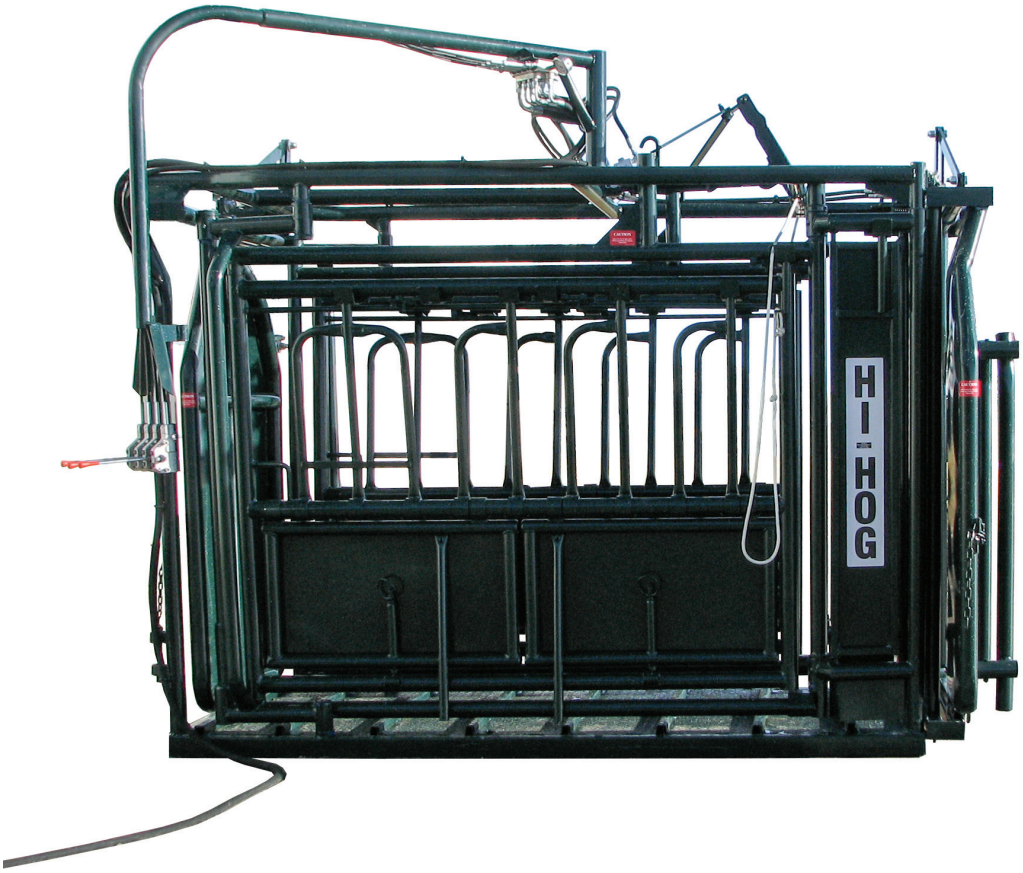
Owner/Operator's Manual

Hi-Hog Farm & Ranch Equipment Ltd.

Hydraulic Squeeze Chute



Congratulations!

You're now the owner of an outstanding Hi-Hog hydraulic squeeze chute.

