



# OWNER'S MANUAL AND SAFETY INSTRUCTIONS

## LHM104 MINI TYPE HAND OPERATED LEVER HOIST

HITCHLIFTING.COM, T: +1 512 823 02 02

MFD FOR: HITCHLIFTING INC., 211 E. 7TH STREET,  
SUITE 620, AUSTIN, TX, 78701-3218, USA

MFD BY: HITCHLIFTING CO., LTD, 7TH BUILDING, SHANGDING  
INDUSTRY PARK, NO.22 HONGHU WEST ROAD, NEW NORTH  
DISTRICT, CHONGQING, CHINA

HITCH IS A REGISTERED TRADEMARK OF HITCHLIFTING INC.

## WARRANTY AND SERVICE

The HITCH company provides a warranty for each product that is sold. If one of our tools needs a service or repair, please contact the Hitch Technical Service team by calling +1 (512) 823-0202, between 8AM to 5PM CST on Monday through Friday, by e-mail to [service@hitchlifting.com](mailto:service@hitchlifting.com), or you may contact the nearest HITCH dealer in your region.

### Warranty Duration

Assuming that there has been normal use of the product, the HITCH company ensures its compliance with published specifications, and that the product is free from defects in its materials and workmanship during the warranty period specified below. The duration of the limited warranty depends on which country the product was purchased in; these are specified in the «Warranty Duration for hoists HITCH» table, unless otherwise provided by law. The duration of the limited warranty starts from the date of purchase of the specified product on your purchase receipt.

See the «Warranty Duration for hoists HITCH» table.

- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items — are defined as spare parts or accessories, which are expected to fail after a certain level of use, and which are subject to a 90-day limited warranty against manufacturing defects.

### Who is covered?

The warranty covers the initial purchaser of the product from the date of delivery.

### What is covered?

The warranty covers any defects in workmanship or materials that are subject to the limitations stated below. This warranty does not cover product failures that have appeared either directly or indirectly due to misuse, neglect, negligence or accidents, normal wear and tear, improper repairs, delays in service or lack thereof.

### More Information

HITCH is constantly adding new products to their product lines. For up-to-date product information, please check with your local distributor or visit the HITCH website.

### How State Law Applies

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

### Getting Support

You can contact the Hitch Technical Service by calling +1 (512) 823-0202 or you may contact the nearest HITCH dealer in your area. Please note that you will be asked to provide proof of your initial purchase when calling. If a product requires further inspection, the technical service representative will assist with any additional action that is required.

### Warranty Limitations

HITCH limits every warranty to the duration of the specific warranty for each product. Except as stated in this document, any other possible warranty for the appearance of the product or its performance is excluded. Some administrative and territorial entities do not allow limitations to a warranty, so the above mentioned limitations may not apply in your case. HITCH will not be liable for death, or personal injury, damage to property, or for incidental, special or consequential damages arising from the use of our products. Some administrative and territorial entities do not allow for the exclusion or limitation of incidental or consequential damages, so the above mentioned limitations may not apply in your case. HITCH only sells its products through distributors. HITCH specifications in printed materials and on the official HITCH website are given as a general guide and are not binding. HITCH reserves the right to make changes to spare parts, fittings, and accessories at their discretion at any time without prior notification.

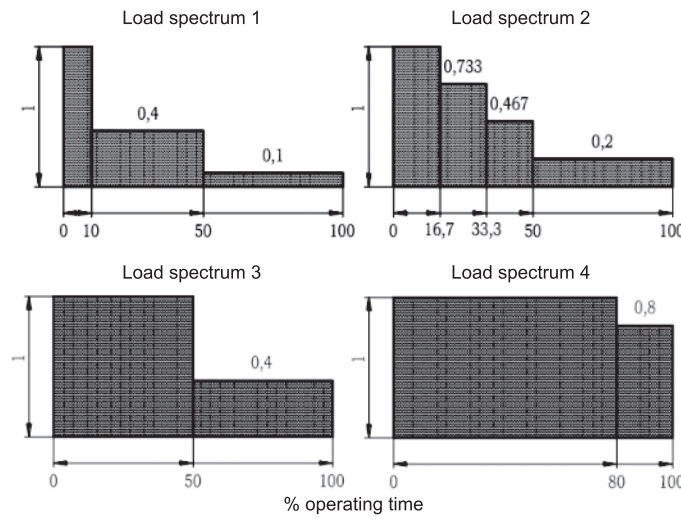
\*. The 5 year HITCH Guarantee. (For markets in North, Central, South America, and the EU only).

For all of the professional HITCH equipment in a black color, the warranty duration is extended to 60 months if the owner registers it within 2 (two) weeks from the date of purchase. Registration can be completed by visiting the following address: [www.hitchlifting.com/warranty](http://www.hitchlifting.com/warranty) A registration card provides confirmation, and this should be printed immediately after the registration process has completed, and kept alongside the original purchase receipt that shows the purchase date of the product.

The registration process will only be complete after the purchaser consents to their personal data being kept on file.

## MECHANICAL CLASSIFICATION

The safety and lifespan of the hoisting equipment is guaranteed under the presumption that it works in accordance with the specified classification. All of the products HITCH designs for class M5-M2 correspond to the classification of the M5-M2 mechanism according to ISO 4301/1. The average daily working time is set by the load spectrum.



