

TARPING SYSTEMS & ACCESSORIES

P/N 1124562 Rev. C



Belly Dump

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 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 conjuction 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 Ph 800.474.8756 | Fax 605.665.0501

SHUR-CO® of FLORIDA

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

SHUR-CO® of IDAHO

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

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

Preferred Donovan-Brand Seller 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

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

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 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

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SHUR-CO® of ILLINOIS

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SHUR-CO® of OHIO

Ph 866.356.0242 | Fax 330.297.5599

For more information, log on to our website:

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 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.

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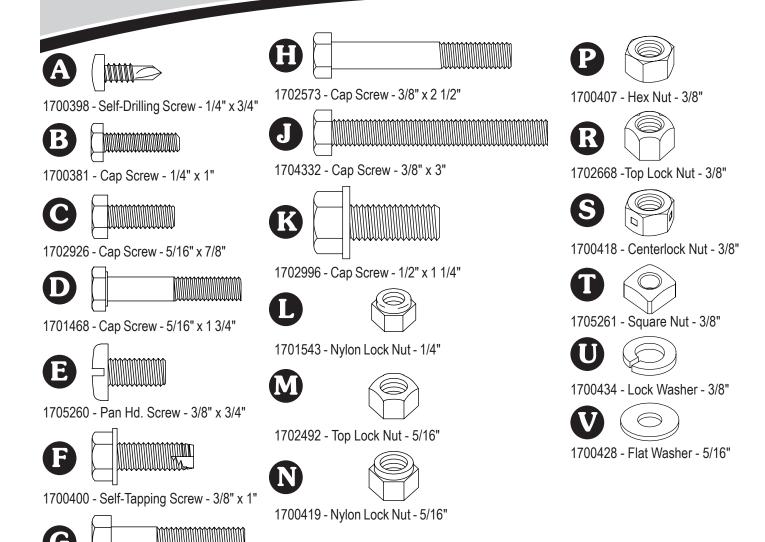
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TOOLS REQUIRED

- 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
- 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



NOTE: Wherever 3/8" x 1" self-tapping screws **3** are used, use lock washers **4** and nuts **2**, 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

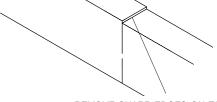
1700369 - Cap Screw - 3/8" x 1 3/4"

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.

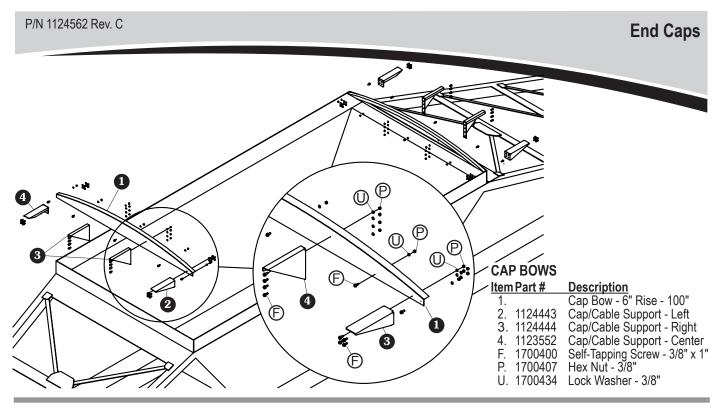
To prevent rust, paint all exposed metal, such as weld seams and/or metal exposed by grinding or cutting, with corrosion-resistant paint.



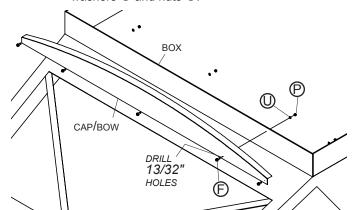
REMOVE SHARP EDGES ON TOP RAIL - PAINT ALL EXPOSED METAL

A CAUTIO

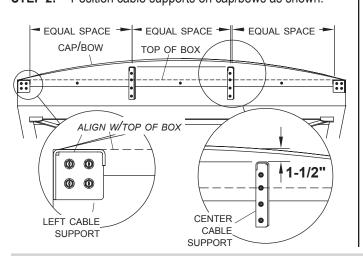
Box extensions (tip tops), if used, must be secured to truck box. System could blow off if box extensions are not secured to box.



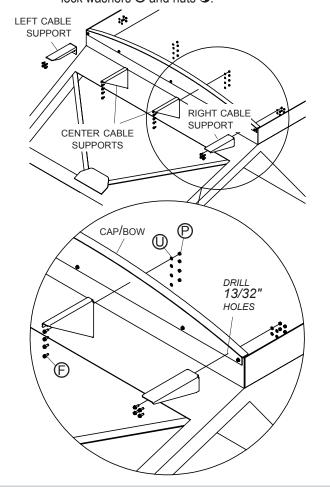
STEP 1: Center caps/bows on box. Drill 13/32" equally spaced holes and fasten cap/bows to rail with screws ①, lock washers ① and nuts ②.

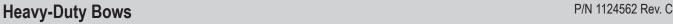


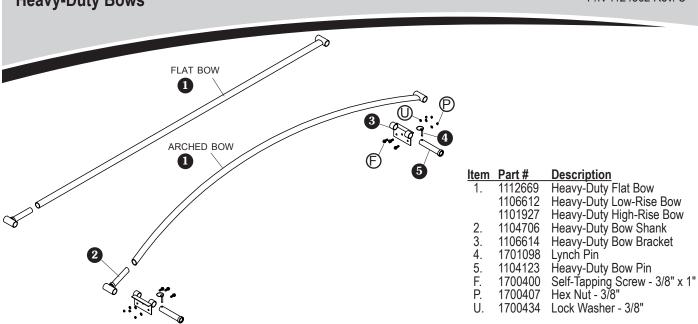
STEP 2: Position cable supports on cap/bows as shown.



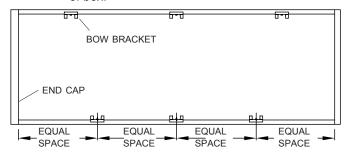
STEP 3: Using cable supports as guide, mark and drill 13/32" holes. Fasten cable supports to caps with screws **3**, lock washers **3** and nuts **2**.



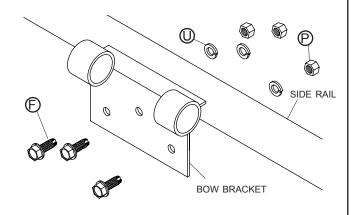




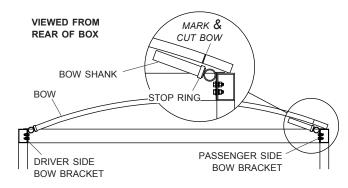
STEP 1: Mark bow bracket locations on top rails between end caps as shown, aligning brackets on opposite sides of box.



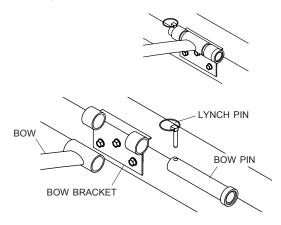
STEP 2: Mark and drill 5/16" holes, then secure brackets with screws **9**, washers **0** and nuts **9**.

