

TARP SYSTEMS & ACCESSORIES

READ BEFORE INSTALLING

P/N 1100496 Rev. U



PBR Premium Belt & Ratchet

OWNER'S MANUAL

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

Contact Information P/N 1100496 Rev.U

Scan QR Code

ORDER TERMS AND CONDITIONS



WARRANTY



PATENTS



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SHUR-CO® UK LIMITED

Unit 41, Rochester Airport Estate Laker Road

Rochester, Kent ME1 3QX

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 \triangle 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. Do not walk on or stand on end caps.
- 4. Return bows to secure position after operation.
- 5. Use only OSHA-approved ladders or scaffolding during installation process.
- Close tarp securely before traveling at highway speed.
- 7. 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.

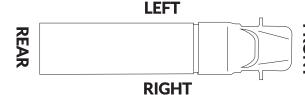
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TOOLS REQUIRED

- 1. Welder
- #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. 3/8" Drill
- 7. 3/16" Drill Bit
- 8. 13/64" Drill Bit
- 9. 1/4" Drill Bit
- 10. 5/16" Drill Bit (for 3/8" self-tapping screws)
- 11. 3/8" Drill Bit (for 3/8" cap screws)
- 12. 13/32" Drill Bit
- 13. Band Saw or Hack Saw
- 14. Grinder
- 15. Hammer
- 16. C-Clamps
- 17. Tape Measure

VEHICLE ORIENTATION







1704743 - Self-Drilling Screw - #10 x 1/2"





1700398 - Self-Drilling Screw - 1/4" x 3/4"





1704768 - Self-Drilling Screw - 1/4" x 3/4"





1700403 - Self-Tapping Screw -1/4" x 3/4"





1700381 - Cap Screw - 1/4" x 1"





1701059 - Self-Tapping Screw - 5/16" x 1"





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





1700408 - Hex Nut - 1/4"





1701543 - Nylon Lock Nut - 1/4"





1700411 - Hex Nut - 5/16"





1700419 - Nylon Lock Nut - 5/16"





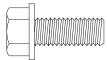
1700418 - Center Lock Nut - 3/8"





1700407 - Hex Nut - 3/8"





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





1700436 - Lock Washer - 1/4"





1700427 Flat Washer - 1/4"





1700434 - Lock Washer - 3/8"





1701176 - Flat Washer - 3/8"





1703373 - Flat Washer - 1/2"





1700717 - Eyebolt Anchor - 5/16"

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

BOX PREPARATION

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 Shur-Co® Customer Service at 1-866-748-7435.

TARP INSPECTION

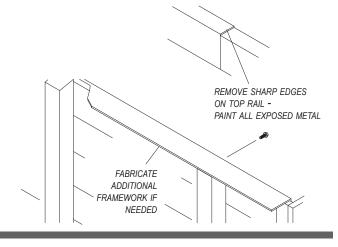
Prepare your box before installing your Shur-Lok® tarping system. Remove or grind any sharp edges smooth to prevent tarp damage. Fabricate additional framework if top rails have gaps that cannot be repaired.

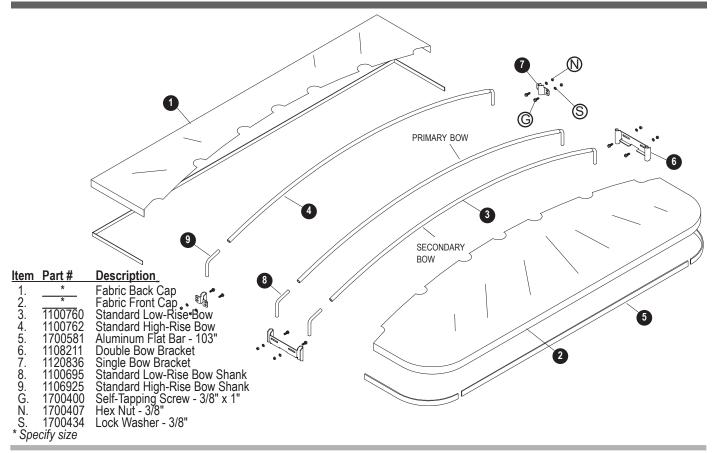
To prevent rust, paint all exposed metal, such as weld seams and/or metal exposed by grinding or cutting, with corrosion-resistant paint.



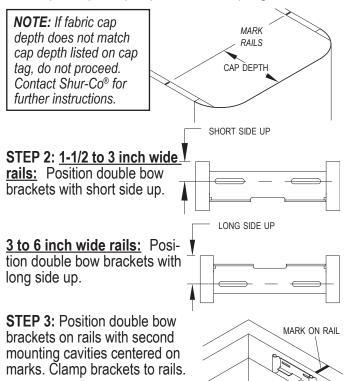
CAUTION

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

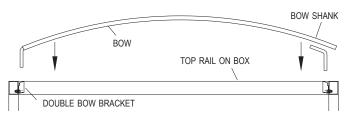




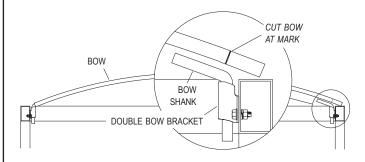
STEP 1: Measuring from front of box, mark cap depth on both top rails per cap depth listed on cap tag.



STEP 4: Place bow into double bow bracket. Place loose bow shank in opposite bow bracket.



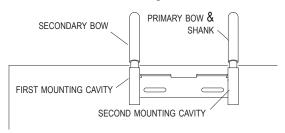
STEP 5: Align bow with bow shank. Mark bow at point where bend starts on shank. Cut both bows to this length.



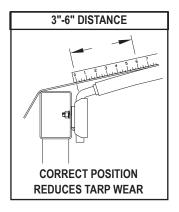
NOTE: Cut bows to exact length. Pressure from tarp will cause short bows not welded to shank to lose arch.

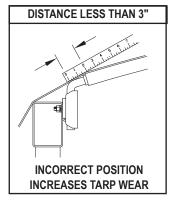
SECOND MOUNTING CAVITY

STEP 6: Weld bow shank into secondary bow, leaving primary bow and shank unwelded. Insert secondary bow into first mounting cavities in bow brackets and primary bow and shank into second mounting cavities.

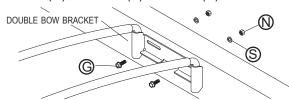


STEP 7: Adjust bow brackets vertically to achieve distance of 3 to 6 inches between bend in bow shank and point where tarp will contact bow.

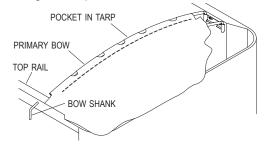




STEP 8: Mark and drill 5/16 inch holes. Mount brackets with screws (**G**), washers (**S**) and nuts (**N**).

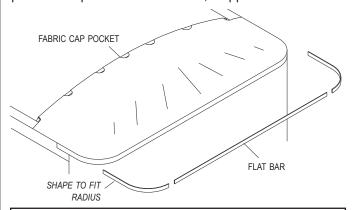


STEP 9: Remove primary bow shank from bow bracket and bow. Install fabric cap onto bow. Replace shank into bow and bow bracket. Allow front and sides of fabric cap to hang over edges of top rail on front of box.



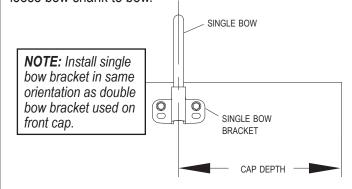
NOTE: Check fabric cap for fit on box, keeping in mind that inconsistencies in boxes may prevent a perfect fit.

STEP 10: Cut aluminum flat bar sections 1/2 inch shorter than pocket lengths. Insert sections into fabric cap pocket. Shape to fit corner radius, if applicable.



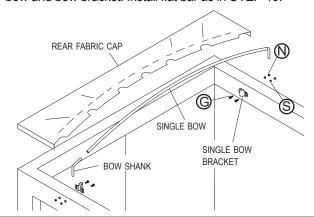
TIPS: Use one flat bar section across straight portion on front of cap. Side and radius may be one piece. Use as few pieces as possible. Create even tension on fabric cap for a secure and attractive fit.

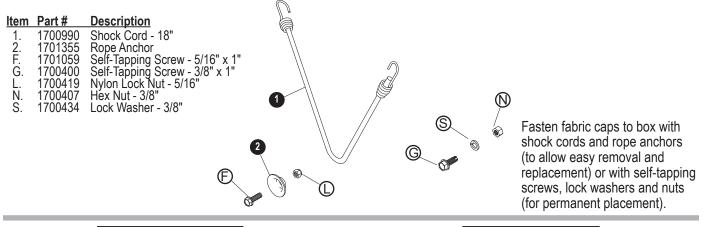
STEP 11: Install rear bow in the same way as front bow, using single bow brackets and single bow. Do not weld loose bow shank to bow.



NOTE: Cut bows to exact length. Pressure from tarp will cause short bows not welded to shank to lose arch.

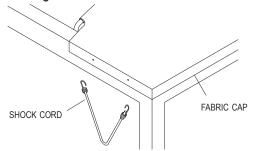
STEP 12: Remove rear bow shank from bow bracket and bow and slide fabric cap onto bow. Replace shank into bow and bow bracket. Install flat bar as in STEP 10.



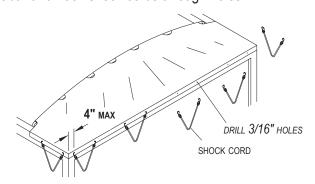


SHOCK CORD OPTION

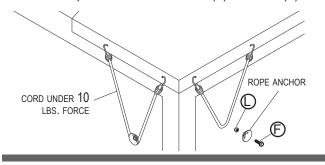
STEP 1: Center shock cords on each side of cap. Drill 3/16 inch holes through aluminum flat bar and hook shock cords through holes.



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



STEP 3: Locate rope anchors so shock cords receive at least 10 pounds of force pulling on them. Drill 1/4 inch holes and fasten rope anchors with screws (**F**) and nuts (**L**).

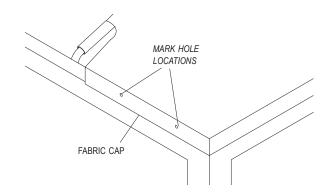


BOLT-DOWN OPTION

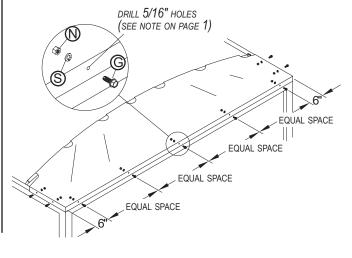
STEP 1: Square up fabric caps on grain cart.

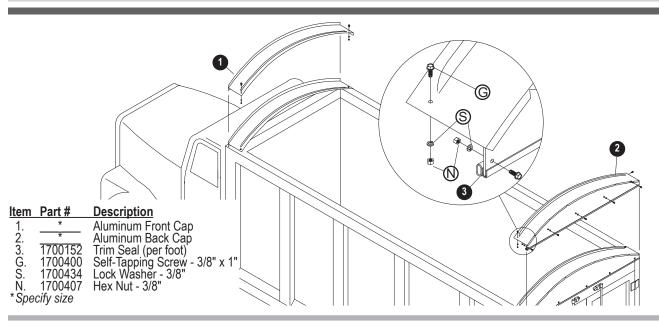
STEP 2: Measure and mark a minimum of 5 hole locations across front of fabric cap, starting 6 inches from each side of fabric cap and equally spacing remaining holes.

