safety of all those operating this system. Therefore, we have provided safety decals at various locations on your tarping system. Keep decals as clean as possible at all times. Replace any decal that has become worn or damaged, painted over or otherwise difficult to read. Replacement decals are available through Shur-Co® dealers.

**SAFETY INSTRUCTIONS**

- 1. Always wear safety glasses during installation and operation.**
- 2. Stay clear of moving parts.**
- 3. Do not operate under low-hung power lines. Always check for overhead obstructions before opening or closing.**
- 4. Open and close tarp only at the job site.**
- 5. Face vehicle into wind when opening and closing tarp.**
- 6. Install tarp on axle to roll off the top and toward the rear of the box.**
- 7. No other use of this system is authorized, except as designed.**

**RUST PREVENTION**

To prevent rust, paint all exposed metal, such as weld seams and/or metal exposed by grinding or cutting, with corrosion-resistant paint.

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**TOOLS REQUIRED**

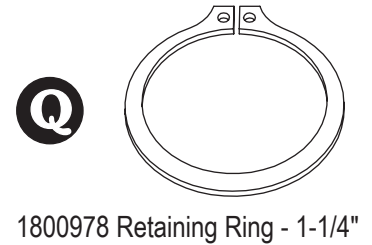
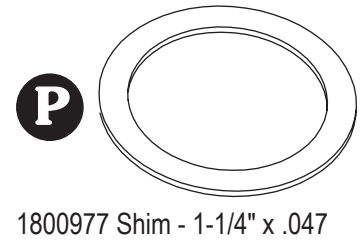
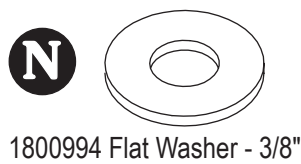
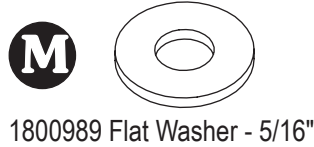
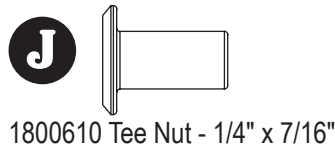
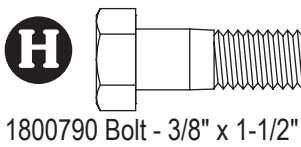
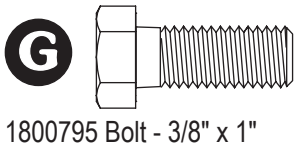
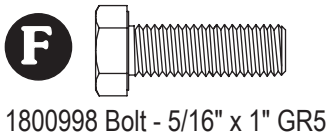
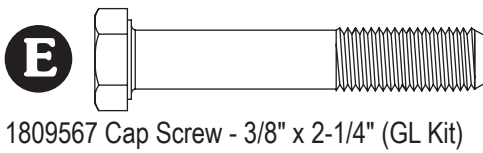
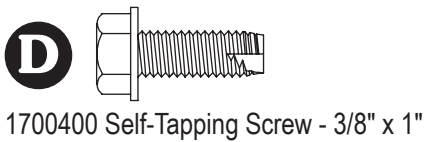
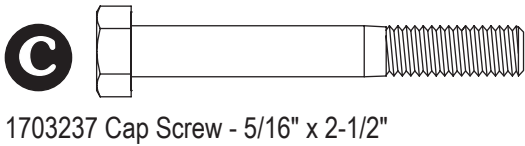
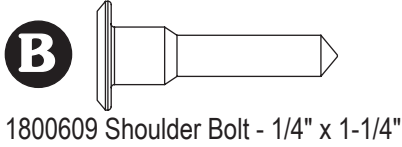
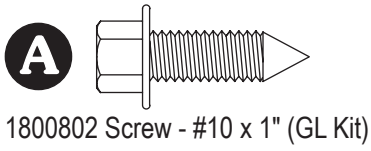
1. Wrenches - 1/2", 9/16", 3/4"
2. Ratcheting Socket Wrench
3. Sockets - 1/2", 9/16", 3/4"
4. Allen Wrenches - 1/8", 5/32", 3/16"
5. Drill Bits (metal cutting) - 5/16", 3/8", 1/2"
6. Center Punch
7. Hammer
8. Tape Measure (2)
9. Flat Head or Phillips Screwdriver
10. Grinder or File
11. Air or Electric Impact Wrench w/9/16" Socket
12. Metal Saw

Additional tools needed, depending on kit configuration:

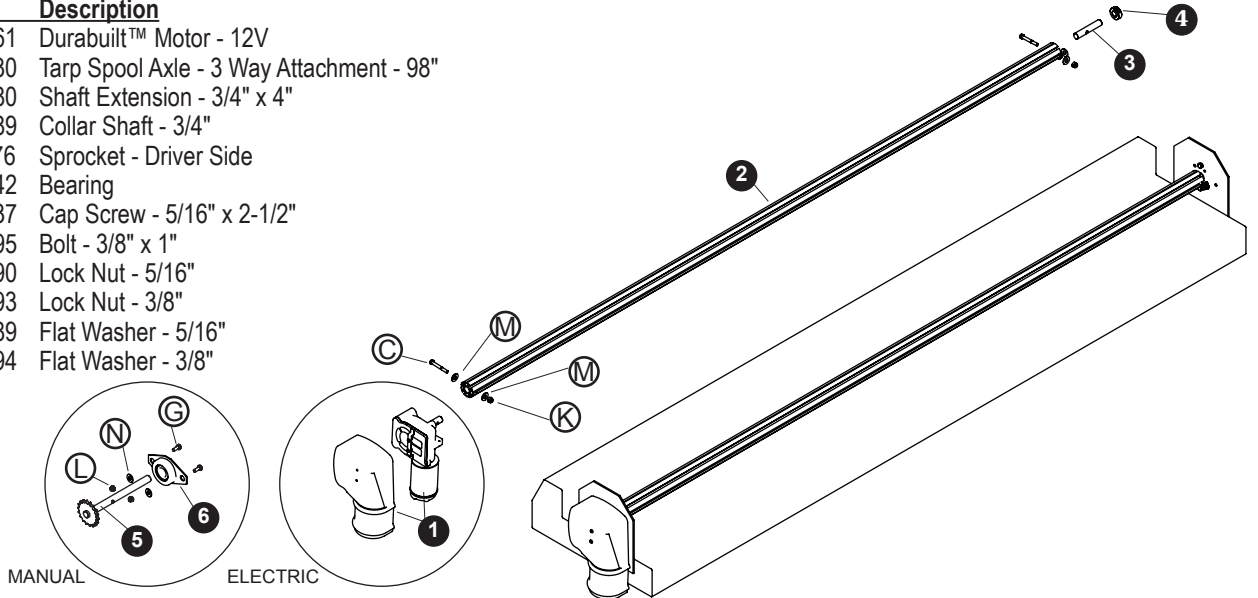
1. Retaining Ring Pliers
2. Wrench or Nut Driver - 10mm
3. Large Pipe Wrench
4. Steel Welder
5. Aluminum Welder

**MAINTENANCE**

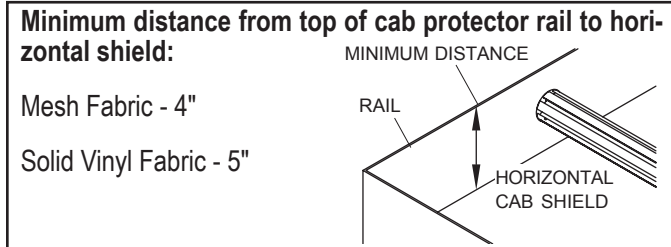
- Spray all bearings with penetrating oil as needed.
- Grease spring bearings as needed.
- Brush springs with steel brush weekly to remove dirt and spray with penetrating oil.
- Tighten any loose bolts.
- Make sure arms are not hitting sides of box. Replace damaged/bent arms.
- Replace worn or broken springs.
- Replace/repair worn or damaged tarps.



Item	Part #	Description
1.	1802061	Durabuilt™ Motor - 12V
2.	1809330	Tarp Spool Axle - 3 Way Attachment - 98"
3.	1800980	Shaft Extension - 3/4" x 4"
4.	1800089	Collar Shaft - 3/4"
5.	1120376	Sprocket - Driver Side
6.	1800042	Bearing
C.	1703237	Cap Screw - 5/16" x 2-1/2"
G.	1800795	Bolt - 3/8" x 1"
K.	1800990	Lock Nut - 5/16"
L.	1800993	Lock Nut - 3/8"
M.	1800989	Flat Washer - 5/16"
N.	1800994	Flat Washer - 3/8"



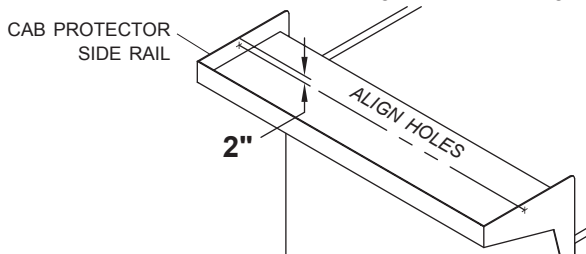
Before drilling holes in box, make sure there is enough room for tarp to roll up around tarp axle. Measure box and compare measurements with those shown.



**STEP 1:** Determine tarp axle mounting location on cab protector. Location must keep spring-loaded arms from interfering with cab doors and exhaust stacks. Arms must not interfere with loading process.

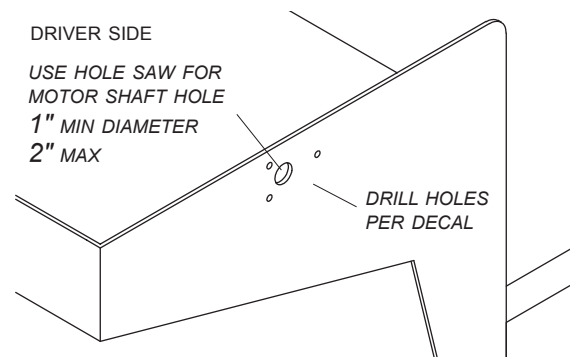
**NOTE:** If manual crank (page 30) will be installed on system at any time, spacers or brackets may need to be fabricated to align driver side tarp axle bracket with mounting surface for manual crank.

**STEP 2:** Prepare to cut holes to mount electric motor and axle bearing. At desired location on each side of cab protector, measure down 2" from top of cab protector side rail and mark location for center of tarp axle. Center of motor shaft hole and axle bearing hole must be aligned.



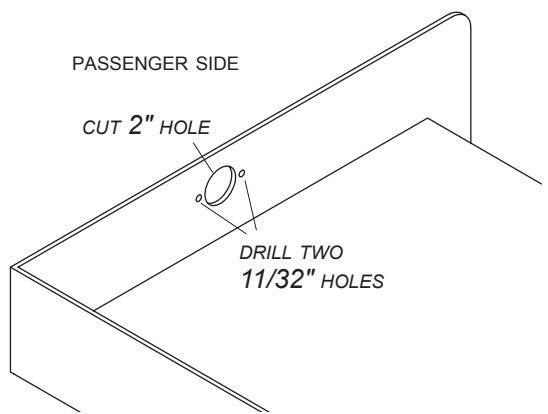
**NOTE:** Install mounting brackets directly across from each other, in line on opposite sides of box/cab guard.

