

Operating Instructions and Parts Manual Lever-Operated Compact Chain Hoist

JLH Compact Series 0.25T and 0.5T



JET 427 New Sanford Road LaVergne, Tennessee 37086 Ph.: 800-274-6848 www.jettools.com

Warranty and Service

JET® warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. JET woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

Warranty Limitations

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support

Please contact Technical Service by calling 1-800-274-6846. Please note that you will be asked to provide proof of initial purchase when calling. If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

More Information

JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

How State Law Applies

This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. JET SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET® branded products are not sold in Canada by JPW Industries. Inc.

Product Listing with Warranty Period

90 Days – Parts; Consumable items

1 Year - Motors; Machine Accessories

2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes

5 Year – Woodworking Machinery

Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools; Air Tools

NOTE: JET is a division of JPW Industries, Inc., References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.

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- 1. Read and understand the entire owner's manual before attempting operation. Failure to comply with instructions and warnings may cause serious injury.
- 2. This lever hoist is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a lever hoist, do not use until proper training and knowledge have been obtained.
- 3. Do not use this lever hoist for other than its intended use. If used for other purposes, JET disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
- 4. Do not use lever hoist to lift, support or transport people; or to lift or support loads over people.
- 5. Do not exceed the rated capacity of the hoist.
- 6. Do not attempt to extend the lever handle using a "cheater pipe" or any other such device.
- 7. Do not strike the lever handle with a hammer or any other object.
- 8. Do not use the load chain as a sling. This may cause damage to the chain.
- 9. Always inspect the lever hoist for damage prior to use. If hoist is damaged, do not use until it has been repaired or replaced.
- 10. Do not use more than one lever hoist to lift or move a load. If this is unavoidable, each hoist must have the same capacity as the load to be moved.
- 11. Never allow chain to "set" over sharp edges. All pulls or lifts must be made with straight chain that is free of obstacles.
- 12. If the lever handle is difficult to operate, then the load exceeds the capacity of the hoist. Reduce load or select a hoist of larger capacity.
- 13. Do not use hoist if the chain is twisted, kinked or damaged.
- 14. Do not operate hoist unless load is centered between top and bottom hooks.
- 15. On hoists with the overload warning lever, do not use this device to measure load weight.
- 16. Always take time to study the job to be performed and choose the safest method. Do not place yourself or other people in an unsafe position.
- 17. Always maintain your balance and firm footing when operating the lever hoist.
- 18. Leave all internal maintenance and inspections to a qualified JET Service Center.
- 19. Do not attempt to lengthen or repair load chain.
- 20. Replace chain with factory replacement chain only. Do not use any other type of chain.
- 21. If welding near the hoist, do not allow the chain or hook to be touched by a live electrode. Prevent weld splatter upon the chain.
- 22. Never use the hoist if either hook is stretched, deformed, or has a broken or missing safety latch. Always replace the safety latch and/or the hook before placing the hoist back in service.
- 23. Be sure supporting structures and load-attaching devices used in conjunction with this lever hoist provide an adequate safety factor to handle the rated load plus the weight of the equipment. If in doubt, consult a qualified structural engineer.
- 24. CALIFORNIA PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.
- 25. Understand and follow all procedures as set forth in American National Standards titled "Performance Standard for Manually Lever Operated Chain Hoists" (ANSI/ASME HST-3) and "Manually Lever Operated Hoists" (ANSI/ASME B30.21). These standards are available through the American Society of Mechanical Engineers, Three Park Ave., New York, NY 10016, or visit www.ASME.org
- 26. Keep visitors a safe distance from the work area. Keep children away.

Introduction

This manual is provided by JET covering the safe operation and maintenance procedures for the JET JLH Compact Series Lever Hoists. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This tool has been designed and constructed to provide consistent, long-term operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or JET. JET can also be reached at our web site: www.jettools.com.