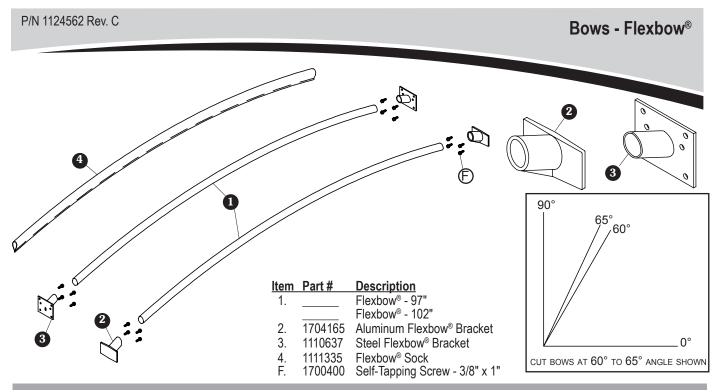


STEP 3: Insert bow shank into driver side bow bracket and align bow with passenger side bow bracket. Align bow with bow shank and mark point where bow meets stop ring. Remove and cut bow at marked location. Grind edges smooth and insert bow shank into bow. Do not weld shank to bow.

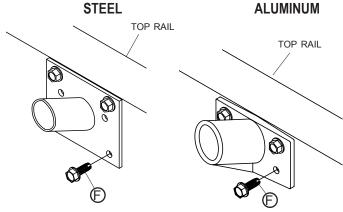


STEP 4: Fasten bow into bow brackets with bow pins. Secure with lynch pins.

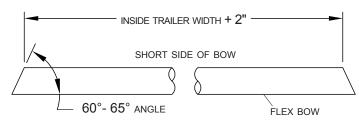




STEP 1: Align bow brackets flush with top rail. Equally space bow brackets, aligning brackets on opposite sides of box. Mark and drill 5/16" holes and secure brackets with screws ③.



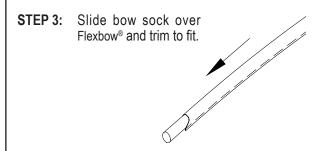
STEP 2: Cut bow ends at 60° to 65° angle. Cut short side of bows 2" longer than inside trailer width to obtain 10" to 12" arch.



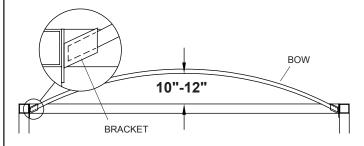
Example: If trailer width is 90" inside to inside, cut short side of bow 92" long.

NOTE: Warranty will be void if bow ends are not cut at 60° to 65° angle.

NOTE: To maintain consistent 10" to 12" bow arch, it is important to measure trailer width at each bow location because widths may vary from front to back.



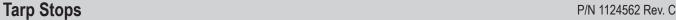
STEP 4: Insert bows into brackets.

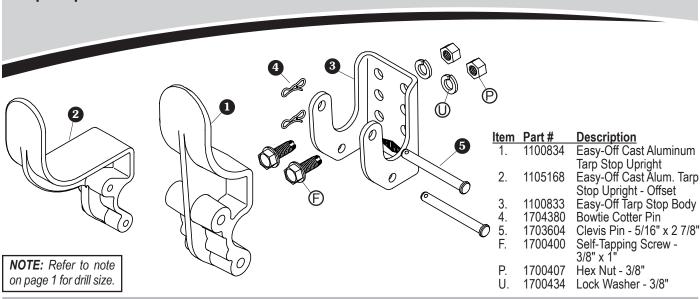


A CAUTION

Stay clear of top side of bow. Bows could release and spring upward.

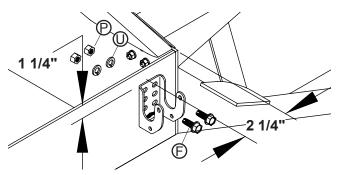
NOTE: Brackets may be welded instead of bolted into place. Consult trailer manufacturer for recommended welding procedure.





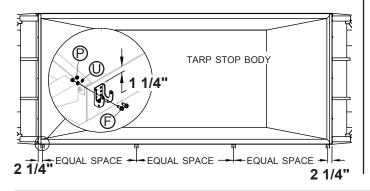
NOTE: If you are installing system to open from passenger side of box, locate tarp stops on driver side.

STEP 1: Locate center of first tarp stop body 2 1/4" from front edge of box and 1 1/4" below top of side rail. Mark and drill holes and fasten to box with screws **9**, lock washers **9** and nuts **9**.



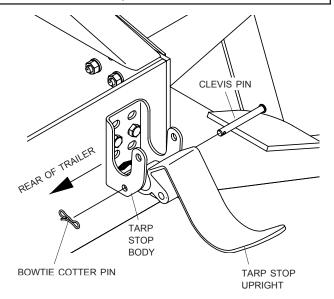
NOTE: Install tarp stop body on vertical surface. Fasten through holes that best fit top rail configuration.

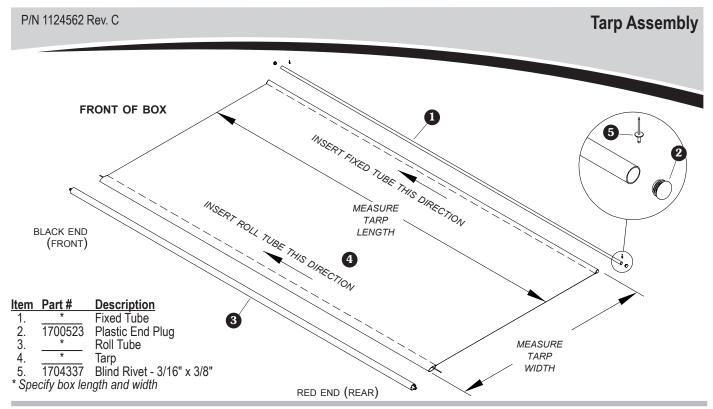
STEP 2: Locate center of second tarp stop body 2 1/4" from rear edge of box and 1 1/4" below top of side rail. Mark and drill holes and fasten with screws 3, lock washers 3 and nuts 3. Equally space remaining tarp stop bodies.



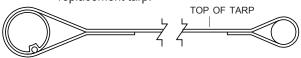
STEP 3: Align lower holes in tarp stop uprights with lower holes in tarp stop bodies. Insert clevis pins through aligned holes and secure with bowtie cotter pin.

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





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.



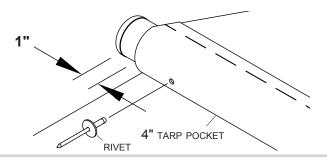
NOTE: Tarps cannot be returned at Shur-Co's expense beyond this point. Tarps damaged beyond this point may be returned for repair or replacement at owner's expense.

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

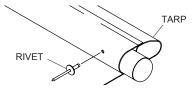
END PLUG

FIXED TUBE

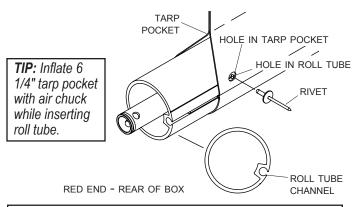
STEP 3: Insert fixed tube into 4" tarp pocket. Extend tube 1" past tarp edge, align pre-punched hole in tarp with 3/16" hole in fixed tube and secure with 3/16" rivet.



