



TARPING SYSTEMS & ACCESSORIES

P/N 1118625 Rev. T

OWNER'S MANUAL



Farm Body

READ BEFORE INSTALLING

PO BOX 713 ■ 2309 SHUR-LOK STREET ■ YANKTON, SD 57078-0713
PHONE 1-800-4-SHUR-LOK (1-800-474-8756) ■ FAX 605-665-0501
www.shurco.com

SHOP ONLINE: www.shopshurco.com

SHIPPING. Orders are shipped F.O.B. from the Shur-Co®, LLC sites listed below. No full freight is allowed or prepaid shipment accepted unless quoted and approved in writing prior to acceptance of the order. All shipments are made by the most reasonable means in accordance with size and weight of order, unless specified routing instructions are furnished by the customer. Shipments are made daily via U.P.S. and common carrier. Claims for shortages must be made within 10 days. All claims for damages or loss in transit must be made with the carrier. No collect calls will be accepted. To ensure delivery of orders, we need your full street address and phone number. When you receive your shipment, examine it carefully. Be sure all cartons listed on the delivery sheet are accounted for. Large items may be packaged separately. If a carton is damaged, open it and inspect the contents before signing for delivery. If merchandise is damaged, describe damage on the delivery receipt. Failure on your part to document damaged or missing merchandise on the delivery receipt releases the carrier of all liability; repair or replacement will be the customer's responsibility.

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 866-748-7435, and sent, with freight paid by us, to Shur-Co®, LLC, 2309 Shur-Lok St., PO Box 713, Yankton, SD 57078. All products returned without an RMA# will be refused. When we issue the RMA#, we will also issue a call tag to have UPS (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®, LLC parts in conjunction with Shur-Co®, 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®, LLC SERVICE AND DISTRIBUTION CENTERS

Corporate HQ and Outlet Store

SHUR-CO® of SOUTH DAKOTA
2309 Shur-Lok St., PO Box 713
Yankton, SD 57078-0713
Ph 800.474.8756 | Fax 605.665.0501

ShurTite™ Service Centers

SHUR-CO® of CANADA
490 Elgin St., Unit #1
Brantford, Ontario N3S 7P8
Ph 800.265.0823 | Fax 519.751.3997

SHUR-CO® of SIOUX FALLS
47184 258th St., Suite B
Sioux Falls, SD 57107
Ph 844.573.9322 | Fax 605.543.5469

SHUR-CO® of ILLINOIS
Ph 866.356.0246 | Fax 217.877.8270

SHUR-CO® of OHIO
Ph 866.356.0242 | Fax 330.297.5599

SHUR-CO® of COLORADO
10220 Brighton Rd., Unit #1
Henderson, CO 80640
Ph 866.355.9173 | Fax 303.289.2298

SHUR-CO® of FLORIDA
3353 SE Gran Park Way
Stuart, FL 34997
Ph 800.327.8287 | Fax 772.287.0431

SHUR-CO® of ILLINOIS
3993 E. Mueller Ave.
Decatur, IL 62526
Ph 866.356.0246 | Fax 217.877.8270

SHUR-CO® of IOWA
3839 Midway Blvd.
Ft. Dodge, IA 50501
Ph 866.356.0245 | Fax 515.576.5578

SHUR-CO® of MICHIGAN
5100 Lakeshore Dr.
Lexington, MI 48450
Ph 800.327.8287 | Fax 772.287.0431

SHUR-CO® of NORTH DAKOTA
1746 4th Ave. NW
West Fargo, ND 58078
Ph 877.868.4488 | Fax 701.277.1283

SHUR-CO® of OHIO
1100 N. Freedom, St. Rt. 88 & 14
Ravenna, OH 44266
Ph 866.356.0242 | Fax 330.297.5599

SHUR-CO® of TEXAS
34505 I-10 West, S. Frontage Rd.
Brookshire, TX 77423
Ph 866.689.0039 | Fax 281.934.3311


SHUR-CO® UK, Ltd.
Unit 41 Rochester Airport Estates
Laker Rd., Rochester, Kent ME1 3QX
Ph +44 (0)1795.473499
Fax +44 (0)871.272.8278

For more info, log on to our website:

www.shurco.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 and repair or replace worn or damaged parts to your system.

QUESTIONS? CALL OUR HELP LINE:

1-866-748-7435

MON-FRI 8 AM-5 PM CENTRAL 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.**
- 2. Keep body and clothing clear of moving parts.**
- 3. Use only OSHA-approved ladders or scaffolding during installation process.**
- 4. No other use of this system is authorized, except as designed.**

RUST PREVENTION

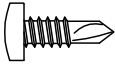



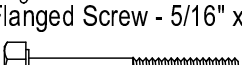
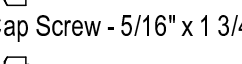
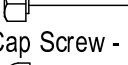


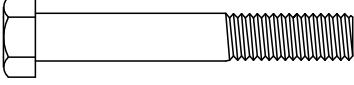
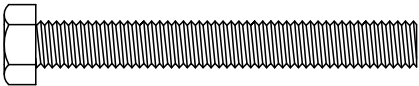






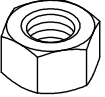

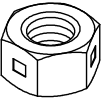
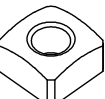
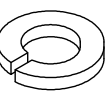
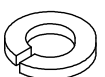
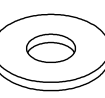
To prevent rust, paint all exposed metal, such as weld seams and/or metal exposed by grinding or cutting, with corrosion-resistant paint.

TABLE OF CONTENTS

- Box Preparation..... 1
- Hardware Identification..... 1
- End Caps..... 2
- Bows 3
- Ridge Straps..... 4
- Tarp Stops 5
- Tarp Assembly..... 6
- Tarp Spool Assemblies..... 7
- Tarp Installation 8
- Ratchet/Cable Assemblies..... 9
- Crank Arms..... 10
- Telescoping/Indexing Crank Retainers..... 11-12
- Crank Retainer - One Piece 13
- Cable Tension..... 14
- Electric Motor..... 15-16
- Rocker Switch..... 17
- Wireless Receiver..... 18-19
- Wireless SMART1+™ Remote Programming & Operating 20-21
- Electric to Manual Power Conversion..... 22
- Replacement Parts 23-27
- Troubleshooting Guide 28-29
- Maintenance & Operation..... 30
- Options & Accessories..... 31

TOOLS REQUIRED

- 1. Grinder
 - 2. #3 Phillips Insert Bit or #3 Phillips Screw Driver
 - 3. Air or Electric Wrench w/9/16" Socket
 - 4. 1/2" Combination Wrench
 - 5. 9/16" Combination Wrench
 - 6. Electric Drill
 - 7. 3/16" Drill Bit
 - 8. 11/32" Drill Bit
 - 9. 5/16" Drill Bit (for 3/8" self-tapping screws)
 - 10. 3/8" Drill Bit (for 3/8" cap screws)
 - 11. 3/4" Combination Wrench or Socket & Wrench
 - 12. Socket Wrench w/1/2" Socket
 - 13. Tape Measure
 - 14. Pencil
 - 15. Clamps
 - 16. Band Saw or Hack Saw
 - 17. Pop Rivet Gun
 - 18. Hammer
 - 19. Pop Rivet Gun
 - 20. 13/32" Drill Bit
- Optional:
Hot Knife, Spray Paint, Caulk, Rubber Sealant or Welder

- | | | |
|---|--|--|
| <p>A 
1700398 - Self-Drilling Screw - 1/4" x 3/4"</p> <p>B 
1700381 - Cap Screw - 1/4" x 1"</p> <p>C 
1702926 - Cap Screw - 5/16" x 7/8"</p> <p>D 
1704441 - Flanged Screw - 5/16" x 1"</p> <p>E 
1701468 - Cap Screw - 5/16" x 1 3/4"</p> <p>F 
1704334 - Cap Screw - 5/16" x 1 3/4" SS</p> <p>G 
1705260 - Pan Hd. Screw - 3/8" x 3/4"</p> <p>H 
1700400 - Self-Tapping Screw - 3/8" x 1"</p> <p>I 
1700369 - Cap Screw - 3/8" x 1 3/4"</p> | <p>J 
1702573 - Cap Screw - 3/8" x 2 1/2"</p> <p>K 
1704332 - Cap Screw - 3/8" x 3"</p> <p>L 
1702996 - Cap Screw - 1/2" x 1 1/4"</p> <p>M 
1701543 - Nylon Lock Nut - 1/4"</p> <p>N 
1700411 - Hex Nut - 5/16"</p> <p>O 
1702492 - Top Lock Nut - 5/16"</p> <p>P 
1700419 - Nylon Lock Nut - 5/16"</p> <p>Q 
1704431 - Nylon Lock Nut - 5/16" SS</p> | <p>R 
1700407 - Hex Nut - 3/8"</p> <p>S 
1702668 - Top Lock Nut - 3/8"</p> <p>T 
1700418 - Centerlock Nut - 3/8"</p> <p>U 
1705261 - Square Nut - 3/8"</p> <p>V 
1700434 - Lock Washer - 3/8"</p> <p>W 
1700433 - Lock Washer - 5/16"</p> <p>Y 
1700428 - Flat Washer - 5/16"</p> |
|---|--|--|

NOTE: Wherever 3/8" x 1" self-tapping screws **G** are used, use lock washers **U** and nuts **R**, if possible, and drill 13/32" holes. Self-tapping screws used without washers and nuts require a minimum wall thickness of 3/16". Drill 5/16" holes.

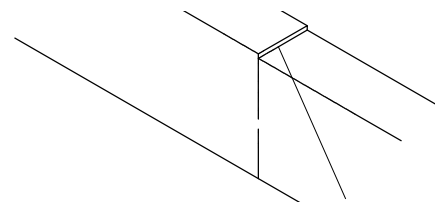
TARP INSPECTION

Measure tarp: Determine tarp length and width with slight tension applied. Compare with length and width stated on sheet attached to tarp. If tarp length and width do not match what is on sheet, do not proceed. Call your local dealer, or call Shur-Co® Customer Service at 1-866-748-7435.

BOX PREPARATION

Before installing Shur-Lok® tarping system, remove or grind any sharp edges smooth to prevent tarp damage.

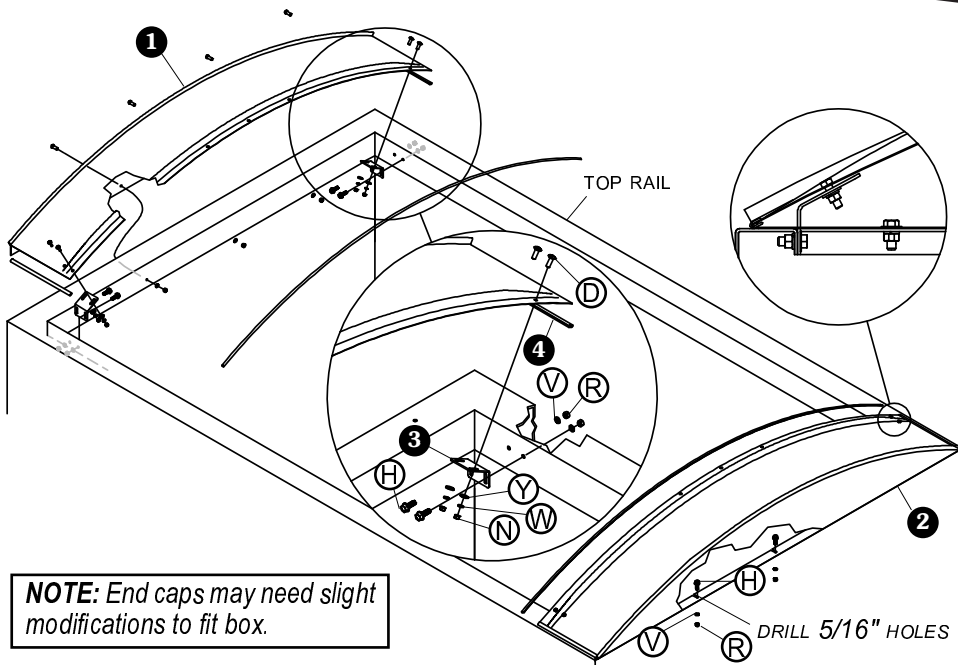
To prevent rust, paint all exposed metal, such as weld seams and/or metal exposed by grinding or cutting, with corrosion-resistant paint.



REMOVE SHARP EDGES ON TOP RAIL - PAINT ALL EXPOSED METAL

CAUTION

Box extensions (tip tops), if used, must be secured to truck box. System could blow off if box extensions are not secured to box.



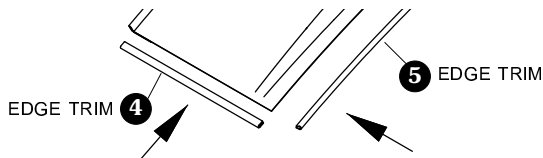
Item Part #	Description
1. *	Galv. Face Mt. Cap - 6" Rise Galv. Face Mt. Cap - 10" Rise
2. *	Galv. Top Mt. Cap - 6" Rise Galv. Top Mt. Cap - 10" Rise
3. 1118188	End Cap Brkt. - LR - Side Mt.
1118189	End Cap Brkt. - HR - Side Mt.
4. 1118596	Edge Trim - 30"
D. 1704441	Flanged Screw - 5/16" x 1"
H. 1700400	Self-Tapping Screw - 3/8" x 1"
N. 1700411	Hex Nut - 5/16"
R. 1700407	Hex Nut - 3/8"
V. 1700434	Lock Washer - 3/8"
W. 1700433	Lock Washer - 5/16"
Y. 1700428	Flat Washer - 5/16"

*Specify style and size

NOTE: End caps may need slight modifications to fit box.

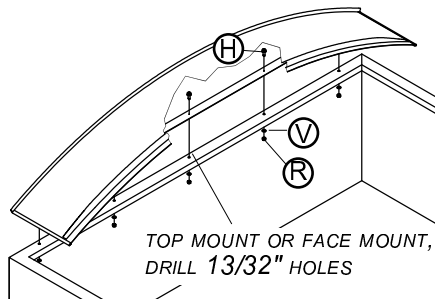
TIP: Apply bead of caulk or rubber seal where cap meets top rail to improve watertightness of caps.

STEP 1: Apply edge trim to end caps, placing edge trim 4 on sides of caps and edge trim 5 on inside edges.

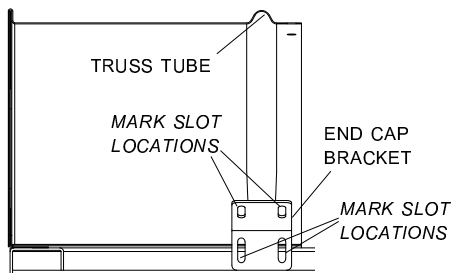


STEP 2: Center caps on box. Mark five evenly spaced hole locations on top rail/box and caps. Drill 13/32" holes and fasten end caps to top rail with screws H, lock washers V and nuts R.

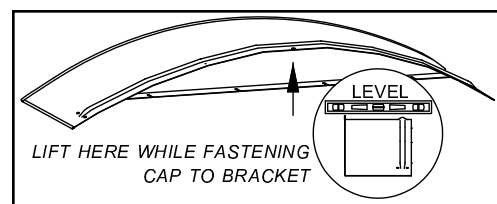
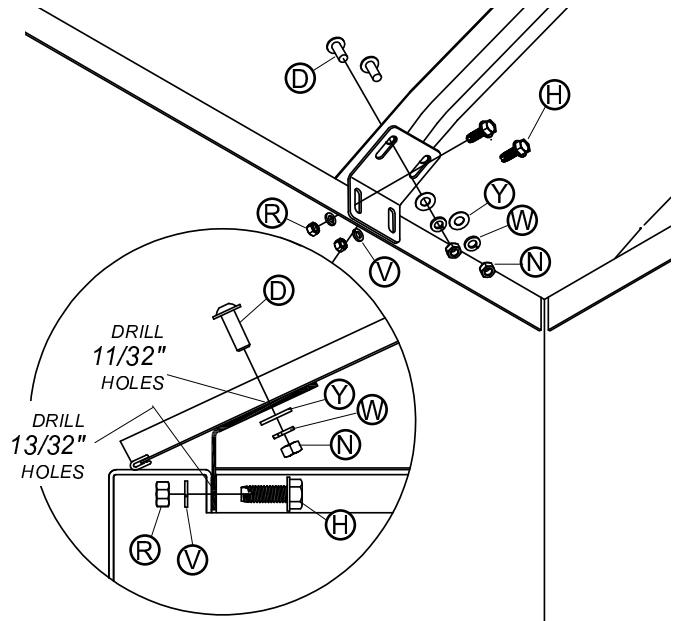
TIP: If cap has mounting slots, loosely fasten screws and nuts into top rail. Slide cap into place, then tighten screws.

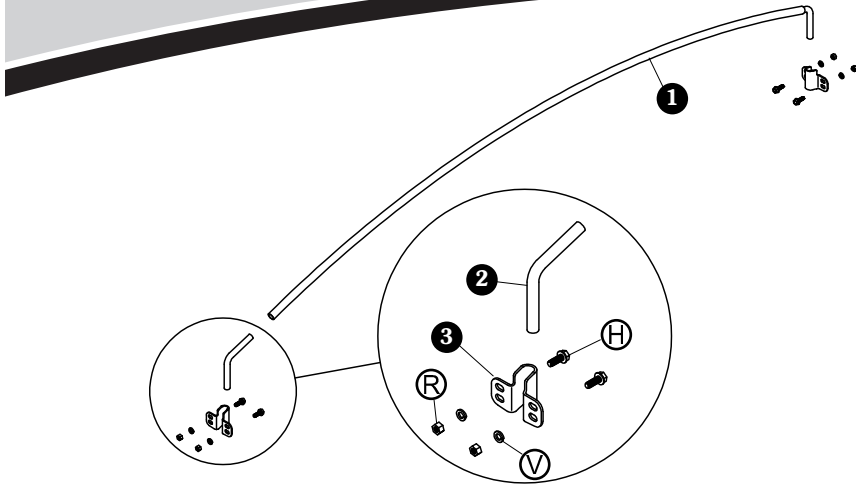


STEP 3: Center end cap brackets under truss tube. Mark locations of slotted holes on box and end caps.



STEP 4: Drill 13/32" holes at marked locations on box. Fasten bracket to box with screws H, flat washers V, lock washers W and nuts N. Drill 11/32" holes and fasten bracket to end cap with screws D, flat washers Y, lock washers V and nuts R.

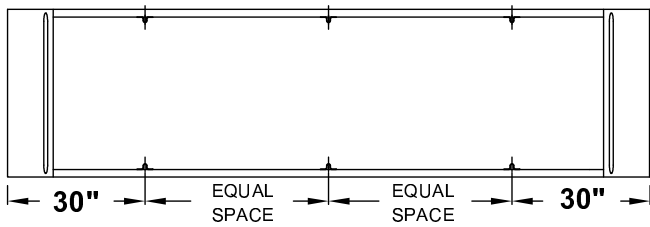




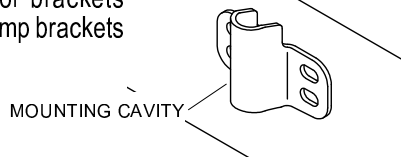
NOTE: Refer to note under Hardware Identification on page 1 for drill size.

Item	Part #	Description
1.	1117905	Std. High-Rise Bow - 89" to 95"
	1100762	Std. High-Rise Bow - 96" to 102"
	1116120	Std. Low-Rise Bow - 85" to 92"
	1100760	Std. Low-Rise Bow - 93" to 102"
2.	1106925	Std. High-Rise Bow Shank
	1100695	Std. Low-Rise Bow Shank
3.	1120836	Single Bow Bracket
H.	1700400	Self-Tapping Screw - 3/8" x 1"
R.	1700407	Hex Nut - 3/8"
V.	1700434	Lock Washer - 3/8"

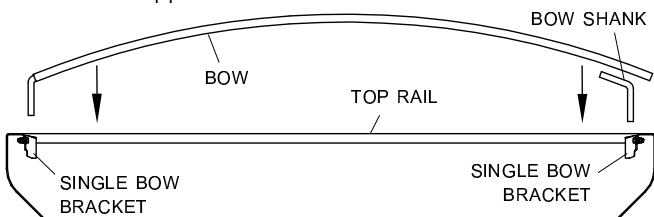
STEP 1: Mark bow bracket locations on top rails as shown.



STEP 2: Align center of brackets with mark. Clamp brackets to rails.

