

SHUR-CO®



SMARTdrive™ Electric Upgrade for Cable-Lok™ Systems

OWNER'S MANUAL



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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:

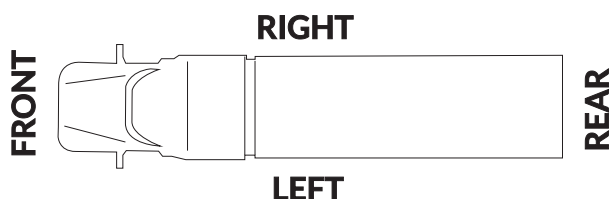
1-866-748-7435

MONDAY-FRIDAY
8 AM-5 PM CENTRAL TIME

MAINTENANCE

- Tension cables with ratchet straps.
- Tighten loose bolts.
- Replace/repair worn or damaged tarps.
- Replace worn or broken springs.
- Check electrical connections.

VEHICLE ORIENTATION



REQUIRED TOOLS

- Tape Measure
- Clamps
- Grinder or Metal File
- Air or Electric Impact
- 7/16" Combination Wrench with 7/16" Socket
- 1/2" Combination Wrench with 1/2" Socket
- 9/16" Combination Wrench with 9/16" Socket
- 3/4" Combination Wrench with 3/4" Socket
- 7/32" Socket
- 3/8" Socket
- 9/16" Socket
- 7/32" Drill Bit (for 1/4" Self-Tapping Screws)
- 1/4" Drill Bit (for 5/16" Self-Tapping Screws)
- 5/16" Drill Bit (for 3/8" Self-Tapping Screws)
- 3/8" Drill Bit (for Regular 3/8" Hex Bolts)
- 1/2" Drill Bit (for Regular 1/2" Hex Bolts)
- #3 Phillips Screw Driver Bit
- Electric Drill
- Wire Cutters & Crimping Tool
- Hack Saw (metal cutter)

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

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Pre-Installation Checklist

- **Clearance Specification**

The Cable-Lok™ system requires a minimum of 8 inches between the cab and the box/body to ensure the system operates as intended.

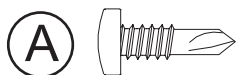
- **Tarp Inspection**

Measure the tarp's length and width with slight tension applied. Compare these measurements with the dimensions listed on the sheet attached to the tarp.

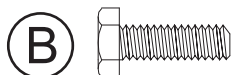
If the tarp's length and width do not match the stated dimensions, do not proceed with the installation. Call your local dealer, or call Shur-Co® Customer Service at 1-866-748-7435.

- **Surface Preparation**

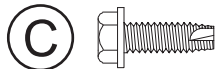
Before installing this tarping system, remove or grind any sharp edges smooth to prevent tarp damage. To prevent rust, paint all exposed metal, such as weld seams and/or metal exposed by grinding or cutting, with corrosion-resistant paint.



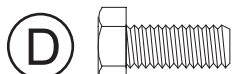
1700398 Self-Drilling Screw - 1/4" x 3/4"



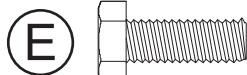
1703959 Hex Head Cap Screw - 1/4" x 3/4"
1706510 Stainless Hex Head Cap Screw - 1/4" x 3/4"



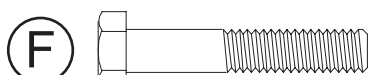
1704338 Self-Tapping Screw - 1/4" x 1"
1706120 Stainless Self-Tapping Screw - 1/4" x 1"



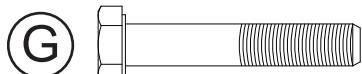
1701045 Hex Head Cap Screw - 5/16" x 3/4"
1201269 Stainless Hex Head Cap Screw - 5/16" x 3/4"
1706095 Hex Head Cap Screw - 5/16" x 3/4" Black Zinc



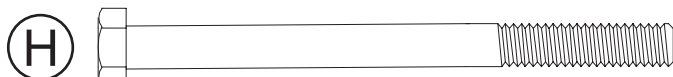
1702926 Hex Head Cap Screw - 5/16" x 1"
1704430 Stainless Hex Head Cap Screw - 5/16" x 1"



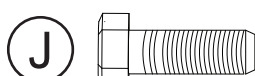
1703237 Hex Head Cap Screw - 5/16" x 2-1/2"



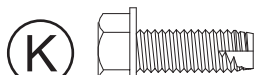
1701468 Hex Head Cap Screw - 5/16" x 1-3/4" Grade 5
1704334 Stainless Hex Hd. Cap Screw - 5/16" x 1-3/4"



1707323 Hex Head Cap Screw - 5/16" x 3-3/4"
1706410 Stainless Hex Head Cap Screw - 5/16" x 3-3/4"



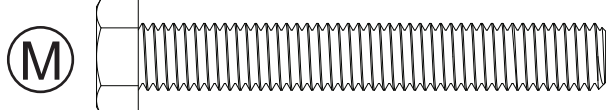
1703579 Stainless Hex Head Cap Screw - 3/8" x 1"



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



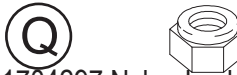
1706093 Hex Head Cap Screw - 3/8" x 6"



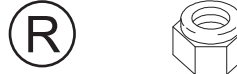
1706597 Hex Head Cap Screw - 1/2" x 3-1/2"
1706005 Stainless Hex Head Cap Screw - 1/2" x 3-1/2"



1701543 Nylon Lock Nut - 1/4"
1706121 Stainless Nylon Lock Nut - 1/4"



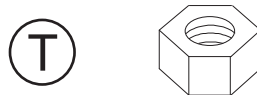
1704297 Nylon Lock Hex Nut - 5/16" Grade 8
1704431 Stainless Nylon Lock Nut - 5/16"



1700419 Nylon Lock Hex Nut - 5/16"
1705919 Nylon Lock Hex Nut - 5/16" Black Zinc
1704431 Stainless Nylon Lock Nut - 5/16"



1704946 Flanged Top Lock Nut - 5/16"



1700407 Hex Nut - 3/8"



1705648 Stainless Nylon Lock Hex Nut - 3/8"



1700409 Hex Nut - 1/2"
1706006 Stainless Hex Nut - 1/2"



1702115 Nylon Lock Hex Nut - 1/2"
1706088 Stainless Nylon Lock Nut - 1/2"



1700427 Flat Washer - 1/4"
1201240 Stainless Flat Washer - 1/4"



1700428 Flat Washer - 5/16"
1201237 Stainless Flat Washer - 5/16"



1700434 Lock Washer - 3/8"



1703577 Stainless Washer - 3/8"



1702114 Flat Washer - 1/2"
1703620 Stainless Flat Washer - 1/2"



1706097 Fender Washer - 1/2"
1706096 Stainless Fender Washer - 1/2"

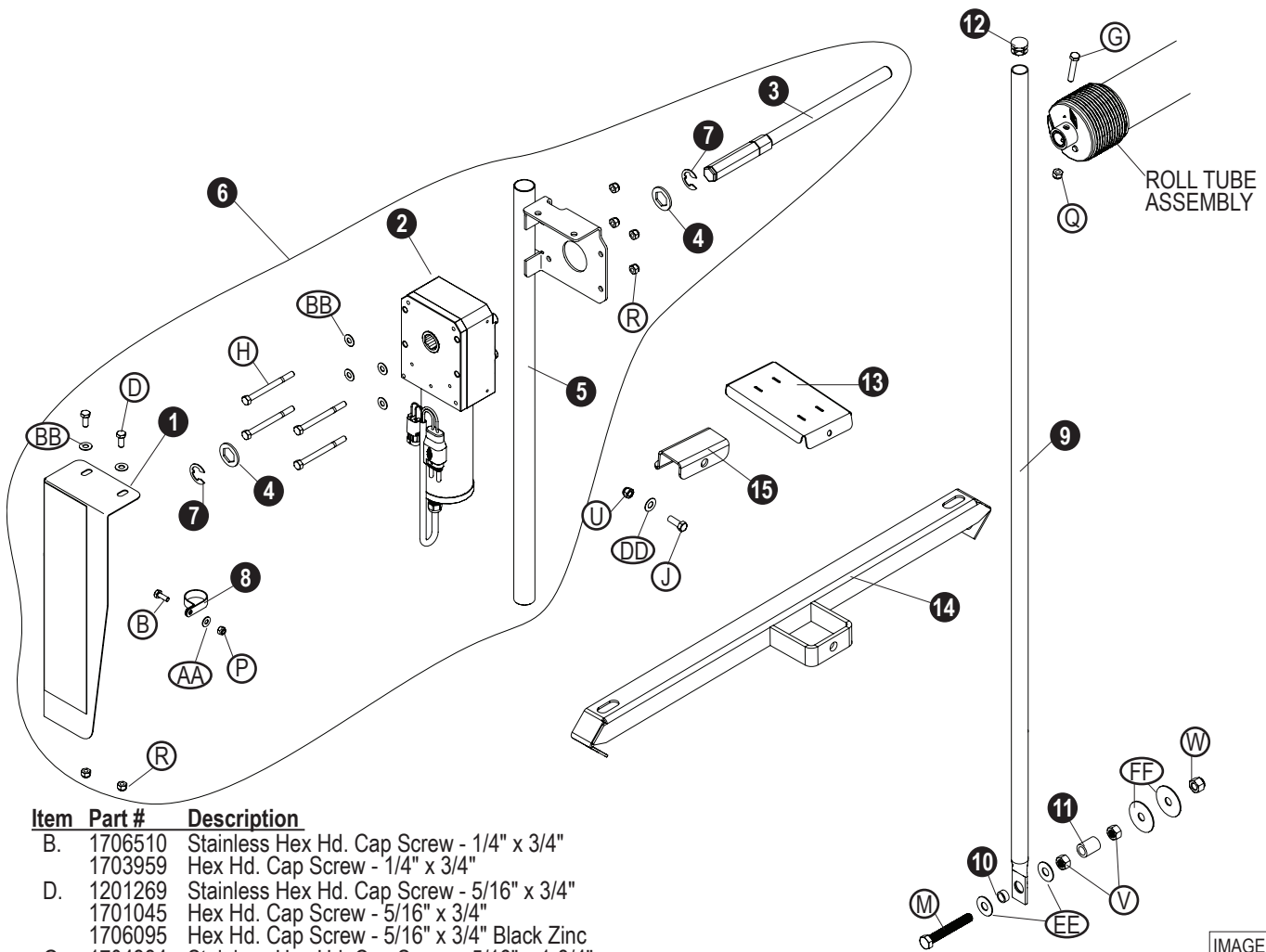


IMAGE 100

Item Part # Description

B.	1706510	Stainless Hex Hd. Cap Screw - 1/4" x 3/4"
	1703959	Hex Hd. Cap Screw - 1/4" x 3/4"
D.	1201269	Stainless Hex Hd. Cap Screw - 5/16" x 3/4"
	1701045	Hex Hd. Cap Screw - 5/16" x 3/4"
	1706095	Hex Hd. Cap Screw - 5/16" x 3/4" Black Zinc
G.	1704334	Stainless Hex Hd. Cap Screw - 5/16" x 1-3/4"
	1701468	Hex Hd. Cap Screw - 5/16" x 1-3/4"
H.	1706410	Stainless Hex Cap Screw - 5/16" x 3-3/4"
	1707323	Hex Cap Screw - 5/16" x 3-3/4"
J.	1703579	Stainless Hex Head Cap Screw - 3/8" x 1"
M.	1706005	Stainless Hex Hd. Cap Screw - 1/2" x 3-1/2"
	1706597	Hex Hd. Cap Screw - 1/2" x 3-1/2"
P.	1706121	Stainless Nylon Lock Nut - 1/4"
	1701543	Nylon Lock Hex Nut - 1/4"
Q.	1704431	Stainless Nylon Lock Nut - 5/16"
	1704297	Nylon Lock Hex Nut - 5/16" Grade 8
R.	1704431	Stainless Nylon Lock Nut - 5/16"
	1700419	Nylon Lock Nut - 5/16"
	1705919	Nylon Lock Nut - 5/16" Black Zinc
U.	1705648	Stainless Nylon Lock Hex Nut - 3/8"
V.	1706006	Stainless Hex Nut - 1/2"
	1700409	Hex Nut - 1/2"
W.	1706088	Stainless Nylon Lock Nut - 1/2"
	1702115	Nylon Lock Hex Nut - 1/2"
AA.	1201240	Stainless Flat Washer - 1/4"
	1700427	Flat Washer - 1/4"
BB.	1201237	Stainless Flat Washer - 5/16"
	1700428	Flat Washer - 5/16"
DD.	1703577	Stainless Flat Washer - 3/8"
EE.	1703620	Stainless Flat Washer - 1/2"
	1702114	Flat Washer - 1/2"
FF.	1706096	Stainless Fender Washer - 1/2"
	1706097	Fender Washer - 1/2"

