

SHUR-CO®

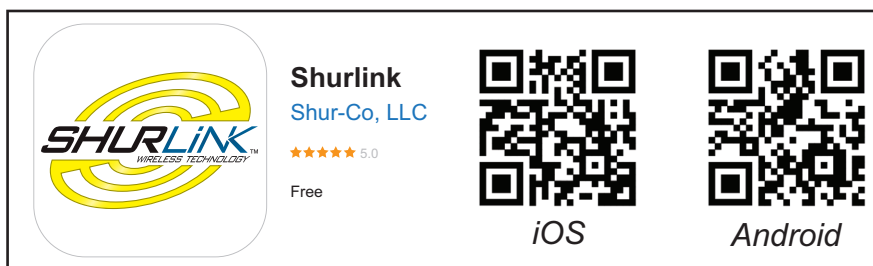


4500 Series HD Electric Single-Arm System for Open-Top Vans and Live Bottom Trailers

OWNER'S MANUAL




Download the ShurLink™ App



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

www.SHURCO.com

**SAFETY INSTRUCTIONS**

At Shur-Co®, 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 Shur-Co® dealer.

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

SHUR-CO® TERMS OF SERVICE**ORDER
TERMS AND CONDITIONS****WARRANTY****PATENTS****SERVICE AND DISTRIBUTION CENTERS**

www.shurco.com/about-us/corporate-locations/

LOCATIONS

MESSAGE TO OWNERS

Thank you for choosing Shur-Co® 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:

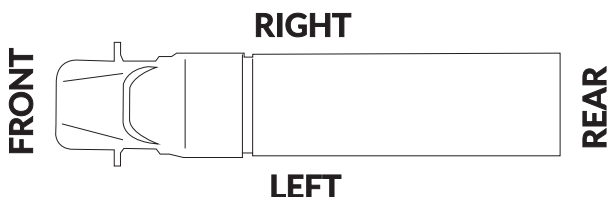
1-866-748-7435

MONDAY-FRIDAY
8 AM-5 PM CENTRAL TIME

MAINTENANCE

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

VEHICLE ORIENTATION



REQUIRED TOOLS

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

Inspect 4500 Series HD kit upon arrival.

CAUTION

Avoid pinch points. Keep hands and fingers clear of moving parts to prevent injury.

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



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

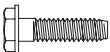
Safety, Legal, and Support Information	2
Product Guide: Tool Requirements, Maintenance, Vehicle Orientation	3
Table of Contents	4
Hardware Identification	5
Installation Instructions	
• Pivot Bracket Installation	6
• Front Flex Arm & Electric Motor Installation	7
• Roll Tube Extension Installation	9
• Stretch Cord Return	11
• Shur-Return™	12
• Rear Cable Return	13
• Value Series Stretch Cord Return	14
• Rocker Switch Wiring	15
• Receiver Wiring	18
Operation	22
Electric to Manual Power Conversion	23
Manual Operation & Tarp Tensioning	25
Electric Motor Replacement	26
Replacement Parts	27

A

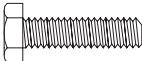
1701423 Set Screw - #10 x 3/16"

B

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

C

1704367 Cap Screw - #10 x 3/4"

D

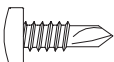
1704905 Flanged Cap Screw - #10 x 1"

E

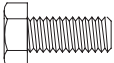
1700736 Self-Tapping Screw - 1/4" x 1/2"

F

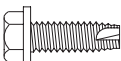
1700403 Self-Tapping Screw - 1/4" x 3/4"

G

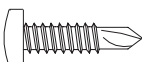
1700398 Self-Drilling Screw - 1/4" x 3/4"

H

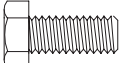
1703959 Cap Screw - 1/4" x 3/4"

J

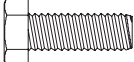
1704338 Self-Tapping Screw - 1/4" x 1"

K

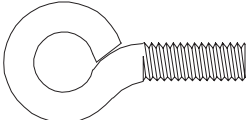
1704353 Self-Drilling Screw - 1/4" x 1"

L

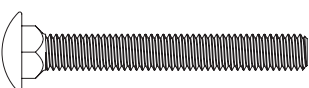
1701045 Cap Screw - 5/16" x 3/4"

M

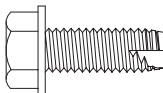
1702926 Cap Screw - 5/16" x 7/8"

N

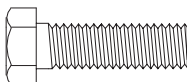
1700717 Eyebolt - 5/16" x 7/8"

P

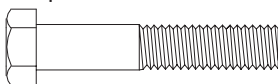
1701455 Carriage Bolt - 5/16" x 2-1/2"

Q

1700400 Cap Screw - 3/8" x 1"

R

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

S

1704057 Cap Screw - 3/8" x 2"

T

1808844 Nylon Lock Nut - #10

U

1706399 Top Lock Flanged Nut - 1/4"

V

1701543 Nylon Lock Nut - 1/4"

W

1700411 Hex Nut - 5/16"

X

1704946 Flanged Top Lock Nut - 5/16"

Y

1704931 Flanged Nylon Lock Nut - 5/16"

Z

1700419 Nylon Lock Nut - 5/16"

AA

1700407 Hex Nut - 3/8"

BB

1701580 Nylon Lock Nut - 3/8"

DD

1700427 Flat Washer - 1/4"

EE

1700428 Flat Washer - 5/16"

FF

1700433 Lock Washer - 5/16"

GG

1700434 Lock Washer - 3/8"

HH

1700429 Flat Washer - 3/8"

JJ

1703373 Flat Washer - 1/2"

KK

1702890 Flat Washer - 1-1/4"

LL

1118318 Spacer Washer - 1/4" x 1.81"

NN

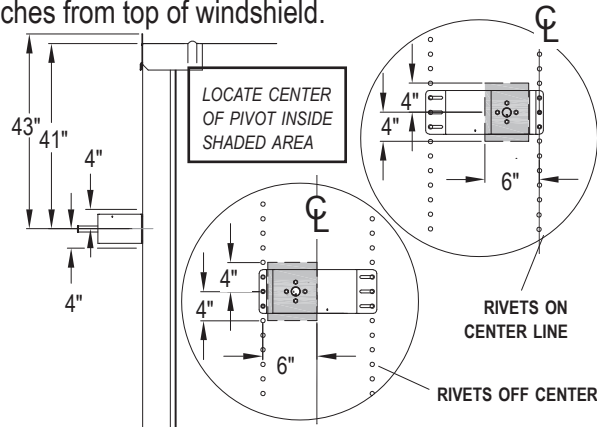
1120291 Pivot Bracket Washer

**Inspect all parts in your
4500 Series Electric
kit upon arrival.**

NOTICE: Use lock washers and nuts with self-tapping screws whenever possible.		
Hardware	Hole Size	Material Thickness
With Lock Washers & Nuts	13/32"	No Minimum
Without Lock Washers & Nuts	5/16"	Minimum 3/16"

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

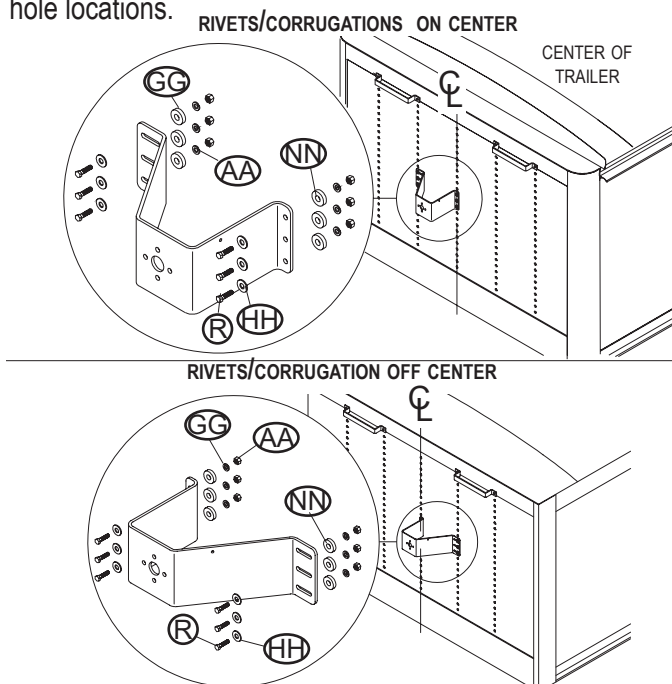
STEP 1: Locate front pivot mount bracket on right side of trailer so center of pivot lies within shaded area shown below. Measure 41 inches down from top of cap or 43 inches from top of windshield.



NOTICE: Mount front pivot bracket into support braces on trailer, if possible. If bracket cannot be mounted into support braces, reinforce mounting area with backer plate for adequate support.

Before drilling any holes, make sure flex arm will have a clear pathway to operate.

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

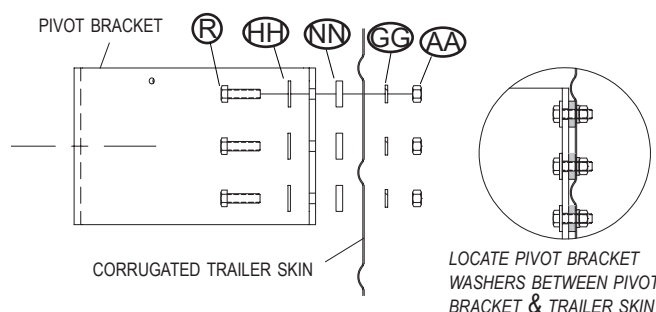


STEP 3: Remove rivets and mount brackets into rivet holes. If this is not possible, drill 13/32 inch holes in trailer. Fasten with screws (R), flat washers (HH), pivot bracket washers (GG), lock washers (NN) and nuts (AA).

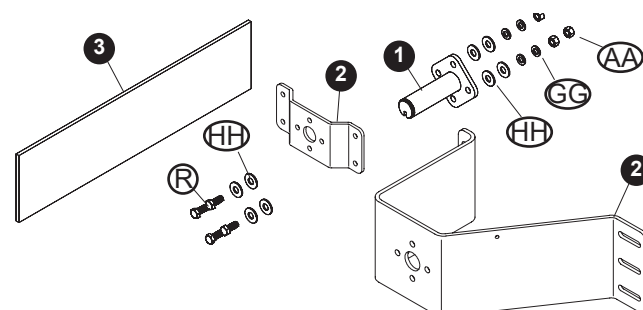
CORRUGATED TRAILERS

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

STEP 3: If installing pivot bracket or pivot mount bracket on horizontally corrugated trailer skin, center bracket between corrugations and use brackets as guide to mark hole locations. Mark and drill 13/32 inch holes in trailer and fasten with screws (R), flat washers (HH), lock washers (GG), pivot bracket washers (NN) and nuts (AA). Locate pivot bracket washers between pivot bracket and trailer skin as shown.

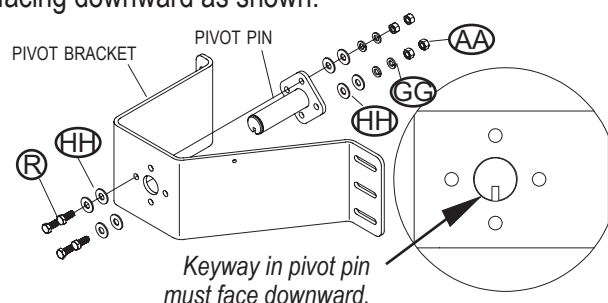


PIVOT PIN INSTALLATION

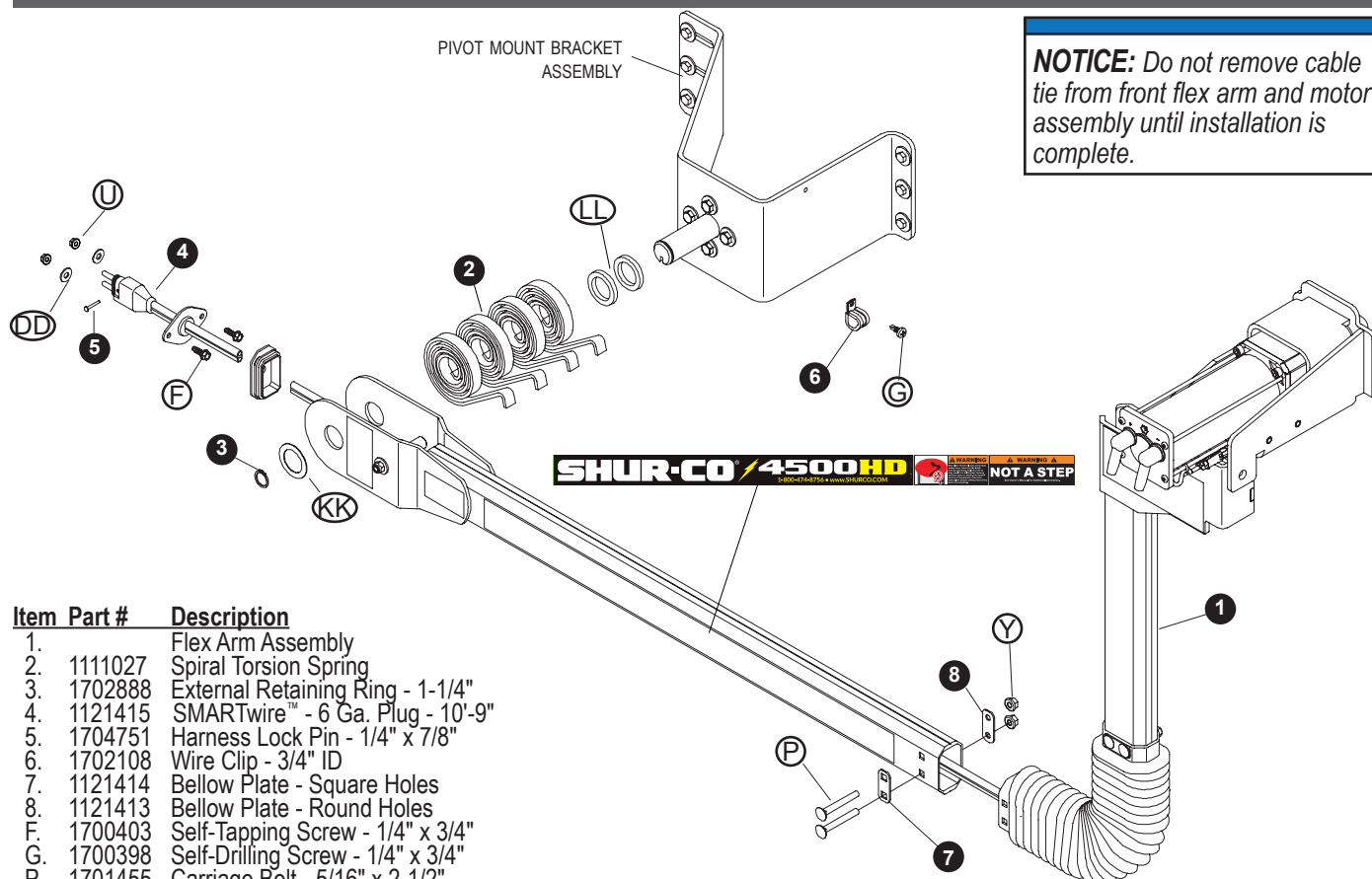


Item	Part #	Description
1.	1116920	Pivot Pin - 4 Spring
2.	1116919	Vertical Pivot Mount Bracket - 7-1/4" Standoff
	1117927	Vertical Pivot Mount Bracket - 12-1/4" Standoff
	1117767	Pivot Mount Bracket - 1-1/4"
3.	1120361	Pivot Backer Plate - 5" x 16"
	1120418	Pivot Backer Plate - 5" x 20"
R.	1702891	Cap Screw - 3/8" x 1-1/4"
Z.	1700407	Hex Nut - 3/8"
FF.	1700434	Lock Washer - 3/8"
GG.	1700429	Flat Washer - 3/8"

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



NOTICE: Do not remove cable tie from front flex arm and motor assembly until installation is complete.

