



Operating Instructions and Parts Manual

Lever Operated Chain Hoist

JLH Mini Series 0.25T and 0.5T



1/4 Ton model shown

WALTER MEIER (Manufacturing) Inc.

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Warranty and Service

Walter Meier (Manufacturing) Inc., warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these Walter Meier Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET® tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.

MORE INFORMATION

Walter Meier is consistently adding new products to the line. For complete, up-to-date product information, check with your local Walter Meier distributor, or visit waltermeier.com.

WARRANTY

JET products carry a limited warranty which varies in duration based upon the product (MW = Metalworking, WW = Woodworking).

90 DAY WARRANTY	1 YEAR WARRANTY	Body Repair Kits Bottle Jacks Cable Pullers Cold Saws Hoists-Air Hoists-Electric Metal forming Mill/Drills Milling Machines MW Bandsaws MW Drill Presses MW Finishing Equipment MW Lathes MW Precision Vises	2 YEAR WARRANTY	Palet Trucks Rigging Equip. Service Jacks Stackers Surface Grinders Tapping Trolleys-Air Trolleys-Electric Web Slings Winches-Electric	3 YEAR WARRANTY	WW Benchtop Tools	5 YEAR WARRANTY	Beam Clamps Chain Hoist-Manual Lever Hoists Pullers-JCH Models Scissor Lift Tables Screw Jacks Trolleys-Geared Trolleys-Plain Winches-Manual WW Air Filtration WW Bandsaws WW Buffers	WW Drill Presses WW Dust Collectors WW Dust Filters WW Dust Fittings WW Jointers WW Lathes WW Planers WW Sanders WW Shapers WW Tablesaws	LIFE LIFETIME WARRANTY	Fastening Tools Mechanics Hand Tools Striking Tools Vises (no -precision) Clamps
<i>Warranty reverts to 1 Year Warranty if woodworking (WW) products listed above are used for industrial or educational purposes.</i>											

WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the exceptions stated below. Cutting tools, abrasives and other consumables are excluded from warranty coverage.

WHO IS COVERED?

This warranty covers only the initial purchaser of the product.

WHAT IS THE PERIOD OF COVERAGE?

The general JET warranty lasts for the time period specified in the product literature of each product.

WHAT IS NOT COVERED?

Five Year Warranties do not cover woodworking (WW) products used for commercial, industrial or educational purposes. Woodworking products with Five Year Warranties that are used for commercial, industrial or education purposes revert to a One Year Warranty. This warranty does not cover defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair or alterations, or lack of maintenance.

HOW TO GET SERVICE

The product or part must be returned for examination, postage prepaid, to a location designated by us. For the name of the location nearest you, please call 1-800-274-6848.

You must provide proof of initial purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will repair or replace the product, or refund the purchase price, at our option. We will return the repaired product or replacement at our expense unless it is determined by us that there is no defect, or that the defect resulted from causes not within the scope of our warranty in which case we will, at your direction, dispose of or return the product. In the event you choose to have the product returned, you will be responsible for the shipping and handling costs of the return.

HOW STATE LAW APPLIES

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

LIMITATIONS ON THIS WARRANTY

WALTER MEIER (MANUFACTURING) INC., LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

WALTER MEIER 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.

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Warnings

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, Walter Meier (Manufacturing) Inc., 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 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 Walter Meier 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. Understand and follow all procedures as set forth in American National Standards titled "Performance Standard for Manually Lever Operated Chain Hoists." ANSI/ASME HST-3M. This standard is available through the American Society of Mechanical Engineers, Three Park Ave., New York, NY 10016, or visit www.ASME.org
25. Keep visitors a safe distance from the work area. **Keep children away.**

