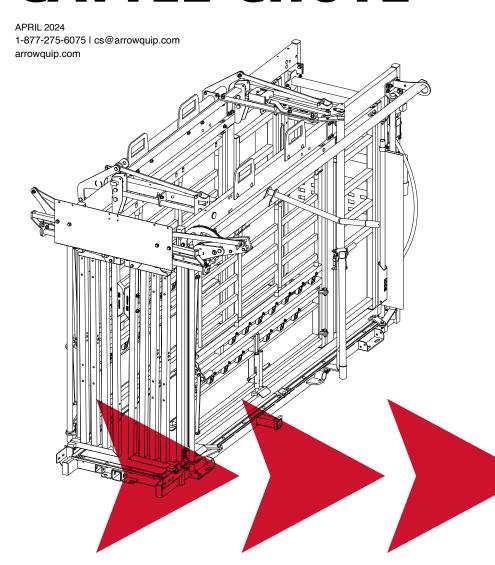


# PRODUCT MANUAL

# ARROWLOCK 88 SERIES CATTLE CHUTE



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#### SAFETY PRECAUTIONS

PLEASE FOLLOW ALL SAFETY INSTRUCTIONS PROVIDED IN THIS MANUAL BEFORE OPERATION. ARROWQUIP DOES NOT ACCEPT RESPONSIBILITY FOR ANY ACCIDENTS OR INJURY WHEN THIS SAFETY MANUAL HAS NOT BEEN READ IN FULL AND KEPT WITH THE PRODUCT AT ALL TIMES. ANY HARM TO THE ANIMAL OR INJURY TO THE OPERATOR WHICH OCCURS DUE TO HOW THE PRODUCT IS OPERATED, OR RESULTING FROM A LACK OF SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE OPERATOR.

All farm machinery and equipment are potentially dangerous. Careless use of any Arrowquip livestock equipment may cause injury or damage to persons, cattle, or property. Arrowquip has taken precautions in the design and manufacturing of this product to ensure that it is safe and user-friendly. Therefore, the user must assume all responsibility and risk associated with the possession and use of the cattle squeeze chute.

#### SAFETY GUARANTEE

Arrowquip is committed to creating safe cattle management experiences. With this commitment to safety, in the event any purchaser of Arrowquip equipment is **physically injured while operating the equipment AND requires medical treatment**, Arrowquip will provide a **full refund** of the equipment purchase price and the purchaser will be allowed to keep the equipment. Equipment must be warranty-registered, and the purchaser must read and practice the contents and recommended maintenance and procedures outlined herein to be eligible.

Arrowquip also commits to repair or replace any part of the equipment that is defective, malfunctions or otherwise falls under normal use and inside the equipment's warranty terms. If the equipment requires replacement, it shall be replaced with an identical model or a newer model of the equipment. For further details, visit arrowquip.com/promise.



#### WARNING: READ BELOW BEFORE OPERATION

Ensure the operator understands the contents of this manual before using the cattle squeeze chute.

- 1. DO NOT wear loose-fitted clothing.
- Ensure the cattle squeeze chute is on a firm, level, dry surface that is free of rocks and other trip hazards. A level concrete pad flush with the ground and with the chute bolted to the concrete is strongly recommended.
- DO NOT enter the vet cage until the animal is secured in the head gate and the rump bar has been placed so that the cow cannot back up.

- DO NOT stand in front of the head gate while operator is moving the cattle through the squeeze chute.
- 5. DO NOT ALLOW CHILDREN UNDER THE AGE OF 18 NEAR AN OPERATING MACHINE.
- Follow safe cattle handling procedures in other areas of the yard so that cattle are more docile in the chute.
- DO NOT make any modifications to Arrowquip equipment. Non-factory modifications to the equipment can reduce the safety for the operator & livestock, and void warranty.

#### **RISK ASSESSMENT**

Conduct a risk assessment on procedures for which the cattle squeeze chute used and establish a safe work procedure.

- Ensure all users of the equipment have been inducted and comply with safe working procedure.
- Please ensure that there are NO large or hazardous objects inside the equipment that may cause injury to the animal or operator, or may cause the equipment to malfunction.
- 3. Make sure that your equipment has been cleared of ALL livestock after use.
- Some chemicals and medicines can damage powder coat. Take all precautions and wash after use.
- 5. Maximum towing speed 50km/30mph.
- 6. Maintain tire pressure of 80 psi.
- 7. Check wheel lug nuts after 10, 25, 50 miles of use, ensure torqued to 120 ft. lbs.
  - a. This applies to first-time use and wheel changes.

#### OPERATING THE ARROWLOCK CATTLE CHUTE



# ENSURE ALL CHUTE FUNCTIONS AND ADD-ONS ARE WORKING PROPERLY BEFORE OPERATING.

- 1. Ensure the head gate and all access points are closed before the animal enters the chute.
- 2. Open the tail gate for the animal to enter the squeeze chute enclosure.
- 3. Close tail gate.
- 4. Open head gate slightly more than the neck size of the animal to tempt the animal to stick its head through. When the neck of the animal is in the correct position, quickly close the head gate securely on the animal's neck.
- 5. If required, side squeeze animal and engage head restraint to restrain further movement.
- If the animal applies excessive pulling pressure on the head gate, it is recommended to use the anti-backing bar behind cattle rump.