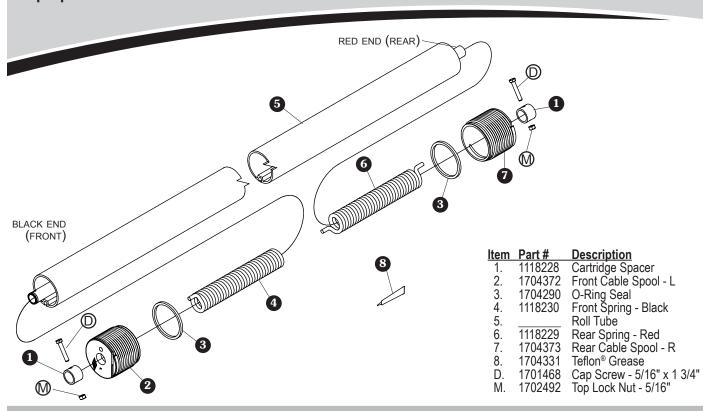
STEP 4: Stretch tarp along fixed tube until second hole in tarp stop is aligned with second hole in fixed tube, then secure second rivet on opposite end of fixed tube.



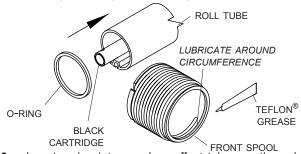
STEP 5: Roll tube. Align roll tube with 6 1/4" pocket in tarp so channel in roll tube lines up with rod sewn inside tarp pocket. Make sure hole in roll tube and hole in tarp are on same side of rod. Slide roll tube into tarp pocket, fitting rod into channel. Align hole near end of roll tube with hole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



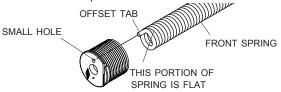
NOTE: Rod must extend past edge of tarp but must not extend past edge of roll tube. Trim rod, if required.



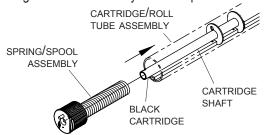
STEP 1: Slide O-ring onto roll tube. Lubricate inside of front spool (marked L) with Teflon® grease.



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.

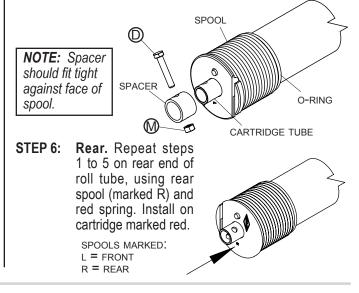


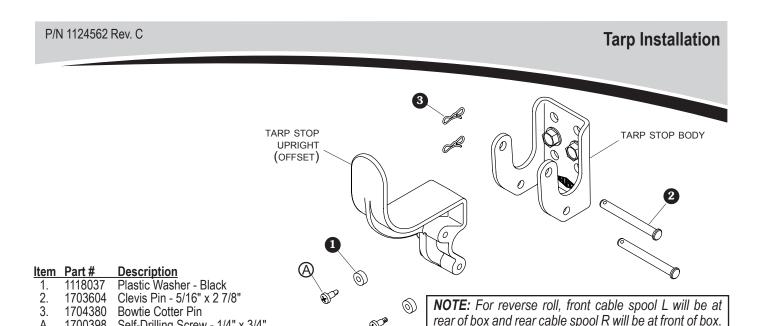
STEP 4: Turn front spool
(marked 'L') and
push to fully engage
spring in roll tube.

SPOOLS MARKED:
L = FRONT
R = REAR

SNAP SPRING
INTO HOLE

STEP 5: Slide spacer on cartridge tube. Align holes with cartridge tube and fasten with cap screw **①** and lock nut **②**. Tighten. Push O-ring against spool.

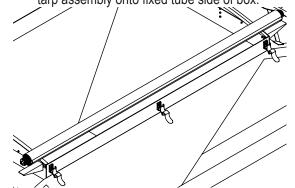




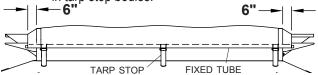
STEP 1: Wind tarp completely around roll tube. Lift rolled-up tarp assembly onto fixed tube side of box.

Self-Drilling Screw - 1/4" x 3/4"

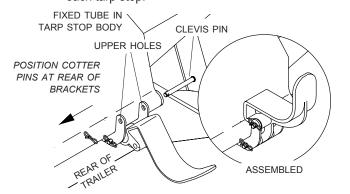
1700398



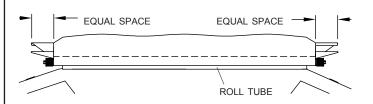
STEP 2: Center tarp on box, overlapping end caps. Unroll tarp so fixed tube hangs over edge of box. Square up tarp and fixed tube. Adjust tarp so fixed tube rests squarely in tarp stop bodies.



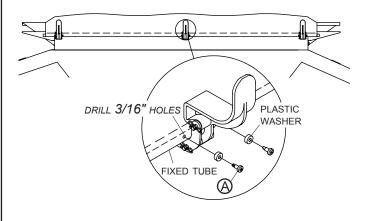
Align upper holes in tarp stop uprights with upper holes in tarp stop bodies. Insert clevis pins through aligned holes and secure with bowtie cotter pins. Repeat for each tarp stop.

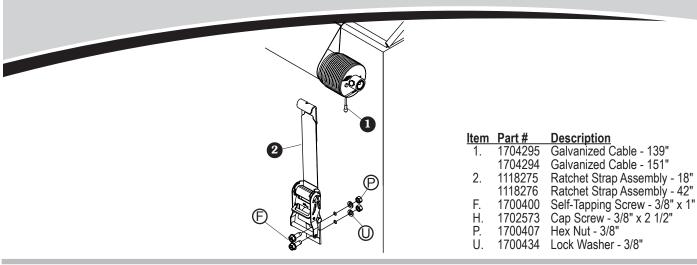


STEP4: Make sure tarp and roll tube are centered on box.

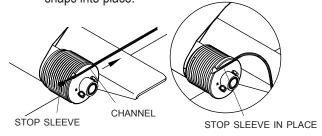


STEP 5: At center tarp stop, hold plastic washer against tarp stop body. Using washer as guide, drill 3/16" hole through tarp and fixed tube. Using #3 Phillips bit, thread self-drilling screw 1 through washer and hole in fixed tube. Remove screw and use screw to fasten washer to fixed tube. Do not overtighten. Repeat on other side of tarp stop body.

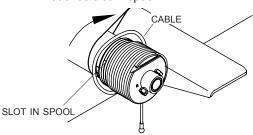




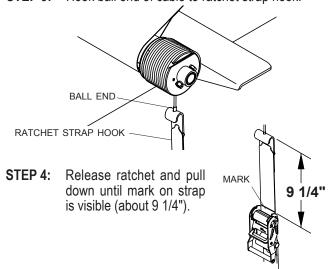
STEP 1: With tarp closed, insert stop sleeve end of cable into channel on end of spool. Pull cable until stop sleeve snaps into place.



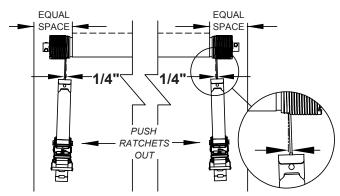
STEP 2: Wrap cable into grooves around spool until cable reaches slot in spool.



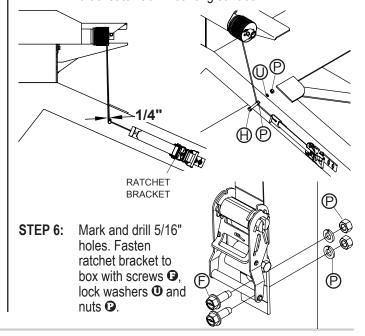
STEP 3: Hook ball end of cable to ratchet strap hook.