### Mechanism Operation Class

The Mechanism Operation Class is characterized by the assumed total in-service time in hours and nominal classes, presented in Table 1.

For classification, it was agreed to provide a mean value of the total operation time, during which a mechanism is in motion. The total in-service time values should be considered as theoretical. They can not be treated as guaranteed values.

### Loading Mode

The Loading Mode determines the relative duration during which a mechanism has incurred the impact of a maximum or decreased load. Nominal loading modes are presented in Table 2. Nominal coefficients of a mechanisms load distribution are set in accordance with Table 2 (the nearest larger value is taken).

### Determination of a Mechanism's Classification

#### Group as a whole

Having determined the Operation Class and the Loading Mode, the Classification Group of the mechanism is determined using Table 3.

Table 1.

| Operation Class | Total Duration of Testing Hours | Notes                                  |
|-----------------|---------------------------------|----------------------------------------|
| To              | 200                             | Irregular operation                    |
| T1              | 400                             |                                        |
| T2              | 800                             |                                        |
| T3              | 1 600                           |                                        |
| T4              | 3 200                           |                                        |
| T5              | 6 300                           | Regular operation in normal conditions |
| T6              | 12 500                          | Regular operation with interruptions   |
| T7              | 25 000                          | Intensive operation                    |
| T8              | 50 000                          |                                        |
| T9              | 100 000                         |                                        |

Table 2. Nominal coefficients of mechanisms load distribution *Km*

| Operation Class | Nominal coefficient of load distribution <i>Km</i> | Notes                                                                                |
|-----------------|----------------------------------------------------|--------------------------------------------------------------------------------------|
| L1 — light      | 0,125                                              | Mechanisms regularly affected by light loading and rarely by maximum loading         |
| L2 — moderate   | 0,25                                               | Mechanisms regularly affected by moderate loading and quite often by maximum loading |
| L3 — heavy      | 0,50                                               | Mechanisms regularly affected by heavy loading and often by maximum loading          |
| L4 — severe     | 1,00                                               | Mechanisms regularly affected by maximum loading                                     |

Table 3. Mechanism Classification Group as a Whole

| Loading Mode  | Nominal coefficient of load distribution <i>Km</i> | Mechanisms Operation Class |    |    |    |    |    |    |    |    |    |    |
|---------------|----------------------------------------------------|----------------------------|----|----|----|----|----|----|----|----|----|----|
|               |                                                    | To                         | T1 | T2 | T3 | T4 | T5 | T6 | T7 | T8 | T9 |    |
| L1 — light    | 0,125                                              |                            |    |    | M1 | M2 | M3 | M4 | M5 | M6 | M7 | M8 |
| L2 — moderate | 0,25                                               |                            |    |    | M1 | M2 | M3 | M4 | M5 | M6 | M7 | M8 |
| L3 — heavy    | 0,50                                               | M1                         | M2 | M3 | M4 | M5 | M6 | M7 | M8 |    |    |    |
| L4 — severe   | 1,00                                               | M2                         | M3 | M4 | M5 | M6 | M7 | M8 |    |    |    |    |

## PRODUCT FEATURES

The ultra-light and compact Hand Operated Lever Hoist HITCH LHM104 MINI can solve complicated problems easily and effectively, such as fastening, fixing and positioning loads. The Hand Operated Lever Hoist HITCH LHM104 MINI is intended for light loads with a load capacity of 1/4 and 1/2 ton. It comes with very precise positioning, of up to several millimeters, mating machine components, parts, and elements.

The conclusive advantages of the Hand Operated Lever Hoist HITCH LHM104 MINI, thanks to its aluminum housing, are its compact size, light weight (LHM104-1 / 4 ton and weighs 4 - 3/4 lb, LHM104-1 / 2 ton and weighs 5-1 / 2 lb, LHM104- 3/4 ton and weighs 7-1 / 2 lb, LHM104-1- 1 / 2 ton and weighs 13-13 / 16 lb, with a standard lifting height of 5 feet). The LHM104-1 / 4 ton and LHM104-1 / 2 ton models can be supplied with a handy belt bag for their hoist. This operator tool is always at hand, making the use of work time more efficient.

Its small caliber (diameter) and its load chain allows for load movement with high accuracy. For each click of the lever, the mechanism moves smoothly about 1/16 inches. All of the rotating parts are equipped with wear-resistant nubs. There is a «free chain» mode for the quick and easy positioning of the hook and the load.

Due to the short lever length of 63 inches, the operator can work in confined spaces, and at high-altitude, where standard equipment is not usually available.

The advanced reducer system (with 5 transmissions in its gearbox) provides a slight force on the lever of only 26-53 lbs at a rated load. It is also conducive to a small structural depth (minimum distance between hooks) of 99 inches, when operated in a confined space. The hooks of alloy steel will rotate 360 degrees for industrial use. An additional and important safety factor is the protection function when in freewheel mode. If the load begins to abruptly fall, the hoist brake is triggered instantly and securely. The brake system double-pawls has been designed to provide additional security and reliability.

The cast steel latches have been enhanced for better durability and safety in harsh environments. A lightweight, aluminum, shock-proof, corrosion resistant case, and a load chain G80 with a galvanic treatment provides a lightweight hoist and the ability to operate in harsh environments.

