



Operating Instructions and Parts Manual

JSH Series Electric Chain Hoists

Models JSH-275, JSH-550



Model JSH-550 shown

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

Part No. M-110100
Revision C 08/2015
Copyright © 2015 JET

1.0 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 outside recommended guidelines 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.

2.0 Table of Contents

Section	Page
1.0 Warranty and Service.....	2
2.0 Table of Contents.....	3
3.0 Safety warnings.....	4
4.0 Introduction	6
5.0 Description	6
6.0 Specifications	7
7.0 Unpacking	8
7.1 Contents of Shipping Container	8
8.0 Installation & Assembly	8
8.1 Electrical Connections.....	8
8.2 Grounding Instructions	8
8.3 Extension Cords	8
8.4 Installing Chain Container	9
9.0 Pre-Operation Inspection.....	10
9.1 Limit Switch Inspection.....	10
9.2 Inspecting the Load Chain.....	10
9.3 Inspecting the Hooks.....	10
10.0 Operating the Hoist	11
11.0 Maintenance.....	12
11.1 Brake Inspection.....	12
11.2 Lubrication.....	12
11.3 Replacing Load Chain	12
11.3.1 How to Cut Chains	12
11.3.2 Making a C-Link.....	12
11.3.3 Single Fall Chain Hoist.....	12
11.3.4 Vertical and Horizontal Links	13
11.3.5 Dual Fall Chain Hoists.....	13
12.0 Inspection and Maintenance	14
13.0 Troubleshooting the JSH Hoist	15
14.0 Replacement Parts.....	15
14.1.1 Parts Breakdown for JSH Series Electric Chain Hoists.....	16
14.1.2 Parts List for JSH Series Electric Chain Hoists	17
15.0 Electrical Connections – JSH Series Hoists.....	19



3.0 Safety warnings

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace the warning labels if they become obscured or removed.
4. This chain 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 chain hoist, do not use until proper training and knowledge have been obtained.
5. Do not use this chain 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.
6. Do not install this chain hoist where explosive hazards may exist.
7. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
8. Do not use to lift people, or loads over people. Warn others in the vicinity when lifting or transporting a load. Avoid swinging load and hook.
9. Make certain the pathway for a moving load is free of all obstructions.
10. Do not leave a suspended load unattended.
11. Do not exceed the rated load limit of the chain hoist.
12. Make sure limit switches are operating properly. Do not use limit switches as routine operating stops; they are emergency devices only.
13. Do not use the loading limit device to measure a load.
14. Do not use the load chain to wrap around the load or as a sling.
15. Maintain firm footing when operating the hoist.
16. Before lifting a load, make sure chain is seated in chain wheels or sprockets.
17. Always inspect the chain hoist for damage prior to use. Do not use a chain hoist with twisted, kinked, worn or otherwise damaged chain. If the chain hoist is damaged, do not use until it has been repaired or replaced.
18. Do not use more than one chain hoist to lift or move a load. If this is unavoidable, *each* chain hoist must have the same capacity as the load to be moved.
19. Do not use when binding causes an unequal load distribution on the supporting chains.
20. Never allow the load chain to "set" over sharp edges. All lifts must be made with straight chain that is free of obstacles.
21. Do not use a chain hoist unless load is centered between top and bottom hooks.
22. Protect load chain from weld splatter and other contaminants. Do not allow the hook or chain to be contacted by a live welding electrode.
23. Do not permit chain or hook to be used as a ground when welding.
24. Do not use the hoist for lifting guided loads, such as elevators and dumbwaiters. These applications require additional protective devices which are not incorporated into this hoist.
25. 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.
26. Do not attempt to repair a damaged load chain or lengthen the chain.
27. Replace the chain with factory replacement chain only. Do not use any other type of chain.

28. Use only recommended lubricant when needed.
29. Never use the chain 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 chain hoist back into service.
30. Leave all internal maintenance to a qualified Walter Meier service center.
31. Do not operate this hoist while tired or under the influence of drugs, alcohol or any medication.
32. Understand and follow all procedures as set forth in American National Standards (ANSI), titled "Performance Standard for Electric Chain Hoist," ANSI/ASME HST-1M.

Familiarize yourself with the following safety notices used in this manual:

⚠CAUTION This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

⚠WARNING This means that if precautions are not heeded, it may result in serious or even fatal injury.

4.0 Introduction

This manual is provided by JET covering the safe operation and maintenance procedures for the JET Model JSH Series Electric Chain Hoists. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This hoist 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 JET. JET can also be reached at our web site: www.jettools.com.

5.0 Description

The JSH Series Electric Hoists are portable, rugged hoists constructed of sturdy but lightweight die cast aluminum alloy housings. A transmission with heat-treated alloy steel gears provides reliable service. Operation is activated with one hand using pushbutton controls on a pendant cord, keeping the other hand free to guide the load. A magnetic disc brake ensures rapid stop and secure holding of loads.

This hoist is designed and tested in accordance with ANSI/ASME B30.16 and HST-1 standards.

⚠ WARNING

Read and understand the entire contents of this manual before attempting set-up or operation! Failure to comply may cause serious injury.

