

## **Preface**

### **Congratulations on your ALR 6G Chain Lever Block or Mini Lever Block purchase.**

The ALR Chain Lever Block you have chosen is a heavy duty hoist, designed to retain its operational features under normal operating conditions. In order to achieve years of satisfactory service from your ALR Chain Lever Block a routine of careful operation, regular maintenance and lubrication should be applied as instructed within this ALR manual.

Prior to the operation, installation or maintenance of your ALR Chain Lever Block, please read all the contents contained within this manual. At all times only competent and experienced personnel should operate, install or maintain this hoist. Failure to comply with the instructions contained within this manual can result in both physical and/or property damage.

In keeping with statutory requirements, and best use for your ALR Chain Lever Block we recommended a periodic maintenance check every 12 months via your ALR distributor.

ALR's experienced and competent personnel will perform a complete service including preventative maintenance, genuine spares and repairs service.

## **Commissioning**

Your ALR Chain Lever Block has been tested, and conforms to Australian Standard AS1418.2.

On completion of installation, but prior to your ALR Chain Lever Block being put into regular service, the following procedures should be carried out -

1. Check that all joints and fasteners are tight and secure.
2. Operate the hoist with both no load and full load, and check that the operation is smooth at all times.
3. Check operation of hoist brake, under light load and full load conditions.
4. Traveling units - run throughout the full extent of the runway, ensuring adequate clearance at all times.
5. Please ensure your ALR Test Cert has been stored and the unit(s) have been placed in your lifting register for future reference.

## Instructions

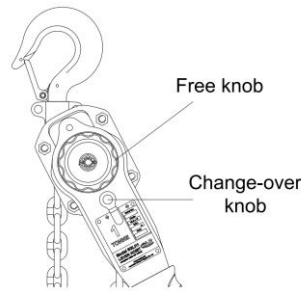
### Operation of Free Chain Adjusting System

**WARNING IMPROPER** chain lever block use could result in death or serious injury. To avoid these hazards:

**NEVER** operate the free chain adjusting device while load is applied to chain lever block.

**NEVER** touch / turn the free knob during lifting or lowering of the load.

**NOTE:** The brake is engaged automatically during lowering or lifting of the load. Free chain adjusting is achieved by releasing the brake during no-load.



### Step by step Action

1. Set the charge-over knob to "N". The change-over knob is located under the free knob on the hand lever.
2. Rotate the "Free" knob slightly in desired direction.
3. Pull the load chain to move the hook to the desired location.
4. By "setting" the change-over knob to "Up" or "Down", this will reset the break and allow the hoist to be operated with the hand lever.

## Method

### Lifting and Lowering Operation

By setting the change-over knob to "UP" or "DOWN", and operating the lever, the female thread and the change-over pawl inside the hoist engage and the female thread rotates in either the lifting or lowering direction. The brake works instantly after the lever operation stops and holds the load.

### Lifting and Lowering

Select direction of movement and ratchet hand lever back and forth, see below:

Chain movement	Change-over knob	Hand lever rotation that produces movement:
Raise	"UP"	Clockwise
Lower	"DOWN"	Counter clockwise

**NOTE 1:** If hand lever movement does not produce lifting, pull down the load chain while ratcheting until slack is removed.

**NOTE 2:** PRE-LOAD is the minimum load that must be applied to the lever block before the braking system activates. The PRE-LOAD on ALR Lever block is set approximately 3% of the W.L.L. (Working Load Limit) of the particular Lever Block. eg. (800Kg lever hoist 24kg), (1600kg lever hoist 48kg), (3200kg lever hoist 96kg), (6300kg lever hoist 189kg), (9000kg lever hoist 270kg).

## **SAFETY PROCEDURES**

The following Safety section should form part of the safety rules for any plant where any hoist or other lifting equipment is being used, serviced or repaired.

Any person(s) operating the hoist should read and observe the following safety instructions and the instructions in the Operating section, to avoid operating hazards.