To ensure its durability, all of the main parts and gears have been made from alloy steel and heat treated. Every Hand Operated Lever Hoist HITCH LHM104 MINI has been load tested to 150% of the rated load capacity with a certification.

Considering all of these features and advantages, the Hand Operated Lever Hoist HITCH LHM104 MINI is a unique product on the market.

### Standards

It complies with mechanical class M2 (which corresponds to the classification mechanism M2 - ISO 4301/1). It conforms to the OSHA Regulations, ANSI / ASME B30.21 and HST-3 Standards.

## SAFETY INFORMATION

It is the responsibility of the owner/user to install, inspect, maintain, and operate these products in accordance with ANSI standards. These general instructions deal with the normal installation, operation and maintenance situations that are encountered with the products described here in. This product should not be installed, operated or maintained by any person who has not read all of the contents of these instructions. Failure to read and comply with these instructions, or any of the warnings or limitations noted herein, can result in serious bodily injury or death, and/or property damage. Only trained and qualified personnel should operate and maintain this equipment.

The equipment described herein has not been designed for, and should not be used for lifting, supporting, or transporting people. Modifications to up-grade, re-rate or otherwise alter these products can only be authorized by the manufacturer.

## SAFETY PRECAUTIONS

- A. Read** these instructions and the relevant American ANSI Standards before installing, operating, or maintaining this equipment.
- B. Warn** personnel of approaching loads.
- C. Improper** use of a Hand Operated Lever Hoist could result in death or serious injury. To avoid this:

**Always** read the owner's manual and safety instructions.

**Always** ensure that you eliminate any load chain slack to avoid a shock load before lifting.

**Always** avoid the risk of overheating the braking system during the prolonged lowering of loads. If you are considering the use of the Hand Operated Lever Hoist under such conditions, please consult HITCH first.

**Always** use original HITCH G80 or G100 load chains.

HITCH shall not be responsible for any claims or damage arising from the use of other chains.

**Always** before storing the hoist, rotate the lever counterclockwise several times.

**Never** do not lubricate the friction plate of the mechanical brake.

**Never** lift more than a rated load.

**Never** lift or transport loads over or near people.

**Never** use a hoist for lifting, supporting, or transporting people.

**Never** run the load chain over sharp edges.

**Never** operate a hoist if damaged or malfunctioning.

**Never** operate unless the load is centered under the hoist.

**Never** use the chain as a sling.

**Never** support a load on the tip of a hook.

**Never** use a twisted, kinked, damaged or stretched load chain.

**Never** use a hoist if the hook latch is missing or broken.

**Never** touch the chain or hook with working welding equipment.

**Never** step on the lever during operation.

**Never** exceed the allowable force on the lever.

**Never** operate with anything other than hand power.

**Never** pull or throw the hoist when carrying.

**Never** remove or obscure the warning tags.

**Never** operate when side-pulling or side-loading a load to the hoist.

**Never** leave a load suspended if unattended, unless specific precautions have been taken.

**Never** lengthen the load chain or repair a damaged load chain by welding.

**Never** use a chain as a ground for welding.

**Never** apply a load to the stopper link or the load chain on the link side.

**Never** put your hands between the top hook and the lever while operating the lever.

**Do read** ANSI/ ASME B30.21, HST-3 Standards and the hoist manufacturer's instructions.

## PRE-INSTALLATION

Check for damage during shipment. DO NOT install or use a damaged product. Check and verify if any structure or other equipment that will support the product has a rated load capacity equal to or greater than the rated load capacity of the product to be used.

### Before initial operation:

1. Read and comply with all of the instructions and warnings that come with or are attached to the product (if applicable).
2. Check the lubricants.
3. Check the operation of the brake.
4. Where applicable, check that the chain is properly seated in the sheaves and that the chain is not twisted, kinked, or damaged.

### Before each shift, where applicable:

1. Inspect the hooks for nicks, gouges, cracks, and signs of pulling apart or twisting.
2. Inspect the hook latches for proper operation.
3. Check the chain for kinks or twists.
4. Check the operation of the brake.
5. Replace warning labels if they are missing or illegible.

### Before operating:

1. Be certain that all personnel are clear of the load to be lifted and moved.
2. Make sure the load will clear stock piles, machinery, or other obstructions when hoisting and moving.

## FREE CHAINING

### ! WARNING

Do not operate the hoist in free chaining mode under a load. When the hoist holds a load, ensure that you set the select lever to the lifting ('UP') position, and to avoid operating the chain knob. Do not pull the no-load-side chain with the select lever set to the lowering ('DN') position, as this will cause the lever to revolve and can be hazardous.

**1.** Move the select lever to the neutral ('N') position.

**2.** With the no-load-side chain pulled lightly, turn the chain knob counterclockwise.

**3.** In this mode, the load chain can be pulled through the hoist to its required length. If the hoist does not shift into free chaining mode, hold the no-load-side chain and lower it to release the brake.

When a load under 15-1/2 lbs is applied to the load chain, the brake does not operate. Do not apply any load to the load chain in free chaining mode, except for the positional adjustment of the load chain by an operator.

### ! WARNING

Do not suddenly pull the load chain in free chaining mode.