**STEP 3A: Electric system.** On driver side, use side plate as guide to center punch and drill holes to mount electric motor.



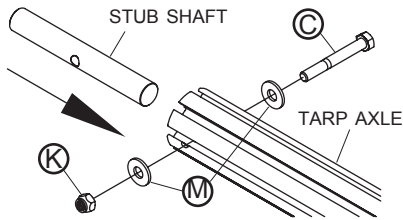
**STEP 3B: Manual system.** Cut matching hole pattern in driver side as illustrated for passenger side in step 4.

**STEP 4:** On passenger side, using 2" hole saw, drill hole for axle bearing at marked location. Center bearing flange over hole and use as guide to drill two 11/32" holes for fastening bearing.

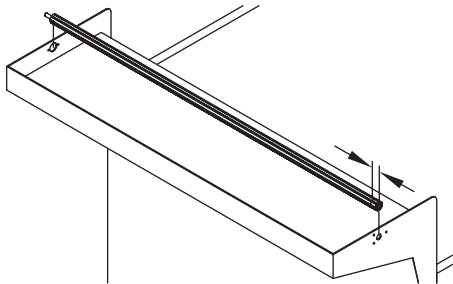




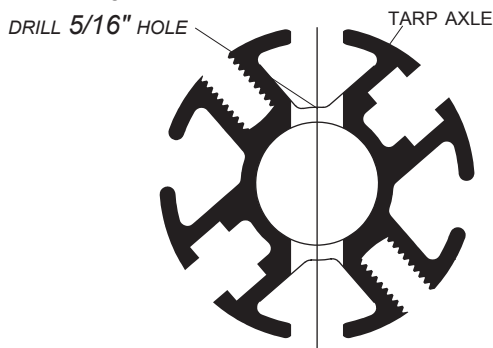
**STEP 5:** Insert stub shaft into end of tarp axle with drilled hole and fasten with screw **C**, washers **M** and nut **K**.



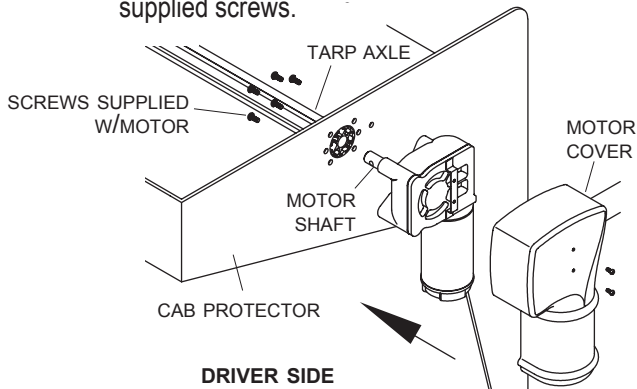
**STEP 6:** Measure inside distance between side rails on cab protector. Measure and mark tarp axle 1" shorter than this distance (do not include stub shaft in measurement). Cut squarely at mark and deburr cut end.



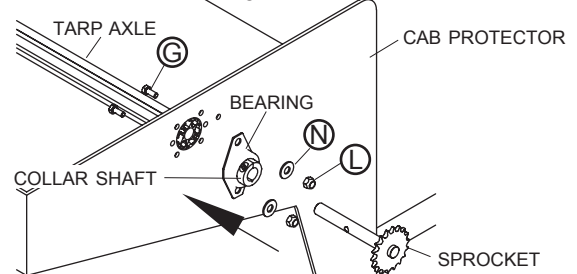
**STEP 7:** Drill 5/16" hole 5/8" in from cut end of tarp axle, aligning hole as shown.



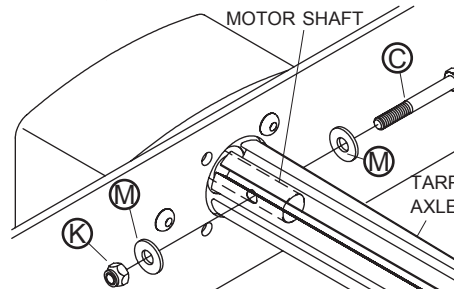
**STEP 8A: Electric system.** Insert stub shaft through bearing hole on passenger side of cab protector. Insert motor shaft through hole on driver side and slide tarp axle onto motor shaft. Fasten motor to cab protector with supplied screws.



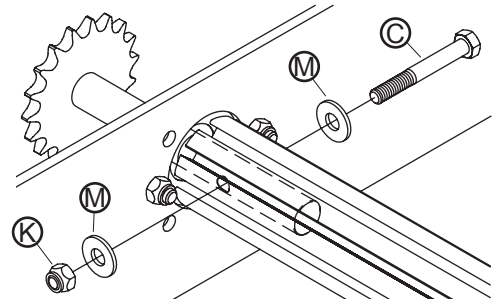
**STEP 8B: Manual system.** Loosely assemble bearing to cab protector using bolts **G**, washers **N** and nuts **L**. Insert stub shaft through bearing hole on passenger side of cab protector. Insert sprocket shaft through collar shaft and bearing into tarp axle.



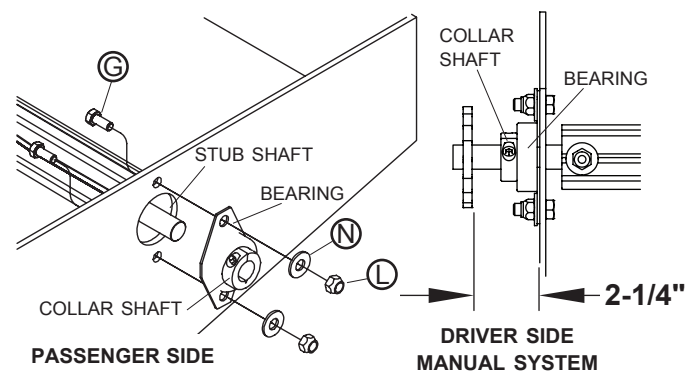
**STEP 9A: Electric system.** Fasten tarp axle to motor shaft with bolt **C**, washers **M** and nut **K**.



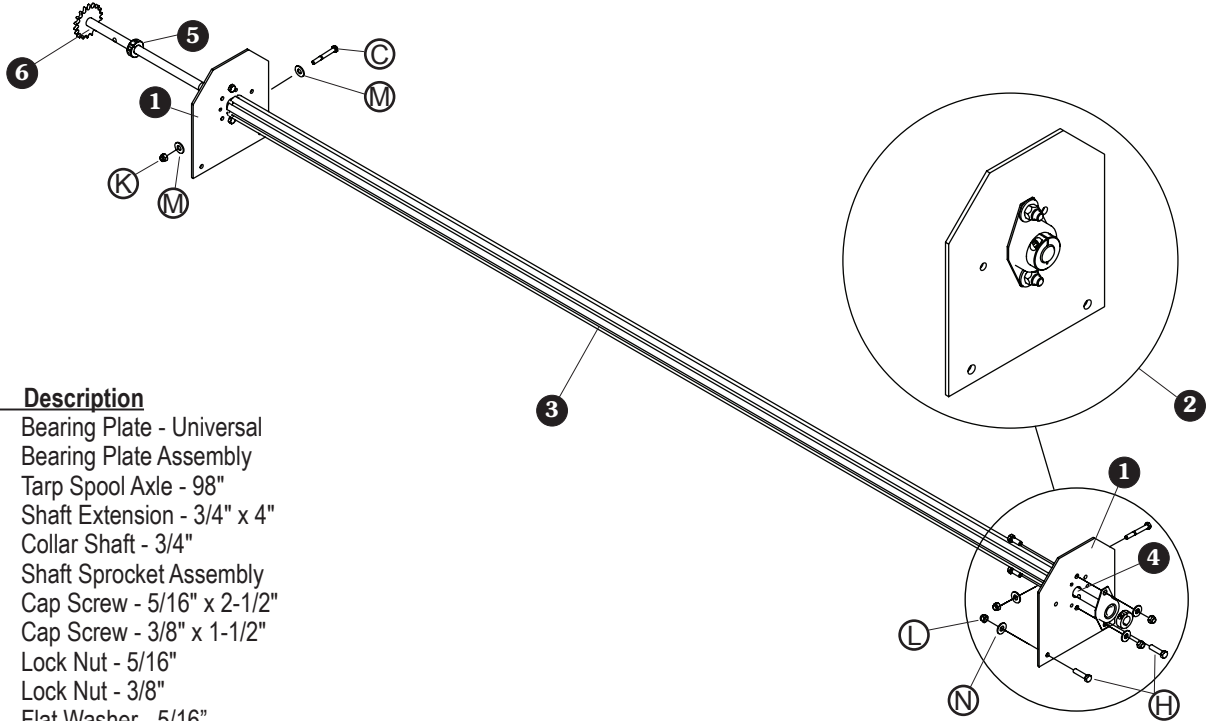
**STEP 9B: Manual system.** Fasten tarp axle to sprocket shaft with screw **C**, washers **M** and nut **K**.



**STEP 10A: Electric system.** Slide flange bearing over stub shaft and fasten to outside of cab protector with bolts **G**, washers **N** and nuts **L**. Tighten set bolts on bearing.



**STEP 10B: Manual system.** Follow instructions for electric system in step 10A. On driver side, adjust sprocket location as shown, then tighten all bearing fasteners and set screws.

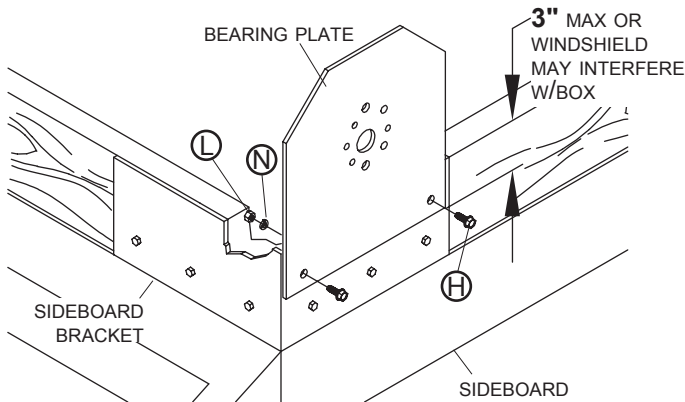


Item	Part #	Description
1.	1809563	Bearing Plate - Universal
2.	1809564	Bearing Plate Assembly
3.	1809330	Tarp Spool Axle - 98"
4.	1800980	Shaft Extension - 3/4" x 4"
5.	1800089	Collar Shaft - 3/4"
6.	1800758	Shaft Sprocket Assembly
C.	1703237	Cap Screw - 5/16" x 2-1/2"
H.	1800790	Cap Screw - 3/8" x 1-1/2"
K.	1800990	Lock Nut - 5/16"
L.	1800993	Lock Nut - 3/8"
M.	1800989	Flat Washer - 5/16"
N.	1800994	Flat Washer - 3/8" GR5

**STEP 1:** Determine tarp axle bracket location on front of box. Position brackets so spring-loaded arms will not interfere with cab door, loader or exhaust stacks.

