

William Hackett

WH-L4 COMPACT LEVER HOIST

USER MANUAL

A LONG LASTING ***CONNECTION***

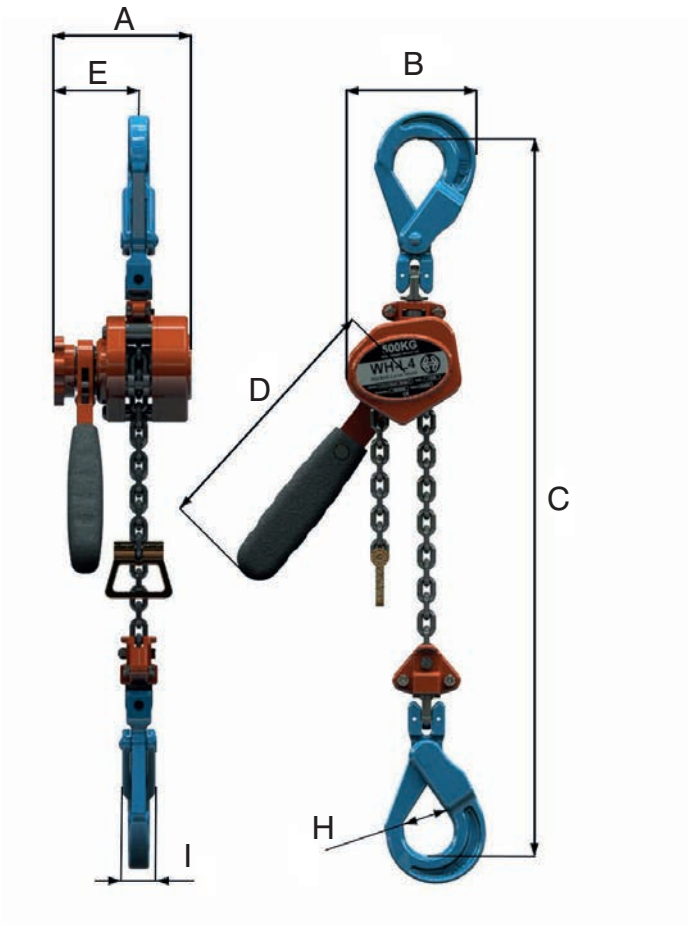

250KG
WH-L4
Hackett Lever Hoist

Contents

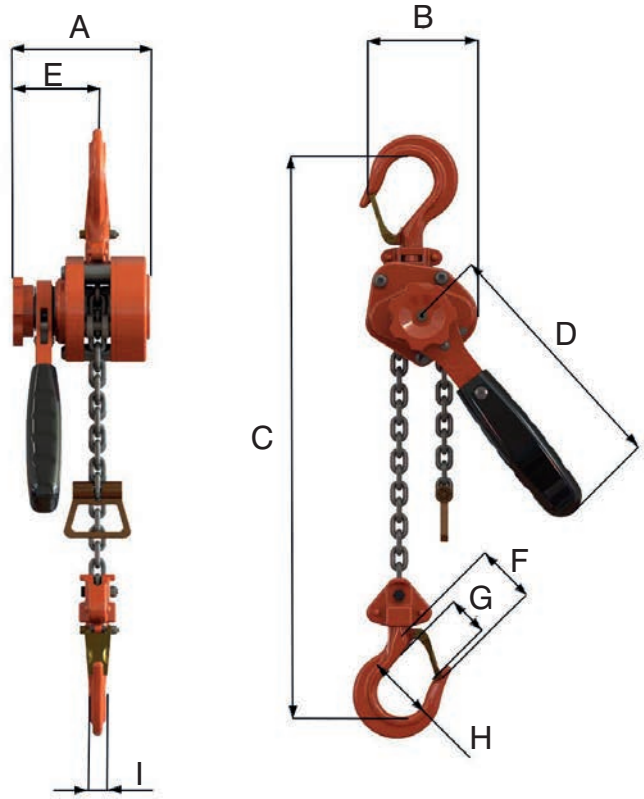
This Manual is designed to provide you with clear, concise, and comprehensive information of (product/service/solution). For further assistance, please don't hesitate to contact us.

DIMENSIONS AND SPECIFICATIONS	4
HOIST SELECTION	5
PRE-USE CHECKS	6
OPERATION	7
SAFE USE INFORMATION	8
STORAGE AND CONTROL PROCEDURE	9
PRACTICAL CONSIDERATIONS	10
PARTS LIST	11
PARTS EXPLOSION	12
HOIST DISASSEMBLY	13
MAINTENANCE AND REPAIR	14-23
ASSEMBLY INSTRUCTIONS	24
FUNCTIONAL CHECKS	25
MISCELLANEOUS	26
WARRANTY	27

Dimensions and Specifications



032.053.TS.B3



032.025 / 032.050

Table 1: Product specification, metric dimensions and WLL for William Hackett L4 Compact Lever Hoists

PART CODE	WLL t	NO. OF FALLS	LOAD CHAIN mm	STANDARD LIFT M	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	MASS kg
032.025	0.25	1	3.2 x 9	1.5	90	68	200	150	56	35.5	20	32.0	11.0	1.6
032.050	0.50	1	4.3 x 12	1.5	98	81	250	172	62	42	21	34.5	12.5	2.6
032.053.TS.B3	0.50	1	4.3 x 12	3.0	98	81	350	172	62	-	-	28.0	15.0	4.7

Hoist Selection

In accordance with statutory requirements (e.g. The Lifting Operations and Lifting Equipment Regulations 1998), all lifts using lever hoists should be planned by a competent person; require risk assessment and the production of a task method statement; and be subject to execution by suitably trained operatives under the supervision of a responsible person. The specification of the lever hoist required to achieve a safe lifting operation must be determined by a competent person.

It is not intended that the recommendations in this manual take precedence over existing plant safety rules and regulations or OSHA regulations. In the event that conflict exists between a rule set forth in this publication and a similar rule already set by an individual company, the more stringent of the two should take precedence.

