



Shur-Lok™ E-Series for Refuse and Chip Trailers

OWNER'S MANUAL

3.55-Inch Electric Roll Tarp System

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PHONE: 1.866.748.7435 | FAX: 1.605.665.0501

2309 SHURLOCK STREET | YANKTON, SD 57078-0713

SHURCO.com



**SAFETY INSTRUCTIONS**

At Shurco™, your safety is our top priority. Please read and thoroughly understand all instructions before operating all equipment. Failure to READ AND FOLLOW INSTRUCTIONS may result in system failure, property damage, or personal injury. Pay close attention to warnings, cautions, and operating instructions. The hazard symbol  alerts users of potentially hazardous conditions, and is followed by Caution, Warning, or Danger messages to indicate risk:

- **Danger** : (Red) Indicates an imminently hazardous situation that, if not avoided, WILL result in death or serious injury.
- **Warning** : (Orange) Indicates a potentially hazardous situation that, if not avoided, COULD result in death or serious injury.
- **Caution** : (Yellow) Indicates a potentially hazardous situation that, if not avoided, MAY result in minor or moderate injury or damage to the system.
- **Notice** : (Blue) Indicates operational notes or other essential information without addressing safety.

Regularly inspect equipment to ensure proper performance. Always repair or replace worn or damaged parts immediately to maintain safety. Safety decals are placed at critical locations on the equipment. Keep these decals clean and legible at all times. Replace any decal that is worn, damaged, painted over or otherwise unreadable. Replacement decals can be obtained by your local Shurco™ dealer.

- Always wear safety glasses during installation and operation.
- Stay clear of moving parts.
- No other use of Shurco™ equipment is authorized, except as designed.

Shur-Co LLC. TERMS OF SERVICE

ORDER
TERMS AND CONDITIONS



WARRANTY



PATENTS

**SERVICE AND DISTRIBUTION CENTERS**

SHURCO.com

LOCATIONS



MESSAGE TO OWNERS

Thank you for choosing Shurco™ for your tarping system needs. We appreciate your confidence in our products. Please note that while this manual provides comprehensive installation and operation instructions, your trailer may require minor adjustments to these guidelines.

Visit Shurco.com to access the most current version of these instructions and other important product information.

QUESTIONS?

CALL OUR HELP LINE:

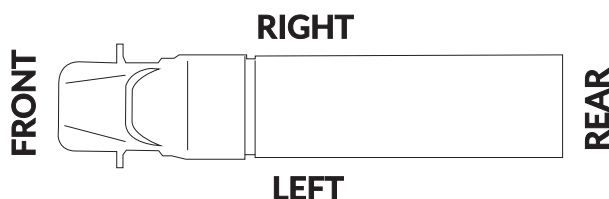
1-866-748-7435

MONDAY-FRIDAY
8 AM-5 PM CENTRAL TIME

MAINTENANCE

- Spray all bearings with penetrating oil as needed.
- Brush springs with steel brush weekly to remove dirt and spray with penetrating oil.
- Tighten loose bolts.
- Make sure arms are not hitting ends of box.
Replace damaged/bent arms.
- Replace worn or broken springs.
- Replace/repair worn or damaged tarp.

VEHICLE ORIENTATION



REQUIRED TOOLS

- Welder Steel, Aluminum Optional
- Hammer
- Center Punch or Transfer Punch
- #3 Phillips Insert Bit
- #2 Phillips Insert Bit
- Air or Electric Impact Wrench (9/16" and 3/4" deep socket)
- 7/16", 9/16", 1/2", 3/4" Combination Wrench
- 7/32", 1/4", 21/64", 5/16", 3/8", 1/2" Drill Bit
- 1/4" Drive with Swivel
- Standard/Flathead Screwdriver
- Utility Knife
- Ratchet
- Hack Saw (metal cutter)
- Pliers
- Grinder
- Tape Measure
- Hand Riveter

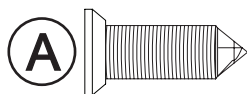
NOTICE: This installation requires two people for safe and efficient completion.



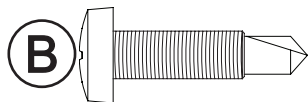
Inspect your kit to ensure all parts and hardware are included before starting installation.

*PLEASE READ THE COMPLETE MANUAL BEFORE
PROCEEDING WITH INSTALLATION OR USE OF THE TARPING SYSTEM.*

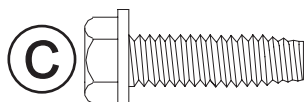
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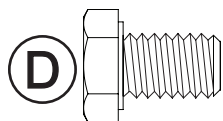
1704768 Self-Drilling Screw 1/4" x 3/4"



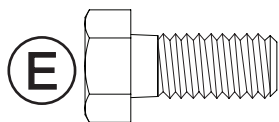
1705198 Self-Drilling Screw - 1/4" x 1"



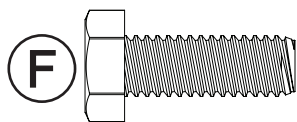
1704338 Self-Tapping Screw - 1/4" x 1"



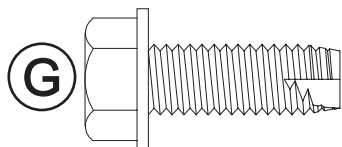
1703171 Hex Head Cap Screw - 5/16" x 1/2"



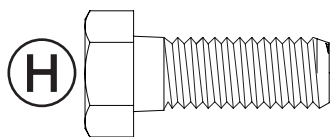
1701045 Cap Screw - 5/16" x 3/4"



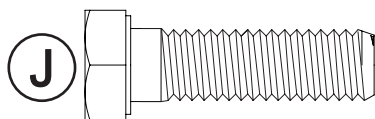
1702926 Cap Screw - 5/16" x 7/8"



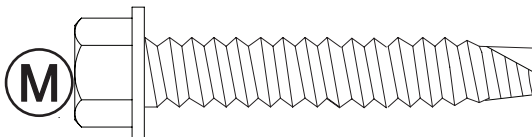
1700400 Self-Tapping Screw - 3/8" x 1"



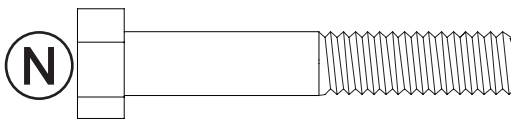
1701061 Hex Head Cap Screw - 3/8"



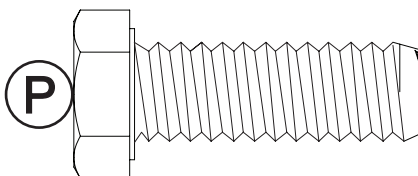
1702891 Cap Screw - 3/8" x 1-1/4"



1701544 Self-Tapping Screw - 3/8" x 2"



1704264 Cap Screw - 3/8" x 2" - Grade 8



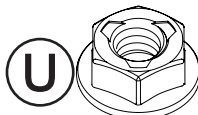
1702075 Hex Head Cap Screw - 1/2" x 1-1/2"



1701543 Nylon Lock Nut - 1/4"



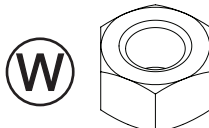
1700419 Nylon Lock Hex Nut - 5/16"



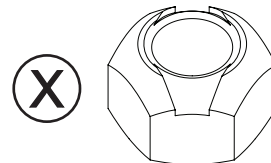
1704946 Top Lock Flanged Nut - 5/16"



1701580 Nylon Lock Nut - 3/8"



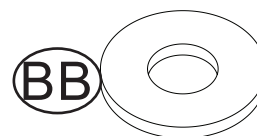
1700407 Hex Nut - 3/8"



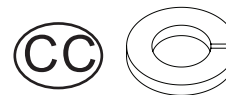
1700416 Lock Nut - 1/2"



1700427 Flat Washer - 1/4"



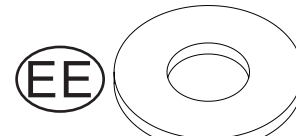
1700428 Flat Washer - 5/16"



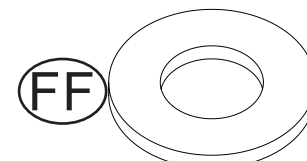
1700433 Lock Washer - 5/16"



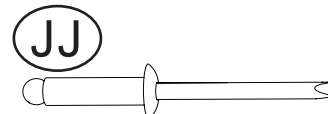
1700434 Lock Washer - 3/8"



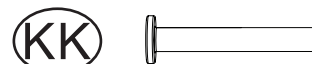
1700429 Flat Washer - 3/8"



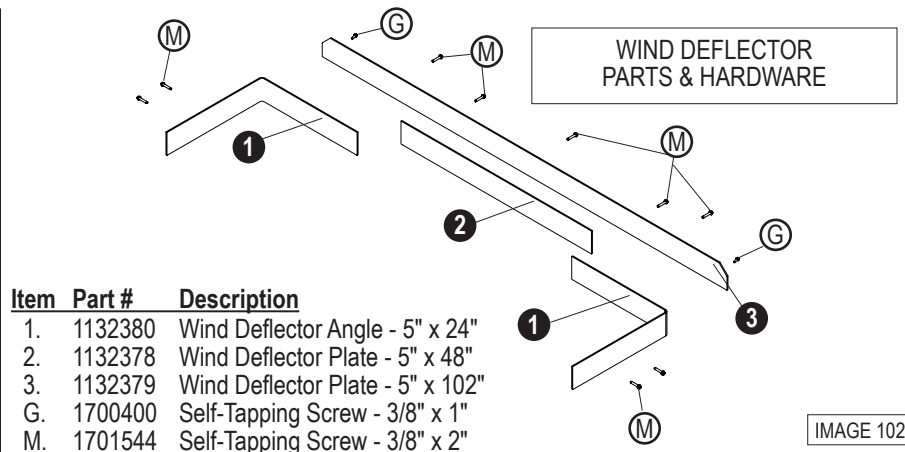
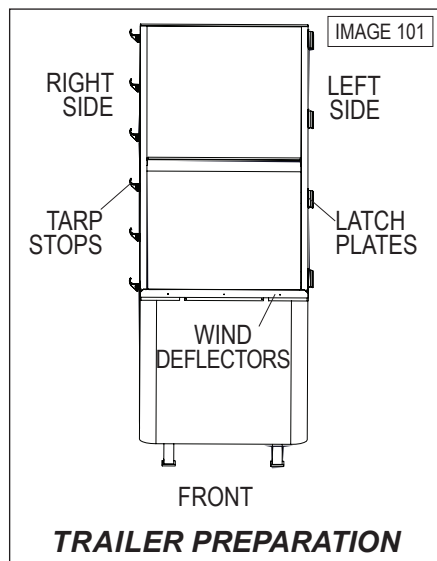
1703373 Flat Washer - 1/2"



1700472 Blind Rivet - 1/4"



1704751 Harness Lock Pin - 1/4" x 7/8"

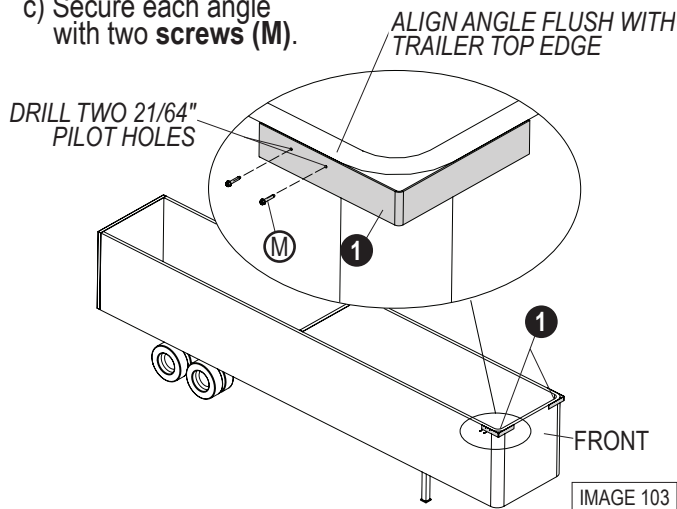


NOTICE: If the trailer does not have a radius or diagonal front, proceed to the next page.

Wind Deflector Installation

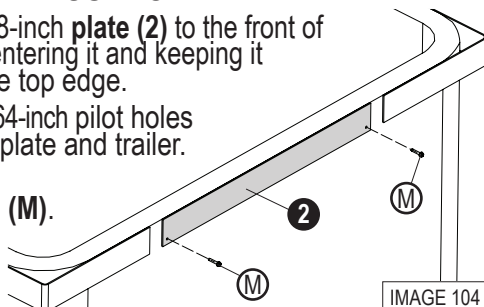
STEP 1: INSTALL WIND DEFLECTOR ANGLES

- Clamp **angle (1)** onto the left and right front corners of the trailer, ensuring the top edge of the angles are flush with the trailer's top edge.
- On each side of the trailer, drill two 21/64-inch pilot holes through the angle and trailer.
- Secure each angle with two **screws (M)**.



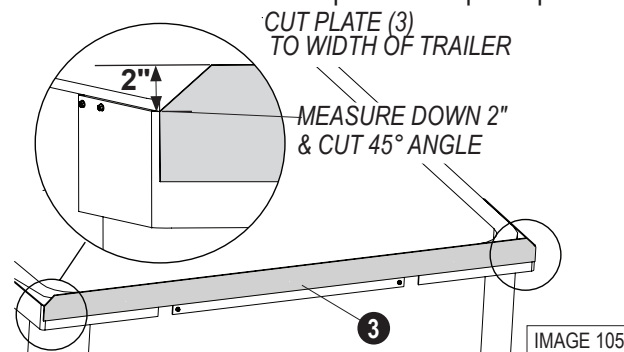
STEP 2: INSTALL SUPPORT PLATE

- Clamp the 48-inch **plate (2)** to the front of the trailer, centering it and keeping it flush with the top edge.
- Drill two 21/64-inch pilot holes through the plate and trailer.
- Secure with two **screws (M)**.



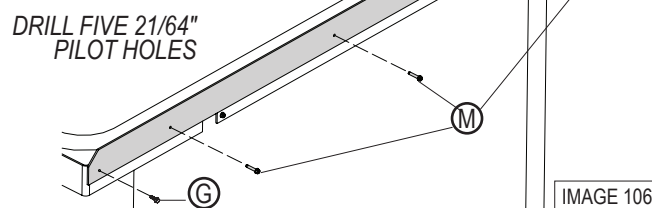
STEP 3: CUT WIND DEFLECTOR PLATE

- Cut the **wind deflector plate (3)** to the width of the trailer.
- At each end of the wind deflector plate, measure down 2 inches and mark. From these marks, make a 45-degree angle cut inward towards the center of the plate.
- Align the plate so that the angle cuts are flush with the trailer's top edge, with the top of the plate positioned 2 inches above the trailer's top rail. Clamp into place.



