

P/N 1121683 Rev. J



Aluminum System for End Dumps

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

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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.

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For more information, 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.

PARTS INSPECTION

Inspect all parts in your 4500 Series Electric kit upon arrival. Please inspect your tarping system regularly, and repair or replace parts when continued use could damage your system.

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.

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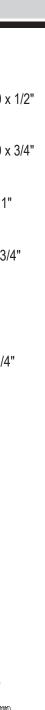
TOOLS REQUIRED

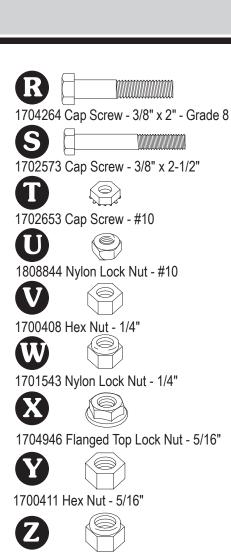
- 1. Welder
- 2. Hammer
- 3. Center Punch or Transfer Punch
- 4. #3 Phillips Insert Bit
- 5. Air or Electric Impact Wrench (9/16" deep socket)
- 6. 7/16" Deep Socket
- 7. 3/8" Combination Wrench
- 8. 9/16" Combination Wrench
- 9. 1/2" Combination Wrench
- 10. 1/8" Hex Wrench Long T-Handle
- 11. 3/16" Hex Wrench Long T-Handle (recommended)
- 12. 5/16" Drill Bit (for 3/8" self-tapping screws)
- 13. 13/32" Drill Bit
- 14. 3/8" Drill Bit
- 15. 1/4" Drill Bit
- 16. 17/64" Drill Bit
- 17. 3/8" Drill
- 18. 2" Hole Saw
- 19. Standard/Flathead Screwdriver
- 20. #2 Phillips Screwdriver
- 21. Utility Knife
- 22. Ratchet
- 23. Hack Saw (metal cutter)
- 24. Pliers
- Snap Ring Pliers
- 26. Wire Cutters
- 27. Grinder
- 28. Tape Measure



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

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









1700407 Hex Nut - 3/8"





1700436 Lock Washer - 1/4"





1700427 Flat Washer - 1/4"





1700428 Flat Washer - 5/16"





1700433 Lock Washer - 5/16"





1700434 Lock Washer - 3/8"





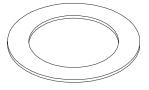
1700429 Flat Washer - 3/8"





1118318 Spacer Washer - 1/4" x 1.81"





1702890 Flat Washer - 1 1/4"

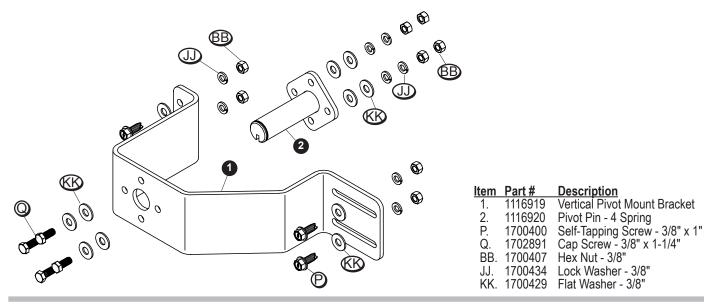




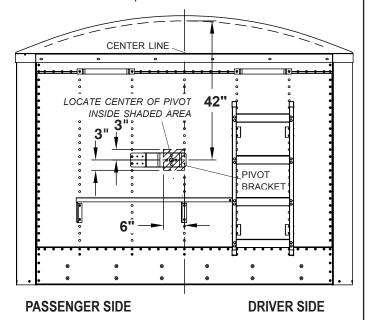
1701580 Nylon Lock Nut - 3/8"

NOTE: 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 4500 Series HD kit upon arrival.



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.



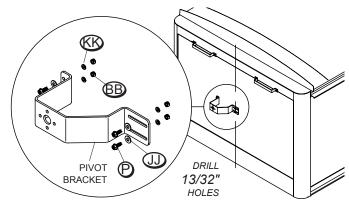
STEP 2: Hold pivot mount brackets in place. Using brackets as guide, mark hole locations.

NOTE: Mount brackets into support braces on trailer, if possible. Reinforce mounting area for adequate support if bracket cannot be mounted into support braces.

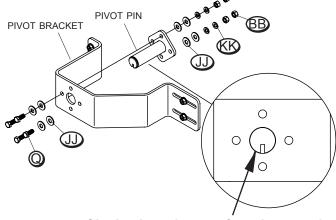
NOTE: Before drilling any holes, make sure flex arm has a clear pathway to operate.

STEP 3: Remove rivets and mount brackets into rivet holes where possible. Otherwise, drill 5/16" holes in trailer. Fasten bracket to trailer with 3/8" self-tapping screws

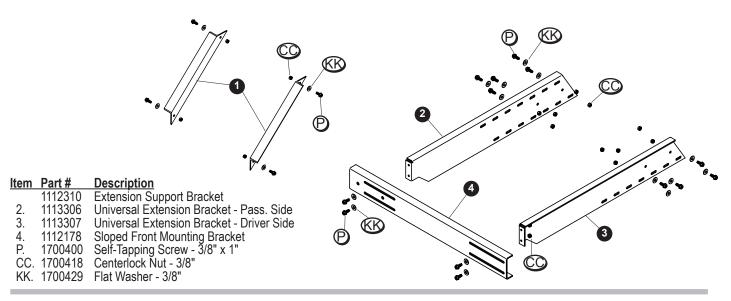
• flat washers • lock washers • and nuts • ...



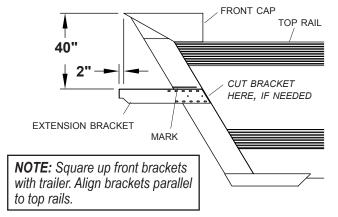
STEP 4: Fasten pivot pin to pivot bracket with 3/8" x 1-1/4" cap screws ♠, flat washers ♠, lock washers ♠ and nuts ♠.



Slot in pivot pin must face downward.

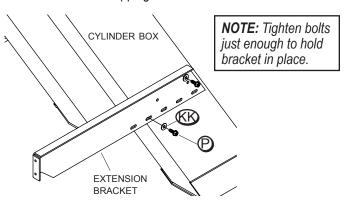


STEP 1: Locate extension brackets 40" down from top of front cap. Mark line on box parallel to top rails on front and outer sides of cylinder box.

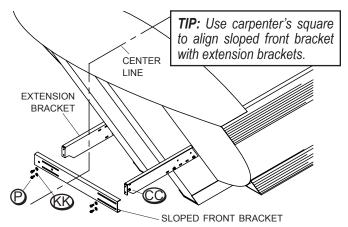


STEP 2: Align front edge of extension bracket 2" past farthest point of front cap. Cut back end of bracket to fit.

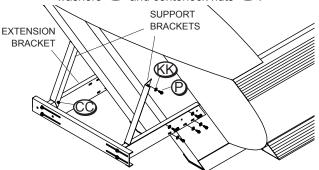
STEP 3: Using bracket as guide, mark and drill 5/16" holes at two slots and fasten bracket to cylinder box with 3/8" x 1" self-tapping screws ② and flat washers ③③.