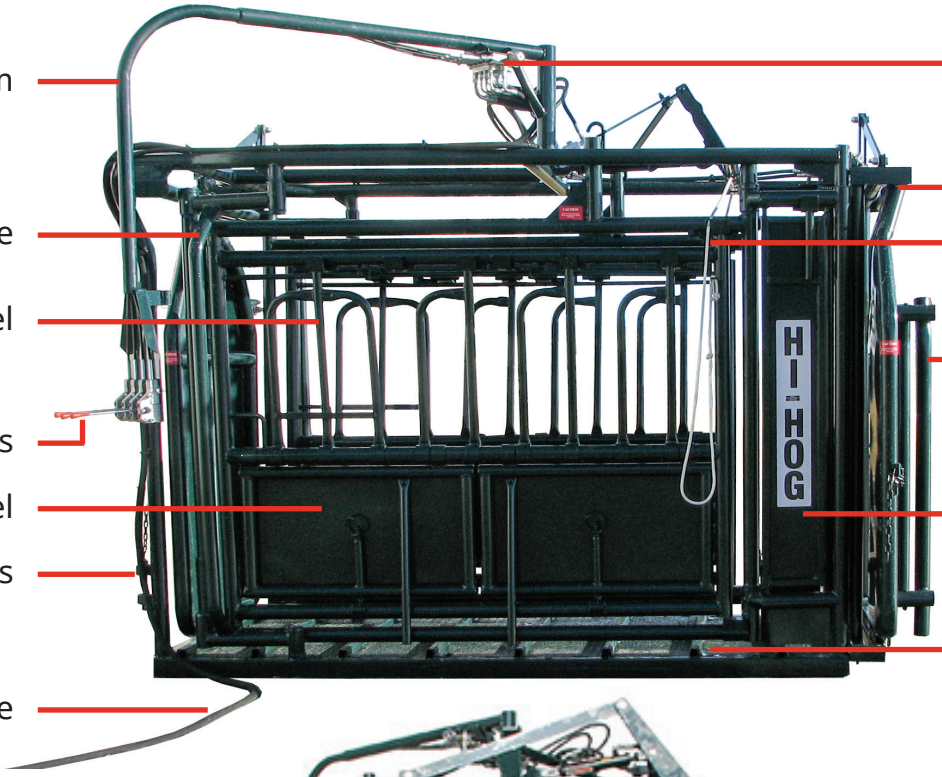
Before you introduce family, friends, and livestock to your new chute, take a moment to familiarize yourself with the best practices for safe and efficient operation of your new Hi-Hog hydraulic squeeze chute.

From our family to yours, thank you for your patronage.
If you have any questions please call us
toll free anywhere in mainland North America

1-800-661-7002

For inquiries outside of North America, call 1-403-280-8300

Hydraulic Chute Terms



Pivot Arm

Tailgate

Drop Down Panel

Hydraulic Controls

Lift-Up Foot Panel

Connector Pins

Hydraulic Hose

Hydraulic Valves

Headgate

Release Rope

Neck Extender

Shoulder Door

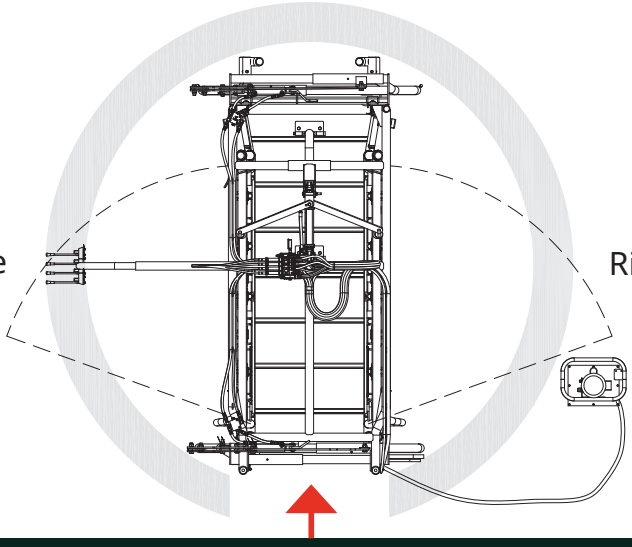
Traction Bars

Side Exit Gate

Head Chain

Pigtail Hook

Daly Hook



Left side of chute

Right side of chute

Power Pack

Note: The term 'operator' will be used in this guide to refer to anyone who is working with, or assisting with, the operation of the chute. This term may refer to the woman or man who is operating the chute or assistant with treating the animal in the chute, or operator or assistant who is helping with the livestock handling process. Note: the images in this guide may differ from the model you have purchased.

Safety

You are responsible for your safety.

Livestock can be unpredictable, particularly if they are excited or scared. Operators should therefore use extreme caution whenever working with livestock. To minimize risk all operators should review the proper use and operation of the chute before each use.

We also recommend that all operators make themselves aware of livestock behavior, signs of livestock stress, and low stress techniques for moving livestock.

Children should be kept safely away from equipment.

If you have one person running the hydraulic controls and another person working the chute please ensure that both individuals have a clear strategy for communicating when it is safe to be near the chute and when it is safe to operate the hydraulics. Do not operate the chute unless you know that all help is safely clear of the chute. Improper use may result in injury or death. For humane animal treatment ensure you have a clear view of the animals whenever you operate any of the hydraulic controls. Do not over-squeeze the chute.

Whenever you leave the chute unattended we recommend the hydraulics should be detached from the equipment to prevent accidental operation.

Preparation of the working environment

The squeeze chute should be installed on a level, dry, firm surface.

