



ENGINEERED TARPING SOLUTIONS

P/N 1111475 Rev. K

Installation Instructions

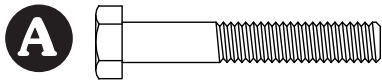


Electric Shur-Lok[®] Farm & Semi

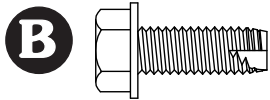
READ BEFORE INSTALLING

PO BOX 713 ■ 2309 SHUR-LOK STREET ■ YANKTON, SD 57078-0713
PHONE 1-800-4-SHUR-LOK (1-800-474-8756) ■ FAX 605-665-0501
www.shurco.com

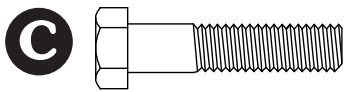
SHOP ONLINE: www.shopshurco.com



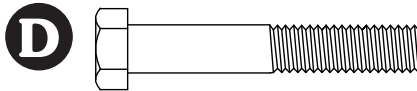
1701420 - Cap Screw - 5/16" x 2"



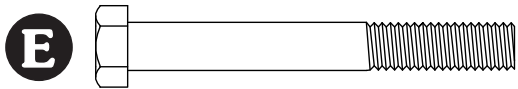
1700400 - Self-Tapping Screw - 3/8" x 1"



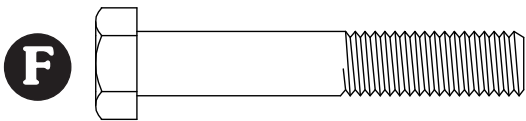
1701434 - Cap Screw - 3/8" x 1 1/2"



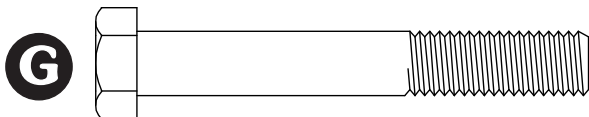
1702667 - Cap Screw - 3/8" x 2 1/4"



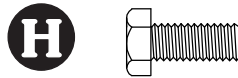
1700371 - Cap Screw - 3/8" x 3"



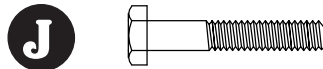
1702701 - Cap Screw - 1/2" x 3"



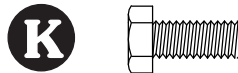
1700378 - Cap Screw - 1/2" x 3 1/2"



1703210 - Cap Screw - 5/16" x 3/4"



1700377 - Cap Screw - 1/4" x 1 1/2"



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



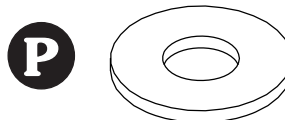
1700427 - Flat Washer - 1/4"



1700434 - Lock Washer - 3/8"



1700429 - Flat Washer - 3/8"



1702114 - Flat Washer - 1/2"



1701543 - Nylon Lock Nut - 1/4"



1700419 - Nylon Lock Nut - 5/16"



1702668 - Top Lock Nut, 3/8"



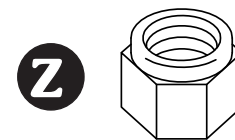
1700407 - Hex Nut - 3/8"



1700411 - Hex Nut - 5/16"



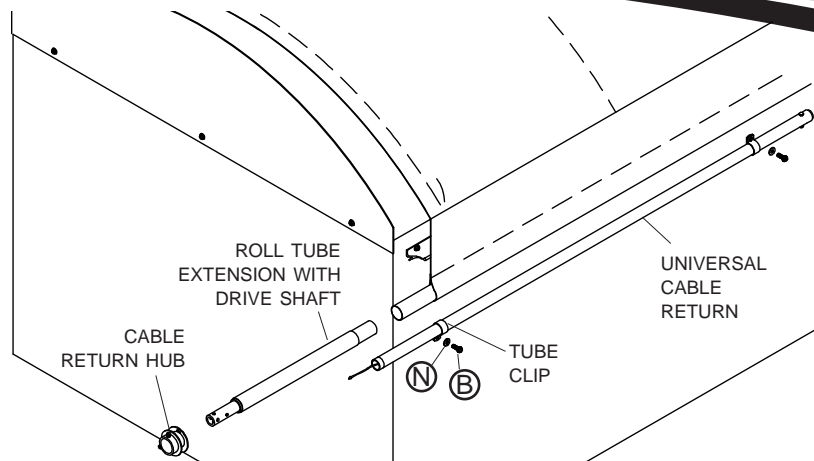
1700413 - Jam Nut - 1/2"



1702115 - Nylon Lock Nut - 1/2"

IMPORTANT: Read all instructions before beginning installation. Install the electric option after the caps, bows, tarp and fixed tube have been installed according to the instructions found in the Shur-Lok® owner's manual. Install electric motor option according to these instructions. If you are installing the electric option to an existing Shur-Lok® system, remove U-clamps and U-joint/crank arm from roll tube. Remove the rear cap, then continue with these instructions.

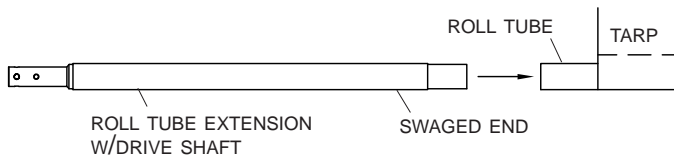
Installation Summary: Extend the length of the roll tube and install the front and rear cable return system and hubs.



Item Description

- B. Self-tapping Screw - 3/8" x 1"
- N. Flat Washer - 3/8"

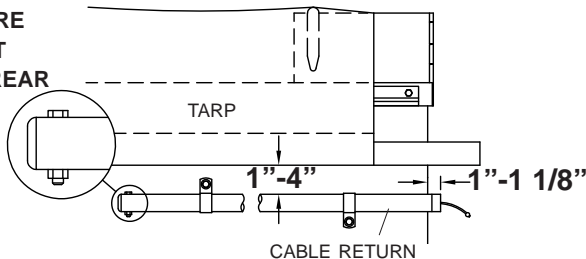
STEP 1: Roll Tube Extension w/Drive Shaft: Insert swaged end of roll tube extension into roll tube at front of trailer and weld. Grind smooth to prevent tarp wear.



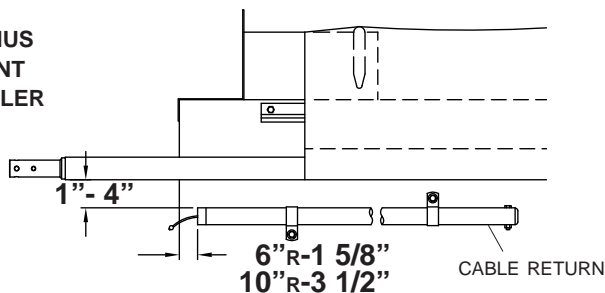
NOTE: Overall length of roll tube and roll tube extension w/drive shaft should be at least 18" to 20" longer than trailer or box.

STEP 2A: Cable Returns for Semi Trailer: Locate cable returns on latchplate side of trailer at front and rear. Position both returns 1" to 4" below tarp with head of cap screw on top side of return.

SQUARE FRONT AND REAR



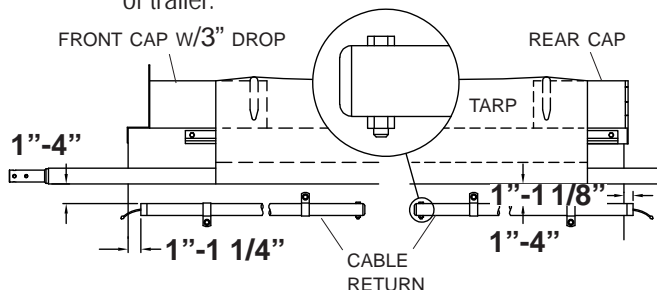
RADIUS FRONT TRAILER



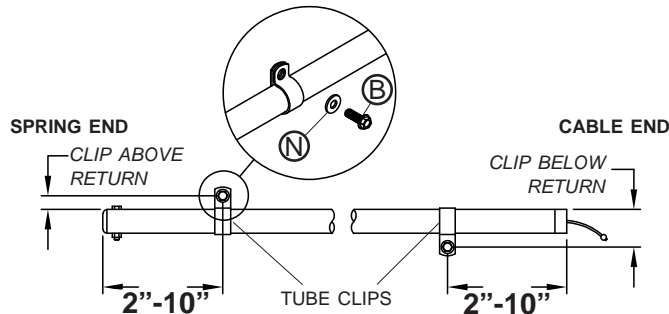
Square Back: Extend rear return 1/8" past edge of trailer.
Square Front: Extend front return 1/8" past edge of trailer.
6" Radius Front: Locate front return 1/8" in from front of trailer.
10" Radius Front: Locate cable end of return 3/2" from front of trailer.