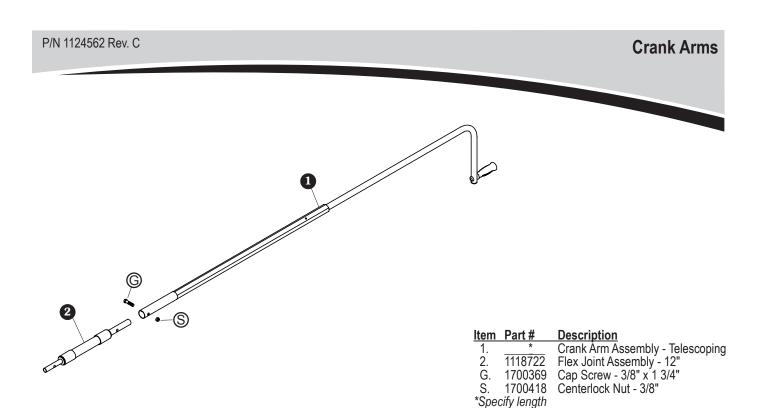


STEP 5: To ensure cable winds correctly in spool grooves, push ratchets out so cable moves 1/4".

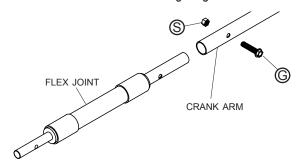


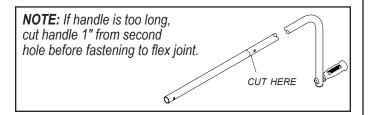
STEP 5A: Mark location for 5/16" holes after ratchets are pushed out so cable moves 1/4". Drill holes. Tighten nut ② on screw ④ and fasten to box with lock washer ④ and nut ④. Guide cable around cap screw and rotate ratchet bracket to fit on mounting surface.



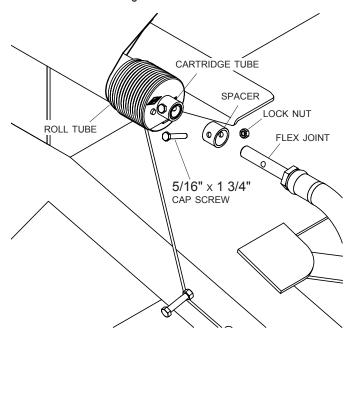


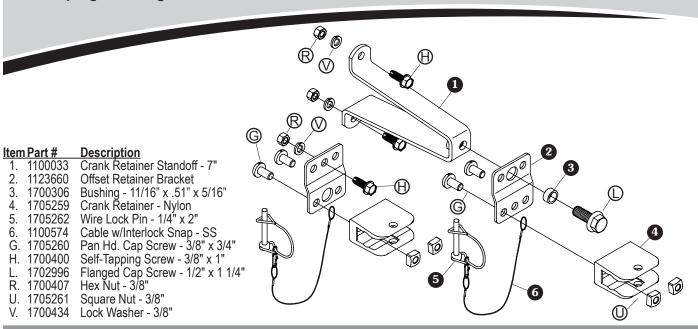
STEP 1: Insert flex joint into end of crank arm. Secure with screw **©** and nut **⑤**. Finger tighten.



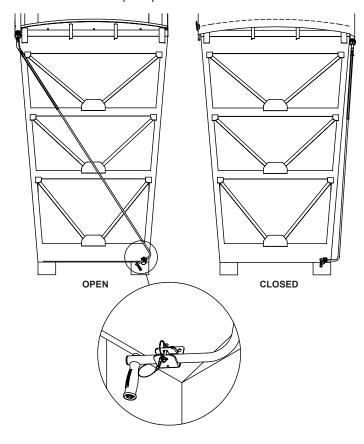


STEP 2: Remove nut and cap screw from spacer on rear (red) end of roll tube. Slide flex joint end into cartridge tube protruding from roll tube. Align holes, reinsert cap screw and tighten hex nut.



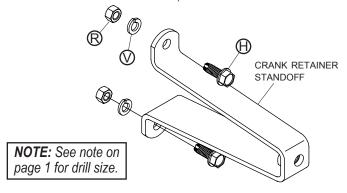


STEP 1: Determine mounting location on rear of box for crank retainer standoffs or crank retainers (if not using standoffs). Location must be accessible by crank arm while tarp is open or closed.

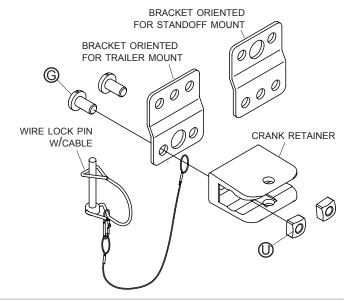


LOCATE CRANK RETAINER TO HOLD CRANK EXTENSION PORTION OF CRANK ASSEMBLY.

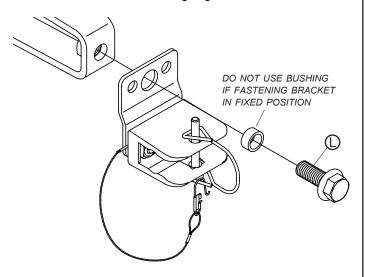
STEP 2: Drill 5/16" holes and fasten crank retainer standoff to trailer with screws ⊕, lock washers • and nuts ⊕.



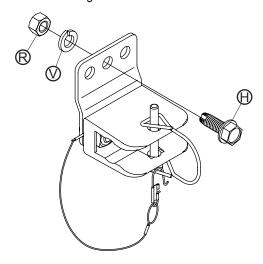
STEP 3: Assemble crank retainer as shown, aligning larger hole on top of bracket if mounting on standoff. If mounting on trailer, align larger hole on bottom.



STEP 3A: Standoff mount. Fasten telescoping crank retainer to crank retainer standoff on rear of trailer with screw **①** and bushing. Tighten fasteners.

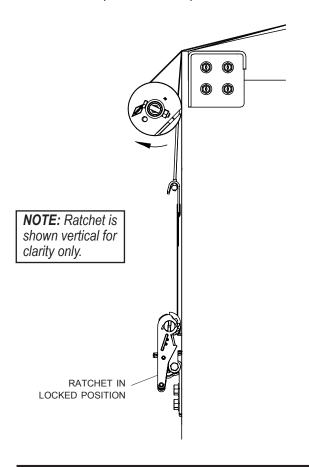


STEP 3B: Trailer mount. Use center hole in retaining bracket as guide to mark and drill 5/16" hole in trailer wall. Fasten with galvanized steel screw ①, washer ② and nut ②. Tighten fasteners.



Cable Tension P/N 1124562 Rev. C

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

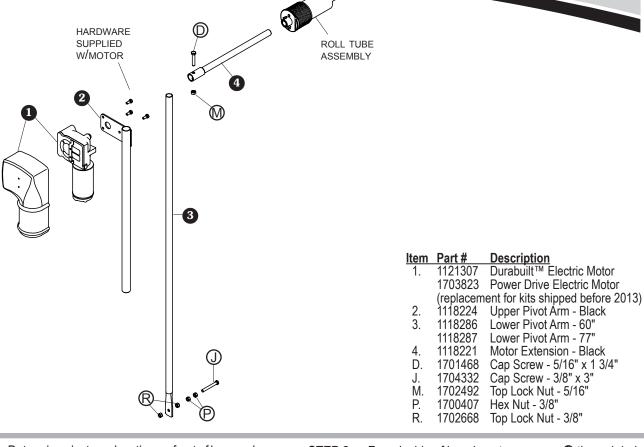
Do not adjust ratchets while system is operating.

Tighten ratchet so channels rotate 90° from original position. STEP 2: 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 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.