STEP 3: Mark 2 hole locations on each side of fabric cap, centering holes approximately.

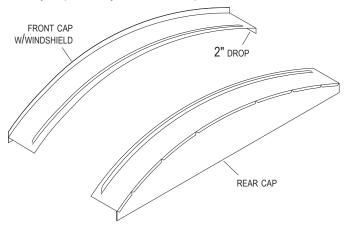


STEP 4: Drill 5/16 inch holes at marked locations through fabric cap, aluminum flat bar and box. Fasten cap to box with screws (**G**), washers (**S**) and nuts (**N**).



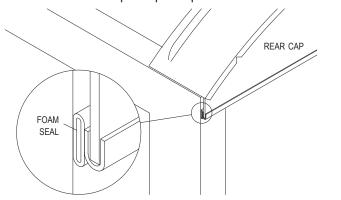


STEP 1: Modify caps to fit. Place front cap with windshield on front of box. Place rear cap on rear of box. Modify caps to fit your box, if required.

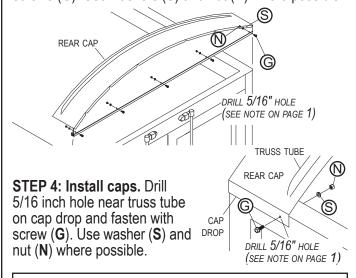


NOTE: To install tarp to open from right side of trailer (reverse roll), remove 2 inch cap drop on right side before installing caps.

STEP 2: Trim seal. Apply trim seal to caps, placing foam seal on inside of caps. Tap into place.

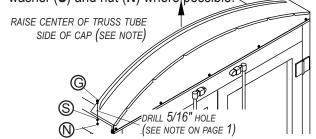


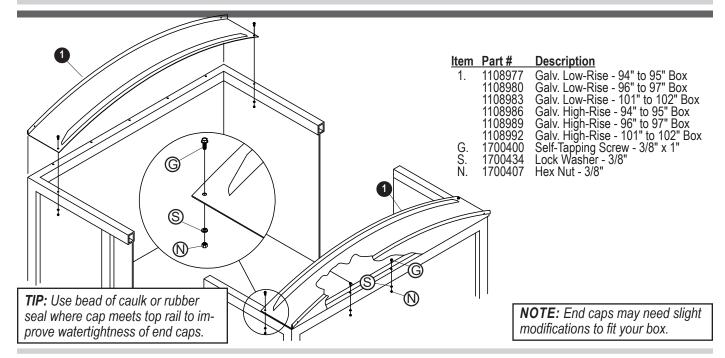
STEP 3: Mark and drill five 5/16 inch holes, evenly spaced across face of cap. Fasten end cap to box with screws (**G**). Use washers (**S**) and nut (**N**) where possible.



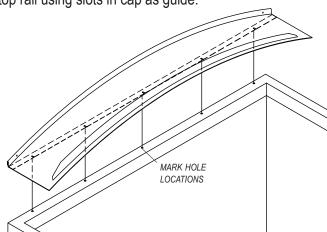
NOTE: For optimal water run-off and tarp support, make sure end caps are level before fastening sides of caps to box. While fastening sides of caps to box, raise center of truss tube edge of cap to be level with or slightly higher than outside edge.

STEP 5: Drill 5/16 inch hole as close as possible to truss tube on left side of cap. Fasten with screw (**G**). Use washer (**S**) and nut (**N**) where possible.



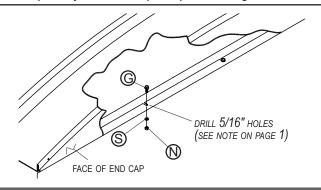


STEP 1: Center end caps on box. Mark hole locations on top rail using slots in cap as guide.



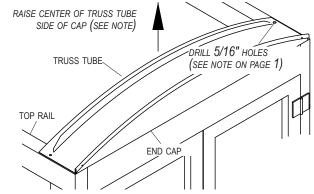
STEP 2: Drill 5/16 inch holes at marked locations on top rail. Fasten end cap to rail with screws (**G**). Use washers (**S**) and nuts (**N**) where possible.

TIP: Thread self-tapping screws (**G**) into top rail, back screws partially out, slide cap into place and tighten screws.



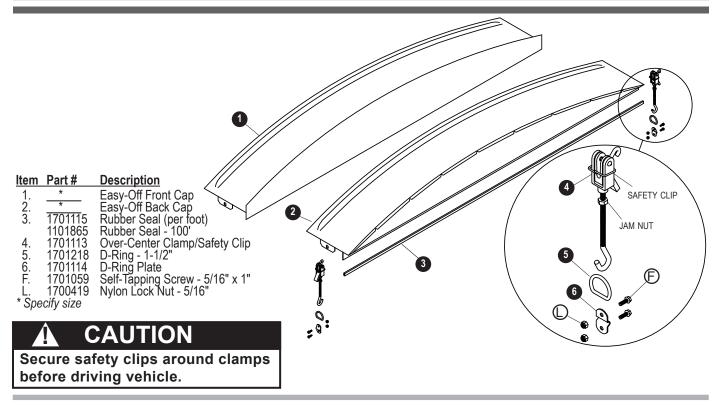
NOTE: For optimal water run-off and tarp support, make sure end caps are level before fastening sides of caps to box. While fastening sides of caps to box, raise center of truss tube side of cap to be level with or slightly higher than outside edge.

STEP 3: Drill 2 -5/16 inch holes as close as possible to truss tube, through end cap and top rail.



STEP 4: Fasten with screws (G). Use washers (S) and nuts (N) where possible.

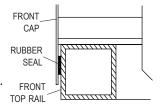
RAISE CENTER OF TRUSS TUBE SIDE OF CAP (SEE NOTE)



STEP 1: Deburr rough edges on truck and clean area thoroughly before applying rubber seal.

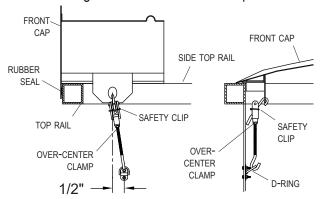
STEP 2: Apply rubber seal to front cap.

STEP 3: Place front cap on box.



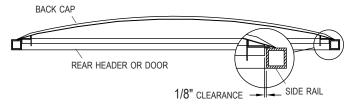
NOTE: Do not apply rubber seal in temperatures below 60°F or above 100°F or adhesive may fail. Apply seal without stretching.

STEP 4: Locate clamps in area free from obstructions and offset D-ring 1/2 inch from center of cap.



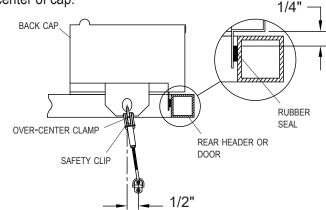
STEP 5: Mark and drill 1/4 inch holes. Fasten D-ring plates to box with screws (**F**) and nuts (**L**). Tighten jam nut against clamp body and position safety clip.

STEP 6: Place rear cap on box. Notch inside drop to allow 1/8 inch clearance on both sides of top rail.

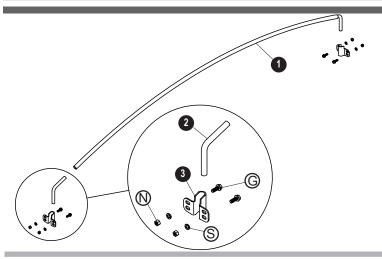


STEP 7: Remove cap, apply rubber seal 1/4 inch down from flat portion of cap above drop.

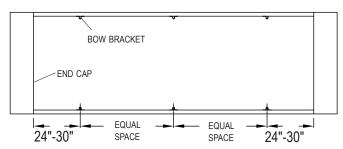
STEP 8: Replace cap, locate over-center clamps in area free from obstructions and offset D-ring 1/2 inch from center of cap.



STEP 9: Mark and drill 1/4 inch holes. Fasten D-ring plate to box with screws (**F**) and nuts (**L**). Tighten jam nut against clamp body and position safety clip.



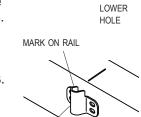
STEP 1: Mark bow bracket locations on top rails between end caps as shown.



STEP 2: 1-1/2 to 3 inch wide rails. Position single bow brackets with long side up and fasten through upper holes.

3 to 6 inch wide rails. Position single bow brackets with long side up and fasten through lower holes.

STEP 3: Align center of brackets with mark. Clamp brackets to rails.



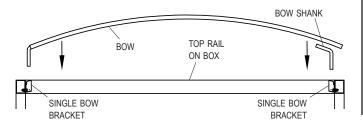
LONG SIDE

UPPER

HOLE

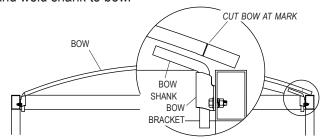
STEP 4: Place bow into bow bracket. Place loose bow shank in opposite bow bracket.

MOUNTING CAVITY



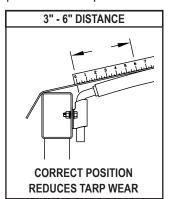
Description Std. Low Rise Bow - 78" to 84" Std. Low Rise Bow - 85" to 92" 1117904 1116120 Std. Low Rise Bow - 93" to 102' 1100760 Std. High Rise Bow - 89" to 95" Std. High Rise Bow - 96" to 102" 1117905 1100762 Std. Flat Bow - 89" to 102" 1109149 Std. Low Rise Bow Shank 1100695 Std. High Rise Bow Shank Std. Flat Bow Shank 1109150 3. G. N. S. Single Bow Bracket Self-Tapping Screw - 3/8" x 1" Hex Nut - 3/8" 1700400 1700407 Lock Washer - 3/8"

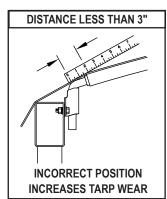
STEP 5: Align bow with bow shank. Mark and cut bow at point where bend starts on shank. Grind edges smooth and weld shank to bow.



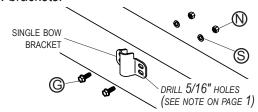
NOTE: Shanks must be welded to bows.

STEP 6: Adjust bow brackets vertically to create a distance of 3 to 6 inches between bend in bow shank and point where tarp will contact bow.

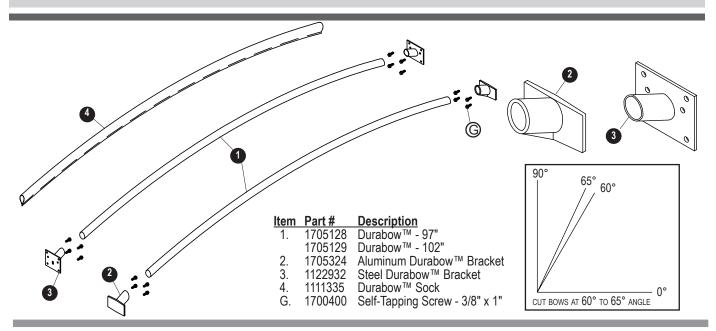




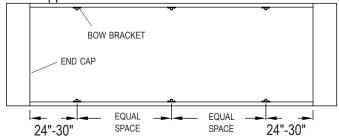
STEP 7: Mark and drill 5/16 inch holes. Mount brackets with screws (**G**), washers (**S**) and nuts (**N**). Install bows into bow brackets.