STEP 2B: Cable Returns for Farm Body: Locate cable returns on latchplate side of trailer at front and rear. Position returns 1" to 4" below tarp with head of cap screw on top side of return.

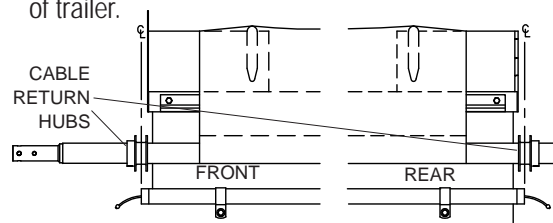
Square Rear: Locate rear return 1/8" past edge of trailer.
Square Front: Locate front return 1/4" in from edge of trailer.



STEP 3: Mount Cable Return: Position tube clips on cable returns 2" to 10" from ends. Locate tube clip on cable end with bolt hole below return and on spring end with bolt hole above return. Mark and drill 5/16" holes and fasten with screws B and washers N.



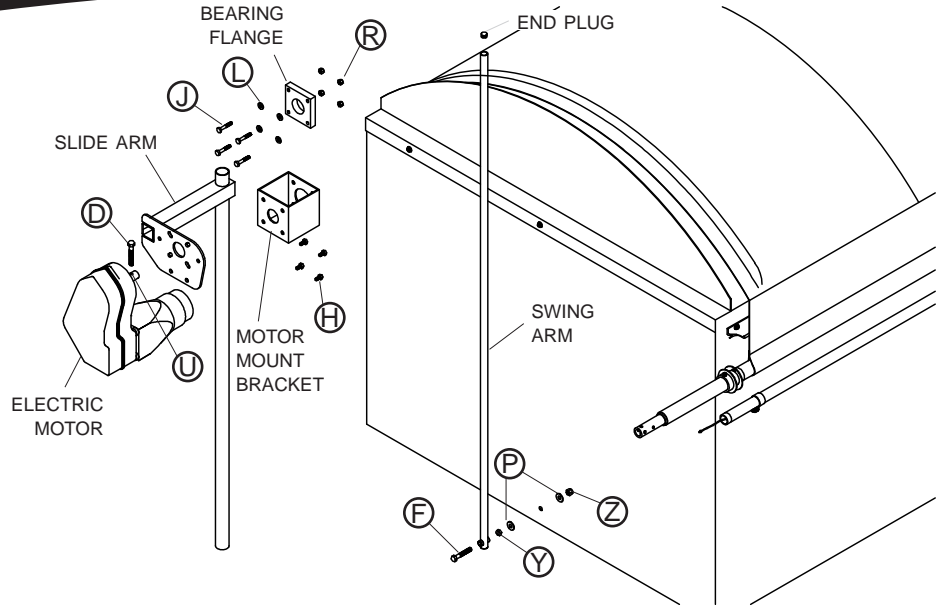
STEP 4: Slide cable return hubs over roll tube at front and rear of trailer.



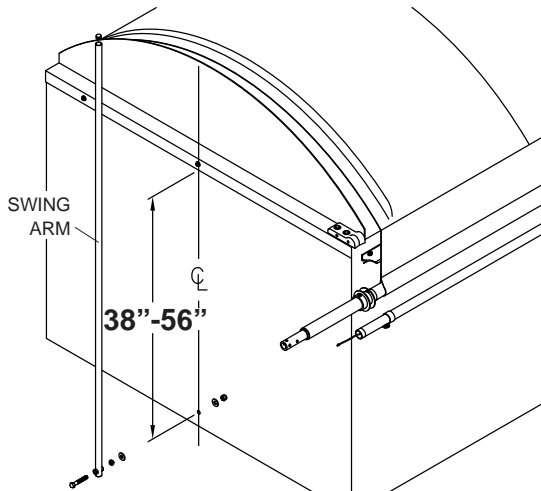
Installation Summary: Mark center line on front of box, assemble motor to swing arm and install on front center line of box.

Item Description

- D. Cap Screw - 3/8" x 2 1/4"
- F. Cap Screw - 1/2" x 3"
- H. Cap Screw - 5/16" x 3/4"
- J. Cap Screw - 1/4" x 1 1/2"
- L. Flat Washer - 1/4"
- P. Flat Washer - 1/2"
- R. Nylon Lock Nut - 1/4"
- U. Top Lock Nut - 3/8"
- Y. Jam Nut - 1/2"
- Z. Nylon Lock Nut - 1/2"

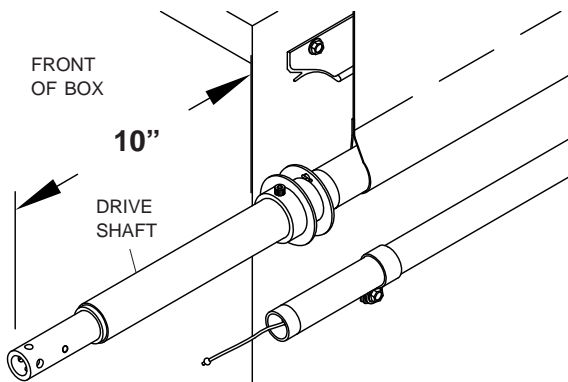


STEP 5: Locate center line on front of truck box. Locate and drill 9/16" hole on center line 38" to 56" from top of box.

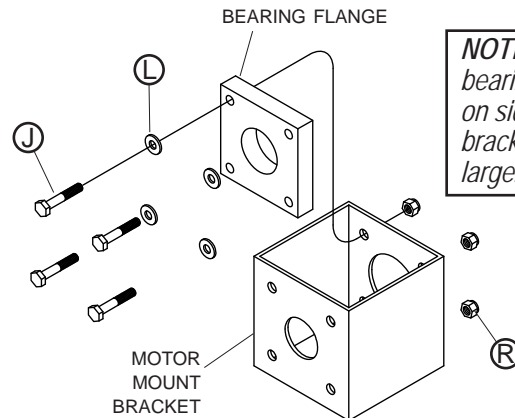


NOTE: Swing arm must operate without interference. Locate 9/16" hole to allow clearance for swing arm operation.

STEP 6: Extend drive shaft 10" beyond front of box.

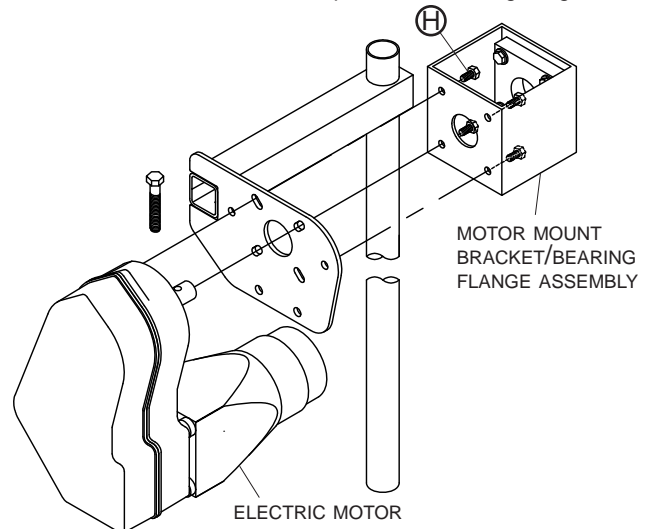


STEP 7: Mount bearing flange to motor mount bracket with cap screws J, washers L and nuts R. Finger tighten.

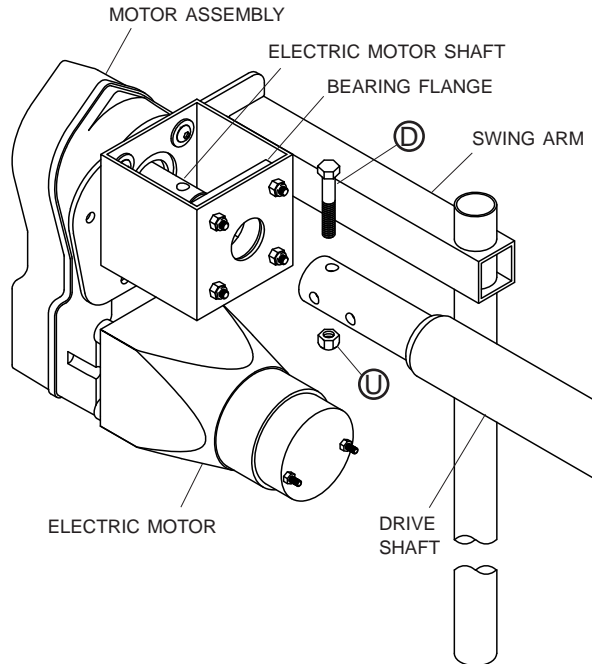


NOTE: Mount bearing flange on side of bracket with larger hole.

