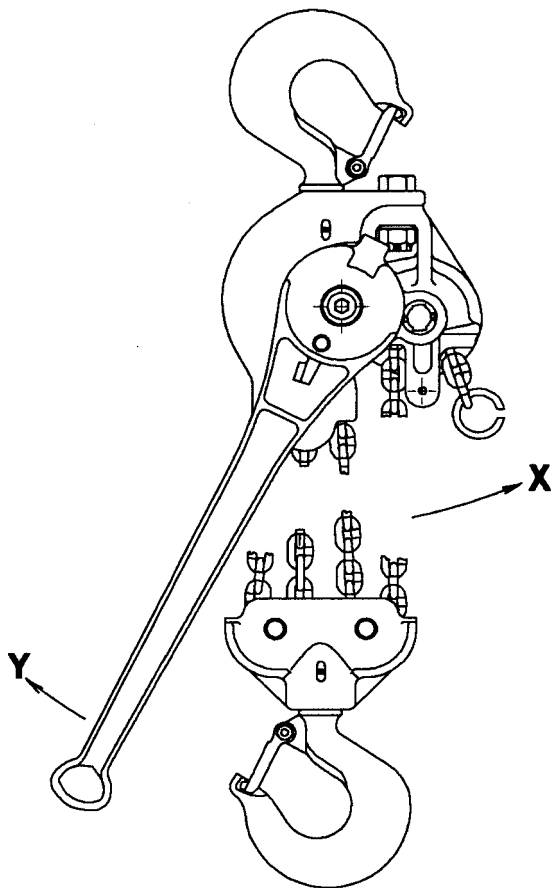


OPERATING AND REPAIR INSTRUCTIONS FOR CHANCE CHAIN HOISTS

MODELS COVERED:

C309-0458	—1½ Ton
C309-0440	—3 Ton
C309-0441	—4½ Ton
C309-0442	—6 Ton



⚠ 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.



CHANCE®

POWER SYSTEMS, INC.

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.

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 (above) on the drawings.

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 approximately 2 links then pull on the hook side of 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.

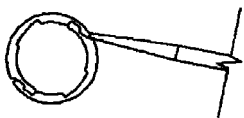
TO LOWER A LOAD:

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

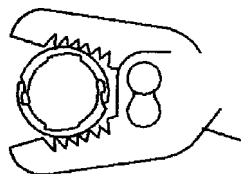
TO SHIFT HANDLE:

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

DISASSEMBLY INSTRUCTIONS FOR PERIODIC INSPECTION AND REPAIR OR REPLACEMENT OF PARTS



To remove Interlocking Snap Ring, pry one end apart using screwdriver. Parts may fly away when Ring unsnaps.



To reinstall, hook one end and close with pliers.

