



Whether you use it on a construction site, dock, garage or on the farm you will see the mechanical advantage your chain block provides will be of great benefit.

Chain Blocks must be used in a safe manner and we strongly urge you to read the safety warnings contained in this manual. When used safely and properly maintained, you can expect years of trouble free and enjoyable operation.

This manual will help you get the best use out of your chain block, and contains important information regarding proper installation, operation and maintenance.

**Chain Block Features and Specifications**

1. Each unit supplied with test certificate, parts list and instructions.
2. Complete three bolt structure that increases the strength of the unit.
3. Dual braking covers offering better protection of the brake.
4. Special knurled lip on top and bottom hooks with high quality safety catches.
5. Patented chain guide prevents chain blockage.
6. The units are complete with G80 alloy steel chain.
7. The rolled in hand cavity allows for multi directional operation of the unit.
8. Heat treated and hardened steel triple spurred gears, shafts and pinions.
9. Secondary Failsafe Chain Stop for extra protection.
10. Complies to AS1418.2.

Capacity (kg)	250	500	1000	2000	3000	5000
Lift (m)	3	3	3	3	3	3
Load	1	1	1	1	2	2
Chain	4 x 12	5 x 15	6.3 x 19	8 x 24	10 x 28	9 x 27
Pull to Lift (N)	235	249	284	343	372	372
Net Weight (kg)	6	10.7	12.2	19.3	35	41
Dia.	A (mm)	120	146	161	202	255
	B (mm)	114	138	154	177	205
	C (mm)	21	23	27	35	39
	D (mm)	31	35	40	50	55
	Hmin (mm)	280	350	383	485	554

**BOTTOM HOOK ASSEMBLY**

No.	Description	500kg	1T	2T	3T
34	Bottom Hook Assy	703034	703134	703234	703334
33	Suspension Pin				
74	Lock Nut				

**TOP HOOK ASSEMBLY**

No.	Description	500kg	1T	2T	3T
30	Top Hook Assy				
31	Double Spring				
32	Safety Latch	703030	703130	703230	703330
67	Lock Nut				
68	Screw				

**Castle Nut & Split Pin**

No.	Description	500kg	1T	2T	3T	5T
61	Split Pin	703062	703162	703262	703362	703562
62	Castle Nut					

**BRAKE DISC SET**

No.	Description	500kg	1T	2T	3T	5T
4	Brake (pair)	703004	703104	703204	703304	703504

**SAFETY CATCH SET - to suit Top & Bottom Hook**

No.	Description	500kg	1T	2T	3T	5T
32	Safety Latch Assy					
31	Double Spring	703032	703132	703232	703332	703532
67	Lock Nut					
68	Screw					

No.	Description	No.	Description
1	Hand Wheel Cover	17	End Anchor
2	Hand Chain Wheel	18	Stripper
3	Protective Cover	19	Guide Roller
4	Friction Plate	20	Load Chain
5	Ratchet Disc	21	Pawl Spring
6	Brake Seat	22	Pawl
7	Positioning Plate	23	Hand Chain
8	Hook Connector	30	Top Hook Assy
9	Left Side Plate Assy	31	Double Spring
10	Load Chain Sprocket	32	Safety Latch
11	Right Side Plate Assy	33	Suspension Pin
12	Split Gear	34	Bottom Hook Assy
13	Disk Gear Assy	60	Lock Nut
14	Shaft	61	Split Pin
15	Gear Cover	62	Castle Nut
16	Name Plate	63	Screw

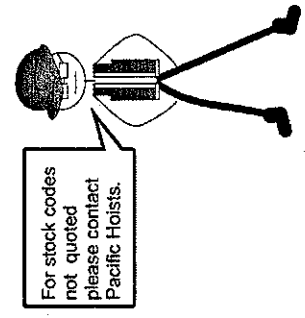
No.	Description
17	End Anchor
18	Stripper
19	Guide Roller
20	Load Chain
21	Pawl Spring
22	Pawl
23	Hand Chain
30	Top Hook Assy
31	Double Spring
32	Safety Latch
33	Suspension Pin
34	Bottom Hook Assy
60	Lock Nut
61	Split Pin
62	Castle Nut
63	Screw

