

USER MANUAL

CHAIN BLOCK W-4, W-5

W-4 Series: 110002, 110005, 110010, 110015, 110020, 110025, 110030, 110035, 110045, 110505, 110510, 110515, 110520, 110525, 110530, 110535, 110540, 110542

W-5 Series: 112010, 112015, 112020, 112025, 112110, 112115, 112120, 112125



1300 100 120

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AUSTRALIAN LIFTING CENTRE PTY LTD

Chain Block (W4 Series)

Austlift industrial grade W4 series manually operated chain blocks are used for general hoisting operation such as mining, construction, industrial lifting and domestic applications. Also available in black color.

- Standard height of lift is 3M, 6M and 12M. Other height of lift available upon request.
- Manufactured for ease of operation, and light weight in design.
- Robust, durable and compact in construction.
- All blocks come with ball bearing swivel hook.
- Individually serial numbered with test certificate and instruction manual supplied.



WLL (T)	W4 SERIES			Wt. (kg)	LIFT (M)	TEST LOAD (T)	PULLING EFFORT (N)	CHAIN FALLS	EXTRA Wt/M (kg)
	3M	6M	12M						
0.25	110002	-	-	7.5	2.5	0.375	187	x1	1.5
0.5	110005	110505	-	9.3	2.5	0.75	224	x1	1.6
1	110010	110510	110710	12	2.5	1.5	281	x1	1.8
1.5	110015	110515	-	17	2.5	2.25	290	x1	2.1
2	110020	110520	110720	19.7	2.5	3	328	x1	2.4
3	110025	110525	-	29	3	4.5	307	x2	3.1
5	110030	110530	110730	42.5	3	7.5	332	x2	4.6
10	110035	110535	110735	73.6	3	12.5	342	x4	9.8
15	-	110540	-	155	3	18.75	400	x6	14.1
20	110045	110542	-	186.2	3	25	435	x8	19.6

Chain Block All Black (W4 Series)

Perfect for entertainment industry.

* Note: Chain Bag sold separately.



WLL (T)	CODE	CHAIN LENGTH (M)	Wt. (kg)	LIFT (M)	TEST LOAD (T)	PULLING EFFORT (N)	CHAIN FALLS	EXTRA Wt/M (kg)
1	110550	10	12	2.5	1.5	281	x1	1.8



Chain Block (W5 Series, with overload protection)

Austlift industrial grade W5 series manually operated chain blocks with overload protection are used for general hoisting operation such as mining, construction, industrial lifting and domestic applications. The overload protection is an added feature on these chain blocks protecting users and the unit itself. Standard height of lift is 3 and 6 metre. Also available in black color.

- Other height of lift available upon request.
- Manufactured for ease of operation, and light weight in design.
- Robust, durable and compact in construction. all blocks come with ball bearing swivel hook.
- Individually serial numbered with test certificate and instruction manual supplied.
- Overload protection for added safety.