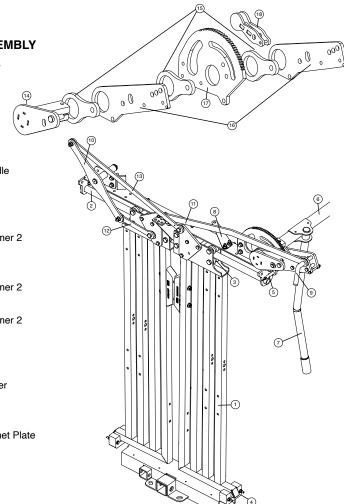


CONFIRM ANIMAL IS SECURELY HELD BEFORE CARRYING OUT ANY HUSBANDRY WORK.

#### **3E ARROWLOCK 88 SERIES HEAD GATE**

Arrowquip squeeze chutes are designed to ensure the safety of both the animal and operator. **With proper maintenance and lubrication, the head gate <u>will not jam under pressure.</u> However, in the rare event that an animal becomes stuck or hip-locked, the following steps can be taken to easily release the animal.** 

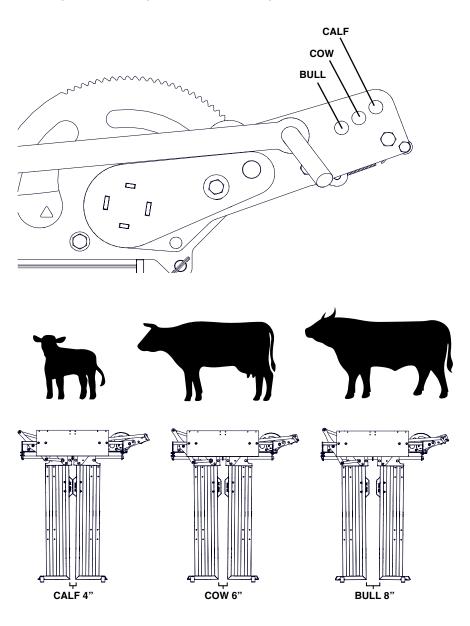
- 1. Position yourself between the chute and the headgate handle.
- Give the headgate handle a firm hit to release the locking mechanism. It is important to have your body positioned between the handle and the chute; due to the pressure on the lock when it releases the handle may jerk upward.
- 3. Continue opening the door fully and allow the animal to exit the chute.



- 1. 3E Head Gate Door
- 2. Head Gate Track
- 3. Head Gate Roller
- 4. Glide Blocks
- 5. Shipping Pin
- 6. Control Tube
- 7. 88 Head Gate Handle
- 8. Shipping Bracket
- 9. 88 Arrowlock Quick Change Pin
- 10. 88 Arrowlock Hammer 2
- 88 Arrowlock Door Drive Link
- 88 Arrowlock Hammer 2
   Bottom Link
- 88 Arrowlock Hammer 2
   Top Link
- 14. 88 Arrowlock
   Drive/Release
- 15. 88 Arrowlock Spacer
- 16. 88 Arrowlock
  Drive Hammer
- 17. 88 Arrowlock Ratchet Plate
- 18. 88 Arrowlock Pawl

#### **HEAD GATE ADJUSTMENT SETTINGS**

The Arrowlock 88 series head gate includes 3 drive settings to optimize head gate holding force, depending on the size of animal you are working. These settings change peak force and minimum gap between head gate doors. The three settings Calf, Cow and Bull, are shown below.



#### ADJUSTING ARROWLOCK 88 SERIES HEAD GATE

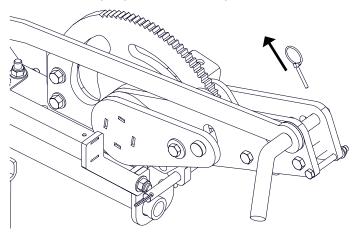
#### **REQUIREMENTS:**

- 1 person

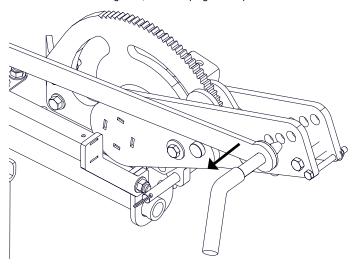
#### ADJUSTMENT:

1 Close Head Gate.

 $oldsymbol{2}$  Remove Retaining Ring Pin from Quick Change Pin.



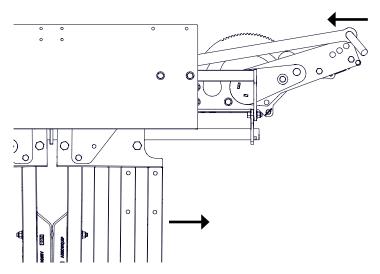
 $oldsymbol{3}$  Remove Quick Change Pin, while keeping link on pin.



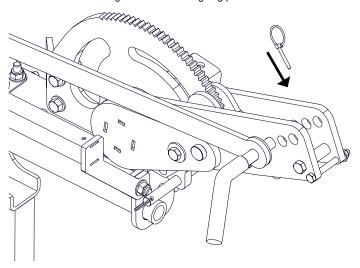


CAUTION: LINK WILL FAILL IF PIN IS REMOVED FROM LINK

 $oldsymbol{4}$  Adjust link position over desired hole setting by moving head gate door by hand.



 $\boldsymbol{5}$  Reinstall Quick Change Pin and retaining ring pin.