**SI BOTTOM HOOK ASSEMBLY COMPLETE**

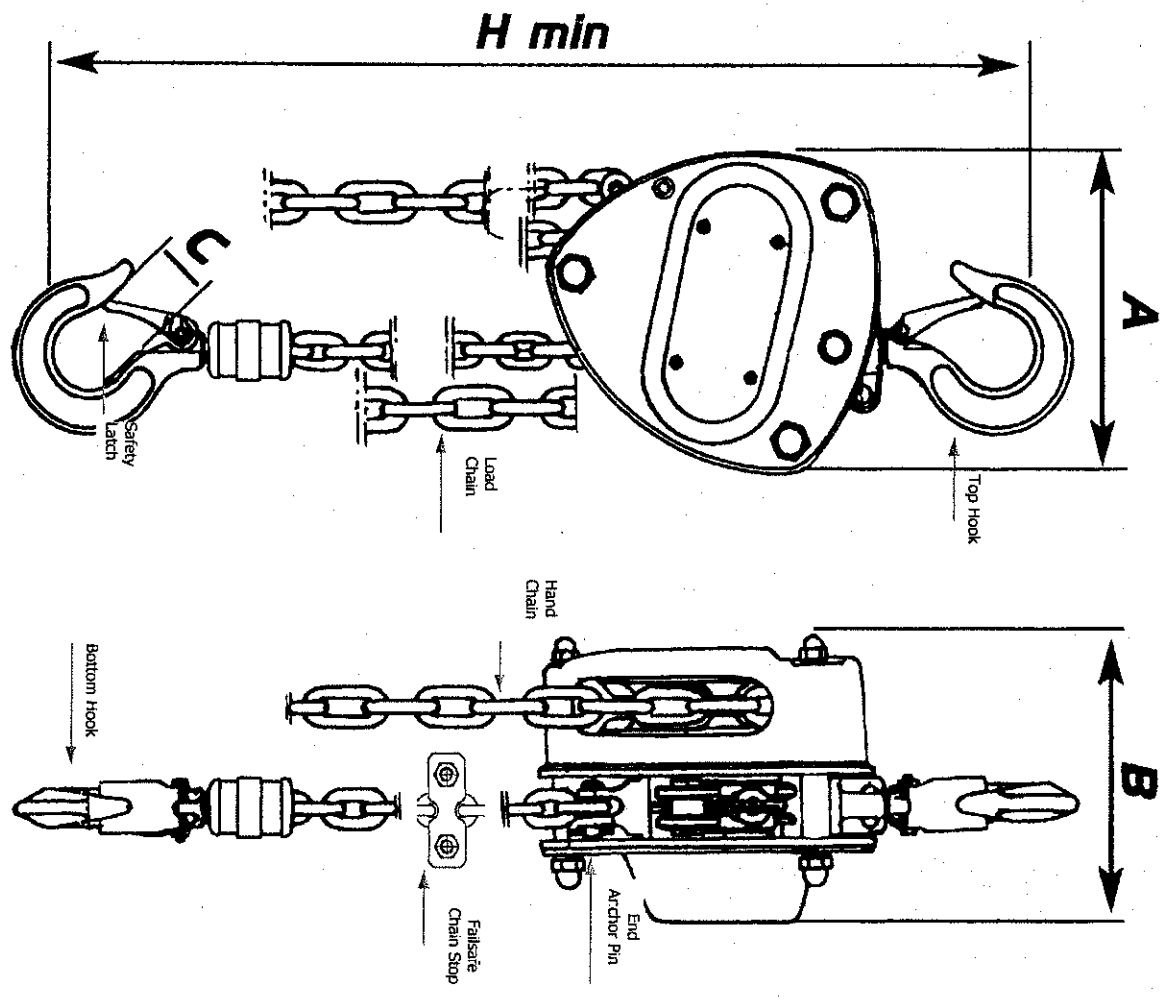
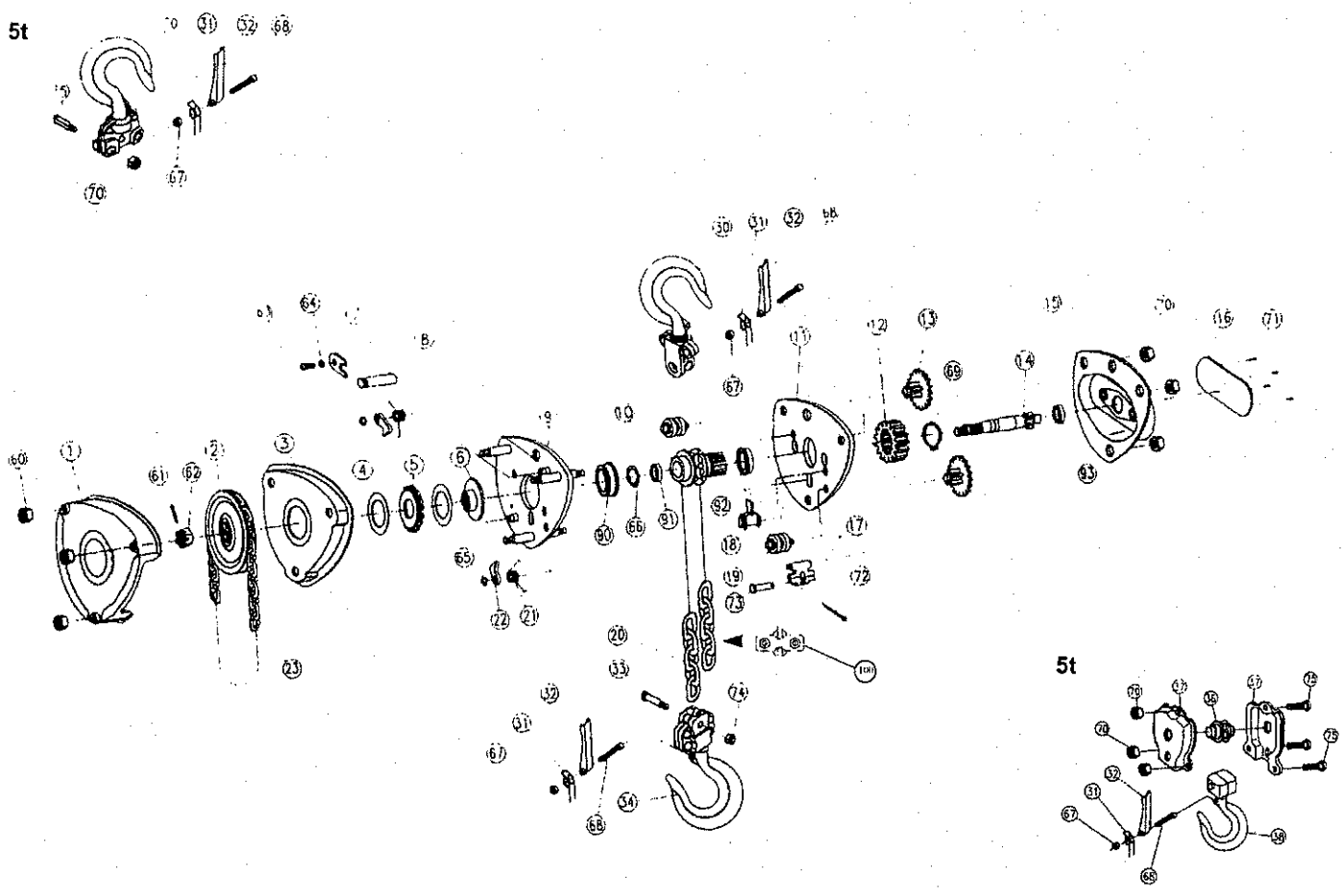
No.	Description	Stock Code
31	Double Spring	
32	Safety Latch	
36	Idle Sheave Assy	
37	Bottom Hook Assy	703534
67	Lock Nut	
68	Screw	
70	Lock Nut	
75	Pin	

