



**DRAPER**<sup>®</sup>

0.5, 1, 2, 3, 5 TONNE

# Chain Hoists

82441, 82446, 82458, 82461, 82466.



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

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## 1.1 INTRODUCTION:

**USER MANUAL FOR: 0.5, 1, 2, 3, 5 TONNE CHAIN HOISTS**

**Stock No's: 82441, 82446, 82458, 82461, 82466.**

**Part No's: CH500C, CH1000C, CH2000C, CH3000C, CH5000C.**

## 1.2 REVISIONS:

**Date first published September 2017.**

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

**Downloads are available from:** <http://drapertools.com/manuals>

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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.

## 1.4 COPYRIGHT © NOTICE:

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# 3. GUARANTEE

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## 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 Sales Desk: (023) 8049 4333** or:

**Product Helpline (023) 8049 4344.**

A proof of purchase must be provided.

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 except where tools are hired out when the guarantee period is 90 days 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, repairs 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

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## 4.1 SCOPE

This chain hoist is designed and constructed to lift it's stated capacity, this hoist is for lifting and not pulling loads.

## 4.2 SPECIFICATION

Stock No's. ....	82441 .....	82446 .....	82458 .....	82461 .....	82466 .....
Part No's. ....	CH500C .....	CH1000C .....	CH2000C .....	CH3000C .....	CH5000C .....
Load .....	500kgs .....	1000kgs .....	2000kgs .....	3000kgs .....	5000kgs .....
Test load .....	750kgs .....	1500kgs .....	3000kgs .....	4500kgs .....	7500kgs .....
Lift height .....	3M .....	3M .....	3M .....	3M .....	3M .....
Hand force (when fully loaded N) .....	210 .....	330 .....	320 .....	380 .....	410 .....
Hook aperture .....	28mm .....	32mm .....	36mm .....	46mm .....	46mm .....
Weight .....	8.5kgs .....	10.5kgs .....	16kgs .....	25kgs .....	39kgs .....

## 4.3 HANDLING AND 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 AND SAFETY INFORMATION

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## 5.1 HEALTH AND SAFETY INFORMATION

**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 chain 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 chain hoist is fully inspected before every use.
- Chain hoists are only to be operated by a trained operator.
- Do not exceed the maximum lifting capability of the chain hoist.
- Ensure that the fixing point is substantial enough to take the load which is intended to be lifted.
- Ensure the chain hoist can swivel freely on this upper hook.
- Never allow the chain hoist housing to bear any support when lifting a load.
- Ensure the suspension hooks 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 chain 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 CHAIN HOIST:
  - Ensure the chain hoists 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 chain hoists or any other overhead lifting equipment for lifting persons.
  - Never use a chain hoist in wet, explosive or corrosive environments.

