ARROWQUIP

PRODUCT MANUAL

POWERLOCK 1075 SERIES

HYDRAULIC CATTLE CHUTE

JANUARY 2026

1-877-275-6075
cs@arrowquip.com
arrowquip.com

WARNING

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.

OPERATORS OF THIS PRODUCT TAKE AND ACCEPT RESPONSIBILITY FOR ANY HARM OR INJURY TO THE ANIMAL OR OPERATOR WHEN IT PERTAINS TO HOW THE EQUIPMENT IS USED AND MAINTAINED.

Please keep this manual for frequent reference and to pass on to new users or owners.

CONTENTS

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.

SAFETY PRECAUTIONS

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-fitting clothing.
2. 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.
3. **DO NOT** enter the vet cage until the animal is secured in the head gate and the rump bar has been placed so the cow cannot back up.
4. **DO NOT** stand in front of the head gate while operator is moving cattle through the squeeze chute.
5. **DO NOT** allow children under the age of 18 near an operating machine.
6. Follow safe cattle handling procedures in other areas of the yard so cattle are more docile in the chute.
7. **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.
8. **DO NOT** allow children under the age of 18 to use the hydraulic equipment.
9. **DO NOT** operate hydraulics while operators are working with the cattle in the chute or are touching the chute. Reaching out or into the chute while hydraulics are in operation can result in serious injury.
10. Please ensure all hydraulic hoses and electrical leads are out of the way and safely positioned before moving cattle or using the chute.
11. Keep a distance of more than an arm's length from the hydraulic chute while hydraulics are in operation.

RISK ASSESSMENT

Conduct a risk assessment on procedures regarding the operation of an Arrowquip hydraulic squeeze chute, establishing a safe work procedure.

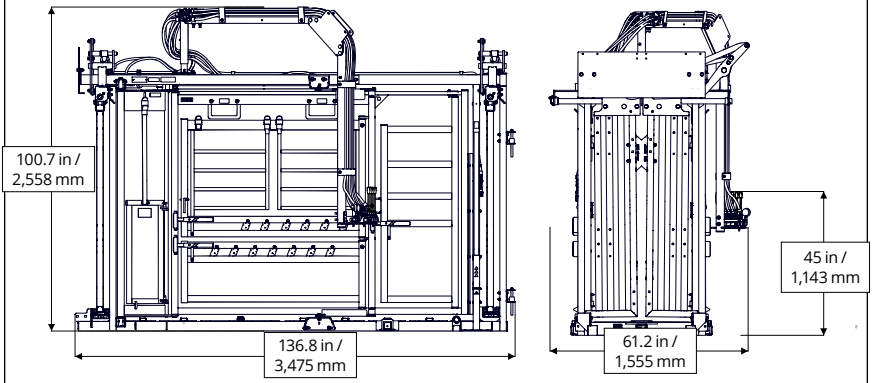
1. Ensure all users of the equipment have been inducted and comply with safe working procedure.
2. Please ensure that there are **NO** large or hazardous objects inside the equipment that may cause injury to the animal or operator or may cause the equipment to malfunction.
3. Ensure that access gates are closed securely before running cattle through the chute.
4. Make sure that your equipment has been cleared of **ALL** livestock after use.
5. Some chemicals and medicines can damage powder coat. Take all precautions and wash after use.
6. Please ensure that the hydraulic chute is secured on firm ground.
7. Please ensure that there are no hazardous hydraulic cords or large objects within or around the chute where cattle and operator will be.
8. Please ensure that all hydraulics work properly before putting cattle through the chute.
9. Please make sure that all hydraulic hoses are properly secured to the hydraulic pump or tractor.
10. Ensure that the hydraulic controls are functioning properly.
11. If hydraulics do not function properly when testing the equipment, **DO NOT** put cattle through the chute.

POWERLOCK 1075 HYDRAULIC SQUEEZE CHUTE OVERVIEW

SPECIFICATIONS

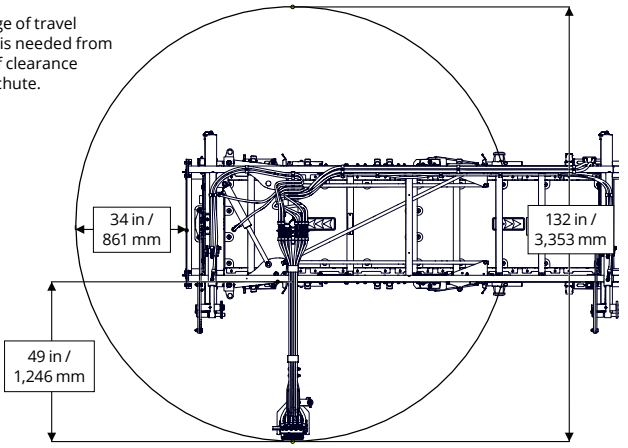
PRODUCT CODE	1075
OIL TYPE	AW22
MAX FLOW RATE	45.4LPM / 12 GPM
RECOMMENDED OPERATING PRESSURE	6894kPa/1000PSI
MAX OPERATING PRESSURE	8273kPa / 1200PSI
WEIGHT	2,694 lbs / 1,224 kg

DIMENSIONS



SWINGARM CLEARANCE

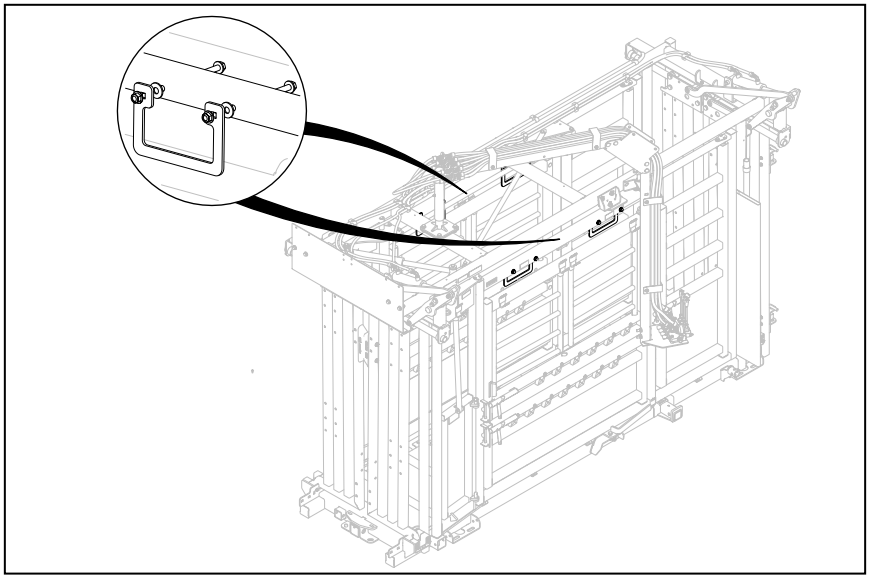
For swingarm to have full range of travel approximately 4' of clearance is needed from the chute frame side, and 3' of clearance needed from the front of the chute.



POWERLOCK 1075 HYDRAULIC SQUEEZE CHUTE ASSEMBLY

CONSIDERATIONS

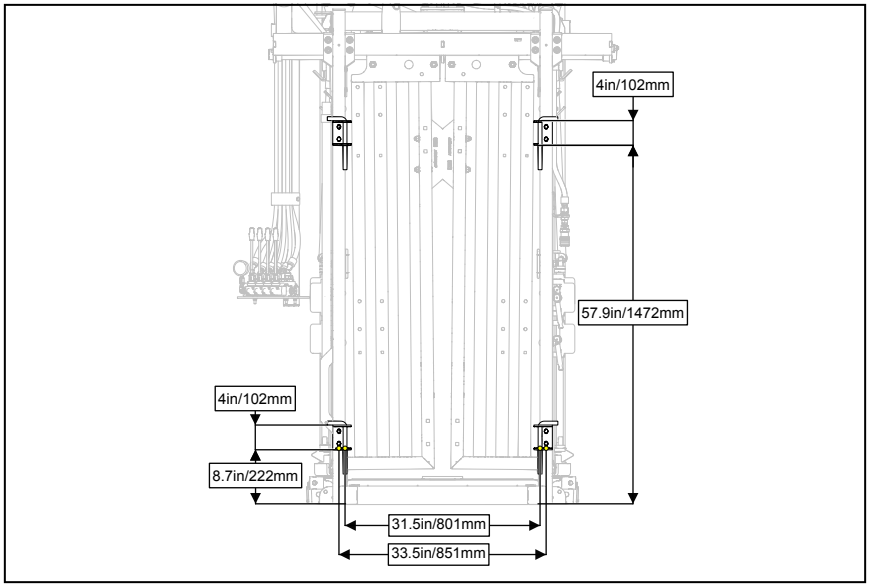
Your Powerlock 1075 Hydraulic Squeeze Chute can be moved with a loader by lifting from the squeeze frame through the bolt on shipping brackets. Arrowquip recommends removing the 4X shipping brackets from the squeeze frame once the chute has been transported to its working location.



It is recommended to install your Powerlock Hydraulic chute on level, solid ground for correct operation. When creating a working area for your chute installation, whether it be packed earth or poured concrete, consider the following:

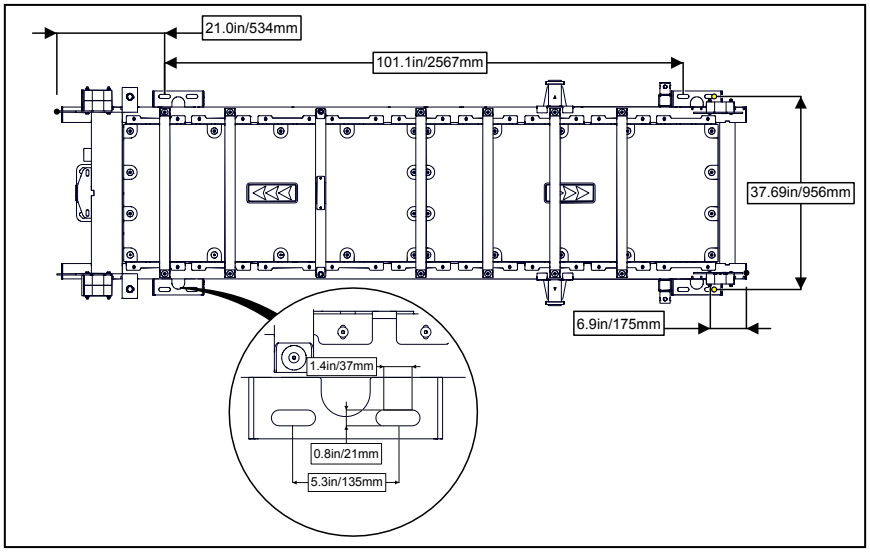
- The size of the pad or working area should be large enough to use the full swingarm travel.
- How will the height of your working area affect the alley leadup to the chute?
- Will you be installing load bars? This will affect connection heights.
- Is there room in your working area to use the emergency exits off the sides of the chute?
- Will you need the ability to draft animals to different pens after the chute?
- Do you have access to power?
- How easy is access for manure cleanout?

Dual width Panel Clips are provided on the rear of all Arrowquip Chutes and can be pinned to the leadup with provided ½" panel pins. The width and heights of the connections are shown below:



MOUNTING & LOAD BARS

The unit comes equipped with mount brackets for permanent installation to the ground and are designed to work with most well-known brands of load bars such as Tru-Test and Gallagher. Mounting dimensions are below:



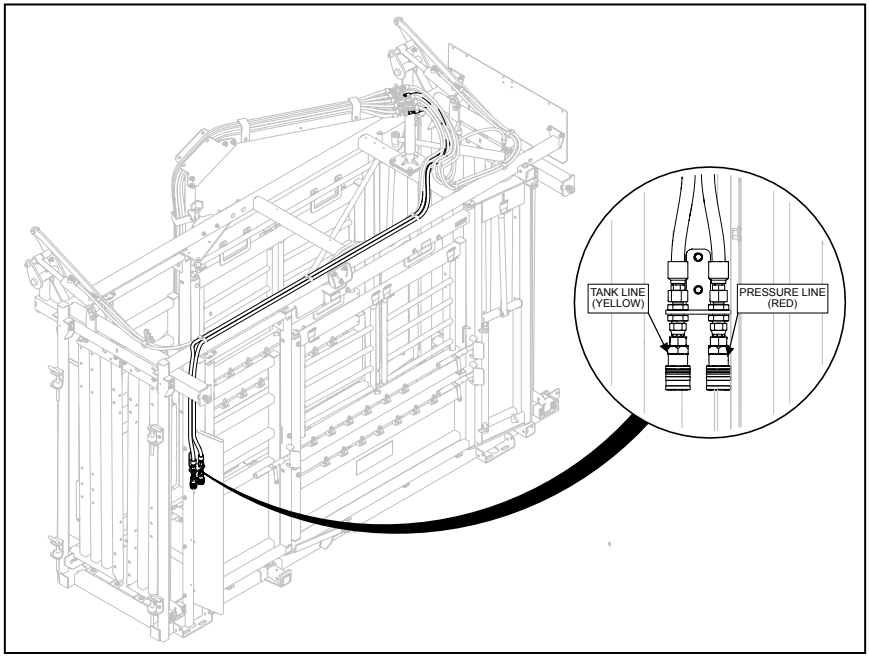
CONNECTING TO HYDRAULIC POWER

Arrowquip Powerlock Chutes require a hydraulic power source. The chute comes with two 40ft ground lines to create a hydraulic circuit.

- The pressure line is marked with **RED** tape and has a ½" male quick connects on each end.
- The tank line is marked with **YELLOW** tape, has a ½" male quick coupler on the chute side hookup and a ¾" male quick coupler on the power source side.

NOTE: Tractor Hydraulics have higher flow than what is required by Powerlock chutes and can be damaged if connected directly to a tractor. Some tractors come equipped with flow controls but typically will not drop lower than the maximum chute flow rate of 12GPM. Never connect the chute directly to tractor hydraulics.

- The power source is connected to the chute through groundlines that hookup to ½" quick couplers that are located on the side of the chute at the rear.
- When looking at the side of the chute, the Pressure line is on the right side identified with **RED** tape, and the Tank line is on the left side identified with **YELLOW** tape.



HYDRAULIC POWER UNITS

Arrowquip provides multiple powerpack options for the 1075 depending on your use case.

For more detailed information concerning the Power Pack models below please refer to the Power Pack manual.

Scan the QR code or visit arrowquip.com/resources/owners-hub.

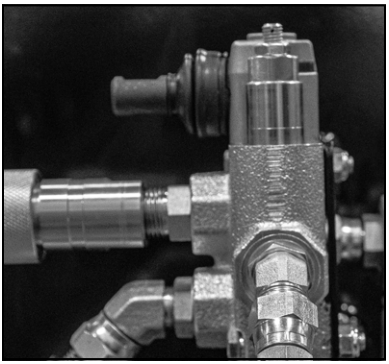
SMART CODE	FULL DESCRIPTION	PART NUMBER (PN)	USE CASE
HPP-1E75-LF	7.5HP SINGLE PHASE ELECTRIC LOW-FLOW POWER PACK	2033202	STATIONARY
HPP-3E75-LF	7.5HP THREE PHASE ELECTRIC LOW-FLOW POWER PACK	2033214	STATIONARY
HPP-G10-LF	10HP GAS POWER PACK	2033153	PORTABLE/POWER UNAVAILABE
GEN-TH	TRACTOR HOOK UP	9000429	PORTABLE/POWER UNAVAILABEBACKUP POWER

POWER PACK FLOW CONTROL

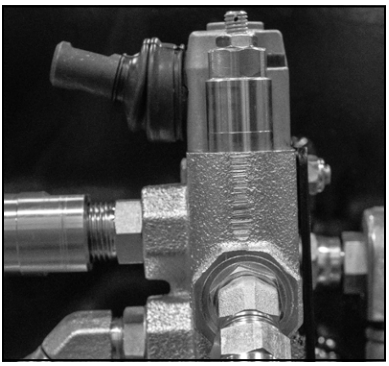
Arrowquip built Power Packs are equipped with a Walvoil SD4 spool valve that serves to redirect fluid flow and protect the system from over pressurizing.

The switch on the top of the spool valve has two settings:

- When the switch lever is in the **horizontal position** the system is in **Neutral/Recirculation mode**.
- When the switch is **flipped upward** the system is in **Active/Powered mode.**



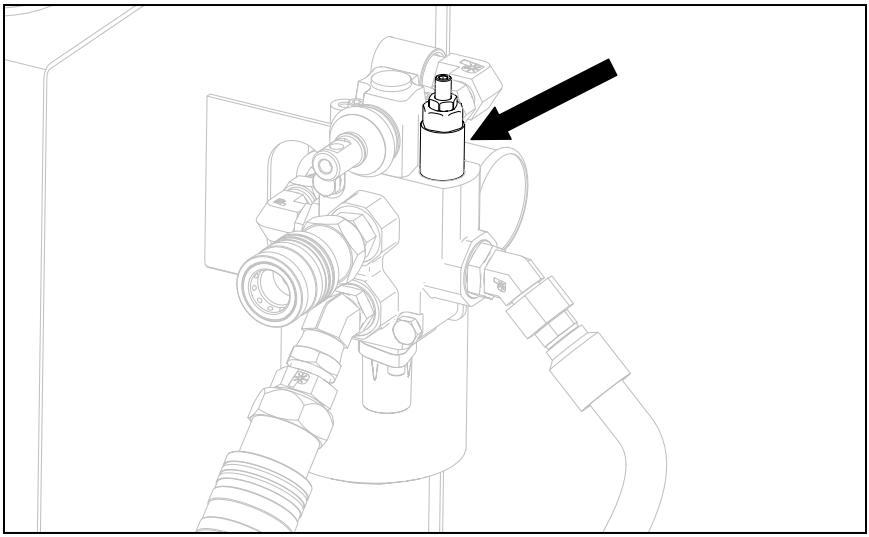
NEUTRAL/RECIRCULATION MODE directs fluid through the oil filter and back to the tank, even if the Power Pack is hooked up to a chute. This mode allows you to start up the Power Pack with virtually no load, decreasing wear and tear on the motor or engine. This mode is also used to pre-heat the oil on colder days before running the chute up.



ACTIVE/POWERED MODE directs fluid out of the top ½" quick connect to the equipment being powered then returns to the Power Pack via the ¾" quick connect, where it is filtered before being dumped to tank.

POWER PACK PRESSURE RELEIF

The pressure relief valve redirects fluid back to the tank when the system pressure rises above a factory set pressure of 1200PSI. This protects the system from over pressurizing if the unit is put into Active/Powered mode without being connected to a chute.



WARNING:

Do not adjust the pressure relief, as it is set to keep animals safe inside Arrowquip products. If the Power Pack's maximum pressure needs to be changed, please contact Arrowquip's Client Care team.

OPERATING THE POWERLOCK HYDRAULIC CATTLE CHUTE

When hooked up to hydraulic power source and flow is engaged to the chute, it is normal to read a pressure on the gauge without touching the chute. The pressure should read in the range of 200-500PSI. From the factory, the pressure relief in the valve bank is set to 900PSI. Do not adjust the pressure above this setting.

NOTE: Increasing pressure relief will not increase the speed of the chute functions.

ELECTRIC POWER PACK RUN-UP AND SHUTDOWN

NOTE: To avoid premature motor wear always ensure that the Power Pack is in Recirculation mode before starting.

1. Plug in Power Pack.
2. Ensure pressure and return hoses are hooked up correctly.
3. Flip Power Pack into powered mode.
4. After cattle working session is complete, flip Power Pack back to Recirculation mode.
5. Un-plug Power Pack.

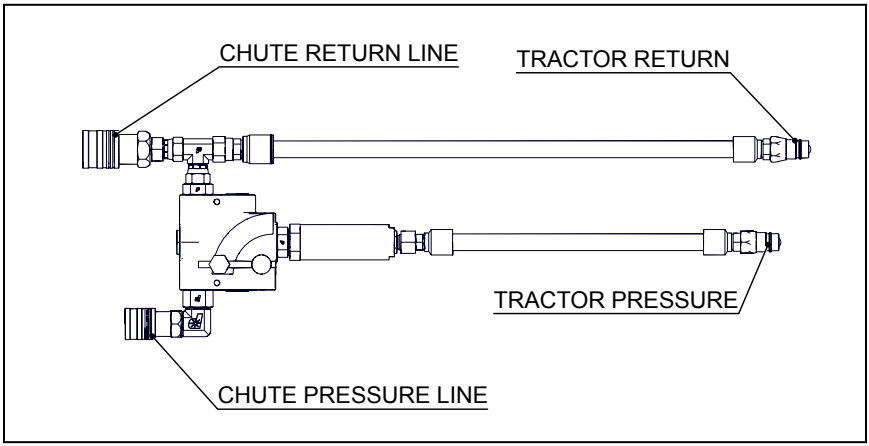
GAS POWER PACK RUN-UP & SHUTDOWN

NOTE: If you're using your Power Pack on hard-packed ground or concrete, it's best to engage the kickstand to keep it from moving due to vibration.

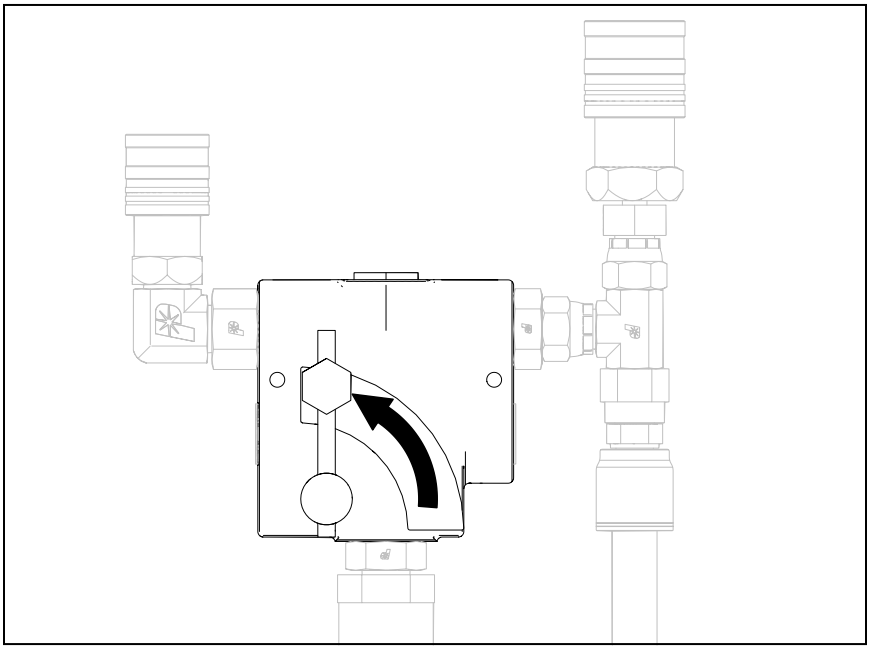
1. Ensure Flow Control is set to Recirculation mode
2. Engage choke, fully engage throttle, pull to start.
3. Let engine warm up, it should be running smooth with no choke applied.
4. Ensure pressure and return hoses are hooked up correctly.
5. Flip Power Pack into Powered mode.
6. After cattle working session is complete, flip Power Pack back to Recirculation mode, throttle down engine to idle and let cool for 2-5 mins.
7. Shutdown engine by positioning throttle all the way down.

TRACTOR HOOKUP RUN-UP & SHUTDOWN

The full procedure should be followed whenever connecting to a new tractor to set optimal flow rate. Below are the hookup locations:



1. Before connecting to equipment ensure flow control is set to zero flow as shown.



2. Ensure male and female couplers on adapter are clean and free of debris.

3. Connect tractor adapter to pressure and tank lines on the tractor and ground lines.
4. Engage hydraulics with tractor.
5. Now you can increase the flow control from 0-1 and test the headgate function lever furthest to the left. It will likely be sluggish at this setting. Gradually increasing flow setting and testing headgate open/close speed. The target speed for the 1075 headgate is around 0.53s.
6. Once optimal setting is found, turn down thumbscrew to lock position.
7. When working session concludes, disengage tractor hydraulics, disconnect flow control from tractor. Groundlines can remain connected for next session.

HOW TO USE CHUTE CONTROLS

The controls on Powerlock chutes are set up intuitively, where pulling on the lever will open a function and pushing on the lever will close the function.

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

1. Ensure the head gate, tail gate, and all access points are closed before the animal enters the chute.
2. Open 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 the head gate. When neck of animal is in the correct position, quickly close the head gate securely on the animal's neck.

NOTE: For high strung or nervous animals with high entry speeds, the squeeze can be used to slow the animals down.

5. Once caught in the head gate, the side squeeze and head restraint can be engaged to further restrain movement as required.
6. If the animal applies excessive pulling pressure on 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.

POWER FAILURE

If you should experience a loss of power while you have an animal in the chute, please follow the instructions below:

1. Operate the hydraulic levers to allow fluid to flow out of the cylinders and release the pressure on the animal.
2. With the levers engaged, pull on the Head Gate Door / Squeeze Panel to open the door if necessary.
3. Check to make sure the animal is free of any injury.
4. Release the animal from the chute.
5. Review the cause for power failure and troubleshoot to restore power.

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.

MAINTENANCE SAFETY

1. Ensure the area is clear of bystanders, especially children, when doing any maintenance or repair on the hydraulic squeeze chute.
2. Keep all body parts, including hair, hands, feet, etc., away from the machine when hydraulics are in operation.
3. Before carrying out any maintenance on the squeeze chute, please ensure there are no livestock in the chute.
4. **DO NOT** repair the chute or go into the chute when hydraulics are in operation. This can result in injury to the worker. Unplug the motor before performing any necessary repairs or inspection.