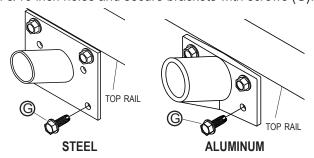
Bows - Durabow[™] P/N 1100496 Rev. U



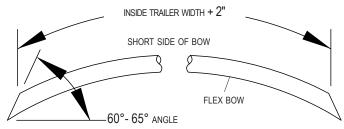
STEP 1: Space bow brackets as shown, aligning brackets on opposite sides of box.



STEP 2: Align bow brackets flush with top rail. Mark and drill 5/16 inch holes and secure brackets with screws (G).



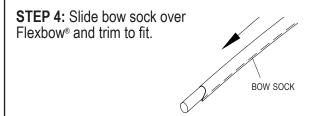
STEP 2: Cut bow ends at 60° to 65° angle. Cut short side of bows 2 inches longer than inside trailer width to obtain 10 to 12 inch arch.



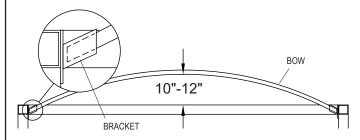
EXAMPLE: If trailer width is 90 inches inside to inside, cut short side of bow 92 inches long.

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

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



STEP 5: Insert bows into brackets.

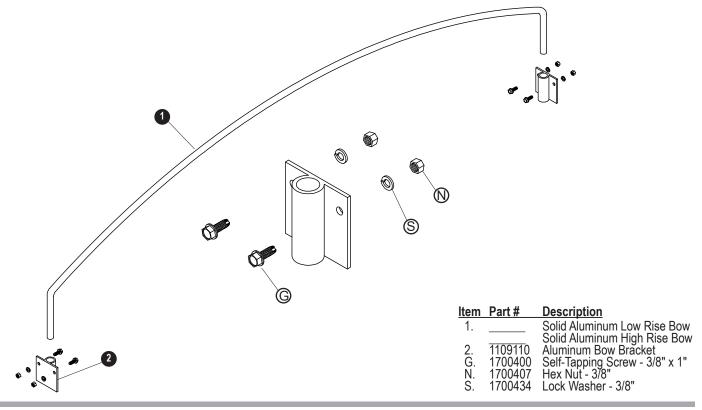


A CAUTION

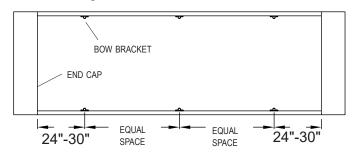
Stay clear of top side of bow. Bows could release and spring upward.

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

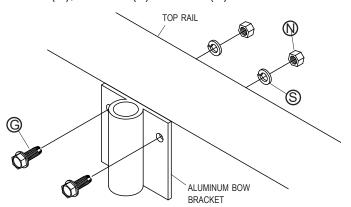
P/N 1100496 Rev. U



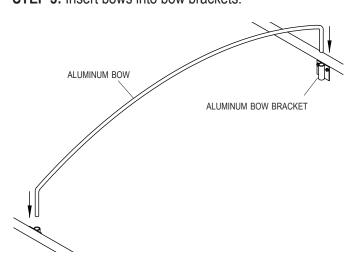
STEP 1: Equally space bow brackets on box, aligning brackets straight across trailer.



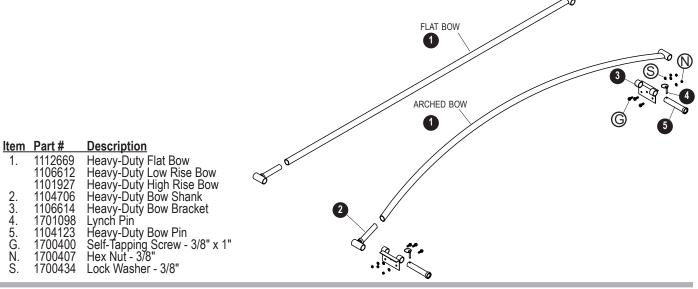
STEP 2: Align top edge of brackets with top edge of rail. Mark and drill 5/16 inch holes. Secure brackets with screws (**G**), washers (**S**) and nuts (**N**).



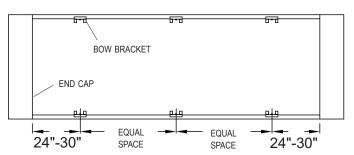
STEP 3: Insert bows into bow brackets.



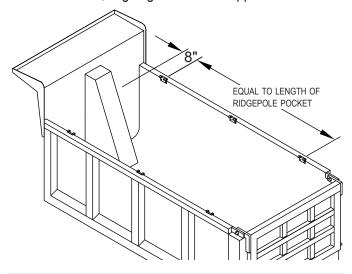
NOTE: Be sure of exact inside box width when ordering solid aluminum bows. Bows cannot be cut to length. Bow width may vary from front to back.



STEP 1A: End dumps and belly dumps. Equally space bow brackets on box, aligning brackets on opposite sides.

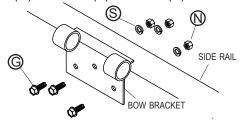


STEP 1B: Dump bodies. Locate front bow brackets 8 inches behind any obstruction, such as cab shield, dog house or plank gussets. Equally space remaining bow brackets on box, aligning brackets on opposite sides.

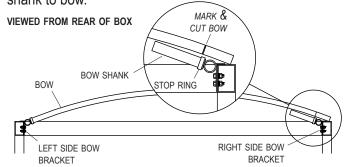


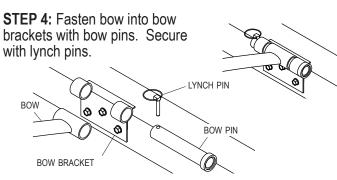
NOTE: If kit uses ridgepole, measure length of ridgepole pocket on tarp. Distance between front and rear bow brackets should be equal to length of ridgepole pocket.

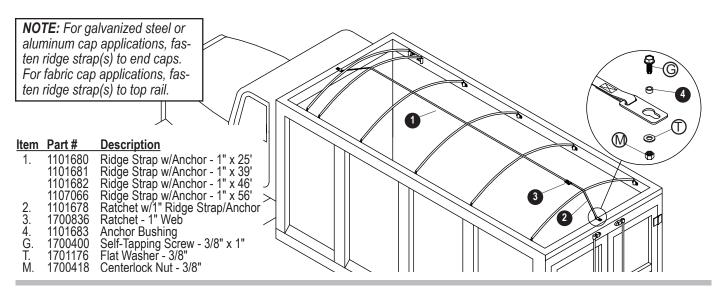
STEP 2: Mark and drill 5/16 inch holes. Secure brackets with screws (**G**), washers (**S**) and nuts (**N**).



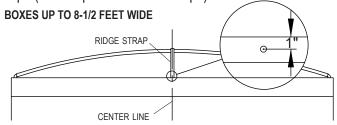
STEP 3: Insert bow shank into left side bow bracket and align bow with right side bow bracket. Align bow with bow shank and mark point where bow meets stop ring. Remove and cut bow at marked location. Grind edges smooth and insert bow shank into bow. Do not weld shank to bow.





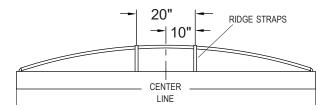


STEP 1: Mark hole locations at center of front and rear caps (mark top rails for fabric caps).



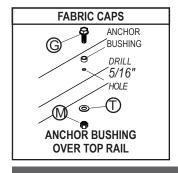
BOXES OVER 8-1/2 FEET WIDE

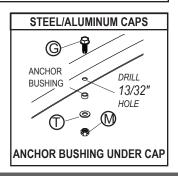
Mark hole locations 20 inches apart on front and rear caps (mark top rails for fabric caps).



STEP 2: Drill holes and fasten ridge strap anchor bushings with screws (**G**), washers (**T**) and nuts (**M**).

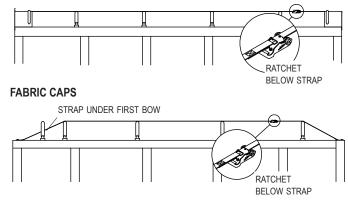
NOTE: Use washers and nuts where needed and drill 13/32 inch holes. If using self-tapping screws only, drill 5/16 inch holes.



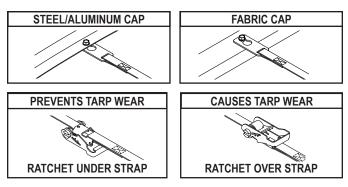


STEP 3: Install ridge straps over bows, positioning ratchet below strap as shown. Position ridge strap under first bow for front fabric cap.

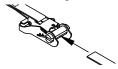
STEEL OR ALUMINUM CAPS

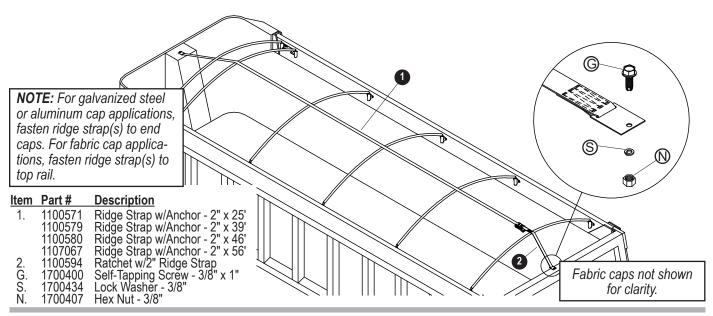


STEP 4: Hook ridge strap anchors onto anchor bushings on front and rear end caps (top rails).

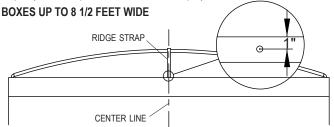


STEP 5: Thread strap through ratchet and tighten.



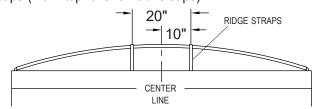


STEP 1: Mark hole locations at center of front and rear caps (mark top rails for fabric caps).



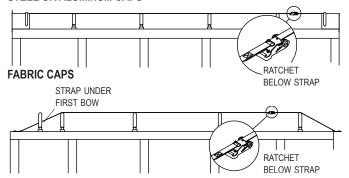
BOXES OVER 8 1/2 FEET WIDE

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



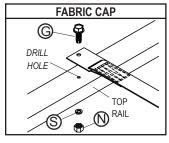
STEP 2: Place ridge straps over bows, positioning ratchet below strap as shown. Position ridge strap under first bow for front fabric cap.

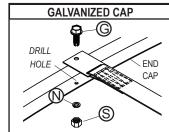
STEEL OR ALUMINUM CAPS

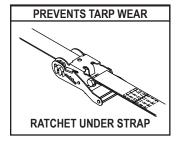


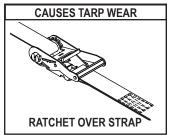
STEP 3: Drill holes and fasten ridge strap anchors with screws (**G**), washers (**S**) and nuts (**N**).

