



P/N 1117719 Rev. P



Aluminum System for Live-Bottom Trailer

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 57078-0713 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. 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 and operation.
- 2. Stay clear of moving parts.
- 3. No other use of this system is authorized, except as designed.

RUST PREVENTION

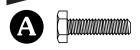
To prevent rust paint all exposed metal, such as weld seams and/or metal exposed by grinding or cutting, with corrosion-resistant paint.

TABLE OF CONTENTS

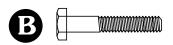
Hardware Identification	1
Front Pivot Bracket/Pivot Pin Installation	2
Front Flex Arm & Electric Motor Installation	3-4
Rear Mounting Beam & Pivot Bracket Installation	5
Rear Flex Arm Installation - Top Hinge	6-7
Rear Flex Arm Installation - Side Hinge	8-9
Roll Tube Extension Installation - Top Hinge	10-12
Roll Tube Extension Installation - Side Hinge	13-15
Electric Mounting & Wiring	16-19
Wireless SMARTransmitter® Programming & Operating	20
Program Wireless SMARTransmitter® to Receiver	21
Change from Electric to Manual Power	22
Replacement Parts	23-26
Troubleshooting Guide	27

TOOLS REQUIRED

- 1. Welder
- 2. Hammer
- 3. Center Punch or Transfer Punch
- 4. #3 Phillips Insert Bit
- 5. Air or Electric Impact Wrench (9/16" deep socket)
- 6. 7/16" deep socket
- 7. 3/8" Combination Wrench
- 8. 9/16" Combination Wrench
- 9. 1/2" Combination Wrench
- 10. 1/8" Hex Wrench Long T-Handle
- 11. 3/16" Hex Wrench Long T-Handle (recommended)
- 12. 5/16" Drill Bit (for 3/8" self-tapping screws)
- 13. 11/32" Drill Bit
- 14. 13/32" Drill Bit
- 15. 3/8" Drill
- 16. 1 1/8" Hole Saw
- 17. 2" Hole Saw (if bracket for conductor socket is not used)
- 18. Standard/Flathead Screwdriver
- 19. #2 Phillips Screwdriver
- 20. Utility Knife
- 21. Ratchet
- 22. Hack Saw (metal cutter)
- 23. Pliers
- 24. Snap Ring Pliers
- 25. Wire Cutters
- 26. Grinder
- 27. Tape Measure



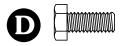
1700381 Cap Screw - 1/4" x 1"



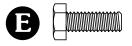
1700377 Cap Screw - 1/4" x 1 1/2"



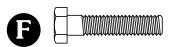
1702672 Cap Screw - 1/4" x 2 1/4"



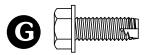
1701045 Cap Screw - 5/16" x 3/4"



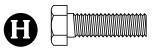
1702926 Cap Screw - 5/16" x 7/8"



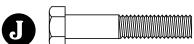
1703487 Cap Screw - 5/16" x 1 1/2"



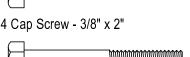
1700400 Self-Tapping Screw - 3/8" x 1"



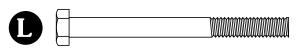
1702891 Cap Screw - 3/8" x 1 1/4"



1704264 Cap Screw - 3/8" x 2"



1702573 Cap Screw - 3/8" x 2 1/2"



1201022 Cap Screw - 5/16" x 3 1/2"



1700408 Hex Nut - 1/4"









1700411 Hex Nut - 5/16"





1700419 Nylon Lock Nut - 5/16"





1700407 Hex Nut - 3/8"





1700418 Centerlock Nut - 3/8"





1701580 Nylon Lock Nut - 3/8"





1700436 Lock Washer - 1/4"





1700427 Flat Washer - 1/4"





1700428 Flat Washer - 5/16"



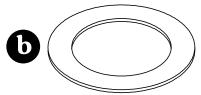


1700434 Lock Washer - 3/8"

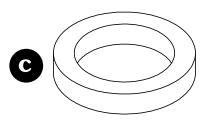




1700429 Flat Washer - 3/8"



1702890 Flat Washer - 1 1/4"



1118318 Spacer Washer - 1/4" x 1.81" x 1.28"





1120291 Pivot Bracket Washer

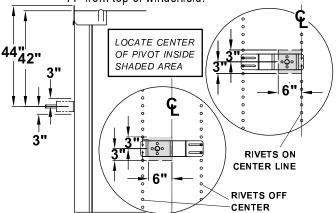
NOTE: Self-tapping screws - Use lock washers and nuts with selftapping screws whenever possible. A minimum material thickness of 3/16" is required in order to use self-tapping screws without lock washers and nuts. Drill 13/32" holes if lock washers and nuts are used drill 5/16" holes if lock washers and nuts are not used.

Inspect all parts in your 3500 electric kit upon arrival.

NOTE: Read entire section before drilling holes. Determine if rivets on front of trailer are centered or off center.

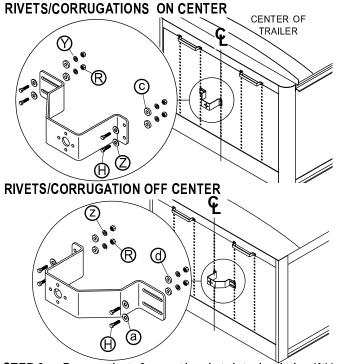
FRONT OF TRAILER

STEP 1: Locate front pivot mount bracket on passenger side of trailer so center of pivot lies within shaded area shown below. Measure 42" down from top of cap, or 44" from top of windshield.



NOTE: Mount front pivot bracket into support braces on trailer if possible. If bracket cannot be mounted into support braces, reinforce mounting area with backer plate for adequate support. Before drilling any holes, make sure flex arm will have a clear pathway to operate.

STEP 2: Place pivot mount brackets on trailer in orientation shown below. Using brackets as a guide, mark mounting hole locations.

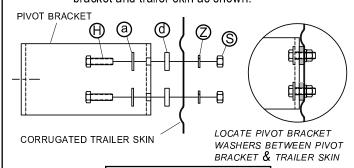


STEP 3: Remove rivets & mount brackets into rivet holes. If this is not possible, drill 13/32" holes in trailer. Fasten with 3/8" x 1 1/4" cap screws, flat washers, lock washers and nuts.

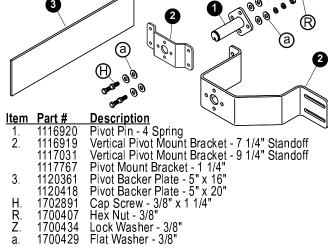
HORIZONTALLY CORRUGATED TRAILERS

NOTE: Use pivot bracket washers only when horizontal corrugation on trailer skin prevents bracket from contacting skin.

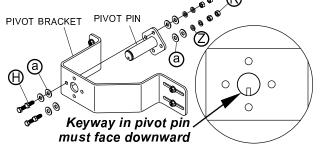
STEP 3: If installing pivot bracket or pivot mount bracket on horizontally corrugated trailer skin, center bracket between corrugations and use brackets as guide to mark hole locations. Mark and drill 13/32" holes in trailer and fasten with 3/8" x 1 1/4" cap screws, flat washers, lock washers, pivot bracket washers and nuts. Locate pivot bracket washers between pivot bracket and trailer skin as shown.

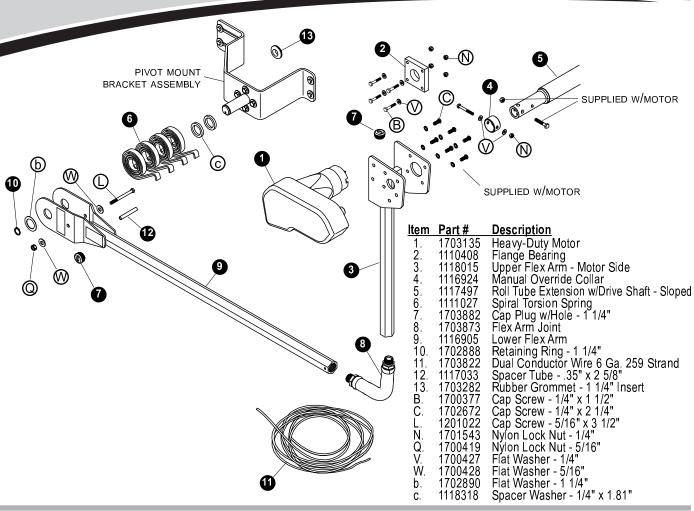


PIVOT PIN INSTALLATION

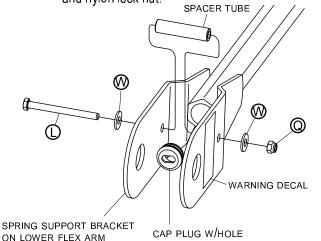


STEP 1: Fasten pivot pin to pivot bracket with keyway facing downward as shown.