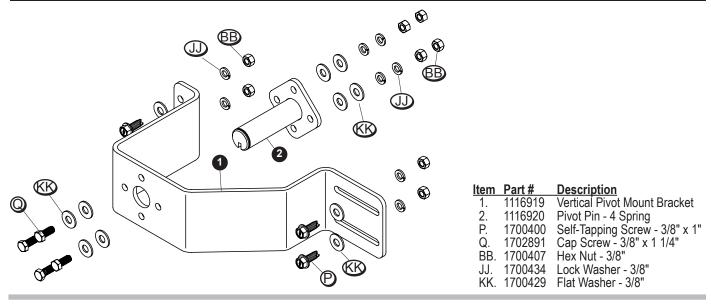
STEP 4: Align center of sloped front mounting bracket with center of trailer. Fasten sloped front bracket to extension brackets with 3/8" x 1" self-tapping screws • flat washers • and centerlock nuts •.



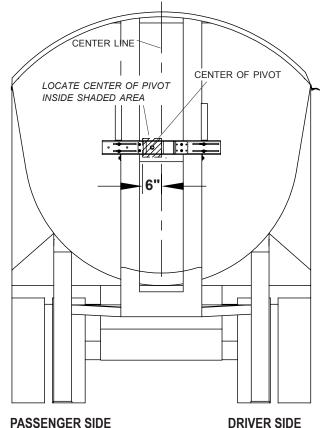
STEP 5: Fasten support brackets to extension brackets and cylinder box with 3/8" x 1" self-tapping screws ♥, flat washers ♥ and centerlock nuts ♥.



STEP 6: Drill 5/16" holes into cylinder box at remaining slots in extension brackets. Fasten with 3/8" x 1" self-tapping screws ② and flat washers ③. Square up brackets with front of trailer. Tighten all bolts.



STEP 1: Locate front pivot mount bracket so center of pivot lies on passenger side of center line within shaded area shown below.

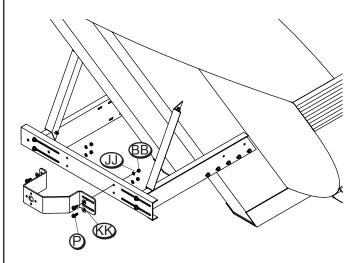


STEP 2: Hold pivot mount brackets in place. Using brackets as guide, mark hole locations.

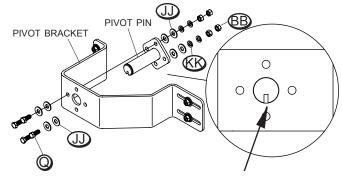
NOTE: Before drilling any holes, make sure flex arm has clear pathway to operate.

STEP 3: Mark and drill 5/16" holes. Fasten pivot bracket to mounting bracket with 3/8" x 1" self-tapping screws

• flat washers • lock washers • and nuts • and nut

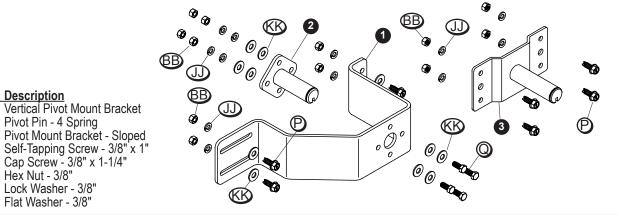


STEP 4: Fasten pivot pin to pivot bracket with 3/8" x 1-1/4" cap screws ①, flat washers ②, lock washers ① and nuts ③.



Slot in pivot pin must face downward.

Rear Pivot Bracket P/N 1121683 Rev. J



NOTE: Rear pivot mount bracket may be located anywhere on rear of trailer as long as upper flex arm is parallel with side of trailer when tarp is closed and rolled up under latchplate.

Item Part #

P.

Q.

1116919

1116920

1116994

1700400

1702891 BB. 1700407

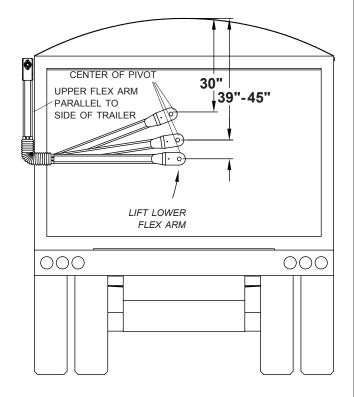
JJ. 1700434 KK. 1700429 **Description**

Pivot Pin - 4 Spring

Lock Washer - 3/8"

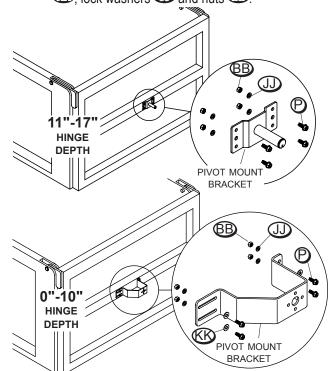
Flat Washer - 3/8"

STEP 1: To determine rear pivot mount bracket location, align bearing hole in upper flex arm with roll tube under latchplate. Hold upper flex arm parallel to side of trailer and lift lower flex arm up so center of pivot is 39" to 45" below top of rear cap.

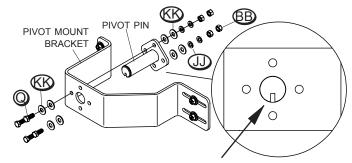


NOTE: If pivot pin cannot be located in recommended area because of grain doors, pivot arm may be located 30" to 45" below top of cap.

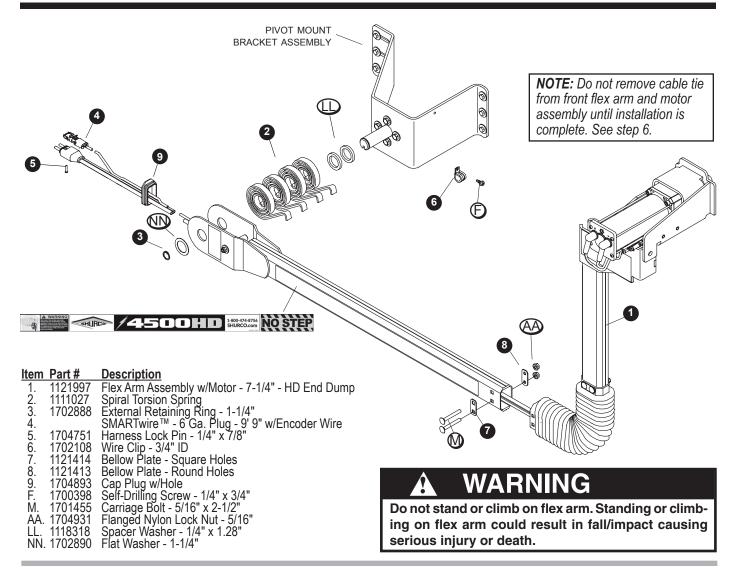
STEP 2: Mark and drill 5/16" holes in trailer. Fasten bracket to trailer with 3/8" self-tapping screws **9**, flat washers . lock washers and nuts .



