

Operating and maintenance manual for **LHT combination trolley**

Installation - Operation - Maintenance



IMPORTANT - READ BEFORE USE!

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Annual inspection

CE DECLARATION OF CONFORMITY

EC DECLARATION OF COOPERATION

SAFETY INSTRUCTIONS

				
<p>1. Read before use!</p>	<p>2. Do not overload</p>	<p>3. Do not work under a load!</p>	<p>4. Never pull the chain from the side!</p>	<p>5. Never work with a damaged hoist!</p>
				
<p>6. Never lift human with this hoist!</p>	<p>7. Never throw the hoist</p>	<p>8. Do not wrap the load chain around the load</p>	<p>9. Never work up to the end of chain</p>	<p>10. Never attach the load on the tip of the hook!</p>
				
<p>11. Never work with a twisted or broken chain!</p>	<p>12. Never work without a safety latch!</p>	<p>13. Never remove the warning notice</p>		

1. General information

Hoists, whether integrated or hooked into the trolley, are used solely for the raising and lowering of loads.

The LHT combination trolley is an inseparable of the LST trolley and the PREMIUM PRO hoist.

Intellectual property

Designs, drawings and technology are the sole property of the manufacturer.

It is expressly prohibited to copy or utilise this type of information, or pass it on to third parties, without express written permission.

Warranty

The manufacturer provides the user with a guarantee regarding the fault-free nature of the hoist material and the work execution for a period of one year from the date of purchase.

The manufacturer shall repair every faulty product free of charge - including part and wage costs - or replace such products at their own discretion, or reimburse the purchase price less an appropriate figure to account for depreciation, in exchange for the product.

If any product proves defective within its original one-year warranty period, it must be returned to an authorised dealer, together with a proof of purchase or including the datasheet/test certificate.

The hoist must be returned carriage paid. This warranty does not apply to products that are found by the manufacturer to have been incorrectly used or misused, or incorrectly maintained by the buyer; or where the malfunction or damage can be attributed to the use of non-original spare parts.

The manufacturer provides no further guarantees and all implicit guarantees including any warranty for defects or guarantees regarding the suitability of the product for a specific purpose are limited to the stipulated duration of the warranty period as cited above. The maximum liability of the manufacturer is limited to the purchase price of the product and the manufacturer cannot under any circumstances be held liable for any consequential, indirect, incidental or special damages of any kind, which arise due to the sale or use of the product, regardless of whether this liability is based on the contract, invalid, or otherwise.

2. Important notes

- Before installation and use, you must read through the operating manual and make it available to the operator of the equipment.
- The operator must be properly instructed in how to use the equipment.
- Never exceed the working load limit (WLL) on the product label.
- Do not pull chains over edges.
- Never use the product to lift people or to lift load above areas where there could be people.
- The equipment must be inspected once a year by a qualified expert, more frequently for harsher operating conditions.
The company must ensure that test certificates are issued.
- Before use, inspect the equipment for damaged, loose bolts or twisted chains and rectify any faults.
- Repairs to the hoists may only be performed by the manufacturer or by a trained service partner, using original spare parts.
- Failure to observe the instructions in the manual, improper use, corrosion due to inadequate protection or unauthorised modifications to the product will void the guarantee.
- Risk of corrosion due to it being continuously subjected to unfavourable weather conditions, such as high humidity or harmful environmental influences, e.g. atmospheres with acidic vapours, corrosive gases or a high concentration of dust will lead to premature wear. This does not give any entitlement to a warranty claim.
- We would be happy to provide you or your specialist dealer with further information or parts lists.