Careful consideration should be given to the mass of the load being lifted and any dynamic factors that may be likely to affect the load on the hoist. Select the hoist capacity equal to or greater than the load. Ideally lever hoists should not be used to lift loads below 10% of their rated WLL limit.

William Hackett compact lever hoists are assembled, chained and tested in the UK to the height of lift specified by the end user. Careful consideration should be given to the headroom required to lift the load and the position of the operator before specifying the length of load chain and the hoist model.

The configuration of lever hoist assemblies are demonstrated on page 4, and are in accordance with the product specification, dimensions and working load limit (WLL) recorded in Table 1 (also on page 4).

William Hackett compact lever hoists are designed for industrial applications in both indoor and outdoor.

William Hackett lever hoists are available in specialised versions to suit hazardous environments. The L4 Atex hoist is suitable for spark sensitive use and the SS-L5 QP is corrosion resistant and suitable for subsea use.

William Hackett compact lever hoists can be used within an operating temperature range of -10°C to +50°C.

A thorough study of the information in this manual should provide a better understanding of safe operating procedures and afford a greater margin of safety for people and equipment.

Pre-use checks

Before the lever hoist is issued from the designated storage location a competent person must ensure that the appropriate certification is in place for the hoist.

Safe use instructions should be made available.

Possession of the relevant certification does not absolve the user from his responsibility to carry out pre-use inspections.

Conducting thorough and consistent checks on a lever hoist immediately prior to use will help identify problems due to accidental damage, internal corrosion, brake contamination or inappropriate storage.
Points to check before each period of use are:

- If necessary, the hoist should be cleaned before inspection.
- Name Plate – details clear and visible.
- Hook latches in good working order
- Is the load chain worn or damaged. Attention should be given to the wear which occurs on the bearing surfaces inside the links and to damage in the form of bent, notched, stretched, or excessively corroded links and the chain should move freely.
- Obvious signs of hooks opening out increase in throat opening or any other form of distortion in the hooks or suspension fittings.
- Top and bottom hooks are free to rotate with no load applied.
- With no load applied turning the grip ring clockwise should produce a clear and positive clicking sound as the brake ratchet activates.
- On multiple fall hoists check that all chain sheaves are free to rotate whilst no load is applied.
- Check all fixings are in place and in good condition, split pins or nyloc nuts.
- Obvious signs of damage to the hoist slack end chain anchor.
- General damage to the hoist body, this can be an indicator of neglect throughout the hoist.
- The load chain wheel should be checked for damage or debris.
- Chain guides and strippers should be free of debris and in good condition.

These checks should be performed with the hoist unloaded.

- Lifting function - select ‘UP’ and whilst pulling the load side of the chain, operate the lever handle clockwise, the ratchet brake mechanism shall engage operate smoothly without snagging.
- Lowering function - Select ‘DN’ and with a light pull of the load side chain, operate the lever counter clockwise, no clicking shall be audible and the chain should pay out smoothly.
- Neutral or free chaining - with the selector lever in the ‘N’ position, the chain shall adjust freely via the hand wheel or by pulling of the load chain.

If any of these points are not satisfied the hoist MUST NOT be used.

Operation

Free Chain Adjustment

1. To adjust the chain, position the selector lever in the horizontal neutral position (N).
2.
   a) In Neutral mode the load chain can be pulled to adjust to the required length, this can be aided by turning the handwheel in the relevant direction – see 2b.

   b) Alternatively, the chain can be adjusted by turning the handwheel clockwise to raise/ shorten or counter clockwise to lower/ lengthen the load side chain.

Advice: Sharp pulling of the load chain can cause the brake to activate, pull the chain progressively and smoothly.

Lifting and Lowering

1. For lifting, position the selector lever in the UP position and operate the lever clockwise.

2. For lowering, position the selector lever in the DN position and operate the lever counter clockwise.

Note: when holding a load, it is recommended to position the selector lever in the 'UP' position.

Safe Use Information

Do not attempt lifting operations unless you understand the use of the equipment, the lifting and slinging procedures and you have been suitably trained.

William Hackett L4 lever hoists are not designed for lifting people and should not be used for that purpose.

Use appropriate personal protective equipment (PPE).

Check the correct engagement of the top and bottom hooks. The hooks should be free to articulate within the load attachment points without overcrowding.

Do not use the grip ring whilst the hoist is loaded.

When the hoist is under load ensure that the selector lever is in the UP position.

Whilst loaded do not try to make chain adjustments by pulling the load chain.

Ensure that the work area is clear to avoid the slack end chain snagging in use.

Ensure that the suspension structure has sufficient load bearing strength and capacity to support the load.

Do not use the lever hoist as a chain sling; it is a lifting appliance, and suitable lifting accessories should be incorporated into the lift plan to facilitate a safe lifting operation.

If more than one lever hoist is to be used, refer to William Hackett's Fleeting Guidelines.

Establish a clearly defined zone around the area of the lifting operation.
Always stand aside from the load when operating the hoist and ensure that no one enters the lift zone unintentionally during the lifting operation.

Ensure that the load chain is not twisted, particular care should be taken when using multi-fall hoists.

During the lift, the load chain should be straight and should not contact any angles or edges.

Take the load steadily and avoid shock loads.

Do not expose lever hoist assemblies to chemicals or corrosive solutions (whether immersed in such solutions or used in atmospheres in which fumes are present), particularly acidic or strongly alkaline environments without consulting the supplier or manufacturer.

Do not leave suspended loads unattended. In an emergency cordon off the working area and establish safe exclusion zones.

Never return a damaged lever hoist to stores; it should be reported to a competent person.

Storage and control procedures

The equipment should ideally be stored in a purpose designed facility where it can be kept secure from unauthorised use. A responsible person should control the issue and receipt of all lifting appliances and accessories, and a system to manage statutory inspections should be in place.

