

DRAPER®

INSTRUCTIONS FOR 0.75, 1.5, 3 tonne Lever Hoists

Stock Nos. 26188
26189
26190

Part Nos. LH750B
LH1500B
LH3000B

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



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GENERAL INFORMATION

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

1. TITLE PAGE

1.1 INTRODUCTION:

USER MANUAL FOR:

0.75, 1.5 & 3 tonne LEVER HOISTS

Stock nos. 26188, 26189, 26190

Part nos. LH750B, LH1500B, LH3000B

1.2 REVISIONS:

Date first published August 2012.

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: <http://www.drapertools.com/b2c/b2cmanuals.pgm>

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1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

- WARNING!** Information that draws attention to the risk of injury or death.
- CAUTION!** Information that draws attention to the risk of damage to the product or surroundings.
- NOTE!** Important information.

1.4 COPYRIGHT © NOTICE:

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3. GUARANTEE

3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England. Telephone: (023) 8026 6355.

A proof of purchase must be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the Terms of Warranty, repair and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

This hoist is for lifting not pulling.

4.2 SPECIFICATION

Stock No.....	26188	26189	26190
Part No.....	LH750B.....	LH1500B.....	LH3000B
Load	750kgs	1500kgs	3000kgs
Test load	1125kgs	2250kgs	4500kgs
Lift height	1.5M.....	1.5M.....	1.5M
Load chain diameter	6x18mm.....	7x21mm.....	10x30mm
Hook aperture.....	26mm.....	29mm.....	37mm
Weight	7kg.....	11.2kg	21.1kg

4.3 HANDLING & STORAGE

Take care when handling and lifting. Do not drop the hoist.

Store in a dry location out of the reach of children.

5. HEALTH & SAFETY INFORMATION

5.1 GENERAL SAFETY INSTRUCTIONS

⚠ WARNING: - Before the use of this or any other lifting equipment all persons who install, operate or maintain this equipment should read and fully understand this manual. If lever hoists or any other lifting equipment presents the possibility of personal injury or damage to property, then it should not be used.

- Ensure that the lever hoist is fully inspected before every use.
- Lever hoists are only to be operated by a trained operator.
- Do not exceed the maximum lifting capability of the lever hoist.
- Ensure that the fixing point is substantial enough to take the load which is intended to be lifted.
- Ensure the lever hoist can swivel freely on this upper hook.
- Never allow the lever hoist housing to bear any support when lifting a load.
- Ensure the suspension hook fits and sits freely within the support clamp.
- Ensure the chains are not twisted or obstructed to prevent free running of the chain.
- Never use undue effort to force the lever hoist to operate.
- Never allow oil or grease to come in contact with the brake.
- Never use the load chain as a sling.
- Never wrap the chain around the load which is to be lifted.
- Never leave the load suspended in the air unattended.
- Do not lower the hook to a point where the chain becomes taut between the lift wheel and the loose end pin.
- **THE LEVER HOIST:**
- Ensure the lever hoist is positioned directly over the load which is to be lifted, this will prevent side lifting.
- While the load is lifted ensure no persons are under the load.
- Never use a lever hoist or any other overhead lifting equipment for lifting persons.
- Never use a lever hoist in wet, explosive or corrosive environments.