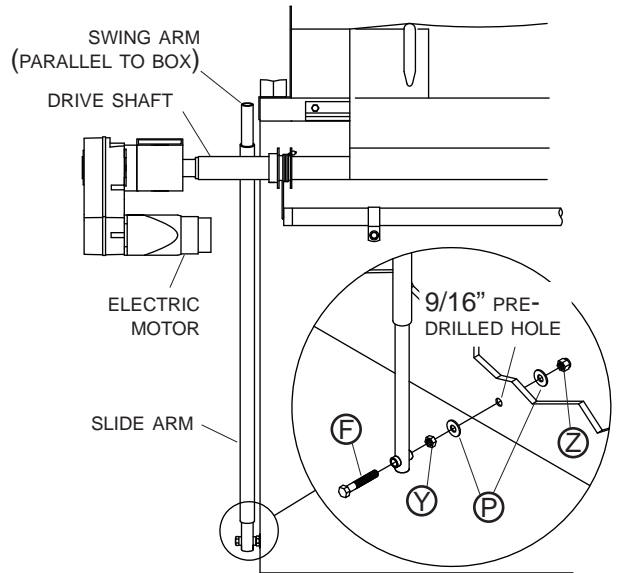
STEP 8: Mount electric motor to swing arm and motor mount bracket with four (4) cap screws D. Finger tighten.



STEP 9: Slide assembly onto drive shaft, aligning holes in drive shaft and electric motor shaft. Install cap screw **D** and nut **U**. Tighten cap screws into electric motor and bearing flange.

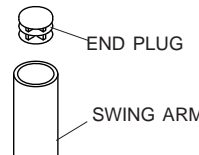


STEP 10: Insert swing arm into slide arm. Align hole in swing arm with pre-drilled 9/16" hole in front of box. Fasten with cap screws **F**, washers **P**, nuts **Y** and **Z**.



NOTE: If swing arm projects out of slide arm while tarp is closed, swing arm may be cut flush with top of motor mount bracket to reduce possibility of swing arm striking another object. Close tarp under latchplate before cutting.

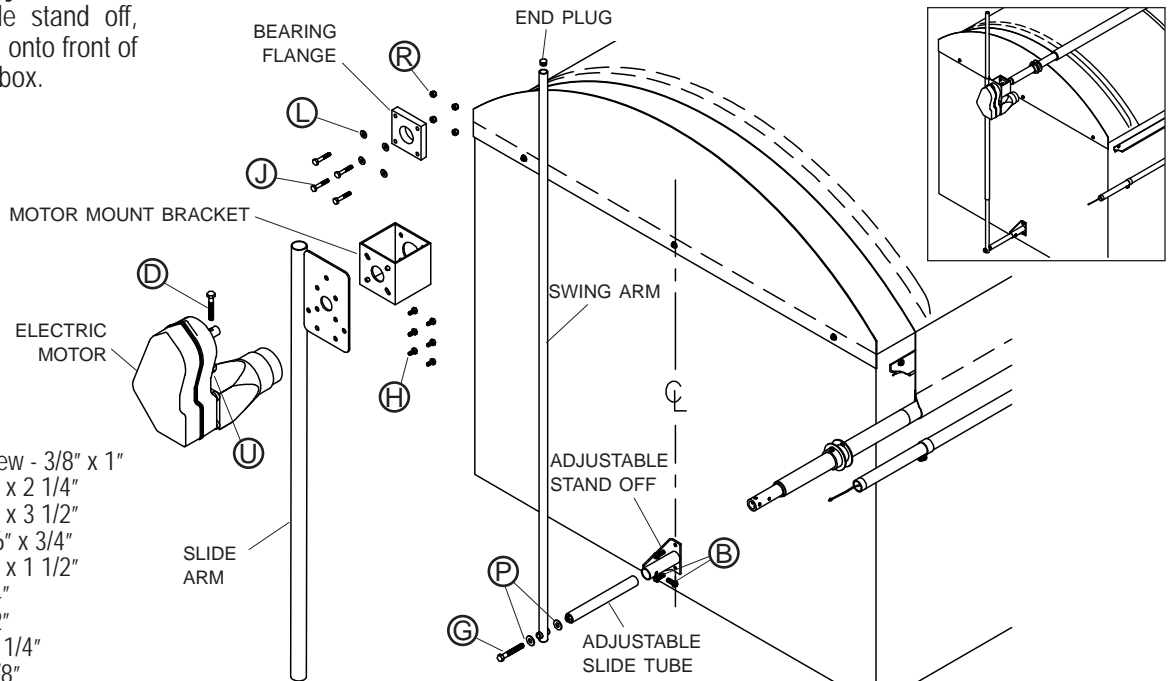
STEP 11: Square Tarp with Box, then install U-clamps on roll tube per owner's manual.



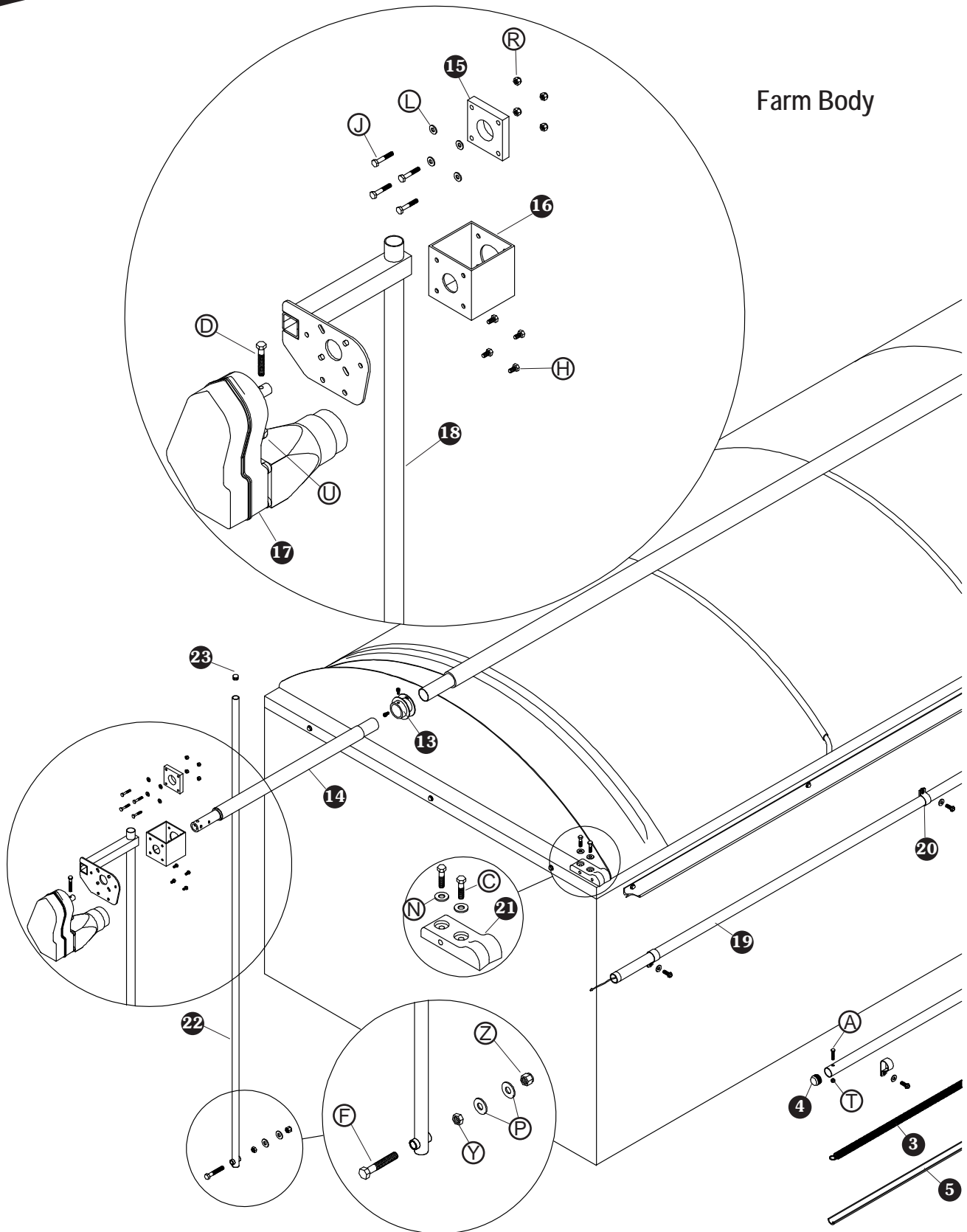
STEP 12: Install end plug into swing arm.