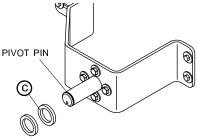


STEP 1: Install cap plug with hole on lower flex arm. Fasten spacer tube into spring support bracket on lower flex arm with 5/16" x 3 1/2" cap screw, two flat washers and nylon lock nut.

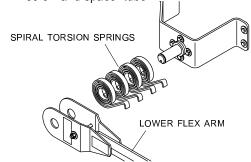


NOTE: Insert cap screw through flex arm so head of screw will be on inside of assembly (toward trailer). Warning label must be in plain view on outside of assembly.

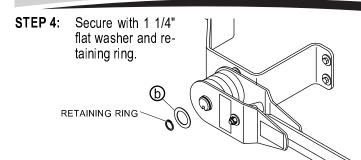
STEP 2: Assemble spacer washers onto pivot pin.



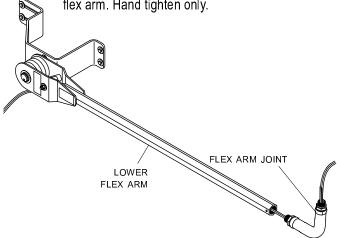
STEP 3: Assemble spiral torsion springs and lower flex arm onto pivot pin. Hook springs over 5/16" x 3 1/2" cap screw and spacer tube.



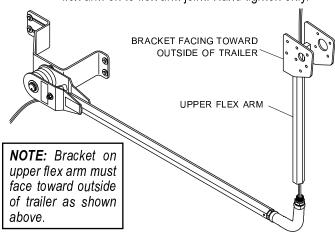
Front Flex Arm & Electric Motor Installation



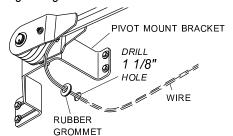
STEP 5: Insert wire (black with red stripe) through lower flex arm and flex arm joint. Thread flex arm joint into lower flex arm. Hand tighten only.



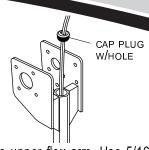
STEP 6: Insert wire through upper flex arm, then thread upper flex arm on to flex arm joint. Hand tighten only.



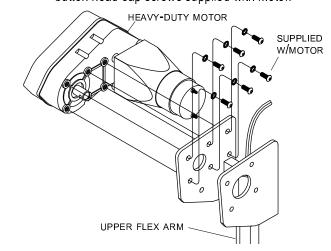
STEP 7: Drill 1 1/8" hole below pivot mount bracket. Press rubber grommet into hole and insert wire through grommet, leaving enough slack in wire to allow arm to travel.



STEP 8: Install cap plug with hole on upper flex arm. Leave about 12" of wire extending out of flex arm.



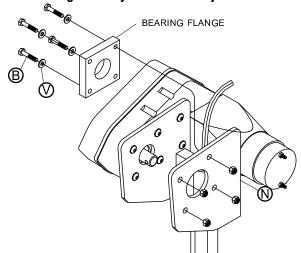
STEP 9: Mount electric motor to upper flex arm. Use 5/16" button head cap screws supplied with motor.

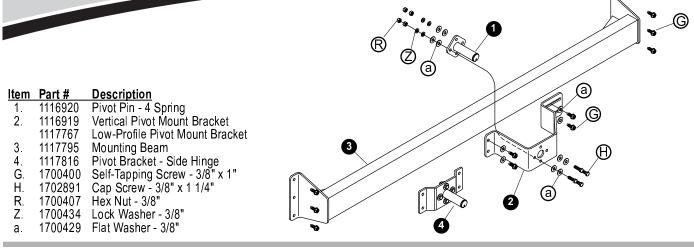


ATTENTION:

- Use all mounting bolts when mounting gear motor.
- Do not use power tools.
- Do not overtighten (torque 5/16" x 7/8" Button Hd. Bolts to 70 in/lbs).
- Over tightening may crack case.
- Install star washers on the bolt side of the mounting plate.
- Do not use any form of thread locker.

STEP 10: Mount bearing flange to upper flex arm bracket with 1/4" x 1 1/2" cap screws, washers and nuts. Finger tighten only to allow for adjustment..

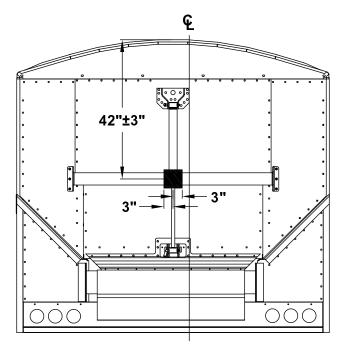




NOTE: Fasten rear mounting beam to structural door only. DO NOT mount beam to door skin. Tarping system will fail if beam is mounted to door skin.

Before drilling any holes, make sure flex arm will have clear pathway to operate. Read entire section before drilling.

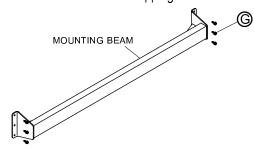
STEP 1: Locate mounting beam so center of mounting beam lies within shaded area shown.



STEP 2: Place mounting beam on trailer as shown. Using beam as guide, determine mounting hole locations.

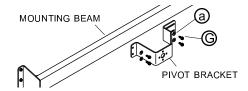
NOTE: On trailers with knife gate, mounting beam must be centered from left to right. Verify bolt locations will not interfere with operation of knife gate or knife gate track.

STEP 3: Remove rivets and fasten mounting beam into rivet holes. If this is not possible, drill 5/16" holes in trailer. Fasten with 3/8" x 1" self-tapping screws.

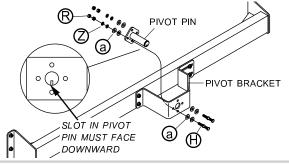


STEP 4: Center pivot bracket vertically on mounting beam. Move pivot bracket from left to right until pivot pin falls in shaded area shown in step 1. Using holes in pivot bracket as guide, mark and drill 5/16" holes. Fasten pivot bracket to beam with 3/8" x 1" self-tapping screws and washers.

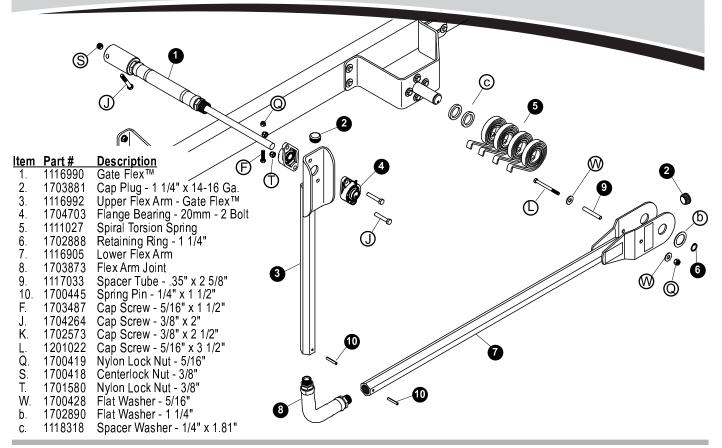
NOTE: If using optional low-profile pivot mount bracket, complete step 5, then step 4.



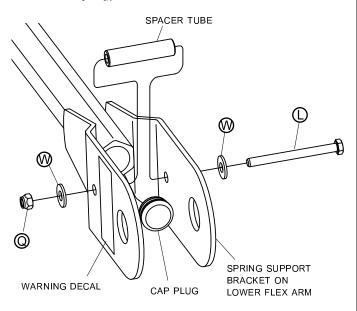
STEP 5: Fasten pivot pin to pivot bracket with keyway facing downward as shown.



Rear Flex Arm Installation - Top Hinge

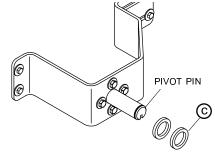


STEP 1: Install cap plug on lower flex arm. Fasten spacer tube into spring support bracket on lower flex arm with 5/16" x 3 1/2" cap screw, two flat washers and nylon lock nut.

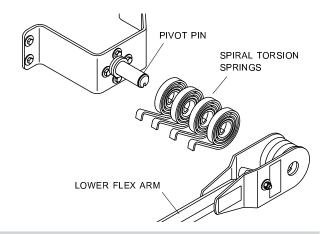


NOTE: Insert cap screw through flex arm so head of screw will be on inside of assembly (toward trailer). Warning label must be in plain view on outside of assembly.

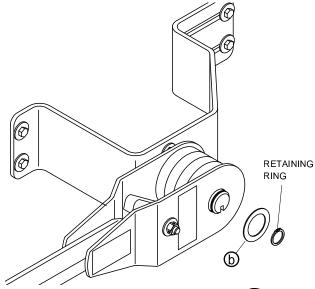
STEP 2: Assemble spacer washers onto pivot pin.