Record your purchase information here for quick reference:

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

6.0 Specifications

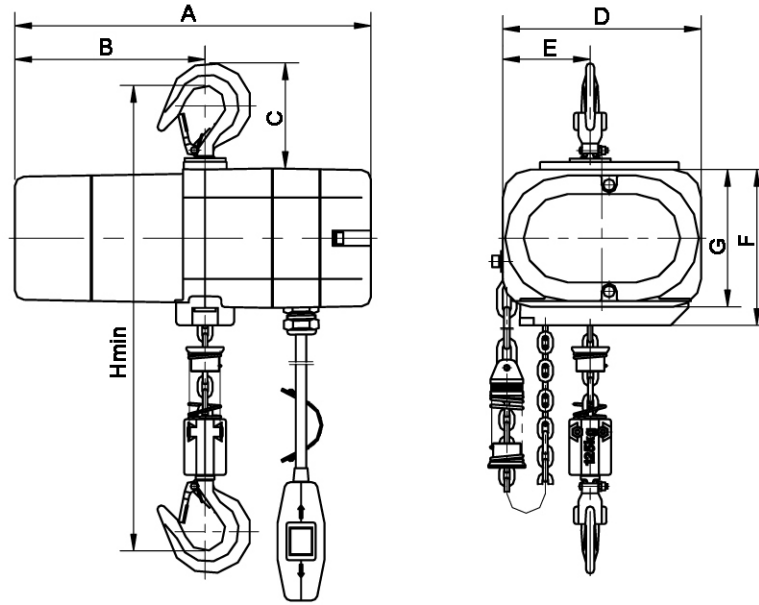


Figure 1

Model No.	JSH-275-10	JSH-275-15	JSH-275-20	JSH-550-10	JSH-550-15	JSH-550-20
Stock No.	110100	110115	110120	110110	110515	110520
Rated Capacity (Ton)	1/8	1/8	1/8	1/4	1/4	1/4
Standard Lift (ft.)	10	15	20	10	15	20
Hoisting Speed (fpm)	16	16	16	8	8	8
Motor	1/6HP, 115V, 1PH, 60Hz					
Rated Amps	3	3	3	3	3	3
Duty Cycle *	25%	25%	25%	25%	25%	25%
Duty Cycle Rating *	H3	H3	H3	H3	H3	H3
No. of Falls	1	1	1	2	2	2
Load Chain (mm)	4 Dia. x 12	4 Dia. x 12	4 Dia. x 12	4 Dia. x 12	4 Dia. x 12	4 Dia. x 12
Push Button Control Cord Length (ft.)	6	11	16	6	11	16
Net Weight (lbs.)	30.62	32.38	33.92	34.6	37.22	40.09
Shipping Weight (lbs.)	33.48	35.02	36.78	37.22	40.09	42.95
A	12.09	12.09	12.09	12.09	12.09	12.09
B	6.46	6.46	6.46	6.46	6.46	6.46
C	3.58	3.58	3.58	3.58	3.58	3.58
D	6.81	6.81	6.81	6.81	6.81	6.81
E	2.99	2.99	2.99	3.74	3.74	3.74
F	5.47	5.47	5.47	5.47	5.47	5.47
G	4.72	4.72	4.72	4.72	4.72	4.72
Headroom - H (in.)	15.27	15.27	15.27	17.1	17.1	17.1

Table 1

* H3, 25% duty cycle = maximum on time: 15 min/hr.
maximum number of starts: 150/hr.

The above specifications were current at the time this manual was published, 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.

7.0 Unpacking

Lift the hoist out of the carton by the top hook or the center section. Do not apply excessive force to the motor cover, as damage may result.

Carefully inspect the hoist for shipping damage, and for loose or missing parts. Report any damage immediately to your distributor and shipping agent. Do not discard any shipping material until the Hoist is installed and running properly.

7.1 Contents of Shipping Container

- 1 Hoist
- 1 Chain Container with Bracket and Fasteners
- 1 Owner's Manual
- 1 Warranty Card

8.0 Installation & Assembly

Support for the hoist may be hook, clevis pin, trolley, or beam clamp. Supporting structures (such as I-Beams, etc.) should be installed by properly licensed professional installers.

CAUTION Whatever method of suspension is chosen, the support components must be rated equal to, or greater than the capacity of the chain hoist.

8.1 Electrical Connections

WARNING Electrical connections must be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.

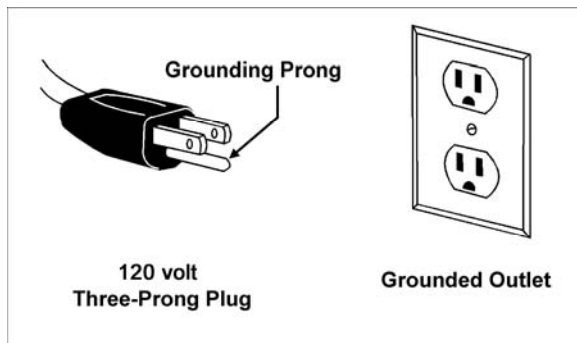


Figure 2

This machine's power cable is installed with a plug that has an equipment-grounding conductor and a grounding prong, similar to that shown in Figure 2. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. Do not modify the plug – if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

8.2 Grounding Instructions

This machine must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Repair or replace a damaged or worn cord immediately.

Make sure the voltage of your power supply matches the specifications on the name plate of the hoist.

8.3 Extension Cords

If an extension cord is necessary, make sure the cord rating is suitable for the amperage listed on the hoist's name plate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

Use Table 2 as a general guide in choosing the correct size cord. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Recommended Gauges (AWG) of Extension Cords

Amps	Extension Cord Length *					
	25 feet	50 feet	75 feet	100 feet	150 feet	200 feet
< 5	16	16	16	14	12	12
5 to 8	16	16	14	12	10	NR
8 to 12	14	14	12	10	NR	NR
12 to 15	12	12	10	10	NR	NR
15 to 20	10	10	10	NR	NR	NR
21 to 30	10	NR	NR	NR	NR	NR

*based on limiting the line voltage drop to 5V at 150% of the rated amperes.

NR: Not Recommended.

Table 2

8.4 Installing Chain Container

Your hoist is supplied with a canvas chain container (Figure 3) designed to fit the particular length of chain. If a different length chain is ever installed on this hoist, the chain container must be replaced by one of proper size.

⚠WARNING Do not overfill chain container. If chain should overfill and begin to fall, the entire chain container may empty without warning, resulting in serious personal injury or property damage.

To assemble the chain container to the hoist:

1. Hang hoist in position on the I-Beam or trolley. Do not install chain container yet. Allow slack side and load side of chain to hang freely from hoist.
2. Apply power to the hoist and press the DOWN button until the lower limit switch is tripped.
3. Check the chain container to ensure that the seam is inside the bag. The bag must not be inside out.
4. Insert bracket prongs into interior bag slots (Figure 3) as far as they will go.
5. Push the bracket down into the bag, making sure the flaps are raised (Figure 4).
6. Push the flaps over and down until they are secure (Figure 5).