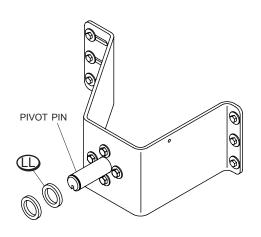
0"-10" hinge depth. Fasten pivot pin to bracket with STEP 3: 3/8" x 1-1/4" cap screws ①, flat washers ③, lock washers and nuts .



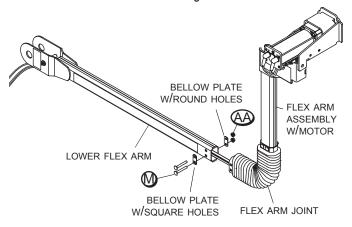
Slot in pivot pin must face downward.



STEP 1: Assemble spacer washers • onto pivot pin.

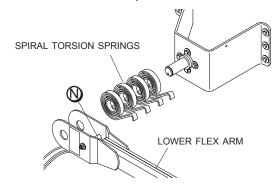


STEP 2: Align holes in bellow, end fitting and bellow plates with holes in lower flex arm assembly as shown. Fasten with 5/16" x 2-1/2" carriage bolts ② and lock nuts ③.

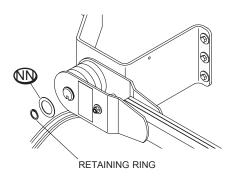


NOTE: Motor assembly on upper flex arm must face toward trailer as shown.

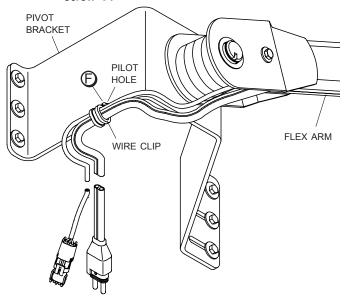
STEP 3: Assemble spiral torsion springs and lower flex arm onto pivot pin. Hook springs over 3/8" x 3-1/2" cap screw **3** and spacer tube.



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



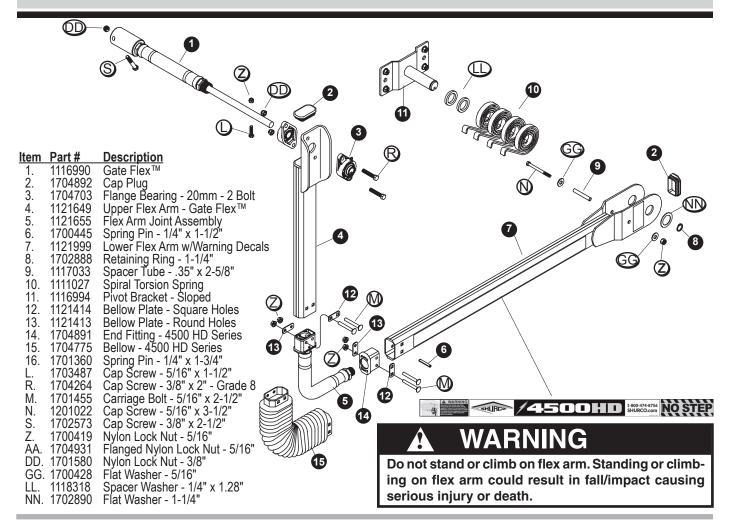
STEP 5: Choose appropriate pilot hole on pivot bracket to route 6-ga. wire from flex arm through trailer skin. Fasten wire clip to pilot hole with 1/4" x 3/4" self-drilling screw 3.



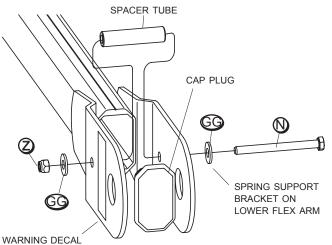
NOTE: Fasten wire clip to pilot hole on opposite side of pivot bracket from flex arm to prevent wire from being pinched during operation.

STEP 6: Remove cable tie from front arm/motor assembly before operating system.

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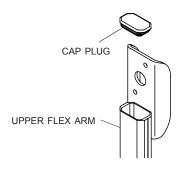


STEP 1: Install cap plug on lower flex arm. Fasten spacer tube into spring support bracket on lower flex arm with 5/16" x 3-1/2" cap screw ♠, two flat washers ♠ and lock nut ♠.

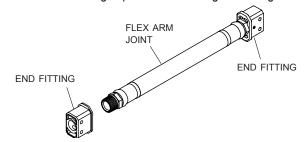


NOTE: Insert cap screw through flex arm so head of screw is on inside of assembly (toward trailer). Warning label must be in plain view on outside of assembly.

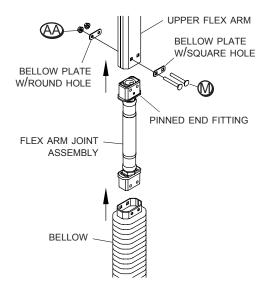
STEP 2: Install cap plug on rear upper flex arm.



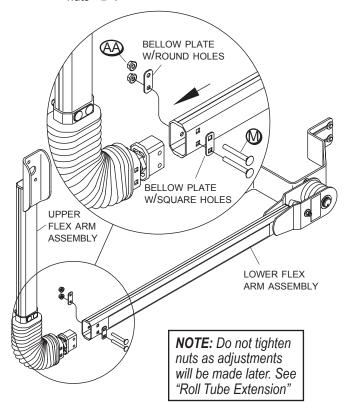
STEP 3: Thread end fitting onto end of flex arm joint. Tighten so end fitting is parallel to existing end fitting.

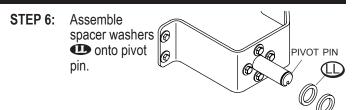


STEP 4: Insert flex arm joint into upper flex arm and slide bellow over flex arm joint. Align holes in upper flex arm, bellow plates, flex arm joint and bellow. Fasten with 5/16" x 2-1/2" carriage bolts ♣ and flanged nylon lock nuts ♣.

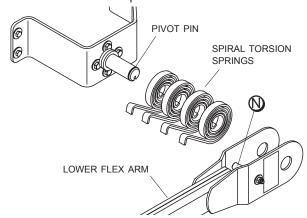


STEP 5: Align holes in end fittings and bellow plates with holes in lower flex arm assembly as shown. Temporarily install 5/16" x 2-1/2" carriage bolts ② and lock nuts ③.



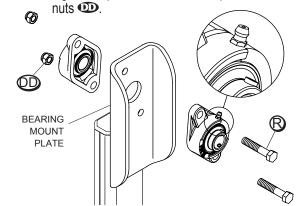


STEP 7: Assemble spiral torsion springs and lower flex arm onto pivot pin. Hook springs over 5/16" x 3-1/2" cap screw **③** and spacer tube.



STEP 9: Secure with 1-1/4" flat washer and retaining ring.

STEP 8: Position flange bearings as shown and fasten to bearing mount plate with 3/8" x 2" cap screws ① and lock



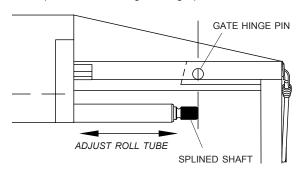
A WARNING

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.

