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<tr>
<th>Date</th>
<th>REMARKS (Include Parts and Service Required)</th>
<th>Inspector</th>
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If you have any questions regarding the information found in this manual please contact RELIABLE EQUIPMENT at the address, phone or fax numbers shown below.

RELIABLE EQUIPMENT & SERVICE CO., INC.
301 Ivyland Road • Warminster, PA 18974
Phone: 800-966-3530 • Fax: 215-357-9193
Visit us on the web at www.Reliable-Equip.com

**OPERATORS’ GUIDE**

REL-12000H - 6 TON LEVER OPERATED ROLLER CHAIN HOIST

**SPECIFICATIONS**

- **Model**: REL-12000H
- **Capacity**: 12,000 lbs.
- **Travel**: 62 inches
- **Headroom**: 20 inches
- **Handle**: 34 inches
- **Stroke**: 52 inches
- **Weight**: 68 lbs.

Manufactured to meet or exceed ASME B30.21.

**WARNING**

All information found in this guide must be read and understood before use or testing of this tool. Failure to read and understand these warnings and safe handling instructions could result in severe personal injury and or death.

**NOTICE**

Sizes, weights and tool specifications listed in this manual are subject to change without notice. Please consult factory for information and updates.

REL-12000H HOIST Manual 10-14
REGISTRATION

UPON RECEIPT OF THIS TOOL, COMPLETE THE REGISTRATION BELOW.

COMPANY ______________________________________________________

ADDRESS  ______________________________________________________

PHONE ___________________ FAX _________________________________

SERIAL NUMBER

DATE OF PURCHASE ______________________________________________

DEALER NAME __________________________________________________

The information in this manual is intended to guide the user in the use and application of this tool. It is not intended as a substitute for proper training and experience in safe work practices for this type of equipment.

Consult your supervisor or safety personnel if you have any questions regarding the safe operation of this tool.

LEVER ASSEMBLY

Press Lever Bushing into Lever.

LUBRICATE Safety Pin Assembly & Spring with a light coating of bearing grease with graphite.


Insert upper end of Trip Rod through outer hole in Lever Pawl Assembly (Release Spring).

Insert the End Spring of Safety Pin Assembly into inner hole in the Lever Pawl Assembly (Release Spring).

Move Lever Pawl Assembly into position and insert Lever Pawl Pin through Lever Pawl Assembly and Lever.

Compress Lever Pawl Spring and install Lever Pawl Spring over Lever Pawl Pin, with Long side of Spring pressing against inside of Lever housing and short end of Spring nested against Lever Pawl Trip Pin.

Install two Round Head Rivets through Lever and Lever Pawl Cover.

Pressing Thumb Latch, mate Lever Assembly with Hoist Body Assembly, over Sprocket Shaft, and install Lever Washer and Cap Screw.

INSTALLATION OF LOAD CHAIN

LUBRICATE entire Load Chain thoroughly with a penetrating oil containing graphite.

Turn Reverse lever to the UP position and insert Load chain into Lower Hoist Body (Frame) as far as possible.

Operate Lever until a manageable length of chain extends from the side of the Hoist Body (Frame).

Install the Load Chain onto the Hoist Body (1) using a Connecting Link and secure with two Cotter Pins. Thread the Load Chain throughout the sprocket system as shown in the Diagram (2-5).

Install the Lug Hook onto the other end of the Load Chain with a Connecting Link and Cotter Pins.

Install a Connecting Link to Bottom of Hoist Body (6) and connect Lug Hook to Connecting Link.

Assembly is complete for the REL-12000H hoist.

Inspect and test the hoist upon completion of any disassembly or maintenance.

Refer to Testing requirements found on page 15 of this manual for guides, or consult your supervising safety authority.
If Safety Latch Assembly has been removed, attach NEW Latch Assembly to Bottom Hook. LUBRICATE Hook Shank with SAE 20-30 gear oil. Insert Hook Assembly between Frame Halves. LUBRICATE inner Super Sprocket Bushing and Outer Super Sprocket Pin with SAE 20-30 gear oil. Place Geared Chain Sprocket and Super Sprocket Assemblies into Super Frame. Assemble Frame with Four (4) Pulling Hook Rivets. Feed Load Chain through Super Frame Assembly. Refer to the illustration above.