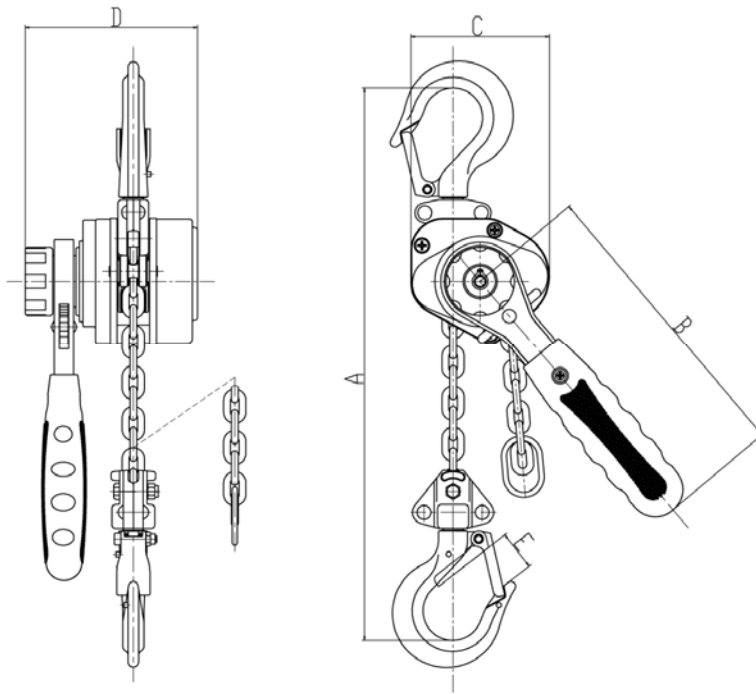
Introduction

This manual is provided by Walter Meier (Manufacturing) Inc., covering the safe operation and maintenance procedures for the JET JLH Mini 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 years of trouble free 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 Walter Meier. Walter Meier can also be reached at our web site: www.waltermeier.com.

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"	Hook Throat Opening (in.) "E"	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.

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 Owner's Manual
- 1 Warranty Card

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

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

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

2. 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 seriously worn on the surface, especially at the points where links contact each other. See "Allowable Limits" on page 12 for measuring chain elongation.
4. Do not use a chain that is seriously rusted or cracked.
5. 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.

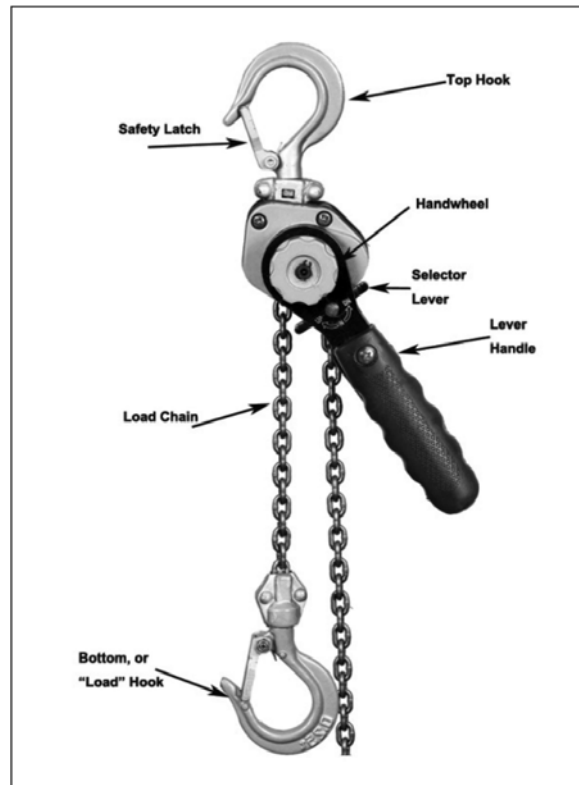


Figure 1
Features and terminology

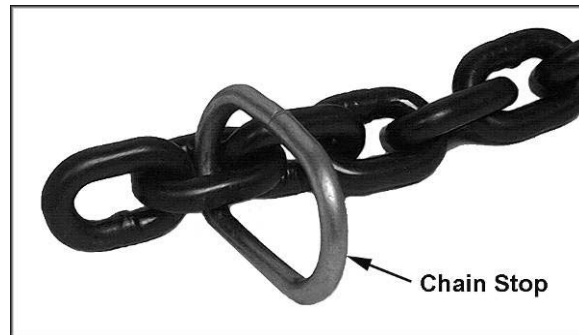


Figure 2

⚠WARNING 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).
- Chemical corrosion or cracks on the hook.
- Excessive wear on the inside surface.
- The throat opening has enlarged. (See page 12 for the maximum allowable limits for the throat opening.)