P/N 1121683 Rev. J Roll Tube Extension

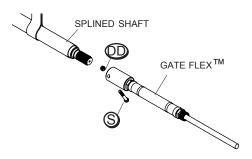
REAR OF TRAILER

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



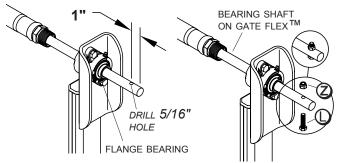
NOTE: If hinge depth is 0" to 4", set end of splined shaft 4" in from back of gate.

STEP 2: Slide Gate Flex™ completely over splined shaft on roll tube. Fasten with 3/8" x 2-1/2" cap screw ③ and centerlock nut ⑩.



NOTE: Do not remove splined shaft. Splined shaft will be needed 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 ②.

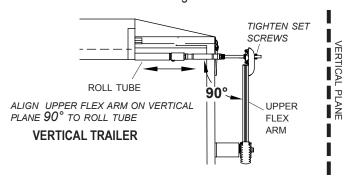


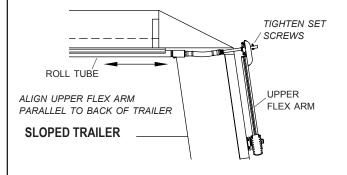
NOTE: Do not leave unattended until flex arm is securely fastened to roll tube extension as shown.

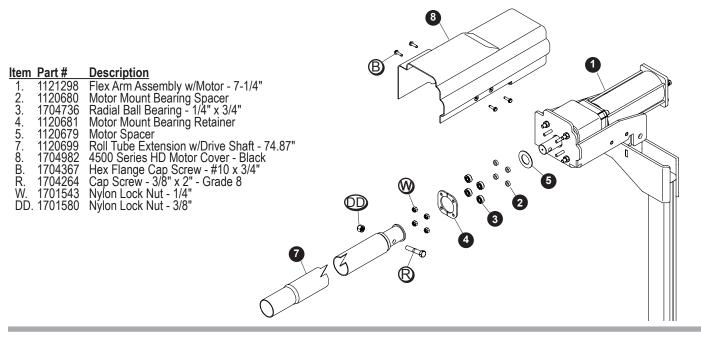
WARNING

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: On vertical trailers, align upper flex arm in vertical plane 90° to roll tube. On sloped trailers, align upper flex arm parallel to back of trailer. Tighten set screws in flush mount bearing.

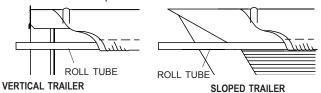




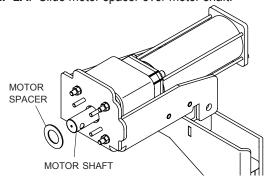


FRONT OF TRAILER

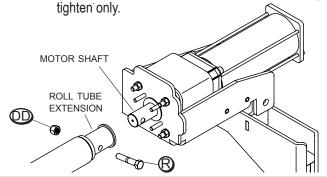
STEP 1: Slide tarp back onto roll tube.



STEP 2A: Slide motor spacer over motor shaft.



STEP 2B: Slide roll tube extension over motor shaft. Fasten with 3/8" x 2" cap screws ② and lock nuts ③D. Finger

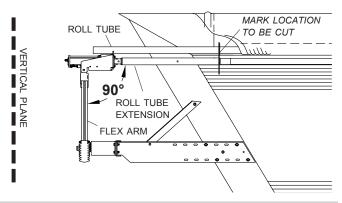


STEP 3: Hold flex arm with motor and roll tube extension in vertical plane to trailer and at 90° angle to roll tube. Mark roll tube at location to be cut as shown.

NOTE: Two people are required for safe installation.

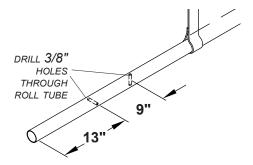
FACE PANEL ROLL TUBE ROLL TUBE ROLL TUBE ROLL TUBE EXTENSION

SLOPED TRAILER



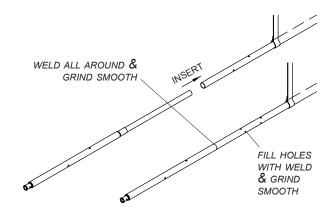
STEP 4: Unfasten and remove motor mount assembly from roll tube extension. Remove roll tube extension from roll tube. Cut roll tube at marked location.

STEP 5: Mark and drill 3/8" holes through roll tube at right angles to each other in locations shown.



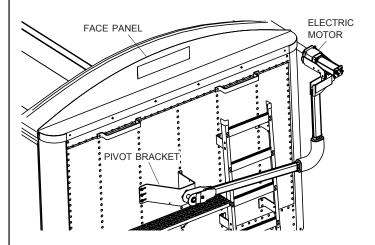
STEP 6: Insert swaged end of roll tube extension w/drive shaft into roll tube. Align extension straight with roll tube and align holes. Weld as shown and grind smooth.

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 weld seams and/or metal exposed by grinding or cutting with corrosion-resistant paint.

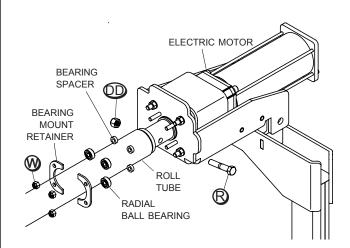
STEP 7: Slide roll tube/roll tube extension weldment back into position and align upper flex arm on front of trailer. Follow steps 6 to 7 to install motor, positioning motor as shown below. Make sure torsion springs load when tarp opens.



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 8: Refasten and secure roll tube to electric motor shaft with 3/8" x 2" cap screw ◑ and lock nut ◑◑. Install bearing spacers, radial ball bearings and bearing mount retainer. Secure with 1/4" lock nuts ◑.

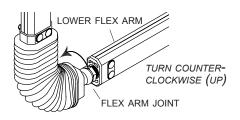


STEP 9: Refasten tarp to roll tube with existing U-clamps and screws. Tighten all fasteners securely. Tighten front and rear flex arm connections.

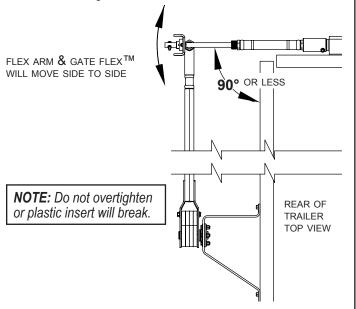
NOTE: Verify that flex arm is on vertical plane and parallel to face panel before proceeding. Make sure all fasteners holding motor to upper flex arm bracket are tightened securely.

REAR OF TRAILER

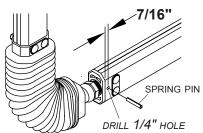
STEP 10: Place wrench on flex arm joint next to lower flex arm. Turn flex arm joint counter-clockwise (up) to move upper flex arm and Gate Flex™ from side to side.