3. Particular safety instructions

certain work and activities are not allowed whilst using the LHT combination trolley, because it is dangerous to life and can cause injuries and damage to the machine, e.g.:

- The user must read the operating manual before commissioning
- NEVER lift more than the rated capacity / working load limit
- NEVER lift a load above people
- NEVER pull the load chain across or along sharp corners
- NEVER operate the equipment when its damaged
- NEVER use the equipment to lift or carry people
- NEVER throw the equipment
- NEVER use the load chain for attachment / rigging purposes
- NEVER work at the end of the chain
- NEVER attach a load to the tip of the hook
- NEVER work while the load chain is twisted or damaged

- NEVER use without the hook safety latch
- NEVER remove the warning notices
- NEVER use the chain as a lifting sling
- NEVER leave a suspended load unattended

Geared LHT trolley:

- NEVER operate the hand chain in a angle contrary to the travel direction of the trolley

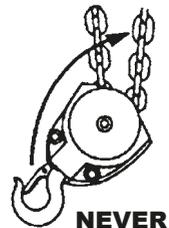
4. Assembly information before commissioning

A. Before commissioning

- Chain hoist made movable by means of a trolley or which were already delivered with a trolley are subject to the Germany industrial safety regulation (BetrSichV) and the DGUV regulations for cranes. In Germany, they must be inspected by a qualified expert and tested for a lead bearing capacity over 1t by a registered inspector, before initial commissioning can occur! Observe the national regulations applicable on your country
- Never operate the LHT trolley-hoist at temperatures below -20 degrees Celsius or above +60 degrees Celsius

B. Installation and inspection before each use

- The hand chain and load chain must hang freely without any bends or twists
- Pull the hand chain all the way through once without a attached load to the hoist
- Inspecting the load brake function: Raise the load slightly (min. 10% WLL) and hold it in place. If the load keeps in position, raise it further. During lowering, the load must not slip when operating the hand chain is stopped. The attached load must not be less than 10% of the rated trolley-hoist capacity.
- If brake function is proper, operation can be initiated
- Important for equipment with multiple chain falls: The hook block must not be passed through the chain loop. This can be recognised from a twisted load chain. If the welds on the chain links are not in line, the hook block must be folded back through the chain loop
- The last link of the load chain must be secured to the housing to prevent the chain from passing through for safety reasons.



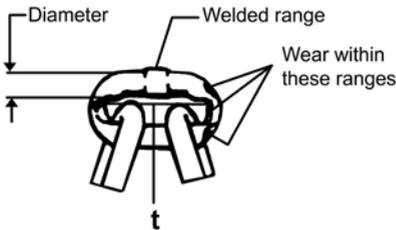
5. Installation

- When the minimum load (10% WLL) is attached, the brake engages automatically
- The hoist is only suitable for lifting and lowering purposes in vertical direction.
- To move the load, pull the hand chain in lifting or lowering direction

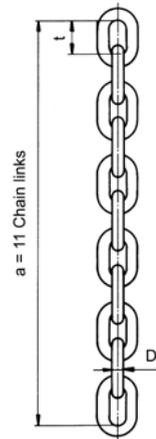
6. Maintenance and inspection

Chains and hook

- The chains and hooks must be inspected on a regular basis! Clean the chain before inspection. Slightly lubricate the load chain from time to time! Never oil or grease the brake!
- The load chain must not crack when load is attached.
- Check the chain for elongation! Measure the internal length (t) of a worn chain link, the smallest diameter of the wire (D) and the length over 11 chain links; the chain must be held taut during this process. If the measured dimension then exceeds the dimension (a) stated in the following table, then the chain must be replaced. The diameter must not be less than dimension (D), do not exceed the spacing (t) on an individual link.



Load bearing capacity	Max. measurement over		Min. chain link diameter (D)
	1 chain link (t)	11 chain links (a)	
0,5t	15,8mm	170,0mm	4,5mm
1t	18,9mm	210,9mm	5,4mm
1,5t	25,2mm	271,9mm	7,2mm
2t	25,2mm	271,9mm	7,2mm
3t	31,5mm	352,5mm	9,0mm
5t	31,5mm	352,5mm	9,0mm
10t	31,5mm	352,5mm	9,0mm
20t	31,5mm	352,5mm	9,0mm



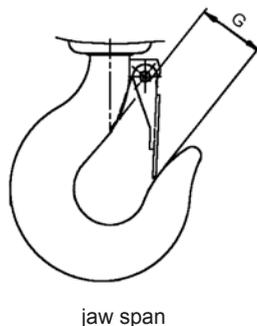
If the load chain needs to be replaced, it is assumed that the load chain sprocket is affected as well. It has to be also checked for wear.

