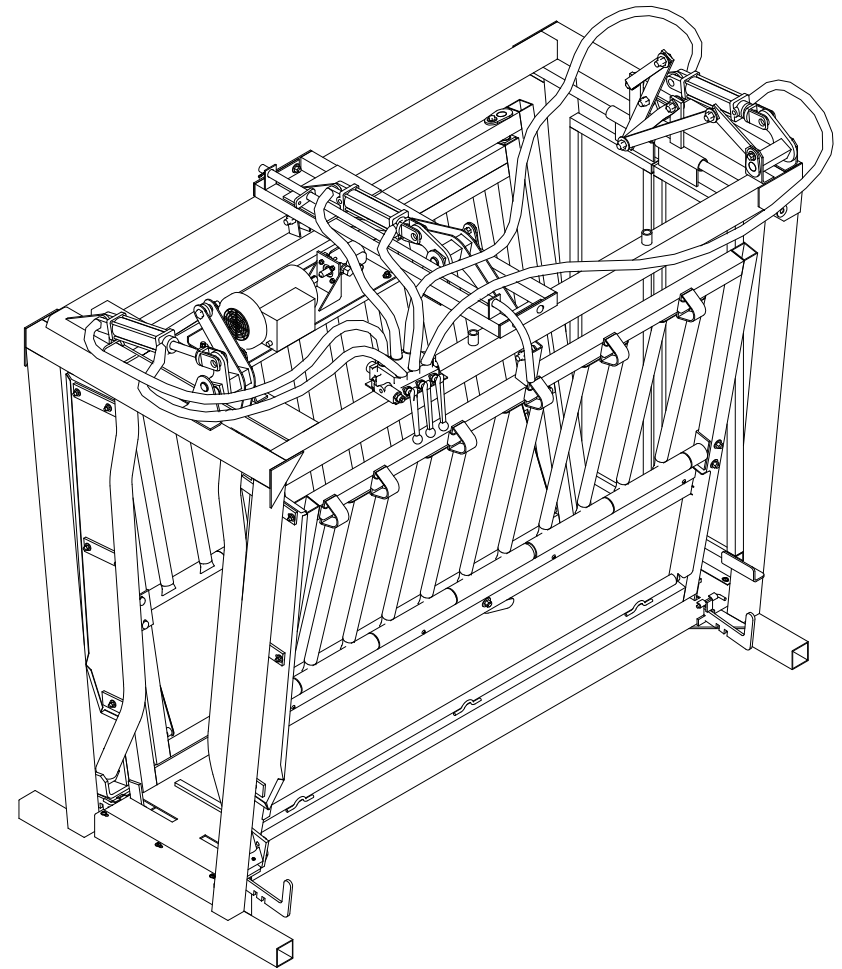


Rancher Hydraulic Chute

Owner's Manual



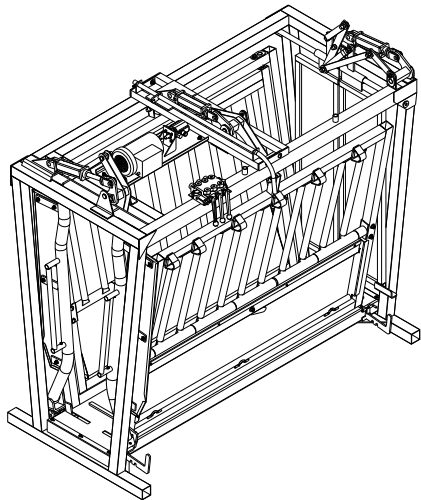
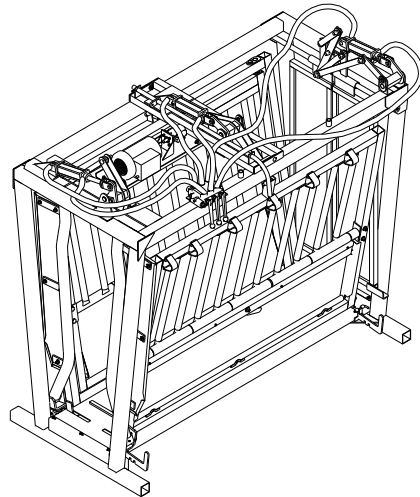
POWDER RIVER
• LIVESTOCK HANDLING EQUIPMENT •

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Since 1938, we at Powder River have dedicated ourselves to making America's best livestock handling equipment. You have purchased just one of the many quality products made by Powder River. We are glad that you have chosen our product and hope you will repeat your business.