To minimize livestock stress ensure the area around the chute is well lit. Livestock will hesitate if they can't see well enough to distinguish if the chute presents a threat. While this usually happens when the chute is too dark it can also happen if the lighting in the chute is too bright. Lighting that points directly at the headgate for example can make it difficult for the animal to see their way forward (for the same reason this can also be caused if the animal is walking directly towards a setting or rising sun).

Ensure the footing around the chute is safe to operate on. The surface should be clean, dry, level, and clear of any obstacles or hazards.

If an animal is able to get into the operator's working area ensure that the operator can quickly and safely escape the area. Ensure that you have an escape plan.

Ensure that the chute can be opened without obstruction to quickly and safely release a troubled animal.

While the chute can be set directly on the ground you can extend the life of the chute by mounting it on timbers, setting it on a concrete pad, installing a paddock slab® base, or providing a similar dry stable environment.

Individuals who are not assisting with the squeeze work should stay clear of the squeeze working area.

Keep the working environment clear of items/elements that may stress your livestock. These items could be the sound of a barking dog, the movement of a plastic bag blowing around the working alley, or even the smell of strange guest, who has come out to help you. Unfamiliar elements in their environment will raise their stress levels. The higher their stress levels the more unpredictable their behavior. Stay safe, keep your livestock calm.

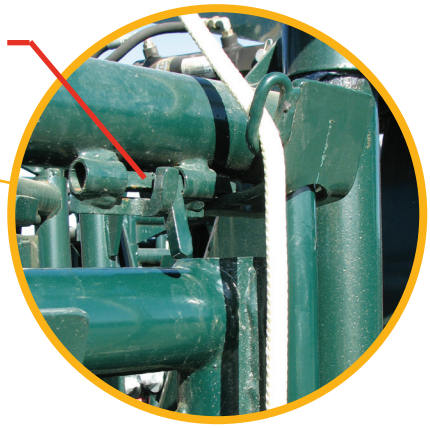
Be Prepared. Have a well equipped first aid kit with you, and know how to use it. If you have cell phone service ensure you have a fully charged cell phone with you. If possible have someone with you when you work your cattle.

Accessibility

Your chute comes with exceptional access . Each of the access gates comes with a large gravity slam latch. All latches and locks are designed to be safely and easily operated, even while wearing mitts or gloves.

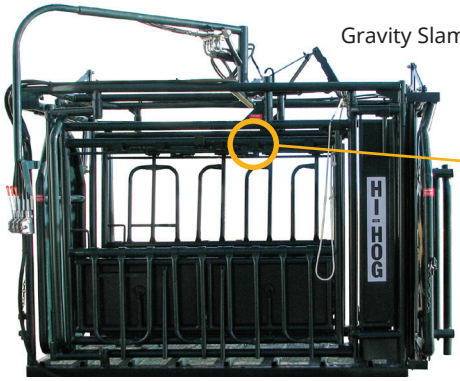
Side Exit Gates

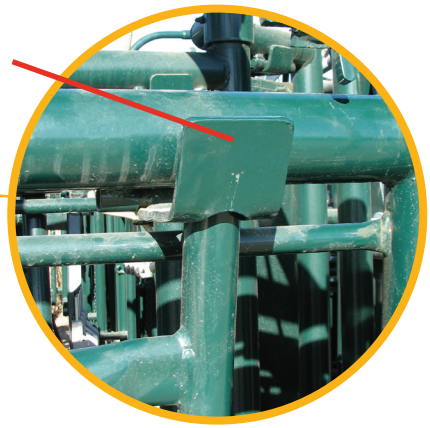
The chute comes standard with a side exit gate on both sides of the chute.
Each gate comes with a slide latch if you wish to secure a side exit gate. With the slide latch in the unlocked position, the side exits can be released from either side of the chute with the control rope.



Side Drop Gates

Each side of the chute includes four drop down panels. Each panel can be lowered flat against the bottom half the side exit panel. The panels can then be swung back up where they engage automatically with the gravity slam latch.



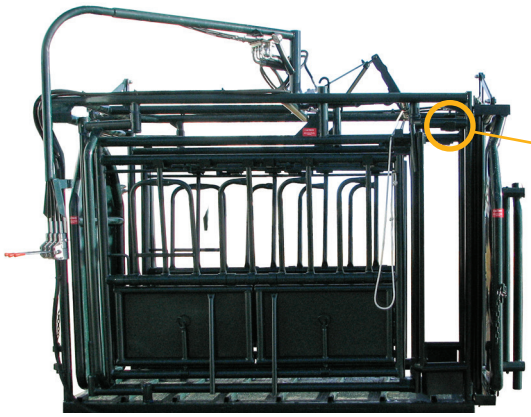


Side Foot Gates

Each side of the chute includes two foot access panels.
Each panel can be raised independently and latched and locked to ensure safe full access to the lower half of the animal.

