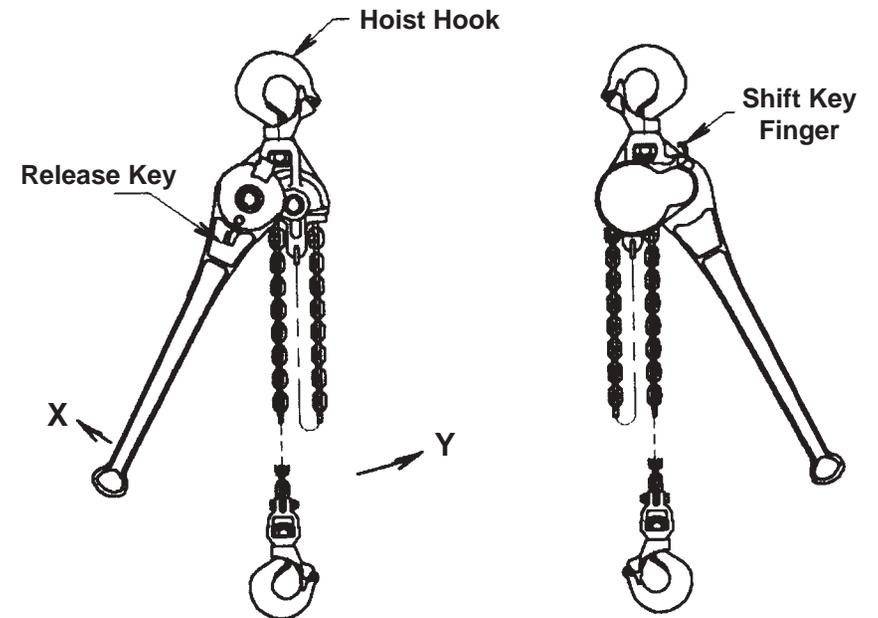


# Operating Instructions for Chance 1<sup>1</sup>/<sub>2</sub>-Ton Hoist C309-0439



210 North Allen Street  
Centralia, MO 65240



NOTE: Because Hubbell has a policy of continuous product improvement, we reserve the right to change design and specifications without notice.

## To Position Hoist for Use:

### **WARNING**

When placing the hoist in operating position care must be taken to make sure that the load hook and the housing hook of the hoist are on the same centerline. If the hoist is restricted from adjusting itself to form a straight line with the direction of loading, damage to the hoist could occur.

The hoist may be operated in any convenient position and the handle may be operated on either side of chain as shown by the arrows (X) and (Y) on the drawing.

To put the hoist in free-wheeling, turn the shift key finger to the "DN" (down) position and hold the release key in the direction of the arrow. Pull the chain in the "up" direction two links then pull on the chain to get sufficient slack to hook onto the load. To take up slack, simply pull on the free end of the chain, the hoist will ratchet even though the release key is not depressed.