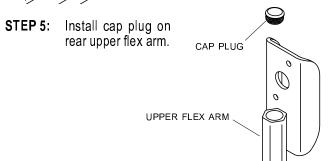


STEP 3: Assemble spiral torsion springs and lower flex arm onto pivot pin. Hook springs over 5/16" x 3 1/2" cap screw and spacer tube.

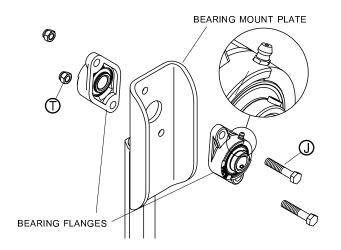


STEP 4: Secure with 1 1/4" flat washer and retaining ring.

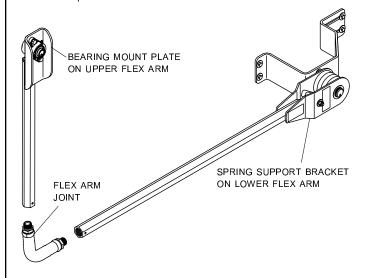




STEP 6: Fasten flange bearing to bearing mount plate with 3/8" x 2" cap screws and lock nuts as shown.



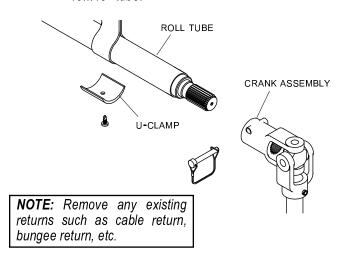
STEP 7: Thread flex arm joint into lower flex arm, then into upper flex arm. Tighten threads, aligning bearing mount plate on upper flex arm parallel to spring support bracket on lower flex arm as shown.

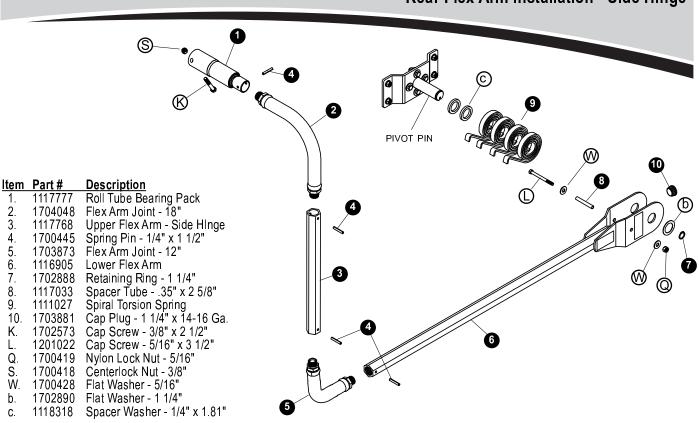


A CAUTION

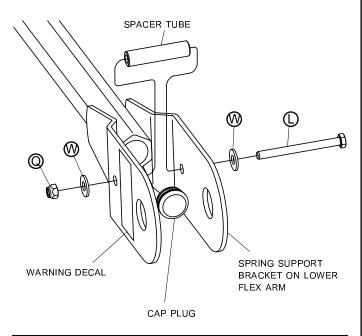
Do not open or close tarp without U-joint securely fastened to splined shaft with wire lock pin. Failure to do so could result in injury.

STEP 8: Roll tarp closed over box with roll tube hanging below latchplate. Remove crank assembly and U-clamps from roll tube.



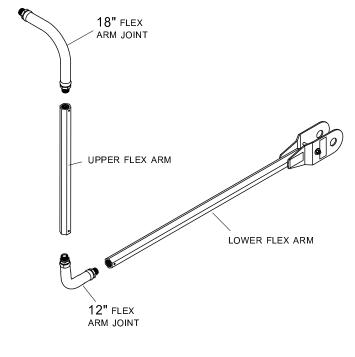


STEP 1: Install cap plug on lower flex arm. Fasten spacer tube into spring support bracket on lower flex arm with 5/16" x 3 1/2" cap screw, two flat washers and nylon lock nut.

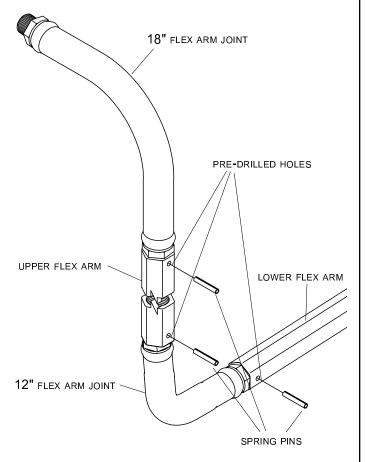


NOTE: Insert cap screw through flex arm so head of screw will be on inside of assembly (toward trailer). Warning label must be in plain view on outside of assembly.

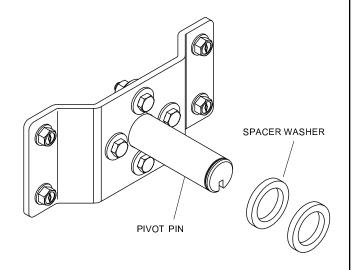
STEP 2: Fasten lower flex arm to one end of 12" flex arm joint. Fasten upper flex arm to other end of flex arm joint. Fasten 18" upper flex arm joint to open end of upper flex arm.



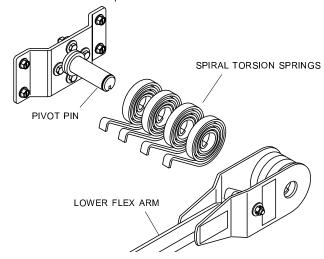
STEP 3: Drill 1/4" holes through flex arm joints at pre-drilled holes in upper and lower flex arms. Install 1/4" x 1 1/2" spring pins into holes.



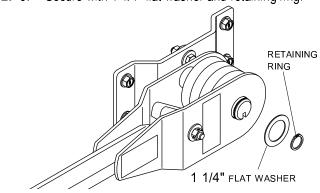
STEP 4: Assemble spacer washers onto pivot pin.



STEP 5: Assemble spiral torsion springs and lower flex arm onto pivot pin. Hook springs over 5/16" x 3 1/2" cap screw and spacer tube.



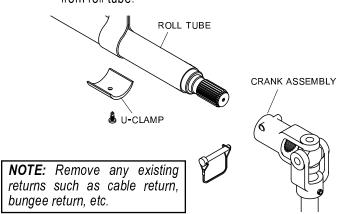
STEP 6: Secure with 1 1/4" flat washer and retaining ring.



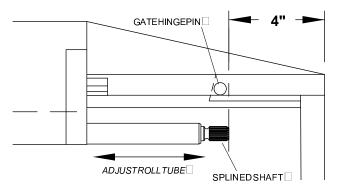
A CAUTION

Do not open or close tarp without U-joint securely fastened to splined shaft with wire lock pin. Failure to do so could result in injury.

STEP 7: Roll tarp closed over box with roll tube hanging below latchplate. Remove crank assembly and U-clamps from roll tube.

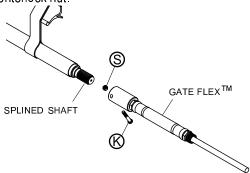


STEP 1: Rear of trailer. Adjust roll tube forward or backward to align end of splined shaft with gate hinge pin.



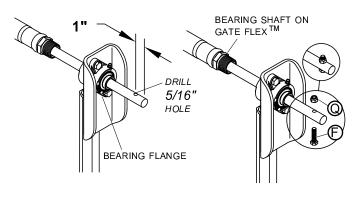
NOTE: If hinge depth is 0" to 4", set end of splined shaft 4" in from back of gate.

STEP 2: Slide Gate Flex™ completely over splined shaft on roll tube. Fasten with 3/8" x 2 1/2" cap screw and centerlock nut.



NOTE: Do not remove splined shaft. Splined shaft will be used if system is switched to manual operation.

STEP 3: Slide bearing shaft on Gate Flex™ through flange bearing on upper flex arm. Drill 5/16" hole through bearing shaft. Insert 5/16" x 1 1/2" cap screw through hole and secure with lock nut.

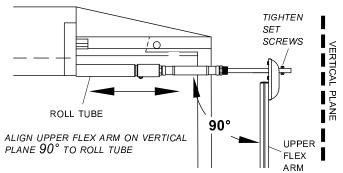


NOTE: Do not leave unattended until flex arm is securely fastened to roll tube extension as shown.

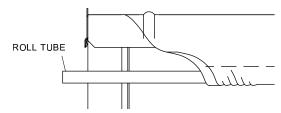
△ WARNING

Flex arms are under tension while torsion springs are engaged. Use caution while assembling and disassembling arms. Failure to read and follow instructions could result in serious injury or death.