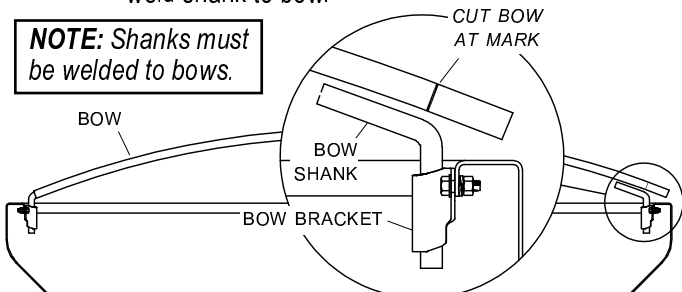


STEP 3: Place bow into bow bracket. Place loose bow shank in opposite bow bracket.

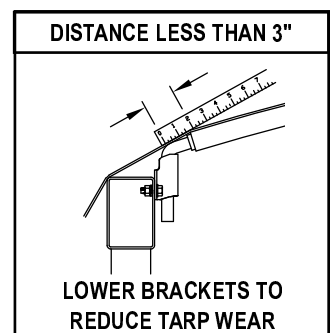
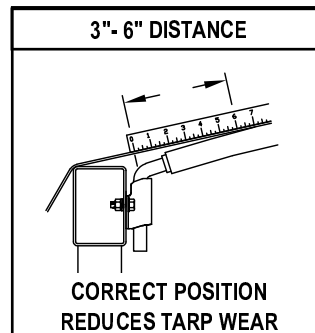


STEP 4: Align bow with bow shank. Mark and cut bow at point where bend starts on shank. Grind edges smooth and weld shank to bow.

NOTE: Shanks must be welded to bows.

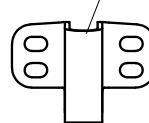


STEP 5: Adjust bow brackets vertically to allow 3" to 6" between bend in bow shank and point where tarp will contact bow.

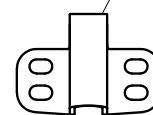


NOTE: Orient bow brackets with either long or short side up in order to attain correct bow height.

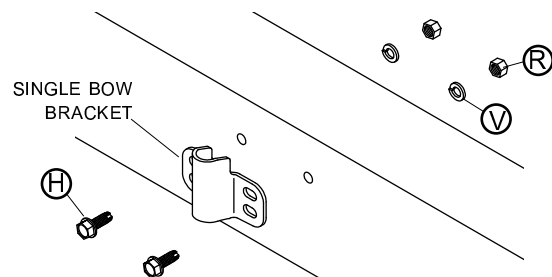
SHORT SIDE UP



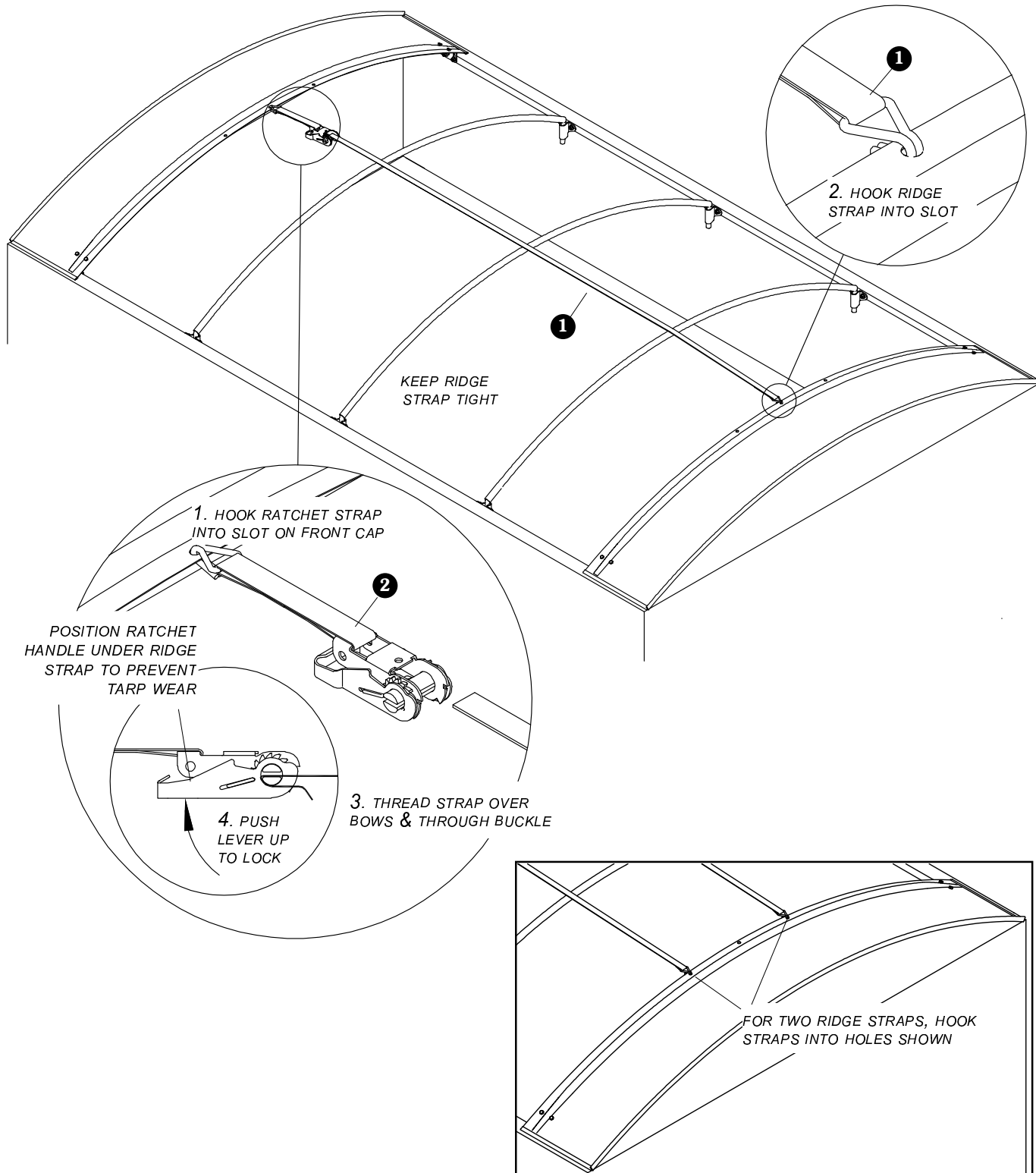
LONG SIDE UP



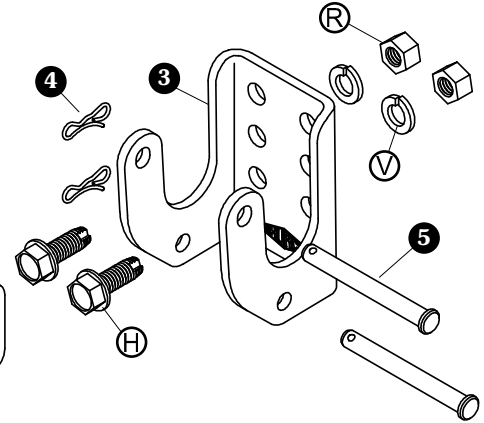
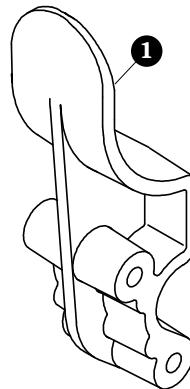
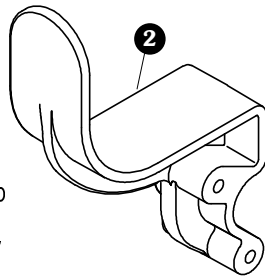
STEP 6: Mark and drill 13/32" holes and mount brackets with screws H, lock washers V and nuts R. Install bows into bow brackets.



Item	Part #	Description
1.	1118520	Ridge Strap w/Hook - 1" x 10'
	1118522	Ridge Strap w/Hook - 1" x 14'
	1118524	Ridge Strap w/Hook - 1" x 24'
2.	1118511	Ratchet w/1" Ridge Strap & Hook



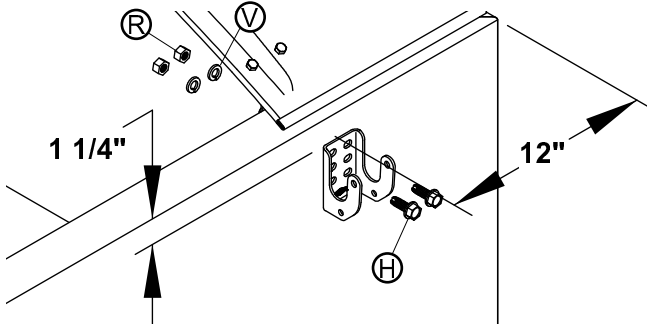
Item	Part #	Description
1.	1705775	Easy-Off Cast Aluminum Tarp Stop Upright
2.	1705454	Easy-Off Cast Alum. Tarp Stop Upright - Offset
3.	1100833	Easy-Off Tarp Stop Body
4.	1704380	Bowtie Cotter Pin
5.	1703604	Clevis Pin - 5/16" x 2 7/8"
H.	1700400	Self-Tapping Screw - 3/8" x 1"
R.	1700407	Hex Nut - 3/8"
V.	1700434	Lock Washer - 3/8"



NOTE: Refer to note on page 1 for drill size.

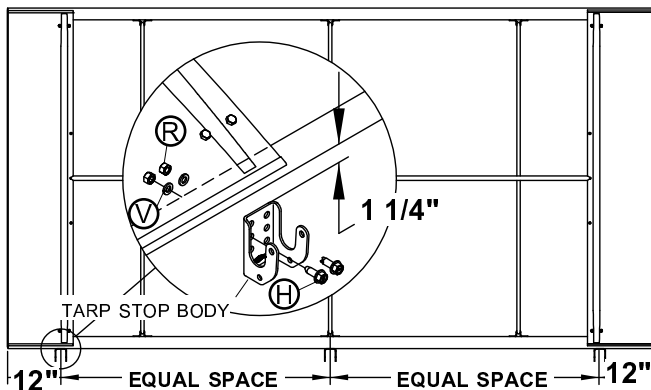
NOTE: If you are installing system to open from passenger side of box, locate tarp stops on passenger side.

STEP 1: Locate first tarp stop body 12" from front edge of box and 1 1/4" below top of side rail. Mark and drill holes and fasten to box with screws **H**, lock washers **V** and nuts **R**.



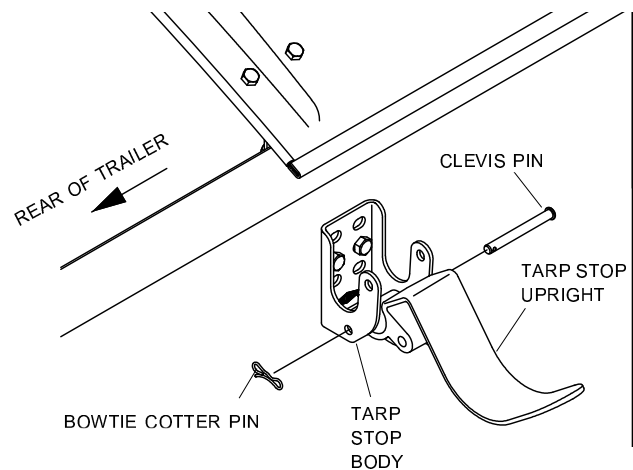
NOTE: Install tarp stop body on vertical surface. Fasten through holes that best fit top rail configuration.

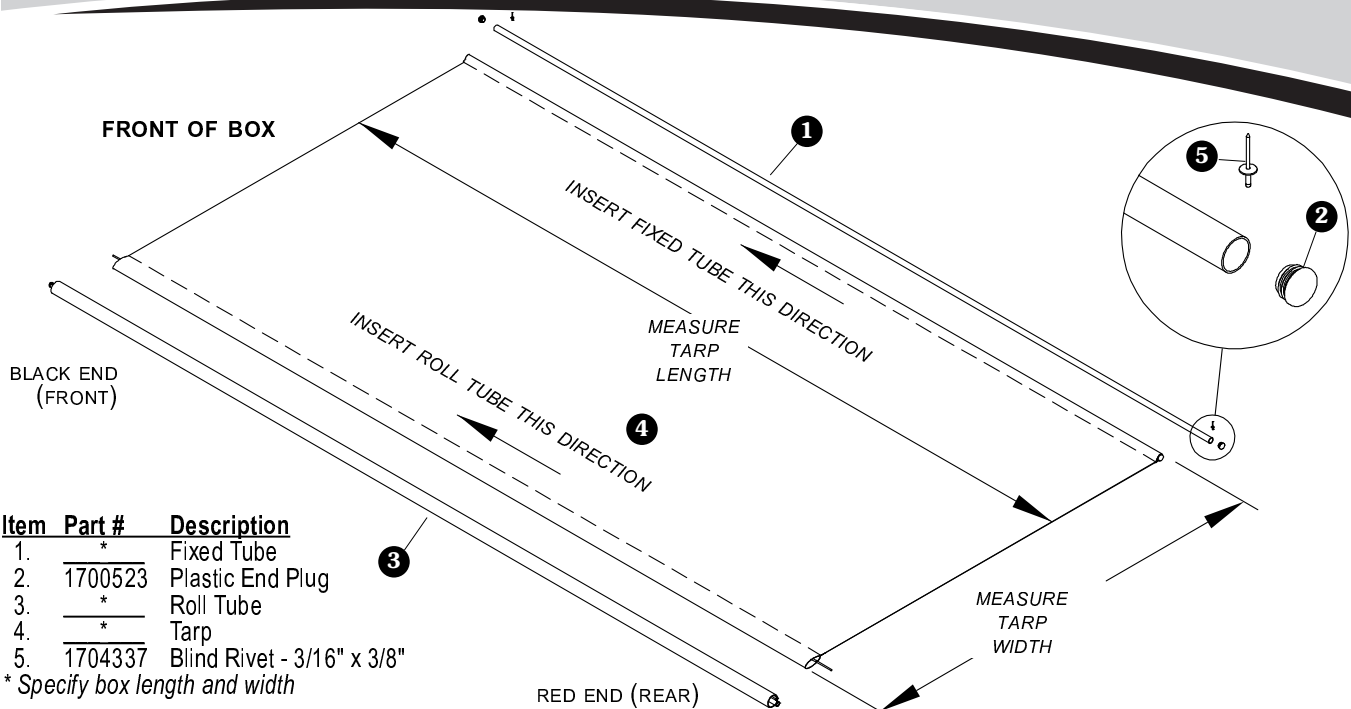
STEP 2: Locate second tarp stop body 12" from rear edge of box and 1 1/4" below top of side rail. Mark and drill holes and fasten with screws **H**, lock washers **V** and nuts **R**. Equally space remaining tarp stop bodies.



STEP 3: Align lower holes in tarp stop uprights with lower holes in tarp stop bodies. Insert clevis pins through aligned holes and secure with bowtie cotter pin.

NOTE: Position cotter pins at rear of bracket as shown.

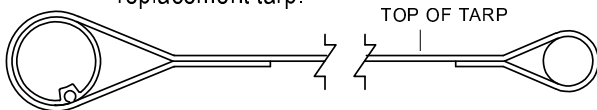




Item	Part #	Description
1.	*	Fixed Tube
2.	1700523	Plastic End Plug
3.	*	Roll Tube
4.	*	Tarp
5.	1704337	Blind Rivet - 3/16" x 3/8"

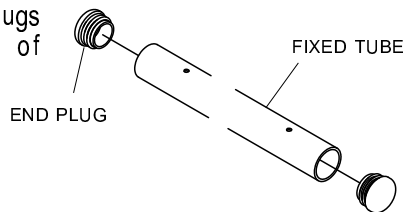
* Specify box length and width

STEP 1: Measure tarp. Open tarp and stretch tight. Measure tarp length and width and compare with sheet attached to tarp. Do not proceed with installation if tarp length or width doesn't match what is specified on sheet. Call Shur-Co® or your local dealer for alterations or a replacement tarp.

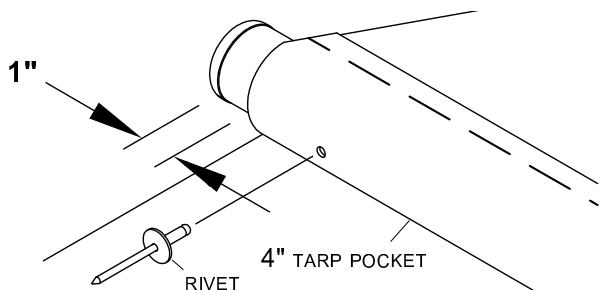


NOTE: Tarps cannot be returned at Shur-Co's expense beyond this point. Tarps damaged beyond this point may be returned for repair or replacement at owner's expense.

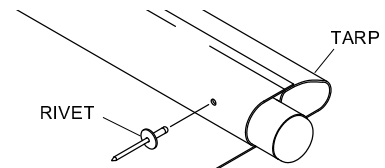
STEP 2: Install end plugs into ends of fixed tube.



STEP 3: Insert fixed tube into 4" tarp pocket. Extend tube 1" past tarp edge, align pre-punched hole in tarp with 3/16" hole in fixed tube and secure with 3/16" rivet.

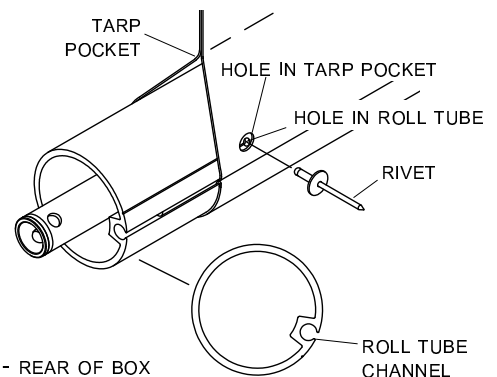


STEP 4: Stretch tarp along fixed tube until second hole in tarp stop is aligned with second hole in fixed tube, then secure second rivet on opposite end of fixed tube.



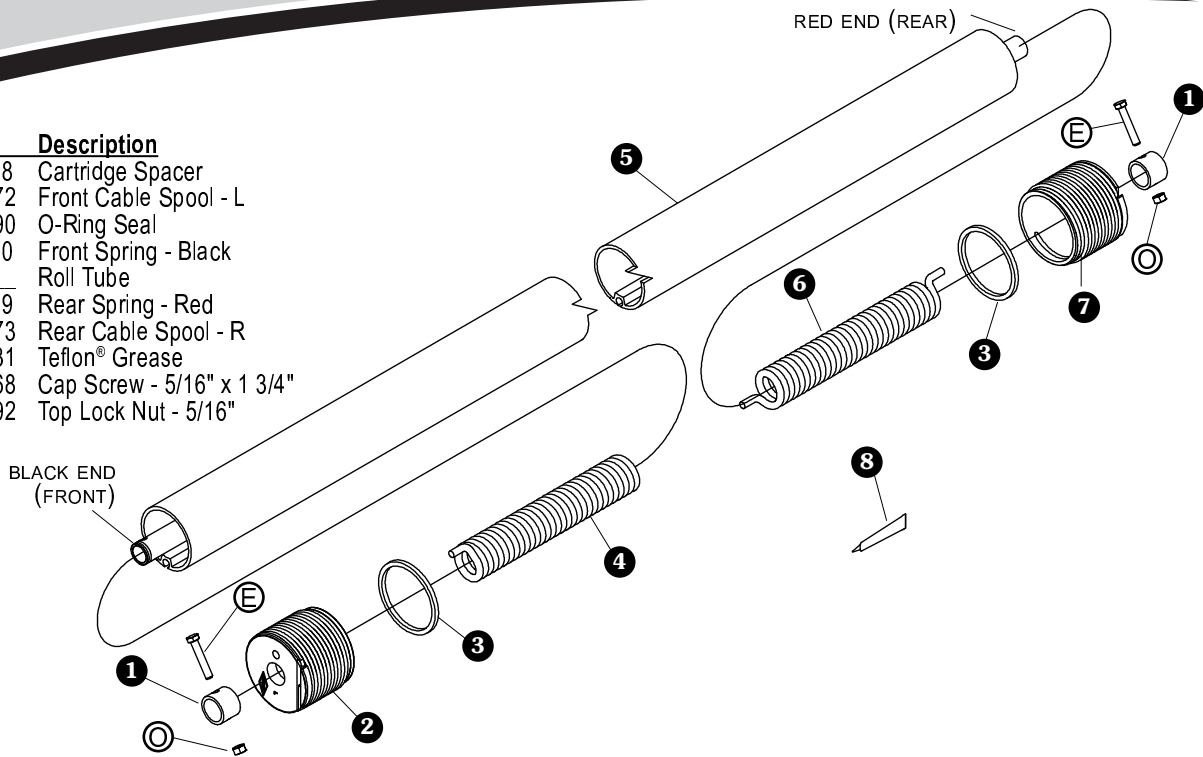
STEP 5: Roll tube. Align roll tube with 6 1/4" pocket in tarp so channel in roll tube lines up with rod sewn inside tarp pocket. Make sure hole in roll tube and hole in tarp are on same side of rod. Slide roll tube into tarp pocket, fitting rod into channel. Align hole near end of roll tube with hole in tarp. Fasten with rivet. At opposite end of roll tube, stretch tarp until hole in tarp aligns with hole in roll tube. Fasten with rivet.