Item Part # Description

1.	1129905	Motor Cover Kit w/Decal - SMARTdrive™ - SS
2.	1127849	SMARTdrive™ Motor
3.	1130852	SMARTdrive™ Drive Shaft
4.	1128785	Drive Shaft Spacer
5.	1128777	Stainless Upper Pivot Arm - SMARTdrive™
	1128776	Upper Pivot Arm - SMARTdrive™
6.	1129628	Stainless Upper Pivot Arm - w/ SMARTdrive™ Motor (New Leader, Agco)
7.	1706411	External Retaining Ring - 7/8" Dia. x .042"
8.	1706509	Stainless Wire Clip - 1-1/4" ID
9.		Lower Pivot Arm
10.	1100306	Retainer Bushing - 11/16"
11.	1127959	Stainless Spacer Tube - .84" OD x .55" ID x 1-1/4"
12.	1701595	End Plug - 1"
13.	1130181	Adapter Pivot Bracket (Agco)
14.	1118246	Stainless Standoff Bracket (New Leader)
15.	1126496	Stainless Adapter Pivot Bracket (New Leader)

BEFORE YOU BEGIN:

Close the tarp. Release tension in the cables, then disconnect the power.

For systems that require a standoff bracket, proceed to page 8.

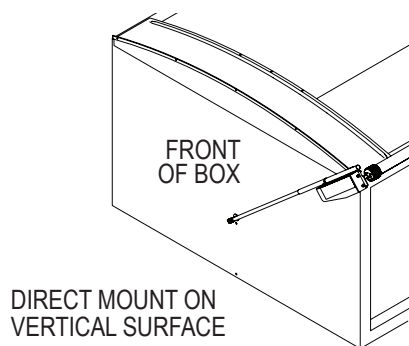
Pivot Arm/Motor Installation - Direct Mount

IMAGE 101

NOTICE: The distance between the back of the cab and the front of the face cap must be at least 8 inches.

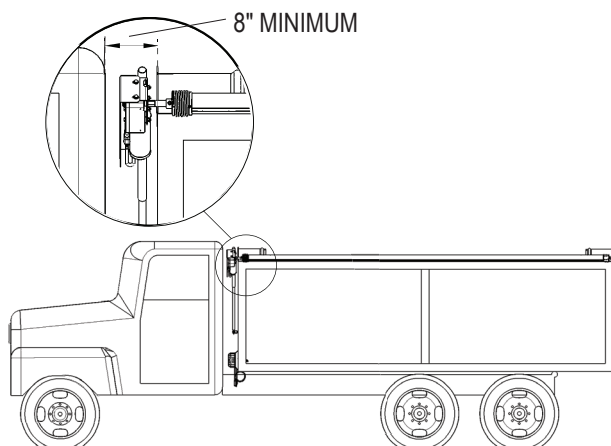


IMAGE 102

STEP 1:

- Determine pivot point location on front of box by measuring 36" down from the lower edge of the end cap at the center of the box.
- Mark the location and drill a 1/2" hole.

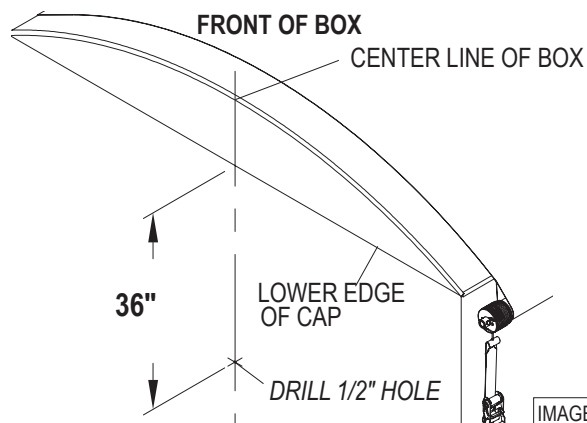


IMAGE 103

STEP 2:

- Insert cap screw (M) through washer (EE), bushing (10) and hole in lower pivot arm.
- Slide second washer (EE) over screw (M) and tighten screw against lower pivot arm with hex nut (V).

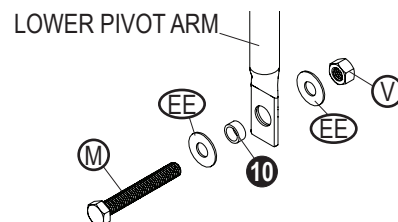


IMAGE 104

STEP 3:

- Slide spacer tube (11) over cap screw (M). Turn second hex nut (V) onto cap screw (M) and tighten nut against spacer tube (11).
- Slide fender washer (FF) over cap screw (M), then slide cap screw through hole in front of box. Slide second fender washer (FF) over cap screw (M) on inside of box and secure with lock nut (W). Do not overtighten; the lower pivot arm must remain free to pivot on the bolt.

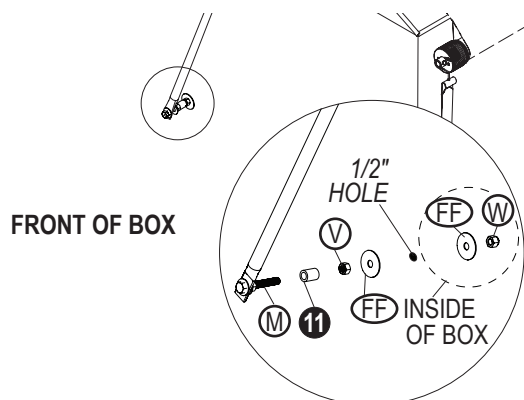


IMAGE 105

Continue to page 9

NOTICE: STANDOFF BRACKETS

- If standoff brackets are required, they may need to be fabricated by the customer, as bracket size can vary depending on the trailer. Call Shur-Co for more information.
- Swing arm must operate without interference. Locate standoff to allow clearance for swing arm operation.

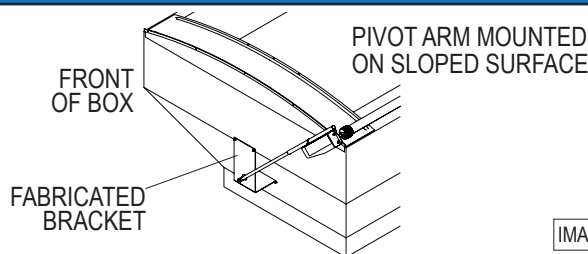


IMAGE 106

STEP 1: PIVOT BRACKET INSTALLATION (3 Options)

New Leader Tender - Pivot Bracket

- **Option 1: Tender- Model Year 2020 & Newer**
1126496 Stainless Pivot Bracket (15)

Install bracket (15) to the existing bracket on the front of the spreader with screw (J), flat washer (DD), and locknut (U), as shown in image 107.

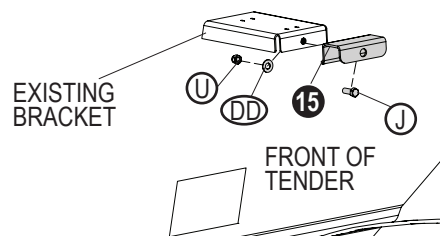


IMAGE 107

New Leader Spreader - Pivot Bracket

- **Option 2: Tender- Model Year older than 2020**
1118246 Stainless Pivot Bracket (14)

- Remove one set of screws and locknuts from each side of the spreader, as indicated in image 108, and retain.
- Fasten bracket (14) with the screws and locknuts removed from the spreader.

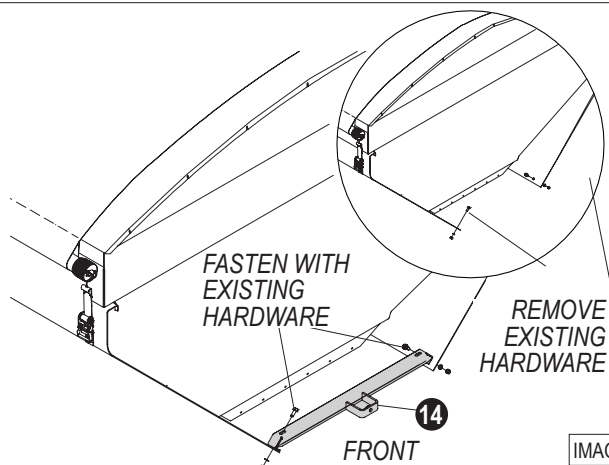


IMAGE 108

AGCO Tender - Pivot Bracket

- **Option 3: 1130181 Adapter Pivot Bracket (13)**

- Install bracket (13) with two screws (J).
- Secure the assembly from the inside of the existing 3/8" holes with washers (DD) and lock nuts (U).

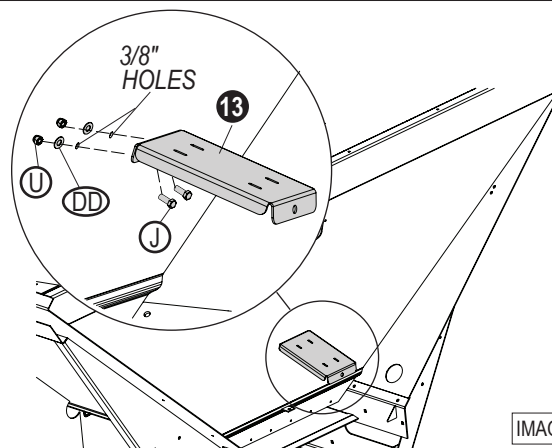


IMAGE 109

STEP 2: ATTACH LOWER PIVOT ARM

- Attach the lower pivot arm (9) to the bracket installed in Step 1B. Insert cap screw (M) through washer (EE), the lower arm (9), bushing (10), flat washer (EE), nut (V), spacer tube (11), nut (V) and into the bracket.
- Secure the assembly from the inside of the bracket with lock nut (W). Do not overtighten; the lower pivot arm must remain free to pivot on the bolt.