⚠WARNING 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.

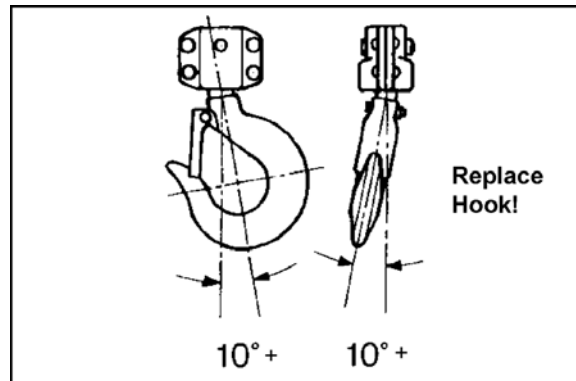


Figure 3

Other Inspections

1. 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 Mini 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.
2. 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).
3. Rotate the handwheel clockwise while simultaneously pulling down on the load chain. The handwheel will snap back into place, re-engaging the gear.
4. Move selector switch to the UP position. Ratchet the lever to raise or pull the load. Do not overload the lever hoist.

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

5. 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.**

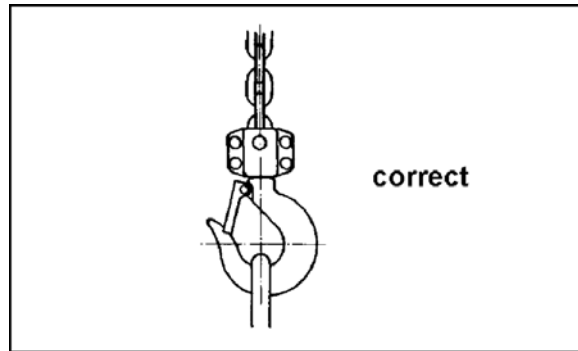


Figure 4

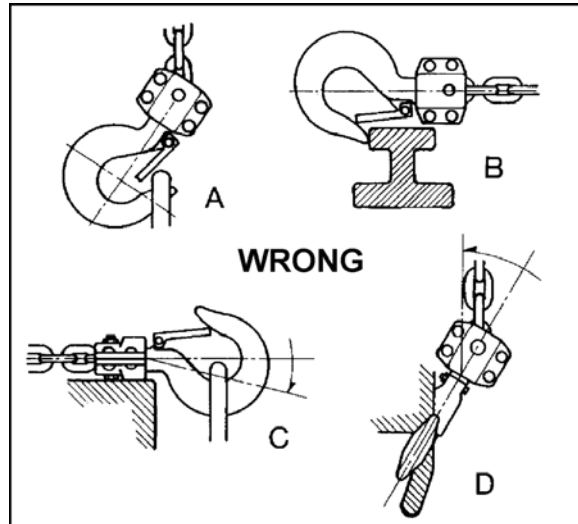


Figure 5

Precautions

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

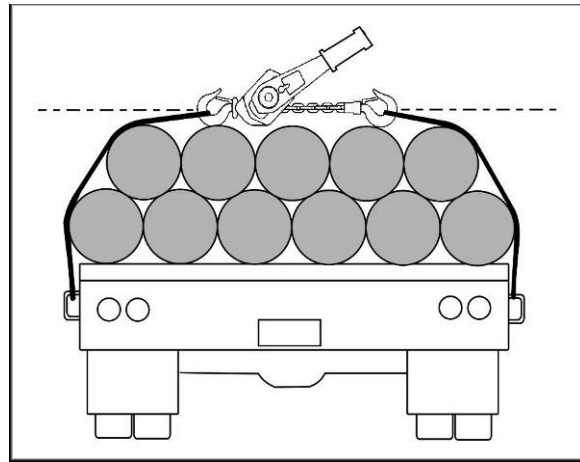


Figure 6

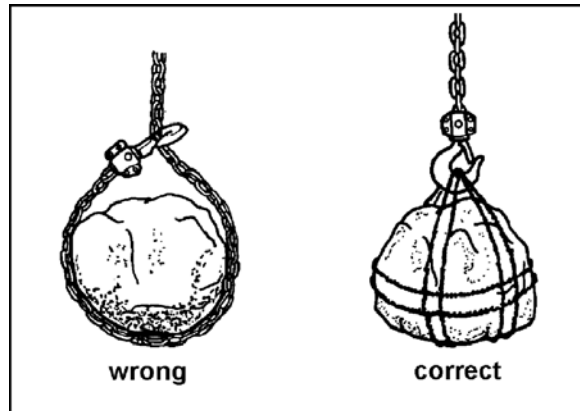


Figure 7

Maintenance

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.

Allowable Limits for Load Chain and Hooks

Load Chain

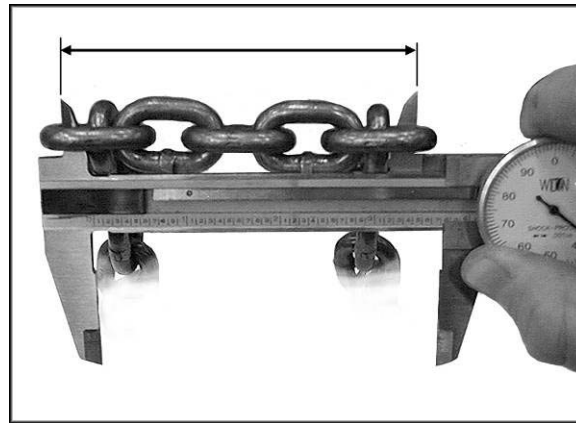
Carefully inspect the entire load chain. As illustrated in Figure 8, measure five consecutive links with calipers to find the length. Compare the results with the table in Figure 8. Check every three feet and especially where excessive wear is indicated. Any load chain that shows noticeable deformation or heat influence must be replaced with a new one.

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

Hooks (Top and Bottom)

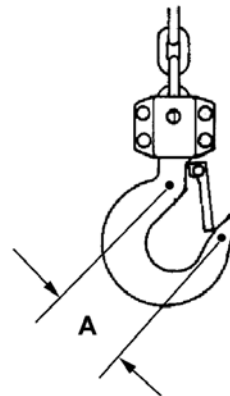
Replace the hook when the distance between indicator points – “A” in Figure 9 – is wider than the limits given in the table.