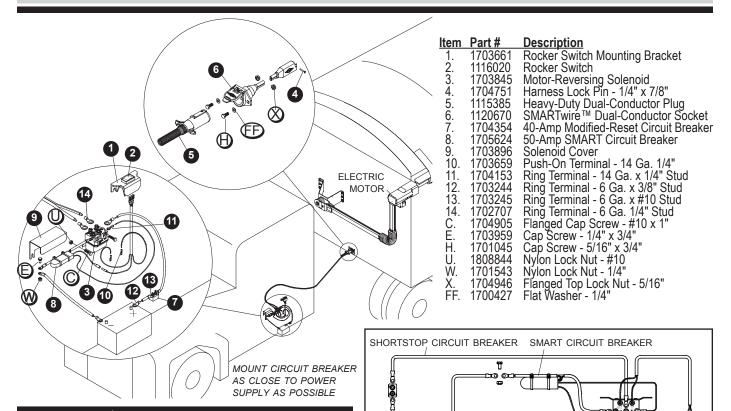
STEP 11: Keep turning flex arm joint until Gate Flex™ is parallel to side of trailer and at 90° angle to rear door. Do not overtighten.



STEP 12: Drill 1/4" hole through lower flex arm and flex arm joint as shown. Install 1/4" x 1-3/4" spring pin into drilled hole



STEP 13: Remove tension from rear arm by lowering roll tube to lowest position on side of trailer. Disconnect Gate Flex™ from splined shaft on roll tube. Remove carriage bolts and plates from lower arm. Slide bellow into position and re-assemble carriage bolts and plates. Tighten nuts and reconnect Gate Flex™ to splined shaft.

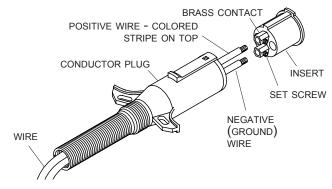


BATTERY

A WARNING

When transporting trailer, wiring from in-cab rocker switch must be connected to 4500 HD system on trailer. If motor is not connected to power while in transit, tarp may unwind and blow off.

- STEP 1: Mount solenoid in battery box or other location protected from elements and road debris. Solenoid posts should face up.
- STEP 2: Assemble conductor plug. Unfasten screw and remove insert from plug housing. Feed 6-ga. dual wire through plug housing. Strip insulation back 1/2" and insert bare wire strands into brass contacts. Ensure there are no loose wire strands that could short circuit. Tighten set screws to secure wires. Replace insert into plug housing and secure screw.



STEP 3: Route 6-ga. dual wire from conductor plug to solenoid and cut wire to length. Crimp and connect 1/4" ring terminals to rear two solenoid posts. Striped wire should be connected to right rear post. Orient wires so shield can be mounted over solenoid later.

JUMPER WIRE

PROVIDED

SOLENOID

ROCKER SWITCH

CONDUCTOR PLUG

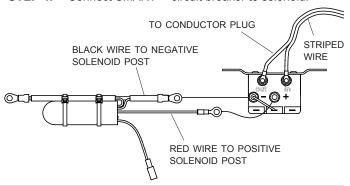
NOTE: Cut wires to length and strip only enough wire insulation to install ring terminals. Insert bare wire into ring terminals and crimp securely.

STRIP WIRE INSULATION

STRIP WIRE INSULATION

CRIMP SECURELY

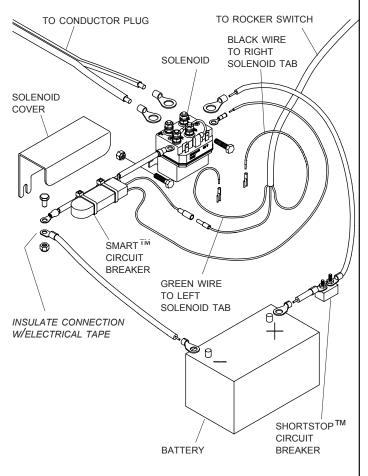
STEP 4: Connect SMART™ circuit breaker to solenoid.



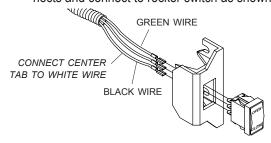
STEP 5: Connect SMART™ breaker to battery. Make jumper out of black 6-ga. wire (no stripe). Connect one end to battery negative post and bolt other ring terminal to SMART™ breaker. Insulate bolted connection with electrical tape.

NOTE: When splitting dual 6-ga. wire into separate halves to make jumper wires, use sharp knife to split webbing in order to prevent insulation from tearing and exposing metal strands.

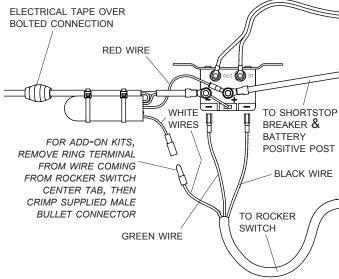
STEP 6: Locate ShortStop™ circuit breaker within 1' of battery positive post. Make jumper wires out of 6-ga. wire (with stripe) for connecting ShortStop™ breaker between positive battery post and positive solenoid post. Connect breaker to positive solenoid post, but do not connect breaker to positive battery post at this time.



STEP 7: Mount rocker switch in cab in convenient location on dash panel or door jamb. Crimp female quick disconnects and connect to rocker switch as shown.



STEP 8: Route 14-ga. 3-conductor cable between rocker switch and solenoid.



STEP 9: Mount solenoid cover over solenoid and tighten fasteners.

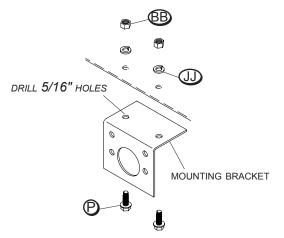
STEP 10: Connect ShortStop[™] breaker to battery positive post and test operation.

OPERATION

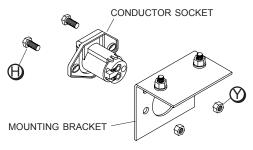
- **A)** Check motor direction by activating switch to OPEN. If switch is running system backwards, swap green and black quick disconnects on solenoid.
- **B)** Close tarp: Push switch to CLOSE and hold. Observe tarp and release switch when tarp is fully closed.
- **C) Open tarp:** Push switch to OPEN and hold. Observe tarp and release switch when tarp is fully open, but before it tightens against tarp stops.

NOTE: Release switch at end of cycle or SMART™ circuit breaker will trip. SMART™ breaker will reset after rocker switch is released. SMART™ breaker should always trip before ShortStop breaker™.

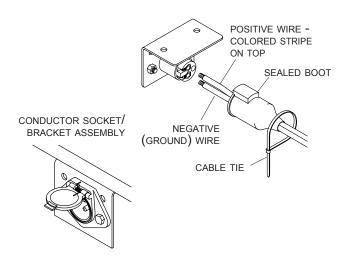
STEP 1: Mount bracket at suitable location on front of trailer, usually near existing plugs. Mark and drill 5/16" holes and fasten with 3/8" x 1" self-tapping screws ②, lock washers ③ and nuts ③.