Storage would normally be on suitable racks within a container, a manner that prevents accidental mechanical damage and where the load chains are clear from the ground.

The load chain should be dried and wrapped around the hoist, not left on the floor.

During transport to the worksite and whilst in store at the worksite, the equipment should be protected from exposure to any conditions which may affect its ability to operate safely. It should be protected from exposure to:

- water/sea water
- temperatures higher than can be comfortably tolerated by the hand
- temperatures below freezing point
- solvents
- corrosive chemicals or fumes
- grit, sand and wind-blown dust.

Any defects should be reported to the responsible person and damaged hoists should be quarantined.

Duty holders and actual users of lifting equipment, including hoists and associated components, can obtain more detailed information and guidance on safe use and compliance with statutory requirements from the following publications;

HSE Publication L22 (2014) Safe Use of Work Equipment.
HSE Publication L113 (2014) Safe Use of Lifting Equipment.
HSE Publication INDG422 (2008) Thorough Examination of Lifting Equipment.
HSE Publication L23 (2004) Manual Handling.
HSE Publication L25 (2005) Personal Protective Equipment at Work.

Practical considerations

As with any item of lifting equipment, the lever hoist will be specified for a maximum working load limit. This should not be exceeded during any lifting operation. It is important, therefore, when planning a lifting operation that the load to be lifted by the lever hoist is known or has been accurately estimated with an adequate allowance for safety. The possible effects of additional loading, such as friction, should be included when the lever hoist is being selected for the lift.

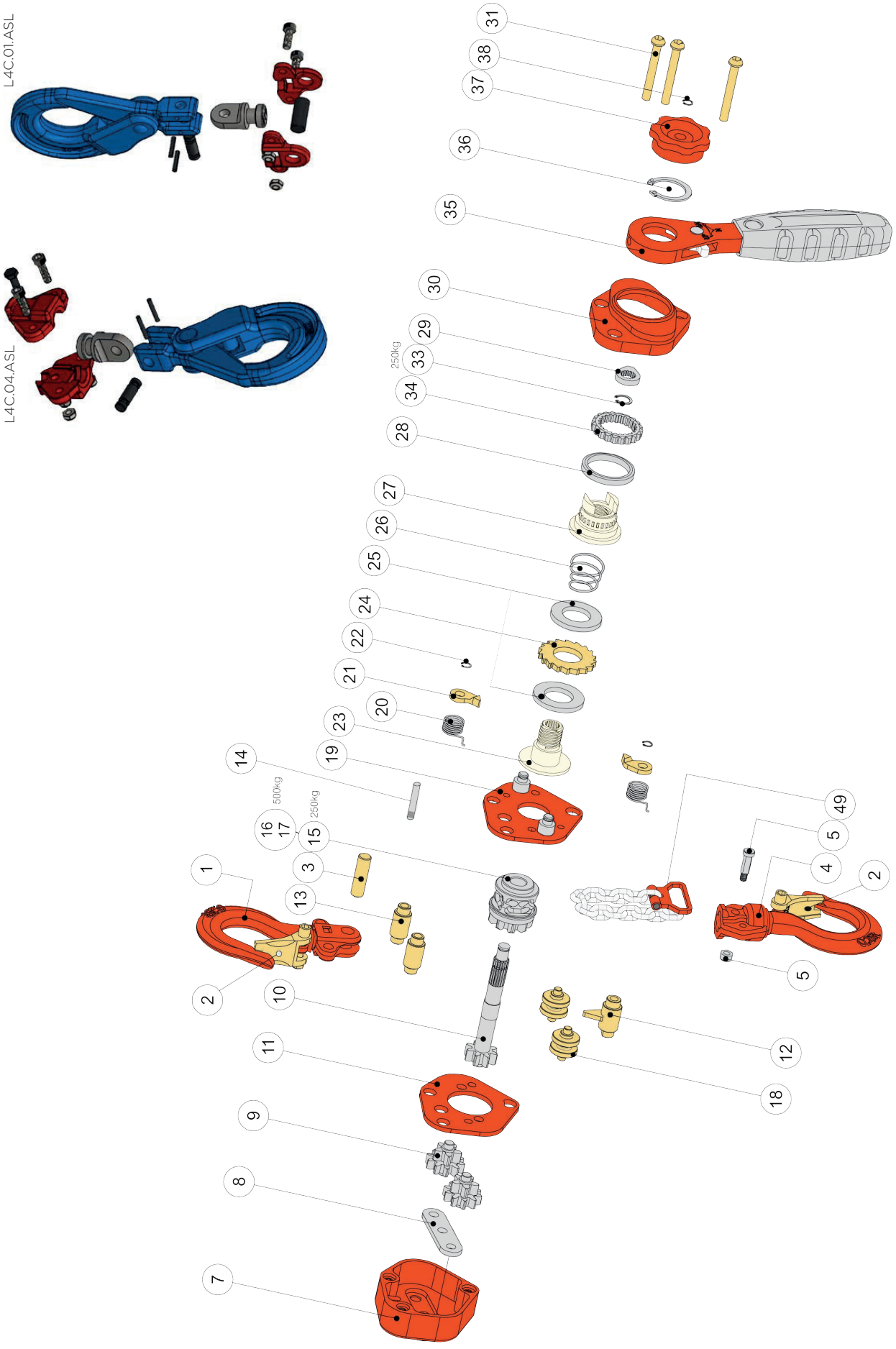
The design of lever hoists is such that a brake mechanism is used to suspend the load but also requires a load to operate. When planning a lifting operation using a lever hoist or selecting a lever hoist for a lift, the light load limitation of the braking mechanism should be recognised. The William Hackett WH-L4 compact lever hoist is tested and certified to have a light load capability at 5% of the lever hoist rated capacity, but it is not recommended to use a lever hoist at below 10% of the rated capacity, but it is not recommended to use a lever hoist at below 10% of the rated capacity.