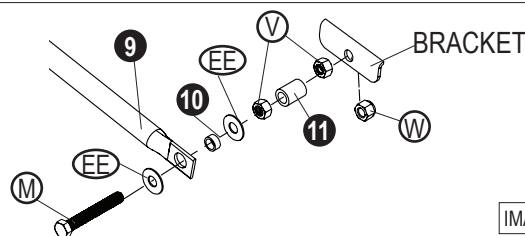


IMAGE 110

STEP 3: PREPARE MOTOR & ARM (2 Options)*Option 1: Kits that require motor assembly.***Motor Assembly**

- a) Fasten motor (2) to upper pivot arm (5) with screws (H), washers (BB) and nuts (R).

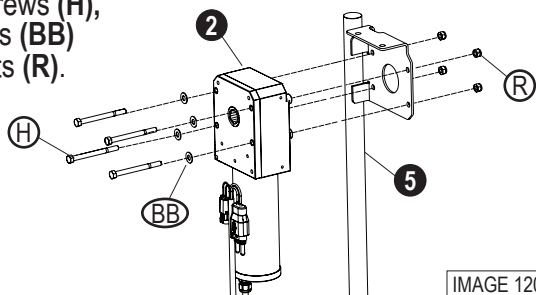


IMAGE 120

- b) Remove cap screw (G) and high-grade lock hex nut (Q) from the front of the roll tube assembly. Keep the spacer installed on the cartridge. Retain the hardware for later use.
- c) Install retaining ring (7) into the groove in the driveshaft and slide the drive shaft spacer (4) up against it.
- d) Insert the drive shaft (3) into the roll tube as shown.

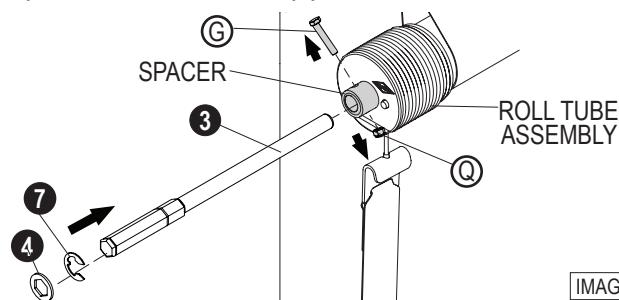


IMAGE 121

- e) Slide upper pivot arm and motor assembly (5) over lower pivot arm (9).

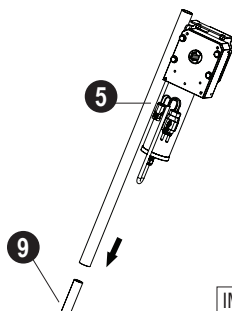


IMAGE 122

- f) On the back of the motor, insert the roll tube and drive shaft (3) into the motor as shown.

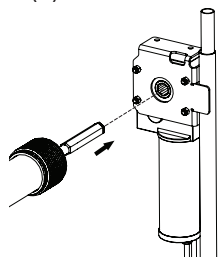


IMAGE 123

*Continue to following page.**Option 2: Kits that include a preassembled motor on the upper arm (P/N 1129628).***Preassembled Motor and Arm Installation**

- a) Remove cap screw (G) and high-grade lock hex nut (Q) from the front of the roll tube. Keep the spacer installed on the cartridge. Retain the hardware for later use.

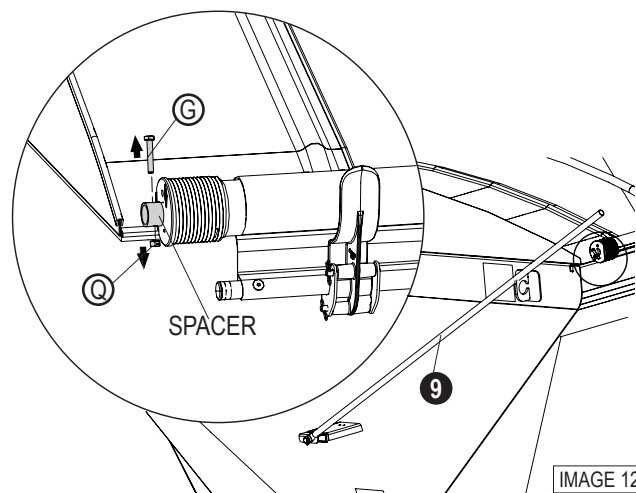


IMAGE 124

- b) Slide the upper arm (6) over the lower pivot arm (9).

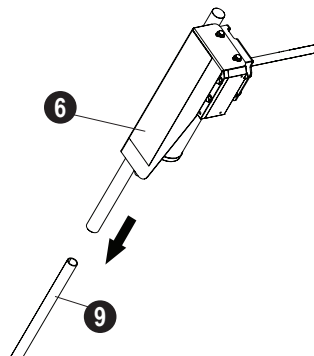


IMAGE 125

- c) Slide the motor drive shaft (3), attached to upper arm (6), into the cartridge and spacer at the end of the roll tube.

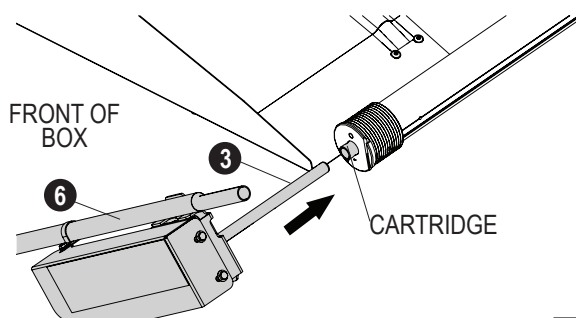


IMAGE 126

Continue to following page.

STEP 4: ALIGN ARM/MOTOR

- Adjust the distance between the motor/arm assembly (2) and the box so that the arm aligns perpendicular to the top of the box.
- Ensure that the arm moves freely across the front of the box.
- Using the **hole in the roll tube** as a guide, mark the hole location on the motor extension.

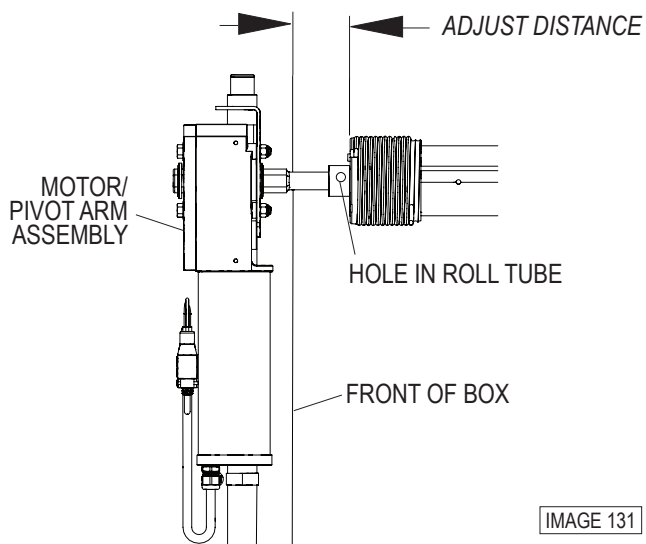


IMAGE 131

NOTICE: The distance between the back of the cab and the front of the face cap must be at least 8 inches.

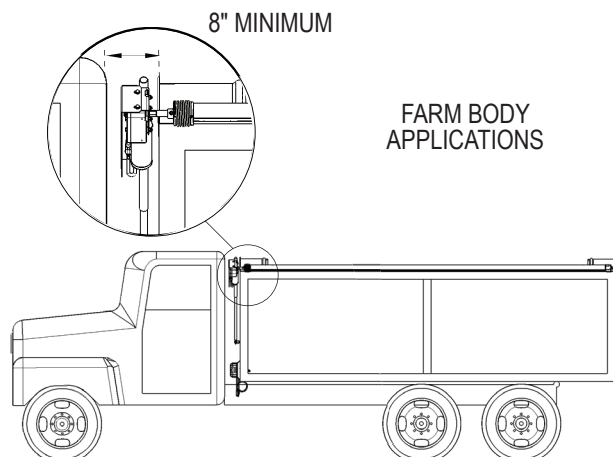


IMAGE 133

STEP 5: DRILL HOLE (2 Options)

- Option 1:** Drill by Hand
- Option 2:** Use a Drill Press (preferred method)

Option 1: Drill by Hand

- Drill a 5/16-inch hole through the drive shaft at the marked location.
- Reinstall the motor shaft into the cartridge with the cap screw (G) and high-grade lock hex nut (Q) removed in Step 3.

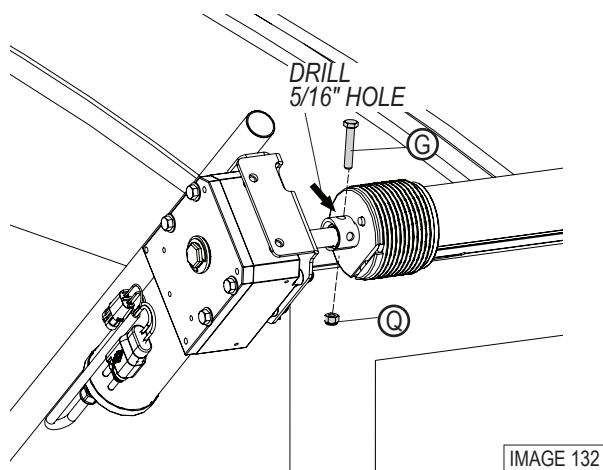
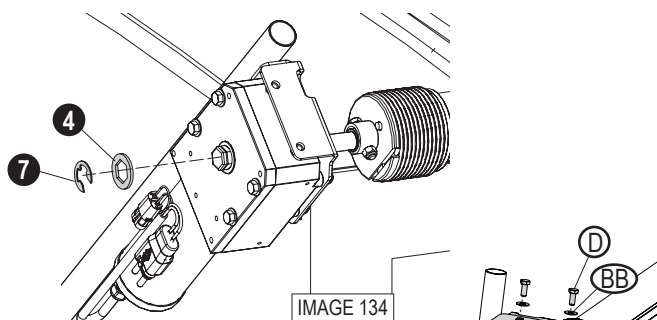
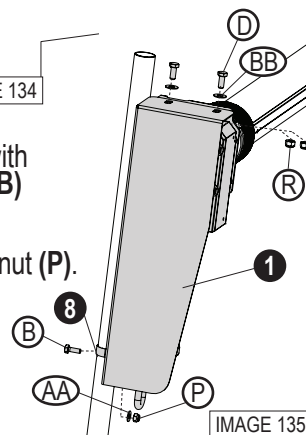


IMAGE 132

- On the front of the motor, slide the drive shaft spacer (4) onto the motor. Secure in place with retaining ring (7).



- Attach the motor cover (1) with cap screws (D), washers (BB) secure with nuts (R). Fasten the wire clip (8) with screw (B), washer (AA) and nut (P).



Continue to Wiring page 11.

Option 2: Use a Drill Press (Steps 5A-5E)**STEP 5A: If required, remove motor cover**

- Remove cap screw (B), washer (AA), nut (P) and wire clip (8). Then remove screws (D), washers (BB) and nuts (R) to remove the motor cover (1) from the motor (2).
- Remove the retaining ring (7) from the drive shaft (3).
- Retain all components for later reassembly.

