

# Instructions for Use

## Ratchet Lever Hoist

### TRA-025/-075/-150/-300/-600



Item no.	Load-carrying capacity	Weight without load chain	Number of chain strands	Load chain dimensions mm	Device measurements H / W / D mm	Handle length	Hoisting force with payload
	Payload					mm	
TRA-025	0,25 t	2 kg	1	4 x 12	210/65/80	160	25 daN
TRA-075	0,75 t	7 kg	1	6 x 18	325/90/150	280	20 daN
TRA-150	1,5 t	11 kg	1	8 x 24	380/100/170	410	35 daN
TRA-300	3,0 t	21 kg	1	10 x 30	480/115/200	410	40 daN
TRA-600	6,0 t	31 kg	2	10 x 30	620/115/200	410	40 daN

## Attention!

**Every user must read these instructions for use before using the device for the first time.**

They are intended for getting to know the hoisting device and taking advantage of its proper applications. These instructions for use have important indications on how to operate the hoisting device safely, properly and economically. Their observance helps to prevent hazards, reduce repair costs and downtime plus increase the reliability and useful life of the hoisting device. These instructions for use should always be available where the hoisting device will be used. Apart from the instructions for use and the obligatory country-specific safety prevention regulations, the recognized rules for safe and professional work must be observed.

## Intended use

**Maximum load**, the payload indicated on the device, may not be exceeded.

**The device** is suitable for hoisting, pulling and tensioning loads. During hoisting, the support and load hook must be above the load's center of gravity in a vertical straight line to prevent the load from oscillating. (Illustration 4) **Loads** may not be kept hoisted or tensioned unattended or for longer periods.

**The operator** may only start moving the load until he is sure that the load is correctly fastened and there are no persons in the danger zone. It is prohibited to stand or sit below a raised load (Illustration 2). **When hooking up** the device, the operator must be careful to use the hoisting device, suspension element or load in a way that will not endanger him. **The device** can be operated at an ambient temperature of -10°C to +50°C. In extreme situations, the manufacturer should be consulted.

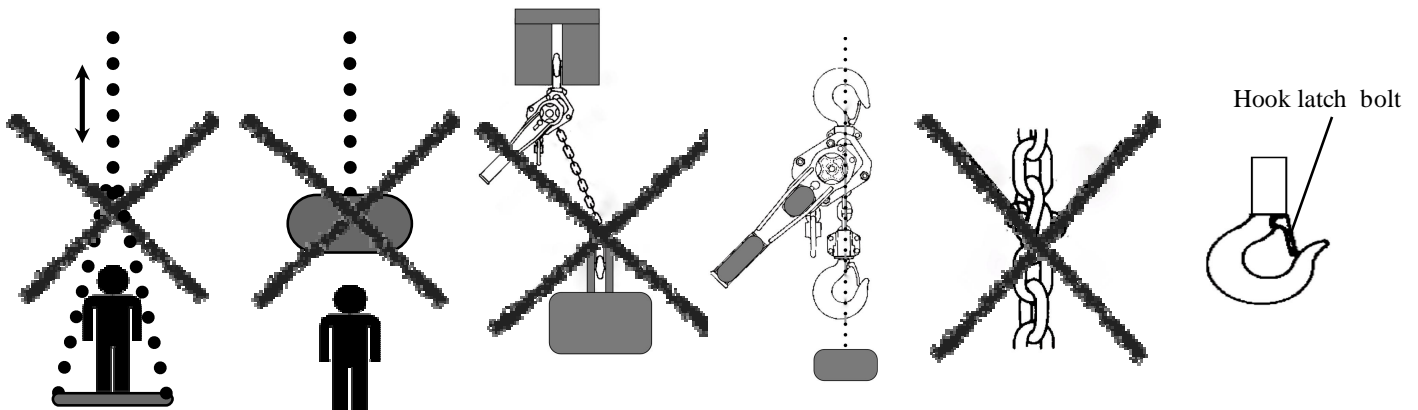
**Attention!** At ambient temperatures below 0°C, check brake for icing!

**The accident prevention and safety rules** for manually operated hoisting devices of the country in which the device is used must be strictly observed. **Proper use** also includes – apart from observance of the instructions for use – compliance with the inspection and maintenance conditions.