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

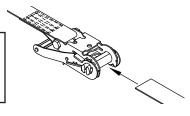


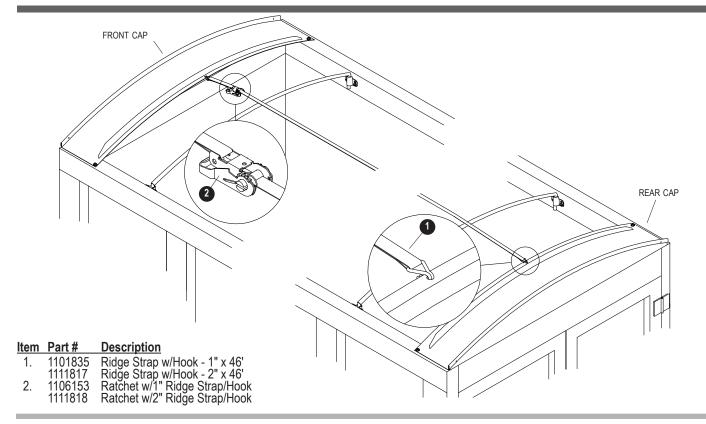




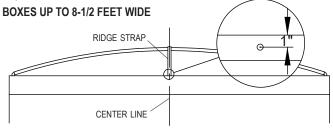


STEP 4: Thread strap through ratchet and tighten.



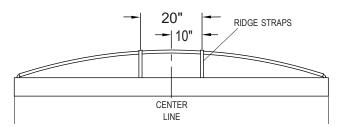


STEP 1: Mark hole locations at center of front and rear caps.

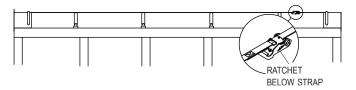


BOXES OVER 8-1/2 FEET WIDE

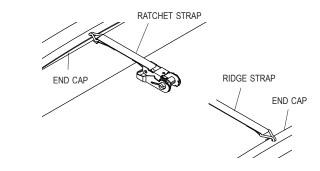
Mark hole locations 20 inches apart on front and rear caps.



STEP 2: Place ridge straps over bows, positioning ratchet below strap as shown.



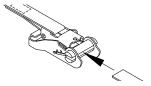
STEP 3: Drill 7/16 inches holes at marked locations. Hook ridge strap and ratchet strap into holes on end caps. Position ratchet under strap to prevent tarp wear.

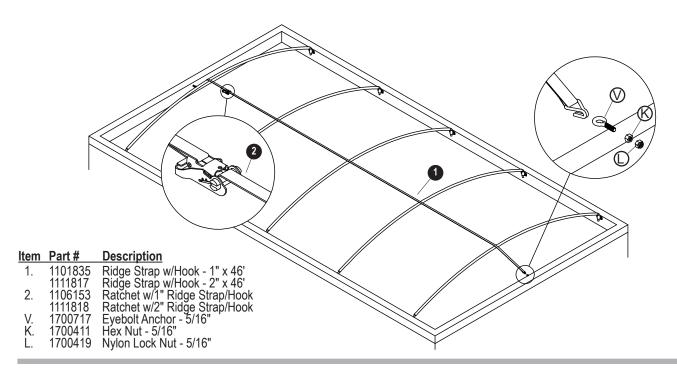




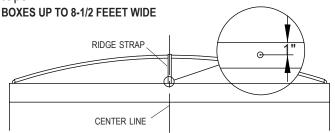


STEP 4: Thread strap through ratchet and tighten.



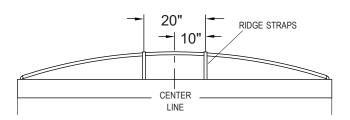


STEP 1: Mark hole locations at center of front and rear caps.

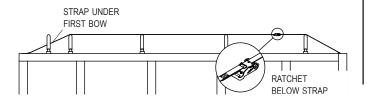


BOXES OVER 8-1/2 FEET WIDE

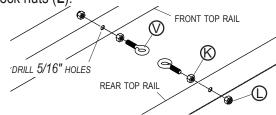
Mark hole locations 20 inches apart on front and rear caps.



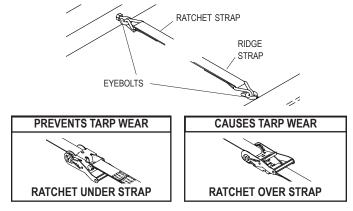
STEP 2: Place ridge straps over bows, positioning ratchet below strap as shown. Position ridge strap under first bow for front fabric cap.



STEP 3: Mark and drill 5/16 inch holes at marked locations. Fasten eyebolt anchors (**V**) through holes with nuts (**K**) and lock nuts (**L**).

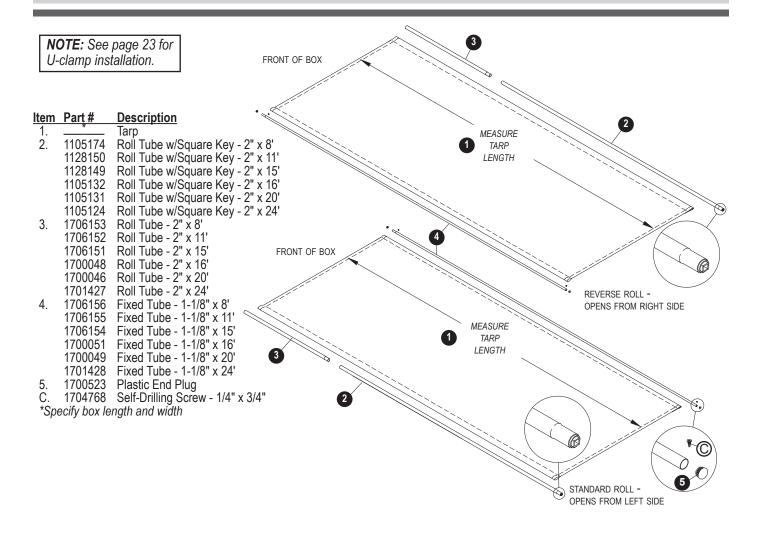


STEP 4: Hook ridge strap and ratchet strap into eyebolts. Position ratchet under strap to prevent tarp wear.



STEP 5: Thread strap through ratchet and tighten.



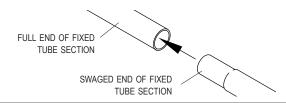


STEP 1: Open tarp and stretch tight. Measure tarp length and compare with tarp length specified on sheet attached to tarp. Do not proceed with installation if tarp length doesn't match length specified on sheet. Call Shur-Co® or your local dealer for alterations or a replacement tarp.

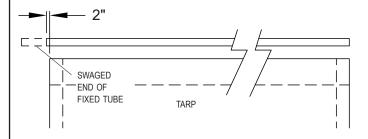
NOTE: Tarps cannot be returned at Shur-Co's expense beyond this point. Damaged tarps may be returned for repair or replacement at owner's expense.

FIXED TUBE

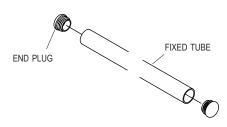
STEP 2: For boxes over 24 feet, insert swaged end of fixed tube section into full end of second tube section. Align tubes, weld and grind smooth.



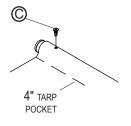
STEP 3: Cut fixed tube 2 inches longer than tarp, removing swaged end. Grind cut edge smooth.



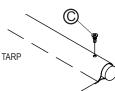
STEP 4: Install end plugs into ends of fixed tube.



STEP 5: Insert fixed tube into 4 inch tarp pocket. Extend tube 1 inch past tarp edge and secure with screw (**C**).

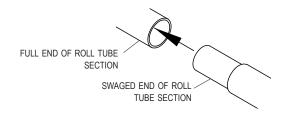


STEP 6: Stretch tarp along fixed tube and fasten second screw on other end of fixed tube.



ROLL TUBE

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



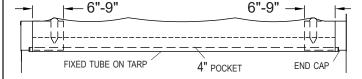
STEP 2: Insert roll tube into 5 inches tarp pocket with square key at rear of tarp.

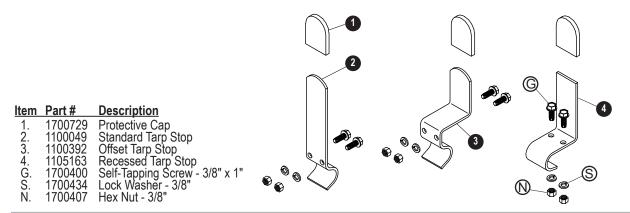


TIP: Inflate 5 inch tarp pocket with air chuck while inserting roll tube.

STEP 3: Wind tarp completely around roll tube, then lift rolled-up tarp assembly onto fixed tube side of box.

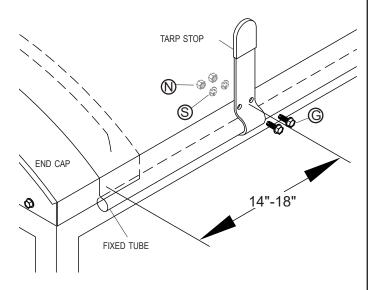
STEP 4: Center tarp on box, overlapping end caps 6 to 9 inches, with fixed tube hanging over edge of box. Square up tarp and fixed tube.



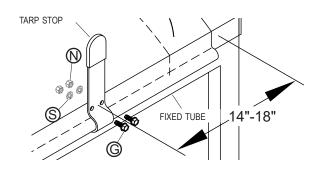


STEP 1: Locate first tarp stop 14 to 18 inches from rear edge of tarp. Mark and drill holes. Hook tarp stop over fixed tube and fasten to box with screws (G), lock washers (S) and nuts (N).

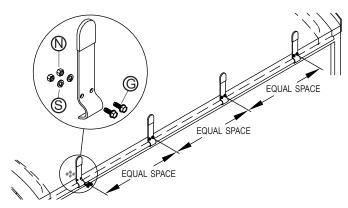
NOTE: See note under Hardware Identification on page 4 for drill size.



STEP 2: Square up tarp on box. Locate second tarp stop 14 to 18 inches from front edge of tarp. Mark and drill holes. Hook tarp stop over fixed tube. Fasten to box with screws (**G**), lock washers (**S**) and nuts (**N**).

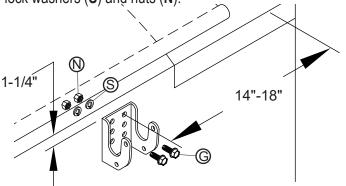


STEP 3: Equally space remaining tarp stops. Mark and drill holes and fasten to box with screws (G), lock washers (S) and nuts (N).