**AS/NZS
1418.2**

Certified

**Instruction
Manual**

**WLL From
1t~3t**

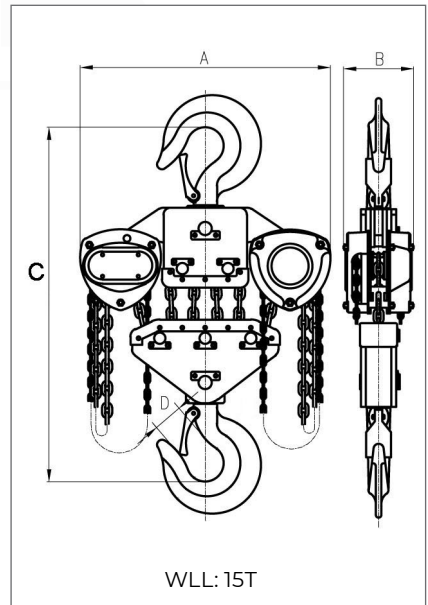
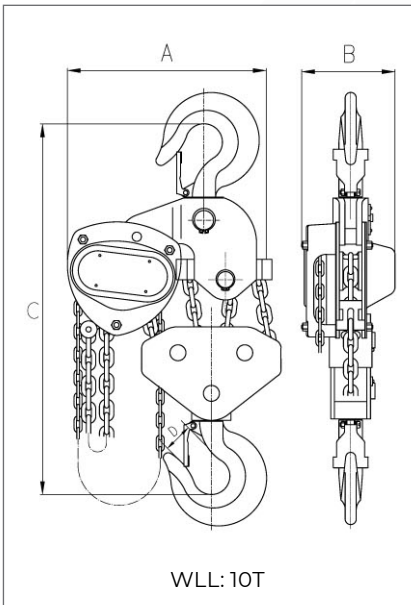
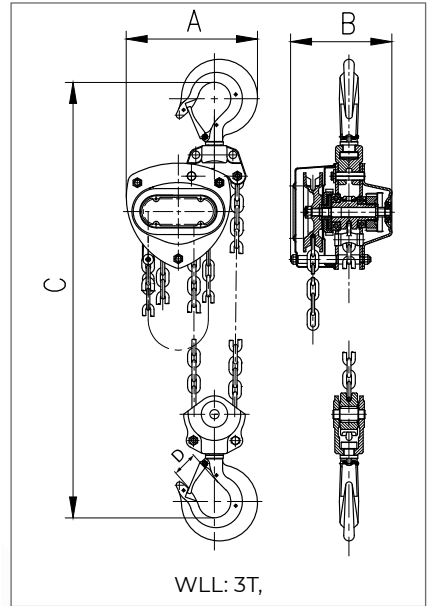
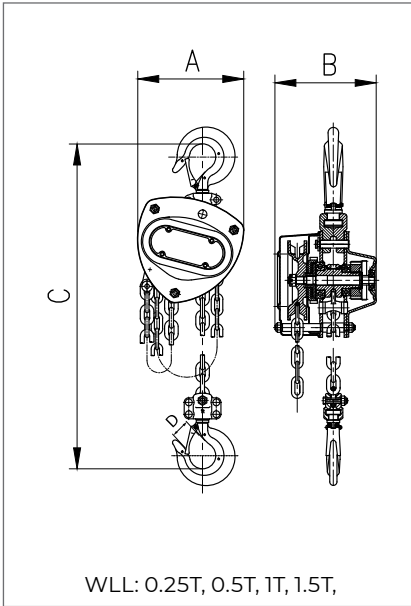


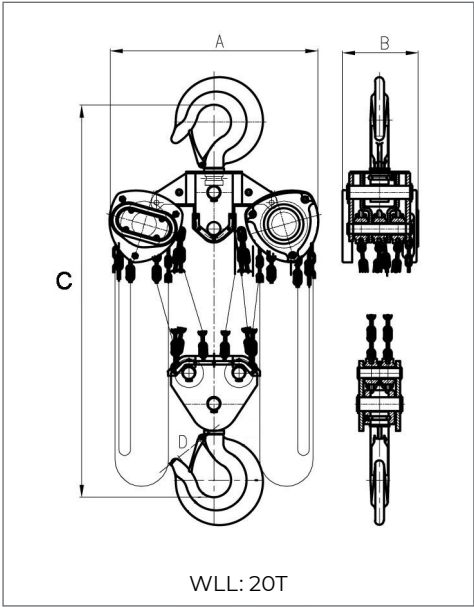
WLL (T)	W5 SERIES		Wt. (kg)	LIFT (M)	TEST LOAD (T)	PULLING EFFORT (N)	CHAIN FALLS	EXTRA Wt/M (kg)
	3M	6M						
1	112010	112110	12	2.5	1.5	281	x1	1.8
1.5	112015	112115	17	2.5	2.25	290	x1	2.1
2	112020	112120	19.7	2.5	3	328	x1	2.4
3	112025	112125	29	3	4.5	307	x2	3.1