This guide will facilitate your use of the Rancher Hydraulic Chute. If in the event you have problems that this guide cannot answer we invite you to contact us at www.powderriver.com or call us at (800) 453-5318.

Rancher Hydraulic Chute
003-40000



**Rancher Hydraulic Chute w/
neck extender**
003-40005

Before Getting Started



Please be aware that incorrect use of this product might cause injury to you and/or to your animals. We advise you to take the necessary time to become familiar with the chute before actually operating it with animals. This will enable you to avoid potential injury to yourself or to your animals.

Rancher Hydraulic Chute

The Rancher Hydraulic Chute is designed to hold livestock in an accessible position for branding, vaccinating, tagging, dehorning, and holding animals in a position to test for pregnancy, and overall inspection. Before using, the chute should be adjusted to accommodate the animals correctly.



Please be aware that the Rancher Hydraulic Chute is engineered for use by the typical rancher. **This chute is not intended for use in feedlots.**

What You Will Need

To adjust and operate your new Rancher Hydraulic Chute you will need:

- Level surface for operation
- 110 or 220 cord for power

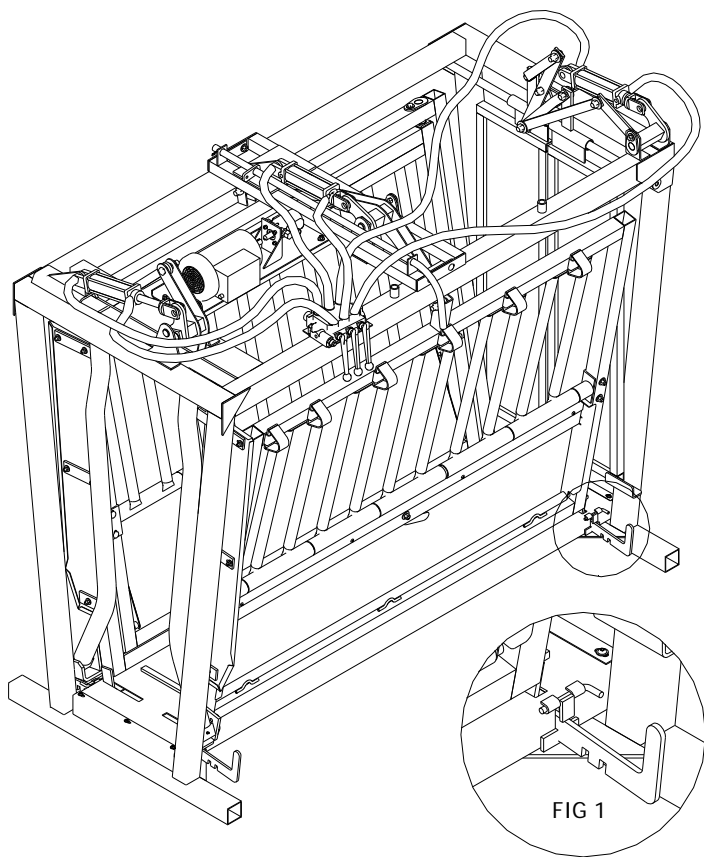
Getting Started

- Check that ground is level
- Check oil levels (p. 11).
- Power supply; 110 or 220 cord
- Check that all connections are secure.
- Check that hydraulic pressure is 1000psi or below (p. 11)



Set Up:

The chute should be adjusted to accommodate the size of the animal. This is the most important step in setting up your chute. The Rancher Hydraulic Chute can be adjusted into three positions. These adjustments change the size of the chute to better fit the size of the animal.



The first adjustment controls the width of the squeeze chute. Side retainers are found at the foot of the chute on both ends, as shown in Fig. 1. The side retainer is a long bar with three notched settings. The notches are designed to fit over the stops in the bottom.