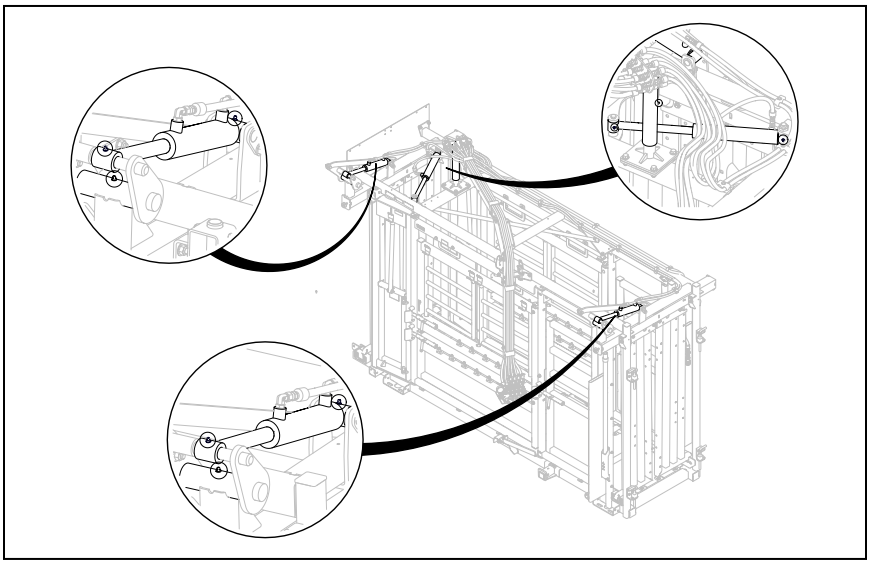
REGULAR MAINTENANCE

DAILY

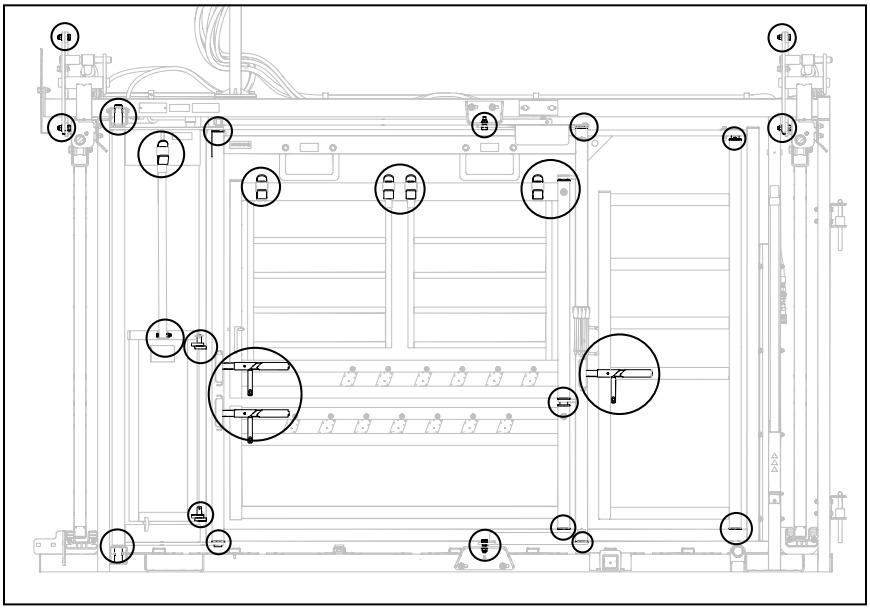
- Inspect the entire unit. Ensure all moving components are free of debris and function properly.
- Clean bottom head gate door track and chute floor. Excess build-up of manure or dirt inside chute can cause the squeeze and head gate to malfunction.
- Check mechanism pivot bolts for wear. Lubricate with WD-40 Dry Lube as necessary.

PER 1000 HEAD OR ANNUALLY

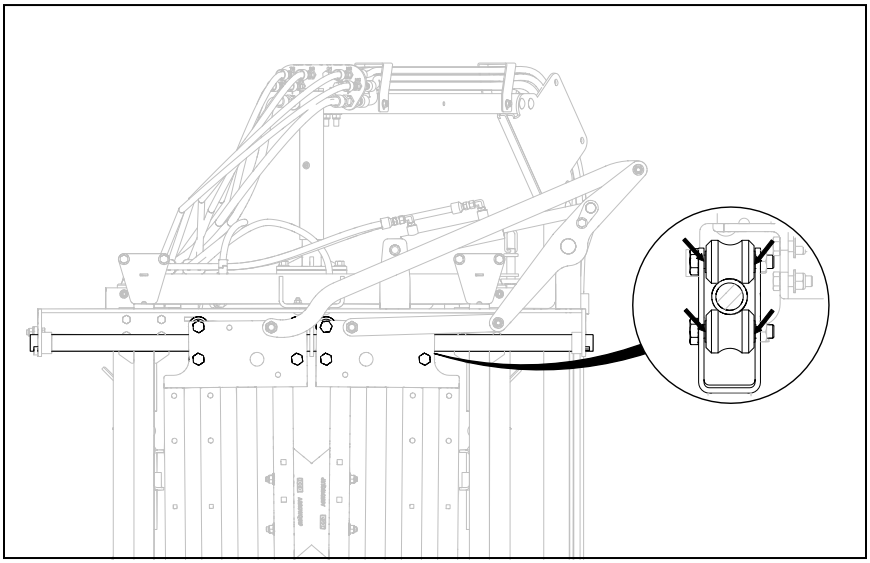
- Grease cylinders, head gate, tail gate and swingarm pivots through provided grease zerks. (9 Places)



- Lubricate slam latches and door hinges with WD-40. (approx. 56 places)



- Lubricate inner race of the head gate and tail gate rollers (16 rollers total) with WD-40. Be mindful not to overspray on the outside of the wheels. Afterwards clean the head gate and tail gate shafts with brake clean to remove dirt build up or excess WD-40.



- Check pressure relief setting, ensure when cylinder reaches end of travel that pressure read on gauge is close to 900PSI.

HYDRAULIC MAINTENANCE

Arrowquip Powerpacks and Powerlock chutes are shipped from factory with ISO 22 AW hydraulic oil to be able to function in hot and very cold climates. Depending on your location this oil may not be available. Depending on how cold it gets in your region or if your working facility is heated, you can consider using the following oils.

HYDRAULIC OIL STANDARD	MINIMUM OPERATING TEMPERATURE
ISO 32 AW	-10C / 14F
ISO 46 AW	0C / 32F
ISO 68 AW	8C / 46F

Replace the hydraulic oil after 2,000 hours of run time, or sooner if needed. If the oil is beginning to become cloudy or muddy, your system might have water contamination. Replace oil as soon as possible as it can cause critical damage to the Power Pack and chute components.

QUICK COUPLER CROSS REFERENCE

Quick couplers have a designated lifespan and in time seals inside may fail resulting in a leak. If you need to replace either the female coupler on your chute or the male coupler on your ground line, you can refer to the brand cross reference below. This will ensure you can find the coupler you need locally.

		
	FEMALE COUPLER BRAND INTERCHANGE	**MALE HOSE END BRAND INTERCHANGE**
BRAND	**PART NUMBER (PN)**	**PART NUMBER (PN)**
PULSAR	C401-08	C404-08
PERFECTING	4AGF4-PV	AG4FOF4-PV
AEROQUIP	N/A	N/A
DNP	NS-08-08-C-NPT	NS-08-08-N-SAE
FASTER	NS12NPTF	N/A
HANSEN	N/A	N/A
HOLMBURY	DINB12-F-08N	DINB12-MS-08S
PARKER	4050-4P	8010-15
SAFEWAY	S25-4	S71-4P
SNAP-TITE	61C-8-8-F	N/A
STUCCHI	F IRV 12 NPT	N/A

TROUBLESHOOTING GUIDE

If you have a problem with your Powerlock 1075 Series Hydraulic Squeeze Chute please consider the following tips or call Client Care at 1-877-275-6075.

ISSUE: Cannot get quick connects to seat.

1. Insert a punch into the center of the female couplers on the chute and apply pressure. The inner poppet should depress and relieve the pressure in the line.
2. To relieve pressure in the ground lines running to the power pack. Hit the end of the male coupler against a hard flat surface. This will depress the poppet relieving the pressure in the line.
3. If the weather is below -10C / 14F than female couplers may require heating to move and seat correctly.

ISSUE: Power Pack is running but no pressure at chute, or chute controls working incorrectly.

1. Check Hydraulic oil level in Powerpack reservoir.
2. Check that the Power Pack is in Powered Mode.
3. Remove plastic shield from Bellhousing on Powerpack and inspect Jaw couplings, replace if necessary.
4. Check that Powerpack groundlines are connected to the chute.
5. Ensure Pressure and Return lines are connected correctly at the chute. Try swapping the lines.
6. If issue persists reach out to Client Care

ISSUE: Gas Engine Power Pack will not start.

1. If colder than -18C or 0F engine may not start and need to be warmed first.
2. Check fuel in tank.
3. Check oil level.
    a. The Vanguard 300 comes with a low oil sensor that will not allow the sparkplug to fire.
2. Check sparkplug.
    a. If sparkplug is coated in fuel or fowled it may need to be cleaned, or have excess fuel burnt off.
    b. Excess fuel in cylinder may also need to be removed. With fuel off pull over engine, ensuring no persons or animals are near the sparkplug port as excess fuel will dissipate through here.
3. For a full guide to troubleshooting small engines:

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.

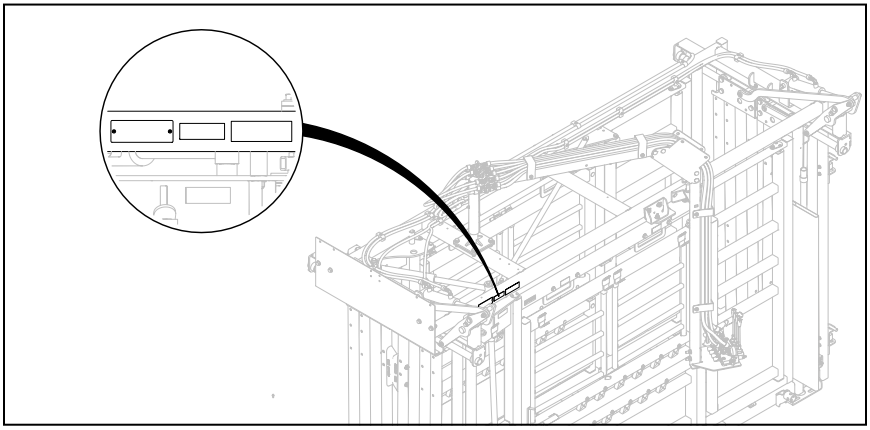
Arrowquip will repair or replace products or parts of a product that prove defective due to manufacturer defect during the Warranty Period, at their sole discretion. This excludes defects resulting from normal wear and tear or product misuse.

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.

IDENTIFICATION

Smartcodes are shorthand forms for Arrowquip products to quickly determine which product you have. The smartcode and serial number can be found in the location shown.



REGISTER FOR WARRANTY NOW:

ONLINE: arrowquip.com/product-registration

PHONE: 1-877-275-6075 | **EMAIL**: cs@arrowquip.com

ADD-ONS & INSTALLATION INSTRUCTIONS

The 1075 Series Hydraulic Squeeze Chute is available with the following options to meet the needs of your operation. While options are typically ordered from the factory, if your chute does not come equipped with what you need, please contact Arrowquip Sales for the option that suits your needs below.

HYDRAULIC HEAD SWEEP INSTALL INSTRUCTIONS **PAGE 28** • Left and Right Hand Available	**HYDRAULIC NECK EXTENDERS** INSTALL INSTRUCTIONS **PAGE 36**	**HYDRAULIC POWERBEYOND KIT*** • Adds 3 more hydraulic controls for hydraulics in your system
4TH GENERATION MANUAL HEAD HOLDER INSTALL INSTRUCTIONS **PAGE 55** • Left and Right Hand Available	**BALK GATE** INSTALL INSTRUCTIONS **PAGE 59** • Not compatible with Neck Extenders or Head Sweep	**CALF RESTRAINER KIT** INSTALL INSTRUCTIONS **PAGE 64**
HEAD GATE SHOULDER CUSHIONS INSTALL INSTRUCTIONS **PAGE 66**	**LUG POST KIT** INSTALL INSTRUCTIONS **PAGE 68**	**SHEETED STERNUM BAR** INSTALL INSTRUCTIONS **PAGE 70**
WHEEL KIT [75WK] INSTALL INSTRUCTIONS **PAGE 72**	**PANEL ADAPTER KIT***	

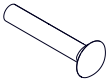
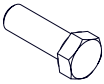
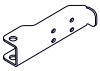
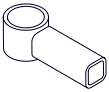
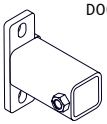
*Install instructions not included

HYDRAULIC HEAD SWEEP

REQUIREMENTS:

- 2 people
- Hammer
- Wrenches/Sockets:
  - 2 x 9/16"
  - 2 x 1-1/8"
  - 3/8"

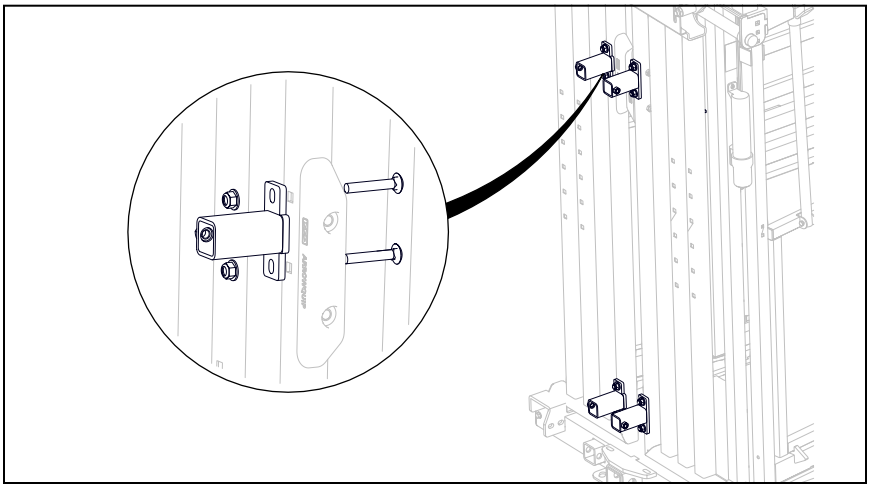
USER ASSEMBLY PARTS LIST

7002026 BOLT-STAP-0.25X0.75-Z-5  x4	7001812 NUT-SFLG-0.5-13-Z-CH  x4	7002265 NUT-JAM-0.5-13-Z-2  x4	7003177 NUT-FNYL-0.5-13-Z-5  x8
7002295 BOLT-CAR-0.5-13-3-Z-5  x12	7002287 BOLT-HH-0.5-13-1.5-Z-5  x4	7002226 NUT-NYL-1-8-Z-5  x2	7002222 BOLT-HH-1-8-5.5-Z-8  x2
7002035 SPRING PIN SS 3/8 X 3"  x1	2002845 SHORT HOSE CLIP  x2	2008742 HYDRAULIC HEAD SWEEP BRACKET  x1	2008743 HYD HEAD SWEEP PLATE  x1
2002831 HEAD SWEEP DOOR HINGE  x2	2002834 NECK EXTENDER UPRIGHT  x1	2002835 HEAD SWEEP DOOR MOUNT  x4	2003096 HYD HEAD SWEEP ASSEMBLY W/A  x1
2001072 CYL 2 X 6" HG & TH 107, -06ORB  x1	9000005 06-06 M ORB-JIC 90 ELBOW  x2	9000488 08-06 M ORB-JIC CONNECTOR  x2	
9000701 HEAD SWEEP HOSE - ROD END *PN WRITTEN ON HOSE x1	9000702 HEAD SWEEP HOSE - CAP END *PN WRITTEN ON HOSE x1		

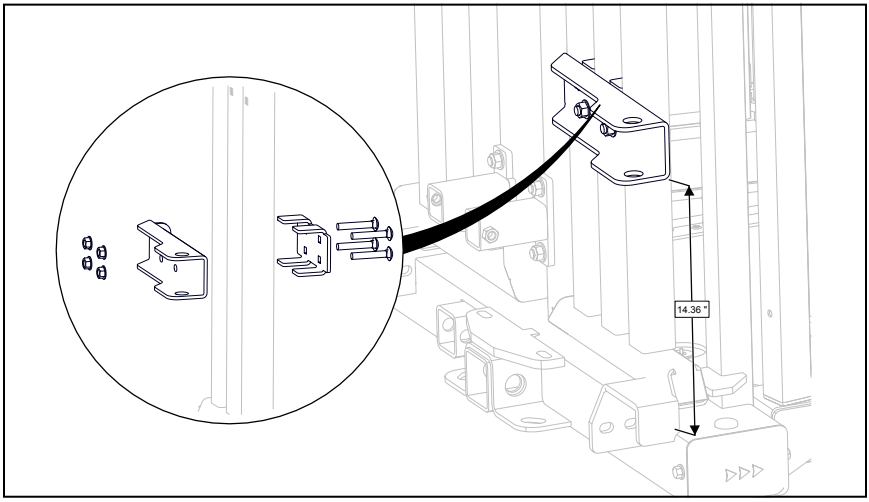
INSTALLATION:

NOTE: Images are shown on the Q-Power 1070. The process is the same for all compatible chutes.

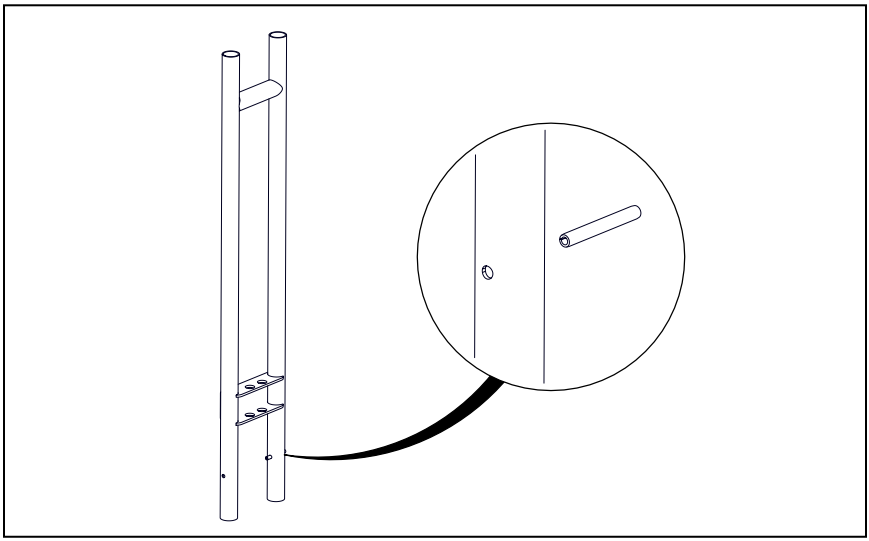
1. Install four Head Sweep Door Mounts (2002835) with 1/2" x 3" long carriage bolt (7002295) and 1/2" nuts (7003177) in the provided holes. Note orientation of Head Sweep Mount and hardware installation direction.



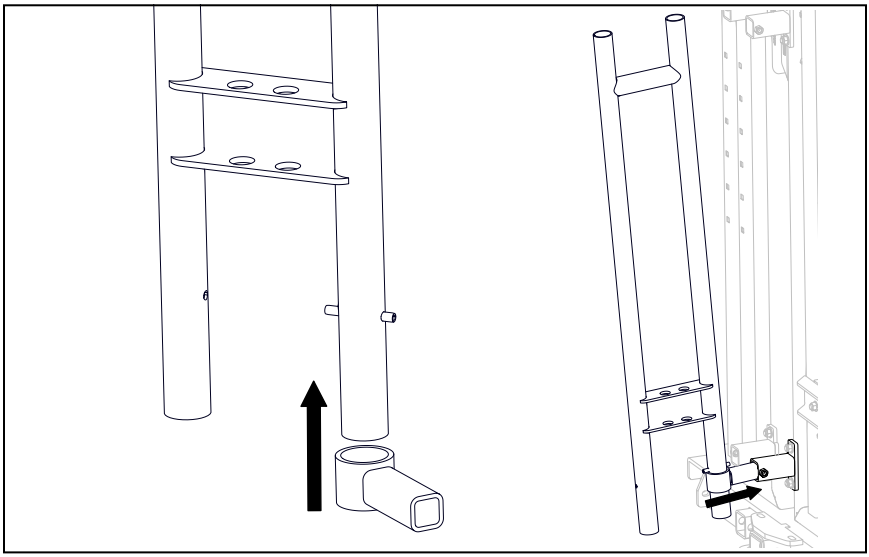
2. Install HYD Head Sweep Bracket (2008742) from the front and HYD Head Sweep Plate (2008743) from the back, with 1/2" x 3" long carriage bolt (7002295) and 1/2" nuts (7003177) as shown. Bottom of mount should be approximately 14-3/8" from the bottom frame rail.



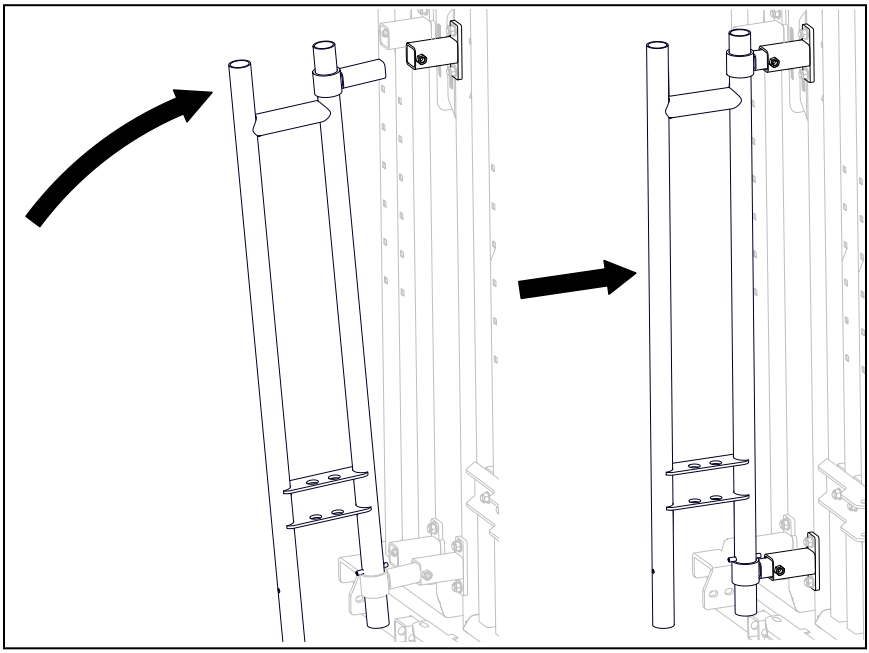
3. Install spring pin (7002035) into the HYD Head Sweep Weldment (2003096).



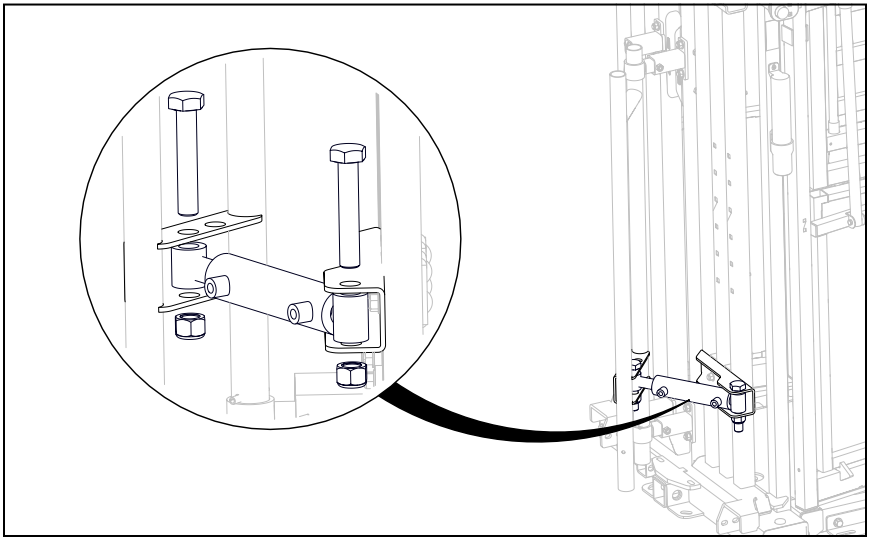
4. Slide the post of the HYD Head Sweep Weldment (2003096) into the bottom Head Sweep Door Hinge (2002831) and slide it up to spring pin. Insert the Head Sweep Door Hinge into the Head Sweep Mount far enough that the tube does not slide out. The assembly is meant to hang at an angle.



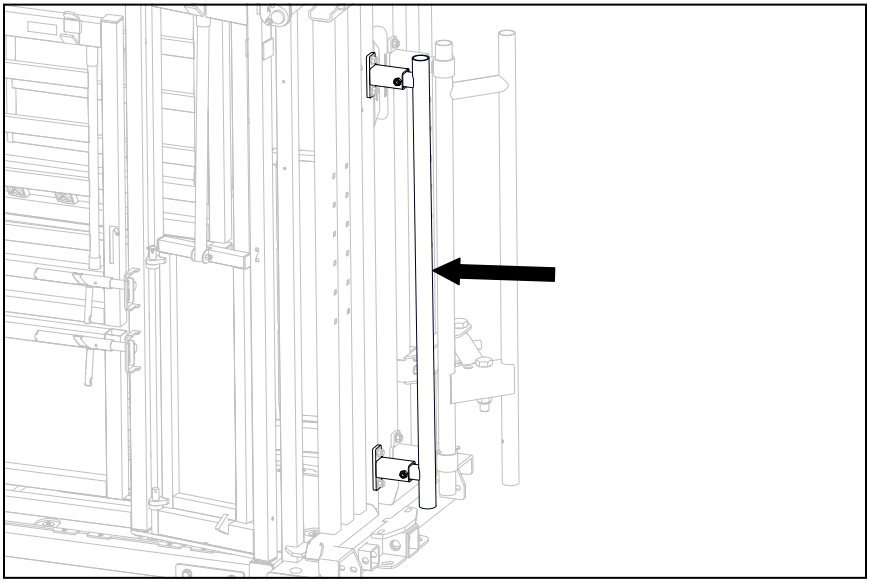
5. Add second Head Sweep Door Hinge to top of Hydraulic Head Sweep Weldment. Align top Head Sweep Door Hinge and top Head Sweep Mount. Once aligned push the assembly into the Head Sweep Mounts until they bottom out.