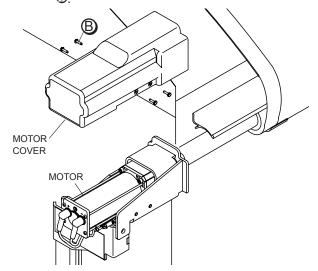
STEP 2: Fasten conductor socket to mounting bracket with 5/16" x 3/4" cap screws ⊕ and lock nuts ♥.



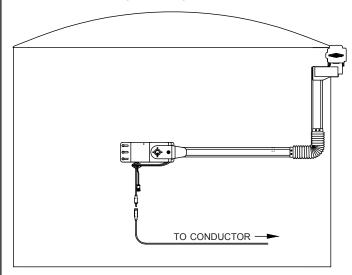
Bring 6-ga. wire from lower end of pivot arm through sealed boot. Connect wire ends to conductor socket, aligning positive wire on socket with positive wire on conductor plug. Slide sealed boot against conductor socket and secure boot to wire with cable tie.



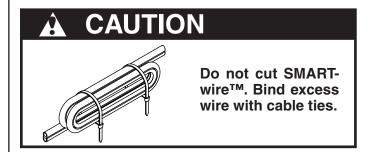
STEP 3: Fasten motor cover onto motor with #10 x 3/4" screws



FRONT VIEW OF TRAILER

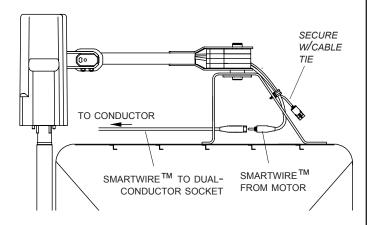


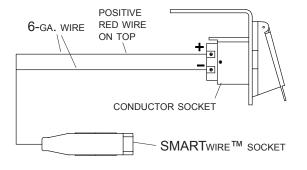
NOTE: Wire lengths are predetermined. Before installing SMARTwire $^{\text{TM}}$ components, review and confirm wire routing so wires will reach components with ample room for connection.



WIRING SCHEMATIC

STEP 1: Connect SMARTwire™ from electric motor to SMARTwire™ from dual conductor and secure connection with lock pin. Secure all wires to trailer with cable clips and screws. If needed, use cable ties.



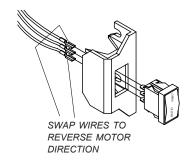


NOTE: Coat each connection with dielectric grease (P/N 1704378) to prevent corrosion.

A CAUTION

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

STEP 2: Check motor direction by activating switch to *OPEN*. If switch is running system backwards, program remote to wireless receiver (see programming instructions) and rewire as directed in Troubleshooting Guide.

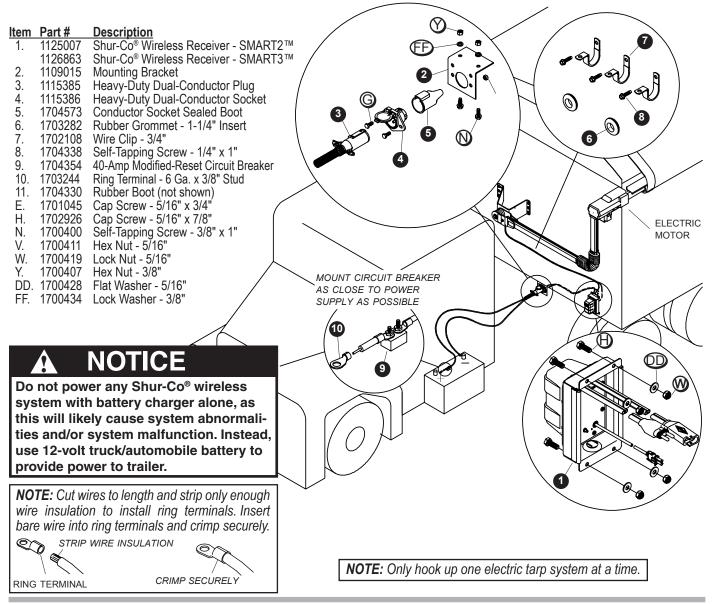


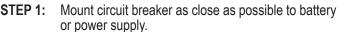
OPERATION:

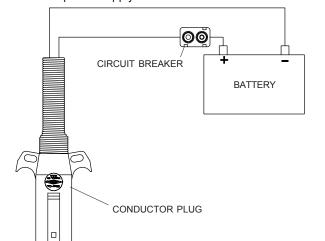
A) Close tarp: Push switch to *CLOSE* and hold. Observe tarp and release switch when tarp is fully closed.

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

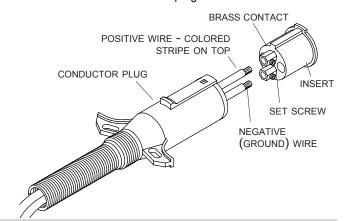
NOTE: Release switch at end of cycle or modified-reset circuit breaker will trip. After breaker resets, switch will activate motor again. To reduce unnecessary strain on tarp components, release switch at end of each cycle.





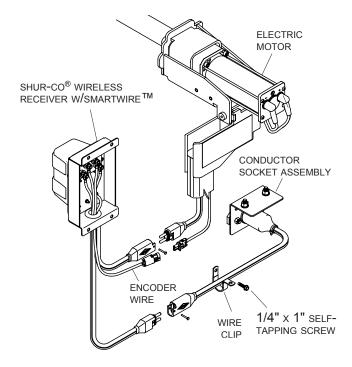


STEP 2: Unfasten and remove insert from conductor plug. Feed 6-ga. wire through plug and into brass contacts on insert. Tighten set screws to secure wires. Replace insert into conductor plug and secure screw.



STEP 1: For ease of operation from ground, locate wireless receiver on front of dump body. Fasten receiver to dump body with screws ① or drill 5/16" holes and fasten with screws ①, washers ① and nuts ①.

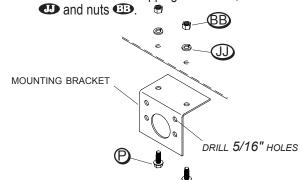
STEP 2: Connect SMARTwire[™] from wireless receiver to SMARTwire[™] from electric motor. Secure connections with lock pins. For SMARTwire[™] systems, connect encoder wire from receiver to encoder wire from motor. Secure wires to trailer with cable clips and screws. If needed, use cable ties.



STEP 3: Check motor direction by activating switch to *Open*. If switch is running system backwards, program remote to wireless receiver and rewire as directed in troubleshooting guide in remote instructions.

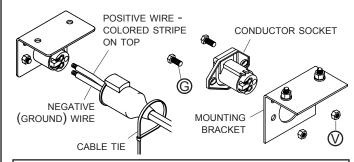
NOTE: Receiver may be pressure washed, but keep nozzle at least 3' from system while spraying.

STEP 1: 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 ②, lock washers



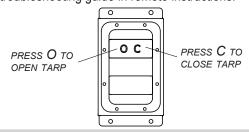
STEP 2: Identify 65' 6-ga. or 90' 4-ga. SMARTwire™. Route bare end of wire along dump body from wireless receiver mounted on dump body to pivot point on trailer. Continue routing bare end of wire along trailer frame from pivot point on trailer to conductor socket.