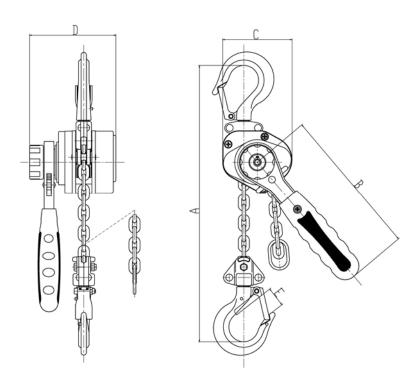
The JLH Compact	Series Lever	Hoists compl	y with OSHA	regulations,	ANSI/ASME B30.21	and HST-3
Standards.				_		

Register your product using the mail-in card provided, or reg	ister online
http://www.jettools.com/us/en/service-and-support/product-re	egistration/

Record your purchase information here for quick reference:

Model No.:	Stock No.:	Serial No.:
Purchased From:		Date Purchased:

Specifications (JLH-25/50)



Stock Number	Description	Rated Capcty. (ton)	Standard Lift (ft.)	Min. Distance between hooks (in.) "A"	No. of falls	Load Chain Diameter (mm)	Lift per full turn (in.)	Lbs. Pull to Lift capacity	Lever Length (in.) " B "	(in.) " C "	Overall width (in.) "D"	Opening	Net Weight (lbs)
181205	JLH-25-5	0.25	5	1.40	1	3.2	0.42	44.97	5.71	2.68	3.43	0.83	3.53
181210	JLH-25-10	0.25	10	1.40	1	3.2	0.42	44.97	5.71	2.68	3.43	0.83	4.41
181215	JLH-25-15	0.25	15	1.40	1	3.2	0.42	44.97	5.71	2.68	3.43	0.83	5.29
181505	JLH-50-5	0.5	5	1.65	1	4.3	0.33	54.01	6.30	3.19	3.96	0.96	5.51
181510	JLH-50-10	0.5	10	1.65	1	4.3	0.33	54.01	6.30	3.19	3.96	0.96	7.05
181515	JLH-50-15	0.5	15	1.65	1	4.3	0.33	54.01	6.30	3.19	3.96	0.96	8.60

NOTE: The above stock numbers are representative; chain is available in other lengths. Specify length when ordering.

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.

Unpacking

Open carton and check for shipping damage. Report any damage immediately to your distributor and shipping agent. Do not discard any shipping material until the Lever Hoist is assembled and running properly. Read this entire instruction manual thoroughly for set-up, maintenance and safety instructions.

Contents of the Carton

- 1 Lever Hoist
- 1 Carry Pouch
- 1 Owner's Manual
- 1 Product Registration Card

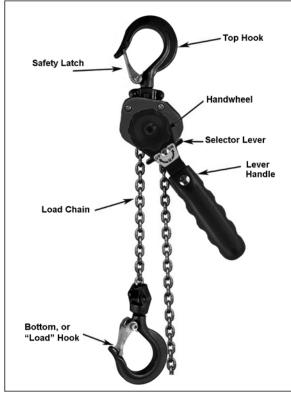


Figure 1
Features and terminology

Installation

Support for the hoist may be hook, clevis pin, trolley, or beam clamp. Whatever method of suspension is chosen, the support components **must** be rated equal to, or greater than the capacity of the lever hoist. Supporting structures (such as I-Beams, etc.) should be installed by properly licensed professional installers.

Pre-Operation Inspection

Inspecting the Load Chain

 A chain stop must be attached to the secondto-last link on the slack end of the chain. See Figure 2.

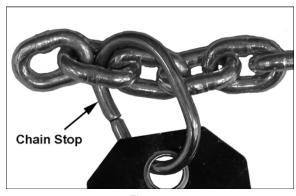


Figure 2

AWARNINGDo not operate the hoist with a twisted, kinked or damaged chain. Do not splice the chain.

- Check that the chain does not twist along its length from hoist to hook. If twist is present on units with multiple falls, the hook must be passed back through the chain loop to remove all twist in the chain.
- 3. Replace the chain if links are stretched too long or severely worn on the surface, especially at the points where links contact each other. See "Allowable Limits" on page 12 for measuring chain elongation.
- Do not use a chain that is cracked or severely rusted.
- Periodically apply a light coat of 30W oil to the chain. This will create easier operation and prolong the chain's life. For optimum results, clean the chain with an acid-free solution before oiling.

AWARNING The load chain supplied with your JET lever hoist is designed, manufactured, and tested for proper fit and durability. If chain should ever need replacing, for your own safety use factory replacement chain only. Use of other than factory replacement chain may cause serious injury and/or damage to the lever hoist.

Never extend load chain by welding a second piece to the original.

Inspecting Hooks

It is important to check top and bottom hooks for proper opening and other signs of deformation or damage. Replace a hook immediately if any of the following problems are identified:

- The safety latch no longer contacts the hook opening.
- The vertical angle at the neck of the hook reaches 10° (see Figure 3).