### **To Lift a Load:**

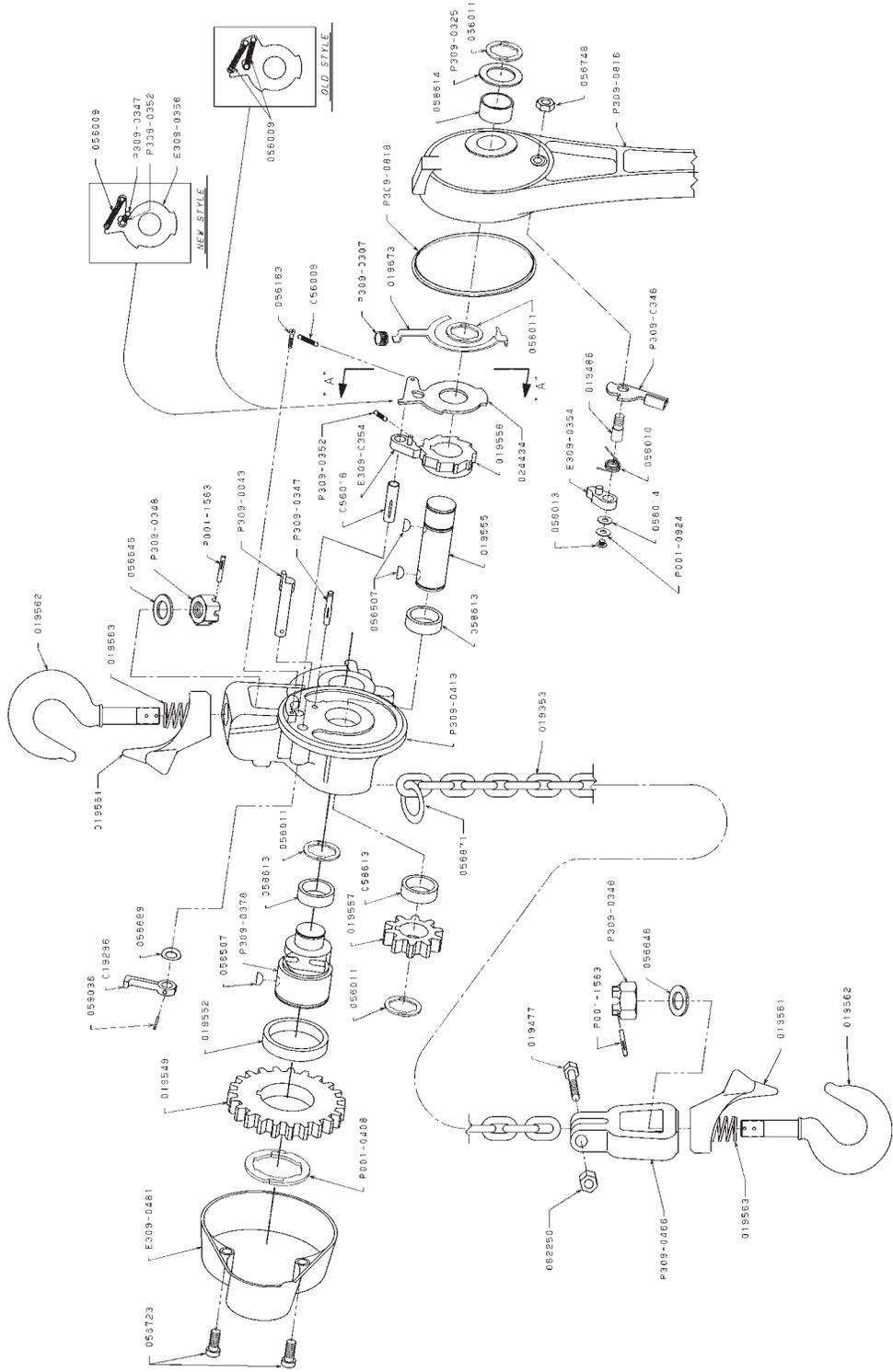
Turn the shift key finger to "UP" and operate the handle. The handle may be operated on either side of chain as shown by the arrows (X) and (Y) on the drawing.

### **To Lower a Load:**

Turn the shift key finger to "DN" (down) and operate the handle. The handle may be operated on either side of chain by the arrows (X) and (Y) on the drawing.

### **To Shift Handle:**

To change position of handle from side marked X to side marked Y, press release key in direction of arrow.



## Repair Parts List for Chance 1 1/2-Ton Hoist

*Handle Subassembly	E309-0819
*Handle	P309-0816
Oilite Bearing	058614
Pin (working dog post)	019486+
Release Key	P309-0346+
Hex Jam Nut	056748+
Spring	056010+
Machine Screw	056013+
Stop Bolt	019673+
Spring	P309-0307+
Washer	056014+
Lockwasher	P001-0924
Unloader Plate Subassembly	E309-0356+
Swivel Hook Subassembly	024000
Chain	019353
Swivel	P309-0466
Thrust Washer	056646
Castle Nut	P309-0348
Pin	P001-1563
Bolt	019477
Hex Nut	062250
Hook	019562
Safety Latch	019561
Spring	019563

Working Dog Subassembly	E309-0354+
Dog	P309-0353
Pin	P001-1368
Dog Holding Subassembly	E309-0354+
Dog	P309-0353
Pin	P001-1368
Housing Subassembly	E309-0414
Housing	P309-0413
Bearing (Oilite)	019552
Bearing	058613
Pin (Driv-Lok Type)	056016
Pin	P309-0347+

### Remaining Parts not requiring Subassemblies

Pocket Wheel	P309-0378
Spur Gear	019549
Woodruff Key	056507+
Pinion Shaft	019555
Ratchet Wheel	019556
Shift Key	P309-0043
Gear Cover	E309-0481
Shift Key Finger	019296+
Washer	056689+
Spring	P309-0352+
Spring	019565
Cap Screw	056723
Driv-Lok Pin	059036+
Spring	056009+
Machine Screw	056163+
Hook	019562
Safety Latch	019561
Snap Rings	056011+
Wear Strip	P309-0818+
Thrust Bearing	056646
Machine Screw	056013
Washer	056014
Torsion Spring	056010
Castle Nut	P309-0348
Pin	P001-1563
Pinion	019557
Ring	P056871
Snap Ring	P001-0408
Washer	P309-0325+

+C309-0349 Repair Kit includes all items marked "+".