Hook inspection Item 31 and Item 32 for 0.25 - 3 t version;
 Item 57 and Item 71 for 5 t version;
 Item 77 and 84 for 10 t version

Hooks can be bent open or elongated due to heavy loading and improper handling of the equipment. If the original dimension „G“ is exceeded by 10%, the hook must be replaced. If this is the case, then the overloading has also damaged other load-bearing parts and the hoist must be checked thoroughly for deformations in all components.

Since the hooks vary due to forging tolerances, actual dimension „G“ on the equipment in question must be measured by the operator before initial commissioning, and entered in the following table.

Load bearing capacity	Hook opening „G“			
	normal	max.	Measured	max. x 1.1
0,5t	26 mm	29 mm		
1 t	32 mm	35 mm		
1,5t	38 mm	42 mm		
2 t	38 mm	42 mm		
3t	43 mm	47 mm		
5t	48 mm	53 mm		
10t	60 mm	66 mm		
20t	84 mm	92 mm		



7. PREMIUM PRO overload safety device

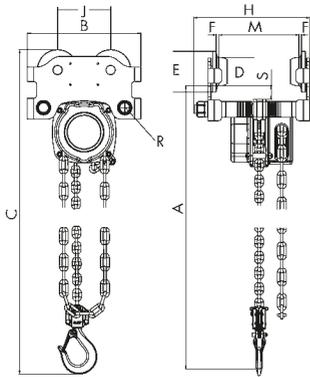
All PREMIUM PRO spur gear hoists have an adjustable overload safety device as standard. This protects the equipment by the fact that one cannot lift more than the preset frictional engagement in the hand wheel permits. The overload safety device is factory-set to approx. 125 % of the nominal load.

The pressure on the friction disk is increased or reduced by tightening and/or loosening the press nut (Item 51).

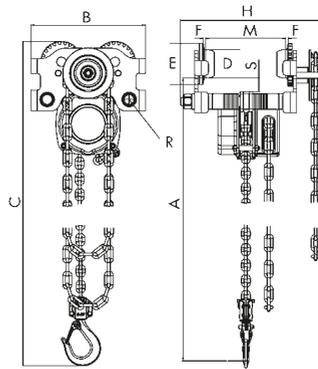
Once the desired value has been reached, the nut (Item 51) is secured by bending one or two teeth of the toothed washer (Item 52) into the appropriate recess on the nut.



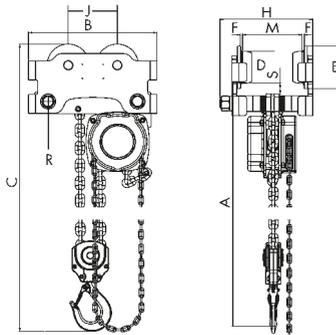
8. Technical data LHT-H / LHT-G (Geared trolley)



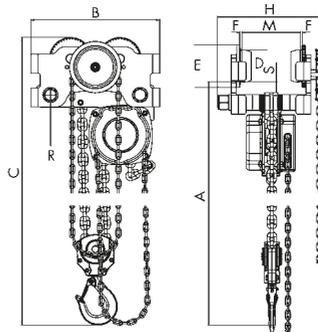
LHT-H 0.5 - 3 t



LHT-G 0.5 - 3 t



LHT-H 5 t



LHT-G 5 t

TYPE	LHT...-H/-G	005L	010L	015L	020L
Capacity	t	0,5	1	1,5	2
Standard lift	m	3	3	3	3
Number of chain falls		1	1	1	1
Chain size	mm	5 x 15	6 x 18	8 x 24	8 x 24
Min. headroom (A)	mm	272	270	388	388
Flange width min. - max. (M)	mm	50 - 203	64 - 203	88 - 203	88 - 203
Min. curve radius	m	0,85	1	1,1	1,1
Dimension H min. LHT-H	mm	270	281	288	288
Dimension H min. LHT-G	mm	325	336	341	341
B	mm	218	260	306	306
C	mm	352	420	487	487
S	mm	26	29	29	29
F	mm	3	3	3	3
Weight with 3 m lift LHT-H	kg	13,5	22	42	42
Weight with 3 m lift LHT-G	kg	14,8	23,5	43,7	43,7