**REVERSING RING & STOP PIN ASSEMBLY**

Install two (2) Reverse Ring Springs and Release Pin Spring onto Reversing Ring Assembly. LUBRICATE mating surfaces of Right Frame and Reversing Ring-Stationary Pin Assembly with a calcium base bearing grease. Align Reversing Ring Assembly with Stop Pin. Slide the Reverse Ring Assembly onto the Right Frame and Sprocket Shaft. Install Reverse Ring Springs on Stationary Pins.

**Reverse Ring / Stationary Pin Assembly**

Align flats of Locking Pawl and Release Pin, and drive Pin into Pawl until Pin extends slightly beyond inner Pawl. Place Locking Pawl Spring over Release Pin, and drive Pin until Pin is flush with outer Pawl.

**Locking Pawl Release Pin Assembly**
REL-12000H
MANUALLY LEVER OPERATED
6 TON ROLLER CHAIN HOIST

The REL-12000H 6 ton hoist from RELIABLE promises to provide years of service, under the rigorous conditions demanded by the Power Utility & Construction Industry.

The durable, malleable iron external frame and lever assemblies house internal components constructed and tested to provide smooth and safe operation.

FEATURES:
The lever action can be reversed simply by releasing the safety pin and rotating handle for inverted applications.

Safety hooks rotate 360° and feature spring latches to simplify a secure connection at the support and the load.

The thumb latch releases chain for fast easy connection to the load.

Slack may be quickly removed by pulling on the free end of the chain.

Redundant safety measures prevent handle rotation or chain release under load if the operator were to lose control.

The REL-12000H hoist utilizes a multiple chain configuration to offer a 6 ton capacity.

The chain lug hook may be detached to provide a longer lift capacity and faster operation in 4-1/2 ton applications.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>REL-12000H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>12,000 lbs.</td>
</tr>
<tr>
<td>Travel</td>
<td>62 inches</td>
</tr>
<tr>
<td>Headroom</td>
<td>17 1/2 inches</td>
</tr>
<tr>
<td>Handle</td>
<td>34 inches</td>
</tr>
<tr>
<td>Stroke</td>
<td>52 inches</td>
</tr>
<tr>
<td>Weight</td>
<td>68 lbs.</td>
</tr>
</tbody>
</table>

Manufactured to meet or exceed ASME B30.21.
Remove Chain Attachments & Super Frame:
To remove the Connecting Link (1), remove the Cotter Pins from the Connecting Link and punch link pins through side plates.
Remove the Lug Hook (6) from the Connecting Link at Hoist Body.
To remove Lug Hook from Load Chain: Remove the Cotter Pins from the Connecting Link and punch link pins through side plates.
To Disassemble the Super Frame: Place the Super Frame in a vise and chisel off the four (4) rivet heads.
Note: The Hook and Super Sprocket will be FREE (released) upon separation of Super Frame halves.
Remove the Super Sprocket Bushing Assembly from the Super Frame Assembly. Press Bushing from Super Sprocket.
Remove Safety Latch Assembly by unthreading the nut and bolt found at the throat of the Hook. **DO NOT** remove Safety Latch Assembly from Hook if no defects are disclosed by the inspection.

Remove Reverse Ring Retaining Ring.
Remove two (2) Reverse Ring Springs from the Stationary Pins, and the Locking Pawl Spring from the Locking Pawl Release Pin.

Turn Locking Pawl to a position which allows the Locking Pawl Release Pin to be punched through the Pawl from the inside. Slide the Reverse Ring Assembly OFF of the Right Frame and Sprocket Shaft.

Follow Chain Diagram for routing of chain through Hoist Body and Super Frame.
**GENERAL SAFETY**

**DANGER**

This unit is not intended for personnel lifting

Overhead loads can fall.

Do not allow anyone to stand under or near load.

Maintain operator control at all times.

Failure to observe this warning could result in serious injury or death.