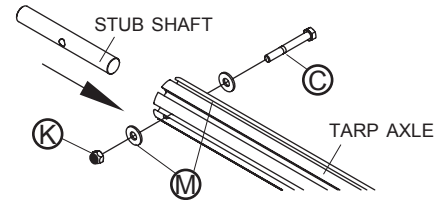
**NOTE:** If manual crank (page 30) will be installed on system at any time, spacers or brackets may need to be fabricated to align driver side tarp axle bracket with mounting surface for manual crank.

**STEP 2:** Using bearing plate as guide, mark and drill 5/16" holes into metal framework on box. Fasten plates with screws H, washers N and nuts L. If mounting to sideboards only, fasten with 3/8" x 2 1/2" carriage bolts, washers and nuts.

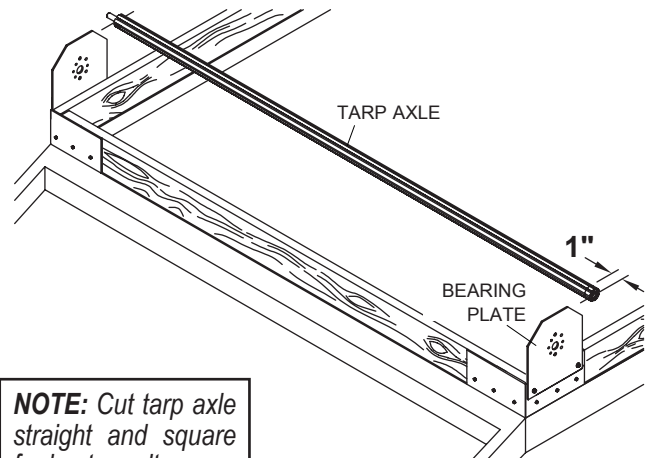


**NOTE:** Install mounting plates directly across from each other, in line on opposite sides of box/cab guard.

**STEP 3:** Insert stub shaft into end of tarp axle with drilled hole and fasten with screw C, washers M and nut K.

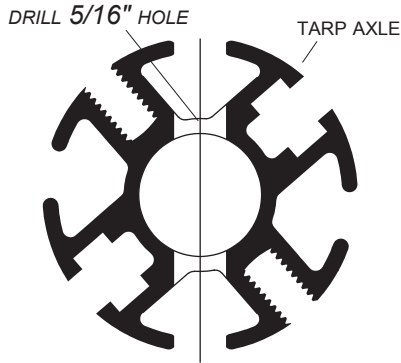


**STEP 4:** Measure distance between inside edges of bearing plates. Measure and mark tarp axle 1" shorter than this distance.

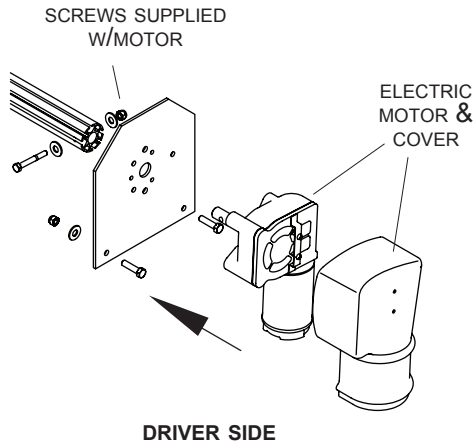


**NOTE:** Cut tarp axle straight and square for best results.

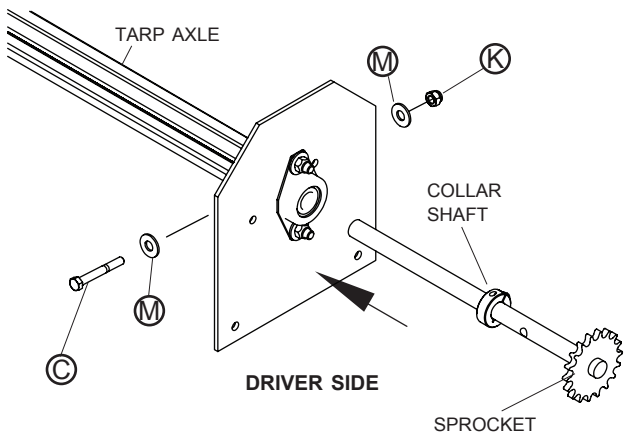
**STEP 5:** Remove tarp axle, cut squarely at mark and deburr cut end. Drill 5/16" hole 5/8" from cut end of axle, aligning hole as shown.



**STEP 6A: Electric motor.** Insert stub shaft through passenger side tarp axle bracket and align tarp axle between brackets. On driver side, insert motor shaft through bracket and into tarp axle. Fasten motor to bracket with supplied screws.

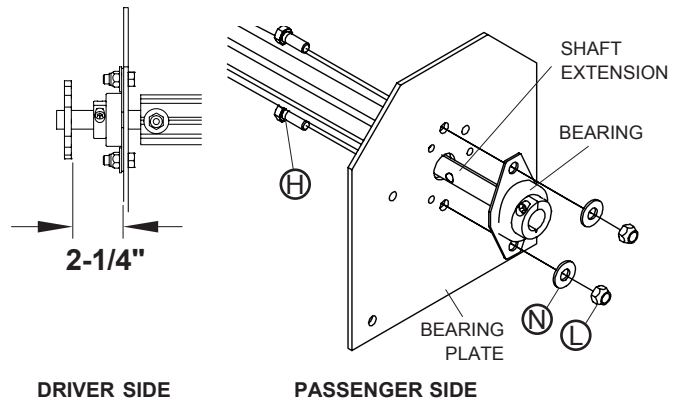


**STEP 6B: Manual crank.** On driver side, loosely fasten flange bearing to bracket with screws (C), washers (M) and nuts (K). Insert stub shaft through passenger side tarp axle bracket and align tarp axle between brackets. Insert sprocket shaft through bearing and into tarp axle.

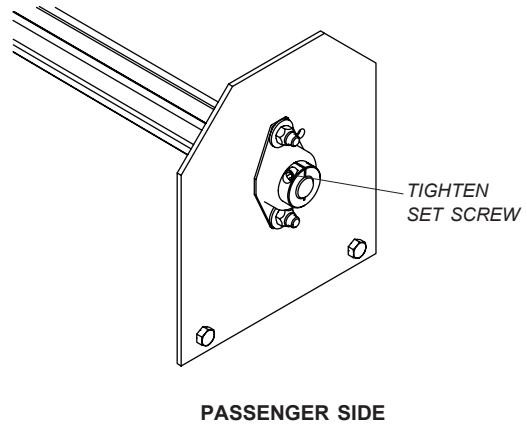


**STEP 7A: Electric system.** Slide bearing assembly over stub shaft and fasten to tarp axle bracket with screws (H), washers (N) and nuts (L).

**STEP 7B: Manual system.** Slide bearing assembly over stub shaft and loosely fasten to bearing plate with screws (H), washers (N) and nuts (L). On driver side, adjust sprocket location, then tighten fasteners.

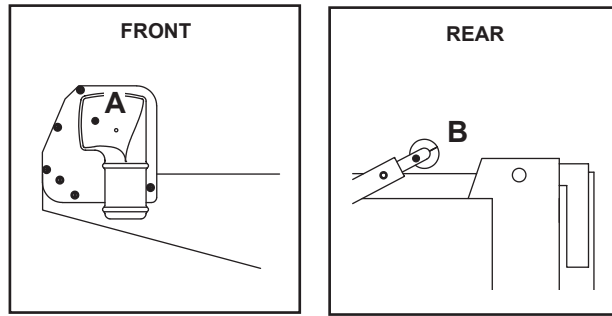


**STEP 8:** Tighten set screw on ball bearing.

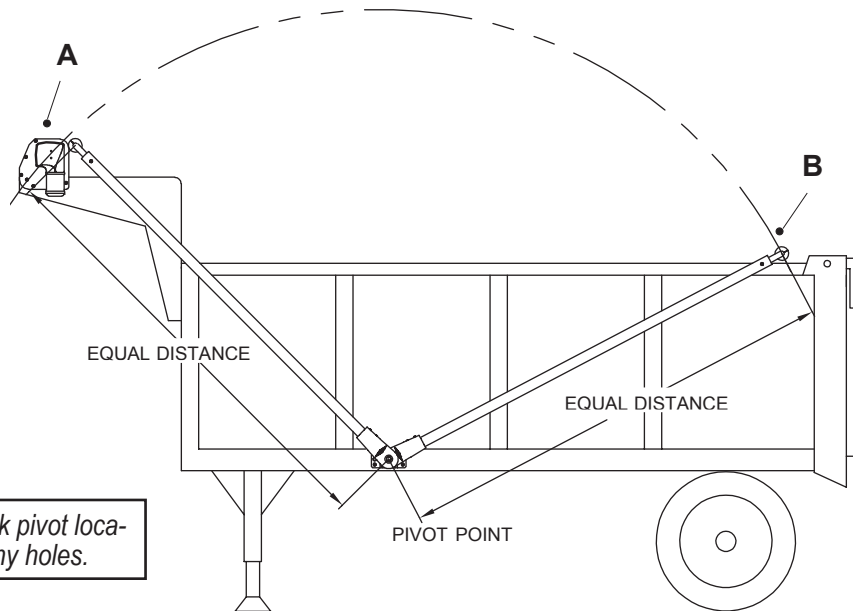




**STEP 1:** Locate points A and B. Point A is center of tarp axle. Point B is desired resting point for tarp tube. Refer to diagram for locations of points A and B.