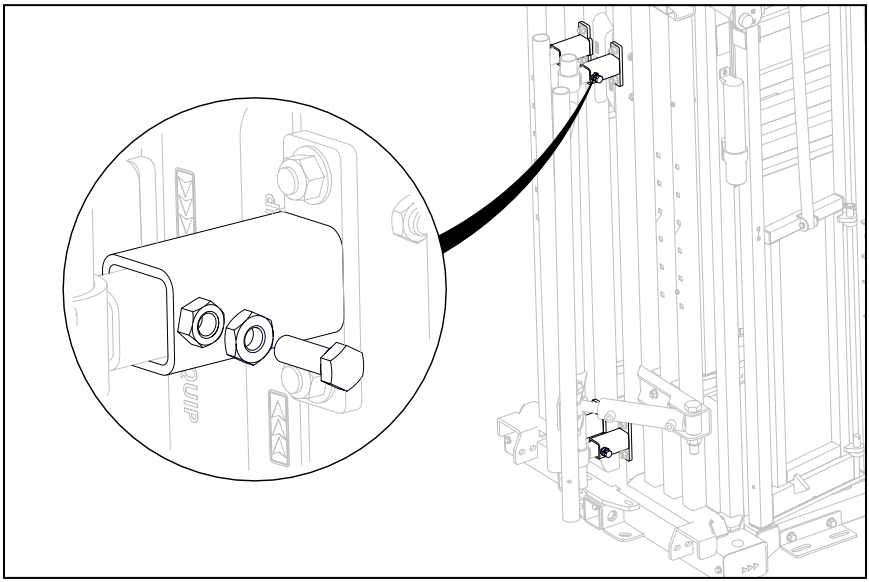
6. Install hydraulic cylinder 2001072 with 1" x 5.5" long bolts (7002222) and 1" nylock nuts (7002226) as shown.



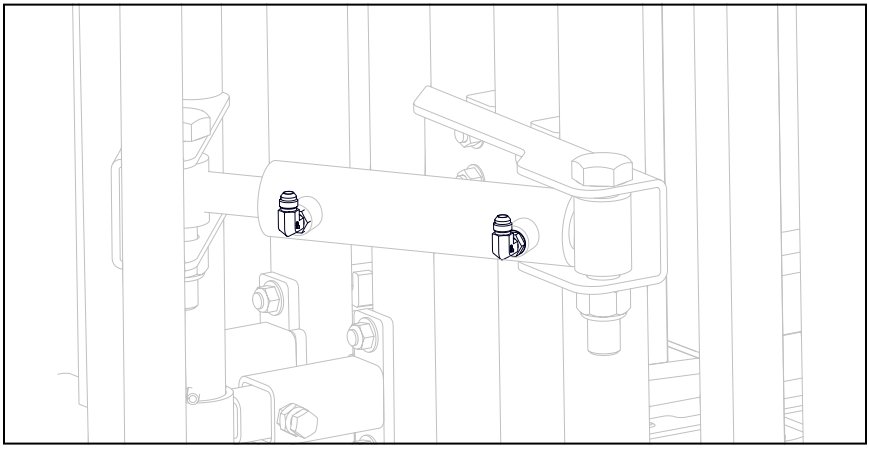
7. Install Neck Extender Upright (2002834) into the Head Sweep Mount on the Right-Hand side of the unit.



8. Lock the Neck Extender Upright and Hydraulic Head Sweep Weldment in place by installing 1/2" x 1.5 long bolts (7002287) and 1/2" jam nuts (7002265) into all four Head Sweep Mounts.



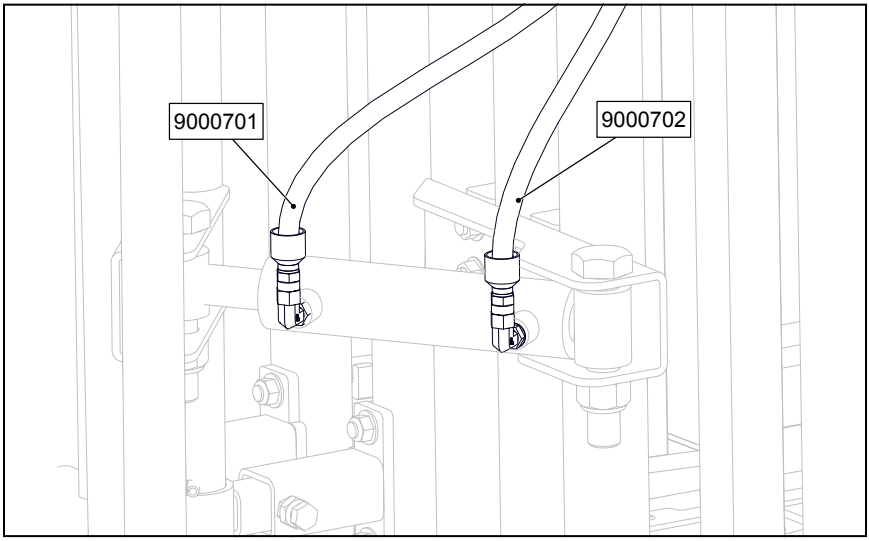
9. Install Elbo fittings (9000005) into each port of hydraulic cylinder. Tighten the fittings with the Male JIC end oriented upward.



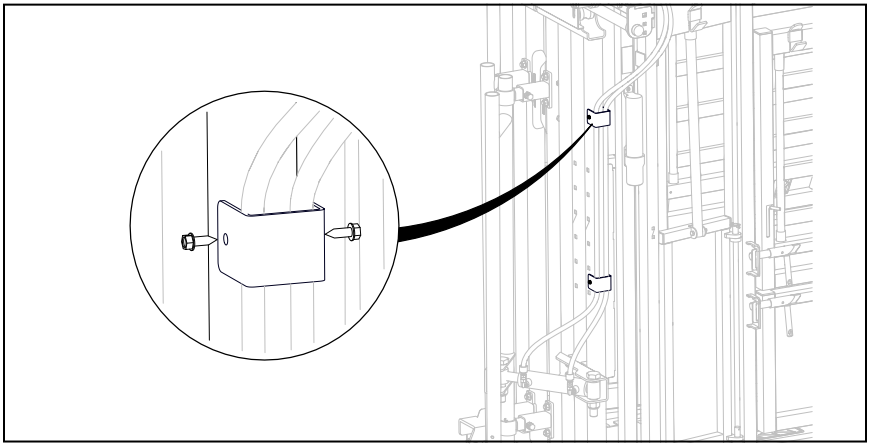
10. Install hydraulic hoses as shown. With Head Sweep Hose - Cap End (9000702) on the cap side of the cylinder and Head Sweep Hose - Rod End (9000701) on the rod side of the cylinder.

NOTE: The part numbers should be labeled on the hoses, but in case this is missing you can identify them by the 90-degree crimp fitting on the other end of the hose.

Head Sweep Hose - Cap End (9000702) has a long 90-degree crimp firring and Head Sweep Hose - Rod End (9000701) has a short 90-degree crimp fitting.



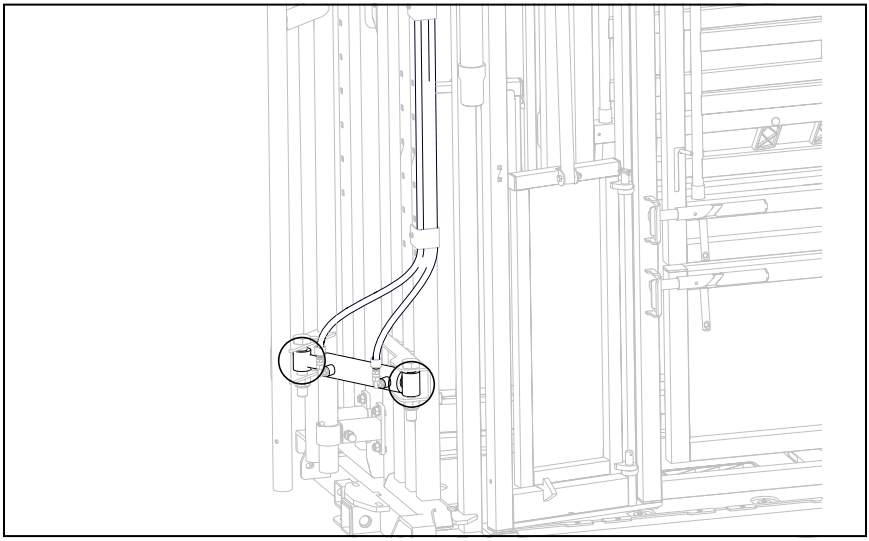
11. Secure hoses to head gate door with the provided brackets (2002845) and self-tapping screws (7002026.)



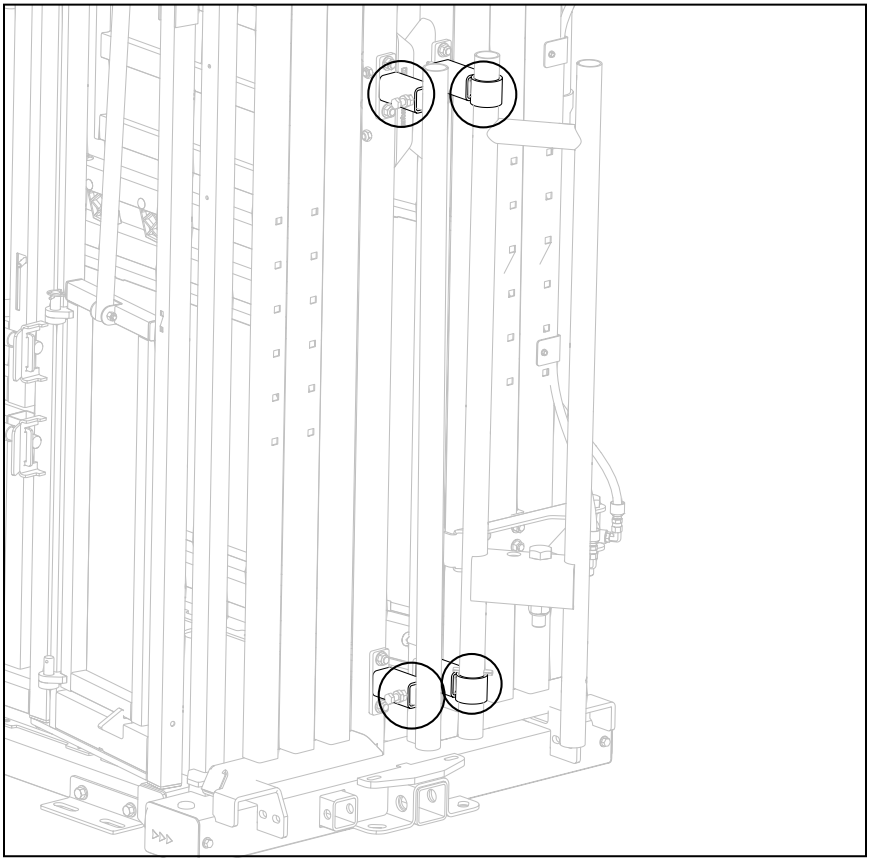
12. Plumb the opposite ends of the hoses into the capped auxiliary port on the bulkhead of the swingarm. With the long 90 going to the top port and the short 90 going to the bottom port.
13. Once plumbed the hoses can be ziptied to the top frame of the chute. Ensure to run up the chute after securing the hoses to ensure the excess hose is not rubbing on the frame as the headgate doors open and close.

REGULAR MAINTENCE

1. Grease both ends of the cylinder through the provided grease zerk every 1000 head or annually.



2. Spray pivot points with penetrating oil and tube mounts, every 500 head or every 3 months for best operation.

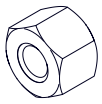
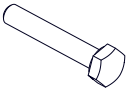
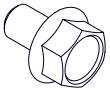
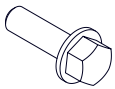
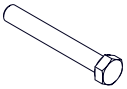
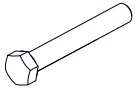
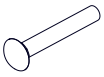
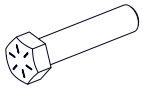
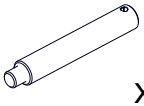
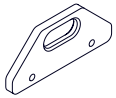
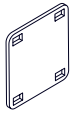
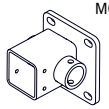
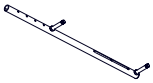
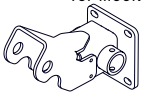
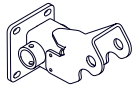
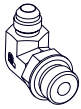
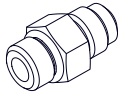
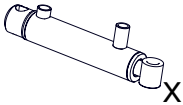


HYDRAULIC NECK EXTENDERS

REQUIREMENTS:

- 2 people
- 2 x Punch or Prybar
- Wrenches/Sockets:
  - 2 x 7/16"
  - 1/2"
  - 2 x 9/16"
  - 2 x 3/4"
  - 7/8"
  - 11/16"
  - 2 x 1-1/2"

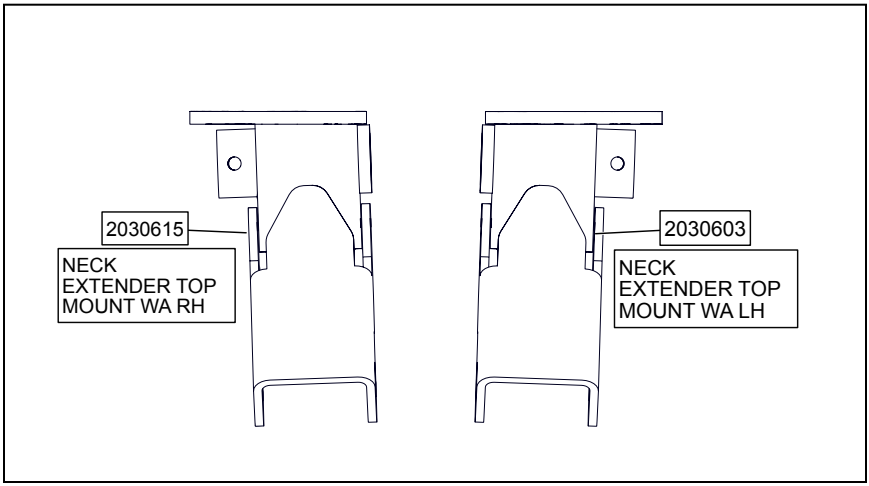
USER ASSEMBLY PARTS LIST

7002102 NUT-NYL-0.25-20-Z-5  x2	7002319 BOLT-HH-0.250-20-1.5-Z-5  x2	7002859 BOLT-FLG-0.3125-18-0.50-Z-5  x4	7003178 NUT-FNYL-0.375-16-Z-5  x8
7002219 BOLT-FLG-0.375-16-1.25-Z-5-FT  x4	7003183 BOLT-HH-0.375-16-2.75-Z-5  x4	7003177 NUT-FNYL-  x24	7002286 BOLT-HH-0.5-13-3.5-Z-5  x8
7002100 BOLT-CAR-0.5-13-3.5-Z-5-FT  x16	7002871 NUT-NYLLP-1-8-Z-2  x12	7002803 SPRING WASHER Z 1"  x4	7002813 BOLT-HH-1-8-4.5-Z-8  x2
7002810 POLYURETHANE BUMPER W/3-8 STUD  x2	2011377 NE PIVOT PIN  x4	2010894 NECK EX. HOSE HOLDER  x2	2017006 3/8" DOUBLE HOSE CLIP  x8
2017711 14" NECK YOKE  x4	2030381 RND PLASTIC CAP 1.49"-1.58" ID  x2	2025604 NECK EXTENDER CLAMP PLATE  x4	2025004 NECK EXTENDER MOUNT WA  x2
2036340 NECK EXTENDER POST W/A V2  x2	2030603 NECK EXTENDER TOP MOUNT WA LH  x1	2030615 NECK EXTENDER TOP MOUNT WA RH  x1	2036331 NECK EXTENDER BOTTOM LINK WA  x2
2036332 NE CYL LINKAGE WA LH  x1	2036334 NE CYL LINKAGE WA RH  x1	9000315 HJ FD/CV MANIFOLD  x1	9000004 06-06 M ORB-JIC CONNECTOR  x6
9000232 08-06 M ORB-JIC 90 ELBOW  x4	2009622 CYL 2 X 6" NECK EXT GEN -08ORB  x2		
9000699 108 NE MANIFOLD TO B-HEAD HOSE *PN WRITTEN ON HOSE x2	9000714 NECK EXTENDER ROD SIDE HOSE *PN WRITTEN ON HOSE x2	9000715 NECK EXTENDER BORE SIDE HOSE *PN WRITTEN ON HOSE x2	

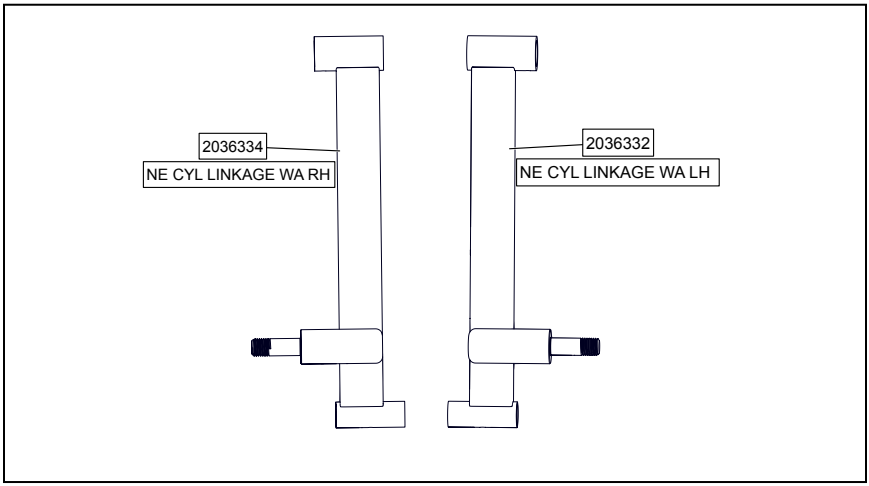
INSTALLATION:

NOTE: Images are shown on the Powerlock 1075. The process is the same for all compatible chutes.

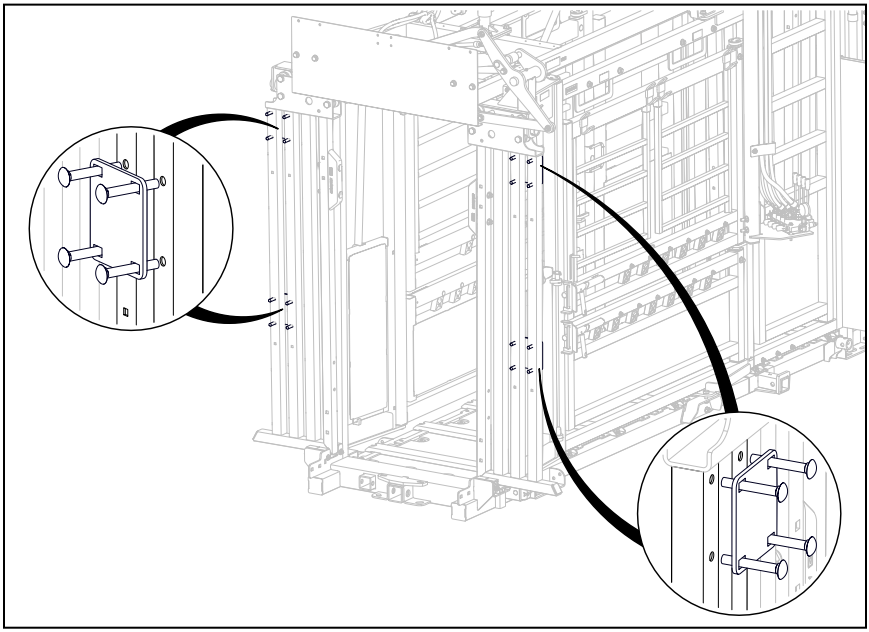
1. Identify and sort right- and left-hand components.
   a. Neck Extender top mounts are angled inwards when looking from the top as shown below.



   b. When laid on the ground side by side, the right- and left-hand linkage can be identified as shown below.

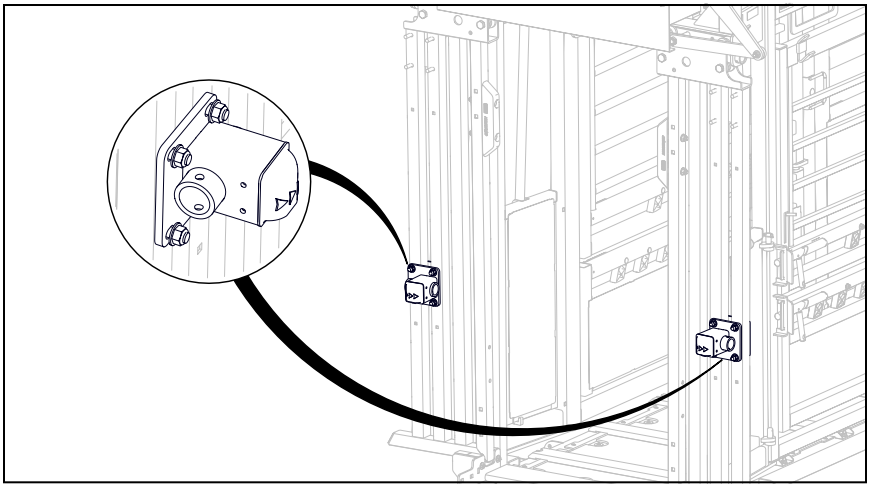


2. With Head Gate doors open, install clamp plate (2025604) with 1/2"x 3.5"carriage head bolts (7002100) on the backside of the doors in the four locations shown.



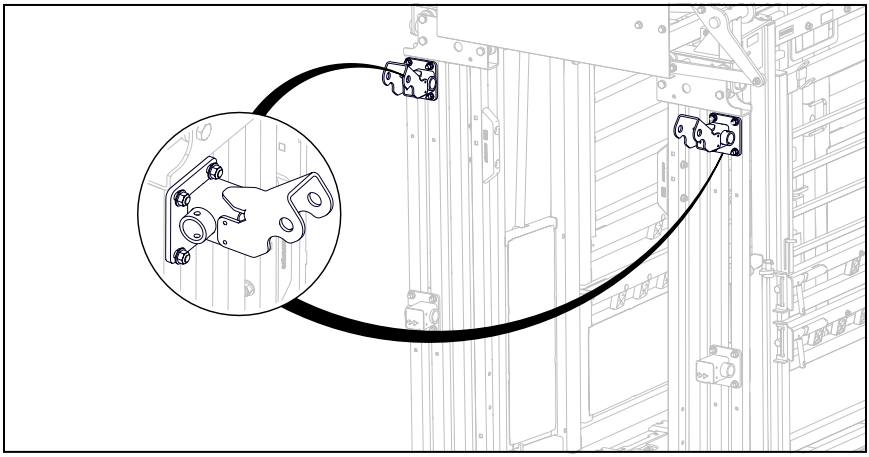
3. Install Neck Extender Mounts (2025004) in bottom location as shown and fasten with ½" nuts (7003177).

NOTE: Do not tighten all the way as this will make further assembly easier.

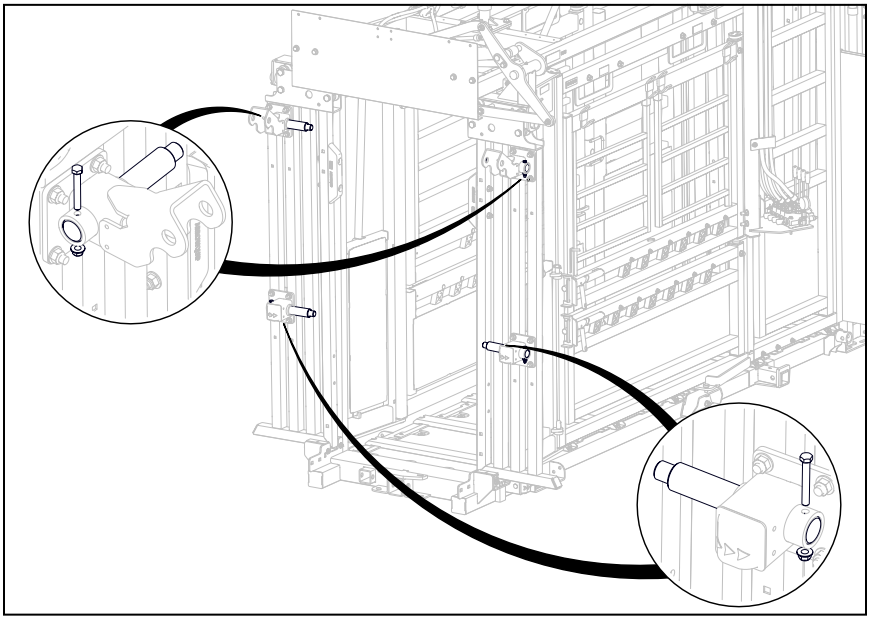


4. Install Neck Extender Top Mounts. Use part (2030603) on the LH door and part (2030615) on the RH door. Fasten with ½" nuts (7003177).

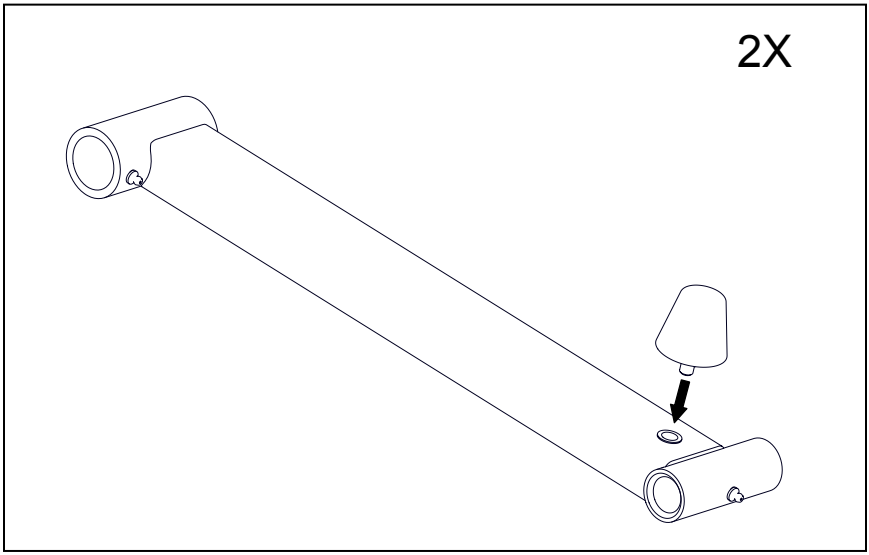
NOTE: Do not tighten all the way.