<u>ltem</u>	Part #	<u>Description</u>	
1.	1705775	Easy-Off Aluminum (Cast) Tarp Stop Upright	
2.	1705454	Easy-Off Aluminum (Cast) 6" Offset Tarp Stop Upright	6 ©
3.	1115216	Easy-Off Flexible Tarp Stop Upright w/Plate	
4.	1115217	Easy-Off Flexible 6" Offset Tarp Stop Upright w/Plate	
5.	1100833	Easy-Off Tarp Stop Body Bowtie Cotter Pin	
6.	1704380	Bowtie Cotter Pin	
7.	1703604	Clevis Pin - 5/16" x 2-7/8"	
G.	1700400 1700434	Self-Tapping Screw - 3/8" x 1" Lock Washer - 3/8"	
S.	1700434	Lock Washer - 3/8"	
N.	1700407	Hex Nut - 3/8"	

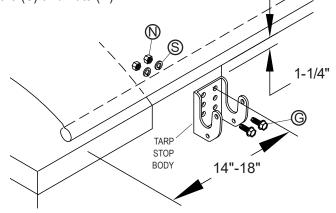
STEP 1: Locate first tarp stop body 14 to 18 inches from front edge of fixed tube and 1-1/4 inch below top of side rail. Mark and drill holes. Fasten to box with screws (**G**), lock washers (**S**) and nuts (**N**).



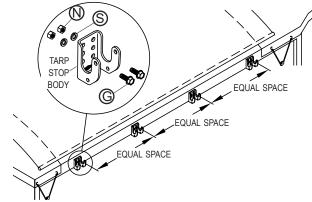
NOTE: See note under Hardware Identification on page 1 for drill size.

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

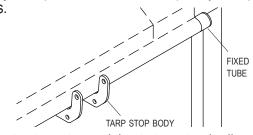
STEP 2: Square up tarp along length of box. Locate second tarp stop body 14 to 18 inches from rear edge of fixed tube and 1-1/4 inch below top of side rail. Mark and drill holes and fasten to box with screws (**G**), lock washers (**S**) and nuts (**N**).



STEP 3: Equally space remaining tarp stop bodies. Mark and drill holes and fasten to box with screws (**G**), lock washers (**S**) and nuts (**N**).

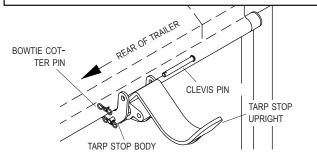


STEP 4: Adjust tarp so fixed tube rests squarely in tarp stop bodies.

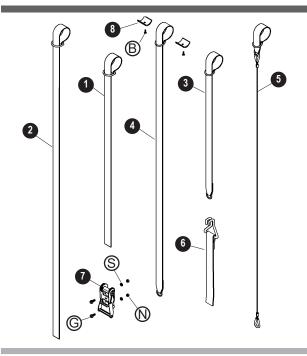


STEP 5: Fasten tarp stop uprights to tarp stop bodies with clevis pins. Secure with bowtie cotter pins.

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



P/N 1100496 Rev. U

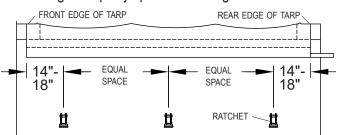


ltem	Part #	Description
1.	1100470	Strap Assembly - 5'
2.	1106774	Strap Assembly - 9'
3.	1107222	Wire Hook Strap Assembly - 5'
4. 5.	1107223	Wire Hook Strap Assembly - 7'
5.	1106763	Cable Assembly w/Hook - 7'
6.	1106754	Web Assembly w/Hook
7.	1100457	Ratchet - 2"
8.	1701354	Plastic U-Clamp
B.	1700398	Self-Drilling Screw - 1/4" x 3/4"
G.	1700400	Self-Tapping Screw - 3/8" x 1" Hex Nut - 3/8"
N.	1700407	
S.	1700434	Lock Washer - 3/8"

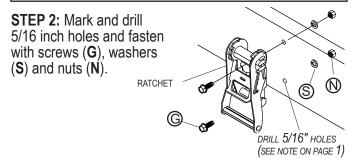
A CAUTION

Close tarp and secure ratchets before driving vehicle to prevent tarp from blowing off.

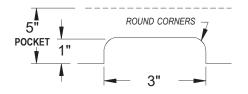
STEP 1: Locate first ratchet 14 to 18 inches from rear edge of tarp at convenient operating height. Locate second ratchet 14 to 18 inches from front edge of tarp at same height. Equally space remaining ratchets.



NOTE: Align ratchets with tarp stops on opposite side of box.

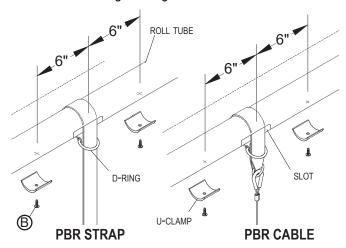


STEP 3: Cut 1 x 3 inch slots along bottom of 5 inch roll tube tarp pocket directly above ratchets. Round corners of slots with scissors.

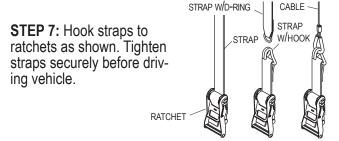


STEP 4: Extend roll tube 2 to 4 inches past farthest obstruction on rear of box. Cut front of roll tube to extend 1 inch past front of tarp. Grind cut edge smooth.

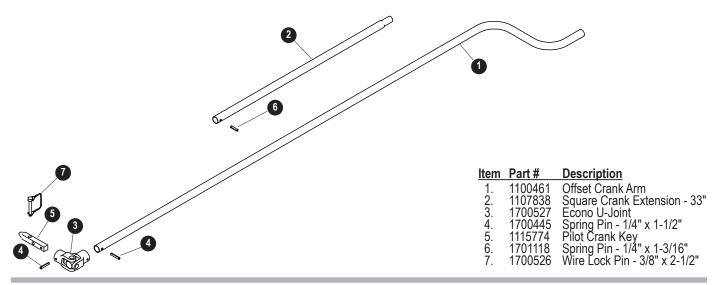
STEP 5: Thread straps or cables through slots, around roll tube and through D-ring.



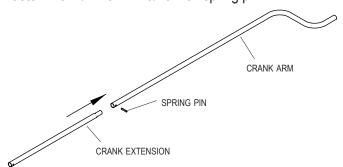
STEP 6: Mark U-clamp locations on both sides of cables or straps, 6 inches from center. Install U-clamps with self-drilling screws (**B**).



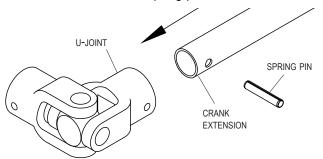
Crank Arms - Standard



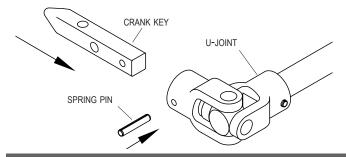
STEP 1: (Optional) Insert crank extension into crank arm. Fasten with 1/4 inch x 1-3/16 inch spring pin.



STEP 2: Insert crank arm/extension into U-joint. Secure with 1/4 inch x 1-1/2 inch spring pin.



STEP 3: Insert crank key into U-joint. Secure with 1/4 inch x 1-1/2 inch spring pin.



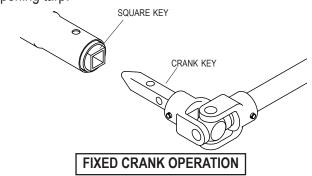
CRANK OPERATION OPTIONS:

Removable crank operation: Open tarp with removable crank arm, remove crank arm and close tarp with rope. Store crank arm on box.

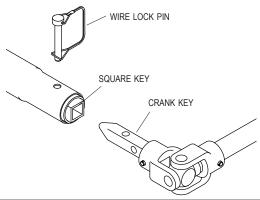
Fixed crank operation: Open and close tarp with fixed crank arm. Hook crank arm into crank retainer on rear of box.

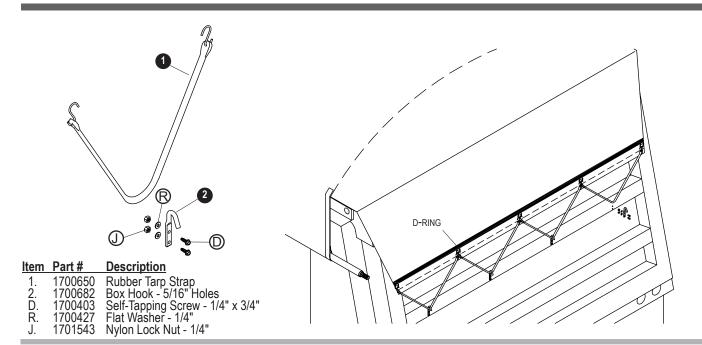
REMOVABLE CRANK OPERATION

STEP 4A: To roll tarp open, insert crank key into square key on roll tube at rear of box. Remove crank arm after opening tarp.



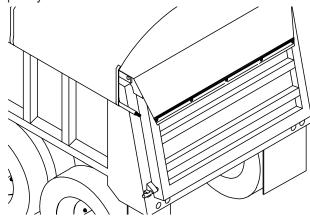
STEP 4B: Insert crank key into square key on roll tube at rear of box. Align holes and fasten with wire lock pin.



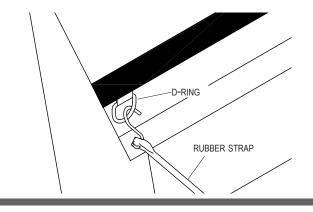


STEP 1: Install rear bow and bow brackets per bow instructions, locating bow as close to tailgate as possible without interfering with tailgate operation. Align bow height with height of previously installed bows.

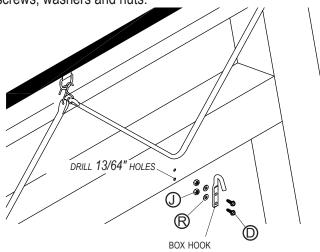
STEP 2: Roll tarp closed over bows. Pull Poorboy tail flap squarely over rear of box.



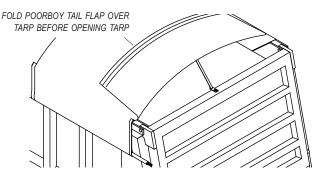
STEP 3: Hook rubber straps into D-rings on poorboy tail.

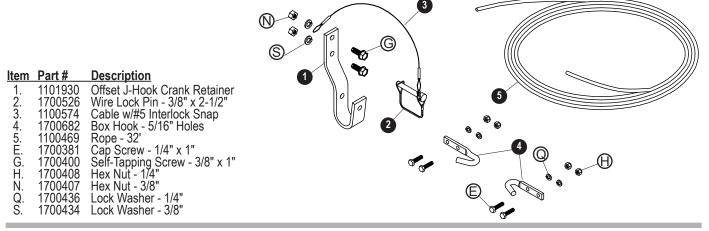


STEP 4: Locate and install box hooks so rubber straps will have at least 10 pounds of force pulling on them. Drill 13/64 inch holes and fasten box hooks with 1/4 inch screws, washers and nuts.

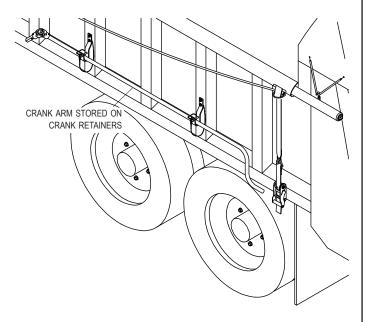


STEP 5: Release rubber straps from box hooks and fold flap over tarp before rolling tarp open. Close tarp and secure rubber straps to box hooks before traveling.