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



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

Figure 8



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

Figure 9

Troubleshooting

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

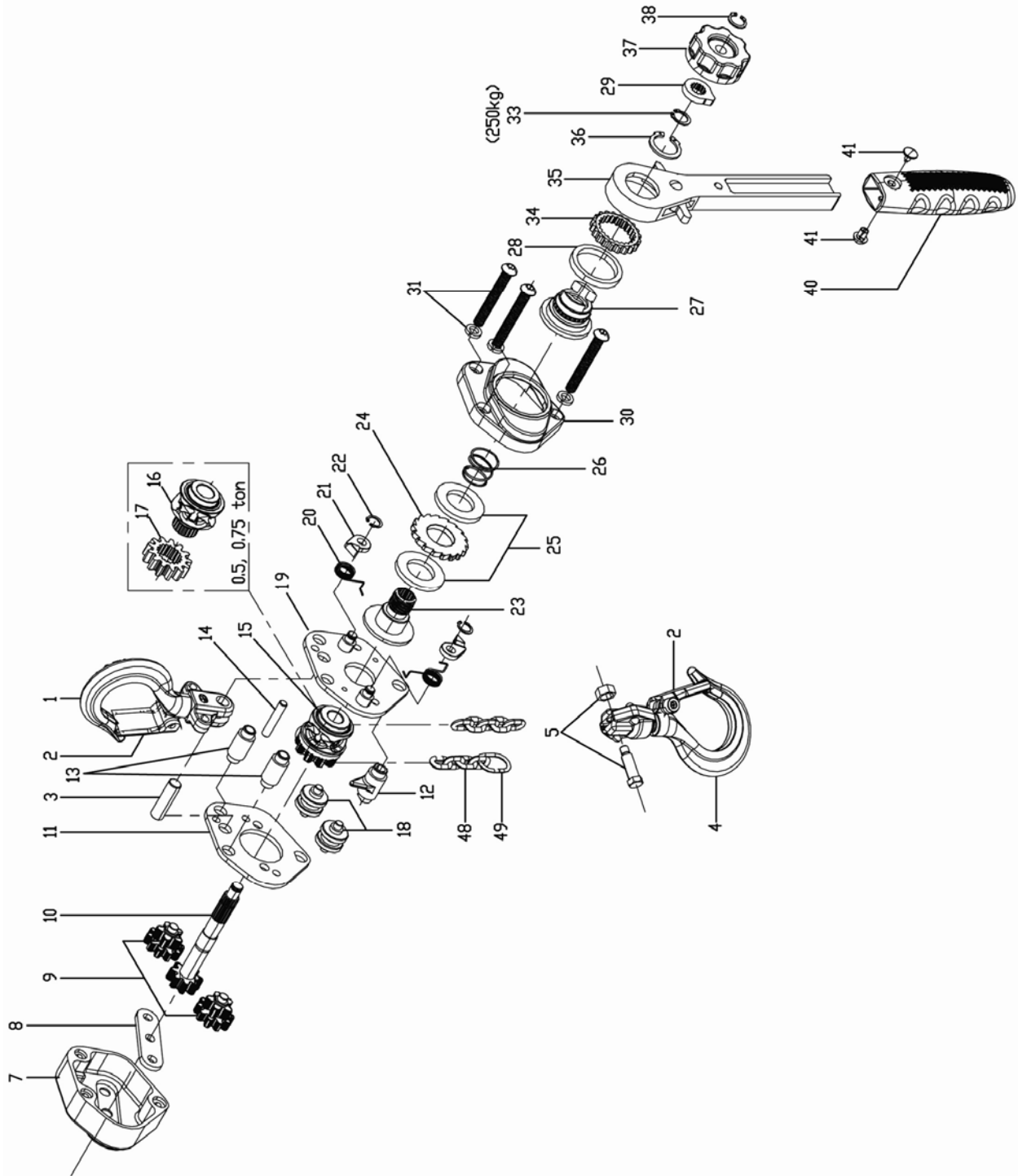
Trouble	Probable Cause	Remedy*
Hoist will not lift (no clicking sound).	Pawl (#21) not engaging ratchet disc (#24); possible dirt or foreign material.	Clean and lubricate pawl/ratchet disc assemblies.
	Pawl spring (#20) is damaged.	Replace pawl spring.
	Selector switch spring is loose or damaged.	Tighten 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 re-set 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 Walter Meier (Manufacturing) Inc., or go to waltermeier.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 (see our website for business hours, www.waltermeier.com). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

JLH 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.	Part No.	Description	Size	Qty
1	JLH25-1	Top Hook Assembly		1
		Top Hook		1
		Safety Latch Kit		1
		Top Hook Holder		1
2	JLH25-2	Safety Latch Kit		2