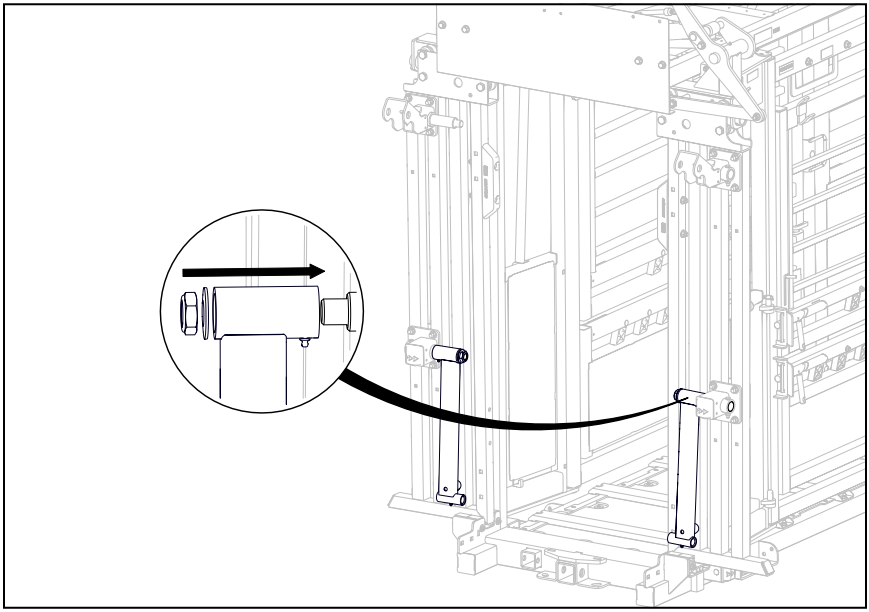
5. Install the Neck Extender Pivot pins (2011377) into the four Neck Extender mounts as shown. Fasten with 3/8"x 2.75"long bolt (7003183) and nut (7003178).



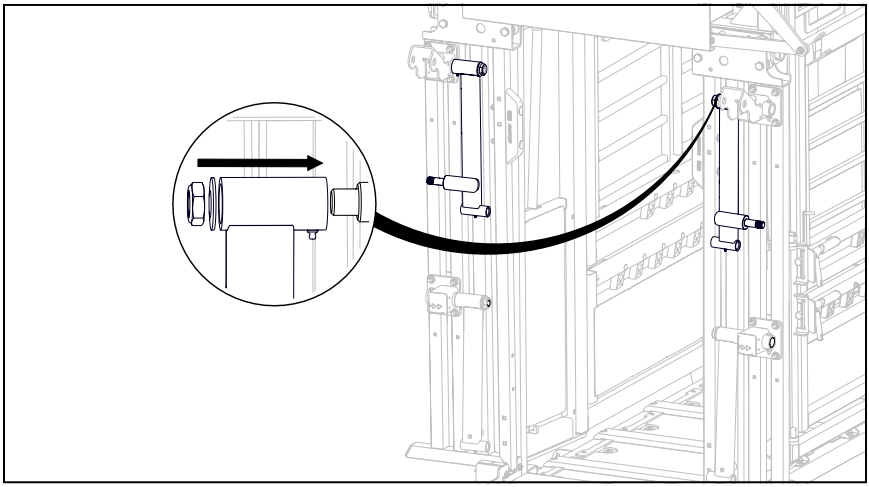
6. Install rubber bumpers (7002810) into threaded nutsert in both bottom linkages (2036331).



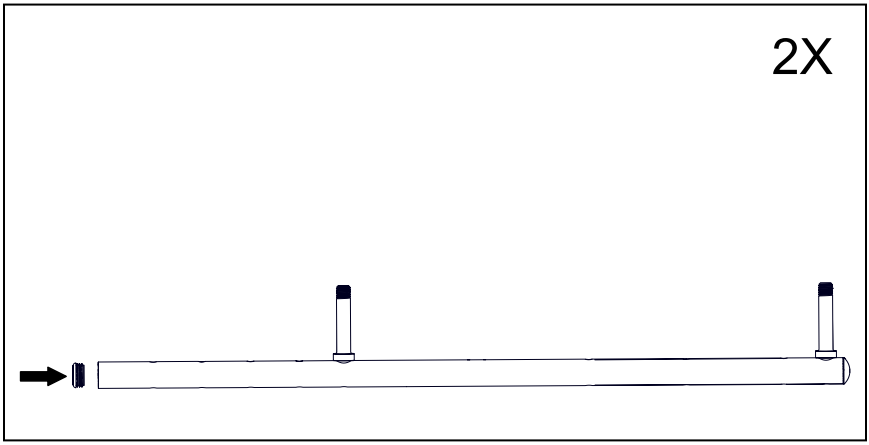
7. With the rubber bumper facing towards the door, install the bottom linkage as shown and install spring washer (7002803) and 1" nut (7002871) by hand. Do not tighten. Repeat on opposite door.



8. Install LH top linkage (2036332) as shown and install spring washer (7002803) and 1" nut (7002871) by hand. Spring washer should have convex side facing out. Repeat on opposite door with RH Linkage (2036334).

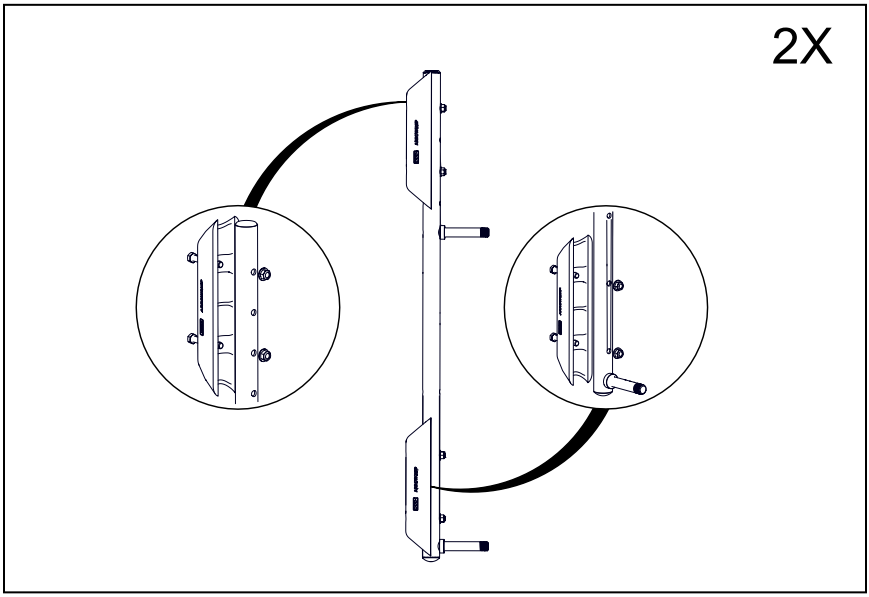


9. Sub-assemble Neck Extender Posts by installing the following to weldments (2036340).
   a. Install tube cap (2030381).

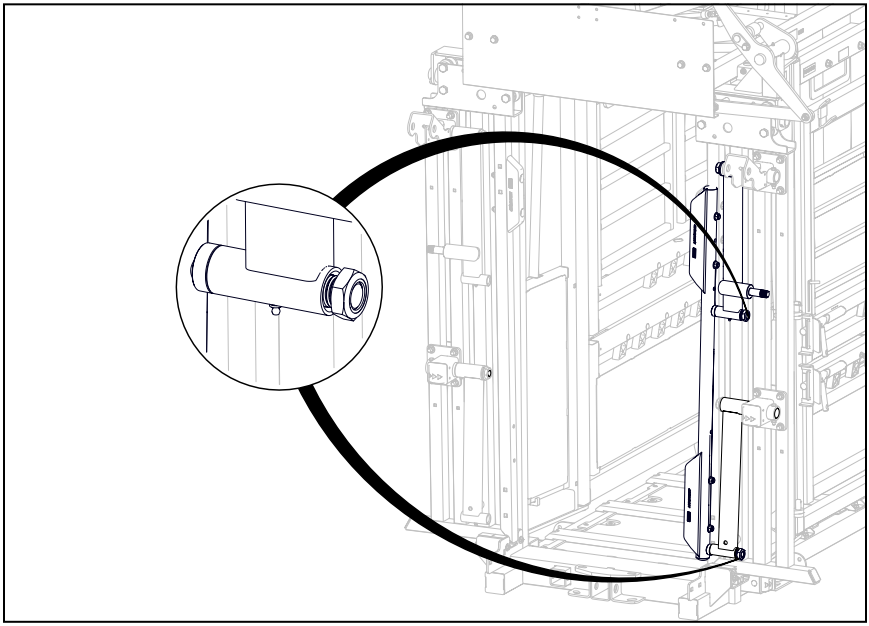


   b. Install top and bottom neck yokes (2017711) with 1/2"x 3.5"long bolt (7002286) and nut (7003177).

NOTE: Both top and bottom neck yoke can be installed in a higher or lower position depending on your needs.

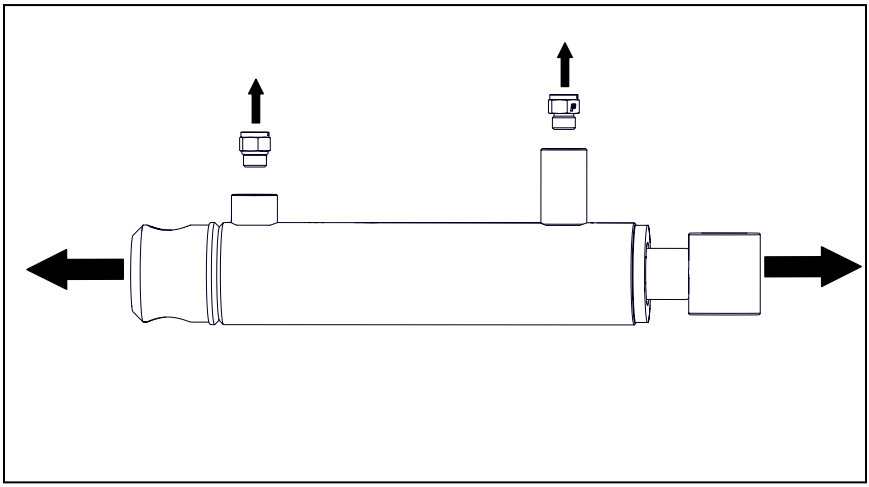


10. Install sub-assembled Neck Extender Post into top and bottom linkages. Fasten with 1" nuts (7002871) by hand.

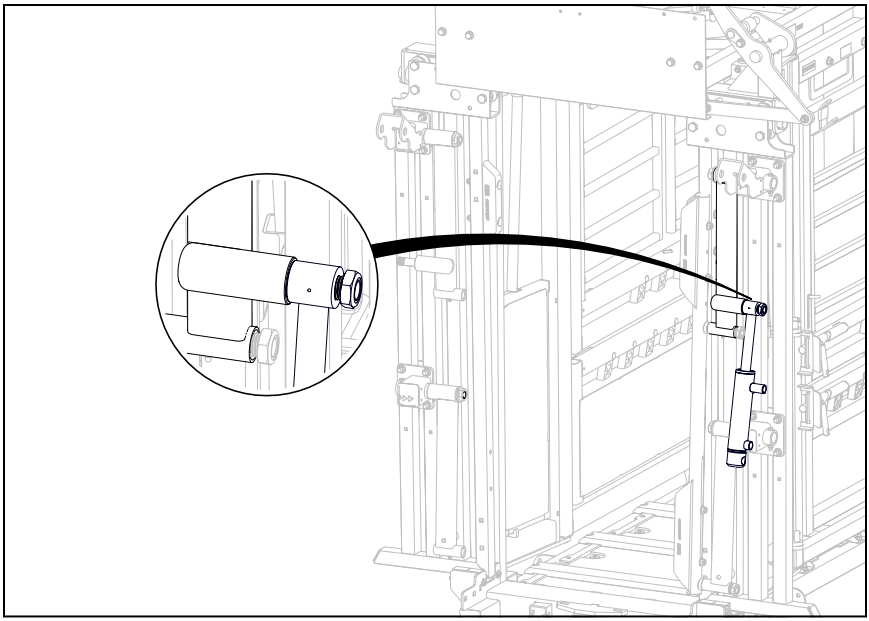


11. Remove factory plugs from cylinder (2009622). Using a punch or prybar, stick the tools through the rod and cap end. With a helper, pull the cylinder into its extended position.

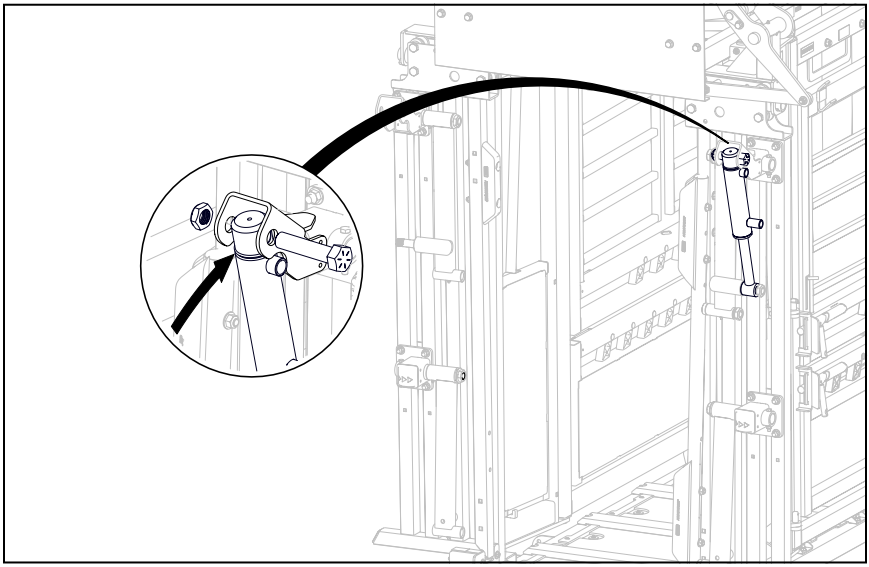
NOTE: Oil may come out of the ports.



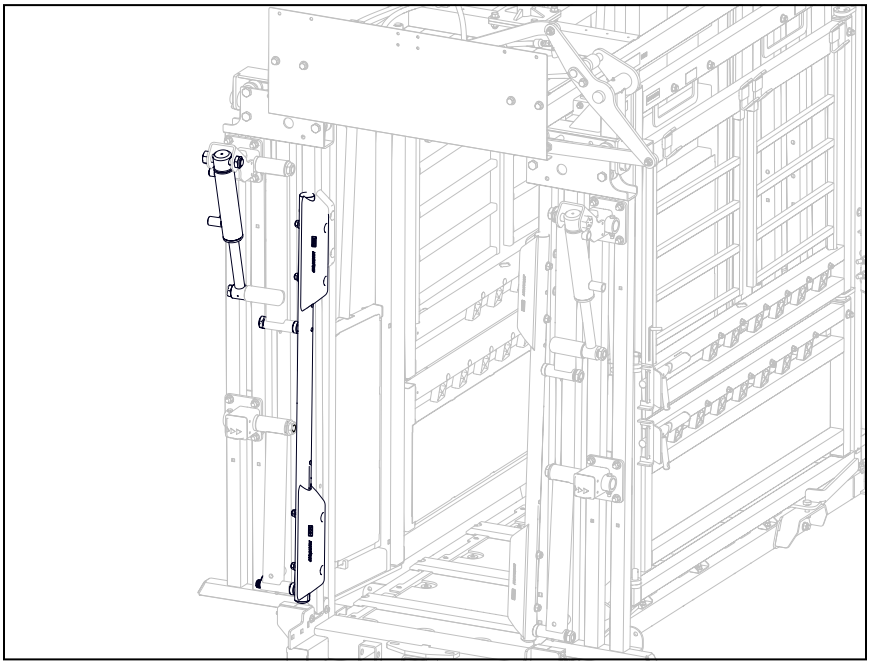
12. Install rod end onto linkage as shown and hand fasten with 1"nut (7002871).



13. Rotate cylinder upward and fasten cap side to Top Neck Extender Mount using 1"x 4.5"bolt (7002813) and nut (7002871).

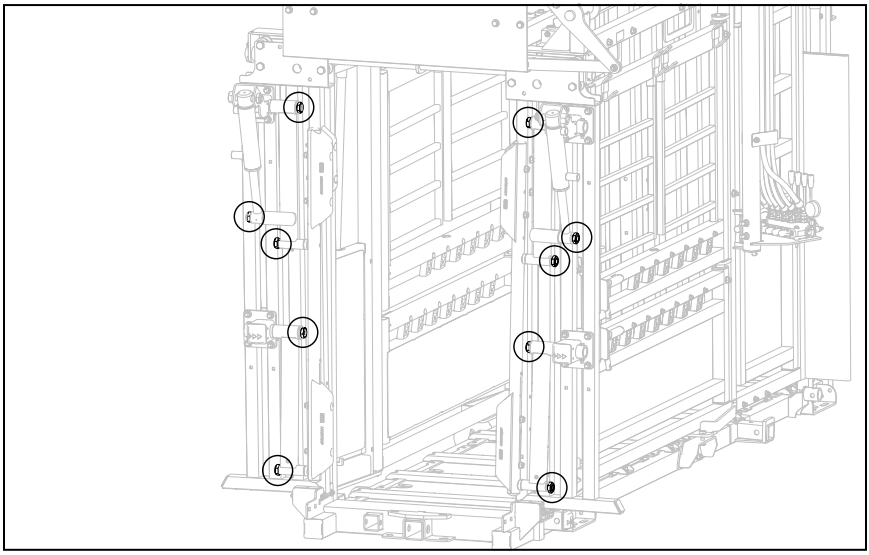


14. Repeat steps 10-13 for RHS.

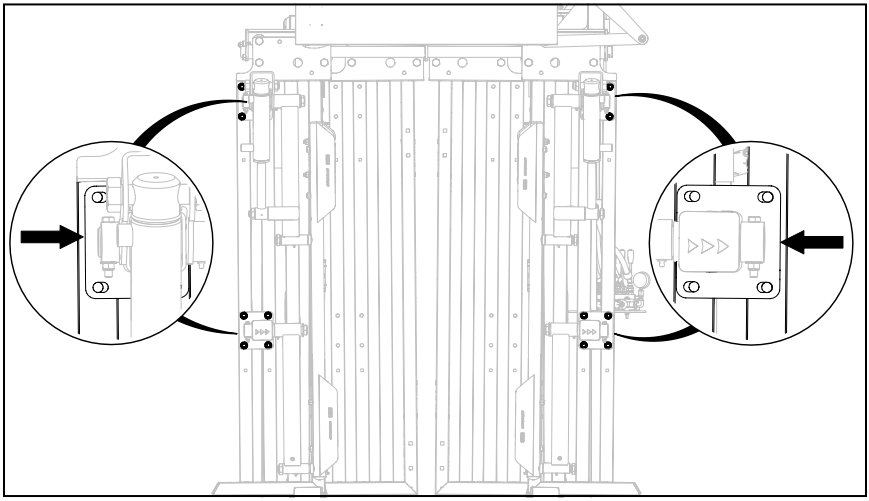


15. Now that all the mechanical components are completely assembled, all 10 x 1" nuts can be tightened.

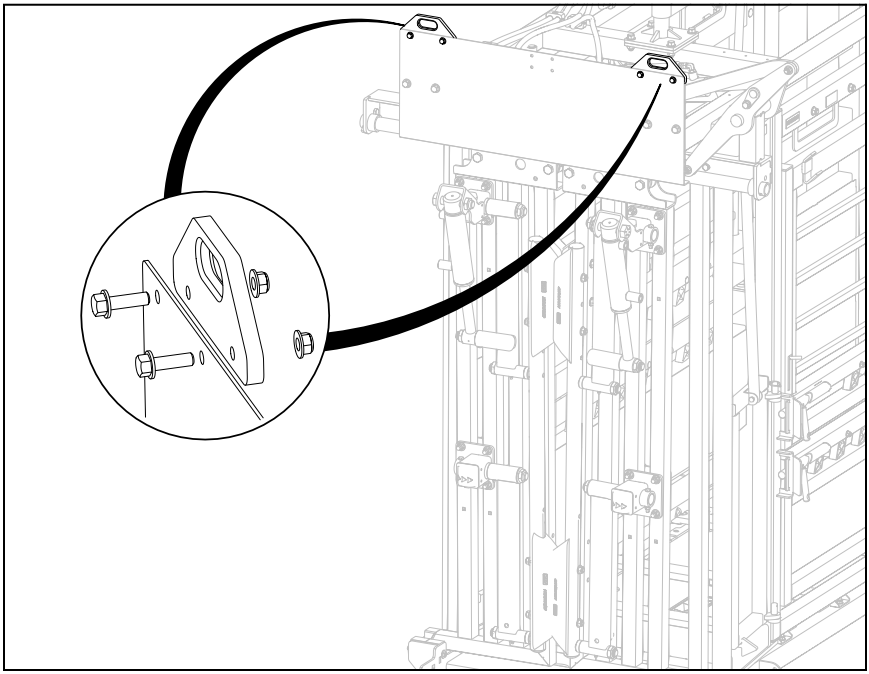
NOTE: Do not overtighten joints so Neck Extenders can still pivot.



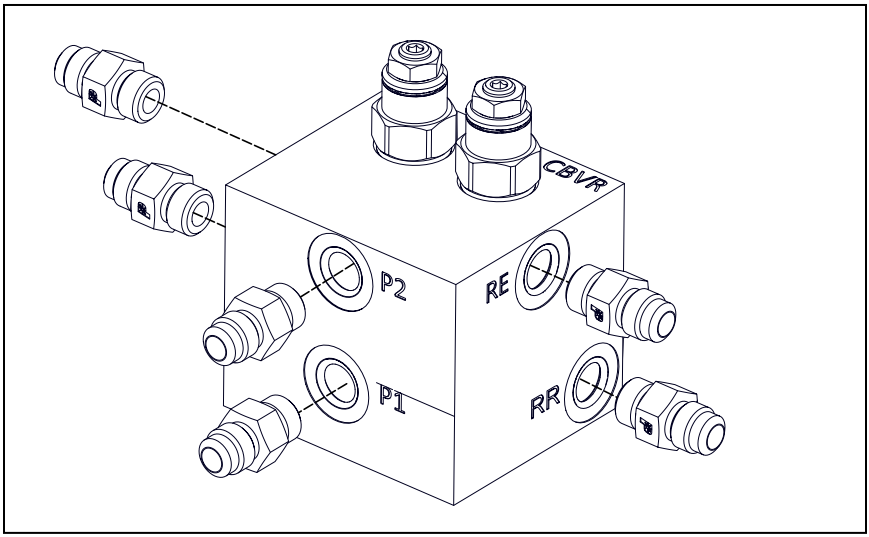
16. Neck Extender mounts are slotted. For best Neck Extender performance: ensure that both top and bottom mounts are pushed towards the center of the chute when tightening the hardware. Neck Extender mount hardware can be tightened in 16 places.



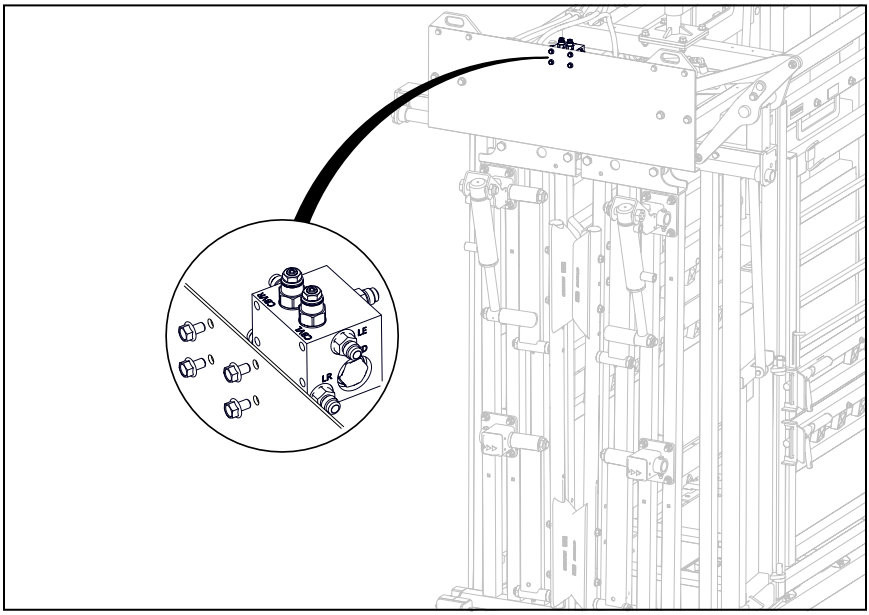
17. Install hose holders (2010894) onto each side of the Head Gate shield using 3/8" x 1.25" long bolt (7002219) and nut (7003178).



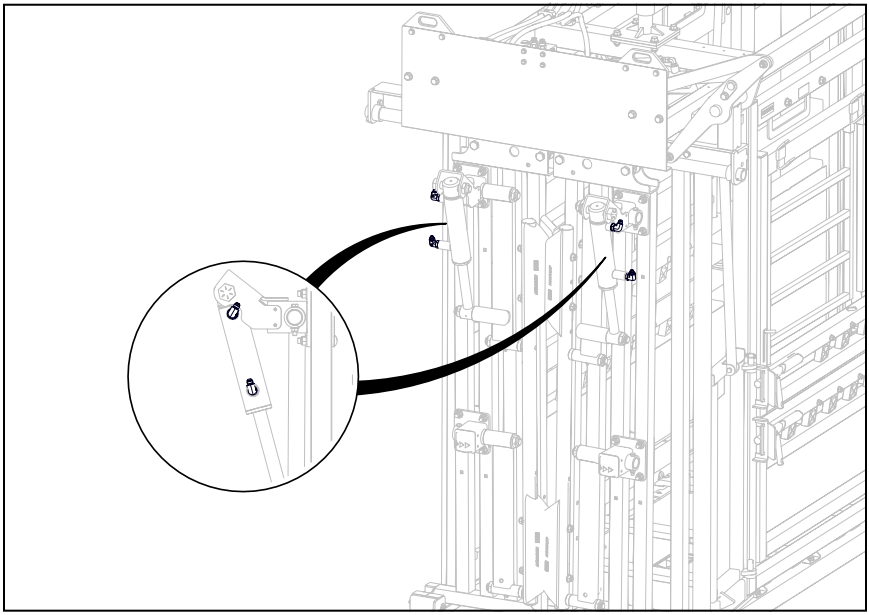
18. Sub-assemble flow divider block (9000315) by installing six fittings (9000004) into ports shown below.