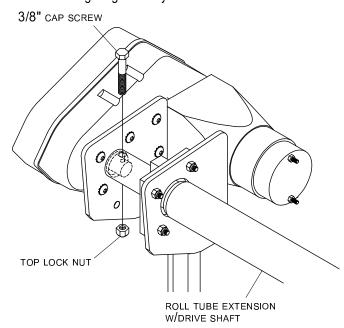
STEP 4: Align upper flex arm in vertical plane 90° to roll tube. Tighten set screws in flush mount bearing.



STEP 5: Front of Trailer. Slide tarp back on roll tube.

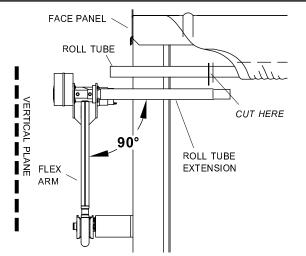


STEP 6: Insert motor shaft into roll tube extension with drive shaft. Fasten with 3/8" cap screw and top lock nut. Finger tighten only.



STEP 7: Hold flex arm with motor and roll tube extension in vertical plane to trailer and 90° to roll tube. Mark and cut roll tube at location shown.

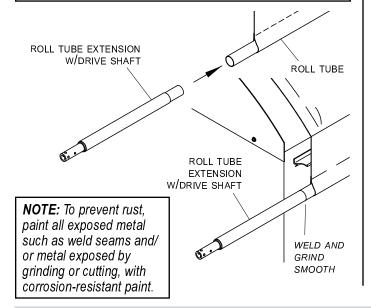
NOTE: Two people required for safe installation.



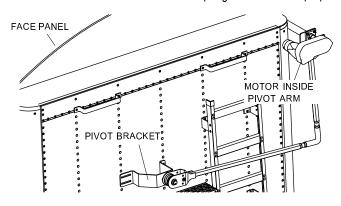
STEP 8: Unfasten and remove motor from roll tube extension. Remove roll tube extension from roll tube. Cut roll tube at marked location.

STEP 9: Insert swaged end of roll tube extension w/drive shaft into roll tube. Align extension straight with roll tube and weld all around. Grind smooth.

NOTE: Pull roll tube away from tarp and trailer before welding to protect from weld spatter. Align roll tube extension straight with roll tube before welding so tarping system will roll smoothly.



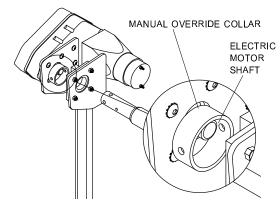
STEP 10: Slide roll tube/roll tube extension weldment back into position and align upper flex arm on front of trailer. Follow steps 8 to 10 to install motor, positioning motor as shown below. Make sure torsion springs load when tarp opens.



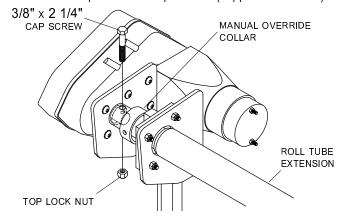
A WARNING

Flex arms are under tension while torsion springs are engaged. Use caution while assembling and disassembling arms. Failure to read and follow instructions could result in serious injury or death.

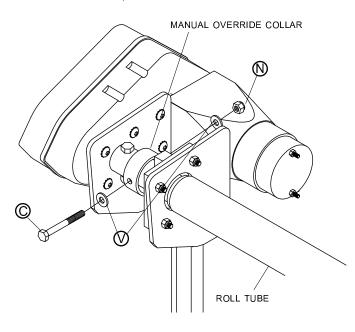
STEP 11: Remove cap screw from motor shaft. Hang manual override collar over electric motor shaft.



STEP 12: Insert roll tube extension through manual override collar. Secure roll tube to electric motor shaft with 3/8" x 2 1/4" cap screw and top lock nut (supplied with motor).

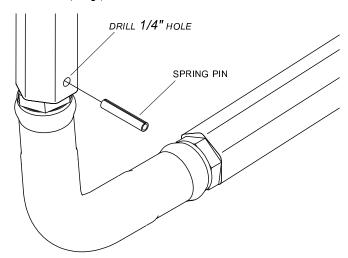


STEP 13: Fasten manual override collar to roll tube with 1/4" x 2 1/4" cap screw, two flat washers and lock nut.

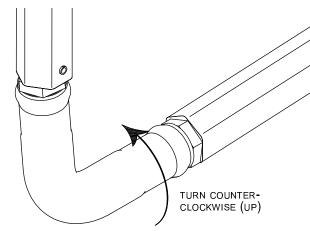


NOTE: Verify again flex arm is on vertical plane and is parallel to face panel before proceeding. Make sure all fasteners holding motor to upper flex arm bracket are tightened securely.

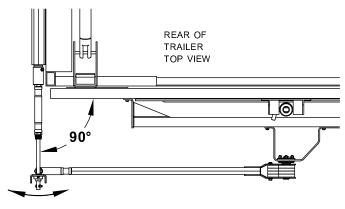
- STEP 14: Re-fasten tarp to roll tube with existing U-clamps and screws. Tighten all fasteners securely. Tighten front and rear flex arm connections.
- STEP 15: On rear arm only drill 1/4" hole through flex arm joint assembly and upper flex arm. Install 1/4" x 1 1/2" spring pin into hole.



STEP 16: Place wrench on flex arm joint next to lower flex arm. Turn flex arm joint counter-clockwise (up). This will move upper flex arm and Gate Flex™ from side to side.

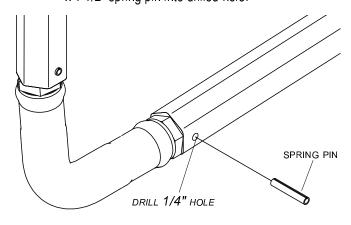


STEP 17: Keep turning flex arm joint until Gate Flex™ is parallel to side of trailer and 90° to rear door.

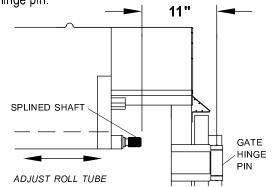


FLEX ARM & GATE FLEXTM
WILL MOVE SIDE TO SIDE

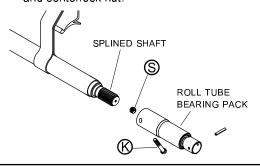
STEP 18: Drill 1/4" hole through flex arm as shown. Install 1/4" x 1 1/2" spring pin into drilled hole.



STEP 1: Rear of trailer. Adjust roll tube forward or backward so end of splined shaft is 11" from center line of gate hinge pin.



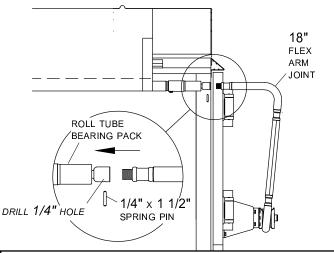
STEP 2: Slide roll tube bearing pack completely over splined shaft on roll tube. Fasten with 3/8" x 2 1/2" cap screw and centerlock nut.



NOTE: DO NOT remove splined shaft. Splined shaft will be used if system is switched to manual operation.

STEP 3: Screw 18" flex arm joint into roll tube bearing pack.

Drill 1/4" hole through bearing pack and secure flex arm joint to bearing pack with 1/4" x 1 1/2" spring pin.

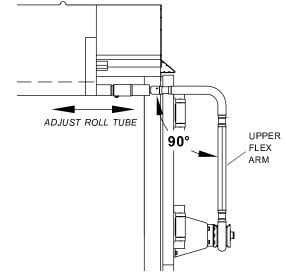


NOTE: DO NOT leave unattended until flex arm is securely fastened to roll tube extension as shown.

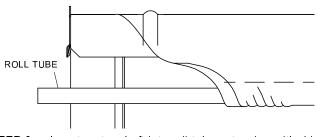
▲ WARNING

Flex arms are under tension while torsion springs are engaged. Use caution while assembling and disassembling arms. Failure to read and follow instructions could result in serious injury or death.

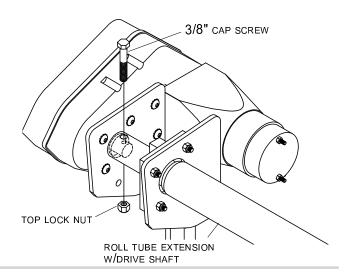
STEP 4: Align upper flex arm in vertical plane 90° to roll tube.



STEP 5: Front of Trailer. Slide tarp back on roll tube.

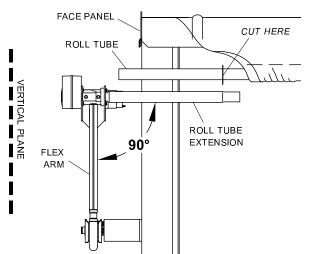


STEP 6: Insert motor shaft into roll tube extension with drive shaft. Fasten with 3/8" cap screw and top lock nut. Finger tighten only.