1. DO NOT load beyond the rated capacity. See ID Plates.
2. DO NOT heat treat and DO NOT weld any part of the lever block, especially the load chain.
3. DO NOT use the lever block as an earth for welding.
4. DO NOT leave a load on the lever block unattended.
5. DO NOT shock load lever block, chain or hook.
6. DO NOT operate the lever block unless it is rigged to pull in a straight line from hook to hook, and the frame is allowed to freely swivel on the upper hook.
7. DO NOT hold the load chain in a loaded state while operating the lever block as serious injury may occur if the brake did not operate properly.
8. DO NOT wrap the load chain around the load and hook onto itself as a choker chain, or bring the load in contact with the lever block.
9. DO NOT use this lever block for lifting or moving people, or lifting loads over people.
10. DO NOT take up the load chain to the point where the end ring or lower hook becomes jammed against the frame.
11. DO NOT use an extension pipe or cheater bar to apply more pressure to the lever handle.
12. DO NOT point load the hook – ensure hook is correctly position with the load at the optimum position.
13. DO NOT use spray lubricates in or near brake discs.

## Care in Use

1. Always examine the hoist carefully prior to use - your life and others may be at risk. Look for cracks or damage, particularly with hooks and load chain.
2. Keep load chain clean and oiled to prevent undue damage or wear. When in use, avoid dragging the load chain through dirt or mud.
3. When the hoist is used outdoors or in a corrosive environment, ensure that it is regularly and adequately lubricated.
4. Do not operate the hoist if you do not have a clear view of the bottom hook and the load.

## WARNING

**If a load hook has been distorted, due to an overload on the hoist, then the whole hoist may also be damaged. A hoist which has been overloaded must be withdrawn from service immediately and tagged out until checked by a component person.**

## Maintenance

The maintenance instructions contained in this manual are intended as a guide to the necessary procedures to be carried out by competent and experienced personnel to prolong the service life of the unit.

ALR Brands, do not accept responsibility either for the manner in which the instructions in this manual are observed or for any consequence there of. Your Lever Block dealer recommends two forms of maintenance to be carried out on your Lever Block periodically.

The two forms include:

1. A Visual Check (prior to each use); Refer to table on page 5 for necessary checks. These checks can be carried out by the operator.
2. A Certified Check (conducted every 12 months); this type of inspection is to be carried out by authorized ALR Distributor personnel only, as a complete service inclusive. This inspection is a certified check, in compliance with AS1418.2 - 1997.

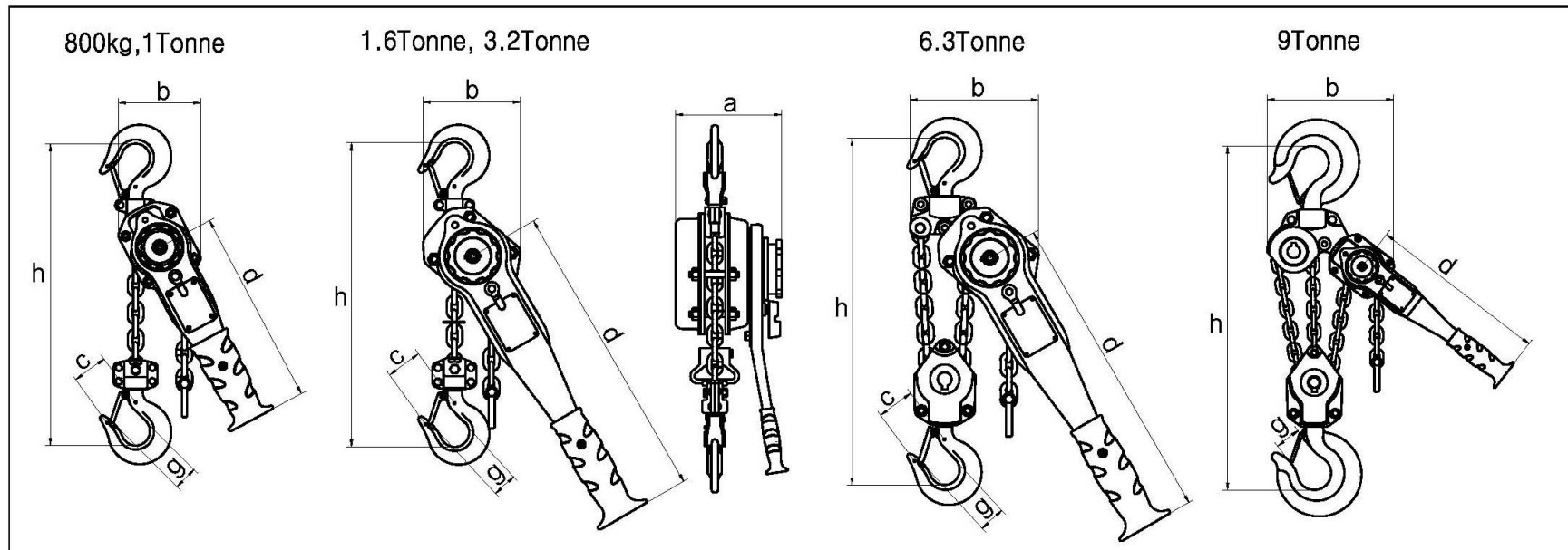
**Important Note: Always store unit in a clean and dry area. Ensure that all repair and maintenance work is carried out by qualified personnel, using only the specified genuine parts from ALR.**