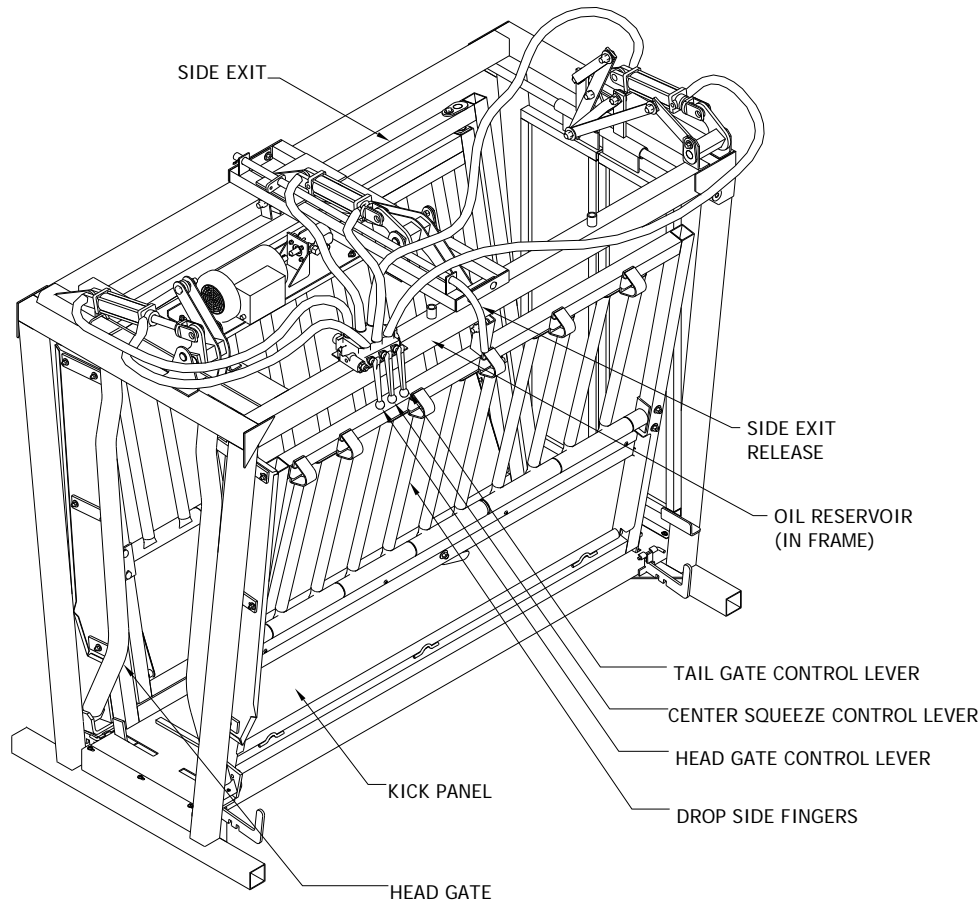
Lift both retainers on one side. After the retainer is raised, push or pull the side of the chute until the side ratchet lines up with the desired notch of the side retainers. The middle notch is designed to fit the average sized animal. Once the chute's side is lined up with the desired notch, lower the side ratchet, fitting the slot over the side retainer. Pushing the chute side narrows the opening for smaller animals and pulling the side widens the chute for larger animals. Repeat this process on the other side of the chute until you reach the desired width of the chute. By doing this, the opening size of the head gate will automatically be adjusted.



As a general safety precaution, adjust the width of the chute according to the size of the animal. Use inside notch for smaller animals such as calves, the middle notch for average sized cattle or other similar sized animals, and the outside notch for larger animals, such as pregnant cows, bulls, etc.

The Rancher Hydraulic Chute and its Working Parts

Before actually operating the Rancher Hydraulic Chute with an animal we suggest that you become familiar with the working parts.



Hydraulics

- As the owner of this chute, you have an obligation to maintain the unit in order for the chute to operate adequately.
- 1: Be sure that adequate power is supplied to the electric motor at the chute control box. Use at least 10 gauge wire cable on any extension cords up to 75 feet.
 - 2: Lubricate all major bearing points that are (zerk) grease fitted and all other bearing points after every 8 hrs of operation (tailgate slide rod).
 - 3: Keep hydraulic oil at the proper operating level. Use a good grade of either anti-wear hydraulic oil or a crankcase motor oil of the viscosity recommended for the operating temperatures in your area. Use a good quality Automatic Transmission Fluid for operation.

Oil Viscosity Recommendations

Anti-wear Hydraulic Oil	ISO Viscosity Grade
-05°F to 140°F	22
-05°F to 180°F	32
-15°F to 170°F	46
-30°F to 210°F	68

Temperatures shown are cold start up to maximize operation. During cold start-up, avoid high speed operation of hydraulic components until the system is warmed up to provide adequate lubrication.