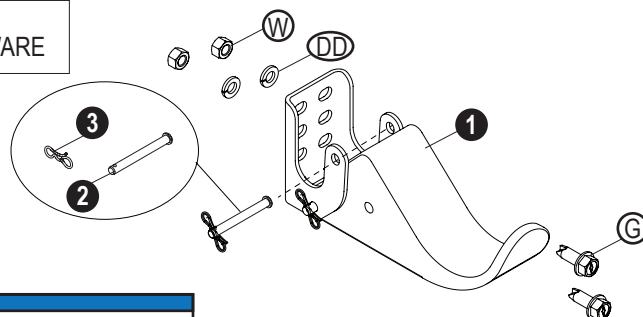
STEP 4: SECURE WIND DEFLECTOR PLATE

- Drill five 21/64-inch pilot holes in the plate—two near each end and one in the center—ensuring the holes pass through the plate, angles, and the trailer skin when possible.
- Secure the plate using a screw (**G**) near each corner and three **screws (M)** as shown below.



Item Part # Description

- | | | |
|-----|---------|----------------------------------|
| 1. | 1131263 | EOF Flexible Offset 6" Tarp Stop |
| 2. | 1703604 | Clevis Pin - 5/16" x 2-7/8" |
| 3. | 1704380 | Bowtie Cotter Pin - 1-3/8" |
| G. | 1700400 | Self-Tapping Screw - 3/8" x 1" |
| W. | 1700407 | Hex Nut - 3/8" |
| DD. | 1700434 | Lock Washer - 3/8" |

**TARP STOP
PARTS & HARDWARE**

NOTICE: Lock washer and nut may be omitted if wall thickness prevents proper securement.

IMAGE 110

Tarp Stop Installation**STEP 1: POSITION FRONT TARP STOP**

On the right side of the trailer, position the front tarp stop (1) 16-20 inches from the front edge of the trailer and 1-1/4 inch from the top edge of the trailer box rail.

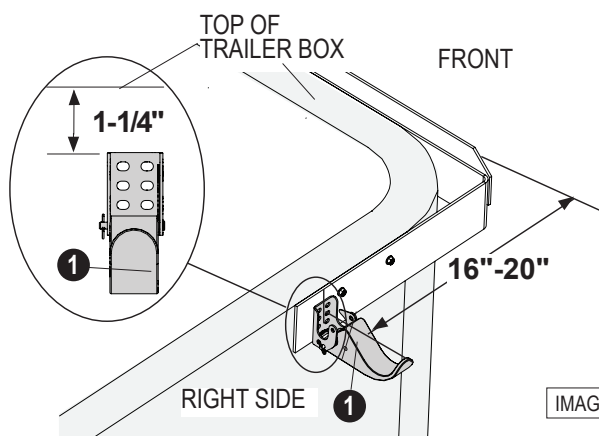


IMAGE 111

NOTICE: Tarp stops should be installed on a vertical surface.

STEP 2: ATTACH FRONT TARP STOP

- Use the tarp stop (1) to mark two hole locations.
- Drill two 21/64-inch holes.
- Fasten to the trailer with screws (G), lock washers (DD), and nuts (W).
- Remove the outside bowtie cotter pin (3) and clevis pin (2), and retain them for later use.

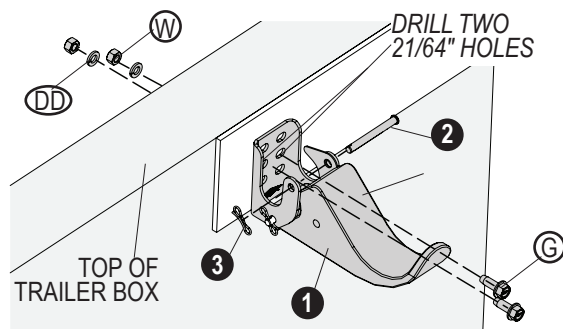


IMAGE 112

STEP 3: ATTACH REAR TARP STOP

- Determine the rear tarp stop placement by subtracting 14 inches from the tarp length. Measure the calculated distance from the front of the trailer and mark the position.
- Align the rear tarp stop (1) on the mark, 1-1/4 inch from the top edge of the rail.
- Secure as directed in Step 2.

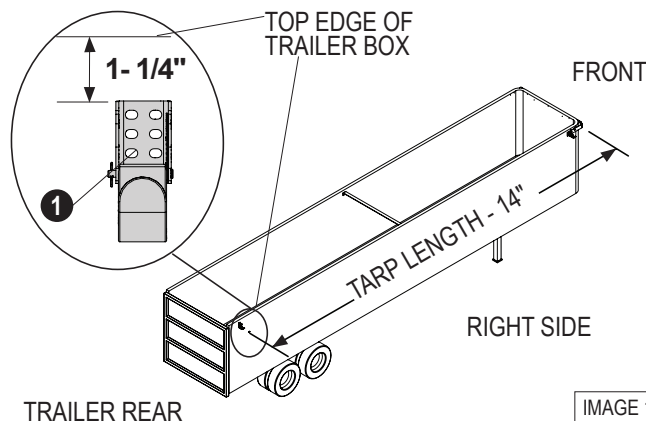


IMAGE 113

STEP 4: ATTACH INTERMEDIATE TARP STOPS

- Distribute the remaining four tarp stops (1) equally spaced and vertically aligned between the front and rear tarp stops.
- Secure as directed in Step 2.

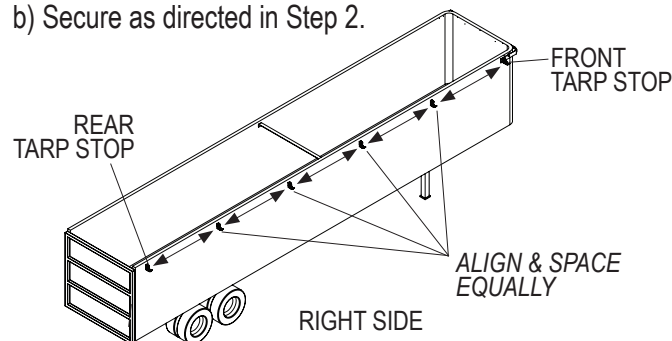


IMAGE 114

Item	Part #	Description
1.	1132381	Latch Plate - 36"
G.	1700400	Self-Tapping Screw - 3/8" x 1"
W.	1700407	Hex Nut - 3/8"
DD.	1700434	Lock Washer - 3/8"

LATCH PLATE PARTS & HARDWARE

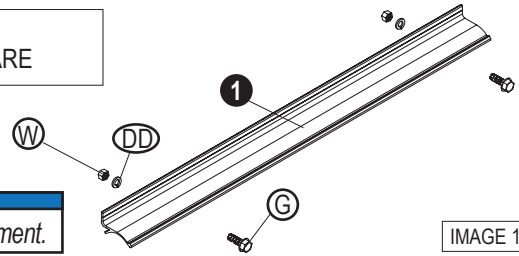


IMAGE 116

NOTICE: Lock washer and nut may be omitted if wall thickness prevents proper securement.

Latch Plate Installation

STEP 1: POSITION FRONT LATCH PLATE

- Clamp a latch plate (1) onto the left side of the trailer, flush with the front corner, and align it 2 to 5 inches from the top of the rail.
- Mark hole locations on each side of the plate, within 6 inches from each edge.

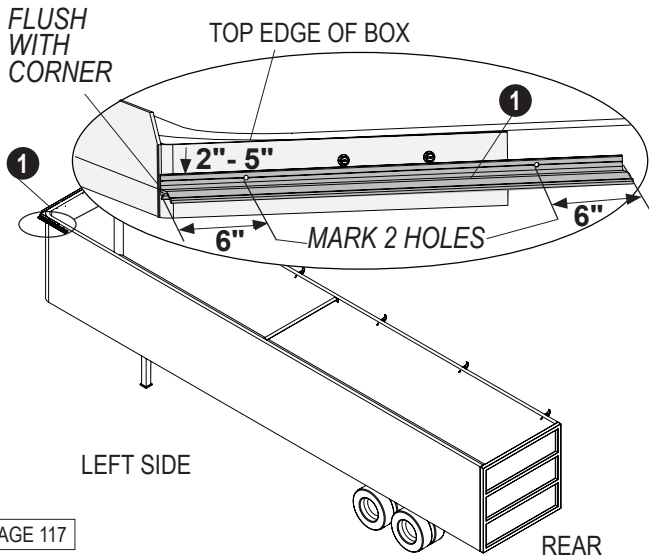


IMAGE 117

STEP 2: INSTALL FRONT LATCH PLATE

- Drill two 21/64-inch pilot holes at the marked locations, through the latch plate (1) and the trailer.
- Secure the plate with two screws (G), two lock washers (DD), and two nuts (W).

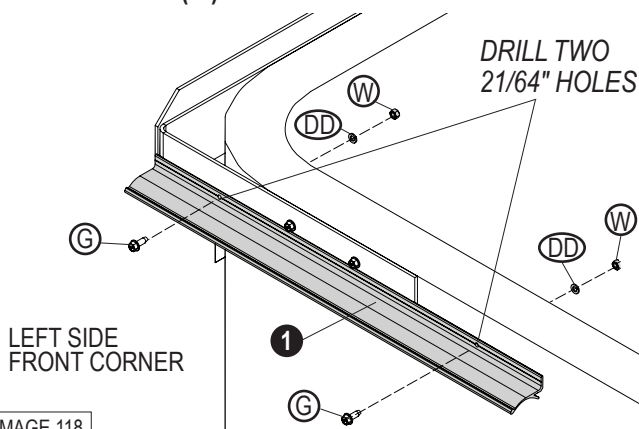


IMAGE 118

STEP 3: POSITION REAR LATCH PLATE

- Determine the rear latch plate (1) placement by adding 6 inches to the tarp length. Measure the calculated distance from the front of the trailer and mark the position.
- Align and clamp the rear latch plate (1) on the mark, 2 to 5 inches from the top edge of the rail.
- Secure as directed in Step 2.

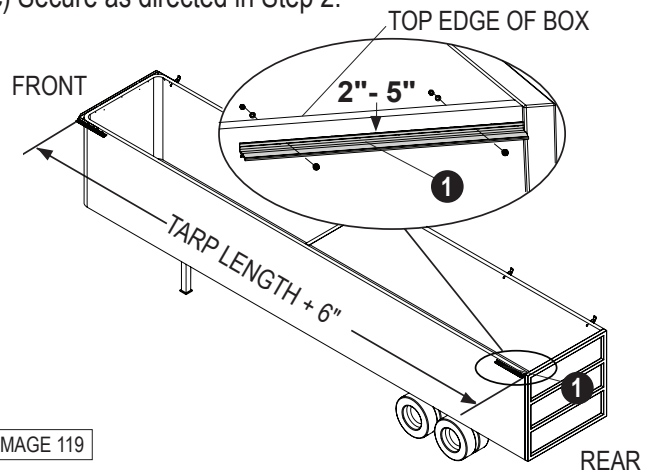


IMAGE 119

STEP 4: ATTACH INTERMEDIATE LATCH PLATES

- Position the remaining two latch plates (1) equally spaced and vertically aligned between the front and rear latch plates.
- Secure as directed in Step 2.

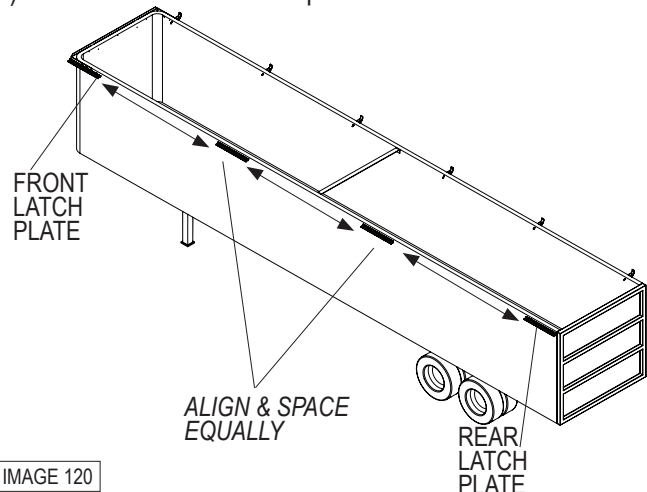
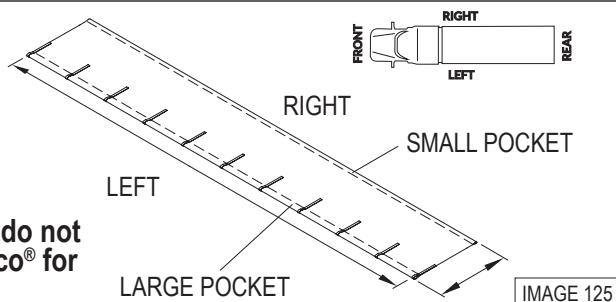


IMAGE 120

TARP INSPECTION

- Spread the tarp out completely and stretch it tightly, ensuring that the tags, or the straps if they are present, are oriented upward. The fold of the pockets (on Shur-co tarps) should face downward.
- Measure the length and width and compare the measurements with those on the spec sheet attached to the tarp.

Do not proceed with the installation if the tarp measurements do not match the spec sheet measurements within 1 inch. Call Shur-co® for alterations or a replacement tarp.



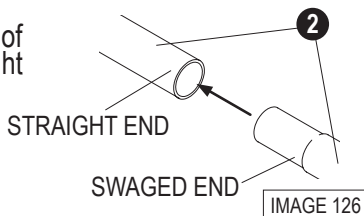
NOTICE: Tarps cannot be returned for free replacement beyond this point. Tarps damaged beyond this point may be returned for repair or replacement at owner's expense.

Fixed Tube Assembly

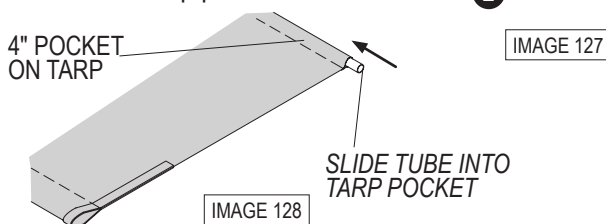
NOTICE: To prevent rust, paint all exposed metal, such as weld seams and/or metal exposed by grinding or cutting, with corrosion-resistant paint.