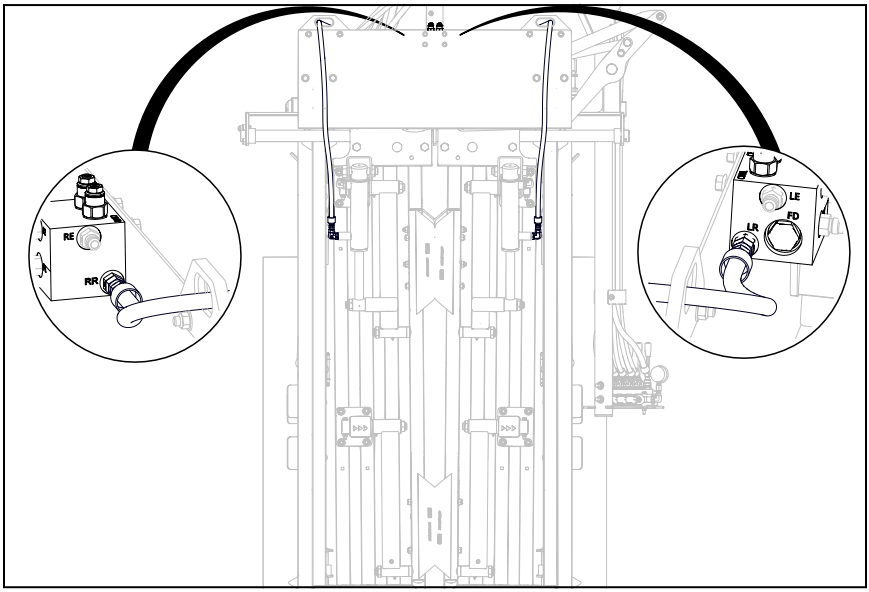
19. Bolt flow divider to Head Gate shield using 5/16"x 1/2"long bolts (7002859).



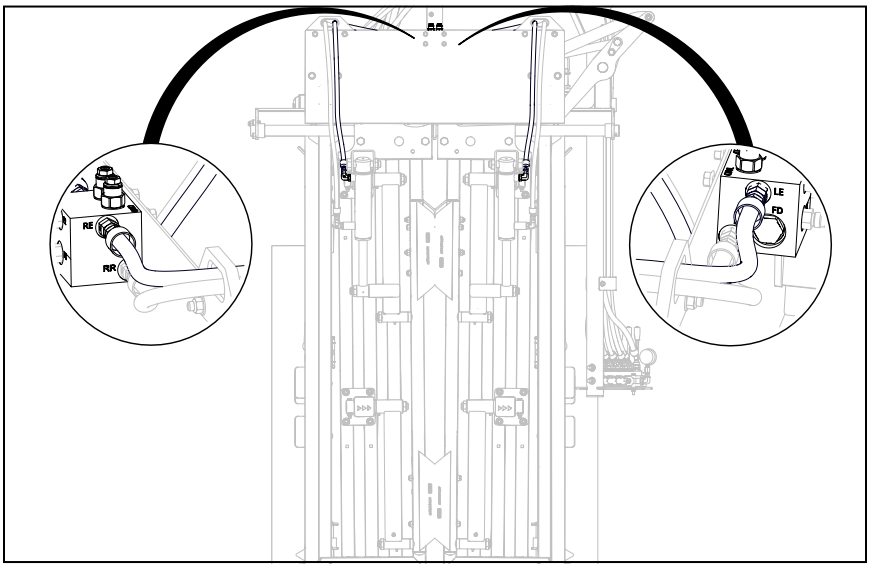
20. Install fittings (9000232) into the Neck Extender cylinder and lock them in the orientation shown.



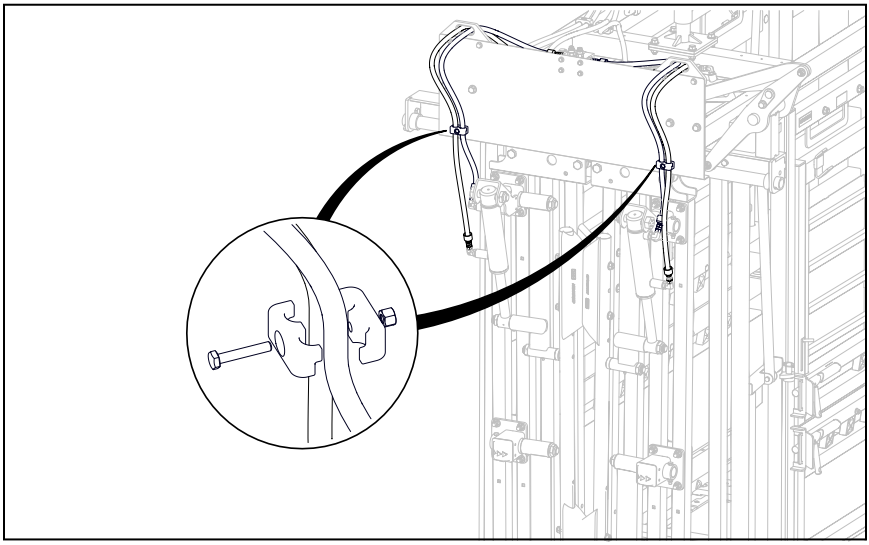
21. Connect the long hose (9000714) to the bottom side fitting on the flow divider “LR” to the Rod end of the cylinder. Repeat on RH side connecting to the flow divider port labeled “RR”.



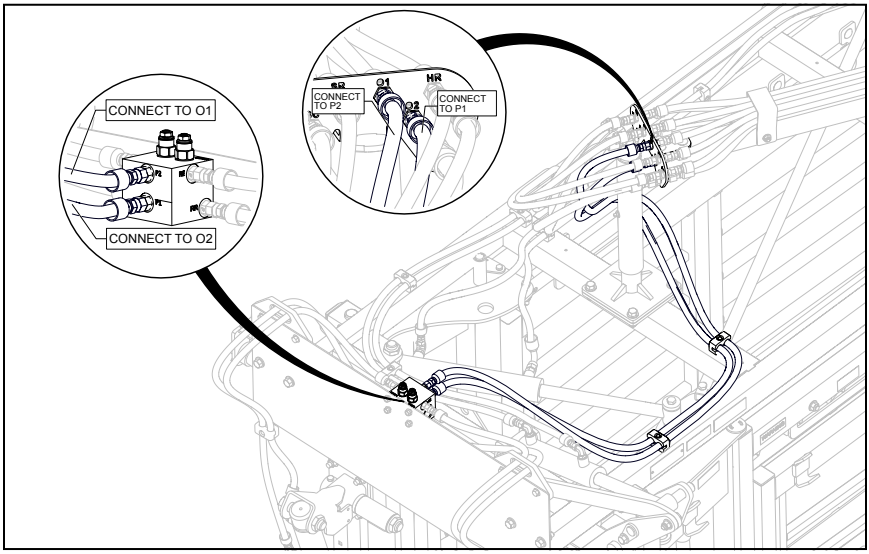
22. Connect the short hose (9000715) to the top side fitting on the flow divider “LE” to the cap end of the cylinder. Repeat on RH side connecting to the flow divider port labeled “RE”



23. Secure Neck Extender hoses together with hose clips (2017006), 1/4"x 1.5"long bolt (7002319) and nut (7002102). Repeat on RH side.



24. Hoses (9000699) can be connected to ports P1 and P2 on the flow divider. Hoses can be routed along the left side of the chute, using the provided clips (2017006) and pre-installed self-tapping bolts in your chute. The hoses can then be routed around the swingarm pivot. The hoses can then be fastened to auxiliary functions on the bulkhead with the hose connected to P1 to O2 and the hose connected to P2 to O1.



25. Neck Extenders are now ready to fill with oil. This can be done by cycling the Neck Extenders in and out around 15-30 times until motion is smooth.

NOTE: Ensure to clean up spilled oil off rubber floor as soon as possible. Prolonged exposure to hydraulic oil can cause rubber mats to swell.

RESETTING & SYNCING:

If you notice Neck Extenders are not staying in sync, or the animal is able to push them out of sync the counterbalance valves in the flow divider block will need to be tightened and synced. The following instructions will improve performance.

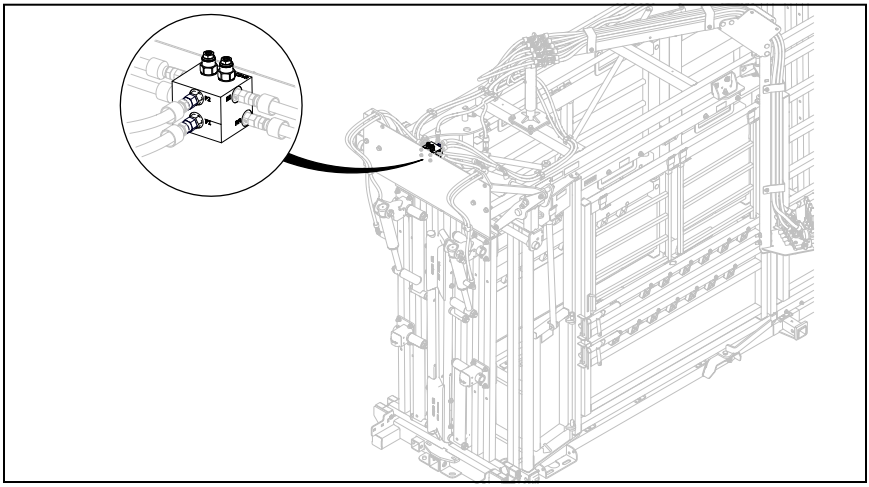
NOTE: The process for resetting and syncing Neck Extenders is the same regardless of which Arrowquip hydraulic chute you have. The images shown in this example are on the Powerlock1075.

Tools Required

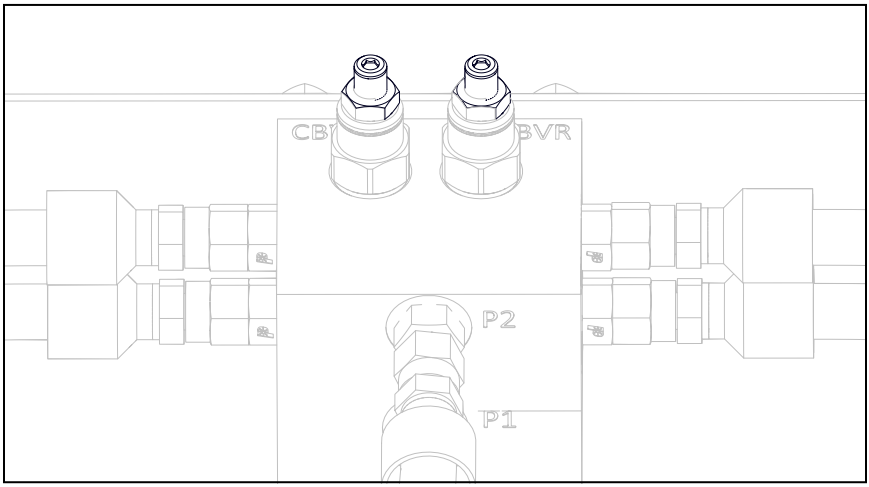
- 4mm Allen key
- 1/2"Wrench

INSTRUCTIONS:

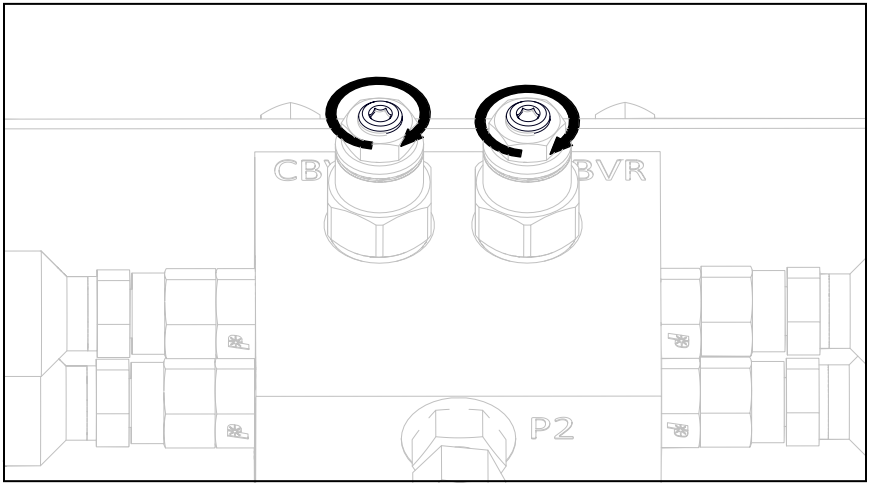
1. Locate the Neck Extender flow divider which is bolted to the backside of the front shield of the chute.



2. Use your Allen Key to hold the counterbalance valve set screws in place and break the jam nuts loose with your wrench.



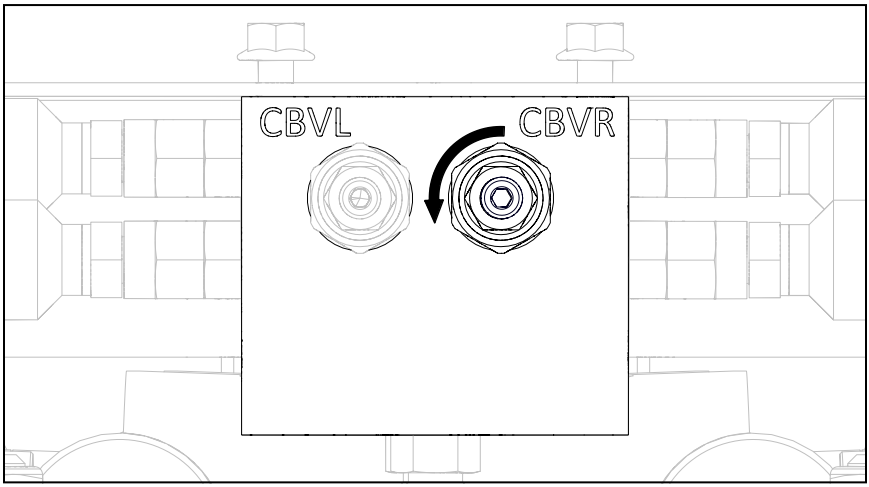
3. Use your Allen key to turn the set screws clockwise until they bottom out.



4. Use the chute controls to push the neck extenders all the way out. You will notice that the Neck Extenders will no longer come back in.

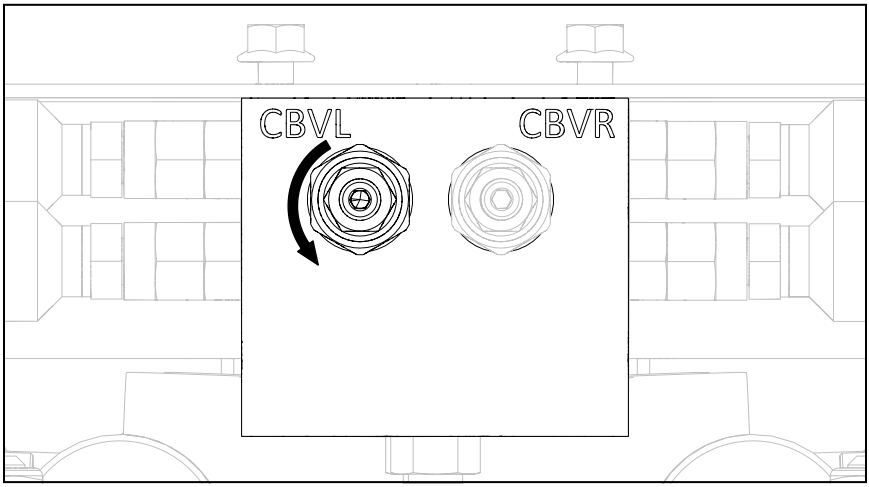
NOTE: If your neck extenders stay locked against the chute, hoses have been installed backwards. swap the top and bottom hoses on both the left- and right-hand side of the block.

5. Starting with one of the CBVR, turn the set screw out in quarter turn increments and try to retract the Neck Extenders. Eventually you will find a point where the right Neck Extender will retract and the left will stay out. This is normal.



IMPORTANT: Keep track of how many turns you have turned the set screw out.

6. At first the Neck Extender will move in a jumpy motion, continue to slightly adjust the set screw until it can retract in a smooth motion.
7. Lock the Jam nut on CBVR.
8. Once this is achieved you can turn the set screw on CBVL counterclockwise the same number of turns you counted on CBVR earlier.



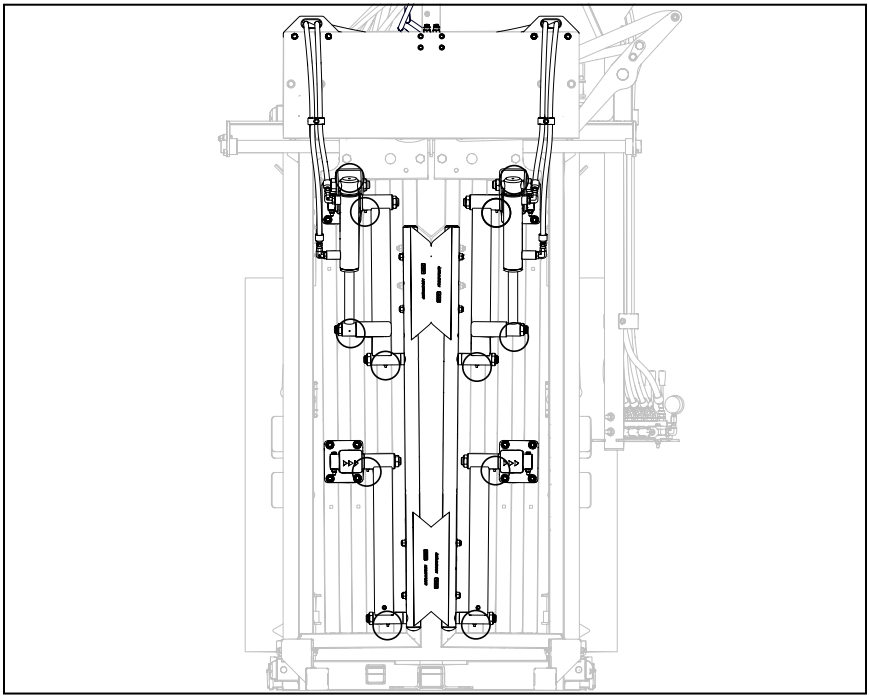
9. Run the Neck Extenders all the way in and out. Watch as the Neck Extenders retract towards the Head Gate. Turning set screw clockwise will decrease speed, turning set screw counterclockwise will increase speed.
    a. If the left Neck Extender is moving faster than the right.
        i. Turn the CBVL set screw clockwise in 1/8th turn increments.
    b. If the left Neck Extender is moving slower than the right.
        i. Turn the CBVL set screw counterclockwise in 1/8th turn increments.
10. Adjust as needed until Neck Extenders are adequately in sync.

NOTE: This method can get the Neck Extenders very close to the same speed but can still come out of sync over many cycles. While working animals remember to do the following:

1. Do not feather the Neck Extender controls. This limits flow and can cause Neck Extenders to come out of sync.
2. Try to retract the Neck Extenders fully against the Head Gate as often as possible, or at least every 10-20 head. This will resync the Neck Extenders as they come to the end of their travel.

REGULAR MAINTENCE

1. Grease Cylinders and linkage pivots through provided zerks every 1000 Head or Annually. (12 places)



4TH GENERATION MANUAL HEAD HOLDER

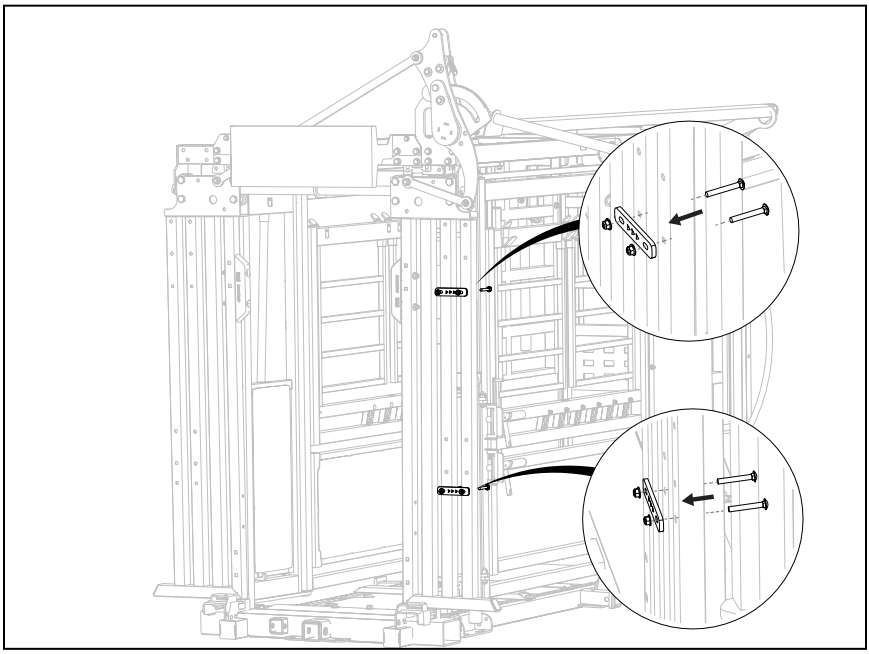
REQUIREMENTS:

- 2 people
- Sockets/Wrenches
  - 9/16"
  - 3/4"

INSTALLATION

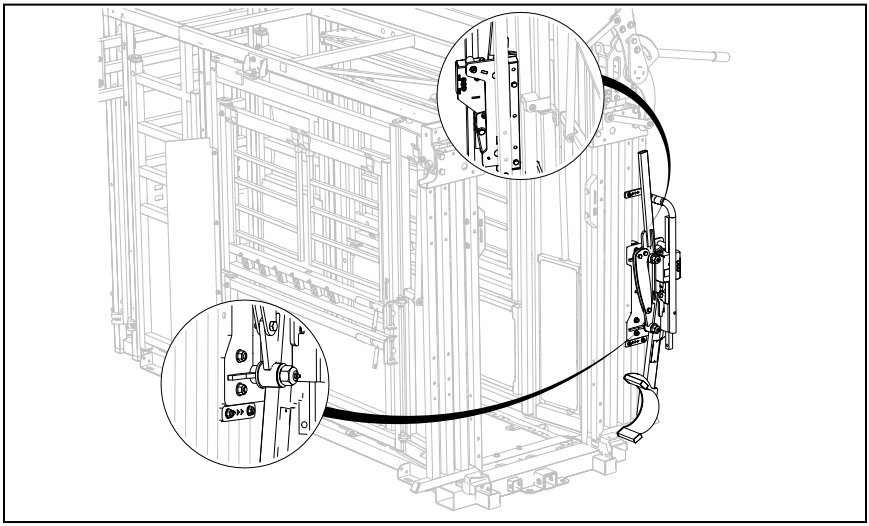
NOTE: The below instructions show a left hand Head Holder installed on 7500LV. The process for installation is the same for right hand installation and other compatible chutes.

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

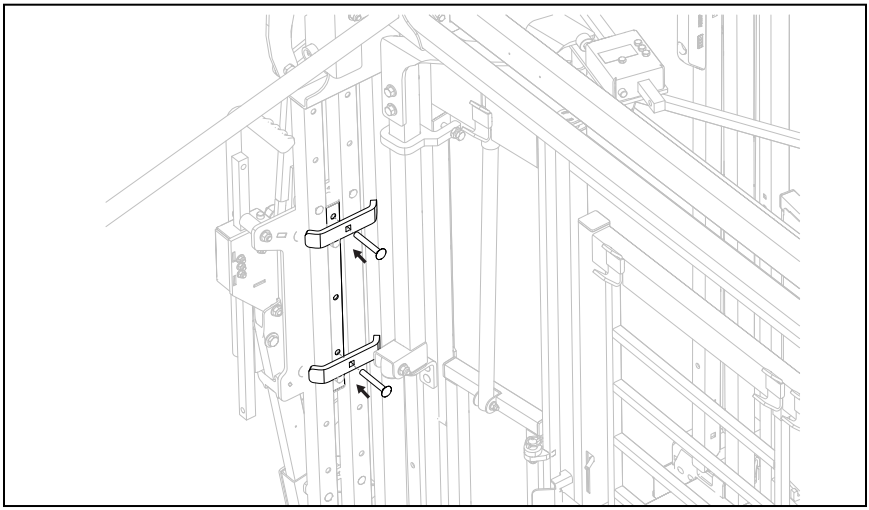


NOTE: Do not hold the bottom plate on the head holder when adjusting.

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.

RECOMMENDED MAINTENANCE:

1. Add grease throughout grease nipples **as needed**.
2. Every 6 months:
   a. Check bolts to ensure they are tightened properly.
   b. Clean lock box shaft.
      i. Spray shaft with Brake cleaner and wipe off any stuck-on debris.
      ii. Work Head Holder in and out ensuring entire lock shaft is clean.
   c. Season lock box shaft
      i. Spray dry clean cloth with WD-40.
      ii. Gently wipe cloth on all sides of shaft.
      iii. Wipe shaft with clean dry cloth.

⚠ WARNING:

DO NOT SPRAY WD-40 DRY LUBE DIRECTLY ON THE SHAFT OR INSIDE THE LOCK BOX AS THIS MAY CAUSE MALFUNCTION.

TROUBLESHOOTING GUIDE

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

PROBLEM: HEAD HOLDER IS TOO TIGHT

SOLUTION:

1. Spray WD-40 Dry Lube on a rag. Wipe the lockbox shaft while opening and closing the head holder to work the lubricant in.
2. Spray WD-40 Dry Lube directly on the pivot points.
3. Add grease through the grease nipples.