**SI TOP HOOK ASSEMBLY COMPLETE**

No.	Description	Stock Code
30	Top Hook Assy.	
31	Double Spring	
32	Safety Latch	
35	Top Hook Pin	703530
67	Lock Nut	
68	Screw	
70	Lock Nut	



No.	Description
64	Spring Washer
65	Snap Ring
66	Snap Ring
67	Lock Nut
68	Screw
69	Snap Ring
70	Lock Nut
71	Name Plate Rivet
72	Split Pin
73	Pin Shaft
74	Lock Nut
90	Left Bearing
91	Needle Bearing
92	Right Bearing
93	Bearing
100	Fail Safe Chain Stop



Inspect Chain Block prior to use for damage that may have occurred in transit, carefully inspect the body and chain for any deformities e.g indentation of housing, nicks in chain, loose or missing parts.

*If damage has occurred to the Chain Block contact the Supplier immediately.*

Confirm that the supporting structure for the chain block is capable of holding the chain block and load. This is your responsibility if uncertain contact a qualified advisor.

**OPERATING INSTRUCTIONS**

1. Suspend Chain Block from your nominated mounting point.
2. At all times the working area must be secure from persons and free from obstructions.
3. The Chain Block is supplied fully lubricated from the factory it is recommended to lubricate the whole length of the load chain with Shell Macoma 75 (oil) before use.
4. Before commencement of the Chain Block into service it is essential to perform:

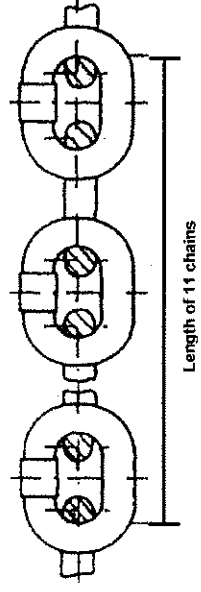
**Correct Operation & Brake Check**

- (a) Operate unit with no load - establish the Chain Block mechanism are working correctly.
- (b) Operate unit with a light load - suspend, remove grip from hand chain - establish if the brake is holding the load when hand chain is released.

The Hooks and load chains is made of special alloy-steel and is precisely heat-treated. Never weld or heat-treat them again.

**(a) LOAD CHAIN**

The load chain is exceptionally long-wearing, but wear is unavoidable and certain conditions will cause wear and corrosion that will lessen the strength. Load chain worn beyond the permissible limits shown in the corresponding table must be replaced at once.

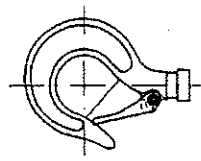


**CHAIN DIMENSIONS**

Capacity (Ton)	Diameter of Chain	Maximum Allowable Gauge Length (11 links)
0.25	Ø4.0mm	137.0mm
0.5	Ø 5.0mm	169.95mm
1	Ø 6.3mm	215.27mm
2	Ø 8.0mm	271.92mm
3	Ø 7.1mm	237.93mm
5	Ø 9.0mm	305.91mm

**(b) HOOKS**

The hook opening will elongate with overloads and incorrect hooking. When the hook opening is elongated beyond permissible limit shown in the corresponding table it is dangerously deformed and must be replaced immediately.

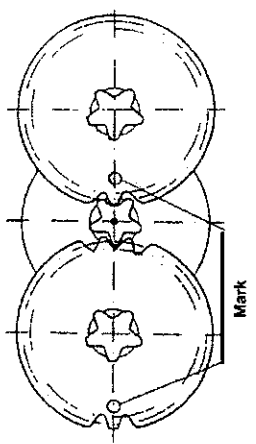


**HOOK THROAT OPENING**

Capacity (Ton)	Hook Throat Opening	
	New Hook O Equals	Replace When O Equals
0.25	29.0mm	31.0mm
0.5	23.6mm	25.96mm
1	28.0mm	30.80mm
2	33.5mm	36.85mm
3	37.5mm	41.25mm
5	42.5mm	46.75mm

**ALIGNMENT OF GEARS DURING REASSEMBLY**

This procedure is for all capacities:  
Align teeth between two marks at the gear spline on horizontal centreline one facing toward centre and one facing outward, as shown. (inner/outer relation).