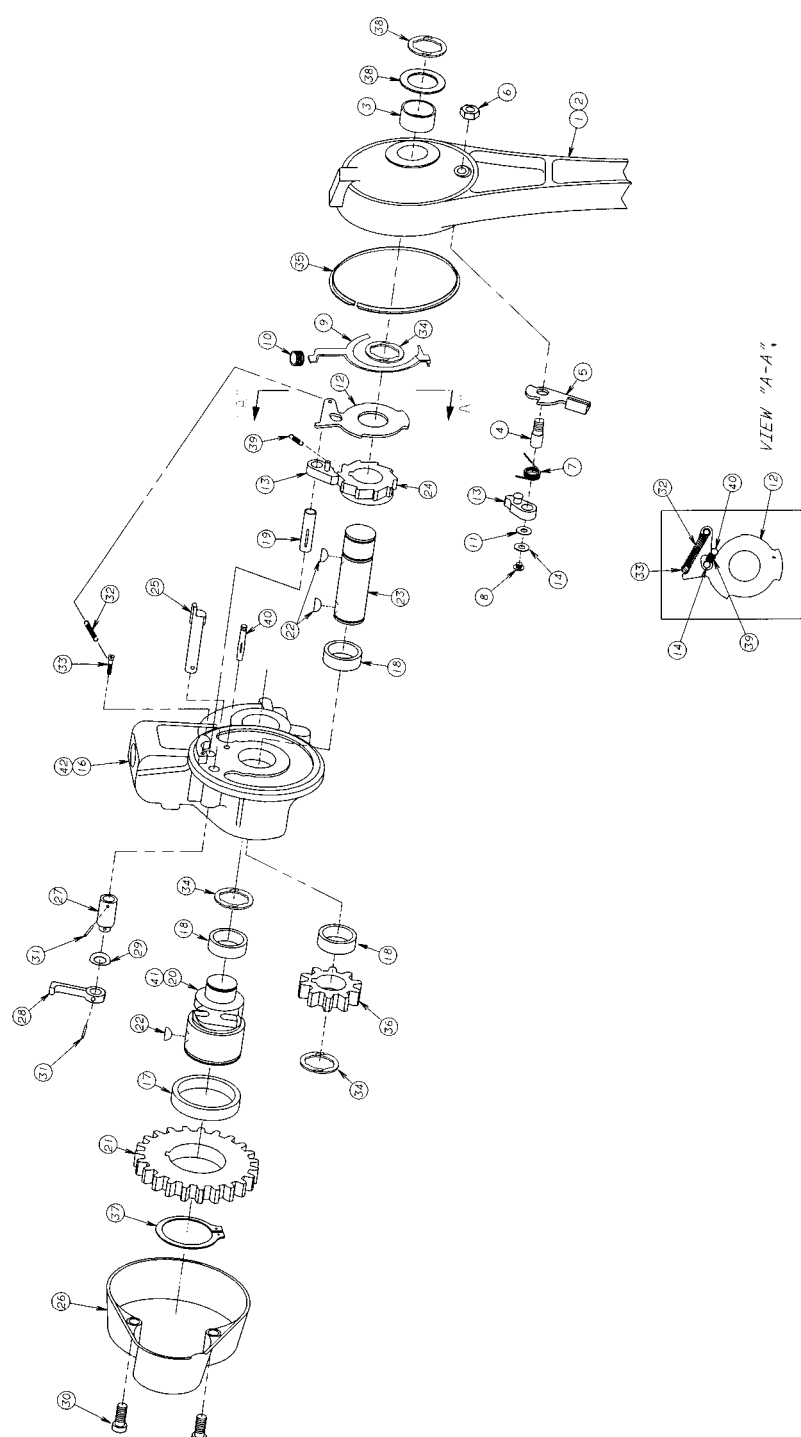
In order to best visualize these instructions, study and refer to the exploded view of the hoist.

1. Remove snap ring (056011) from shaft (019555).
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 assembly off the shaft. This will expose the mechanism.
3. The working pawl may be removed by first removing screw (56013) and washer (56014) from the post supporting the pawl. Torsion spring (56010) can be removed, after the dog, if needed.
4. When reassembling working pawl and spring (56010), 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 (19486) or release key (P309-0346) press the pawl post out of handle with a careful and steady force. In replacing the new pawl post (19486), 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 (56163) in the housing. Remove snap ring (56011) and slide unloader plate off shaft (019555) after which pawl can be lifted off post (56016).
7. After unloader plate has been removed, ratchet (19556) may be slipped off the shaft. Then woodruff key (56507) may be removed. The shaft (019555) 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, disconnect chain end and pull out of housing (on reassembly, insure welded side of chain is away from chain socket). Then by removing interlocking snap ring (56011), the chain socket and gear (019549) will slide out in one piece.
10. Hook (P309-0389) may be removed from the housing after pressing roll pin (P001-1460) from the nut (P001-0757) and unscrewing hook from nut.
11. The shift key (P309-0043) can be removed by backing out the drive-lock pin (59036) holding the shift key finger (19296) to the shift key.
12. The bearings (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 relubricated periodically depending on working conditions.