TIP: Inflate 6 1/4" tarp pocket with air chuck while inserting roll tube.

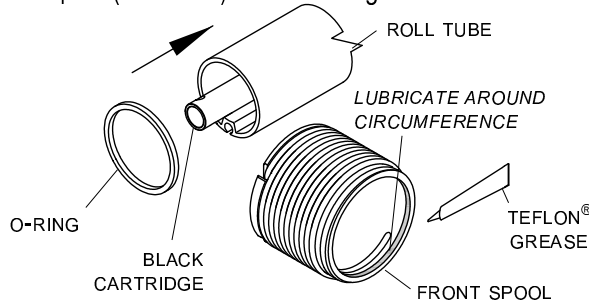


NOTE: Rod must extend past edge of tarp but must not extend past edge of roll tube. Trim rod, if required.

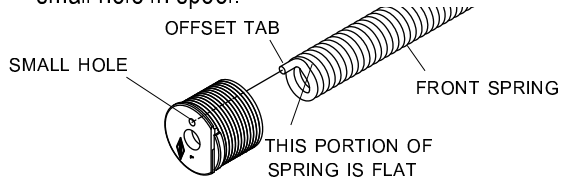
Item	Part #	Description
1.	1118228	Cartridge Spacer
2.	1704372	Front Cable Spool - L
3.	1704290	O-Ring Seal
4.	1118230	Front Spring - Black
5.		Roll Tube
6.	1118229	Rear Spring - Red
7.	1704373	Rear Cable Spool - R
8.	1704331	Teflon® Grease
E.	1701468	Cap Screw - 5/16" x 1 3/4"
O.	1702492	Top Lock Nut - 5/16"



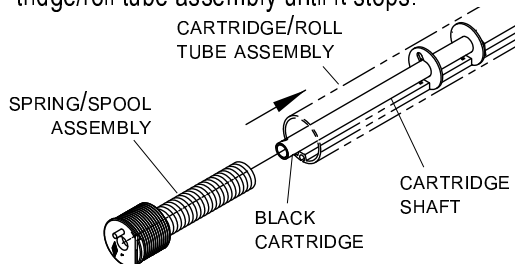
STEP 1: Slide O-ring onto roll tube. Lubricate inside of front spool (marked L) with Teflon® grease.



STEP 2: Insert spring into spool so offset tab goes through small hole in spool.

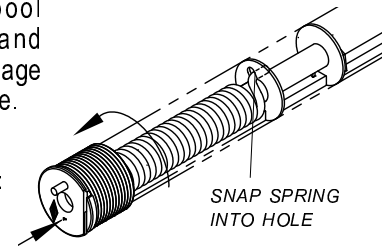


STEP 3: Insert spring and spool onto black cartridge shaft. Continue to slide spring/spool assembly into cartridge/roll tube assembly until it stops.



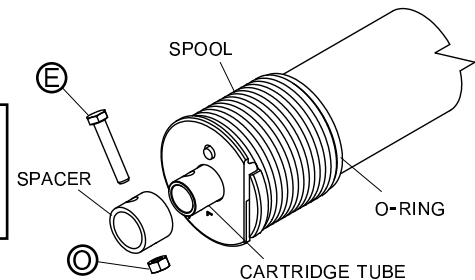
STEP 4: Turn front spool (marked 'L') and push to fully engage spring in roll tube.

SPOOLS MARKED:
L = FRONT
R = REAR



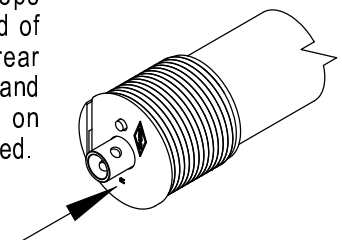
STEP 5: Slide spacer on cartridge tube. Align holes with cartridge tube and fasten with cap screw (E) and lock nut (O). Tighten. Push O-ring against spool.

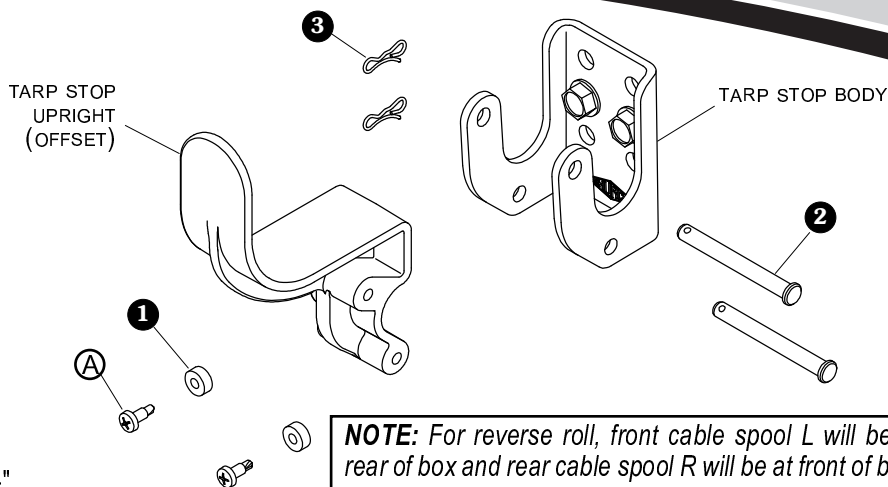
NOTE: Spacer should fit tight against face of spool.



STEP 6: Rear. Repeat steps 1 to 5 on rear end of roll tube, using rear spool (marked R) and red spring. Install on cartridge marked red.

SPOOLS MARKED:
L = FRONT
R = REAR

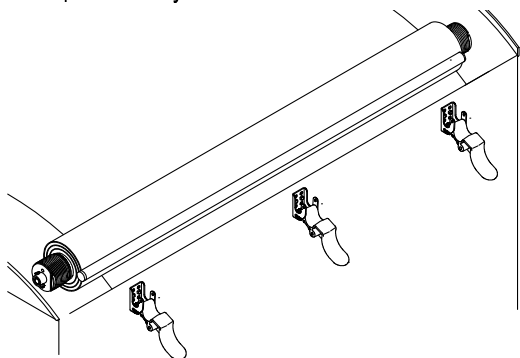




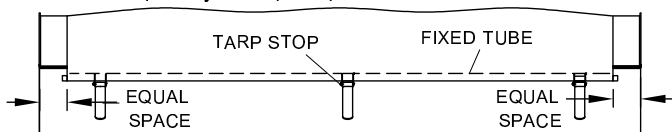
Item	Part #	Description
1.	1118037	Plastic Washer - Black
2.	1703604	Clevis Pin - 5/16" x 2 7/8"
3.	1704380	Bowtie Cotter Pin
A.	1700398	Self-Drilling Screw - 1/4" x 3/4"

NOTE: For reverse roll, front cable spool L will be at rear of box and rear cable spool R will be at front of box.

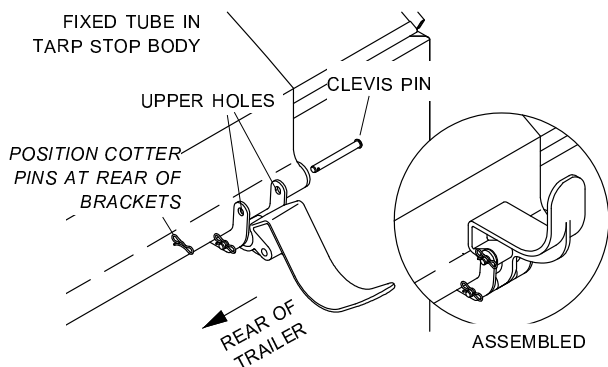
STEP 1: Wind tarp completely around roll tube. Lift rolled-up tarp assembly onto fixed tube side of farm box.



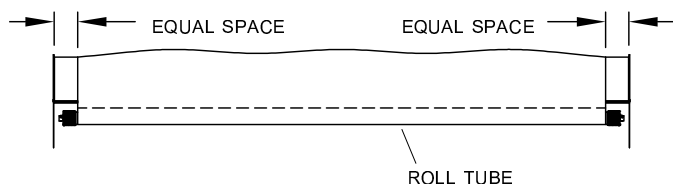
STEP 2: Center tarp on farm box, overlapping end caps. Unroll tarp so fixed tube hangs over edge of box. Square up tarp and fixed tube. Adjust tarp so fixed tube rests squarely in tarp stop bodies.



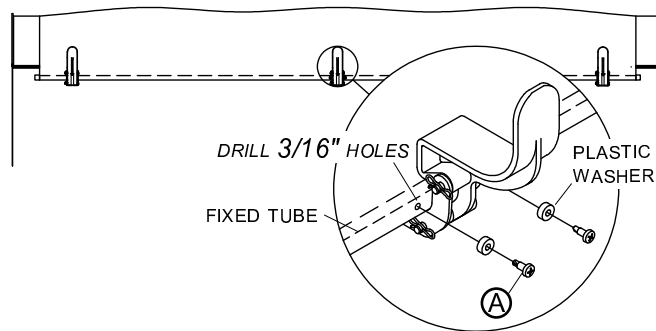
STEP 3: Align upper holes in tarp stop uprights with upper holes in tarp stop bodies. Insert clevis pins through aligned holes and secure with bowtie cotter pins. Repeat for each tarp stop.



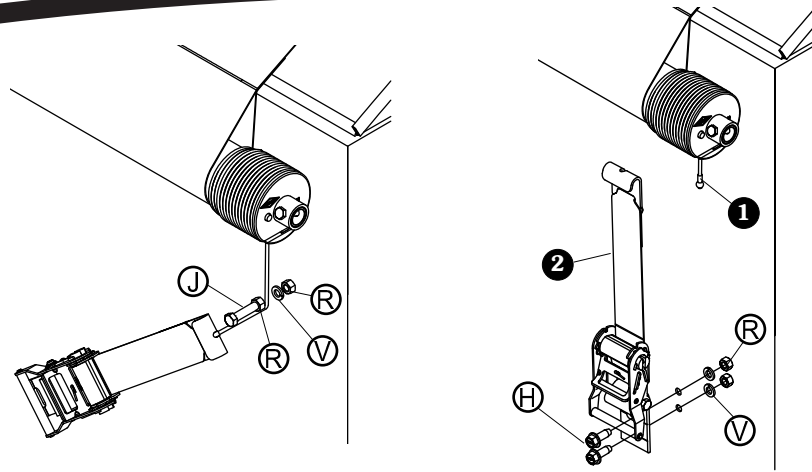
STEP 4: Make sure tarp and roll tube are centered on box.



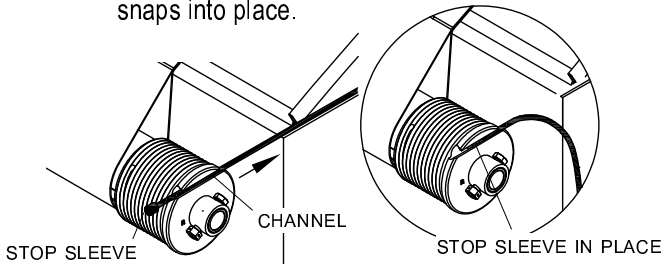
STEP 5: At center tarp stop, hold plastic washer against tarp stop body. Using washer as guide, drill 3/16" hole through tarp and fixed tube. Using #3 Phillips bit, thread self-drilling screw (A) through washer and hole in fixed tube. Remove screw and use screw to fasten washer to fixed tube. Do not overtighten. Repeat on other side of tarp stop body.



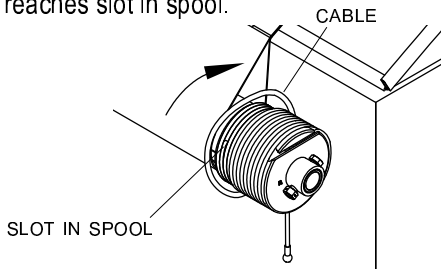
Item	Part #	Description
1.	1704295	Galvanized Cable - 139"
	1704294	Galvanized Cable - 151"
2.	1118275	Ratchet Strap Assembly - 18"
	1118276	Ratchet Strap Assembly - 42"
H.	1700400	Self-Tapping Screw - 3/8" x 1"
J.	1702573	Cap Screw - 3/8" x 2 1/2"
R.	1700407	Hex Nut - 3/8"
V.	1700434	Lock Washer - 3/8"



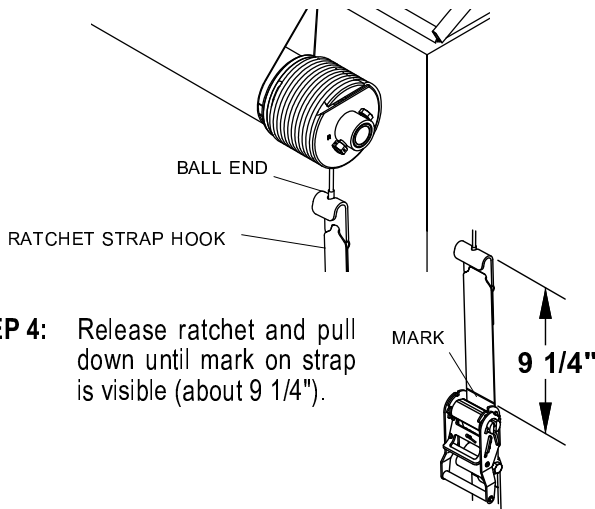
STEP 1: With tarp closed, insert stop sleeve end of cable into channel on end of spool. Pull cable until stop sleeve snaps into place.



STEP 2: Wrap cable into grooves around spool until cable reaches slot in spool.

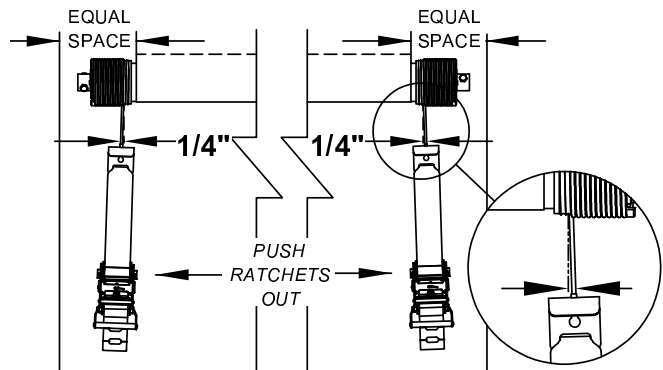


STEP 3: Hook ball end of cable to ratchet strap hook.

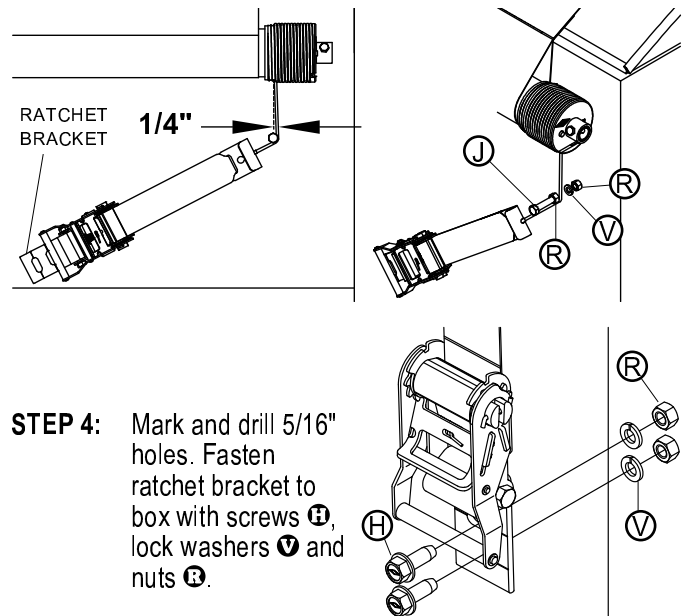


STEP 4: Release ratchet and pull down until mark on strap is visible (about 9 1/4").

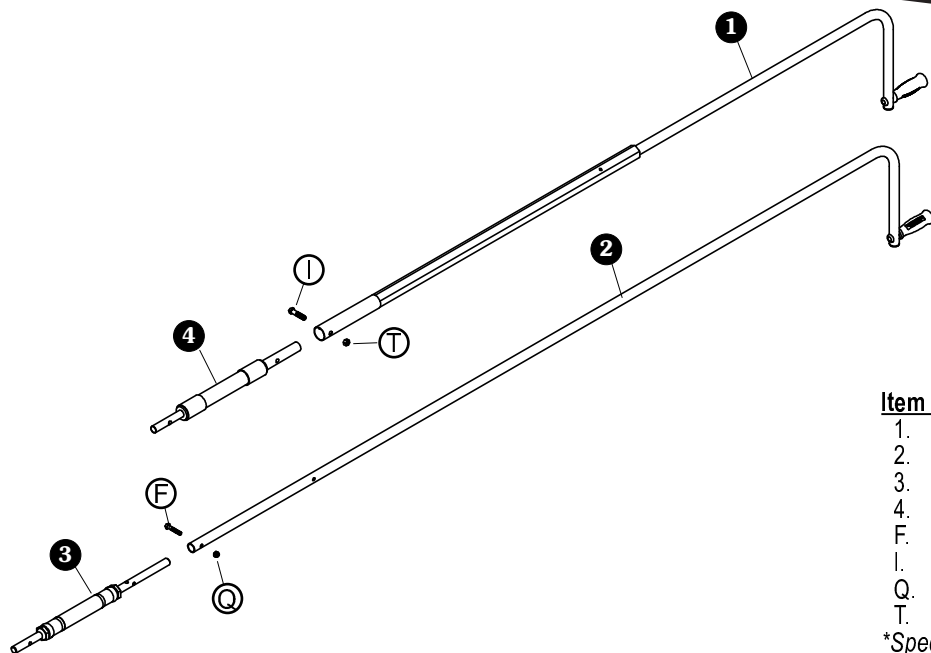
STEP 5: To ensure cable winds correctly in spool grooves, push ratchets out so cable moves 1/4".



STEP 5A: If vertical surface is too short to mount ratchets. Mark location for 5/16" holes after ratchets are pushed out so cable moves 1/4". Drill holes. Tighten nut ③ on screw ① and fasten to box with lock washer ④ and nut ②. Guide cable around cap screw and rotate ratchet bracket to fit on vertical surface.



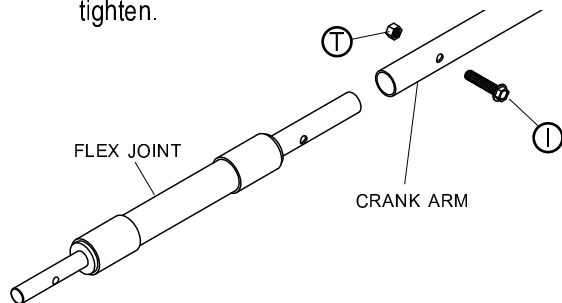
STEP 4: Mark and drill 5/16" holes. Fasten ratchet bracket to box with screws ①, lock washers ④ and nuts ②.



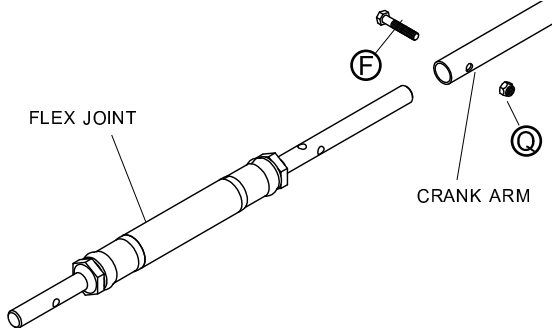
Item	Part #	Description
1.	*	Crank Arm Assembly - Telescoping
2.	1123954	Crank Arm Assembly - One Piece
3.	1122010	Flex Joint Assembly
4.	1118722	Flex Joint Assembly - 12"
F.	1701468	Cap Screw - 5/16" x 1 3/4"
I.	1700369	Cap Screw - 3/8" x 1 3/4"
Q.	1700419	Nylon Lock Nut - 5/16"
T.	1700418	Centerlock Nut - 3/8"

*Specify length

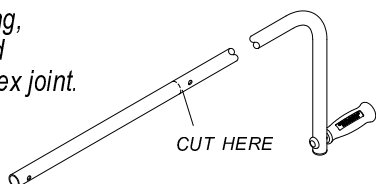
STEP 1A: Telescoping crank option. Insert flex joint into end of crank arm. Secure with screw **I** and nut **T**. Finger tighten.