A lever hoist should be loaded and unloaded using the lever handle. When a load is removed from a lever hoist other than using the lever handle (e.g. by transfer of a load to a surface crane) the brake mechanism will remain locked together. Subsequent loading of the hoist (for example, by the transferring of a load on to the hoist from a surface crane) will result in the load being applied to a locked brake mechanism - something manufacturers regard as bad practice, potentially resulting in unexpected slippage as the hoist is then operated. If a load is removed from a lever hoist, the lever handle should be operated to unlock the brake and confirm the hoist is fully functional before the lever hoist is used for another lifting operation.

Parts List

PART CODE	PART NAME	QUANTITY
L4C.01	Top Hook Assembly	1
L4C.01.ASL	Top Hook c/w Clevis Adaptor and Self-Locking Hook	1
L4C.02	Safety Latch Kit	2
L4C.03	Top Hook Shaft	1
L4C.04	Bottom Hook Assembly	1
L4C.04.ASL	Bottom Hook c/w Clevis Adaptor and Self-Locking Hook	1
L4C.05	Chain Pin and Lock Nut	1
L4C.07	Gear Cover Set	1
L4C.08	Reinforced Plate	1
L4C.09	Planetary Load Gear	2
L4C.10	Pinion Shaft	1
L4C.11	Gear Side Plate	1
L4C.12	Chain Stripper	1
L4C.13	Stay Bolt	2
L4C.14	Pin (500kg)	1
L4C.15	Load Sheave Assembly	1
L4C.16	Load Sprocket	1
L4C.17	Load Gear	1
L4C.18	Chain Guide	2
L4C.19	Lever Side Plate Assembly	1
L4C.20	Pawl Spring	2
L4C.21	Pawl	2
L4C.22	Snap Ring	2
L4C.23	Brake Seat	1
L4C.24	Ratchet Disc	1
L4C.25	Friction Disc	2
L4C.26	Push up Spring	1
L4C.27	Brake PLate	1
L4C.28	Bushing	1
L4C.29	Stop Knob	1
L4C.30	Brake Cover	1
L4C.31	Stay Bolt Socket Head Screw and Washer	3
L4C.33	Circlip (250kg)	1
L4C.34	Change Over Gear	1
L4C.35	Lever Handle Assembly	1
L4C.36	Circlip	1
L4C.37	Handwheel	1
L4C.38	Circlip	1
L4C.48	Load Chain	N/A
L4C.49	End Stop	1

Parts Explosion



Hoist disassembly

L4 Maintenance Instructions - Models: WH-L4 Compact Lever Hoist

Tool requirements:

Allen Keys

Metric spanners or ratchet and socket 7 and 8mm.

Circlip pliers – small and medium size

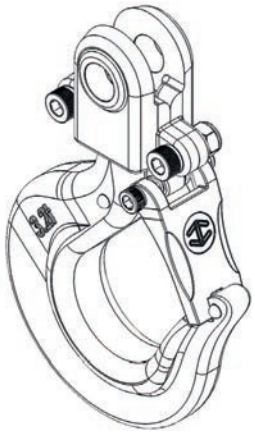
The following procedures should only be performed by a competent person.
It is a responsibility of the owner/user to install, operate, inspect and maintain product in accordance with all applicable Standards and Regulations. If the product is installed as part of a lifting system, it is also the responsibility of the owner/user to comply with the applicable standards that address other types of equipment used.

Component part numbers are indicated in bold.

Disassembly

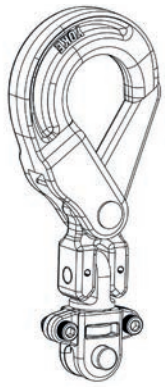
NEVER perform maintenance whilst the hoist is under load. Always use OEM parts where replacement parts where replacement parts are necessary.
These instructions should be used alongside the illustrated parts list.
It is recommended to keep the parts in order when disassembling to aid with assembly.

1. Remove the bottom hook, chain anchor and load chain from the hoist.
2. Remove circlip **38** from handwheel.
3. Handwheel **37** can now be lifted from the assembly.
4. Remove stop knob **29** and circlip **36** taking note of the stop knob position when the brake is fully engaged.
5. Lift lever handle assembly **35** away from the hoist body.
6. Remove change over gear **34**, bushing **28** and unscrew the brake plate **27** counter clockwise. Note: On 250kg models circlip **33** must be removed prior to the brake plate **27**.
7. Remove twisting spring **26** taking note of its orientation.
8. Remove 3pcs of dome head socket bolts and washers **31** from the brake cover **30**, Note: these bolts secure the hoist body assembly so care should be taken when removing.
9. The brake cover **30** can now be removed revealing the brake assembly.
10. Lift the brake assembly components **23-25** from the ratchet assembly.
11. Remove the pawl ciclip **22**, pawl **21** and pawl spring **20**.
12. Lift the lever side plate 19 and remove components **1, 3, 12, 13,** (**14** 500kg) and **18**.
13. Gear cover **7** can be lifted away.
14. Remove the planetary load gears **9**, pinion shaft **10** then load gear **17** and sheave/sprocket **16**
    Note: 250kg models components **16** and **17** are one piece.



L4C.01 Top Hook Assembly

INSPECTION TYPE	Visual and Dimensional
QUANTITY	1
ACTION	Check for distortion, fractures and stretching. The hook shall be free and smooth to rotate.



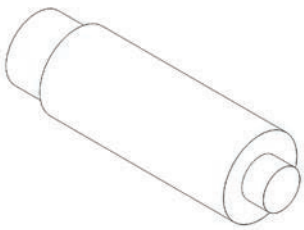
L4C.01.ASL Top Hook Assembly

INSPECTION TYPE	Visual and Dimensional
QUANTITY	1
ACTION	Check all components for distortion, damage, wear, fractures and stretch, the hook assembly shall be smooth and free to rotate, check self-locking hook latch to tolerances on page 26.