Side Shoulder Gate

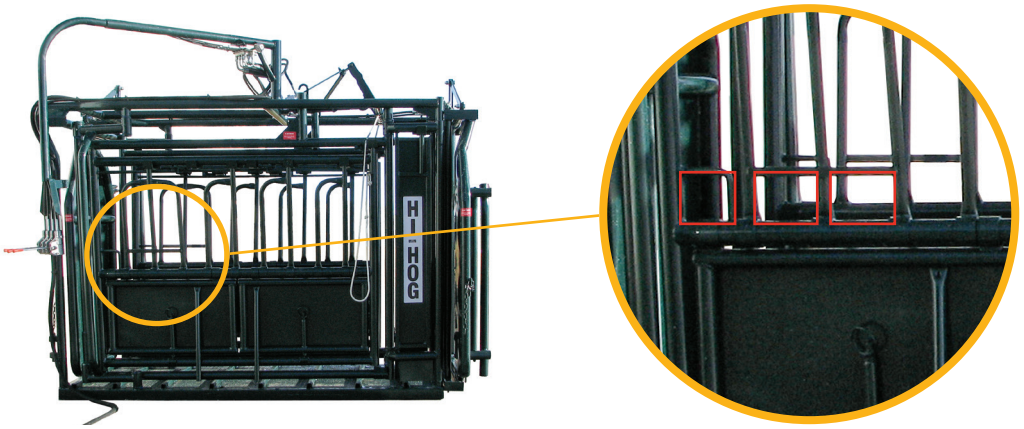
Each side of the chute includes a full height shoulder access gate. Each gate includes a fast action gravity slam latch.



Accessibility

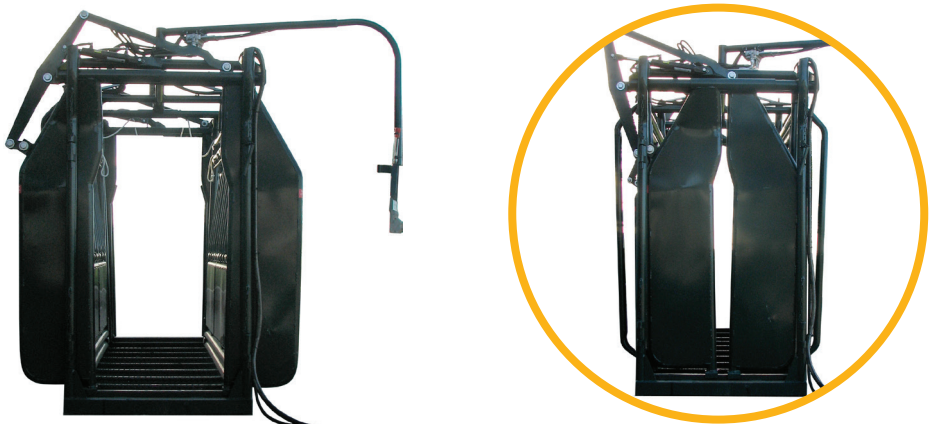
Side Back-up Slots

The rear two drop down panels, in each of the squeeze sides, include slots to slide in a back-up bar. (Back-up bar not included)



Tailgate

The tailgate and the headgate work the same way. The two sides of the tailgate operate simultaneously ensuring the stanchions remain parallel as they open and close. Because each side only needs to travel a short distance, they can be opened or closed very quickly. The tailgate can also be used like the headgate, to hold an animal.