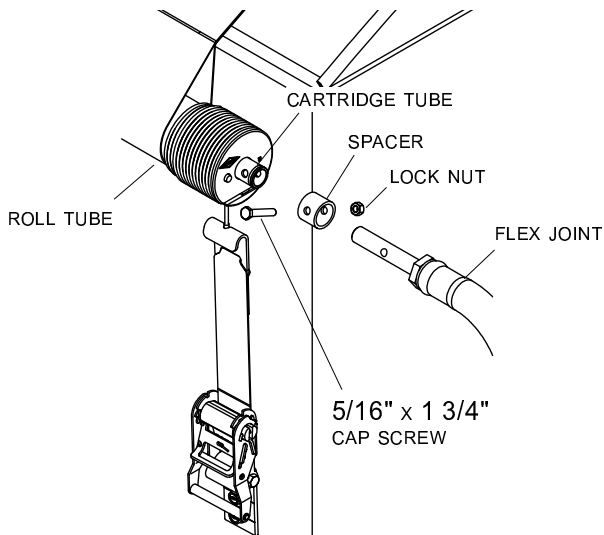
STEP 1B: One piece option. Insert flex joint into end of crank arm. Fasten with screw **F** and nut **Q**. Finger tighten.



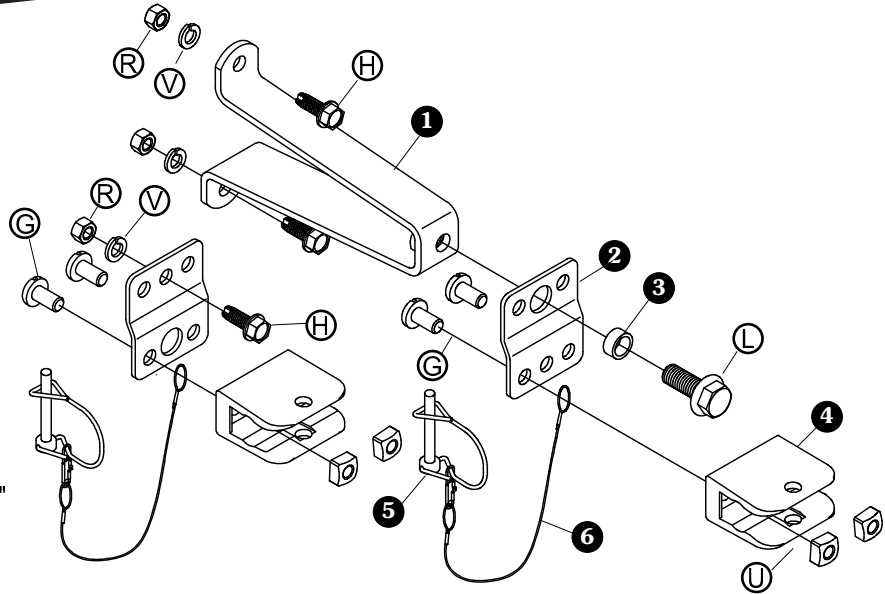
NOTE: If handle is too long, cut handle 1" from second hole before fastening to flex joint.



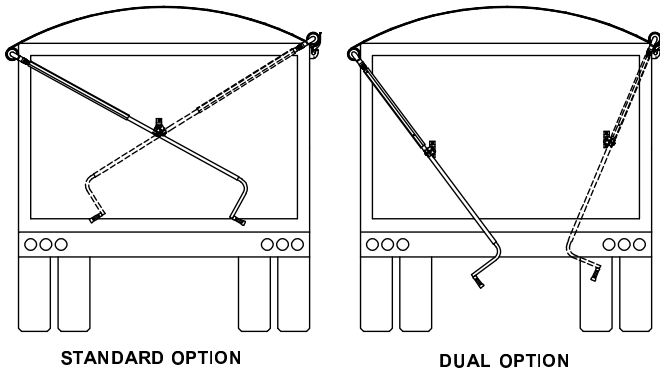
STEP 2: Remove nut and cap screw from spacer on rear (red) end of roll tube. Slide flex joint end into cartridge tube protruding from roll tube. Align holes, reinsert cap screw and tighten hex nut.



Item Part #	Description
1. 1100033	Crank Retainer Standoff - 7"
2. 1123660	Offset Retainer Bracket
3. 1700306	Bushing - 11/16" x .51" x 5/16"
4. 1705259	Crank Retainer - Nylon
5. 1705262	Wire Lock Pin - 1/4" x 2"
6. 1100574	Cable w/Interlock Snap - SS
G. 1705260	Pan Hd. Cap Screw - 3/8" x 3/4"
H. 1700400	Self-Tapping Screw - 3/8" x 1"
L. 1702996	Flanged Cap Screw - 1/2" x 1 1/4"
R. 1700407	Hex Nut - 3/8"
U. 1705261	Square Nut - 3/8"
V. 1700434	Lock Washer - 3/8"

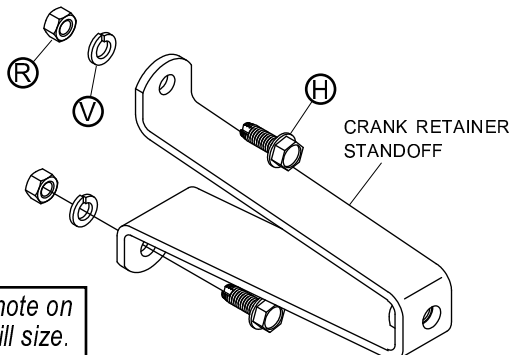


STEP 1: Determine mounting location on rear of trailer for 1 or 2 crank retainer standoffs or crank retainers (if not using standoffs). Location must be accessible by crank arm while tarp is open or closed.



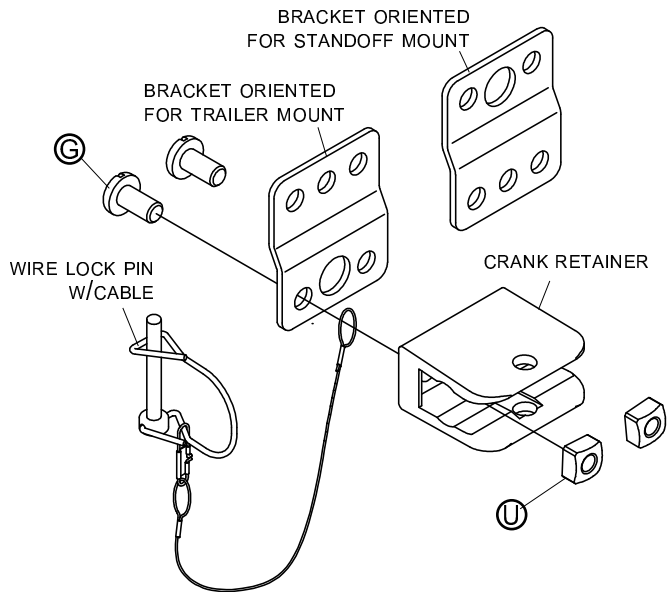
LOCATE CRANK RETAINER TO HOLD CRANK EXTENSION PORTION OF CRANK ASSEMBLY.

STEP 2: Drill 5/16" holes and fasten crank retainer standoff to trailer with screws **H**, lock washers **V** and nuts **R**.

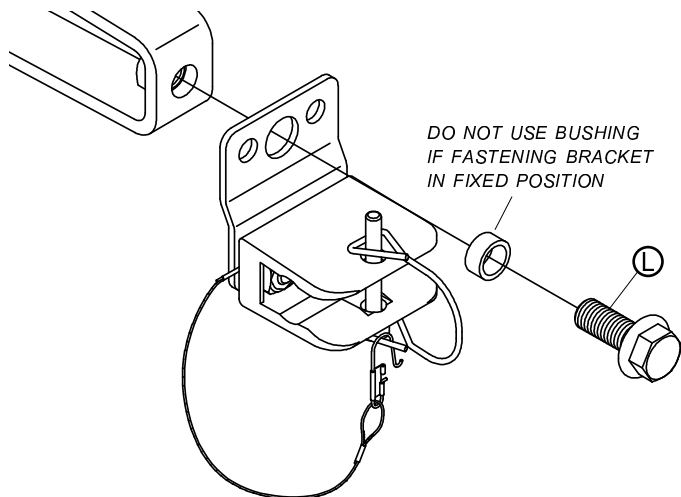


NOTE: See note on page 1 for drill size.

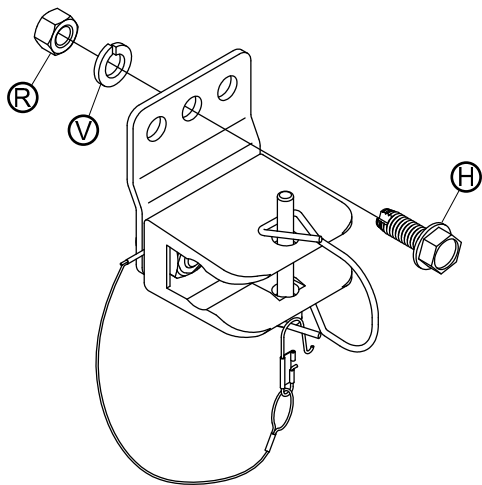
STEP 3: Assemble crank retainer as shown, aligning larger hole on top of bracket if mounting on standoff. If mounting on trailer, align larger hole on bottom.



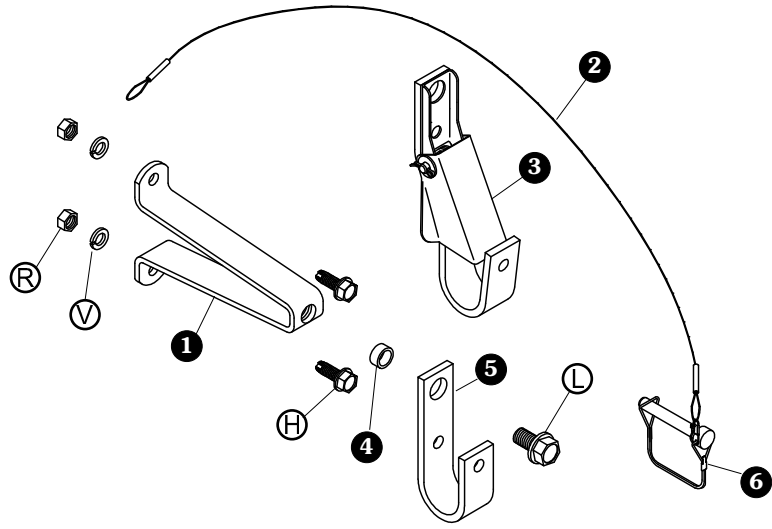
STEP 3A: Standoff mount. Fasten telescoping crank retainer to crank retainer standoff on rear of trailer with screw **L** and bushing. Tighten fasteners.



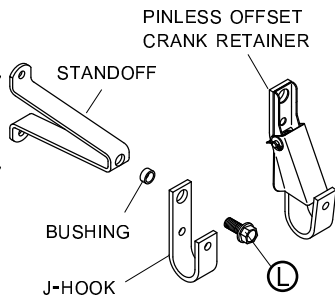
STEP 3B: Trailer mount. Use center hole in retaining bracket as guide to mark and drill 5/16" hole in trailer wall. Fasten with galvanized steel screw **H**, washer **V** and nut **R**. Tighten fasteners.



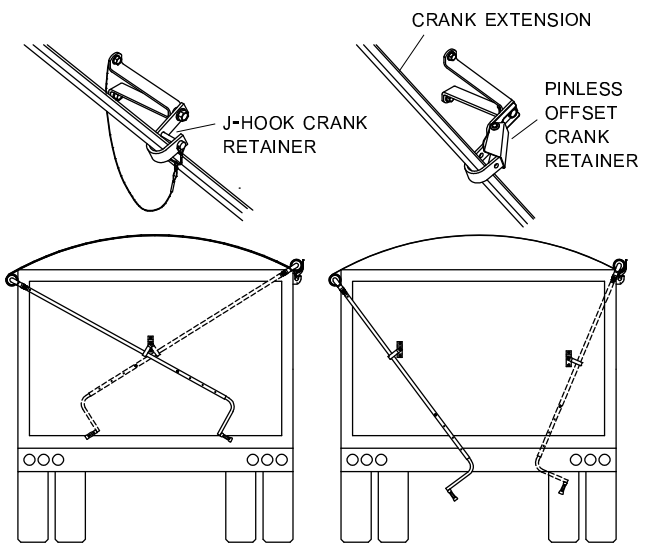
Item	Part #	Description
1.	1100033	Crank Retainer Standoff - 7"
	1109478	Crank Retainer Standoff - 11"
2.	1100574	Cable w/Snap
3.	1118640	Offset Pinless Crank Retainer Kit
4.	1100306	Retainer Bushing
5.	1100040	Crank Retainer J-Hook
6.	1700526	Wire Lock Pin
H.	1700400	Self-Tapping Screw - 3/8" x 1"
L.	1702996	Flanged Cap Screw - 1/2" x 1 1/4"
R.	1700407	Hex Nut - 3/8"
V.	1700434	Lock Washer - 3/8"



STEP 1: Assemble stand-off, bushing and J-hook or pinless offset crank retainer with screw **H**. Assemble pinless offset components per instructions P/N1114601.

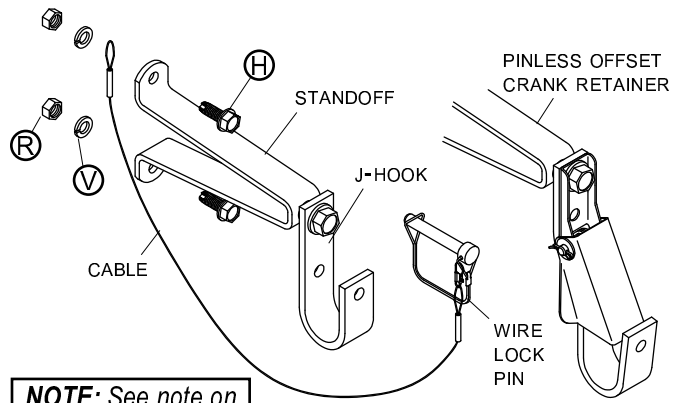


STEP 2: Mark locations for 1 or 2 crank retainers on back of box, where accessible by crank arm while tarp is open or closed.



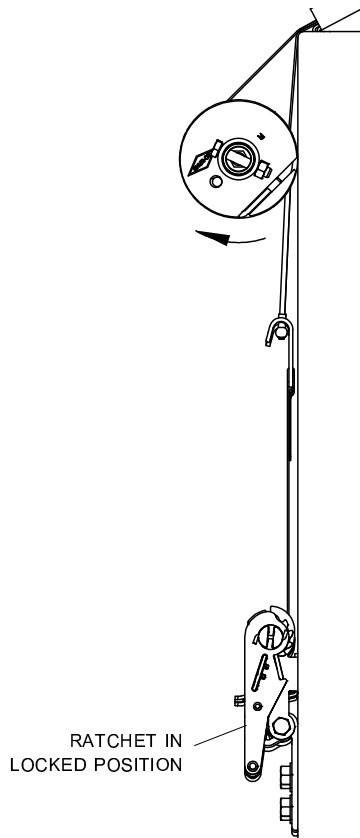
LOCATE CRANK RETAINER TO HOLD CRANK EXTENSION PORTION OF CRANK ASSEMBLY

STEP 3: Drill 5/16" holes and fasten crank retainer assembly to box with screws **H**, lock washers **V** and nuts **R**. If using J-hook, fasten cable to wire lock pin. Fasten other end of cable behind standoff.



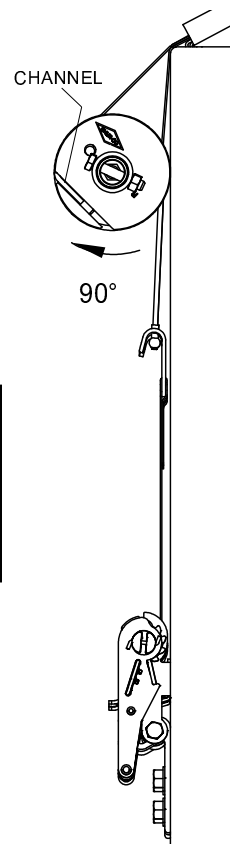
NOTE: See note on page 1 for drill size.

STEP 1: Determine tarp tension. Tighten ratchets to apply initial tension to tarp. Note position of channels on front and rear spools as initial tarp tension is reached.



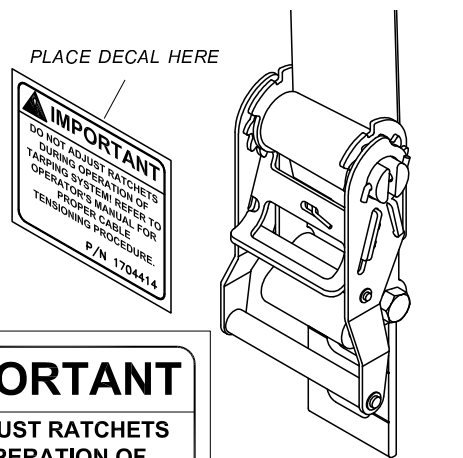
⚠ CAUTION
 Do not adjust ratchets while system is operating.

STEP 2: Tighten ratchet so channels rotate 90° from original position. Open and close tarp system 5 or 6 times to allow cable to seat in spool grooves and tarp to pull snug. Check position of channel and retighten ratchet as needed to rotate channel 90° from initial position.

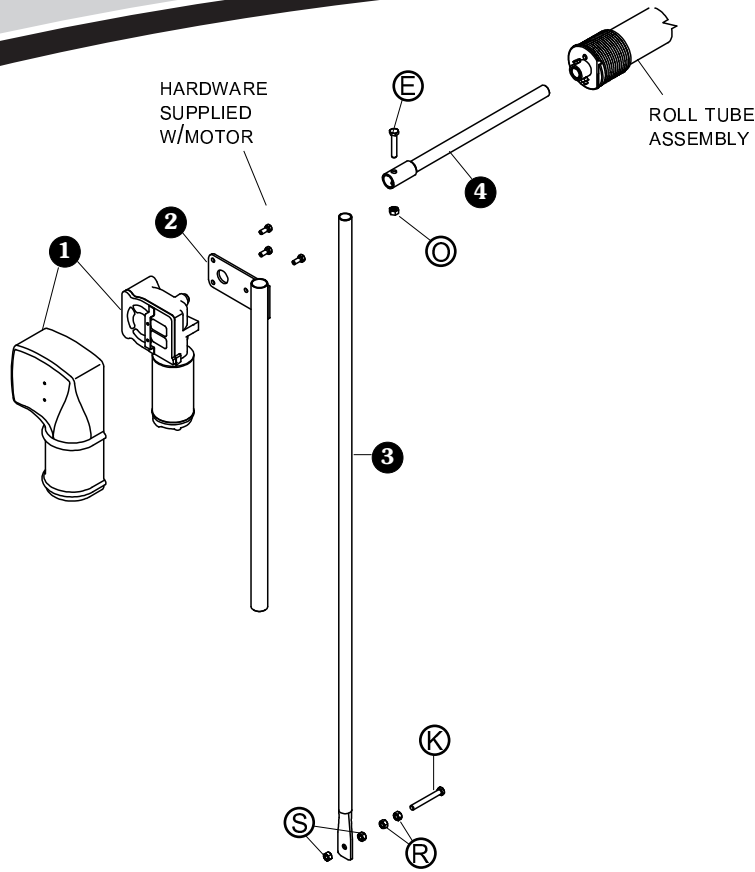


NOTE: Ratchet must be in locked position to hold tension. Do not release tension to operate system.

STEP 3: Place decal as shown.

