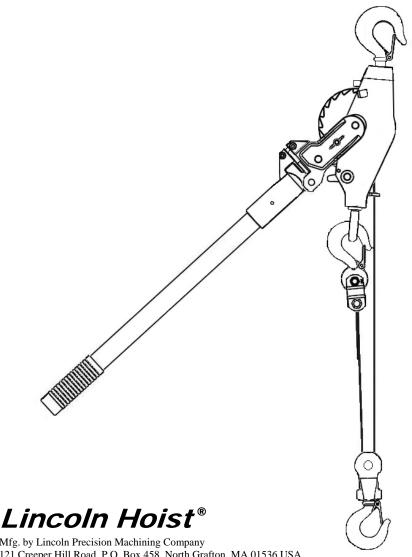
# Lincoln Hoist®

## Web Hoist Operating Manual



Mfg. by Lincoln Precision Machining Company 121 Creeper Hill Road, P.O. Box 458, North Grafton, MA 01536 USA Toll Free (888) 306-7222 Phone (774) 551-9000 Fax (508) 839-4729 Email sales@lincolnhoist.com



Overloading and Improper Use Can Result In Injury.

### Read and understand operator's manual.

- Do not exceed rated capacity.
- Inspect hoist for damage or malfunction before use.
- Do not use if damaged or malfunctioning.
- Do not remove or obscure warning label.
- Always rig in a straight line. Do not bind.
- Do not use as a load binder.
- Do not use with handle extension.
- Do not use to lift people or loads over people.
- Do not leave load unattended.
- Do not use for towing.
- Do not use damaged, twisted, or kinked strap.
- Do not operate hoist when it is restricted from forming a straight line with the direction of loading.
- The web strap on this hoist is not a rated insulating member. When clean and dry, the strap may have dielectric properties typical of nylon or polyester fibers.
- Use an appropriate insulating member in series with hoist to achieve proper working distances per OSHA Regulation Subpart V, 1926.950 or your company work practices.
- When handle swings closer to energized conductors than OSHA safe working distances or company practices permit, use appropriate clothing and rubber gloves for rated voltages.
- If Stress Link breaks from overload, <u>REPLACE IMMEDIATELY!</u>
- Use only genuine Lincoln Hoist replacement parts.

### **Before Operating Hoist**

The supporting structure or anchoring means shall have a load capacity at least equal to that of the hoist.

The operator shall be familiar with all operating controls of the hoist, and shall be instructed as to warnings on the hoist, and the hoisting practices listed here.

- If adjustments or repairs are necessary, or any defects are known, the operator shall report this promptly to the appointed person.
- Hoist shall be used only in locations that will allow the operator to be free of the load.
- The operator shall have access to the handle.
- The operator shall not operate a hoist that bears an out of order sign.
- The operator shall not adjust or repair a hoist unless qualified to perform maintenance on the hoist.
- Hoist shall not be operated by other than the hand power of one operator.

Hoists shall not be operated with an extension on the handle.

### **Handling The Load**

The web strap shall not be wrapped around the load.

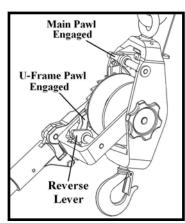
- The sling or other device shall be properly seated in the base (bowl) of the hook. The hook latch shall not be allowed to support any part of the load.
- Hoist shall not be operated until the load block, wire rope, and hoist body are directly in line with the direction of loading to avoid sidepull.
- The operator shall not apply a load to the hoist until the operator and all other personnel are clear of the load.
- The operator shall make sure the load clears obstacles before moving.
- The hoist should not be used to lift, support, or otherwise transport people.
- The operator shall avoid carrying loads over people.
- When starting to lift or pull, the operator should move the load a few inches and then check the hoist for proper load holding action. The operation shall be continued only after the operator is assured that the hoist is operating properly.

The operator shall not leave a load unattended.

