TARP SYSTEMS & ACCESSORIES

P/N 1107910 Rev. EE



3



Grain Carts & Gravity Wagons

READ BEFORE INSTALLING

2309 SHUR-LOK STREET • YANKTON, SD 57078-0713 PHONE: 1-800-SHUR-LOK (1-800-474-8756) • FAX: 1-605-665-0501 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.

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

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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 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 **A** 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.
- 2. Keep body and clothing 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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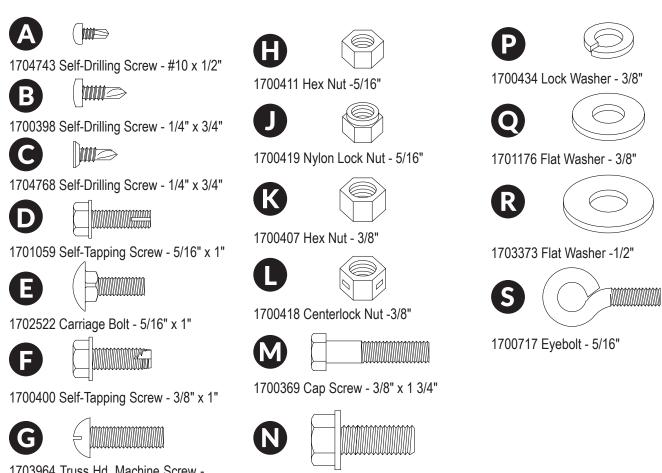
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TOOLS REQUIRED

- 1. Welder
- 2. #3 Phillips Insert Bit or #3 Phillips Screw Driver (use with 13/64" drill bit)
- 3. #2 Phillips Screw Driver Bit
- 4. Air or Electric Wrench w/9/16" Socket
- 5. 9/16" Combination Wrench
- 6. Electric Drill
- 7. 3/16" Drill Bit
- 8. 1/4" Drill Bit
- 9. 5/16" Drill Bit (for 3/8" self-tapping screws)
- 10. 3/8" Drill Bit (for 3/8" cap screws)
- 11. 13/32" Drill Bit
- 12. Tape Measure
- 13. Pencil
- 14. Clamps
- 15. Band Saw or Hack Saw
- 16. Grinder
- 17. Hammer

<u>Optional</u>

Hot Knife, Spray Paint, Caulk or Rubber Sealant



1703964 Truss Hd. Machine Screw - 3/8" x 1 1/4"

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

1702996 Cap Screw - 1/2" x 1 1/4"

TARP INSPECTION

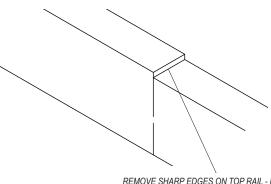
Tarp length: Determine tarp length with slight tension applied. Compare actual tarp length with length stated on sheet attached to tarp. If tarp length does not match length on sheet, do not proceed. Call your local dealer, or call Shur-Co[®] Customer Service at 1-866-748-7435.

BOX PREPARATION

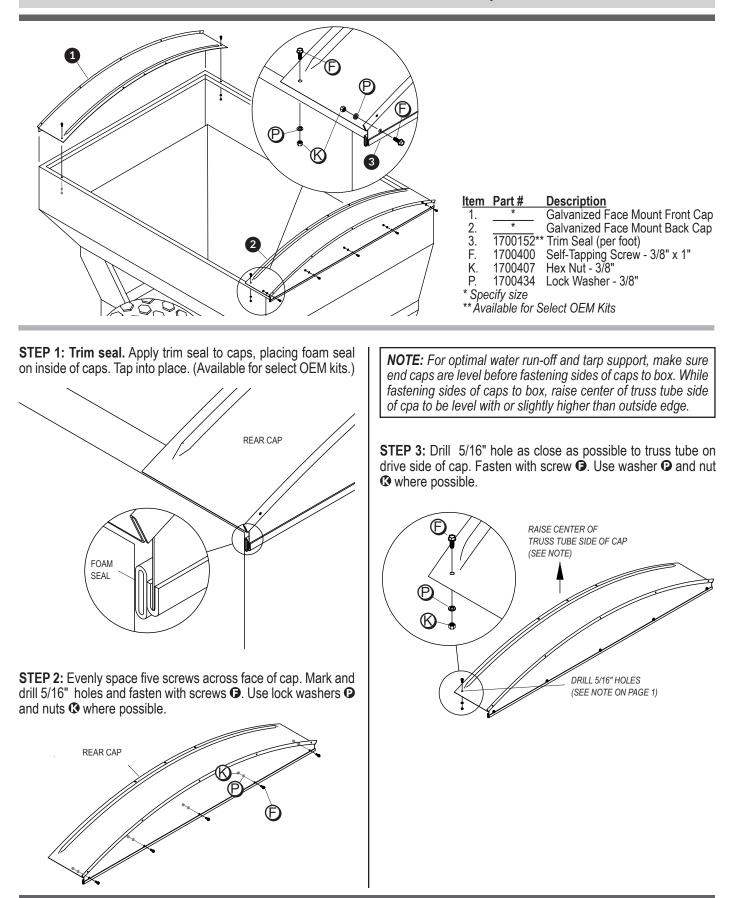
Prepare your box before installing your Shur-Lok[®] tarping system. Remove or grind any sharp edges smooth to prevent tarp damage.

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

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



REMOVE SHARP EDGES ON TOP RAIL - PAINT ALL EXPOSED METAL



SHUR-CO® HELP LINE: 1-866-748-7435

End Caps - Galvanized Steel

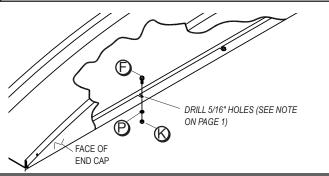
STEP 1: Center end caps on box. Mark hole locations on top rail

Ð

HOLES

STEP 2: Drill 5/16" holes at marked locations on top rail. Fasten end cap to rail with screws **9**. Use washers **9** and nuts **8** where possible.

TIP: Thread 3/8" x 1" self-tapping screws into top rail, back screws partially out, slide cap into place and tighten screws.

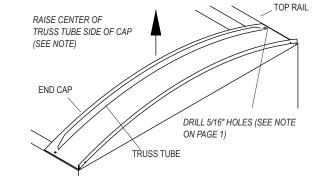


STEP 3: Drill two 5/16" holes, as close as possible to truss tube, through end cap and top rail.

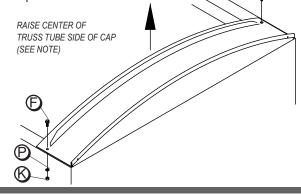
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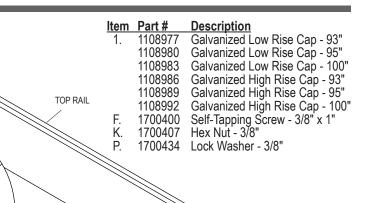
DRILL 5/16" HOLES

NOTE: For optimal water run-off and tarp support, make sure end caps are level before fastening sides of caps to box. While fastening sides of caps to box, raise center of truss tube side of cap to be level with or slightly higher than outside edge.









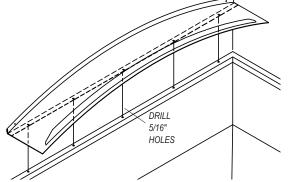
P/N 1107910 Rev. EE

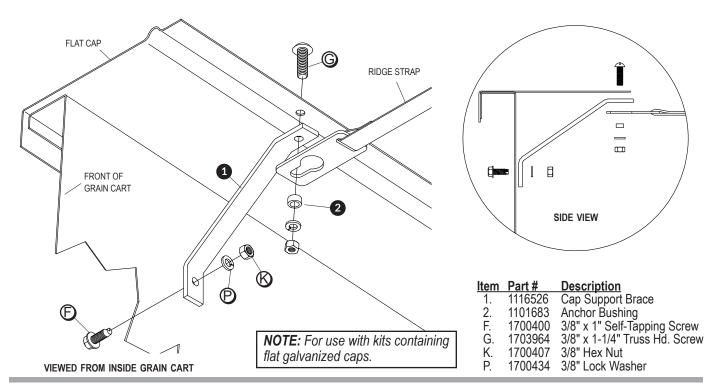
using slots in cap as a template.

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

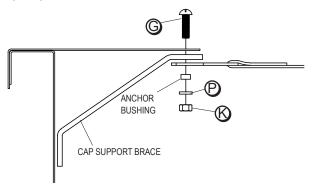
TIP: Use bead of caulk or rubber seal where cap meets top rail to

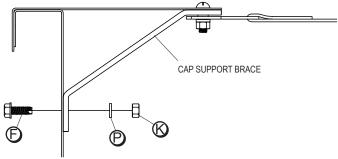
improve seal on end caps.



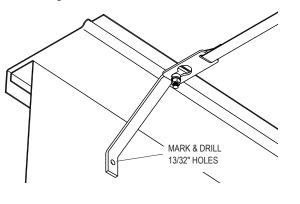


STEP 1: Fasten cap support braces into pre-drilled holes in flat cap as shown, using screws **(G)**, bushings, washers **(D)** and nuts **(B)**. Finger tighten.

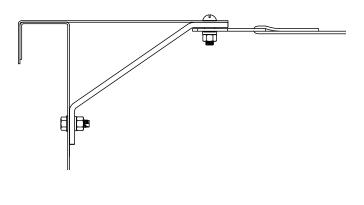


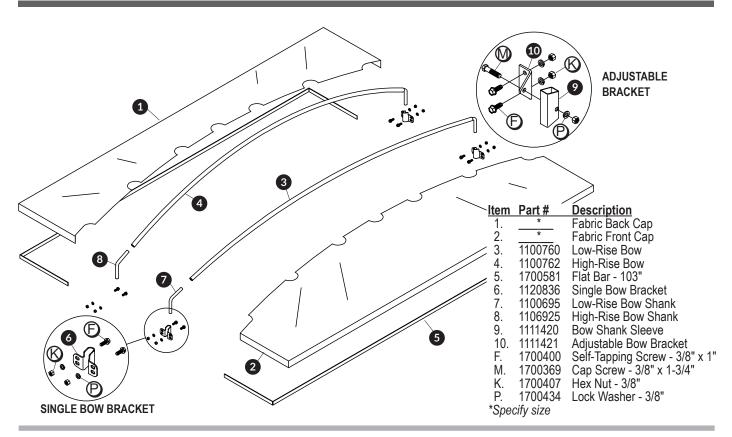


STEP 2: Mark and drill 13/32" holes in grain cart, using cap support brace as a guide.