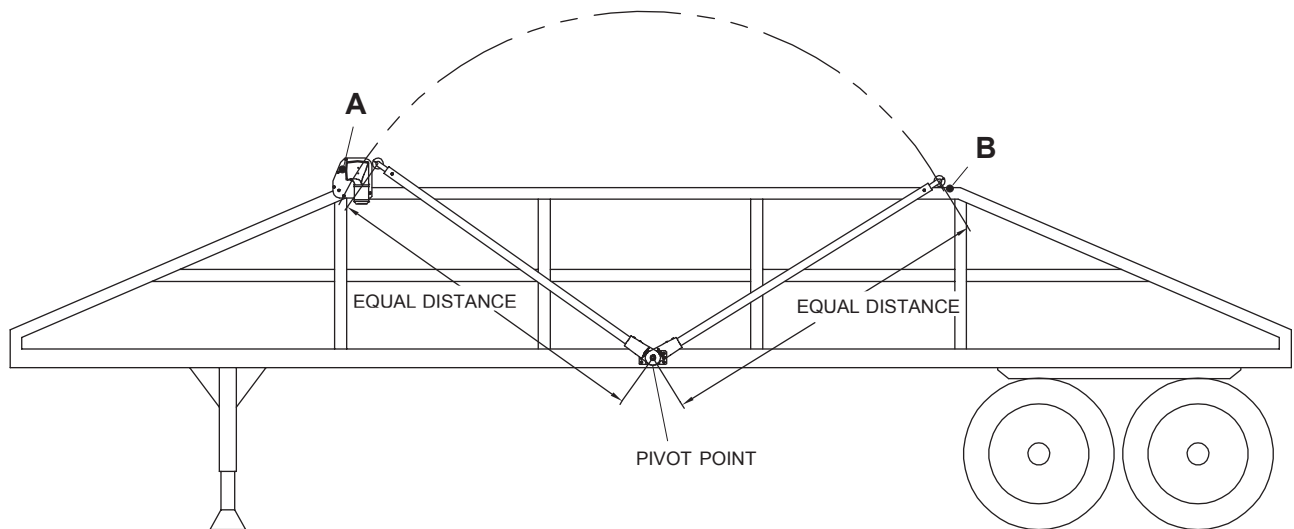


**STEP 2:** Locate and mark pivot point on bottom rail at equal distance between points A and B.

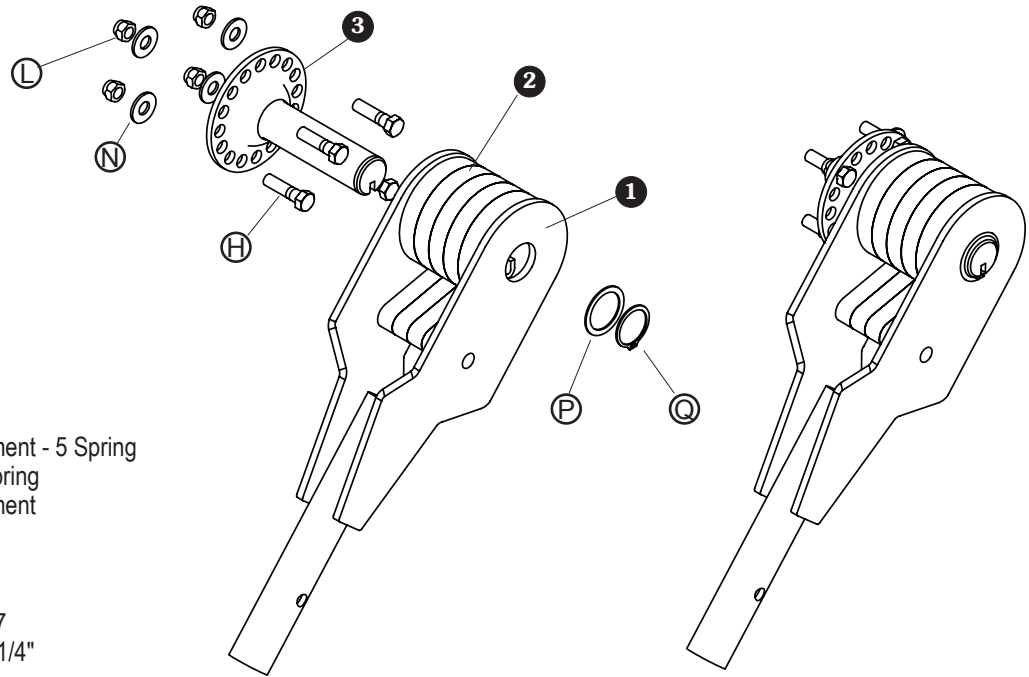


**NOTE:** Double check pivot location before drilling any holes.

**NOTE:** To determine pivot point on opposite side of box, first make sure box is square. Transfer measurement from point A to pivot point over to opposite side of box.



**NOTE:** Tapered, wedged, rounded or sloped trailers may require additional bracketry to offset and square arms with trailer.



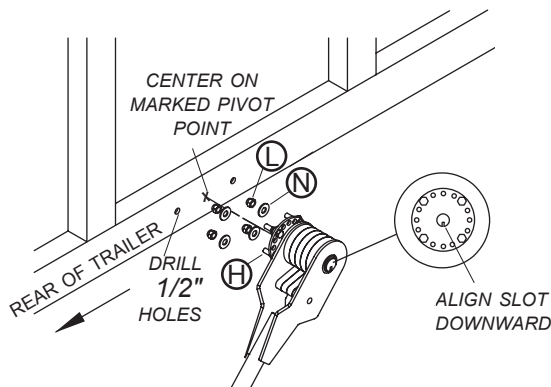
Item	Part #	Description
1.	1809609	Spring Pivot Weldment - 5 Spring
2.	1800763	Flat Coil Torsion Spring
3.	1809583	Pivot Spring Weldment
H.	1800790	Bolt - 3/8" x 1-1/2"
L.	1800993	Lock Nut - 3/8"
N.	1800994	Flat Washer - 3/8"
P.	1800977	Shim - 1-1/4" x .047
Q.	1800978	Retaining Ring - 1-1/4"

## 5-SPRING PIVOT ASSEMBLY

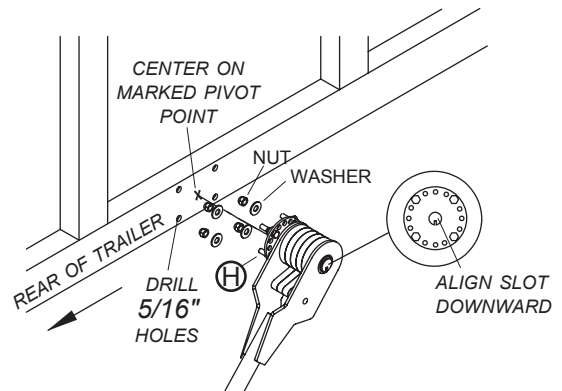
**STEP 1:** Clamp pivot assembly to box, centering shaft on marked pivot point with slot in shaft facing downward.

**NOTE:** Double check pivot location before drilling any holes.

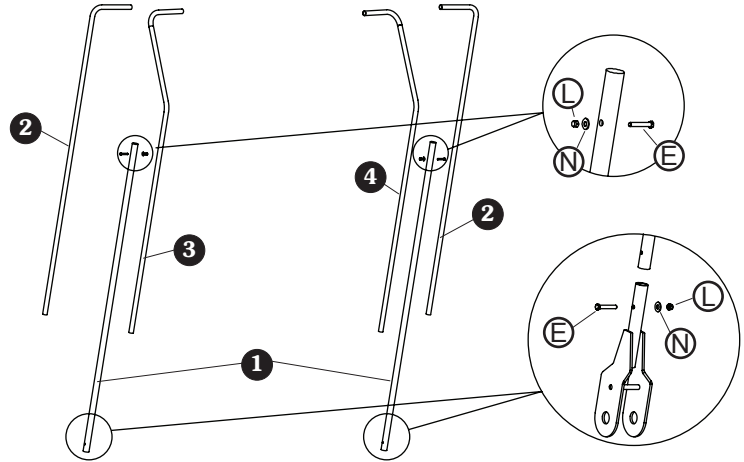
**OPTION A** - Using holes in pivot bracket as guide, mark and drill two 1/2" holes in box. Fasten assembly to box with screws **H**, washers **N** and nuts **L**. Repeat on opposite side.



**OPTION B - Fasten to blind holes.** Drill four 5/16" holes in box. Fasten assembly to box with screws **H** and, if possible, secure with washers and nuts. Repeat on opposite side.

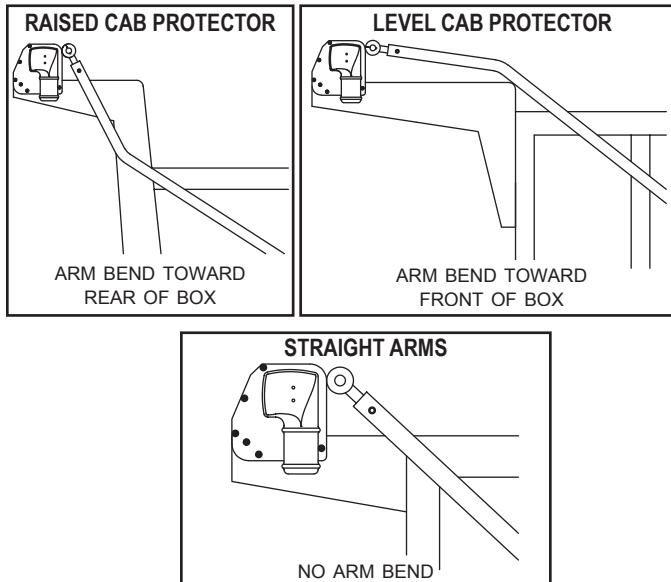


Item	Part #	Description
1.	1809407	Lower Arm
2.	1809408	Upper Arm - Straight
3.	1809553	Upper Arm - 30° Bend - Driver Side
4.	1809554	Upper Arm - 30° Bend - Pass. Side
E.	1809567	Cap Screw - 3/8" x 2-1/4"
L.	1800993	Nylon Lock Nut - 3/8"
N.	1800994	Flat Washer - 3/8"

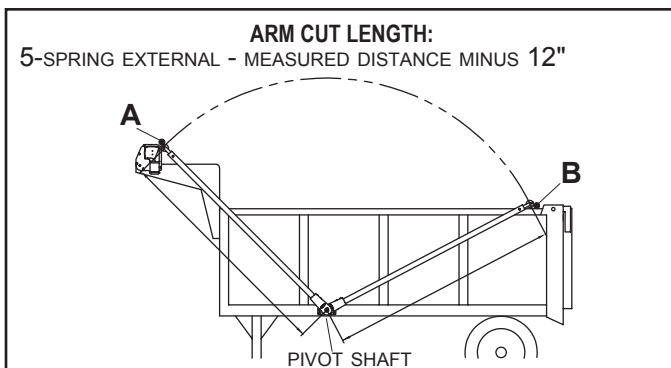


**NOTE:** Determine desired length and orientation of arms before attaching arms to spring pivot.

**STEP 1:** Determine which orientation works best for your application.

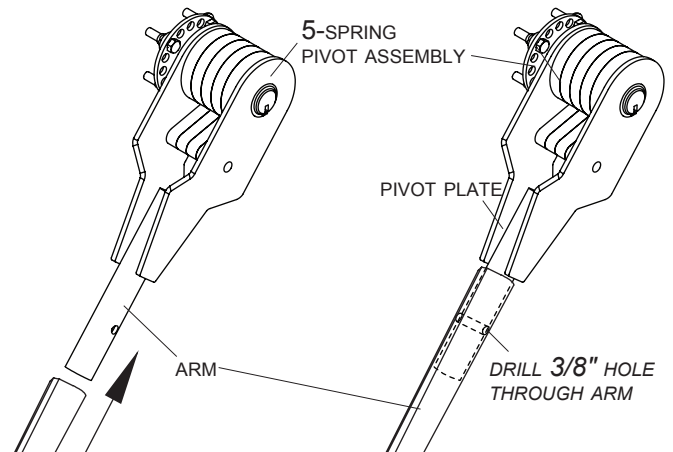


**STEP 2:** Determine arm length. Measure from center of pivot shaft to desired resting points for arm at front and rear of box. Find distance between point A and pivot shaft and between point B and pivot shaft. Calculate and cut arm length using shorter of two distances.