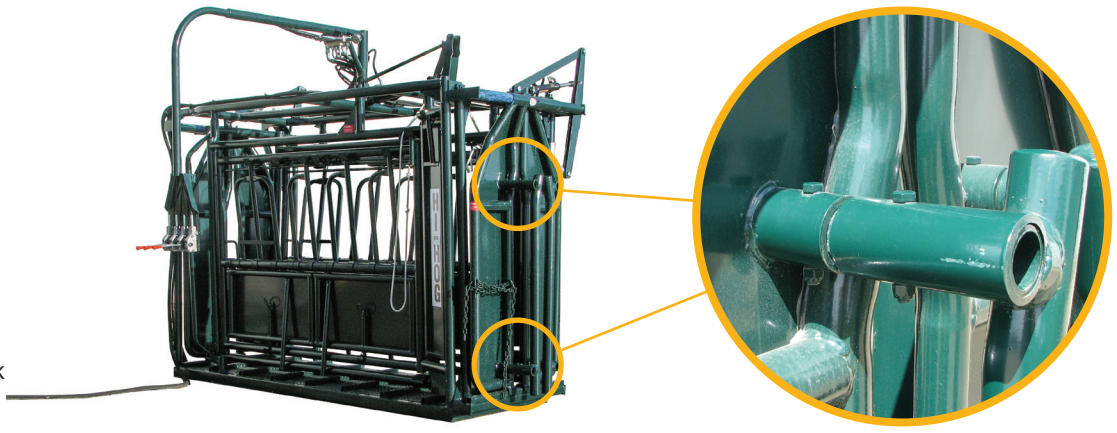


Headgate

The parallel stanchions minimize the risk of choking. The full width opening ensures livestock can enter and exit the chute efficiently, calmly and safely.

Neck Extension Bars

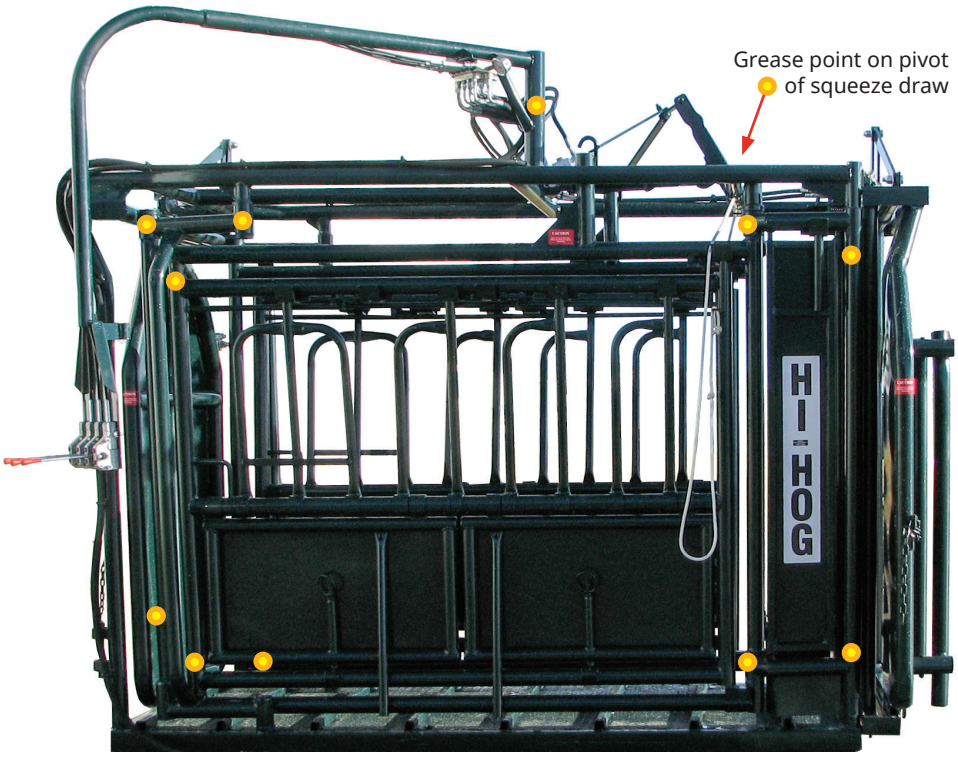
The neck extender holds the head away from the headgate to provide a safe area for neck injections. The extender is bolted on to the chute. If you do not need or want it on your chute, you can easily remove it. The connecting sleeve includes several optional bolt locations so you can set the depth of the neck extender to fit your needs.



Maintenance

Lubrication Instructions

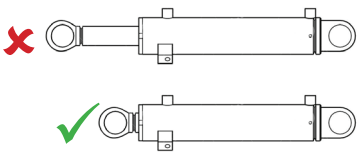
To extend the life of your chute ensure the greased pivot points remain greased. The chute includes 26 greased pivots complete with grease zirks. Clean grease zirks to remove any dust or debris prior to injecting new grease. After injecting grease, remove any excess grease as the excess grease can attract contaminants. Chevron Delo® EP2 grease is installed at the factory. This grease provides extreme pressure high load carrying capacity, excellent corrosion and wear protection, excellent water resistance, excellent high temperature stability, and outstanding low temperature pump-ability. Operating temperature -40ºC min, 177ºC max.