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

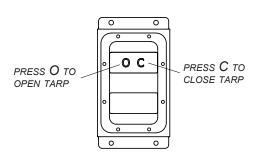


NOTE: Use dielectric grease (P/N 1704378) to prevent corrosion on terminals.

STEP 2: Check motor direction by pressing either button. If button is released and operation continues, system is in *Express Mode*. To stop operation, press button again. If switch is running system backwards, program remote to wireless receiver and rewire as directed in troubleshooting guide in remote instructions.



Operation P/N 1121683 Rev. J



NOTE: 4500 Series HD trailer-mounted control boxes now operate in **EXPRESS MODE**. Pressing **O** or **C** button on control box initiates express open or close operation. After that, pressing either button will stop tarp operation. If neither button is pressed, operation will automatically stop at end of travel. On SMART2™ systems, if travel stops are not set, trailer-mounted control box operates in MANUAL (momentary) MODE. Remotes for both systems are shipped with tarp channel set to **EXPRESS MODE** and can be configured as desired.

NOTE: Tarp systems will operate in **EXPRESS MODE** when using buttons on trailer-mounted control box, if encoder wires are connected. For SMART2™ systems, travel stops must also be set, otherwise you must press and hold buttons. When in **EXPRESS MODE**, press and release buttons to open and close tarp (operation will continue until complete after releasing button). When in MANUAL **MODE**, press and hold buttons (operation will stop if button is released). See remote instruction manual for detailed instructions on remote operation.

NOTE: Tarp systems operate in **EXPRESS MODE** when commanded to operate from buttons on trailer-mounted control box. Closing remote lid or pressing select button will not stop system in this case. Pressing OPEN or CLOSE button on remote will stop system if in range.

NOTE: Tarp systems operate in **EXPRESS MODE** when using buttons on trailer-mounted control box, if encoder wires are connected. For SMART2™ systems, travel stops must also be set. Otherwise you must press and hold buttons (see remote instructions for SMART2™ systems).

WARNING



DO NOT OPERATE MOTORIZED SYSTEMS WHILE INDIVIDUALS 38 ARE ON OR OCCUPYING 8 BOX/TRAILER/HOPPER.

THIS TARP SYSTEM OPERATES IN EXPRESS MODE. UPON PRESSING THE OPEN/CLOSE BUTTON THE TARP SYSTEM WILL CONTINUE TO TRAVEL TO THE END STOPS. TO STOP THE MOTOR, PRESS EITHER BUTTON. READ OWNERS MANUAL BEFORE OPERATING. CONTACT SHUR-CO® FOR ALL TARP **SYSTEM QUESTIONS AT 1-866-748-7435.**

NOTICE

Decal shown above must be placed above wireless receiver on front of box.

WARNING

Stay clear of roll tarp and arm(s) area of travel during operation. Failure to do so could result in serious injury or death.



Stay clear of the roll tarp and arm(s) sweep area, from front-to-back, during operation. Failure to do so may result in a fall/impact causing serious injury or death. For repair/service of equipment, reference manual for proper safety precautions before proceeding.

Decal P/N 1705523







1-800-474-8756 SHURCO.com



A W

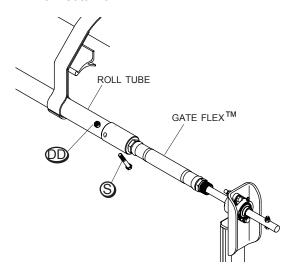
WARNING

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.

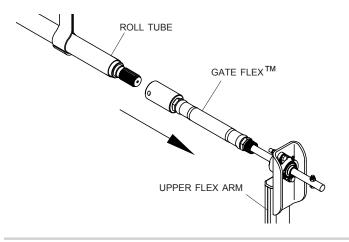
NOTE: Store manual crank arm either in truck or mounted to trailer. (Example: above kingpin in apex.)

Perform following steps to convert 4500 Series HD electric tophinge system to manual crank operation. Same steps apply to convert side-hinge system.

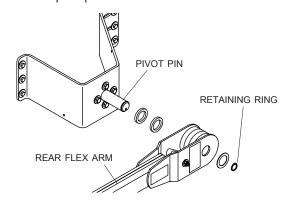
STEP 1: Close tarp but let roll tube hang loose under latchplate. Remove 3/8" x 2-1/2" cap screw ⑤ and lock nut ௵ from Gate Flex™.



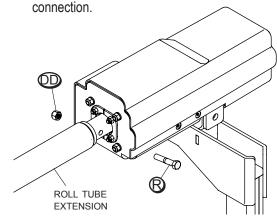
STEP 2: Carefully slide Gate Flex™ off roll tube. Flex arm will be under tension and have some downward force.



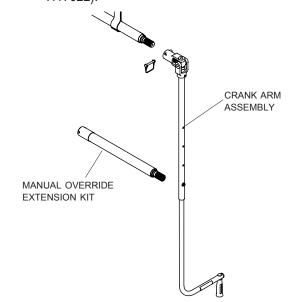
STEP 3: Remove retaining ring on rear flex arm. Carefully slide arm off pivot pin.



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

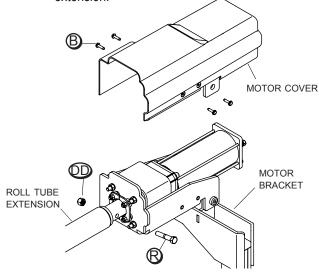


STEP 5: Install crank arm assembly as shown in Shur-Lok® owner's manual, at www.shurco.com. You may need optional manual override extension kit (P/N 1117022).



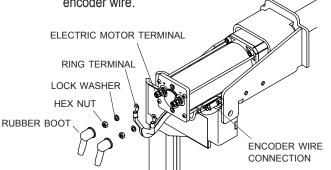
REMOVE EXISTING MOTOR

STEP 1: Disconnect electric power to trailer. Unfasten and remove motor cover. Unfasten 3/8" x 2" cap screw and lock nut holding motor shaft to roll tube extension.

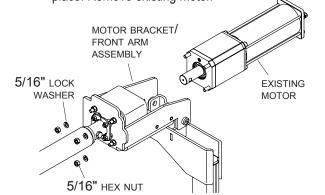


NOTE: Leave roll tube fastened to motor bracket.

STEP 2: Disconnect electric wires from motor terminals and encoder wire.

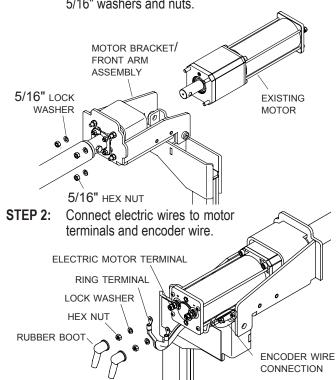


STEP 3: Unfasten and remove only 5/16" lock washers and hex nuts holding motor to motor bracket/front arm assembly, leaving motor mount bearing retainers in place. Remove existing motor.