STEP 7: Hold flex arm with motor and roll tube extension in vertical plane to trailer and 90° to roll tube. Mark and cut roll tube at location shown.

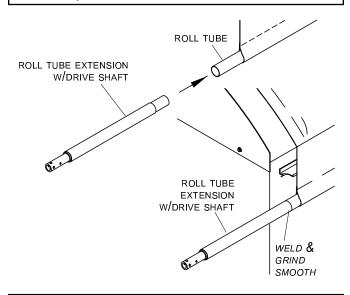
NOTE: Two people required for safe installation.



STEP 8: Unfasten and remove motor from roll tube extension. Remove roll tube extension from roll tube. Cut roll tube at marked location.

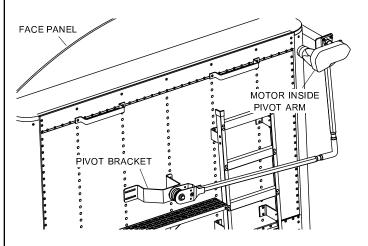
STEP 9: Insert swaged end of roll tube extension w/drive shaft into roll tube. Align extension straight with roll tube and weld all around. Grind smooth.

NOTE: Pull roll tube away from tarp and trailer before welding to protect from weld spatter. Align roll tube extension straight with roll tube before welding so tarping system will roll smoothly.



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

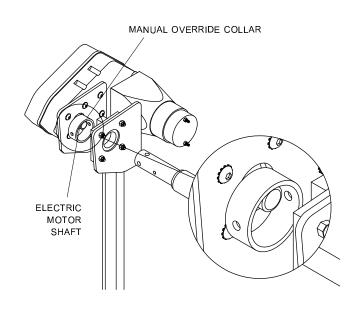
STEP 10: Slide roll tube extension weldment back into position and align upper flex arm on front of trailer. Follow steps 8 to 10 to install motor, positioning motor as shown below. Make sure torsion springs load when tarp opens.



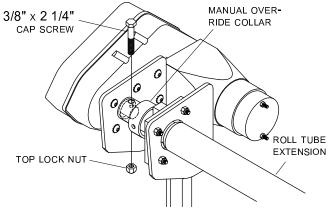
▲ WARNING

Flex arms are under tension while torsion springs are engaged. Use caution while assembling and disassembling arms. Failure to read and follow instructions could result in serious injury or death.

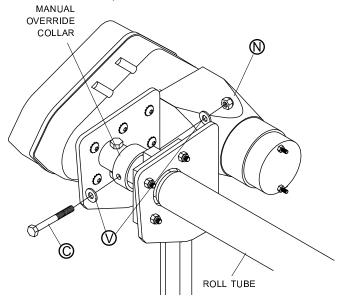
STEP 11: Remove cap screw from motor shaft. Hang manual override collar over electric motor shaft.



STEP 12: Insert roll tube extension through manual override collar. Secure roll tube to electric motor shaft with 3/8" x 2 1/4" cap screw and top lock nut (supplied with motor).

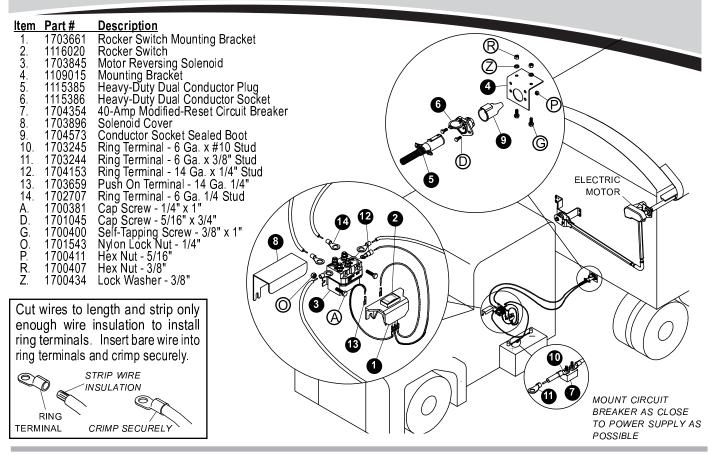


STEP 13: Fasten manual override collar to roll tube with 1/4" x 2 1/4" cap screw, two flat washers and lock nut.



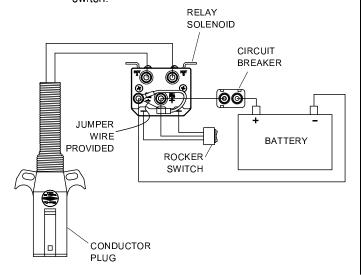
NOTE: Verify again flex arm is on vertical plane and is parallel to face panel before proceeding. Make sure all fasteners holding motor to bearing mount plate to upper flex arm are tightened securely.

STEP 14: Re-fasten tarp to roll tube with existing U-clamps and screws. Tighten all fasteners securely. Tighten front and rear flex arm connections.

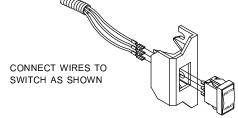


STEP 1: Circuit breaker & battery. Mount circuit breaker as close as possible to battery or power supply.

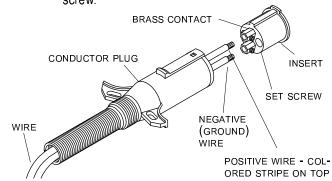
STEP 2: Mount solenoid. Mount solenoid in suitable location - a ventilated area near battery is ideal. Determine best route for wire. This is usually along frame with existing wire harness. Run 6-ga. wire from conductor plug to solenoid and from power supply to solenoid as shown in diagram. Run 14-ga.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



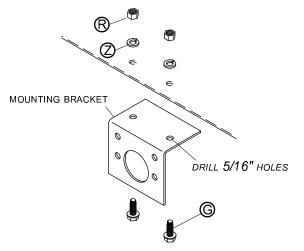
STEP 3: Rocker switch. Locate rocker switch in convenient operating location. Switch can be mounted in cab, on dash panel, on driver side door jamb or in convenient location outside cab.



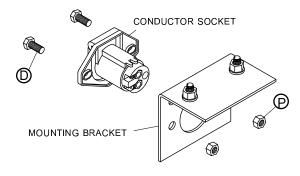
STEP 4: Conductor plug. Unfasten and remove insert from conductor plug. Feed 6-ga. wire through plug and into brass contacts on insert. Tighten set screws to secure wires. Replace insert into conductor plug and secure screw.



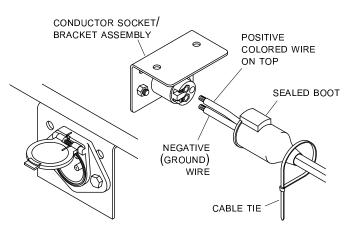
STEP 1: Mounting bracket. Mount bracket at suitable location on front of trailer, usually near existing plugs. Mark and drill 5/16" holes and fasten with 3/8" x 1" self-tapping screws, lock washers and nuts.



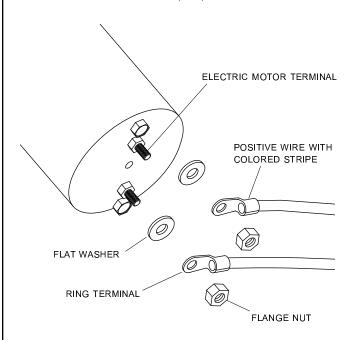
STEP 2: Conductor socket. Fasten conductor socket to mounting bracket with 5/16" x 3/4" cap screws and nuts.



Bring 6-ga. wire from lower end of pivot arm through sealed boot. Connect wire ends to conductor socket, aligning positive wire on socket with positive wire on conductor plug. Slide sealed boot against conductor socket and secure boot to wire with cable tie.



STEP 3: Connect wires at top of pivot arm to motor.



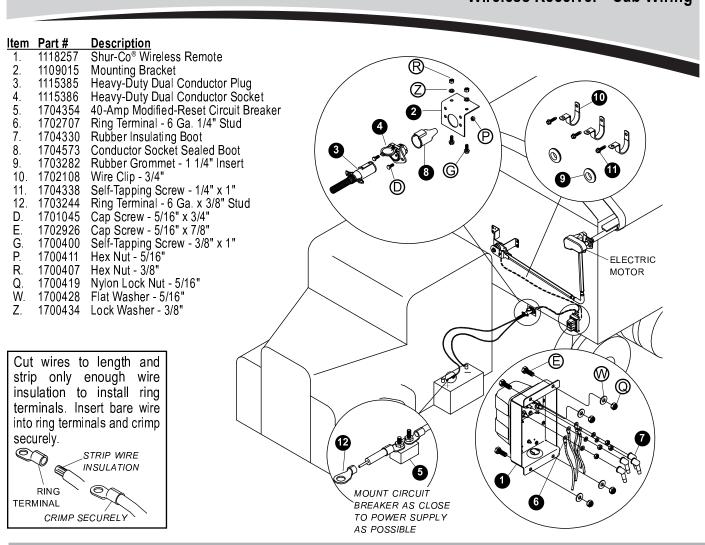
A CAUTION

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

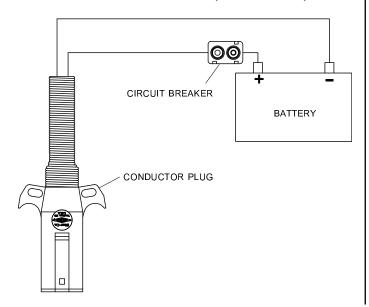
OPERATION:

- **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.