• Excessive pulling may enable the brake and stop your ability to feed the chain.

• In this case, set the select lever to the lowering ('DN') position, lower it, and then start over again.

Free chaining with the chain knob facing upwards, as shown in Figure 3, may cause a braking force. In this case, direct the knob to face horizontally, as shown in Figure 4, in free-chaining mode.

**4.** To reset the hoist for load operation, with the load-side chain pulled lightly, turn the chain knob clockwise or lift it to eliminate the clearance of the friction plate and operate it by using the lever.

## HOOKS

### ! WARNING

**1.** Look out for any hook that requires replacement because of excessive bends, twists, or damage to the throat opening indicating the abuse or overloading of the product. In this situation, check the other load-supporting components of the product for possible damage.

**2.** Never repair hooks by welding or reshaping. Heat applied to the hook will alter the original heat treatment of the hook material and reduce the strength of the hook.

**3.** Never weld handles or other attachments to the hook.

### Hook inspection

Where applicable, inspect the hooks and measure the throat opening at least once a month. Between regular inspections, visually check for deformation, distortion, twisting, damage and missing or damaged hook latches daily. Hooks damaged from chemicals, deformations or cracks, or hooks that have more than a 10° twist from the plane of the unbent hook or an excessive opening or seat wear, must be replaced. Also, hooks that have been opened to the extent that the latch does not engage the tip must be replaced, see Figure 1.

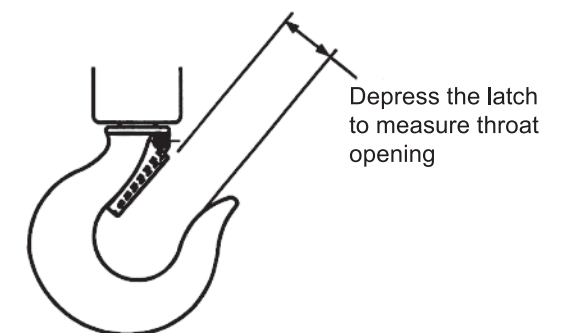


Figure 1.

Replace the hook when opening greater than 5/8 inch to the size «g»

## CHAIN

Inspect the chain before each use. Between regular inspections, visually check for nicks, gouges, weld splatter, corrosion, or distorted links daily. Inspect the chain thoroughly if it does not feed smoothly over the load sheaves. Inspect as follows.

**1.** Clean the chain before inspection.

**2.** Test the hoist with a load and observe the operation of the chain load sheaves.

**3.** Slacken the chain and inspect the contact points for excessive wear, Refer to Figure 2.

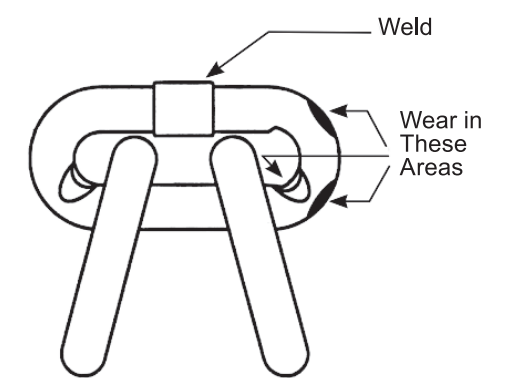
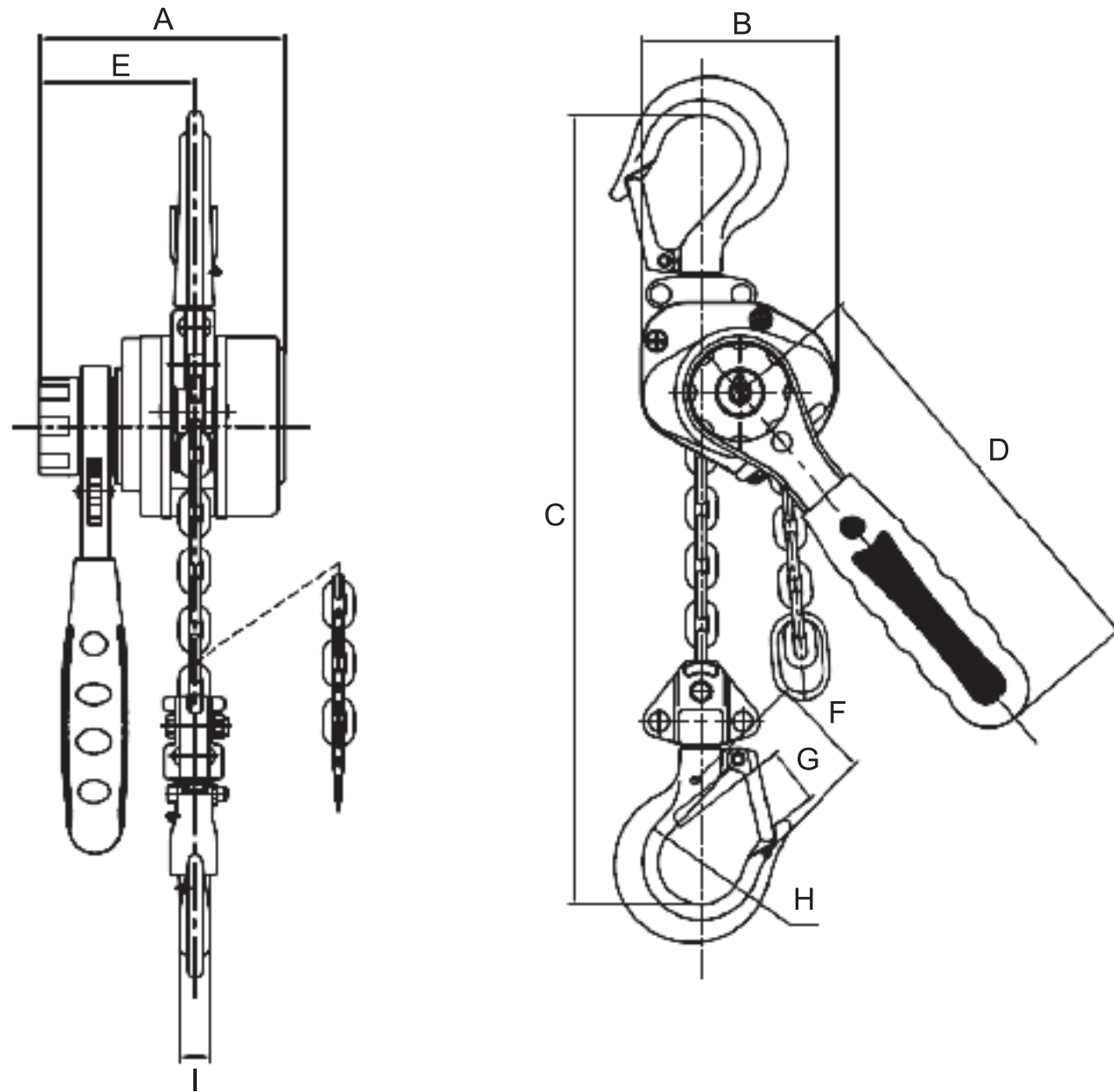