Figure 3



Figure 4



Figure 5

7. Remove the screw and washer holding the end chain to the hoist (Figure 6). Mount the bracket of the chain container in that location as shown in Figure 7.
8. Put the chain stop into the container (Figure 7), and operate the hoist to bring the load hook up until the upper limit switch is tripped.
9. Check the chain to ensure that all the non-loaded chain is completely in the container.

⚠CAUTION Do not put chain into the chain container by hand! By not following the above steps, the chain can become twisted or kinked and can damage the hoist.

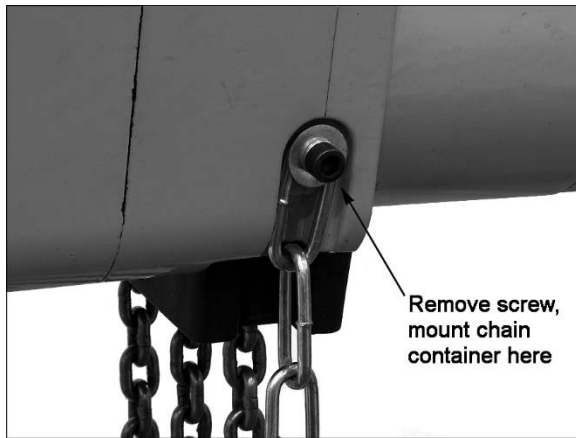


Figure 6

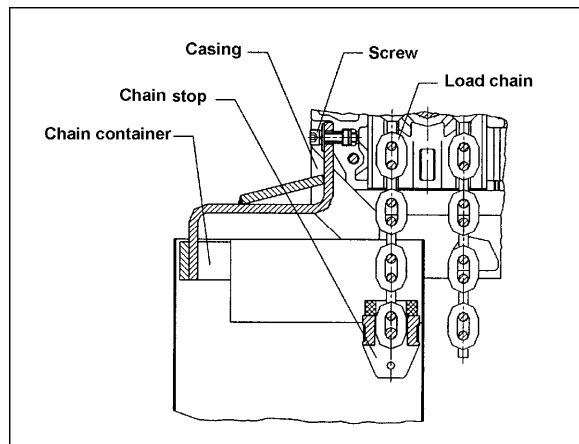


Figure 7

9.0 Pre-Operation Inspection

9.1 Limit Switch Inspection

1. Press UP button.
2. While the hook moves up, raise the limit switch paddle where the chain enters the hoist.
3. Hook should immediately stop.
4. Check DOWN limit switch in similar manner.

9.2 Inspecting the Load Chain

Clean the chain with a solvent, and carefully inspect the entire load chain. The chain should be visually checked before each day's use. Replace damaged chain before using the chain hoist.

Replace the load chain if any of the following are identified:

1. Seriously rusted or cracked.
2. Marks on the chain surface are deeper than 5% of the link's diameter.
3. Links are twisted or deformed.
4. The links are stretched too long or seriously worn on the surface, especially at the points

where links contact each other. To check the links for stretch, proceed as follows:

5. Select an unworn, un-stretched length of chain (at the slack end for example). Let the chain hang vertically with a light load (about 20 pounds) on the chain to pull it taut.
6. Use a large caliper to measure the outside length of a convenient number of links. Measure the same number of links in a used section of chain and calculate the percentage increase in length of the worn chain.
7. If the length of the worn chain is more than 1-1/2% longer than the unused chain, then the chain should be replaced. If the chain is worn less than 1-1/2%, check it at several more places along its length. If any section is worn more than 1-1/2%, the chain should be replaced.

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

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

⚠ WARNING The load chain supplied with your JET chain hoist is designed, manufactured, and tested for proper fit and durability. Over a period of time, the chain may need to be replaced. 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 hoist.

9.3 Inspecting the 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:

1. The safety latch no longer contacts the hook opening.
2. The vertical angle at the neck of the hook reaches 10° (see Figure 8).
3. Chemical corrosion or cracks on the hook.
4. Excessive wear on the inside surface.
5. The throat opening has enlarged wider than the maximum permissible 10% increase, as shown in Figure 9.

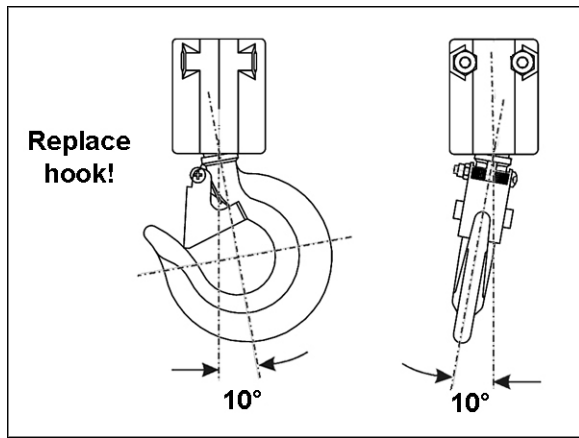
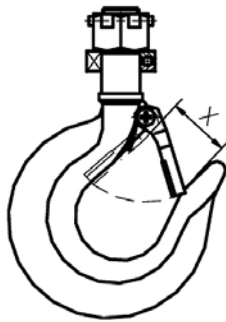


Figure 8



HOIST CAPACITY	TOP HOOK and BOTTOM HOOK	
	X-Normal	X-Limit
1/8 Ton	0.906 inches	1 inch
1/4 Ton	0.906 inches	1 inch

NOTE: Maximum permissible throat opening of hook with latch fully retracted.

Figure 9

NOTE: Excessive hook throat opening or twist indicates abuse or overloading of the hoist. If such deformation is discovered, inspect hoist, chain and all supporting members very carefully for additional indications of excessive hoist loading.

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.