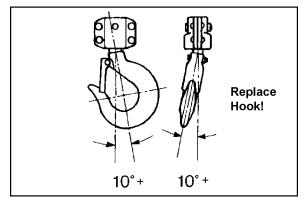


Figure 3

- Chemical corrosion or cracks on the hook.
- Excessive wear on the inside surface.
- The throat opening has enlarged. (See page 10 for the maximum allowable limits for the throat opening.)

AWARNING Do not attempt repair of a hook by heat treating, bending or attaching anything by welding. Such procedures will weaken and may cause failure of the hook.

Other Inspections

- Check for appropriate clicking sounds: With
 the selector lever in UP position, there will be a
 clicking sound when the lever handle is rotated
 in either direction. When the selector lever is in
 DOWN position, there will be a clicking sound
 only when the lever handle is ratcheted back
 into position but not as the load is lowered. If
 these sounds are not present, or if irregular
 clicking noises develop, do not use the hoist –
 have it inspected and repaired by an
 authorized service center.
- 2. If the lever hoist has not been used for an extended period of time, check for proper operation before putting into service.
- 3. The brake mechanism must be kept clean and free from dirt, water, and oil. Never allow oil to penetrate the braking mechanism. The brake should not slip while using the hoist.

Operation

The JLH Compact Lever Hoist may be used either in vertical position as a hoist; or in angled or horizontal position as a puller. Below is the general procedure for operating the hoist:

1. Set the top hook securely.

- Correctly center the load on the bottom hook (Figure 4). Incorrect loading is dangerous to the operator, the lever hoist, and the load.
 - Never load the hook in front of the safety latch (A, Figure 5).
 - Never load the hook tip (B, Figure 5).
 - Never load the hook off the centerline (C, Figure 5).
 - Never load the hook sideways (D, Figure 5).

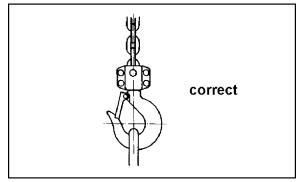


Figure 4

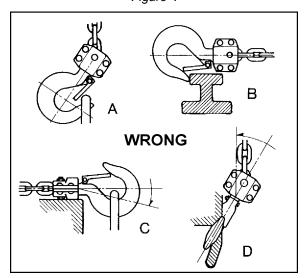


Figure 5

- Rotate the handwheel clockwise while simultaneously pulling down on the load chain.
 The handwheel will snap back into place, reengaging the gear.
- Move selector switch to the UP position. Ratchet the lever to raise or pull the load. Do not overload the lever hoist.

MARNING

Do not touch the handwheel while lifting or lowering. Do not operate freewheel mode while there is a load on the hoist.

To release or lower the load, turn selector switch on the handle to the DOWN position and ratchet the handle. NOTE: If the chain is pulled too suddenly in freewheel mode, the brake may set preventing further pulling. Re-set the hoist by repeating step number 3 above, and then set the hoist back into freewheel mode to continue the operation.

Avoid lifting one load with two hoists. If this is unavoidable, apply equal weight to both hoists and use hoists with the proper lift capacity. Capacity of each hoist must be equal to the total load to be lifted.

Precautions

- During lifting operations, do not stand under the load.
- Do not use any extension on the lever handle.
 See Figure 6.
- Do not use your foot to apply pressure to the lever handle. See Figure 7.
- Prevent the chain from dragging over sharp edges or corners. This will cause links to weaken, bend, or break. See Figure 8.
- When connecting to a wire rope sling or strap system, the lever hoist must be applied along a straight line parallel to the surface on which it is resting. See Figure 9.

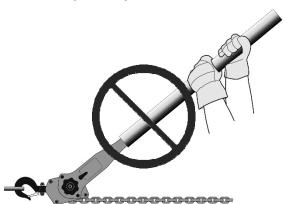


Figure 6

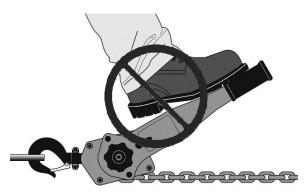


Figure 7

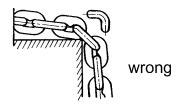


Figure 8

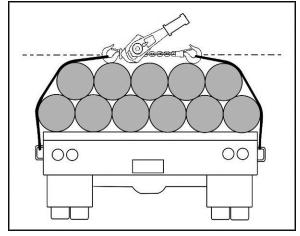


Figure 9

- When lifting loads, hook the load with slings.
 Do not use the lever hoist chain as a sling (Figure 10).
- Both ends of a sling or rope must be completely on the inside of the safety latch before pulling or lifting the load. Do not put one end on the inside of the latch and leave the other end on the hook end outside the latch.