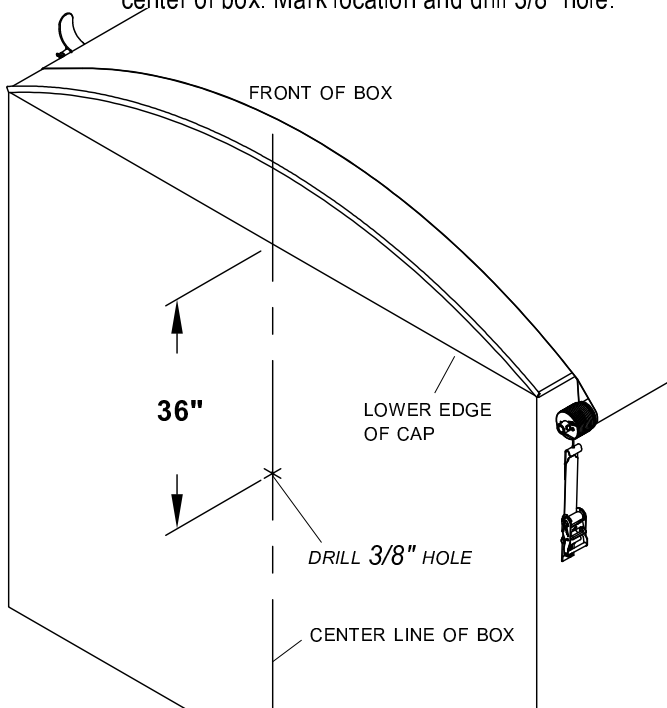


▲ IMPORTANT
 DO NOT ADJUST RATCHETS
 DURING OPERATION OF
 TARPING SYSTEM! REFER TO
 OPERATOR'S MANUAL FOR
 PROPER CABLE
 TENSIONING PROCEDURE.
 P/N 1704414

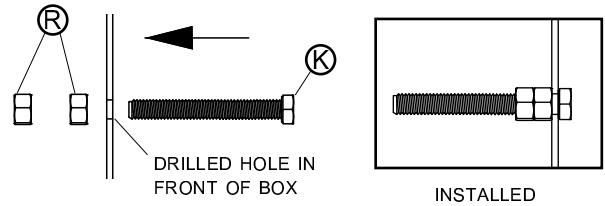


Item	Part #	Description
1.	1121307	Durabuilt™ Electric Motor
	1703823	Power Drive Electric Motor (replacement for kits shipped before 2013)
2.	1118224	Upper Pivot Arm - Black
3.	1118286	Lower Pivot Arm - 60"
	1118287	Lower Pivot Arm - 77"
4.	1118221	Motor Extension - Black
E.	1701468	Cap Screw - 5/16" x 1 3/4"
K.	1704332	Cap Screw - 3/8" x 3"
O.	1702492	Top Lock Nut - 5/16"
R.	1700407	Hex Nut - 3/8"
S.	1702668	Top Lock Nut - 3/8"

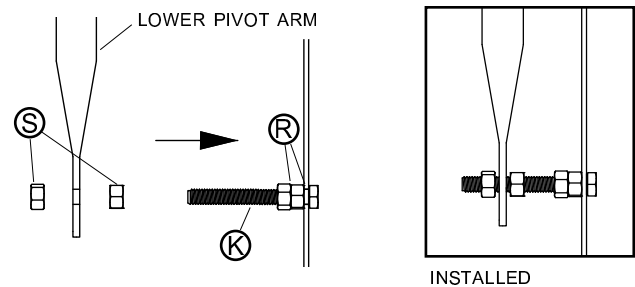
STEP 1: Determine pivot point location on front of box by measuring 36" down from lower edge of end cap at center of box. Mark location and drill 3/8" hole.



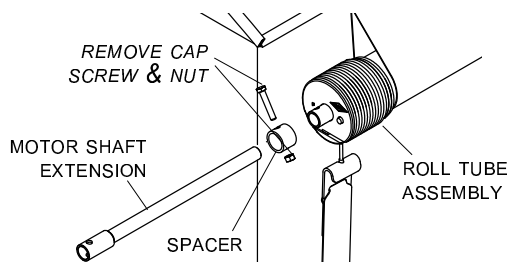
STEP 2: From inside of box, insert cap screw (K) through hole and tighten against box wall with hex nut (R). Tighten second hex nut (S) against first hex nut.



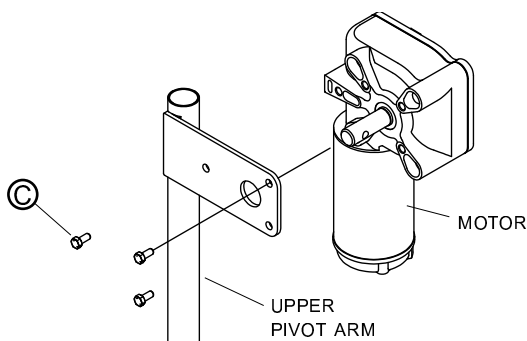
STEP 3: Turn lock nut (S) onto cap screw (K), positioning nut to allow enough thread on cap screw to place pivot arm and another nut. Install lower pivot arm over cap screw (K) and turn second lock nut (S) onto cap screw (K), leaving room for arm to rotate freely.



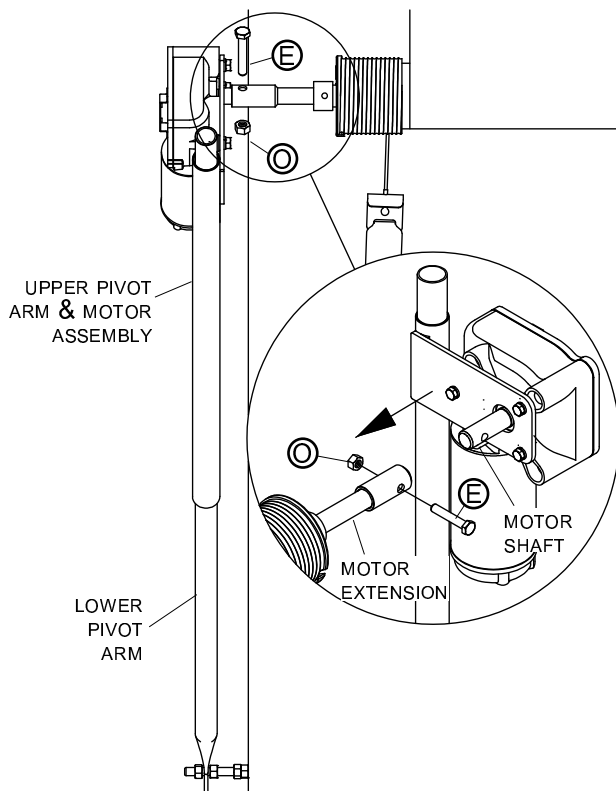
STEP 4: Remove cap screw **E** and lock nut **O** from cartridge spacer on front of roll tube. Insert motor shaft extension into spacer and roll tube assembly.



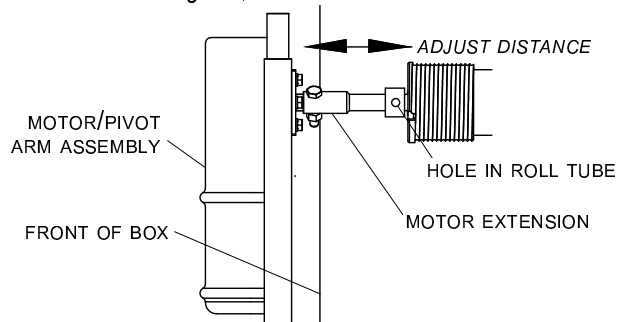
STEP 5: Fasten motor to upper pivot arm with screw supplied with motor.



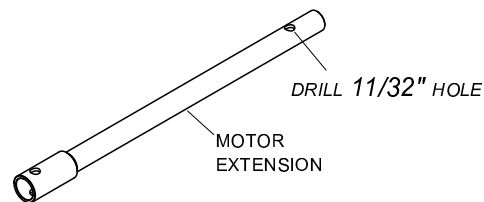
STEP 6: Slide upper pivot arm and motor assembly over lower pivot arm. Insert motor shaft into motor extension. Insert screw **E** and finger tighten nut **O**.



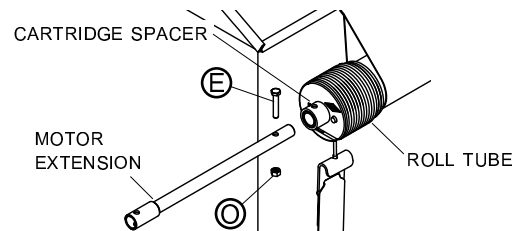
STEP 7: Adjust distance between motor/pivot arm assembly and box to allow free movement of pivot arm and motor assembly across front of box. Using hole in roll tube as guide, mark hole location on motor extension.



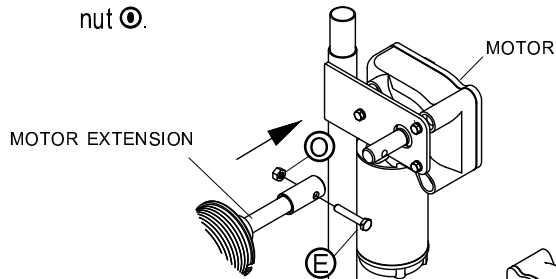
STEP 8: Remove motor extension. Drill 11/32" hole through motor extension at marked location.



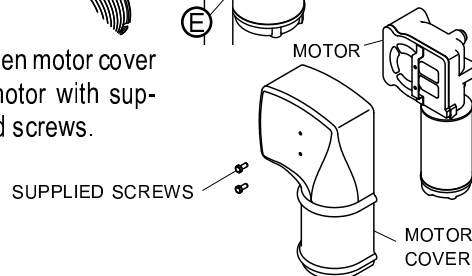
STEP 9: Replace motor extension into roll tube. Align holes and secure cartridge spacer and motor extension to roll tube with screw **E** and nut **O**.



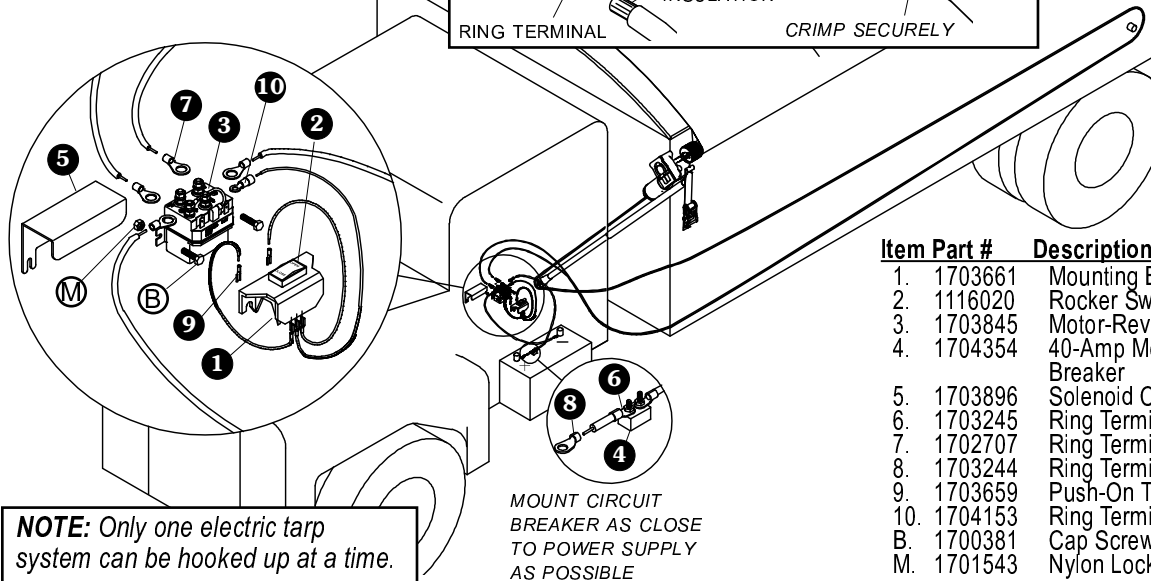
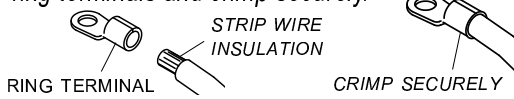
STEP 10: Replace motor onto motor extension. Align holes and secure motor to motor extension with screw **E** and nut **O**.



STEP 11: Fasten motor cover to motor with supplied screws.



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



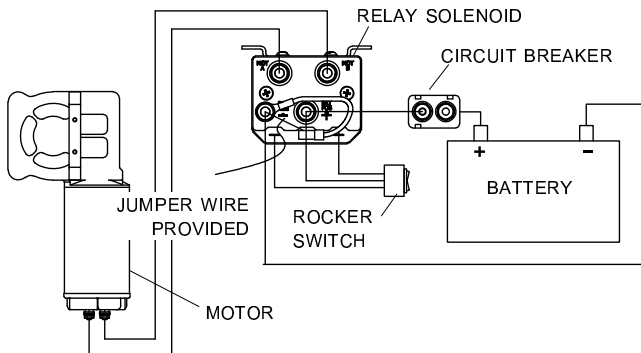
NOTE: Only one electric tarp system can be hooked up at a time.

MOUNT CIRCUIT BREAKER AS CLOSE TO POWER SUPPLY AS POSSIBLE

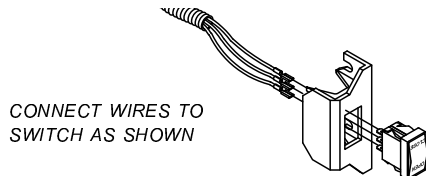
Item	Part #	Description
1.	1703661	Mounting Bracket - Rocker Switch
2.	1116020	Rocker Switch
3.	1703845	Motor-Reversing Solenoid
4.	1704354	40-Amp Modified-Reset Circuit Breaker
5.	1703896	Solenoid Cover
6.	1703245	Ring Terminal - 6 Ga. x #10 Stud
7.	1702707	Ring Terminal - 6 Ga. x 1/4" Stud
8.	1703244	Ring Terminal - 6 Ga. x 3/8" Stud
9.	1703659	Push-On Terminal - 14 Ga. x 1/4"
10.	1704153	Ring Terminal - 14 Ga. x 1/4" Stud
B.	1700381	Cap Screw - 1/4" x 1"
M.	1701543	Nylon Lock Nut - 1/4"

STEP 1: Circuit breaker & battery. Mount circuit breaker as close as possible to battery or power supply.

STEP 2: Mount solenoid. Mount solenoid in a suitable location - a ventilated area near the battery is ideal. Determine best route for wire, usually along frame with existing wire harness. Run 6-ga. wire from motor to solenoid and from power supply to solenoid as shown in diagram. Run 14-ga. wires from solenoid to switch.

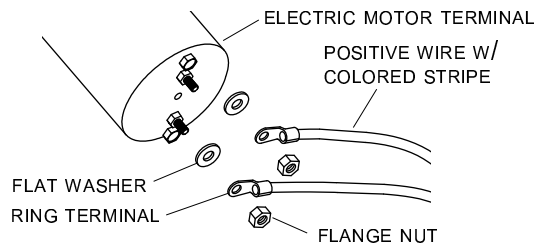


STEP 3: Rocker switch. Locate rocker switch in convenient operating location. Switch can be mounted in cab, on dash panel, on driver side door jamb or in convenient location outside cab.



STEP 4: Wire routing. Run wire to rear of box, around hoist pin and back to front of box.

STEP 5: Connect wires at top of pivot arm to motor.



OPERATION:

A) Check motor direction by activating switch to "OPEN." If switch is running system backwards, change wire leads on motor to opposite connections.

B) Close tarp: Push switch to "CLOSE" and hold. Observe tarp and release switch when tarp is fully closed.

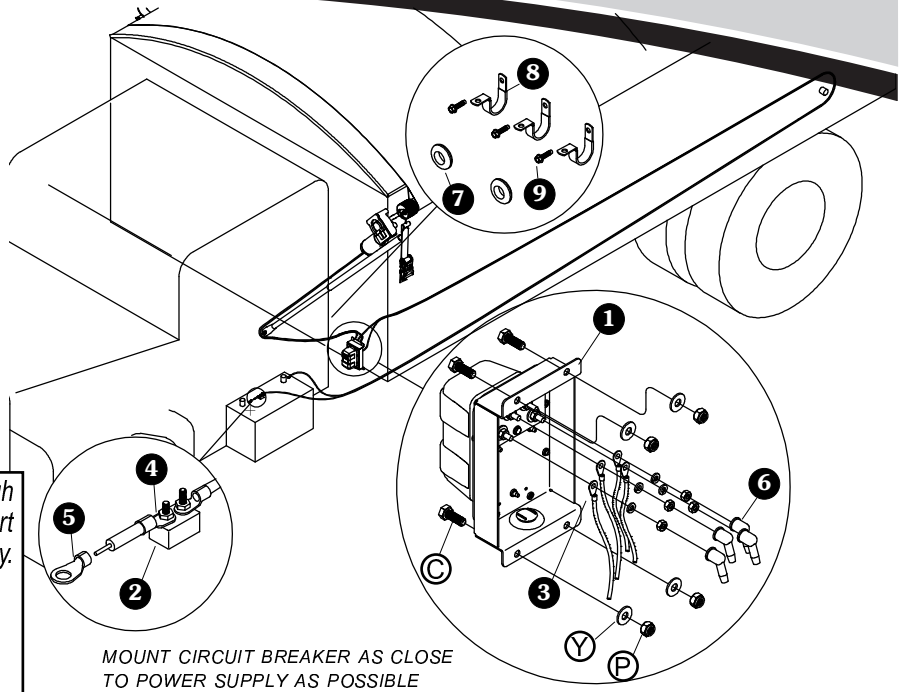
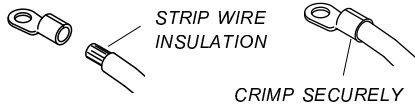
C) Open tarp: Push switch to "OPEN" and hold. Observe tarp and release switch when tarp is fully open.

NOTE: Release switch at end of cycle or modified-reset circuit breaker will trip. After breaker resets, switch will activate motor again. To reduce unnecessary strain on tarp components, release switch at end of each cycle.

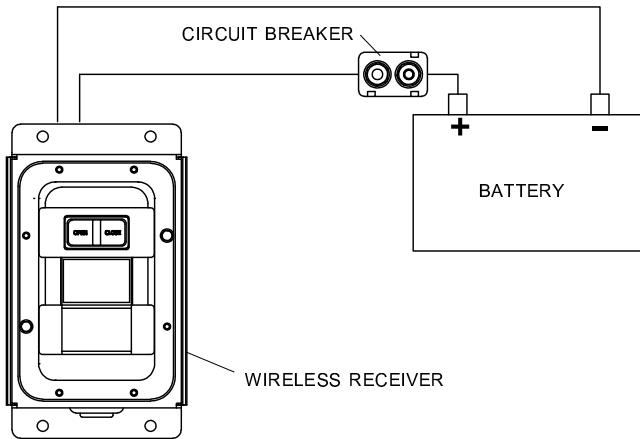
⚠ CAUTION
Check all hardware for complete assembly before operating. Inspect system at this time and adjust as required.

Item	Part #	Description
1.	1123582	Shur-Co® Wireless Receiver - SMART1+™ w/SMARTwire™
2.	1704354	40-Amp Modified-Reset Circuit Breaker
3.	1702707	Ring Terminal - 6 Ga. - 1/4" Stud
4.	1703245	Ring Terminal - 6 Ga. x #10 Stud
5.	1703244	Ring Terminal - 6 Ga. x 3/8" Stud
6.	1704330	Rubber Insulating Boot
7.	1703282	Rubber Grommet - 1 1/4" Insert
8.	1702108	Wire Clip - 3/4"
9.	1704338	Self-Tapping Screw - 1/4" x 1"
C.	1702926	Cap Screw - 5/16" x 7/8"
P.	1700419	Lock Nut - 5/16"
Y.	1700248	Flat Washer - 5/16"

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



STEP 1: Circuit breaker & battery. Mount circuit breaker as close as possible to battery or power supply.