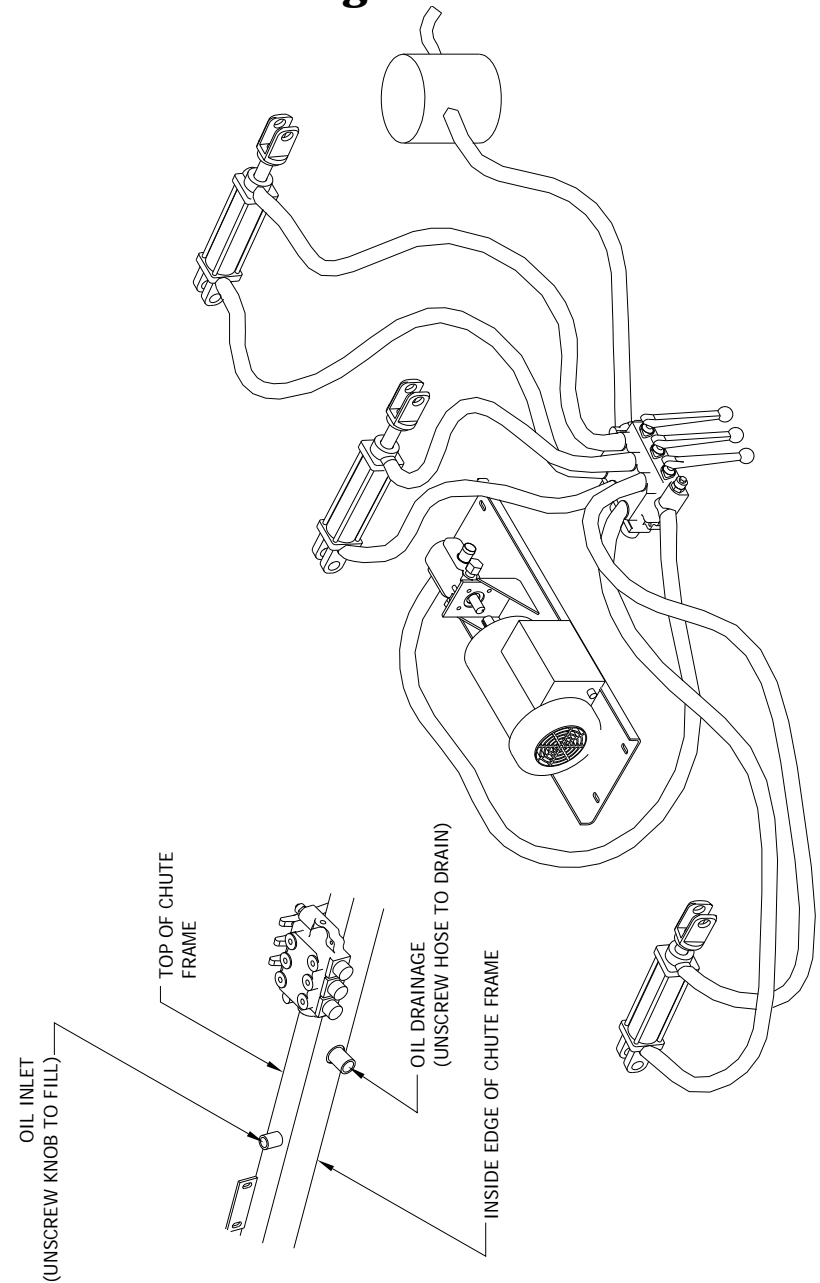
Very Important

In order for this Hydraulic Squeeze Chute to operate adequately, you must have approximately 1000psi showing on the pressure gauge.

To check gauge pressure:

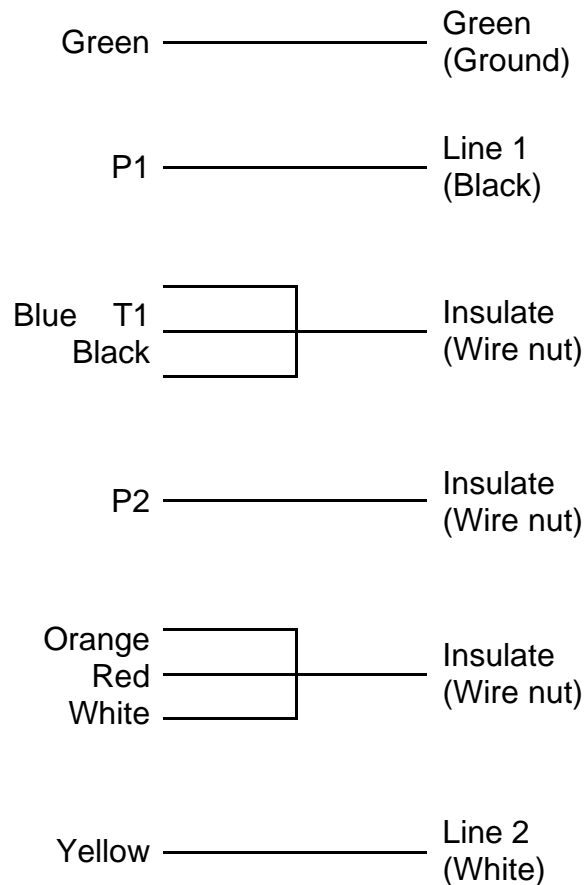
1. Run hydraulic pump long enough for oil to reach normal operating temperatures.
2. With the Head Stanchions in the closed position, continue to hold the control lever in until the maximum gauge pressure is reached. It should read 1000psi.