Motor & Swing Arm - Semi Grain Trailer

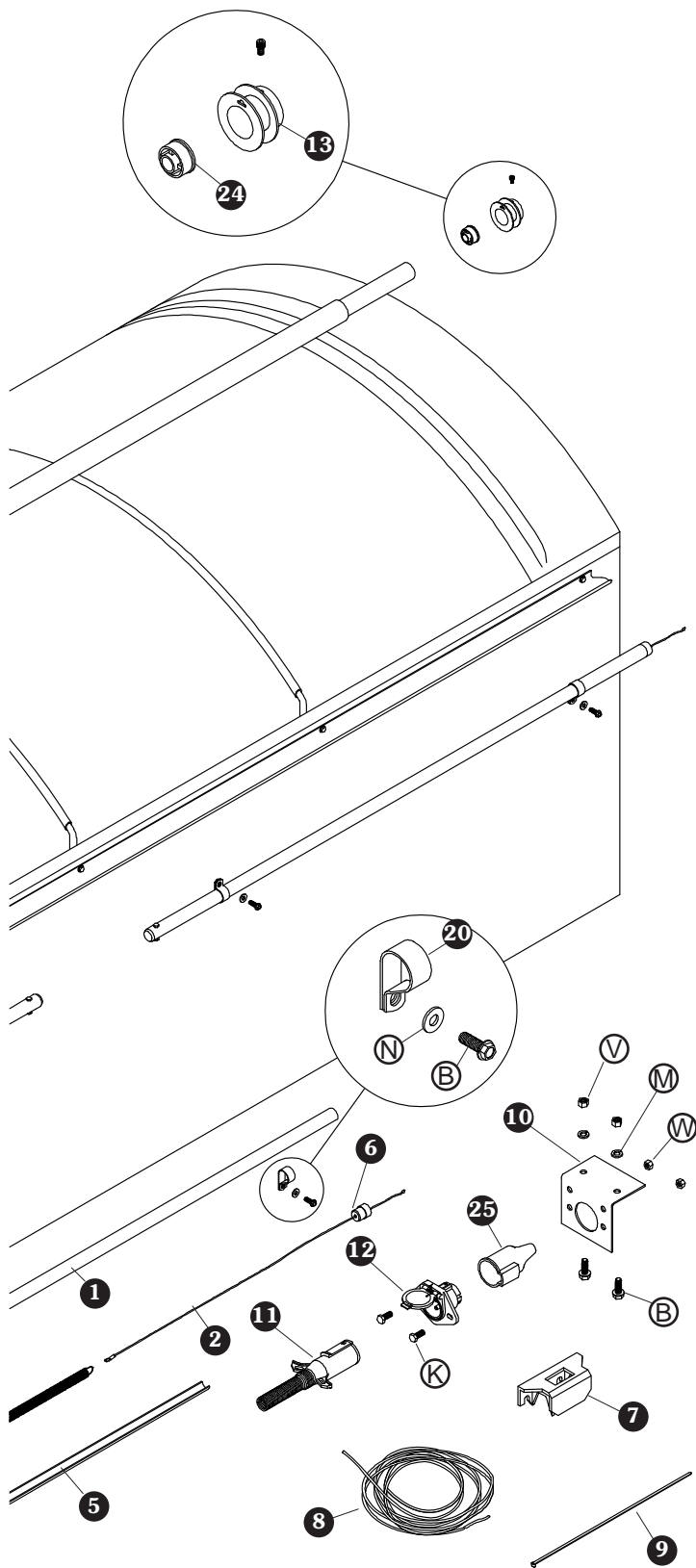
Installation Summary: Assemble and install adjustable stand off, motor and swing arm onto front of box on center line of box.



Item	Description
B.	Self-Tapping Screw - 3/8" x 1"
D.	Cap Screw - 3/8" x 2 1/4"
G.	Cap Screw - 1/2" x 3 1/2"
H.	Cap Screw - 5/16" x 3/4"
J.	Cap Screw - 1/4" x 1 1/2"
L.	Flat Washer - 1/4"
P.	Flat Washer - 1/2"
R.	Nylon Lock Nut - 1/4"
U.	Top Lock Nut - 3/8"