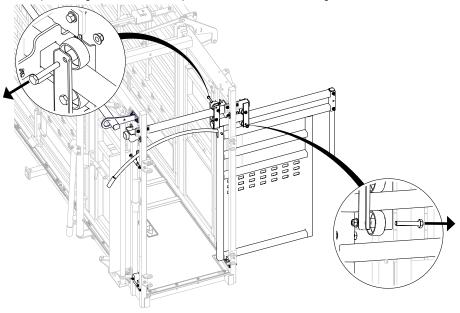
#### **ROLLING DOOR CONVERSION**

#### **REQUIRED TOOLS:**

- 2 people - 2 x \(\frac{9}{16}\)" wrench - 2 x \(\frac{34}{1}\)" wrench

#### INSTALLATION:

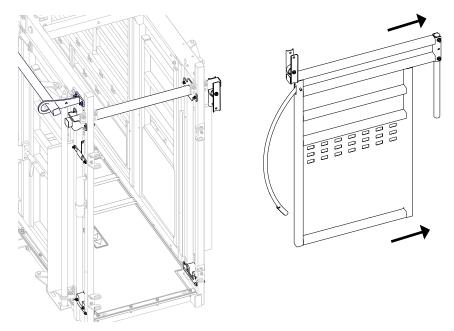
1 Open Rolling Door and remove top and bottom wheel from working side.



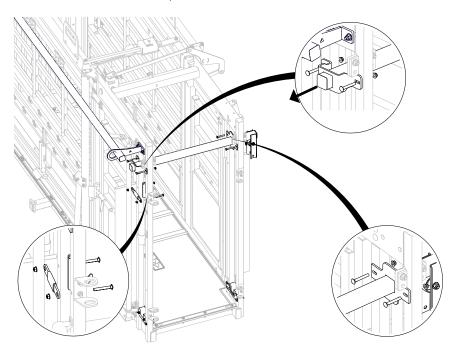


**CAUTION: DOOR WILL SWING DOWN** 

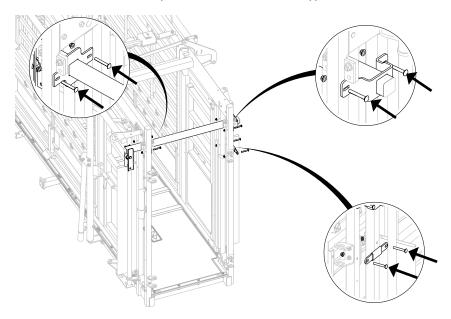
# **2** Remove the Rolling Door completely.



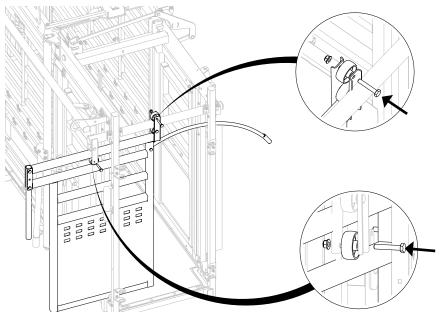
 ${f 3}$  Remove the side bracket, track plate, and door handle slider as shown.



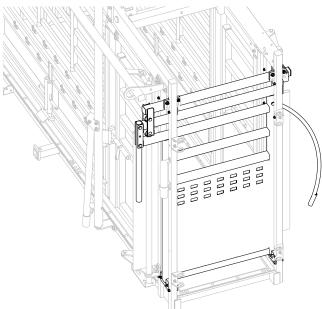
 $oldsymbol{4}$  Install the side bracket, track plate, and door handle slider on opposite side.



 $\boldsymbol{5}\,$  Slide the door into the track and install top and bottom wheels.



6 Close door.

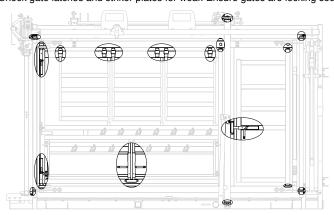


#### RECOMMENDED MAINTENANCE

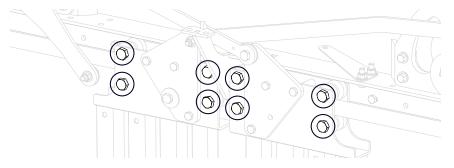
All Arrowquip products are made with precision parts to require minimal maintenance. However, regular maintenance will keep your equipment running smoothly and safely.

#### **REGULAR MAINTENANCE (EVERY 6 MONTHS)**

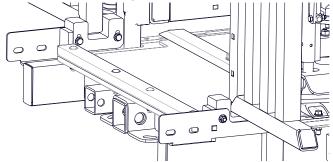
- Inspect the entire unit. Ensure all moving components are free of debris and functioning properly. Use proper cleaning and troubleshooting steps if necessary.
- ✓ Lubricate Slam Latches and door hinges with WD-40 Dry Lube.
- ✓ Check gate latches and striker plates for wear. Ensure gates are locking securely.



- ✓ Inspect the head gate.
  - a. You should feel the head gate rollers moving when you open the head gate. The rollers should be tight enough to be moved by hand, but not over-tight to cause the rollers to bind. If rollers are binding, loosen bolts with 15/16" wrenches.



b. Clean bottom head gate door track to prevent dirt-build-up.



✓ Clean the chute floor. Excess build-up of manure or dirt inside chute can cause the squeeze and head gate to malfunction.