STEP 1: PREPARE FIXED TUBE

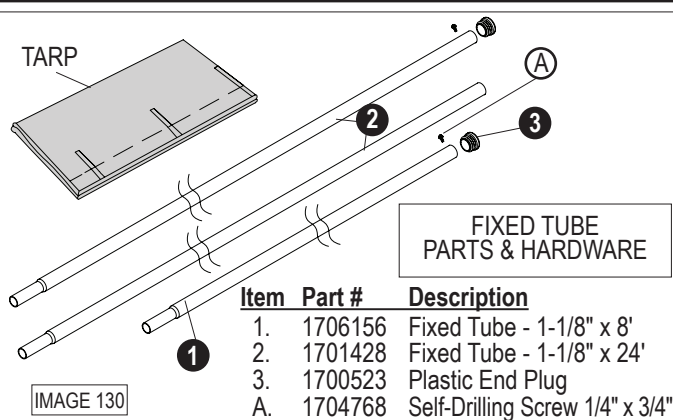
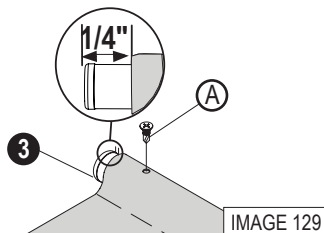
- Determine fixed tube length based on the trailer length:
 - Less than 24 feet - use **tube (2)** and continue to Step 2
 - More than 24 feet, combine tube lengths as directed in Step 1b.
- Insert the swaged end of one tube into the straight end of a second tube.
- Align the tubes, weld them together, and grind the joint smooth.

**STEP 2: INSERT TUBE INTO TARP**

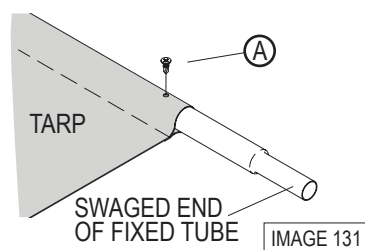
- Insert the **end plug (3)** into the straight end of the tube.
- Slide the tube, end plug first, into the 4-inch tarp pocket.

**STEP 3: SECURE FIXED TUBE IN TARP**

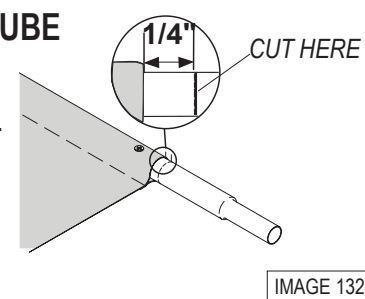
- Position the fixed tube so that it extends 1/4 inch beyond the tarp's edge.
- Fasten the tarp to the fixed tube using a 1/4" **screw (A)**.

**STEP 4: ALIGN TARP**

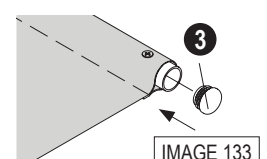
- Straighten and pull the tarp taut to the other end of the fixed tube.
- Fasten the tarp to the fixed tube using a 1/4" screw **(A)**.

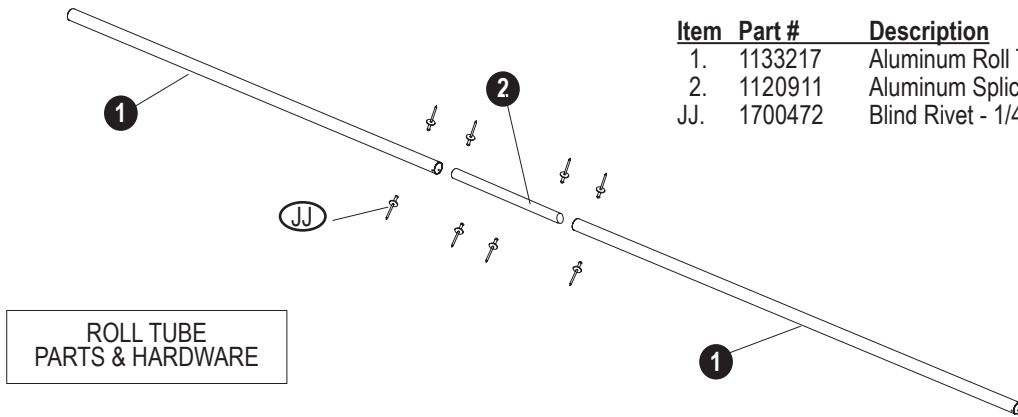
**STEP 5: CUT FIXED TUBE**

- Measure and mark the fixed tube 1/4 inch beyond the tarp's edge. Cut the tube at this mark, removing the swaged end.
- Grind the cut end of the tube smooth.

**STEP 6: FINALIZE FIXED TUBE**

Insert the end plug **(3)** into the newly cut end of the tube.





Item	Part #	Description
1.	1133217	Aluminum Roll Tube - 3.55" x 27'
2.	1120911	Aluminum Splice Tube - 3.55"
JJ.	1700472	Blind Rivet - 1/4"

IMAGE 140

Roll Tube Assembly

NOTICE: Do not cut off pre-drilled holes on end of roll tube.



STEP 1: CUT ROLL TUBE

- Determine roll tube length by adding 11-1/2 inches to the trailer's length.
- Mark and cut one section of **roll tube (1)**—not the end with predrilled holes—so the combined sections match the required roll tube length. Grind edges until smooth.

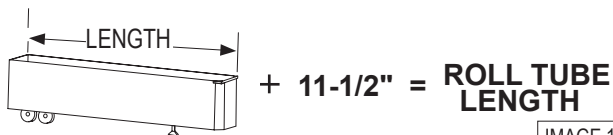


IMAGE 141

STEP 2: INSTALL SPLICE TUBE

Connect two sections of **roll tube (1)** using a **splice (2)**, inserting half of the splice tube into each roll tube section.

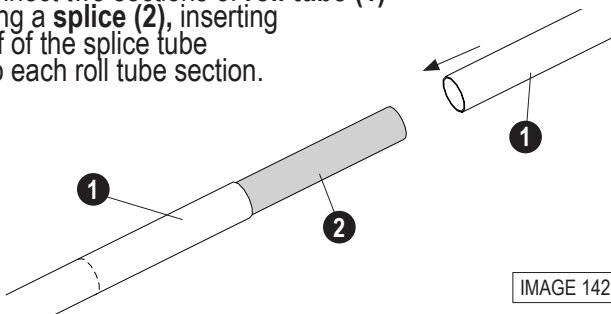


IMAGE 142

STEP 3: JOIN TUBES (2 Options)

Option 1 (Preferred):

Drill eight 1/4-inch holes through the **roll tubes (1)** and **splice (2)**. Then secure with eight **rivets (JJ)**. This method offers enhanced durability. See image 143.

Option 1 (Preferred)

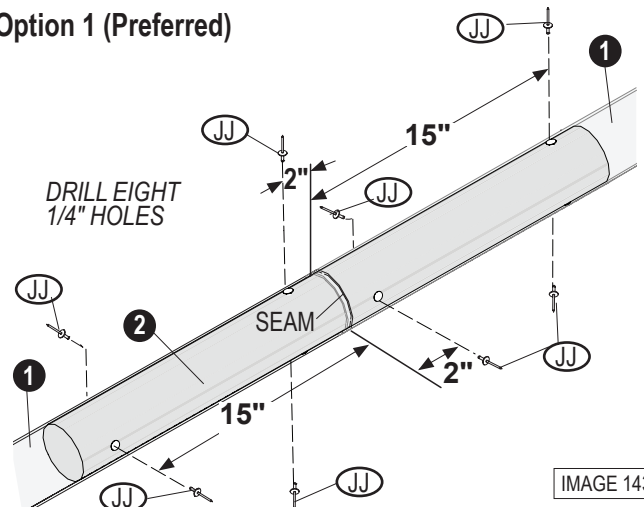


IMAGE 143

Option 2:

Drill eight 1/2-inch holes through the **roll tubes (1)** but not the **splice (2)**. Plug weld the roll tube to the splice. Grind until smooth.

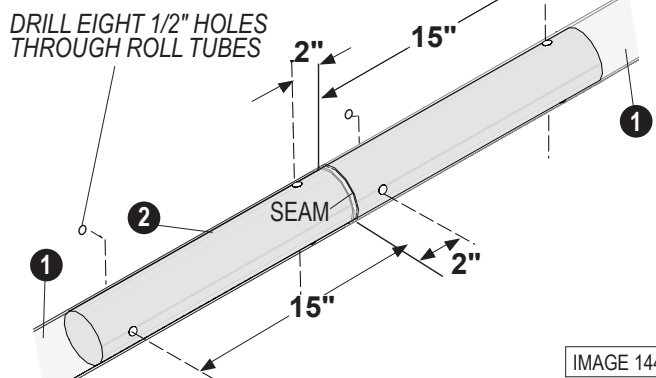


IMAGE 144

STEP 4: INSERT ROLL TUBE INTO TARP

Insert the roll tube into the tarp's 8-inch-pocket.

NOTICE: Inflate 8" tarp pocket with air chuck while inserting roll tube.

Tarp Placement

NOTICE: For ease of handling, wind the tarp onto the roll tube before lifting it onto the trailer box.

PLACE TARP

- Position a temporary support tube across the trailer's top, ensuring it is centered from the front to the back. Remove any sharp edges that could damage the tarp.
- Lay the tarp over the trailer box, positioning the roll tube at the left side and the fixed tube on the right side. Ensure that the tags, or the straps if they are present, are oriented upward. The fold of the tube pockets (on Shur-co® tarps) should face downward.
- Align the tarp evenly between the trailer's front and rear ends.

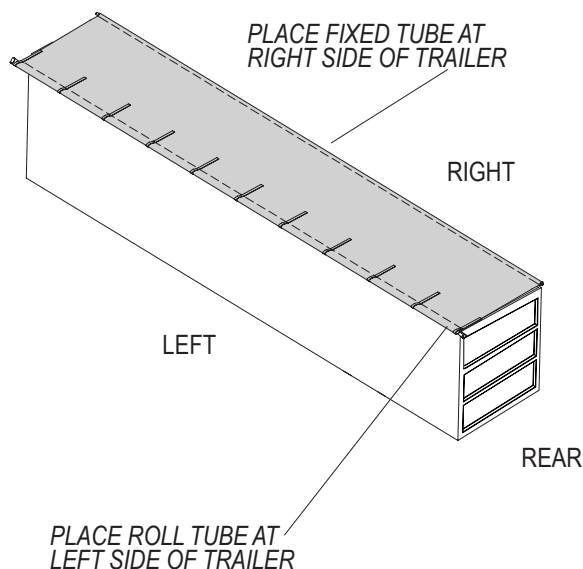


IMAGE 145

Fixed Tube Securement

STEP 1: SECURE FIXED TUBE TO TRAILER

- Adjust the tarp so the tarp edge is 2-3 inches from the wind deflector plate.
- Place the fixed tube so that it rests inside the U-shaped grooves of the six tarp stops.

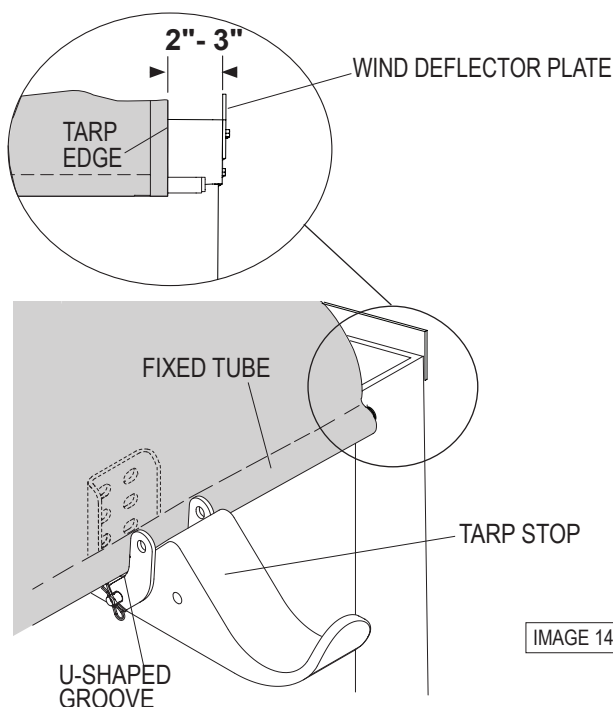


IMAGE 147

STEP 2: SECURE TARP STOPS

- Pivot the tarp stop upwards until the clevis pin holes are aligned.
- Insert the clevis pin, retained during the tarp stop installation, and secure with the bowtie cotter pin.

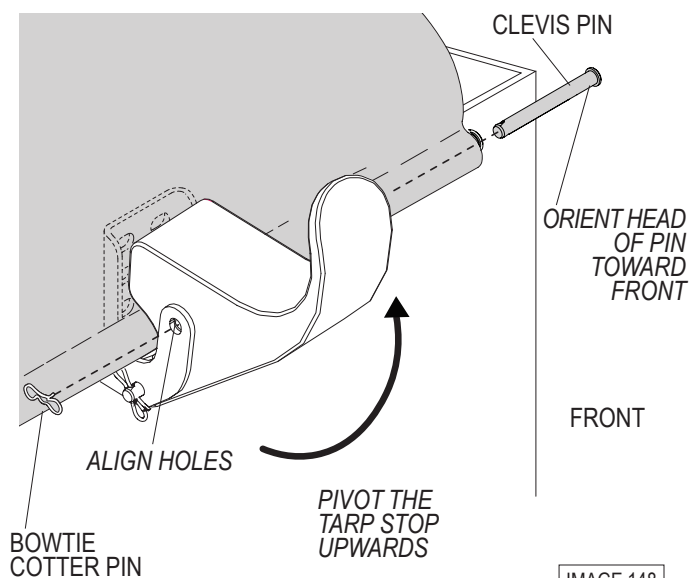


IMAGE 148

NOTICE: Install the clevis pin so its head is oriented toward the front of the trailer to reduce debris buildup in the tarp stop.

NOTICE: The following steps apply to installations where an existing system is being modified.
If installing a complete system, continue to the next page.

Existing System Conversion - Preparation

STEP 1: REMOVE HAND CRANK

- a) Using the hand crank, close the tarp over the box until the roll tube hangs below the latchplates.
- b) Remove the existing hand crank.

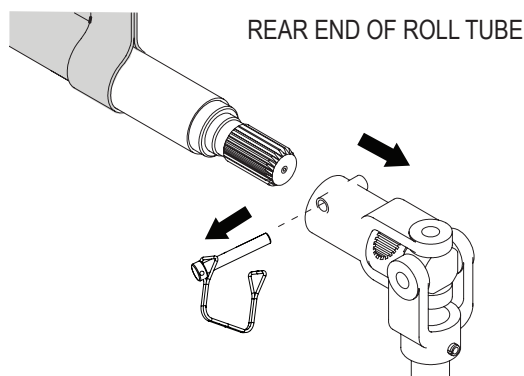


IMAGE 149

STEP 2: PREPARE ROLL TUBE

- a) Remove any existing returns, such as a cable return, bungee return, etc.
- b) Remove all U-clamps and screws from the roll tube, and retain them for later use.