10.0 Operating the Hoist

CAUTION Before beginning a work shift, an operator should test the pushbutton station, limit switches and brake control. If not functioning properly, they should be replaced or repaired before putting hoist in service.

Allow the hoist to come to a full stop before changing direction. Rapidly reversing or catching a falling load can overload the hoist system and cause a failure in the hoist and/or chain, resulting in injury or property damage.

If the hoist is connected to a manual trolley, move the hoist by pushing on the suspended load. Move an unloaded hoist by pulling on the empty hook. Do **NOT** move the hoist by pulling on the pendant cord.

The brake mechanism must be kept clean and free from dirt, water, and oil. Never allow oil to penetrate the brake mechanism. Always keep your hoist clean, and store in a clean, dry location.

Follow this general procedure for hoisting loads:

1. Secure the upper hook to the supporting structure.
2. Place load sling or chain in the center of the bottom hook, making sure the safety latch is secure. **Never load the hook in front of the safety latch.** See Figure 10.

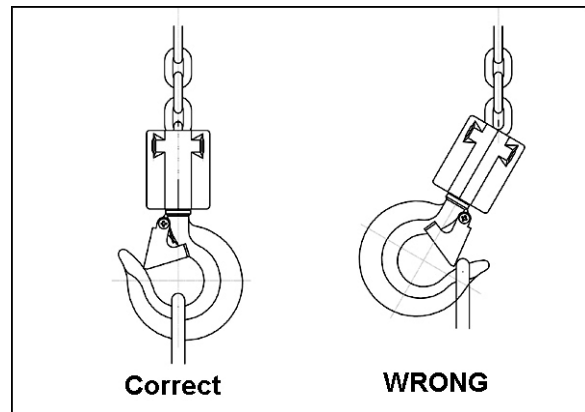


Figure 10

3. 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.**
4. Press UP button and remove all slack in load chain. Increase tension in the load chain until the hoist is about to raise the load.
5. Check again that the load is properly slung, directly under hoist, and will not suddenly swing or twist.
6. Raise load an inch or two above the ground and stop. Observe load for a few moments, looking for signs that the load or hoist system is unstable, or other indications that there is a problem.
7. Check that the chain is not twisted at the bottom hook. All welds should face the same direction (see Figure 14). For hoists with two or more falls of chain, make sure the bottom hook is not turned over. This may cause the chain to twist.
8. Raise load to the traveling height. Raise only to the height necessary to safely clear all obstacles.

9. Lower load at destination. If both UP and DOWN commands must be used during lowering, pause for a moment between each reversal of load direction.
10. Slowly allow weight to shift from hoist to ground or new support. Do not approach load until all tension is out of chain and load is stable.

11.0 Maintenance

11.1 Brake Inspection

CAUTION Keep brake surface and lining free of grease.

1. Remove load and disconnect hoist from power source.
2. Remove the back frame cover (index #31, page 16).
3. Check for worn brake disc by measuring the brake air gap with a feeler gauge (Figure 11). A brake gap larger than the allowable wear limit – 0.039" - may cause chatter or failure to release.
4. If the brake is not operating properly, the **entire brake assembly** must be replaced by qualified service personnel.

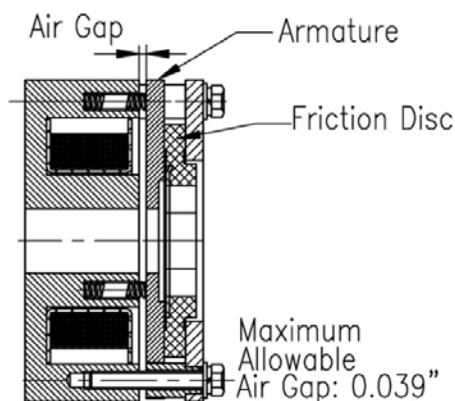


Figure 11

11.2 Lubrication

The gear housing has been filled with 1/2 pound of grease at the manufacturer and should not require attention. If future lubrication becomes necessary, use approximately 3/4 cup of a light semi-fluid NLGI #1 grease.

Wipe the chain clean with a cloth periodically and apply a light coat of SAE 90 gear oil.

11.3 Replacing Load Chain

Over time, the load chain will wear or elongate. This can cause damage to the hoist, breakage, or non-engagement of the load sheave. The following

procedures describe replacing the load chain for single and multiple fall hoists. **These procedures should be performed by experienced personnel only.**

11.3.1 How to Cut Chains

Use a bolt cutter with special cutter jaws for cutting hardened chain. Cut only one side of the link at a time. When making the second cut, place a mat over the chain to catch the flying chain section.

11.3.2 Making a C-Link

Replacing load chain will require the use of a C-link (in some cases, two C-links), which you can easily make as follows:

1. Cut a link from the old chain.
2. Cut the weld from the link leaving an opening approximately 1.25 times the diameter of the link material. See Figure 12.
3. Grind the cut areas smooth and remove all burrs.

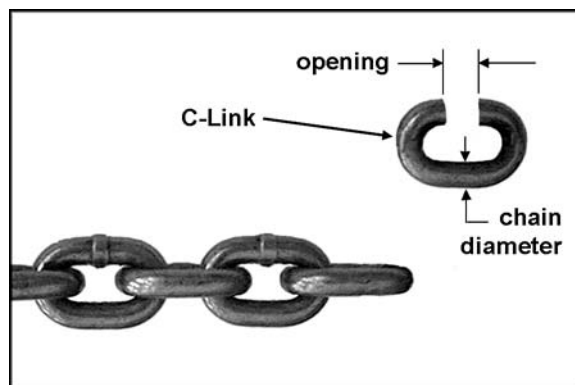


Figure 12

11.3.3 Single Fall Chain Hoist

1. Lower the load hook until only 1 to 2 feet of slack chain remains in the chain container.
2. Remove chain container.
3. On the slack side of the old chain, remove the chain stop and the spring (Figure 13). Keep these handy for later re-installing.

