# OPERATING & MAINTENANCE INSTRUCTIONS

# "RAPTOR" Manual Chain Hoist





**Note:** The Owner/Operator must read carefully and understand All the information presented here before operation.

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THANK YOU FOR PURCHASING THE <u>"RAPTOR CHAIN HOIST"</u>. FOR YOUR SAFETY, CORRECT OPERATION & MAINTENANCE - PLEASE CAREFULLY READ THIS INSTRUCTION MANUAL PRIOR TO OPERATION.

**NOTE:** All of the information reported herein is based on data available at the moment of printing. The manufacturer reserves the right to modify its own products at any moment without notice and incurring in any sanction.

# INTRODUCTION

The "RAPTOR" hand Operated Manual Chain Hoist is a versatile lifting device that can be used for either lifting or lowering, using a suitable fixed anchor point or suspended from a suitable trolley.

The frame, cover and lever have been manufactured from high quality steel stampings, and the gears from heat treated steel. Both the upper and lower swivel hooks from forged steel and fitted with safety catches.

# 2 - CORRECT OPERATION / GENERAL WARNINGS

- 1) Retain this Manual for future reference.
- Do not use this hoist in areas containing flammable vapors, liquids, gasses or combustible dust or fiber.
- 3) Do not use the hoist in highly corrosive, abrasive, wet environments.
- 4) The hoist can be used in ambient temperatures between -10C and +50C.
- 5) At ambient temperatures below 0C the hoist brake should be inspected and tested before operation.
- 6) Never exceed the capacity stated on the hoist.
- 7) Do not use the hoist for lifting or transporting of personnel.
- Do not lift or transport loads while any personnel are under or within the danger zone.
- 9) It is the operator's responsibility to ensure the load is attached to the hoist in a safe and secure manner before movement of load.
- 10) Never leave a suspended load unattended.
- 11) Never use other devices to exert extra force to the lifting or lowering application.
- 12) Never use the load chain to sling around item to be lifted.
- 13) Respect hoist, always place hoist safely/carefully on the ground.

## 3 - IN SERVICE INSPECTION & MAINTENANCE

## **INITIAL INSPECTION**

Check that the correct hoist and the capacity of hoist are suitable for the job in hand.

Prior to operating hoist for the first time, the hoist must be checked by a competent person. Visually check hoist has been delivered and/or stored in a safe and undamaged condition.

## IN-SERVICE INSPECTION - Before operation

Prior to operating hoist check all components are free from excessive wear and general condition of hoist is good. Inspect the housing, chain and hooks are all in good working condition. If hoist is fitted with brake it should be tested before operation. Check that anchor point is sufficient to take the intended load.

#### LOAD CHAIN INSPECTION

The Load Chain should be inspected for wear, defects, and deformations or superficial/corrosion marks before use, if operator is unsure of condition of chain it should be checked by a trained and competent person. Clean and lubricate at regular intervals.

#### TOP/BOTTOM HOOK INSPECTION

Both the top and bottom hooks should be inspected for wear, defects, and deformations or superficial/corrosion marks before use. Check that safety catches are fitted and are working correctly if operator is unsure of condition of hooks, they should be checked by a trained and competent person.

# **REEVED CHAIN INSPECTION**

If the unit is fitted with two or more falls of chain, the hoist should be inspected to make sure the load chain is free from kinks and/or not twisted.

REMEMBER - The load chain welds should always face away from load sheave

#### 4 - OPEARTION

## ATTACHING/LIFTING LOADS

Secure top hook to an appropriate anchor point.

Attach lower hook to the load so that it is seated correctly in the bow of the hook and check that the safety catch has closed. Do not wrap the chain around the load and hook back onto the load chain and do not let the load come into contact with the load chain. Make sure the top and bottom hooks are in a straight line and the frame is free to swivel on the upper hook.

Lifting Load – Use the Hand Chain Only – With the Handwheel Casing facing towards the operator, Pull on the Right Hand side of the hand chain (Clockwise). The load will begin to rise. The hoist has been designed for hand use only; do not use an extension on the lever.