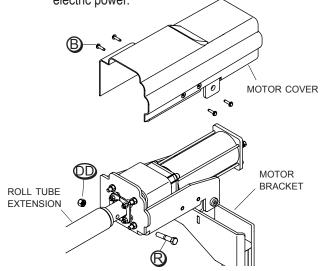


INSTALL NEW MOTOR

STEP 1: Install new motor. Fasten motor to motor bracket with 5/16" washers and nuts.

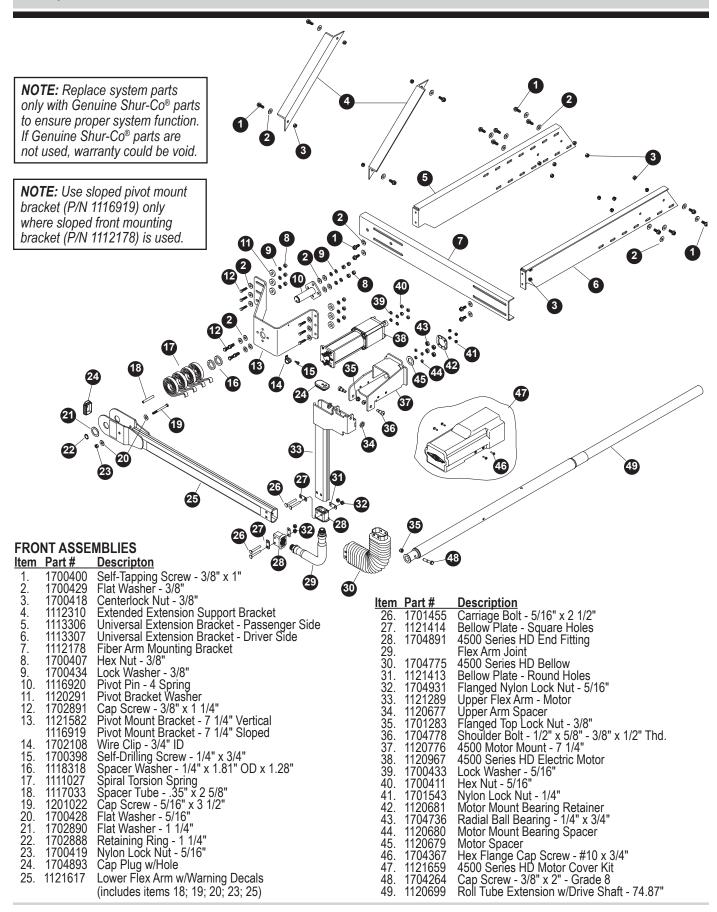


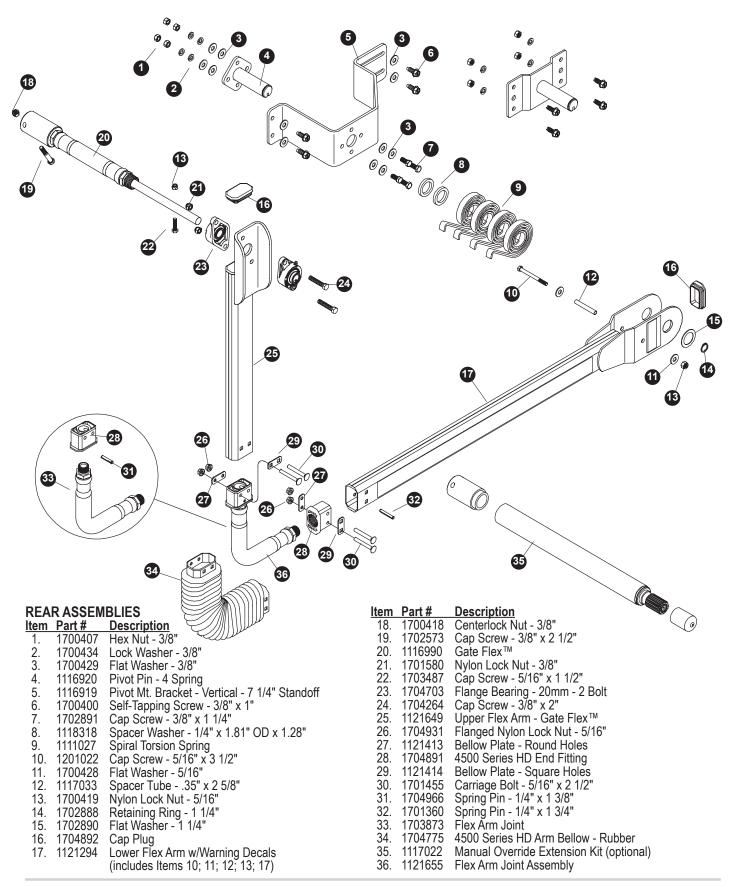
STEP 3: Fasten motor shaft to roll tube with 3/8" x 2" cap screw
② and lock nut ③D. Replace motor cover and fasten to motor with #10 x 3/4" cap screws ③. Reconnect electric power.

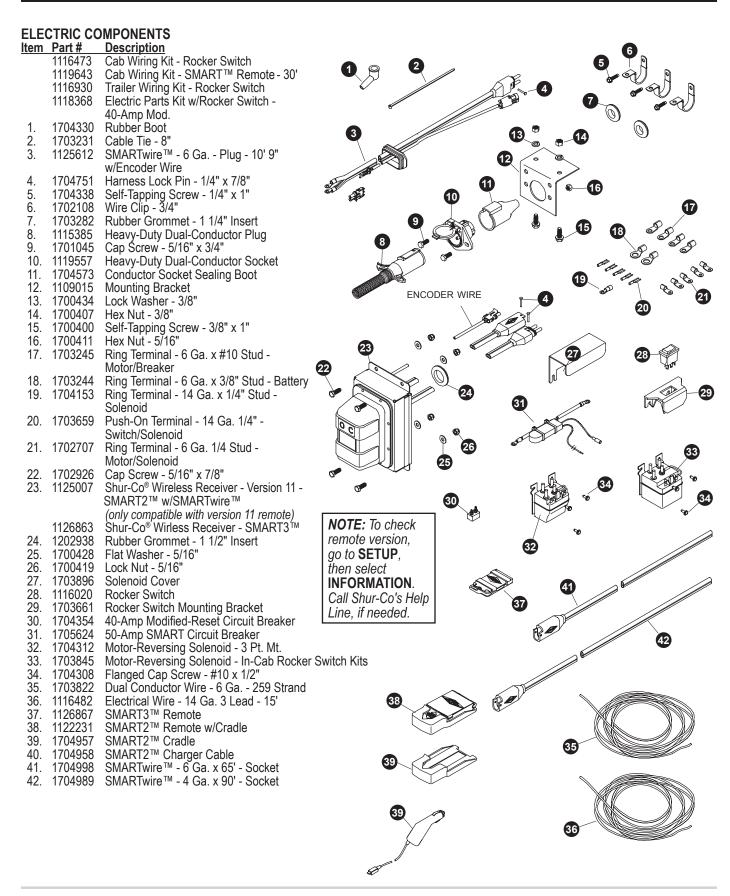


A CAUTION

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







P/N 1121683 Rev. J **Notes**

P/N 1121683 Rev. J **Notes**

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