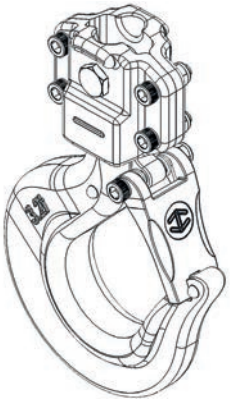
L4C.02 Latch Kit

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Latch assemblies should be secure and free/smooth to open and close. Springs and bolts should be free from cracks and damage.



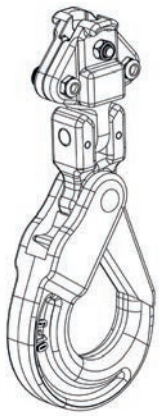
L4C.03 Top Hook Pin

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check dimensionally and visually for damage or wear.



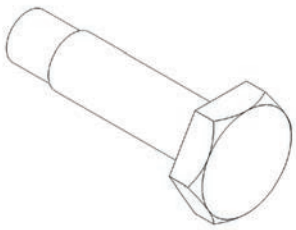
L4C.04 Bottom Hook Assembly

INSPECTION TYPE	Visual and Dimensional
QUANTITY	1
ACTION	Check for distortion, damage, fractures and stretchin. The hook shall be free and smooth to rotate, the hook to housing contact points should have even wear.



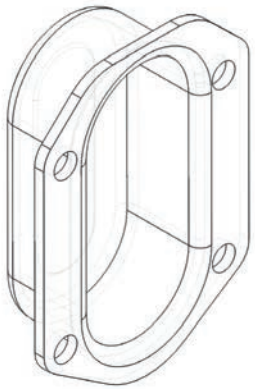
L4C.04.ASL Bottom Hook Assembly

INSPECTION TYPE	Visual and Dimensional
QUANTITY	1
ACTION	Check all components for distortion, damage, wear, fractures and stretch, the hook assembly shall be smooth and free to rotate, check self-locking hook latch to tolerances on page 26.



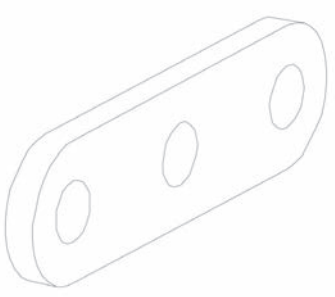
L4C.05 Chain Fixing Pin

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check for damage to nut bolt and threads.



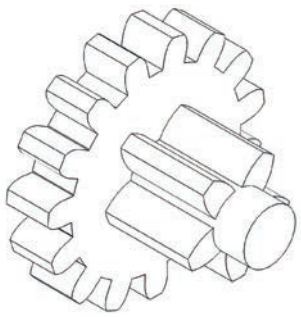
L4C.07 Gear Cover

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine for cracks, distortion, damaged or broken parts, check gear bushings are secure and in good condition.



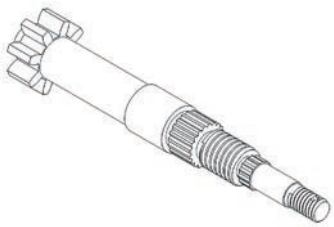
L4C.08 Reinforced Plate

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine for cracks, distortion, damaged or broken parts.



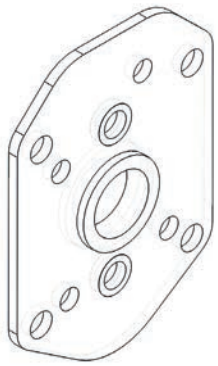
L4C.09 Planetary Load Gear

INSPECTION TYPE	Visual
QUANTITY	2
ACTION	Examine gears for wear, fractures and alignment.



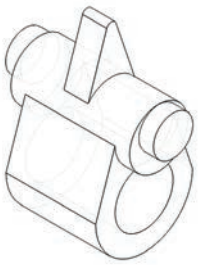
L4C.10 Pinion Shaft

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine pinion shaft for damage and distortion, check shaft for straightness, spline and thread condition.



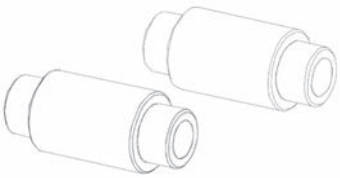
L4C.11 Right Side Plate Assembly

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine gear side plates for alignment and ensure they are free from damage and distortion, examine load pin, guide, stripper and stay bolt holes for signs of wear and stretch, check gear bushings are secure and in good condition.



L4C.12 Chain Stripper

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine chain stripper for wear and damage.



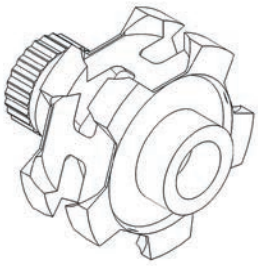
L4C.13 Stay Bolt

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine stay bolts for excessive wear and damage.



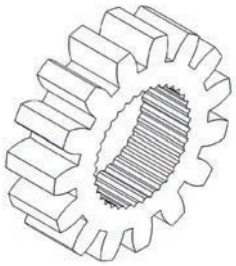
L4C.14 Pin (500kg)

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check for damage and distortion.



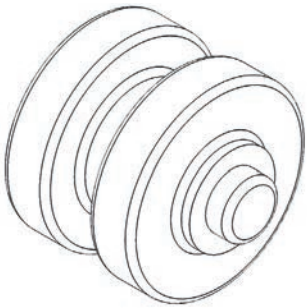
L4C.15 and L4C.16 Load Sheave Assembly

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check load chain pockets for wear and damage, ensuring satisfactory seating of load chain in pockets.



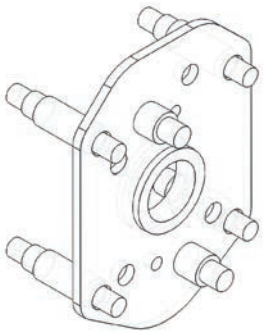
L4C.17 Load Gear

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine gear for wear, fracture and alignment. Check condition of internal splines.