Chain Bag (W4 Series)

CHAIN BAG CODE	SUITABLE FOR				
	WLL (T)	CHAIN BLOCK CODE			
		3M	6M	10M	12M
003800SP4	1	110010	110510	110550	110710
003801SP4	2	110020	110520	-	110720
003803SP4	3	110025	110525	-	-
003806SP4	5	110030	110530	-	110730
003807SP4	10	110035	110535	-	110735







WLL (T)	W4 SERIES			W5 SERIES		DIMENSIONS (mm)			
	3M	6M	12M	3M	6M	A	B	C (Min)	D
0.25	110002	-	-	-	-	120	115	280	21
0.5	110005	110505	-	-	-	148	133	346	28
1	110010	110510	110710	112010	112110	173	150	376	32
1.5	110015	110515	-	112015	112115	196	173	442	38
2	110020	110520	110720	112020	112120	211	176	470	40
3	110025	110525	-	112025	112125	230	174	560	38
5	110030	110530	110730	-	-	279	201	688	50
10	110035	110535	110735	-	-	463	201	765	64
15	-	110540	-	-	-	730	189	1090	85
20	110045	110542	-	-	-	860	169	1170	85



WARNING
New operator must be trained prior to use!

Construction

The W4 & W5 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.

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.

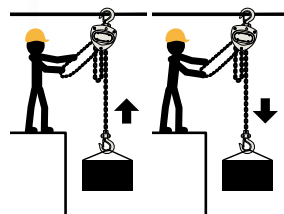
The driving gear shaft turns the disc gear, pinion shaft and spline gear to rotate, hence the load chain sprocket which is mounted on the spline gear actuates the load chain to lift the load smoothly and firmly.

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.

Features

Five prominent features in design and in service are inherent with Chain Block;

1. Safety in operation with minimum maintenance
2. High efficiency and Light hand pull
3. Light weight and easy handling
4. Fine appearance with compact size
5. Durability in service
6. **Overload protection equipped in W5 Series**



Application

The W4 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.

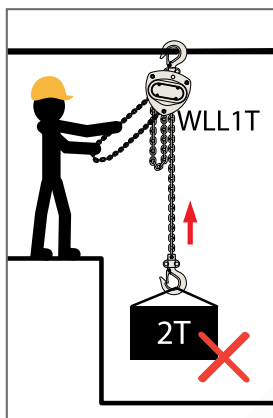
How to use W4/W5 Chain Block

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. To lift the load, pull the hand chain 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.

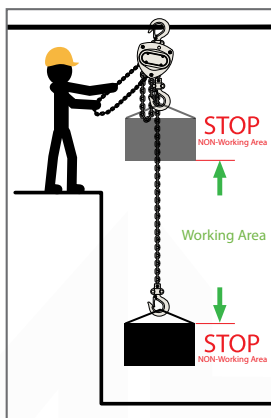


WARNING
New operator must be trained prior to use!

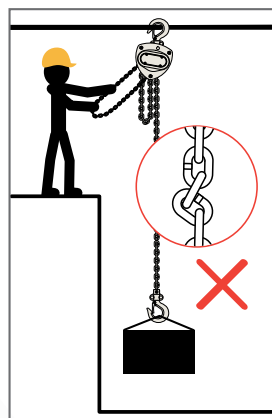
Care In Use



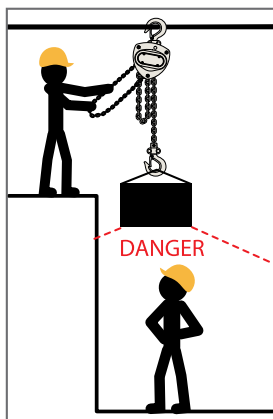
DO NOT lift a load exceeding the capacity of the chain block.