Figure 2.



# HAND OPERATED LEVER HOIST LHM104-G\* MINI TYPE



## Specification

| STOCK NUMBER **                                   | 12325101          | 1230511  | 1237511  | 1231511   |
|---------------------------------------------------|-------------------|----------|----------|-----------|
| <b>RATED CAPACITY [TONS]</b>                      | 1/4 Ton           | 1/2 Ton  | 3/4 Ton  | 1-1/2 Ton |
| <b>TEST LOAD [TONS]</b>                           | 3/8               | 3/4      | 1-1/8    | 2-1/4     |
| <b>STANDARD LIFT [FT.] ***</b>                    | 3-1/4             | 5        | 5        | 5         |
| <b>PULL TO RATED LOAD [LBS.]</b>                  | 26,5              | 53       | 64       | 70-9/16   |
| <b>NUMBER OF LOAD CHAIN FALLS</b>                 | 1                 | 1        | 1        | 1         |
| <b>LOAD CHAIN DIA. STRENGTH CLASS G80 [MM]</b>    | 4,0               | 4,0      | 5        | 7,1       |
| <b>MECHANICAL CLASS</b>                           | M2                |          |          |           |
| <b>OPERATION TEMPERATURE [F] ****</b>             | -5 F Up to +120 F |          |          |           |
| <b>DIMENSIONS [IN.]</b>                           | <b>A</b>          | <b>B</b> | <b>C</b> | <b>D</b>  |
|                                                   | 39-3/8            | 33       | 98-7/16  | 63        |
|                                                   | 39-3/8            | 33       | 98-7/16  | 63        |
|                                                   | 41-5/16           | 36-1/4   | 102-3/4  | 71        |
|                                                   | 48                | 43       | 130      | 86-5/8    |
|                                                   | <b>E</b>          | <b>F</b> | <b>G</b> | <b>H</b>  |
|                                                   | 24-5/8            | 14       | 8-1/4    | 12-5/8    |
|                                                   | 24-5/8            | 16-9/16  | 9-5/8    | 13-9/16   |
|                                                   | 25-3/16           | 16-9/16  | 11-1/4   | 14        |
|                                                   | 27                | 20-1/2   | 13-3/4   | 16-3/4    |
|                                                   | <b>I</b>          |          |          |           |
|                                                   | 4-5/16            |          |          |           |
|                                                   | 4-3/4             |          |          |           |
| <b>NET WEIGHT [LBS]</b>                           | 4-3/4             | 5-1/2    | 7-1/2    | 13-13/16  |
| <b>WEIGHT FOR ADDITIONAL 3,3 FT OF LIFT [LBS]</b> | 1/2               | 13/16    | 1-3/16   | 2-7/16    |

\* Options:  
 «G» - «Galvanic» - Load chain with a galvanic coating  
 «B» - «Bearings» - Hoist equipped with friction bearings  
 «S» - «SMART» - Overload Protection System

\*\* Stock Number is indicated for standard design and standard lift. For more detail see [www.hitchlifting.com](http://www.hitchlifting.com).