#### WHEN NECESSARY

- ✓ Clean the unit to remove excess build-up or dirt.
- ✓ Lubricate the head gate lock.
  - a. Use WD-40 on all connection points.

#### NOTE: YOU CAN USE GREASE ON THE HEAD GATE TEETH

#### TROUBLESHOOTING GUIDE

If you have a problem with your Arrowlock Cattle Chute, please consider the following tips or call us at 1-877-275-6075.

#### **HEAD GATE**

- 1. Make sure the unit is situated on level ground or base.
- 2. Make sure head gate door tracks are clear of debris.
- Keep floor clean. Excess build-up of manure or dirt inside the chute can cause the squeeze and head gate to malfunction.
- 4. Ensure there is no tension on the head gate lock. When using the head gate, you should hear the lock clicking. If you don't hear the click:
  - a. Ensure Arrowlock Assembly bolts are not overtightened.
  - b. Ensure pivot points and locks are properly lubricated.
  - c. Ensure the spring is tight and installed properly.
- Check nuts and bolts on all moving parts to ensure they are tightened correctly and are not binding.
- 6. All pivot points should be lubricated as needed with WD-40 Dry Lube.

#### **SQUEEZE CHUTE**

- Check nuts and bolts on items and ensure that they are tightened correctly and are not binding.
- 2. Lock Box and pivot points should be lubricated as needed with WD-40 Dry Lube.

# ADD-ONS MAINTENANCE AND SAFETY PRECAUTIONS

#### 4TH GENERATION HEAD HOLDER

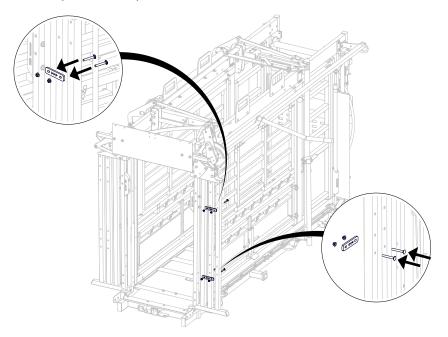
For complete information, read the 4th Generation Head Holder manual.

#### REQUIRED TOOLS:

- 2 people - %6" wrench - 34" wrench

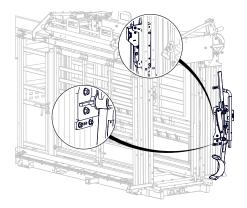
#### **INSTALLATION:**

1 Install top and bottom stops to the slots in the Head Gate.

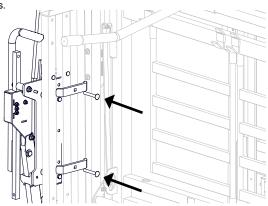


NOTE: DO NOT HOLD THE BOTTOM PLATE ON THE HEAD HOLDER WHEN ADJUSTING.

2 Align the rear Head Holder tube between the Head Gate rails, resting the Head Holder on the stop.



3 Loosely fasten on rear brackets.



4 Lift the Head Holder to desired position and tighten brackets.

#### Safety Precautions:

✓ Ensure the Head Holder remains open until required to hold the animal's head.

#### Maintenance:

- 1. Add grease through the grease nipples as needed.
- 2. Every 6 months:
  - a. Check bolts to ensure they are tightened properly.
  - Spray brake cleaner on a rag and wipe the lock box shaft while opening and closing the head holder.

#### **LUG POSTS**

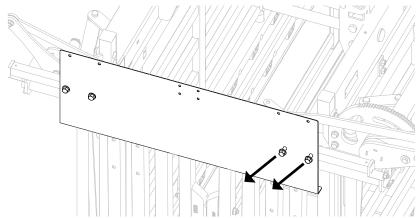
#### **REQUIREMENTS:**

- 2 people - 2 X %6" wrench - 2 x 3/4" wrench

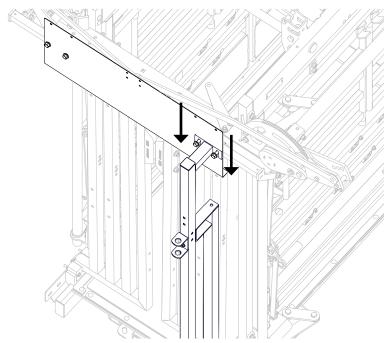
#### INSTALLATION:

#### NOTE: ONLY INSTALL ONE SIDE AT A TIME SO NAME SHIELD STAYS ON THE CHUTE

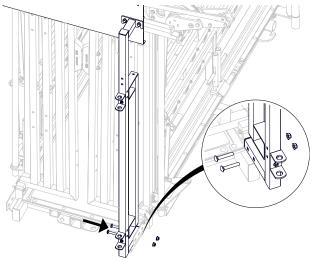
1 Loosen bolts holding decal name shield.



2 Slide Lug Post behind the bolt heads. Do not tighten.

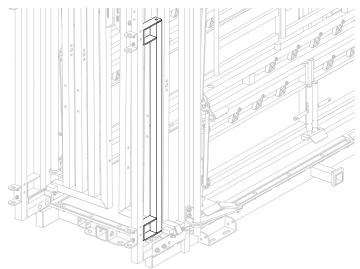


 $oldsymbol{3}$  Align bottom of lug post and carriage head bolts with the head towards the inside of the chute.



- 4 Tighten down all 4 bolts.
- **5** Repeat steps to install the post on the opposite side.

NOTE: REMOVE FILLER POST BEFORE INSTALLING HEAD HOLDER.