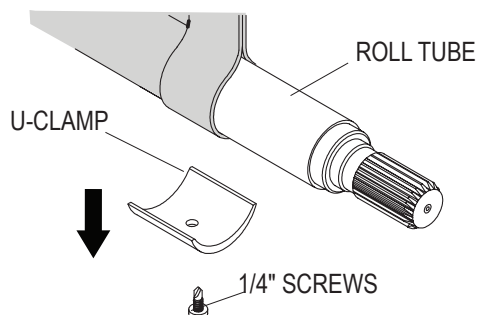


IMAGE 150

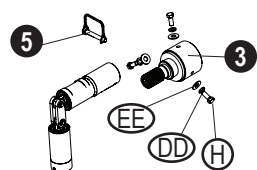
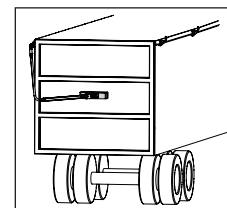
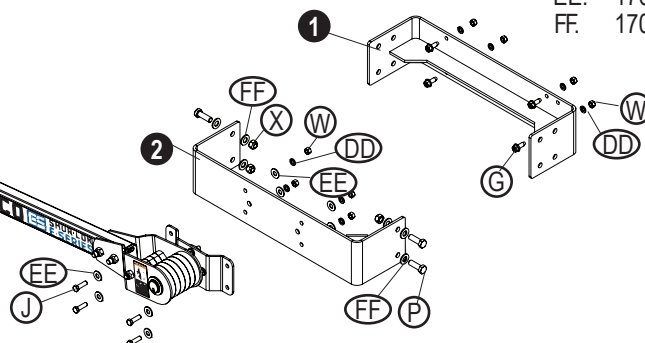
REAR ARM & BRACKET
PARTS & HARDWARE

IMAGE 151

Item	Part #	Description
1.		Rear Pivot Bracket
2.		Front Pivot Bracket
3.		Rear Arm Adapter
4.	1133194	Rear Arm Assembly
5.	1700526	Wire Lock Pin - 3/8" x 2-1/2"
6.	1809211	Thread Lock (not pictured)
G.	1700400	Self-Tapping Screw - 3/8" x 1"
H.	1701061	Hex Head Cap Screw - 3/8" x 1"
J.	1702891	Hex Head Cap Screw - 3/8" x 1-1/4"
P.	1702075	Hex Head Cap Screw - 1/2" x 1-1/2"
W.	1700407	Hex Nut - 3/8"
X.	1700416	Lock Nut- 1/2"
DD.	1700434	Lock Washer - 3/8"
EE.	1700429	Flat Washer - 3/8"
FF.	1703373	Flat Washer - 1/2"

Rear Arm & Pivot Bracket Installation

STEP 1: DETERMINE BRACKET LOCATION

REAR TRAILER

Center the rear bracket (1) according to trailer length:

- 102-inch trailer - center 46-inches down from highest point.
- 96-inch trailer - center 48-inches down from highest point.

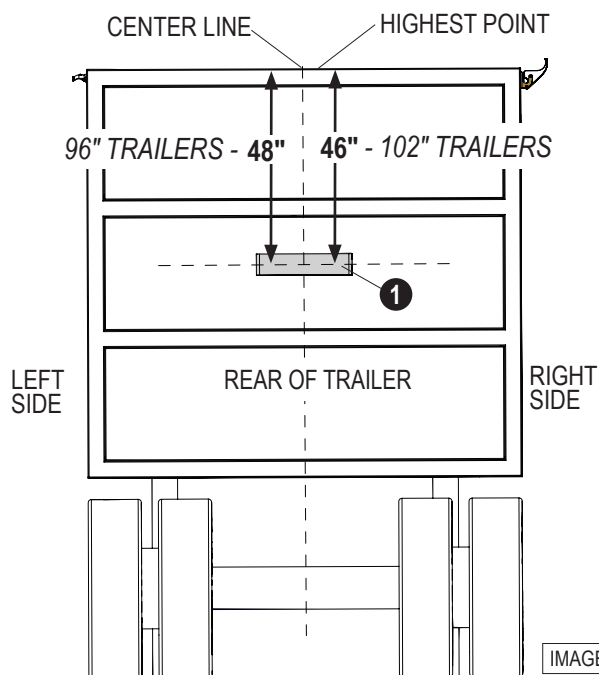


IMAGE 152

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

STEP 2: MOUNT REAR BRACKET

- Hold **rear bracket (1)** at location identified in Step 1. Mark hole locations.
 - When possible, remove existing rivets to use existing holes.
 - If required, drill 21/64-inch holes in trailer.
- Secure **rear bracket (1)** with four **screws (G)**, four **washers (DD)** and four **nuts (W)**.

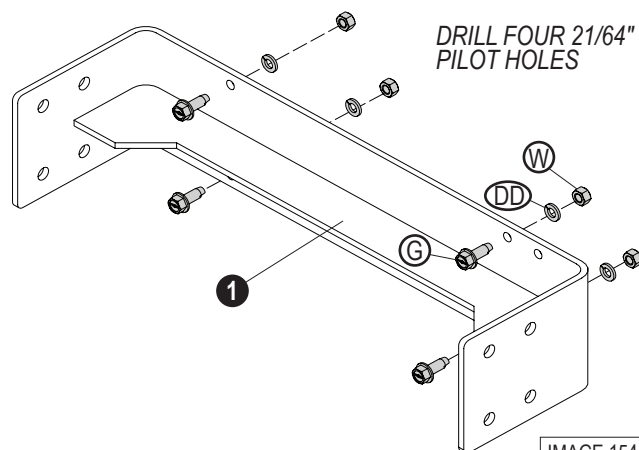
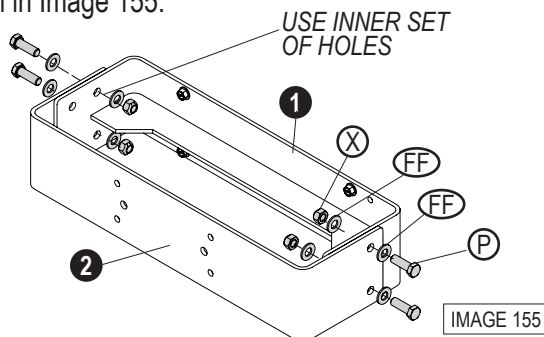


IMAGE 154

STEP 3: SECURE BRACKETS

Install the **front bracket (2)** to the **rear bracket (1)** using the inner set of holes (closest to the trailer). Secure them with four **screws (P)**, eight **washers (FF)**, and four **nuts (X)**, as shown in Image 155.

**⚠ WARNING**

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

⚠ CAUTION

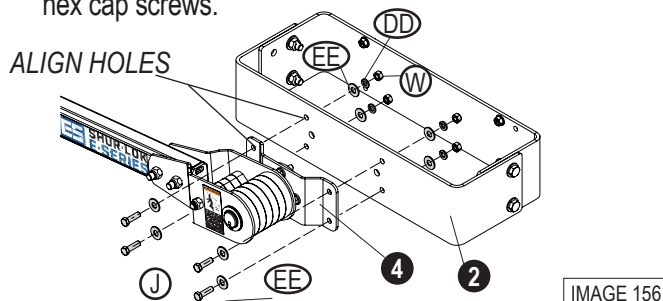
The arm assembly must be installed with the warning decals facing away from the trailer and in plain view.

⚠ WARNING

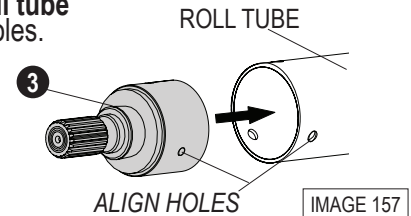
Do not stand or climb on the flex arm. Doing so may result in a fall or impact, causing serious injury or death.

STEP 4: ATTACH REAR ARM TO BRACKET

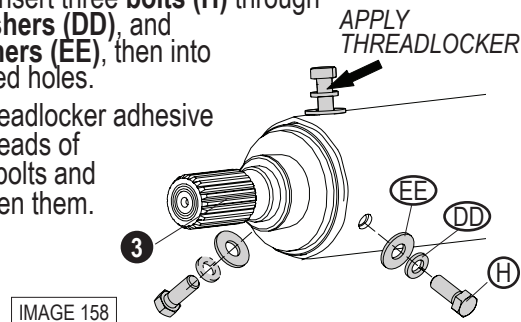
- Align holes on the rear arm plate (4) with the holes in the front bracket (2). Keep arm parallel to the front of the trailer.
- Place **washers (EE)** and **hex cap screws (J)** onto the plate and insert them into the bracket hole.
- From inside the bracket, attach **washers (EE)**, **lock washers (DD)** and **nuts (W)** onto the end of the hex cap screws.

**STEP 5: INSTALL REAR ARM ADAPTER**

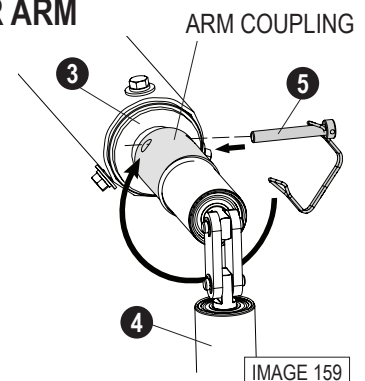
Slide the **rear arm adapter (3)** into the end of the **roll tube** and align the three holes.

**STEP 6: SECURE REAR ARM ADAPTER**

- Loosely insert three **bolts (H)** through **lock washers (DD)**, and **flat washers (EE)**, then into the aligned holes.
- Apply threadlocker adhesive to the threads of all three bolts and fully tighten them.

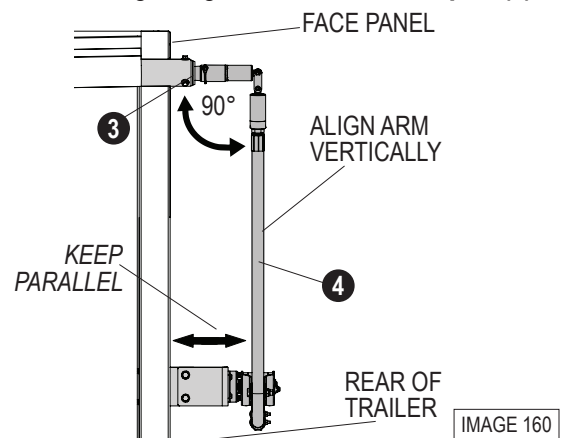
**STEP 7: SECURE REAR ARM**

- Lift the **rear arm (4)** and slide the coupling onto the splined shaft of the **adapter (3)**.
- Insert the pin of the **wire lock (5)** through the arm to secure it into place.

**STEP 8: VERIFY REAR ARM PLACEMENT**

At the rear of the trailer, ensure the **rear arm (4)**:

- Lines up straight, parallel to the face panel.
- Remains at a right angle to the roll tube **adapter (3)**.



Item Description

1. Rear Pivot Bracket
2. Front Pivot Bracket
3. Front Arm Adapter
4. Front Arm Assembly
5. Thread Lock (not pictured)

FRONT ARM & BRACKET PARTS & HARDWARE**Item Part # Description**

- | | | |
|-----|---------|------------------------------------|
| G. | 1700400 | Self-Tapping Screw - 3/8" x 1" |
| H. | 1701061 | Hex Head Cap Screw - 3/8" x 1" |
| J. | 1702891 | Hex Head Cap Screw - 3/8" x 1-1/4" |
| P. | 1702075 | Hex Head Cap Screw - 1/2" x 1-1/2" |
| W. | 1700407 | Hex Nut - 3/8" |
| X. | 1700416 | Lock Nut - 1/2" |
| DD. | 1700434 | Lock Washer - 3/8" |
| EE. | 1700429 | Flat Washer - 3/8" |
| FF. | 1703373 | Flat Washer - 1/2" |

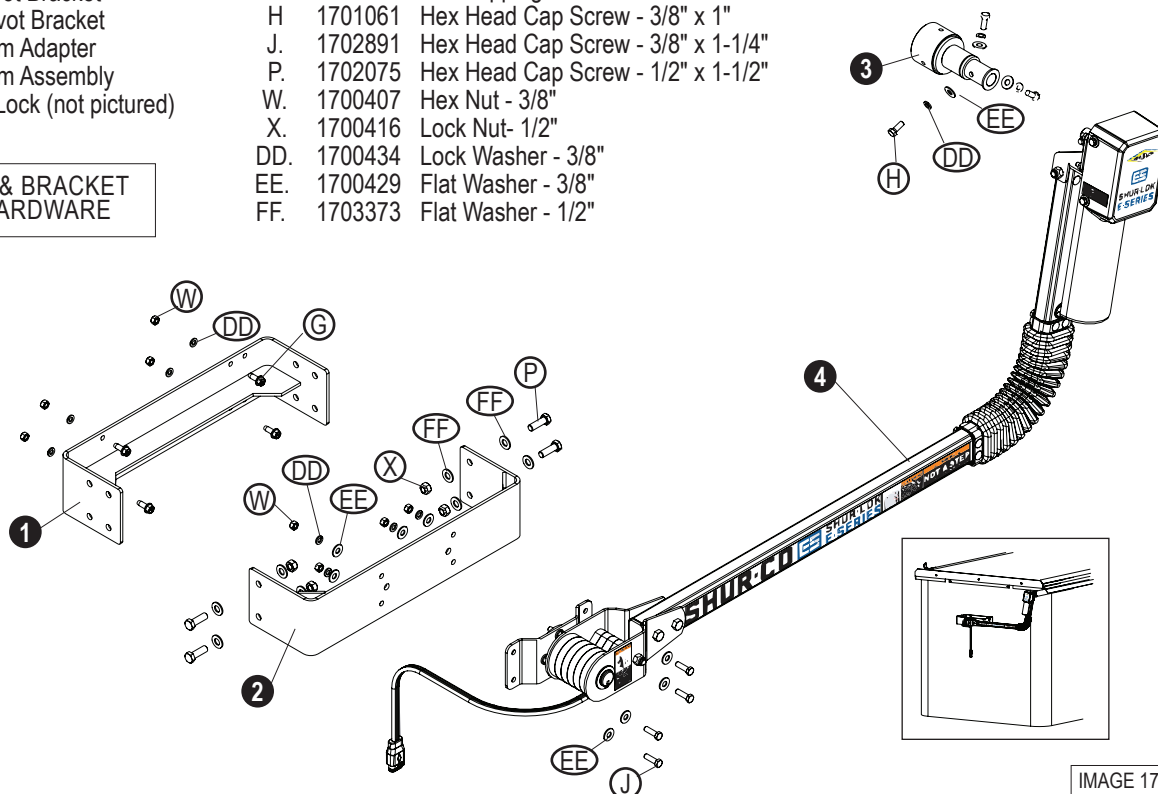


IMAGE 170

Front Arm & Pivot Bracket Installation**STEP 1: BRACKET PLACEMENT****FRONT TRAILER**

Center the **rear bracket (1)** according to trailer length:

- 102-inch trailer - center 28 inches down from highest point.
- 96-inch trailer - center 30 inches down from highest point.