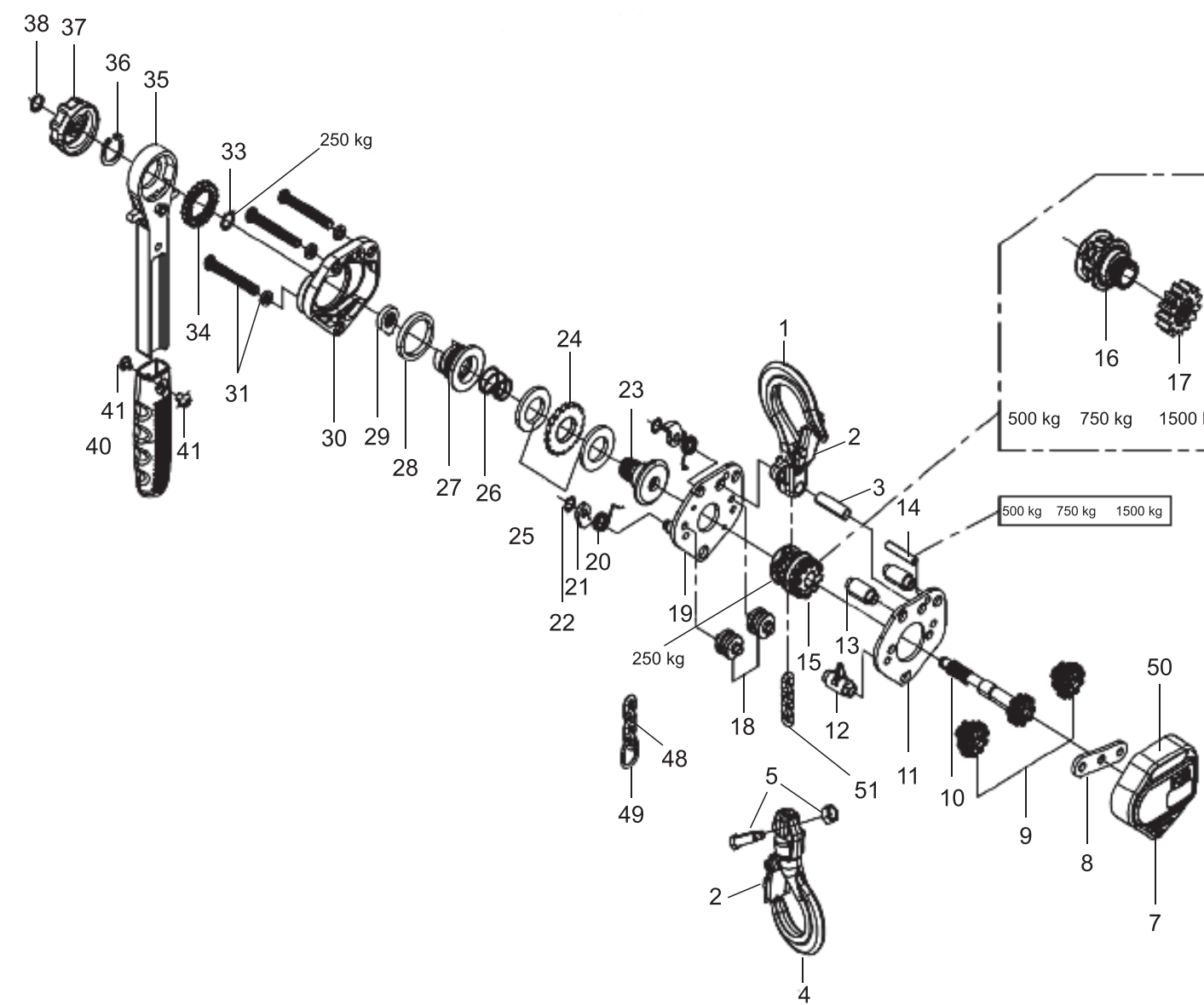
\*\*\* Maximum standard lift height of 40 Ft. Specify your required lifting height in your order.

\*\*\*\* Necessary to check the brake at a temperature below 32 F in case of freezing.

Operation humidity - 100%

These specifications were relevant at the date of publication, but because of the continuous improvement process HITCH reserves the right to change the specifications at any time without notice, and without any additional obligation.