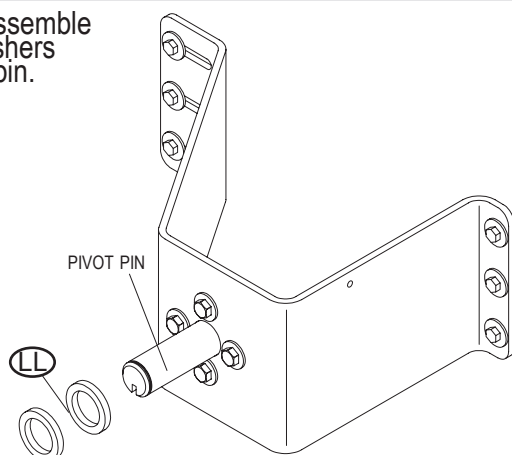


Item	Part #	Description
1.		Flex Arm Assembly
2.	1111027	Spiral Torsion Spring
3.	1702888	External Retaining Ring - 1-1/4"
4.	1121415	SMARTwire™ - 6 Ga. Plug - 10'-9"
5.	1704751	Harness Lock Pin - 1/4" x 7/8"
6.	1702108	Wire Clip - 3/4" ID
7.	1121414	Bellow Plate - Square Holes
8.	1121413	Bellow Plate - Round Holes
F.	1700403	Self-Tapping Screw - 1/4" x 3/4"
G.	1700398	Self-Drilling Screw - 1/4" x 3/4"
P.	1701455	Carriage Bolt - 5/16" x 2-1/2"
U.	1700408	Hex Nut - 1/4"
	1706399	Top Lock Flanged Nut - 1/4"
Y.	1704931	Flanged Nylon Lock Nut - 5/16"
DD.	1700427	Flat Washer - 1/4"
KK.	1702890	Flat Washer - 1-1/4"
LL.	1118318	Spacer Washer - 1/4" x 1.28"

⚠ WARNING

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

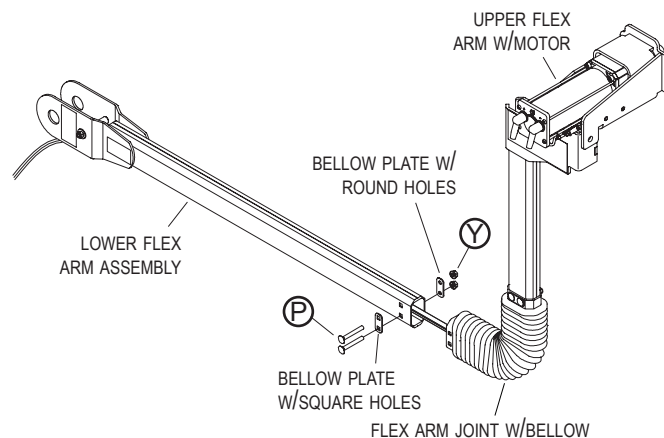
STEP 1: Assemble spacer washers onto pivot pin.



⚠ CAUTION

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

STEP 2: Align holes in bellow and bellow plates with holes in lower flex arm assembly as shown. Fasten with carriage bolts (P) and lock nuts (Y).

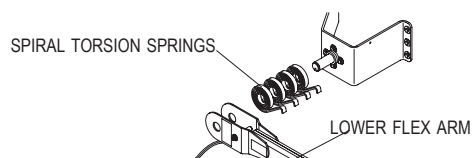


NOTICE: The motor assembly on the upper flex arm must face toward the trailer as shown.

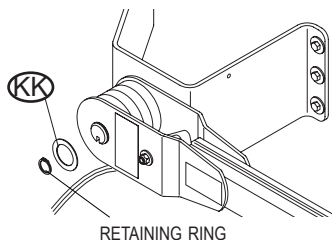
⚠ WARNING

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 3: Assemble spiral torsion springs and lower flex arm onto pivot pin. Hook springs over cap screw and spacer tube on lower flex arm.

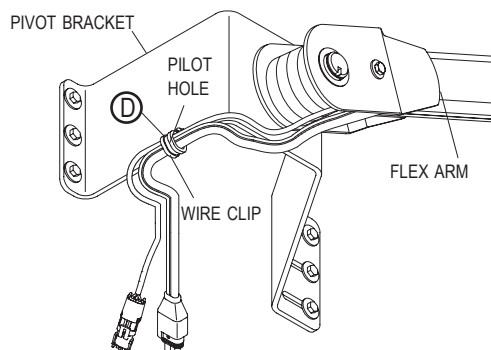


STEP 4: Secure with flat washer (KK) and retaining ring.



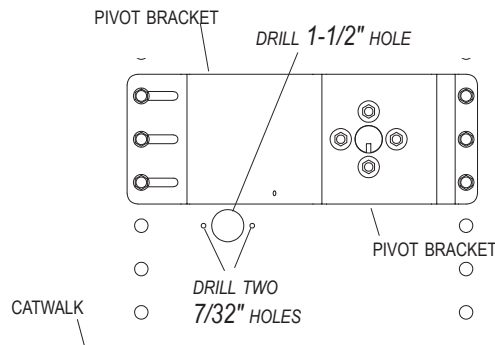
External Trailer Wiring

NOTICE: After all components are installed and system operation has been tested, choose an appropriate pilot hole on the pivot bracket to secure the wire with self-drilling screw (D) and the wire clip.



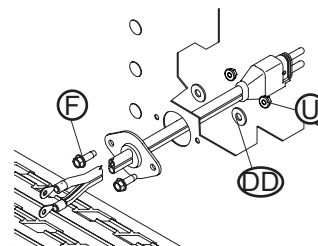
Internal Trailer Wiring

STEP 4A: Measure 11 inches horizontally from center line of trailer and 1 inch down from lower edge of pivot bracket. Mark and drill 1-1/2 inch hole through trailer skin.

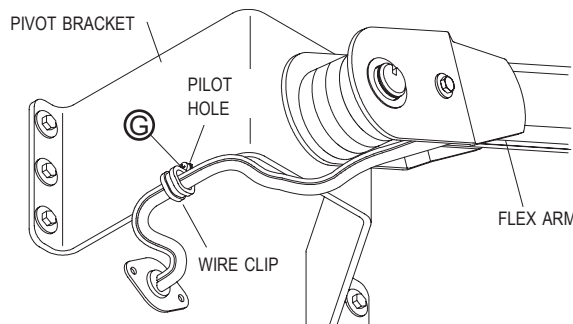


STEP 4B: Align adapter plug with 1-1/2 inch hole. Using plug as guide, mark and drill two 7/32 inch holes as shown.

STEP 4C: Fasten adapter plug to front of trailer with screws (F), flat washers (DD) and nuts (U).



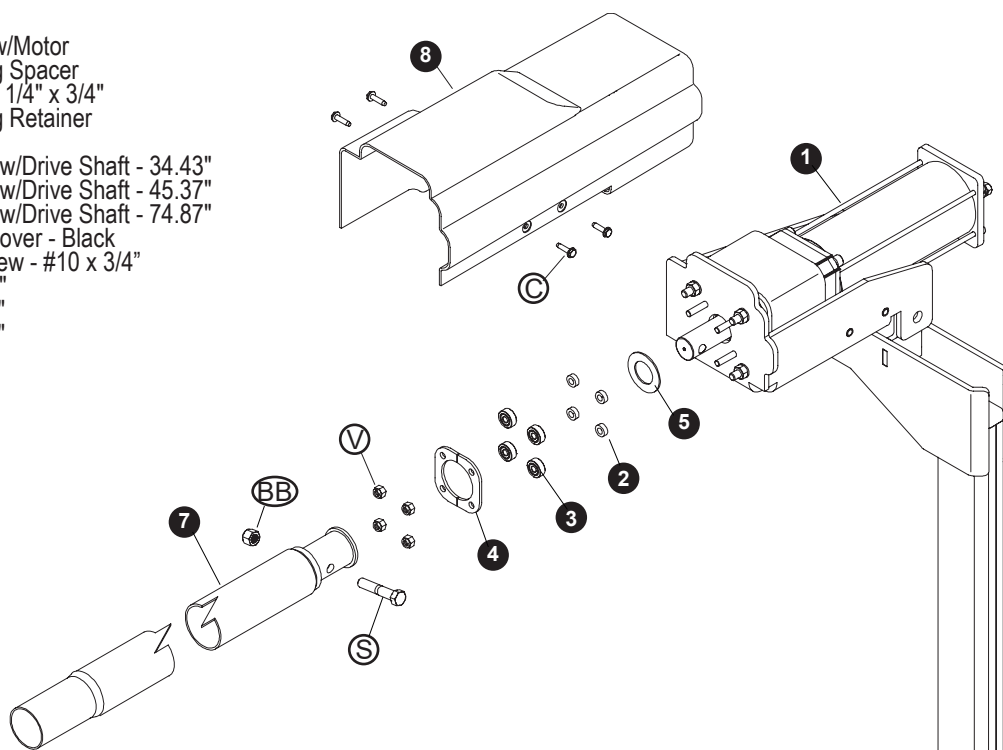
NOTICE: After all components are installed and system operation has been tested, choose appropriate pilot hole on the pivot bracket to secure the wire with the wire clip and self-drilling screw (D).



⚠ CAUTION

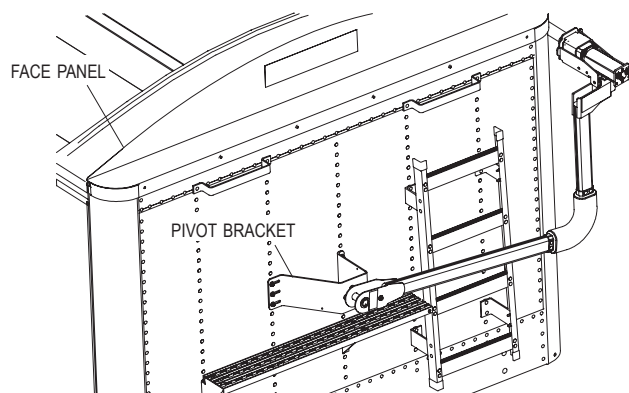
Fasten wire to the pilot hole on the opposite side of the pivot bracket, away from the flex arm, to prevent the wire from being pinched during operation.

Item	Part #	Description
1.		Flex Arm Assembly w/Motor
2.	1120680	Motor Mount Bearing Spacer
3.	1704736	Radial Ball Bearing - 1/4" x 3/4"
4.	1128243	Motor Mount Bearing Retainer
5.	1120679	Motor Spacer
7.	1120697	Roll Tube Extension w/Drive Shaft - 34.43"
	1120698	Roll Tube Extension w/Drive Shaft - 45.37"
	1120699	Roll Tube Extension w/Drive Shaft - 74.87"
8.	1704982	4500 Series Motor Cover - Black
C.	1704367	Hex Flange Cap Screw - #10 x 3/4"
S.	1704057	Cap Screw - 3/8" x 2"
V.	1701543	Nylon Lock Nut - 1/4"
BB.	1701580	Nylon Lock Nut - 3/8"



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

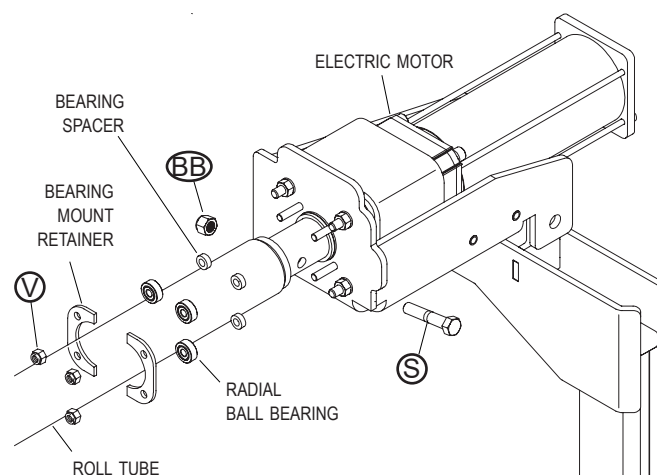
STEP 1: Slide roll tube/roll tube extension weldment back into position and align upper flex arm on front of trailer. Install motor, positioning motor as shown below. Make sure torsion springs load when tarp opens.



⚠ WARNING

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

STEP 2: Refasten and secure roll tube to electric motor shaft with screw (S) and nut (BB). Install bearing spacers, radial ball bearings and bearing mount retainer and secure with nuts (V). Remove cable tie from front arm/motor assembly.



NOTICE: Verify again that the front arm is on a vertical plane and parallel to the face panel before proceeding. Make sure all fasteners holding the motor to the bearing mount plate are securely tightened.

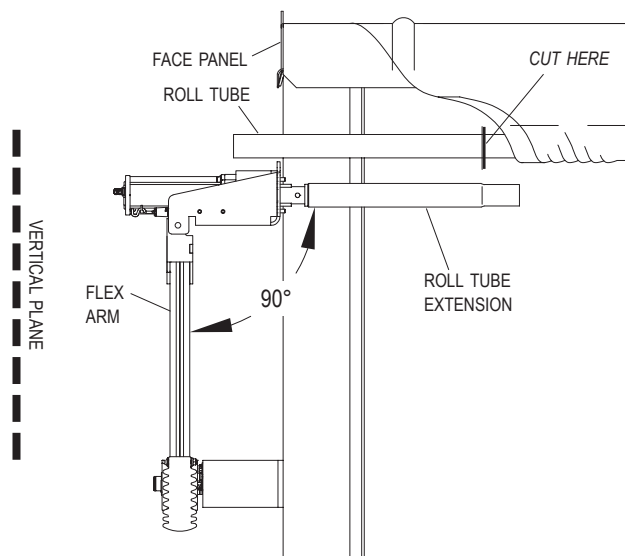
STEP 3: Hold flex arm with motor and roll tube extension in vertical plane to trailer and 90° to roll tube. Mark roll tube at location to be cut.

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



⚠ CAUTION

On certain trailers, clearance lights may obstruct the roll tube and could be damaged if caution is not taken. A deflector may need to be installed to prevent the roll tube from damaging the lights.



STEP 4: Reverse STEP 2 to unfasten and remove motor from roll tube extension. Remove roll tube extension from roll tube. Cut roll tube at marked location.

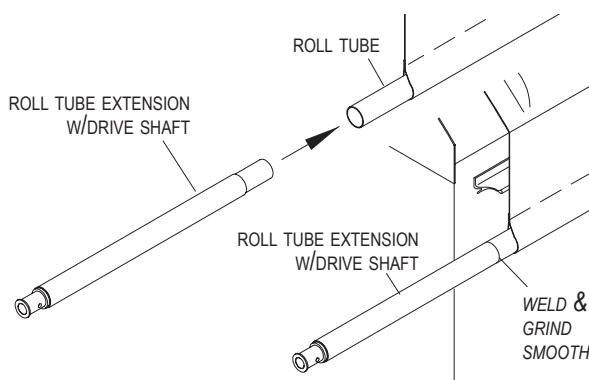
⚠ CAUTION

Do not leave the tarping system unattended until the flex arm is securely fastened to the roll tube extension.

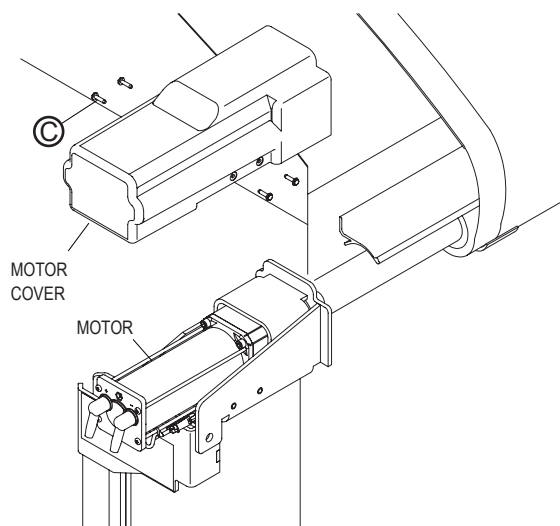
STEP 5: Insert swaged end of roll tube extension w/drive shaft into roll tube. Align extension straight with roll tube and weld all around. Grind smooth.

⚠ CAUTION

Pull the roll tube away from the tarp and trailer before welding to prevent weld spatter damage. Ensure the roll tube extension is aligned straight with the roll tube before welding to allow the tarp system to roll smoothly.