#### **BALK GATE**

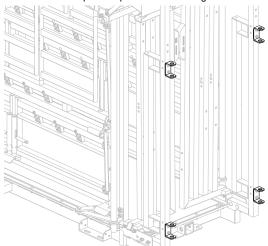
#### **REQUIREMENTS:**

- 1 person - 2 x 34" wrench - 2 x 1-1/6" wrench

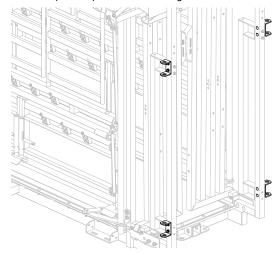
#### INSTALLATION:

NOTE: THE BALK GATE CANNOT BE INSTALLED WITHOUT LUG POSTS. FOR INSTALLATION, REFER TO LUG POST INSTALLATION.

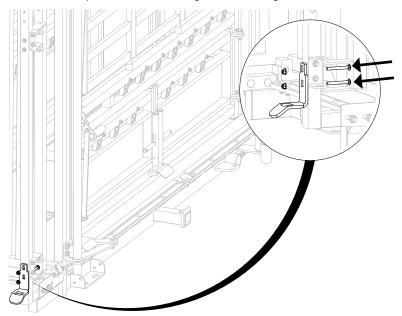
1 Remove front panel clips from front of Lug Posts.



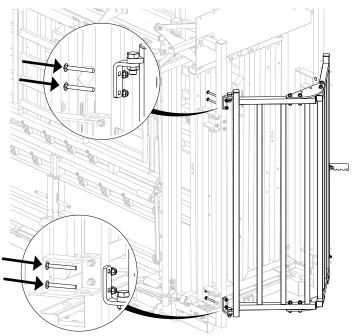
 ${f 2}$  Attach panel clips to the side of Lug Posts.



 ${f 3}$  Bolt on striker plate to the bottom of Lug Posts on working side.



4 Mount Balk gate and hinges to the front of offside Lug Post.



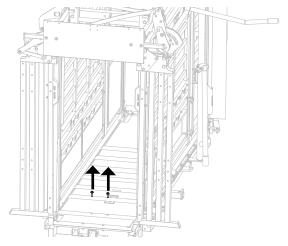
#### SHEETED STERNUM BAR

REQUIREMENTS:

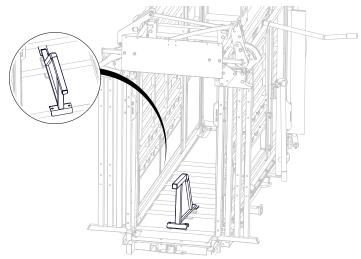
- 1 person - 3/4" wrench

#### INSTALLATION:

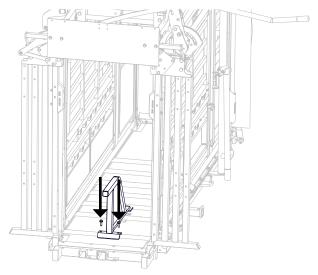
1 Remove stock bolts from front hold-down.



2 Insert rear of Sternum Bar into hold-down.



## 3 Bolt down front of Sternum Bar.





#### **SAFETY CHECK:**

✓ Ensure that the Sternum Bar is installed correctly before running cattle through the chute.

#### **Safety Precautions:**

✓ It is recommended you remove the Sternum Bar when working calves.

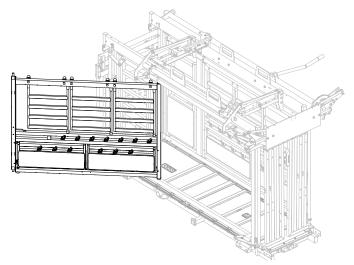
#### **CALF RESTRAINER BAR**

#### **REQUIREMENTS:**

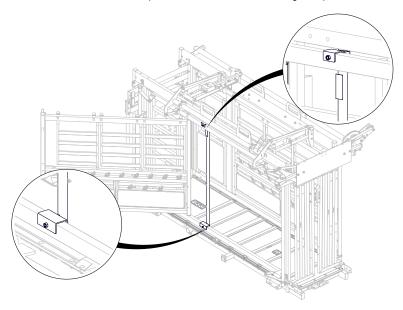
- 1 person

#### Installation:

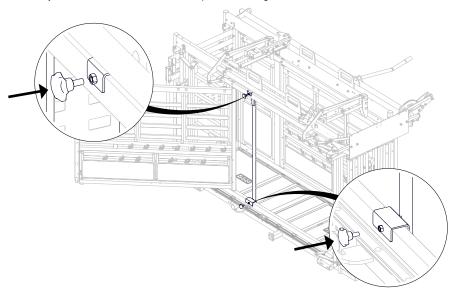
**1** Open the emergency exit doors.



 ${f 2}$  Insert Restrainer Bar so that top and bottom brackets are resting on squeeze frame tubes.



 ${f 3}$  Adjust Calf Restrainer Bar to desired position and tighten knobs.