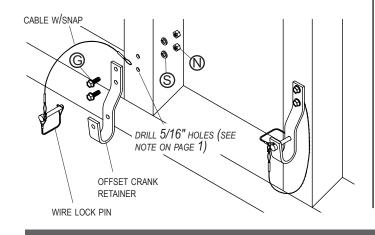




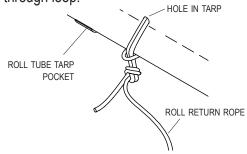
STEP 1: Locate and align crank retainers in convenient location to store crank arm.



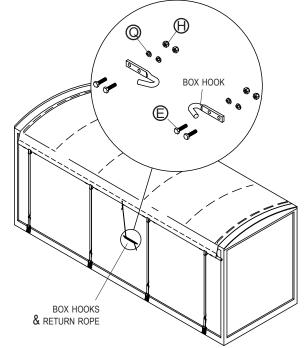
STEP 2: Mark and drill holes and fasten crank retainers to side of box with screws (**G**), lock washers (**S**) and nuts (**N**). Fasten cable between crank retainer and box.



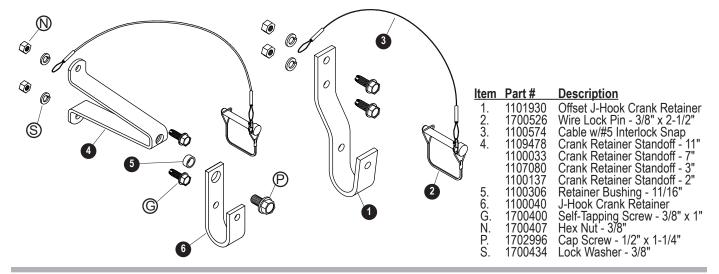
STEP 3 Melt hole in tarp at center of box. Tie loop in end of rope return. Thread loop through hole and pull loose end of rope through loop.



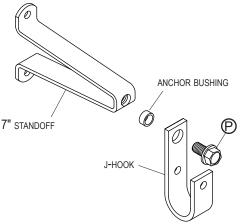
STEP 4: Locate box hooks to prevent interference with ratchet operation. Mark and drill 3/16 inch holes and fasten with screws (**E**), washers (**Q**) and nuts (**H**).



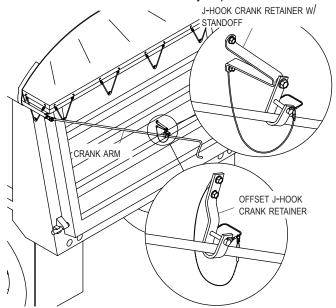
STEP 5: Wrap return rope around box hooks for storage while tarp is closed.



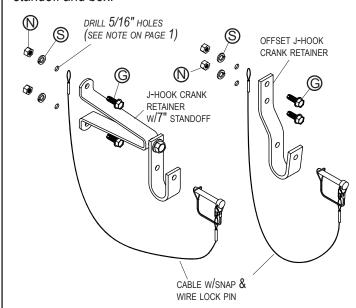
STEP 1: If using J-hook crank retainer, assemble as shown.



STEP 2: With tarp closed, rotate crank arm across rear of box to determine crank retainer position. Position crank retainer to hold crank arm securely in place.

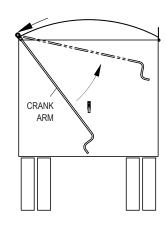


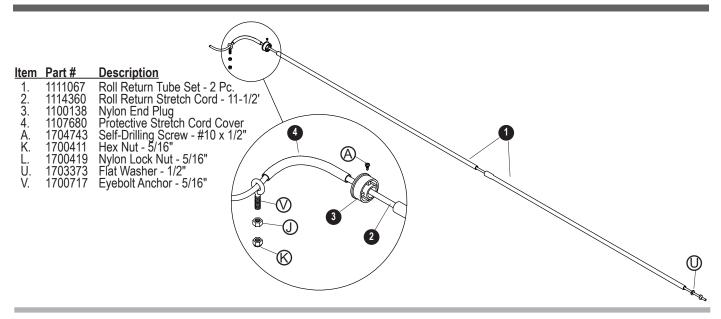
STEP 3: Mark and drill 5/16 inch holes and fasten crank retainer to box with screws (**G**), lock washers (**S**) and nuts (**N**). Fasten cable with snap and wire lock pin between standoff and box.



STEP 4: Hold crank firmly with both hands and roll tarp closed.

NOTE: Stretch cord return and gravity will force roll tube and crank arm downward when opening and closing tarp. Hold crank firmly with both hands while opening and closing tarp to prevent crank arm from spinning.

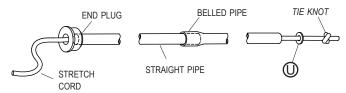




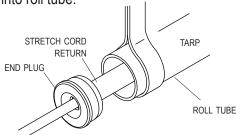
STEP 1: Insert straight pipe into belled pipe. Insert end plug into straight pipe.



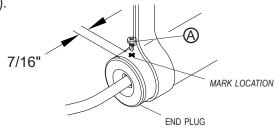
STEP 2: Insert stretch cord through end plug and pipes. Slide flat washer (**U**) over stretch cord and tie knot in cord.



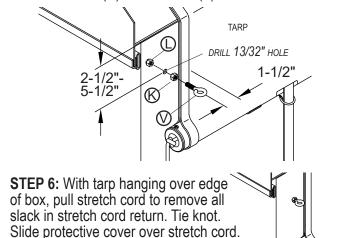
STEP 3: Insert stretch cord return into roll tube. Lightly tap end plug into roll tube.



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



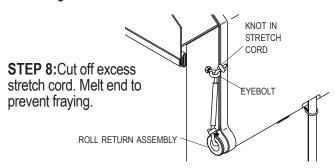
STEP 5: Drill 13/32 inch hole through box, 1-1/2 inches from edge of tarp and 2-1/2 to 5-1/2 inches down from top edge of top rail. Insert eyebolt (**V**) through hole and secure with nut (**K**) and lock nut (**L**).



STEP 7: Thread stretch cord through eyebolt. Pull cord to create enough tension to almost lift roll return. Tie knot.

STRETCH CORD

PROTECTIVE



The Premium Belt & Ratchet system is designed to provide years of reliable service. Follow installation instructions, maintenance schedule and operating instructions provided to receive years of service from your PBR system. Incorrect operation or lack of maintenance can severely impair operation of the system and cause premature tarp and cable wear.

Maintenance Schedule

Perform the following procedures 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 - Manual Crank

To uncover load:

- 1. Release all hold-down straps from ratchets.
- 2. Unwrap rope return from storage hooks.
- 3. Remove crank from crank retainers and insert square key into square end of roll tube.
- 4. Turn crank clockwise (counter-clockwise for reverse roll) until tarp has rolled up against tarp stops.
- 5. Detach crank from roll tube and place crank back into crank retainers.

To cover load:

- 1. Pull rope return to roll tarp closed.
- 2. Store rope return by wrapping rope around storage hooks.
- 3. Connect hold-down straps to ratchets and ratchet straps down until tarp is correctly tensioned.

Operating Instructions - Fixed Crank

To uncover load:

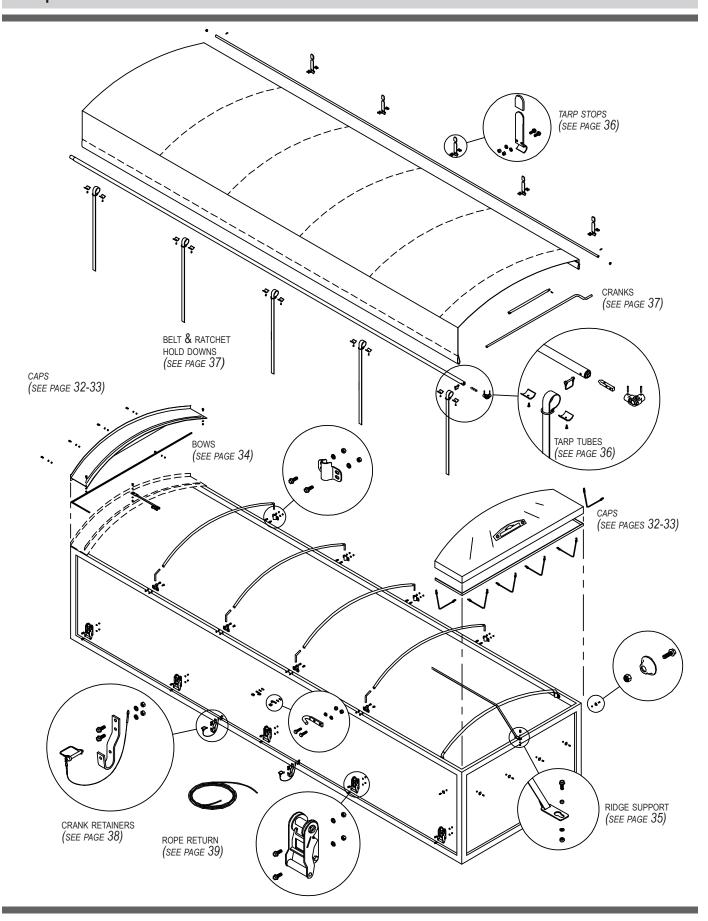
- 1. Release all hold-down straps from ratchets.
- 2. Release crank from crank retainer.
- 3. Turn crank clockwise (counter-clockwise for reverse roll) until tarp has rolled up against tarp stops.
- 4. Place crank back into crank retainer.

To cover load:

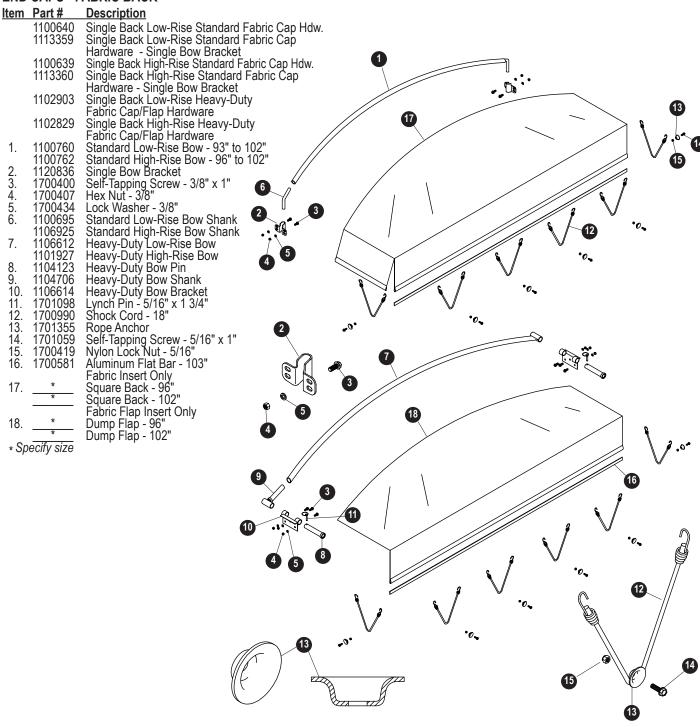
- 1. Release crank from crank retainer.
- 2. Turn crank counter-clockwise (clockwise for reverse roll) until tarp is hanging over edge of trailer, completely unrolled.
- 3. Place crank back into crank retainer.
- 4. Connect hold-down straps to ratchets and ratchet straps down until tarp is correctly tensioned

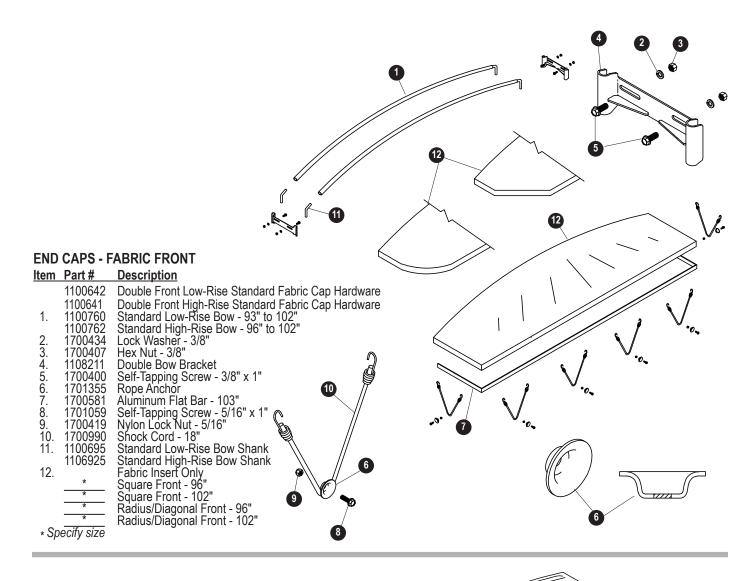
Close cover at all times except when loading or unloading to extend the life of your PBR system.