**USE ALL APPROPRIATE AND APPLICABLE PERSONAL SAFETY EQUIPMENT**

As required by the operating company.

**INSPECT TOOL BEFORE USE.** Replace any worn, damaged or missing parts.

A damaged or improperly assembled tool may injure operator and/or nearby personnel.

**KEEP ALL PARTS OF THE BODY AWAY** from moving parts of the tool.

Make sure there is no person in close proximity to you, the tool, or the work area, who could be injured by any operation being performed, tool malfunction, or flying/falling debris.

**DO NOT OVEREXTEND** your position by overreaching or unbalancing the footing necessary to maintain physical control of your body and the tool.

Always maintain a firm grip on the tool to avoid loss of control during an operation, causing property damage, serious injury or death.

**DO NOT PERFORM ADDITIONAL ACTIVITIES** which divert attention from this operation.

**USE THIS TOOL FOR THE MANUFACTURERS’ INTENDED PURPOSE ONLY.**

**OBSERVE CLOSELY ALL OF THE SAFETY RULES FOR A PARTICULAR JOB CLASS**

Operation/Safety methods may vary in accordance with the working guidelines established by each utility or contractor. Ensure that you fully comply with all safe operation guidelines required by your employer.

**ELECTRICAL SHOCK HAZARD**

Always wear and use the necessary clothing, equipment and safety practices to protect against electrical shock.

Failure to observe this warning can result in serious injury or death.

**FAILURE TO HEED THESE WARNINGS COULD RESULT IN PROPERTY DAMAGE, SERIOUS PERSONAL INJURY OR DEATH.**

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DISASSEMBLY OF HOIST BODY
Clamp hoist body assembly in a vise, and chisel the heads OFF of the six (6) Round Head Rivets. Punch Rivets through Frame for removal. Separate left frame from right frame. Light force may be required to separate the Frame.

NOTE: Use CAUTION to avoid personal injury, damage to the hoist body and/or internal assemblies. Support Hook and Super Sprocket will be freed when frame halves are separated. (Secure or Support)

Inspect Sprocket shaft for excessive wear, scoring, damage to the teeth, or stripped threads. Check lubrication port for obstruction. Inspect Retaining Ring for wear or distortion. Inspect Reverse Ring/Stationary Pin Assembly for damage, wear, loose or broken Pins, and worn or missing springs. Inspect Locking Pawl Release Pin for looseness.

Reverse Ring Assembly
Sprocket Shaft
Reverse Ring Assembly
Frame
Reverse Ring / Stationary Pin Assembly
Upper Sprocket Shaft (Lever) Tooth
Pin
Stationary Pin Spring Attachment
Lubrication Port
Stationary Pin Spring Attachment
Locking Pawl Release Pin Spring Attachment
Locking Pawl SpringAttachment
Inspect Reversing Lever and R.L. Spring for wear, damage or distortion. Inspect (Chain) teeth on the lower Sprocket Shaft for wear, damage or distortion. Inspect Locking Pawl and L.P. Spring for wear, damage or distortion. Inspect Chain Shredder for wear or looseness. Check all Frame surfaces which mate with (Seat) Sprocket Shaft, Locking Pawl and Support Hook for wear and scoring. Inspect Support Hook using dye penetrant, magnetic particle inspection (Magnaflux) or other acceptable detection method.

Do not disassemble Lever Assembly if no defects are disclosed by the inspections.

Inspect hoist body (Frame) for cracks, damage or distortion which may have been caused by misuse, overloading or dropping. Disassembly is recommended to permit detailed internal inspection.

GENERAL MAINTENANCE
It is recommended that a planned inspection routine be established. Inspection intervals and procedures should be determined with respect to frequency and severity of use, as well as exposure to conditions that may cause wear or deterioration during use and storage.

An Inspection Check List can be found later in this manual. Confirm operation of all components, and inspect each part for wear, cracks, bending and distortion. Frequent Inspections should be performed daily to monthly by the trained operator or other designated person, and does not require a written report.