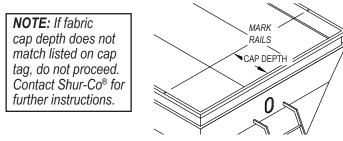


STEP 4: Secure all fasteners.

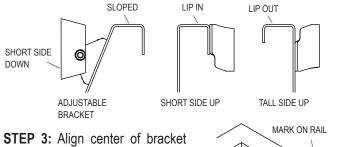




STEP 1: Measuring from front of box, mark cap depth on both sides of top rail per cap depth listed on cap tag.



STEP 2: Position bow brackets according to step 4 with the short side up for lip-in boxes or the tall side up for lip-out boxes. If using adjustable bow bracket for grain carts with sloped side rails, position short side down.

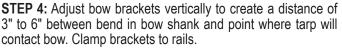


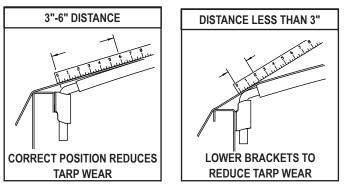
FRONT OF BOX

BOW

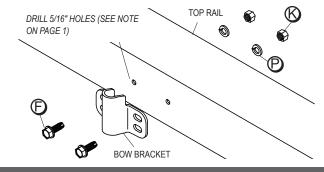
BRACKET

with marks.

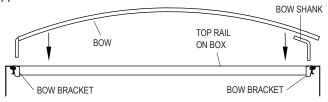




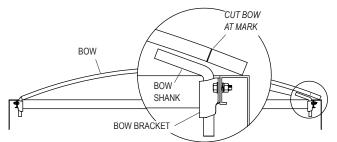
STEP 5: Mark and drill 5/16" holes. Mount brackets with screws **(b)**, washers **(b)** and nuts **(c)**.



STEP 6: Place bow into bow bracket. Place loose bow shank in opposite bow bracket.

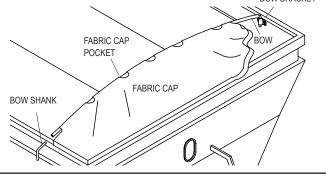


STEP 7: Align bow with bow shank. Mark bow at point where bend starts on shank. Remove bow and cut at mark.



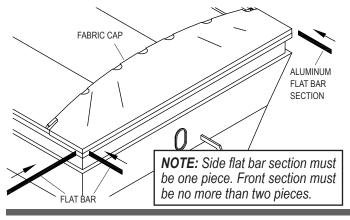
NOTE: Cut bow to exact length. If bow is too short and not welded to shank, pressure from tarp will flatten bow arch.

STEP 8: Insert bow into fabric cap pocket. Replace bow shank into bow and bow bracket.



NOTE: Use correct fabric cap for box. Inconsistencies in boxes may cause cap to fit less than perfectly.

STEP 9: Cut flat bar sections 1/2" shorter than front and side pocket lengths. Insert sections into fabric cap pockets.



STEP 10: Install rear fabric cap in same manner as front cap.

SHOCK CORD OPTION

NOTE: Latchplate and tarp must be installed before installing shock cords and rope anchors. See page 10 to install shock cords and rope anchors.

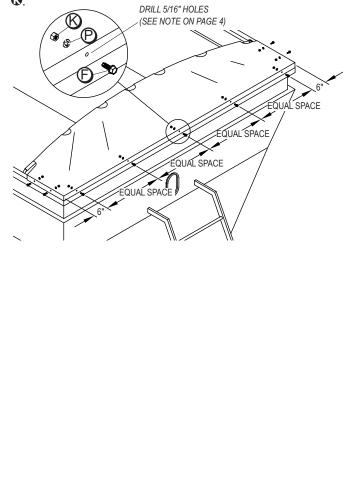
BOLT-DOWN OPTION

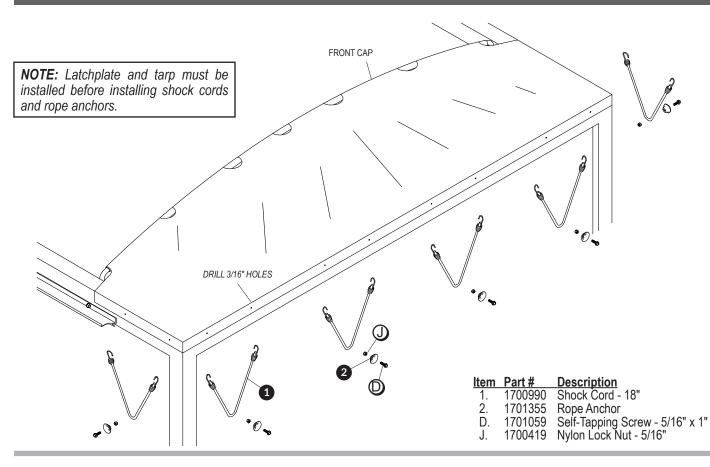
NOTE: Fabric caps may be bolted to box after aluminum flat bar sections have been installed. It is not necessary to install tarp and latchplate first.

STEP 11: Square up fabric caps on grain cart.

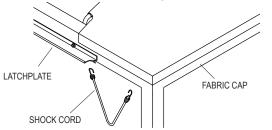
STEP 12: Measure and mark a minimum of 5 hole locations across front of fabric cap. Measure and mark hole locations 6" from each side of fabric cap, equally spacing remaining holes. Mark 2 hole locations on each side of fabric cap.

STEP 13: Drill 5/16" holes through fabric cap, aluminum flat bar and box. Fasten cap to box with screws **(P**), washers **(P)** and nuts **(Q**).

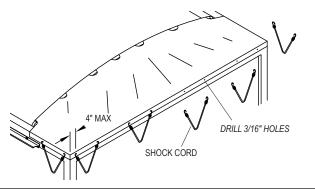




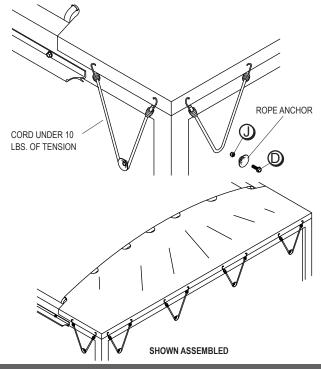
STEP 1: Locate one shock cord on each side of cap, as close as possible to center of cap without touching latchplate.

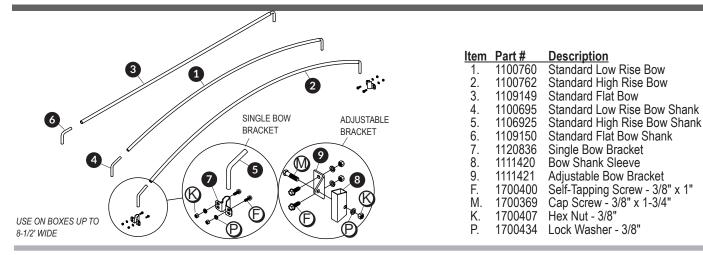


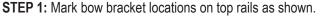
STEP 2: Equally space remaining shock cords across face of fabric cap. Drill 3/16" holes through aluminum flat bar and hook shock cords into holes.

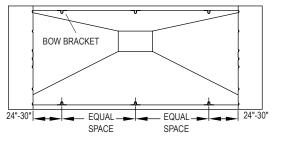


STEP 3: Locate rope anchors so shock cords will receive at least 10 pounds of force. Drill 1/4" holes and fasten rope anchors with screws O and nuts O.

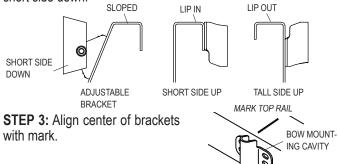




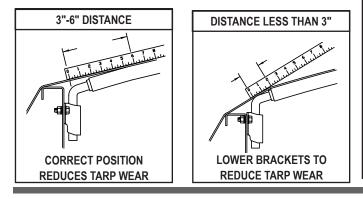




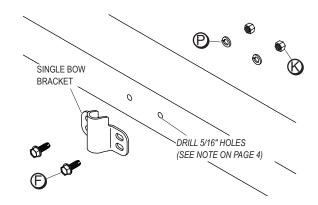
STEP 2: Position bow brackets according to Step 4 with short side up for lip-in boxes or tall side up for lip-out boxes. If using adjustable bow bracket for grain carts with sloped side rails, position short side down.

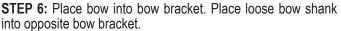


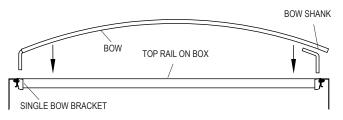
STEP 4: Adjust bow brackets vertically to create distance of 3" to 6" between bend in bow shank and point where tarp will contact bow. Clamp brackets to rails.



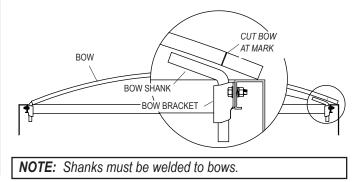
STEP 5: Mark and drill 5/16" holes, then mount brackets with screws **G**, washers **D** and nuts **G**.







STEP 7: Align bow with bow shank. Mark and cut bow at point where bend starts on shank. Grind edges smooth and weld shank to bow. Install finished bows into bow brackets.

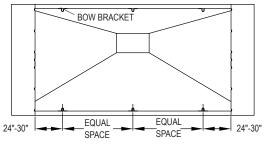


SHUR-CO[®] HELP LINE: 1-866-748-7435

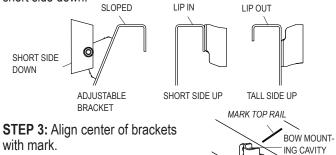
ltem	Part #	Description
1.	1106950	X-Wide Low Rise Bow
2.	1106926	X-Wide High Rise Bow
3.	1100685	X-Wide Bow Connector Tube
4.	1120836	Single Bow Bracket
5.	1111420	Bow Shank Sleeve
6.	1111421	Adjustable Bow Bracket
F.	1700400	Self-Tapping Screw - 3/8" x 1"
Μ.	1700369	Cap Screw - 3/8" x 1-3/4"
K.	1700407	Hex Nut - 3/8"
Ρ.	1700434	Lock Washer - 3/8"



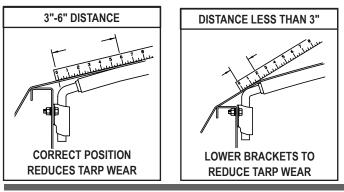
STEP 1: Mark bow bracket locations on top rails as shown.

