



## SPRING ARM WITH CHAIN INSTRUCTIONS

Use these instructions to install a spring arm with chain. Read and follow these instructions along with the standard instructions carefully before installing or using ROLTEC® Electric Tarp Conversion.

**NOTICE TO INSTALLER:** Even if familiar with product, read instructions prior to installation as improvements may be made without notice. Always handle components with care. If you have questions or problems, call customer service. When done, these instructions must be given to the consumer.

**NOTICE TO CONSUMER:** Before using this product, read operating, maintenance and safety sections. Save these instructions for future reference.



### **PREPARATION**

Unpack spring arm with chain components at rear of trailer and clean mounting location.

#### **TOOLS NEEDED**

- 9/16" Wrench
- 9/16" Socket
- Drill with 5/16" and 13/32" bits
- Ft-lbs torque wrench
- Hammer
- · Protective eyewear
- · Marking pen
- · Tape measure
- Ladder

NOTE: Hardware appearance and components may vary.

#### STAINLESS STEEL HARDWARE ONLY

▲ CAUTION: To avoid galling of stainless steel hardware, use anti-galling spray, grease or lubricant on threads and avoid high speed when fastening. Do not use impact tools for stainless steel hardware.

- A. Turn 3/8" x 1" non-stainless steel self-threading bolt in 5/16" hole to cut threads, then turn back out.
- B. Turn 3/8" x 1" stainless steel bolt in for attachment. When possible, use stainless steel nuts and washers with these bolts.

### SAFETY INFORMATION

- Be aware the front and rear arms move during operation. Ensure people and objects are clear of tarp system before and during operation.
- Do not use front or rear arms as a step.
- Always use caution when operating tarp.
- Disconnect power before servicing system or electrical components.
- Ensure tarp is fully open before unloading or loading.
- Do not operate tarp with box hoisted in elevated position.
- If tarp is covered with snow, remove before operating.
- End caps must be free from commodity that may be piled on them. Commodity should not be piled higher than end caps.
- Ensure tarp system is fully open or fully closed before operating vehicle at highway speeds.
- Instruct everyone who will operate this tarp on the proper procedures.
- Do not directly spray electric motor or connections with a pressure washer.

## REMOVING REAR RETURN SYSTEM

A. Move tarp to position with least amount of tension on return system. Uninstall current return system connected to rear of trailer.

▲ WARNING: When removing return system under pressure, always use caution and assistance from another person. Before attempting to remove return system, always move arm to position with least amount of tension.

IMPORTANT: Disconnect power before servicing system or electrical components.

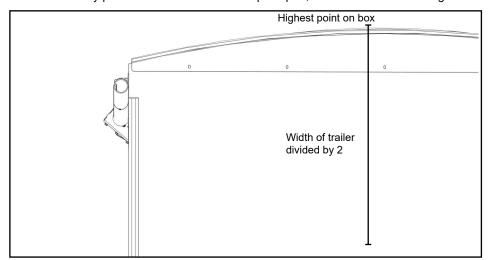
### 1: INSTALL MOUNTING PLATE

#### IMPORTANT: Disconnect power to trailer before drilling any holes.

A. Measure width of trailer and divide by 2. Measure this distance down from highest point of box (i.e. end caps). This is the approximate height where rear arm mounting plate should be installed.

**Tip:** When heaped loads are 18" or less, use pile height as highest point on box.

NOTE: Arm may protrude above box when tarp is open, check for clearance height.



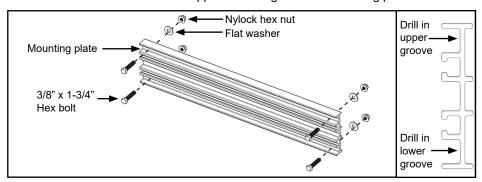
B. At previously recorded height, center mounting plate horizontally then mark hole locations on mounting plate.