Under NORMAL usage and conditions the hoist should receive a monthly inspection. Under HEAVY usage or adverse conditions the hoist should be inspected weekly to monthly. Under SEVERE usage or extreme conditions the hoist should be inspected daily to weekly. Periodic Inspections are in-depth in nature but DO NOT require complete disassembly. Some disassembly may be required to permit a more detailed inspection. A written test report is recommended and should be kept on file for later reference as needed.

Under NORMAL usage and conditions the hoist should receive a yearly inspection. An evaluation by a designated person may indicate the hoist to require disassembly for a more detailed inspection. Under HEAVY usage, a semiannual inspection may be required. An evaluation by a designated person may indicate the hoist to require disassembly for a more detailed inspection. Under SEVERE usage, a quarterly inspection may be required. An evaluation by a designated person may indicate the hoist to require disassembly for a more detailed inspection.

Inspection of Hoists NOT in Regular Use:
For a hoist that has been unused for 1-5 months, refer to Frequent Inspections above. For a hoist that has remained idle in excess of 6 months, refer to Periodic Inspections above. Clean all parts thoroughly with an acid-free solvent. Roller chain should be soaked in solvent and agitated to ensure that all joints are free from foreign matter. Remaining deposits of dirt and grease may be removed using a stiff bristled brush dipped in the cleaning solvent. WARNING: Read and follow all safety and handling instructions for cleaning solvents. Lubrication - HOOKS: Allow a few drops of gear oil to run along shank into Frame Assembly. SPROCKET SHAFT: Remove Lever Cap Screw and attach a grease gun forcing grease to bearing surfaces through lubrication passage. SUPER SPROCKET PIN & BUSHING: Remove one Cotter Pin and unseat Sprocket Pin. Apply a few drops of gear oil between Sprocket Pin n and Bushing and work into assembly. LOAD CHAIN: Lubricate entire chain with a penetrating oil containing graphite. Work oil into each link and around Sprocket. Remove excess oil from Chain. Refer to lubrication chart found on the next page and specific lubrication instructions for all parts as described in the Assembly section of this manual. WARNING: Never apply grease to the chain. All maintenance or disassembly should take place on a flat, clean work surface covered with towels or wipers so as to have a clean space for the disassembled parts. Discard the worn or damaged parts and replace with new factory authorized parts.

When disposing of tool parts or components, observe all federal, state, and local guidelines.
**PRE-OPERATION**

This tool requires regular inspection and testing by qualified trained personnel.

Refer to Inspection criteria found later in this manual, and practices established by local authority.

Visual inspection of the hoist condition and operation, as well as the support structure, rigging and load are required. **DO NOT OPERATE A DAMAGED OR MALFUNCTIONING HOIST**

---

**OPERATION**

Read entire manual prior to using this tool. Refer to all safety cautions and warnings.

This tool is to be used by qualified trained personnel only.

Observe all safe working practices as dictated by local codes and the operating authority.

If you are unsure of these practices please obtain training for the required application.

1. **DO NOT OVERLOAD THE HOIST**

   - Check the load. Use a larger capacity hoist if needed.

   Ensure that the hoist has been properly inspected and is in good operating condition.

2. Ensure that the slings and other rigging are in good condition and have sufficient capacity (at least equal to the combined weight of the hoist, and it’s safe load rating) to support the load.

   **CLEAR THE AREA OF OBSTRUCTIONS** to the load and the proper operation of the hoist.

   Ensure that there is no person in close proximity to you, the tool, or the work area, who could be injured by any operation being performed, tool malfunction, or flying/falling debris.

3. Secure the hoist to a suitable support device by use of the top hook.

   Ensure that the safety latch has closed completely and is operating properly.

   **NOTE:** Failure to secure latch may compromise the security/safety of the load, resulting in severe damage and/or personal injury or death.

   Apply a small amount of Lubriplate or equivalent between the hook and the support device.

4. Check and correct any twist or kink in the load chain prior to making a connection.

   **NEVER WRAP LOAD CHAIN AROUND THE LOAD**

   Extend chain for easy connection of the hook. Turn side control lever to “Down” position, press thumb latch (release) on the lifting lever and pull chain as needed.