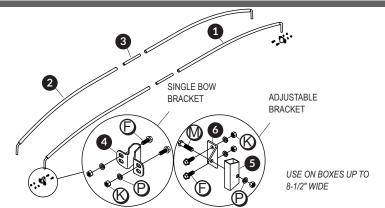


STEP 2: Position bow brackets according to step 4 with short side up for lip-in boxes or tall side up for lip-out boxes. If using adjustable bow bracket for grain carts with sloped side rails, position short side down.

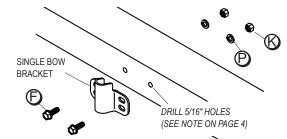


STEP 4: Insert bow weldments into bow brackets. Adjust bow brackets vertically to create distance of 3" to 6" between bend in bow shank and point where tarp will contact bow. Clamp brackets to rails.

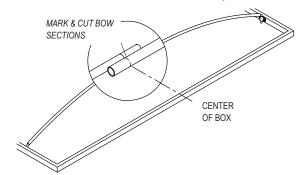




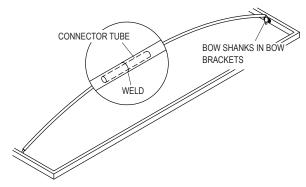
STEP 5: Mark and drill 5/16" holes. Mount brackets with screws **(P**, washers **(P**) and nuts **(C**).

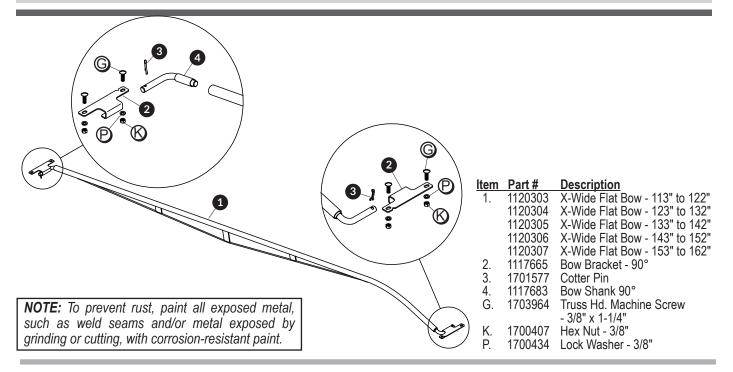


STEP 6: Place bow shanks into bow brackets on opposite sides of box. Mark point where bows intersect at center of box. Remove bow sections and cut sections at marked points.

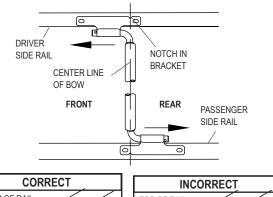


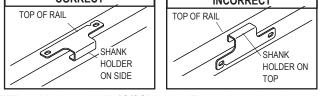
STEP 7: Insert connector tube into bow sections. Center connector tube with bow sections. Push bow upward while welding. Grind smooth. Insert bow shanks into bow brackets. Weld and grind smooth. Install bows into bow brackets.

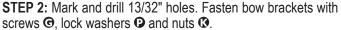


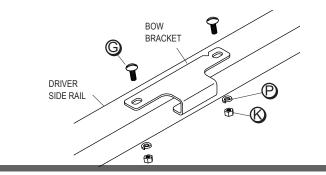


STEP 1: Mark bow bracket locations on top rails as shown in step 1 on page 11. Align center line of bows with notch in brackets as shown below.

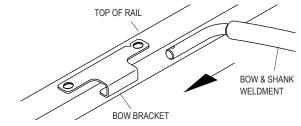


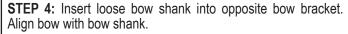


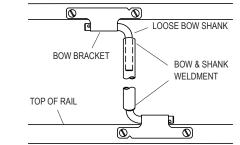




STEP 3: Insert bow and shank weldment into bow bracket.

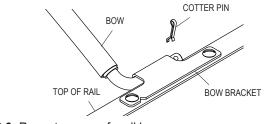






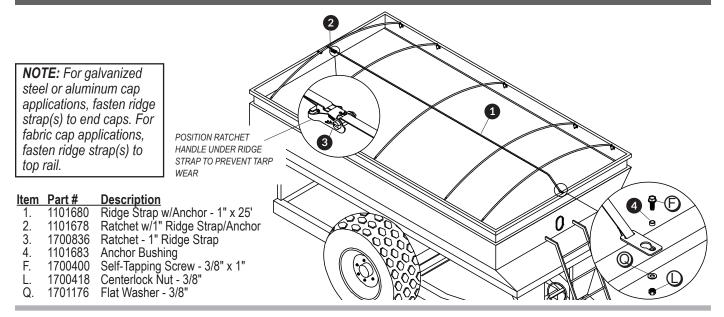
RECOMMENDED: Weld shanks to bows.

STEP 5: Install bows into bow brackets and secure with cotter pins.

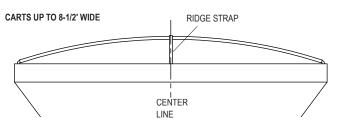


STEP 6: Repeat process for all bows.



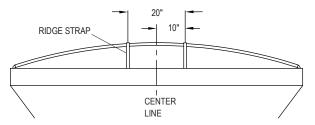


STEP 1: Mark hole locations at center of front and rear caps (mark top rails for fabric caps).



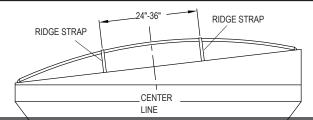
CARTS OVER 8-1/2' WIDE & SLOPED CARTS

Mark hole locations 20" apart on front and rear caps (mark top rails for fabric caps).



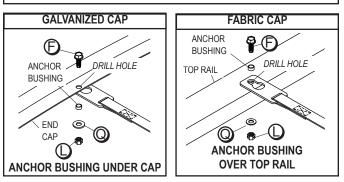
Mark hole locations 24" to 36" apart on front and rear caps (mark top rails for fabric caps).

TIP: Straps can be placed farther apart on carts with steeper slopes.

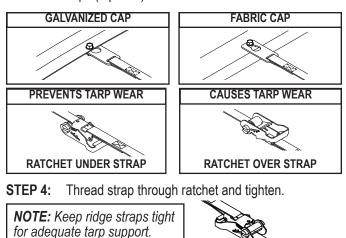


STEP 2: Drill holes and fasten ridge strap anchor bushings with screws **O**, washers **O** and nuts **O**.

NOTE: Use washers and nuts where needed and drill 13/32" holes. If using self-tapping screws only, drill 5/16" holes.

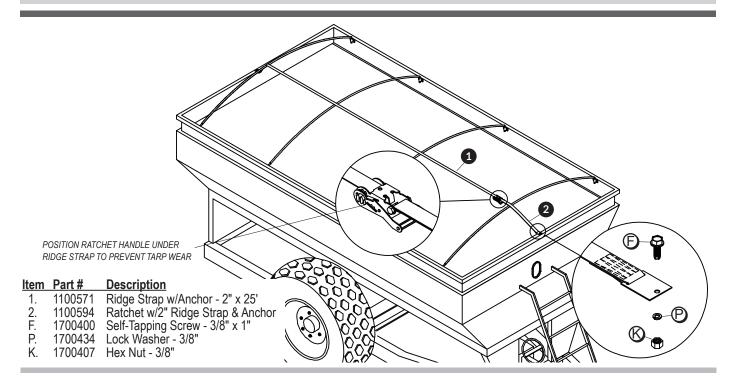


STEP 3: Install ridge strap(s) over bows. Hook ridge strap anchors onto anchor bushings on front and rear end caps (top rails).

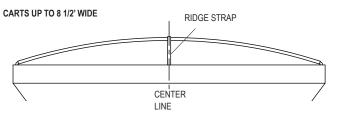


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Check tension regularly.

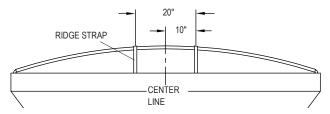


STEP 1: Mark hole locations at center of front and rear caps (mark top rails for fabric caps).



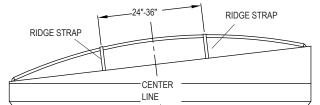
CARTS OVER 8 1/2' WIDE & SLOPED CARTS

Mark hole locations 20" apart on front and rear caps (mark top rails for fabric caps).



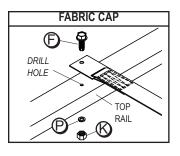
Mark hole locations 24" to 36" apart on front and rear caps (mark top rails for fabric caps).

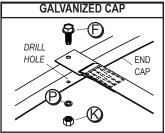
TIP: Straps can be placed farther apart on carts with steeper slopes.



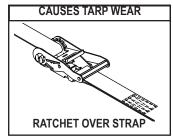
STEP 2: Drill holes and fasten ridge strap anchor with screws **(P**, washers **(D**) and nuts **(D**).

NOTE: Use washers and nuts where needed and drill 13/32" holes. If using self-tapping screws only, drill 5/16" holes.