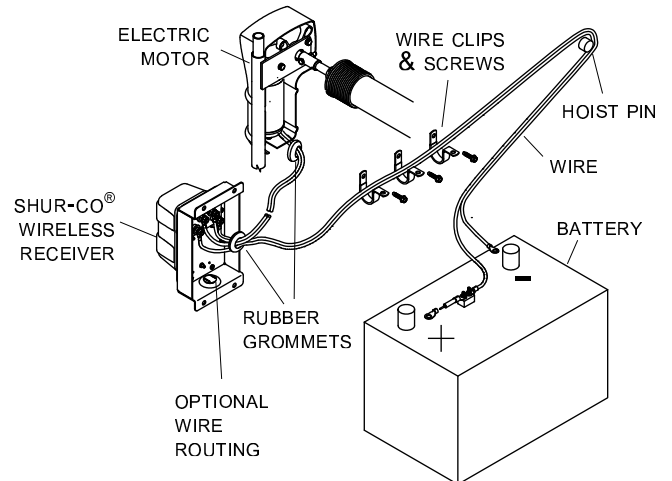
STEP 2: Strip and prep wire ends for connection to motor. Insert end of wire through rubber boots, then crimp 1/4" ring terminals onto wire ends. Connect wires at top of pivot arm to motor.

STEP 3: Shur-Co® wireless receiver. Run 6-ga. wire from electric motor down pivot arm. Use cable ties to hold wire onto pivot arm. Drill 1 1/8" hole below pivot point. Press rubber grommet into hole and insert wire through grommet. Leave slack in wire for movement during operation. Route wires as desired, securing with wire clips and self-tapping screws. Drill 1 1/8" hole through front of trailer at suitable location for wireless receiver. Insert grommet into hole and push wire through grommet.

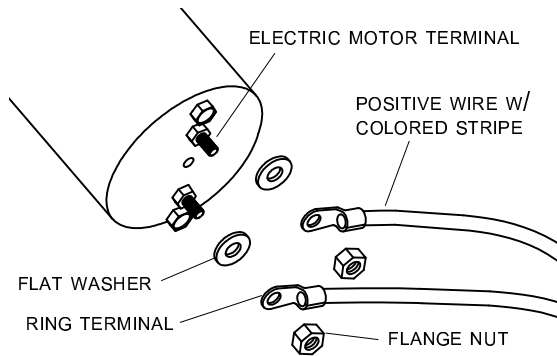
NOTE: Use dielectric grease (P/N 1704378) to prevent corrosion on terminals.

STEP 4: Insert end of wire through rubber boots, then crimp 1/4" ring terminals onto wire ends. Remove nuts and lock washers from back of wireless receiver. Place positive wire on upper orange post and negative wire on upper black post. Secure lock washers and hex nuts. Coat with dielectric grease and install rubber boots over ring terminals.

STEP 5: Run section of 6-ga. wire long enough to reach rear hoist pin and back to battery through rubber boots. Crimp 1/4" ring terminals to wire ends. On back of wireless receiver, place positive wire on lower orange post and negative wire on lower black post. Secure with 1/4" lock washers and hex nuts. Coat with dielectric grease and install rubber boots over ring terminals. Mount wireless receiver to cover rubber grommet. Mark and drill 11/32" holes and fasten receiver to trailer with 5/16" x 7/8" cap screws, flat washers and lock nuts.



STEP 6: Connect wires at top of pivot arm to motor.



CAUTION

Check all hardware for complete assembly before operating. Inspect system at this time and adjust as required.

OPERATION:

A) Check motor direction by activating switch to "OPEN." If switch is running system backwards, change wire leads on motor to opposite connections.

B) Close tarp: Push switch to "CLOSE" and hold. Observe tarp and release switch when tarp is fully closed.

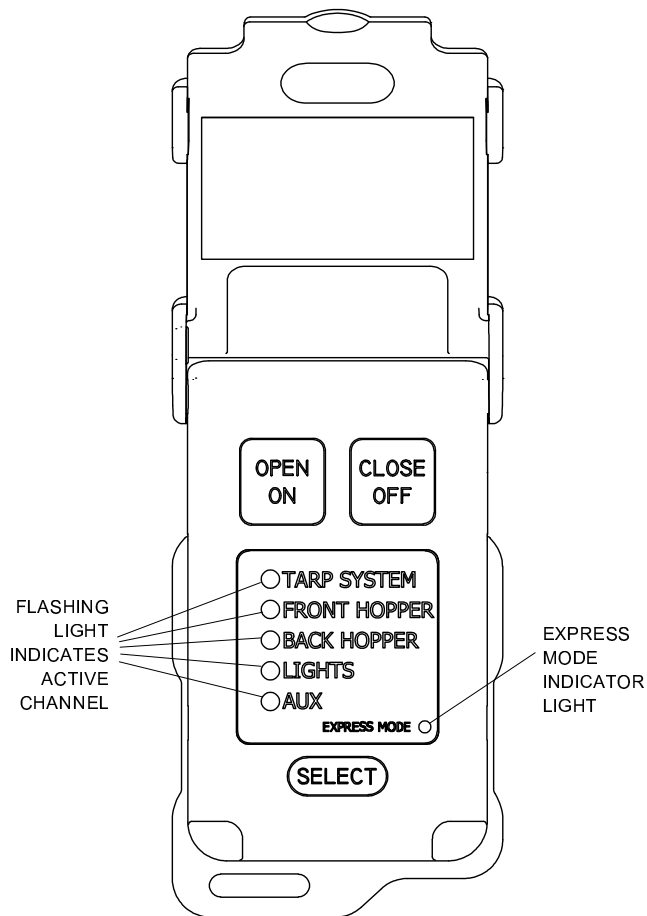
C) Open tarp: Push switch to "OPEN" and hold. Observe tarp and release switch when tarp is fully open.

NOTE: Release switch at end of cycle or modified-reset circuit breaker will trip. After breaker resets, switch will activate motor again. To reduce unnecessary strain on tarp components, release switch at end of each cycle.

NOTE: Receiver may be pressure washed, but keep nozzle at least 3' from system while spraying.

POWER UP/DOWN

Remote will power up when lid is opened. Remote will power down when lid is closed or when lid is left open three minutes after last button is pushed.



STANDARD OPERATION

After power-up, first channel will be immediately active and indicator light will be flashing. *Open/On* and *Close/Off* buttons are operational for indicated active channel. While either *Open* or *Close* button is pressed, indicator light for active channel will flash faster, indicating command is being transmitted on active channel. *Select* button will cycle between enabled channels.

Each channel on remote can be set to operate in either *Momentary Mode* or *Express Mode*.

Momentary Mode: While remote channel is in *Momentary Mode*, *Open* or *Close* button must be held down to operate system.

NOTE: Some Shur-Co® products are not compatible with **EXPRESS MODE**. If motor does not have encoder wire, remote will operate in *Momentary Mode* only.

Indicator light labeled **EXPRESS MODE** will be off when remote is in *Momentary Mode*.

If remote channel is in *Momentary Mode*, you may still force system to open or close automatically one time by pressing *Open* or *Close*, while simultaneously pressing *Select* button. System will continue to operate until fully open or closed. System can be stopped at any time by pressing any button on remote or closing remote lid.

Indicator light labeled *Express Mode* will be lit for first five seconds after initiating "One Time" Express command.

Express Mode: While remote channel is in *Express Mode*, *Open* or *Close* button can be pressed and released. System will continue to operate until fully open or closed. System can be stopped at any time by pressing any button on remote or closing remote lid.

Indicator light labeled **EXPRESS MODE** will be on when remote is in *Express Mode*.

PAIRING (INTRODUCING) REMOTE(S) TO RECEIVER

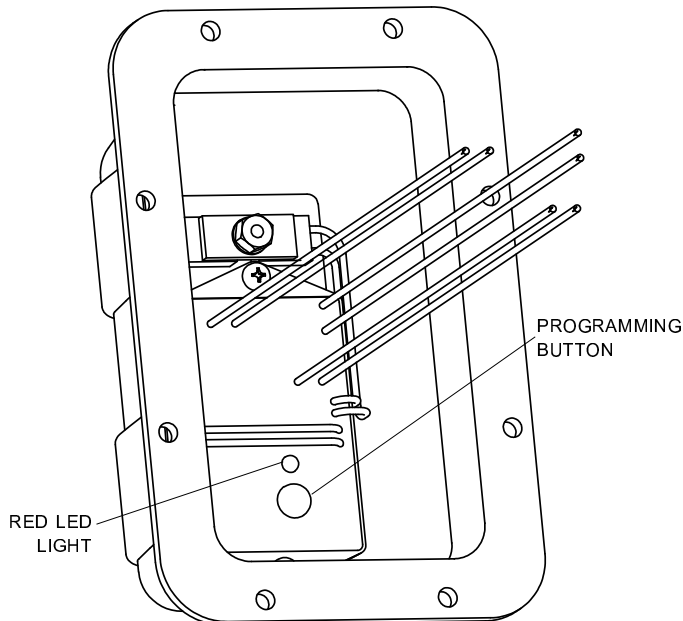
Receiver will accept and respond to signals from up to five remotes. Receiver will not respond to signals from remotes that have not been paired to it.

NOTE: Remotes are typically paired to receivers at factory if remote is shipped with receiver.

Follow instructions below to pair remote(s) to receiver:

1. Remove solenoid cover from receiver assembly, pulling gently on cover to prevent damage to wires connected to cover.

NOTE: Only SMART1+™ remotes will function with SMART1+™ receivers. The original SMARTtransmitter® cannot be used.



2. Check to be sure receiver is connected to 12-volt power supply. Receiver must be connected to power to be programmed. If battery disconnect switch is installed, make sure it is turned on.

NOTE: Read following steps entirely before proceeding. Programming must be completed within 20 seconds. Receiver will exit program mode after 20 seconds, whether or not it has received Open/On button signals from remote.

3. Receiver can learn to recognize up to five remotes. Gather all of remotes to be introduced to receiver. Open remote lid(s) to activate.
4. Set remote(s) to appropriate channel (*Tarp System*).
5. Press and hold programming button on receiver for five seconds. Red light will start flashing to indicate it is in programming mode. Release programming button. Red light will now turn off.

Single SMART1+™ remote:

- 6a1. On remote, press *Open/On* button five times. Red light on receiver will flash after each button press. After receiving last signal, light will flash twice, then begin flickering, indicating it has been successfully programmed.
- 6a2. Verify remote and receiver are operating correctly, then refasten solenoid cover.

Multiple SMART1+™ remotes:

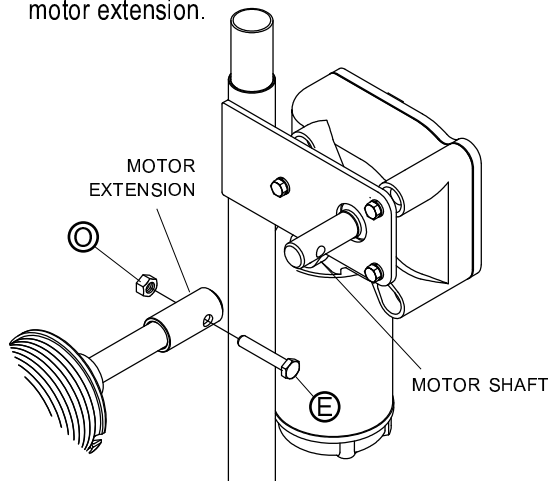
- 6b1. Press *Open/On* button on first remote. Red light will flash after receiving signal.
- 6b2. Repeat above step for each remote being used.
- 6b3. Receiver will accept up to five signals. Press *Open/On* button additional times on last remote being programmed to achieve total of five signals. Red light on receiver will flash twice after last (fifth) signal, then begin flickering, indicating it has been successfully programmed (see programming example).
- 6b4. Verify each remote and receiver are operating correctly, then refasten solenoid cover.

Perform the following steps to convert your electric Cable-Lok™ system to a manual crank operation:

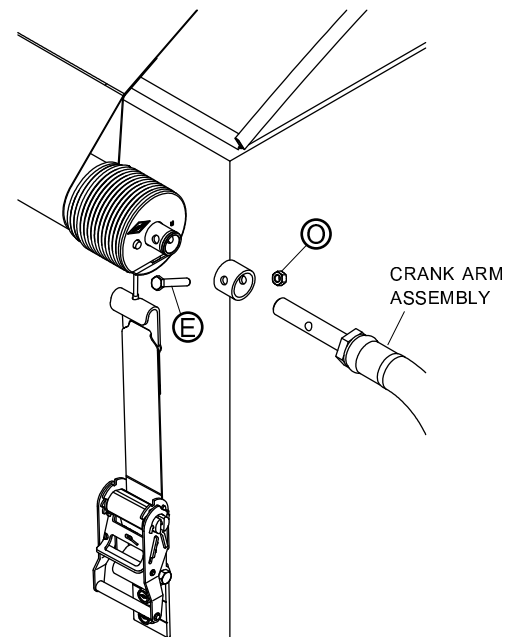
NOTE: Store manual crank arm in truck or mounted to trailer.
(Example: Above kingpin in apex.)

STEP 1: Close tarp, letting roll tube hang loose.

STEP 2: At front of box, remove cap screw **B** and nut **C** from motor shaft and motor extension. Remove motor from motor extension.



STEP 3: Install crank arm at rear of box as shown in the *Manual Crank Option* section of this manual.



GALVANIZED END CAPS

Item Part # Description

Face Mount

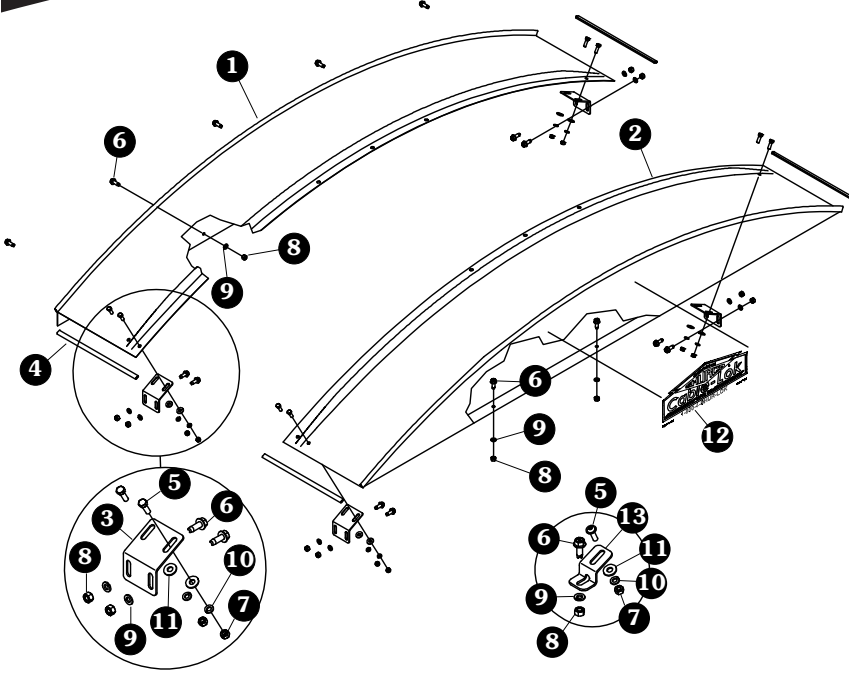
- 1. 1118896 Face Mt. Cap - 6" Rise w/89"
- 1118892 Face Mt. Cap - 10" Rise w/89"
- 1118804 Face Mt. Cap - 6" Rise w/93"
- 1118800 Face Mt. Cap - 10" Rise w/93"
- 1118613 Face Mt. Cap - 6" Rise w/95"
- 1118605 Face Mt. Cap - 10" Rise w/95"
- 1118614 Face Mt. Cap - 6" Rise w/101"
- 1118606 Face Mt. Cap - 10" Rise w/101"

Top Mount

- 2. 1118894 Top Mt. Cap - 6" Rise w/89"
- 1118888 Top Mt. Cap - 10" Rise w/89"
- 1118807 Top Mt. Cap - 6" Rise w/93"
- 1118803 Top Mt. Cap - 10" Rise w/93"
- 1118615 Top Mt. Cap - 6" Rise w/95"
- 1118608 Top Mt. Cap - 10" Rise w/95"
- 1118616 Top Mt. Cap - 6" Rise w/101"
- 1118609 Top Mt. Cap - 10" Rise w/101"

Mounting Hardware

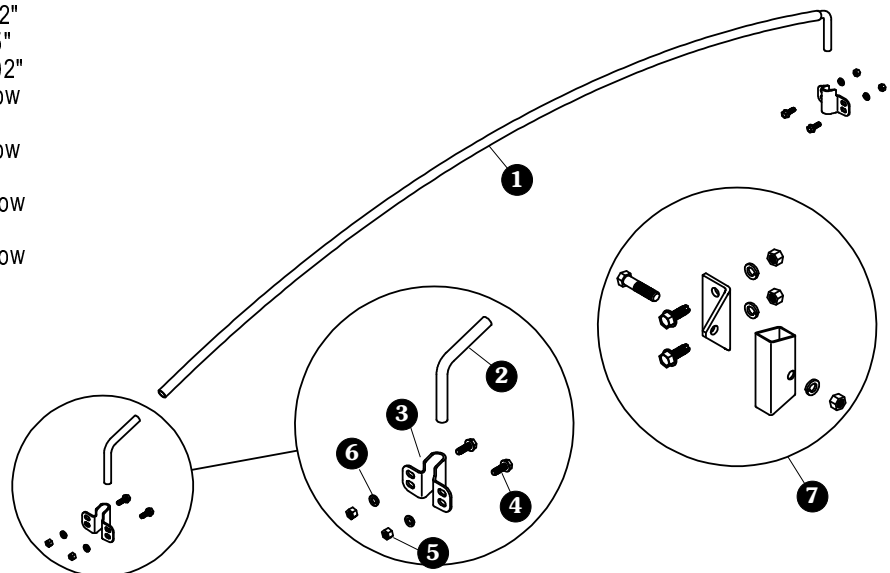
- 1118594 Cap Mounting Hardware - Bolt Kit
- 1118595 Cap Mounting Hardware w/Edge Trim
- 3. 1118188 End Cap Brkt - 6" Rise - Face Mt.
- 1118189 End Cap Brkt - 10" Rise - Face Mt.
- 4. 1118596 Edge Trim - 30"
- 5. 1704441 Flange Screw - 5/16" x 1"
- 6. 1700400 Self-Tapping Screw - 3/8" x 1"
- 7. 1700411 Hex Nut - 5/16"
- 8. 1700407 Hex Nut - 3/8"
- 9. 1700434 Lock Washer - 3/8"
- 10. 1700433 Lock Washer - 5/16"
- 11. 1700428 Flat Washer - 5/16"
- 12. 1704417 Cable-Lok™ Decal
- 13. 1118191 End Cap Brkt. - 6" Rise - Top Mt.
- 1118192 End Cap Brkt. - 10" Rise - Top Mt.