Hydraulic Drawing



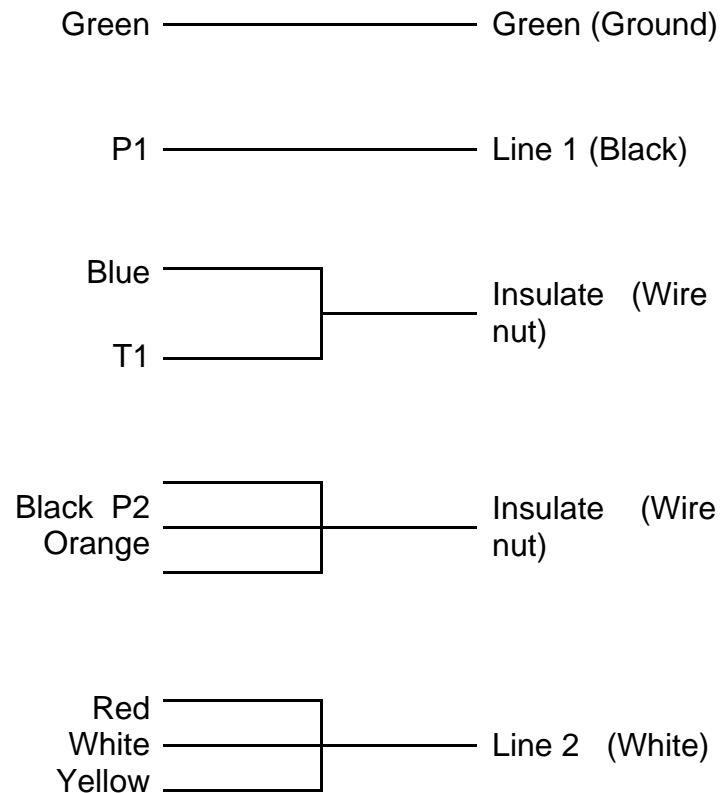
220 V CW Wire Diagram

Marathon Motor Model: BXK 145TBFR5341AE P



110 V CW Wire Diagram

Marathon Motor Model: BXK 145TBFR5341AE P



Checklist

- ✓ Lubricate every 8 hours
- ✓ Check hydraulic oil level
- ✓ Operating pressure at or around 1000psi
- ✓ Allow pump to run long enough for oil to reach normal operating temperatures before use
- ✓ Check that pump is properly grounded

Specifications of Hydraulic Pump

Stages.....2
Max. Operating Speed.....3600 RPM
Construction.....Cast Iron
Max. Operating Pressure.....3000 PSI
Mounting.....4 bolt 4F17
Pump Rotation.....**Clockwise** (Facing Shaft)

General Pump Safety Information

1. Never exceed max. operating speed and pressure on the pump.
2. Properly ground the motor.
3. Drain all liquids before servicing
4. Periodically check the pump and components.
5. Check tank oil level before operating.
6. Be familiar with all controls on machinery.

WARNINGS

- Disconnect Power before servicing
- Release system pressure before servicing
- Do not over-tighten fittings and bolts
- Do not force coupling onto pump shaft
- Provide cooling for hydraulic oil as needed
- Do not use Teflon tape on hydraulic fittings
- Never run pump without hydraulic oil
- Do not exceed pressure ratings of pump.

Troubleshooting Chart

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Pump does not develop full pressure	<ol style="list-style-type: none"> 1. System relief valve set too low or leaking 2. Oil temp. too high 3. Pump is worn out 4. Double acting cylinder piston seals are cut or worn out 	<ol style="list-style-type: none"> 1. check system relief valve for proper setting with pressure gauge in outlet line. 2. Let oil cool below 140°F 3. Replace worn parts or pump 4. Replace or repair cylinder
Motor won't start	<ol style="list-style-type: none"> 1. Loose connection 2. Circuit breaker tripped 3. Voltage drop 4. Seized pump 	<ol style="list-style-type: none"> 1. Check wiring 2. Reset circuit breaker 3. use heavier gauge wire 4. Replace pump
Will not pump oil (motor runs but cylinder does not move, or moves slowly)	<ol style="list-style-type: none"> 1. No oil in reservoir 2. Motor operating wrong rotation 3. Oil level low 4. Suction strainer is clogged 5. Double acting cylinder piston seals are cut or worn out 6. Reservoir breather is dirty or clogged 	<ol style="list-style-type: none"> 1. Check oil level, refill 2. Change rotation of prime mover 3. Add oil as needed 4. Clean suction strainer 5. Replace or repair cylinder 6. Clean reservoir breather and reinstall.
Pump motor unit is noisy	<ol style="list-style-type: none"> 1. Low oil level 2. Air in system 3. Suction strainer or in-line filter is clogged 	<ol style="list-style-type: none"> 1. Add oil as needed 2. Bleed air from highest fitting in system by loosening fitting very slightly and operating unit until bubbling of air stops, then tighten 3. Clean suction strainer or in-line filter