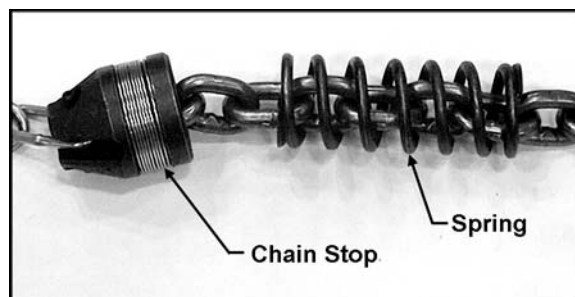


Figure 13

4. Using a C-link, connect the new chain to the old chain. Be sure vertical link welds face away from load sprocket (see Figure 14).

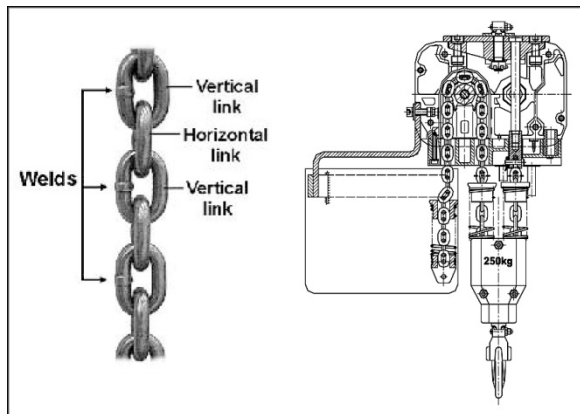


Figure 14

(dual fall model shown)

5. Keep tension on both sides of the chain and lower the load hook to pull the new chain through the hoist. Do not let the chain twist or bind as it is being pulled through the hoist.
6. Stop hoist when 1 to 2 feet of new chain remains on the slack side.
7. Install the spring and chain stop on the slack end of the new chain.
8. Remove C-link. Remove the load hook and the spring from the old chain, and install them on the new chain. Inspect condition of both spring and hook.
9. Lower load hook until the limit switch stops hoist movement. Inspect the chain for any signs of twist.
10. Install chain container following the instructions in this manual. Do not fill chain container by hand.
11. It is recommended that after installing new chain, the first few lifts be limited to no more than 25-50% of the rated load. Thoroughly inspect chain for twist before placing hoist in routine service.

11.3.4 Vertical and Horizontal Links

Vertical and horizontal are determined from the relationship with the load sprocket. Vertical links will be guided by the center slit in the load sprocket. Horizontal links will engage in the oval pockets on the sprocket. See Figure 15.

11.3.5 Dual Fall Chain Hoists

CAUTION The link on the load side end must be a vertical link. If it is a horizontal link, the chain will have a twist in it.

1. Lower hook until only 1 to 2 feet of slack chain remains in the chain container.
2. Remove chain container.

3. On the slack side of the chain, remove chain stop, and remove the spring(s). (see Figure 13). Keep these handy for later re-installing.
4. Using a C-link(s), connect the new chain to the old chain. If the end link of the old chain is horizontal, use two C-links. If the end link of the old chain is vertical, use one C-link See Figure 15. Using the correct number of C-links will properly orient the chain, and ensure that first link on load side end is a horizontal link.

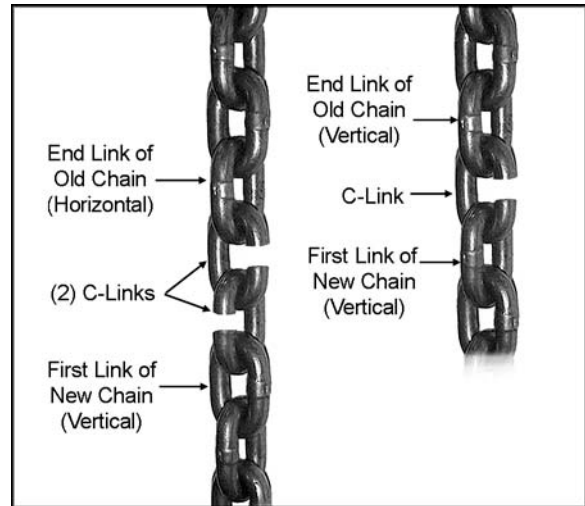


Figure 15

5. Install the spring(s) and chain stop on the opposite end of the new chain.
 6. Support the load hook so that the load chain can pass through the chain sheaves smoothly.
 7. Press the DOWN button to move the chain through the hoist. Keep tension on the chain as you pull it through to the load side, until the C-link(s) clears the hoist at the load side.
 8. Feed the new chain through the load hook.
 9. Remove the clevis pin from the suspension block (#48, page 16), and remove old chain.
 10. Remove C-link and connect end of new chain to suspension block, using the clevis pin and a new cotter pin to secure it. **Do not substitute any other pin or bolt in this application.**
- NOTE: Be sure that there is no twisting of chain between last chain sprocket in the hoist and the suspension block.
11. Install chain container following instructions in this manual. Do not fill chain container by hand.
 12. Lower hook until limit switch stops hoist movement, then raise hook until limit switch stops hoist movement. Inspect chain for any signs of twist and correct before continuing.
 13. It is recommended that the first few lifts be limited to no more than 25-50% of the rated load. Inspect chain for twist before placing hoist into routine service.

12.0 Inspection and Maintenance

⚠WARNING All repairs and adjustments are to be performed by trained and experienced personnel using procedures that are approved for the hoist system being serviced. All safety-related deficiencies discovered in the inspection are to be corrected before hoist is placed back into service. Check for internal damage whenever external damage has occurred.

Read and follow the 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 following items are to be inspected by appointed personnel at the time interval noted below. Dated inspection and repair reports must be maintained. Copies of all reports must be available to service personnel.

