

*Oz Blok*

# Hand Chain Hoists

For 0.5t, 1t, 2t, 3t,  
5t, 10t, & 20t

These Hand Chain  
Hoists meet or  
exceed the following  
standards:

AS1418.2  
ANSI B30.21  
ANSI B30.16

This Manual covers -  
Red Hoists without Overload  
Protection and Yellow Hoists  
with Overload Protection.

## Operating Instruction Manual



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## SERVICE NOTES

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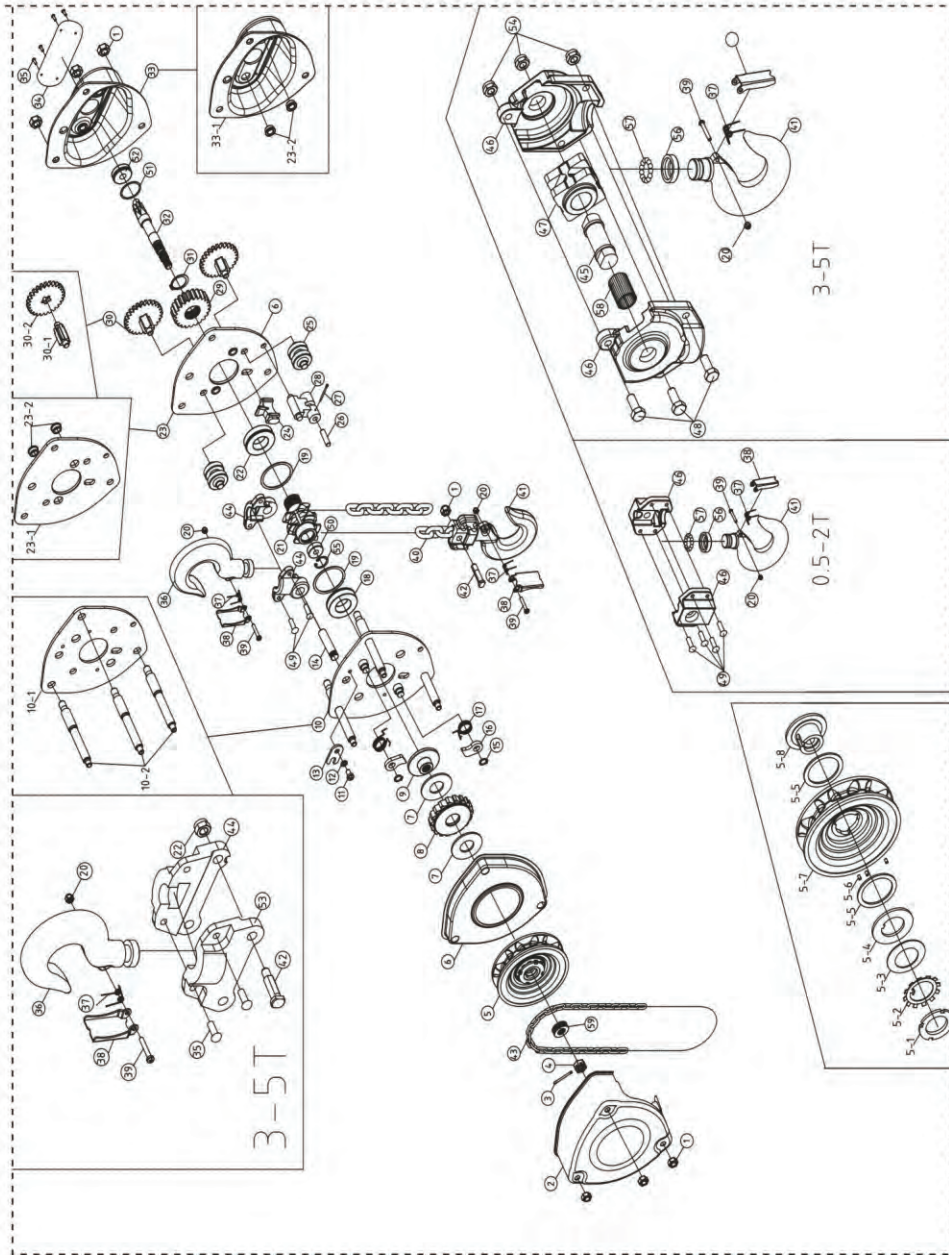
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## SPARE PARTS (0.5 Tonne - 20 Tonne)



## FIVE YEAR LIMITED WARRANTY

**OzBlok** products are guaranteed to be free of defects in materials and workmanship. If one of these products fails during the first 5 years of operation due to defective materials or workmanship it will be repaired or replaced at our discretion. Normal wear and tear of moving parts is excluded from this guarantee. This guarantee does not apply to any product showing signs of misuse, overloading, alteration or improper maintenance.