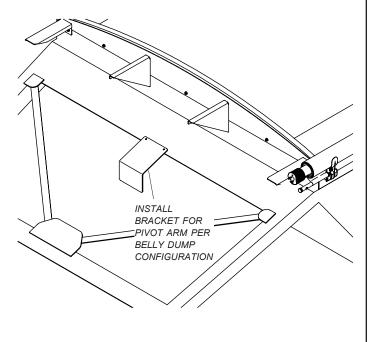
STEP 3: Place decal as shown.



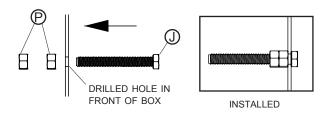
P/N 1124562 Rev. C Electric Motor



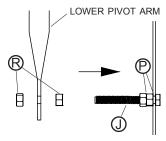
STEP 1: Determine pivot arm location on front of box as shown. Fabricate bracket and weld or fasten on center of box in determined location.

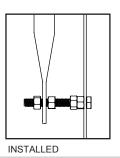


STEP 2: From inside of box, insert cap screw through hole and tighten against box wall with hex nut . Tighten second hex nut against first hex nut.



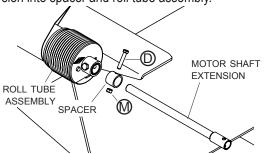
STEP 3: Turn lock nut ① onto cap screw ②, positioning nut to allow enough thread on cap screw to place pivot arm and another nut. Install lower pivot arm over cap screw ② and turn second lock nut ② onto cap screw ③, leaving room for arm to rotate freely.



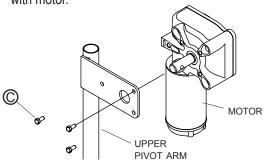


14

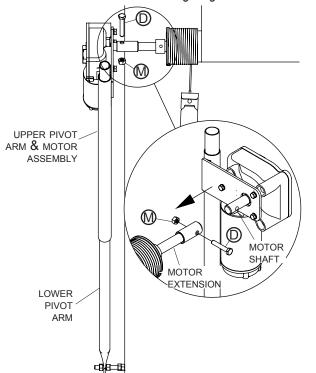
STEP 4: Remove cap screw **②** and lock nut **③** from cartridge spacer on front of roll tube. Insert motor shaft extension into spacer and roll tube assembly.



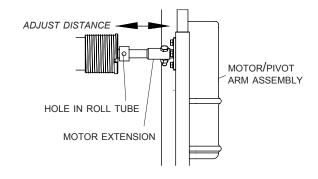
STEP 5: Fasten motor to upper pivot arm with screw supplied with motor.



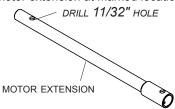
STEP 6: Slide upper pivot arm and motor assembly over lower pivot arm. Insert motor shaft into motor extension. Insert screw ① and finger tighten nut ②.



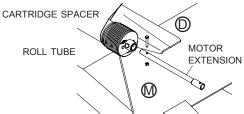
STEP 7: Adjust distance between motor/pivot arm assembly and box to allow free movement of pivot arm and motor assembly across front of box. Using hole in roll tube as guide, mark hole location on motor extension.



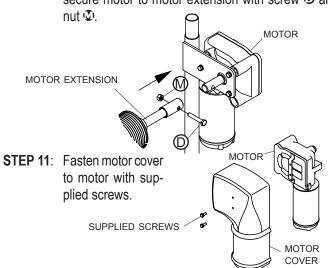
STEP 8: Remove motor extension. Drill 11/32" hole through motor extension at marked location.

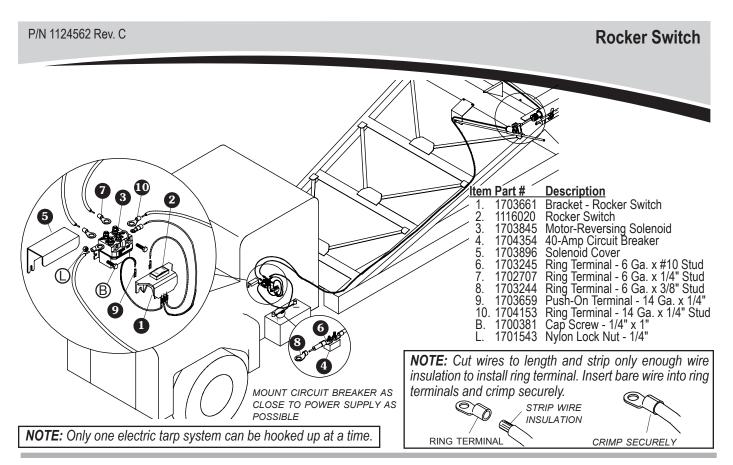


STEP 9: Replace motor extension into roll tube. Align holes and secure cartridge spacer and motor extension to roll tube with screw **②** and nut **③**.

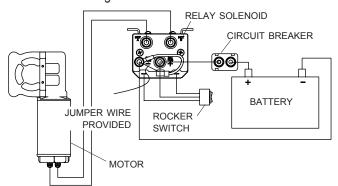


STEP 10: Replace motor onto motor extension. Align holes and secure motor to motor extension with screw **①** and





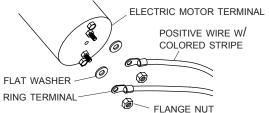
- **STEP 1:** Circuit breaker & battery. Mount circuit breaker as close as possible to battery or power supply.
- STEP 2: Mount solenoid. Mount solenoid in suitable location ventilated area near battery is ideal. Determine best route for wire, usually along frame with existing wire harness. Run 6-ga. 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:

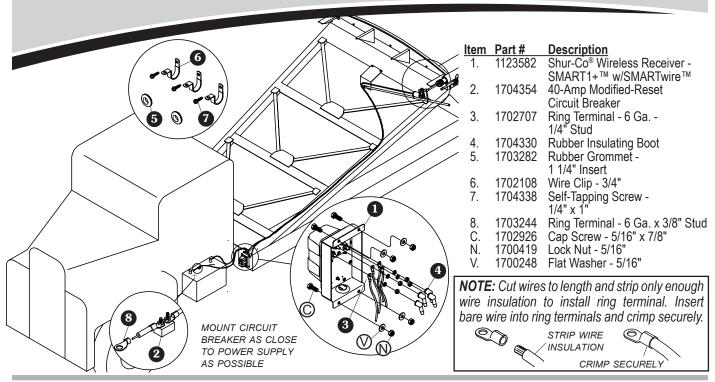
- **A)** Check motor direction by activating switch to "OPEN." If switch is running system backwards, change wire leads on motor to opposite connections.
- **B)** Close tarp: Push switch to "CLOSE" and hold. Observe tarp and release switch when tarp is fully closed.
- **C) Open tarp:** Push switch to "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.

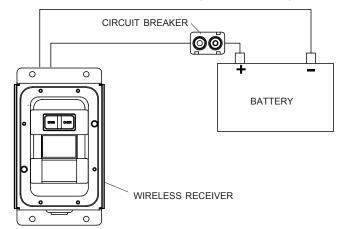
A CAUTION

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

Wireless Receiver P/N 1124562 Rev. C



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



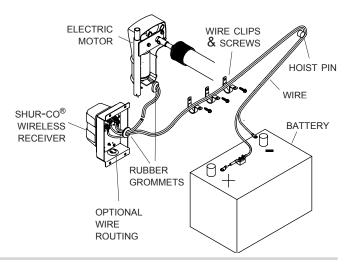
STEP 2: Strip and prep wire ends for connection to motor. Insert end of wire through rubber boots, then crimp 1/4" ring terminals onto wire ends. Connect wires at top of pivot arm to motor.