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

NOTICE: Wire lengths are predetermined. Before installing SMARTwire™ components, review and confirm wire routing so wires reach components with ample room for connection.

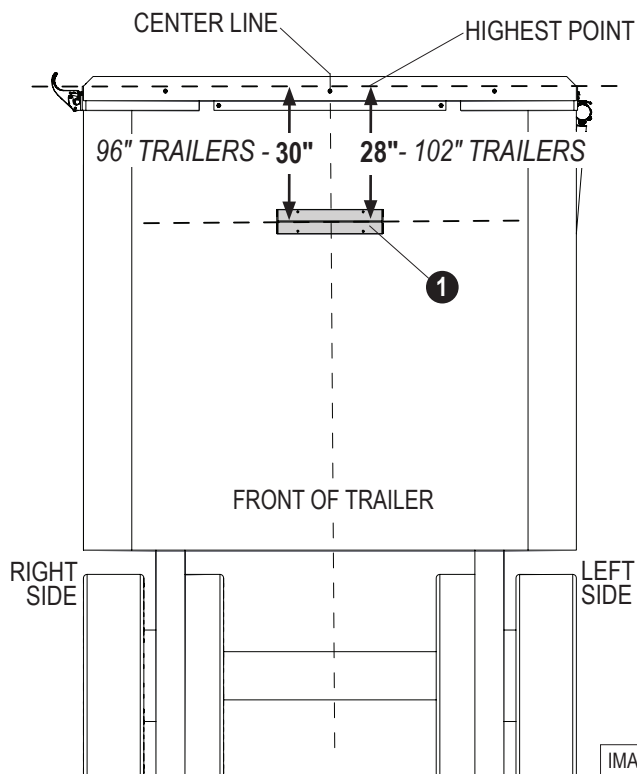


IMAGE 171

STEP 2: MOUNT BRACKET TO FRONT TRAILER

Hold **rear bracket (1)** at location identified in Step 1. Mark hole locations and drill 21/64-inch holes in trailer. Secure bracket as shown in Image 172.

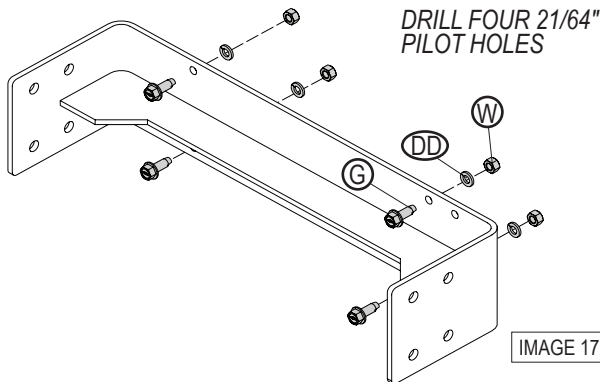


IMAGE 172

STEP 3: SECURE BRACKETS

Install the **front bracket (2)** to the **rear bracket (1)** using the inner set of holes (closest to the trailer). Secure them with four **screws (P)**, eight **washers (FF)**, and four **nuts (X)**, as shown in Image 173.

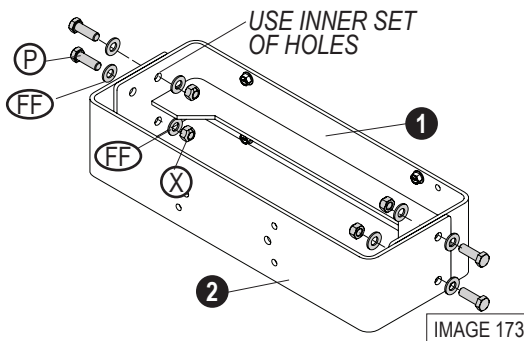


IMAGE 173

⚠ WARNING

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

⚠ CAUTION

The arm assembly must be installed with the warning decals facing away from the trailer and in plain view.

⚠ WARNING

Do not stand or climb on the flex arm. Doing so may result in a fall or impact, causing serious injury or death.

STEP 4: ATTACH FRONT ARM TO BRACKET

- Align holes on the front **arm plate (4)** with the holes in the front **bracket (2)**. Keep arm parallel to the front of the trailer.
- Place **washers (EE)** and hex cap **screws (J)** onto the plate and insert them into the bracket hole.
- From inside the bracket, attach washers **(EE)**, lock washers **(DD)** and nuts **(W)** onto the end of the hex cap screws.

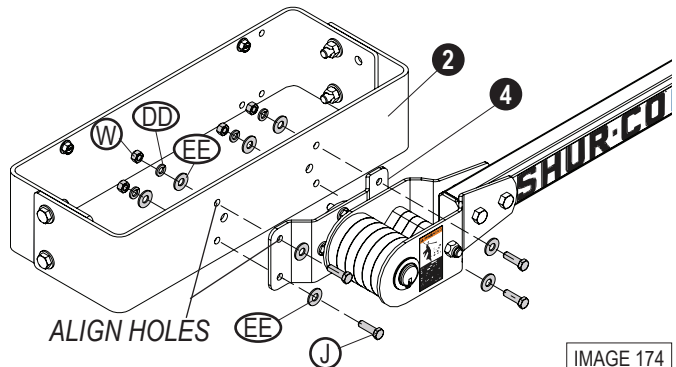


IMAGE 174

STEP 5: INSTALL FRONT ARM ADAPTER

Slide the **front arm adapter (3)** into the end of the roll tube and align the three holes.

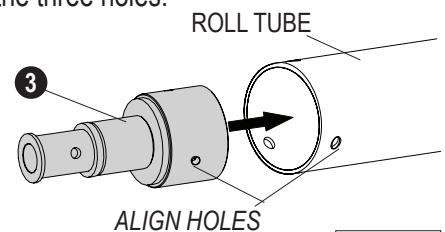


IMAGE 175

STEP 6: SECURE FRONT ARM ADAPTER

- Loosely insert three **bolts (H)** through **lock washers (DD)** and **flat washers (EE)**, then into the aligned holes.
- Apply threadlocker adhesive to the threads of all three bolts and fully tighten them.

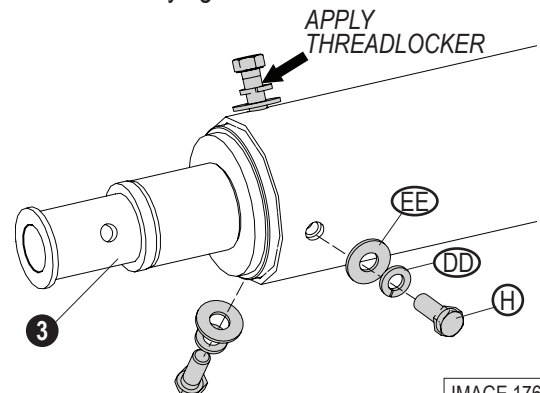


IMAGE 176

Item	Part #	Description
1.		Front Arm Assembly
2.	1120680	Motor Mount Bearing Spacer
3.	1704736	Radial Ball Bearing - 1/4" x 3/4"
4.	1120681	Motor Mount Bearing Retainer
5.	1120679	Motor Spacer
6.		Front Roll Tube Adapter
D.	1703171	Hex Head Cap Screw - 5/16" x 1/2"
N.	1704264	Cap Screw - 3/8" x 2" - Grade 8
S.	1701543	Nylon Lock Nut - 1/4"
V.	1701580	Nylon Lock Nut - 3/8"
BB.	1700428	Flat Washer - 5/16"
CC.	1700433	Lock Washer - 5/16"

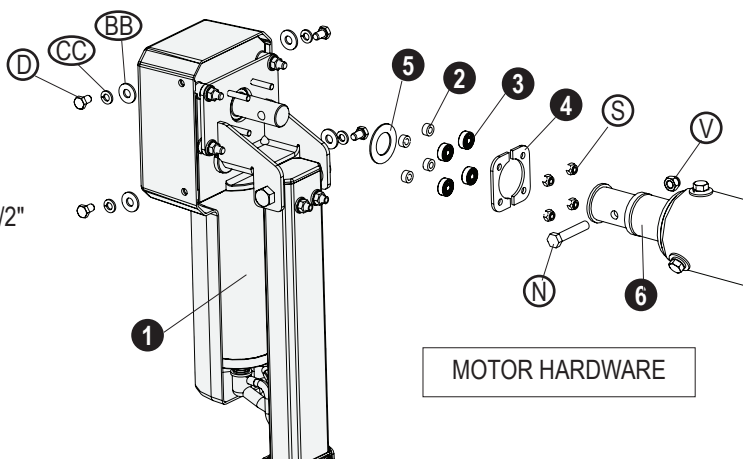


IMAGE 180

Motor Installation

STEP 1: VERIFY REAR ARM PLACEMENT

At the rear of the trailer, ensure the rear arm:

- Lines up straight, parallel to the face panel.
- Remains at a right angle to the roll tube.

STEP 2: PREPARE MOTOR

At the front of the trailer, slide the **motor spacer (5)** over the motor shaft and press it against the motor.

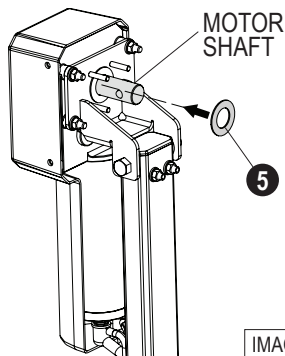


IMAGE 181

STEP 3: SECURE ARM TO ROLL TUBE

- Ensure the roll tube is in its correct position and the front arm is aligned vertically on the front end of the trailer.
- Fasten and secure the roll tube to the motor shaft with **Grade 8 screw (N)** and **lock nut (V)**.

ALIGN ARM VERTICALLY

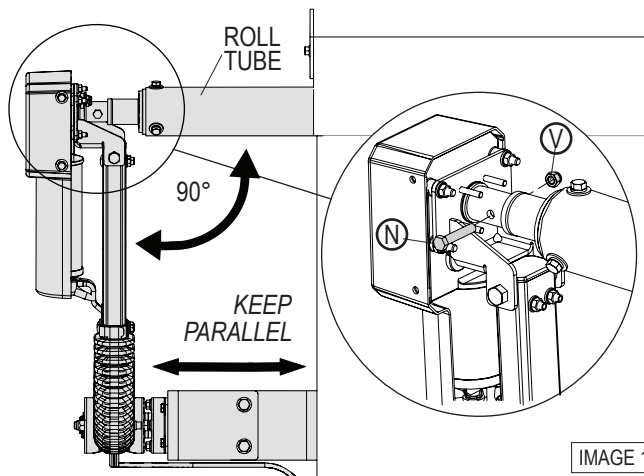


IMAGE 182

⚠ CAUTION

Avoid pinch points when sliding the roll tube extension over the motor shaft and during tightening. Keep hands and fingers clear of moving parts to prevent injury.

⚠ WARNING

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

STEP 4: SECURE MOTOR HARDWARE

Install four **bearing spacers** (2), four **ball bearings** (3), two **bearing retainers** (4) onto the four threaded posts and secure with four **nuts** (S).

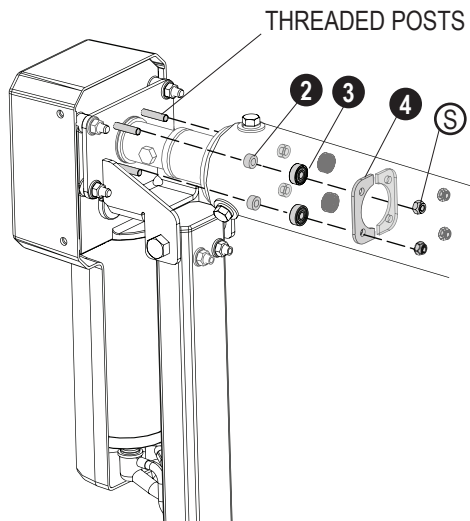


IMAGE 183

STEP 5: INSTALL MOTOR COVER

Fasten the **motor cover** to the motor with four **screws** (D), **lock washers** (CC), and **washers** (BB).

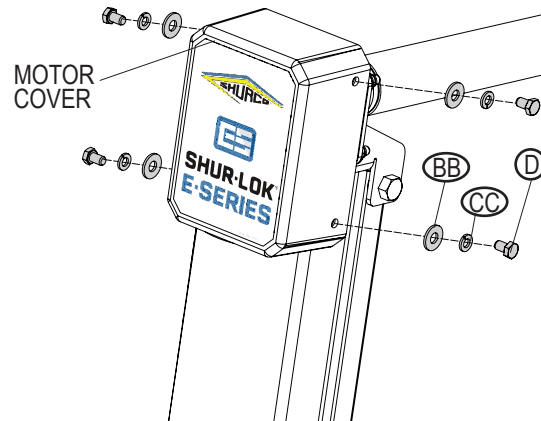


IMAGE 184

Item	Part #	Description
1.	1701354	Plastic U-Clamp
B.	1705198	Self-Drilling Screw - 1/4" x 1"

U-CLAMP PARTS & HARDWARE

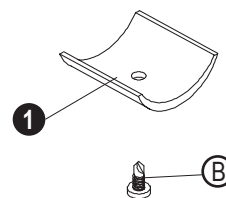


IMAGE 190

U-Clamp Installation

STEP 1: POSITION THE TARP

Ensure the tarp is square and the roll tube is aligned 2–3 inches from the wind deflectors, matching the fixed tube alignment.

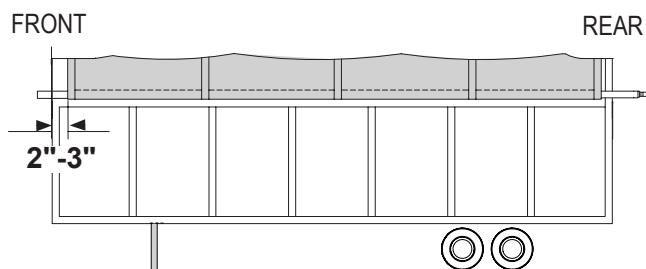
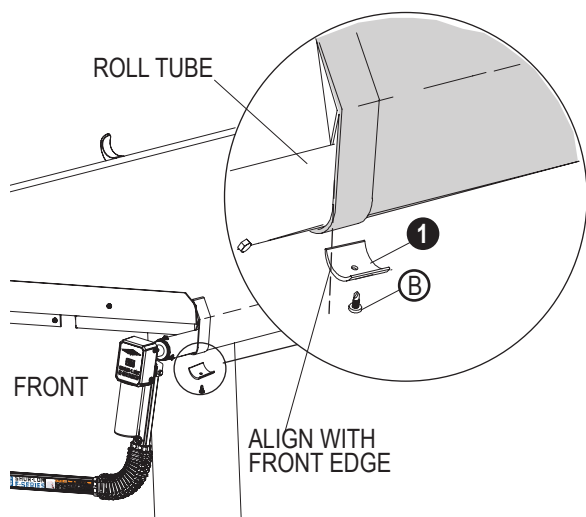


IMAGE 191

NOTICE: For conversion applications, use the U-clamps and screws removed at the beginning of the installation.