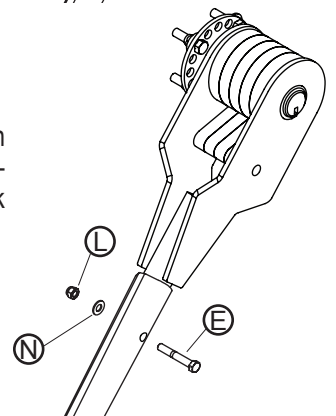


**5-SPRING PIVOT ASSEMBLY**

**STEP 3A:** Slide arm over tube on 5-spring pivot assembly until arm contacts pivot plates. Align arm as shown and drill 3/8" hole through arm. Drilled hole must align with hole in tube.

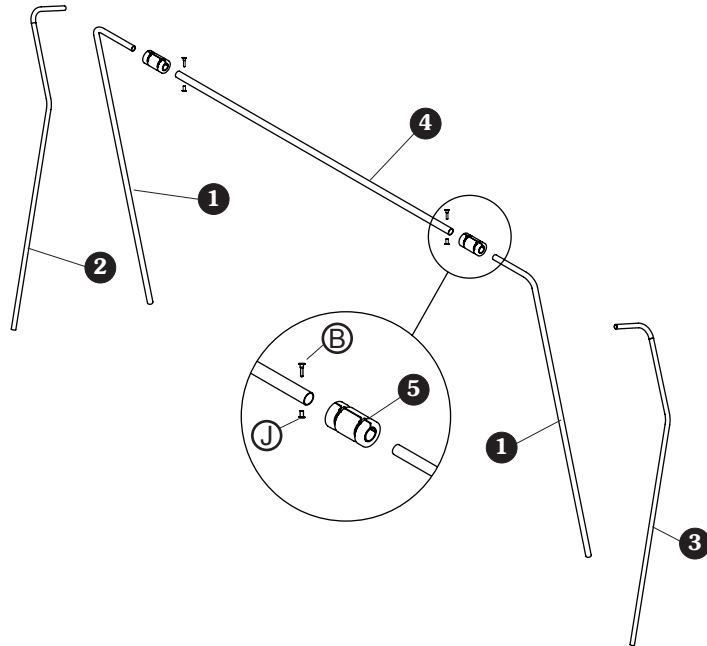


**STEP 3B:** Fasten securely with cap screw E, washers N and nylon lock nut L.



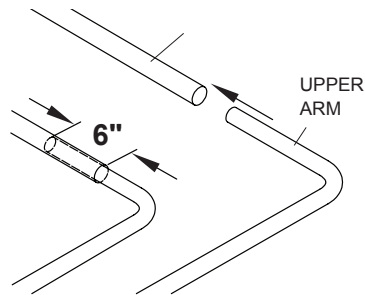
**WARNING**  
Apply arm warning decals (P/N 1704561) on box near spring pivot. Arms are under spring tension while springs are engaged. Use caution while assembling or disassembling arms.

Item	Part #	Description
1.	1809408	Upper Arm
2.	1809553	Upper Arm - 30° - Driver Side
3.	1809554	Upper Arm - 30° - Passenger Side
4.	1809409	Rear Crosspiece
5.	1808819	Rubber Bumper Assembly - 6"
B.	1800609	Shoulder Bolt - 1/4" x 1-1/4"
J.	1800610	Tee Nut - 1/4" x 7/16"

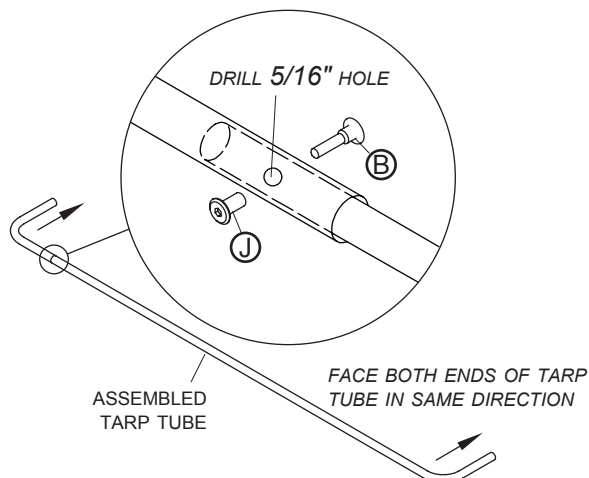


**STEP 1:** Center rear crosspiece between upper arms.

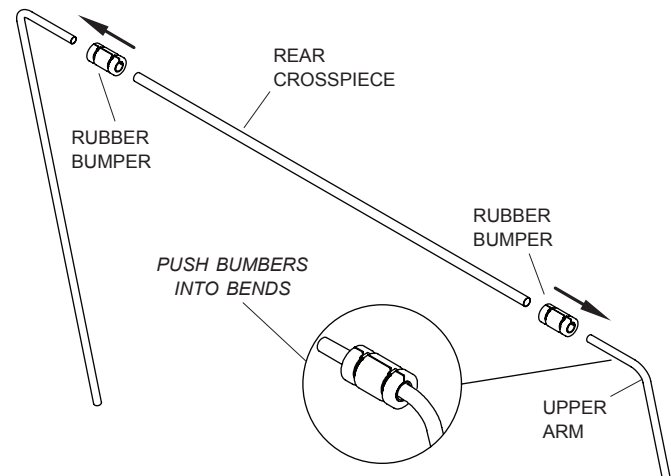
**NOTE:** Deburr inside of tarp tube or outside of elbow if elbow will not easily slide into tarp tube.



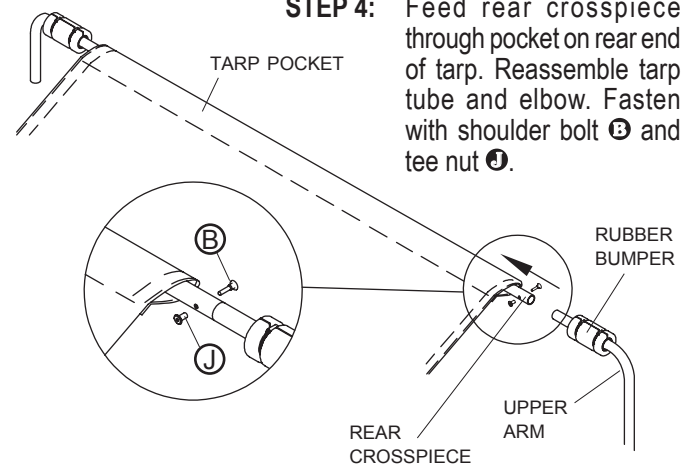
**STEP 2:** Lay assembled tarp tube on flat surface with ends of tube laying flat and facing same direction. Drill two 5/16" holes on tarp tube side of joint. Fasten with shoulder bolt (B) and tee nut (J).



**STEP 3:** Slide rubber bumpers onto upper arm. Push bumpers as far into bends as possible.

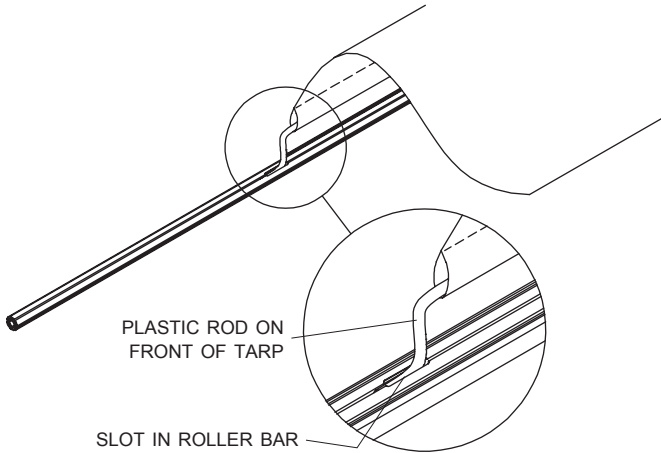


**STEP 4:** Feed rear crosspiece through pocket on rear end of tarp. Reassemble tarp tube and elbow. Fasten with shoulder bolt (B) and tee nut (J).



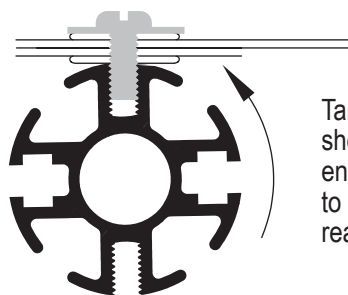
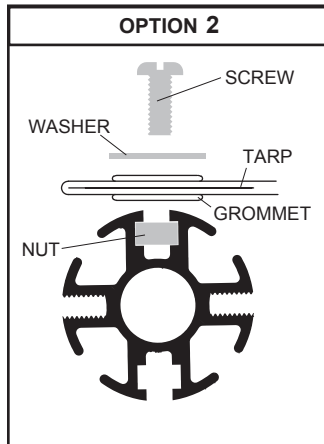
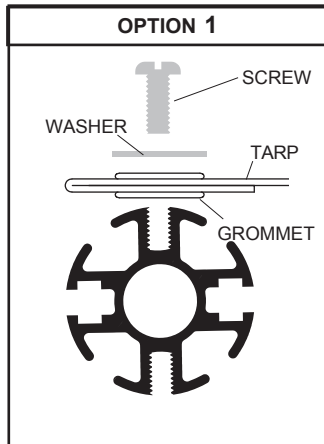
**STEP 5:** Lay front edge of tarp across tarp axle and center tarp with box (cab guard may be off center). Start at center and work toward edges, pulling tarp tight.

**Option 1 (Recommended)** - Thread front of tarp with plastic rod into slot in center of roller bar. Trim ends of rod to fit tarp.



**Option 2** - Fasten screws through washers and grommets into threaded groove. Hardware not included.

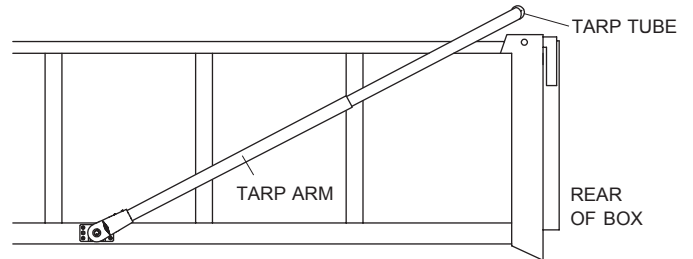
**Option 3** - Install nuts into axle groove, fasten screws through washers, grommets and nuts. Hardware not included.



