

BLUERANGE®

LEVER HOIST

OPERATING INSTRUCTIONS



Model No's:

BRLH.75T ~ 0.75 Tonne x 1.5m

BRLH1.5T ~ 1.5 Tonne x 1.5m



PROTECT THE ENVIRONMENT

When this product reaches the end of its useful/working life it should be recycled in line with local policies and regulations. Take the product to your recycling centre to be disposed of in an environmentally friendly manner.

IMPORTANT:

We reserve the right to update our product specification, data and parts with out notice, as part of our continuous improvement policy.

We accept no liability for any incorrect use of this product.

Document BRLH – Dated 1st May 2021 Rev 1.2

IMPORTANT:

KEEP THESE INSTRUCTIONS SAFE FOR FUTURE REFERENCE.



READ INSTRUCTIONS CAREFULLY, FOLLOW THE SAFE WORKING PRACTICES OUTLINED AND HEED THE WARNINGS. FAILURE TO DO SO MAY LEAD TO PERSONAL INJURY OR DAMAGE THE PRODUCT.

SAFETY

Before use ensure the lever hoist is in good working order and not damaged. If the lever hoist is damaged remove from service immediately. Damaged parts should be repaired or replaced before the unit is used again. This should be undertaken using genuine parts by a trained technician.

- **Ensure** support for the lever hoist can carry at least 1 1/2 times the hoists WLL.
- **Ensure** the lever hoist is suitably rated to carry the designated load.
- **Ensure** all but essential personnel keep a safe distance while the hoist is in use.
- **Ensure** the lever hoist work area is well lit, clean and free from clutter.
- **Ensure** work area floor is sound and not slippery so a firm footing can be maintained.
- **Ensure** only competent personnel operate the lever hoist.
- **Ensure** load sling(s) are fully engaged in the load hook and safety bar is closed before lifting. Operate the hoist smoothly **DO NOT** allow the load to fall freely – even for short distances
- **Ensure** brake is operating by stopping when the load has been raised a short distance (10cm) and ensuring there is no downward creeping of the load.
- **Ensure** lever hoist is maintained as per these instructions.
- **Ensure** a risk assessment is undertaken before deploying the lever hoist

DANGER

Use the lever hoist for lifting only – never to support the lifted load for other work tasks eg welding..

- **DO NOT** exceed the rated capacity of the lever hoist..
- **DO NOT** allow untrained personnel to operate the lever hoist.
- **DO NOT** use two or more lever hoists to lift a load – use a single hoist of the correct rated capacity.
- **DO NOT** drag a load across the floor with the lever hoist – place the lever hoist directly above the load.
- **DO NOT** allow personnel to stand or pass underneath a raise load..
- **DO NOT** use the lever hoist in a explosive or corrosive atmosphere.
- **DO NOT** use when under the influence of drugs, alcohol or medication that may cause drowsiness.
- **DO NOT** use the lever hoist if damaged.
- **DO NOT** use the lever hoist if any chains are kinked or knotted.



Refer to instructions



Wear protective gloves



Wear safety footwear

IMPORTANT-CAUTION

Install, operate and maintain this equipment in accordance with these instructions. Failure to do so may lead to personal injury, damage to the Lever Hoist and invalidation of the warranty.

Take immediate action to repair or replace damaged parts by contacting your supplier. Ensure that all accessory lifting devices are suitably certified. If Lever Hoist is damaged, remove from service immediately.

Read thoroughly the contents before use and keep this handbook for future use.

APPLICATION

This lever hoist is a portable lifting device easily operated via its handle. It is suitable for use in a wide range of industrial and commercial settings for the installation of equipment, as well as for loading and unloading goods. The unit is designed for use in a workshop/garage or warehouse environment.

Being hand operated it is ideal for use when no power supply is available.

It is suitable for monorail overhead conveying system, hand travelling crane and jib crane

FEATURES

The Bluerange Lever hoist comes with five outstanding design and service features:-

1. Safe and reliable operation with minimum maintenance.
2. High operating efficiency means less user effort.
3. Light weight and easy to handle.
4. Attractive compact design.
5. Long service life.

PRECAUTIONS BEFORE INSTALLATION

1. Inspect the unit carefully for any damage that may occur during shipping. Check for loose, missing or damaged parts.
2. Confirm that the structure supporting the hoist is strong enough to support the rated capacity of the hoist with a safety factor of at least 1½ times the WLL of the lever hoist .

PRECAUTIONS BEFORE USE

1. Check and be sure that the load chain is not twisted, kinked, damaged or worn. The load chain must always mesh correctly with the load sheave.