PROBLEM: HEAD HOLDER IS SLIPPING

SOLUTION:

1. Clean the lock box shaft and inside the lock box with brake cleaner to remove build-up.
   a. Thoroughly clean all parts of the lock, including wiping down the shaft with brake cleaner.
2. Open and close the Head Holder a few times, then confirm that all build up is removed. Repeat Step 1 if necessary.
3. Using the Head Holder operation handle, close the Head Holder half-way.
4. Pull on the Head Holder to test the security of the lock.
   a. If the lock continues to slip, contact Arrowquip Client Care to determine if replacement parts are needed.

b. If the locks are secure, move on to Step 5.

5. If the Head Holder locks are creating excessive noise season the lock box shaft.
   a. Spray dry clean cloth with WD-40.
   b. Gently wipe cloth on all sides of shaft.
   c. Wipe shaft with clean dry cloth.

BALK GATE

REQUIREMENTS:

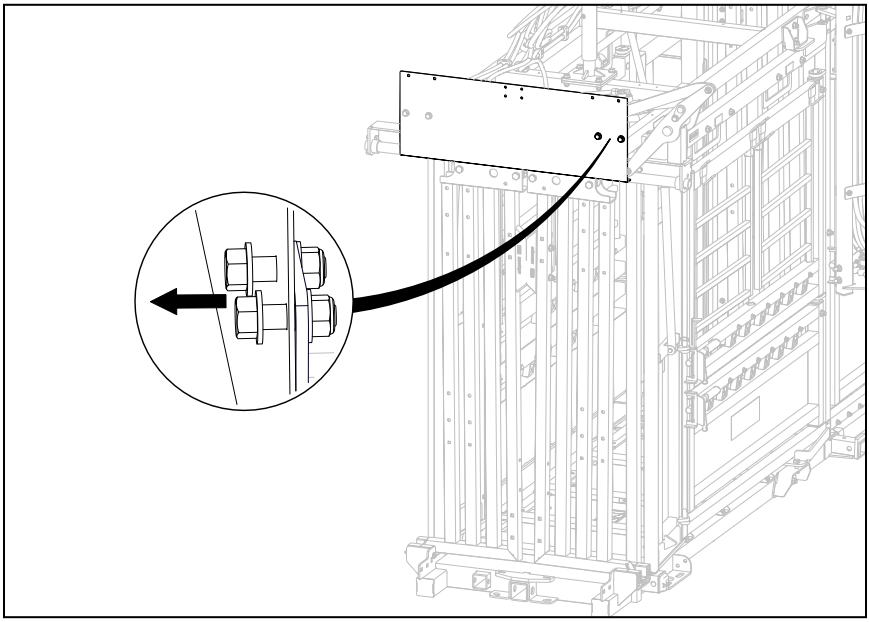
- 2 people
- Sockets/Wrenches
  - 9/16"
  - 2 x 3/4"
  - 2 x 1-1/8"

INSTALLATION:

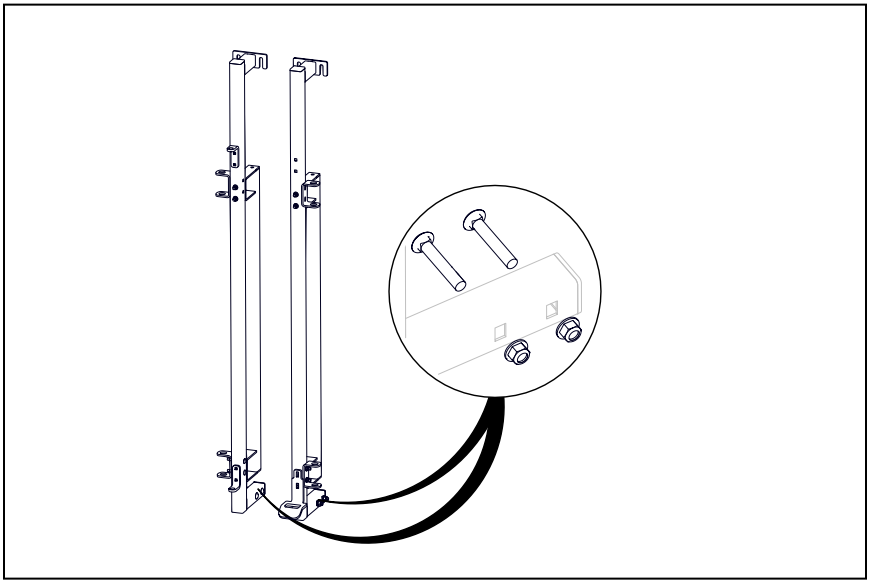
NOTE:

- The below instructions show the 88-LPCG Balk Gate Kit being installed on a 1075. The process for installation is the same for other compatible chutes.
- Balk gate comes with lug posts and most components for balk gate a pre-assembled. Depending on if you have purchased a left-hand (LH) and right-hand (RH) configuration will determine the installation position of each lugpost.
- These instructions are to install a LH configured balk gate. For RH installation follow steps and install on lug posts on opposite side of chute.

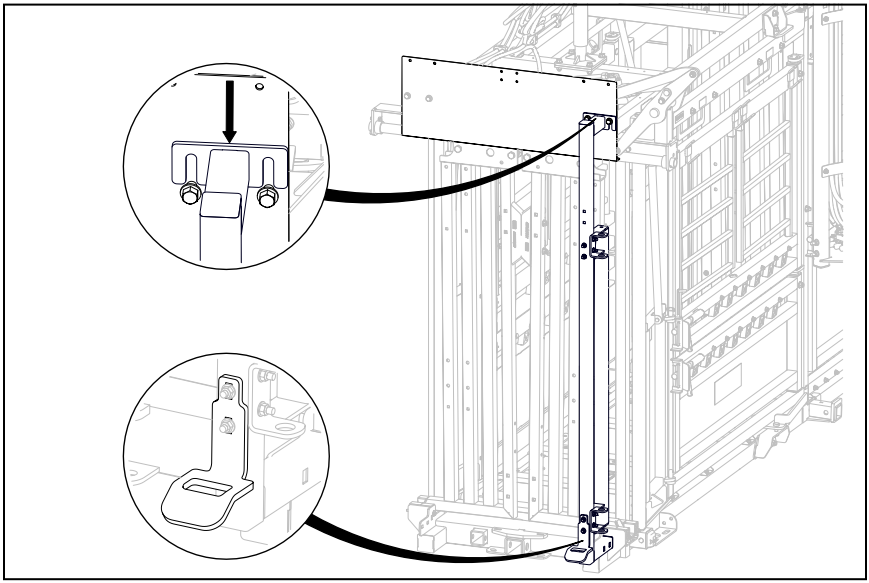
1. Loosen the two bolts on the LH side of the decal name shield.



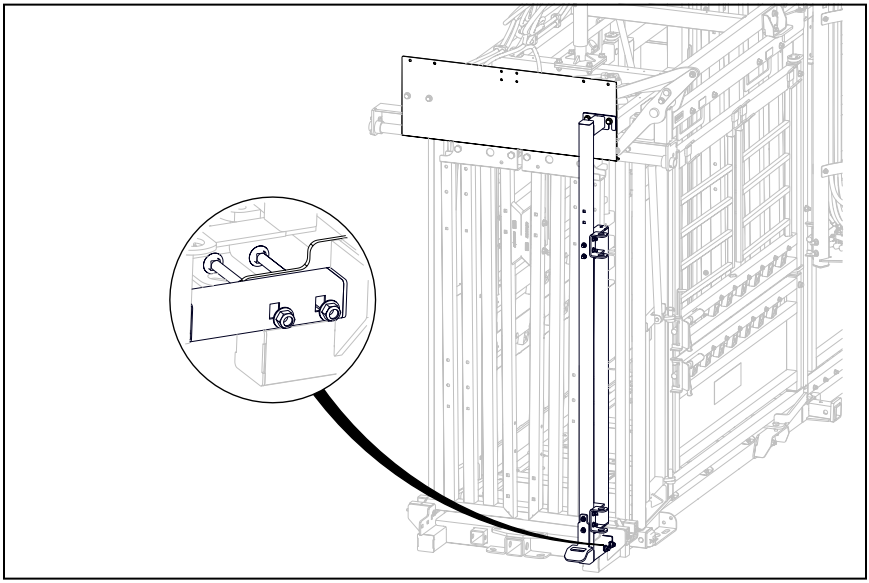
2. Remove the 1/2" x 3" long carriage head bolts from the bottom of both provided Lug Posts. Keep for later step.



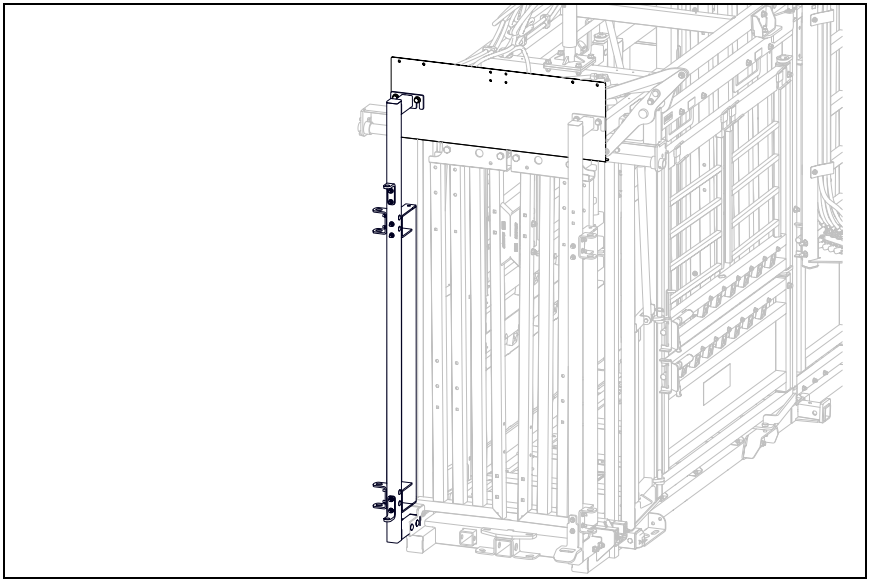
3. Look for Lug Post that has striker plate bolted on to the bottom. Slide this Lug Post behind the bolt heads on the LH side of the chute as shown. Do not tighten bolts.



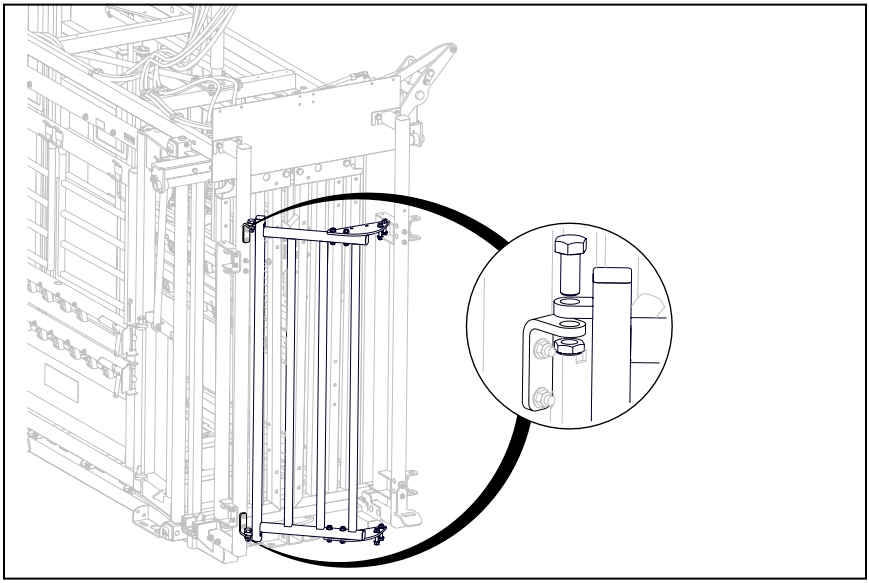
4. Using the hardware removed in step 2, bolt the bottom of the Lug Post to the chute as shown.



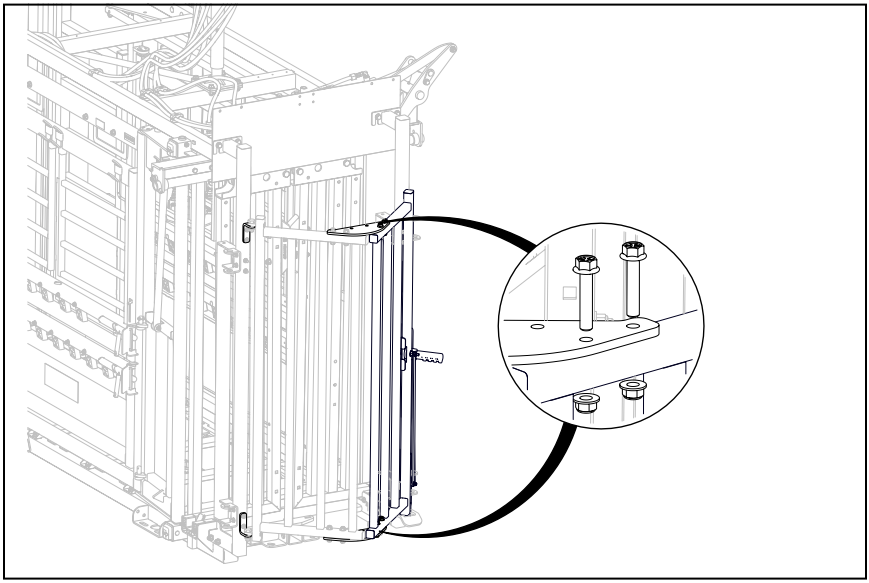
5. The top bolts from Step 3 can now be tightened.
6. Repeat steps 1-4 on the RH side with the other provided Lug Post.



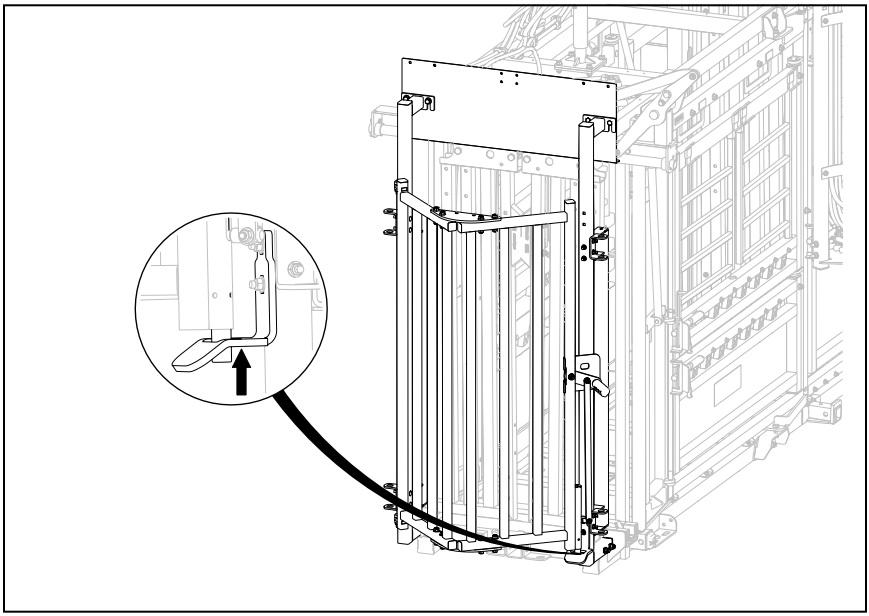
7. Using the pre-installed hardware, bolt the hinged half of the gate to the RH side of the chute as shown.



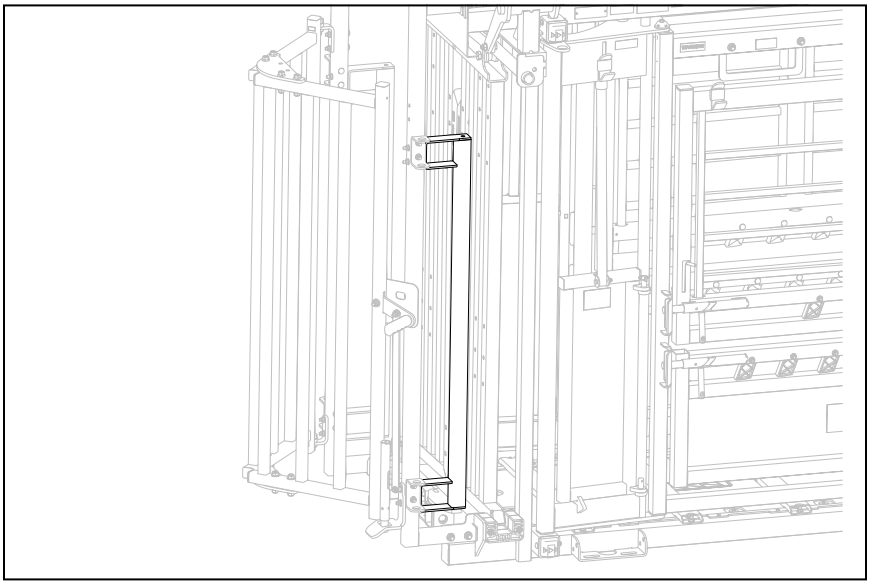
8. Use the hardware pre-installed in the plates to bolt on the latch side of the gate as shown.



9. Ensure striker plate is adjusted to provide adequate lock engagement.



NOTE: **REMOVE FILLER POST BEFORE INSTALLING HEAD HOLDER**.



CALF RESTRAINER BAR

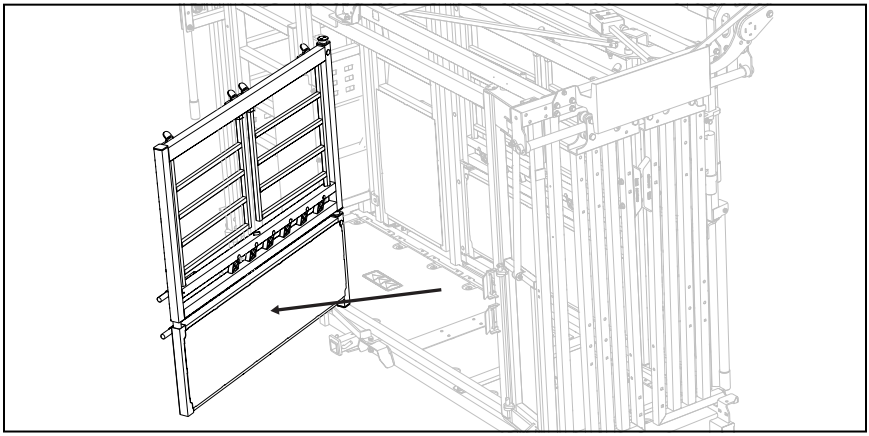
REQUIREMENTS:

- 3/4" Wrench

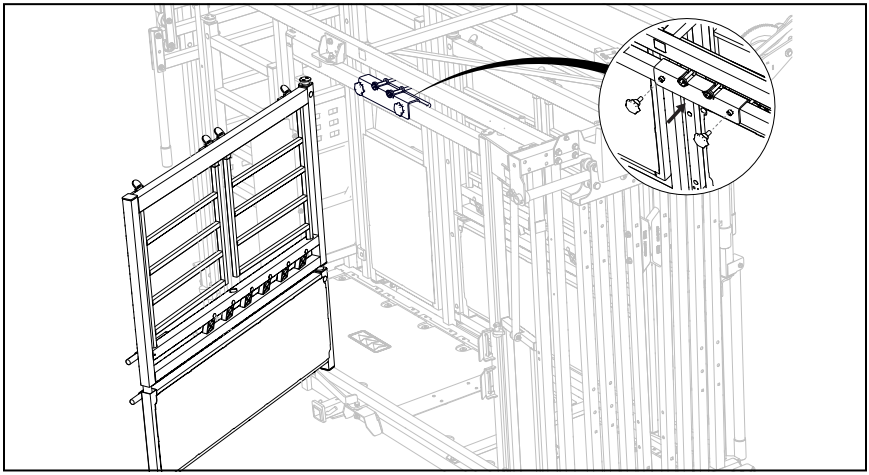
INSTALLATION

NOTE: The below instructions show the QC-GB Calf Restrainer Bar being installed on an Arrowlock 75 Series Chute. The process for installation is the same for all other compatible chutes.

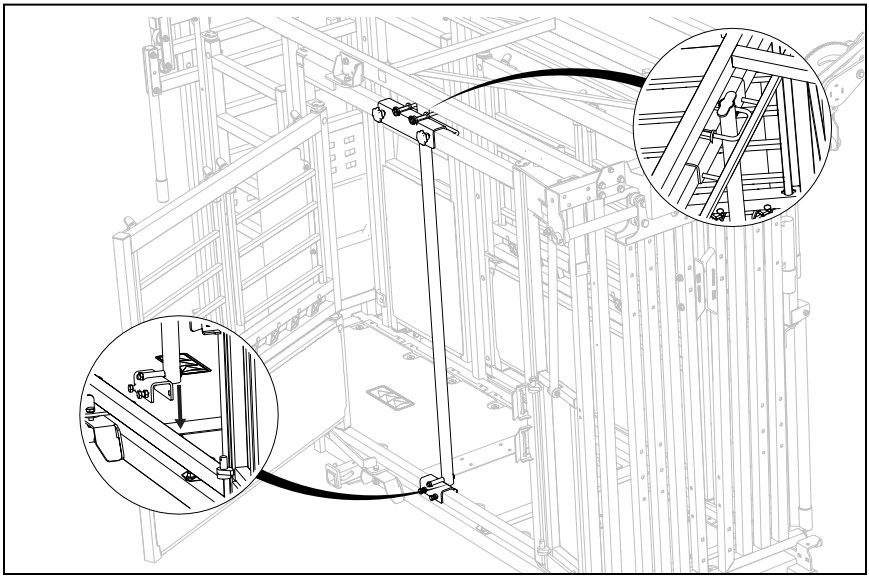
1. Open the emergency exit doors.



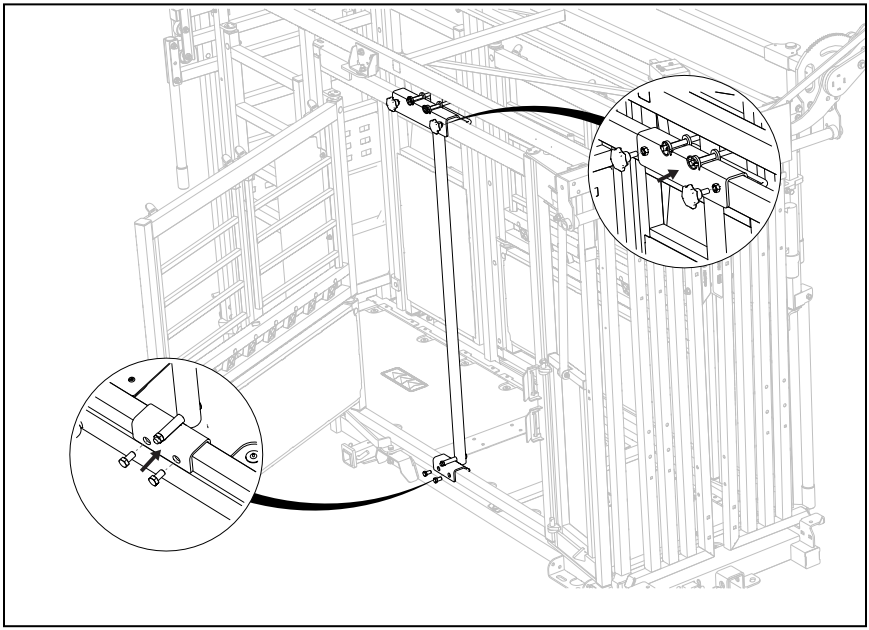
2. Mount the top bracket onto the chute.



3. Insert Calf Restrainer Bar into the top bracket, and then lower bottom bracket onto squeeze frame.

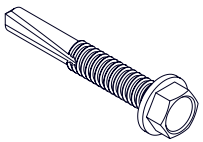


4. Adjust to desired position along the squeeze frame.
5. Then tighten top knobs and bottom bolts to fix the bar in place.



HEAD GATE SHOULDER CUSHIONS

PARTS LIST:

7002969 #12X1-1/2" SELF TAPPING SCREW  x16	2013732 SHOULDER CUSHION STRIP x4	2013729 SHOULDER CUSHION  x2

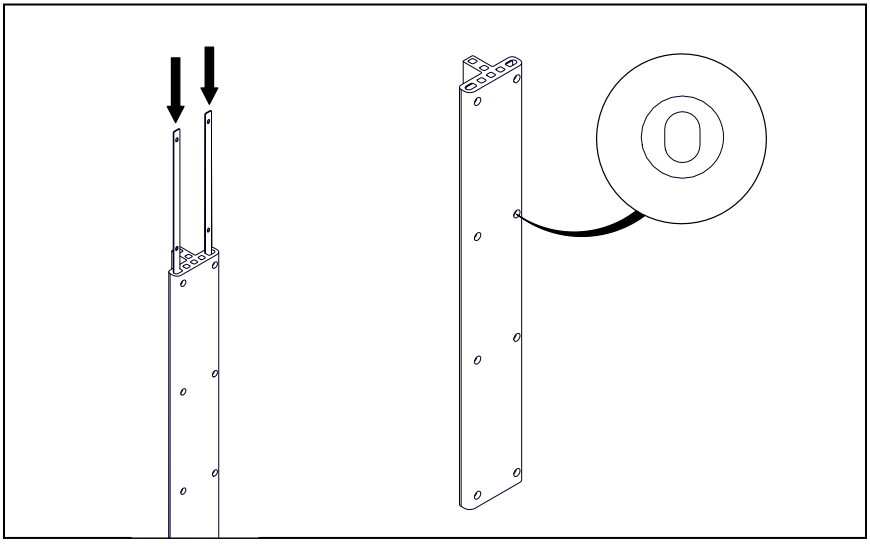
REQUIREMENTS:

- 2 People or 1 x Clamp
- 5/16" Socket

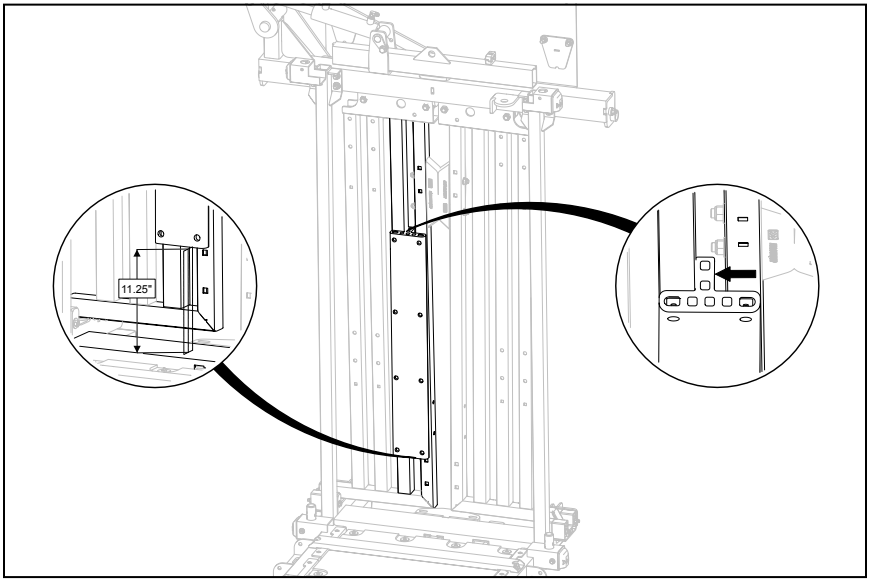
INSTALLATION:

NOTE: The below instructions show the HG-C Shoulder Cushion Kit being installed on a Powerlock 1075 Series Chute. The process for installation is the same for all other compatible chutes.