#### WHEEL KIT

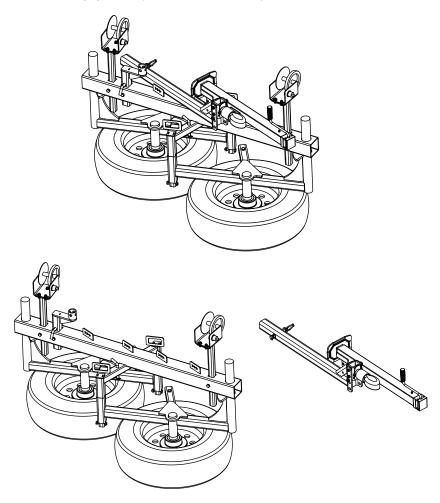
#### Setup and Use

#### **REQUIREMENTS:**

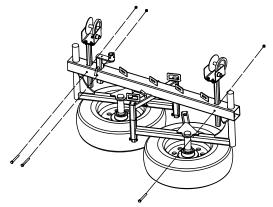
- 2 people - 2 x ¾" Wrench - Drill (optional)

#### UNPACKAGING:

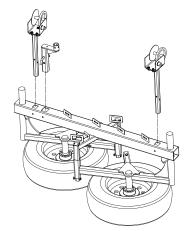
**1** Remove packaging from the jack and the hitch. Set the jack and hitch aside.



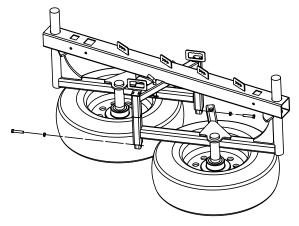
 ${f 2}$  Remove the nuts and bolts shown below and set aside.



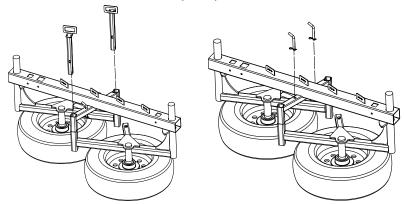
 $oldsymbol{3}$  Remove both wheel winches and the jack adapter.



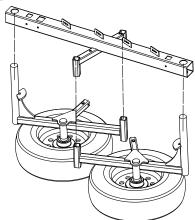
 $\boldsymbol{4}$  Remove the nuts and bolts shown below and set aside.



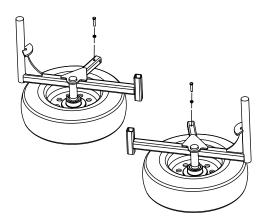
 $\boldsymbol{5}$  Remove the two stabilizer lock bars, R clips and pins to set aside.



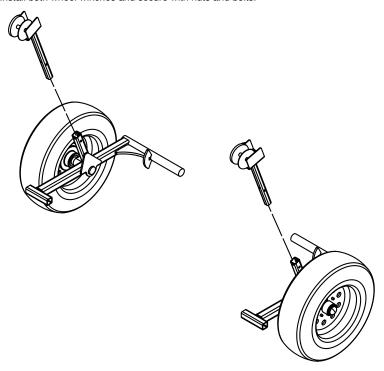
**6** Remove the shipping bar.



7 Remove the nuts and bolts shown below and set aside.

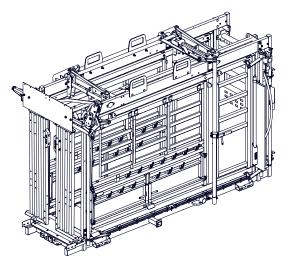


 $\boldsymbol{8}$  Install both wheel winches and secure with nuts and bolts.

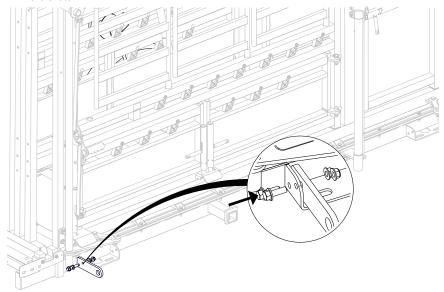


#### INSTALLATION:

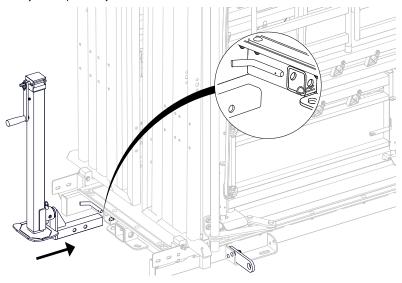
**1** Ensure the chute is on level, firm ground.



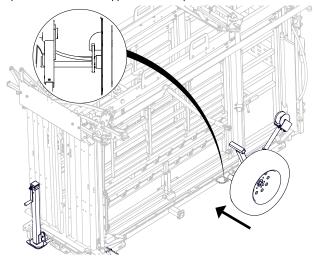
**2** If this is the first time using your 88 Wheel Kit, install winch hook plate to the scale bracket on the chute.



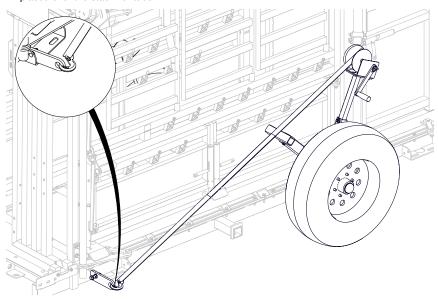
3 Install front jack adapter and jack.