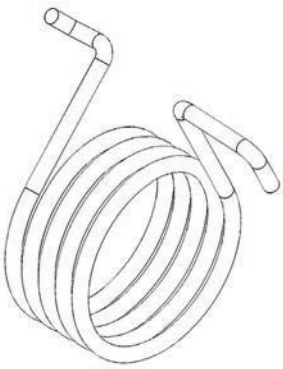
L4C.18 Chain Guide

INSPECTION TYPE	Visual
QUANTITY	2
ACTION	Examine chain guide for wear, fracture and alignment.



L4C.19 Left Side Plate Assembly

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine body plates for alignment and ensure they are free from wear and distortion, examine load pin, guide and stripper holes for signs of weasr and stretch, check pawl stands are secure and free from defects.



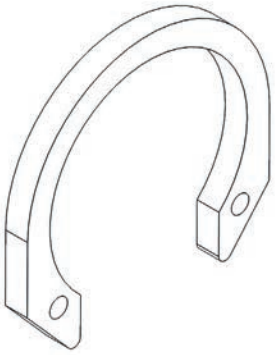
L4C.20 Pawl Spring

INSPECTION TYPE	Visual
QUANTITY	2
ACTION	Examine pawl springs for corrosion and fractures, ensure the spring is in good working order and not deformed or stretched.



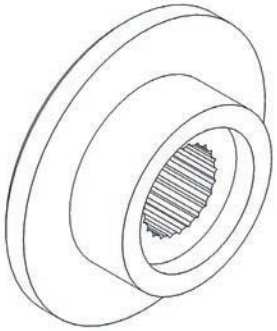
L4C.21 Pawl

INSPECTION TYPE	Visual
QUANTITY	2
ACTION	Check pawl for wear ensuring pawl is free to move on pawl shaft.



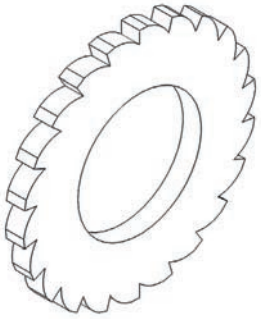
L4C.22 Circlip

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine for cracks, distortion or damage.



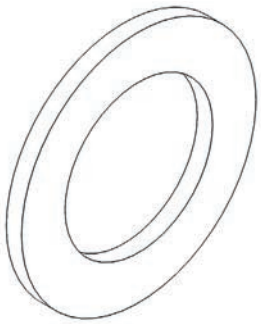
L4C.23 Brake Seat

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check splines and ensure the component mating surfaces are smooth, flat and without excessive corrosion.



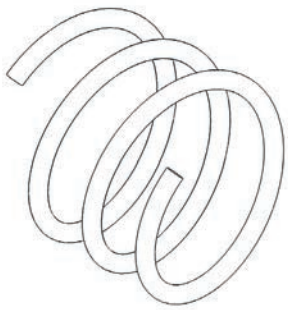
L4C.24 Ratchet Gear

INSPECTION TYPE	Visual and Dimensional (see page 26)
QUANTITY	1
ACTION	Examine ratchet teeth and brake compoinent surfaces ensuring they are smooth and flat.



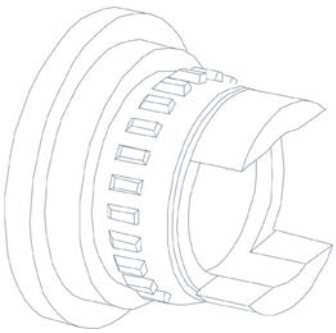
L4C.25 Friction Disc

INSPECTION TYPE	Visual and Dimensional (see page 26)
QUANTITY	2
ACTION	Check for fractures, wear and damage ensuring mating surfaces are flat and clean and free from contaminants.



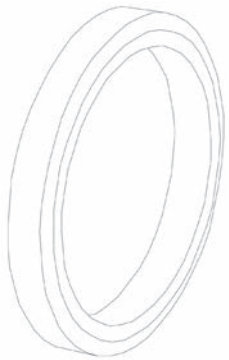
L4C.26 Push up Spring

INSPECTION TYPE	Visual
QUANTITY	2
ACTION	Examine spring for corrosion and fractures, ensure the spring is in good working order and not deformed or stretched.



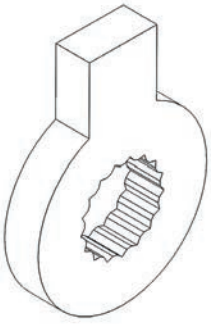
L4C.27 Brake Plate

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check mating surface is smooth and flat, check thread and pawl drive for damage, wear and corrosion.



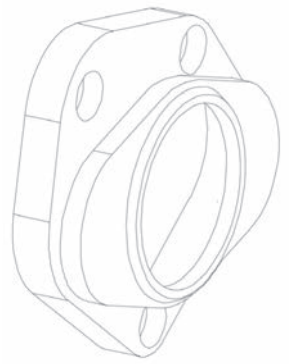
L4C.28 Bushing

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine for cracks, distortion, damaged or broken parts.



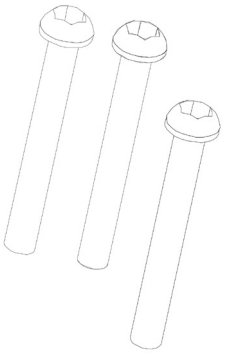
L4C.29 Stop Knob

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check splines and ensure the component mating surfaces are smooth, flat and without corrosion or wear.



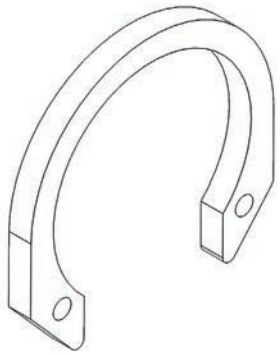
L4C.30 Brake Cover

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine for cracks, corrosion, distortion, damage and wear.