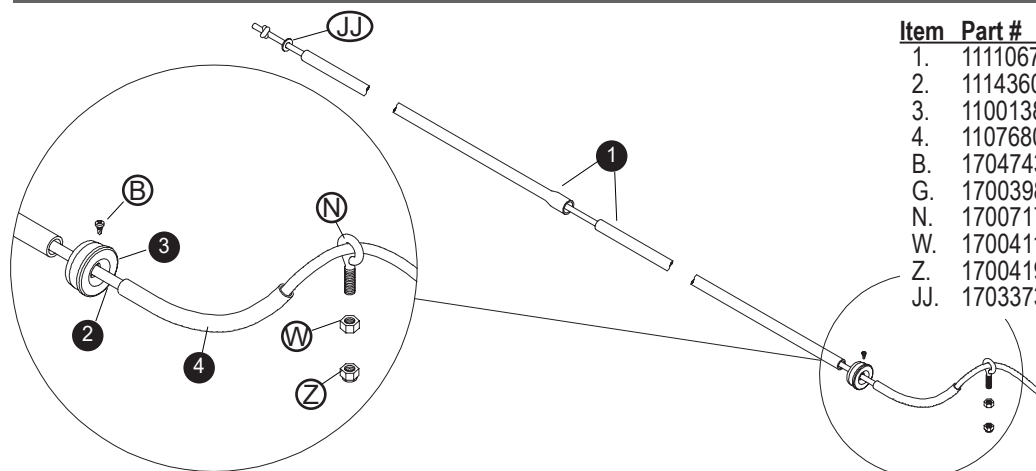


STEP 6: Fasten motor cover onto motor with screws (C).



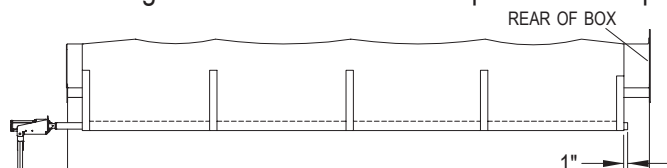
STEP 7: Adjust rear roll tube extension to align flex arm on vertical plane parallel to face panel. Do not drill holes and/or fasten until tarp and roll tube are in desired position.

STEP 8: Re-fasten tarp to roll tube with existing U-clamps and screws. Tighten all fasteners securely. Tighten front and rear flex arm connections.

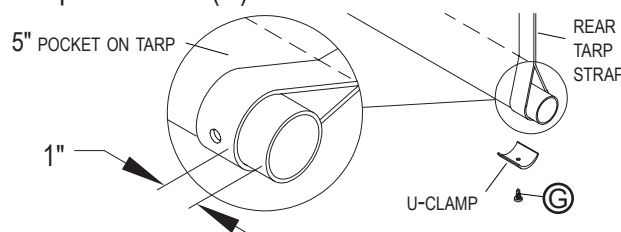


Item	Part #	Description
1.	1111067	Stretch Cord Return Tube Set
2.	1114360	Stretch Cord Return Cord - 11-1/2'
3.	1100138	Nylon End Plug
4.	1107680	Protective Stretch Cord Cover
B.	1704743	Self-Drilling Screw - #10 x 1/2"
G.	1700398	Self-Drilling Screw - 1/4" x 3/4"
N.	1700717	Eyebolt - 5/16" x 7/8" Thread
W.	1700411	Hex Nut - 5/16"
Z.	1700419	Nylon Lock Nut - 5/16"
JJ.	1703373	Flat Washer - 1/2"

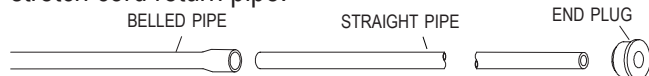
STEP 1: Align roll tube to extend 1 inch past rear of tarp.



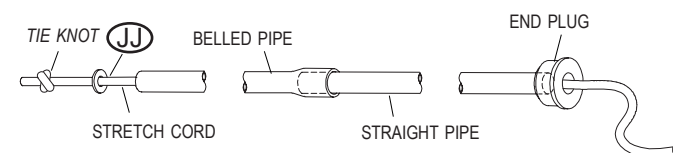
STEP 2: Center first U-clamp on rear tarp strap, positioning screw (G) on crease at bottom of tarp pocket. Fasten U-clamp with screw (G).



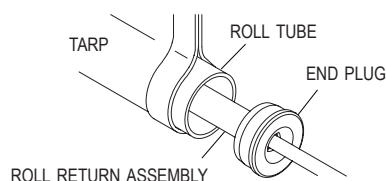
STEP 3: Insert straight stretch cord return pipe into belled stretch cord return pipe. Insert end plug into straight stretch cord return pipe.



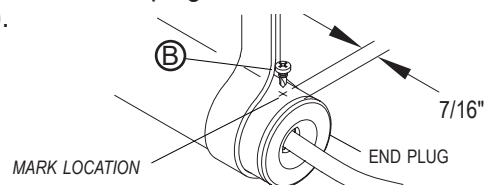
STEP 4: Insert stretch cord through end plug and roll return pipes. Slide flat washer (JJ) over stretch cord and tie knot in cord.



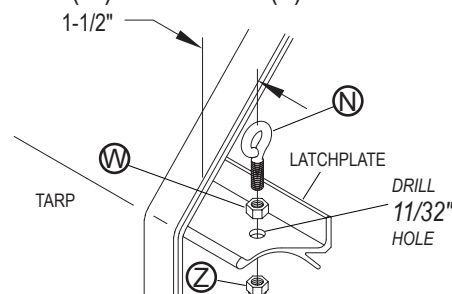
STEP 5: At rear of box, insert stretch cord return assembly into roll tube. Lightly tap end plug into roll tube.



STEP 6: Mark location about 7/16 inch from edge of end plug. Secure end plug to roll tube with self-drilling screw (B).

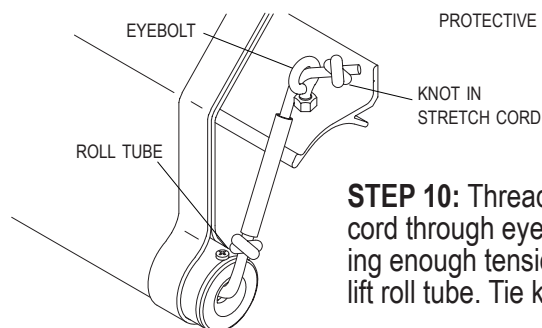
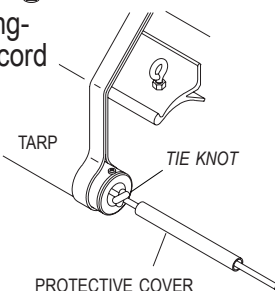


STEP 7: Drill 11/32 inch hole through latchplate, 1-1/2 inches from edge of tarp. Insert eyebolt (N) through hole and secure with nut (W) and lock nut (Z).

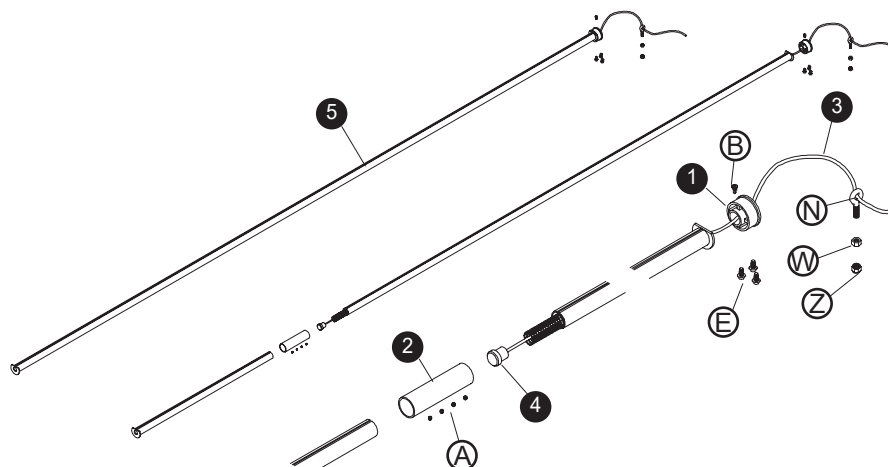


STEP 8: With tarp closed and hanging over edge of box, pull stretch cord to remove all slack in stretch cord return assembly.

STEP 9: Tie knot in cord at end plug. Slide protective cover over stretch cord.



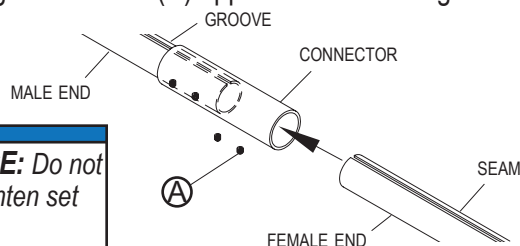
STEP 10: Thread stretch cord through eyebolt, applying enough tension to almost lift roll tube. Tie knot.



Item	Part #	Description
1.	1100138	Nylon End Plug
2.	1107879	Connector Sleeve
3.	1100826	Shur-Return™ Rope
4.	1100827	Spring Retainer Plug
5.	1100832	Shur-Return™ Assembly (Spring - Rope - Slide)
A.	1701423	Set Screw - #10 x 3/16"
B.	1704743	Self-Tapping Screw - #10 x 1/2"
E.	1700736	Self-Tapping Screw - 1/4" x 1/2"
G.	1700398	Self-Drilling Screw - 1/4" x 3/4"
N.	1700717	Eyebolt Anchor - 5/16" x 7/8"
W.	1700411	Hex Nut - 5/16"
Z.	1700419	Nylon Lock Nut - 5/16"

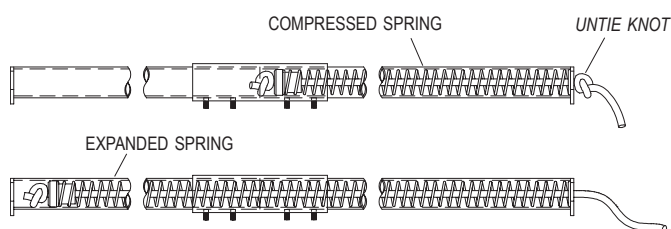
NOTICE: Follow STEPS 1 and 2 on page 11 before proceeding. STEPS 1 and 2 on this page are for UPS-able Shur-Return™ only.

STEP 1: Align grooves in male and female UPS-able Shur-Return™ ends, insert female end into connector sleeve and align set screws (A) opposite seam and tighten.



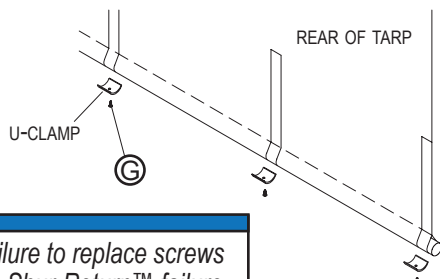
NOTICE: Do not overtighten set screws.

STEP 2: Cautiously untie knot and slowly allow spring to expand to full length of UPS-able Shur-Return™.



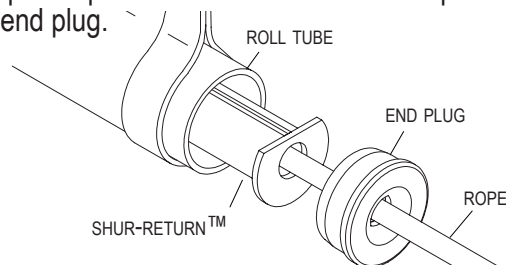
NOTICE: Spring is compressed. Use caution when untying knot.

STEP 3: Remove all 1/4 inch x 3/4 inch screws on U-clamps from rear 11 feet of tarp, then replace with screws (G).

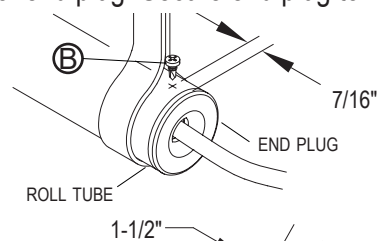


NOTICE: Failure to replace screws could result in Shur-Return™ failure.

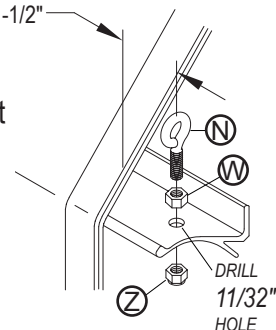
STEP 4: Insert Shur-Return™ into roll tube at rear of box, with rope at open end of roll tube. Thread rope through nylon end plug.



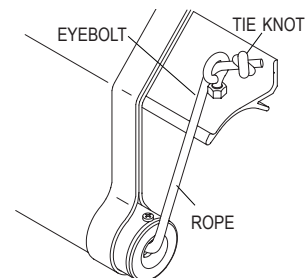
STEP 5: Tap end plug into roll tube and mark location 7/16 inch from edge of end plug. Secure end plug to roll tube with screw (B).



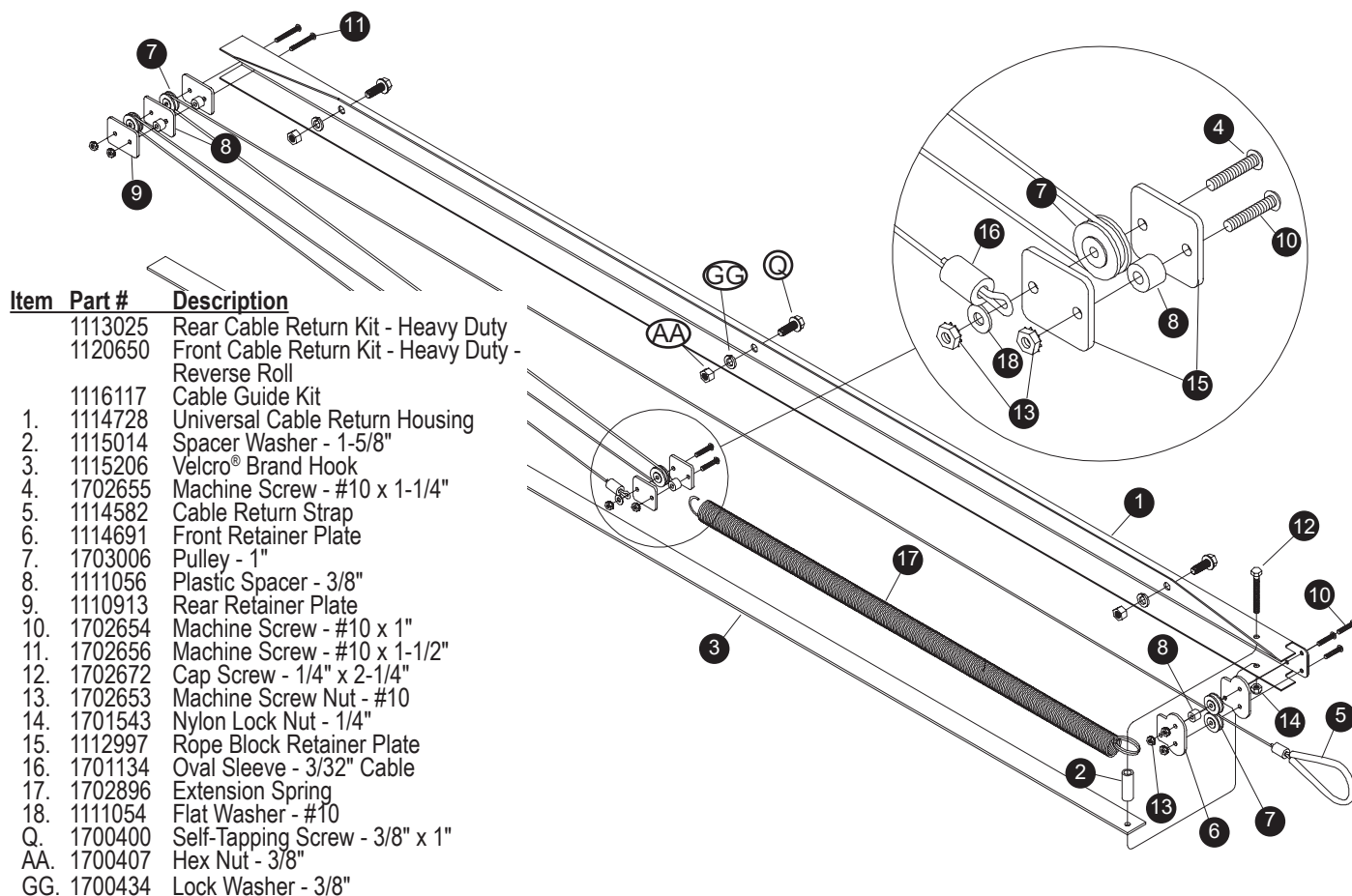
STEP 6: Drill 11/32 inch hole into latchplate 1-1/2 inches past end of tarp. Insert eyebolt (N) through hole and secure with nut (W) and nut (Z).