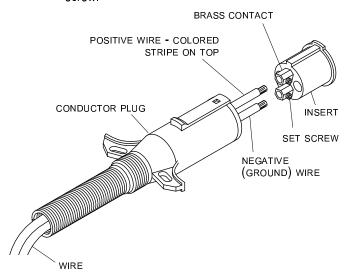
NOTE: Release switch at end of cycle or modified-reset circuit breaker will trip. After breaker resets, switch will activate motor again. To reduce unnecessary strain on tarp components, release switch at end of each cycle.



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



STEP 2: Conductor plug. Unfasten and remove insert from conductor plug. Feed 6-ga. wire through plug and into brass contacts on insert. Tighten set screws to secure wires. Replace insert into conductor plug and secure screw.

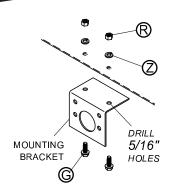


STEP 1: Mounting bracket.

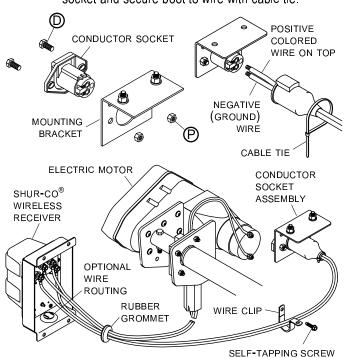
Mount bracket at suitable location on front of trailer, usually near existing plugs.

Mark and drill 5/16" holes and fasten with 3/8" x 1" self-tapping screws, lock washers

and nuts.



STEP 2: Conductor socket. Fasten conductor socket to mounting bracket with 5/16" x 3/4" cap screws and nuts. Bring 6-ga. wire from lower end of pivot arm through sealed boot. Connect wire ends to conductor socket, aligning positive wire on socket with positive wire on conductor plug. Slide sealed boot against conductor socket and secure boot to wire with cable tie.



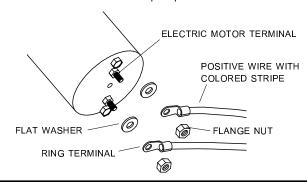
STEP 3: Shur-Co® wireless receiver, Identify 6-ga. wires running from electric motor through front pivot arm and grommets. Route wires as desired, securing with wire clips and self-tapping screws. Drill 1 1/8" hole through front of trailer at suitable location for wireless receiver. Insert grommet with hole into hole and push wire through grommet. Insert ends of wires 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.

USE DIELECTRIC GREASE (P/N 1704378) TO PREVENT CORROSION ON TERMINALS.

Run section of 6-ga. wire, long enough to reach conductor socket, 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. When wiring socket, align positive wire with positive wire on plug.

Mount wireless receiver to cover rubber grommet. Mark and drill 11/32" holes and fasten with 5/16" x 7/8" cap screws, flat washers and lock nuts.

STEP 4: 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: Pressure Wash: The receiver may be pressure washed, but keep nozzle at least three feet from system while spraying.

Power-up/down:

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

Standard operation:

After power-up, the first channel will be immediately active and the LED indicator for this channel will be flashing. The *Open/On* and *Close/Off* buttons are operational for the indicated active channel. While pressed, the LED indicator will flash faster, indicating channel operation.

The *Select* button will cycle between enabled channels. If only one channel is enabled, there will be no apparent change when the *Select* button is pressed.

Channel Programming Mode:

The Shur-Co® SMARTransmitter® has five channels. Pressing the *Select* button toggles through these channels. Unused channels can be disabled if desired, using the following process, but your transmitter is fully operational as shipped. This process may be skipped. Unused transmitter channels will not perform any functions.

Hold the *Select* button down for 10 seconds and the transmitter will enter *Channel Programming Mode*. Each time *Channel Programming Mode* is entered, the status of all five channels must be reset.

While In *Channel Programming Mode*, the programmable channel will be indicated by a solid lit LED.

NOTE: The transmitter will NOT activate any motor or lighting system while the transmitter is in Channel Programming Mode.

Press the *Open/On* button to enable the current channel (designated by the indicator light). Press the *Close/Off* button to disable the current channel. The indicator light will automatically jump to the next channel.

After programming all five channels, the transmitter will display the programmed channel status for all channels for three seconds. All enabled channel LEDs will be lit solid and all disabled channel LEDs will not be lit. Buttons will not function during this three second period.

The transmitter will automatically exit *Channel Programming Mode* after three seconds and return to *Operational Mode*.

NOTE: If there is not at least one enabled channel after programming, the transmitter will not save the changes and will revert back to the previously saved channel settings.

TIP: To cancel your changes and exit Channel Programming Mode, close the transmitter cover.

Channel programming example:

The transmitter in this example is labeled with the following five channels:

- Tarp System
- Front Hopper
- Back Hopper
- Lights
- Auxiliary

These channel labels are for a standard agricultural transmitter. Your transmitter label may differ.

The task is to enable the *Tarp System*, *Front Hopper* and *Back Hopper* channels.

- 1. Hold down the *Select* button for 10 seconds. The transmitter will enter *Learn Mode*. The *Tarp System* channel LED will be lit. All other channel LEDs are off.
- 2. Press the *Open/On* button to enable the *Tarp System* channel. The *Front Hopper* LED will now be lit.
- **3.** Press the *Open/On* button to enable the *Front Hopper*. The *Back Hopper* LED will be lit.
- **4.** Press the *Open/On* button to enable the *Back Hopper*. The *Lights* channel LED will be lit.
- **5.** Press the *Close/Off* button to disable the lights. The *Auxiliary* LED will be lit.
- **6.** Press the *Close/Off* button to disable the *Auxiliary* channel LED.
- 7. The transmitter will display all activated channels for three seconds. The transmitter will automatically exit *Channel Programming* and revert to *Operational Mode*. The *Tarp System* LED will be flashing, indicating that the channel is active and ready for operation.

SMARTransmitter® to receiver programming:

Shur-Co® SMARTrailer® wireless systems are typically pre-programmed at the factory or by the dealer and should be ready to use as shipped. Re-programming is necessary after replacement transmitters or receivers are installed.

Use the following method to program the RF receiver to accept and respond to signals from up to five transmitters. The receiver will not accept or respond to signals from transmitters that have not been programmed using this method.

- 1. Remove the receiver cover, pulling gently on the cover to prevent damage to wires that are connected to the rocker switch.
- **2.** Check to be sure the 3500 is connected to the power supply. The receiver must be connected to power to be programmed. If a battery disconnect switch is installed, make sure it is turned on.
- 3. The receiver can learn to recognize and respond to up to five transmitters. Gather all of the transmitters to be introduced to the receiver. Open the transmitter lid(s) in order to turn them on.
- **4.** Set the transmitter(s) to the appropriate channel (*Tarp System*, etc.). See *Transmitter Operation & Programming Instructions*.

NOTE: Read the following steps in their entirety before proceeding, steps 6 to 8 must be completed within 10 seconds.

- **5.** Press and hold the programming button on the bottom of the RF solenoid for five seconds. The solenoid will beep to indicate that it is in programming mode. Release the programming button.
- **6.** Press the *Open/On* button on the first transmitter being introduced. The receiver will beep after receiving the transmitter signal.
- **7.** Repeat step 6 for any remaining transmitters.
- **8.** The receiver will expect five signals, so if you are programming less than five transmitters, press the *Open/On* button additional times on the last transmitter you are programming. Push the *Open/On* button a total of five times (see programming example).
- **9.** After pushing the *Open/On* button five times, the receiver will beep twice to indicate that it has been programmed successfully.

NOTE: The receiver will exit program mode after 10 seconds, whether or not it has five Open/On button signals.

- **10.** Verify each transmitter is operating correctly. If none of the transmitters are operating correctly, verify that there are 12 to 14 volts from the receiver positive to negative, then repeat steps 3 to 9.
- 11. Refasten receiver cover

Receiver programming example:

In this example, the receiver controls the 3500 motor. The task is to program the receiver to recognize three transmitters.