		Safety Latch		2
		Double Spring		2
		Socket Cap Screw		2
		Lock Nut		2
3	JLH25-3	Top Hook Shaft		1
4	JLH25-4	Bottom Hook Assembly		1
		Bottom Hook		1
		Bottom Hook Holder		1
		Safety Latch Kit		1
7	JLH25-6	Gear Cover Set		1
8	JLH25-8	Reinforced Plate		1
9	JLH25-9	Load Gear		2
10	JLH25-10	Pinion Shaft		1
11	JLH25-11	Gear Side Plate		1
12	JLH25-12	Chain Stripper		1
13	JLH25-13	Stay Bolt		2
15	JLH25-15	Load Sheave Assembly		1
18	JLH25-18	Chain Guide		2
19	JLH25-19	Lever Side Plate Assembly		1
		Lever Side Plate		1
		Pawl Pin		2
20	JLH25-20	Pawl Spring (0.25,0.5 ton)		2
21	JLH25-21	Pawl (0.25,0.5 ton)		2
22	JLH25-22	Snap Ring (0.25,0.5 ton)	6mm	2
23	JLH25-23	Brake Seat		1
24	JLH25-24	Ratchet Disc		1
25	JLH25-25	Friction Disc		2
26	JLH25-26	Twisting Spring		1
27	JLH25-27	Brake Plate		1
28	JLH25-28	Bushing		1
29	JLH25-29	Stop Knob		1
30	JLH25-30	Brake Cover		1
31	JLH25-31	Socket Head Screw and Spring Washer	M5x42 and 5mm	3
33	JLH25-33	Snap Ring	9mm	1
34	JLH25-34	Change Over Gear		1
35	JLH25-35	Lever Handle Assembly		1
		Lever Handle		1
		Selector Level		1
		Change Over Pawl		1
		Snap Ring	6mm	1
		Roller	Ø5mm	1
		Change Over Spring		1