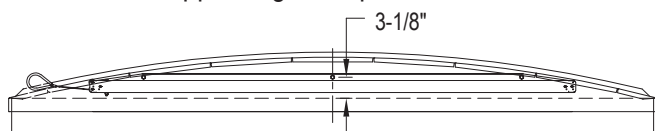
STEP 7: Insert Shur-Return™ rope through eyebolt, remove all slack from rope and tie knot.



NOTICE: Do not cut off excess rope until sure tarp will open completely.



STEP 1: Mark point on center line of face panel 3-1/8 inches above upper edge of top rail.



STEP 2: Center punch and drill 13/32 inch hole at mark.

STEP 3: Align center mounting hole on return to drilled hole in cap and fasten with screw (Q), lock washer (GG) and nut (AA).

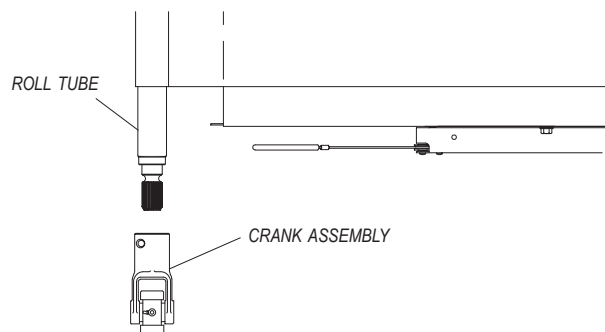
STEP 4: Align cable return parallel with top rail on box.

STEP 5: Mark mounting holes and repeat STEPS 2 and 3.

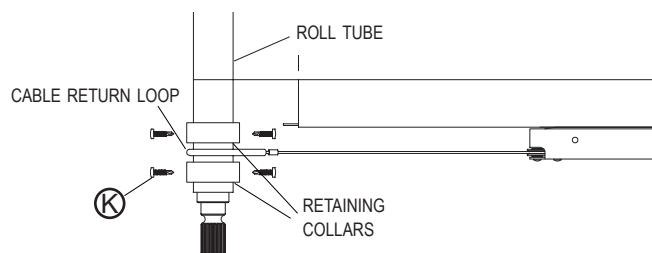
STEP 6: Release tarp from latchplate and let hang over side of trailer.

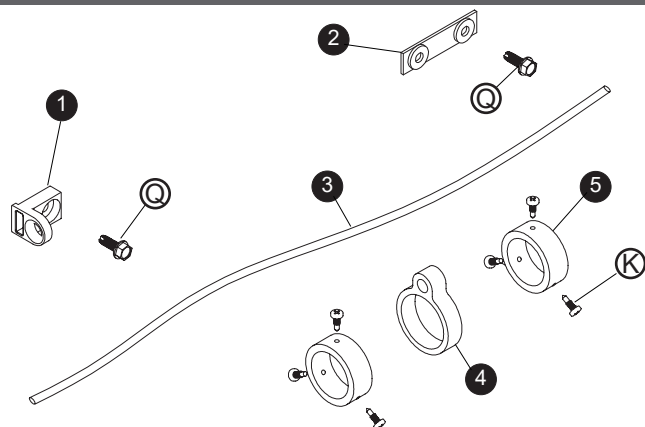
TIPS - Install spacer, such as S/40 PVC pipe, to align cable with pulleys and/or separate cable loop from weld. Adjust cable to prevent rubbing on objects and fraying. Remove weld spatter or debris from roll tube. Replace cable assembly every two years. Roll tube must extend at least 4 inches past front of trailer - purchase 4 foot roll tube P/N 1111719, if required.

STEP 7: Remove crank assembly from roll tube.



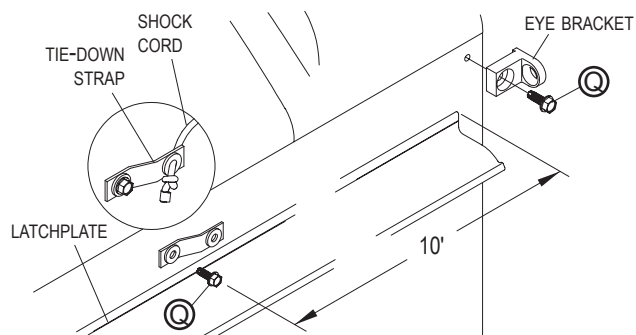
STEP 8: Slide cable return loop and retaining collars over roll tube. Fasten collars to roll tube with screws (K).





Item	Part #	Description
1.	1703445	Shock Cord Eye Bracket
2.	1114948	Shock Cord Tie-Down Strap
3.	1100169	Shock Cord - 138"
4.	1114947	Roll Tube Eye
5.	1704352	Retaining Collar
K.	1704353	Self-Drilling Screw - 1/4" x 1"
Q.	1700400	Self-Tapping Screw - 3/8" x 1"

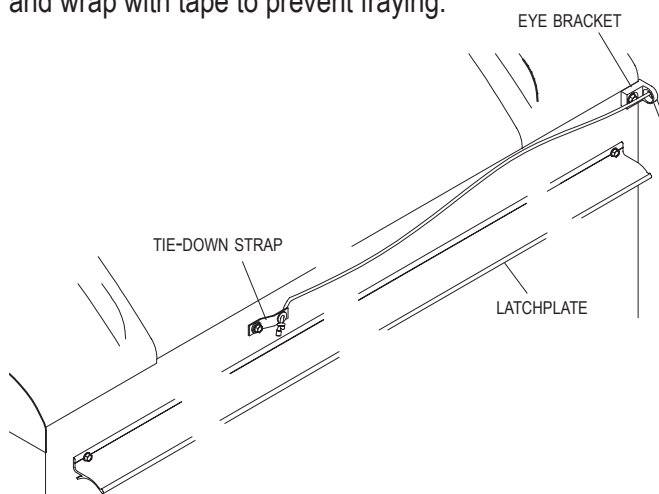
STEP 1: Open tarp against tarp stops. At rear of box, locate eye bracket in configuration shown.



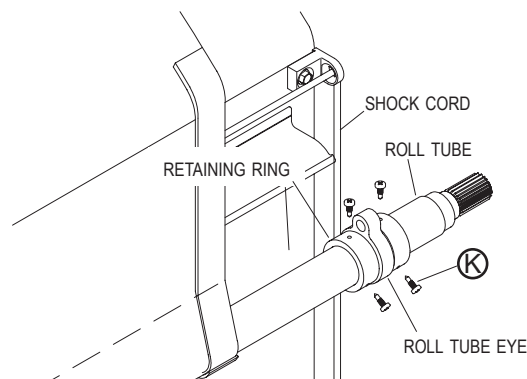
STEP 2: Using eye bracket as guide, mark and drill 5/16 inch hole in trailer. Fasten bracket to trailer with screws (Q).

STEP 3: Mount shock cord tie-down strap 10 feet back from rear edge of latchplate. Drill 5/16 inch hole and fasten with screws (Q).

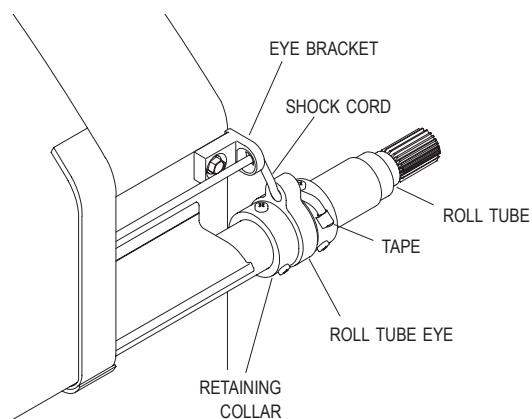
STEP 4: Lead shock cord through eye bracket, then through grommet on tie-down strap. Tie knot in shock cord at tie-down strap to secure. Trim end of shock cord and wrap with tape to prevent fraying.



STEP 5: Allow shock cords to hang down. Slide roll tube eye onto rear end of roll tube and align eye about 1 inch from shock cord, toward outside of trailer. Space retaining rings about 1/8 inch from each side of roll tube eye. Tighten screws (K) to secure retaining rings.



STEP 6: Roll tarp closed tight under latchplate and pull shock cord through roll tube eye to create tension. Tie permanent knot in shock cord at rear of roll tube.



STEP 7: Roll tarp open and closed to make sure roll tube returns correctly. Adjust tension in shock cord as needed. Trim end of shock cord and wrap with tape to prevent fraying.

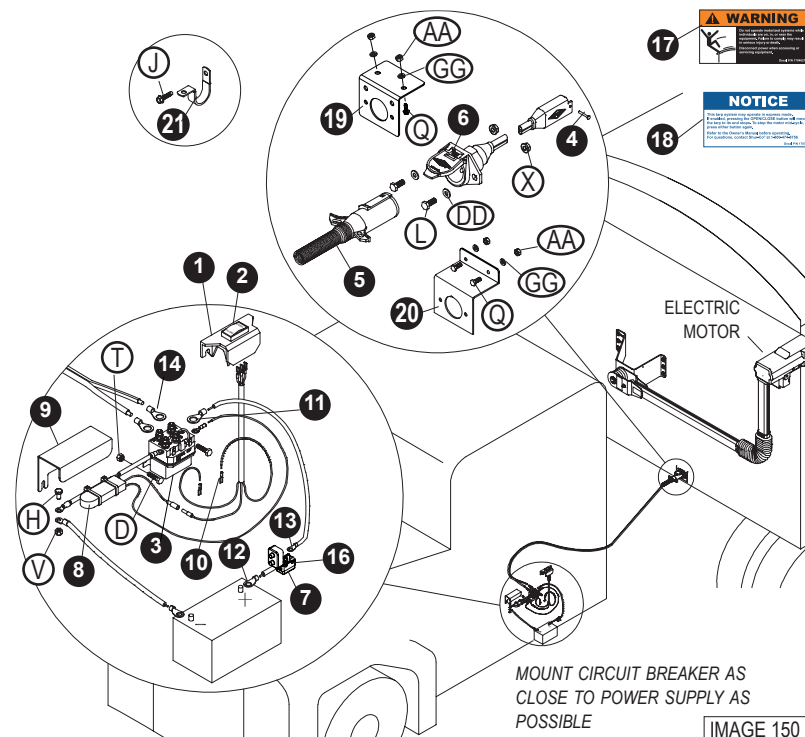


IMAGE TO LEFT ILLUSTRATES A GENERAL WIRING LAYOUT, APPLICATIONS MAY VARY.

Item	Part #	Description
1.	1703661	Rocker Switch Mounting Bracket
2.	1116020	Rocker Switch
3.	1703845	Motor-Reversing Solenoid
4.	1704751	Harness Lock Pin - 1/4" x 7/8"
5.	1115385	Heavy-Duty Dual-Conductor Plug
6.	1120670	SMARTwire™ Dual-Conductor Socket
7.	1704354	40-Amp Reset Circuit Breaker - Shortstop
8.	1705624	50-Amp SMART Circuit Breaker
9.	1703896	Solenoid Cover
10.	1703659	Push-On Terminal - 14 Ga. 1/4"
11.	1704153	Ring Terminal - 14 Ga. x 1/4" Stud
12.	1703244	Ring Terminal - 6 Ga. x 3/8" Stud
13.	1703245	Ring Terminal - 6 Ga. x #10 Stud
14.	1702707	Ring Terminal - 6 Ga. 1/4" Stud
15.	1704378	Dielectric Grease (not pictured)
16.	1704411	Circuit Breaker Boot - Red
17.	1704627	Motorized System Warning Decal
18.	1707865	Express Operation Decal
19.	1109015	Conductor Plug Mtg (L) Bracket
20.	1127798	Conductor Plug Mtg (Z) Bracket
21.	1702108	Wire Clip - 3/4"
D.	1704905	Flanged Cap Screw - #10 x 1"
H.	1703959	Cap Screw - 1/4" x 3/4"
J.	1704338	Self-Tapping Screw - 1/4" x 1"
L.	1701045	Cap Screw - 5/16" x 3/4"
Q.	1700400	Self-Tapping Screw - 3/8" x 1"
T.	1808844	Nylon Lock Nut - #10
V.	1701543	Nylon Lock Nut - 1/4"
X.	1704946	Flanged Top Lock Nut - 5/16"
AA.	1700407	Hex Nut - 3/8"
DD.	1700427	Flat Washer - 1/4"
GG.	1700434	Lock Washer - 3/8"

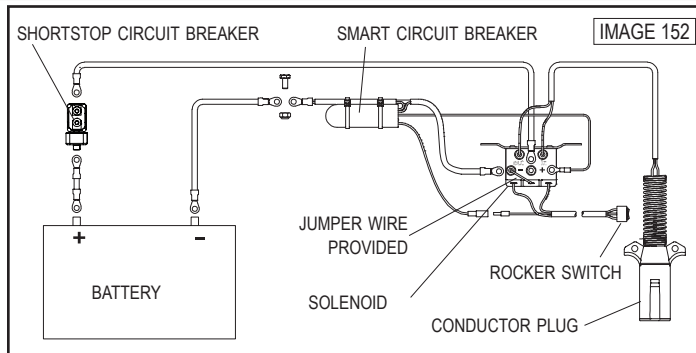
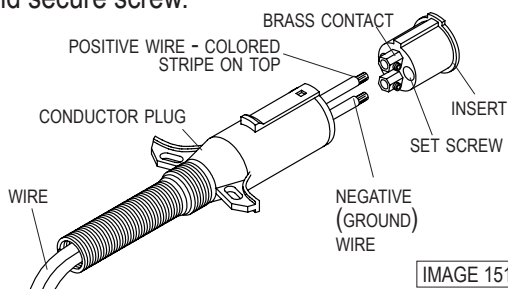
WARNING

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

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

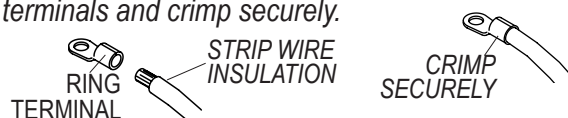
STEP 1: Mount solenoid in battery box or other location protected from elements and road debris. Solenoid posts should face up.

STEP 2: Assemble conductor plug. Unfasten screw and remove insert from plug housing. Feed 6-ga. dual wire through plug housing. Strip insulation back 1/2 inch and insert bare wire strands into brass contacts. Ensure there are no loose wire strands that could short circuit. Tighten set screws to secure wires. Replace insert into plug housing and secure screw.

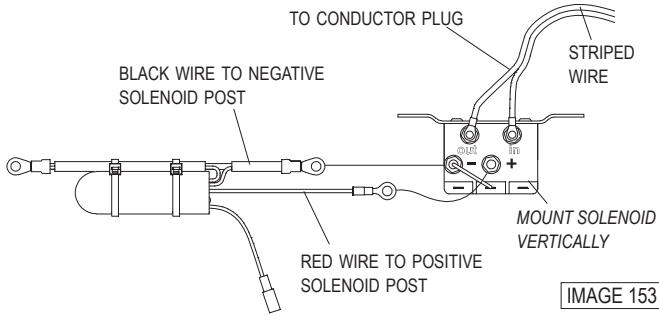


STEP 3: Route 6-ga. dual wire from conductor plug to solenoid and cut wire to length. Crimp and connect 1/4 inch ring terminals to rear two solenoid posts. Striped wire should be connected to right rear post. Orient wires so shield can be mounted over solenoid later.

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

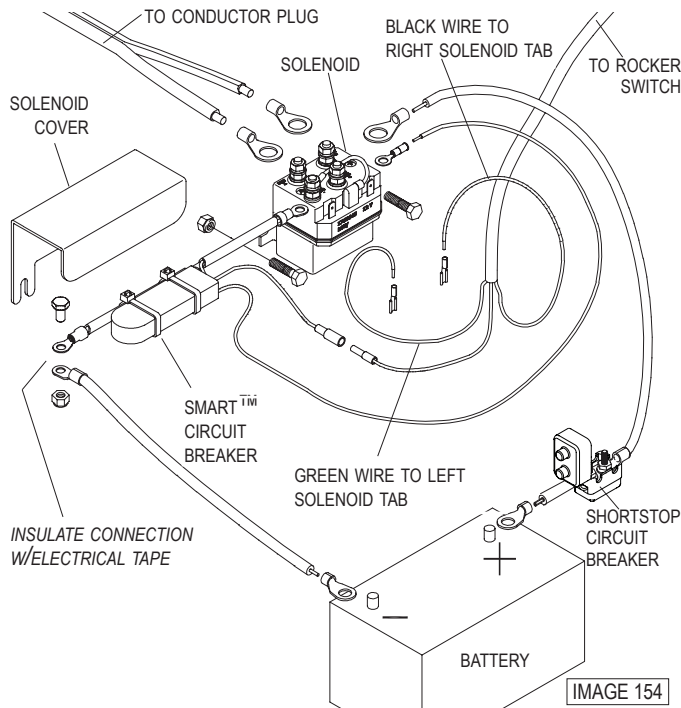


STEP 4: Connect SMART™ circuit breaker to solenoid.