## ⚠ CAUTION

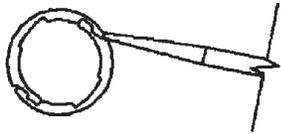
The equipment covered in this instruction guide should be installed, used and serviced only by competent personnel familiar with and following good work and safety practices. This equipment is for use by such personnel and is not intended as a substitute for adequate training and experience in safe procedures for this type of equipment.

The information contained in this instruction guide has been compiled as a result of review of the product, its intended application and use considerations. However, this instruction guide does not cover all details or situations in equipment use nor does it provide for every possible contingency to be encountered in relation to installation, operation or maintenance. Should additional information and details be desired or specific situations arise which are not covered adequately for the user's purpose, consult your supervisor and the appropriate rules for safe work practices.

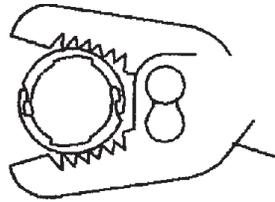
### Disassembly Instructions for Periodic Inspection and Repair or Replacement of Parts for 1½-Ton Hoists

In order to best visualize these instructions, study and refer to the exploded view of the hoist.

1. Remove snap ring (056011) from shaft (019555).



To remove interlocking snap ring, pry one end apart using a screwdriver. Parts may fly away when ring unsnaps.



To reinstall, hook one end and close with pliers.

2. Push "Release Key" (P309-0346) in the indented area of the handle in the direction marked "Release" to disengage the working pawl from the unloader plate and lift handle (P309-0816) off the shaft. This will expose the mechanism.
3. The working pawl may be removed by first removing screw (056013) and washer (056014) from the post supporting the pawl. Torsion spring (056010) can be removed, after the pawl has been removed, for replacement, if needed.
4. When reassembling working pawl and spring (056010), place the short leg of the spring to the pin on the pawl on the side facing handle (P309-0816), and the long leg of the spring against the handle housing (P309-0816).

5. If necessary to replace the pawl post (019486) or release key (P309-0346), press the pawl post out of handle (P309-0816) with a careful and steady force. In replacing the new pawl post (019486), be certain it is pressed in straight, using an even pressure, and that release key (P309-0346) is in position before pressing post into handle.
6. The holding pawl can be removed by unhooking the two extension springs from the unloader plate and from screw (056163) in the housing. Remove snap ring (056011) and slide unloader plate off shaft (019555), after which pawl can be lifted off post (056016).
7. After unloader plate has been removed, ratchet (019556) may be slipped off the shaft. Then woodruff key (056507) may be removed. Shaft (019555) with pinion (019557) intact may be slipped out of bearing bore.
8. In replacing the holding pawl, make sure the pin which is permanently secured to the pawl is faced to the outside, so that it projects through the unloader plate when it is replaced on the shaft.
9. To remove the ratchet gear and chain socket, remove the ring (P056871) and free the end of the chain, this will allow the chain to be "pulled" through the housing. Then by removing interlocking snap ring (056011), the chain socket with gear (019549) will slide out in one piece.
10. Hook (019562) may be removed from the housing after pressing groove pin (P001-1563) from the nut (P309-0348) and unscrewing hook from nut.
11. The shift key (P309-0043) can be removed by backing out the drivelock pin (059036) holding the shift key finger (019296) to the shift key.
12. The oilite bearing (058613, 058614) can be removed and replaced in the accepted manner of pressing them out and pressing the new ones in.

To reassemble, follow these instructions in the reverse manner replacing parts in the same position as noted when removed. It is important that the hoist be inspected, cleaned and re-lubricated periodically depending on usage conditions.

**The Chance hoist is designed to provide long and rugged service. Observing the suggestions listed below will increase the service life of the hoist:**

1. The hoist should be inspected, cleaned and re-lubricated periodically depending on usage conditions.
2. When lowering a light or "bouncing" load do not flip or otherwise cause the handle to become self-ratcheting. Allowing the handle to self-ratchet causes undue wear on the stop areas and reduces the wear life of the hoist. In addition, the free-ratcheting handle could strike the operator.
3. When operating the handle it is not necessary to "slam" the handle past the ratcheting position. Constant impact will increase wear of the hoist mechanism.