2. Lubricate the whole load chain with machine or gear oil.
3. Confirm that the brake is functioning properly. Lift the load up 10cm, stop to confirm the brake hold the load. If it does not – **DONOT** use the unit until it is serviced/repaired.

HOW TO USE THE LEVER HOIST

1. Hoisting(Pulling) and Lowering(Releasing)

- 1.1 Hoisting (Pulling)
Set the Change-over lever to the **UP** position. take up the slacked load chain by turning the Hand Wheel clockwise.

To raise the load - move Operating Handle in a clockwise direction.

- 1.2 Lowering(Releasing)
Set the Change-over lever to the **DOWN** position.

To lower the load- move the Operating handle in a counter clockwise direction. When there is no load on the Lever hoist, the Load chain can be slacked by turning the Hand Wheel Counter clockwise.

2. Free-wheeling

This operation is for making quick adjustments of the Load chain length.

Set the Change-over lever to the **N** position and pull the Load chain out in the desired direction.

Free-wheeling will not be possible during the following conditions:

- a. When the lever hoist is under a load.
- b. When the Hand Wheel is in contact with something and can not rotate freely.
- c. When the brake has activated and locked due to a large or abrupt load: Turn the Hand Wheel 45 degree counter clockwise to unlock the brake.
- d. When the brake is locked: The brake can be unlocked by setting the Change-over lever to the **DOWN** position and manipulating the Operating handle counterclockwise.

3. Resetting

The lever hoist will automatically change from the Free-wheeling condition to the brake locked condition when a load is Applied.

Apply the load with one of the following two methods:

- a. Turn the Hand Wheel clockwise until the brake locks from the force of the load.
- b. Firmly pull the chain stop till the brake locks from the force of the load.

Next, turn the Change-over lever to the **UP** position and hoist or pull by manipulating the Operating handle.

PRECAUTIONS DURING USE

1. Never lift loads in excess of the rated capacity marked on the hoist.



2. Never walk or work under a hoisted load.



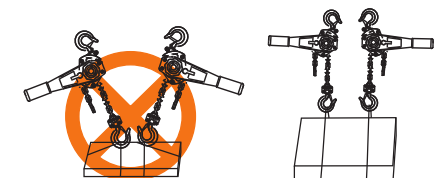
3. Never lift, support, or transport people.



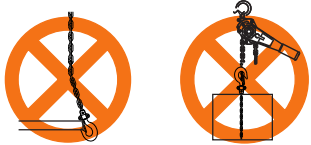
4. Never lengthen the handle to reduce the operating force. Do not operate hoist with excessive manual force.

5. Do not allow two or more operators to operate on a single hoist at one time.

6. Lifting a load with two hoists is not recommended. If the operation is un-avoidable, please consult with qualified lifting engineer to make sure the lifting plan is approved. Even then, it is essential the load is kept balanced during the whole operation.



- Hoists are designed for lifting loads vertically and should not be used for horizontal or angle hoisting.
- Lift loads correctly with proper slings and attachments.
Do Not lift with the point of the hook.
Do Not use the load chain as a sling by back hooking.
Do Not direct bind a load with load chain.



- Do Not** leave a load hanging on the hoist.

- The hoisting operation should never be down with the hook caught to a stationary object.



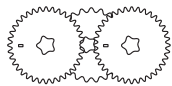
- Do Not** use the hoist to support workpieces for other operations ie: do welding or cutting .

- Use only genuine parts and chains supplied by the authorized distributors.

MAINTENANCE

NOTE: The Lever Hoist **MUST** be maintained in accordance with these instructions Maintenance and repairs should only be carried out by qualified people.

- Clean off any dirt on the lever hoist after use and store it in safe, dry place when not in use.
- Clean the parts with kerosene and lubricate the gears and bearings with grease once a year.
- Align the " 0" marks of the two gears (part no.9) while assembling, as shown below.



- While assembling the brake mechanism, take care to mesh the slanting teeth of the ratchet disc and the pawl. Make sure that the pawl is Positively secured by the spring. Then turn the change over pawl to UP position and turn the handle clockwise after screwing it onto the driving shaft, it must press the ratchet gear and the brake disc on the brake seat.

- Part no.5 is a complete set. **Do not** dismantle

- After cleaning and repairing, the hoist should be subjected to no-load test and load test by a competent person.

The lever hoist can be put returned operation after it has been tested and found to be in good condition.

