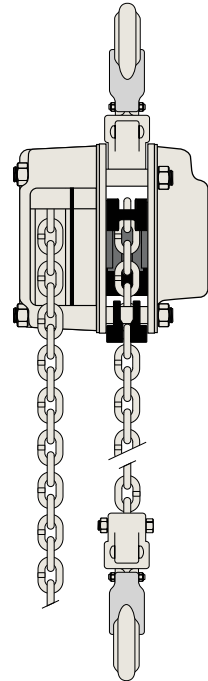
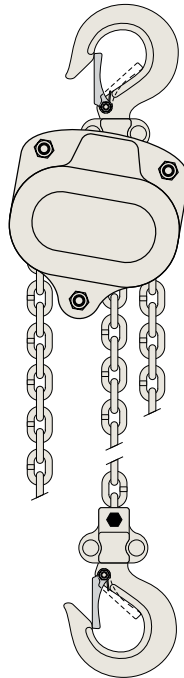


W-3 Series CHAIN BLOCK

Operational Instruction Manual



ISO9001
ISO14001

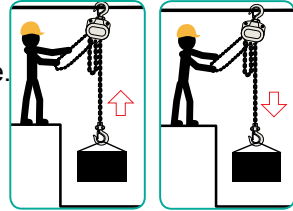
FEATURES:



Warning: New operator must be trained prior to use!

Five prominent features in design and in service are Inherent with W-3 Series Chain Block;

- Safety in operation with minimum maintenance.
- High efficiency and Light hand pull.
- Light weight and easy handing.
- Fine appearance with compact size.
- Durability in service.



APPLICATION:

The W-3 Series Chain Block is a portable lifting device easily operated by hand chain it is suitable for use in factories, mines, farms, construction sites, wharves, docks and warehouses for installation of equipment, as well as for loading and unloading goods it is specially advantageous for lifting work in open air grounds and places where no power supply is available. The chain block can be attached to a trolley of any type as a travelling chain block. It is suitable to monorail overhead conveying system, travelling crane and jib crane.

OPERATION INSTRUCTIONS:

1. Judge the weight of the load to be lifted and make sure that the weight is not over the rated capacity of the chain block Never overload the block on any occasion.
2. Careful Inspection should be made to the parts, such as hooks, load chain, braking device, etc. and the lubrication of the Block. The chain block can only be put into operation when it is found to be in good condition.
3. Before lifting, inspect the hooks to see whether they are securely attached. Obliquity of the hooks and load suspension at hook tip are not permissible. For perfect performance of the block, the load chain should be kept vertically straight without any twist so as to prevent it from tangling.
4. During operation, the operator should stand in the plane of the hand wheel (9). To lift the load, pull the hand chain (15) to rotate the hand wheel in clockwise direction. When pulling the hand chain in the reverse direction the hand wheel will be separated from brake seat, the ratchet disc checked by pawl will be released, and the load will be lowered down smoothly. Do not pull the hand chain in a position oblique to the plane of the hand wheel to prevent tangling of the hand chain and turning of the block.
5. For the sake of safety passing or working under a lifting load is strictly forbidden.
6. While lifting or lowering a load the hand chain should be pulled steadily so as to prevent it from jerking or tangling.
7. Stop operation immediately in case the hand chain cannot be pulled any further, Don't ask more hands for pulling. Proceed Inspection as follows:
 - If there is anything entangled with the load.

- Whether there is any trouble with the parts of the block.
- Whether the load weight is over the rated capacity of the block.

CONSTRUCTION:

The W-3 Series Chain Block is designed with a transmission mechanism of symmetrically managed two-step spur gears it comprises the following principal parts hand chain, hand wheel, brake, driving gear shaft, disc gear, pinion shaft, spline gear, chain sprocket and load chain. (See page 6, Construction of body).

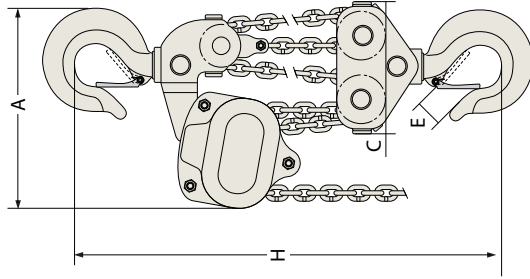
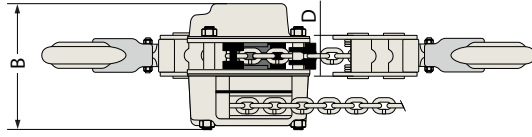
On pulling the hand chain the hand wheel rotates in clockwise direction, presses the friction plates and ratchet disc tightly against the brake seat and causes these parts to rotate in unison.