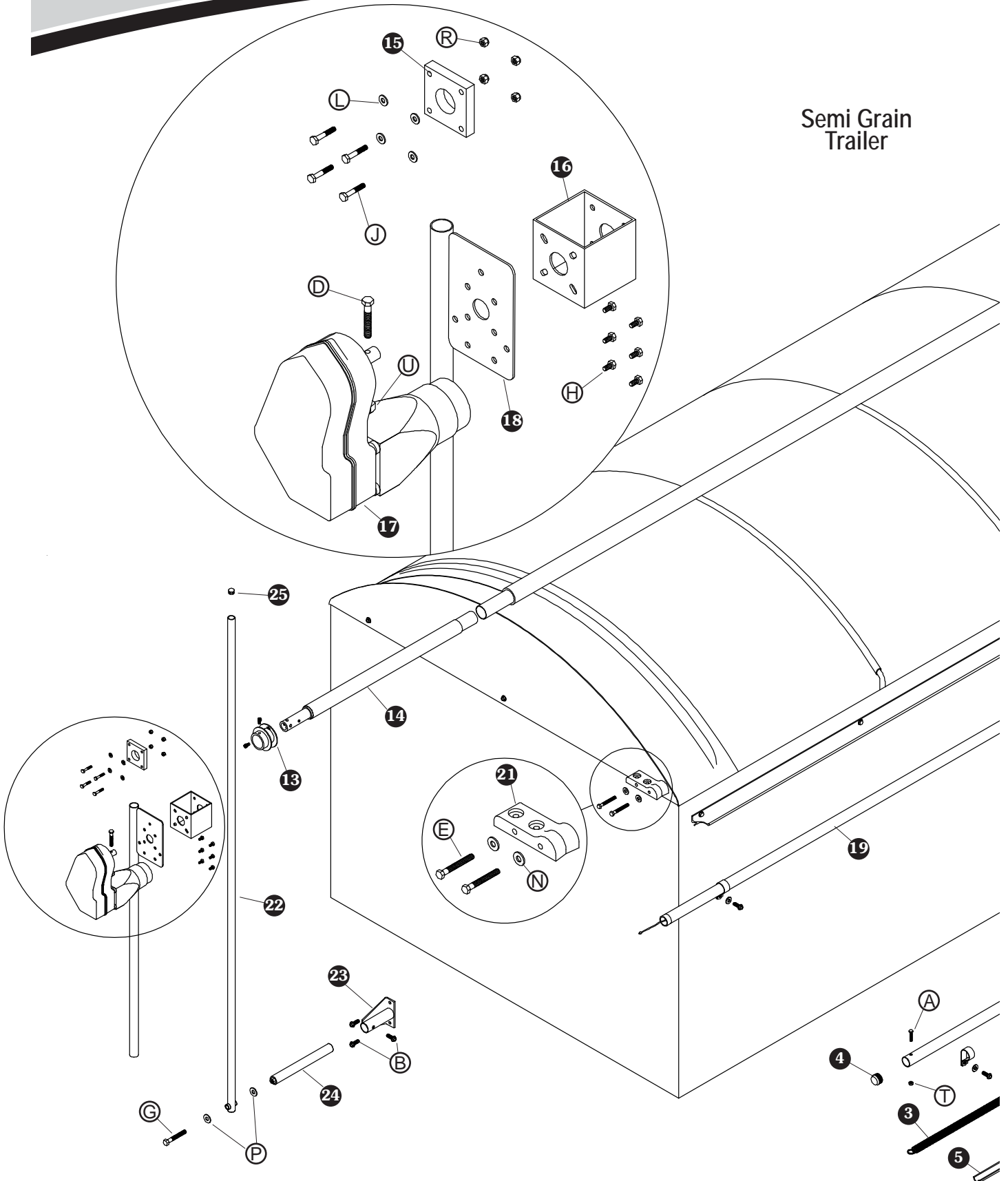


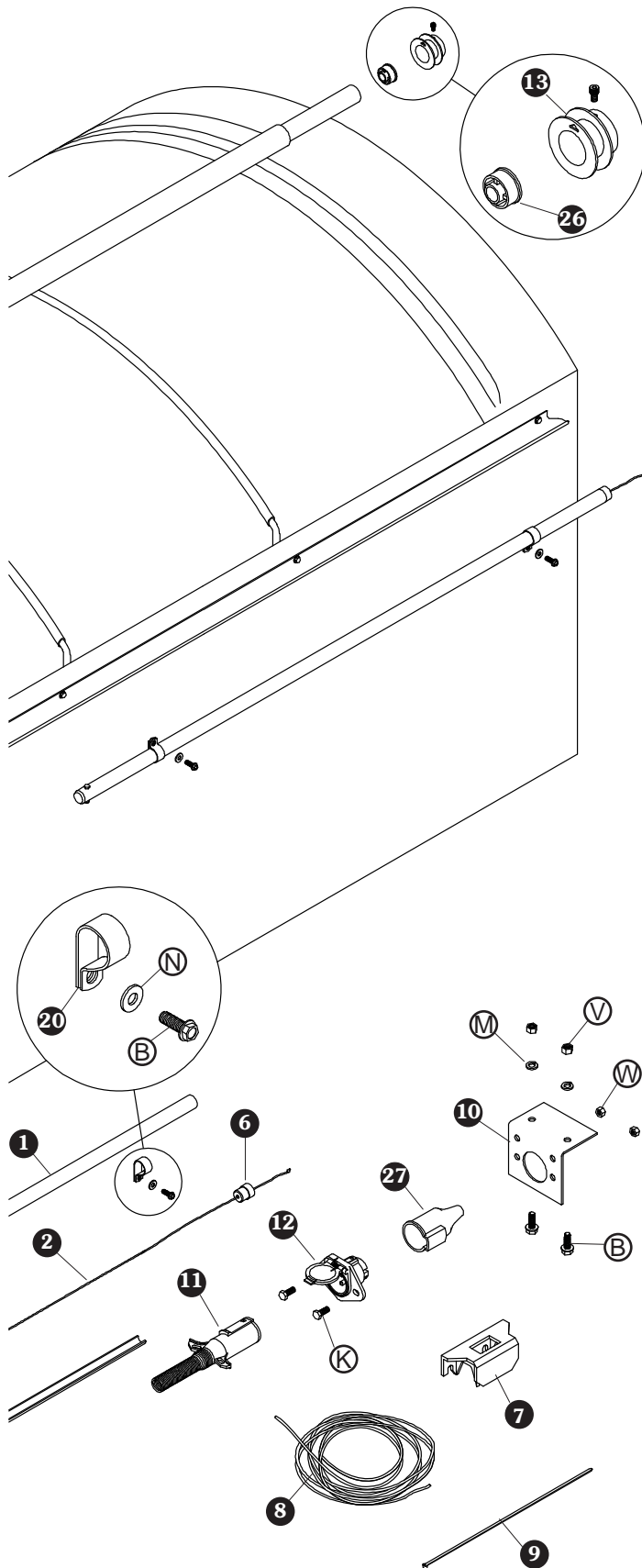
Farm Body



Item	Part #	Description
1.	1110401	Universal Cable Return Housing
2.	1110375	Cable Replacement Kit
3.	1702585	Extension Spring - 1" x 38"
4.	1702587	End Plug - 1 1/2"
5.	1110402	Spring Tray
6.	1702586	End Plug - 1 1/2"
7.	1703661	Mounting Bracket for Switch
8.	1108102	Dual Conductor Wire - 6 Ga. 75'
9.	1701058	Cable Tie - 15"
10.	1109015	Dual Conductor Mounting Bracket
11.	1115385	Heavy-Duty Dual Conductor Plug
12.	1115386	Heavy-Duty Dual Conductor Socket
13.	1110411	Cable Return Hub
14.	1117497	Roll Tube Extension with Drive Shaft
15.	1110408	Four Bolt Bearing Flange - 1 1/2"
16.	1110407	Motor Mount Bracket
17.	1703135	Tarp Stretcher Electric Motor
18.	1110428	Motor Mount Slide Arm
19.	1111435	Universal Cable Return
20.	1702583	Tube Clip - 1 7/16" x 3/4"
21.	1110410	Universal Cable Guide
22.	1110406	Swing Arm
23.	1701595	End Plug - 1"
24.	1100138	Roll Return End Plug - 2"
25.	1704573	Conductor Socket Sealing Boot
	1118368	Electric Parts Kit
A.	1701420	Cap Screw - 5/16" x 2"
B.	1700400	Self-Tapping Screw - 3/8" x 1"
C.	1701434	Cap Screw - 3/8" x 1 1/2"
D.	1702667	Cap Screw - 3/8" x 2 1/4"
F.	1702701	Cap Screw - 1/2" x 3"
H.	1703210	Cap Screw - 5/16" x 3/4"
J.	1700377	Cap Screw - 1/4" x 1 1/2"
K.	1701045	Cap screw - 5/16" x 3/4"
L.	1700427	Flat Washer - 1/4"
M.	1700434	Lock Washer - 3/8"
N.	1700429	Flat Washer - 3/8"
P.	1702114	Flat Washer - 1/2"
R.	1701543	Nylon Lock Nut - 1/4"
T.	1700419	Nylon Lock Nut - 5/16"
U.	1702668	Top Lock Nut - 3/8"
V.	1700407	Hex Nut - 3/8"
W.	1700411	Hex Nut - 5/16"
Y.	1700413	Hex Jam Nut - 1/2"
Z.	1702115	Nylon Lock Nut - 1/2"

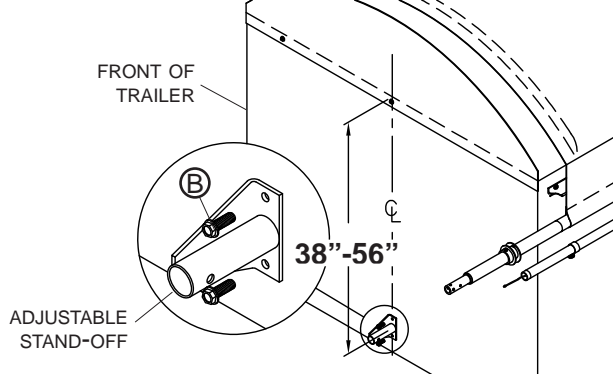
Semi Grain Trailer





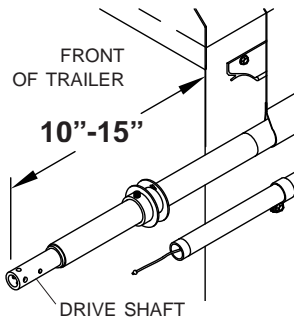
Item	Part #	Description
1.	1110401	Universal Cable Return Housing
2.	1110375	Cable Replacement Kit
3.	1702585	Extension Spring - 1" x 38"
4.	1702587	End Plug - 1 1/2"
5.	1110402	Spring Tray
6.	1702586	End Plug - 1 1/2"
7.	1703661	Mounting Bracket for Switch
8.	1110312	Dual Conductor Wire - 6 Ga. 50'
9.	1701058	Cable Tie - 15"
10.	1109015	Dual Conductor Mounting Bracket
11.	1115385	Heavy-Duty Dual Conductor Plug
12.	1115386	Heavy-Duty Dual Conductor Socket
13.	1110411	Cable Return Hub
14.	1117497	Roll Tube Extension w/Drive Shaft
15.	1110408	Four Bolt Bearing Flange - 1 1/2"
16.	1110407	Motor Mount Bracket
17.	1703135	Tarp Stretcher Electric Motor
18.	1116892	Slide Arm
19.	1111435	Universal Cable Return
20.	1702583	Tube Clip - 1 7/16" x 3/4"
21.	1110410	Universal Cable Guide
22.	1110406	Swing Arm
23.	1110417	Adjustable Standoff
24.	1110415	Adjustable Slide Tube
25.	1701595	End Plug - 1"
26.	1100138	Roll Return End Plug - 2"
27.	1704573	Conductor Socket Sealing Boot
	1118368	Electric Parts Kit w/Rocker Switch
A.	1701420	Cap Screw - 5/16" x 2"
B.	1700400	Self-Tapping Screw - 3/8" x 1"
D.	1702667	Cap Screw - 3/8" x 2 1/4"
E.	1700371	Cap Screw - 3/8" x 3"
G.	1700378	Cap Screw - 1/2" x 3 1/2"
H.	1703210	Cap Screw - 5/16" x 3/4"
J.	1700377	Cap Screw - 1/4" x 1 1/2"
K.	1701045	Cap Screw - 5/16" x 3/4"
L.	1700427	Flat Washer - 1/4"
M.	1700434	Lock Washer - 3/8"
N.	1700429	Flat Washer - 3/8"
P.	1702114	Flat Washer - 1/2"
R.	1701543	Nylon Lock Nut - 1/4"
T.	1700419	Nylon Lock Nut - 5/16"
U.	1702668	Top Lock Nut - 3/8"
V.	1700407	Hex Nut - 3/8"
W.	1700411	Hex Nut - 5/16"

STEP 13: Locate adjustable stand-off on front of trailer 38" to 56" from top of trailer on center line. Mark and drill 5/16" holes and fasten with **B**.