Inspection Schedule A

Service Interval:

- Normal Service – Monthly**
- Heavy Service – Weekly to Monthly**
- Severe Service – Daily to Weekly**

1. Check brake for slippage.
2. Check that pushbutton controls operate properly.
3. Check that limit switches function properly. Without load, operate up button control while observing stopper spring. If stopper spring becomes compressed and motor does not stop, STOP operation immediately. Limit switch is not operating properly. Repeat test with down button control.
4. Check top hook and load hook for deformation, chemical damage, and cracks.
5. Check that load chain is clean and lightly lubricated, free of excessive wear or deformation at the contact points between links and link and hook. This hoist uses special alloy hoisting chain and does not interchange with any other manufacturer. All replacement chain must be purchased from your JET distributor or from Walter Meier directly by calling 800-274-6848.
6. Check that the chain is untwisted, and passes through all sprockets smoothly while under load.
7. Check entire hoist system for signs of damage and loss of integrity.

Inspection Schedule B

Service Interval:

- Normal Service – Yearly**
- Heavy Service – Semi-Annually**
- Severe Service – Quarterly**

1. Do all the Schedule A items.
2. Check entire unit for loose screws, bolts, nuts and pins.
3. Check for evidence of excessive wear, corrosion, cracks, or distortion in the following parts: hook parts, chain attachments, suspension bolts and shafts, gears, bearings, pins, rollers, and locking and clamping devices.
4. Check for evidence of damage to hook parts including hook retaining nuts and collars and pins and hook holding frame and parts used to secure the frame.
5. Check for evidence of damage or excessive wear of load gear, sheave and sprocket wheel. If the pockets are too deep, the chain may jam with corresponding failure of engagement between chain and sprocket or sheave.
6. Check for evidence of excessive load brake wear. Inspect clearance between brake components, and adjust if needed.
7. Check for evidence of pitting or other deterioration of visible controller contacts.
8. Check for evidence of deterioration of supporting structures and trolleys.
9. Check for visible deformation of limit switch coil springs.
10. Check that all warning labels are present and readable.