Clean any dirt off the chain block including hand and load chain, avoid having any foreign material potentially interfering with the brake and ratchet system.  
 Periodic lubrication with a light grease on the gears inside the chain block will ensure smooth operation.

General disassembling of chain block, this maintenance should be performed by a skilled service technician please contact the distributor or Pacific Hoists.

Inspections are very important in determining whether a deficiency has occurred constituting a safety risk.

Frequent : performed by operator prior to each use		
TYPE	ACTION	SUGGESTION
Visual and Audio Check	Chain feeds through block smoothly Listen for irregular clicking or excessive noise Check hook for throat width increase Missing or broken safety latch Bent or twisted hook Hook bearings swivel easily	If not: clean and lubricate chain Suspend from service for periodic inspection If throat dimensions has increase, suspend unit from service and replace hook Suspend unit from service and replace safety latch Suspend unit from service and replace hook If Hook doesn't swivel easily, lubricate or replace bearings If signs of damage suspend unit from service and replace parts If links are damaged, suspend from service and replace chain
<p><b>Periodic: performed by qualified person and is dependant on Chain Block usage (to be done Annually or Quarterly)</b></p>		
Operation Visual and audio Components	As per Frequent inspection Check all components, gears shafts bearings brakes	View page 6 & 7 of Manual Hooks, Gears Information and Parts Lists

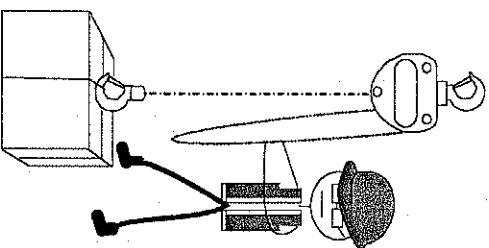
NOTE: Deficiencies are to be reported and corrected before the unit can be placed into service and damaged or worn parts be disposed of to prevent future use.

Testing/Service log is allocated on back page for convenience.

NOTE: Each time a load is lifted, the load brake should be checked this can be done by raising the load slightly and stopping. Once brake hold has been established you may proceed with load lifting.

**To Lift Load**

(a) Position the load directly under the Chain Block. Connect the load hook to item. Positioning the hook on the load may require lifting straps, chains or suitable lifting device that is not incorporated in the load.



(b) Never wrap the Chain Block load chain around the load. Always use a separate set of straps or chains which should be connected to the load hook. Be sure the load chain is not twisted or entangled in the hand chain.

(c) Pull on the hand chain with even pulls until the chain between the load and the chain block is taught. Inspect the load chain and hook, position to make sure it will stay properly positioned as the lifting continues.

(d) Continue pulling the hand chain until the load is raised. When the load is positioned as desired, pull in the opposite direction on the lifting chain until the tension on the load chain has been released.

(e) Release the chain.