## WARRANTY POLICY

Any product for which there is a warranty claim must be returned prepaid to an authorized **OzBlok** warranty depot along with proof of purchase.

For information on **OzBlok** products, please contact your local distributor:



Manufactured and tested for and on behalf of:

**Hoisting Equipment Specialists Pty Ltd**

31 Mangrove Lane  
Taren Point NSW 2229 Australia  
Phone: 1300 792 464  
[www.hesgroup.com.au](http://www.hesgroup.com.au)  
[www.ozblok.com.au](http://www.ozblok.com.au)

## SAFETY INFORMATION

It is the responsibility of the owner/user to install, inspect, test, maintain, and operate these products in accordance with AS1418.2 standards.

These general instructions deal with the normal installation, operation and maintenance situations encountered with the products described herein.

This product should not be installed, operated or maintained by any person who has not read all 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 shall operate and maintain this equipment.

Equipment described herein is not 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.

## PRE-INSTALLATION INSTRUCTIONS

Check for damage during shipment. DO NOT install or use a damaged product. Check and verify 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.

### OPERATION

Before initial operation:

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

Before each shift, where applicable:

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

Before operating:

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

## SAFETY PRECAUTIONS

- READ** these instructions and relevant Australian Standard - AS1418.2 before installing, operating, or maintaining this equipment.
- WARN** personnel of approaching loads.

## SPARE PARTS LIST

No.	Parts	No.	Parts	No.	Parts
1	Hex nut of hand wheel cover 0.5T:M6/1-2T:M8/3T-20T:M10	23-1	Right side plate	43	Hand chain
2	Hand wheel cover	23-2	Steel ring	44	Top hook housing A
3	Split pin	24	Stripper	45	Shaft of bottom hook's Axle
4	Hexagon slotted nut:0.5&1&1.5&2&5: M12	25	Guide roller	46	Bottom hook's housing B
5	Hand wheel	26	Pin of suspension plate	47	Axle of bottom hook's housing
6	Brake disc cover	27	Split pin	48	Screw bolt of bottom hook's housing B M8*35mm
7	Friction plate	28	End anchor	49	Rivet of bottom hook housing 0.5T:φ5*18mm/1T:φ5*20mm/ 1.5-2T:φ6*20mm
8	Ratchet gear	29	Splined gear	50	Roller bearing
9	Brake seat	30	Disc gear assembly	51	Snap ring
10	Left side plate assembly	30-1	Gear 1st	52	Roller bearing
10-1	Left side plate	30-2	Gear 2nd	53	Top hook housing B
10-2	Support pin	31	Snap ring	54	Hex nut of bottom hook's housing A M8
11	Screw of lock plate:M6*10mm	32	Pinion shaft	55	Washer
12	Spring washer of lock plate	33	Gear cover assembly	56	Sleeve of bearing
13	Lock plate	33-1	Gear cover	57	Ball bearing of bottom hook
14	Pin of top hook	23-2	Steel ring	58	Needle of bottom hook's Axle
15	Washer	34	Nameplate	59	Thrust bearing
16	Pawl	35	Rivet of name plate:φ2.5*6mm	5-1	Locking nut of overload protection
17	Spring of pawl	36	Top hook	5-2	Brake seat ring of overload protection
18	Bearing A	37	Spring of safety latch	5-3	Spring of overload protection
19	Snap ring	38	Safety latch	5-4	Clamp of overload protection
20	Hex nut of bottom hook's housing 0.5-1T:M6/1.5-20T:M8	39	Pin of safety latch	5-5	Friction disc of overload protection
21	Chain sprocket	40	Load chain	5-6	Roll pin of overload protection
22	Hex nut of bottom hook's housing: 0.5- 1T:M6/1.5-20T:M8	41	Bottom hook	5-7	Ratchet gear of overload protection
23	Right side plate assembly	42	Pin of bottom hook housing	5-8	Brake seat of overload protection

\*30 Individual components of hand wheel overload clutch are not available. Replace with complete assembly, refer to figure. \*30 for complete assembly.

\*\* 3 t to 20 t Hook Assembly Parts. We do not recommend to buy an individual part for Hook Assembly.

## CHAIN

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

1. Clean chain before inspection.
2. Test hoist with load and observe operation of chain over load sheaves.
3. Slacken chain and inspect contact points for excessive wear. Refer to Figure 2.