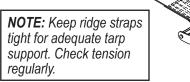


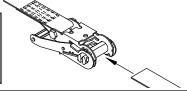


PREVENTS TARP WEAR

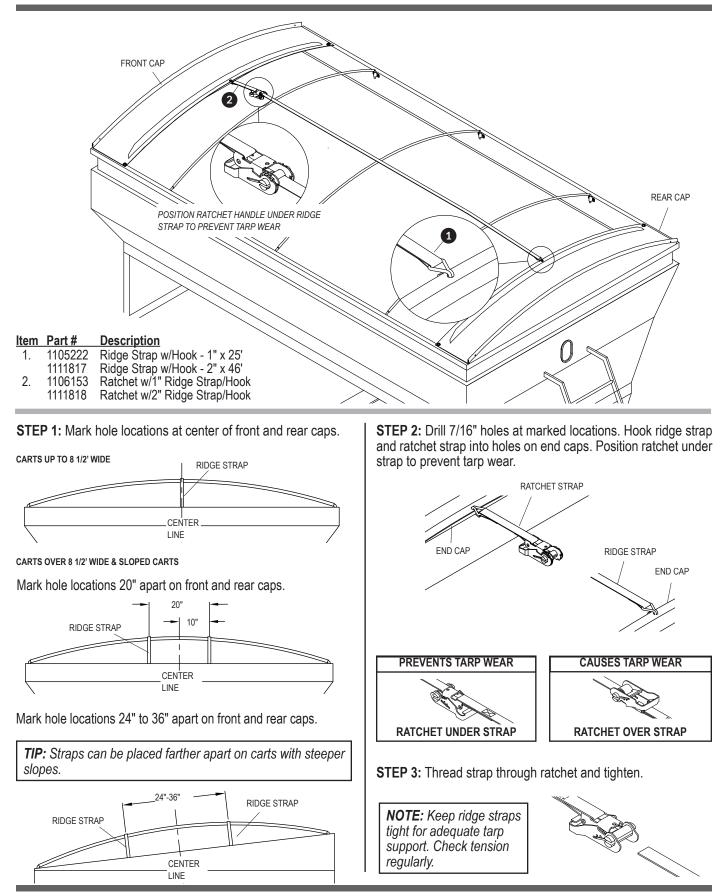


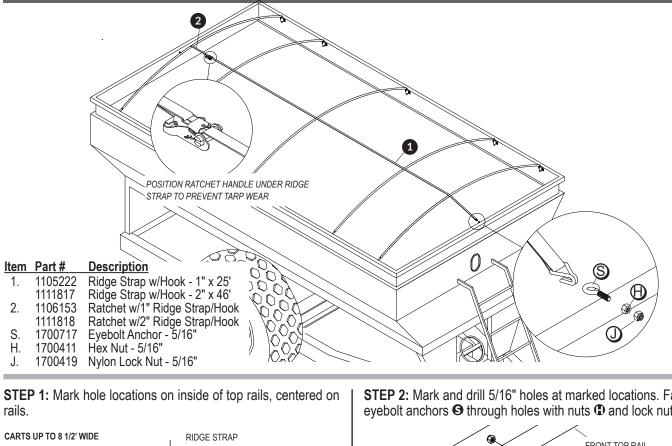
STEP 3: Thread strap through ratchet and tighten.

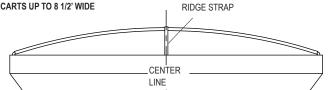




Ridge Straps - Metal Caps w/Hook

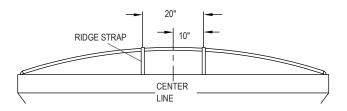






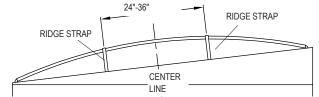
CARTS OVER 8 1/2' WIDE & SLOPED CARTS

Mark hole locations on inside of top rails, 20" apart.

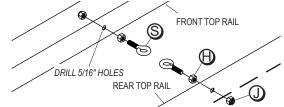


Mark hole locations on inside of top rails, 24" to 36" apart.

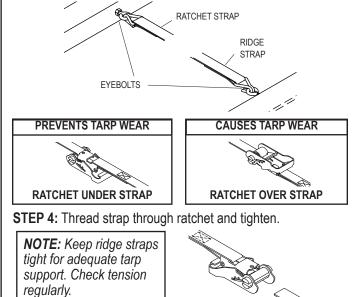
TIP: Straps can be placed farther apart on carts with steeper slopes.



STEP 2: Mark and drill 5/16" holes at marked locations. Fasten eyebolt anchors S through holes with nuts D and lock nuts D.



STEP 3: Hook ridge strap and ratchet strap into eyebolts. Position ratchet under strap to prevent tarp wear.



Adjustable Offset Bracket - Latchplate/Tarp Stop

1

0

0

2

0

NOTE: Adjustable offset brackets create space between box and tarp stops/latchplates. Use where obstacles interfere with standard tarp stop/latchplate installation or top rail does not provide enough material to mount tarp stops or latchplates.

Item Part # Description

- Adjustable Offset Bracket Latchplate/Tarp Stop Slider 1121507 1. Adjustable Offset Bracket - Latchplate/Tarp Stop - Fixed 2.
- 1121508 1702522
- Ε. Carriage Bolt - 3/8" x 1" 1700400
- Self-Tapping Screw 3/8" x 1" F. Ρ. 1700434 Lock Washer - 3/8"
- K. Hex Nut - 3/8" 1700407

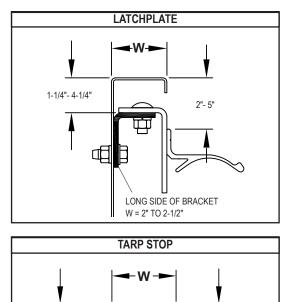
1-3/16" OR

1-11/16" OR

2-9/16"

NOTE: To determine tarp stop and latchplate bracket assembly locations along side of box, see next page.





ΨŦ

SHORT SIDE OF BRACKET W = 2-1/2" TO 3"

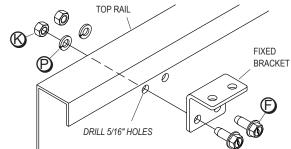
1-1/4"

 \cap

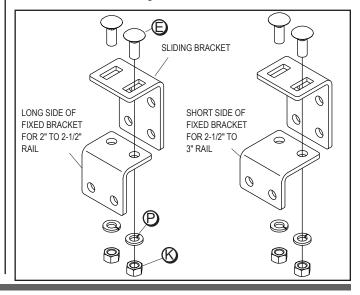
С

STEP 2: To position tarp stops 1-1/4" below top of rail as shown on page 20, align bracket with one of three measurements shown in Step 1 (depending on box design). Using holes in bracket as guide, mark and drill 5/16" holes. Fasten bracket to side of box with screws **O**, washers **O** and nuts **O**.

P

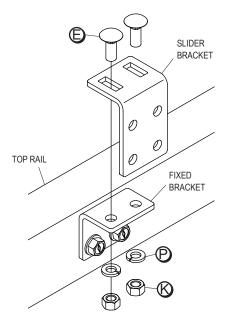


STEP 3: Assemble sliding bracket to fixed bracket as shown.

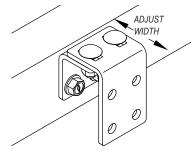


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STEP 4: Assemble slider bracket to fixed bracket with carriage bolts **(3)**, washers **(2)** and nuts **(3)**.

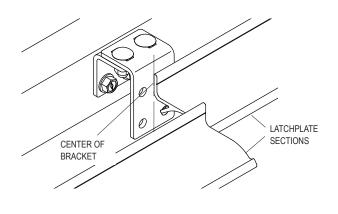


STEP 4: Adjust width to match hinge bracket width before tightening carriage bolts.

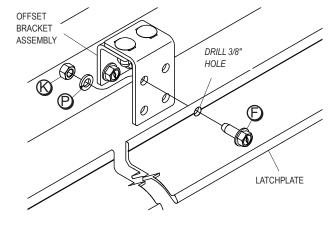


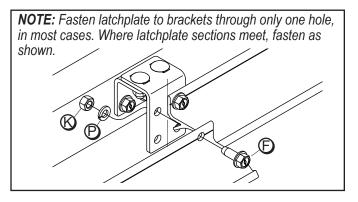
LATCHPLATES

STEP 1: Position one offset bracket assembly every 2' along top rail (see owner's manual). Where latchplate sections meet, center bracket assemblies as shown (see note).



STEP 2: Align latchplate with upper holes in offset bracket assemblies. Using holes in brackets as guide, mark and drill 3/8' holes in latchplate. Fasten latchplate to offset bracket assemblies with screws Θ , washers Θ and nuts \emptyset .

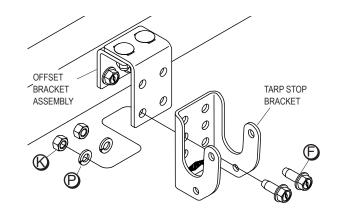




TARP STOPS

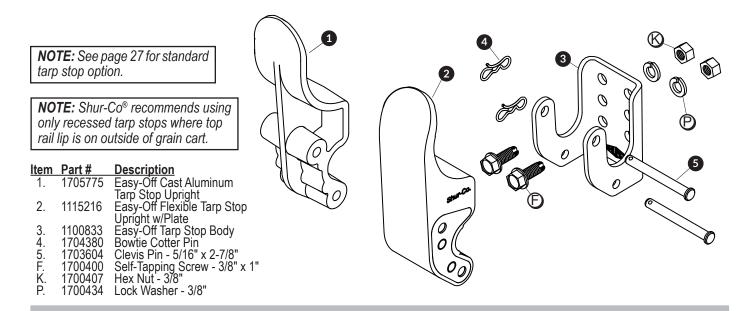
STEP 1: Locate one offset bracket at each tarp stop. See owner's manual for tarp stop locations.

STEP 2: Align middle holes in tarp stop bracket with lower holes in offset bracket assembly. Fasten tarp stop bracket to offset bracket assembly with screws **O**, washers **O** and nuts **O**.



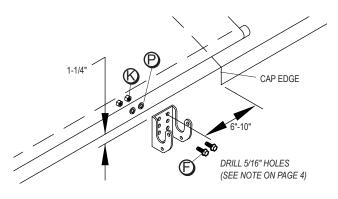
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Easy-Off Tarp Stop Option

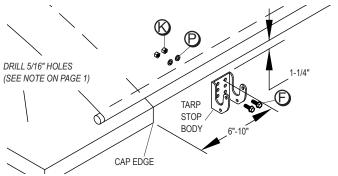


NOTE: Install tarp stop body on a vertical surface. Fasten through holes that best fit your top rail configuration.

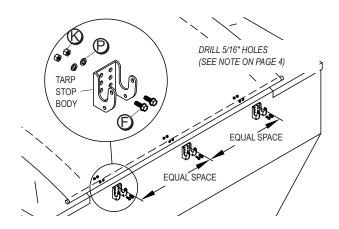
STEP 1: Locate first tarp stop body 6" to 10" from edge of end cap and 1-1/4" below top of side rail. Mark and drill holes and fasten to box with screws **G**, lock washers **D** and nuts **G**.