   **ATTACH THE BOTTOM HOOK TO THE LOAD USING A SLING OR OTHER ACCEPTABLE DEVICE.**

   **DO NOT TIP LOAD THE HOOK** (hook strain and or failure may result)

   Ensure that the sling or device is properly seated in the saddle, and the latch has closed completely and is operating properly.

   **Additional inspection of chain (chain removed)**

   Remove End Lug and Lug Hook prior to removal of load chain.

   To remove chain place reversing lever in the down position, depress the thumb latch and pull on chain above bottom hook. Clean and lubricate chain thoroughly. See cleaning under General Maintenance.

   **See lubrication under Assembly in this manual.**

   **Inspect Load Chain for:**

   - Bent or turned pins
   - Side plates that are spread or open.
   - Corrosion, pitting or discoloration of chain
   - Wear or damage (i.e. gouges, nicks, weld splatter)

   **NOTE:** Excessive wear, damage or deterioration described above should be addressed immediately.

   Manufacturer recommends replacement with chain and connecting links from RELIABLE EQUIPMENT.

   **PERIODIC INSPECTION**

   Inspect each part for wear, cracks, bending and distortion. Discard worn or damaged parts and replace with new factory authorized parts.

   Clean and lubricate all parts and assemblies during inspection, and before disassembly.

   If any Conditions requiring additional inspection or repair are found hoist shall be immediately tagged and repaired by a trained, designated technician before returning to operation.

   **Inspect all parts and operations as required by frequent and chain inspection criteria.**

   Lifting Lever should be removed to provide visual access prior to continuing the periodic inspection.

   **TO REMOVE LIFTING LEVER ASSEMBLY**

   Place reverse lever in the “UP” position.

   Pull free end of chain assembly until bottom hook assembly contacts frame assembly.

   Rotate lever cap screw counterclockwise to remove remaining slack, and continue turning.

   **(Tension should increase slightly until screw begins to unthread from assembly) Continue until lever cap screw is free of lever assembly.**

   Remove Lever Washer.

   Remove Lever Assembly from Hoist Body.

   **Check all nuts, bolts for damaged or stripped threads and rivets for looseness.**

   **Check Lever for damage or distortion.**

   **Check Trip Rod for damage or bending.**

   Replace entire assembly if any component is bent, worn or damaged.

   Check Lever Pawl for binding with Lever Pawl Pin.

   **Confirm Thumb Latch activation of Lever Pawl.**

   Lever Pawl should move freely when latch is depressed, and return upon release. (Minimum required clearance between Lever Pawl and Lever Bushing should be 5/16”)
Inspection, Disassembly and Repair
All maintenance or disassembly should take place on a flat, clean work surface covered with towels or wipers so as to have a clean space for any disassembled parts.
Inspect each part for wear, cracks, bending and distortion. Discard worn or damaged parts and replace with new factory authorized parts. Clean and lubricate all parts and assemblies during inspection, and before disassembly.
Dirt is among the leading causes of hoist failure.

FREQUENT INSPECTION
Inspect the hooks for environmental or chemical damage, cracks or distortion. (Twist in excess of 10° or throat openings in excess of 1-1/4 inch) DO NOT include Latch Assembly when measuring
NOTE: If hooks show signs of distortion due to overloading or abuse inspect all load bearing hoist components.
Ensure that both hooks swivel freely. Inspect operation of Safety Latch Assemblies. Inspect assemblies and observe operation of all control mechanisms.

Reversing Lever Thumb Latch
Lifting Lever Safety Pin

Inspect Load Chain Assembly and Operation.
NOTE: Clean and lubricate chain before inspection.
Test lifting and lowering operations under nominal load (50 -100 lbs.) while observing chain and sprocket function.
Chain feed and stripping operations should be smooth and should not bind or jump.
NOTE: Observe audible cues (i.e., strain, popping)
Check chain for elongation, (under nominal load)
Measure a 12 pitch section that normally travels over the load sprocket using a caliper type gage.
Measure from the edge of one chain pin to the edge of the 12th chain pin.
This measurement should be 12 inches.
Chain has been compromised and should be replaced if measurement exceeds 12.25 inches.
Check chain for twist in excess of 15 degrees over any 5 foot section (extended & under nominal load)
Check chain for straightness or side bow in excess of .125 inch (1/8") over any 2.5 foot section of chain. (extended & under nominal load)

5a. TO RAISE OR PULL THE LOAD - Turn the side control to the “UP” position.
DO NOT OVEREXTEND YOUR POSITION by overreaching or unbalancing the footing necessary to maintain physical control of your body and the tool.
DO NOT STAND BENEATH THE LOAD or endanger any other persons while raising or moving the load.
Take up slack by pulling on the free end of the chain.