TYPE	LHT...-H/-G	030L	050L	100L	200L
Capacity	t	3	5	10	20
Standard lift	m	3	3	3	3
Number of chain falls		1	2	3	8
Chain size	mm	10 x 30	10 x 30	10 x 30**	10 x 30
Min. headroom (A)	mm	472	595	800	965
Flange width min. - max. (M)	mm	100 - 203	114 - 203	124 - 203	136 - 203
Min. curve radius	m	1.3	1.4	2	3.5
Dimension H min. LHT-H	mm	307	317	391	449
Dimension H min. LHT-G	mm	356	369	391	498
B	mm	356	440	447	891
C	mm	566	745	940	1165
S	mm	30	37	40	58
F	mm	3	3	3	3
Weight with 3 m lift LHT-H	kg	56	82	143	331
Weight with 3 m lift LHT-G	kg	58	85	148	353



CE DECLARATION OF CONFORMITY
in accordance with the EC Machinery Directive 2006/42/EC, Annex II A

We,

PLANETA-Hebetechnik GmbH, Resser Straße 17, 44653 Herne

hereby declare that the product

Combination trolley Model series LHT-H
Capacity 500 kg – 20.000 kg

Combination trolley Model series LHT-G
Capacity 500 kg – 20.000 kg

which were developed for the lifting and lowering of loads, in the series production version, including load capacity control, **comply with the following applicable regulations:**

EC Machinery Directive 2006/42/EC

Person responsible for the compilation of the technical documents:

Dipl.-Ing. Matthias B. Klawitter, CE-Coordinator,
PLANETA-Hebetechnik GmbH, Resser Straße 17, 44653 Herne

Herne, February 2018

PLANETA-Hebetechnik GmbH



Dipl.-Ök. Christian P. Klawitter
(Managing Director)

The undersigned is responsible for completion, installation and commissioning according to the operating instructions:

Location

Date

Person responsible

Company

EC DECLARATION OF INCORPORATION

Declaration for the installation of an incomplete machine according to
EC Directive 2006/42/EC, Annex II B

We,

PLANETA-Hebetechnik GmbH, Resser Straße 17, D-44653 Herne

that the following items of partly completed machinery

Combination trolley Model series LHT-H
in payload range 500 kg – 20.000 kg

Combination trolley Model series LHT-G
in payload range 500 kg – 20.000 kg

in the series production version, including load capacity control, are intended for installation
in a machine and meet the basic requirements for the following EC directives, where
applicable for the scope of goods supplied:

EC Machinery Directive 2006/42/EC

We also declare that the technical documents have been produced in accordance
with Annex VII Part B of Directive 2006/42/EC. We undertake to transfer the special
documentation for the aforementioned products to national authorities, in response to a
reasoned request. The transfer will be implemented electronically. This declaration refers
only to the aforementioned products. Commissioning is prohibited until it can be ascertained
that the aforementioned products have been properly integrated and fulfil the provisions of
the aforementioned EC directives.

Person responsible for the compilation of the technical documents:

Dipl.-Ing. Matthias B. Klawitter, CE-Coordinator,
PLANETA-Hebetechnik GmbH, Resser Straße 17, 44653 Herne

Herne, February 2018

PLANETA-Hebetechnik GmbH



Dipl.-Ök. Christian P. Klawitter
(Managing Director)

The undersigned is responsible for completion, installation and commissioning according to
the operating instructions:

Location

Date

Person responsible

Company Firma

Supplier responsible