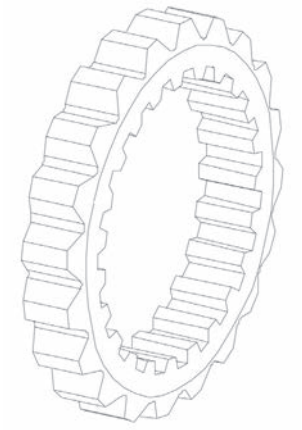
L4C.31 Stay Bolt Socket Head Screw and Washer

INSPECTION TYPE	Visual
QUANTITY	3
ACTION	Check for damage to bolt and threads, check for distortion and wear.



L4C.33 Circlip (250kg)

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine for cracks, distortion or damage.



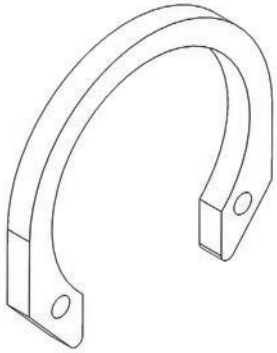
L4C.34 Change Over Gear

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check mating surface is smooth and flat, check spline, lugs and pawl drive for damage, wear and corrosion.



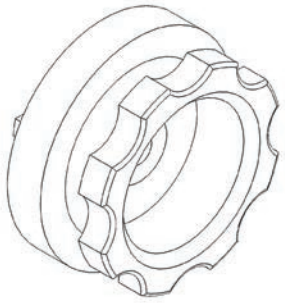
L4C.35 Lever Handle Assembly

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine lever for cracks, corrosion, distortion, damage and wear. Check selector lever function is smooth and secure. Check grip/ handle is of good condition and secure. Check handle assembly fixings are of good condition.



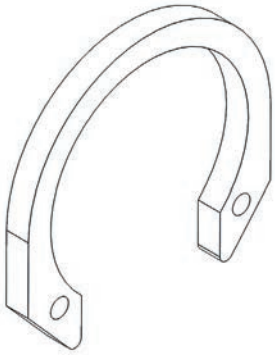
L4C.36 Circlip

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine for cracks, distortion or damage.



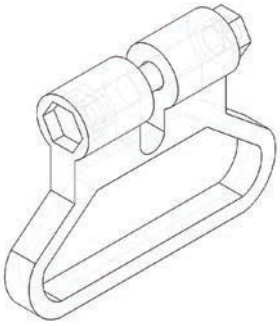
L4C.37 Handwheel

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check grip ring for wear and damage.



L4C.38 Circlip

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Examine for cracks, distortion or damage.



L4C.49 Square Type End Stop

INSPECTION TYPE	Visual
QUANTITY	1
ACTION	Check for cracks, corrosion, distortion and wear.

Assembly instructions

Assembly

NEVER perform maintenance whilst the hoist is under load. Always use OEM parts where replacement parts where replacement parts are necessary.

These instructions should be used alongside the illustrated parts list.

1. Apply a light coating of grease to the load sheave **15** and side plate **11** mating surfaces then insert the load sheave into the gear side plate so that the splined side protrudes through the plate. (250kg Models proceed to step 3)
2. Attach the sprocket load gear **17**.
3. Apply a light grease to the pinion shaft **10** and insert through the sheave from the gear side.
4. Apply grease to the sheave spline and position the two planetary gears **9** into their locating holes either side of the pinion shaft.
5. Apply slight pressure to both planetary gears in the direction of the pinion shaft whilst rotating the gears, ensure at least two full cycles, the gears should run smoothly without snagging or jamming.
6. Attach the gear cover **7** ensuring plate **8** is in position and secure.
7. Lay the hoist on its gear side and install the roller guides **18**, stripper **12**, stay bolts **13**, and pin **14** (**14** = 500kg only).
8. Place the lever side plate **19** onto the assembly.
9. Insert the top hook **1** and secure with the top hook pin **3**.
10. Lightly grease the pawls stands, attach the pawl spring **20**, pawl **21** then pawl circlip **22**. Ensure the pawl spring is located correctly to provide tension to the pawl.
11. Lower the brake seat **23** onto the pinion shaft spline.
12. Place the lower friction plate **25** onto the brake seat.
13. Place the ratchet disc **24** onto the lower friction plate ensuring it is correctly orientated so that the ratchet teeth engage fully with the pawl teeth.
14. Check that the pawls and pawl springs are with tension onto the ratchet.
15. Install the upper friction plate **25**.
16. Place the brake cover **30** over the assembly and secure with the three dome head bolts and washers **31**.
17. Place the twisting spring **26** onto the brake assembly narrowest diameter towards the brake seat.
18. Screw the brake plate **27** onto the assembly clockwise and secure with the circlip **33**.
    Note:(**33** = 250kg only).
19. Place bushing **28** then change gear **34** onto the brake plate.
20. Position the selector lever in neutral (N) and Place the lever handle **35** onto the assembly ensuring it is fully seated, secure with circlip **36**.
21. Install the stop knob **29** leaving 10°-15° between the stop know and the change gear upright.
22. Place the handwheel onto the pinion shaft with the internal raised portion on the opposite side to the stop knob, secure with circlip **38**.

Functional checks

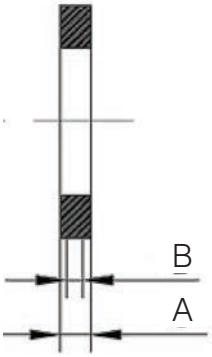
1. In neutral with a light progressive pull on both the hook side and slack end load chain, the chain should run freely and smoothly. With a sharp pull on the load chain the hoist brake should activate.
2. Check the selector lever is free and operates smoothly to and from all positions.
3. With a light pull on the load chain switch between up and down whilst ratcheting the lever handle, both functions should operate in a controlled manor.
4. Rotate the lever handle with the selector lever In Neutral (N), the lever should rotate smoothly without snagging or jamming.
5. Turn the handwheel clockwise and counter clockwise, this motion should be smooth, free and without snagging or jamming.