## **Operating Instructions**

## **Lifting or Pulling**

- 1. Hang hoist freely from adequate support.
- 2. Place reverse lever in lift/pull position to engage u-frame pawl in drum teeth.
- 3. Operate the handle in steady strokes to lift or pull. (DO NOT OVERLOAD HOIST!)

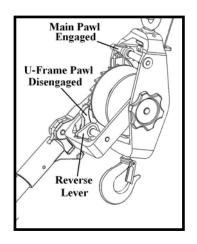


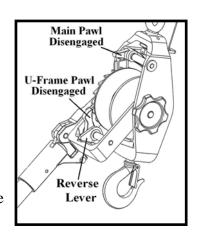
### **Lowering or Backing Off**

- Place reverse lever in lower/back off position and operate handle to disengage u-frame pawl from drum teeth.
- 2. Operate handle until u-frame pawl disengages main pawl from drum tooth.
- 3. Operate handle in reverse direction until main pawl engages drum tooth again.
- 4. Repeat until load is free.

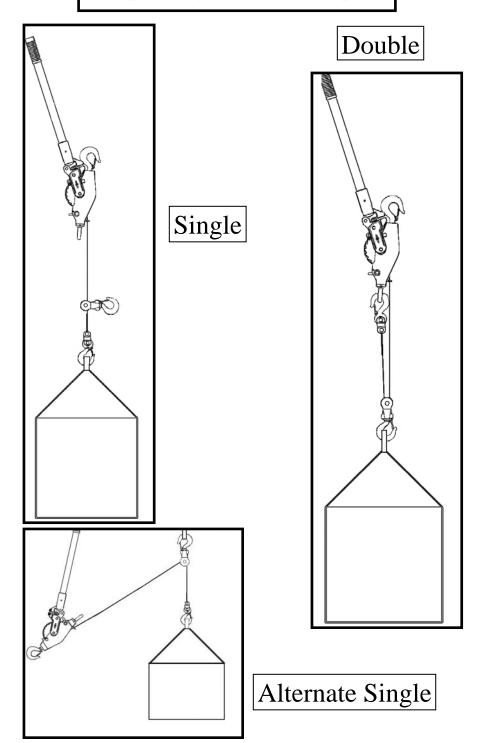
### Free Release

- 1. Do not release under load
- Place reverse lever in lower/back off position and operate handle to disengage u-frame pawl from drum teeth.
- 3. Press and hold main pawl to disengage it from drum teeth.
- 4. Pull web strap out from drum.





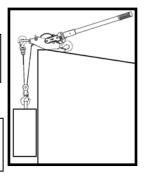
## **Proper Rigging Techniques**



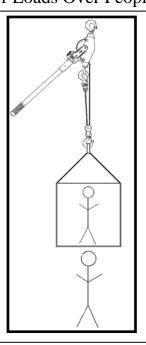
## **Unsafe Rigging Techniques**

**Do Not** Use Around Corners

**Do Not** Lift People Or Loads Over People



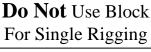
**Do Not** Let Web Strap Contact Any Surface

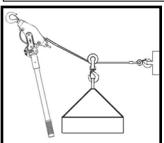


**Do Not** Use As A Choker

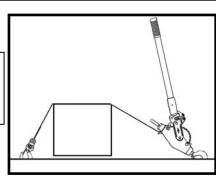


**Do Not** Use As A Tow Line





**Do Not** Use As A Load Binder



## **Maintenance**

#### Never perform maintenance when there is a load on the hoist!

Inspect hoist before each use. Check for wear, damage, distortion, and cleanliness.

- Keep hoist clean from dirt and debris, clean out immediately.
- Replace worn or damaged parts before any further use.
- Check stress links for breakage, replace if needed.

Check web strap, it should be clean and dry. Replace if severely worn, there is distortion of the structure, acid or caustic burns, weld spatter, broken stitching, cuts or tears, damaged eyes or fittings, abrasive wear, and knots.