**In case of malfunction**, the hoisting device must be immediately taken out of service.

## Improper use

**The indicated payload** may not be exceeded. **The use** of the hoisting device for transporting persons is prohibited (Illustration 1). **A lever extension** is not permitted. **Welding work** on the hook, chain and device is prohibited. During welding work, the chain may not be employed as grounding cable. **Diagonal pulling**, i.e. lateral load in the housing or bottom hook block, is prohibited (Illustration 3). **The load chain** may not be directly used as sling chain. Do not knot or connect the **load chain** with bolts, screws, splints or the like (Illustration 5). **Load chains permanently installed in hoisting devices** may not be repaired. **The removal** of the hook latch bolt from support and load hooks is prohibited. (Illustration 6) Always hook up **the load** in the middle of the hook, do not overload the hook tip (this also applies to the support hook). **The operational turning of the load** is prohibited. If an operational load turning is intended, so-called swivels must be installed. **The chain end ring** may not be used as hoist limit. Do not drop the **hoisting device** from a significant height. The device should always be properly laid down on the floor.



Picture 1

Picture 2

Picture 3

Picture 4

Picture 5

Picture 6

## Initial operation testing

**Before initial use**, an expert must subject the hoisting device to a test. Possible defects must be corrected at once. This test consists largely of a visual and functional test. You must ensure that the device is in a safe position and defects or damages can be determined and corrected if applicable. Qualified persons can be deemed to be the service staff of the manufacturer or supplier, for example. The operator can also have skilled staff trained specifically for this purpose carry out the test.

**Before starting work**, the device and supporting elements, chains, equipment and supporting construction must be inspected for obvious defects and malfunctions. Furthermore, the brake and correct hooking up of the device and load must be checked too. To do this, lift, pull or tense a load over a short distance and then lower or unload it. **The load chain and the support or load hook** must be checked for external defects, deformations, cracks, wear and corrosion as well as heavy wear and tear. It should also be checked for adequate lubrication.

**The chain end ring** must always be mounted on the loose chain end.

**The load chain** may not be twisted or intertwined, especially in devices with two or more strands. Check for correct chain alignment. The chain welding joint must point outwards.

## Function

Safetex ratchet lever hoists have been exclusively approved for – and must be used with – original Safetex chains. A perfect function is only guaranteed with original chains. It must be ensured that only chains corresponding to the size of the device type are used.

### Initial operation

When anchoring the ratchet lever hoist, make sure that the supporting construction has been statically laid out for accepting the corresponding payload. The ratchet lever hoist must be safely hung and the hook latch bolt on the supporting hook **1** closed in order to secure the pulley against unhooking.

**Chain activation:** Put shift lever **9** in neutral position so the chain can be pulled in both directions and the load chain strand **4** can be quickly brought to pre-tensioning. **Attention:** The minimum load for the automatic brake closing lies between min. 30 - 45 kg.

**Load hoisting:** Snap the shift lever **9** in place in hoisting direction. Use the handle **7** for making pumping movements. When the hoisting device is under load but not operated, the shift lever **9** must remain in hoisting position. **Lowering the load:** Put shift lever **9** in lowering position and snap it in place. Make pumping movements with the handle **7**.

**Brake tightening:** If a hoisting device under load is suddenly unloaded by lifting the load, for example, without starting the lowering process before, the brake remains closed. The brake will also close when the load hook with the bottom hook block is pulled too tightly to the housing.

**Loosening the tightened brake:** Put shift lever **9** in lowering direction and press the handle **7** through with a jerk. If tightness is too high, the brake can be loosened by abruptly loading the handle **7**.

Carrying capacity according to designation 1:1 (test load 1:1.5). **The accident prevention rules** for hoisting devices and the guidelines for chains and load suspension elements must be observed.