Testing

1. Apply a light load of 5% the rated capacity, raise the load stopping and starting intermittently to a minimum of 300mm and position the selector lever in neutral (N), sharply turn the handwheel counter clockwise, the brake shall activate and hold the load.
2. In line with site policies a Dynamic test between rated capacity and 1.5 times rated capacity shall be applied over 300mm minimum, check all components and fixings are satisfactory, check the lifting and lowering functions operate freely and smoothly and that the hoist brake activates and holds the load without slippage or creep.

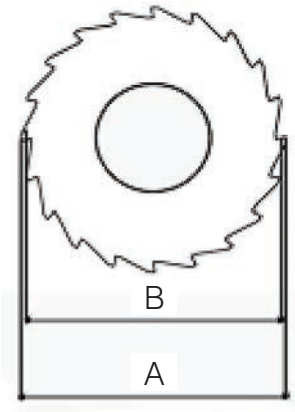
BRAKE DISC

Replacement limits for brake disc



CAPACITY (kg)	A (mm)	B (mm)
250	3	2.7
500	2.5	2.25

Replacement limits for Ratchet Brake System



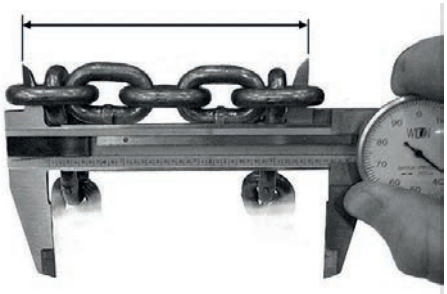
CAPACITY (kg)	A (mm)	B min (mm)
250	36	35.3
500	40	39.2

B = inner diameter A = outer diameter

ALLOWABLE LIMITS FOR LOAD CHAIN AND HOOKS

Load Chain

Carefully inspect the entire load chain. As illustrated below, measure five consecutive links with calipers to find the length. Compare the results with the table below. Check every three feet and especially where excessive wear is indicated. Any load chain that shows noticeable deformation or heat influence must be replaced with a new one.

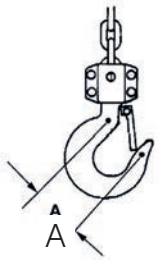


HOIST CAPACITY	5 LINKS NORMAL (mm)	5 LINKS LIMIT Replace if >
250kg	45	46.3
500kg	60	61.8

Hooks (Top and Bottom)

Replace the hook when the distance between indicator points – “A” is wider than the limits given in the table.

Never heat treat the hook or attach anything to the hook by welding.



HOIST CAPACITY	‘A’ DIMENSION Normal (mm)	A’ DIMENSION Replace if >
250kg	35.5	37.3
500kg	41	43.1

Tolerance for 6mm Self-Locking Hooks

The criteria to judge the quality for wear of Yoke Eye Self-Locking Hook between hook tip and latch under vertical play, the clearance shall not be greater than indicated below.

HOOK SIZE	MAXIMUM CLEARANCE
6mm	4mm

Warranty

When supplied new the L4 Compact lever hoist will be supplied with a Declaration of Conformity which sanctions the use of the product for a maximum period of 12 months before re-certification is required by a competent person.

The L4 Compact lever hoist is a lifting appliance and should be thoroughly examined by a competent person at least every 12 months, or following each period of deployment.

Only original William Hackett spare parts should be used.

William Hackett guarantee the performance of the L4 Compact lever hoist for a period of 12 months from the date of sale subject to the purchaser and users complying with the safe use, storage, routine maintenance and servicing instructions, and there being no excessive wear and tear or misuse of the product.

These points do not affect the purchasers statutory rights.

William Hackett

LEEA Full Member

Delivery Address:	Supplied To:	ABC001
ABC DISTRIBUTORS 123 ANYWHERE STREET SOMEWHERE AB12 3CD	Certificate Number:	C0000001234
	Customer Order Number:	8496
	Certificate Date:	14-Mar-2025
	PRODUCTS REQUIRING A DECLARATION OF CONFORMITY ARE INDICATED BY (A) THOSE REQUIRING JUST A MANUFACTURER'S CERTIFICATE ARE INDICATED BY (B)	

DUAL PURPOSE DOCUMENT

UKCA DECLARATION OF CONFORMITY (A)	DECLARATION OF CONFORMITY (A)	MANUFACTURER'S CERTIFICATE (B)
I DECLARE THAT THE ITEMS DESCRIBED ON THIS DOCUMENT MEET THE ESSENTIAL SAFETY REQUIREMENTS OF THE SUPPLY OF MACHINERY (SAFETY) REGULATIONS 2008 & SECTION 6 OF THE HEALTH AND SAFETY AT WORK ACT 1974	I DECLARE THAT THE ITEMS DECRIBED ON THIS DOCUMENT COMPLY WITH THE REQUIREMENTS OF THE MACHINERY DIRECTIVE 2006/42/EC	CERTIFIED ON BEHALF OF THE COMPANY Roderick Bell ROD BELL 14-Mar-2025

Authorised person for the configuration of the declaration documents: Roderick Bell, William Hackett Lifting Products, Alnwick, UK

A/B	Item Code	Description	Quantity	Working Load Limit	Proof Load	Min Break
Alt Reference	Batch/Serial Numbers					
A	032.050	500kg L4 Hackett lever hoist 1.5m HOL in accordance with EN13157	2.0	0.5t	0.75t	
	2408381, 2408494					

WH-L4
COMPACT
LEVER HOIST
USER MANUAL



liftingsales@williamhackett.co.uk
www.williamhackett.co.uk
+44 (0)1665 604200

William Hackett Lifting Products Limited
Lionheart Enterprise Park, Oak Drive,
Alnwick, Northumberland, NE66 2EU.

WH-L4 LCOMPACT EVER HOIST USER MANUAL
WHM-0011 REV. 3