Head Gate

The head gate is opened and closed using the front lever on the three spool valve. The head gate is open until the animal is in the catch position, at which time, you will close the gate by pushing the lever then squeeze the animal with the squeeze hydraulic lever.

Tail Gate

The tailgate is located at the rear end of the chute. The back lever on the three spool valve operates the tailgate. Simply pull the tailgate lever towards you to open. To close the gate, push tailgate lever away from you.

Center Squeeze

The center squeeze lever on the three spool valve operates the actual squeezing of the chute sides. As the lever is pushed the squeeze is locked into position squeezing the animal. To release the animal, pull the lever towards you.

Side Exit

The side exit is a safety feature. This enables the operator to release an animal that won't exit out the front or an animal that goes down while in the chute.

Located on the top of the frame is a handle with a yellow grip, pulling on the handle releases the side exit. After the handle is pushed up, the side exit will fall open releasing the animal. To close

Warning!



Side exit side is very heavy! To avoid potential injury, be cautious that the area is clear when opening side exit.

Kick Panel

The Kick Panel is designed to allow access to the legs and hooves of the animal. The Kick Panel runs along the bottom on both sides of the chute. Push the Kick Panel latch up and lower the Kick Panel by pulling it outward.

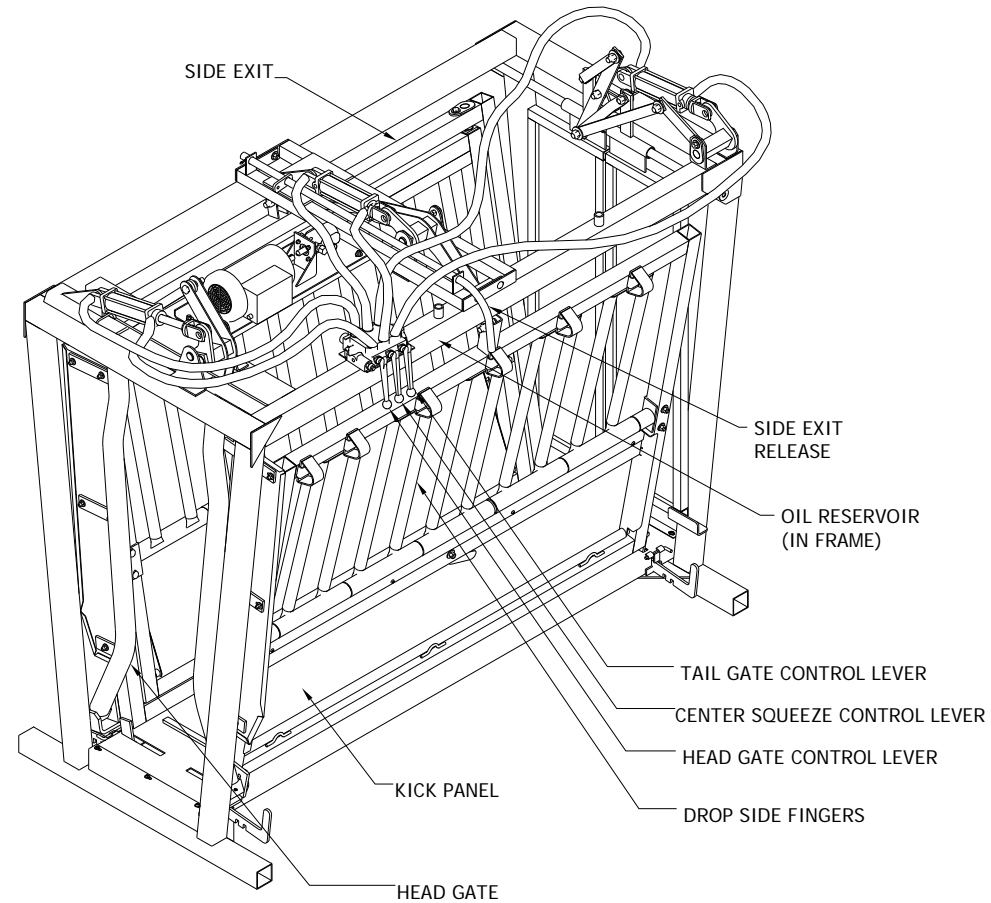
Fingers

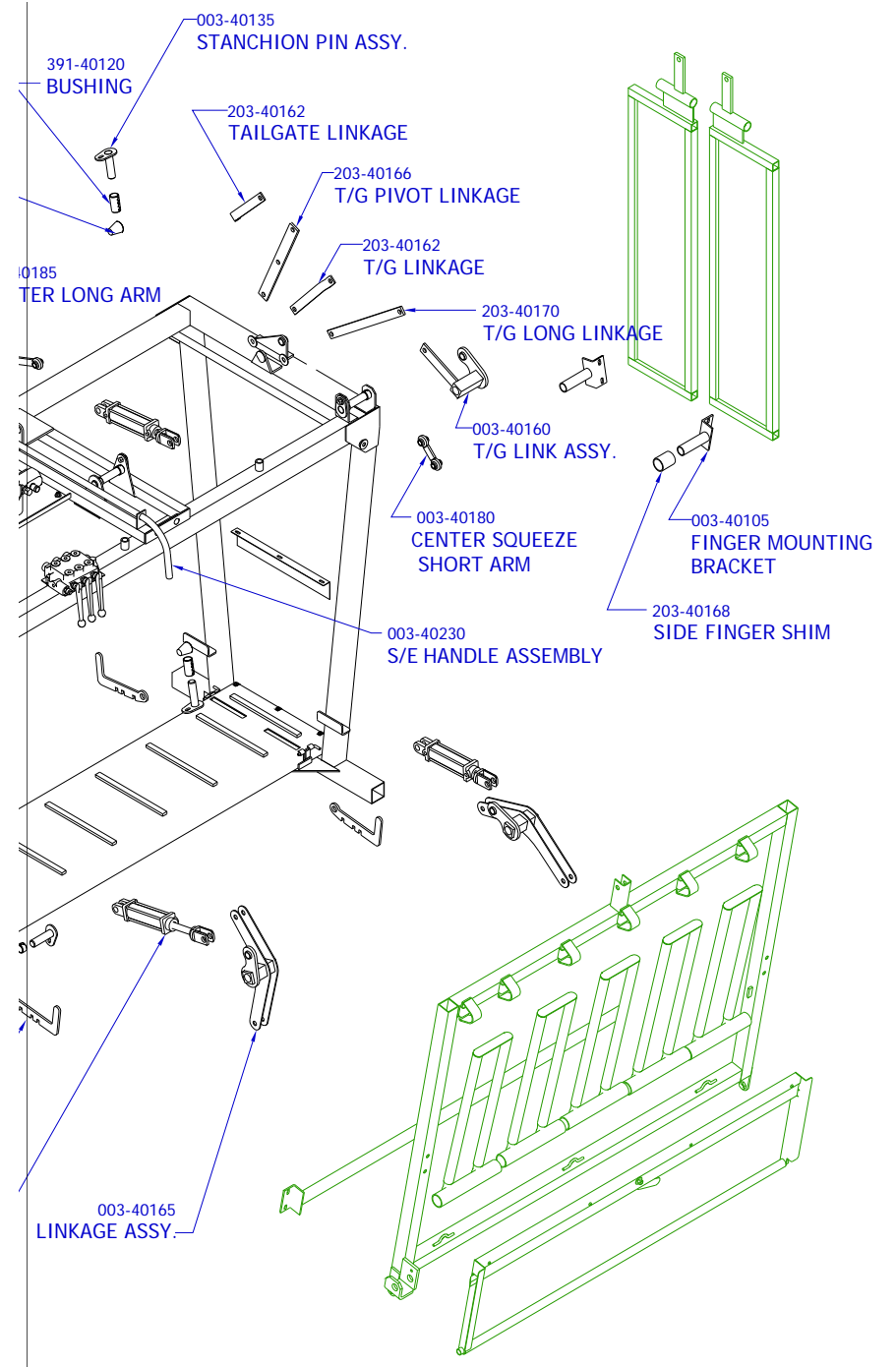
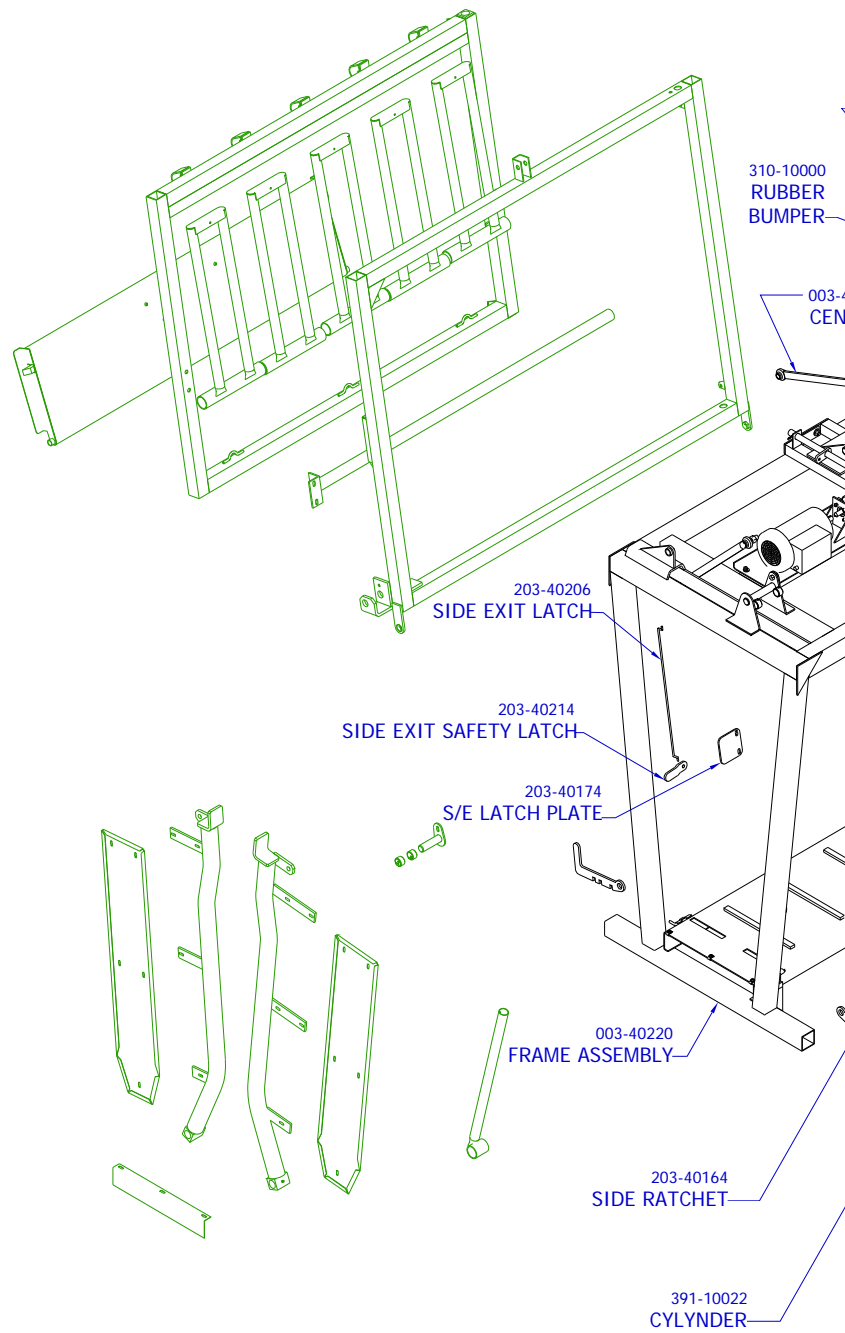
The fingers are designed to swing away to allow free access to the animal's sides. They are located on both sides of the chute. Push the finger latch up and lower the fingers by pulling them outward.



Hydraulic levers control the headgate, center squeeze, and tailgate. Pull levers to open and push levers to close.

Working Parts





003-40150
SIDE EXIT KICKPAN ASSY.

003-40110
SIDE EXIT FINGER MT.

003-40200
SIDE EXIT FRAME

003-40120
RH STANCHION PIPE

203-40026
STANCHION COVERS

203-40188
CHUTE BOTTOM COVER

391-40000
BUSHING

003-40135
STANCHION
PIN ASSY.

003-40235
SINGLE FINGER

003-40125
STANCHION LH PIPE

003-40130
SIDE EXIT GATE

003-40160
TAILGATE LINK ASSY.

003-40155
CHUTE TAILGATE

ASSY.

003-40115
STAND SIDE FINGER MNT.

003-40145
STANDARD SIDE FRAME

003-40210
STND SIDE KICKPAN ASSY.