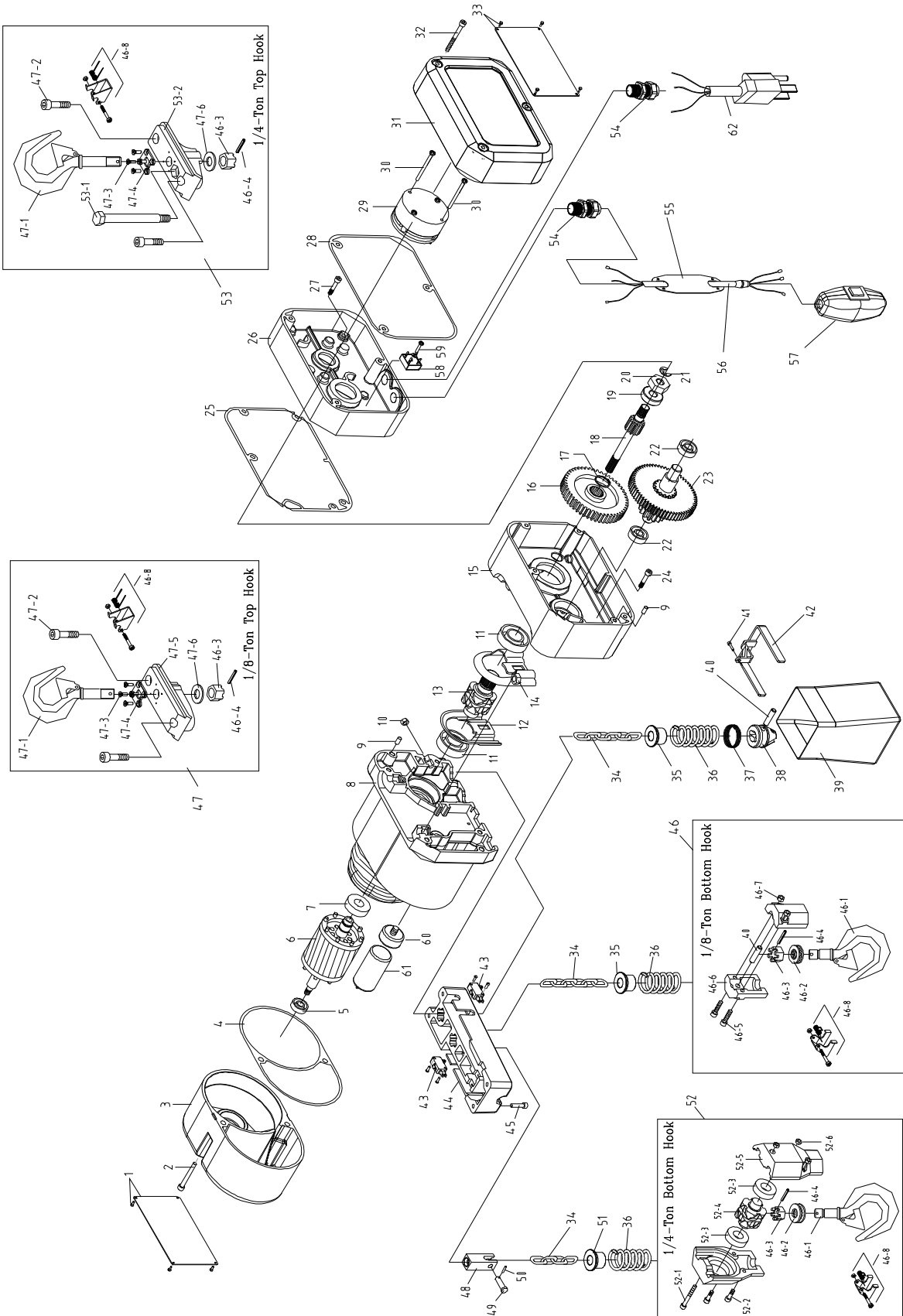
13.0 Troubleshooting the JSH Hoist

Trouble	Probable Cause	Remedy
Motor will not run.	No incoming power, or low voltage.	Check circuit breakers, switches and connections in power supply lines. If low voltage, have certified electrician test incoming power.
	Rectifier damaged so that the brake won't release.	Have rectifier replaced by qualified service personnel.
	Motor damaged.	Have motor replaced by a qualified service technician.
Hoist lifts very slowly.	Overloaded.	Reduce load.
	Low voltage.	Determine cause of low voltage and bring up to within +/- 10% of the voltage listed on the hoist nameplate.
Hoist lifts but will not lower.	Broken conductor in pendant cord.	Test continuity of each conductor. Replace cable if needed.
	Up/down switch malfunctioning.	Repair or replace switch.
Hoist lowers but will not lift.	Overloaded.	Reduce load to within hoist capacity.
	Up/down switch malfunctioning.	Repair or replace switch.
	Brake malfunction.	Have brake inspected by qualified personnel. Replace if needed.
Load continues drifting down excessively when hoist is stopped.	Hoist overloaded.	Reduce load to within rated capacity.
	Grease or oil on the lining.	Have a qualified technician disassemble the brake and clean the lining.
	Brake disc is worn.	Replace brake assembly.
	Brake springs are damaged.	Replace brake springs (qualified personnel).
Motor overheats.	Excessive load or too frequent use.	Operate within rated load and according to duty cycle rating.
	Brake drags.	Adjust brake clearance (qualified personnel).
Poor engagement of chain with sprocket/sheave.	Load chain seriously worn.	Replace load chain.
	Sprocket wheel, sheave or the chain guide is seriously worn.	Replace parts as needed.
Brake chatters.	Check for greater than allowable air gap.	Replace brake assembly.
	If brake still chatters after being replaced check rectifier for proper operation.	Have rectifier replaced by qualified service personnel.
Limit switch failure.	Bad connection of limit switch leads.	Inspect the contacts of the leads and limit switches.
	Limit switch damaged.	Replace limit switch.

14.0 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.jettools.com). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

14.1.1 Parts Breakdown for JSH Series Electric Chain Hoists



14.1.2 Parts List for JSH Series Electric Chain Hoists

Index No.	Part No.	Description	Size	Qty
1	JSH275-1	Capacity Label for JSH-275		1
	JSH550-1	Capacity Label for JSH-550		1
	TS-1531012	Phillips Pan Head Machine Screw	M3x6	2
	TS-1550011	Plain Washer	3mm	2
2	JSH275-2	Socket Head Cap Screw	M6x40	2
	TS-2361061	Spring Washer	6mm	2
	TS-1550041	Plain Washer	6mm	2
3	JSH275-3G	Motor Side Cover		1
4	JSH275-4	Motor Case Gasket		1
5	JSH275-5	Grooved Ball Bearing	6201	1
6	JSH275-6	Rotor Assembly		1
7	JSH275-7	Grooved Ball Bearing	6202	1
8	JSH275-8G	Motor Case Assembly		1
9	JSH275-9	Round Pin		4
10	JSH275-10	Self Locking Hex Nut	M6	1
11	JSH275-11	Grooved Ball Bearing	6004	2
12	JSH275-12	Chain Guard		2
13	JSH275-13	Lift Wheel		1
14	JSH275-14	Self Locking Hex Nut	M8	2
15	JSH275-15G	Gear Case		1
16	JSH275-16	Lift Gear		1
17	JSH275-17	Snap Ring	18mm	1
18	JSH275-18	First Gear Shaft		1
19	JSH275-19	Grooved Ball Bearing	6000	1
20	JSH275-20	Brake Nut		1
21	JSH275-21	Snap Ring	10mm	1
22	JSH275-22	Grooved Ball Bearing	6201	2
23	JSH275-23	Second Gear Assembly		1
24	TS-1503061	Socket Head Cap Screw	M6x25	4
	TS-2361061	Spring Washer	6mm	4
	TS-1550041	Plain Washer	6mm	4
25	JSH275-25	Gear Side Gasket		1
26	JSH275-26G	Back Frame		1
27	TS-1503061	Socket Head Cap Screw	M6x25	3
	TS-2361061	Spring Washer	6mm	3
	TS-1550041	Plain Washer	6mm	3
28	JSH275-28	Back Frame Gasket		1
29	JSH275-29	Brake		1
30	JSH275-30	Cross Head Pan Screw	M5x65	2
	TS-2361051	Spring Washer	5mm	2
	TS-1550031	Plain Washer	5mm	2
31	JSH275-31G	Back Frame Cover		1
32	TS-1502091	Socket Head Cap Screw	M5x40	3
	TS-2361051	Spring Washer	5mm	3
	TS-1550031	Plain Washer	5mm	3
	JSH275-32-3	O-Ring	4x1.8mm	3
33	LM000081	Name Plate for JSH-275		1
	LM000082	Name Plate for JSH-550		1
	TS-1531012	Phillips Pan Head Machine Screw	M3x6	4
	TS-1550011	Plain Washer	3mm	4
34	JSH275-34	Load Chain	Ø4x12mm	per ft.
35	JSH275-35	Touch Block A		2
36	JSH275-36	Limit Spring		2
37	JSH275-37	Retainer Ring		1
38	JSH275-38	Chain Stop		1
39	JSH275-39	Chain Container		1
40	JSH275-40	Spring Pin		2
41	TS-1503061	Socket Head Cap Screw	M6x25	1
	TS-2361061	Spring Washer	6mm	1
	TS-1550041	Plain Washer	6mm	1