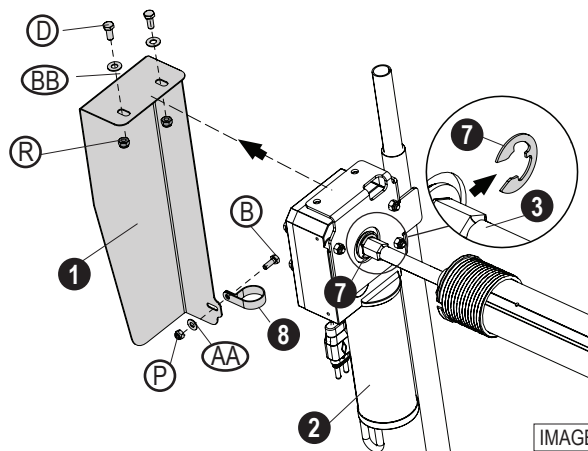


IMAGE 137

STEP 5B: Remove drive shaft (3) from motor. Drill a 5/16-inch hole through motor extension at marked location.

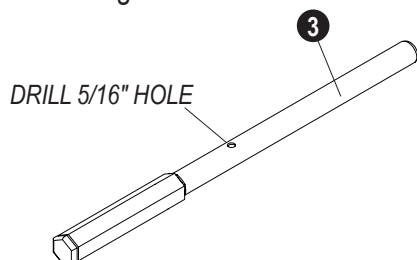


IMAGE 138

STEP 5C:

- Reinstall drive shaft (3) into the roll tube. Align the holes and secure the drive shaft to the roll tube with cap screw (G) and high-grade lock hex nut (Q).
- Install the retaining ring (7) into the groove in the drive shaft (3) and slide the drive shaft spacer (4) up against it.

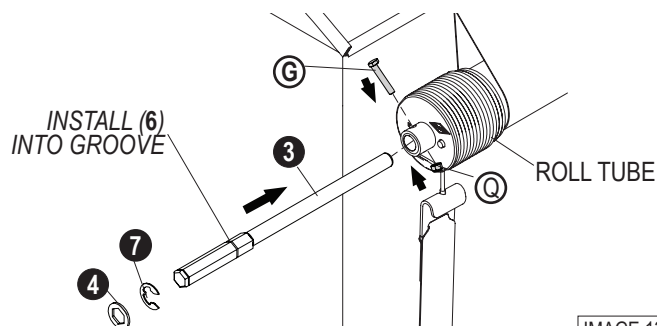


IMAGE 139

STEP 5D: Insert the drive shaft/roll tube into the back of the motor. On the front of the motor, slide the drive shaft spacer (4) onto the motor as shown. Secure the spacer with the retaining ring (7).

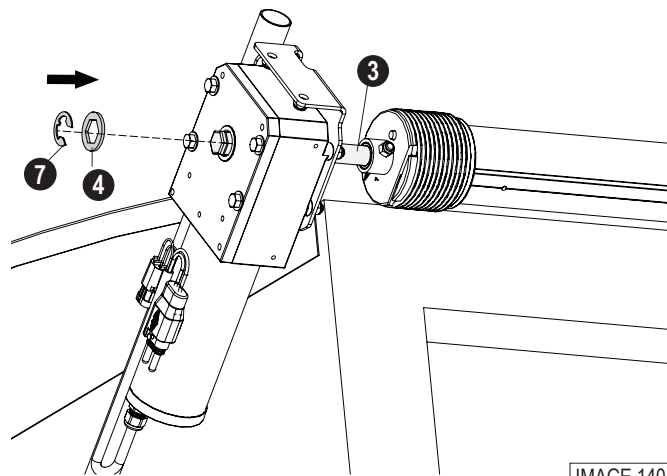


IMAGE 140

STEP 5E:

Attach the motor cover with cap screws (D), washers (BB) secure with nuts (R). Fasten the wire clip (8) with screw (B), washer (AA) and nut (P).

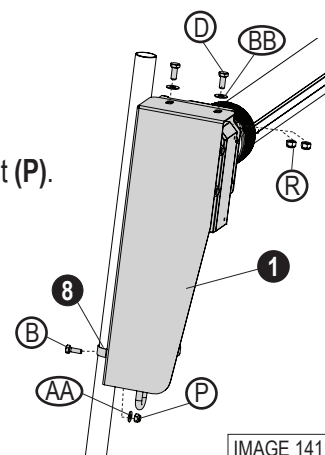


IMAGE 141

Standard Parts

Item	Part #	Description
1.		ShurLink™ Receiver
2.	1131576	ShurLink™ EZR™ Remote
3.	1703231	Cable Tie - 8"
4.	1702108	Wire Clip - 3/4" ID
5.	1704354	40-Amp Modified-Reset Circuit Breaker
6.	1704411	Circuit Breaker Boot - Red
7.	1703244	Ring Terminal - 6 Ga. x 3/8" Stud - Battery
8.	1703245	Ring Terminal - 6 Ga. x #10 Stud - Motor/Breaker
9.	1128857	Encoder Wire Ext - 18 Ga. - Plug/Socket - 10' 6" - to Motor
10.	1127574	SMARTwire™ Socket x Plug - 6 Ga. x 10' 6"
	1704827	SMARTwire™ Socket x Plug - 6 Ga. - 16'
11.	1704988	SMARTwire™ Socket x Blunt - 6 Ga. x 65'
	1121631	SMARTwire™ Socket x Blunt - 6 Ga. x 18'
12.	1704751	Harness Lock Pin - 1/8" x 7/8"
17.	1127972	Solenoid Hinge Bracket
18.	1127977	Spacer Tube - 11/16" x 5"
23.	1704627	Motorized System Decal Warning
24.	1707865	Motorized System Decal Notice
25.	1707832	Cable-Lok E-Operation Decal
26.	1704378	Dielectric Connector Protector (not pictured)

Fasteners

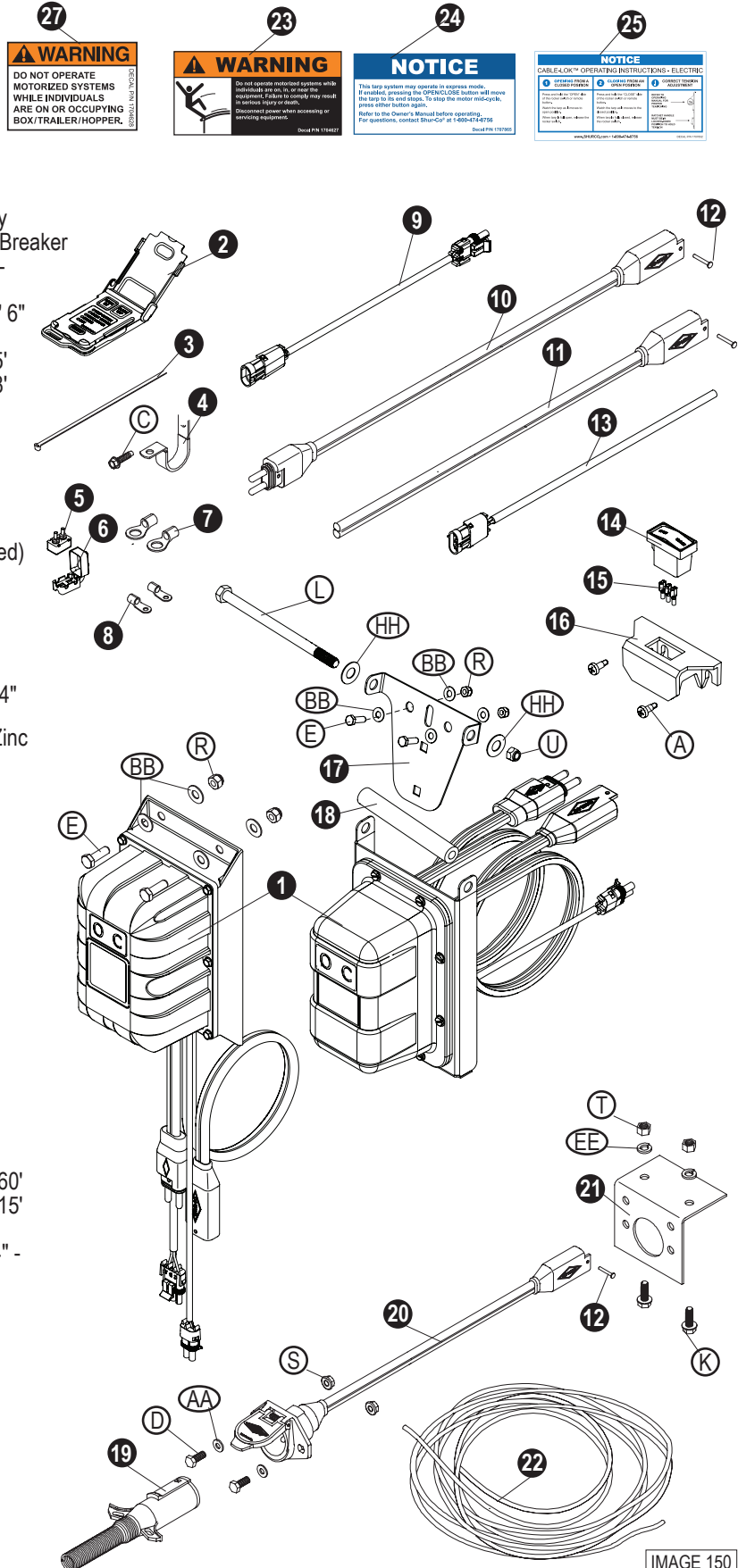
A.	1700398	Self-Drilling Screw - 1/4" x 3/4"
C.	1704338	Self-Tapping Screw - 1/4" x 1"
	1706120	Stainless Self-Tapping Screw - 1/4" x 1"
D.	1201269	Stainless Hex Hd. Cap Screw - 5/16" x 3/4"
	1701045	Hex Hd. Cap Screw - 5/16" x 3/4"
	1706095	Hex Hd. Cap Screw - 5/16" x 3/4" Black Zinc
E.	1704430	Stainless Cap Screw - 5/16" x 1"
	1702926	Cap Screw - 5/16" x 1"
K.	1700400	Self-Tapping Screw - 3/8" x 1"
L.	1706093	Hex Head Cap Screw - 3/8" x 6"
R.	1704431	Stainless Nylon Lock Nut - 5/16"
	1700419	Nylon Lock Nut - 5/16"
	1705919	Nylon Lock Nut - 5/16" Black Zinc
S.	1704946	Flanged Top Lock Nut - 5/16"
T.	1700407	Hex Nut - 3/8"
U.	1705648	Nylon Lock Hex Nut - 3/8"
AA.	1700427	Flat Washer - 1/4"
BB.	1201237	Stainless Flat Washer - 5/16"
	1700428	Flat Washer - 5/16"
EE.	1700434	Lock Washer - 3/8"
HH.	1703577	Stainless Flat Washer - 3/8"