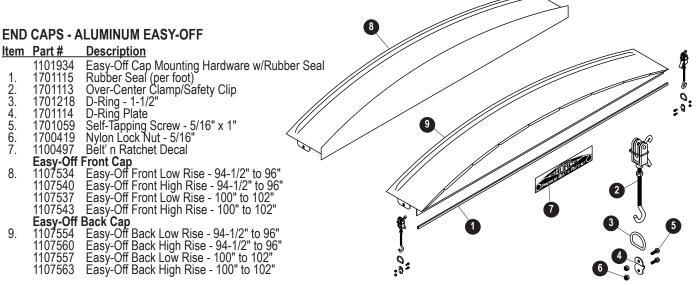
Open cover while unloading box. Unloading box with cover closed will create a vacuum which could damage your system.

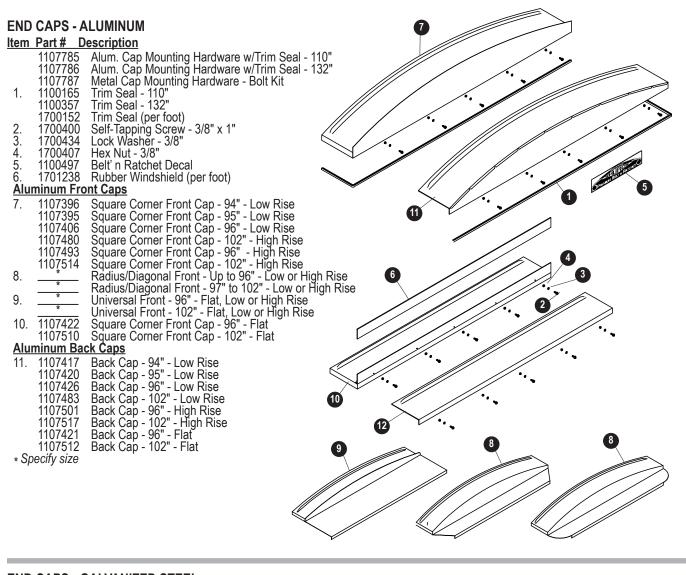


END CAPS - FABRIC BACK

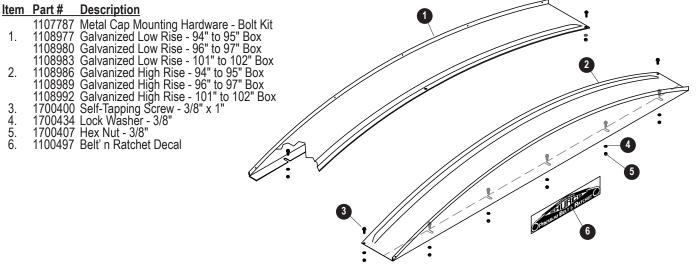


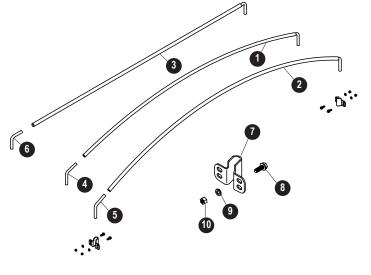






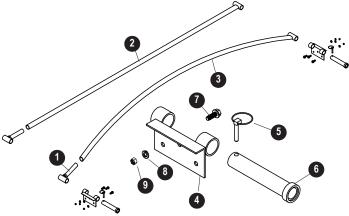
END CAPS - GALVANIZED STEEL





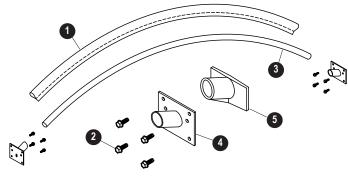
BOWS - STANDARD STEEL

<u>ltem</u>	Part #	<u>Description</u>
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	1111781 1100766 1100768 1109139 1109091 1100762 1109149 1100695 1106925 1109150 1120836 1120836 1700400 1700434 1700407	Standard Flat Bow Kit - 96" to 102" Standard Low-Rise Bow Kit - 93" to 102" Standard High-Rise Bow Kit - 96" to 102" Standard Low-Rise Bow Kit - 96" to 102" Standard High-Rise Bow Kit - Universal Standard High-Rise Bow - 93" to 102" Standard High-Rise Bow - 96" to 102" Standard Flat Bow - 89" to 95" Standard Flat Bow - 89" to 95" Standard High-Rise Bow Shank Standard High-Rise Bow Shank Standard Flat Bow Shank Single Bow Bracket Self-Tapping Screw - 3/8" x 1" Lock Washer - 3/8" Hex Nut - 3/8"
10.	1700407	HEX NUL - 3/0



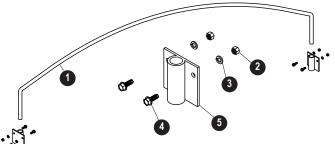
BOWS - HEAVY DUTY

<u>tem</u>	Part #	<u>Description</u>
111	2667	Heavy-Duty Flat Bow Kit
	1106615	Heavy-Duty Low-Rise Bow Kit
	1102697	Heavy-Duty High-Rise Bow Kit
1.	1104706	Heavy-Duty Bow Shank
2.	1112669	Heavy-Duty Flat Bow
3.	1106612	Heavy-Duty Low-Rise Bow
	1101927	Heavy-Duty High-Rise Bow
4.	1106614	Heavy-Duty Bow Bracket
5.	1701098	Lynch Pin - 5/16" x 1 3/4"
<u>6</u> .	1104123	Heavy-Duty Bow Pin
7.	1700400	Heavy-Duty Bow Pin Self-Tapping Screw - 3/8" x 1" Lock Washer - 3/8"
8.	1700434	
9.	1700407	Hex Nut - 3/8"



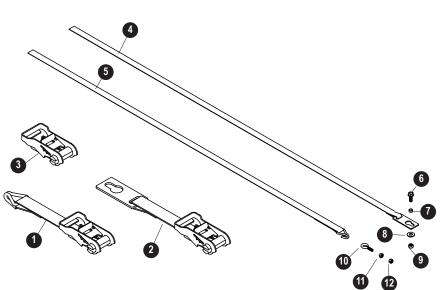
BOWS - DURABOW™

<u>Item</u>	Part#	<u>Description</u>
	1110652	Durabow™ Bow Kit - 97" - Steel Bracket
	1112186	Durabow™ Bow Kit - 102" - Steel Bracket
	1111656	Durabow™ Bow Kit - 97" - Aluminum Bracket
	1112187	Durabow™ Bow Kit - 102" - Aluminum Bracket
1.	1111335	Durabow™ Bow Sock
	1704046	Diamondback Durabow™ Bow Sock (per foot)
2.	1700400	Self-Tapping Screw - 3/8" x 1"
2. 3.	1702625	Self-Tapping Screw - 3/8" x 1" Durabow™ - 97"
	1702857	Durabow™ - 102"
4.	1110637	Steel Durabow™ Bracket
5.	1704165	Aluminum Durabow™ Bracket



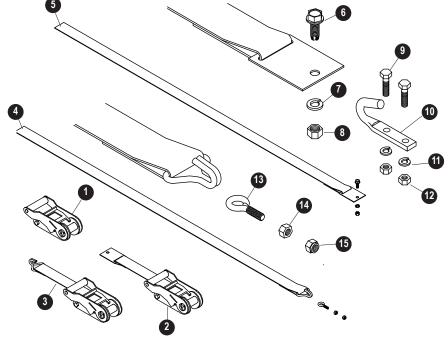
BOWS - ALUMINUM

Item Part #	<u>Description</u>
1*	Solid Aluminum Low-Rise Bow
<u>*</u>	Solid Aluminum High-Rise Boy
2. 1700407	Hex Nut - 3/8"
3. 1700434	Lock Washer - 3/8"
4. 1700400	Self-Tapping Screw - 3/8" x 1"
5. 1109110	Self-Tapping Screw - 3/8" x 1" Aluminum Bow Pocket
 Specify size 	



RIDGE STRAPS - 1 INCH

	<u>ltem</u>	Part #	<u>Description</u>
	1. 2.	1101685 1101686 1101687 1107068 1101833 1120048 1120454 1106153 1101678 1700836 1101680 1101681 1101682 1107066	Ridge Strap Kit w/Anchor - 1" x 25' Ridge Strap Kit w/Anchor - 1" x 39' Ridge Strap Kit w/Anchor - 1" x 46' Ride Strap Kit w/Anchor - 1" x 46' Ridge Strap Kit w/Hook - 1" x 46' Ridge Strap Kit w/Hook - 1" x 25' Ridge Strap Kit w/Hook - 1" x 56' Ratchet w/1" Ridge Strap/Hook Ratchet w/1" Ridge Strap/Anchor Ratchet - 1" Ridge Strap Ridge Strap w/Anchor - 1" x 25' Ridge Strap w/Anchor - 1" x 39' Ridge Strap w/Anchor - 1" x 46' Ridge Strap w/Anchor - 1" x 56'
	5.	1150222 1101835 1116163	Ridge Strap w/Hook - 1" x 25' Ridge Strap w/Hook - 1" x 46' Ridge Strap w/Hook - 1" x 56'
)	<u>6</u> .	1700400	Self-Tapping Screw - 3/8" x 1"
	7.	1101683	Anchor Bushing
	6. 7. 8. 9.	1701176 1700418	Flat Washer - 3/8" Centerlock Nut - 3/8"
	10.	1700410	Eyebolt Anchor - 5/16"
	11.	1700411	Hex Nut - 5/16"
	12.	1700419	Nylon Lock Nut - 5/16"