STEP 2: ATTACH FRONT U-CLAMP

Center a **U-clamp (1)** on the front edge of the tarp, positioning **screw (B)** on the crease at the bottom of the tarp pocket. Fasten the U-clamp with screw **(B)**.



STEP 3: ATTACH REAR U-CLAMP

- Stretch the tarp along the roll tube so the tarp is square.
- Install a U-clamp **(1)** on the rear strap, positioning screw **(B)** on the crease at the bottom of the tarp pocket.
- Fasten the U-clamp with screw **(B)**.

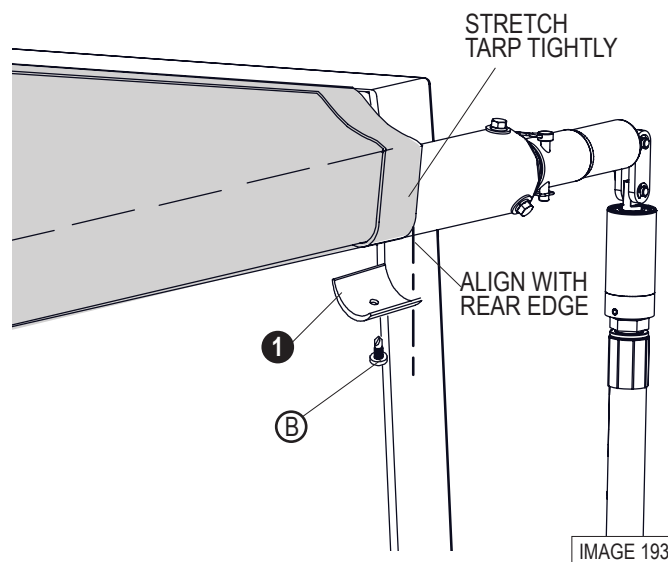


IMAGE 193

STEP 4: ATTACH REMAINING U-CLAMPS

- Position the remaining U-clamps evenly between the front and rear U-clamps.
 - If the tarp includes straps, place one U-clamp on each strap.
 - If there are no straps, space the U-clamps no more than 36 inches apart.
- Fasten with screws **(B)**.

Item	Part #	Description
1.		Front Arm
2.	1132046	Receiver
3.	1120670	SMARTwire™ Dual-Conductor Socket
4.	1127798	Conductor Plug Mtg (Z) Bracket
5.	1702108	Wire Clip - 3/4"
6.	1703231	Cable Ties (not pictured)
7.	1704378	Dielectric Grease (not pictured)
8.	1704627	Motorized System Warning Decal
9.	1707865	Express Operation Decal
C.	1704338	Self-Tapping Screw - 1/4" x 1"
E.	1701045	Cap Screw - 5/16" x 3/4"
F.	1702926	Hex Head Cap Screw - 5/16" x 7/8"
G.	1700400	Self-Tapping Screw - 3/8" x 1"
T.	1700419	Nylon Lock Hex Nut - 5/16"
U.	1704946	Flanged Top Lock Nut - 5/16"
W.	1700407	Hex Nut - 3/8"
AA.	1700427	Flat Washer - 1/4"
BB.	1700428	Flat Washer - 5/16"
DD.	1700434	Lock Washer - 3/8"
KK.	1704751	Harness Lock Pin - 1/4" x 7/8"

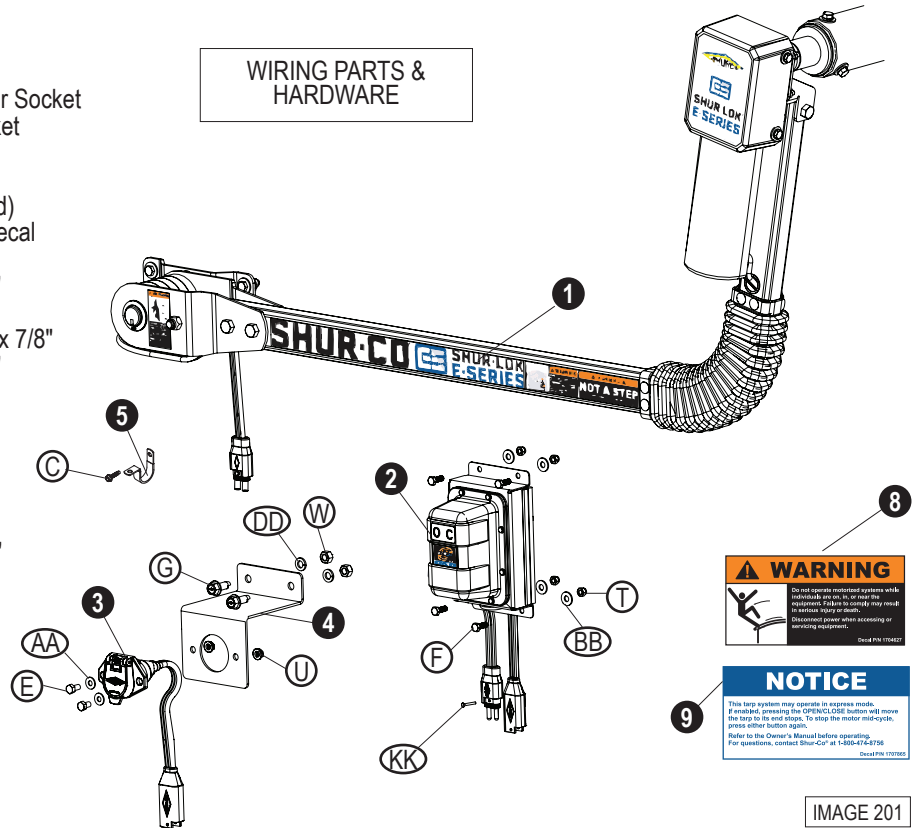
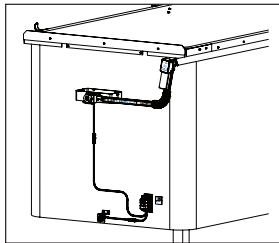


IMAGE 201

Front Arm, Dual Conductor Socket & Receiver Wiring

⚠ CAUTION

- Do not cut SMARTwire™. Wire ends are designed with sealed connections to prevent corrosion; cutting the wire may lead to operational problems.
- Bind excess wire with cable ties to prevent loose wire entanglement.

NOTICE: Wire lengths are predetermined. Before installing SMARTwire™ components, review and confirm wire routing so wires reach components with ample room for connection.

STEP 1: CAB WIRING (Optional)

See the Dual Conductor Plug Kit for cab wiring instructions (Part Number 1119643).

NOTICE: Washers and nuts may be omitted if wall thickness prevents proper securement.

STEP 2: MOUNT DUAL CONDUCTOR SOCKET & BRACKET

- Determine location on the front of the trailer, near the existing 7-pole conductor socket for the socket (3).
- Drill two 21/64" pilot holes.
- Fasten the mounting bracket (4) with two screws (G), two lock washers (DD) and two nuts (W).
- Attach the socket (3) with two screws (E), two washers (AA), and two nuts (U).

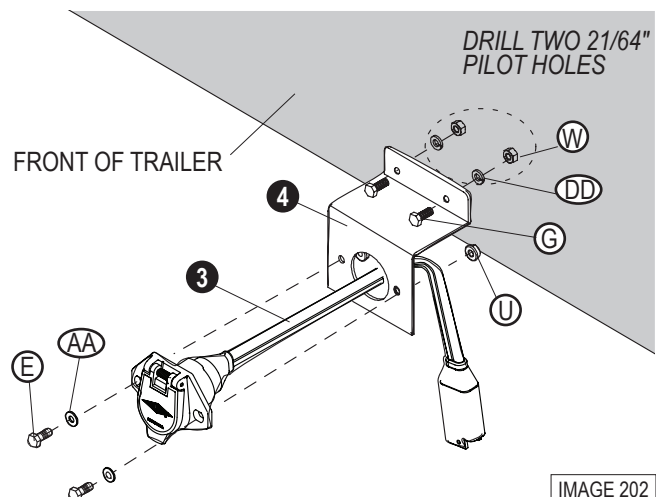


IMAGE 202

STEP 3 : FASTEN RECEIVER

- Determine a location on the front, left side of the trailer, positioning the **receiver (2)** as low as possible to ensure the front arm can move in an unobstructed travel path.
- Use the holes on the receiver as a guide to drill four 5/16-inch holes.
- Insert four **screws (2)** through the front of the receiver brackets and attach four **washers (3)** and four **nuts (4)** inside the trailer skin.

DRILL FOUR 5/16-INCH HOLES

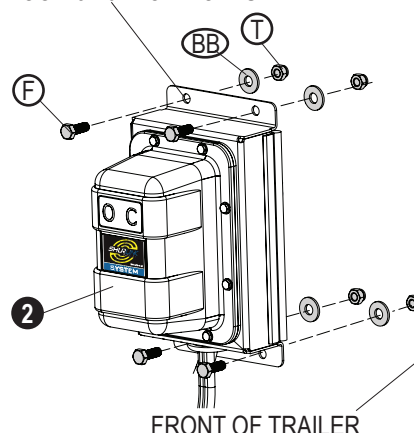


IMAGE 203

STEP 4 :CONNECT SMARTWIRE

- Apply **dielectric grease (7)** to the male plug ends of the **receiver (2)** and **front arm (1)**.
- Connect the SMARTwire from the **front arm (1)** to the **receiver (2)**.
- Connect the SMARTwire from the **receiver (2)** to the **dual-conductor socket (3)**.
- Secure connections with **lock pins (KK)**.
- Secure wires to the trailer with **wire clips (5)** and **screws (C)**. Use **cable ties (6)**, if needed.

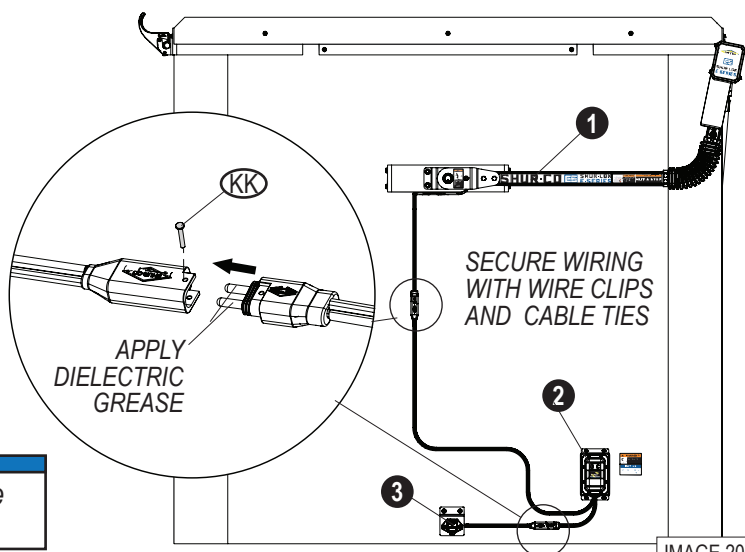


IMAGE 204

NOTICE: Coat each connection with dielectric grease to prevent corrosion.

STEP 5: PLACE DECALS

- Ensure the surface area near the receiver is clean and dry.
- Remove the backing from **warning decal (8)** and **express notice decal (9)**.
- Place the decals in a visible location near the receiver, as shown in Image 205.
 - Regularly inspect all safety decals for wear and adhesion to maintain safety.
 - Replace worn or damaged decals as necessary.

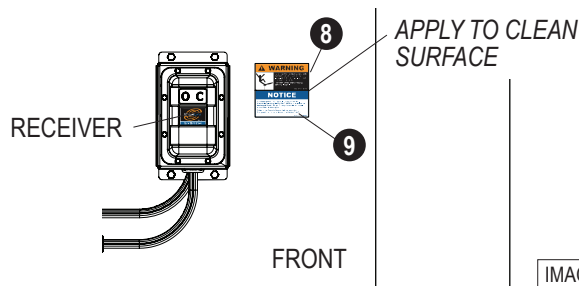
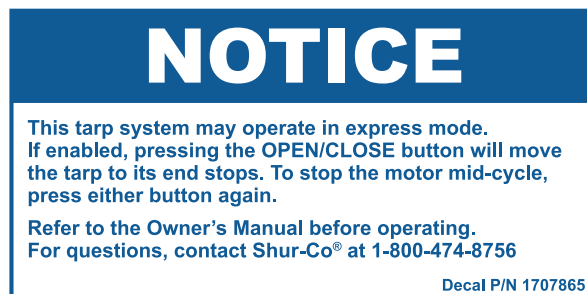


IMAGE 205



⚠ CAUTION

Ensure all hardware is secure before operating the system. Inspect the complete system at this time and make adjustments as required.

EXPRESS MODE

The tarp system automatically enters Express Mode when operated using the buttons on the trailer-mounted receiver box or through the Shurlink™ remote system. In this mode, pressing the O (open) or C (close) button initiates an express operation to open or close the tarp. This operation will continue until either button is pressed again to stop, or it will automatically conclude once the tarp reaches the end of its travel.

⚠ WARNING

Do not stand or climb on the flex arm. Doing so may result in a fall or impact, causing serious injury or death.

⚠ WARNING

FLEX ARM
UNDER
SPRING
TENSION

Read manual thoroughly before assembling or disassembling flex arm.

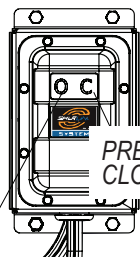
Failure to do so may result in serious injury or death.

Find Owner's Manual at:
www.shurco.com

Decal P/N 1703897

TEST OPERATION

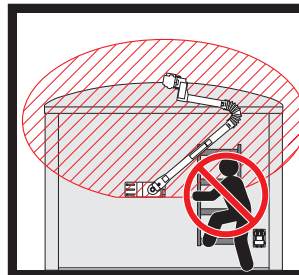
- Check the motor direction by pressing either the Open or Close button on the receiver.
- If the button is released and operation continues, the system is in Express Mode. To stop operation, press button again.