Rocker Switch Applications

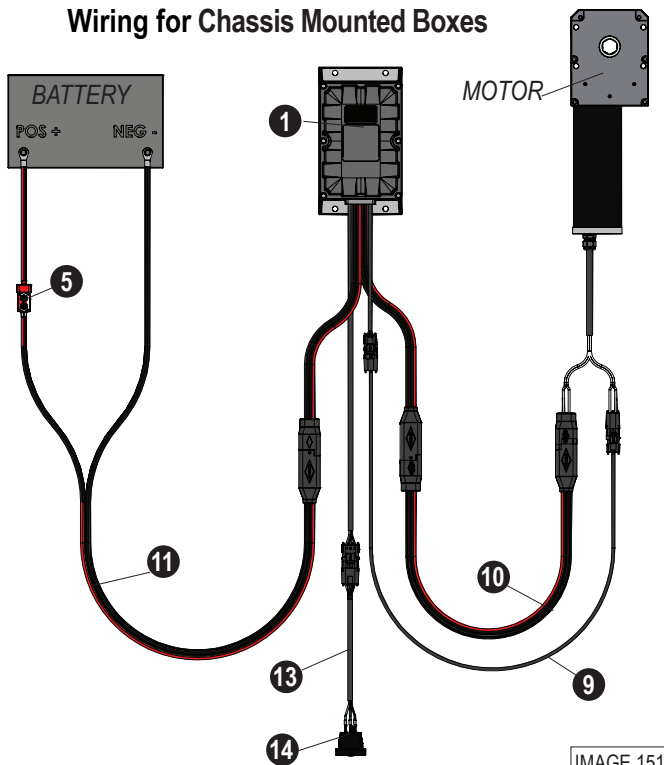
13.	1132777	Rocker Adapter Wire - 14 Ga. - Shroud - 60'
	1129634	Rocker Adapter Wire - 14 Ga. - Shroud - 15'
14.	1116020	Rocker Switch
15.	1703659	Quick Disconnect - Female - 14 Ga. x 1/4" - Switch/Solenoid
16.	1703661	Rocker Switch Mounting Bracket
27.	1704628	Rocker Switch Motorized Warning

Tender Trailers

19.	1115385	HD Dual-Cond Plug - Vert Pin
20.	1120670	SMARTwire™ Dual-Conductor Socket
21.	1109015	Conductor Plug Mtg (L) Bracket
22.	1119033	Dual Conductor Wire - 6 Ga. x 25'

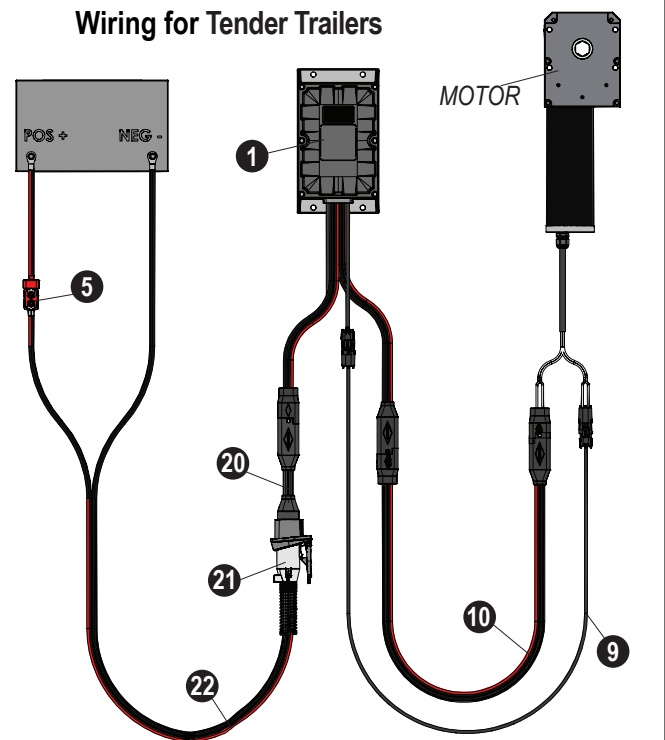


Wiring for Chassis Mounted Boxes



Rocker switch (14) & adapter wire (13) may not be included in all kits.

Wiring for Tender Trailers



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

Shurlink™ Receiver Installation

STEP 1: IDENTIFY RECEIVER MOUNTING LOCATION

Identify an easily accessible location for the receiver. The receiver must hang vertically.

NOTICE: Wire lengths are predetermined. Before installing SMARTwire™ components, review the wire routing to ensure the wires reach the components with ample room for connection.

NOTICE: Do not mount the receiver on the trailer frame.

FARM BODY -

Mount the receiver on the left side, towards the front corner of the box to ensure the motor works properly.

TENDER-

Mount the receiver in a suitable location on the box. Ensure the SMARTwire length will allow the receiver to connect to the motor.

FRONT OF BOX

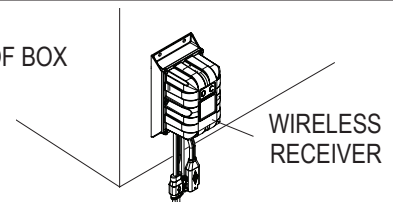


IMAGE 153

STEP 2: INSTALL RECEIVER (2 Options)

- Option 1: ShurLink™ Rec - Bottom Output

Secure receiver with screws (E), flat washers (BB), and lock nuts (R), as shown in image.

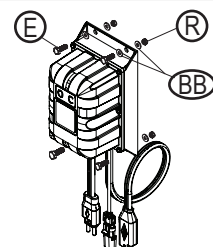


IMAGE 154

• **Option 2: ShurLink™ Rec - Rear Output**

- i) a) Determine bracket (17) orientation as shown in the images to the right.
- b) Fasten bracket (17) with two cap screws (E), two washers (BB) and secure with two washers (BB) and two lock nuts (R).

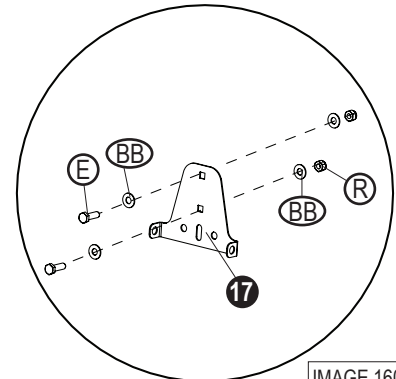
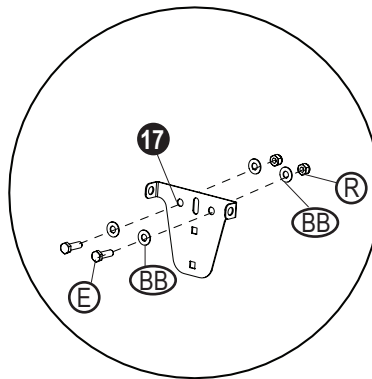


IMAGE 160

- ii) a) Align the spacer tube (18) with the receiver (1) and the bracket flanges (17).
- b) Insert the 6-inch cap screw (L) through washer (HH), then through the receiver flanges, spacer tube and bracket.
- c) Place a washer (HH) and lock nut (U) onto the end of the cap screw on the outside of the bracket.

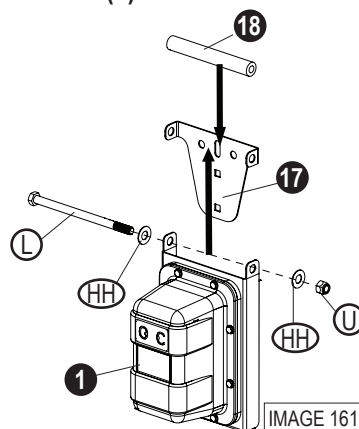


IMAGE 161

**OPTION 1
INSTALLED**

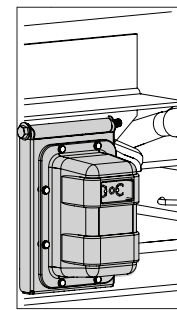


IMAGE 162

**OPTION 2
INSTALLED**

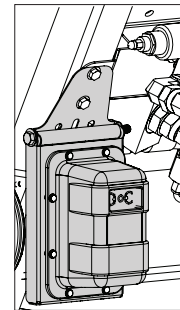


IMAGE 163

STEP 3: CONNECT MOTOR TO RECEIVER

- a) Apply dielectric grease (26) to the SMARTwire™ connections on both the motor and receiver (1). Connect SMARTwire (10) between the motor and receiver, and secure each end with lock pins (12).
- b) Connect the encoder wire (9) to the encoder wire connections on the receiver and motor.

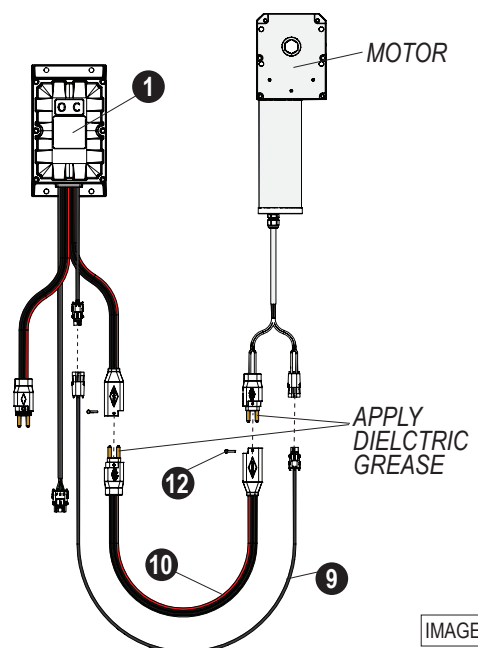


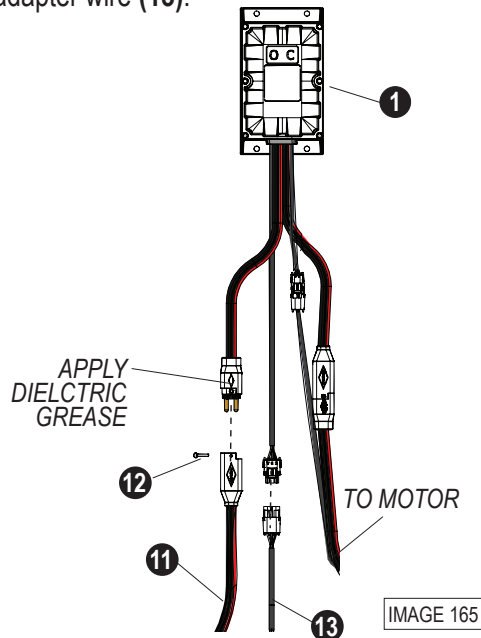
IMAGE 164

For chassis mounted box wiring, proceed to page 15.
For tender trailer wiring, proceed to page 16.

Chassis Mounted Box - Wiring

STEP 4A: RECEIVER WIRING

- Apply dielectric grease (26) to the receiver (1) connection and SMARTwire (11) connections. Secure the connection with lock pin (12).
- If your system includes a rocker switch, connect the receiver's (1) rocker switch connection to the rocker adapter wire (13).



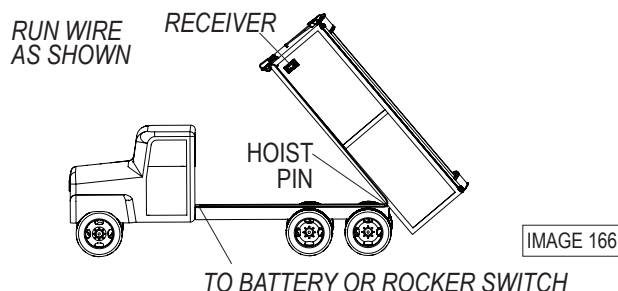
STEP 4B: ROUTE WIRE

- Route SMARTwire (11) to the battery.
- If your system includes a rocker switch, route wire (13) to rocker switch mounting location.