## LOWERING/LOOSENING LOAD

Use the Hand Chain Only – With the Handwheel Casing facing towards the operator, Pull on the Left Hand side of the hand chain (Counter Clockwise). The load will begin to lower. The hoist has been designed for hand use only; do not use an extension on the lever.

#### 5 - MAINTENANCE/INSPECTION

To maintain continuous and satisfactory operation, a regular inspection procedure must be initiated so that worn or damaged parts can be replaced before they become unsafe. The intervals of inspection must be determined by the individual application and are based upon the type of service to which the hoist is subjected. To test the brake a test load with capacity the same as the hoist should be used.

The hoist should be visually inspected by the operator / competent person daily or before each use.

To check for worn parts the hoist may need to be disassembled this should only be carried out by a qualified repairer and not by the operator.

Annual inspection and re-certifying of the hoist should be carried out in accordance to European Safety Regulations – therefore the hoist must be returned to a recognized and competent lifting equipment repair centre.

# 6 - EC DECLARATION of CONFORMITY 2006/42/EC

We hereby declare, that the design, construction and commercialized execution of the below mentioned machine complies with the essential health and safety requirements of the <u>EC MACHINERY DIRECTIVE</u>. The validity of this declaration will cease in the case of any modification or supplement not being agreed with the manufacturer beforehand.

Furthermore, validity of this declaration will cease in case that the machine will not be operated correctly and in accordance to the operating instruction manual and/or not being inspected regularly.

PRODUCT DESCRIPTION - Hand Operated Manual chain Hoist

MODEL RANGE - MH Series

CAPACITY - 500Kgs to 10,000Kgs

IDENTIFICATION - Located on Serial Plate on Machine

And stated on individual EC

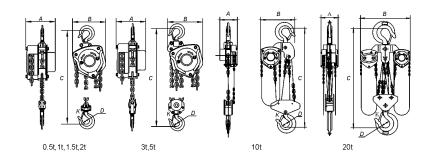
Declaration of Conformity supplied

separate to this booklet

RELEVANT EC

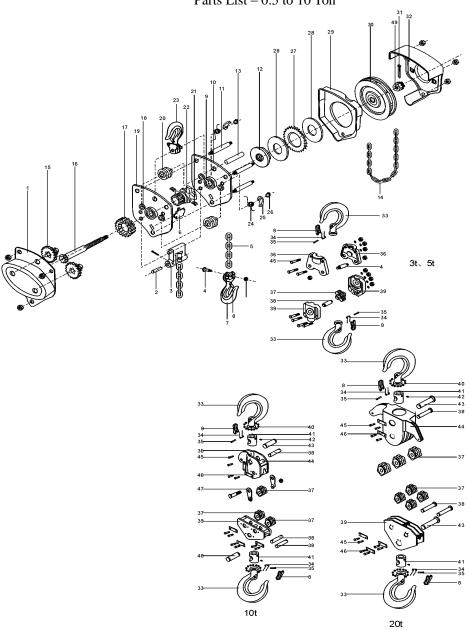
DIRECTIVES - The Machinery Directive 2006/42/EC

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Capacity	tons	0.5	1	1.5	2	3	5	10	20
Standard lift m		2.5	2.5	2.5	3	3	3	3	3
Running test load	kn	7.5	15	22.5	30	45	75	150	300
Effort required to lift ma	ax. Load N	231	309	320	360	340	414	414	414×2
No. of columns of lo	ad chain	1	1	1	1	2	2	4	8
Load chain diameter	r mm	6	6	8	8	8	10	10	10
	А	131	140	161	161	161	186	207	215
	В	127	158	174	187	199	253	398	650
Dimensions (mm)	С	270	317	399	414	465	636	798	890
(11111)	D	35	35.5	45	42.5	50	64	85	110
	К	30	28	36	33.5	40	50	64	85
Net weight	kg	10	12	19	20	27	45.5	83	193
Packing measureme	ent cm	22×15×19.5	23×18×19.5	28×18×19.5	28×21×24	32×21×26	40×21×31	50×41×21	64×38×64
Extra weight per meter	extra lift kg	1.7	1.7	2.3	2.3	3.7	5.6	9.7	19.4

# Parts List -0.5 to 10 Ton



# Record of Examination

Date	Description of inspection	Signed