5b. TO LOWER OR REMOVE LOAD - Turn the side control to the “DOWN” position.
*** NOTE: See SAFETY LOWERING at the end of this section for additional instruction.

6. Extend the lifting lever upward completely. Raise, pull or lower load by operating the lever/handle down and repeat operation.

CAUTION: DO NOT RELEASE THE LEVER WHILE UNDER LOAD
The locking pawl will engage at the end of each lever stroke. The action should be notable and audible. If stroke cannot be completed, remain in control of the lever until it returns to the stop position on the load block frame.

RAISE OR PULL LOAD ONLY until the chain is taut. Inspect rigging before continuing.
DO NOT USE A HANDLE EXTENSION, CHEATER BAR OR ADDITIONAL PERSONNEL
Additional force or leverage should not be required to operate your hoist within the rated working capacity. Check the hoist operation and load again.
Use a larger capacity hoist if needed.

7. Continue as described above to move the load as required by the operation.
DO NOT LEAVE THE HOIST UNDER LOAD unattended or for extended periods of time.
Additional precautions must be taken to ensure safety and provide protection.
Consult a qualified person for applicable safety practices related to your application.

*** SAFETY LOWERING - In lowering operations where the load counterbalances the lever an “unattended” ratcheting action may occur if the handle is released while under load.
This UNDESIRED occurrence can be prevented using the automatic safety feature.
It is recommended that this feature be employed for lowering operations. Immediately after turning the side control to the “DOWN” position return it to the “UP” position. The load can then be lowered using multiple short strokes.
NOTE: Keep the lever in the lower half of its normal operating range. Hoist action will revert to “UP” (RAISE/PULL) if lifting lever is extended fully.

OPTIONAL APPLICATIONS:
TO USE THE HOIST IN THE INVERTED POSITION. (UPSIDE DOWN)
Pull safety pin out as far as possible, and rotate lifting lever to the opposite side of the load block. The hoist will now operate on the down stroke with the hoist inverted.
CONVERSION OF MULTIPLE CHAIN HOIST TO THE NEXT SMALLER CAPACITY
Enables the hoist to perform longer lifts and/or faster operation.
DAILY MAINTENANCE

The life, reliability, and safety of the tool is dependent on proper inspection & maintenance. Clean and inspect all surfaces (ie; hooks, latches, body, lever, chain, safety pin, etc...) Refer to the Inspection Check List found in this manual for items which require attention.

WARNING: Tool frame, handles and chain may cut or pinch. Please use extreme caution. Worn or damaged parts (i.e. bent handle or chain) may malfunction during operation, causing more extensive damage to the tool, load and/or severe injury to the operator or bystander. All parts must be replaced with new parts if signs of wear or damage are evident. Keep WARNING Labels clean and legible. DO NOT REMOVE Replace decals when necessary. Observe during operation for any damage caused by or related to the applications in progress.

NOTE: Any unsatisfactory findings MUST be remedied before returning hoist to field operation.