## MAINTENANCE CHECKLIST

Points of Inspection	Inspections	Outcome
<b>Hook Top/Bottom</b>		
Deformation of hook	visual	There should be no deformation of the hook. Safety catch should close against the tip of the hook securely.
Damage to the hook	visual	There should be no crack or serious damage.
Bend in the Neck of hook	visual	Hook should hang square to lifting unit or top hook or to side plates (bottom block)
Side plates and suspension plates	visual	There should be no cracks, damage or wear
Rivets, bolts and nuts	visual	All fasteners should be tight
Safety Catch	visual	Should close properly and spring should keep latch closed
Chain	visual	Should be properly lubricated and free from bends, nicks or stretch, rust and dust
Chain Guide Rollers	visual	Should rotate freely and keep chain in the pockets of the chain wheel(s)
<b>Functions</b>		
Lifting and Lowering	Lift and lower a light load no less than the recommended Pre-Load described on pg.2	Hoist should operate smoothly and easily. Pawls should click during lifting. Lifting and lowering operations should be smooth and without any of the following defects:
Braking	Lift and lower the full working load limit not exceeding the W.L.L.	<ol style="list-style-type: none"> <li>1. Load falls if chain is released</li> <li>2. Load falls while lowering</li> <li>3. Load slips</li> </ol>

## TROUBLE SHOOTING

Problem	Cause	Solution
1. Chain is jammed	<p>Load not being pulled in a vertical direction.</p> <p>Load swivel has ceased operating</p> <p>Block is dirty, or hampered with foreign matter</p> <p>Fall of chain is tangled</p> <p>Block is overloaded</p> <p>Brake mechanism has jammed</p> <p>Swivel has ceased operating</p>	<p>Line load to be positioned vertically</p> <p>Reduce angle of pull</p> <p>a)Unload load and de-swivel</p> <p>b)Replace swivel</p> <p>Refer to maintenance and repair section of this manual</p> <p>Unravel and straighten chain</p> <p>Load block to recommended capacity only</p> <p>Return to supplier for repair</p>
3. Block Seized	<p>Wear and tear</p> <p>Poor maintenance and inspection</p> <p>Poor storage and handling</p> <p>Block is overloaded</p>	<p>Replace block</p> <p>Refer to manual for maintenance and inspection details</p> <p>Always store unit in a dry clean area</p> <p>Load block to recommend capacity only</p>
4. Slippage of Load	<p>Brake mechanism worn</p> <p>Load to small (less than 3%)</p> <p>Unit not being used in direct line – luffing</p>	<p>Return to supplier for repair and testing</p>
5. Block not braking	<p>Brake mechanism worn</p> <p>Load to small (less than 3%)</p> <p>Unit not being used in direct line - luffing</p>	<p>Return to supplier for repair and testing</p>