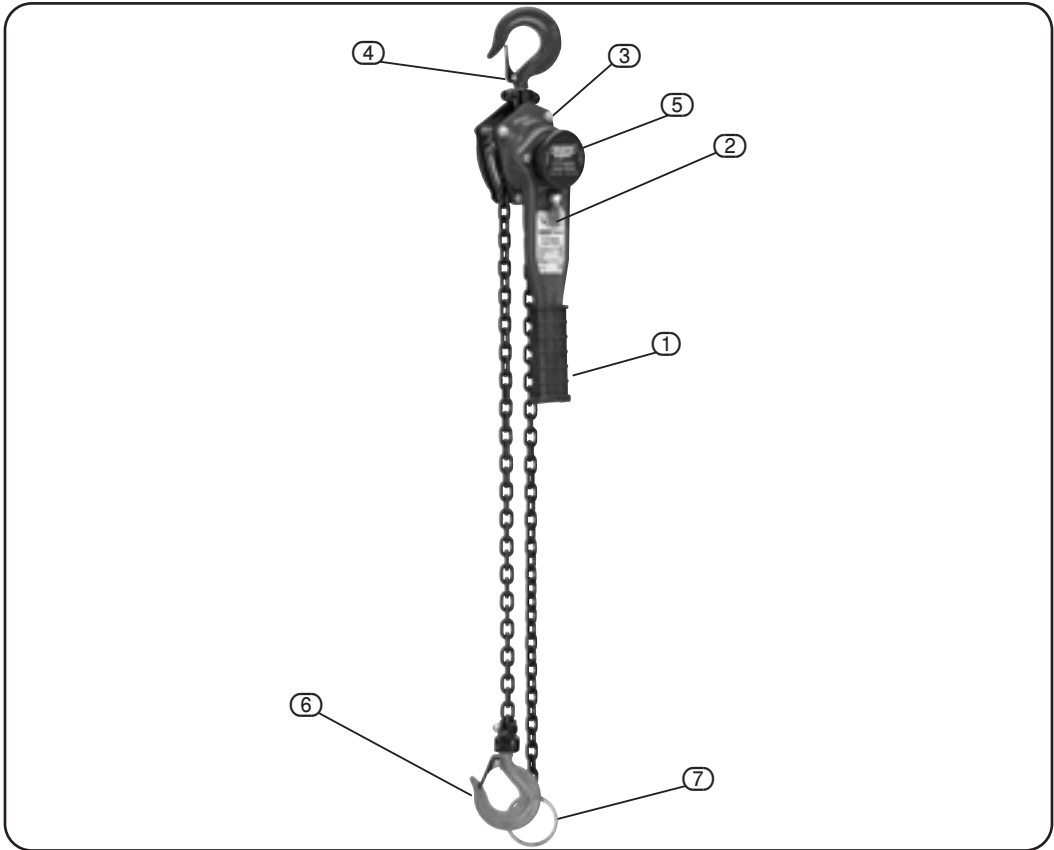
6. UNPACKING & CHECKING

6.1 PACKAGING

After removing the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. If in doubt, do not use the product and contact the dealer from whom it was purchased.

The packaging materials (plastic bags, polystyrene, etc.), must be disposed of in an appropriate refuse collection container. These materials must not be left within the reach of children as they are potential sources of danger.

6.2 WHAT'S IN THE BOX?



- ① Lever.
- ② Direction lever.
- ③ Drum.
- ④ Upper hook.
- ⑤ Free chain dial.
- ⑥ Lower hook.
- ⑦ Chain end stop.

7. HEALTH & SAFETY INFORMATION

Always ensure that the product is fully inspected before every use, this will prevent damage or serious injury to person.

7.1 FREQUENT INSPECTION

A visual inspection is to be carried out by a trained person before every use. This inspection should consist of:

- Evidence of slippage on the braking mechanisms.
- Inspection of the load chain for wear, lubricant, damaged chain links or dirt.
- Hooks for damage, fracture marks, cracks, latch engagement and latch operation.
- Any missing parts or safety devices
- Housing is not distorted.

7.2 PERIODIC INSPECTION

An appointed person who over see the visual inspection and ensure that records are taken to ensure continue evaluation.

It will be necessary to partially disassemble the unit to perform more periodic inspection.

The periodic inspections are to include the following -

- more in depth inspection to look for wear, cracks or distortion of all parts of the lever hoist including - hooks, chains, chain guide, hook collar, dead end stud, all nuts, bolts and pins, shafts, gears and bearings.
- Inspection of the chain for excessive wear or stretch, (see maintenance section for further details on Gauging Load Chain Wear).
- Inspection for wear on the tip of the pawl, teeth or the ratchet and pockets of the lift wheel and hand wheel, hook block sheaves and hanger sheaves
- Loose or missing bolts, nuts, pins or rivets.
- Inspection for corroded, stretched or broken pawl spring.
- Inspection of the brake compartment for worn, glazed, or oil-contaminated friction discs and scoring of the hand wheel hub, ratchet and friction hub.

Any deficiencies noted are to be corrected before the hoist is returned to service.

Any parts that are deemed unserviceable are to be replaced with new parts before the unit is returned to service.

8. OPERATION AND USE

8.1 WARNING:

Before each use ensure that the lever hoist is fully inspected.

Ensure that all chains are not twisted. The lever hoist must always be rigged to lift in a straight line. The hoist must always be free to swivel on the upper hook and not be disrupted in any way. Under no condition should the hoist frame or hanger bear any support or weight of the load.

NOTE:

The ambient operating temperature of this lever hoist is between -10°C and $+50^{\circ}\text{C}$.