NOTE: Swing arm must operate without interference. Locate adjustable stand-off to allow clearance for swing arm operation.

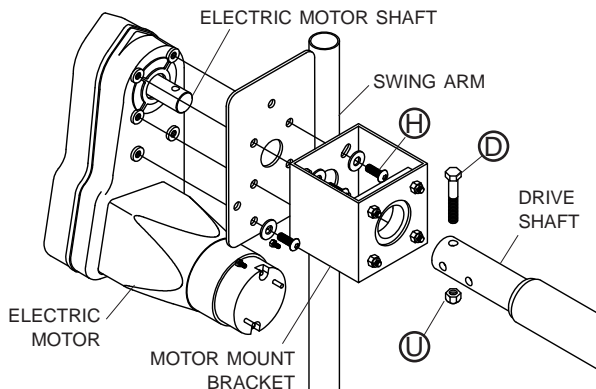
STEP 14: Extend drive shaft 10" to 15" past front of trailer as shown.



Rule of Thumb: Extend drive shaft at least 1" past any obstructions on front of trailer.

NOTE: Complete step 7 on page 3 to install the bearing flange, then proceed to step 15.

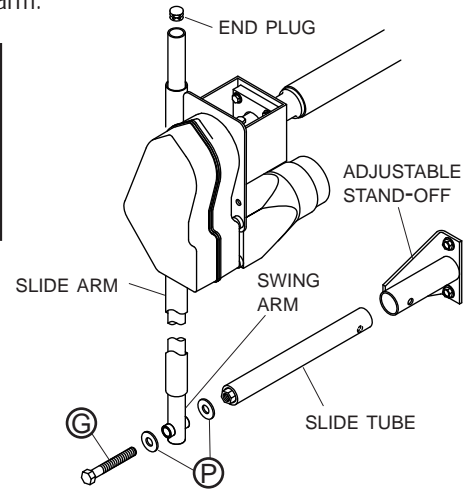
STEP 15: Mount electric motor to swing arm and motor mount bracket with six (6) cap screws **H**. Finger tighten.



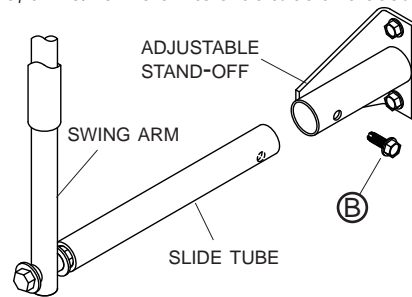
STEP 16: Slide assembly on to drive shaft, aligning holes in drive shaft and electric motor shaft. Install screw **D** and nut **U**. Tighten cap screws into electric motor and bearing flange.

STEP 17: Insert slide tube into adjustable stand-off. Insert swing arm into slide arm, fasten lower end of swing arm to slide tube with **G** and **P**. Insert end plug into end of swing arm.

NOTE: Shorten adjustable slide tube if required, to allow swing arm to bolt to slide tube.

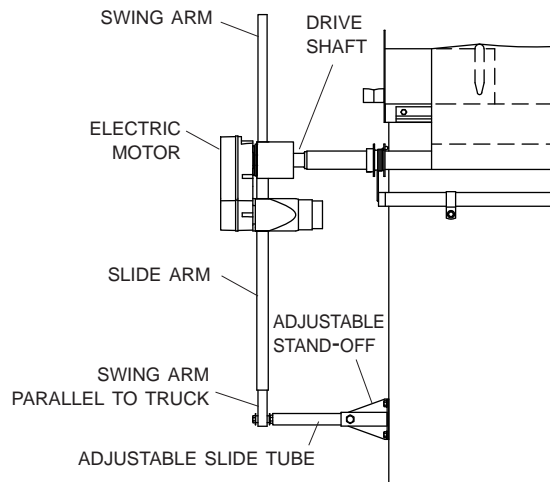


STEP 18: Square tarp with box. Using hole in adjustable stand-off as guide, drill 5/16" hole into slide tube and secure with **B**.



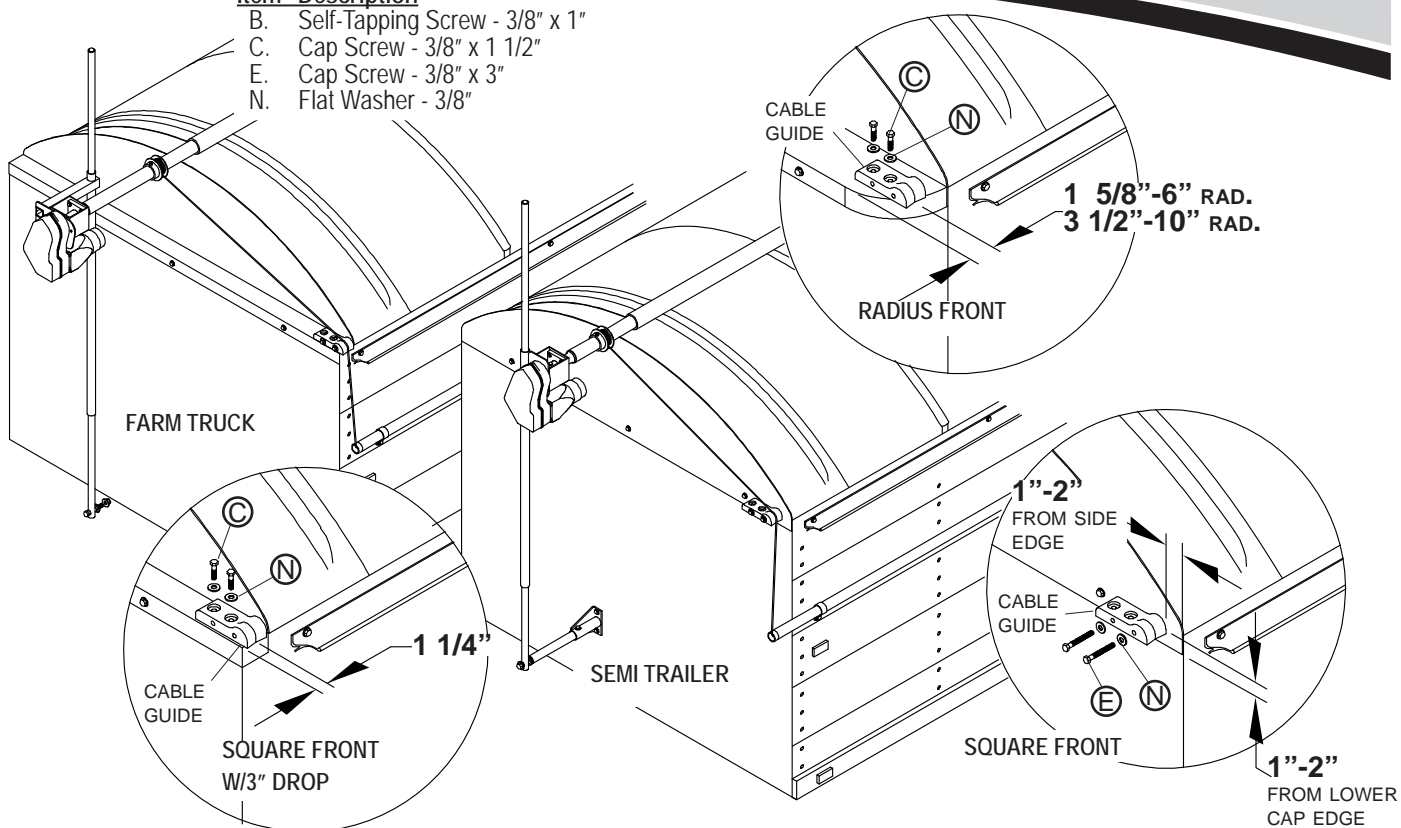
NOTE: Swing arm **MUST** be parallel to front of truck. Adjust drive shaft forward or backward to align arm.

STEP 19: Install U-clamps on roll tube per owner's manual.