Storage

When you are not using your hydraulic chute you can do a few simple tasks to help extend the life of your chute.

1. Clean the chute of any manure or debris prior to storing.
2. Ensure all hydraulic rams are left in there closed, protected, position. When the hydraulic rams are in the correct storage position the headgate and the tailgate will be open and the squeeze sides will be open to the full width of the chute.

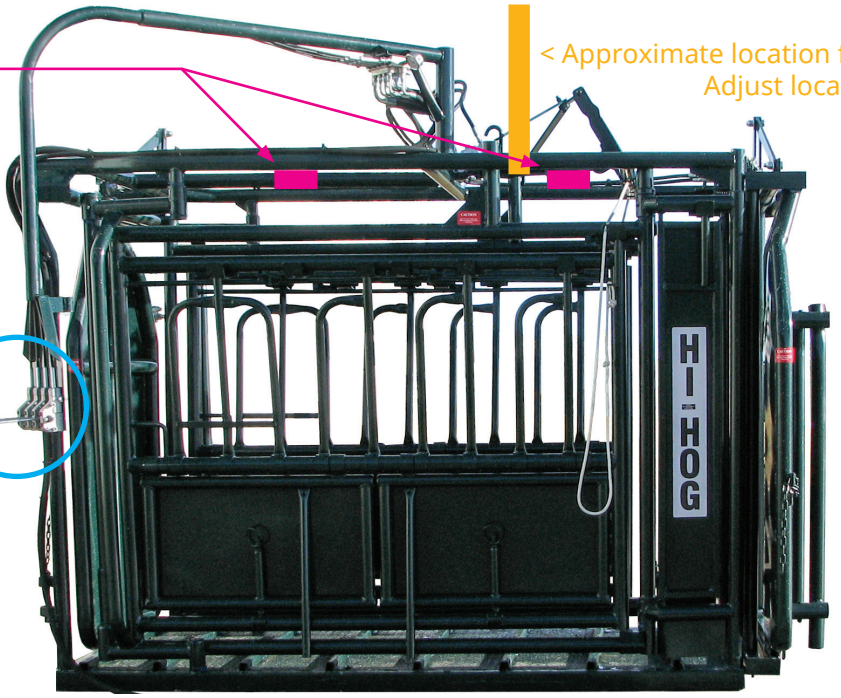


3. Detach your hydraulic pump, cap the hydraulic lines, and relocate the pump to a warm, dry environment. Avoid storing in environments where rodents or other animals may chew on the hydraulic lines.
4. Ensure the hydraulic controls are positioned and/or protected from potential animal contact. Animals may chew or rub up against the hydraulic lines and controls which could potentially damage the equipment.
5. If the chute is in a damp or wet environment consider moving it to a dry location for storage.

Maintenance

Transporting your chute

When you are preparing to move your hydraulic chute, try to position the hydraulic controls so they will be protected from accidental damage. The best place to lift the hydraulic chute is under the top horizontal rail. In addition to the primary lifting methods described above, we recommend you use additional ties/straps to secure your chute so that it does not shift or slide during transport.



Caution: Before you lift the chute, ensure that it is not attached to any other items, and that it will not get hung up on the lifting equipment or any other structure.
Caution: always check for overhead lines

If you are using the optional Hi-Hog squeeze chute trailer, please follow the instructions that come with the trailer. After transport check all functions thoroughly before running livestock through the equipment.

Note: Failure to lift or transport the chute correctly may result in damage to the chute as well as injury or death to the operator.

Chute Preparation

Inspect the chute before processing animals to ensure all components are working properly. All gates and latches should be inspected to ensure they function correctly and are latched securely before animals are introduced into the chute.

The chute will perform better when the hydraulic fluid has been warmed up. To warm the hydraulic fluid simply run all the hydraulic controls to circulate the fluid. The duration required to warm up the fluid is dependent on the temperature of the working environment. In cold climates this may take approximately half an hour.

Do not operate any of the hydraulics while an operator is in the chute.