**NOTE:** Attach mounting plate to support braces whenever possible.

#### IMPORTANT: Before drilling any holes, ensure arm has a clear path to operate.

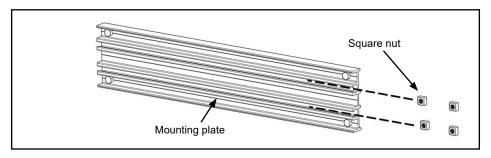
C. Drill (4) 5/16" holes at marked locations. Attach mounting plate to box wall by turning 3/8" x 1" self-threading bolt to cut threads, then turn back out. Secure using (4) 3/8" x 1-3/4" hex bolts, when possible use flat washers and nylock hex nuts on back side

**NOTE:** Ensure holes are drilled in upper or lower grooves in mounting plate.



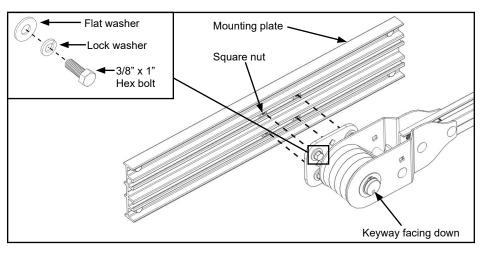
# 2: MOUNTING REAR ARM

A. Slide (2) square nuts into top and bottom channel.



B. Attach rear arm with (4) 3/8" x 1" hex bolts, lock washers and flat washers to square nuts in mounting plate. Center rear arm on mounting plate. Ensure keyway in pivot shaft is pointed down.

**NOTE:** If required, a pivot mount and/or slant bracket may be used to provide additional clearance between arm and trailer, ladder, steps, etc.



**NOTE:** For reversed roll, remove and flip springs. Ensure spring tabs point in direction of travel.

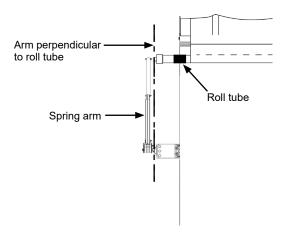
# 3: VERTICAL ALIGNMENT OF REAR ARM

NOTE: Arm is under pressure. Requires two people for safe installation.

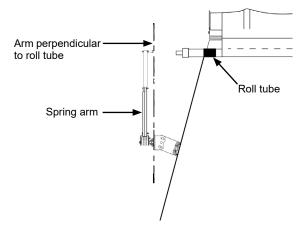
A. Lift rear arm vertically to square arm to roll tube. Ensure path is free of obstructions.

NOTE: Roll tube may require an extension or trimming in order to achieve proper alignment.

#### **VERTICAL WALL BOX**



#### **SLANT WALL BOX**



## 4: INSTALLING CARTRIDGE

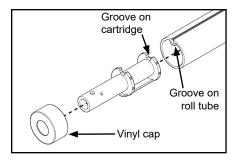
To install cartridge, perform one of the following:

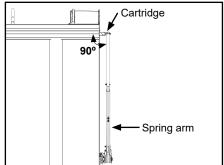
#### 3" ALUMINUM ROLL TUBE

A. With grooves aligned, slide cartridge into end of roll tube then vinyl cap onto cartridge shaft and roll tube.

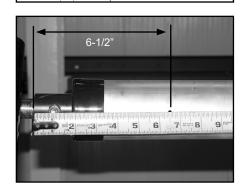
**NOTE:** Cartridge shaft should protrude out of roll tube with vinyl cap in place.

B. Raise arm to cartridge in roll tube and adjust cartridge in or out of roll tube until cartridge placement provides a 90° angle from arm to roll tube. Then lower arm to resting position.

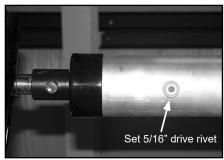




C. Measure along side of roll tube, 180° opposite of rope channel, and mark 6-1/2" in from beginning of cartridge.



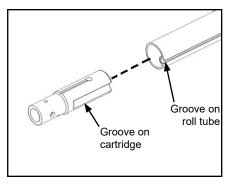
- D. Drill 5/16" hole through roll tube and first wall of cartridge inside of tube.
- E. Insert 5/16" x 9/32" drive rivet. Ensure rivet is fully seated. Set with hammer.
- F. Proceed to Step 5 for remaining installation.