## 6. TECHNICAL DESCRIPTION

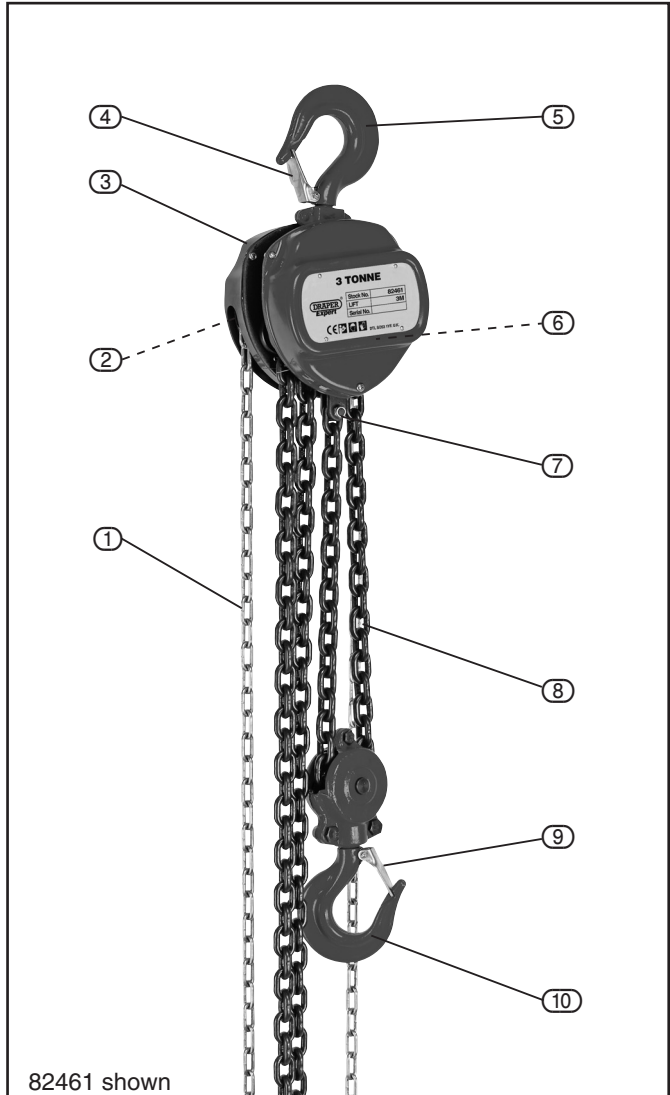
### 6.1 PACKAGING

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 IDENTIFICATION

- ① Hand chain.
- ② Hand chain wheel.
- ③ Cover.
- ④ Secure latch.
- ⑤ Upper hook.
- ⑥ Load chain wheel.
- ⑦ Anchorage of the load chain.
- ⑧ Load chain.
- ⑨ Secure latch.
- ⑩ Load hook.



# 7. INSTRUCTIONS FOR USE

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## 7.1 WARNING:

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

Ensure that all chains are not twisted. The 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.

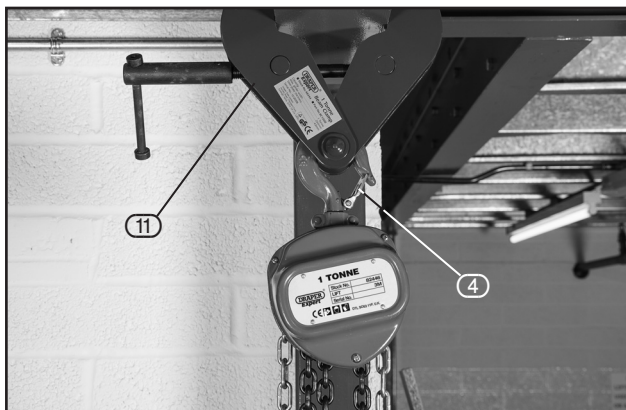
### NOTE:

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

## 7.2 MOUNTING THE CHAIN HOIST

Ensure that the hook sits over the holding beam of a secure beam clamp (11) or beam trolley. (ensure that the beam clamp/trolley is of the same or greater weight rating as the chain hoist).

The secure latch (4) should be in the closed position once the unit is hung. Before attaching the load, ensure the hand chain runs freely.



## 7.3 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, move the chains through your hands in a clockwise direction at an even rate. Sudden jerks can cause the load to twist and tilt. To lower the load, run the chain in an anti-clockwise direction, 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.



## 8. MAINTENANCE

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Care should be taken when handling and disposing of any lubricants. Clean the chain with a non-acid and non-caustic type solvent.

### 8.1 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 those allow the latch to disengage the tip, must be replaced.

Any hooks that are 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.

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

### 8.2 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.

### 8.3 PERIODIC INSPECTION

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

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

The periodic inspection are to include the following -

- more in depth inspection to look for wear, cracks or distortion of all parts of the chain 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.
- Inspection for wear on the tip or 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. MAINTENANCE

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### **HAND CHAIN:**

The hand chain should be cleaned, inspected and gauged in the same manner as the load chain. The hand chain does contain an un-welded link. Therefore, if it is necessary to shorten the hand chain or replace the hand chain, a hand chain connecting link will be required. Note, opening and closing the connecting link more than twice is not recommended. Also, connecting links must not be made by cutting the weld side of a standard hand chain link. Care must be taken to ensure that there is no twists in the hand chain loop.

### **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.

# NOTES

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## CONTACTS

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E-mail: [sales@drapertools.com](mailto:sales@drapertools.com)

General Enquiries: (023) 8026 6355

Service/Warranty Repair Agent:

For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST

PJMC0817

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