#### **Web Strap Replacement**

To remove strap, pull completely out of drum to expose drum anchor pin. Using 1/8" punch, drive drum anchor pin out. some hoists you must remove E-ring from end of shaft. Remove drum shaft, drum, and u-frame. Remove screw using allen wrench. Pull strap out through web guide.

Feed the new strap (the end without the warning tag) through web guide with the cut end facing towards drum hub. Put loop end in drum screw cavity. Replace screw. Put drum shaft through drum and u-frame in original position. Replace Ering on end of shaft if needed. Replace drum anchor pin with new one. Sink drum anchor pin approximately ½" below hub surface. Make sure pin does not stick out above drum hub surface.

#### **Stress Link Replacement**

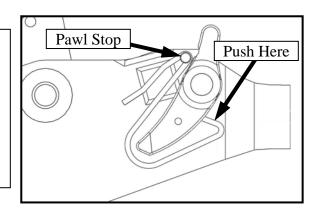
Remove nuts from threaded link pins. Remove both link pins from socket and side bar. Remove overload link and broken pieces of stress link. Place a new stress link on top of overload link and replace in socket and sidebar. Replace link pins and nuts. Fully tighten nuts.

#### Fiberglass Handle Replacement

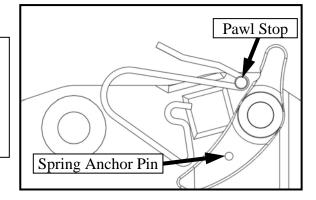
Drive handle pin from socket towards numbered side using 1/8" punch. Replace handle in socket. Line up holes in socket and handle. Drive the new pin (small end first) into socket from numbered side.

## 200 Main Pawl Spring Replacement

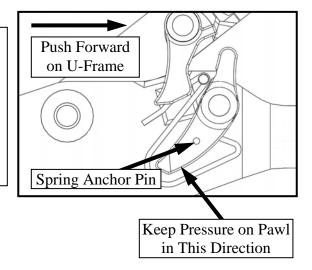
To remove the old spring, use a screw driver or punch to push down on the spring as shown. After the spring releases from the main pawl, rotate it around until it can be slid off of the pawl stop on the main frame.



To install the new spring, slide the long end under the pawl stop. Rotate around the pawl stop until the spring rests against the spring anchor pin.

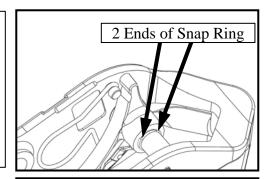


First, keep main pawl engaged in drum teeth. With the spring resting on the pawl stop and main pawl, push the u-frame forward until the spring re-engages the spring anchor pin on the main pawl.

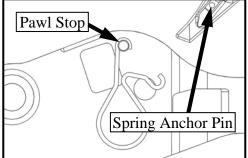


## 131 Main Pawl Spring Replacement

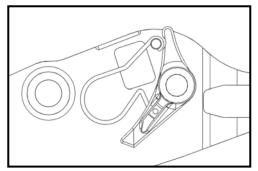
To remove the old spring, remove the snap ring on the main pawl shaft (use a hammer and 2 nails or small punches to tap ring equally from both sides). Slide the shaft out of the main frame and remove the pawl and spring.



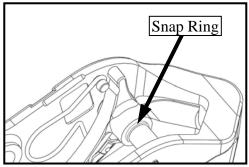
To install the new spring, hang spring on pawl stop. Next slide spring anchor pin on pawl into the other end of the spring.



Next push the main pawl to line up the holes in the main pawl and main frame. Slide the main pawl shaft through the main frame and main pawl.



Use a hammer and punch to install a new snap ring in the groove on the main pawl shaft.