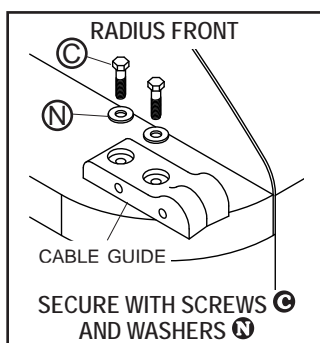
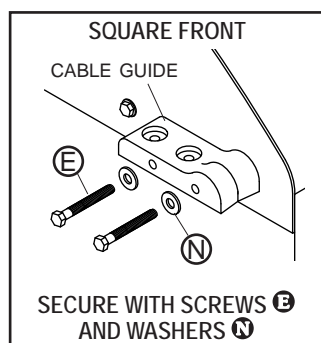


NOTE: If swing arm projects out of slide arm when tarp is closed, cut swing arm flush with top of motor mount bracket to reduce possibility of swing arm striking another object. Close tarp under latchplate before cutting.

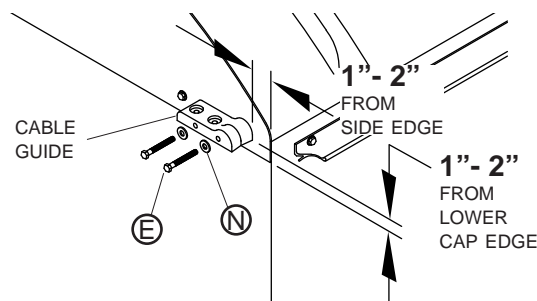
- | Item | Description |
|------|--------------------------------|
| B. | Self-Tapping Screw - 3/8" x 1" |
| C. | Cap Screw - 3/8" x 1 1/2" |
| E. | Cap Screw - 3/8" x 3" |
| N. | Flat Washer - 3/8" |



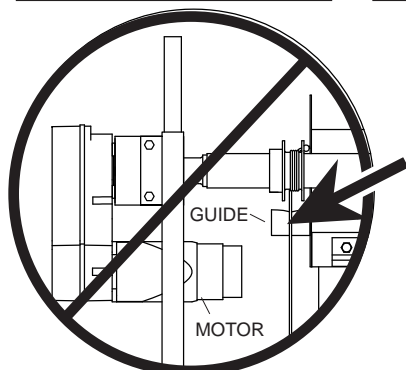
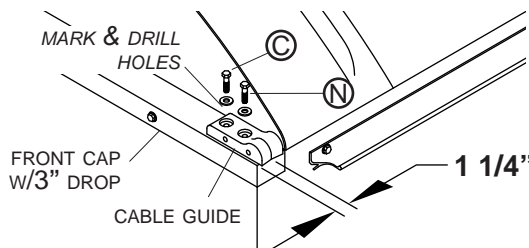
STEP 20: Front Cable Guide for Semi: Position cable guide on square front or radius front trailer at dimensions shown above. Mark and drill 5/16" holes. Cut threads with screw **B**. Secure with hardware indicated below.



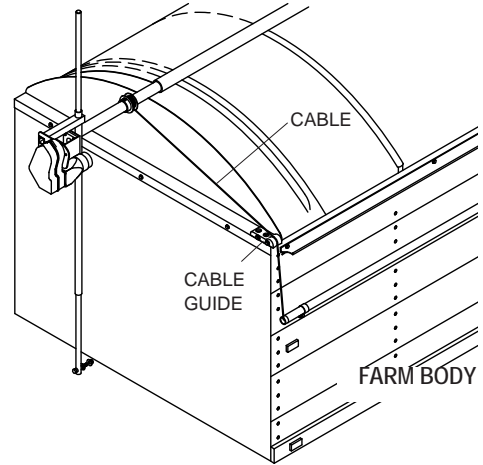
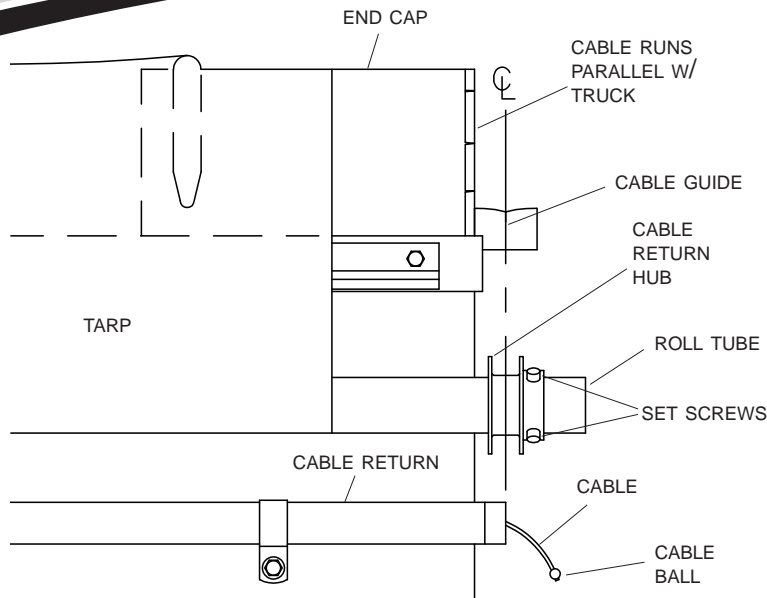
STEP 21: Rear Cable Guide for Farm Body or Semi: Position cable guide on rear of trailer. Mark and drill 5/16" holes. Cut threads with screw **B**. Secure with screws **B** and washers **N**.



STEP 22: Front Cable Guide for Farm Body: Position cable guide on front of trailer. Mark and drill 5/16" holes. Cut threads with screw **B**. Secure with screws **C** and washers **N**.

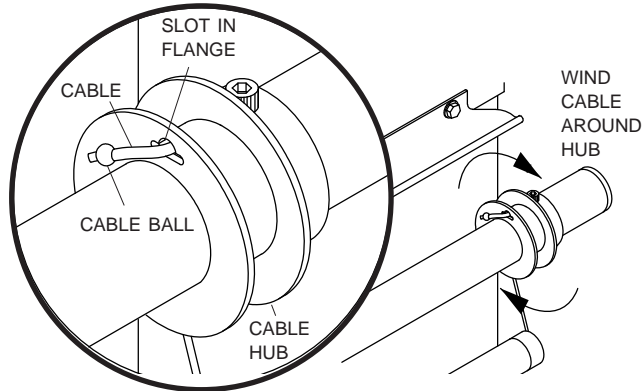


NOTE: Semi Trailers:
 Cable guide location must not interfere with operation of electric motor on front cap. Position cable guide to provide clearance for electric motor operation.

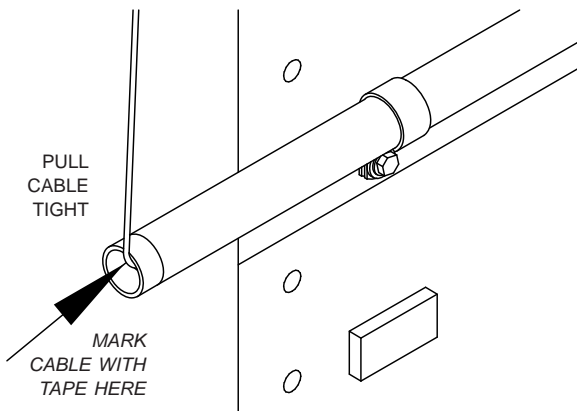


NOTE: When attaching cable to cable return hub, the cable must run parallel with the back of the truck for the system to operate correctly.

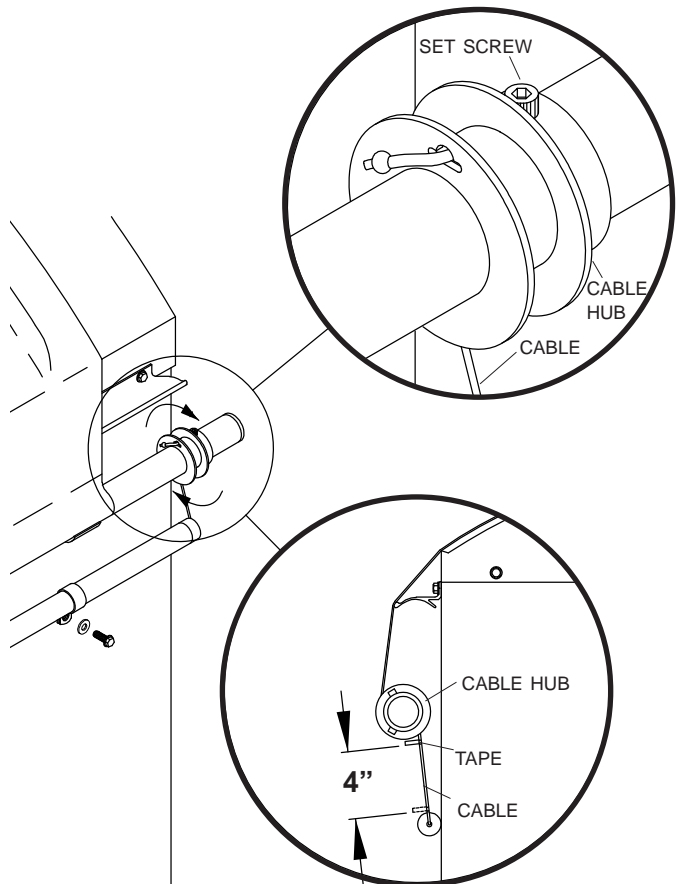
STEP 23: Cable Installation: Slide ball on end of cable through slot in flange on cable hub. Wrap cable around hub in direction shown below.