RECOMMENDED LUBRICATION SCHEDULE

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>TYPE OF LUBRICANT</th>
<th>TYPE &amp; FREQUENCY OF SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load Chain</td>
<td>Penetrating Oil w/ graphite or SAE 20-30 gear oil</td>
<td>Daily, Weekly, Monthly</td>
</tr>
<tr>
<td>Sprocket Shaft</td>
<td>Bearing Grease Multi Purpose - Lithium Base</td>
<td>Monthly, Yearly, Yearly</td>
</tr>
<tr>
<td>Top Hook</td>
<td>SAE 20-30 Gear Oil</td>
<td>Monthly, Yearly, Yearly</td>
</tr>
<tr>
<td>Bottom Hook</td>
<td>SAE 20-30 Gear Oil</td>
<td>Monthly, Yearly, Yearly</td>
</tr>
<tr>
<td>Super Sprocket Pin &amp; Bushing</td>
<td>SAE 20-30 Gear Oil</td>
<td>Monthly, Yearly, Yearly</td>
</tr>
<tr>
<td>Locking Pawl</td>
<td>SAE 20-30 Gear Oil</td>
<td>Service at Periodic Inspection</td>
</tr>
<tr>
<td>Reverse Ring Stop Pin</td>
<td>Bearing Grease Calcium Base w/ Graphite</td>
<td>Service at Periodic Inspection</td>
</tr>
<tr>
<td>Reversing Ring - Shoulder Pin Assy</td>
<td>Bearing Grease Calcium Base w/ Graphite</td>
<td>Service at Periodic Inspection</td>
</tr>
<tr>
<td>Internal Lever Parts</td>
<td></td>
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</tbody>
</table>

Test hoist upon completion of any disassembly or maintenance. Testing should be performed by a trained, designated service technician. Observe the operation of the hoist through several NO LOAD operating cycles. Ensure that slack chain can be taken up by pulling on free end of chain. Turn the control lever to the DOWN position, push thumb latch and ensure that free chain can be obtained by pulling on lower hook. Attach a nominal load (approximately 50-100 lbs.) to the hook and observe the operation of the hoist through several lifting and lowering cycles. If operation appears smooth and unrestricted, test hoist with rated load. Test the REL-12000H at 12,000 lbs. Hoist must perform smoothly in both raising and lowering operations. If hoist fails to perform smoothly, proceed with required steps of Frequent, and Periodic Inspections as needed to resolve any operational issues before returning hoist to use in any application.

IF YOU HAVE QUESTIONS REGARDING THE REPAIR AND MAINTENANCE OF THIS TOOL, CONTACT RELIABLE EQUIPMENT AT 800-966-3530
Improper Operation, Binding, or Unusual Sounds

Inadequate lubrication, excessive wear, damage, or distortion, cracked, spread or twisted links, corrosion or obstruction

Stretched throat opening, Distortion, damaged hook latch, wear, chemical or environmental damage, worn hook bearing. Cracks

Use dye penetrant, magnetic particle Magnaflux, or other suitable detection method

Bends, cracks, distortion

Load Chain

Inadequate lubrication, excessive wear, damage, or distortion, cracked, spread or twisted links, corrosion or obstruction

Bends, excessive wear

Hooks

Stretched throat opening, Distortion, damaged hook latch, wear, chemical or environmental damage, worn hook bearing. Cracks

Use dye penetrant, magnetic particle Magnaflux, or other suitable detection method

Thermal expansion

All functional mechanisms

Lever, Control Lever, Thumb Latch

Improper Operation, Binding, or Unusual Sounds

Deflection, Stress or Corrosion

Excessive wear, scoring

Lever Parts:

Lever

Bends, cracks, distortion

Trip Rod

Straightness, ability to move pawl

Pawl

Wear, binding

Trip Pin

Bends, excessive wear

Release Spring and Pawl Spring

Deformation, breaks, corrosion

Bushing

Excessive wear, scoring

Sprocket, Sprocket Shaft, Chain Attachments

Distortion, cracks, damaged teeth, damaged, Stripped threads

Reverse Ring

Excessive wear, loose or missing pins

Shoulder Pin Assembly

Frames, Swivels

Cracks, distortion, excessive wear

Locking Pawl

Excessive wear, binding

Reverse Springs, Locking Pawl Springs

Deformation, breaks, corrosion

Pins, Bolts, Rivets

Looseness, thread damage, corrosion

Warning Label

Missing, damaged, or illegible

NOTE: Refer to Maintenance and Inspection Sections of the Hoist Maintenance Manual for additional details.

For additional information regarding frequency of inspection, see General Maintenance.