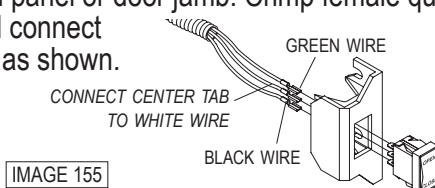


STEP 5: Connect SMART™ breaker to battery. Make jumper out of black 6-ga. wire (no stripe). Connect one end to battery negative post and bolt other ring terminal to SMART™ breaker. Insulate bolted connection with electrical tape.

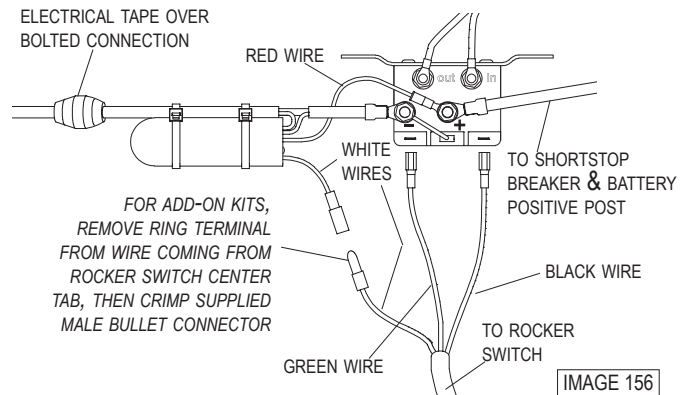
STEP 6: Push circuit breaker boot onto shortstop circuit breaker. Place shortstop circuit breaker within 1 foot of battery positive post. Make jumper wires out of 6-ga. wire (with stripe) for connecting shortstop breaker between positive battery post and positive solenoid post. Connect breaker to positive solenoid post, but do not connect breaker to positive battery post at this time.



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



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



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

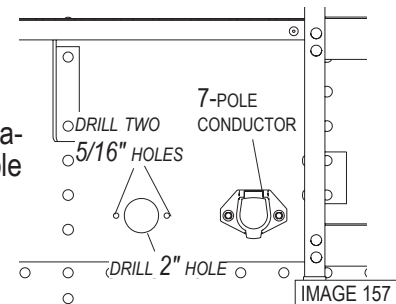
STEP 10: Connect ShortStop™ breaker to battery positive post.

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

Trailer Wiring (Internal and External Options)

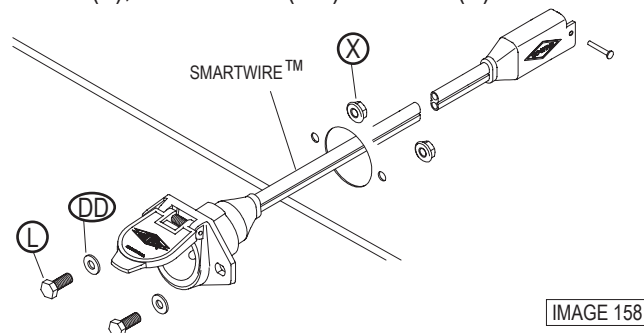
Option 1: Internal Trailer Wiring

STEP 11A: Locate dual-pole conductor socket near 7-pole conductor socket as shown. Determine location and drill 2 inch hole through trailer skin.



STEP 11B: Align socket over 2 inch hole. Using holes in flanges on socket as guide, mark and drill two 5/16 inch holes.

STEP 11C: Fasten conductor socket to trailer with cap screws (L), flat washers (DD) and nuts (X).



Option 2: External Trailer Wiring

STEP 11A: Mount bracket at suitable location on front of trailer, usually near existing plugs. Mark and drill 5/16 inch holes and fasten with self-tapping screws (Q), lock washers (GG) and nuts (AA).

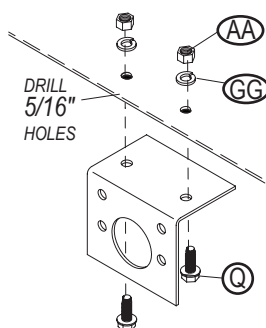
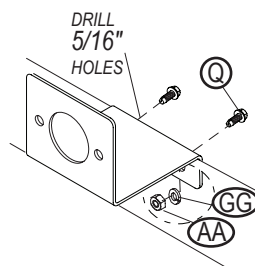
Bracket Option 1**Bracket Option 2**

IMAGE 159

STEP 11B: Fasten conductor socket to mounting bracket with screws (L), flat washers (DD) and nuts (X). Bring 6-ga. wire from lower end of pivot arm through sealed boot. Connect wire ends to conductor socket, aligning positive wire on socket with positive wire on conductor plug. Slide sealed boot against conductor socket and secure boot to wire with cable tie.

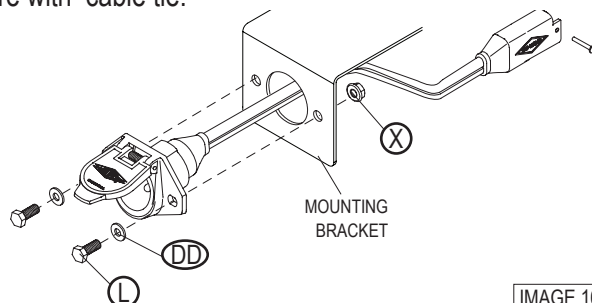


IMAGE 160

Wire Connection - All Applications

NOTICE: Coat all connections, including the conductor plug terminals, with dielectric grease to prevent corrosion.

CAUTION

- Do not cut molded SMARTwire™ ends. Molded SMARTwire ends are designed with sealed connections to prevent corrosion; cutting the wire may lead to operational problems.
- Only the loose (unmolded) wire end may be cut.
- Bind excess wire with cable ties to prevent loose wire entanglement.

STEP 12: Connect SMARTwire™ from electric motor to SMARTwire™ from dual-conductor. Coat each connection with dielectric grease and secure connection with lock pin. Secure all wires to trailer with cable clips and screws. If needed, use cable ties.

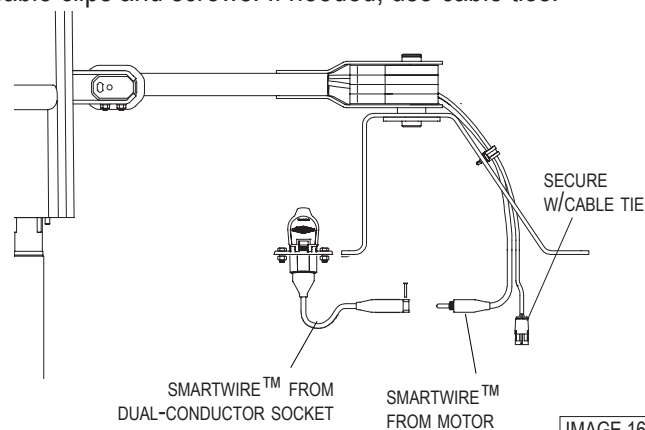


IMAGE 161

CAUTION

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

STEP 13: Identify a clean, dry surface area that is visible from the tarp system controls. Remove the backing from the warning decal (17) and notice decal (18). Apply them to the identified surface. Regularly inspect all safety decals for wear and adherence, and replace if necessary.



17



18

OPERATION:

A) Check motor direction by activating switch to *OPEN*. If switch is running system backwards, change wire leads on dual-conductor plug to opposite connections.

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

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

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



IMAGE BELOW ILLUSTRATES A GENERAL WIRING LAYOUT, APPLICATIONS MAY VARY.

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

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



WARNING

Do not power any Shur-Co wireless system using a battery charger alone, as this may cause system abnormalities and malfunctions. Use a charged 12-volt vehicle battery to power the trailer instead.

MOUNT CIRCUIT BREAKER AS CLOSE TO POWER SUPPLY AS POSSIBLE

IMAGE 170

Item	Part #	Description
1.	1115385	Heavy-Duty Dual-Conductor Plug
2.	1120670	SMARTwire™ Dual-Conductor Socket
3.	1704378	Dielectric Grease (not pictured)
4.	1704751	Harness Lock Pin - 1/4" x 7/8"
5.	1702108	Wire Clip - 3/4"
6.	1704354	40-Amp Modified-Reset Circuit Breaker
7.		ShurLink™ Receiver
8.	1703244	Ring Terminal - 6 Ga. x 3/8" Stud
9.	1703245	Ring Terminal - 6 Ga. x #10 Stud
10.	1704411	Circuit Breaker Boot - Red
11.	1127798	Conductor Plug Mtg (Z) Bracket
12.	1109015	Conductor Plug Mtg (L) Bracket
13.	1704627	Motorized System Warning Decal
14.	1707865	Express Operation Decal

Item	Part #	Description
J.	1704338	Self-Tapping Screw - 1/4" x 1"
L.	1701045	Cap Screw - 5/16" x 3/4"
M.	1702926	Cap Screw - 5/16" x 7/8"
Q.	1700400	Self-Tapping Screw - 3/8" x 1"
X.	1704946	Flanged Top Lock Nut - 5/16"
Z.	1700419	Lock Nut - 5/16"
AA.	1700407	Hex Nut - 3/8"
DD.	1700427	Flat Washer - 1/4"
EE.	1700428	Flat Washer - 5/16"
GG.	1700434	Lock Washer - 3/8"

STEP 1: Push circuit breaker boot onto circuit breaker. Mount circuit breaker as close as possible to battery or power supply.

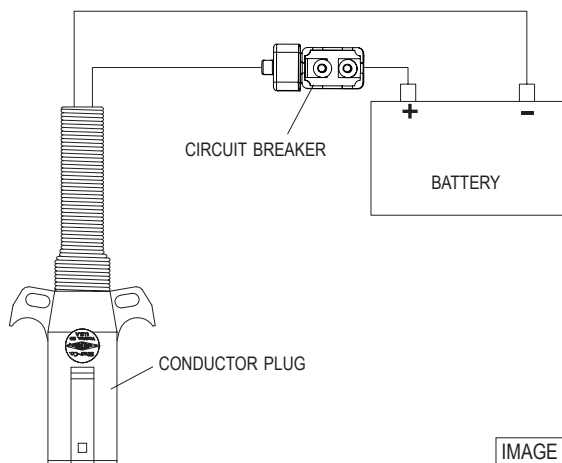


IMAGE 171

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

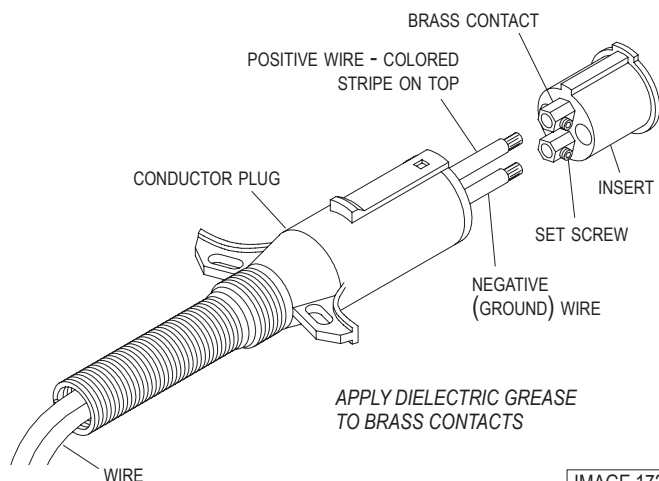


IMAGE 172

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

⚠ CAUTION

- Do not cut molded SMARTwire™ ends. Molded SMARTwire ends are designed with sealed connections to prevent corrosion; cutting the wire may lead to operational problems.
- Only the loose (unmolded) wire end may be cut.
- Bind excess wire with cable ties to prevent loose wire entanglement.

Dual Pole Socket (Internal and External Options)

Option 1: Internal Wiring - Dual Pole Socket

STEP 3A: Locate dual-pole conductor socket near 7-pole conductor socket as shown. Determine location and drill 2 inch hole through trailer skin.

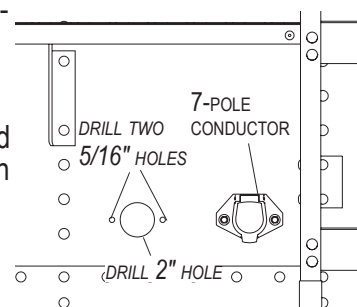


IMAGE 173

STEP 3B: Align socket over 2 inch hole. Using holes in flanges on socket as guide, mark and drill two 5/16 inch holes.

STEP 3C: Fasten conductor socket to trailer with cap screws (L), flat washers (DD) and nuts (X).

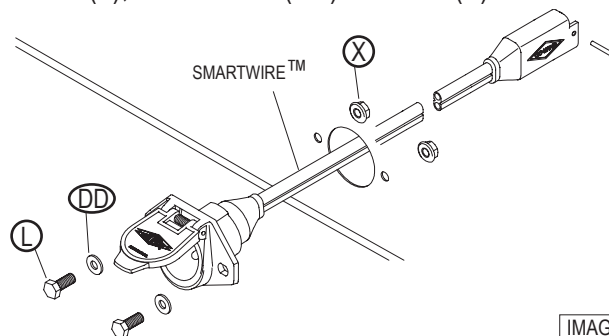


IMAGE 174

Option 2: External Wiring - Dual Pole Socket

STEP 3A: Mount bracket at suitable location on front of trailer, usually near existing plugs. Mark and drill 5/16 inch holes and fasten with self-tapping screws (Q), lock washers (GG) and nuts (AA).

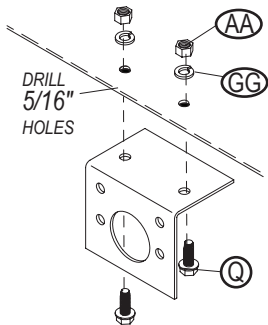
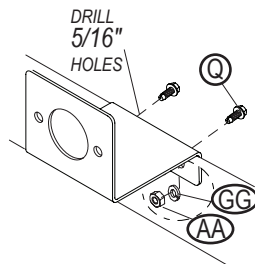
Bracket Option 1

IMAGE 175

Bracket Option 2

STEP 3B: Fasten conductor socket to mounting bracket with cap screws (L), washers (DD) and lock nuts (X).

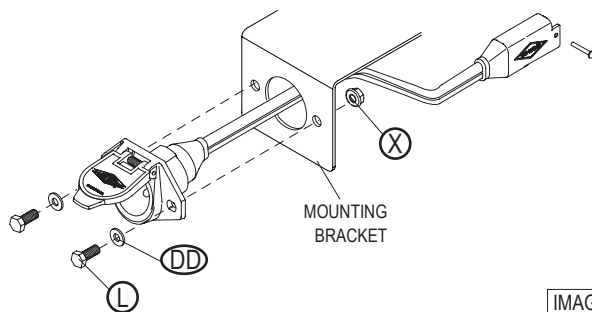


IMAGE 176

NOTICE: In order to clear travel area of front arm, locate the receiver as low as possible on the front of the trailer.

STEP 4: For ease of operation from ground, locate receiver on the bottom right corner of the front of the trailer.

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

Receiver Mounting (2 Options)**Option 1: Internal Wiring - Rear Output**

STEP 5A: Determine receiver location and drill 2-inch hole through trailer skin.

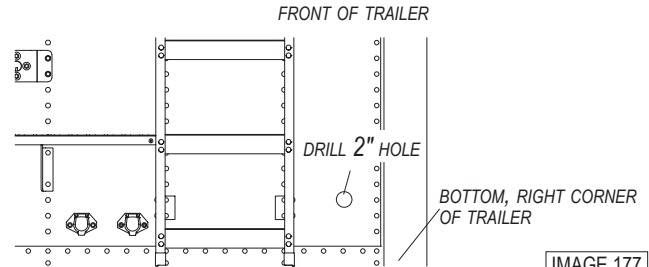


IMAGE 177

STEP 5B: Align hole in the receiver over 2 inch hole in trailer as shown below. Using holes in flanges on receiver base as guide, mark and drill four 5/16 inch holes as shown.