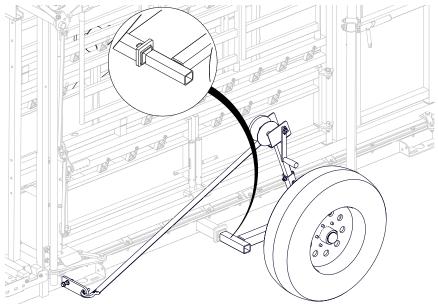
4 Install both wheels into the circular wheel mounts located near the vet cage, ensuring the profiles on the main support bars line up with the slots on the chute wheel mounts.



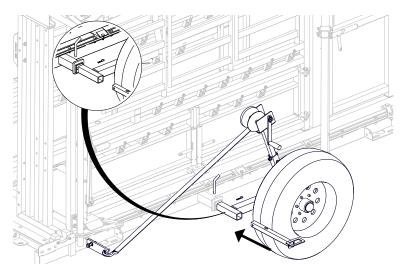
5 Starting on one side of the chute, crank the winch handle to extend the strap until you can connect the strap hook to the bracket located at the front of the chute, ensuring the strap is placed over the stabilizer tube.



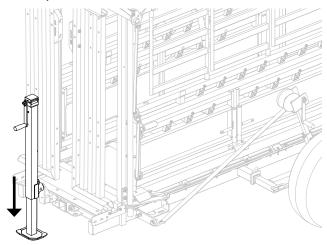
**6** Crank the winch handle to retract the strap. The strap will tighten and the chute will begin to lift. Retract the strap until the wheel stabilizer tube is lined up with the front wheel mount.



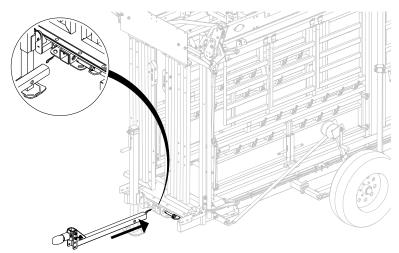
7 Insert the stabilizer lock bar through the stabilizer tube on the wheel and into the front wheel mount on the chute. Secure with a transport pin and R clip.



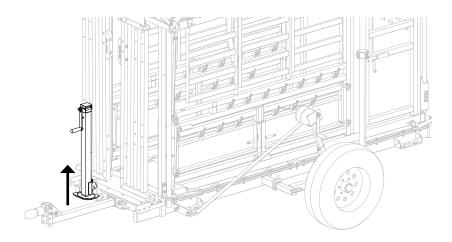
- $\boldsymbol{8}$  Crank the winch to release the tension in the strap.
- $\boldsymbol{9}$  Repeat on the other side of the chute. Full lift height is 14.3".
- ${\bf 10}$  Crank the handle on the front jack to lift the front of the chute.



 ${f 11}$  Insert the hitch tube into the front receiver, pin in place and secure with an R-clip.



- 12 Adjust the jack height until it is just high enough to be connected to your vehicle hitch.
- 13 Connect to vehicle.
- ${\bf 14} \ {\sf Retract} \ {\sf jack} \ {\sf until foot} \ {\sf is} \ {\sf at} \ {\sf or} \ {\sf above} \ {\sf the} \ {\sf bottom} \ {\sf of} \ {\sf the} \ {\sf chute} \ {\sf frame}.$





#### **SAFETY CHECK:**

- ✓ Ensure there is no tension in winch straps. Failure to remove tension will result in winch damage.
- ✓ Jacks are retracted completely.
- ✓ All doors and gates are shut.
- ✓ Tires are in good condition.

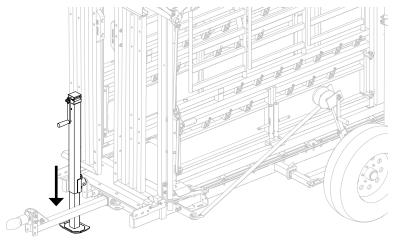
MAXIMUM SPEED: 50 KPH / 30 MPH

#### REMOVAL:

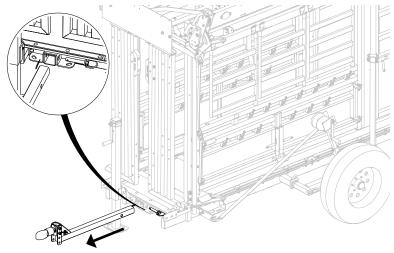


# ENSURE YOU ARE DISCONNECTING THE CHUTE ON FIRM, LEVEL GROUND BEFORE PROCEEDING.

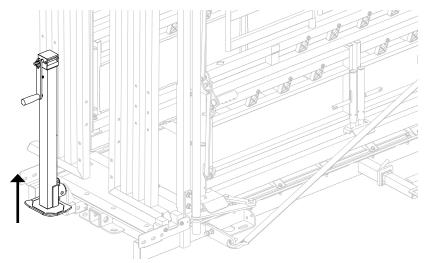
 ${f 1}$  Jack up the chute just enough so it can be disconnected from your vehicle.



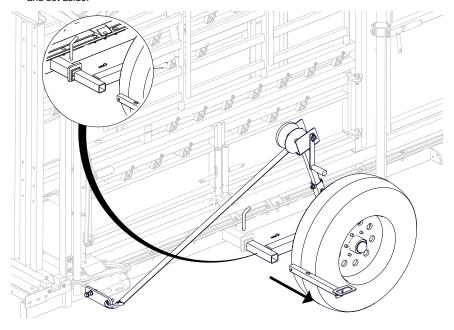
- **2** Unhook the unit from towing vehicle. Move the vehicle forward and safely out of the way.
- ${f 3}$  Remove the hitch.