PRESS "C" TO
CLOSE TARP

PRESS "O" TO
OPEN TARP

IMAGE 206

**⚠ WARNING**

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

REMOTE OPERATION (OPTIONAL - NOT INCLUDED)

EZR™ remotes are pre-programmed to Express Mode but can be reconfigured according to your preferences. To stop the tarp system while using the remote, press the open or close button within range. If operation was initiated from the receiver, note that closing the remote lid or pressing the select button does not stop the system during Express Mode operation. For remote operation, refer to the remote instruction manual.

CHANGE MOTOR DIRECTION

If the open/close buttons are running the system backwards, download the app to change motor direction.

Follow QR code for Shurlink™ App Product Support

**⚠ WARNING**

Powering any Shur-co® wireless system solely with a battery charger may lead to operational issues or system failure. A 12-volt truck or automobile battery must be used as the power source for the trailer's system.

NOTICE: Only one electric tarp system can be hooked up at a time.

⚠ WARNING

Do not operate motorized systems while individuals are on, in, or nearby the equipment. Failure to comply may result in serious injury or death.

Disconnect power when accessing or servicing equipment.

Perform the following steps to convert the Shur-lock E Series electric system to manual crank operation.

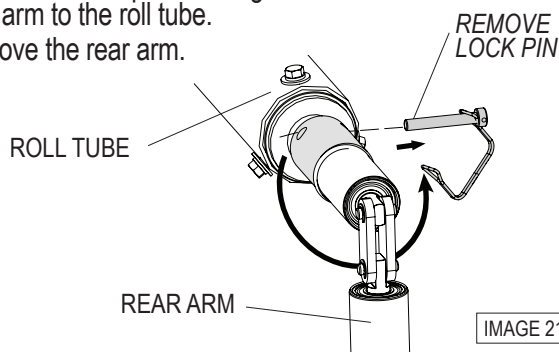
NOTICE: Store the hand crank arm in the truck or mount it to the trailer. (Example - above kingpin, near the apex.)

STEP 1: DISCONNECT POWER

Disconnect power from the front of the trailer.

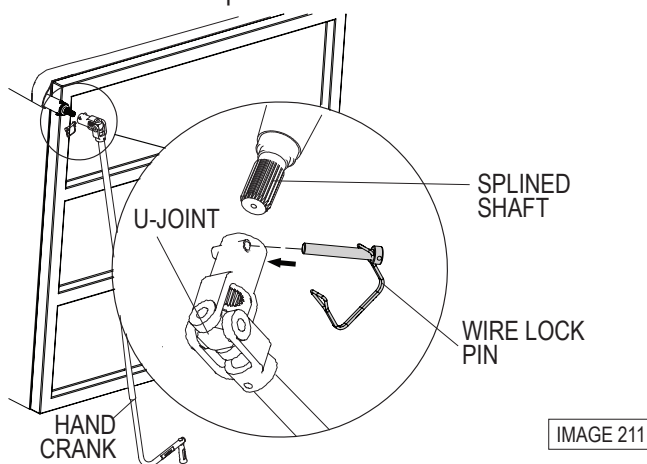
STEP 2: REMOVE REAR ARM

- At the rear end of the trailer, remove the lock pin securing the rear arm to the roll tube.
- Remove the rear arm.



STEP 3: ATTACH HAND CRANK

Place splined U-joint on splined shaft. Secure with wire lock pin.



⚠ WARNING

Do not open or close the tarp unless the U-joint is securely fastened to the splined shaft with the wire lock pin. Failure to do so could result in severe injury or death.

NOTICE: The U-joint is designed to operate as shown in Image 212 and is able to withstand considerably more pressure in this position.

RECOMMENDED

RETAINING WIRE
ENCIRCLES
U-JOINT

NOTE U-JOINT
POSITION

IMAGE 212

NOT RECOMMENDED

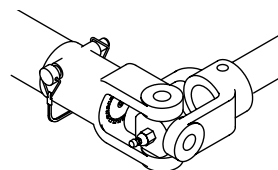


IMAGE 213

⚠ WARNING

Ensure the retaining wire encircles the U-joint to prevent the wiring from catching during operation. Failure to do so could cause severe injury or death.

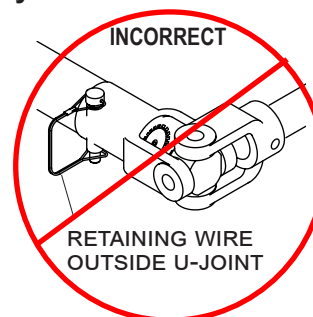


IMAGE 214

STEP 4: DISCONNECT MOTOR

At the Rear of the Trailer: Hold the crank handle to prevent the arms from rotating the roll tube.

At the Front of the Trailer:

Have a second person remove the screw (N) and nut (V) from the motor shaft and roll tube extension.

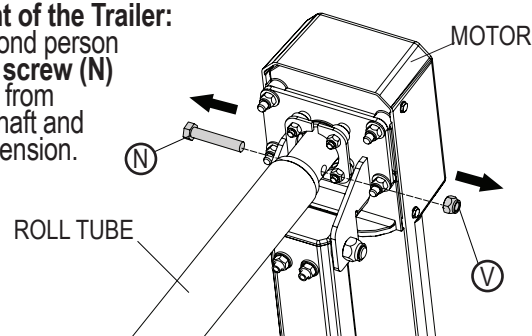


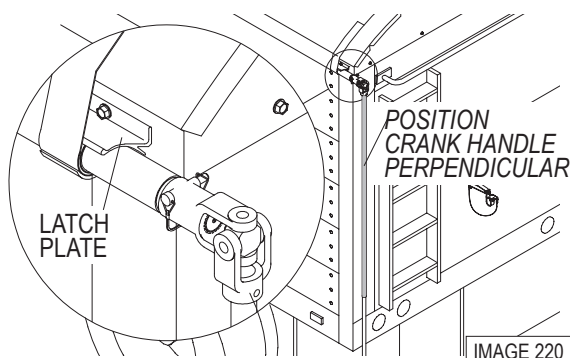
IMAGE 215

OPERATING INSTRUCTIONS

Use the crank arm assembly mounted at the rear of the trailer to manually open and close the tarp system until electrical system issues can be resolved. See the Shur-Lok® owner's manual for proper safety procedures at www.shurco.com.

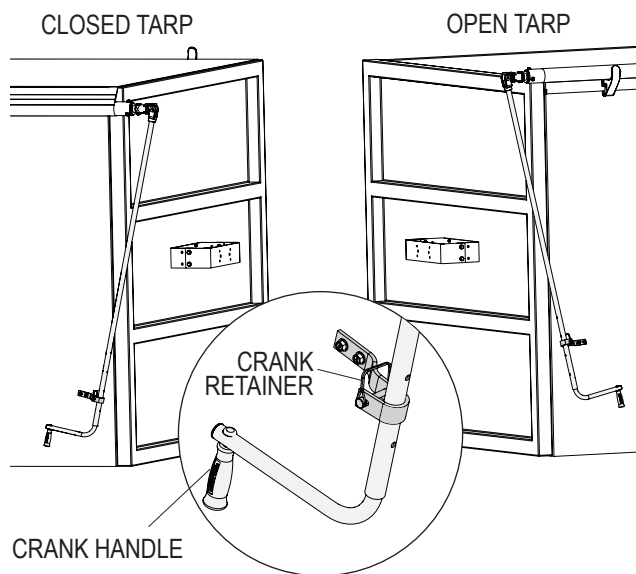
STEP 1:

Hold the crank firmly with both hands and roll the tarp closed under the latchplate. Bring the crank handle down perpendicular to the ground.



STEP 2:

Tighten the tarp by lifting the crank handle up into the crank retainer and secure with lock pin.



STEP 3:

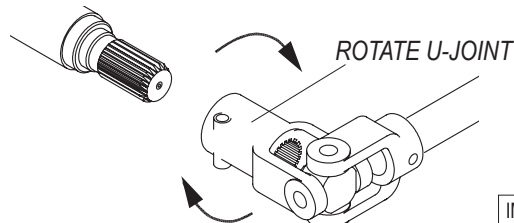
Check the tarp tension. It should take 40 to 60 pounds of pressure to force the crank handle into the crank retainer. The crank extension will bend 1/8".

⚠ WARNING

Do not open or close the tarp unless the U-joint is securely fastened to the splined shaft with the wire lock pin. Failure to do so could result in severe injury or death.

STEP 4:

If required, adjust the tension by removing the U-joint from the splined shaft, rotating the U-joint tooth, and replacing it on the splined shaft.

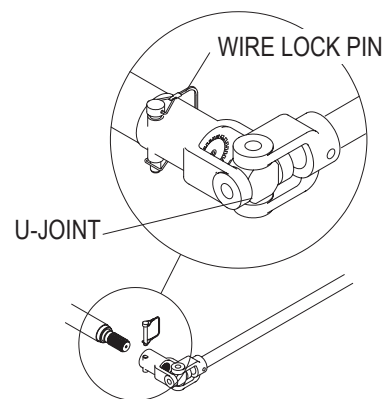


STEP 5:

Repeat Step 3 and Step 4 until the correct tension is achieved.

STEP 6:

Secure the U-joint to the splined shaft with the wire lock pin.



To uncover load:

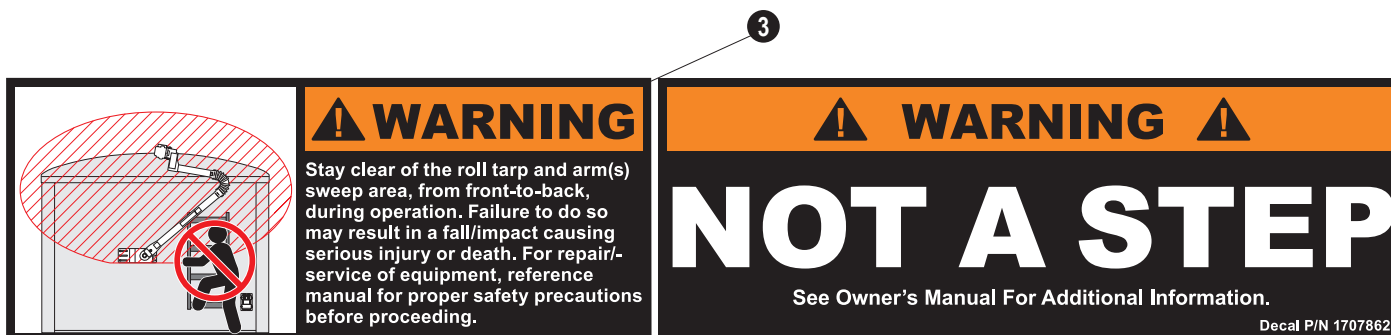
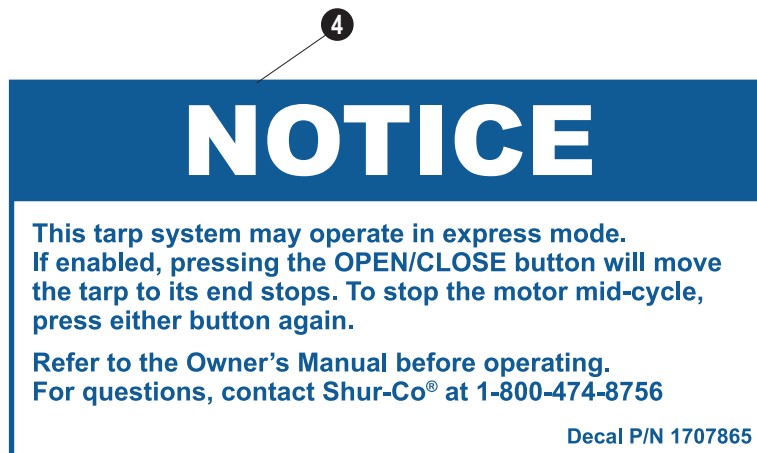
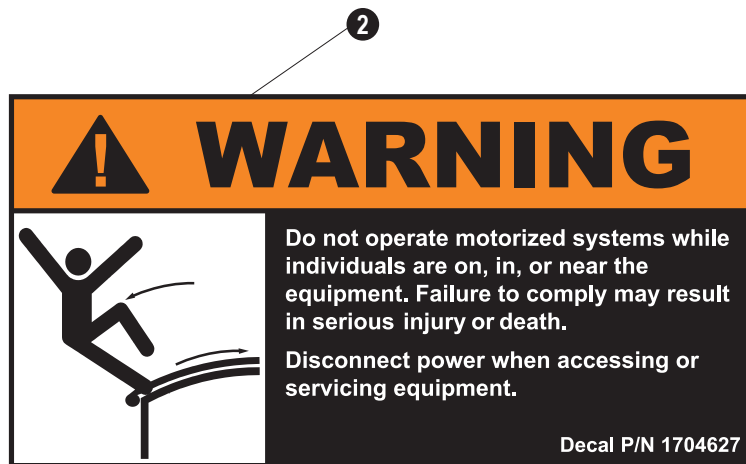
1. Release the crank from the crank retainer.
2. Turn the crank clockwise (counter-clockwise for reverse roll) until the tarp has rolled up against the tarp stops.
3. Place the crank back into the crank retainer and secure with lock pin.