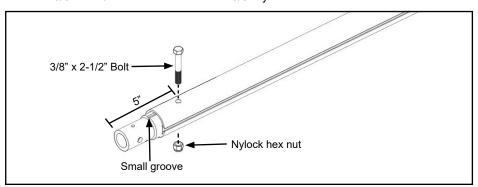
# 4: INSTALLING CARTRIDGE (Continued)

#### 2" ALUMINUM ROLL TUBE

A. With grooves aligned, slide cartridge into end of roll tube.



- B. Use small groove on cartridge as guide to measure along side of roll tube and mark 5" in from end of cartridge, then drill 13/32" hole through first layer of roll tube.
- C. Push cartridge into previously selected location of roll tube using hole as guide to drill through cartridge and second layer of roll tube.
- D. Insert 3/8" x 2-1/2" bolt and secure with 3/8" nylock hex nut.



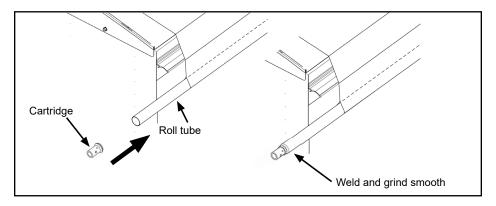
E. Proceed to Step 5 for remaining installation.

# 4: INSTALLING CARTRIDGE (Continued)

#### 2" STEEL ROLL TUBE

- A. Pull end of roll tube out away from tarp and trailer prior to welding (heat and splatter from welding can damage tarp and trailer).
- B. Insert swaged end of cartridge into roll tube. Ensure cartridge is aligned with roll tube for smooth operation.
- C. Then weld all around. Let cool and grind weld smooth.

**Tip:** For rust prevention, apply rust resistant paint to exposed metal from welding and grinding.



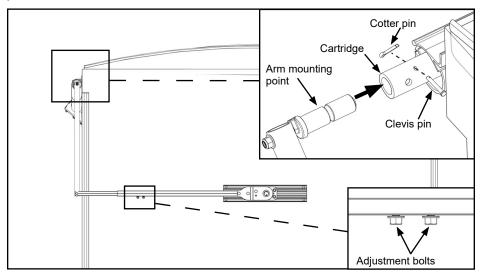
D. Proceed to Step 5 for remaining installation.

## 5: INSTALLING REAR ARM

A. Loosen (2) rear arm adjustment bolts.

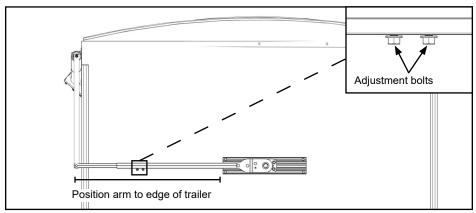
NOTE: Arm is under pressure. Requires two people for safe installation.

B. Lift arm and insert arm mounting point into cartridge. Secure with clevis and cotter pins.



C. Adjust length to edge of trailer and tighten (2) adjustment bolts with 9/16" socket.

▲ CAUTION: Keep arm length as close to edge of trailer as possible. Do not overhang more than 1-1/2" past trailer.



- D. Torque 3/8" x 1" adjustment bolts to 32 ft-lbs.
- E. Connect tarp electrical system, test operation and adjust arm length if necessary.

## INSPECTION AND MAINTENANCE

- Periodic preventive maintenance should be practiced. Inspect tarp system often for proper operation.
- Periodically inspect rear arm components and replace worn parts as needed.
- Always use genuine Agri-Cover, Inc. replacement parts if repairs are needed.
- Periodically check the tightness of mounting bolts.



Agri-Cover, Inc. Customer Service Dept 3000 Hwy 281 SE Jamestown, ND 58402 Phone: 800-233-4655

Hours: 8:00 am - 5:00 pm CST Monday through Friday, except Holidays