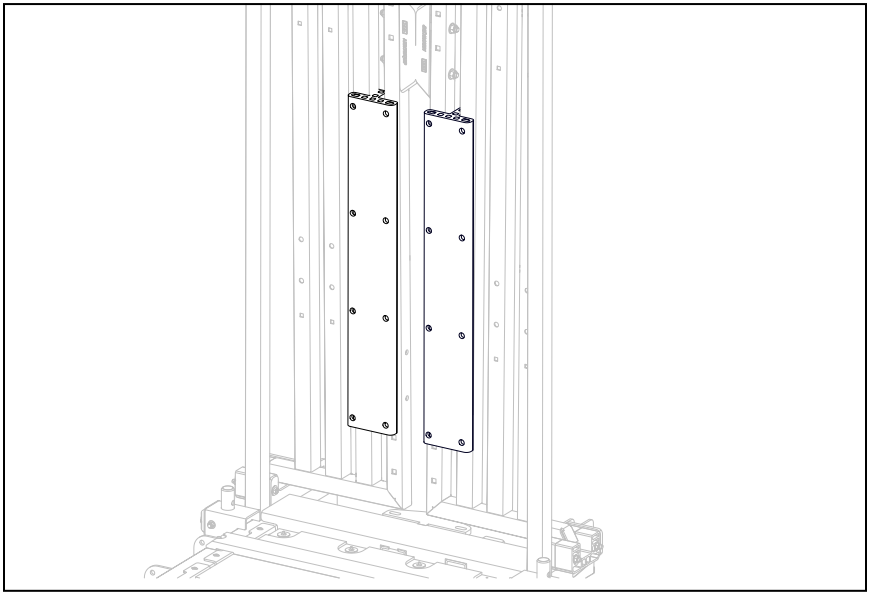
1. Insert Shoulder Cushion Strips [2013732] into Shoulder Cushions [2013729] until holes are aligned.



2. Using a clamp or a helper position the Shoulder Cushion as shown.
   a. The bottom should be 11.25" from the floor.
   b. The rib should be oriented to rest against outer tube so it is supported.



3. Use the self-tapping screws to secure the Shoulder Cushions to the Head Gate. Once secured, your Shoulder Cushions are ready for use.



LUG POST KIT

REQUIREMENTS:

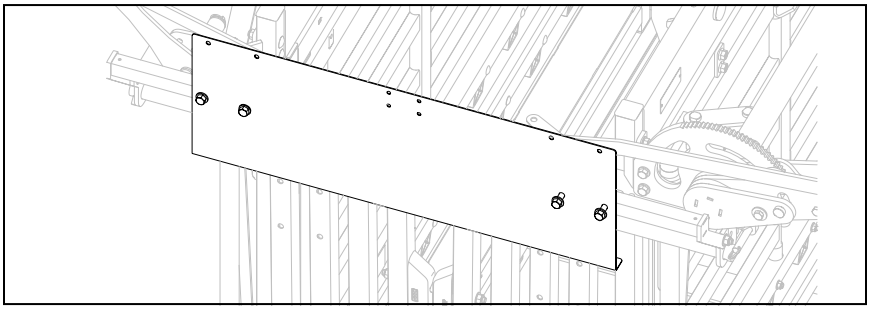
- 2 people
- 9/16" Wrench
- 2 x 3/4" Wrench

INSTALLATION:

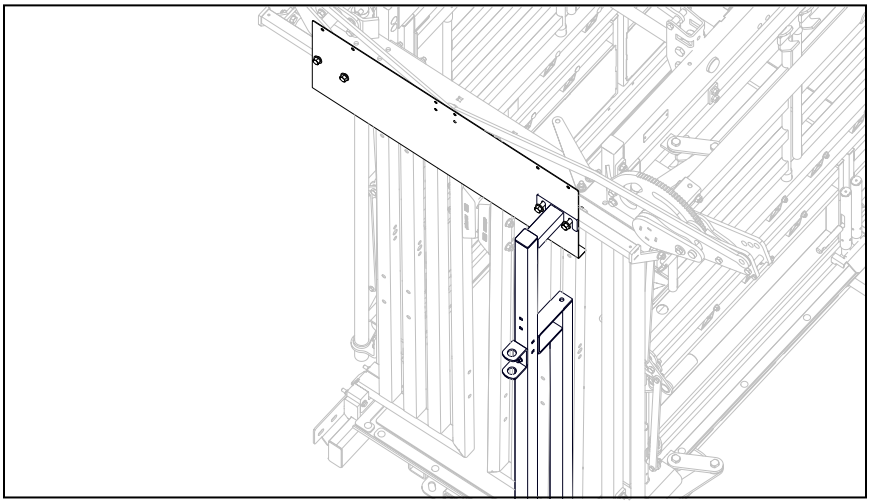
NOTE:

- The below instrucitons show the LP-88 Lug Post Kit being installed on an 8800. The process for installation is the same for other compatible chutes.
- Only install one side at a time so name shield stays on the chute.

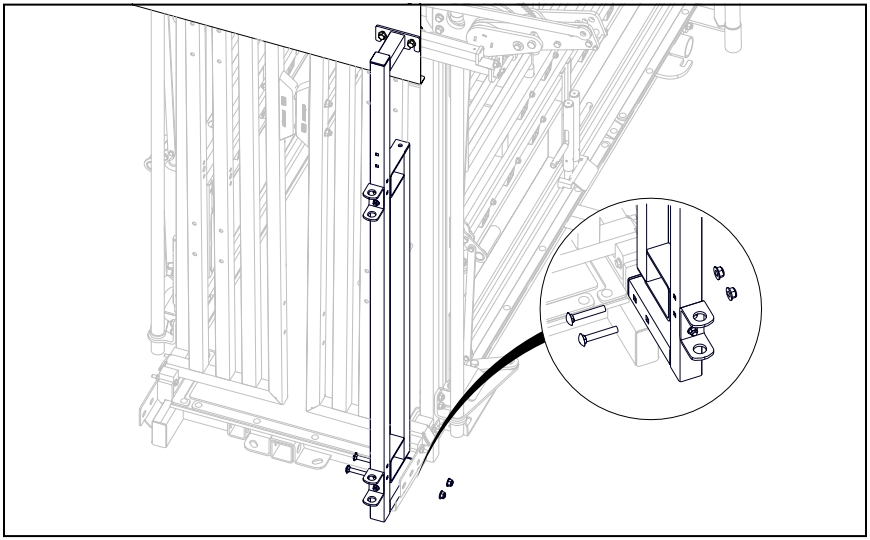
1. Loosen bolts holding decal name shield.



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

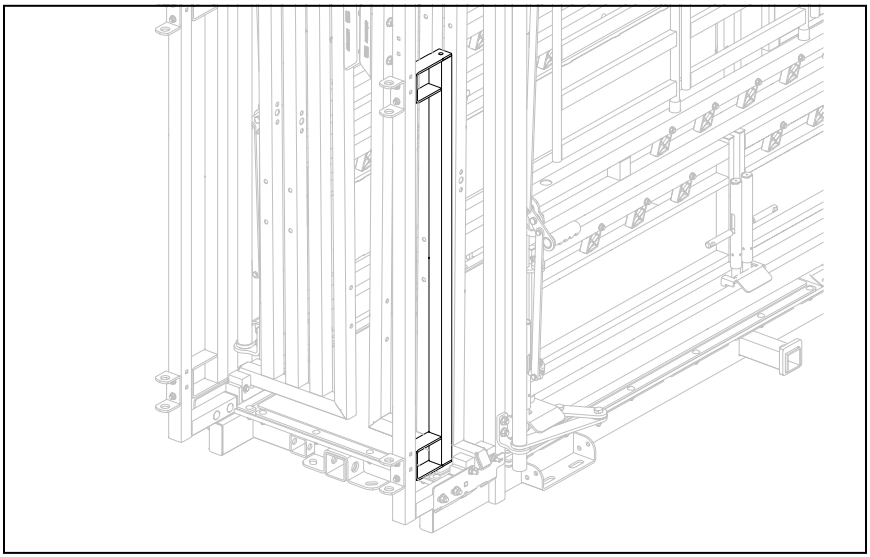


3. Align bottom of Lug Post and carriage head bolts with the head towards the inside of the chute.



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**.



SHEETED STERNUM BAR

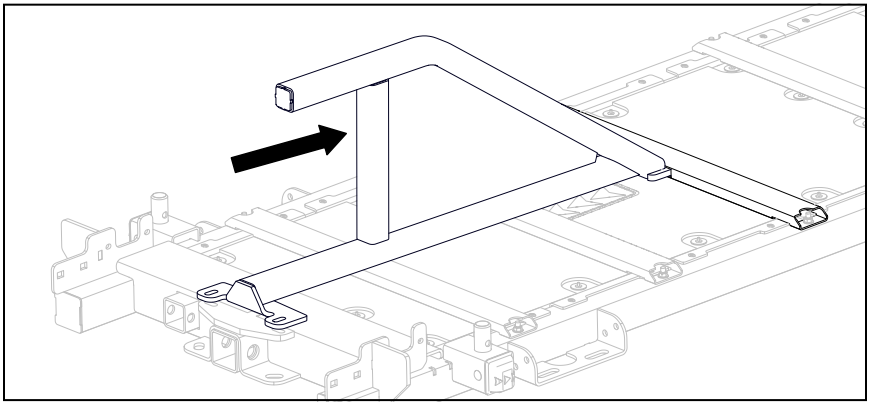
REQUIREMENTS:

- 3/4" Wrench or Socket

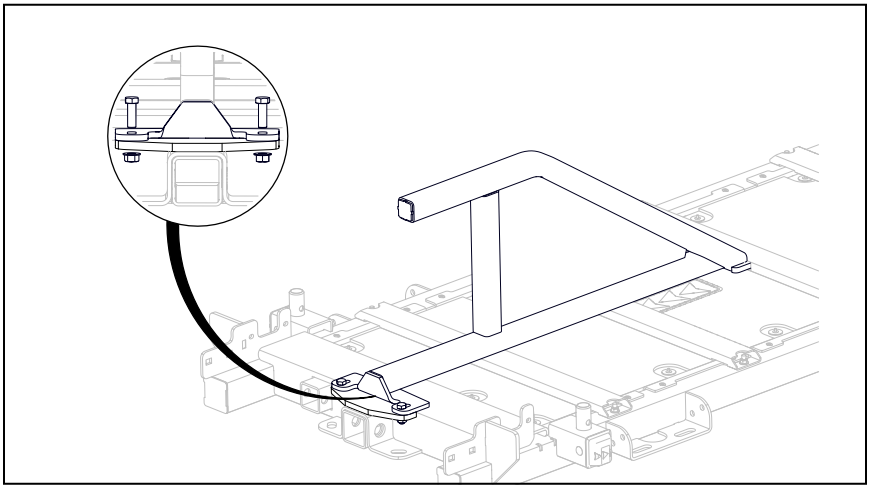
INSTALLATION:

NOTE: The below instructions show the STBR-8774 Sheeted Sternum Bar being installed on a Powerlock 1075 Series Chute. The process for installation is the same for all other compatible chutes.

1. Insert the Sternum Bar into the bracket.



2. Fasten Sternum Bar front to front plate using provided 1/2" hardware.



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.

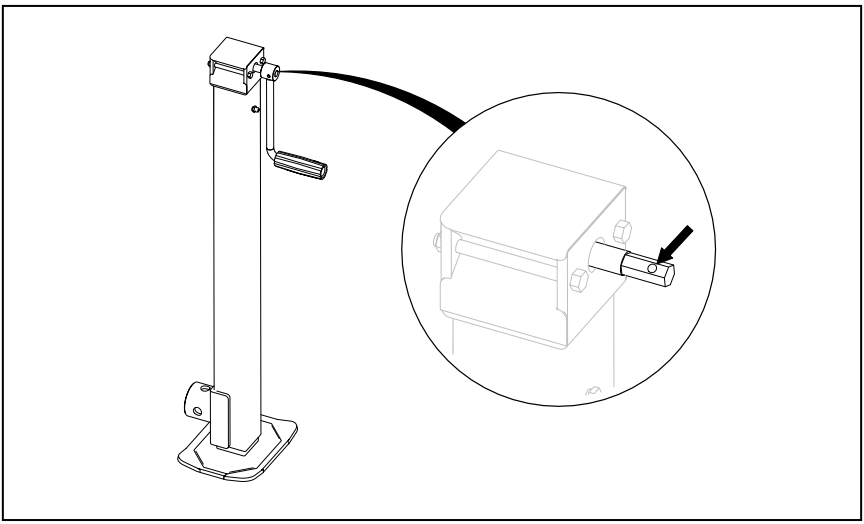
WHEEL KIT [75WK]

REQUIREMENTS:

- (Optional for jacks) Drill with 1/2" deep socket

JACK OPERATION:

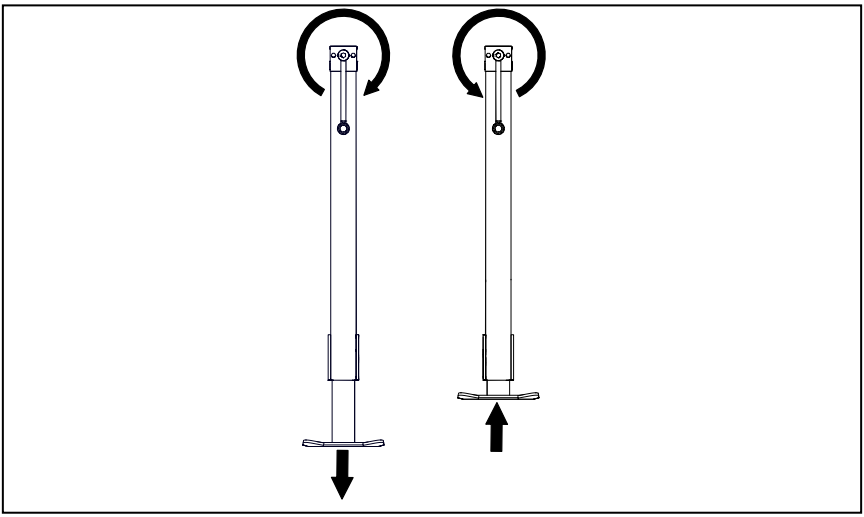
Arrowquip Jacks have a removable handle allowing you to quickly run the jacks up and down with a drill instead of manually cranking the jack. It is important to use a deep socket that extends past lynch pin hole on the jack handle to prevent damage.



WARNING:

Never use an impact driver! An impact driver will damage jack internals.

Turning the jack clockwise will extend the jack, while turning the jack counterclockwise will retract the jack.

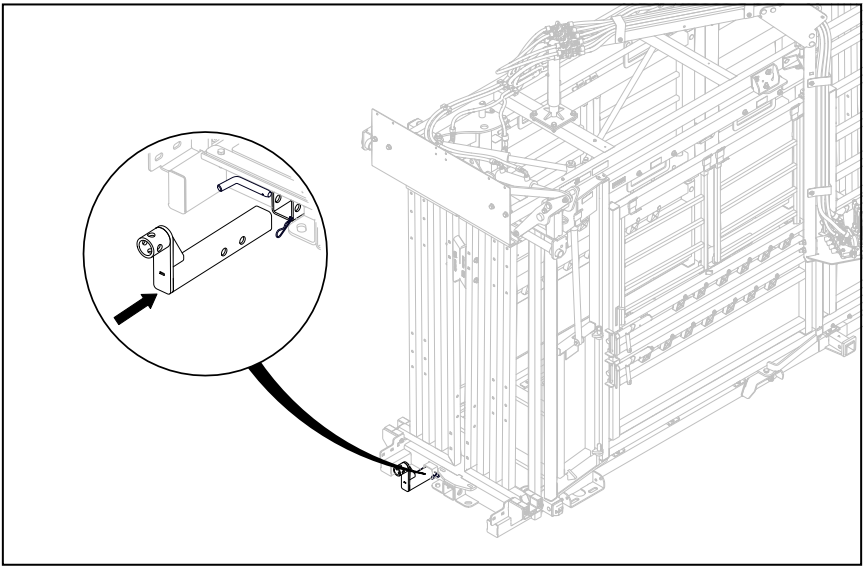


INSTALLATION:

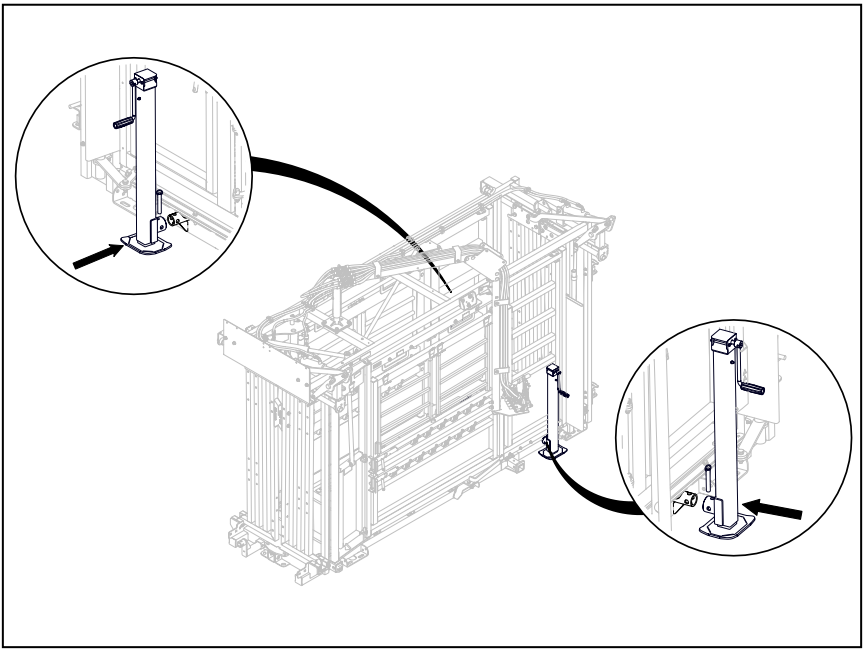
THE CHUTE MUST BE FLAT ON THE GROUND BEFORE PROCEEDING.

NOTE: The below instructions show the 75WK Wheel Kit being installed on a Powerlock 1075 Series Chute. The process for installation is the same for all other compatible chutes.

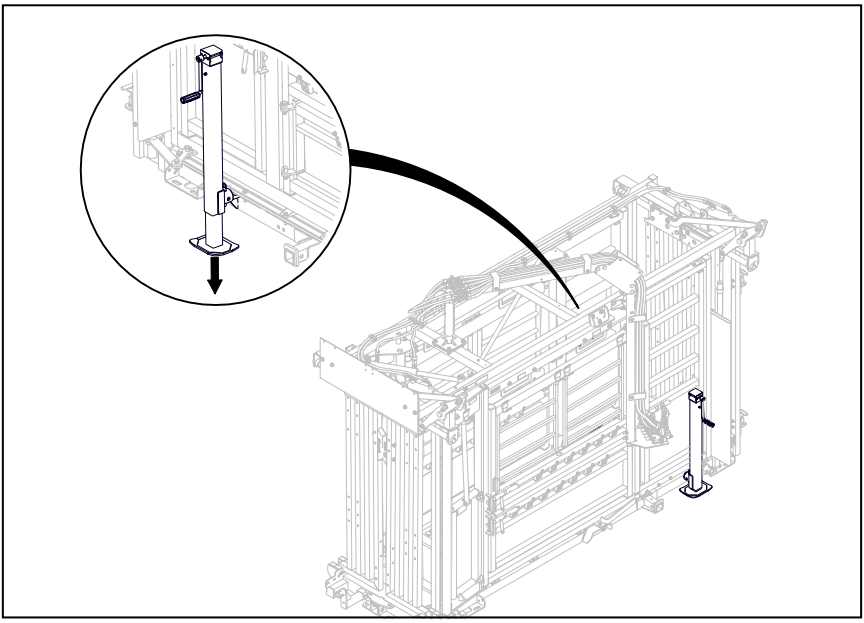
1. Mount the jack adaptor to the front of the chute.



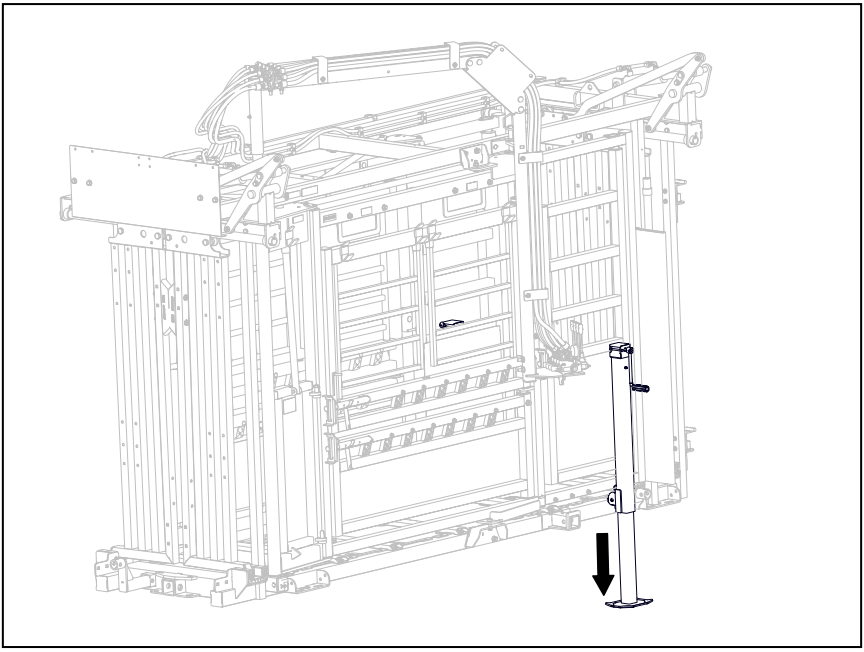
2. Install both jacks on the mounts located on each side near the rear of the chute. Secure jacks to chute with attached pin.



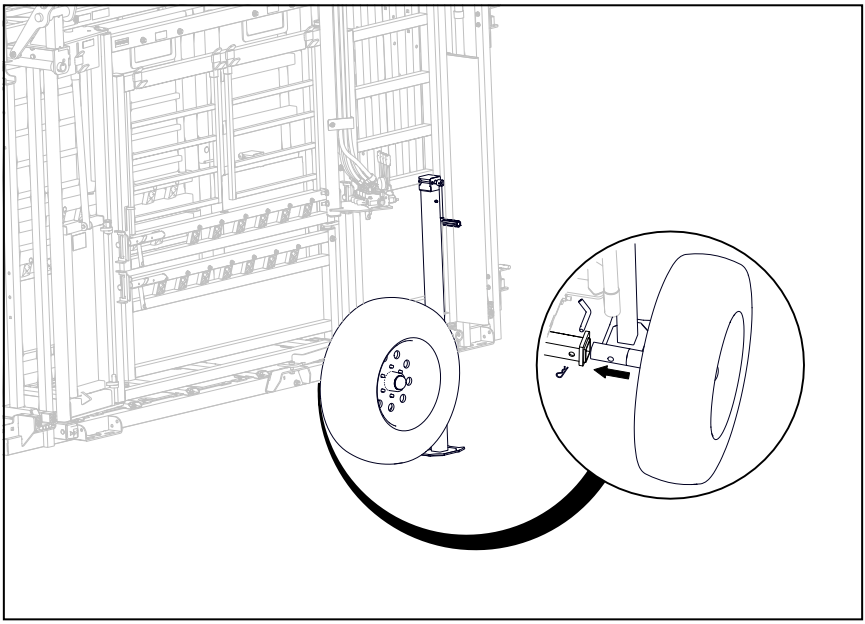
3. Use the jack to raise one side of the unit approx. 6"off the ground.



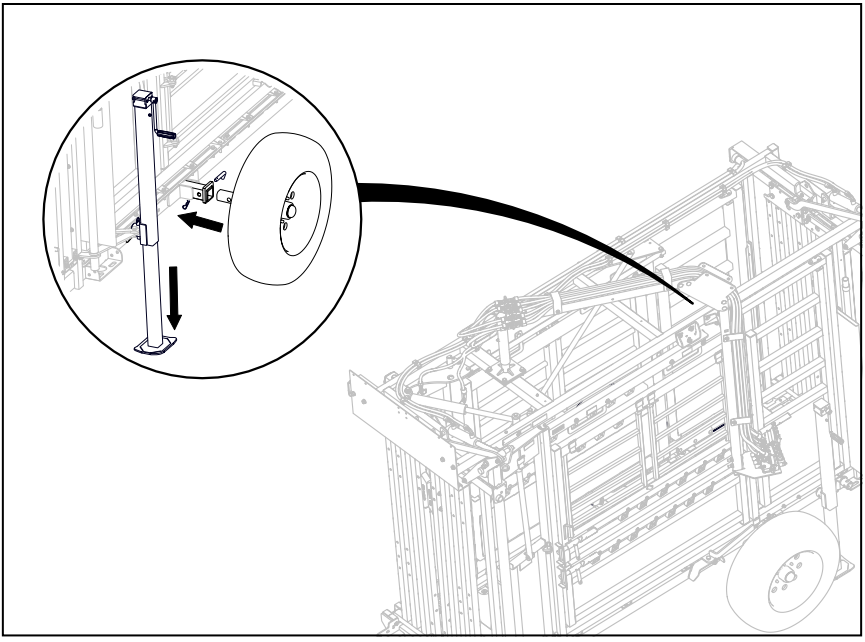
4. Raise the opposite side of the unit enough to install the wheel.