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.

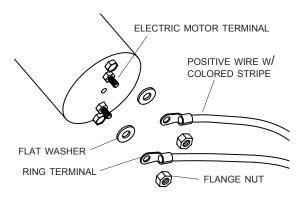
NOTE: Use dielectric grease (P/N 1704378) to prevent corrosion on terminals.

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 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.



A CAUTION

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

OPERATION:

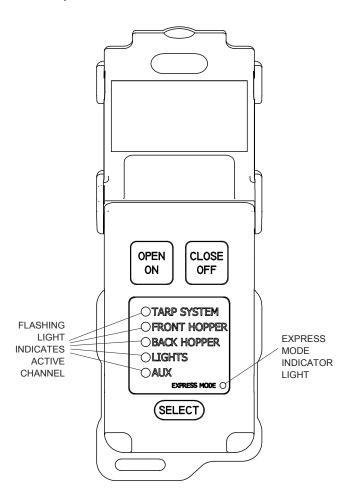
- **A)** Check motor direction by activating switch to "OPEN." If switch is running system backwards, change wire leads on motor to opposite connections.
- **B) Close tarp:** Push switch to "CLOSE" and hold. Observe tarp and release switch when tarp is fully closed.
- **C) Open tarp:** Push switch to "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

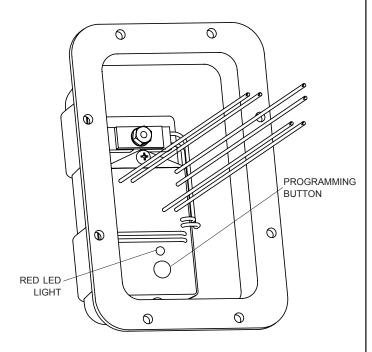
Receiver will accept and respond to signals from up to five remotes. Receiver will not respond to signals from remotes that have not been paired to it.

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.



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.

- 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*).
- 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:

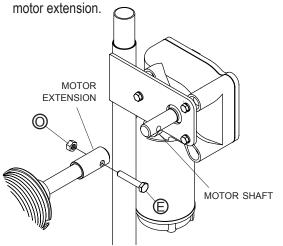
- **6b1.** Press *Open/On* button on first remote. Red light will flash after receiving signal.
- **6b2.** Repeat above step for each remote being used.
- 6b3. Receiver will accept up to five signals. Press Open/On button additional times on last remote being programmed to achieve total of five signals. 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 following steps to convert electric Cable-Lok™ system to manual crank operation:

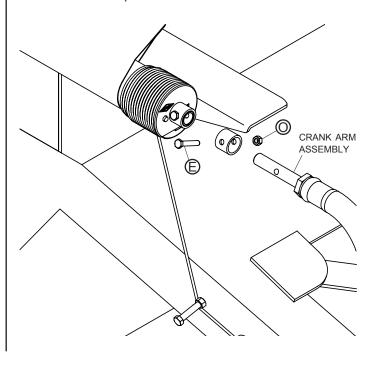
NOTE: Store manual crank arm in truck or mounted to trailer. (Example: Above kingpin in apex.)

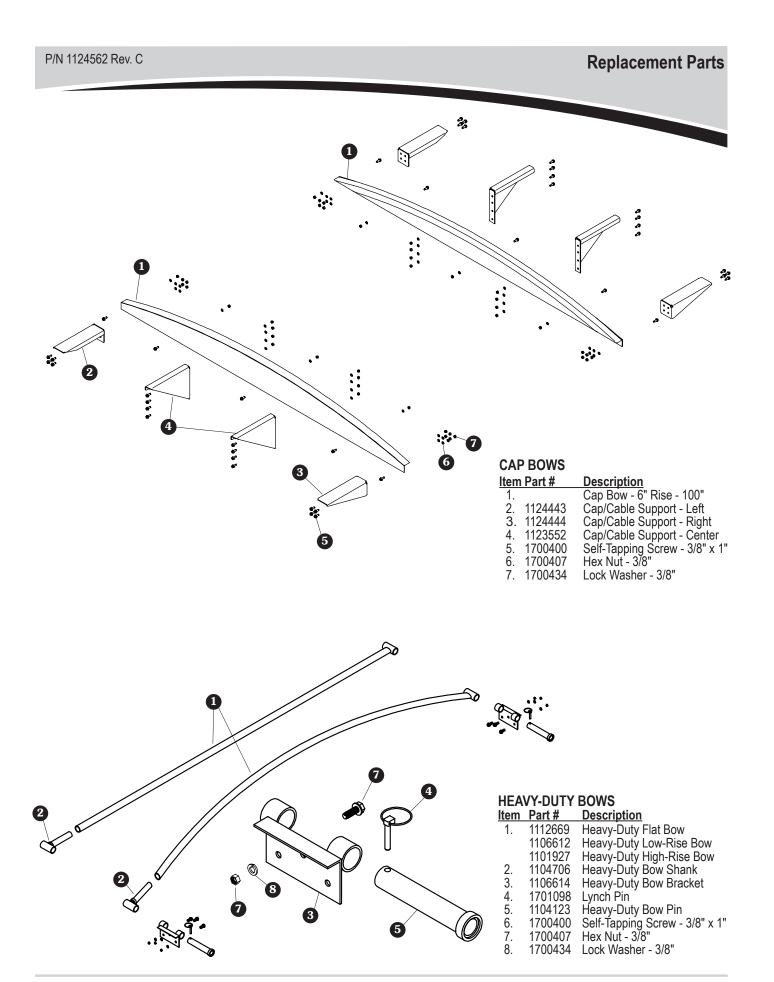
STEP 1: Close tarp, letting roll tube hang loose.

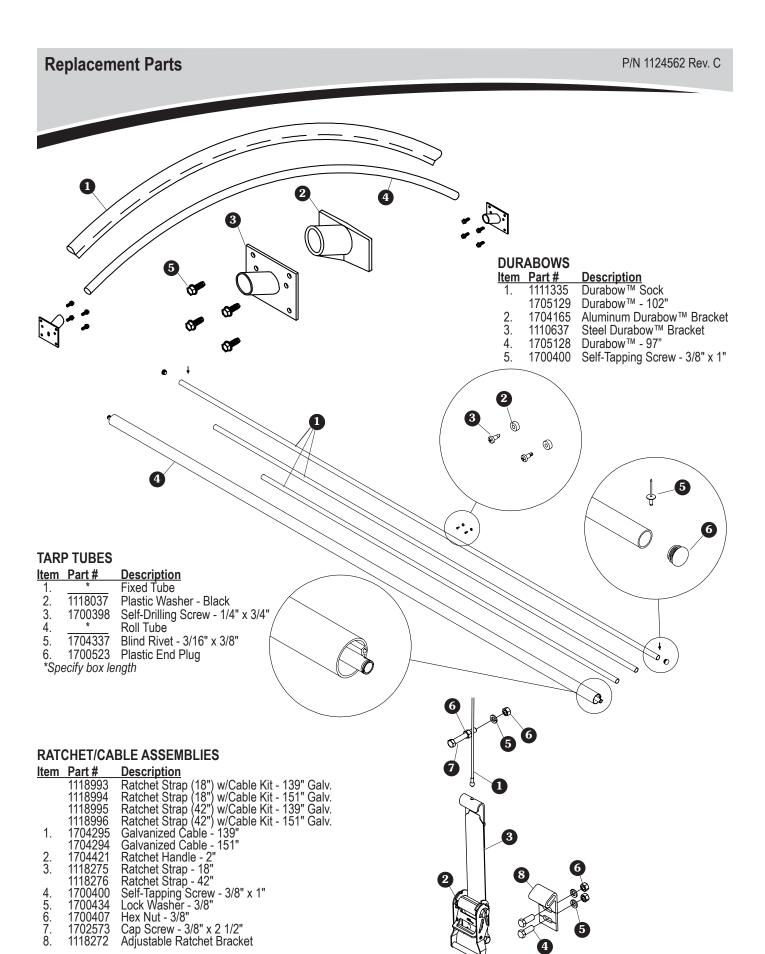
STEP 2: At front of box, remove cap screw **3** and nut **5** from motor shaft and motor extension. Remove motor from