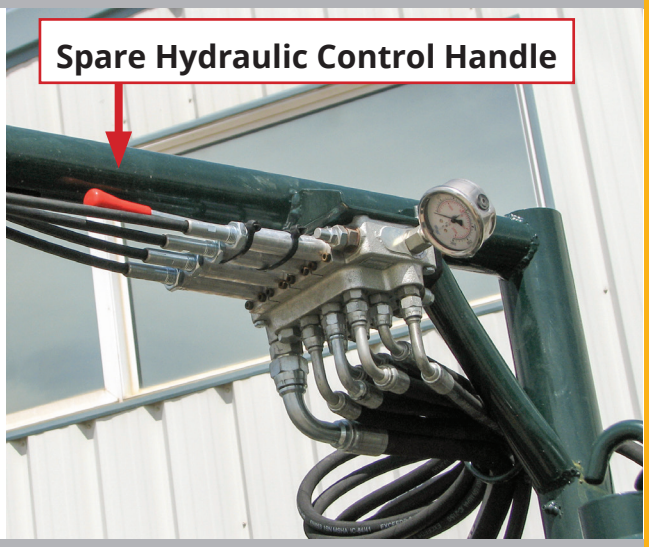
Keep the chute clean. While using the chute, one should periodically inspect the interior of the chute to ensure it is safe for livestock to enter the chute. Build up of manure can create dangerous footing conditions. These conditions will slow down processing as livestock will be more cautious when entering the chute and, if an animal slips in the chute, you will be required to take time to secure their safety.

Hydraulic Controls

Install Handles

Hi-Hog's hydraulic chutes are shipped with the control handles removed. These handles are strapped to the chute as shown on your right.

Remove the three handles from the control arm and install them into the left three hydraulic controls. If you intend to use the spare hydraulic control remove it from the control arm and install it the fourth hydraulic control at the right end of the control station.



Hydraulic Controls

The set up shown here is Hi-Hog's standard set up for our hydraulic chute. This set up is practical for right hand operation.

If you wish to change the location of the controls simply unscrew the controls from the control station and re-install the controllers in the order you want.

Lift the hydraulic control handle up to close the headgate and tailgate, or narrow the chute sides.

Push the hydraulic control handle down to open the headgate and tailgate or widen the chutes sides.

Note: the handles on new chutes are installed in a vertical position.

Hydraulic Controls

Hi-Hog uses Texaco Rando HDZ 15 hydraulic fluid. This hydraulic fluid is formulated with antiwear additives, oxidation and corrosion inhibitors, foam and aeration suppressants, and a shear stable viscosity index improver.

Do not use in high pressure systems in the vicinity of flames, sparks, and hot surfaces. Use only in well ventilated areas. Keep container closed.

Adjusting Hydraulic Pressure
The pressure can be adjusted at the hydraulic/cable junction located on top of the chute mounted on the central control mast.

Pressure Setting, The pressure relief valve is set at the factory for a hydraulic fluid pressure of between 1100 PSI and 1300 PSI.

If you have questions about your hydraulics call 1-800-661-7002

General chute operation

A: Prepare chute to receive animal

1 Set headgate width for the head size of the next animal. (~12” to 15”)

2 Set opening width of the chute for the next animal.

B: Catch animal

1 Open Tailgate

Open tailgate to full width to let animal into the squeeze chute. See Note below*

2 Close headgate

Operator may have to widen the headgate opening to entice animal forward. Close the headgate when the animal’s head passes by the stanchion.

3 Squeeze Sides

Squeeze the sides of the chute so they are snug to the animal but not tight. Operator should be able to slide their hand between the side and the animal.

*Note: After the animal has entered the squeeze chute you will close the tailgate. The speed of the entering animal will determine if this step is performed before, during, or after step 2. Closing the tailgate will prevent the animal in the chute from backing out of the chute and prevent additional animals from attempting to enter the chute.

General chute operation

C: Release animal

1 Release Sides

2 Release Headgate

Emergency response

1 Assess Situation

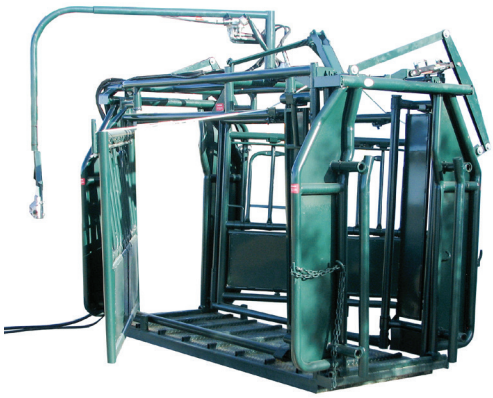
Despite the care taken to make the chute as safe as possible, livestock may find themselves in need of help. See Note below**

2 Give animal space

Often all an animal needs is a little extra space to get itself out of trouble. This could be as simple as opening the chute to its full width to stand up.