The driving gear shaft turns the disc gear, pinion shaft and spline gear to rotate, hence the load chain sprocket which is mounted on the spline gear actuates the load chain to lift the load smoothly and firmly.

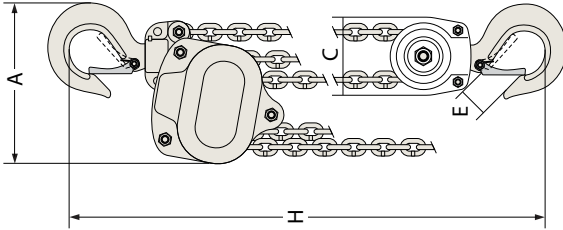
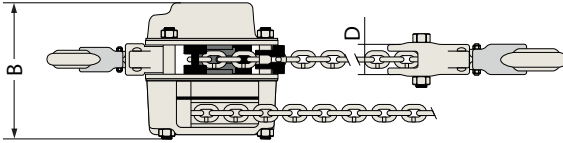
The brake used is a ratchet disc with a set of single-acting friction plates it holds up itself on load and the pawls meshed with the ratchet disc by force of the spring thus ensuring the brake to work safely.

MAINTENANCE:

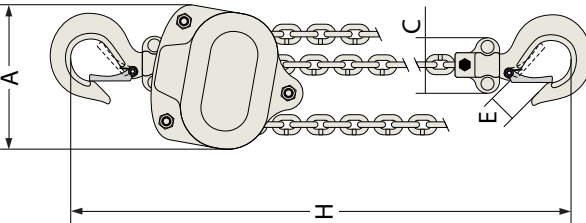
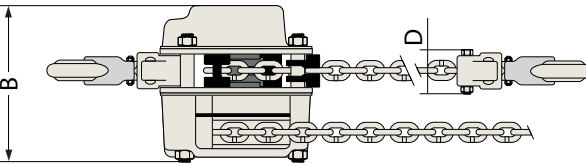
1. Clean off the dirt on the chain block after use and store it in a dry place to keep it from getting rusty and corrosive.
2. Clean the parts with kerosene and smear the gears and bearings with grease once a year by a competent person.
3. Align the o marks of the two gears (8) while assembling as shown in Section View c-c.
4. The rollers of the chain sprocket bearing may be stuck with grease to the journal of the chain sprocket before fitting them into the outer race of the bearing on the side plate.
5. While assembling the brake mechanism care should be taken to mesh the slanting teeth of the ratchet disc and the pawl. Make sure that the pawl is controlled by the spring sensitively and reliably. Then turn the hand wheel clockwise after screwing it onto the driving shaft and it must press the disc and the plates on the brake seat turning it counter clockwise there should be clearances between the disc and the plates.
6. Transition fit is applied to the stay (3) and the right side plate. Don't dismantle them, or they will get loose.
7. Never allow any unqualified person to disassemble the block. Blocks shall be serviced and tested by a qualified person.
8. After cleaning and repairing the block should be subjected to no-load test and heavy load test. A chain block can be put into operation after it has been tested and found in good condition.
9. Keep clean the friction surfaces of the brake while lubricating or operating the block. Brake mechanism should be inspected regularly for prevention of faulty braking and falling of the load.