Product Code	Working Load Limit	No. of Falls	Load Chain (mm)	Pull to Rated Load (N)	Proof Load (tonnes)	Standard Lift (m)	Net Weight (kg)	Gross Weight (kg)	Extra Wt. per m(kg)	a (mm)	b (mm)	c (mm)	d (mm)	g (mm)	h (mm)
6GLB0815	800kg	1	5.6x17	280	1.2	1.5	5.8	6.1	0.7	148	121	37.5	278	28	280
6GLB1015	1000kg	1	5.6x17	353	1.5	1.5	5.9	6.3	0.7	148	121	45	278	33	290
6GLB1615	1600kg	1	7.1x21	280	2.4	1.5	9.1	9.6	1.1	165.5	141	47	433	33.5	350
6GLB3215	3200kg	1	10x30	381	4.8	1.5	17.2	17.8	2.17	194.5	178	62.5	433	43.5	420
6GLB6315	6300kg	2	10x30	402	9.45	1.5	25.7	26.3	4.34	194.5	228	78	433	51	570
6GLB9015	9000kg	3	10x30	406	13.5	1.5	38.3	44.8	6.51	194.5	310	-	433	64	680

Key No	No.Req	Part Name	800kg	1600kg	3200kg	6300kg	9000kg
1	1	Lever Side Plate Assembly	6H008-1	6H016-1	6H032-1		
2	1	Load Sheave	6H008-2	6H016-2	6H032-2		
3	2	Chain Guide	6H008-3	6H016-3	6H032-3		
4	1	Top Hook Shaft	6H008-4	6H016-4	6H032-4		
5	1	Top Hook Holder Assembly	6H008-5	6H016-5	6H032-5	6H063-5	6H090-5
6	1	Gear Side Plate Assembly	6H008-6	6H016-6	6H032-6		
7	1	Splined Gear	6H008-7	6H016-7	6H032-7		
8	1	Driving Shaft	6H008-8	6H016-8	6H032-8		
9	2	Spur Gear Assembly	6H008-9	6H016-9	6H032-9		
10	1	Gear Case Assembly	6H008-10	6H016-10	6H032-10		
11	4	Locking Nut	6H008-11		6H032-11		
12	1	Chain Stripper	6H008-12	6H016-12	6H032-12		
13	1	Disc Hub	6H008-13	6H016-13			
14	2	Pawl Spring	6H008-14	6H016-14	6H032-14		
15	2	Pawl	6H008-15	6H016-15	6H032-15		
15A	2	Snap Ring	6H008-15A	6H016-15A			
17	2	Friction Disc	6H008-17	6H016-17			



Key No	No.Req	Part Name	800kg	1600kg	3200kg	6300kg	9000kg
18	1	Ratchet Disc	6H008-18	6H016-18			
19	1	Brake Cover Assembly	6H008-19	6H016-19	6H032-19		
20	1	Spring	6H008-20	6H016-20			
21	2	Locking Nut	6H008-21	6H016-21			
23	1	Change Over Gear	6H008-23	6H016-23			
24	1	Change Over Pawl	6H008-24	6H016-24			
25	1	Change Over Spring	6H008-25	6H016-25			
26	1	Spring Set	6H008-26	6H016-26			
27	1	Handle Grip	6H008-27	6H016-27			
27A	1	Nut & Bolt for Lever Handle	6H008-27A				
28	1	Lever Handle Assembly	6H008-28	6H016-28			
29	1	Hex Cap Screw	6H008-29	6H016-29			
29A	1	Spring Washer	6H008-29A	6H016-29A			
30	1	Hand Wheel	6H008-30	6H016-30			
31	1	Stop Knob	6H008-31	6H016-31			
32	1	Washer	6H008-32	6H016-32			
33	1	Castle Nut	6H008-33	6H016-33			

34	1	Split Pin	6H008-34	6H016-34			
35	1	Load Chain	6H008-35	6H016-35	6H032-35		
36	1	End Chain Ring	6H008-36	6H016-36	6H032-36		
37	1	Bottom Hook Holder Assembly	6H008-37	6H016-37	6H032-37	6H063-37	6H090-37
38	1	Chain Pin & Locking Nut	6H008-38	6H016-38	6H032-38	6H063-38	6H090-38
50	1	Name Plate	6H008-50	6H016-50	6H032-50	6H063-50	6H090-50
51	4	Rivet	6H008-51				