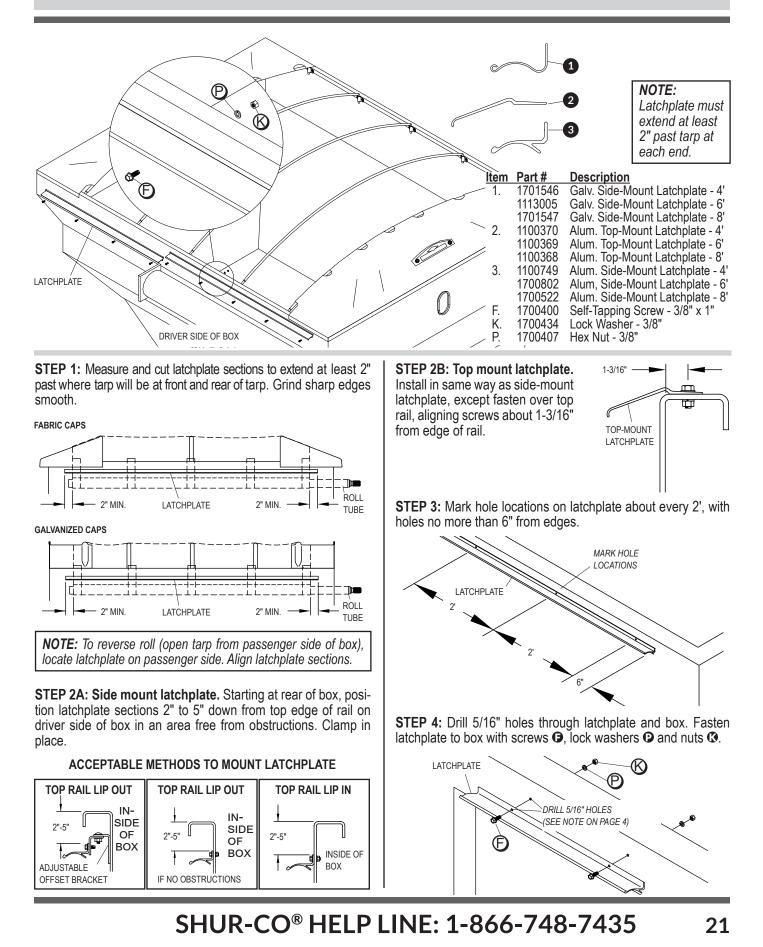
STEP 2: Square up tarp along length of box. Locate second tarp stop body 6" to 10" from edge of end cap and 1-1/4" below top of side rail. Mark and drill holes and fasten with screws Θ , lock washers Θ and nuts Θ .



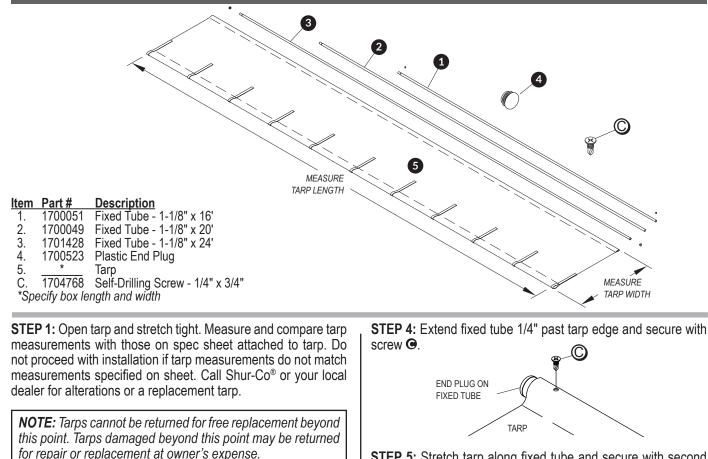
STEP 3: Equally space remaining tarp stop bodies. Mark and drill holes and fasten to box with screws **9**, lock washers **9** and nuts **6**.



NOTE: Tarp stop uprights will be installed after tarp has been set on box with fixed tube resting in tarp stop bodies. See page 25.



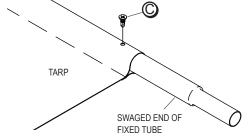
Tarp Inspection & Fixed Tube



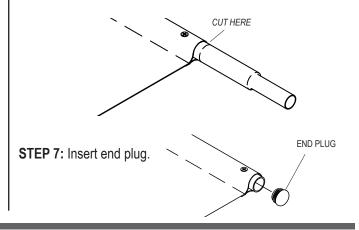
SWAGED END OF

ROLL TUBE SECTION

STEP 5: Stretch tarp along fixed tube and secure with second screw **O**.

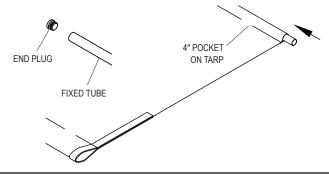


STEP 6: Cut fixed tube 1/4" past edge of tarp, removing swaged end. Grind smooth.



STEP 3: Install end plug into full end of tube weldment. Insert tube, end plug first, into 4" pocket on tarp.

STEP 2: For boxes over 24', insert swaged end of fixed tube section into full end of second tube section. Align tubes, weld

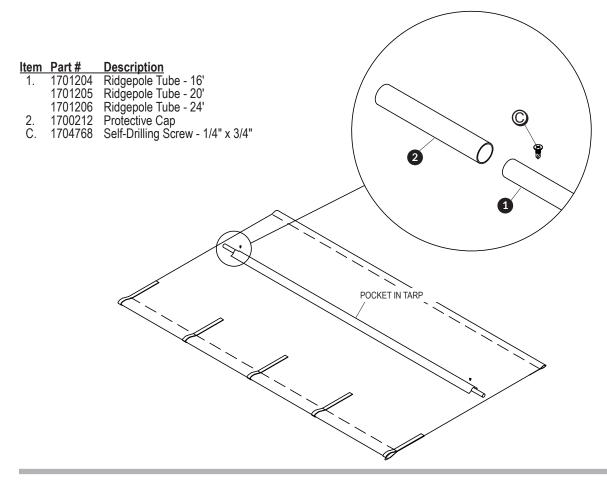


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and grind smooth.

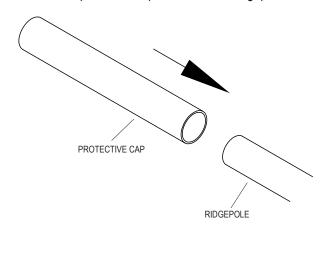
FULL END OF ROLL

TUBE SECTION

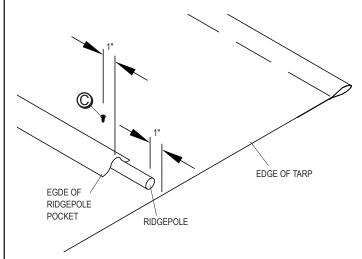


STEP 1: Cut ridgepole tube 2" shorter than tarp length. Grind rough edges smooth.

STEP 2: Install protective caps over ends of ridgepole.



STEP 3: Insert ridgepole into ridgepole pocket on tarp. Center ridgepole in tarp pocket and verify that ridgepole is 1" shorter than tarp on each end.



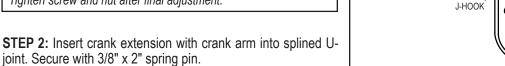
STEP 4: Install screw **O** 1" from edge of pocket. Pull tarp to full length and install screw 1" from opposite end of ridgepole. Equally space remaining screws.

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U-JOINT

Cranks & Crank Retainers

k extension. Fasten with	STEP 3: Assemble crank retainer standoff, bushing and pinless crank retainer or J-hook with screw \mathbf{O} .



NOTE: See page 25 to install crank retainer and page 29 to complete crank arm installation.

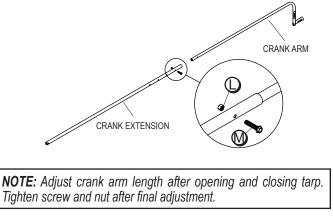
STANDOFF

BUSHING

Ø

PINLESS CRANK RETAINER

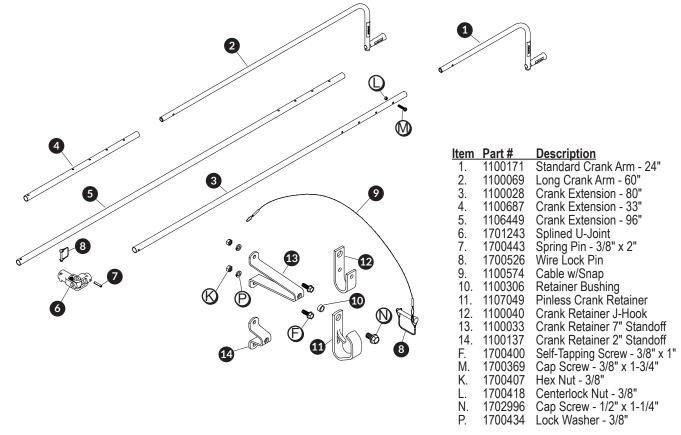
STEP 1: Insert crank arm into crank screw (1) and nut (1). Finger tighten.



CRANK EXTENSION

SPRING PIN





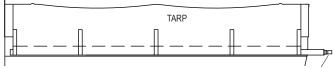
ROLL TUBE

STEP 1: Insert roll tube into 5" tarp pocket with splined shaft at rear of tarp.

TIP: Inflate 5" tarp pocket with air chuck while inserting roll tube.

STEP 2: Wind tarp around roll tube and set on top of bows with splined shaft at rear of cart.

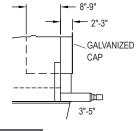
STEP 3: Unroll tarp and let roll tube side of tarp hang on driver side of cart.



SPLINED SHAFT ON ROLL TUBE AT REAR, DRIVER SIDE OF CART

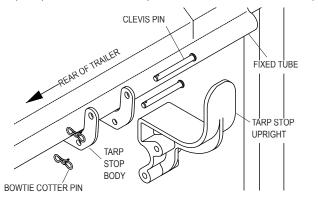
NOTE: If you are installing system to open from driver side of cart, roll tube will hang on passenger side of cart.

STEP 4: Center tarp between end caps on grain cart. Tarp must overlap end caps at least 8" to 9", leaving 2" to 3" of cap exposed. Splined shaft must extend 3" to 5" past rear of cart.