WLL: 10T



WLL: 3T, 5T



WLL: 0.25T, 0.5T, 1T, 1.5T, 2T

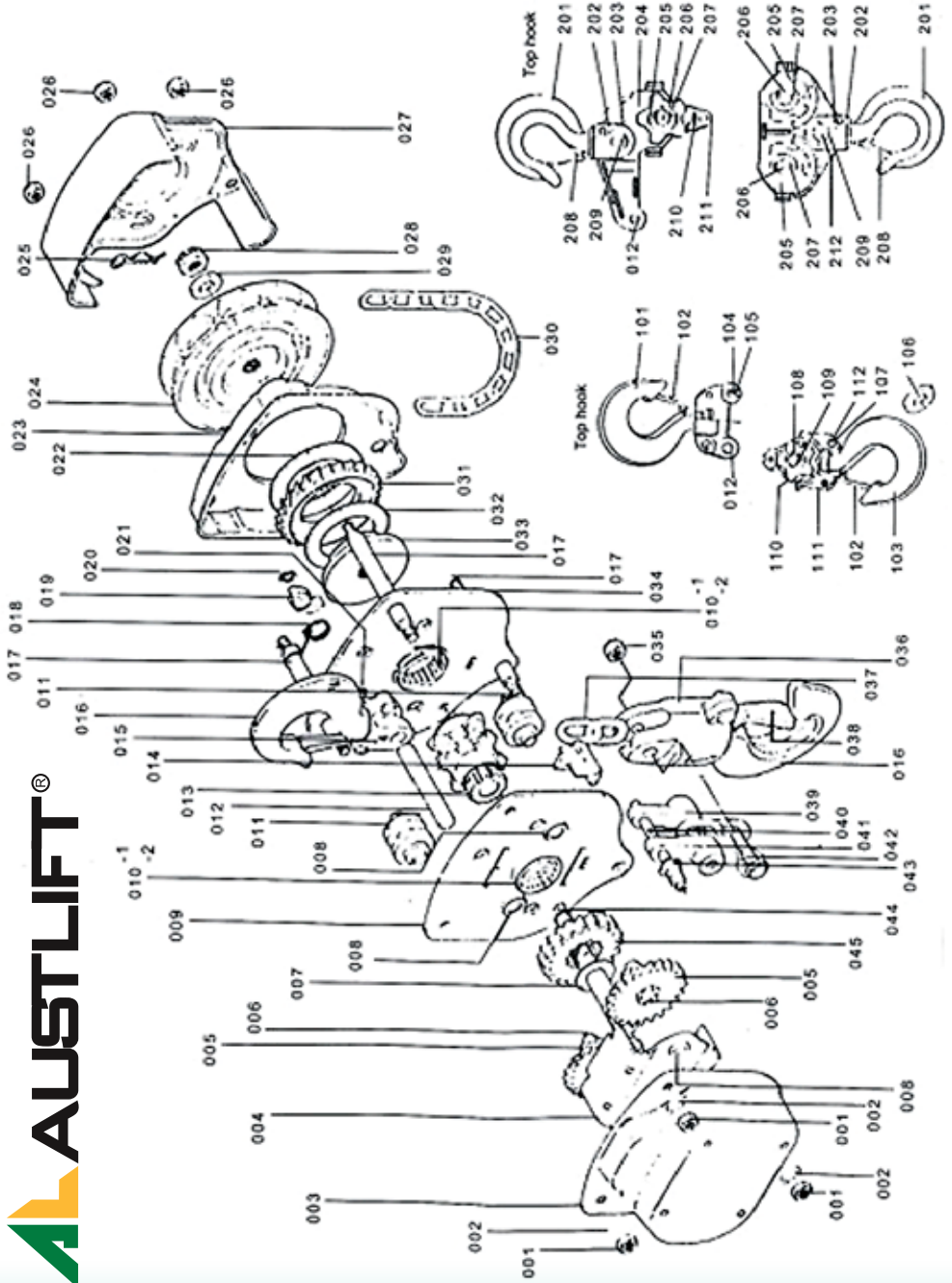
Warning: New operator must be trained prior to use!



DIMENSIONS

3M Chain Code	6M Chain Code	WLL Tonne	A mm	B mm	C mm	D mm	E mm
111002	-	0.25	95	97	27	27	18
111005	111505	0.5	140	131	60	33	31
111010	111510	1	156	151	61	31	33
111015	111515	1.5	176	151	60	44	38
111020	111520	2	223	183	67	58	40
111025	111525	3	223	151	106	85	44
111030	111530	5	252	183	133	64	49
111035	111535	10	380	183	263	88	64
111040	111540	15	420	230	310	95	80
111045	111542	20	480	320	580	100	95

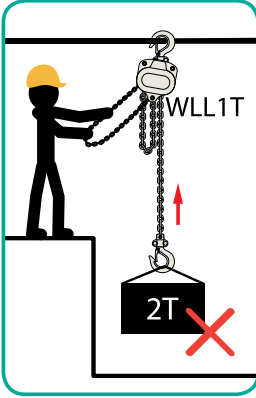
WLL	0.25T	0.5T	1T	1.5T	2T	3T	5T	10T	15T	20T
3M CODE	111002	111005	111010	111015	111020	111025	111030	111035	111040	111045
6M CODE	-	111505	111510	111515	111520	111525	111530	111535	111540	111542
Test Load(T)	0.32	0.63	1.25	1.88	2.5	3.75	7.5	12.5	18.75	25
Pulling Effort(Kg)	≤20	≤27	≤31.5	≤36	≤40	≤47.5	≤48	≤49.5	≤49.5	≤49.5
Load Chain Size (mm)	4	5	6	7.1	8	7.1	9	9	10	10
No. of chain falls	1	1	1	1	1	2	2	4	6	8
Net Weight(Kg)	3	8.2	11.3	13.2	21.3	21.7	39.7	66		
Chain Weight/M (Kg)	0.35	0.6	0.8	1	1.42	1	1.7	1.7	2	2
Packaging Dimensions(cm)	18x11x11.6	22x17x23	24x18x23	26x18x26	32x20x29	32x23x38	40x20x36	54x50x31		