Tarp must wind open in direction shown. To prevent debris from entering tarp axle, position tarp to roll open off top of axle toward rear of box.

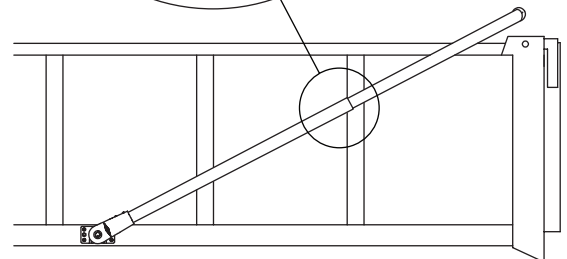
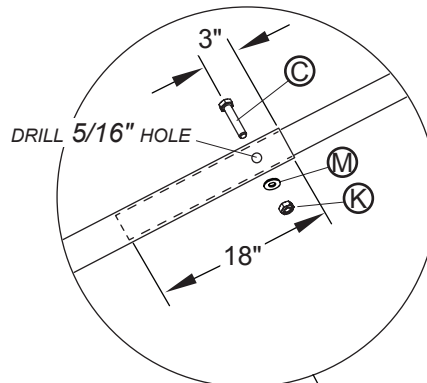
**STEP 6:** Position tarp arms at top rear of box. Square up tarp tube with box by adjusting distance where tarp tube enters arms.

**NOTE:** First, insert tarp tube as far as possible into tarp arms. Pull ends of tarp tube slightly out of each arm as needed to align tarp tube squarely across box.



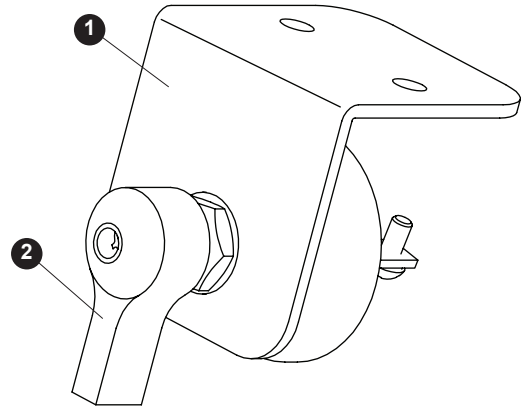
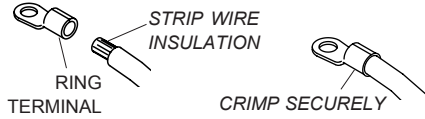
**STEP 7:** Drill 5/16" hole through both arms approximately 3" lower on lower arm. Attach with cap screw C, flat washer M and lock nut K.

**NOTE:** Maintain minimum 18" inset when cutting upper arm down to length.

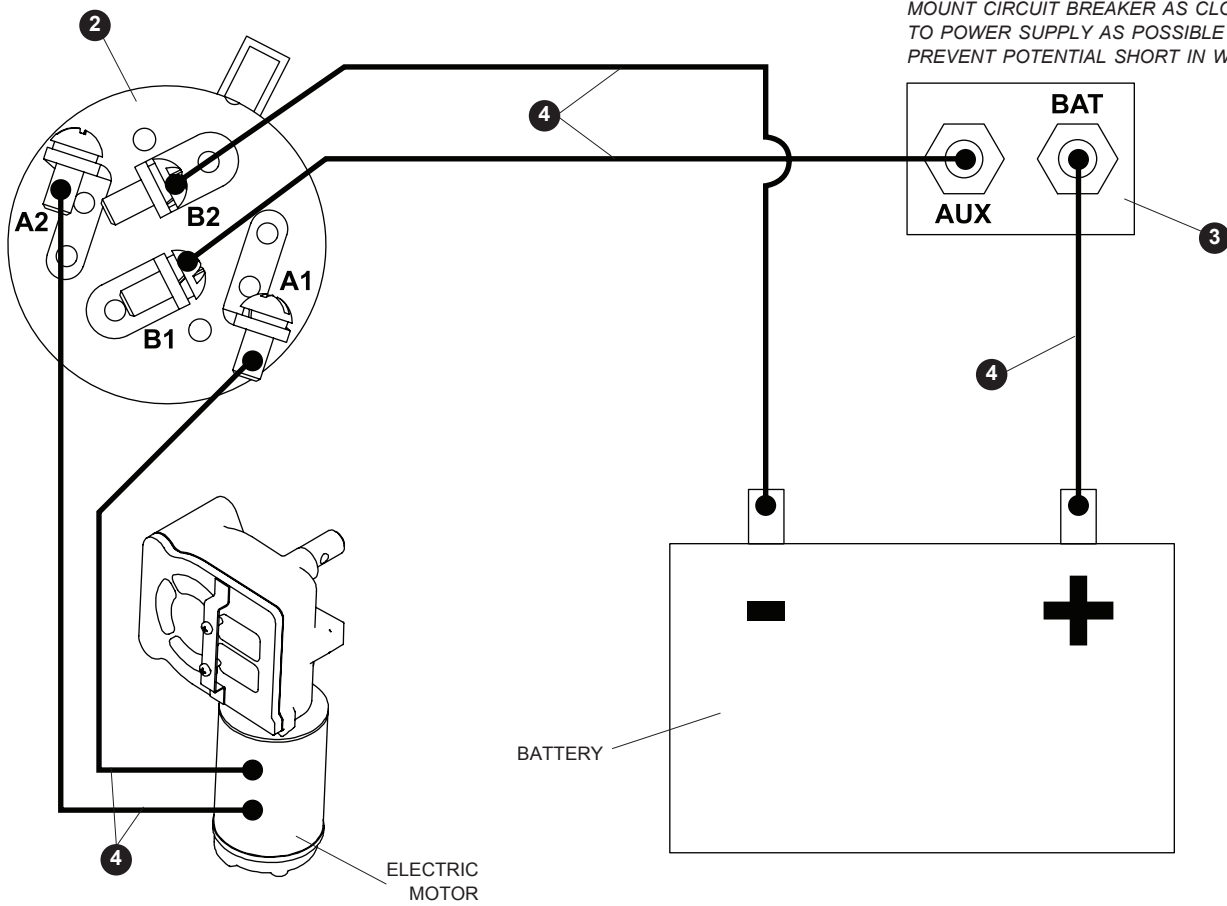


Item	Part #	Description
1.	1800516	Rotary Switch Bracket
2.	1110551	Heavy-Duty Rotary Switch
3.	1800536	Circuit Breaker - 40 Amp
4.	1800028	Wire - 8 Ga. - 60'

**NOTE:** Cut wires to length and strip only enough wire insulation to install ring terminals. Insert bare wire into ring terminals and crimp securely.

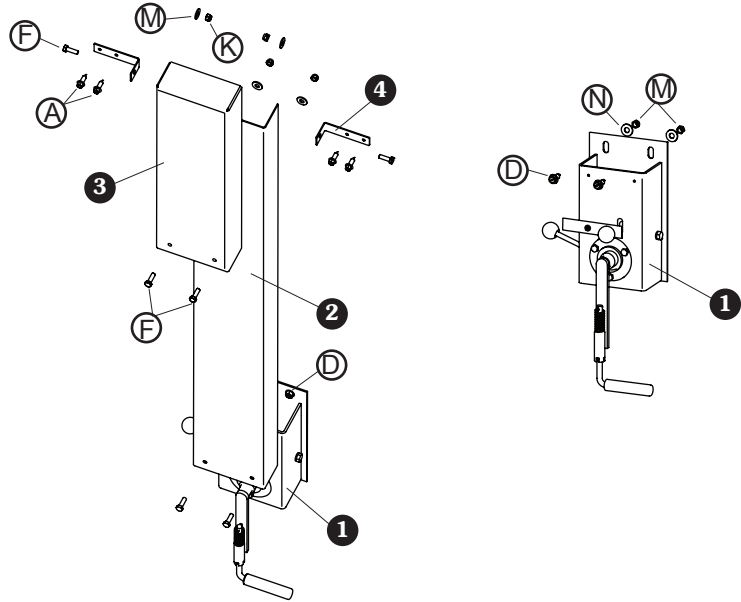


MOUNT CIRCUIT BREAKER AS CLOSE TO POWER SUPPLY AS POSSIBLE TO PREVENT POTENTIAL SHORT IN WIRE

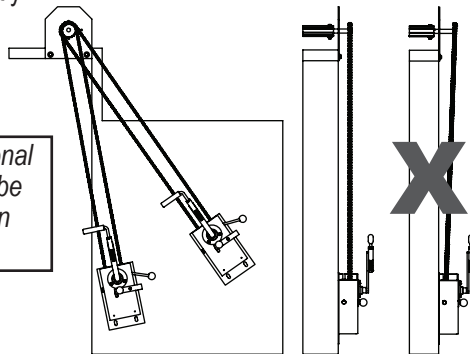




Item	Part #	Description
1.	1800178	Control Box
2.	1800186	Lower Chain Guard
3.	1800185	Upper Chain Guard
4.	1800404	Chain Guard Bracket
A.	1800802	Screw - #10 x 1" (GL Kit)
D.	1700400	Self-Tapping Screw - 3/8" x 1"
F.	1800998	Bolt - 5/16" x 1" GR5 (GL Kit)
K.	1800990	Lock Nut - 5/16"
L.	1800993	Lock Nut - 3/8"
M.	1800989	Flat Washer - 5/16"
N.	1800994	Flat Washer - 3/8" GR5

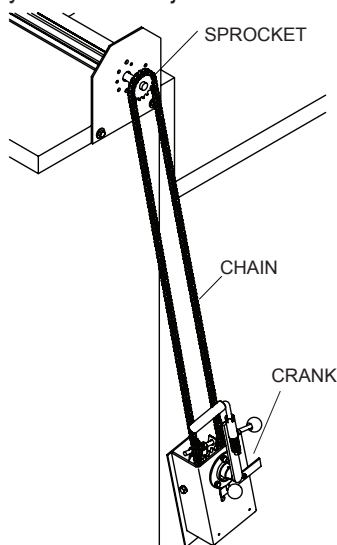


**STEP 1:** Determine mounting location for crank. Drive shaft sprocket and crank sprocket must line up to work correctly.



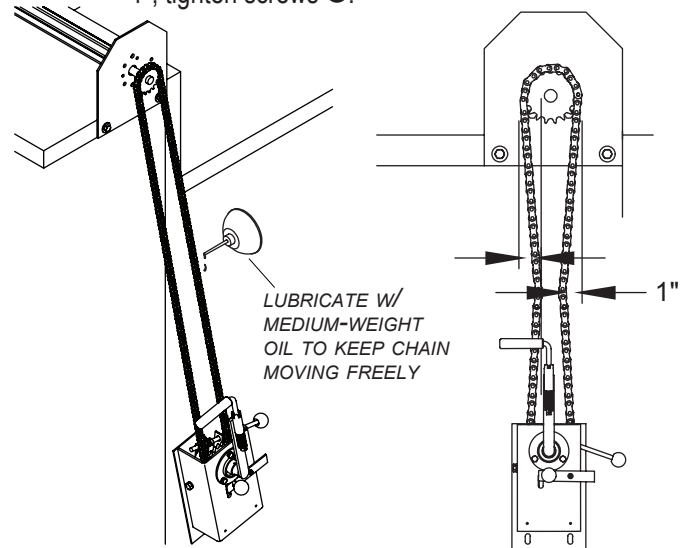
**NOTE:** Additional brackets may be needed to align sprockets.