- Ensure the brake friction surfaces are not contaminated while lubricating or operating the Block. The brake mechanism should be inspected regularly to prevent failure of the System..

- Keep the hoist well lubricated. Oil the load chain, hook shank regularly.

- Store the hoist correctly protected from rain and moisture.

INSPECTION

Prior to initial use, all new, modified and repaired products shall be inspected in accordance with Table 1.

Thereafter, items to be inspected are indicated in Table 1 by F(Frequent) or P(Periodic).

Frequent Inspection - Visual inspection by the operator or other authorised person. This inspection includes listening for unusual sounds while the product is operated that may indicate deficiencies.

Periodic Inspection-Audible-visual inspection as for Frequent Inspections, with some disassembly to allow a more detailed inspection if external conditions indicate the need.

Attention:
Check Brakes daily by operating the product with and without load, stopping at different positions to ensure safe operation.

TABLE 1 - INSPECTION CHART

F indicates Frequent Inspection,

P indicates Periodic Inspection

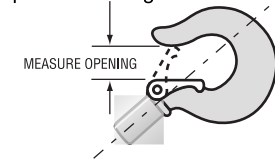
PARTS & UNITS		CHECK FOR	F	P
Braking mechanism		Slipping under load	✓	
		Hard to release	✓	
Brake parts:	Brake Discs	Glazing		✓
		Oil contamination		✓
	Pawl: Ratchet	Excessive wear		✓
	Pawl: Spring	Corrosion: stretch		✓
Hook		Chemical damage	✓	
		Deformation	✓	
		Cracks (dye penetrant, magnetic particle, or other suitable detection method)		✓
Hook Holding System (Pins, Bolts, Nuts)		Not tight or secure		✓
Hook Latch		Damaged; does not close	✓	
Suspension System (Sheaves,		Excessive wear		✓
Hand-wheels, Chain attachments, Suspension bolts or pins)		Cracks	✓	✓
Gears		Distortion		✓
		Broken or worn teeth		✓
		Cracks		✓
		Inadequate lubrication		✓
Load Block: Suspension housing		Distortion	✓	✓
		Cracks	✓	✓
Trolley: Supporting structure		Possible inability to continue supporting loads		✓
Bolts, Nuts, Rivets		Not tight or secure		✓
WARNING Label		Removed or illegible	✓	

HOOKS

Where applicable, inspect hooks and measure throat opening at least once a month.

During regular inspections check visually daily for deformation, distortion, twisting, damage and missing or damaged hook latches.

Hooks damaged by chemicals, suffering deformations or cracks, or that have more than 10 degrees twist from the plane of the unbent hook or excessive opening or seat wear, must be replaced. Also hooks that are opened to the extent that the latch does not engage the tip must be replaced. See figure 1



Replace hook when opening is greater than	Hoist capacity (tonnes)
31mm	0.75
41mm	1.5
43mm	3
55mm	6
62mm	9

Figure 1 - Hook throat opening

Top and bottom hooks have same dimensions.

CHAIN

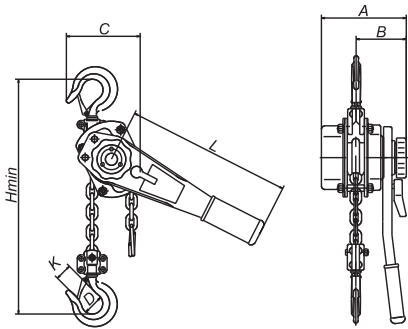
Inspect chain before each use. During regular inspections, check visually daily for nicks, gouges, weld splatter, corrosion, or distorted links. Inspect chain thoroughly if it does not feed smoothly over load sheaves. Inspect as follows.



Figure 2

- Clean chain before inspection.
- Test hoist with load and observe the operation of the load chain on load sheave.
- Slacken chain and inspect contact points for excessive wear. Refer to Figure 2.