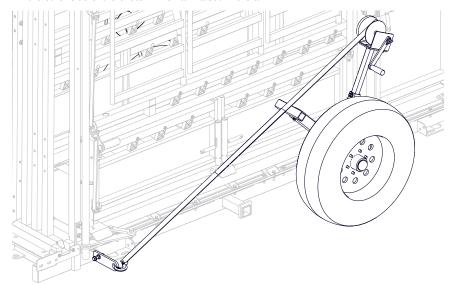
**4** Jack the chute down until the jack is retracted completely and the front of the chute is sitting fully on the ground.



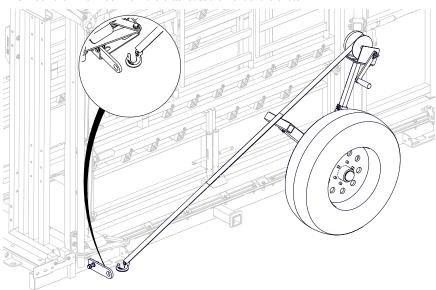
**5** Crank the winch handle to apply tension to winch strap until stabilizer lock bar can move freely. Remove the R clip, pin, and stabilizer lock bar connecting the wheel to the front wheel mount and set aside.



**6** Crank the winch handle to lower the side of the chute until it is fully on the ground. Note that the other side of the chute will remain raised in the air.

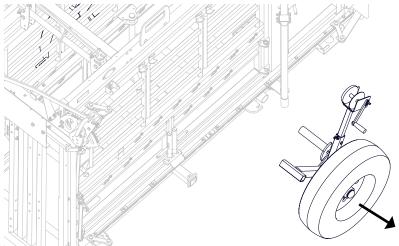


7 Unhook the winch hook from the bracket at the front of the chute.

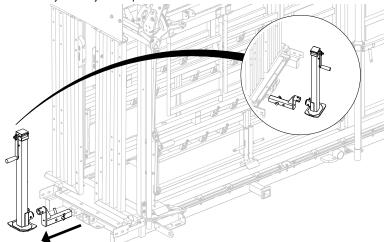


8 Crank the winch handle to retract the winch strap until it is retracted completely.

**9** Pull the wheel out of the rear wheel mount.



- **10** Repeat on the other side of the chute.
- 11 Remove the front jack and jack adaptor.



12 Ensure stabilizer lock bars, pins and R clips are inserted back into the wheels for safe storage until next use. The winch hook plate need not be removed.



#### **SAFETY CHECK:**

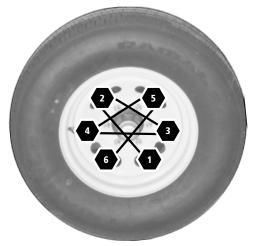
- ✓ Inspect for damages due to transport.
- ✓ Head Gate and squeeze mechanisms are functioning properly.
- ✓ All latches on doors, gates, and panels are functioning properly.
- ✓ When applicable, all add-ons are properly installed and functioning.

#### WHEEL MAINTENANCE

It is extremely important to apply and maintain proper wheel mounting torque on the wheels. Torque is a measure of the amount of tightening applied to a fastener (nut or bolt) and is expressed as length force. For example, a force of 90 pounds applied at the end of a wrench on foot long will yield 90 ft. lbs. of torque. A torque wrench is the best method to assures the proper amount of torque is being applied to a fastener.

Be sure to use only fasteners matched to the cone angle of your wheel – usually 60° or 90°. The proper procedure for attaching your wheels is as follows:

- 1. Start all bolts or nuts by hand to prevent cross-threading.
- Spin lug nuts all the way down until rim is seated against the wheel hub. Tighten bolts or nuts in the sequence shown for wheel torque requirements.



- 3. Torque lug nuts to 120 ft. lbs. in cross sequence.
- 4. Wheel nuts/bolts should be torqued before first road use and after each wheel removal. Check and re-torque after the first 10 miles, 25 miles, and again at 50 miles. Check periodically thereafter.

#### WARRANTY

Your product must be registered to claim warranty, and to ensure that Arrowquip has the required information to contact you in the event of a product or part recall. Any owner who fails to register their product warranty with Arrowquip through their Authorized Arrowquip Dealer voluntarily voids their warranty. Arrowquip will repair or replace products or parts of a product that prove defective due to manufacturer defect during the Warranty Period, at their sole discretion. This excludes defects resulting from normal wear and tear or product misuse. Warranty does not cover corrosion. NOTE: Any modification, in any fashion, to any Arrowquip equipment immediately voids the product warranty. This includes the parts contained therein.

E.g. If a modification is made to the squeeze mechanism in a squeeze chute, and the sternum bar is bent afterwards, warranty for the damaged part, the sternum bar, contained in the modified equipment, the squeeze chute, is void. In addition, any remaining warranty for the squeeze chute and other parts contained therein, including, but not limited to, the head gate, locking system, Arrowlock or Powerlock system, and rollers, is null and void.

#### WARRANTY PERIOD

Arrowlock 88 Series Standard Deluxe Vet Model I 15 Years or 50,000 Total Head of Cattle\*

#### REGISTER FOR WARRANTY NOW:

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Phone: 1-877-275-6075 | Email: cs@arrowquip.com



If you have any questions regarding your product or require assistance, please contact Arrowquip's Client Care Team at 1-877-275-6075 or by email at cs@arrowquip.com.