Figure 2

## OVERLOAD PROTECTION

If you have purchased an **OzBlok** Hand Chain Hoist fitted with overload protection, the following information should be read in conjunction with all other information contained in this Operator's Manual:

- The "LOAD-SAFE" overload protection consists of the components shown as sub-parts of part #30 in the exploded view of the product.
- The overload protection is calibrated at the time of manufacture and should not require re-calibration if the hoist is used as intended.
- The overload clutch can be re-calibrated using factory supplied tools available only to **OzBlok** repair agents.
- In the unlikely event of the overload clutch being damaged, complete replacement kits are available. Individual clutch components are **NOT** available.

## C. DO NOT, WHERE APPLICABLE:

1. Lift more the rated load.
2. Operate the product when it is restricted from forming a straight line with the direction of loading.
3. Operate with twisted, kinked or damaged chain.
4. Operate if chain is not seated in sheaves or sprockets.
5. Wrap chain around load or use chain as a sling.
6. Operate unless load is properly applied to the saddle or bowl of the hook.
7. Operate if load is applied to the tip of the hook.
8. Operate with damaged or missing hook latches.
9. Lift people or lift loads over people.
10. Operate with side-pulling or side-loading of load to hoist.
11. Operate a damaged or malfunctioning product.
12. Operate with other than hand power.
13. Remove, deface, or obscure warning label or labels.
14. Leave load suspended if unattended, unless specific precautions have been instituted.
15. Lengthen load chain or repair damaged load chain by welding.
16. Use chain as a ground for welding.

## INSPECTION AND MAINTENANCE

Prior to initial use, all new, modified and repaired products shall be inspected in accordance with Table 1. Thereafter, items to be inspected are indicated in Table 1 by F (Frequent) or P (Periodic).

**Frequent Inspections** - Visual inspection by the operator or other authorized person. This inspection includes listening for unusual sounds while the product is operated that may indicate deficiencies.

**Periodic Inspections** - Audible-visual inspection as for Frequent Inspections, with some disassembly to allow a more detailed inspection if external conditions indicate the need.

**Exception:** Brakes require more than audible-visual inspection. Check daily by operating the product with and without load, stopping at various positions to ensure safe operation.

**TABLE 1 - INSPECTION CHART**

In chart, F indicates Frequent Inspection, P indicates Periodic Inspection

LOCATION		CHECK FOR	F	P
Braking mechanism		Slipping under load	✓	
		Hard to release	✓	
Brake parts:	Brake Discs	Glazing		✓
		Oil contamination		✓
	Pawl: Ratchet	Excessive wear		✓
	Pawl: Spring	Corrosion: stretch		✓
Hook		Chemical damage	✓	
		Deformation	✓	
		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 attachments, Suspension bolts or pins)		Excessive wear		✓
		Cracks	✓	✓
Gears		Distortion		✓
		Broken or worn teeth		✓
		Cracks		✓
		Inadequate lubrication		✓
Load Block: Suspension housing		Distortion	✓	✓
		Cracks	✓	✓
Trolley: Supporting structure		Possible inability to continue supporting loads		✓
Bolts, Nuts, Rivets		Not tight or secure		✓
WARNING Label		Removed or illegible	✓	

**HOOKS**

**WARNING**

1. Any hook that requires replacement because of excessive bends, twists, or throat opening indicates abuse or overloading of the product. Therefore, other load-supporting components of the product should be inspected for possible damage when such conditions are found.
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 hooks and measure throat opening at least once a month. Between regular inspections check visually daily for deformation, distortion, twisting, damage and missing or damaged hook latches.

Hooks damaged from chemicals, deformations or cracks, or that have more than 10° twist from the plane of the unbent hook or excessive opening or seat wear, must be replaced. Also, hooks that are opened to the extent that the latch does not engage the tip must be replaced. See figure 1.

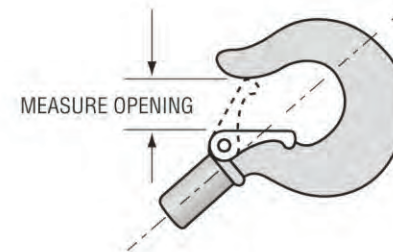


Figure 1 - Hook throat opening

Replace hook when opening is greater than	Hoist capacity (tonnes)
29mm	0.5
29mm	1
30mm	2
36.5mm	3
40mm	5
54mm	10
100mm	20

Note: Top and Bottom Hooks have same dimensions.