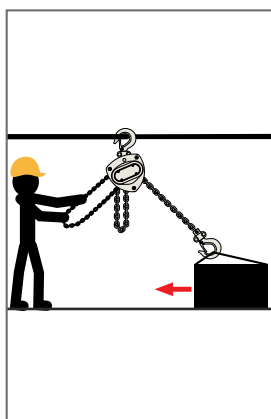
DO NOT try to hoist further than the hook limit to the block or lower a load to the limit of the chain stop.



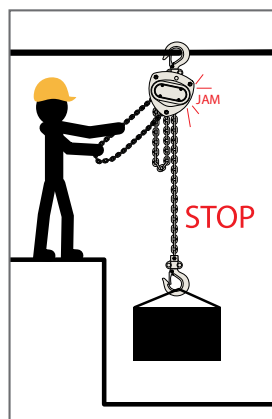
DO NOT hoist a load while the chain is kinked, twisted or damaged.



DO NOT walk or stand under a suspended load.



DO NOT use a chain block to drag a load along the ground.

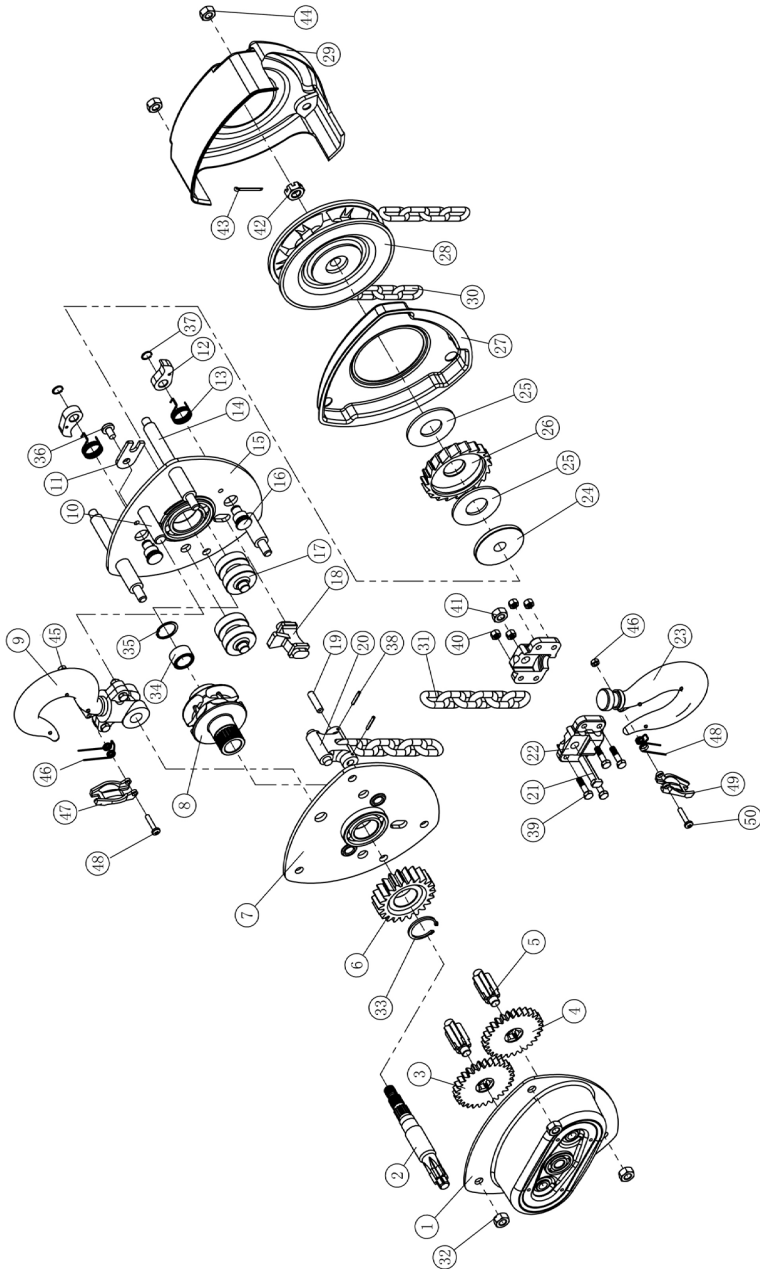


DO NOT try to pull hand chain if the block jams.