NOTICE: FARM BODY with HOIST

Run SMARTwire (11) and if applicable, rocker adapter wire (13) to the rear of the box, around the hoist pin, then back to the front of the box as shown.

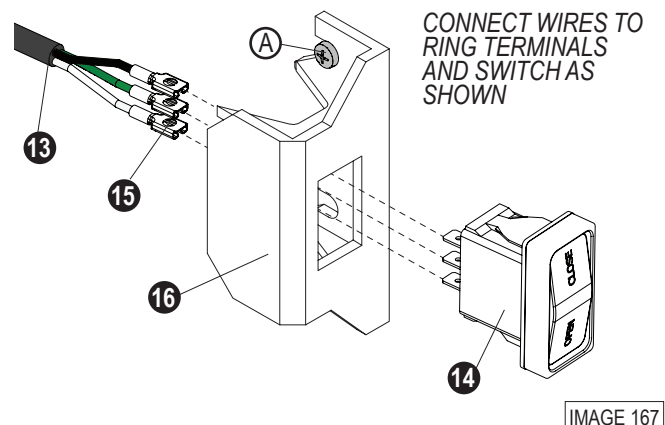
Do not mount the receiver to the trailer frame.



NOTICE: The rocker switch must be mounted inside the cab. It is not designed for external use or exposure to weather conditions.

STEP 4C: ROCKER SWITCH WIRING

- Mount the rocker switch (14) inside the cab using self tapping screws (A), in a location easily accessible to the driver, (e.g., on driver-side door jamb or dash panel).
- Connect the 14-ga. wire (13) to the quick disconnects (15), then connect the disconnects to the rocker switch (14) as shown below.



STEP 4D: INSTALL SAFETY DECAL

- Identify a clean, dry surface area near the rocker switch.
- Remove the backing from decal (27). Apply it to the identified surface.
- Regularly inspect all safety decals for wear and adherence to ensure ongoing safety. Replace if necessary.

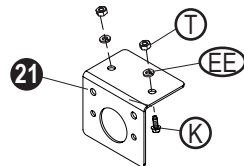


Tender Trailer - Wiring

STEP 4A: MOUNT DUAL CONDUCTOR SOCKET

- Determine location on the front of the trailer to mount the dual-conductor socket (20).
- If needed, fasten the mounting bracket (21) with two screws (K), two lock washers (EE) and two nuts (T).
- If no bracket is needed, drill a 2" hole through the trailer. Align the socket over the 2-inch hole and use as a guide to drill two 5/16" holes.
- Attach socket with two screws (D), two washers (AA) and secure from inside the trailer with two nuts (S).

OPTIONAL BRACKET



TRAILER

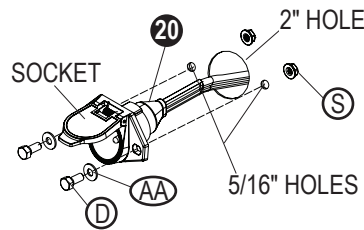


IMAGE 168

STEP 4B: WIRE CONNECTOR PLUG

- Loosen screw (a) on the conductor plug (19) and remove the insert from the plug housing.
- Feed the 6 ga. wire (22) through the plug (19) housing.
- Strip insulation back 1/2 inch, apply dielectric grease to the brass contacts, and insert bare wire strands into contacts. Ensure there are no loose wire strands that could short circuit.
- Tighten set screws (b) to secure wires.
- Replace insert into the plug housing and secure screw (a).

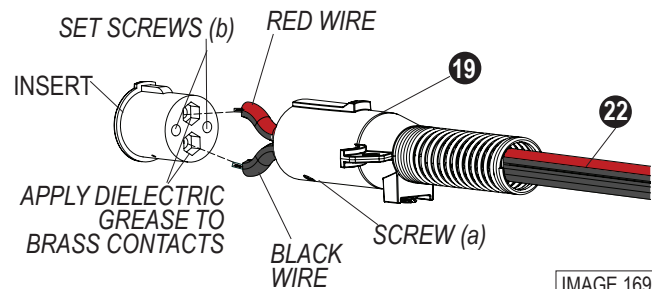


IMAGE 169

STEP 4C: CONNECT SMARTWIRES

Apply dielectric grease (26) to the dual-conductor (20) SMARTwire connection and secure to the receiver (1) connection with lock pin (12).

STEP 4D: CONNECT DUAL POLE PLUG AND SOCKET

Wiring - All Applications

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 5: CONNECT CIRCUIT BREAKER

- Run 6 ga. wire to the battery. Determine circuit breaker (4) location as close as possible to the battery or power supply.
- Attach ring terminals as shown in the image.
- Install the circuit breaker (4) in the boot (5) to the red wire.
- Finally, connect the ring terminals (2) to the battery.

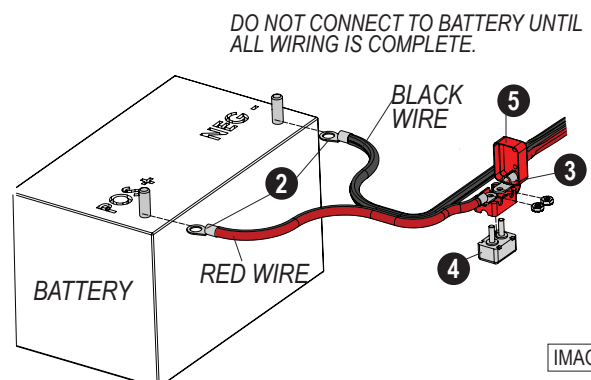
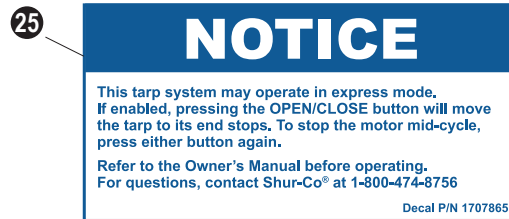
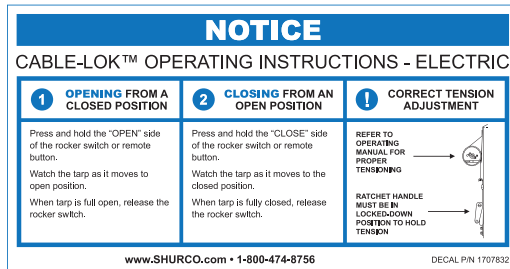


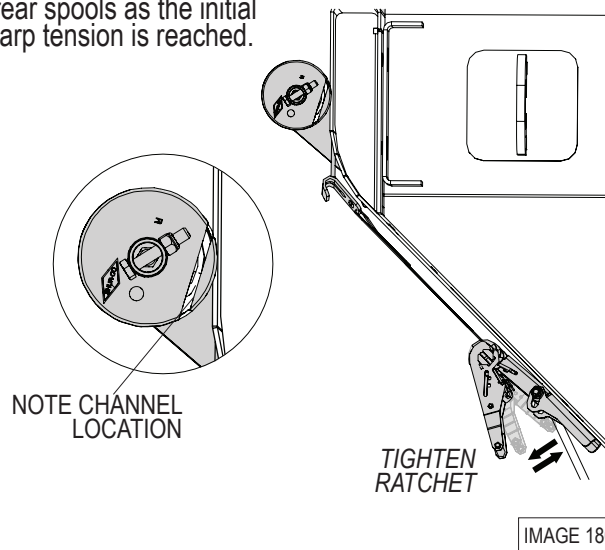
IMAGE 170

STEP 1: INSTALL SAFETY DECALS

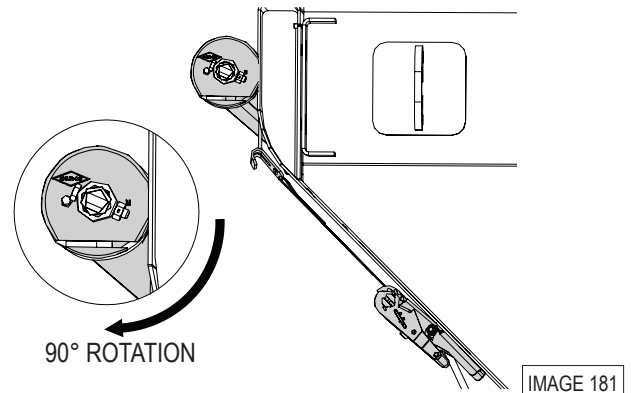
- Identify a clean, dry surface area that is visible from the tarp system controls.
- Remove the backing from the motorized warning decal (23), the motorized notice decal (24) and the electric operation decal (25). Apply them to the identified surface.
- Regularly inspect all safety decals for wear and adherence to ensure ongoing safety. Replace if necessary.

**CABLE TENSIONING****STEP 2: TENSION CABLES**

- Tighten the ratchets to remove slack in the tarp.
- Observe the position of the channels on the front and rear spools as the initial tarp tension is reached.



- Tighten the ratchets to rotate both channels 90° from their initial position.
- Recheck the channels' positions and retighten the ratchets as needed to achieve a full 90° rotation.
- Open and close the tarp system at least 5 or 6 times to verify consistent tension.
- Adjust cable tension with ratchets as needed.



NOTICE: Ensure the ratchet is in the locked position to hold tension. Do not release tension to operate the system.

! WARNING

Keep hands, hair, and loose clothing away from the roll spool when the cable is wrapping. Avoid over- or under-ratcheting, as improper tension can increase the risk of entanglement. Do not adjust ratchets during operation of the tarping system.

Continue installation on the following page.

STEP 3: CUT PIVOT ARM

Close the tarp. Cut the pivot arm off 1 inch above the motor bracket.

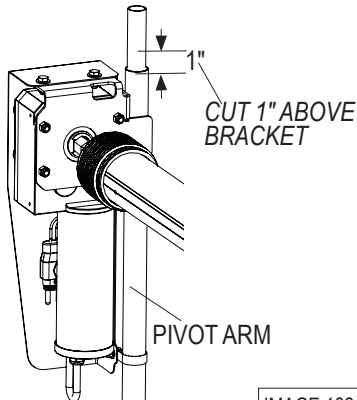


IMAGE 182

STEP 4: INSTALL END PLUG

Insert the end plug into the top of the pivot arm.

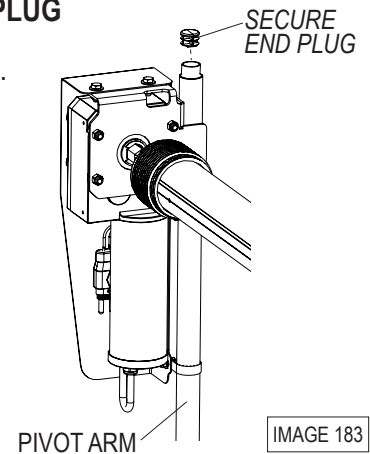


IMAGE 183

Operation

⚠ CAUTION

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

⚠ 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.

CABLE-LOK™ OPERATING INSTRUCTIONS - ELECTRIC

1 OPENING FROM A CLOSED POSITION

Press and hold the "OPEN" side of the rocker switch or remote button.
Watch the tarp as it moves to open position.
When tarp is full open, release the rocker switch.

2 CLOSING FROM AN OPEN POSITION

Press and hold the "CLOSE" side of the rocker switch or remote button.
Watch the tarp as it moves to the closed position.
When tarp is fully closed, release the rocker switch.