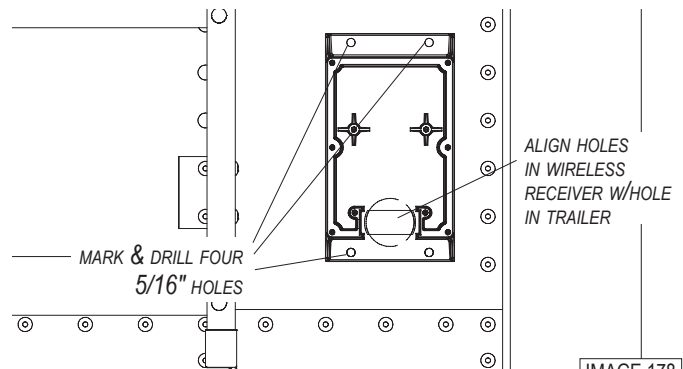


IMAGE 178

STEP 5C: Align holes on the receiver with holes on trailer. Fasten receiver to trailer with four cap screws (M) and washers (EE), and secure with four additional washers (EE) and lock nuts (Z).

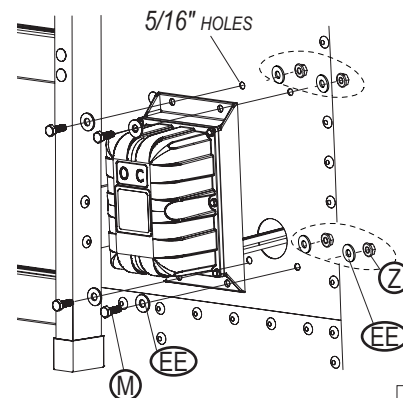


IMAGE 179

Option 2: External Wiring- Bottom Output

STEP 5: For ease of operation from ground, locate receiver on the bottom right corner of the front of the trailer. Align holes on the receiver with holes on trailer. Drill 5/16 inch holes and fasten receiver to trailer with four cap screws (M), washers (EE), and secure with four additional washers (EE) and lock nuts (Z).

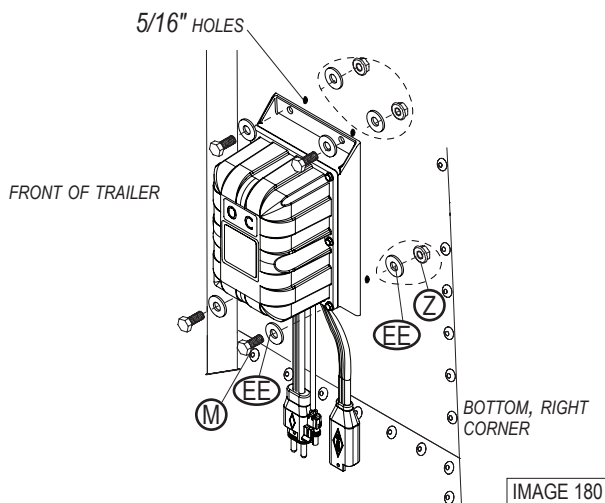


IMAGE 180

Wire Connection - All Applications

Continue to Step 6

⚠ CAUTION

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

STEP 6: Connect the SMARTwire™ from the receiver to the SMARTwire™ from the electric motor. Coat each connection with dielectric grease and secure connection with lock pin. If you have a ShurLink system, connect encoder wire from receiver to encoder wire from motor. Secure wires to trailer with cable clips and screws. If needed, use cable ties.

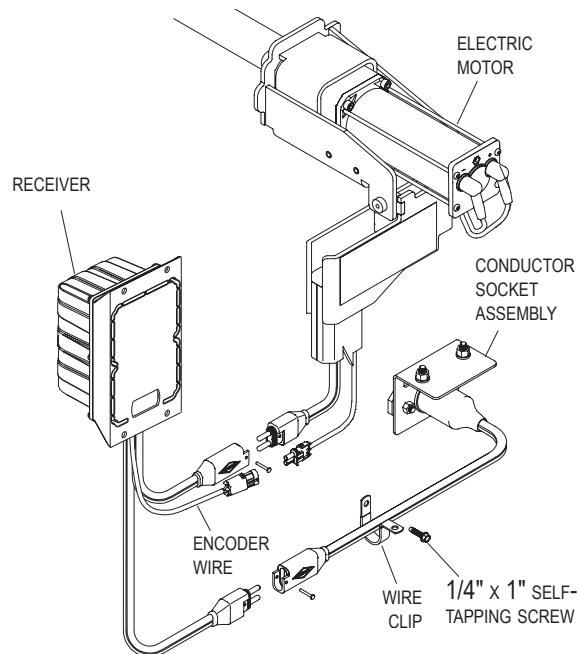


IMAGE 181

NOTICE: Apply a thin layer of dielectric grease to conductor plug terminals before inserting into the conductor socket.

STEP 7: Identify a clean, dry surface area near the receiver. Remove the backing from the warning decal (13) and notice decal (14). Apply them to the identified surface. Regularly inspect all safety decals for wear and adherence, and replace if necessary.

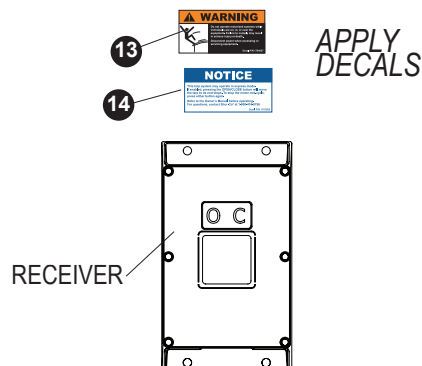


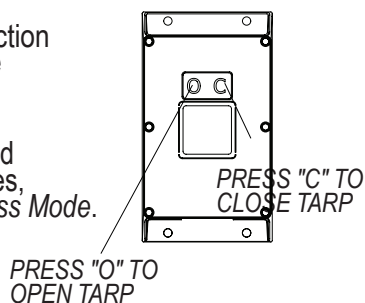
IMAGE 182

EXPRESS MODE

- **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.

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.



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



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

⚠ WARNING

Do not operate motorized systems while individuals are on, in, or near the equipment. Failure to comply may result in serious injury or death. Disconnect power when accessing or servicing equipment.

⚠ WARNING



FLEX ARM
UNDER
SPRING
TENSION

Read manual thoroughly before assembling or disassembling flex arm.

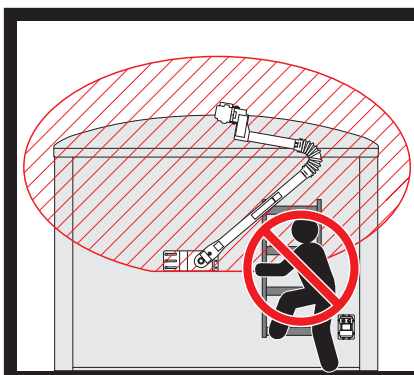
Failure to do so may result in serious injury or death.

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

Decal P/N 1703897

⚠ 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

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.

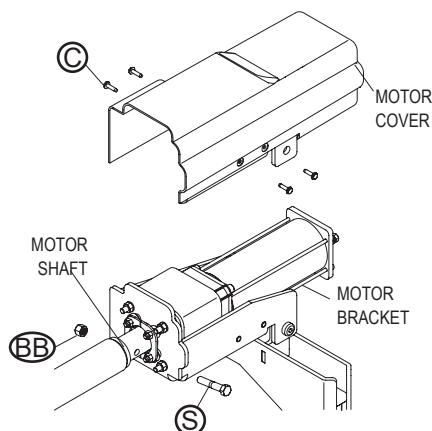
! WARNING

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.

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

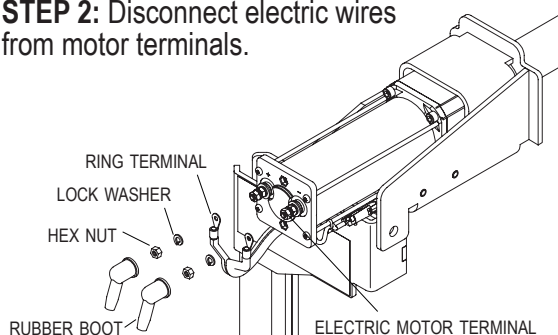
SYSTEMS WITH SHUR-RETURN OR STRETCH CORD RETURN

STEP 1: Disconnect electric power to trailer. Unfasten and remove motor cover. Unfasten screw (S) and lock nut (BB) holding motor shaft to roll tube/front arm assembly.

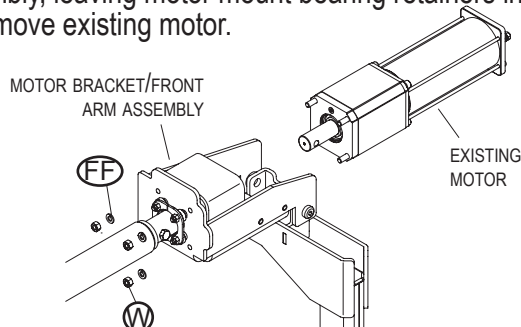


NOTICE: Leave roll tube fastened to motor bracket.

STEP 2: Disconnect electric wires from motor terminals.



STEP 3: Unfasten and remove only washers (FF) and nuts (W) holding motor to motor bracket/front arm assembly, leaving motor mount bearing retainers in place. Remove existing motor.



Continue to next page.

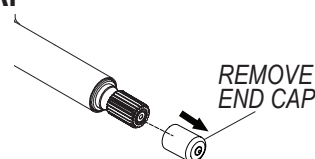
ALL OTHER SYSTEMS

STEP 1: DISCONNECT POWER

Disconnect power from the front of the trailer.

STEP 2: REMOVE END CAP

On the rear end of the trailer, remove the protective cap from the roll tube.



STEP 3: ATTACH HAND CRANK

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

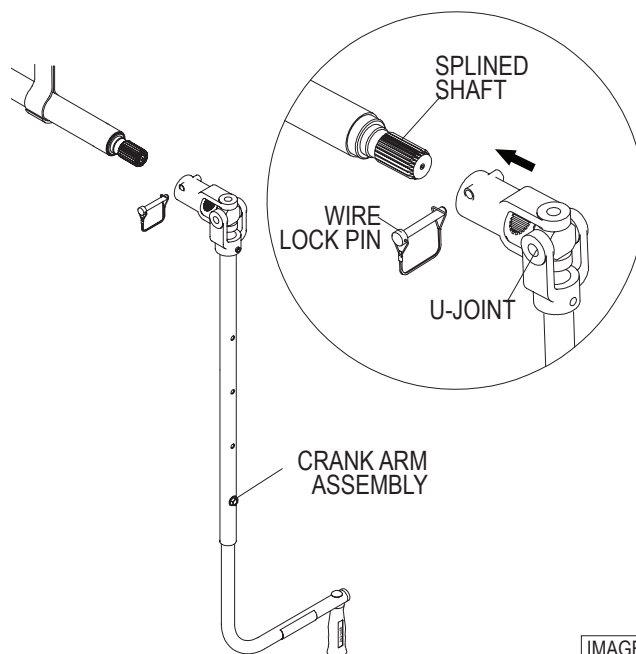
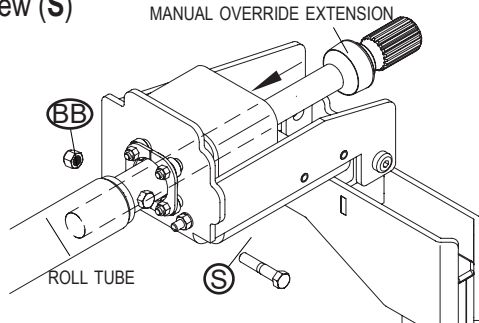


IMAGE 171

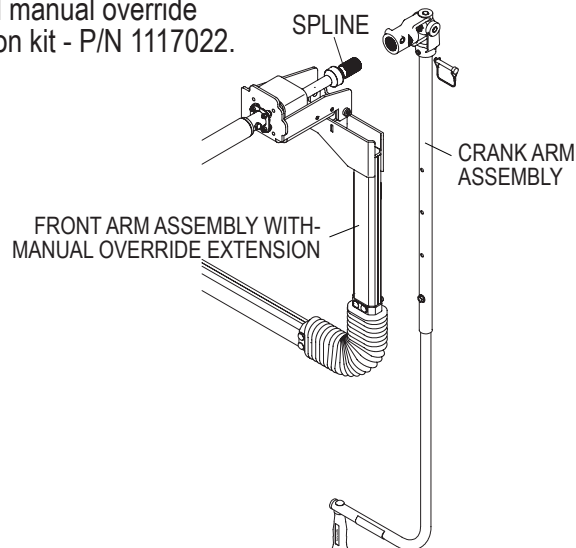
Continue to next page.

SYSTEMS WITH SHUR-RETURN OR STRETCH CORD RETURN

STEP 4: Insert manual override extension through motor bracket and into roll tube at front of trailer as shown. Fasten with screw (S) and nut (BB).



STEP 5: Install crank arm assembly. You may need optional manual override extension kit - P/N 1117022.

**ALL OTHER SYSTEMS****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 (Q) and nut (AA) from the motor shaft and roll tube extension.

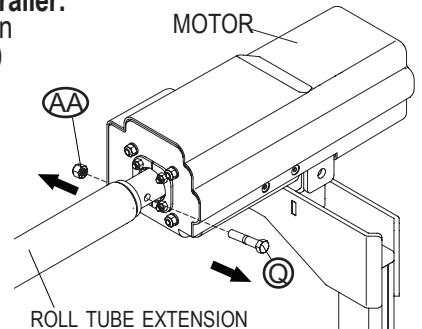


IMAGE 176

⚠ 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 183 and is able to withstand considerably more pressure in this position.

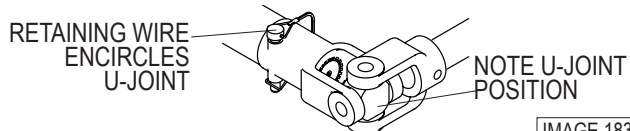
RECOMMENDED

IMAGE 183

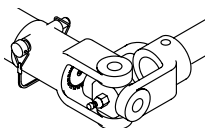
NOT RECOMMENDED

IMAGE 184

⚠ 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.

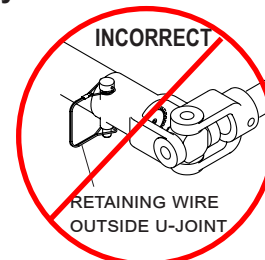


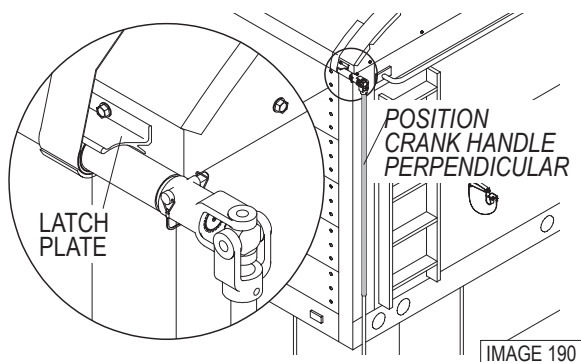
IMAGE 185

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.

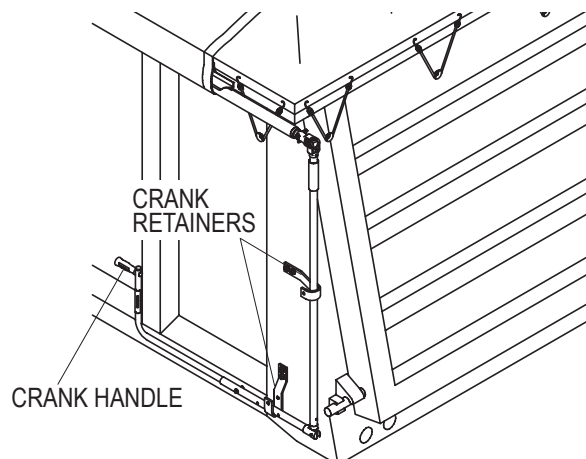
STEP 1:

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 pushing the crank handle up into the crank retainers.



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 inch.