- 1. Remove the receiver cover and turn on the three transmitters.
- **2.** Set all three transmitters to the tarp system channel.
- **3.** Press and hold the programming button on the RF solenoid for fiveseconds. The solenoid will beep to indicate it has entered *Channel Programming Mode*. Release the programming button.
- **4.** Press the *Open/On* button on the first transmitter. The receiver will beep to indicate that it has received a signal and memory slot #1 has been filled.
- **5.** Press the *Open/On* button on the second transmitter. The receiver will beep to indicate that is has received a signal and memory slot #2 has been filled.
- **6.** Press the *Open/On* button on the third transmitter. The receiver will beep to indicate that it has received a signal and memory slot #3 has been filled.
- **7.** Press the *Open/On* button on the third transmitter again. The receiver will beep to indicate that it has received a signal and memory slot #4 has been filled.
- **8.** Press the *Open/On* button on the third transmitter again. The receiver will beep twice to indicate that it has received a signal, and memory slot #5 has been filled. The double beep also indicates that the receiver has exited programming mode.
- **9.** Verify that the tarp system *Open* and *Close* operations are functioning correctly on all three transmitters.
- **10.** Refasten the receiver cover to motor assembly.

A

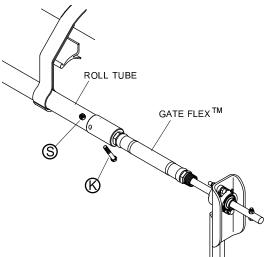
WARNING

Flex arms are under tension while torsion springs are engaged. Use caution while assembling and disassembling arms. Failure to read and follow instructions could result in serious injury or death.

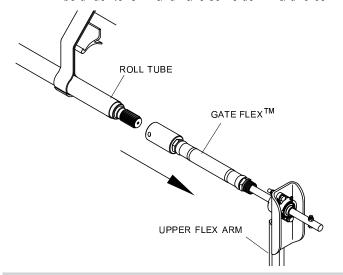
NOTE: Store manual crank arm either in truck or mounted to trailer. (Example: above kingpin in apex.)

Perform following steps to convert 3500 Series Electric Top Hinge system to manual crank operation. Same steps apply to convert Side Hinge system.

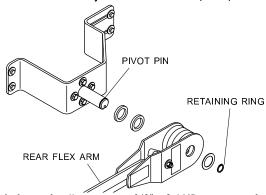
STEP 1: Close tarp but let roll tube hang loose under latchplate. Remove 3/8" x 2 1/2" cap screw and lock nut from Gate Flex™.



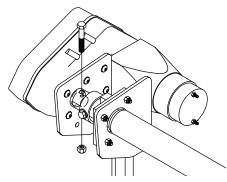
STEP 2: Carefully slide Gate Flex™ off roll tube. Flex arm will be under tension and have some downward force.



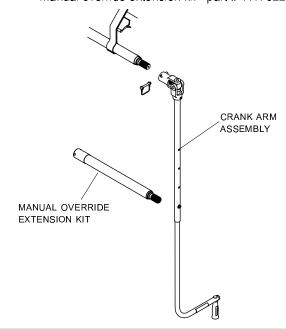
STEP 3: Remove retaining ring on rear flex arm. Carefully slide arm off from pivot pin.



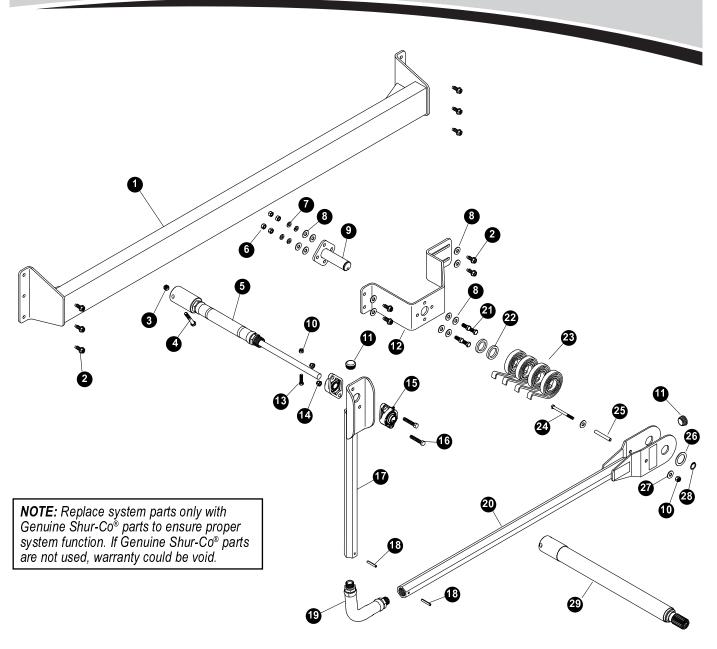
STEP 4: At front of trailer, remove 3/8" x 2 1/4" cap screw from motor shaft and roll tube extension connection.



STEP 5: Install crank arm assembly as shown in Shur-Lok® owner's manual. Owner's manual may be viewed at http://www.shurco.com. You may need optional manual override extension kit - part # 1117022.

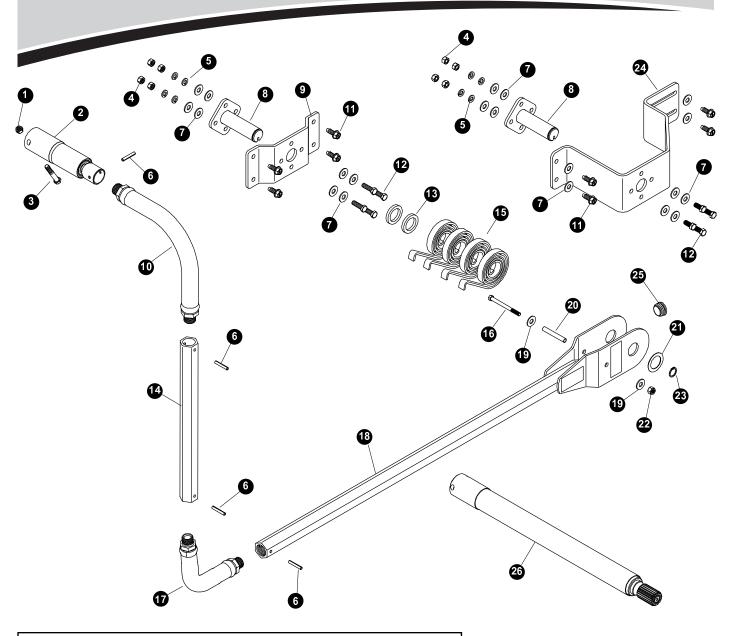


FRONT Item Part # Description Nylon Lock Nut - 1/4" 1701543 Roll Tube Extension w/Drive Shaft - Sloped 1117497 Cap Screw - 1/4" x 2 1/4" 1702672 1702891 Cap Screw - 3/8" x 1 1/4" Flat Washer - 3/8" 5. 6. 1700429 Vertical Pivot Mount Bracket - 7 1/4" Stand-off 1116919 Vertical Pivot Mount Bracket - 9 1/4" Stand-off 1117031 Pivot Pin - 4 Spring 1116920 8. 1700434 Lock Washer - 3/8" Hex Nut - 3/8" 1700407 Retaining Ring - 1 1/4" Flat Washer - 1 1/4" 10. 1702888 11. 1702890 Spacer Tube - .35" x 2 5/8" 12. 1117033 Spiral Torsion Spring 1111027 13. Spacer Washer - 1/4" x 1.81" OD Nylon Lock Nut - 5/16" 14. 1118318 15. 1700419 Flat Washer - 5/16" @ 1700428 16. @ Cap Screw - 5/16" x 3 1/2" 17. 1201022 18. 1700377 Cap Screw - 1/4" x 1 1/2" Flat Washer - 1/4" 19. 1700427 20. 1110408 Flange Bearing Lower Flex Arm 21. 1116905 Heavy-Duty Motor Cap Plug w/Hole - 1 1/4" x 14-16 Ga. Manual Override Collar 22. 1703135 23. 1703882 24. 1116924 25. 1118015 Upper Flex Arm - Motor Side 26. 1703873 Flex Arm Joint 27. 1120291 Pivot Bracket Washer Ø SUPPLIED W/MOTOR Ð NOTE: Replace system parts only with Genuine Shur-Co® parts to ensure proper system function. If Genuine Shur-Co® parts are not used, warranty could be void.