RIDGE STRAPS - 2 INCH

KIDGE STRAPS • Z INCH		
Item	Part #	<u>Description</u>
1	1100783 1100784 1100774 1107069 1111823 1700519 1100594	Ridge Strap Kit w/Anchor - 2" x 25 Ridge Strap Kit w/Anchor - 2" x 39 Ridge Strap Kit w/Anchor - 2" x 46 Ride Strap Kit w/Anchor - 2" x 56' Ridge Strap Kit w/Hook - 2" x 46' Ratchet - 2" Web Ratchet w/2" Ridge Strap/Anchor
2. 3. 4.	1111818	Ratchet w/2" Ridge Strap/Hook
4. 5.	1111817 1100571	Ridge Strap w/Hook - 2" x 46' Ridge Strap w/Anchor - 2" x 25'
•	1100579 1100580 1107067	Ridge Strap w/Anchor - 2" x 39' Ridge Strap w/Anchor - 2" x 46' Ridge Strap w/Anchor - 2" x 56'
6. 7.	1700400 1700434	Self-Tapping Screw - 3/8" x 1" Lock Washer - 3/8"
8.	1700407	Hex Nut - 3/8"
9. 10	1700381 1700682	Cap Screw - 1/4" x 1" Box Hook - 5/16" Holes"
11.	1700682 1700436	Lock Washer - 1/4"
12. 13.	1700408 1700717	Hex Nut - 1/4" Eyebolt Anchor - 5/16"
	1700411	Hex Nut - 5/16"
15.	1700419	Nylon Lock Nut - 5/16"

TARP TUBES

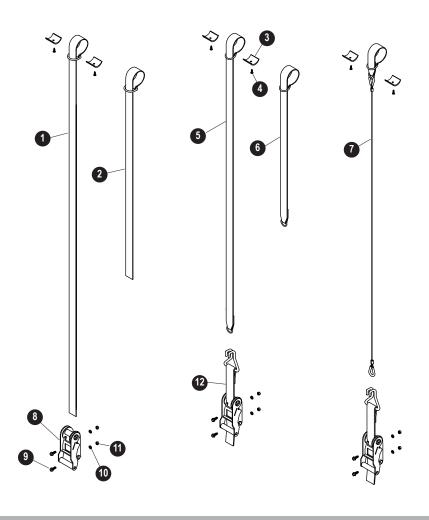
	IODEO		
<u>ltem</u>	Part #	<u>Description</u>	
1.	1105174	Roll Tube w/Square Key - 2" x 8'	
	1128150	Roll Tube w/Square Key - 2" x 11'	
	1128149	Roll Tube w/Square Key - 2" x 15'	
	1105132	Roll Tube w/Square Key - 2" x 16'	
	1105131	Roll Tube w/Square Key - 2" x 20'	
	1105124	Roll Tube w/Square Key - 2" x 24'	
2.	1706153	Roll Tube - 2" x 8'	
	1706152	Roll Tube - 2" x 11'	
		Roll Tube - 2" x 15'	2
	1700048	Roll Tube - 2" x 16'	
		Roll Tube - 2" x 20'	
	1701427	Roll Tube - 2" x 24'	
3.		Fixed Tube - 1-1/8" x 8'	
	1706155	Fixed Tube - 1-1/8" x 11'	
		Fixed Tube - 1-1/8" x 15'	
		Fixed Tube - 1-1/8" x 16'	
		Fixed Tube - 1-1/8" x 20'	
		Fixed Tube - 1-1/8" x 24'	
4.		Plastic End Plug	
5.	1105033		it
6.		Plastic U-Clamp	•
7.		Self-Drilling Screw - 1/4" x 3/4"	
8.	1704768	Self-Drilling Screw - 1/4" x 3/4"	

TARP STOPS

IAR	PSTOPS		lacksquare
Item	Part #	Description	
1.	1111092 1111093 1111096 1111094 1111095 1114047 1114388 1124768 1124771 1114017 1114515 1700729	Standard Tarp Stop Kit Offset Tarp Stop Kit Recessed Tarp Stop Kit Easy-Off Aluminum Tarp Stop Kit Easy-Off Aluminum 6" Offset Tarp Stop Kit Easy-Off Flexible Tarp Stop Kit Easy-Off Flexible 6" Offset Tarp Stop Kit Easy-Off Aluminum Tarp Stop Assembly Easy-Off Aluminum 6" Offset Tarp Stop Assembly Easy-Off Flexible Tarp Stop Assembly Easy-Off Flexible 6" Offset Tarp Stop Assembly	
2. 3.	1100049 1100392	Standard Tarp Stop	
4.	1105163	Recessed Tarp Stop	
4. 5. 6.	1700400 1700434	Self-Tapping Screw - 3/8" x 1" Lock Washer - 3/8"	
7. 8.	1700407	Nut - 3/8"	
9.	1115217	Bowtie Cotter Pin Easy-Off Flexible 6" Offset Tarp Stop Upright w/Embedded Safety Plate	
10.	1115216	Easy-Off Flexible Tarp Stop	3
11.	1100833	Upright w/Embedded Safety Plate Easy-Off Tarp Stop Body Clevis Pin - 5/16" x 2-7/8"	
12. 13.	1703604 1705454	Clevis Pin - 5/16" x 2-7/8" Fasy-Off Alum (Cast) 6" Offset Tarn Ston Unright	
14.	1705775	Easy-Off Alum. (Cast) 6" Offset Tarp Stop Upright Easy-Off Aluminum (Cast) Tarp Stop Upright	

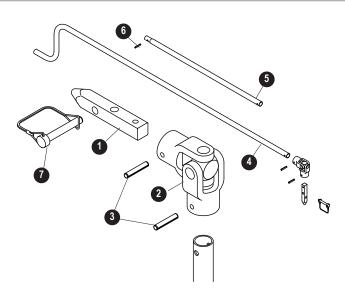
HOLD-DOWNS - BELT' N RATCHET

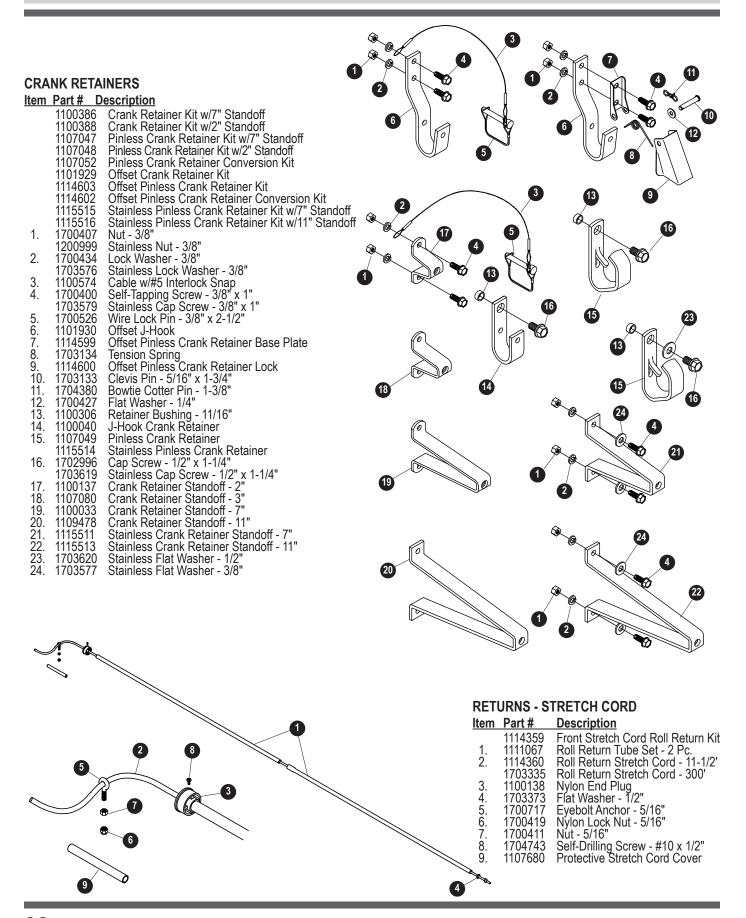
<u>ltem</u>	Part #	<u>Description</u>
4. 5. 6. 7. 8. 9.	1106770 1106771 1106772 1107224 1107225 1106774 1100470 1701354 170223 1107222 1106763 1100457 1700400 1700434 1700407 1106754	Cable Hold-Down Kit - 7' Strap Hold-Down Kit w/Hook - 5 Strap Hold-Down Kit w/Hook - 5 Strap Hold-Down Kit w/Hook - 5 Strap Hold-Down Kit w/Hook - 7 Strap Assembly - 9' Strap Assembly - 5' Plastic U-Clamp Self-Drilling Screw - 1/4" x 3/4" Wire Hook Strap Assembly - 7' Wire Hook Strap Assembly - 5' Cable Assembly w/Hook - 7' Ratchet - 2" Self-Tapping Screw - 3/8" x 1" Lock Washer - 3/8" Web Assembly w/Hook

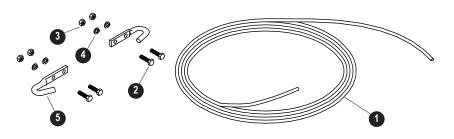


CRANK ARMS - STANDARD

Item	Part #	Description
	1100061	Standard Belt 'n Ratchet Crank Arm Kit
	1101500	Long Belt 'n Ratchet Crank Arm Kit
1.	1115774	Pilot Crank Key
2.	1700527	Econo U-Joint
3.	1700445	Spring Pin - 1/4" x 1-1/2"
4.	1100461	Offset Crank Arm
5.	1107838	Square Crank Extension - 33"
6.	1701118	Spring Pin - 1/4" x 1-3/16"
7.	1700526	Wire Lock Pin - 3/8" x 2-1/2"







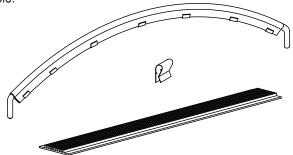
RETURNS - ROPE

ltem	Part #	<u>Description</u>
	1100064	Rope Return Kit
1.	1100469	Rope - 32'
2.	1700381	Cap Screw - 1/4" x 1"
3.	1700408	Nut - 1/4"
4.	1700436	Lock Washer - 1/4"
5.	1700682	Box Hook - 5/16" Holes

OPTIONS & UPGRADES

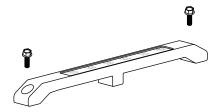
BOW COVERS

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



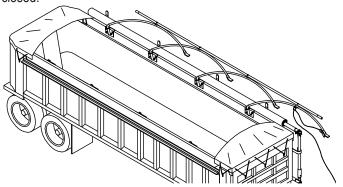
ROLL TUBE DEFLECTOR

Fasten to latchplate side of trailer to keep roll tube from damaging paint job. Fasten with 5/16 inch self-tapping screws.



TURNING POINT™ BOWS

Operated from the ground, Turning Point™ bows easily swing aside with just a pull of a rope. Bows latch securely when closed.



STANDARD TARP REPAIR KIT



PROFESSIONAL TARP REPAIR KIT

Shur-Co's professional tarp repair kit repairs your tarp using the heat-seal method. No messy adhesives or solvents. This kit includes heat gun, scissors,

roller, 12 feet of 18-oz. or 22-oz. repair tarp (specify color) and instructions.



TARP OPTIONS

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