! CORRECT TENSION ADJUSTMENT

REFER TO OPERATING MANUAL FOR PROPER TENSIONING
RATCHET HANDLE MUST BE IN LOCKED-DOWN POSITION TO HOLD TENSION

NOTICE: This tarping system may operate in express mode. If enabled, pressing the OPEN/CLOSE button will move the tarp to its end stops. To stop the motor mid-cycle, press either button again.

ROCKER SWITCH TEST OPERATION

Check the motor direction by activating switch to "OPEN". If switch is running the system backwards, swap the wires leads on the two outside tabs on the rocker switch.

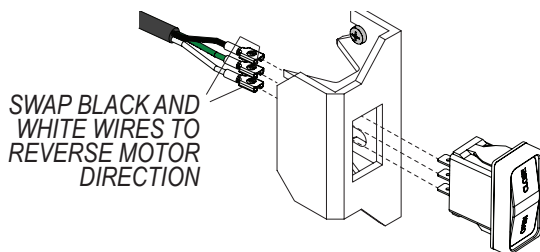


IMAGE 184

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.

⚠ CAUTION

When pressure washing the system, keep the nozzle at least 3 feet from the receiver and motor to avoid system damage.

Perform following steps to convert electric Cable-Lok™ system to manual crank operation:

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

STEP 1: Close the tarp. Release tension in the cables, then disconnect the power.

STEP 2: Unfasten and remove cap screw (G) and lock nut (Q) from roll tube and drive shaft extension. Either secure motor/arm assembly to trailer or box, or completely remove assembly from trailer or box.

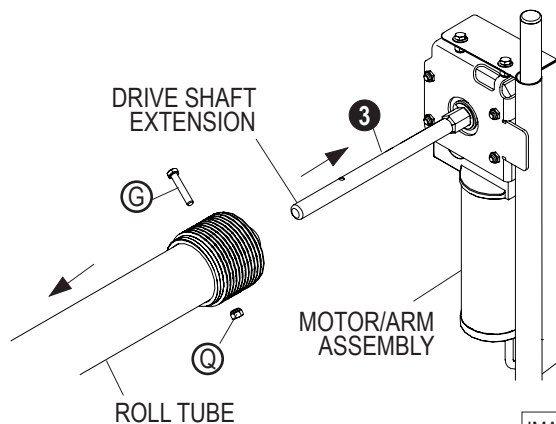


IMAGE 190

STEP 3: Unfasten and remove motor cover (1).

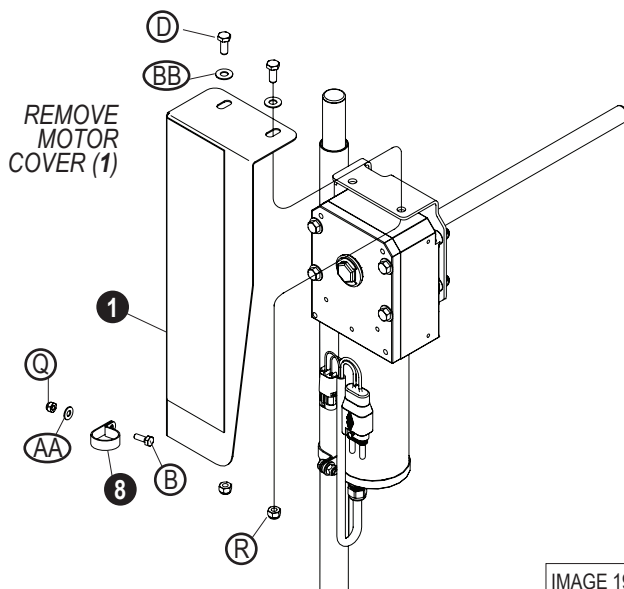


IMAGE 191

STEP 4: Remove retaining ring (7) from back of motor. Slide the drive shaft extension out of front of motor. The drive shaft spacer (4) will dislodge from the back of the motor.

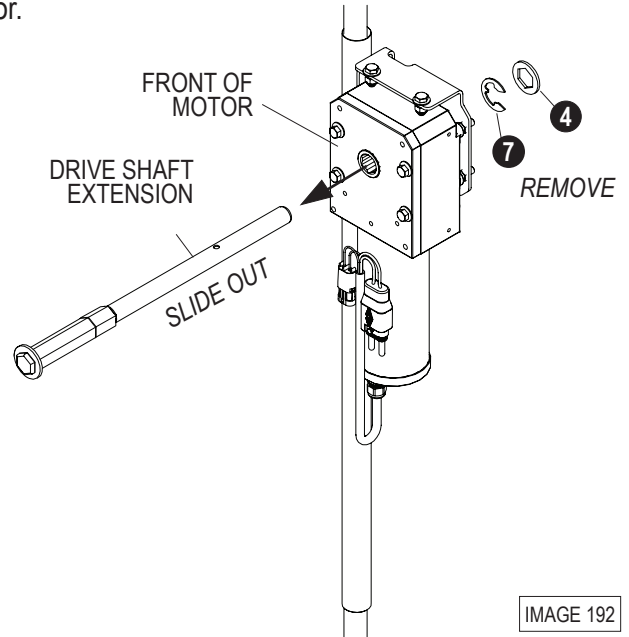


IMAGE 192

STEP 5: Install crank arm at rear of box. Fasten into roll tube with cap screw (G) and nut (Q).

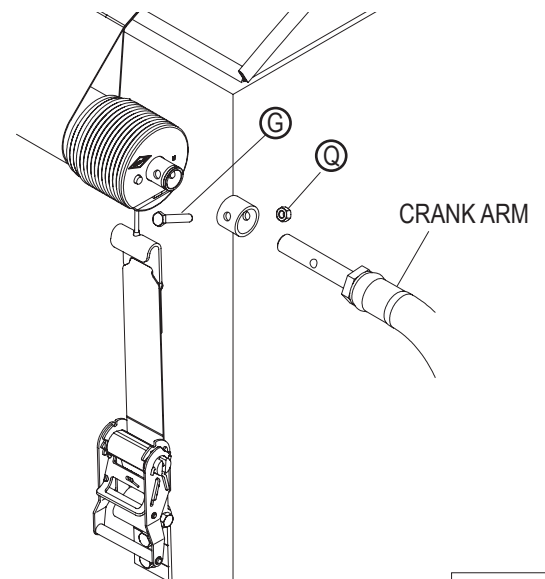


IMAGE 193

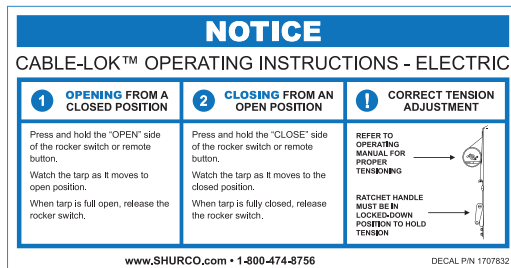
NOTICE: Refer to **Cable Tensioning** on page 17 for detailed cable tensioning instructions.

Decals

Item	Part #	Description
1.	1704627	Motorized System Decal Warning
2.	1707865	Motorized System Decal Notice
3.	1707832	Cable-Lok E-Operation Decal
4.	1704628	Rocker Switch Motorized Warning