SPECIFICATIONS

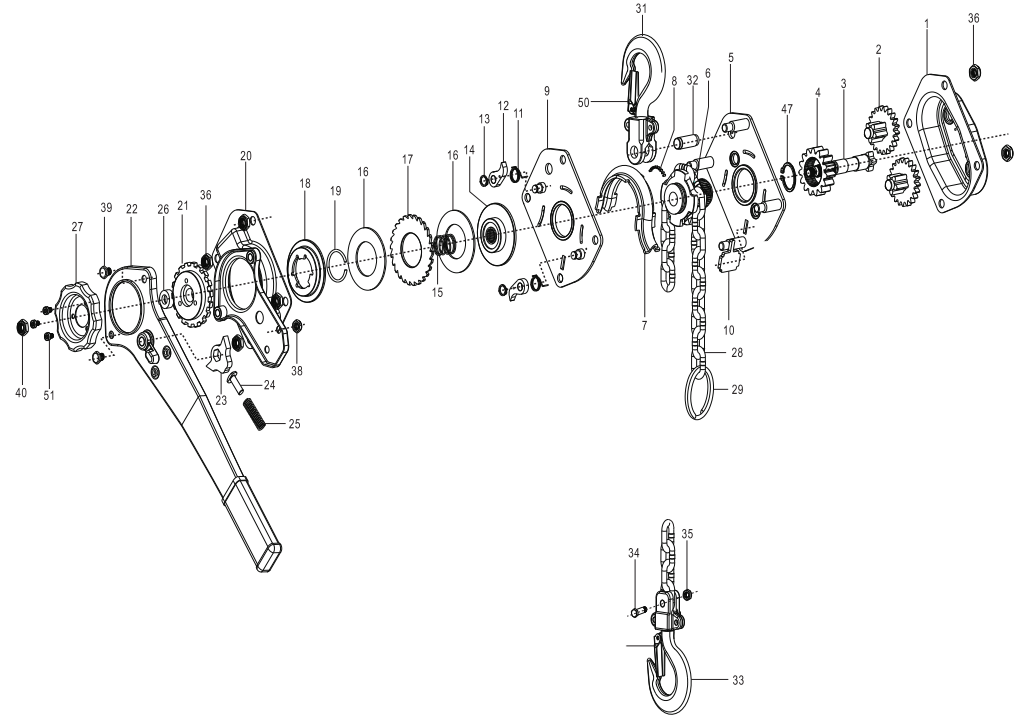


BRLH.75T BRLH1.5T

Capacity	tons	0.75	1.5
Standard lift	m	1.5	1.5
Running test load	Kn	11.2	22.5
Effort required to lift max. Load	N	140	220
No. of columns of load chain		1	1
Load chain diameter	mm	6	8
Dimensions (mm)	A	145	175
	B	86	100
	C	134	150
	D	38	48
	H	340	380
	L	285	410
	K	27	36
Net weight	kg	9.5	11.5
Packing measurement	cm	37.5x16x18	52x17x22
Extra weight per meter extra lift	kg	0.8	1.4

Data subject to change without notice

EXPLODED DIAGRAM



- 1. Gear Cover Set
- 2. Gear Set
- 3. Pinion Shaft
- 4. Lift Wheel Gear
- 5. Gear Side Plate Assembly
- 6. Load sheave
- 7. Chain Guide
- 8. Roller
- 9. Brake Side Plate Assembly
- 10. Chain Stripper
- 11. Retaining Spring
- 12. Retaining Pawl
- 13. Snap link for Pawl
- 14. Friction Hub
- 15. Wire Snap Ring
- 16. Brake Disc
- 17. Ratchet Gear
- 18. Brake Ring
- 19. Wire Snap Ring
- 20. Lever Cover
- 21. Change over Gear
- 22. Operating Handle Kits
- 23. Change over Pawl
- 24. Pushing Up Pin
- 25. Pushing Up Spring
- 26. Bushing
- 27. Hand Wheel
- 28. Load Chain
- 29. Chain Stop
- 31. Top Hook
- 32. Upper Hook Pin
- 33. Bottom Hook
- 34. Bolt for load Chain
- 35. Nut for load Chain
- 36. Nut for plate
- 38. Net for lever cover
- 39. Bolt for lever
- 40. Nut for Pinion Shaft
- 47. Snap Ring
- 49. Bolt for Grip Ring
- 50. Latch Kits
- 51. Needle
- 52. Idle Sheave Axle
- 53. Idle Sheave
- 54. Bottom hook for 6T/9T
- 55. Idle Sheave Holder

Dual Document



**EC DECLARATION
OF CONFORMITY**



Designation: Lever Hoist 750kg, 1500kg

Model No: BRLH.75T , BRLH1.5T

Complies with the following directives:

Machinery Directive 2006/42/EC

The conformity assessment procedure followed was in accordance with EN ISO 13157A1:2009

Manufacturing Date/serial number :

Please refer to product data label

Technical file holder : Bluerange

Authorised signatory

Dated: 11/05/2021

Signature:

Malcolm Lewis

Name: Mr Malcolm Lewis

Position: Brand Manager

Company:

Bluerange 76 Regent Road Bootle Merseyside L20 1BL

MAINTENANCE NOTES