3 Release Animal

If the animal needs more room the headgate, tailgate and two side exits can be opened up to give the animal plenty of room to sort themselves.



**Note: Quickly assess situation. Before adjusting the squeeze chute evaluate if your actions may endanger operator or animal. If there is no risk you can proceed to adjust the chute to provide room for the animal to remove themselves from danger. If the animal is highly stressed you should release the animal as soon as possible.

Add-on options

Sternum Bar, Item 1554

The sternum bar option can be installed into either the hydraulic or manual squeeze chutes. Two base plates are bolted to the floor of the squeeze chute (as shown at left). The sternum bar is attached to these brackets with a pin connection. To remove the sternum bar simply remove the pins from the floor plates.

Some people refer to the sternum bar as a brisket bar.

Squeeze Trailer, Item 140

Transport and share your Hi-Hog cattle squeeze chute.

Hi-Hog's squeeze transport kit will make it easy for you to load and haul your cattle chute from one pasture to another, or share your chute with a friend or neighbor. Works with Hi-Hog's manual and parallel axis squeeze chute.

The transport frame attaches quickly and securely to your manual or hydraulic Hi-Hog squeeze chute. With 7-3/4" of clearance below the tongue there is plenty of clearance for rough terrain and the addition of a 62" long towing neck provides greater flexibility to negotiate corners.

Please note: If your chute was built prior to 2017, you will need to weld mounting brackets onto your chute to assist in lining up and securing the trailer. Contact Hi-Hog or visit www.hi-hog.com for installation and mounting instructions.

Head Sweep, Item 1561

While the hydraulic chute comes with a neck extender you may prefer to work with a head sweep. The hydraulic head sweep bar pushes the head of the animal to the side to secure the head and expose the neck for safe injections.

This item is only available by special order.

Hydraulic pump options

Gas Power Pack, Item 1562

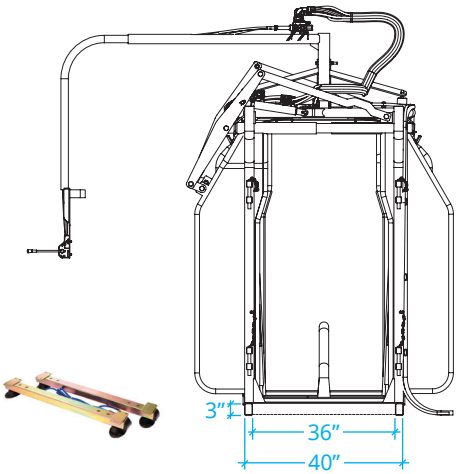
The gas powered hydraulic pump features a Honda 5.5 horse power 163cc engine providing 7.59 ft-lb of torque. The pump is a 2-stage hydraulic pump which provides faster cycle times and higher pressure with small engine requirements. Max continuous flow, low pressure 10.6 gpm / high pressure 2.3 gpm, with continuous pressure of 3000 psi
Compact combustion chamber, overhead cam design, and uni-block construction reduce fuel consumption
Powerful torque across a wide RPM range helps reduce engine speed drop from sudden load increases.
Internal timing belt provides quiet operation
Valve train and gear noise is minimized
Precision engineered and machined components result in lower vibration
The motor is mounted in a wheeled frame for easy handling
65 lbs

Electric Power Pack, Item 1559

Hi-Hog's 2 horsepower electric hydraulic pump is set at the factory to pump 1.5 gallons/minute at 1000 psi. The electric pump can run on either 110 V or, for best performance, 220 V.

65 lbs

Load bars / cells



The load bars / load cells of most companies can be mounted on Hi-Hog's hydraulic squeeze chute.

The side rails of the squeeze floor are made with 2"w x 3"h rectangular tubing with a distance of 36" in between the rails. Consult with manufacture for proper mounting instructions.

Note: The capacity of your load bars must be able to handle the combined weight of both the chute and the livestock being weighed.

Troubleshooting

Hydraulic operation

If you are having issues with your hydraulics check the following:

1. Ensure your hydraulic fluid tank is at least 2/3rds full
2. Check to ensure all fittings are secure and not leaking
3. Ensure the hydraulic lines have been warmed up sufficiently. The colder the working environment the longer you should allow your pump to run before operation.
4. If your hydraulics operate in a jerky manner you may have some air in you hydraulic lines. If this is the case simply ...

If you have any questions please contact the factory and one of our technicians will assist you (toll free 1-800-661-7002 Monday to Friday from 7:00 am to 3:00 pm MST)