# PART LIST HAND OPERATED LEVER HOIST LHM104-G\* MINI TYPE



| No | Description                    | Qty | 1/4 Ton | 1/2 Ton | 3/4 Ton | 1-1/2Ton |
|----|--------------------------------|-----|---------|---------|---------|----------|
| 1  | Top Hook Assembly [Incl.#2]    | 1   | 025-1   | 050-1   | 075-1   | 150-1    |
| 2  | Safety Latch Kit               | 2   | 025-2   | 050-2   | 075-2   | 150-2    |
| 3  | Top Hook Shaft                 | 1   | 025-3   | 050-3   | 075-3   | 150-3    |
| 4  | Bottom Hook Assembly [Incl.#2] | 1   | 025-4   | 050-4   | 075-4   | 150-4    |
| 5  | Chain Pin & Locking Nut        | 1   | 025-5   | 050-5   | 075-5   | 150-5    |
| 7  | Gear Case                      | 1   | 025-7   | 050-7   | 075-7   | 150-7    |
| 8  | Reinforced Plate               | 1   | 025-8   | 050-8   | 075-8   | 150-8    |
| 9  | Load Gear                      | 2   | 025-9   | 050-9   | 075-9   | 150-9    |
| 10 | Driving Pinion                 | 1   | 025-10  | 050-10  | 075-10  | 150-10   |
| 11 | Right Side Plate               | 1   | 025-11  | 050-11  | 075-11  | 150-11   |
| 12 | Chain Stripper                 | 1   | 025-12  | 050-12  | 075-12  | 150-12   |
| 13 | Stay Bolt                      | 2   | 025-13  | 050-13  | 075-13  | 150-13   |
| 14 | Pin                            | 1   |         | 050-14  | 075-14  | 150-14   |
| 15 | Load Sheave Assembly [250 kg]  | 1   | 025-15  |         |         |          |
| 16 | Load Gear                      | 1   |         | 050-16  | 075-16  | 150-16   |
| 17 | Load Sheave                    | 1   |         | 050-17  | 075-17  | 150-17   |
| 18 | Chain Guide                    | 2   | 025-18  | 050-18  | 075-18  | 150-18   |
| 19 | Left Side Plate Assembly       | 1   | 025-19  | 050-19  | 075-19  | 150-19   |
| 20 | Pawl Spring                    | 2   | 025-20  | 050-20  | 075-20  | 150-20   |
| 21 | Pawl                           | 2   | 025-21  | 050-21  | 075-21  | 150-21   |
| 22 | Snap Ring for Pawl             | 2   | 025-22  | 050-22  | 075-22  | 150-22   |
| 23 | Brake Seat                     | 1   | 025-23  | 050-23  | 075-23  | 150-23   |
| 24 | Ratchet Disc                   | 1   | 025-24  | 050-24  | 075-24  | 150-24   |
| 25 | Friction Disc                  | 2   | 025-25  | 050-25  | 075-25  | 150-25   |
| 26 | Spring                         | 1   | 025-26  | 050-26  | 075-26  | 150-26   |
| 27 | Brake Plate                    | 1   | 025-27  | 050-27  | 075-27  | 150-27   |
| 28 | Bushing                        | 1   | 025-28  | 050-28  | 075-28  | 150-28   |
| 29 | Stop Knob                      | 1   | 025-29  | 050-29  | 075-29  | 150-29   |
| 30 | Brake Cover                    | 1   | 025-30  | 050-30  | 075-30  | 150-30   |
| 31 | Socket Head Screw 6            | 3   | 025-31  | 050-31  | 075-31  | 150-31   |
| 33 | Spring Washer                  |     | 025-32  | 050-32  | 075-32  | 150-32   |
| 34 | Snap Ring for Break Seat       | 1   | 025-33  | 050-33  | 075-33  | 150-33   |
| 35 | Change Over Gear               | 1   | 025-34  | 050-34  | 075-34  | 150-34   |

# LOAD OPERATION

## ! WARNING

Do not operate the chain knob during lifting or lowering. Before operating, make sure that the hoist is out of free chaining mode, and the select lever position meets your operational demands.

The following table shows the select lever position and the lever operation for lifting and lowering.

**Table 4. Hoist & Lever Operation**

| Hoist Operation | Select Lever | Lever Operation  |
|-----------------|--------------|------------------|
| Lifting         | UP           | Clockwise        |
| Lowering        | DN           | Counterclockwise |

Under no load or light load conditions (in the region of 6-5/8 lbs) if the load chain does not move against your operation, operate the lever with the load-side chain pulled lightly (Standard manner).



Figure 3

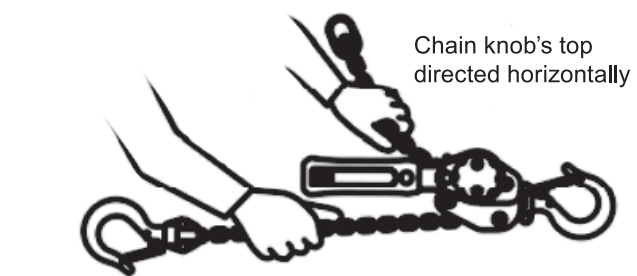


Figure 4

# INSPECTION AND MAINTENANCE

Prior to the initial use, all new, modified, and repaired products should be inspected in accordance with Table 5. Thereafter, items to be inspected are indicated in Table 5 by F (Frequent) or P (Periodic).

Frequent inspections are visual inspections usually carried out by the operator or other authorized personnel. These inspections include listening for unusual sounds that may indicate deficiencies while the product is in operation. Periodic inspections should be audible-visual inspections as with the frequent inspections, with some disassembly to allow for a more detailed inspection if the external conditions indicate that there is a need. Exception: the brakes require more than a simple audible-visual inspection, these must be checked daily by operating the product with and without a load, and they must be stopped in various positions to ensure their safe operation.