**DO NOT** use the load chain as a sling.

**DO NOT** use more than one Chain Block to lift a load.

**DO NOT** use the Chain Block if the chain is twisted, kinked or damaged.

**DO NOT** operate if the load is not centred between the top and bottom hook.

**NEVER** use the Chain Block if either hook is stretched, deformed or has a broken or missing safety catch.

**DO NOT** use the Chain Block to lift people or loads over people.

**NEVER** use a motor or other mechanical device to lift the load. The Chain Block is designed for manual lifting only.

**NEVER** allow the Chain Block operator or other personnel to pass underneath a suspended load.

**DO NOT** operate a Chain Block that has been deemed unsafe after inspection/service.

**NEVER** support the load on the Tip of the bottom hook.

**DO NOT** swing a suspended load or leave the suspended load unattended.

**ONLY** allow trained personnel to operate the Chain Block.

**ALLWAYS** visually inspect the Chain Block for damage or faults before use.

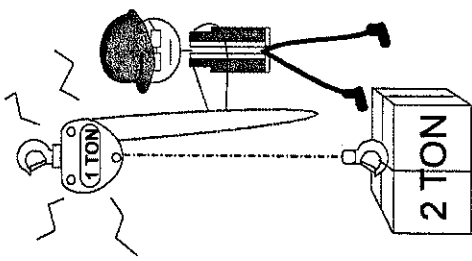
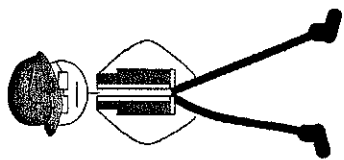
**WHEN** lifting or lowering, the hand chain should be pulled steadily to avoid jerking or tangling of chains.

**DO** inspect and service your Chain Block regularly, replacing worn or damaged parts.

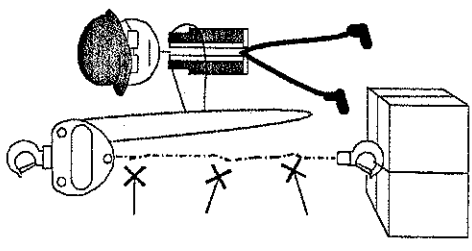
**DO** lubricate your Chain Block regularly especially in corrosive conditions.

**ALLWAYS** check the top and bottom hook safety latches are engaged prior to use.

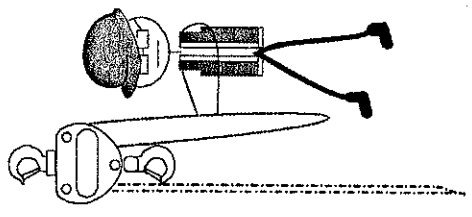
**CONFIRM** the load is properly seated in the saddle of the hook prior to use.



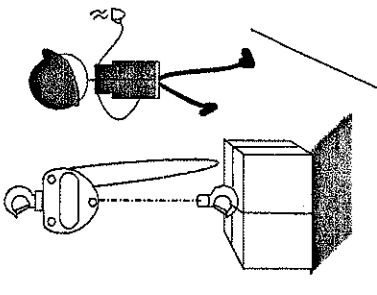
NEVER exceed the rated capacity of the Chain Block.



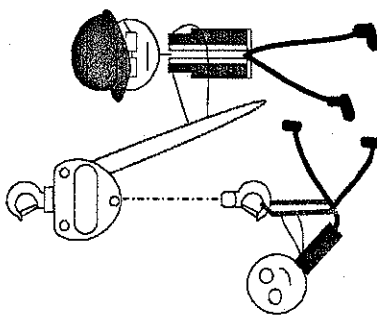
NEVER operate the Chain Block if the chain is kinked, damaged or twisted.



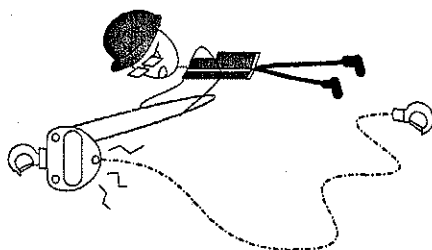
NEVER pull the bottom hook into the Chain Block housing.



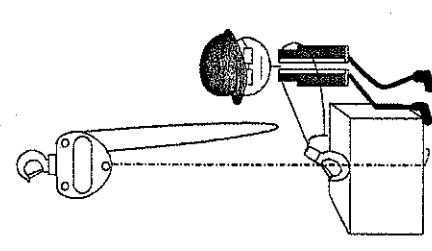
NEVER leave a suspended load on the Chain Block unattended.



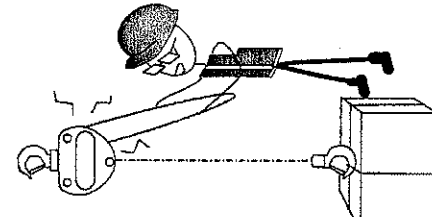
NEVER use the Chain Block to lift people or suspend loads over people.



NEVER run load chain to the end stopper.



NEVER use the load chain as a sling.



NEVER pull excessively on hand chain.