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 While assembling as shown In Section View.
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 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

W4 & W5 Chain Block Spare Parts



W4 & W5 Chain Block Spare Parts																
1	Gear cover	11	Positioning plate		21	Suspension load pin		31	Load chain		41	Nut				
2	Long shaft gear	12	Pawl		22	Bottom hook frame		32	Nut		42	Slotted nut				
3	Disk gear 1st	13	Pawl spring		23	Bottom hook assy		33	Circlip for shaft		43	Split pin				
4	Disk gear 2nd	14	Shore		24	Brake seat		34	Needle bearing		44	Nut				
5	Short shaft gear	15	Left side plate assy		25	Friction plate		35	Circlip for hole		45	Nut				
6	Spline gear	16	Pawl pin		26	Ratchet wheel		36	Screw		46	Double coil spring				
7	Right side plate assy	17	Guide roller		27	Ratchet wheel cover		37	Circlip for shaft		47	Safety latch				
8	Load chain sprocket	18	Stripper		28	Hand chain wheel		38	Spring pin		48	Pin				
9	Top hook assy	19	End anchor pin		29	Hand wheel cover		39	Bolt							
10	Hook connector	20	End anchor		30	Hand chain		40	Nut							
WLL	W4 SERIES		W5 SERIES		NO. 9		NO. 23		NO. 25		NO. 30		NO. 31		NO. 46+47+48	
	3M	6M	3M	6M	Top Hook	Bottom Hook	Brake Disk	Hand Chain	Load Chain	Load Chain	Safety Latch					
0.25T	110002	-	-	-	-	-	-	-	003002SP	-	-	-	-	-	-	-
0.5T	110005	110505	-	-	001505SP4	010305SP4	003200SP4	003002SP	003705SP	003805SP4	003810SP4	003815SP4	003820SP4	003830SP4	003850SP4	003860SP4
1T	110010	110510	112010	112110	001510SP4	010310SP4	003200SP4	003002SP	003706SP	003810SP4	003815SP4	003820SP4	003830SP4	003850SP4	003860SP4	003870SP4
1.5T	110015	110515	112015	112115	001515SP4	010315SP4	003200SP4	003002SP	003707SP	003810SP4	003815SP4	003820SP4	003830SP4	003850SP4	003860SP4	003870SP4
2T	110020	110520	112020	112120	001520SP4	010320SP4	003200SP4	003002SP	003708SP	003810SP4	003815SP4	003820SP4	003830SP4	003850SP4	003860SP4	003870SP4
3T	110025	110525	112025	112125	001530SP4	010330SP4	003200SP4	003002SP	003709SP	003810SP4	003815SP4	003820SP4	003830SP4	003850SP4	003860SP4	003870SP4
5T	110030	110530	-	-	001540SP4	010340SP4	003200SP4	003002SP	003710SP	003810SP4	003815SP4	003820SP4	003830SP4	003850SP4	003860SP4	003870SP4
10T	110035	110535	-	-	001545SP4	010345SP4	003200SP4	003002SP	003710SP	003810SP4	003815SP4	003820SP4	003830SP4	003850SP4	003860SP4	003870SP4
15T	-	110540	-	-	001550SP4	010350SP4	003200SP4	003002SP	003710SP	003810SP4	003815SP4	003820SP4	003830SP4	003850SP4	003860SP4	003870SP4
20T	110045	110542	-	-	-	-	-	-	003002SP	003710SP	003810SP4	003815SP4	003820SP4	003830SP4	003850SP4	003860SP4

INSPECTION LOG

Product Type : _____

Year of Mnf. : _____

Serial No. : _____

User Name: _____

[illegible]

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Wholesale of Lifting, Rigging, Load Restraint
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