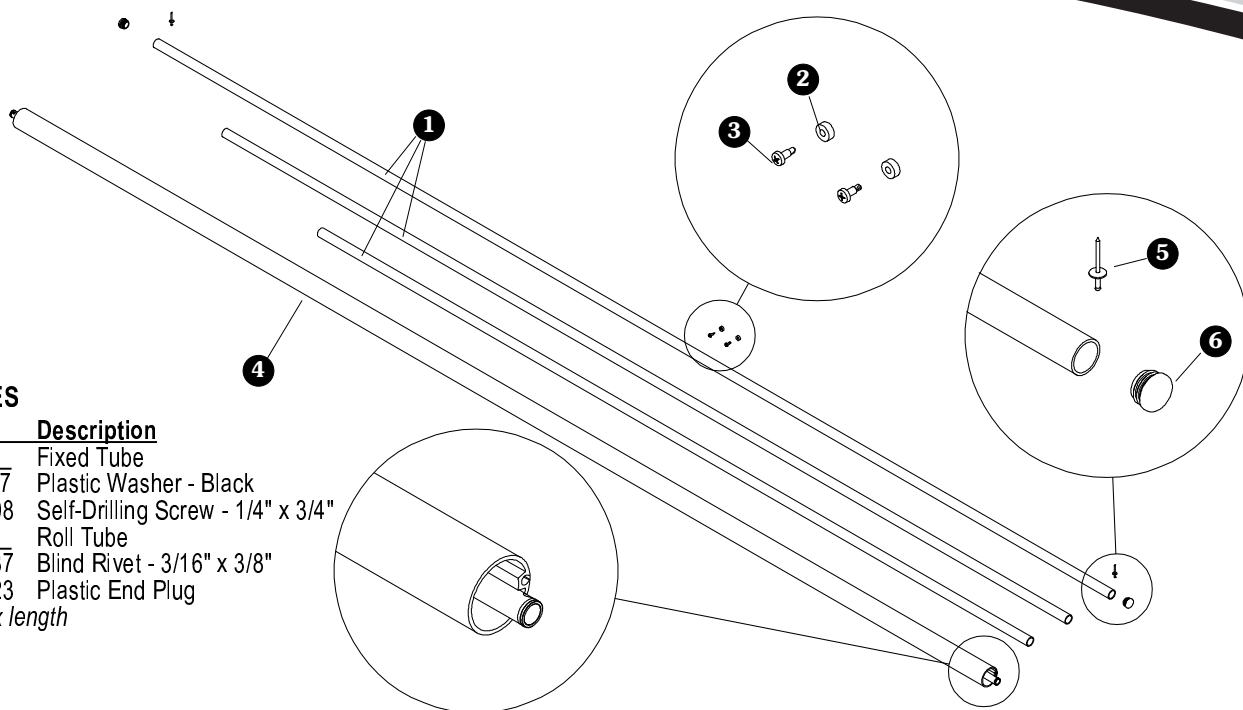


BOWS

Item Part # Description

- 1117916 Std. Low-Rise Bow Kit - 85" to 92"
- 1100766 Std. Low-Rise Bow Kit - 96" to 102"
- 1117917 Std. High-Rise Bow Kit - 85" to 95"
- 1100768 Std. High-Rise Bow Kit - 96" to 102"
- 1117205 Std. Low-Rise Bow Kit - Single Bow Bracket - 85" to 92"
- 1109139 Std. Low-Rise Bow Kit - Single Bow Bracket - 93" to 102"
- 1117919 Std. High-Rise Bow Kit - Single Bow Bracket - 89" to 95"
- 1109091 Std. High-Rise Bow Kit - Single Bow Bracket - 96" to 102"
- 1. 1117905 Std. High-Rise Bow - 89" to 95"
- 1100762 Std. High-Rise Bow - 96" to 102"
- 1116120 Std. Low-Rise Bow - 85" to 92"
- 1100760 Std. Low-Rise Bow - 93" to 102"
- 2. 1106925 Std. High-Rise Bow Shank
- 1100695 Std. Low-Rise Bow Shank
- 3. 1120836 Single Bow Bracket - Steel
- 4. 1700400 Self-Tapping Screw - 3/8" x 1"
- 5. 1700407 Hex Nut - 3/8"
- 6. 1700434 Lock Washer - 3/8"
- 7. 1117946 Adjustable Bow Bracket Kit





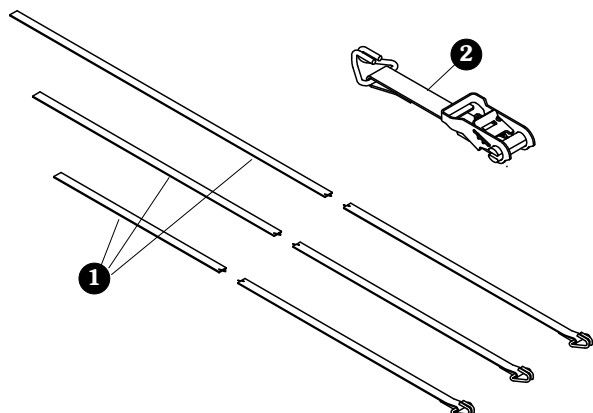
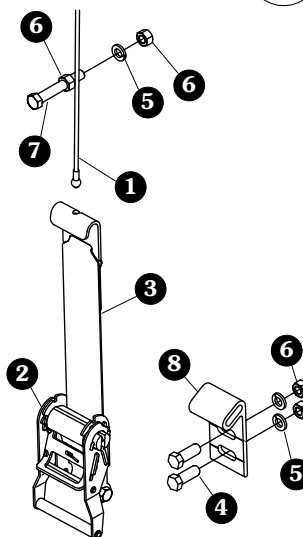
TARP TUBES

Item	Part #	Description
1.	*	Fixed Tube
2.	1118037	Plastic Washer - Black
3.	1700398	Self-Drilling Screw - 1/4" x 3/4"
4.	*	Roll Tube
5.	1704337	Blind Rivet - 3/16" x 3/8"
6.	1700523	Plastic End Plug

*Specify box length

RATCHET/CABLE ASSEMBLIES

Item	Part #	Description
	1118993	Ratchet Strap (18" w/Cable Kit - 139" Galv.
	1118994	Ratchet Strap (18" w/Cable Kit - 151" Galv.
	1118995	Ratchet Strap (42" w/Cable Kit - 139" Galv.
	1118996	Ratchet Strap (42" w/Cable Kit - 151" Galv.
1.	1704295	Galvanized Cable - 139"
	1704294	Galvanized Cable - 151"
2.	1704421	Ratchet Handle - 2"
3.	1118275	Ratchet Strap - 18"
	1118276	Ratchet Strap - 42"
4.	1700400	Self-Tapping Screw - 3/8" x 1"
5.	1700434	Lock Washer - 3/8"
6.	1700407	Hex Nut - 3/8"
7.	1702573	Cap Screw - 3/8" x 2 1/2"
8.	1118272	Adjustable Ratchet Bracket

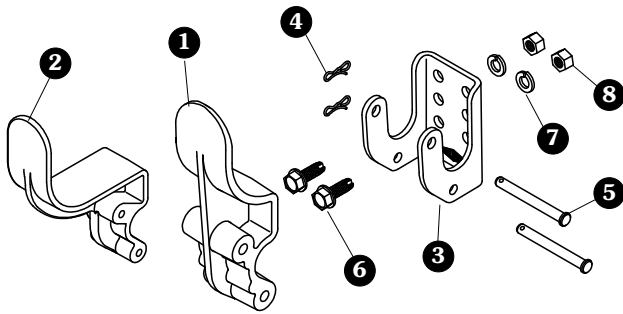


RIDGE STRAPS

Item	Part #	Description
	1118521	Ridge Strap Kit w/Hook - 10'
	1118523	Ridge Strap Kit w/Hook - 14'
	1118525	Ridge Strap Kit w/Hook - 24'
1.	1118520	Ridge Strap w/Hook - 1" x 10'
	1118522	Ridge Strap w/Hook - 1" x 14'
	1118524	Ridge Strap w/Hook - 1" x 24'
2.	1118511	Ratchet w/1" Ridge Strap & Hook

TARP STOPS

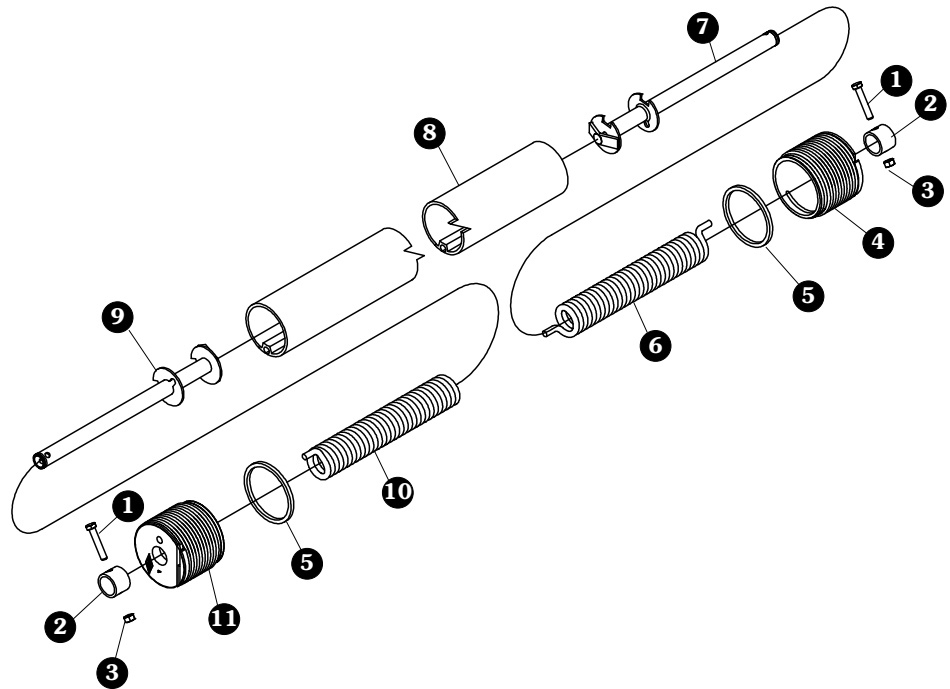
Item	Part #	Description
	1111094	Easy-Off Tarp Stop w/Mounting Hardware
	1111095	Offset Easy-Off Tarp Stop w/Mounting Hardware
	1124768	Easy-Off Aluminum Tarp Stop Assembly
	1124771	Easy-Off Aluminum 6" Offset Tarp Stop Assembly
	1118389	Bowtie Cotter Pin/Ring Assembly
1.	1705775	Easy-Off Cast Alum. Tarp Stop Upright
2.	1705454	Offset Easy-Off Cast Alum. Tarp Stop Upright
3.	1100833	Easy-Off Tarp Stop Body
4.	1704380	Bowtie Cotter Pin
5.	1703604	Clevis Pin - 5/16" x 2 7/8"
6.	1700400	Self-Tapping Screw - 3/8" x 1"
7.	1700434	Lock Washer - 3/8"
8.	1700407	Hex Nut - 3/8"



TARP SPOOL ASSEMBLIES

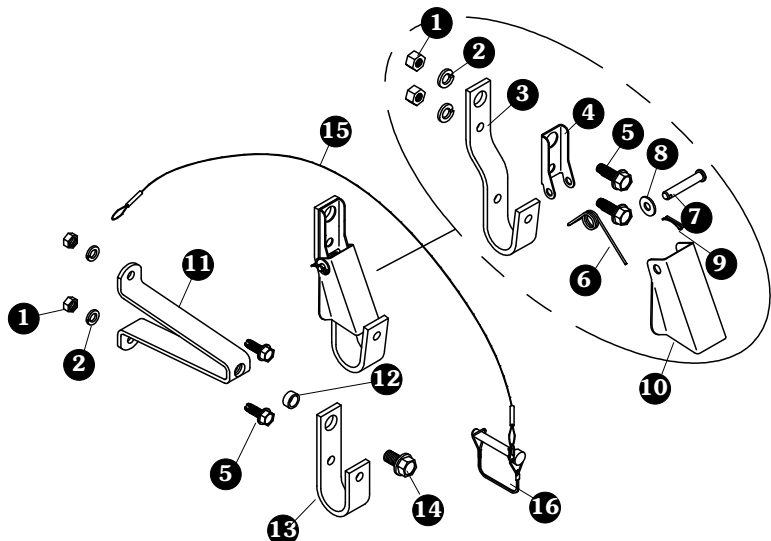
Item	Part #	Description
1.	1701468	Cap Screw - 5/16" x 3/4"
2.	1118228	Cartridge Spacer
3.	1702492	Top Lock Nut - 5/16"
4.	1704373	Rear Cable Spool - R
5.	1704290	O-Ring Seal
6.	1118229	Rear Spring - Red
7.	1123953	Rear Cartridge Kit
8.	*	Roll Tube
9.	1123952	Front Cartridge Kit
10.	1118230	Front Spring - Black
11.	1704372	Front Cable Spool - L

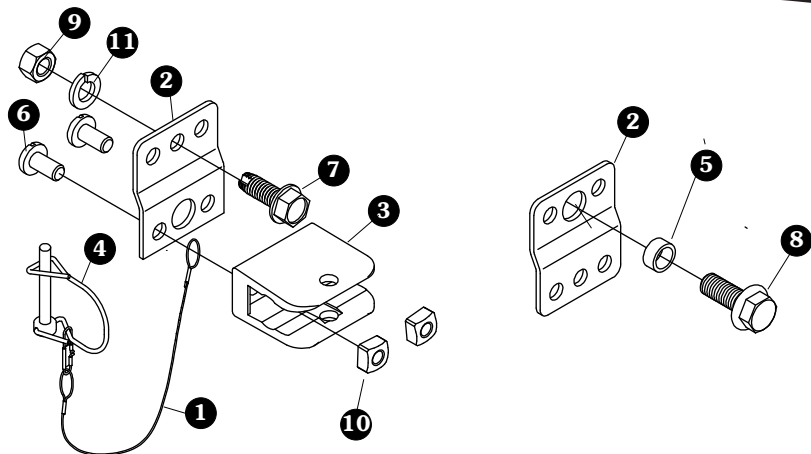
*Specify box length



CRANK RETAINERS - ONE PIECE

Item	Part #	Description
1.	1700407	Hex Nut - 3/8"
2.	1700434	Lock Washer - 3/8"
3.	1118641	Offset Crank Retainer J-Hook
4.	1118657	Crank Retainer Base Plate
5.	1700400	Self-Tapping Screw - 3/8" x 1"
6.	1703134	Tension Spring
7.	1703133	Clevis Pin - 5/16" x 1 3/4"
8.	1700427	Flat Washer- 1/4"
9.	1700448	Cotter Pin - 3/32"
10.	1114600	Offset Pinless Crank Retainer Lock
11.	1100033	Crank Retainer Standoff - 7"
12.	1100306	Retainer Bushing
13.	1100040	Crank Retainer J-Hook
14.	1702996	Cap Screw - 1/2" x 1 1/4"
15.	1100574	Cable w/Snap
16.	1700526	Wire Lock Pin - 3/8" x 2 1/2"



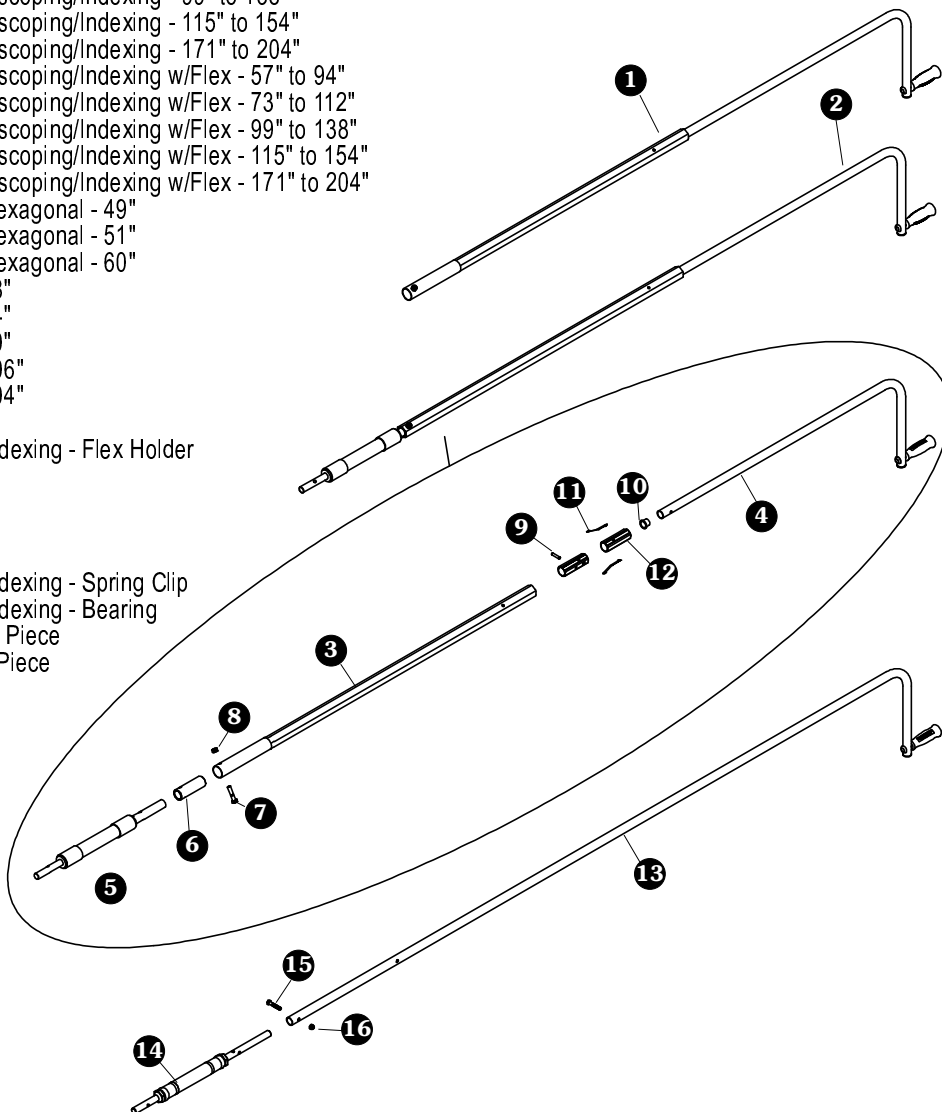


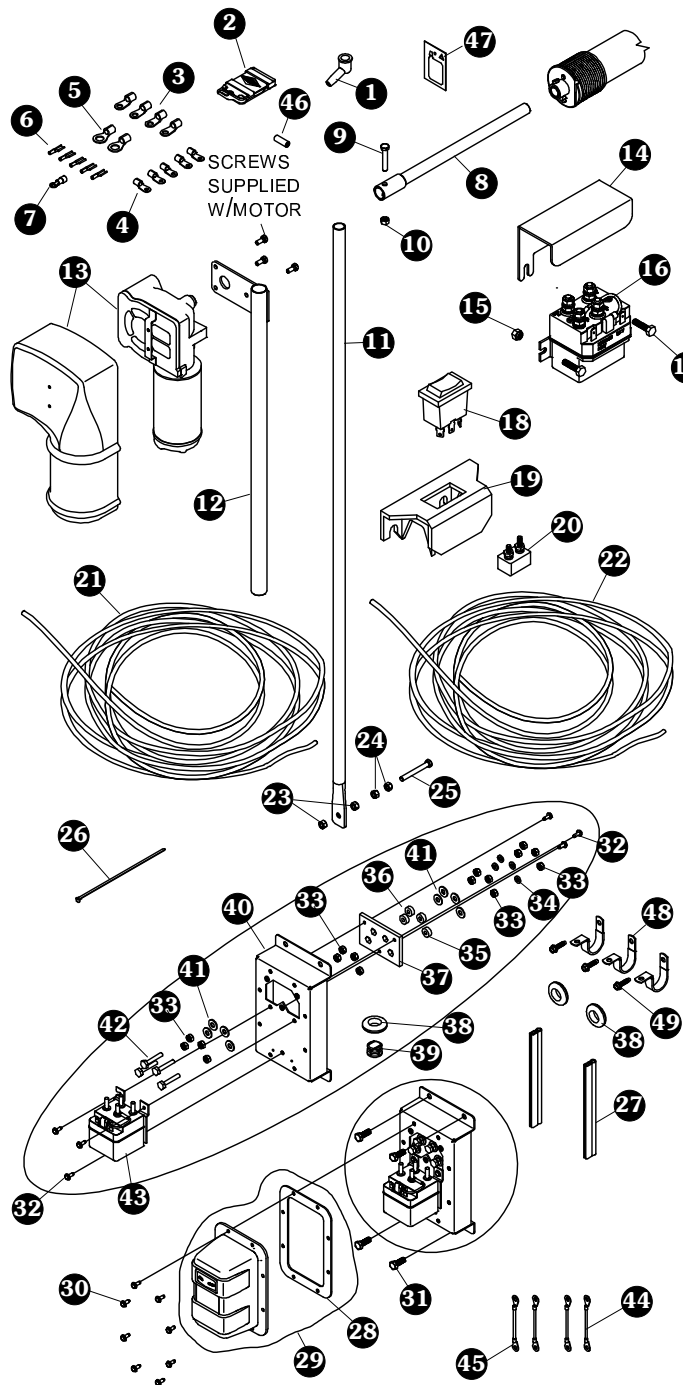
CRANK RETAINERS - TELESCOPING

- 1. 1100574 Cable w/Interlock Snap
- 2. 1123660 Offset Retainer Bracket
- 3. 1705259 Crank Retainer - Nylon
- 4. 1705262 Wire Lock Pin - 1/4" x 2"
- 5. 1700306 Bushing - 11/16" x .51" x 5/16"
- 6. 1705260 Pan Hd. Cap Screw - 3/8" x 3/4"
- 7. 1700400 Self-Tapping Screw - 3/8" x 1"
- 8. 1702996 Flanged Cap Screw - 1/2" x 1 1/4"
- 9. 1700407 Hex Nut - 3/8"
- 10. 1705261 Square Nut - 3/8"
- 11. 1700434 Lock Washer - 3/8"