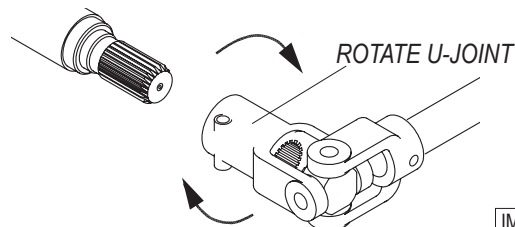


WARNING

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.

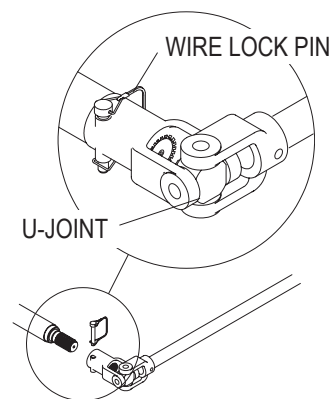


STEP 5:

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:

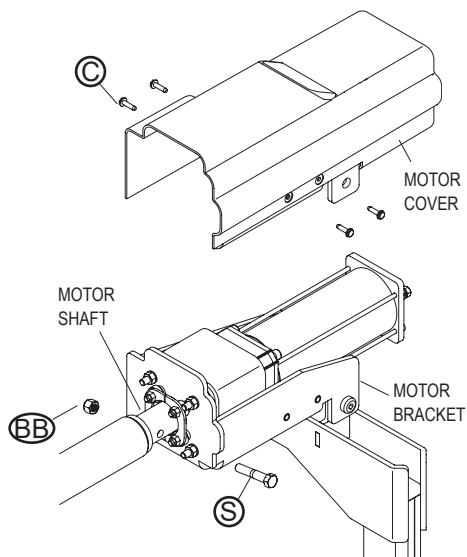
1. Release the crank from the crank retainer.
2. Turn the crank clockwise (counter-clockwise for reverse roll) until the tarp has rolled up against the tarp stops.
3. Place the crank back into the crank retainer.

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.

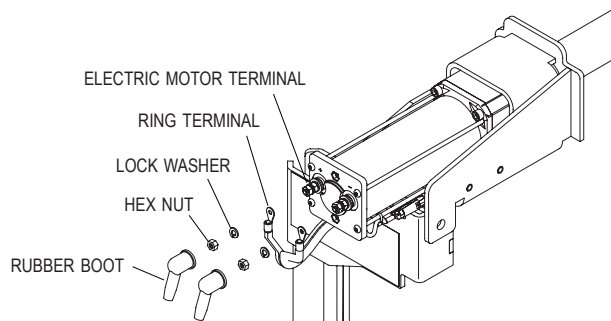
REMOVE EXISTING MOTOR

STEP 1: Disconnect electric power to trailer. Unfasten and remove motor cover. Unfasten screw (O) and nut (X) holding motor shaft to roll tube/front arm assembly.

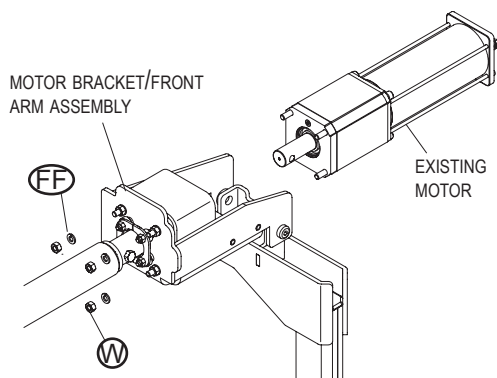


NOTICE: Leave roll tube fastened to motor bracket.

STEP 2: Disconnect electric wires from motor terminals.

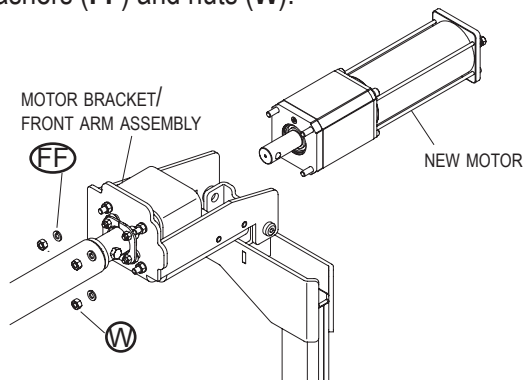


STEP 3: Unfasten and remove only washers (FF) and nuts (W) holding motor to motor bracket/front arm assembly, leaving motor mount bearing retainers in place. Remove existing motor.

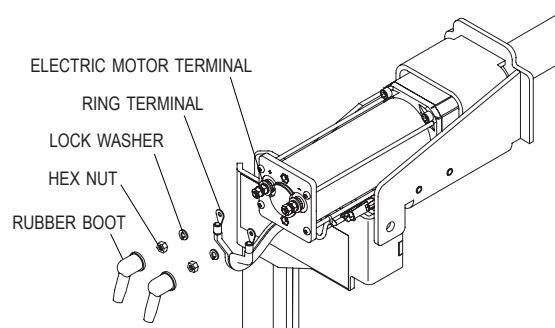


INSTALL NEW MOTOR

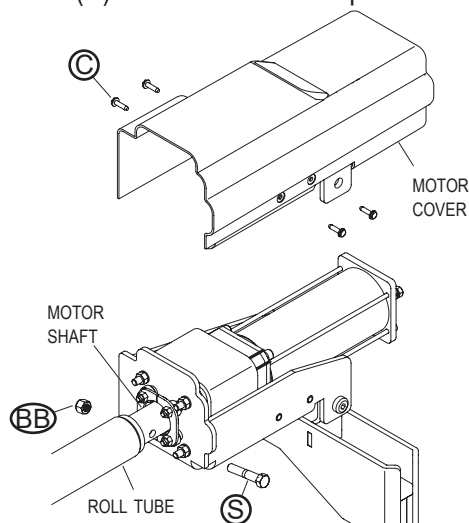
STEP 1: Install new motor. Fasten motor to motor bracket with washers (FF) and nuts (W).



STEP 2: Connect electric wires to motor terminals.



STEP 3: Fasten motor shaft to roll tube with screw (S) and nut (BB). Replace motor cover and fasten to motor with screws (C). Reconnect electric power.

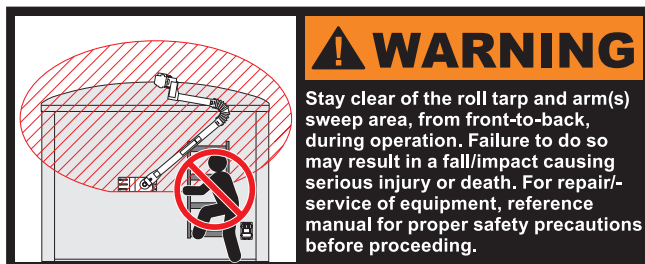
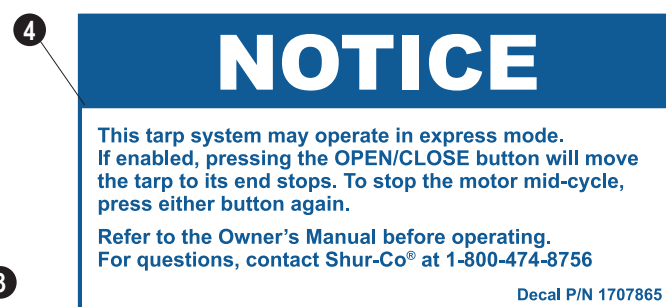
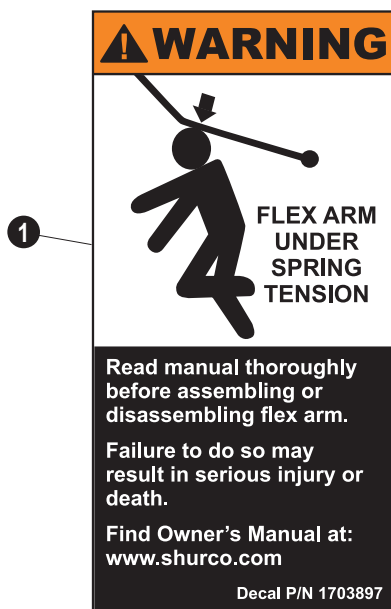


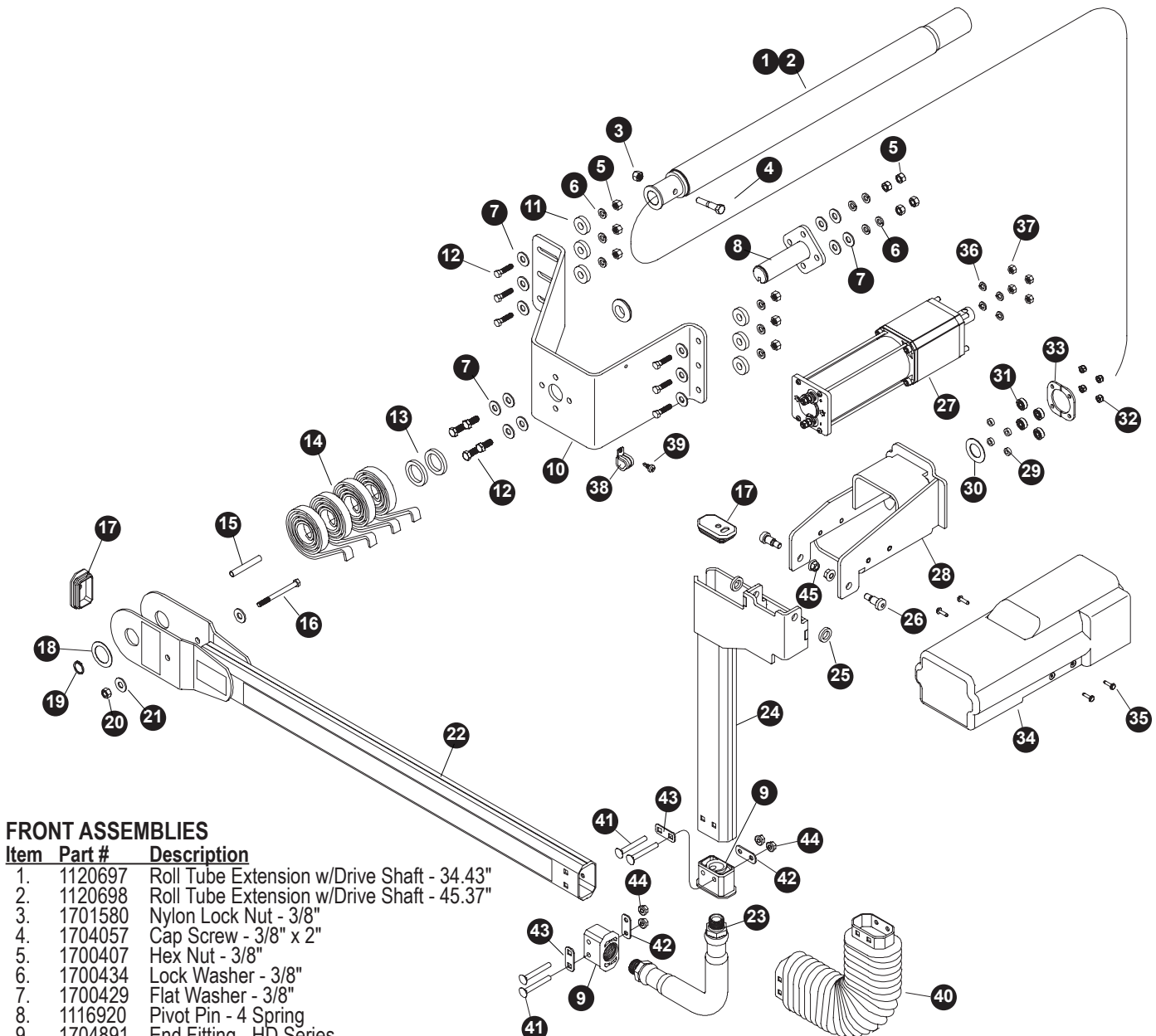
CAUTION

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

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

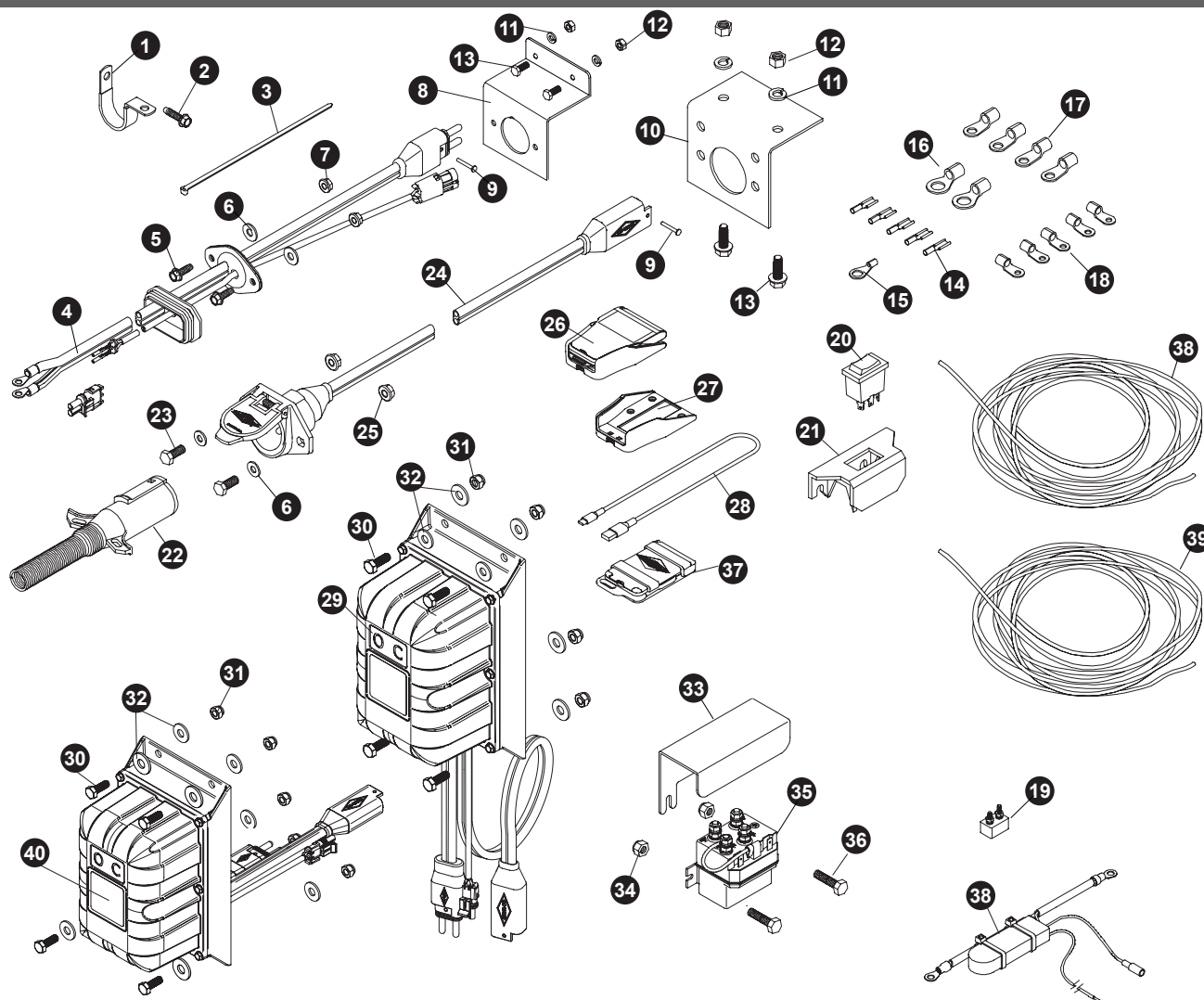




FRONT ASSEMBLIES

Item	Part #	Description
1.	1120697	Roll Tube Extension w/Drive Shaft - 34.43"
2.	1120698	Roll Tube Extension w/Drive Shaft - 45.37"
3.	1701580	Nylon Lock Nut - 3/8"
4.	1704057	Cap Screw - 3/8" x 2"
5.	1700407	Hex Nut - 3/8"
6.	1700434	Lock Washer - 3/8"
7.	1700429	Flat Washer - 3/8"
8.	1116920	Pivot Pin - 4 Spring
9.	1704891	End Fitting - HD Series
10.	1121578	Pivot Mt. Bracket - Vertical - 9-1/4" Standoff
	1121582	Pivot Mt. Bracket - Vertical - 7-1/4" Standoff
11.	1120291	Pivot Bracket Washer
12.	1702891	Cap Screw - 3/8" x 1-1/4"
13.	1118318	Spacer Washer - 1/4" x 1.81" OD x 1.28"
14.	1111027	Spiral Torsion Spring
15.	1117033	Spacer Tube - .35" x 2-5/8"
16.	1201022	Cap Screw - 5/16" x 3-1/2"
17.	1704893	Cap Plug w/Hole
18.	1702890	Flat Washer - 1-1/4"
19.	1702888	External Retaining Ring - 1-1/4"
20.	1700419	Nylon Lock Nut - 5/16"
21.	1700428	Flat Washer - 5/16"
22.	1121617	Lower Flex Arm w/Warning Decals (includes items 15; 16; 20; 21; 22)
23.	1706825	Flex Arm Joint
24.	1121289	Upper Flex Arm - Motor
25.	1120677	Upper Arm Spacer
26.	1704778	Shoulder Bolt - 1/2" x 5/8" - 3/8" x 1/2" Thd.
27.	1120967	4500 Series HD Electric Motor