**STEP 2:** Using crank mounting holes as guide, mark and drill 5/16" holes in box. Fasten with screws **D**, washers **N** and nuts **L**, leaving fasteners loose enough for crank assembly to slide for adjustment.



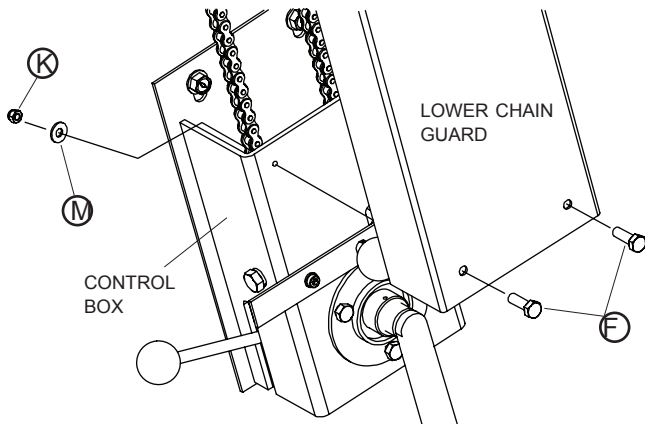
**STEP 3:** To determine chain length, wrap chain around both sprockets and pull crank assembly up until screws **D** are in middle of adjustment slots. Mark chain and remove excess links. Connect ends with connector link.

**STEP 4:** Adjust chain tension, having helper pull downward on crank assembly. When chain can be deflected about 1", tighten screws **D**.



**NOTE:** Entire chain guard assembly can be welded together and to truck body. If bolting is preferred, continue with following steps.

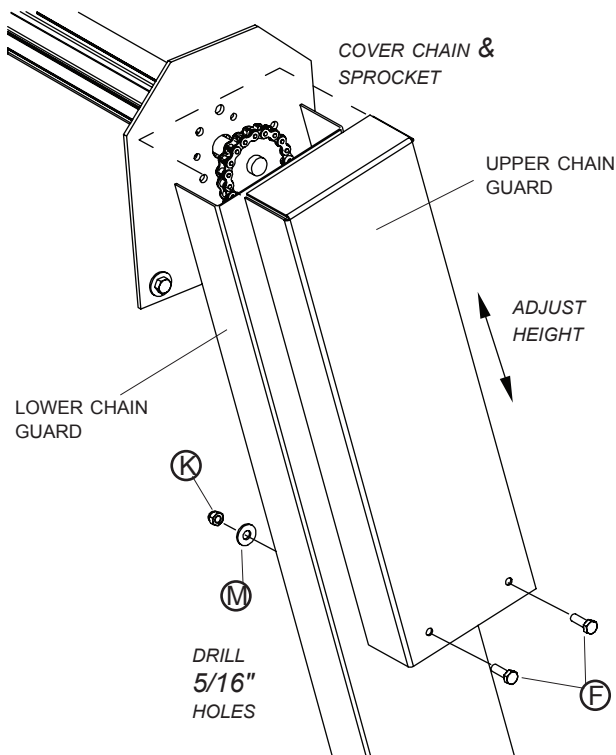
**STEP 5:** Attach lower chain guard to control box using 5/16" bolt **F**, washers **M** and lock nuts **K**.



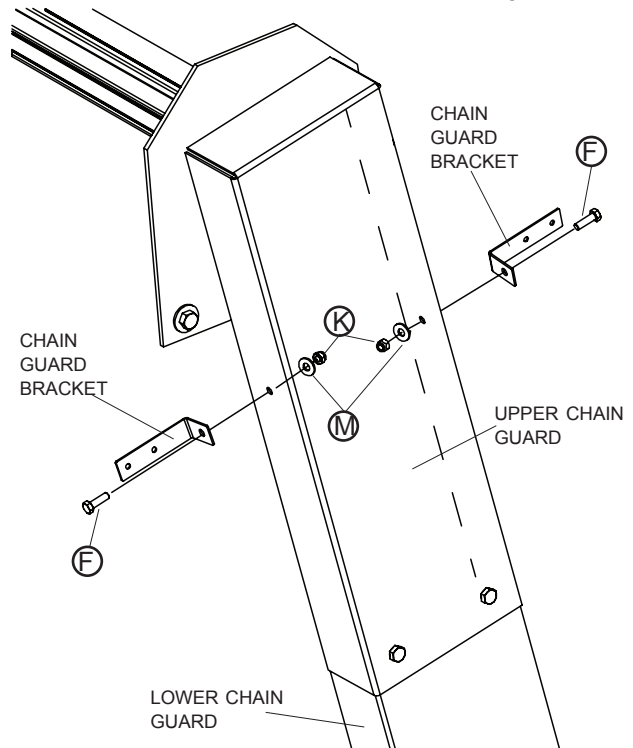
**STEP 6:** Place upper chain guard over lower chain guard and adjust height until chain and sprocket assembly are safely covered.

**STEP 7:** Mark and drill 5/16" holes through lower chain guard using upper chain guard hole pattern as template.

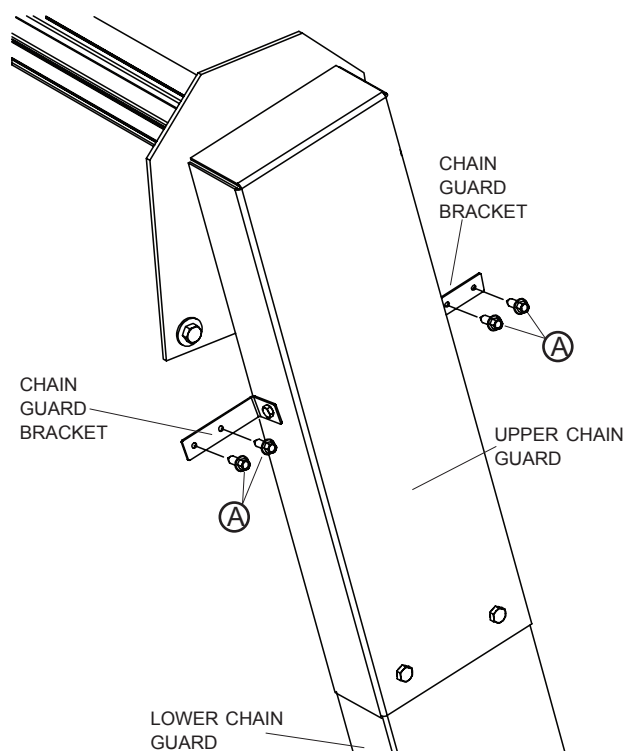
**STEP 8:** Attach upper guard to lower guard using 5/16" bolt **F**, washers **M** and lock nuts **K**.



**STEP 9:** Attach chain guard brackets near top of upper chain guard. Mark and drill 5/16" holes through upper chain guard for mounting. Use 5/16" bolt **F**, washers **M** and lock nuts **K** to secure bracket to chain guard.