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



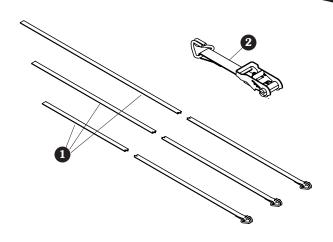


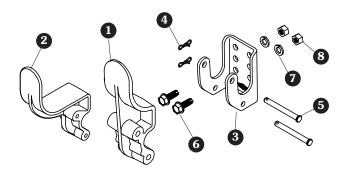


P/N 1124562 Rev. C Replacement Parts

RIDGE STRAPS

| ltem | Part # | <u>Description</u> |
|------|---------|---------------------------------|
| | 1118523 | Ridge Strap Kit w/Hook - 14' |
| | 1118525 | Ridge Strap Kit w/Hook - 24' |
| 1. | 1118522 | Ridge Strap w/Hook - 1" x 14' |
| | 1118524 | Ridge Strap w/Hook - 1" x 24' |
| 2. | 1118511 | Ratchet w/1" Ridge Strap & Hook |



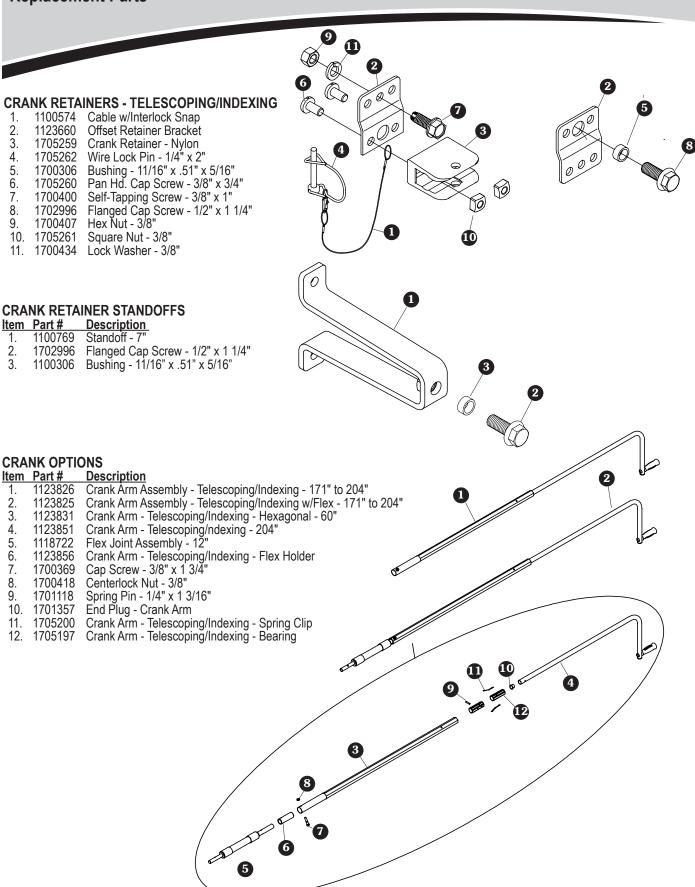


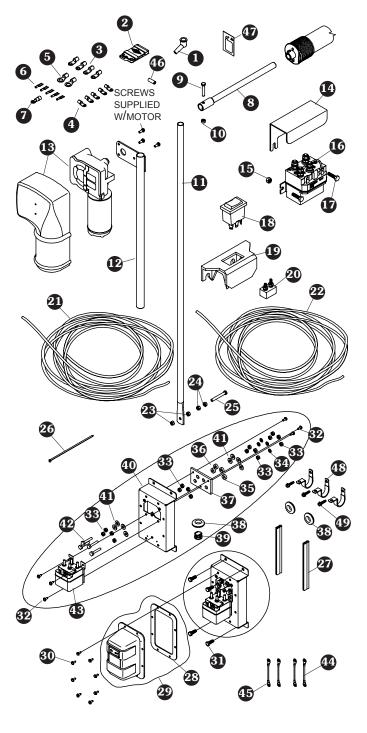
TARP STOPS

| Item | Part # | Description |
|----------|---------|---|
| | 1111094 | Easy-Off Tarp Stop w/Mounting Hardware |
| | 1111095 | Offset Easy-Off Tarp Stop w/Mounting Hardware |
| | 1101407 | Easy-Off Tarp Stop |
| | 1105169 | Offset Easy-Off Tarp Stop |
| | 1118389 | Bowtie Cotter Pin/Ring Assembly |
| 1. | 1100834 | Easy-Off Cast Alum. Tarp Stop Upright |
| 2. | 1105168 | Offset Easy-Off Cast Alum. Tarp Stop Upright |
| 3. 4. | 1100833 | Easy-Off Tarp Stop Body |
| | 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" |
| | | |

| | Part # 1701468 1118228 1702492 | Cartridge Spacer Top Lock Nut - 5/16" Rear Cable Spool - R O-Ring Seal | |
|------------------------------|---|---|------------------------------|
| 7. 8. 9. 10. 11. | 1123953 * 1123952 | Rear Cartridge Kit Roll Tube Front Cartridge Kit Front Spring - Black Front Cable Spool - L | |
| | | | 3 1 1 1 1 1 1 1 1 1 1 |

Replacement Parts
P/N 1124562 Rev. C





Ε

| ELE | CTRICS - | DRIVE ASSEMBLIES |
|------------|--------------------|---|
| | Part # | Description |
| 100111 | 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 |
| 1. | 1119519 1704330 | Elec. Upgrade - Truck - SMART1+ - 75' Wire |
| 1. 2. | 1123160 | Insulating Rubber Boot 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 1118287 | Lower Pivot Arm - 60" Lower Pivot Arm - 77" |
| 12. | 1118224 | Upper Pivot Arm - Black |
| 13. | 1121307 | Durabuilt™ Electric Motor |
| 10. | 1703823 | Power Drive Electric Motor |
| | | nent for kits shipped before 2013) |
| 14. | 1703896 | Solenoid Cover |
| 15. | | Nylon Lock Nut - 1/4" |
| 16. | | Motor-Reversing Solenoid |
| 17. | | Cap Screw - 1/4" x 1" |
| 18. 19. | | Rocker Switch Mounting Bracket - Rocker Switch |
| 20. | | 40-Amp Modified-Reset Circuit Breaker |
| 21. | | Dual Conductor - 6 Ga. Wire - 75' |
| 22. | 1116482 | Electrical Wire - 14 Ga. Lead - 15' |
| 23. | | Top Lock Nut - 3/8" |
| 24. | | Hex Nut - 3/8" |
| 25. | | Cap Screw - 3/8" x 3" |
| 26. | | Cable Tie - 8" |
| 27. 28. | | Trim Seal Solenoid Cover Gasket |
| 20. 29. | | 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. | | Black Plastic Washer - 1/4" x .63" |
| 37. 38. | 1118297 1703282 | Insulating Plate Rubber Grommet - 1 1/4" Insert |
| 39. | | 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. 12-Ga. Wire x 3" Red - 1/4" Terminals |
| 44. | 1704316 | 12-Ga. Wire x 3" Red - 1/4" Terminals |
| 45. | | 12-Ga. Wire x 3" Black - 1/4" Terminals |
| 46. 47. | 1705163 | SMART1+™ Remote Battery (AAA battery) |
| 47. 48. | 1704378 1702108 | Dielectric Grease Wire Clip - 3/4" ID |
| 40. 49. | 1702100 | Self-Tapping Screw - 1/4" x 1" |
| τЭ. | 1107000 | Con Tupping Colow - 1/T A I |