CRANK OPTIONS

Item	Part #	Description
1.	1123810	Crank Arm Assembly - Telescoping/Indexing - 57" to 94"
	1123814	Crank Arm Assembly - Telescoping/Indexing - 73" to 112"
	1123818	Crank Arm Assembly - Telescoping/Indexing - 99" to 138"
	1123822	Crank Arm Assembly - Telescoping/Indexing - 115" to 154"
	1123826	Crank Arm Assembly - Telescoping/Indexing - 171" to 204"
2.	1123809	Crank Arm Assembly - Telescoping/Indexing w/Flex - 57" to 94"
	1123813	Crank Arm Assembly - Telescoping/Indexing w/Flex - 73" to 112"
	1123817	Crank Arm Assembly - Telescoping/Indexing w/Flex - 99" to 138"
	1123821	Crank Arm Assembly - Telescoping/Indexing w/Flex - 115" to 154"
	1123825	Crank Arm Assembly - Telescoping/Indexing w/Flex - 171" to 204"
3.	1123829	Crank Arm - Telescopic - Hexagonal - 49"
	1123830	Crank Arm - Telescopic - Hexagonal - 51"
	1123831	Crank Arm - Telescopic - Hexagonal - 60"
4.	1123835	Crank Arm - Telescopic - 48"
	1123839	Crank Arm - Telescopic - 64"
	1123843	Crank Arm - Telescopic - 90"
	1123847	Crank Arm - Telescopic - 106"
	1123851	Crank Arm - Telescopic - 204"
5.	1118722	Flex Joint Assembly - 12"
6.	1123856	Crank Arm - Telescoping/Indexing - Flex Holder
7.	1700369	Cap Screw - 3/8" x 1 3/4"
8.	1700418	Centerlock Nut - 3/8"
9.	1701118	Spring Pin - 1/4" x 1 3/16"
10.	1701357	End Plug - Crank Arm
11.	1705200	Crank Arm - Telescoping/Indexing - Spring Clip
12.	1705197	Crank Arm - Telescoping/Indexing - Bearing
13.	1122011	Crank Arm Assembly - One Piece
14.	1122010	Flex Joint Assembly - One Piece
15.	1701468	Cap Screw - 5/16" x 1 3/4"
16.	1700419	Centerlock Nut - 5/16"





ELECTRICS - DRIVE ASSEMBLIES

Item	Part #	Description
	1118619	Rocker Switch Cab Wiring Kit
	1118620	Remote Cab Wiring Kit
	1118368	Electrical Parts Kit w/Rocker Switch - 40 Amp
	1118257	Shur-Co® Wireless Bracket Assembly
	1119516	Elec. Upgrade - Truck - Rocker in Cab - 30' Wire
	1119517	Elec. Upgrade - Truck - SMART1+™ - 30' Wire
	1119518	Elec. Upgrade - Truck - Rocker in Cab - 75' Wire
	1119519	Elec. Upgrade - Truck - SMART1+ - 75' Wire
1.	1704330	Insulating Rubber Boot
2.	1123160	5-Channel SMART1+™ Remote
3.	1703245	Ring Terminal - 6 Ga. x #10 Stud - Motor/Breaker
4.	1702707	Ring Terminal - 6 Ga. x 1/4" Stud - Motor/Solenoid
5.	1703244	Ring Terminal - 6 Ga. x 3/8" Stud - Battery
6.	1703659	Push-On Terminal - 14 Ga. x 1/4" - Switch/Solenoid
7.	1704153	Ring Terminal - 14 Ga. x 1/4" Stud - Solenoid
8.	1118221	Black Motor Extension
9.	1701468	Cap Screw - 5/16" x 1 3/4"
10.	1702492	Top Lock Nut - 5/16"
11.	1118286	Lower Pivot Arm - 60"
	1118287	Lower Pivot Arm - 77"
12.	1118224	Upper Pivot Arm - Black
13.	1121307	Durabuilt™ Electric Motor
	1703823	Power Drive Electric Motor (replacement for kits shipped before 2013)
14.	1703896	Solenoid Cover
15.	1701543	Nylon Lock Nut - 1/4"
16.	1703845	Motor-Reversing Solenoid
17.	1700381	Cap Screw - 1/4" x 1"
18.	1116020	Rocker Switch
19.	1703661	Mounting Bracket - Rocker Switch
20.	1704354	40-Amp Modified-Reset Circuit Breaker
21.	1108102	Dual Conductor - 6 Ga. Wire - 75'
22.	1116482	Electrical Wire - 14 Ga. Lead - 15'
23.	1702668	Top Lock Nut - 3/8"
24.	1700407	Hex Nut - 3/8"
25.	1704332	Cap Screw - 3/8" x 3"
26.	1703231	Cable Tie - 8"
27.	1704369	Trim Seal
28.	1704309	Solenoid Cover Gasket
29.	1123604	Solenoid Cover w/Gasket - SMART1+™
30.	1704367	Cap Screw - #10 x 3/4"
31.	1702926	Cap Screw - 5/16" x 7/8"
32.	1704308	Cap Screw - #10 x 1/2"
33.	1700408	Hex Nut - 1/4"
34.	1700436	Lock Washer - 1/4"
35.	1118250	Orange Plastic Washer - 1/4" x .63"
36.	1118037	Black Plastic Washer - 1/4" x .63"
37.	1118297	Insulating Plate
38.	1703282	Rubber Grommet - 1 1/4" Insert
39.	1701595	End Plug - 1" x 14-23 Ga.
40.	1118296	Modular Control Bracket
41.	1700427	Flat Washer - 1/4"
42.	1704343	Cap Screw - 1/4" x 1 1/2"
43.	1704312	Motor-Reversing Solenoid - 3 Pt. Mt.
44.	1704316	12-Ga. Wire x 3" Red - 1/4" Terminals
45.	1704317	12-Ga. Wire x 3" Black - 1/4" Terminals
46.	1705163	SMART1+™ Remote Battery (AAA battery)
47.	1704378	Dielectric Grease
48.	1702108	Wire Clip - 3/4" ID
49.	1704338	Self-Tapping Screw - 1/4" x 1"

Our **Advanced Troubleshooting Guide** is available on our website:
<http://www.shurco.com>, or call our Help Line: **1-866-748-7435**.

PROBLEM:	TRY THIS:
<p>When operating the system, cables do not wind properly in the spool grooves.</p>	<ol style="list-style-type: none"> 1. Verify spools are not binding on roll tube. Remove, clean and re-grease, if required. <i>See Springs and Spools.</i> 2. Verify tarp is centered on end caps and black plastic washers are correctly installed. Measure, center tarp and install washers. <i>See Tarp Installation.</i> 3. Verify ratchets are correctly installed. Adjust from side to side. <i>See Cables and Ratchets.</i> 4. Verify correct cable tension. Adjust as needed. <i>See Cable Tension.</i>
<p>When operating the system, the tarp doesn't roll up evenly. Tarp binds on one or both ends.</p>	<ol style="list-style-type: none"> 1. Verify spools are not binding on roll tube. Remove, clean and re-grease, if required. <i>See Springs and Spools.</i> 2. Verify cable tension is not too loose. Adjust as needed. <i>See Cable Tension.</i> 3. Verify tarp has not been altered or improperly repaired. Verify tarp length and width have not changed and tarp is square.
<p>When closed, the tarp doesn't become tight in the middle.</p>	<ol style="list-style-type: none"> 1. Verify cable tension. Adjust as needed. <i>See Cable Tension.</i> 2. Verify correct number of ridge straps are installed and are in correct location. Move or install as needed. <i>See Ridge Straps.</i> 3. Verify correct bow spacing and installation height and bows are not damaged. Bow height should be 1" to 2" above cap height. Move, adjust, repair or replace bows as needed. <i>See Standard Bows.</i>
<p>The tarp is worn or has holes.</p>	<ol style="list-style-type: none"> 1. Verify tarp is not contacting any sharp edges. Remove sharp edges. <i>See Box Preparation.</i> 2. Consult your local Shur-Co® dealer for repairs or order tarp repair kit. 3. If required, replace tarp or parts with Genuine Shur-Co® parts.
<p>The SMART1+™ remote is not working. None of the lights on the remote turn on when I open the lid.</p>	<ol style="list-style-type: none"> 1. Make sure the batteries are placed correctly. 2. The batteries may be dead and must be replaced. High-capacity replacement batteries (two AAA batteries) may be purchased from Shur-Co® (P/N 1705163). 3. The SMART1+™ remote may be damaged. Call Shur-Co's Help Line.

PROBLEM:	TRY THIS:
<p>The SMART1+™ remote is not working.</p> <p>I can operate the system with the rocker switch but not with the remote. The SMART1+™ remote channel light (<i>Tarp System</i>, for example) is blinking, and when I press the <i>Open/On</i> button, the light blinks faster.</p>	<ol style="list-style-type: none"> 1. Make sure the remote is set to the right channel. If you cannot set the remote to the desired channel (<i>Tarp System</i>, for example), the remote must be reprogrammed. See the SMART1+™ Remote Programming instructions. 2. Make sure you are within a couple feet of the receiver and try again. <ol style="list-style-type: none"> a) If it works at short range but not at greater distances, you have a range problem. A new battery may be needed. If the remote battery is not the cause, call Shur-Co's Help Line. 3. Reprogram the receiver. See the Receiver Programming instructions. If this doesn't work, call Shur-Co's Help Line.
<p>The system will not operate with the rocker switch or with the SMART1+™ remote.</p> <p>When I try to use the rocker switch or SMART1+™ remote, I don't hear any noises (a clicking noise, for example) from the receiver.</p>	<ol style="list-style-type: none"> 1. Make sure the master disconnect switch is turned to the "ON" position. 2. The circuit breaker may have tripped. Wait one minute and try again. 3. Check the vehicle's battery to make sure it isn't dead. 4. Check all connections from the battery to the system. Check for polarity, good connections and corrosion. Verify you have at least 12V on the back side of the receiver on the battery hookup posts. 5. Call Shur-Co's Help Line.
<p>The system will not operate with the rocker switch or with the SMART1+™ remote.</p> <p>When I try to use the rocker switch or SMART1+™ remote I hear a clicking noise but nothing happens.</p>	<ol style="list-style-type: none"> 1. Verify you have at least 12V on the back side of the receiver on the battery hookup posts. 2. Call Shur-Co's Help Line.
<p>The rocker switch is not sticking, but the motor continues to run after I release the rocker switch.</p>	<ol style="list-style-type: none"> 1. Call Shur-Co's Help Line.
<p>The rocker switch is sticking.</p>	<ol style="list-style-type: none"> 1. Check the switch for excessive dirt, rocks or other objects. If the rocker switch cannot be cleaned, call Shur-Co's Help Line for a replacement receiver. <p>Pressure Wash: Receiver may be pressure washed, but keep nozzle at least 3' from system while spraying.</p>

Our **Advanced Troubleshooting Guide** is available on our website: <http://www.shurco.com>, or call our Help Line: **1-866-748-7435**.

MAINTENANCE SCHEDULE

Every 2 to 4 weeks:

1. Inspect tarp - repair any tears, cuts or worn areas.
2. Inspect hardware - securely tighten any loose fasteners.
3. Check cable tension and adjust as needed (see *Cable Tension*).

MANUAL OPERATING INSTRUCTIONS

Open tarp from closed position:

1. Using both hands, carefully remove crank from crank retainer.
2. Move crank handle to operating position.
3. Turn crank clockwise to roll tarp open.
4. Return crank to other crank retainer and secure.

Close tarp from open position:

1. Using both hands, carefully remove crank from crank retainer.
2. Move crank handle to operating position.
3. Turn crank counter-clockwise to roll tarp closed.
4. Return crank to other crank retainer and secure.

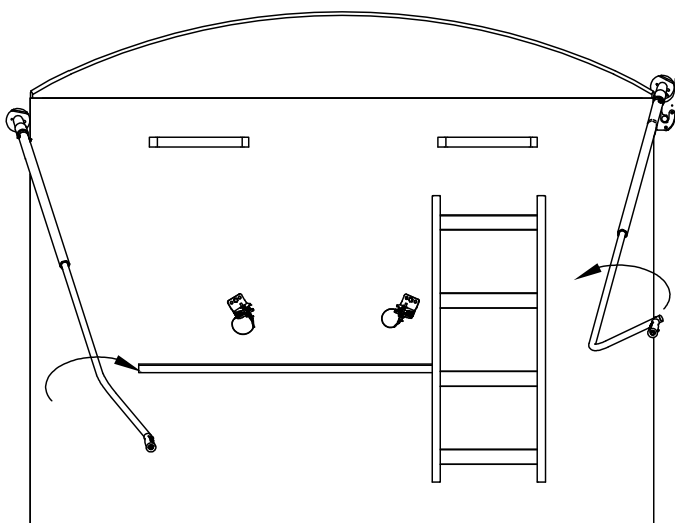
ELECTRIC OPERATING INSTRUCTIONS

Open tarp from closed position:

1. Press and hold 'OPEN' side of rocker switch or remote button.
2. Watch as tarp opens.
3. When tarp is fully open, release rocker switch.

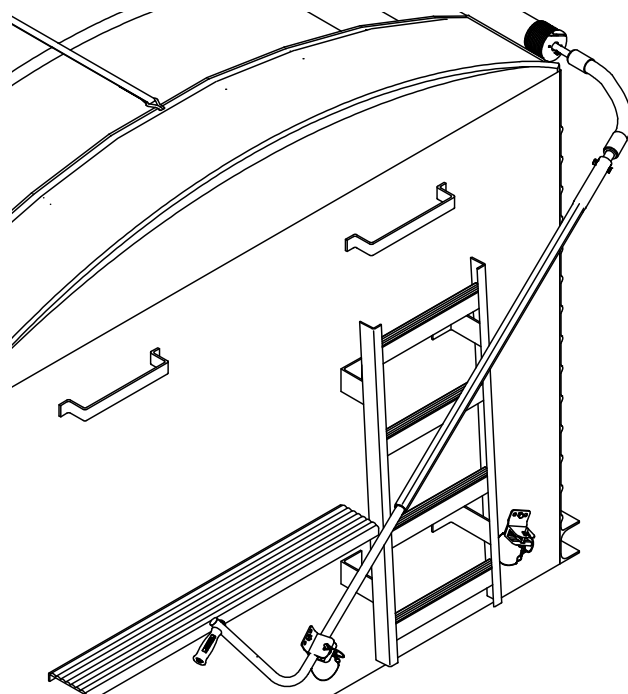
Close tarp from open position:

1. Press and hold 'CLOSE' side of rocker switch or remote button.
2. Watch as tarp closes.
3. When tarp is fully closed, release rocker switch or remote button.



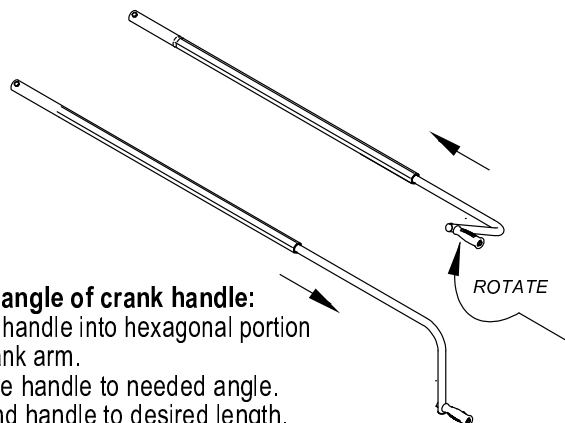
SAFETY INSTRUCTIONS

1. Do not adjust ratchets while operating tarping system.
2. Do not load or unload trailer while tarp is closed.
3. Do not operate tarping system while box is raised or elevated.
4. Do not stand or walk on tarp or end caps.
5. Do not drive vehicle at highway speeds unless tarp is fully open or closed (fully closed is recommended.)



Change angle of crank handle:

1. Slide handle into hexagonal portion of crank arm.
2. Rotate handle to needed angle.
3. Extend handle to desired length.

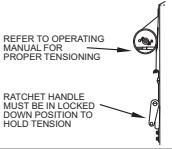


PLACE ONLY THE LOWER PORTION OF THIS DECAL IN A LOCATION VISIBLE TO THE OPERATOR OR ALL WARRANTIES ARE VOID!

ATTENTION!

TARP MUST BE IN THE OPEN POSITION BEFORE UNLOADING OR LOADING.
 DO NOT WALK OR STAND ON THE TARP OR END CAPS.
 DO NOT OPERATE TARP WITH THE BOX IN A RAISED OR ELEVATED POSITION.
 DO NOT OPERATE THIS VEHICLE AT HIGHWAY SPEEDS UNLESS THE TARP IS IN THE FULLY CLOSED OR FULLY OPEN POSITIONS. NOTE: DRIVING AT HIGHWAY SPEEDS IN THE FULLY CLOSED POSITION IS RECOMMENDED.

CABLE-LOK OPERATING INSTRUCTIONS – MANUAL

1) OPENING FROM A CLOSED POSITION	2) CLOSING FROM AN OPEN POSITION	CORRECT TENSION ADJUSTMENT
Using Both Hands, Carefully Remove Crank From The Crank Retainer. Extend Crank Handle To Its Operating Position. Use Crank To Roll Tarp To Fully Open Position. Return Crank To Crank Retainer And Secure.	Using Both Hands, Carefully Remove Crank From The Crank Retainer. Extend Crank Handle To Its Operating Position. Use Crank To Roll Tarp To Fully Closed Position. Return Crank To Crank Retainer And Secure.	REFER TO OPERATING MANUAL FOR PROPER TENSIONING  RATCHET HANDLE MUST BE IN LOCKED DOWN POSITION TO HOLD TENSION

Shur-Co., Yankton, SD 1-800-4 SHUR-LOK (1-800-474-8756)
 P/N: 1704412

NOTE: Manual system. Install warning decal shown above near crank retainer on box or all warranty claims will be void.

OPTIONS & ACCESSORIES

PROFESSIONAL TARP REPAIR KIT

Repair your tarp using the heat-seal method. No messy adhesives or solvents. Kit includes Wagner heat gun, scissors, roller, 12' of 18-oz. or 22-oz. tarp (specify color) and instructions.



STANDARD TARP REPAIR KIT

Includes adhesive, cleaner, 10' of tarp (specify color) and instructions.

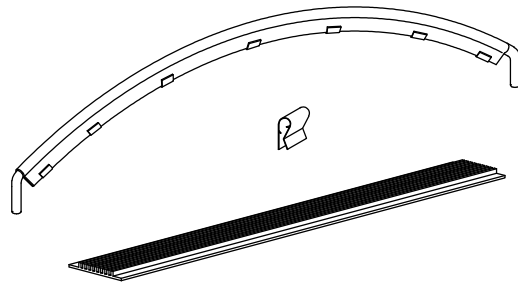


TARP OPTIONS

22-oz. heavy-duty fabric, multicolored tarps, personalized tarps, reinforcements, extra length or width, 13 vibrant colors available.

BOW COVERS

Vinyl-coated compound wraps over bows and clips underneath. Reduces tarp wear and grain splatter, prevents rust and provides traction. Extra-wide bow covers also available.



MORE QUALITY PRODUCTS FROM SHUR-CO®

- **Genuine Replacement Tarps**
- **Genuine Replacement Parts**

- **Agriculture Products**
 - *The Original Shur-Lok®*
 - **Shur-Lok® Junior**
 - **Premium Belt 'n Ratchet**
 - **Cable-Lok™**
 - **Turning Point™ Bow**
 - **Tater-Top™**

- **SMARTrailer™ Accessories for Agriculture Products**
 - **SMART2™ Remote**
 - **SMART3™ Remote**
 - **4500 Series HD Electric**
 - **Electric Shur-Lok®**
 - **AutoTrap™ Hopper Opener**
 - **ProTrap® Hopper Opener**
 - **Electric Gate & Hoist**
 - **LiteALL™ Work Lights**
 - **Cable-Lok™ Electric Upgrade**
 - **Electric Turning Point™ Bow**
 - **Solar Power Pack**

- **Flatbed Products**
 - **ShurTite™ Retractable Tarps**
 - **Stock Lumber & Steel Tarps**

- **Construction Products**
 - *The Original Shur-Lok®*
 - **Shur-Trak II™**
 - **Cover-Pro II®**
 - **Turning Point™ Bow**
 - **IronSide II™**
 - **Shur-Matic™**

- **SMARTrailer™ Accessories for Construction Products**
 - **4500 Series HD Electric w/Gate Flex™**
 - **Shur-Trak II™ Electric Upgrade**
 - **Cover-Pro II® Electric Upgrade**
 - **Electric Turning Point™ Bow**
 - **Solar Power Pack**

- **Custom Products**
 - **Fitted Truck Covers**
 - **Flat Utility Tarps**
 - **Bean Drill Covers**
 - **Gustbuster™ Tarp Cords**

TARPING SYSTEMS & ACCESSORIES