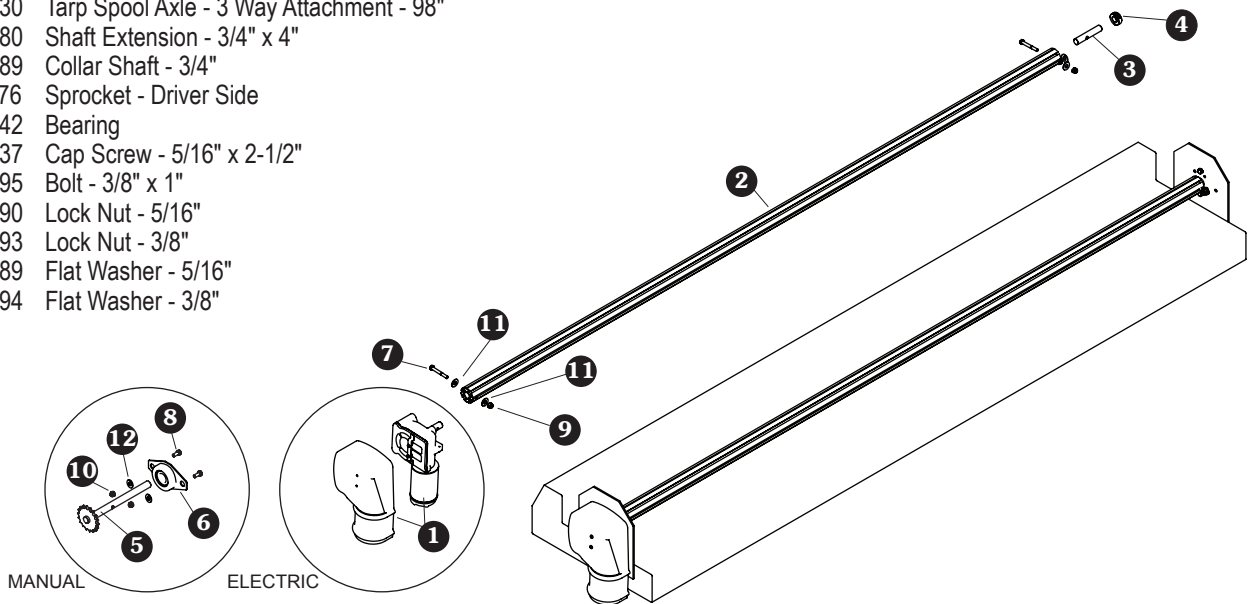


**STEP 10:** Secure chain guard brackets to truck box using sheet metal screws **A**.



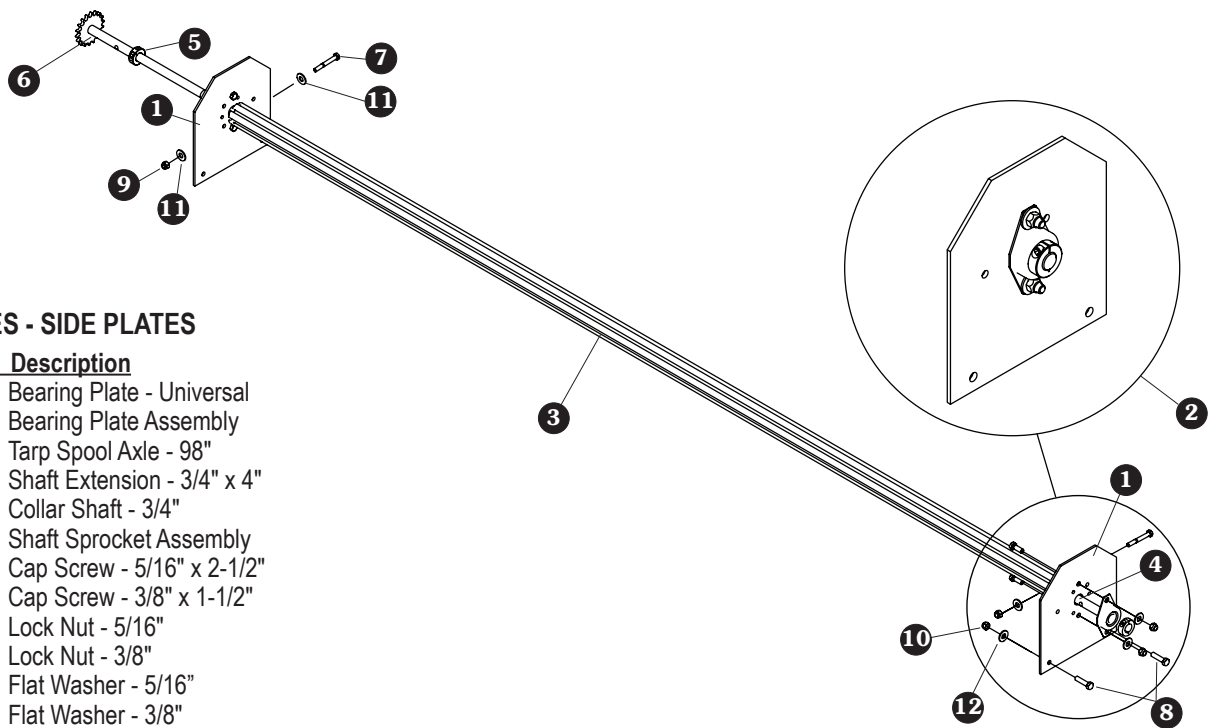
**FRONT DRIVES - THROUGH CAB**

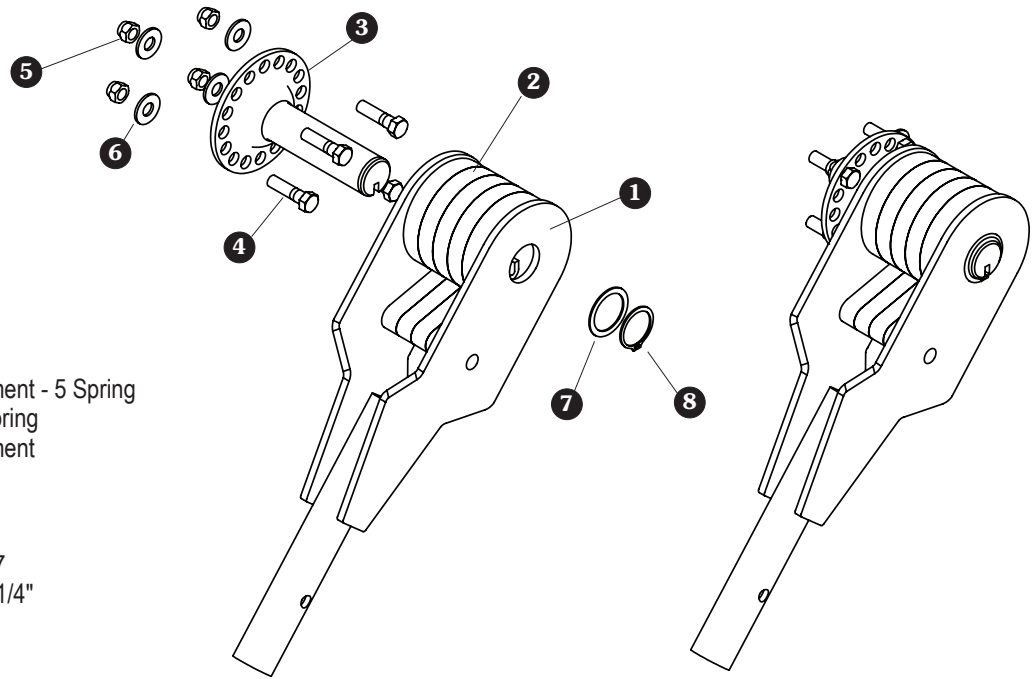
Item	Part #	Description
1.	1802061	Durabuilt™ Motor - 12V
2.	1809330	Tarp Spool Axle - 3 Way Attachment - 98"
3.	1800980	Shaft Extension - 3/4" x 4"
4.	1800089	Collar Shaft - 3/4"
5.	1120376	Sprocket - Driver Side
6.	1800042	Bearing
7.	1703237	Cap Screw - 5/16" x 2-1/2"
8.	1800795	Bolt - 3/8" x 1"
9.	1800990	Lock Nut - 5/16"
10.	1800993	Lock Nut - 3/8"
11.	1800989	Flat Washer - 5/16"
12.	1800994	Flat Washer - 3/8"



**FRONT DRIVES - SIDE PLATES**

Item	Part #	Description
1.	1809563	Bearing Plate - Universal
2.	1809564	Bearing Plate Assembly
3.	1809330	Tarp Spool Axle - 98"
4.	1800980	Shaft Extension - 3/4" x 4"
5.	1800089	Collar Shaft - 3/4"
6.	1800758	Shaft Sprocket Assembly
7.	1703237	Cap Screw - 5/16" x 2-1/2"
8.	1800790	Cap Screw - 3/8" x 1-1/2"
9.	1800990	Lock Nut - 5/16"
10.	1800993	Lock Nut - 3/8"
11.	1800989	Flat Washer - 5/16"
12.	1800994	Flat Washer - 3/8"



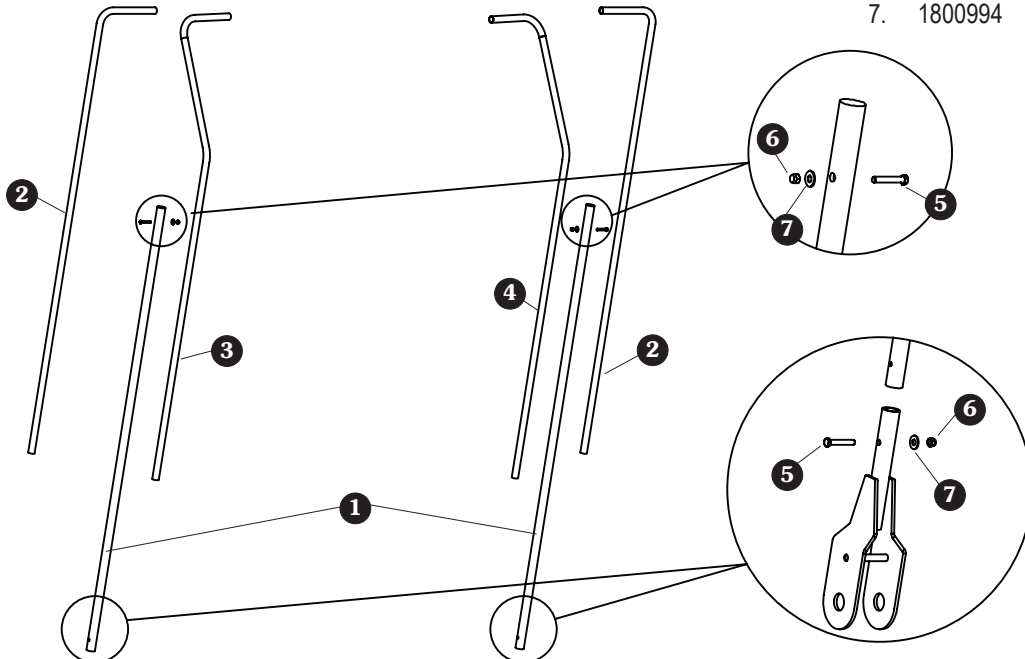


**5-SPRING EXTERNAL PIVOTS**

Item	Part #	Description
1.	1809609	Spring Pivot Weldment - 5 Spring
2.	1800763	Flat Coil Torsion Spring
3.	1809583	Pivot Spring Weldment
4.	1800790	Bolt - 3/8" x 1-1/2"
5.	1800993	Lock Nut - 3/8"
6.	1800994	Flat Washer - 3/8"
7.	1800977	Shim - 1-1/4" x .047
8.	1800978	Retaining Ring - 1-1/4"

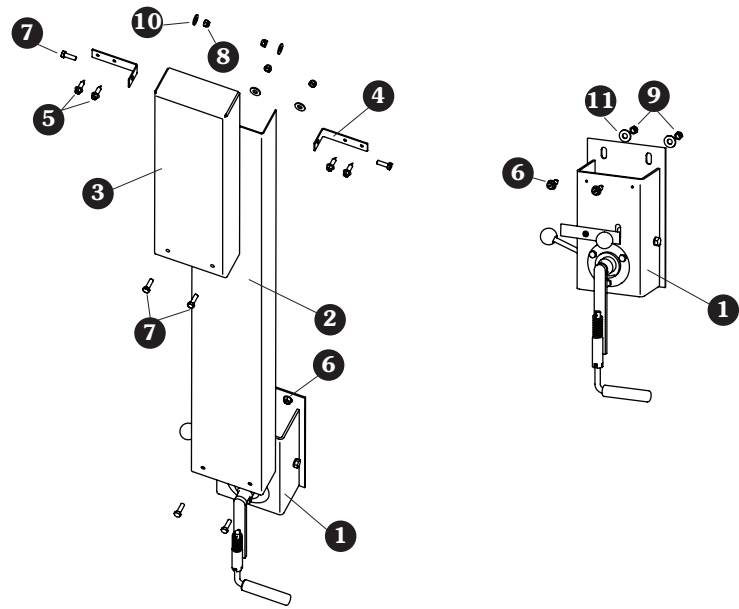
**ARM ASSEMBLIES**

Item	Part #	Description
1.	1809407	Lower Arm
2.	1809408	Upper Arm - Straight
3.	1809553	Upper Arm - 30° Bend - Driver Side
4.	1809554	Upper Arm - 30° Bend - Pass. Side
5.	1809567	Cap Screw - 3/8" x 2-1/4"
6.	1800993	Lock Nut - 3/8"
7.	1800994	Flat Washer - 3/8"



**CONTROL BOX & CHAIN GUARDS**

Item	Part #	Description
1.	1800178	Control Box
2.	1800186	Lower Chain Guard
3.	1800185	Upper Chain Guard
4.	1800404	Chain Guard Bracket
5.	1800802	Screw - #10 x 1"
6.	1700400	Self-Tapping Screw - 3/8" x 1"
7.	1800998	Bolt - 5/16" x 1" GR5
8.	1800990	Lock Nut - 5/16"
9.	1800993	Lock Nut - 3/8"
10.	1800989	Flat Washer - 5/16"
11.	1800994	Flat Washer - 3/8" GR5



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