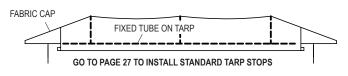
TARP STOPS

STEP 5A: Easy-off tarp stop option: Adjust tarp so fixed tube rests squarely in tarp stop bodies. Fasten tarp stop uprights to tarp stop bodies with clevis pins. Secure with bowtie cotter pins.



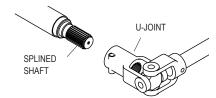
NOTE: Align bowtie cotter pins toward rear of trailer as shown.

STEP 5B: Standard tarp stop option: Adjust fixed tube to hang about 3" below top rail on passenger side of box. Square up tarp and fixed tube.

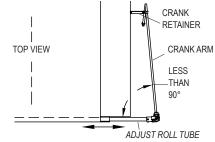


CRANK RETAINERS

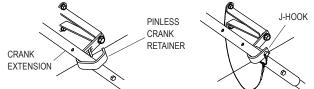
STEP 6: Slide U-joint on crank arm over splined shaft.



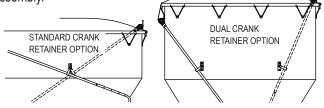
STEP 7: Adjust roll tube toward front or rear of cart until angle between roll tube and crank arm is less than 90° when viewed from above.



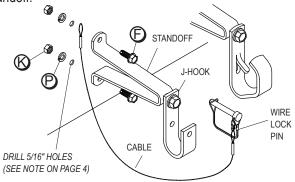
STEP 8: Mark locations for one or two crank retainers on back of box, where accessible by crank assembly from open or closed position.



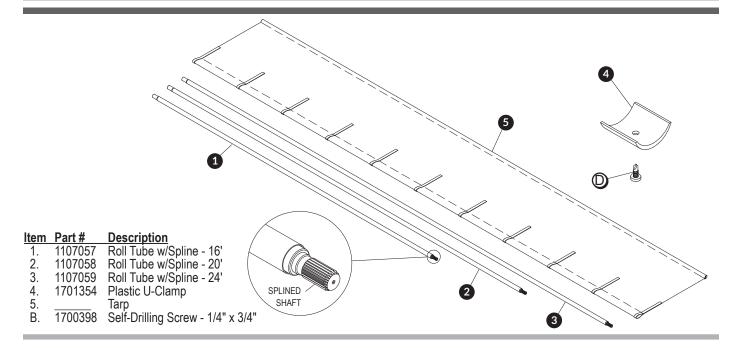
Locate crank retainer to hold crank extension portion of crank assembly.



STEP 9: Drill 5/16" holes and fasten crank retainer to box with screws **9**, lock washers **9** and nuts **3**. If using J-hook, snap cable onto wire lock pin and fasten cable between box and standoff.



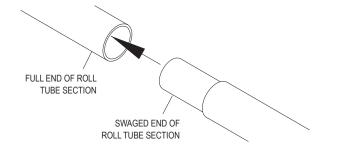
Roll Tube & Tarp Installation



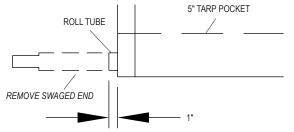
ROLL TUBE - continued

NOTE: To insert roll tube into tarp pocket and adjust position of roll tube, see previous page.

STEP 1: For box lengths over 24', insert swaged end of roll tube section into full end of second tube section. Align tubes, weld and grind smooth.

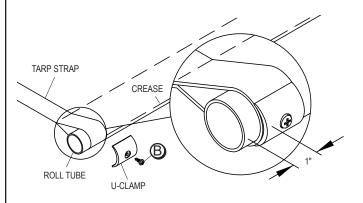


STEP 2: Cut roll tube 1" past front of tarp. Grind cut edge smooth.



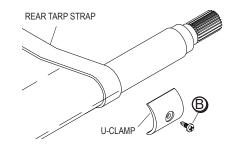
NOTE: If roll tube is swaged at front end, remove swage to allow Stretch Cord Return or Shur-Return[™] to fit into roll tube.

STEP 3: Center first U-clamp on front tarp strap, positioning screw ⁽¹⁾ on crease at bottom of tarp pocket. Fasten with screw ⁽²⁾.

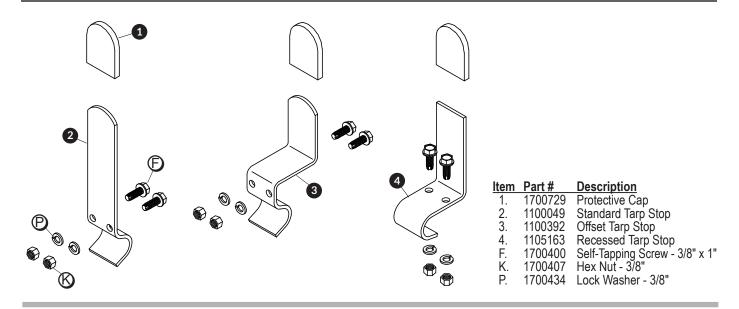


NOTE: If installing Shur-Return[™], follow instructions included with kit. Fasten U-clamps with 1/4" x 1/2" screws.

STEP 4: Stretch tarp along roll tube so both sides of tarp are equal in length. Install second U-clamp on rear tarp strap.



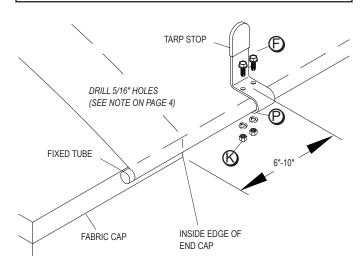
STEP 5: Install remaining U-clamps in same manner on remaining tarp straps.



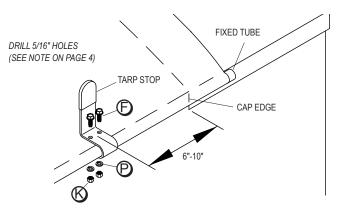
NOTE: If installing system to open from passenger side of cart, locate tarp stops on driver side.

STEP 1: Locate first tarp stop 6" to 10" from edge of end cap. Using tarp stop as guide, mark and drill holes. Place tarp stop over fixed tube and fasten to box with screws, lock washers **O** and nuts **O**.

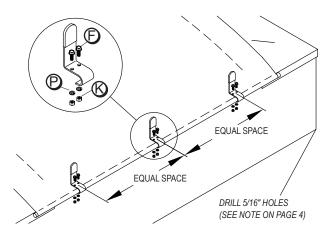
NOTE: Use washers and nuts where needed and drill 13/32" holes. If using self-tapping screws only, drill 5/16" holes.

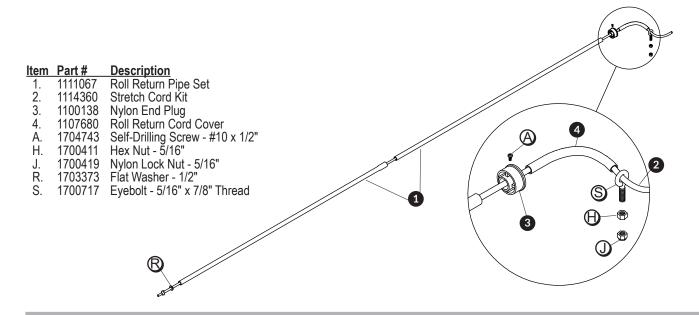


STEP 2: Square up and stretch tarp tight. Locate second tarp stop 6" to 10" from edge of end cap. Mark and drill holes and fasten to box with screws **G**, lock washers **O** and nuts **G**.

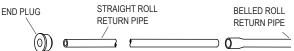


STEP 3: Equally space remaining tarp stops. Mark and drill holes and fasten to box with screws Θ , lock washers Θ and nuts \mathbb{O} .

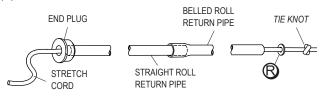




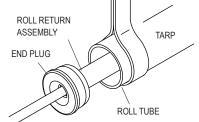
STEP 1: Insert straight roll return pipe into belled roll return pipe. Insert end plug into straight roll return pipe.



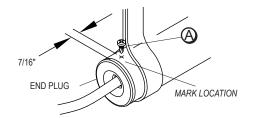
STEP 2: Insert stretch cord through end plug and roll return pipes. Slide flat washer **(**) over stretch cord and tie knot in cord.



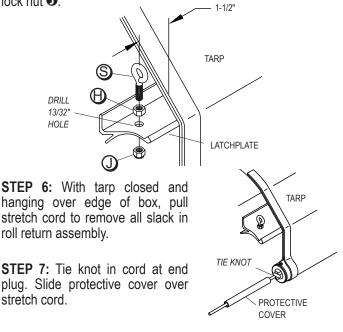
STEP 3: Insert roll return assembly into roll tube. Lightly tap end plug into roll tube.



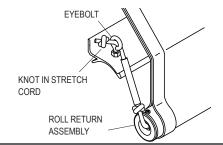
STEP 4: Mark location about 7/16" from edge of end plug.Secure end plug to roll tube with self-drilling screw **④**.



STEP 5: Drill 13/32" hole through latchplate, 1-1/2" from edge of tarp. Insert eyebolt **S** through hole and secure with nut **D** and lock nut **D**.



STEP 8: Thread stretch cord through eyebolt, applying enough tension to almost lift roll return. Tie knot.



U-JOINT

SPLINED SHAFT

STEP 2: Tighten tarp by lifting crank handle up into crank retainer (about 45°).

STEP 3: Hold crank handle firmly with both hands and roll tarp closed under latchplate. Bring crank handle perpendicular to

ground to lock U-joint.

STEP 4: Check tarp tension. Holding crank arm at handle, press crank arm into crank retainer. It should take 40 to 60 pounds of pressure to force crank arm into crank retainer. Crank arm

STEP 4: To adjust tension, remove U-ioint, rotate one tooth at a time and replace into splined shaft. Repeat until correct tension is achieved.should

> CAUTION /Ì\

Uncontrolled crank spin. Hold crank firmly with both hands while operating. Failure to do so may result in minor or moderate injury.