**Table 5. Inspection chart**

In the chart, F – Frequent Inspection, P – Periodic Inspection

| Location                                                                              | Check for                                                                     | F                    | P |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------|---|
| Braking mechanism                                                                     | Slipping under load                                                           | ✓                    |   |
|                                                                                       | Hard to release                                                               | ✓                    |   |
| Brake parts                                                                           | Brake Discs                                                                   |                      | ✓ |
|                                                                                       | Pawl: Ratchet                                                                 |                      | ✓ |
|                                                                                       | Pawl: Spring                                                                  |                      | ✓ |
|                                                                                       | Excessive wear                                                                |                      | ✓ |
| Hook                                                                                  | Chemical damage                                                               | ✓                    |   |
|                                                                                       | Cracks (dye penetrant, magnetic particle, or other suitable detection method) |                      | ✓ |
| Hook retaining members (Pins, Bolts, Nuts)                                            | Not tight or secure                                                           |                      | ✓ |
| Hook latch                                                                            | Damaged, does not close                                                       | ✓                    |   |
| Suspension Members (Sheaves, Hand wheels, Chain attachment, Suspension bolts or pins) | Excessive wear                                                                |                      | ✓ |
|                                                                                       | Cracks                                                                        | ✓                    |   |
| Gears                                                                                 | Distortion                                                                    | ✓                    |   |
|                                                                                       | Broken or worn teeth                                                          | ✓                    |   |
|                                                                                       | Cracks                                                                        | ✓                    |   |
| Load Block: Suspension housing                                                        | Inadequate lubrication                                                        | ✓                    |   |
|                                                                                       | Distortion                                                                    | ✓                    |   |
| Trolley: Supporting structure                                                         | Cracks                                                                        | ✓                    |   |
|                                                                                       | Possible inability to continue supporting loads                               | ✓                    |   |
| Bolts, Nuts, Rivets                                                                   | Not tight or secure                                                           |                      | ✓ |
|                                                                                       | WARNING label                                                                 | Removed or illegible | ✓ |

| No | Description                     | Qty | 1/4 Ton | 1/2 Ton | 3/4 Ton | 1-1/2 Ton |
|----|---------------------------------|-----|---------|---------|---------|-----------|
|    | Lever Handle Assembly           | 1   | 025-35  | 050-35  | 075-35  | 150-35    |
|    | Lever Handle                    | 1   | 025-36  | 050-36  | 075-36  | 150-36    |
|    | Selector Lever                  | 1   | 025-37  | 050-37  | 075-37  | 150-37    |
|    | Change Over Pawl                |     | 025-38  | 050-38  | 075-38  | 150-38    |
|    | Snap Ring for Change Over Pawl  | 1   | 025-39  | 050-39  | 075-39  | 150-39    |
|    | Over Pawl                       |     | 025-40  | 050-40  | 075-40  | 150-40    |
|    | Roller                          | 1   | 025-41  | 050-41  | 075-41  | 150-41    |
|    | Change Over Spring              | 1   | 025-42  | 050-42  | 075-42  | 150-42    |
| 36 | Snap Ring                       | 1   | 025-43  | 050-43  | 075-43  | 150-43    |
| 37 | Hand Wheel                      | 1   | 025-44  | 050-44  | 075-44  | 150-44    |
| 38 | Snap Ring for Hand Wheel        | 1   | 025-45  | 050-45  | 075-45  | 150-45    |
| 40 | Handle Sleeve                   | 1   | 025-46  | 050-46  | 075-46  | 150-46    |
| 41 | Bolt & Nut                      | 1   | 025-47  | 050-47  | 075-47  | 150-47    |
| 48 | Load Chain                      | 1   | 025-48  | 050-48  | 075-48  | 150-48    |
| 49 | End Ring                        | 1   | 025-49  | 050-49  | 075-49  | 150-49    |
| 50 | Warning Label [not shown]       | 1   | 025-50  | 050-50  | 075-50  | 150-50    |
| 51 | Pendant Warning Tag [not shown] | 1   | 025-51  | 050-51  | 075-51  | 150-51    |

## Warranty Duration for hoists HITCH

| SERIES       | MODELS MANUAL HOIST AND TROLLEY HITCH                                                                                              | WARRANTY DURATION | REGION                        |
|--------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------|
| PROFESSIONAL | HAND CHAIN HOIST HITCH - CH200, CH200-G, CH200-GS, CH200-GSB, CH360, CH202"STORM", CH203 MC 6, CHM204 MCGMINI, CH205 LARGE-TONNAGE | 5* YEARS          | NORTH, SOUTH, CENTRAL AMERICA |
|              |                                                                                                                                    | 5* YEARS          | EU                            |
|              | LEVER HOIST HITCH - LH200, LH200-G, LH201, LH201G, LH201GS, LH202 MCL6-S, LH203 COMPACT, LHM204 MINI PROFF                         | 3 YEARS           | MIDDLE EAST, AFRICA           |
|              |                                                                                                                                    | 3 YEARS           | ASIAN-PACIFIC AREA            |
|              | TROLLEY GEARED HITCH TR200, TR201, BC202 WJ                                                                                        | 3 YEARS           | RUSSIA, THE CUSTOMS UNION     |
| REGULAR      | HAND CHAIN HOIST HITCH - CH100, CH100-G, CHM104 MINI TYPE, CH101, CH102 TD, CH105                                                  | 2 YEARS           | NORTH, SOUTH, CENTRAL AMERICA |
|              |                                                                                                                                    | 2 YEARS           | EU                            |
|              | LEVER HOIST HITCH - LHM104 MINI TYPE, LH100                                                                                        | 2 YEARS           | MIDDLE EAST, AFRICA           |
|              |                                                                                                                                    | 2 YEARS           | ASIAN-PACIFIC AREA            |
|              |                                                                                                                                    | 2 YEARS           | RUSSIA, THE CUSTOMS UNION     |