To cover load:

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

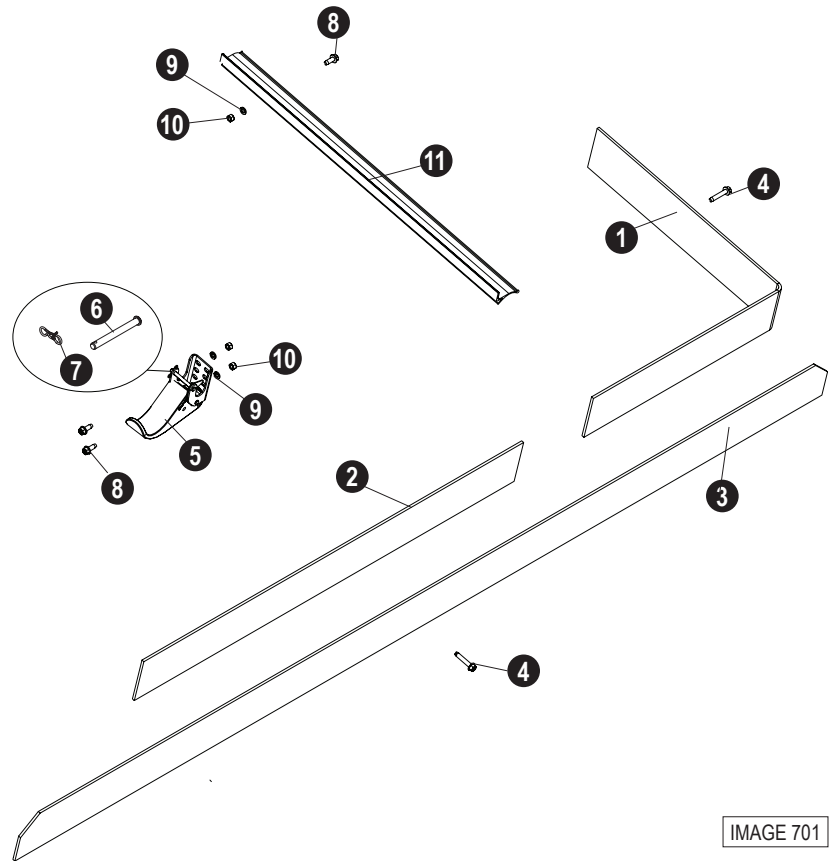
Decals

Item	Part #	Description
1.	1703897	Flex Arm Tension Warning Decal
2.	1704627	Motorized System Warning Decal
3.	1707862	Flex Arm Step Warning Decal
4.	1707865	Express Operation Decal



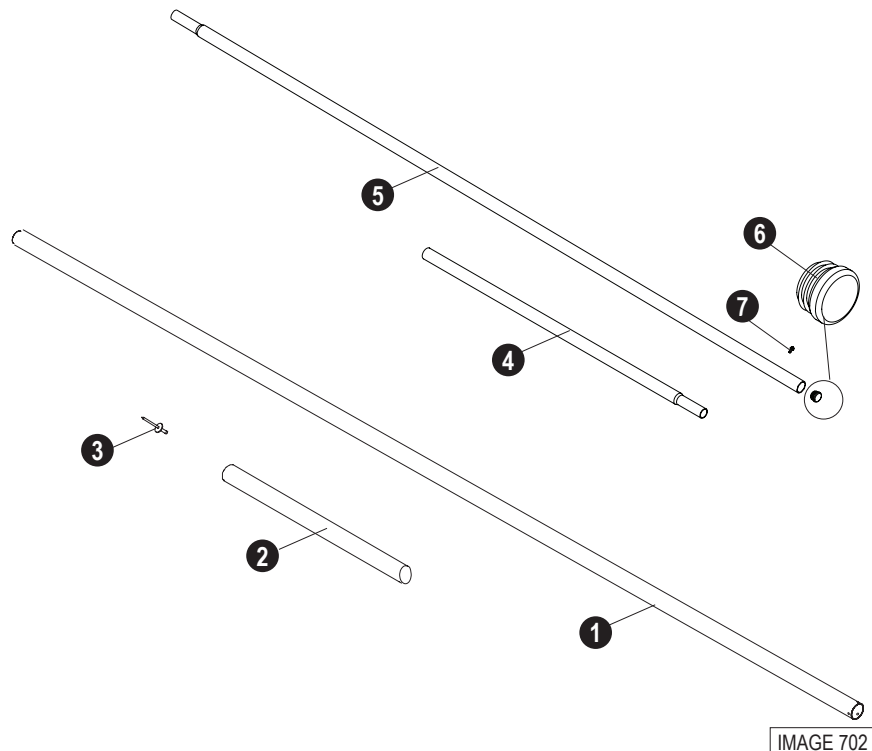
WIND DEFLECTORS, TARP STOP, LATCH PLATE

Item	Part #	Description
1.	1132380	Wind Deflector Angle - 5" x 24"
2.	1132378	Wind Deflector Plate - 5" x 48"
3.	1132379	Wind Deflector Plate - 5" x 102"
4.	1701544	Self-Tapping Screw - 3/8" x 2"
5.	1131263	EOF Flexible Offset 6" Tarp Stop
6.	1703604	Clevis Pin - 5/16" x 2-7/8"
7.	1704380	Bowtie Cotter Pin - 1-3/8"
8.	1700400	Self-Tapping Screw - 3/8" x 1"
9.	1700434	Lock Washer - 3/8"
10.	1700407	Hex Nut - 3/8"
11.	1132381	Latch Plate - 36"



ROLL TUBE, FIXED TUBE

Item	Part #	Description
1.	1133217	Aluminum Roll Tube - 3.55" x 27'
2.	1120911	Aluminum Splice Tube - 3.55"
3.	1700472	Blind Rivet - 1/4"
4.	1706156	Fixed Tube - 1-1/8" x 8'
5.	1701428	Fixed Tube - 1-1/8" x 24'
6.	1700523	Plastic End Plug
7.	1704768	Self-Drilling Screw 1/4" x 3/4"



Front Arm

Item Part # Description

1. 1133197 Front Arm Assembly without Motor
1133224 Front Arm Assembly with Motor
2. 1133019 E-Series Motor
3. 1133018 Motor Cover Kit - E-Series
4. 1133202 Front Arm Roll Tube Adapter Kit
Front Arm Roll Tube Adapter
Thread Lock (not pictured)
Hex Head Cap Screw - 3/8" x 1"
Lock Washer - 3/8"
Flat Washer - 3/8"
5. 1120977 Motor Mount Hdw - 4500HD/E-Series
Motor Mount Bearing Spacer
Radial Ball Bearing - 1/4" x 3/4"
Motor Mount Bearing Retainer
Motor Spacer
Cap Screw - 3/8" x 2" - Grade 8
Nylon Lock Nut - 3/8"
Nylon Lock Nut - 1/4"

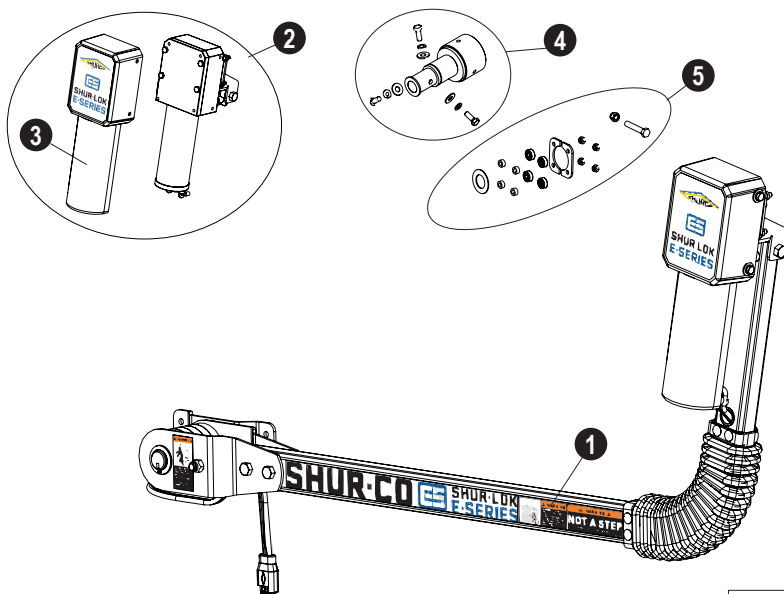
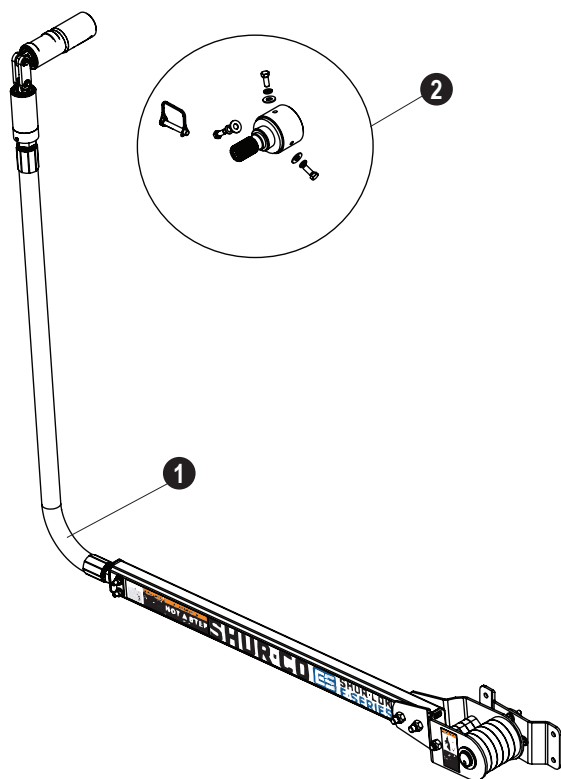


IMAGE 703



Rear Arm

Item Part # Description

1. 1133194 Rear Arm Assembly
2. 1133201 Rear Roll Tube Adapter Kit
Rear Arm Roll Tube Adapter
Wire Lock Pin - 3/8" x 2-1/2"
Hex Head Cap Screw - 3/8" x 1"
Lock Washer - 3/8"
Flat Washer - 3/8"
Thread Lock (not pictured)

IMAGE 704

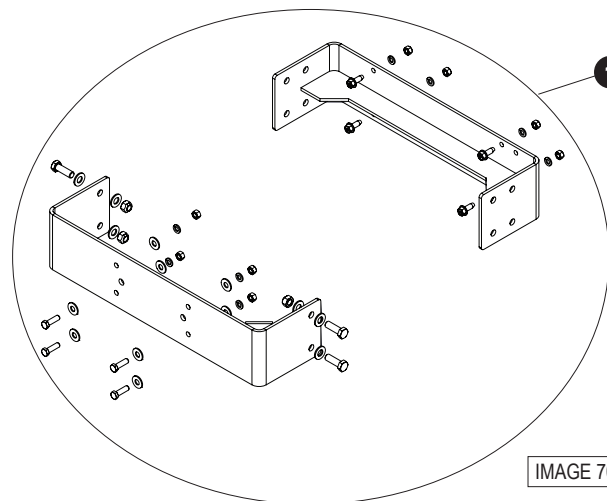


IMAGE 705

Brackets

Item Part # Description

1. 1133199 Bracket Mounting Kit
Rear Pivot Bracket
Front Pivot Bracket
Self-Tapping Screw - 3/8" x 1"
Hex Head Cap Screw - 3/8" x 1-1/4"
Hex Head Cap Screw - 1/2" x 1-1/2"
Hex Nut - 3/8"
Lock Nut - 1/2"
Lock Washer - 3/8"
Flat Washer - 3/8"
Flat Washer - 1/2"

RECEIVER & DUAL-CONDUCTOR SOCKET COMPONENTS

Item Part # Description

1. 1132046 Receiver
Flanged Nylon Lock Nut - 5/16"
Flat Washer - 5/16"
Wire Clip - 3/4"
Cap Screw - 5/16" x 7/8"
Cable Ties (not pictured)
Dielectric Grease (not pictured)
Self-Tapping Screw - 1/4" x 1"
Harness Lock Pin - 1/4" x 7/8"
2. 1120670 SMARTwire™ Dual-Conductor Socket
3. 1127798 Conductor Plug Mtg (Z) Bracket
4. 1700400 Self-Tapping Screw - 3/8" x 1"
5. 1700407 Hex Nut - 3/8"
6. 1700434 Lock Washer - 3/8"

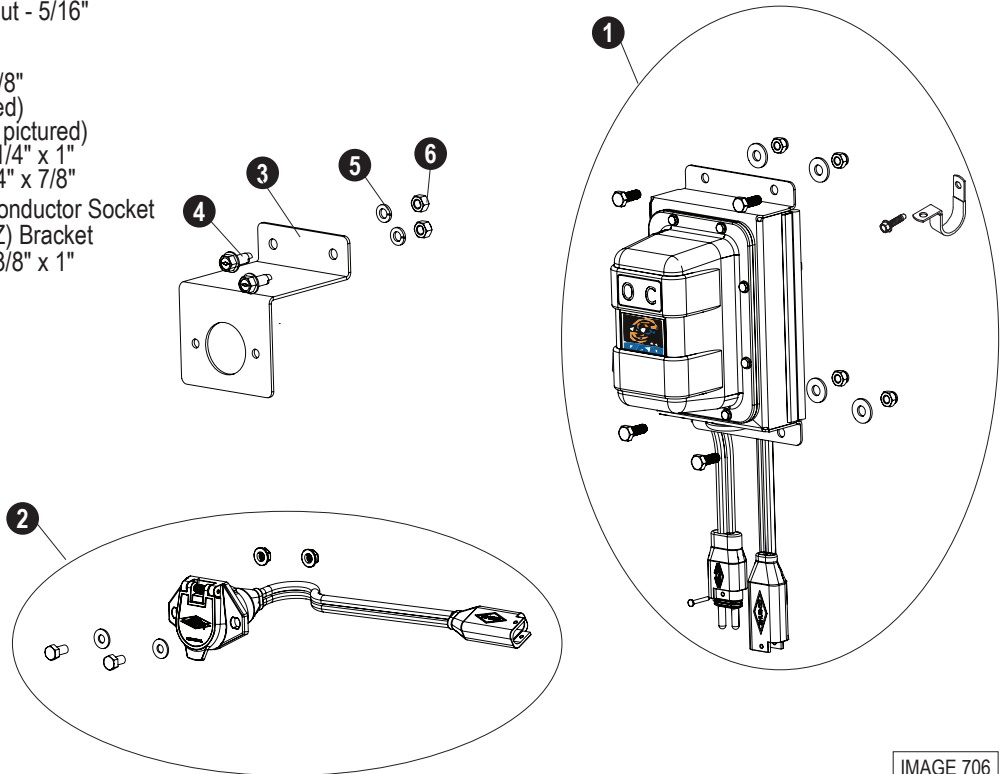


IMAGE 706

OPTIONS

Item Part # Description

1. 1119643 Cab Wiring Kit - 6 Ga. x 30'- 40Amp
HD Dual-Cond Plug - Vert Pin
Dual-Cond Wire - 6 Ga. - 30' (not pictured)
40-Amp Modified-Reset Circuit Breaker
Cable Tie - 8"
Ring Terminal - 6 Ga. x 3/8" Stud - Battery
Ring Terminal - 6 Ga. x #10 Stud - Motor/Breaker
Circuit Breaker Boot - Red
2. 1131576 ShurLink EZR™ Remote

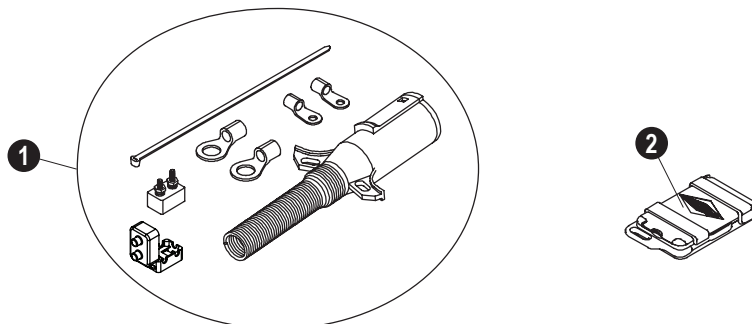


IMAGE 707

2309 SHURLOCK STREET | YANKTON, SD 57078-0713
PHONE: 1.866.748.7435 | FAX: 1.605.665.0501
SHURCO.com