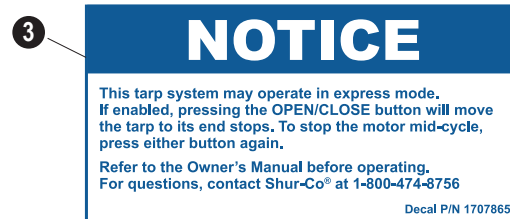


Decal P/N 1704627



www.SHURCO.com • 1-800-474-8756

DECAL P/N 1707832



Decal P/N 1707865



DECAL P/N 1704628

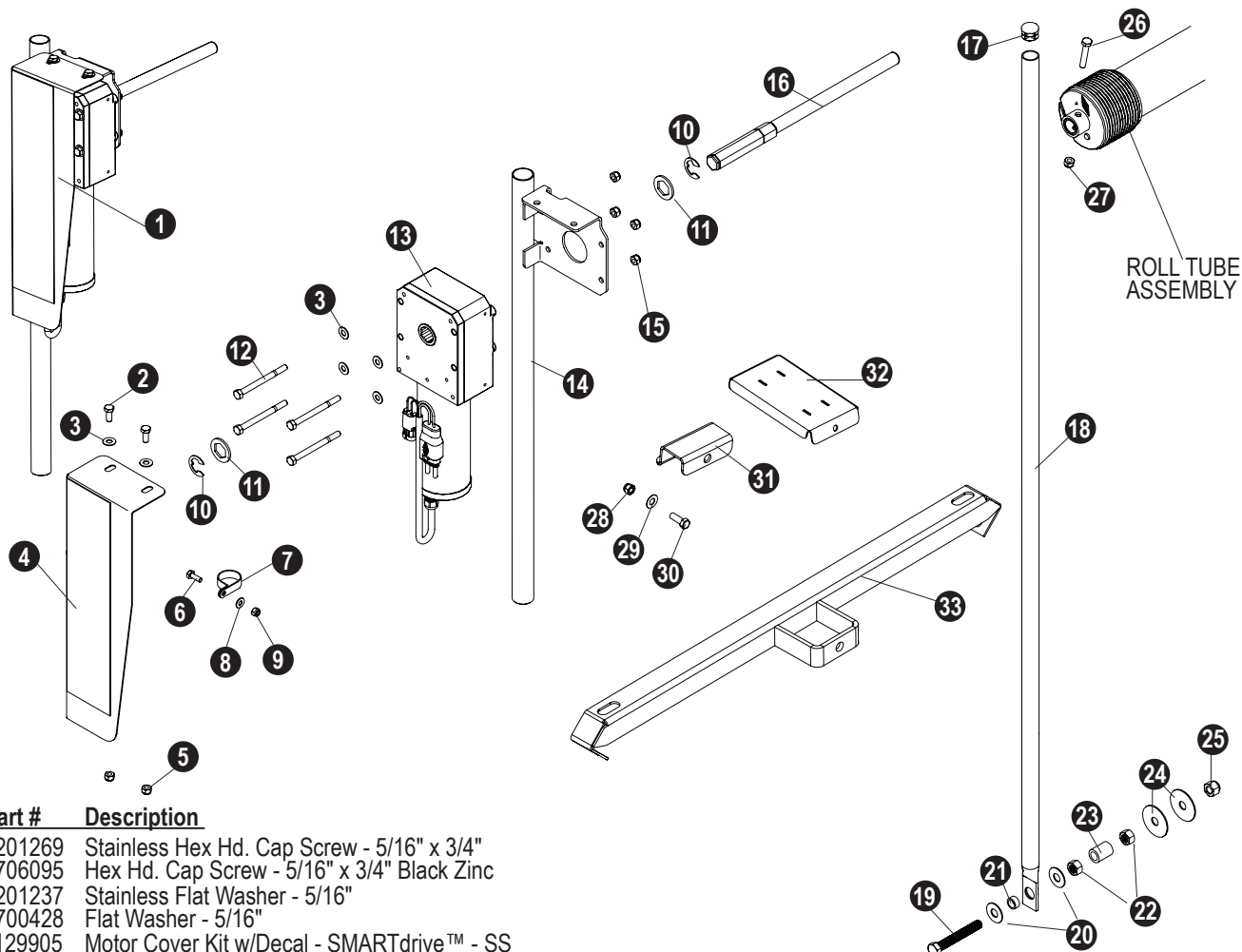


IMAGE 701

Item	Part #	Description
2.	1201269	Stainless Hex Hd. Cap Screw - 5/16" x 3/4"
	1706095	Hex Hd. Cap Screw - 5/16" x 3/4" Black Zinc
3.	1201237	Stainless Flat Washer - 5/16"
	1700428	Flat Washer - 5/16"
4.	1129905	Motor Cover Kit w/Decal - SMARTdrive™ - SS
5.	1704431	Stainless Nylon Lock Nut - 5/16"
	1705919	Nylon Lock Nut - 5/16" Black Zinc
6.	1706510	Stainless Hex Hd. Cap Screw - 1/4" x 3/4"
	1703959	Hex Hd. Cap Screw - 1/4" x 3/4"
7.	1706509	Stainless Wire Clip - 1-1/4" ID
8.	1201240	Stainless Flat Washer - 1/4"
	1700427	Flat Washer - 1/4"
9.	1706121	Stainless Nylon Lock Nut - 1/4"
	1701543	Nylon Lock Hex Nut - 1/4"
10.	1706411	External Retaining Ring - 7/8" Dia. x .042"
11.	1128785	Drive Shaft Spacer
12.	1706410	Stainless Hex Cap Screw - 5/16" x 3-3/4"
	1707323	Hex Cap Screw - 5/16" x 3-3/4"
13.	1127849	SMARTdrive™ Motor
14.	1128777	Stainless Upper Pivot Arm - SMARTdrive™
	1128776	Upper Pivot Arm - SMARTdrive™
15.	1704431	Stainless Nylon Lock Nut - 5/16"
	1705919	Nylon Lock Nut - 5/16" Black Zinc
16.	1130852	SMARTdrive™ Drive Shaft
17.	1701595	End Plug - 1"
18.	1127979	Stainless Lower Pivot Arm - 60"
	1129986	Lower Pivot Arm - 60"
19.	1706005	Stainless Hex Hd. Cap Screw - 1/2" x 3-1/2"
	1706597	Hex Hd. Cap Screw - 1/2" x 3-1/2"
20.	1703620	Stainless Flat Washer - 1/2"
	1702114	Flat Washer - 1/2"
21.	1100306	Retainer Bushing - 11/16"

Item	Part #	Description
22.	1706006	Stainless Hex Nut - 1/2"
	1700409	Hex Nut - 1/2"
23.	1127959	Stainless Spacer Tube - .84" OD x .55" ID x 1-1/4"
24.	1706096	Stainless Fender Washer - 1/2"
	1706097	Fender Washer - 1/2"
25.	1706088	Stainless Nylon Lock Nut - 1/2"
	1702115	Nylon Lock Hex Nut - 1/2"
26.	1704334	Stainless Hex Hd. Cap Screw - 5/16" x 1-3/4"
	1701468	Hex Hd. Cap Screw - 5/16" x 1-3/4"
27.	1704431	Stainless Nylon Lock Nut - 5/16"
	1704297	Nylon Lock Hex Nut - 5/16" Grade 8
28.	1705648	Stainless Nylon Lock Hex Nut - 3/8"
29.	1703577	Stainless Flat Washer - 3/8"
30.	1703579	Stainless Hex Head Cap Screw - 3/8" x 1"

New Leader

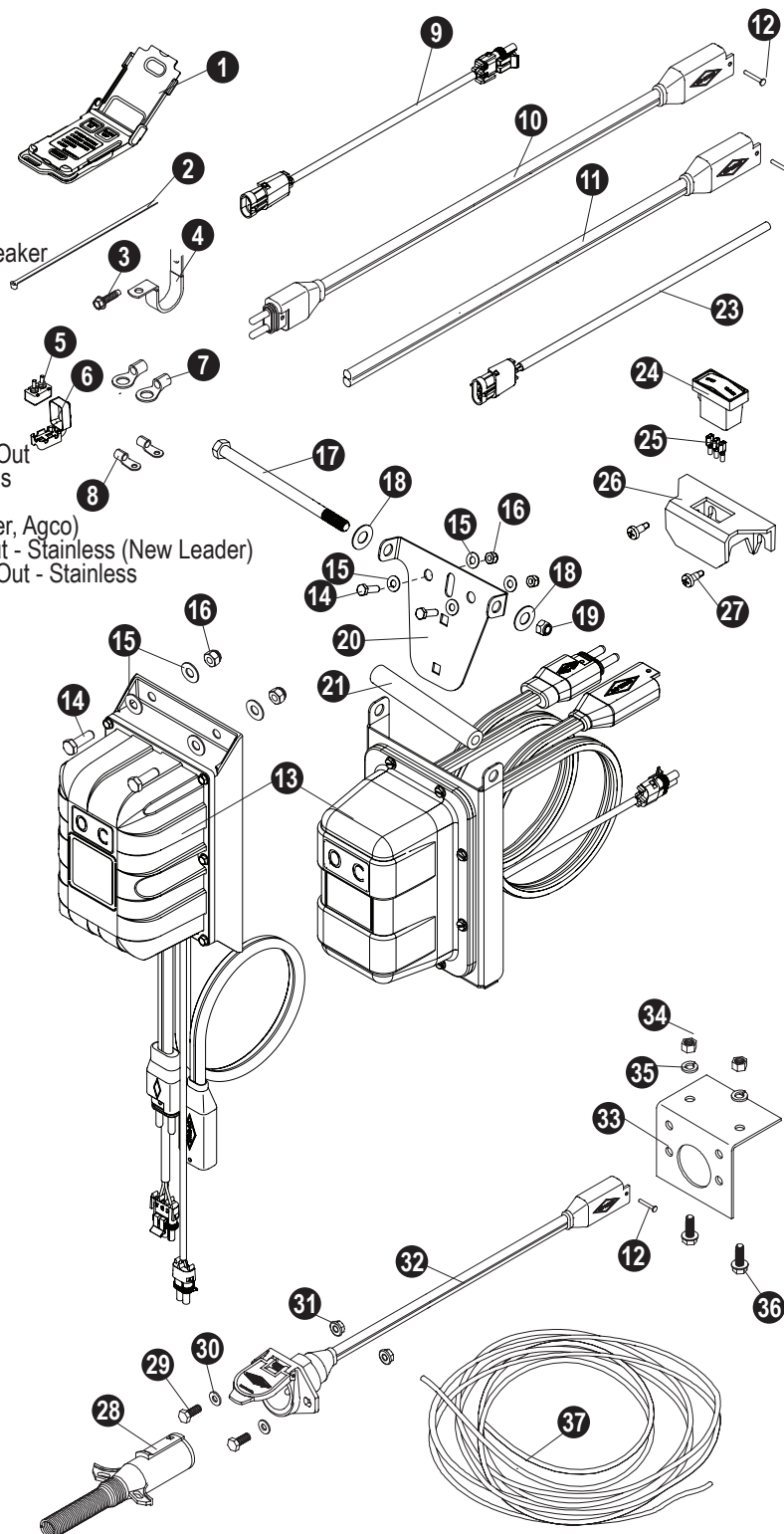
1.	1129628	Stainless Upper Pivot Arm - w/ SMARTdrive™ Motor
14.	1118246	Stainless Standoff Bracket
18.	1127970	Stainless Lower Pivot Arm - 64" (DS20, DS35, DN456, DN495)
	1115558	Stainless Lower Pivot Arm - 80" (DS30, DN485)
31.	1126496	Stainless Adapter Pivot Bracket

AGCO

1.	1129628	Stainless Upper Pivot Arm - w/ SMARTdrive™ Motor
32.	1130181	Adapter Pivot Bracket
33.	1115558	Stainless Lower Pivot Arm - 80" (DS30, DN485)

Standard Parts

Item	Part #	Description
1.	1131576	ShurLink™ EZR™ Remote
2.	1703231	Cable Tie - 8"
3.	1704338	Self-Tapping Screw - 1/4" x 1"
4.	1706120	Stainless Self-Tapping Screw - 1/4" x 1"
5.	1702108	Wire Clip - 3/4" ID
6.	1704354	40-Amp Modified-Reset Circuit Breaker
7.	1704411	Circuit Breaker Boot - Red
8.	1703244	Ring Terminal - 6 Ga. x 3/8" Stud - Battery
9.	1703245	Ring Terminal - 6 Ga. x #10 Stud - Motor/Breaker
10.	1128857	Encoder Wire Ext - 18 Ga. - Plug/Socket - 10' 6" - to Motor
11.	1127574	SMARTwire™ Socket x Plug - 6 Ga. x 10' 6"
12.	1704827	SMARTwire™ Socket x Plug - 6 Ga. - 16'
13.	1704988	SMARTwire™ Socket x Blunt - 6 Ga. x 65'
14.	1121631	SMARTwire™ Socket x Blunt - 6 Ga. x 18'
15.	1704751	Harness Lock Pin - 1/8" x 7/8"
16.	1132033	ShurLink™ Rec - Rocker Express - Bottom Out
17.	1132056	ShurLink™ Receiver - Bottom Out - Stainless
18.	1131572	ShurLink™ Receiver - Bottom Out
19.	1131615	ShurLink™ Receiver - Rear Out (New Leader, Agco)
20.	1132030	ShurLink™ Rec - Rocker Express - Rear Out - Stainless (New Leader)
21.	1132034	ShurLink™ Rec - Rocker Express - Bottom Out - Stainless
22.	1704430	Stainless Cap Screw - 5/16" x 1"
23.	1702926	Cap Screw - 5/16" x 1"
24.	1201237	Stainless Flat Washer - 5/16"
25.	1700428	Flat Washer - 5/16"
26.	1704431	Stainless Nylon Lock Nut - 5/16"
27.	1700419	Nylon Lock Nut - 5/16"
28.	1706093	Hex Head Cap Screw - 3/8" x 6"
29.	1703577	Stainless Flat Washer - 3/8"
30.	1705648	Nylon Lock Hex Nut - 3/8"
31.	1127972	Solenoid Hinge Bracket
32.	1127977	Spacer Tube - 11/16" x 5"
33.	1704378	Dielectric Connector Protector (not pictured)



Rocker Switch Applications

23.	1132777	Rocker Adapter Wire - 14 Ga. - Shroud - 60'
24.	1129634	Rocker Adapter Wire - 14 Ga. - Shroud - 15'
25.	1116020	Rocker Switch
26.	1703659	Quick Disconnect - Female - 14 Ga. x 1/4" - Switch/Solenoid
27.	1703661	Rocker Switch Mounting Bracket
28.	1700398	Self-Drilling Screw - 1/4" x 3/4"

Tender Trailers

29.	1115385	HD Dual-Cond Plug - Vert Pin
30.	1701045	Hex Hd. Cap Screw - 5/16" x 3/4"
31.	1700427	Flat Washer - 1/4"
32.	1704946	Flanged Top Lock Nut - 5/16"
33.	1120670	SMARTwire™ Dual-Conductor Socket
34.	1109015	Conductor Plug Mtg (L) Bracket
35.	1700407	Hex Nut - 3/8"
36.	1700434	Lock Washer - 3/8"
37.	1700400	Self-Tapping Screw - 3/8" x 1"
38.	1119033	Dual Conductor Wire - 6 Ga. x 25'

IMAGE 702

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