ATTENTION!

k Retaine

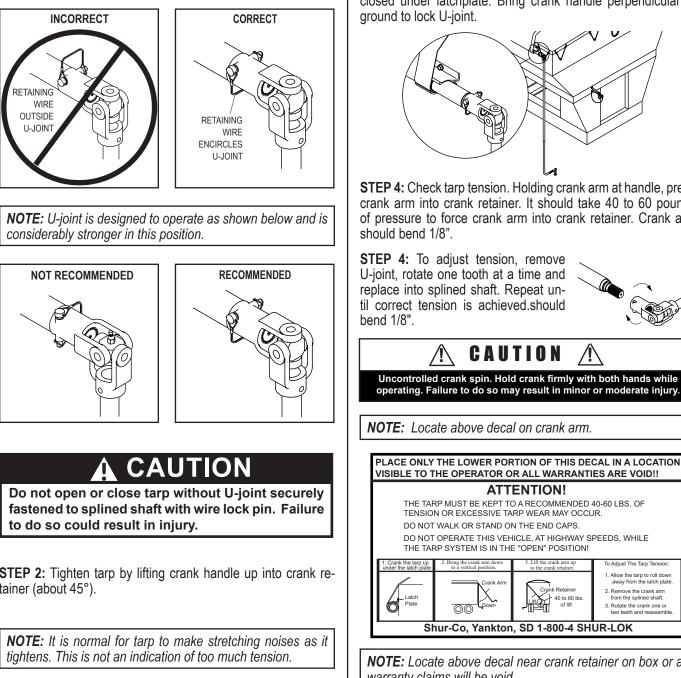
40 to 60 lb of lift

NOTE: Locate above decal on crank arm.

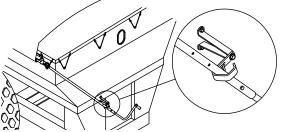
Shur-Co, Yankton, SD 1-800-4 SHUR-LOK NOTE: Locate above decal near crank retainer on box or all warranty claims will be void.

SHUR-CO® HELP LINE: 1-866-748-7435

P/N 1107910 Rev. EE

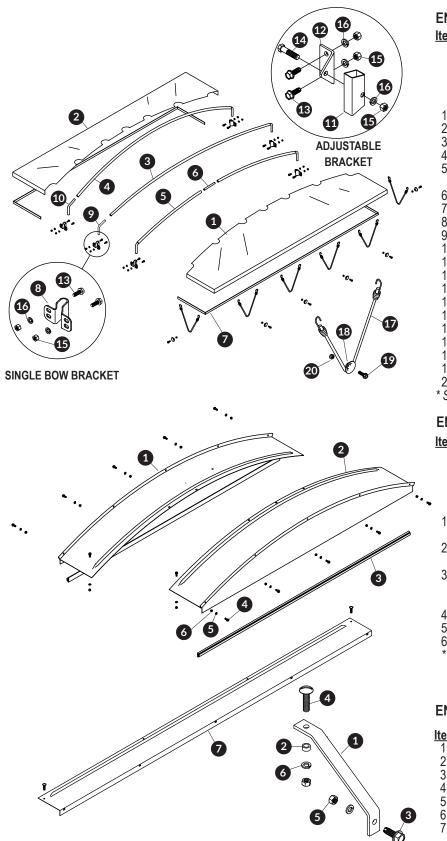


WIRE LOCK PIN



Allow the tarp to roll down away from the latch plate

Remove the crank arm from the splined shaft. Rotate the crank one or two teeth and reassemb



END CAPS - FABRIC

	0/11 0 1	
ltem	Part #	Description
	1113359	Low-Rise Fab Cap Hardware
	1113360	High-Rise Fab Cap Hardware
	1113350	X-Wide Low-Rise Fab Cap Hardware
	1113351	X-Wide High-Rise Fab Cap Hardware
	1117946	Adjustable Bow Bracket Kit
1.	*	Fabric Back Cap
2.	*	Fabric Front Cap
2. 3.	1100760	Low-Rise Bow
4.	1100762	High-Rise Bow
5.	1106950	X-Wide Low-Rise Bow
	1106926	X-Wide HIgh-Rise Bow
6.	1110685	X-Wide Bow Connector Tube
7.	1700581	Flat Bar - 103"
8.	1120836	Single Bow Bracket
	1100695	Low-Rise Bow Shank
10.	1106925	High-Rise Bow Shank
11.	1111420	Bow Shank Sleeve
12.	1111421	Adjustable Bow Bracket
	1700400	Self-Tapping Screw - 3/8" x 1"
	1700369	Cap Screw - 3/8" x 1-3/4"
	1700407	Hex Nut - 3/8"
16.	1700434	Lock Washer - 3/8"
	1700990	Bungee Cord - 18"
	1701355	Rope Anchor
	1701059	Self-Tapping Screw - 5/16" x 1"
	1700419	Nylon Lock Hex Nut - 5/16"
* Spe	cify size	

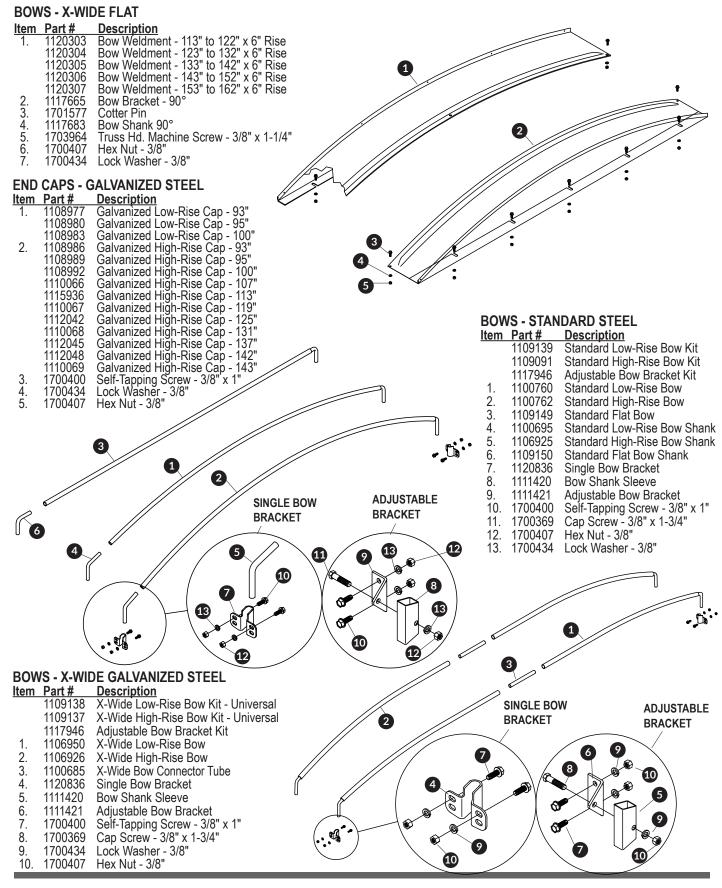
END CAPS - FACE MOUNT GALVANIZED

ltem	Part #	Description
	1107785	Galvanized Face Mount Cap Mtg.
		Hardware w/Trim Seal - 110"
	1107786	Galvanized Face Mount Cap Mtg.
		Hardware w/Trim Seal - 132"
	1107787	Metal Cap Mounting Hardware
1.	*	Low-Rise Square Corner Front Cap
	*	High-Rise Square Corner Front Cap
2.	*	Low-Rise Square Corner Back Cap
۷.	*	High-Rise Square Corner Back Cap
3.	1700152	Trim Seal (per foot)
э.	1100165	Trim Seal - 110"
	1100357	Trim Seal - 132"
4.	1700400	Self-Tapping Screw - 3/8" x 1"
5.	1700434	Lock Washer - 3/8"
6.	1700407	Hex Nut - 3/8"
*	Specify of	70

Specify size

END CAPS - FLAT W/CAP SUPPORT BRACES

	Part #	Description
1.	1116526	Cap Support Brace
2.	1101683	Anchor Bushing
3.	1700400	3/8" x 1" Self-Tapping Screw
4.	1703964	3/8" x 1-1/4" Truss Hd. Screw
5.	1700407	3/8" Hex Nut
6.	1700434	3/8" Lock Washer
7.	*	Galvanized Flat Cap