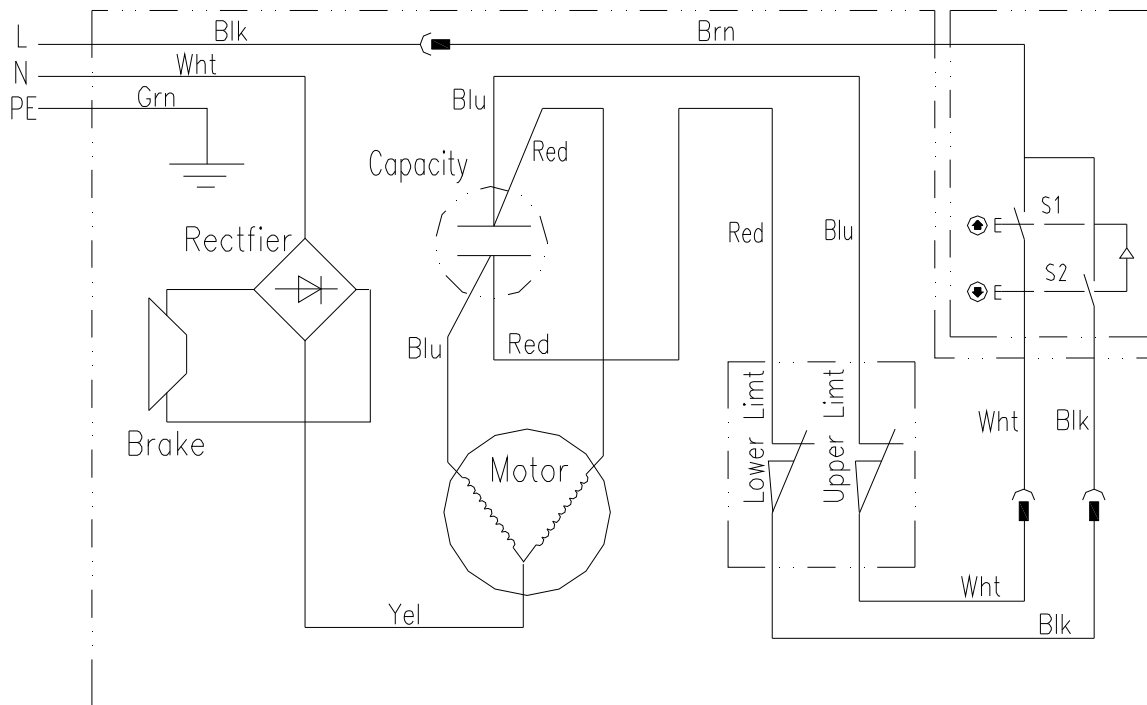
Index No.	Part No.	Description	Size	Qty
42	JSH275-42	Chain Container Bracket		1
43	JSH275-43	Limit Switch		2
	JSH275-43-1	Phillips Pan Head Machine Screw	M3x16	4
	TS-2361031	Spring Washer	3mm	4
	TS-1550011	Plain Washer	3mm	4
44	JSH275-44	Limit Switch Assembly		1
	JSH275-44-1	Gasket		1
	JSH275-44-2	Cover		1
	JSH275-44-3	Countersunk Cross Head Screw	M3x8	2
	JSH275-44-4	Insulation Sheet		2
	JSH275-43	Limit Switch		2
	JSH275-43-1	Phillips Pan Head Machine Screw	M3x16	4
	TS-2361031	Spring Washer	3mm	4
	TS-1550011	Plain Washer	3mm	4
45	TS-1501081	Socket Head Cap Screw	M4x30	4
	TS-2361041	Spring Washer	4mm	4
	TS-1550021	Plain Washer	4mm	4
46	JSH275-46	Bottom Hook Assembly for JSH-275		1
46-1	JSH275-46-1	Bottom Hook		1
46-2	JSH275-46-2	Thrust Ball Bearing	8100	1
46-3	JSH275-46-3	Slotted Hex Nut	M10	1
46-4	JSH275-46-4	Spring Pin	Ø2.5x8mm	1
46-5	JSH275-45-5	Socket Head Cap Screw	M5x20	2
46-6	JSH275-45-6	Bottom Hook Housing		2
46-7	JSH275-45-7	Self Locking Hex Nut	M5	2
46-8	JSH275-46-8	Safety Latch Assembly		1
		Safety Latch		1
		Double Spring		1
		Phillips Pan Head Machine Screw	M4x20	1
		Self Locking Hex Nut	M4	1
47	JSH275-47	Top Hook Assembly for JSH-275		1
47-1	JSH275-47-1	Top Hook		1
47-2	TS-1504051	Socket Head Cap Screw	M8x25	2
47-3	JSH275-47-3	Countersunk Cross Head Screw	M5x10	4
47-4	JSH275-47-4	Fixing Board		1
47-5	JSH275-47-5	Connection Bar for JSH-275		1
47-6	JSH275-47-6	Washer		1
48	JSH550-48	Suspension Chain Block		1
49	JSH550-49	Clevis Pin		1
50	JSH550-50	Cotter Pin	Ø2x16mm	1
51	JSH550-51	Touch Block B		1
52	JSH550-52	Bottom Hook Assembly for JSH-550		1
52-1	JSH275-32	Socket Head Cap Screw	M5x40	1
52-2	JSH275-45-5	Socket Head Cap Screw	M5x20	2
52-3	JSH275-7	Grooved Ball Bearing	6202	2
52-4	JSH550-52-4	Sheave		1
52-5	JSH550-52-5	Bottom Hook Housing		2
52-6	JSH275-45-7	Self Locking Hex Nut	M5	3
53	JSH550-53	Top Hook Assembly for JSH-550		1
53-1	JSH550-53-1	Suspension Bolt		1
53-2	JSH550-53-2	Connection Bar for JSH-550		1
54	JSH275-54	Cable Gland		2
55	JSH275-55	Warning Card		1
56	JSH275-56	Pushbutton Cord	16AWGx3C	per ft.
57	JSH275-57	Pushbutton		1
58	JSH275-58	Rectifier	50A	1
59	TS-2284202	Phillips Pan Head Machine Screw	M4x20	1
	TS-1550021	Plain Washer	4mm	1
60	JSH275-60	Housing for Capacitor		1
61	JSH275-61	Capacitor		1
62	JSH275-62	Power Cable Assembly	16AWGx3C	1

Complete push-button controller assemblies (include #55,56,57):

-JSH-PBC10..... Push-Button Pendant Controller, 10' Lift
-JSH-PBC15..... Push-Button Pendant Controller, 15' Lift
-JSH-PBC20..... Push-Button Pendant Controller, 20' Lift

15.0 Electrical Connections – JSH Series Hoists

115V 60Hz 1~





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