Item	Part #	Description
28.	1120776	4500 Series HD Motor Mount - 7-1/4"
	1120662	4500 Series HD Motor Mount
29.	1120680	Motor Mount Bearing Spacer
30.	1120679	Motor Spacer
31.	1704736	Radial Ball Bearing - 1/4" x 3/4"
32.	1701543	Nylon Lock Nut - 1/4"
33.	1128243	Motor Mount Bearing Retainer
34.	1704982	4500 Series HD Motor Cover - Black
35.	1704367	Hex Flange Cap Screw - #10 x 3/4"
36.	1700433	Lock Washer - 5/16"
37.	1700411	Hex Nut - 5/16"
38.	1702108	Wire Clip - 3/4" ID
39.	1700398	Self-Drilling Screw - 3/8" x 3/4"
40.	1704775	4500 Series HD Bellow
41.	1701455	Carriage Bolt - 5/16" x 2-1/2"
42.	1121413	Bellow Plate - Round Holes
43.	1121414	Bellow Plate - Square Holes
44.	1704931	Flanged Nylon Lock Nut - 5/16"
45.	1701283	Flanged Top Lock Nut - 3/8"

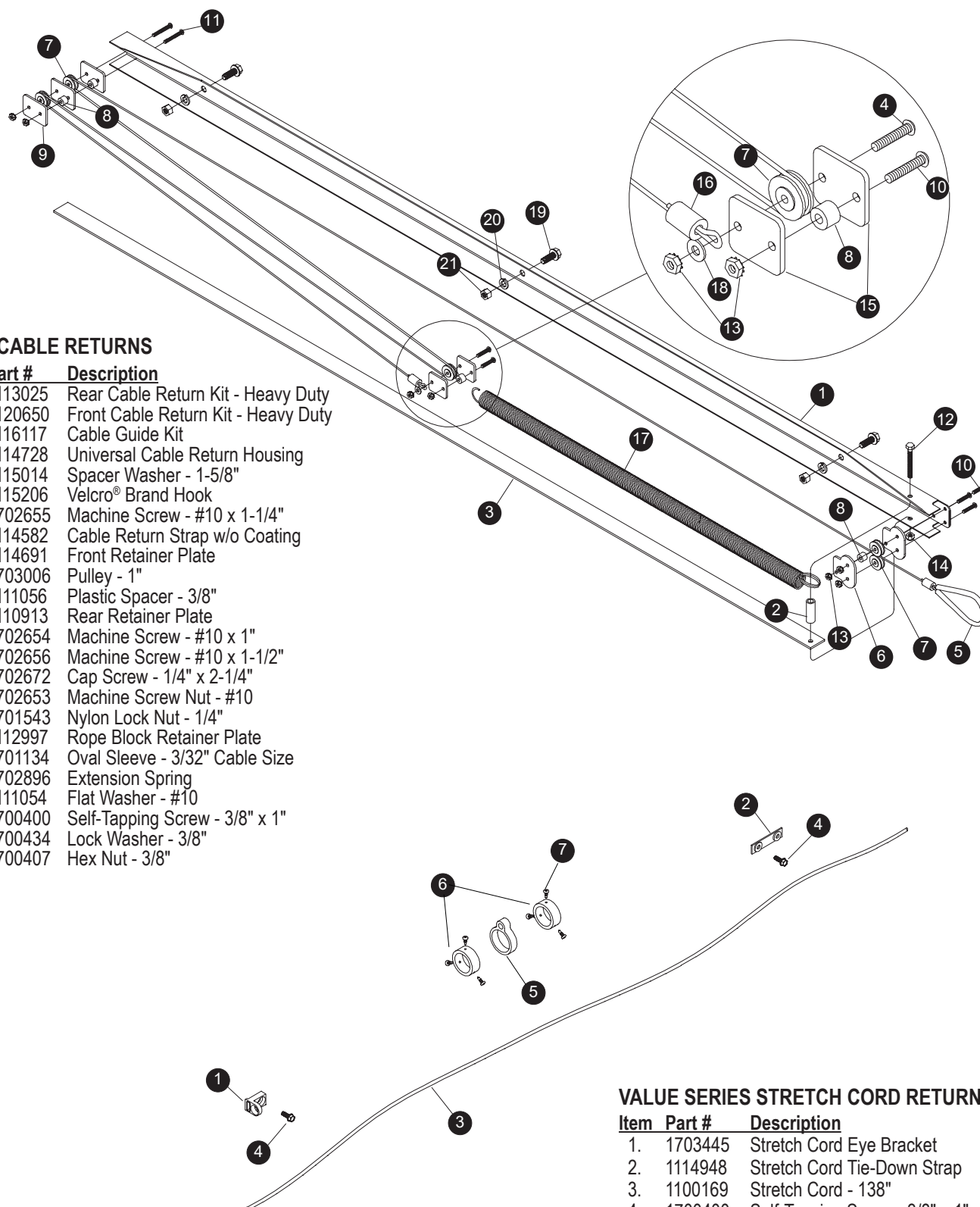
**ELECTRIC COMPONENTS**

Item	Part #	Description
1.	1702108	Wire Clip - 3/4"
2.	1704338	Self-Tapping Screw - 1/4" x 1"
3.	1703231	Cable Tie - 8"
4.	1121415	SMARTwire™ - 6 Ga. - Plug - 10'-9" w/Encoder Wire
5.	1700403	Self-Tapping Screw - 1/4" x 3/4"
6.	1700427	Flat Washer - 1/4"
7.	1706399	Top Lock Flanged Nut - 1/4"
8.	1127798	Conductor Plug Mtg (Z) Bracket
9.	1704751	Harness Lock Pin - 1/4" x 7/8"
10.	1109015	Mounting Bracket
11.	1700434	Lock Washer - 3/8"
12.	1700407	Hex Nut - 3/8"
13.	1700400	Self-Tapping Screw - 3/8" x 1"
14.	1703659	Push-On Terminal - 14 Ga. 1/4" - Switch/Solenoid
15.	1704153	Ring Terminal - 14 Ga. x 1/4" Stud - Solenoid
16.	1703244	Ring Terminal - 6 Ga. x 3/8" Stud - Battery
17.	1703245	Ring Terminal - 6 Ga. x #10 Stud - Motor/Breaker
18.	1702707	Ring Terminal - 6 Ga. 1/4" Stud - Motor/Solenoid
19.	1704354	40-Amp Modified-Reset Circuit Breaker

Item	Part #	Description
20.	1116020	Rocker Switch
21.	1703661	Rocker Switch Mounting Bracket
22.	1115385	Heavy-Duty Dual-Conductor Plug
23.	1701045	Cap Screw - 5/16" x 3/4"
24.	1120670	SMARTwire™ Dual-Conductor Socket
25.	1704946	Flanged Top Lock Nut - 5/16"
26.	1131575	ShurLink Pro™ Remote w/Cradle & Charging Cable
27.	1706751	ShurLink PRO™ Replacement Cradle
28.	1706836	USB Charging Cable - Type A to C
29.	1131572	ShurLink™ Receiver Bottom Output
30.	1702926	Cap Screw - 5/16" x 7/8"
31.	1700419	Lock Nut - 5/16"
32.	1700428	Flat Washer - 5/16"
33.	1703896	Solenoid Cover
34.	1808844	Nylon Lock Nut - #10
35.	1703845	Motor-Reversing Solenoid
36.	1704905	Flanged Cap Screw - #10 x 1"
37.	1131576	5-Channel ShurLink™ EZR Remote
38.	1703822	Dual Conductor Wire - 6 Ga. - 259 Strand
38.	1116482	Electrical Wire - 14 Ga. 3 Lead - 15'
39.	1705624	50-Amp SMART Circuit Breaker
40.	1131566	ShurLink™ Rec - Express - Rear Output

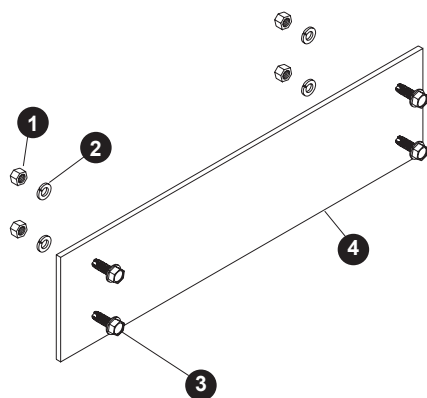
REAR CABLE RETURNS

Item	Part #	Description
	1113025	Rear Cable Return Kit - Heavy Duty
	1120650	Front Cable Return Kit - Heavy Duty
	1116117	Cable Guide Kit
1.	1114728	Universal Cable Return Housing
2.	1115014	Spacer Washer - 1-5/8"
3.	1115206	Velcro® Brand Hook
4.	1702655	Machine Screw - #10 x 1-1/4"
5.	1114582	Cable Return Strap w/o Coating
6.	1114691	Front Retainer Plate
7.	1703006	Pulley - 1"
8.	1111056	Plastic Spacer - 3/8"
9.	1110913	Rear Retainer Plate
10.	1702654	Machine Screw - #10 x 1"
11.	1702656	Machine Screw - #10 x 1-1/2"
12.	1702672	Cap Screw - 1/4" x 2-1/4"
13.	1702653	Machine Screw Nut - #10
14.	1701543	Nylon Lock Nut - 1/4"
15.	1112997	Rope Block Retainer Plate
16.	1701134	Oval Sleeve - 3/32" Cable Size
17.	1702896	Extension Spring
18.	1111054	Flat Washer - #10
19.	1700400	Self-Tapping Screw - 3/8" x 1"
20.	1700434	Lock Washer - 3/8"
21.	1700407	Hex Nut - 3/8"

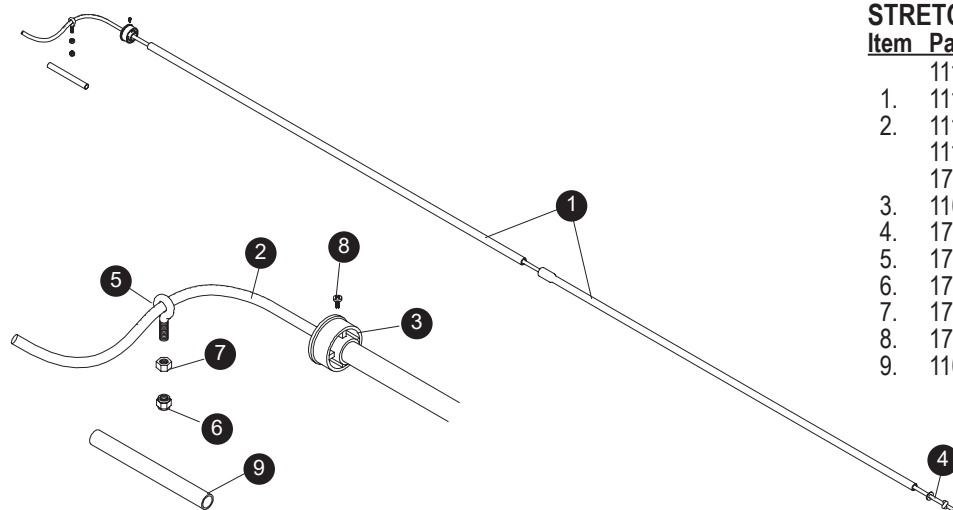


VALUE SERIES STRETCH CORD RETURNS

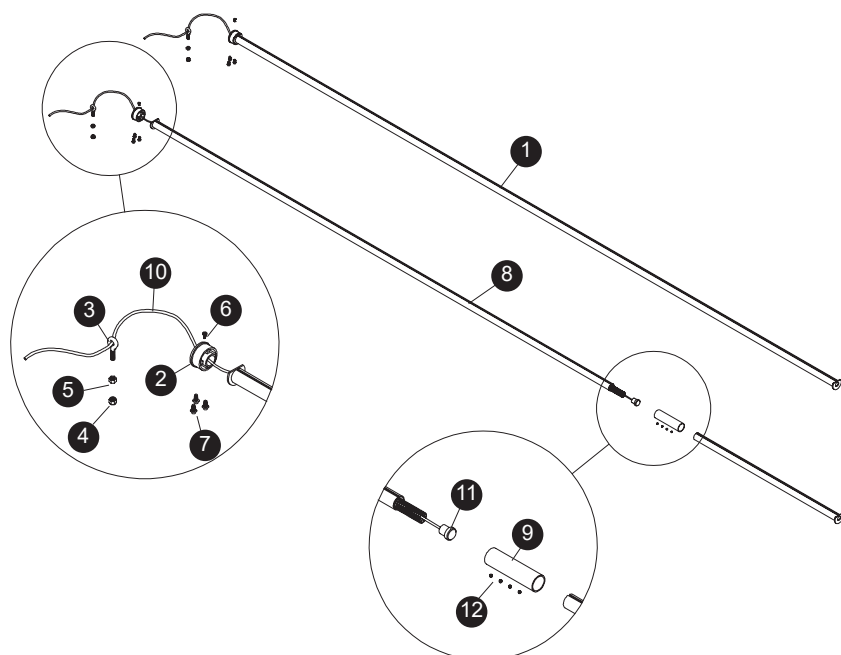
Item	Part #	Description
1.	1703445	Stretch Cord Eye Bracket
2.	1114948	Stretch Cord Tie-Down Strap
3.	1100169	Stretch Cord - 138"
4.	1700400	Self-Tapping Screw - 3/8" x 1"
5.	1114947	Roll Tube Eye
6.	1704352	Retaining Collar
7.	1704353	Self-Drilling Screw - 1/4" x 1"

**PIVOT BACKER PLATE**

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

**STRETCH CORD RETURNS**

Item	Part #	Description
	1114359	Front Stretch Cord Roll Return Kit
1.	1111067	Roll Return Tube Set - 2 Pc.
2.	1114360	Roll Return Stretch Cord - 11-1/2'
	1114362	Roll Return Stretch Cord - 16-1/2'
	1703335	Roll Return Stretch Cord - 300'
3.	1100138	Nylon End Plug
4.	1703373	Flat Washer - 1/2"
5.	1700717	Eyebolt Anchor - 5/16"
6.	1700419	Nylon Lock Nut - 5/16"
7.	1700411	Nut - 5/16"
8.	1704743	Self-Drilling Screw - #10 x 1/2"
9.	1107680	Protective Stretch Cord Cover

**SHUR-RETURNS**

Item	Part #	Description
	1100824	Shur-Return™ Kit
	1107881	UPS-able Shur-Return™ Kit
1.	1100832	Tube Assembly
2.	1100138	Nylon End Plug
3.	1700717	Eyebolt Anchor - 5/16"
4.	1700419	Nylon Lock Nut - 5/16"
5.	1700411	Hex Nut - 5/16"
6.	1704743	Self-Drilling Screw - #10 x 1/2"
7.	1700736	Self-Tapping Screw - 1/4" x 1/2"
8.	1107880	UPS-able Shur-Return™ Assembly
9.	1107879	Connector Sleeve
10.	1100826	Shur-Return™ Rope
11.	1100827	Shur-Return™ Spring Retainer Plug
12.	1701423	Set Screw - #10 x 3/16"

2309 SHURLOCK STREET | YANKTON, SD 57078-0713
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www.SHURCO.com