No.	Part No.	Description
1	P309-0816	Handle
2	E309-0819	Handle
3	058614	Oilite Bearing
4	019486	Pin
5	P309-0346	Release Key
6	056748	Hex-Jam Nut
7	056010	Spring
8	056013	Machine Screw
9	019673	Stop Bolt
10	P309-0307	Spring
11	056014	Washer
12	E309-0356	Unloader Plate
13	E309-0354	Dog Assembly
14	P001-0924	Lockwasher
15		
16	P309-0396	Housing
17	019552	Oilite Bearing
18	058613	Bearing
19	056016	Pin (Driv-Lok Type)
20	P309-0378	Pocket Wheel
21	019549	Spur Gear
22	056507	Woodruff Key
23	019555	Pinion Shaft
24	019556	Ratchet Wheel
25	P309-0043	Shift Key
26	P309-0417	Gear Cover
27	P309-0384	Shift Shaft Extension
28	019296	Shift Key Finger
29	056689	Washer
30	056723	Cap Screw
31	059036	Driv-Lok Pin
32	056009	Spring
33	056163	Machine Screws
34	056011	Snap Rings
35	P309-0818	Wear Strip
36	019557	Pinion
37	P001-1558	Snap Ring
38	P309-0325	Washer
39	P309-0352	Spring
40	P309-0347	Pin (Driv-Lok Type)
41	P309-0461	Sprocket Shaft-Roller
42	P309-0460	Housing-Roller



HOUSING SUB-ASSEMBLY
ALL MODELS
FIG. 1

No.	Part No.	Description
14	P001-0816	Washer, 4 1/2 - 6 Ton
15	P001-0814	Bolt-Housing to Adapter
16	P001-1465	Pin, 3 Ton
17	P001-1461	Pin, 4 1/2 - 6 Ton
18	P309-0466	Bottom Block 1 1/2 Ton (1 Chain)
19	P309-0421	Bottom Block 3 Ton (2 Chain)
20	P309-0420	Bottom Block 4 1/2 Ton (3 Chain)
21	P309-0419	Bottom Block 6 Ton (4 Chain)
22	019477	Chain Connecting Bolt 1 1/2 Ton
23	062250	Nut
24	E309-0423	Idler Sprocket w/Bearing-All Models
25	P309-0397	Bearing only (Idler Sprocket)
26	P309-0385	Axle-Bottom Block 3-4 1/2 Ton only
27	P309-0383	Axle-Top 4 1/2 Ton - All 6 Ton
28	P309-0382	Retaining Ring-Axle-All
29	P001-0810	Pin-Chain Anchor 3 & 4 1/2 Ton
30	P309-0450	Swivel Adapter-Roller
31	P309-0841	Spacer
32	P309-0463	Connecting Link-Roller
33	P309-0462	Chain 1-1/2 T Roller
34	P309-0386	Yoke
35	P309-0427	Chain 1 1/2 Ton
36	P309-0428	Chain 3 Ton
37	P309-0429	Chain 4 1/2 Ton

No.	Part No.	Description
1	(see Fig. 1)	Housing Sub-Assembly-All Models
2	C-309-0803	Top or Bottom Hook for 1 1/2 Ton
3	P309-0860	Top or Bottom Hook for 3 Ton
4	P309-0861	Top or Bottom Hook for 4 1/2 Ton
5	P309-0862	Top or Bottom Hook for 6 Ton
6	058762	Nut
7	P309-0869	Safety Latch Kit for 3 Ton
8	P309-0870	Safety Latch Kit for 4 1/2-6 Ton
9	056871	Ring-Chain End
10	P001-0757	Hook Nut, 3 Ton
11	P001-0817	Hook Nut, 4 1/2 - 6 Ton
12	P309-0430	Chain 6 Ton
13	056510	Washer, 3 Ton