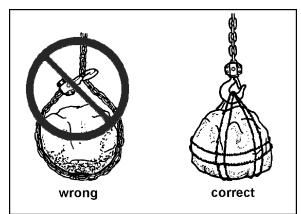


Figure 10

Inspection and Maintenance

Read and follow ANSI Inspection and Maintenance Instructions. Know the meaning of Frequent Inspection, Periodic Inspection, Normal Service, Heavy Service, and Severe Service. It is the customer's responsibility to understand and follow all ANSI and JET inspection and maintenance instructions.

The lever hoist should be stored in a clean, dry environment. Clean and oil the hoist before storage.

Hoists that are installed out-of-doors should be covered or brought inside when not in use.

Periodically apply a light coat of 30W oil to the load chain. Also lubricate the safety latches and the bearings in the hooks.

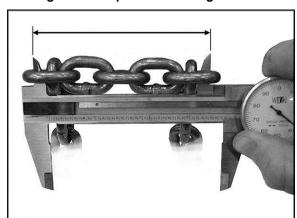
Annually, the hoist should be disassembled, inspected, and cleaned by trained and experienced personnel only. Contact a JET authorized service center by calling your dealer or visiting our web site at jettools.com.

Allowable Limits for Load Chain and Hooks

Load Chain

Carefully inspect the entire load chain. As illustrated in Figure 11, measure five consecutive links with calipers to find the length. Compare the results with the table in Figure 11. Check every three feet and especially where excessive wear is indicated. Any load chain that shows noticeable deformation or heat influence must be replaced with a new one.

AWARNING Never extend load chain by welding a second piece to the original.



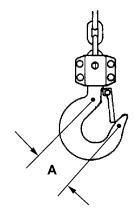
Hoist	5 Links Normal	5 Links Limit
Capacity	(mm)	Replace if ≥
0.25 ton	45	46.3
0.5 ton	60	61.8

Figure 11

Hooks (Top and Bottom)

Replace the hook when the distance between indicator points – "A" in Figure 12 – is wider than the limits given in the table.

Never heat treat the hook or attach anything to the hook by welding.



Hoist Capacity	"A" Dimension Normal (mm)	"A" Dimension Replace if ≥
0.25 ton	35.5	37.3
0.5 ton	41	43.1

Figure 12

Troubleshooting JLH Compact Lever Hoists

The numbers in parentheses refer to the parts breakdown on the following page.

Trouble	Probable Cause	Remedy*
Hoist will not lift (no clicking sound).	Pawl (#21) not engaging ratchet disc (#24); possible dirt or foreign material.	Clean and lubricate pawl/ratchet disc assemblies.
	Pawl spring (#20) is damaged.	Replace pawl spring.
	Selector switch spring is loose or damaged.	Tighten or replace selector switch spring.
Load slips or drifts while being lowered.	Dirt/corrosion/foreign material in hoist components.	Inspect and correct problem. Keep hoist clean and lubricated.
	Brake is slipping. Brake seat (#23) is worn from long-term use, or is damaged from overloading or misuse.	Replace disc hub. Do not overload hoist.
Hoist will not lower load.	The brake has caught. (Hoist was left under load condition for extended period, or was shock-loaded while operating.)	Place selector lever in DOWN position and pull hard on the lever handle to reset the brake. Resume operation.
	Brake components are corroded or damaged.	Replace components as needed; keep hoist clean and lubricated.
Hoist will not freewheel.	Brake has caught because load chain was pulled too hard.	Reset by rotating handwheel clockwise while pulling down on load chain. Return hoist to freewheel mode and continue. Pull load chain less forcibly.

^{*} Any disassembly or repair of the lever hoist should be performed by properly trained personnel. Call JET or go to www.jettools.com to find an authorized Service Center nearest you.