Index No.	Part No.	Description	Size	Qty
36	JLH25-36	Snap Ring	22mm	1
37	JLH25-37	Handwheel		1
38	JLH25-38	Snap Ring	7mm	1
40	JLH25-40	Rubber Grip		1
41	JLH25-41	Bolt and Locking Nut (0.25,0.5 ton)	M3.5	1
48	JLH25-48	Load Chain – <i>specify length</i>	3.2x9 mm	1
49	JLH25-49	End Chain Ring		1

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
1	JLH50-1	Top Hook Assembly		1
		Top Hook		1
		Safety Latch Kit		1
		Top Hook Holder		1
2	JLH50-2	Safety Latch Kit		1
		Safety Latch		2
		Double Spring		2
		Socket Cap Screw		2
		Lock Nut		2
3	JLH50-3	Top Hook Shaft		1
4	JLH50-4	Bottom Hook Assembly		1
		Bottom Hook		1
		Bottom Hook Holder		1
		Safety Latch Kit		1
5	JLH50-5	Chain Pin & Lock Nut		1
7	JLH50-7	Gear Cover Set		1
8	JLH50-8	Reinforced Plate		1
9	JLH50-9	Load Gear		2
10	JLH50-10	Pinion Shaft		1
11	JLH50-11	Gear Side Plate		1
12	JLH50-12	Chain Stripper		1
13	JLH50-13	Stay Bolt		2
14	JLH50-14	Pin		1
16	JLH50-16	Load Sprocket		1
17	JLH50-17	Load Gear		1
18	JLH50-18	Chain Guide		2
19	JLH50-19	Lever Side Plate Assembly		1
		Lever Side Plate		1
		Pawl Pin		2
20	JLH25-50	Pawl Spring (0.25,0.5 ton)		2
21	JLH25-21	Pawl (0.25,0.5 ton)		2

Index No.	Part No.	Description	Size	Qty
22	JLH25-22	Snap Ring (0.25,0.5 ton)	6mm	2
23	JLH50-23	Brake Seat		1
24	JLH50-24	Ratchet Disc		1
25	JLH50-25	Friction Disc		2
26	JLH50-26	Twisting Spring		1
27	JLH50-27	Brake Plate		1
28	JLH50-28	Bushing		1
29	JLH50-29	Stop Knob		1
30	JLH50-30	Brake Cover		1
31	JLH50-31	Socket Head Screw & Spring Washer	M6x45 & 6mm	3
34	JLH50-34	Change Over Gear		1
35	JLH50-35	Lever Handle Assembly		1
		Lever Handle		1
		Selector Lever		1
		Change Over Pawl		1
		Snap Ring	6mm	1
		Roller	Ø5mm	1
		Change Over Spring		1
36	JLH50-36	Snap Ring	25mm	1
37	JLH50-37	Handwheel		1
38	JLH50-38	Snap Ring	7mm	1
40	JLH50-40	Rubber Grip		1
41	JLH25-41	Bolt & Locking Nut (0.25, 0.5 ton)	M3.5	1
48	JLH50-48	Load Chain – <i>specify length</i>	4.3x12mm	1
49	JLH50-49	End Chain Ring		1

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