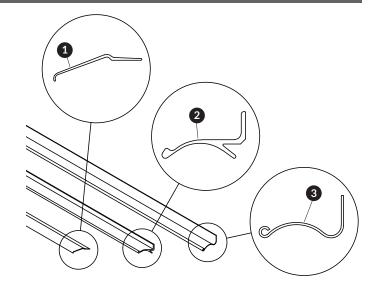
SHUR-CO® HELP LINE: 1-866-748-7435

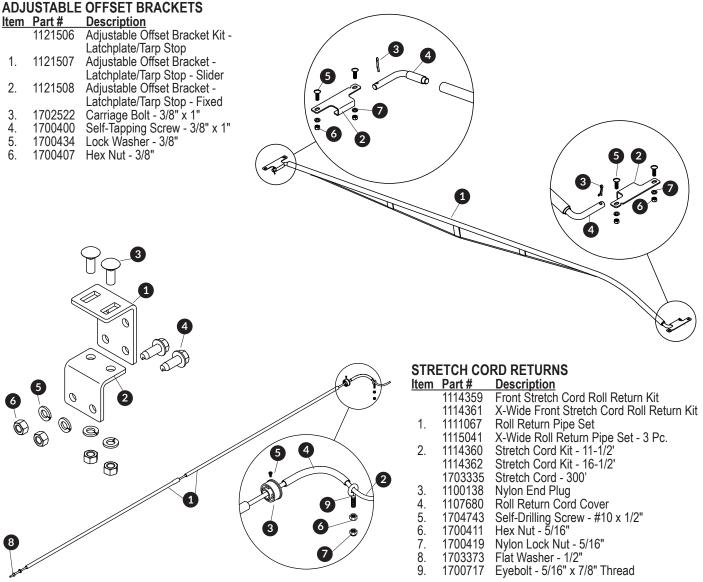
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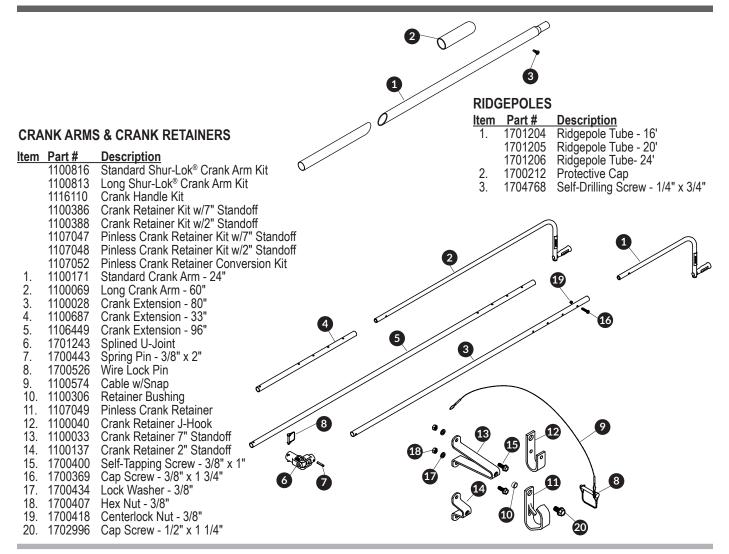
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RIDGE STRAPS - 1 INCH	
Item Part # Description 1101685 Ridge Strap Kit w/Anchor - 1" x 25' 2 1101686 Ridge Strap Kit w/Anchor - 1" x 39' 2 1120048 Ridge Strap Kit w/Hook - 1" x 25' 2	
1. 1101680 Ridge Strap w/Anchor - 1" x 25' 1101681 Ridge Strap w/Anchor - 1" x 39'	5
2. 1105222 Ridge Strap w/Hook - 1" x 25' 3. 1101678 Ratchet w/1" Ridge Strap/Anchor	
4. 1106153 Ratchet w/1" Ridge Strap/Hook 5. 1700836 Ratchet - 1" Ridge Strap 6. 1101683 Anchor Bushing	
7. 1700400 Self-Tapping Screw - 3/8" x 1" 8. 1701176 Flat Washer - 3/8"	
9. 1700418 Centerlock Nut - 3/8" 10. 1700717 Eyebolt Anchor - 5/16" 11. 1700411 Hex Nut - 5/16"	
12. 1700411 Hex Nut - 5/16 12. 1700419 Nylon Lock Nut - 5/16"	TARP TUBES
	Item Part # Description 1. 1700051 Fixed Tube - 1-1/8" x 16'
	2. 1700523 Plastic End Plug
	3. 1107057 Roll Tube w/Spline - 16' 1107058 Roll Tube w/Spline - 20'
	4. 1700048 Roll Tube - 16'
5	5. 1701354 Plastic U-Clamp 6. 1700398 Self-Drilling Screw - 1/4" x 3/4"
	7. 1704768 Self-Drilling Screw - 1/4" x 3/4"
6 3	
TARP STOPS	
Item Part # Description 1111092 Standard Tarp Stop Kit	
1111093 Offset Tarp Stop Kit	
1111094 Easy-Off Aluminum Tarp Stop Kit	
1111095 Easý-Off Aluminum 6" Óffset Tarp Stop Kit 1114047 Easy-Off Flexible Tarp Stop Kit	
1114388 Easý-Off Flexible 6" Offset Tarp Stop Kit 1124768 Easy-Off Aluminum Tarp Stop Assembly	
1124771 Easy-Off Aluminum 6" Offset Tarp Stop Assembly	
1114017 Easy-Off Flexible Tarp Stop Assembly 1114515 Easy-Off Flexible 6" Offset Tarp Stop Assembly	
1118389 Bowtie Cotter Pin/Ring Assembly 1. 1700729 Protective Cap	
2. 1100049 Standard Tarp Stop 3. 1100392 Offset Tarp Stop	
4. 1105163 Recessed Tarp Stop	
 1100049 Standard Tarp Stop 1100392 Offset Tarp Stop 1105163 Recessed Tarp Stop 1700400 Self-Tapping Screw - 3/8" x 1" 1700434 Lock Washer - 3/8" 1700407 Nut - 3/8" 	
7. 1700407 Nut - 3/8" 8. 1100814 Tarp Stop Bracket	
9. 1704380 Bowtie Cotter Pin	
10. 1115217 Easy-Off Flexible 6" Offset Tarp Stop Upright w/Embedded Safety Plate 11. 1115216 Easy-Off Flexible Tarp Stop	
Upright w/Embedded Safety Plate 12. 1100833 Easy-Off Tarp Stop Body	
13. 1703604 Clevis Pin - 5/16" x 2-7/8" 14. 1705454 Easy-Off Alum. (Cast) 6" Offset Tarp Stop Upright	
15. 1705775 Easy-Off Aluminum (Cast) Tarp Stop Upright	

LATCHPLATES

Item	Part #	Description
1.	1100370	Aluminum Top-Mount Latchplate - 4'
	1100369	Aluminum Top-Mount Latchplate - 6'
	1100368	Aluminum Top-Mount Latchplate - 8'
2.	1100749	Aluminum Side-Mount Latchplate - 4'
	1700802	Aluminum Side-Mount Latchplate - 6'
	1700522	Aluminum Side-Mount Latchplate - 8'
3.	1701546	Galvanized Side-Mount Latchplate - 4'
	1113005	Galvanized Side-Mount Latchplate - 6'
	1701547	Galvanized Side-Mount Latchplate - 8'







MAINTENANCE & OPERATION

MAINTENANCE SCHEDULE Every 2 to 4 Weeks:

- 1. Inspect tarp repair any tears, cuts or worn areas.
- 2. Inspect hardware securely tighten any loose fasteners.

OPERATING INSTRUCTIONS

To Uncover Load:

- 1. Release crank from crank retainer.
- 2. Turn crank clockwise (counter-clockwise for reverse roll) until tarp has rolled up against tarp stops.
- 3. Place crank back into crank retainer.

To Cover Load:

- 1. Release crank from crank retainer.
- Turn crank counter-clockwise (clockwise for reverse roll) until tarp is unrolled over edge of trailer.
- 3. Continue cranking to roll tarp up under latchplate.
- 4. Bring crank arm down to a vertical position.
- 5. Swing crank arm up and place into crank retainer.

Close cover at all times, except when loading or unloading, to extend the life of your Shur-Lok[®] system.

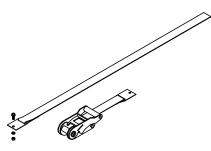
Open cover while unloading box. Unloading box with cover closed will create a vacuum which could cause system damage.

OPERATING SAFETY INSTRUCTIONS

- 1. Keep body and clothing clear of moving parts.
- 2. Hold crank firmly with both hands while opening and closing tarp.
- 3. Keep 40 to 60 lbs. of tension in crank retainer or excessive tarp wear may occur.
- Secure U-joint on crank arm to splined shaft on roll tube with wire lock pin before opening or closing tarp.
- Do not drive vehicle at highway speeds with tarp open.

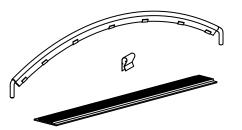
2" RIDGE STRAP

Designed to resist stretching during weather changes. Two 2" ridge straps offer twice the tarp support while reducing grain splatter by allowing you to pour grain between them.



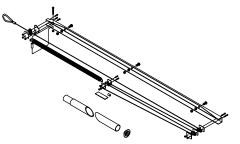
STANDARD & X-WIDE BOW COVERS

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



STANDARD & X-WIDE CABLE RETURN - FRONT & REAR Uses a non-stretch cable and heavy-duty internal tension

spring-and-pulley system. Exactly what cold climates demand.



SHUR-RETURN™

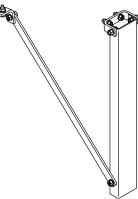
Carries a lifetime guarantee and features steel construction, a steel tension spring and 1/4" nylon rope. This ensures dependable operation in the coldest of climates.



TARP OPTIONS 22-oz. heavy-duty fabric, multicolored tarps, personalized tarps, reinforcements, extra length or width, 12 vibrant colors available.

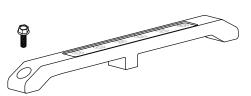
UNIVERSAL CRANK RETAINER SUPPORT KIT

Universal crank retainer support kit allows you to efficiently position the crank in non-vertical configurations.



ROLL TUBE DEFLECTOR

Roll tube deflectors fasten to side of box, keeping roll tube from damaging paint on sides of trailer.



PROFESSIONAL TARP REPAIR KIT

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



STANDARD TARP REPAIR KIT

Shur-Co's standard tarp repair kit includes adhesive, cleaner, 10' of tarp (specify color) and instructions.



MORE QUALITY PRODUCTS FROM SHUR-CO®

GENUINE REPLACEMENT TARPS

GENUINE REPLACEMENT PARTS

GENUINE REPLACEMENT PARTS

- Shur-Lok[®]
- Cable-Lok[™]
- Tater-Top[™]
- Premium Belt 'N Ratchet
- Turning Point[™] Bow
- Shur-Lok[®] Junior

SMARTRAILER™ ACCESSORIES FOR AGRICULTURE PRODUCTS

- SMART2[™] Remote
- SMART3[™] Remote
- 4500 Series HD Electric
- Electric Shur-Lok®
- Electric Cable-Lok™
- Electric Tater-Top™
- ProTrap[®] Hopper Opener
- AutoTrap[™] Hopper Opener
- Electric Gate & Hoist
- DriveMaxx[™] Auger Drive Kit
- Electric Farm Swing Gate
- LiteALL[™] LED Work Lights
- Solar Power Pack
- Electric Turning Point[™] Bow
- Service Truck Power Kit

CONSTRUCTION PRODUCTS

- Shur-Lok[®]
- Shur-Trak[™] II
- IronSide[™] II
- Apex[™]
- Shur-Matic[™]
- Premium Belt 'N Ratchet
- Turning Point[™] Bow

SMARTRAILER[™] ACCESSORIES FOR CONSTRUCTION PRODUCTS

- SMART2[™] Remote
- SMART3[™] Remote
- 4500 Series HD Electric w/Gate Flex[™]
- Electric Shur-Lok®
- Electric Cable-Lok™
- Electric Shur-Trak[™] II
- Solar Power Pack
- Electric Turning Point[™] Bow
- Service Truck Power Kit

CUSTOM PRODUCTS

- Fitted Truck Covers
- Flat Utility Tarps
- Bean Drill Covers
- GustBuster[™] Tarp Cords
- SMARTwire[™]

TARP SYSTEMS & ACCESSORIES