#### **Inspection Check List**

Model#\_\_\_\_\_ Date In Service\_\_\_\_\_

	In	spectio	n Chart					
Item	Normal Service		Heavy Service		Severe Service			
	Visual Monthly	Record Yearly	Visual Weekly to Monthly	Record Semiannually	Visual Daily to Weekly	Record Quarterly		
Frequent Inspection								
All functional mechanisms for proper operation.	*		*		*			
Hooks and latches for deformation, chemical damage, cracks, and wear.	*		*		*			
Hook latch operation.	*		*		*			
Web strap for signs of melting or charring, acid or caustic burns, weld spatter, broken stitching, cuts or tears, damaged eyes or fittings, abrasive wear, and knots	*		*		*			
Handle for bends, cracks, or other damage.	*		*		*			
	Per	riodic Ir	spection					
All requirements of Frequent Inspection.		**		***		***		
Evidence of loose pins, bolts, nuts, or rivets.		**		***		***		
Evidence of worn, corroded, cracked, or distorted parts such as load blocks, suspension housing, levers, web strap attachments, yokes, shafts, bearings, pins, rollers, and locking and clamping devices.		**		***		***		
Evidence of damage to hook retaining nuts and pins used to secure the retaining members.		**		***		***		
Evidence of damage or excessive wear of drum teeth.		**		***		***		
Evidence of worn pawls or ratchets; corroded, stretched, worn or broken pawl springs.		**		***		***		
Labels and tags must be legible and securely fastened to the hoist.		**		***		***		
End connections and termination of web strap.		**		***		***		

Notes:

- \* Visual inspection by operators or other designated personnel.
- \*\* Visual inspection by a designated person of conditions.
- \*\*\* Same as \*\* unless conditions indicate that disassembly should be done to permit detailed inspection.

NORMAL SERVICE: Weekly usage HEAVY SERVICE: Daily usage

SEVERE SERVICE: Daily usage and/or in severe loading or weather conditions.

## **Notes**

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## **Troubleshooting**

Hoist Does Not Lift/Pull				
Cause	Remedy			
U-pawl not engaged	Move reverse lever to engage u-pawl			
Main pawl spring doesn't hold	Replace main spring.			
pawl engaged.	Check frame for loose spring anchor.			
Distorted or broken main pawl.	Replace main pawl.			
Broken tooth on drum.	Replace drum.			

Hoist Does Not Lower/Back Off Under Tension				
Cause	Remedy			
U-pawl engaged	Move reverse lever to disengage upawl.			
Broken main pawl spring.	Replace main pawl spring.			
Main pawl spring has lost tension.	Replace main pawl spring.			
U-pawl button slips by main	Inspect u-pawl for bending or excess			
spring.	button wear. Replace if needed.			
	Straighten or replace u-frame if			
	needed.			
U-pawl hits main frame.	Straighten or replace u-frame.			
Distorted or broken main pawl.	Replace main pawl.			
Broken tooth on drum.	Replace drum.			

## Warranty

Every hoist is thoroughly inspected and tested prior to shipping from the Lincoln Hoist factory. If any properly installed, maintained, and operated hoist as outlined in this manual develops a performance problem due to defective workmanship or materials as verified by Lincoln Hoist, repair or replacement of the hoist will be made to the original purchaser without charge and the hoist will be returned via prepaid shipping, for **ONE YEAR FROM ORIGINAL PURCHASE DATE**. This warranty does not apply where deterioration is caused by normal wear, abuse, improper or inadequate maintenance, eccentric or side loading, overloading, chemical or abrasive actions, excessive heat, unauthorized modifications or repairs, or use of non Lincoln Hoist repair parts.

Except as stated herein, Lincoln Hoist makes no other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose.

To make a claim under this warranty, the consumer must return the hoist and all ancillary parts thereto to:

Lincoln Hoist 121 Creeper Hill Road, P.O. Box 458, North Grafton, MA 01536

Proof of purchase, such as sales receipt or other documentation is required when requesting warranty service.



Overloading and Improper Use Can Result In Injury.

#### To Avoid Injury:

- ⚠ Read and understand operators manual.
- ⚠ Do not exceed working load limit, load rating, or capacity.
- ⚠ Do not use to lift people or loads over people.
- **△** Use only Lincoln Hoist replacement parts.

To request more information please contact:

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