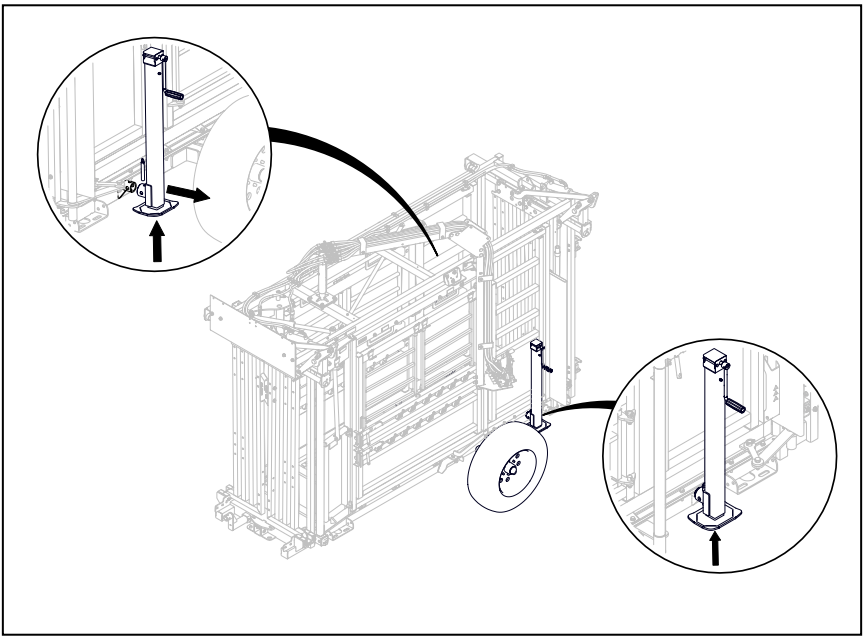
5. Install the wheel and secure with transport pins.



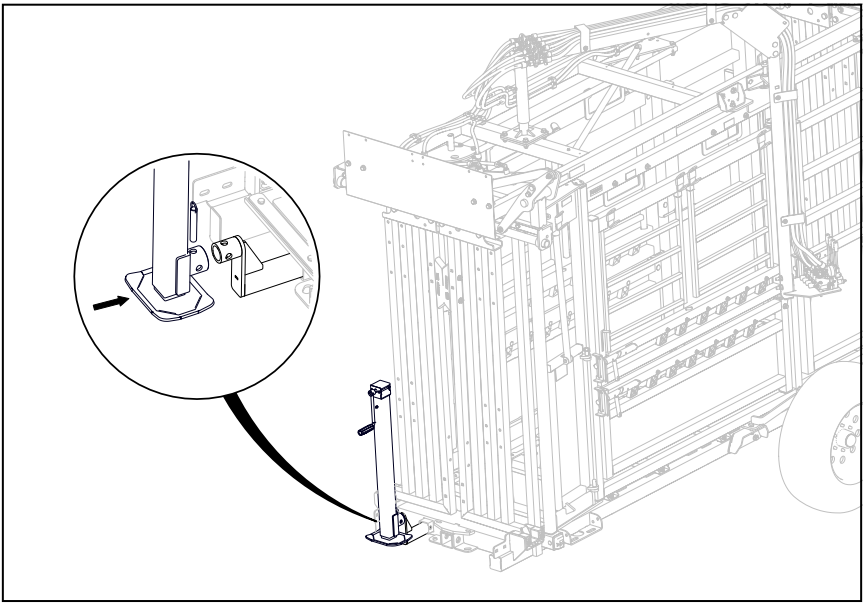
6. Raise the opposite side of the unit enough to install the other wheel.



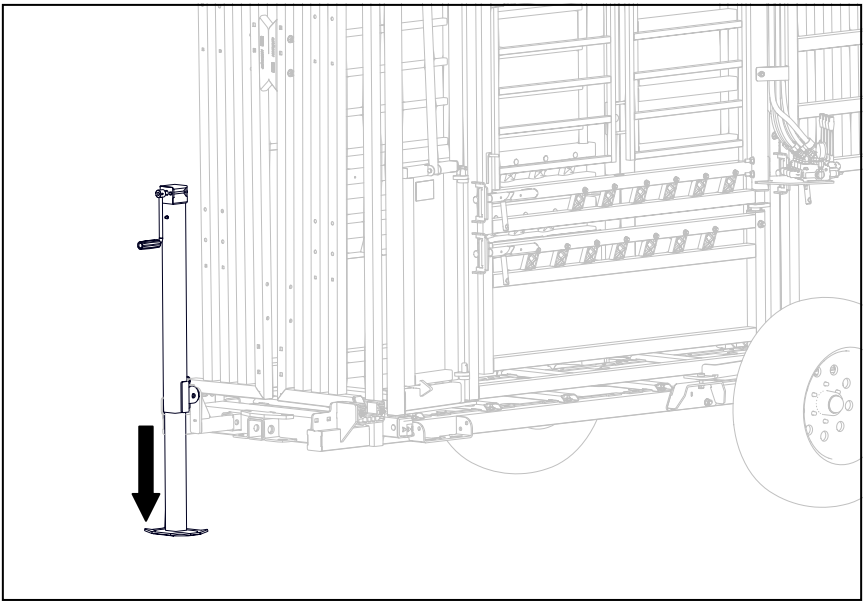
7. Retract both rear jacks completely and remove one of the jacks from the chute.



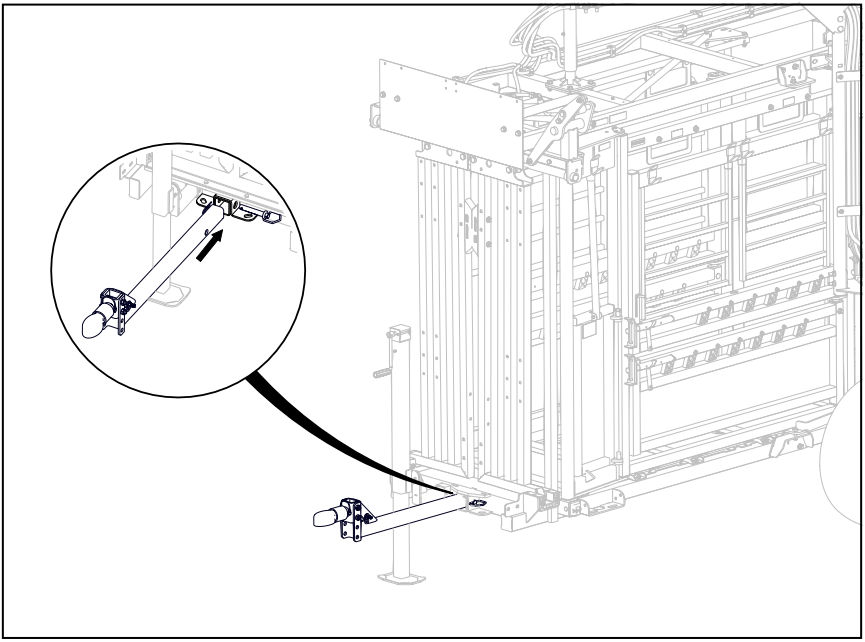
8. Mount one jack onto the jack adapter on the front of the chute and secure with pin.



9. Use the front jack to raise the chute off the ground enough to install the hitch.



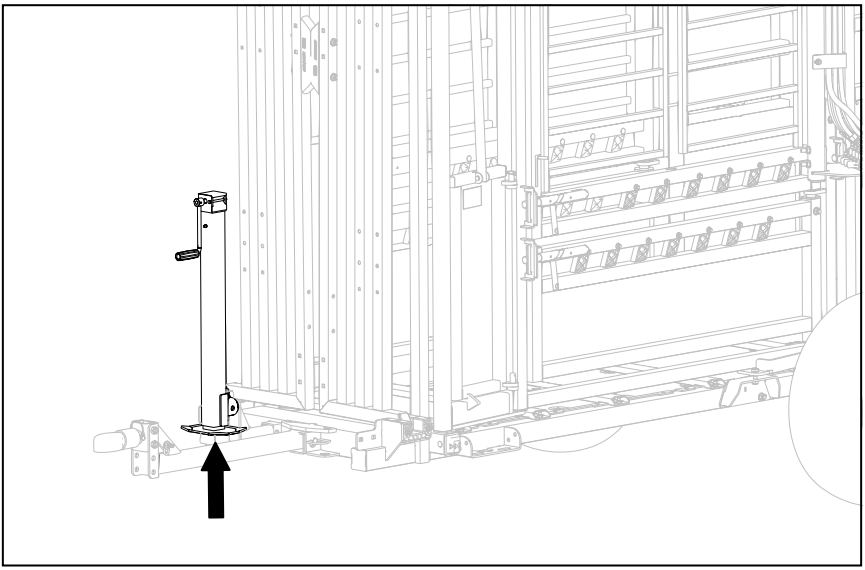
10. Install the hitch and secure with the pin.



11. Attach the unit to the towing vehicle. Adjust the jack to move hitch to the proper position for the vehicle, if necessary.

NOTE: **ENSURE SAFETY CHAINS PROVIDED HAVE BEEN ATTACHED TO THE UNIT**.

12. Retract the front jack foot completely.



STOP

SAFETY CHECK:

- Jacks are retracted completely.
- All doors and gates are shut.
- Tires are in good condition.

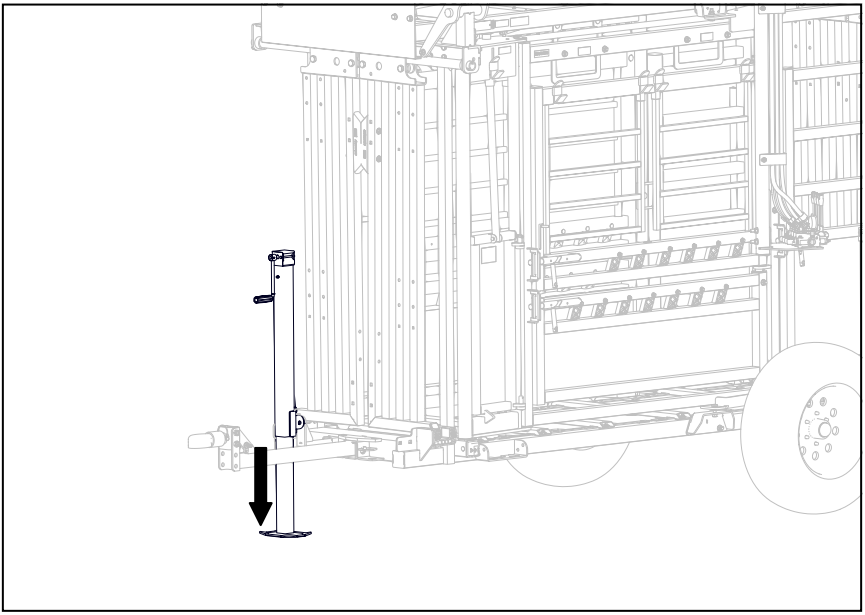
MAXIMUM SPEED: 50 KPH / 30 MPH

REMOVAL:

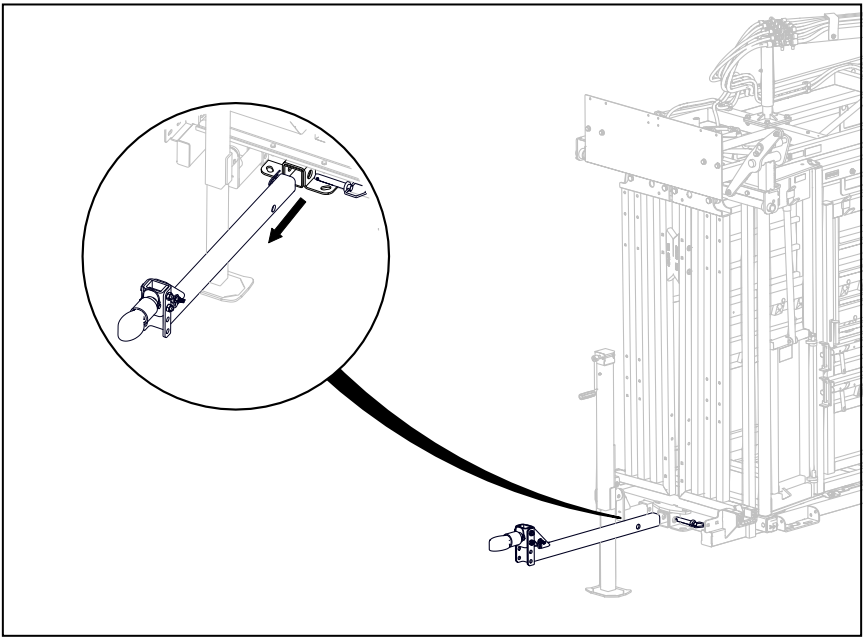
STOP

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

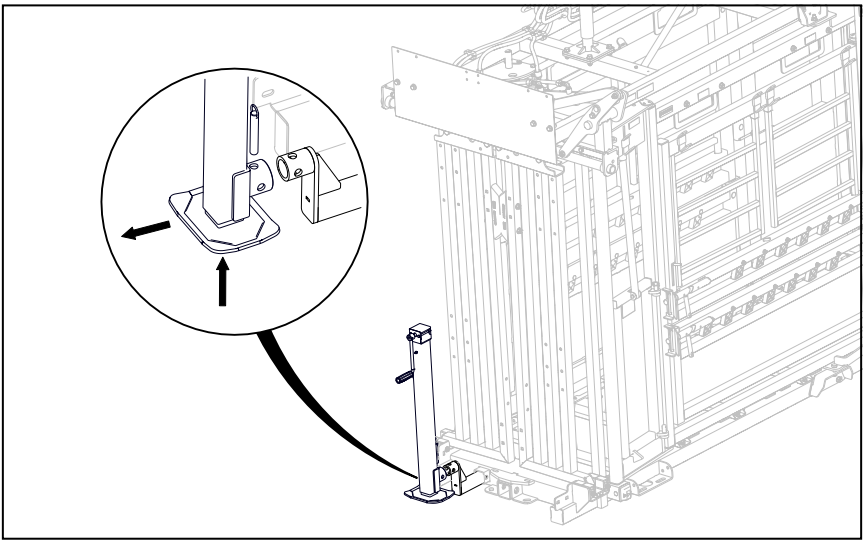
1. Extend front jack until the hitch is free from the towing vehicle.



2. Remove the hitch.

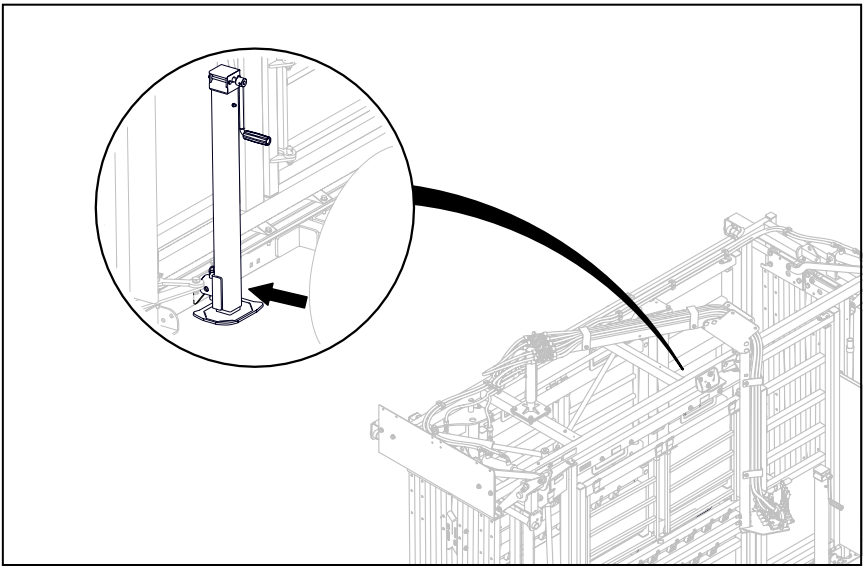


3. Using the jack, lower the chute to the ground. Remove jack from the chute.

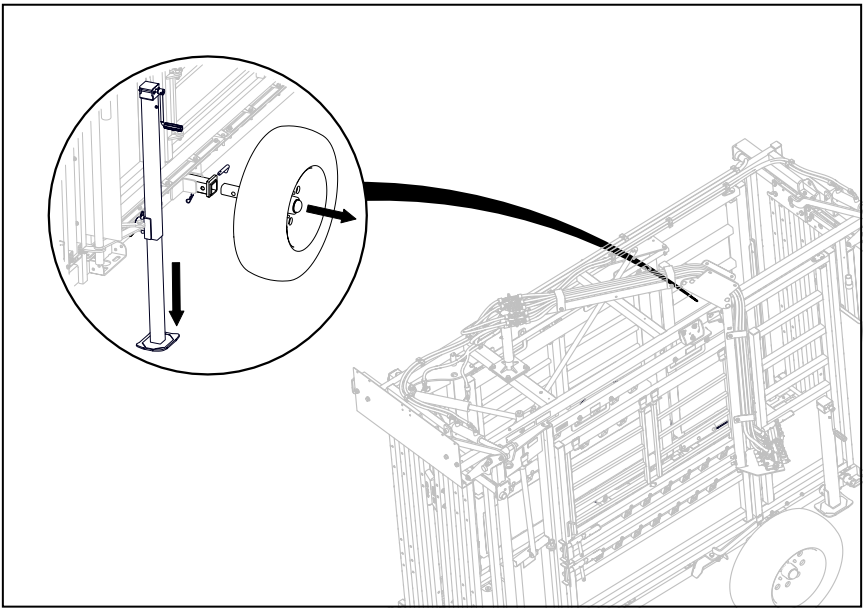


STOP **THE FRONT SECTION OF THE CHUTE MUST BE LYING FLAT ON THE GROUND BEFORE PROCEEDING.**

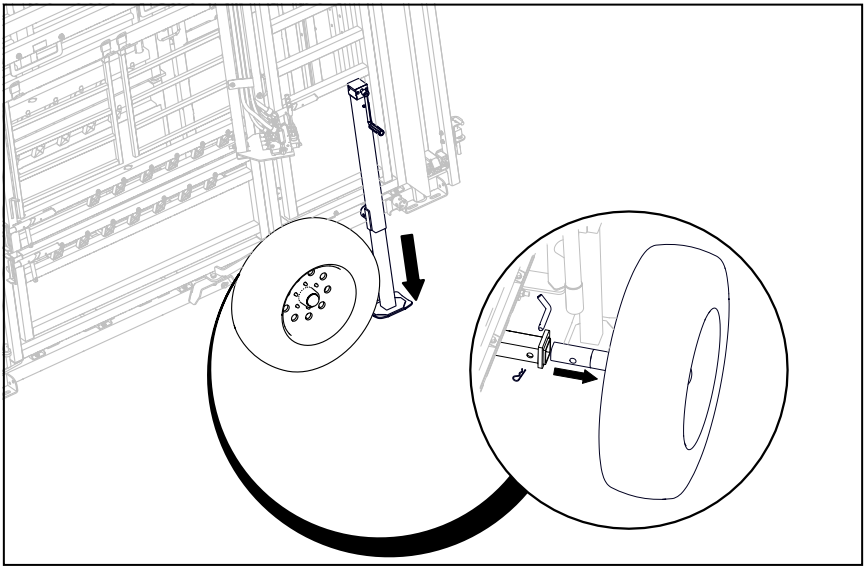
4. Transfer the front jack to the rear mount.



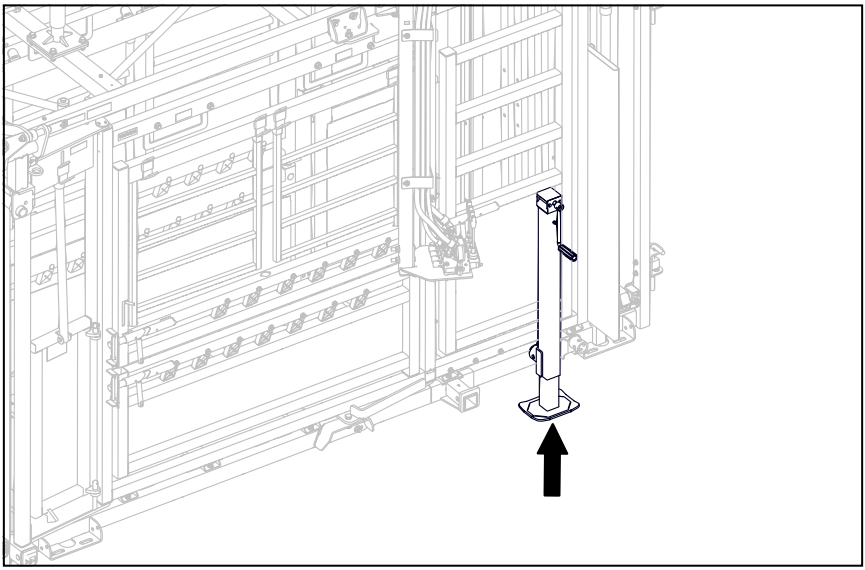
5. Extend the jack on one side of the unit until high enough to remove the wheel. Safely set the wheel aside.



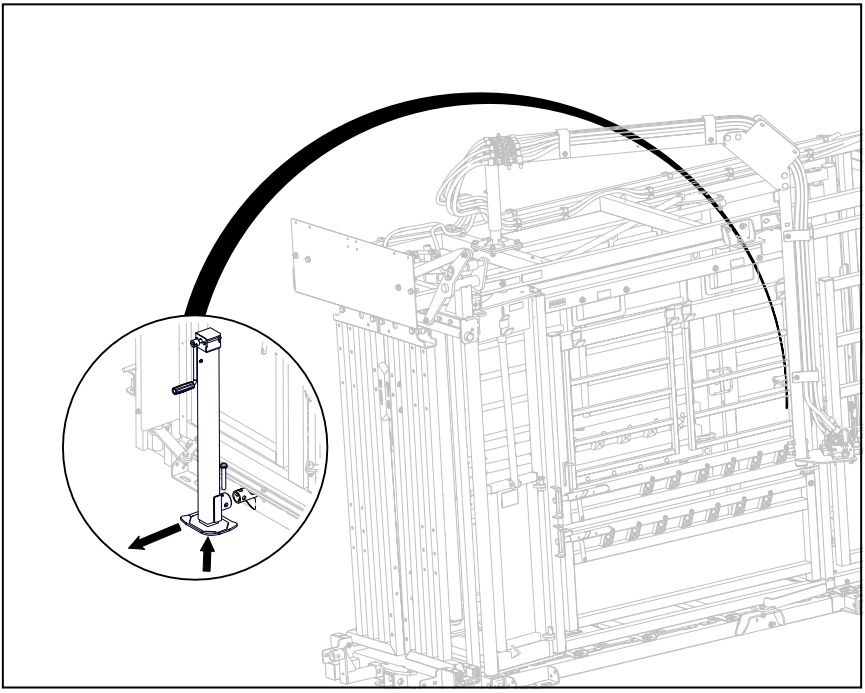
6. On the opposite side, jack the unit all the way up. Remove the wheel and set safely aside.



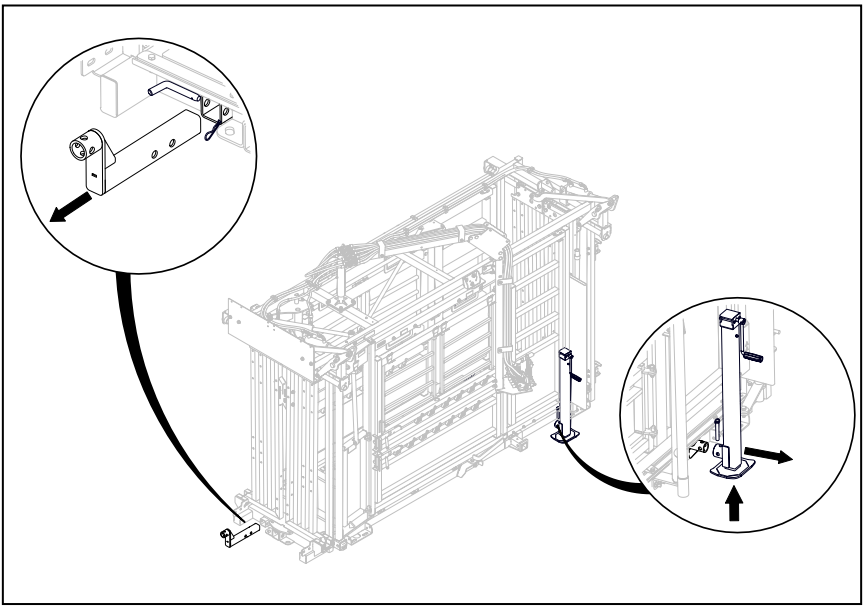
7. Retract one jack until it is only extended about 6".



8. Retract the other jack completely, remove from mount and set safely aside.



9. Retract the opposite jack the rest of the way then remove the jacks and front jack adaptor. Set aside.



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

Pressure

The pressure in the tires from factory will be around 80 PSI.

For an improved towing feel reduce air pressure to recommended value depending on the product:

- **ARROWLOCK AND POWERLOCK CHUTES:** 40 PSI
- **ARMY SERIES CHUTES:** 50 PSI

Torque

Lug nuts should be tightened to 120 ft. Lbs.

A torque wrench is recommended to make sure fasteners are tightened properly.

Be sure to use only fasteners matched to the cone angle of your wheel – usually 60° or 90°.

To properly attach wheels:

1. Start all bolts or nuts by hand to prevent cross-threading.
2. Spin lug nuts all the way down until rim is seated against the wheel hub. Tighten lug nuts to 120 ft. lbs. in cross sequence as shown below.

3. Torque the wheel nuts/bolts before first road use and after each wheel removal. Check and re-torque after 50 miles. Check periodically thereafter.

ARROWQUIP

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**

arrowquip.com