8.2 MOUNTING THE LEVER HOIST (Fig.1.):

Ensure that the hook sits over the holding beam of a secure beam clamp or dolly. The secure latch should be in the closed position once the unit is hung. Before attaching the load, ensure the hand lever runs freely.

8.3 FREE CHAINING (Fig.2.):

In this mode, the chain can be pulled through the hoist in either direction by hand for quick attachment to the load.

With no load on the hoist, set the directional lever to the neutral position. Pull the free chaining dial out and rotate in a counterclockwise direction, until the dial is sitting on top of the cam guide. The internal gearing is now disengaged and the chain can be pulled through the hoist in either direction.

WARNING:

NEVER RELEASE THE FREE CHAIN DIAL WHEN THE LOAD IS ATTACHED AS THIS WILL CAUSE INJURY.

After the chain has been pulled to the length required, disengage the free chaining feature by moving the direction lever to the load position and then rotate the free chaining dial in a clockwise direction, until the dial engages the cam guide. Pull the chain in either direction to ensure the unit is out of free chaining mode.

8.4 LIFTING THE LOAD:

Ensure that the lower hook is attached to the load securely over the centre of its gravity, this will prevent the load from tilting or twisting while the lift happens. Ensure that the surrounding area is free of obstacles.

To lift the load, set the directional lever to the load position and operate the lever, the load will be pulled and tensioned. To lower the load, set the directional lever in the unload position and lower the load by operating the lever. Ensure that the area below the load is free of obstacles.

Be aware that the braking mechanism can become heated during prolonged lowering of loads.



FIG.1



FIG.2

9. MAINTENANCE

Clean the chain with a non-acid and non-caustic type solvent.

9.1 HOOK INSPECTION:

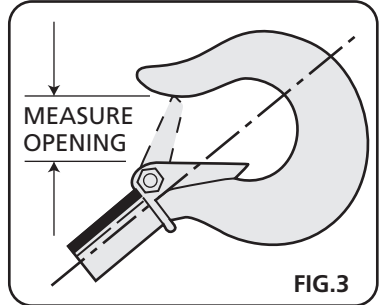
Hooks damaged from chemicals, deformations or crack, or that have more than a 10 degree twist from the plane of the unbent hook or excessive opening or seat wear must be replaced.

Hooks that are opened and thus allow the latch to disengage the tip, must be replaced.

Any hook that is twisted or has excessive throat opening indicates abuse or over-loading of the unit. Other load sustaining components of the hoist should be inspected for damage.

CHECK TO ENSURE THAT THE LATCH IS NOT DAMAGED OR BENT (FIG.3.):

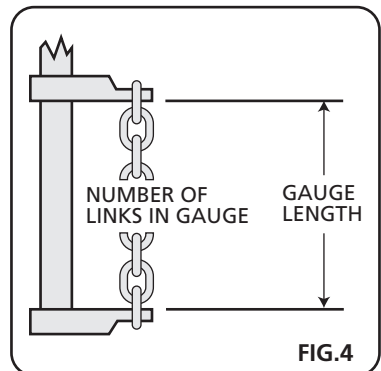
If the opening has been increased due to use, measure the throat opening, depress the latch against the hook body as shown, once the measurement has been taken compare against the chart below.



Hoist Capacity	Replace hook when the opening is greater than
750kgs	28.6mm
1500kgs	31.9mm
3000kgs	40.7mm

9.2 GAUGING LOAD CHAIN WEAR (Fig.4.):

To determine if the load chain should continue to be used. Check the gauge lengths as shown. Chain worn beyond length indicated, severely nicked, gouged or twisted should be replaced before using the chain hoist again. The chain should be cleaned, free of twists and pulled taut before measuring. In cases where the wear is localized and not beyond serviceable limits, the chain should be replaced.



10. MAINTENANCE

Hoist Capacity	Dia of Chain Stock	No of links to Gauge	Max. Length Allowable used Chain
750kgs	6mm	11	203.0mm
1500kgs	7.0mm	11	236.8mm
3000kgs	10mm	11	338.3mm

LUBRICATION:

Lubricate the load chain with a light coating of chain oil. Be sure the lubricant reaches the bearing surfaces between the links, remove the excess oil from the chain using a cloth.

WARNING:

The brake is designed to operate dry. Do not use any grease or lubricant on the braking surfaces. When lubricating pans adjacent to the brake, do not use excessive amount of lubricant, which could seep onto the brake surfaces.

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