STEP 24: Pull cable tight and mark cable with tape where cable exits cable return.

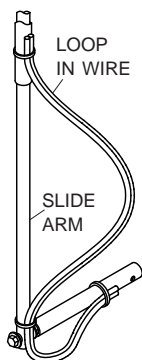


STEP 25: Adjust Cable Tension: Turn cable hub to wrap four more inches of cable around hub. Tighten both set screws. This is done to add tension (preload) to the cable.



STEP 26: Repeat steps 23 to 25 on front end of trailer.

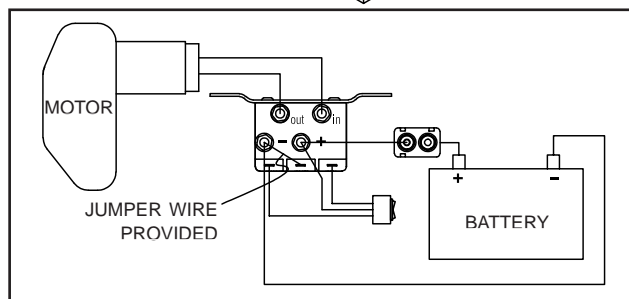
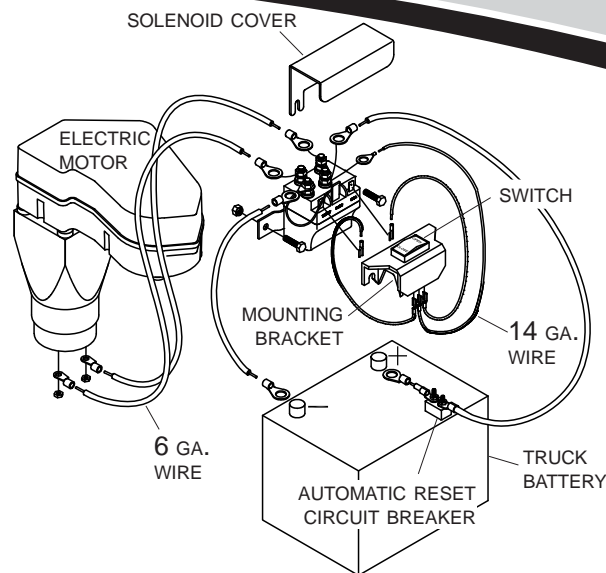
STEP 27: Mount solenoid in suitable location - ventilated area near battery is ideal. Run 6 ga. wire from motor to solenoid and from power supply to solenoid as shown. Run 14 ga. wires from solenoid to switch and mount switch in area convenient to operator. Mount switch inside or outside cab. Mount with bracket, or install directly into dash panels.



WIRING TIPS

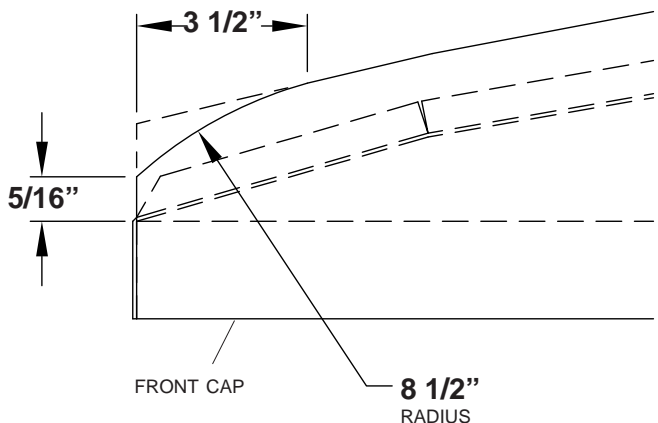
- ▶ Pick up power at battery or terminal block. Use only 6 ga. wire or larger when connecting to power supply and motor.
- ▶ Do not place wiring in areas where wire could be pinched or cut during operation. Be sure to leave enough loop in wire at slide arm (see drawing).
- ▶ If switch is running system backwards, wires at motor can be reversed to switch operation of system.
- ▶ System will run only while momentary contact switch is manually held in open position.

NOTE: Mount circuit breaker as close as possible to power supply.



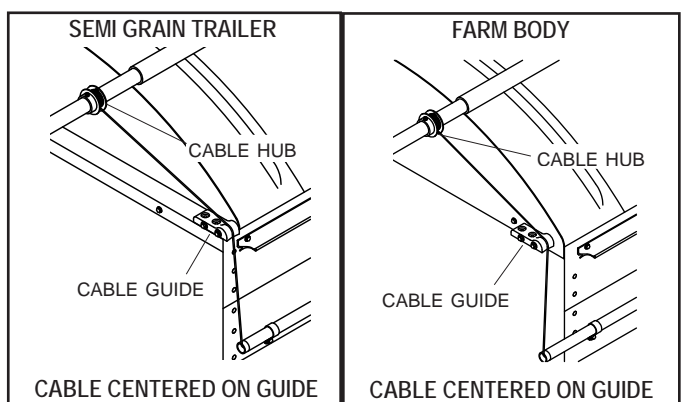
Final Adjustments

STEP 28: Semi Trailers: Aluminum front cap may require some modifications to ensure smooth operation of roll tube over corners of the cap. Accomplish this by grinding both cap corners or by sawing corners with a saber saw. See Illustration below.



STEP 29: Cable Alignment: Check cable alignment after wiring motor and during first operation. Cable proceeding from cable hub must line up with center of cable guides. To adjust, loosen set screws on cable while keeping tension on the cable. Reposition cable hub and re-tighten set screws.

CAUTION
Adjust cable alignment with tarp hanging below latchplate. Do not adjust cable alignment while tarp is under tension, or injury could occur.



MORE QUALITY PRODUCTS FROM SHUR-CO®

- **Genuine Replacement Tarps**
- **Genuine Replacement Parts**
- **Agriculture Products**
 - Value Series Shur-Lok®
 - Super Duty Shur-Lok®
 - Shur-Lok® Junior
 - Premium Belt 'n Ratchet
 - Cable-Lok™
 - Turning Point™ Bow System
- **SMARTrailer™ Accessories for Agriculture Products**
 - SMART2™ Remote
 - SMART1 +™ Remote
 - SMARTransmitter®
 - Shur-Link Pro™
 - 4500 Series HD Electric
 - ProTrap® Hopper Opener
 - LiteALL™ Work Lights
 - Cable-Lok™ Electric Upgrade
 - Electric Turning Point™ Bow System
 - Value Series Electric
 - Solar Power Pack
- **Flatbed Products**
 - ShurTite™ Retractable Tarps
 - Lumber Tarps
 - Steel Tarps
 - Coil Tarps
 - Cargo Control
- **Construction Products**
 - Super Duty Shur-Lok®
 - Premium Belt 'n Ratchet
 - Shur-Trak II™
 - Cover-Pro II®
 - UltraSteel Econo-Pull
 - UltraSteel Arm - Basic
 - UltraSteel Arm - Premium
 - Arm-Matic™
 - Turning Point™ Bow System
 - IronSide™ Side Arm System
 - DuraPull™ Tarp System
- **SMARTrailer™ Accessories for Construction Products**
 - SMARTransmitter®
 - 4500 Series HD Electric w/Gate Flex™
 - Shur-Trak II™ Electric Upgrade
 - Cover-Pro II® Electric Upgrade
 - Electric Turning Point™ Bow System
 - Solar Power Pack
- **Custom Products**
 - Fitted Truck Covers
 - Flat Utility Tarps
 - Bean Drill Covers
 - Hopper Extension Covers
 - Auger Boots
 - Shur-Lok® Tarp Cords

ENGINEERED TARPING SOLUTIONS