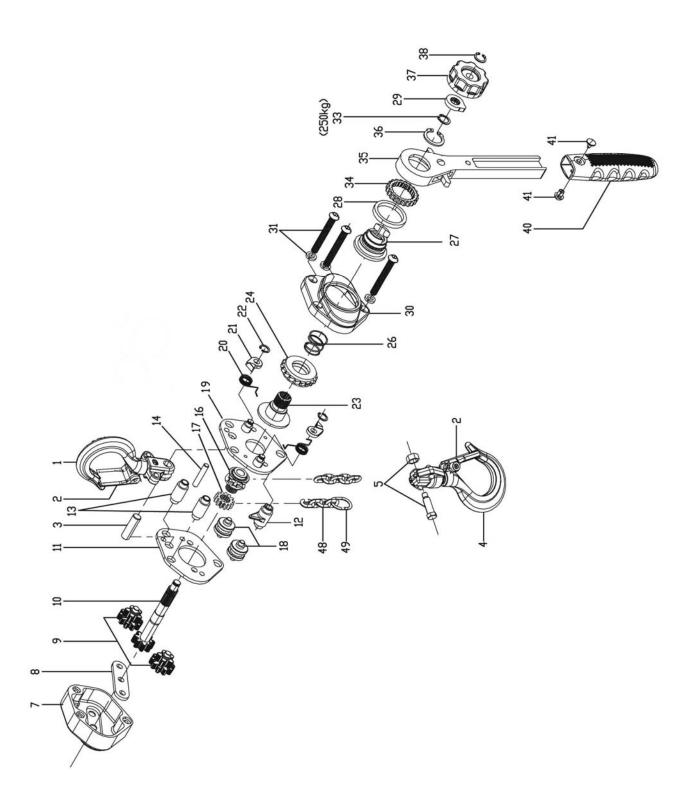
Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Non-proprietary parts, such as fasteners, can be found at local hardware stores, or may be ordered from JET.

Some parts are shown for reference only, and may not be available individually.

JLH Compact Series Lever Hoists (JLH-25/50)



Parts List: JLH-25 (0.25 Ton)

Parts listed under each assembly are parts that make up that assembly.

Index No.		Description	Size	Qt
1	.JLH25-1G	Top Hook Assembly		
		Top Hook		
		Safety Latch Kit		
		Top Hook Holder		
		Safety Latch Kit		
		Safety Latch		
		Double Spring		
		Socket Cap ScrewLock Nut		
		Top Hook Shaft		
		Bottom Hook Assembly		
		Bottom Hook		
		Bottom Hook Holder		
		Safety Latch Kit		
		Chain pin and Lock Nut		
		Gear Cover Set		
		Reinforced Plate		
		Load Gear		
		Pinion Shaft		
		Gear Side Plate		
		Chain Stripper		
		Stay Bolt		
		Load Sprocket		
		Load Gear		
		Chain Guide		
		Lever Side Plate Assembly		
		Lever Side Plate		
		Pawl Pin		
		Pawl Spring (0.25,0.5 ton)		
		Pawl (0.25,0.5 ton)		
		Snap Ring (0.25,0.5 ton) Brake Seat		
		Fused Brake Disc		
		Twisting Spring		
		Brake Plate		
		Bushing		
		Stop Knob		
		Brake Cover		
		Socket Head Screw and Spring Washer		
33	.JLH25-33	Snap Ring	9mm	
		Change Över Gear		
		Lever Handle Assembly		
		Lever Handle		
		Selector Level		
		Change Over Pawl		
		Snap Ring	6mm	
		Roller	Ø5mm	
		Change Over Spring		
		Snap Ring		
		Handwheel		
		Snap Ring		
		Rubber Grip		
		Bolt and Locking Nut (0.25,0.5 ton)		
		Load Chain – specify length		
49	.JLH25-49	End Chain Ring		
		Carry Pouch for JLH-25 (not shown)		
	.LMUU0040	Name Plate JLH-25 (not shown)		

Note: All parts mentioned as assembly are sold as an assembly only. When ordering replacement chain (#48), specify length.

Parts List: JLH-50 (0.5 Ton)

Parts listed under each assembly are parts that make up that assembly. Index No. Part No. **Description** Size Qty ______ Top Hook ______ 1 Safety Latch 2 Double Spring 2 Socket Cap Screw 2 Lock Nut. 2 Safety Latch Kit 1 ______Snap Ring ______6mm ____1

Note: All parts mentioned as assembly are sold as an assembly only. When ordering replacement chain (#48), specify length.

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