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: |
|---|---|
| When operating the system, cables do not wind properly in the spool grooves. | Verify spools are not binding on roll tube. Remove, clean and re-grease, if required. See Springs and Spools. |
| | Verify tarp is centered on end caps and black plastic washers are correctly installed. Measure, center tarp and install washers. See Tarp Installation. |
| | Verify ratchets are correctly installed. Adjust from side to side. See Cables and Ratchets. |
| | Verify correct cable tension. Adjust as needed. See Cable Tension. |
| When operating the system, the tarp doesn't roll up evenly. Tarp binds on one or both ends. | Verify spools are not binding on roll tube. Remove, clean and re-grease, if required. See Springs and Spools. |
| | Verify cable tension is not too loose. Adjust as needed. See Cable Tension. |
| | Verify tarp has not been altered or improperly repaired. Verify tarp length and width have not changed and tarp is square. |
| When closed, the tarp doesn't become tight in the middle. | Verify cable tension. Adjust as needed. See Cable Tension. |
| | Verify correct number of ridge straps are installed and are in correct location. Move or install as needed. See Ridge Straps. |
| | 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. See Standard Bows. |
| The tarp is worn or has holes. | Verify tarp is not contacting any sharp edges. Remove sharp edges. See Box Preparation. |
| | 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. |
| The SMART1+™ remote is not working. | Make sure the batteries are placed correctly. |
| None of the lights on the remote turn on when I open the lid. | 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). |
| | The SMART1+™ remote may be damaged. Call Shur- Co's Help Line. |

| PROBLEM: | TRY THIS: | |
|---|---|--|
| The SMART1+™ remote is not working. 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. | 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. | |
| On button, the light billies laster. | Make sure you are within a couple feet of the receiver and try again. | |
| | 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. | |
| The system will not operate with the rocker switch or with the SMART1+™ remote. | Make sure the master disconnect switch is turned to the "ON" position. | |
| When I try to use the rocker switch or SMART1+™ remote, I don't hear any noises (a clicking noise, for example) from | The circuit breaker may have tripped. Wait one minute and try again. | |
| the receiver. | 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. | |
| The system will not operate with the rocker switch or with the SMART1+™ remote. | Verify you have at least 12V on the back side of the receiver on the battery hookup posts. | |
| When I try to use the rocker switch or SMART1+™ remote I hear a clicking noise but nothing happens. | 2. Call Shur-Co's Help Line. | |
| The rocker switch is not sticking, but the motor continues to run after I release the rocker switch. | 1. Call Shur-Co's Help Line. | |
| The rocker switch is sticking. | 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. | |
| | Pressure Wash: Receiver may be pressure washed, but keep nozzle at least 3' from system while spraying. | |

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 postion:

- 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.

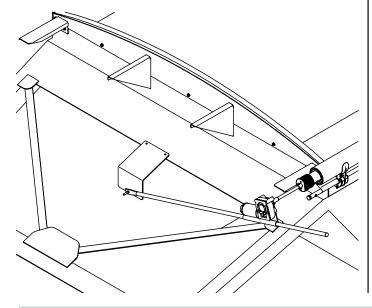
ELECTRIC OPERATING INSTRUCTIONS

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.

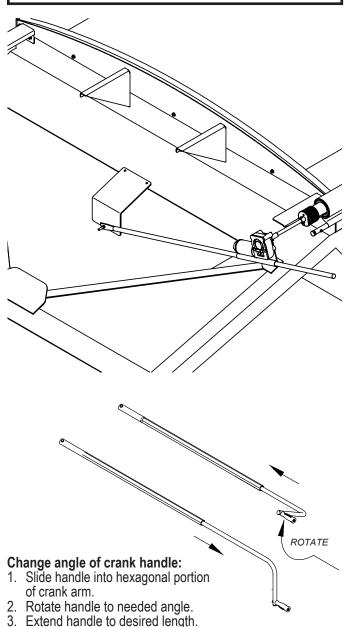
Close tarp from open position:

- 1. Press and hold 'CLOSE' side of rocker switch or remote button.
- 2. Watch as tarp closes.
- 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.)



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. | Using Both Hands, Carefully Remove Crank From The Crank Retainer. | REFER TO OPERATING MANUAL FOR | |
| Extend Crank Handle To Its Operating Position. | Extend Crank Handle To Its Operating Position. | MANUAL FOR PROPER TENSIONING | |
| Use Crank To Roll Tarp To Fully Open Position. | Use Crank To Roll Tarp To Fully Closed Position. | RATCHET HANDLE MUST BE IN LOCKED DOWN POSITION TO HOLD TENSION | |
| Return Crank To Crank Retainer And Secure. | Return Crank To Crank Retainer And Secure. | | |
| Shur-Co.®, Yankton, SD 1-800-4 SHUR-LOK (1-800-474-8756) | | | |

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.

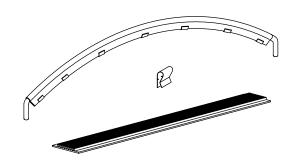


TARP OPTIONS

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.



| P/N 1124562 Rev. C | Notes |
|--------------------|-------|
| | |

MORE QUALITY PRODUCTS FROM SHUR-CO®

- Genuine Replacement Tarps
- Genuine Replacement Parts
- Agriculture Products
 - The Original Shur-Lok®
 - Turning Point™ Bow
 - Shur-Lok® Junior
 - Premium Belt 'n Ratchet
 - Cable-Lok™
 - 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
 - DriveMaxxTM Auger Drive
 - Electric Farm Swing Gate
 - LiteALL™ Work Lights
 - Cable-Lok™ Electric Upgrade
 - Electric Turning Point $^{\scriptscriptstyle{\text{TM}}}$ Bow
 - Solar Power Pack
 - Tater-Top™ Electric
 - Service Truck Power Kit

- Construction Products
 - The Original Shur-Lok®
 - Turning Point™ Bow
 - Shur-Trak II™
 - IronSide II™
 - Shur-Matic™
- SMARTrailer[™] Accessories for Construction Products
 - 4500 Series HD Electric w/Gate Flex™
 - Shur-Trak II™ Electric Upgrade
 - Electric Turning Point™ Bow
 - Solar Power Pack
- Custom Products
 - Fitted Truck Covers
 - Flat Utility Tarps
 - Bean Drill Covers
 - Gustbuster[™] Tarp Cords
 - SMARTwireTM