REAR - TOP HINGE

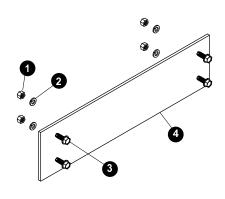
Item	Part #	Description	ltem	Part #	Description
1.	1117795	Beam Bracket	15.	1704703	Flange Bearing - 20mm - 2 Bolt
2.	1700400	Self-Tapping Screw - 3/8" x 1"	16.	1704264	Cap screw - 3/8" x 2"
3.	1700418	Centerlock Nut - 3/8"	17.	1116992	Upper Flex Arm, Gate Flex™
4.	1702573	Cap Screw - 3/8" x 2 1/2"	18.	1700445	Spring Pin - 1/4" x 1 1/2"
5.	1116990	Gate Flex™	19.	1703873	Flex Arm Joint
6.	1700407	Hex Nut - 3/8"	20.	1116905	Lower Flex Arm
7.	1700434	Lock Washer - 3/8"	21.	1702891	Cap Screw - 3/8" x 1 1/4"
8.	1700429	Flat Washer - 3/8"	22.	1118318	Spacer Washer - 1/4" x 1.81"
9.		Pivot Pin - 4 Spring	23.	1111027	Spiral Torsion Spring
10.	1700419	Nylon Lock Nut - 5/16"	24.	1201022	
11.	1703881	Cap Plug - 1 1/4" x 14 to 16 Ga.	25.	1117033	Spacer Tube - 35" x 2 5/8"
12.	1116919	Pivot Mt. Bracket - Vertical - 7 1/4" Stand-off	26.	1702890	Flat Washer - 1 1/4"
	1117031	Pivot Mt. Bracket - Vertical - 9 1/4" Stand-off	27.		Flat Washer - 5/16"
13.	1703487	Cap Screw - 5/16" x 1 1/2"	28.		Retaining Ring - 1 1/4"
14.	1701580	Nylon Lock Nut - 3/8"	29.	1117022	Manual Överride Extension Kit (optional)



NOTE: Replace system parts only with Genuine Shur-Co® parts to ensure proper system function. If Genuine Shur-Co® parts are not used, warranty could be void.

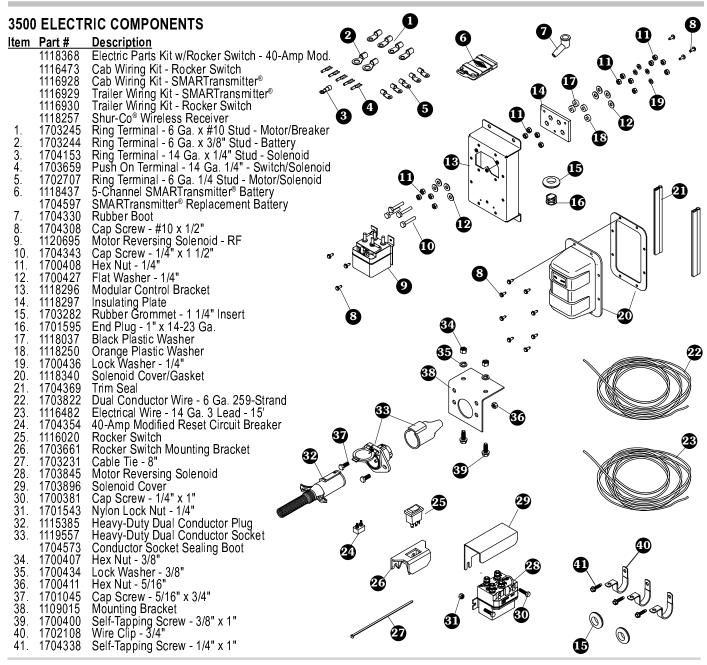
_	_	_	_		_		_			
п	_	Λ.	п		c	ır	١г.			GF
ĸ	_	Δ	ĸ	_	-		-	_	IN	

ltem	Part #	Description	Item	Part #	Description
1.	1700418		14.	1117768	Upper Flex Arm - Side Hinge
2.	1117777	Roll Tube Bearing Pack	15.	1111027	Spiral Torsion Spring
3.	1702573	Cap Screw - 3/8" x 2 1/2"	16.	1201022	Cap Screw - 5/16" x 3 1/2"
4.	1700407	Hex Nut - 3/8"	17.	1703873	Flex Arm Joint - 12"
5.	1700434	Lock Washer - 3/8"	18.	1116905	Lower Flex Arm
6.	1700445	Spring Pin - 1/4" x 1 1/2"	19.	1700428	Flat Washer - 5/16"
7.	1700429	Flat Washer - 3/8"	20.	1117033	Spacer Tube35" x 2 5/8"
8.	1116920	Pivot Pin - 4 Spring	21.	1702890	Flat Washer - 1 1/4"
9.	1117767	Pivot Bracket	22.	1700419	Nylon Lock Nut - 5/16"
10.	1704048	Flex Arm Joint - 18"	23.	1702888	Retaining Ring - 1 1/4"
11.	1700400	Self-Tapping Screw - 3/8" x 1"	24.		Pivot Bracket - Vertical
12.	1702891	Cap Screw - 3/8" x 1 1/4"	25.	1703884	Cap Plug - 1 1/4" x 10-16 Ga.
		Spacer Washer - 1/4" x 1.8" x 1.28"			Manual Överride Extension Kit (optional)



PIVOT BACKER PLATE

ltem	Part #	<u>Description</u>
1.	1700407	Hex Nut - 3/8"
2.	1700434	Lock Washer - 3/8"
3.	1702891	Cap Screw - 3/8" x 1 1/4"
4.	1120361	Pivot Backer Plate - 5" x 16'
	1120418	Pivot Backer Plate - 5" x 20'



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:
The SMARTransmitter® is not working. I can operate the system with the rocker switch but not with the remote. The SMARTransmitter® channel light (<i>Tarp System</i> , for example) is blinking, and when I press the <i>Open/On</i>	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 SMARTransmitter® programming instructions.
button, the light blinks faster.	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.
	Reprogram the receiver. See the receiver programming instructions. If this doesn't work, call Shur-Co's Help Line.
The SMARTransmitter® is not working.	1. Make sure the battery is placed correctly.
None of the lights on the remote turn on when I open the lid.	 The battery may be dead and must be replaced. Re- placement high-capacity SMARTransmitter[®] batteries may be purchased from Shur-Co[®] (part # 1704597).
	3. The SMARTransmitter® may be damaged. Call Shur- Co's Help Line.
The system will not operate with the rocker switch or with the SMARTransmitter [®] .	Make sure the master disconnect switch is turned to the "ON" position.
When I try to use the rocker switch or SMARTransmitter®, I don't hear any noises (a clicking noise, for example) from the	The circuit breaker may have tripped. Wait one minute and try again.
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 that 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 SMARTransmitter [®] .	Verify that 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 SMARTransmitter®, 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: The receiver may be pressure washed, but keep nozzle at least three feet 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.

P/N 1117719 Rev. P	Notes

MORE QUALITY PRODUCTS FROM SHUR-CO®

- Genuine Replacement Tarps
- Genuine Replacement Parts
- Agriculture Products
 - Value Series Shur-Lok®
 - Super Duty Shur-Lok®
 - Shur-Lok® Junior
 - Premium Belt 'n Ratchet
 - Cable-Lok™
 - Turning Point™ Bow
- SMARTrailer[™] Accessories for Agriculture Products
 - SMART2[™] Remote
 - SMART1 + TM Remote
 - 4500 Series HD Electric
 - Electric Shur-Lok®
 - AutoTrap™ Hopper Opener
 - ProTrap® Hopper Opener
 - Electric Gate & Hoist
 - LiteALLTM Work Lights
 - Cable-Lok™ Electric Upgrade
 - Electric Turning Point™ Bow
 - Solar Power Pack
- Flatbed Products
 - ShurTite™ Retractable Tarps
 - Stock Lumber & Steel Tarps
- Custom Products
 - Fitted Truck Covers
 - Flat Utility Tarps
 - Bean Drill Covers
 - Shur-Lok® Tarp Cords
 - GustbusterTM Tarp Cords

- Construction Products
 - Super Duty Shur-Lok®
 - Shur-Trak II™
 - Cover-Pro II®
 - Turning Point™ Bow
 - IronSide™ Side-Dump System
 - Arm-Matic™
 - DuraPull™
 - Econo-Pull™
 - Turbo Tarp2™
 - 2000 Series
 - 5000 Series
 - Hammer™
 - BulletTM
 - Flash™
 - Long ArmTM
- SMARTrailer[™] Accessories
 - for Construction Products
 - 4500 Series HD Electric w/Gate Flex™
 - Shur-Trak $II^{\text{\tiny TM}}$ Electric Upgrade
 - Cover-Pro II® Electric Upgrade
 - Electric Turning Point™ Bow
 - Solar Power Pack
- **■** Waste Products
 - The OxTM
 - Quick-Flip III™
 - Sidewinder™
 - Sidewinder[™] 350
 - HyTowerTM SL
 - HyTower™ DL
 - Double-Flip™