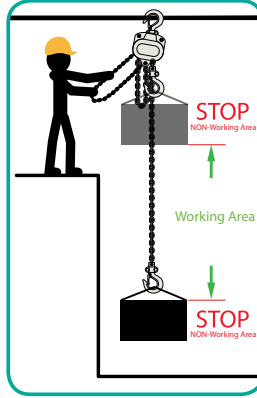
KEY	PART NAME	QUANTITY	KEY	PART NAME	QUANTITY	KEY	PART NAME	QUANTITY
001	Nut	3	025	Cotter Pin	1	104	Top Suspension Pin	1
002	Spring washer	3	026	Nut	3	105	Screw Washer	1
003	Gear Cover	1	027	Wheel Cover	1	106	Hand Wheel Washer(3T)	2
004	Support Plate	1	028	Pinion Nut	1	107	Screw(5T)	3
005	2st Gear	2	029	Hang Wheel Washer	1	107	Screw Washer(3T)	2
006	3ird Gear	2	030	Hand Chain	1	107	Screw Washer(3T)	2
007	Pinion Washer	1	031	Ratchet Gear	1	108	Shaft	1
008	Gear Bushing	4	032	Brake Disk B	1	109	Needle(3T, 5T)	24,29
009	Side Plate(2)	1	033	Break Seat	1	110	Idle Sheave	1
010-1	Bearing Race	2	034	Side Plate(1)	1	111	Bottom Hook Frame	2
011	Load Chain Guide	2	035	Screw Washer	1	112	Screw(5T)	3
021	Hook Pin	1	036	Bottom Hook Hold	1	112	Screw(3T)	2
013	Load Sheave	1	037	Load Chain	1	201	Hook	2
014	Chain Stripper	1	038	Safety Latch	1	202	Steel Balls	26
015	Top Hook Hold	1	039	End Anchor A	1	203	Hook Hold Screw	2
016	Hook	2	040	End Spring	1	204	Beam	1
017	Stay Bolt	3	041	End Anchor B	1	205	Sheave	3
018	Spring	1	042	Chain Pin	1	206	Needle	75
019	Pawl	1	043	End Spring	1	207	Shaft	3
020	Snap Ring	1	044	Pinion Shaft	1	208	Safety Latch	2
021	Pawl Stud	1	045	Splinted Gear	1	209	Hook Bearing-Snap Ring	2
022	Brake Disk A	1	101	Top Hook Combination	1	210	Suspension Plate	2
023	Brake Cover	1	102	Safety Latch	2	211	Top Pin- Pinch Nut	1



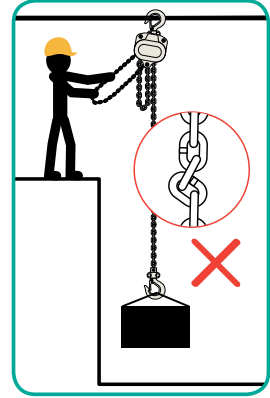
DANGER! Don't when operating Chain Block's



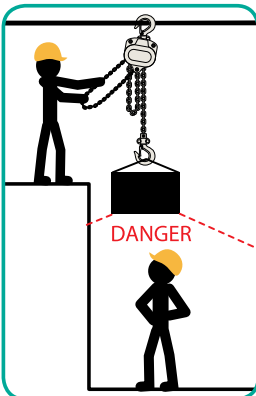
Don't lift a load exceeding the capacity of the chain block.



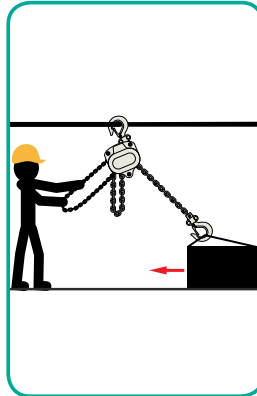
Don't try to hoist further than the hook limit to the block or lower a load to the limit of the chain stop.



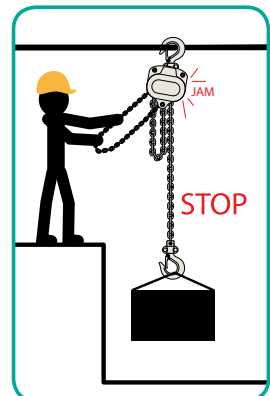
Don't hoist a load while the chain is kinked, twisted or damaged



Don't walk under a suspended load.



Don't use a chain block to drag a load along the ground.



Don't try to pull hand chain if the block jams.

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