1) Support hook with hook latch bolt

2) Load hook with hook latch bolt

3) Bottom hook block

4) Load chain

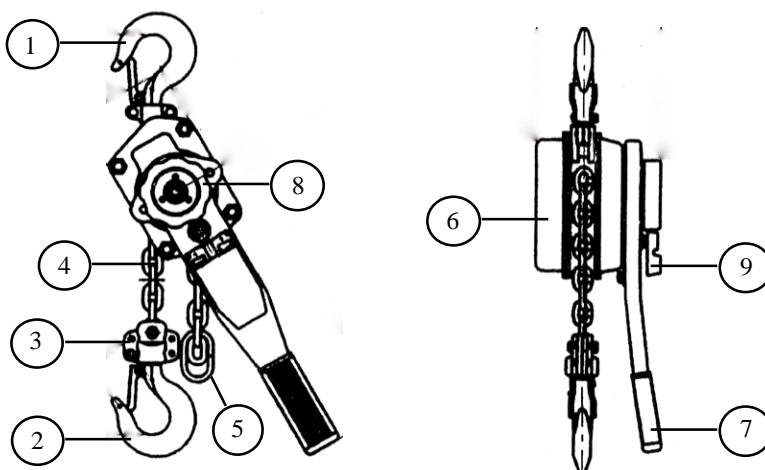
5) Chain end ring

6) Housing

7) Handle

8) Hand wheel

9) Shift lever



## **Inspection-Maintenance**

**A yearly inspection of the device** must be carried out on a regular basis by a qualified individual, who must ensure that device and accessories remain in safe condition. If the device is used with heavy loads, testing should be done in shorter intervals.

**The inspections are largely visual and functional tests.** The condition of the structural components regarding damage, wear, corrosion or other changes must be assessed, as well as the completeness and effectiveness of the safety devices. To check parts subject to wear and tear, a disassembly may be necessary. For checking the hoisting, pulling and lowering functions, a payload equivalent to the nominal load is generally required. Only authorized specialized shops that use original Safetex spare parts may repair our products.

**The operator of the device must order the inspections and record them in the instructions for use Declaration of conformity – in accordance with guideline 2006/42/EC**

It is hereby confirmed that the conception, design and execution of the devices we market described in these instructions for use comply with the pertinent, basic safety and health requirements of EC guideline 2006/42/EC for machinery. If the device is modified or supplemented without our knowledge, this EC declaration of conformity will cease to be valid. This EC declaration of conformity will also cease to be valid if the machine is not used as intended according to the uses indicated in these instructions for use and the tests are not regularly performed.

## **Standards-Guidelines**

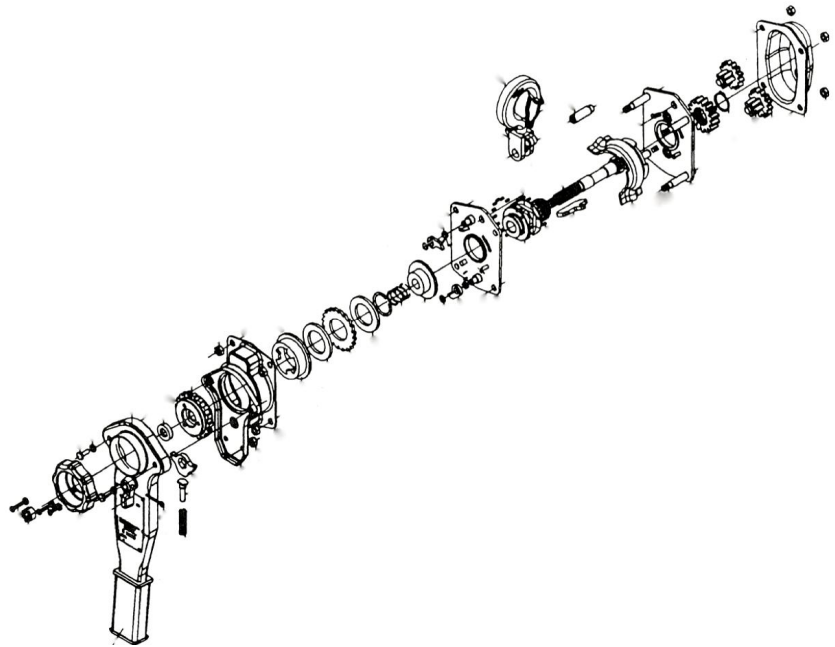
EC guideline 2006/42/EC for machines  
DIN EN 349 machine safety

## **Final inspection**

Type of device	Series number	Inspector	Date
TRA-			

## **Test report / Inspection**

Inspection remark	Inspector	Date
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### Exploded view

No.	Description
1	Friction plate brake pad
2	Brake disk
3	Safety catch
4	Load hook complete
5	Device hook complete
6	Spare part set for hook

- 9
- 7
- 6
- 1
- 2
- 5
- 6
- 3
- 4

Principle sketch

### List of spare parts

Item numbers -

No.	for TRA-075	for TRA-150	for TRA-300	for TRA-600
1	TRA-010-ET-RP	TRA-150-ET-RP	TRA-300-ET-RP	TRA-600-ET-RP
2	TRA-010-ET-BS	TRA-150-ET-BS	TRA-300-ET-BS	TRA-600-ET-BS
3	TRA-010-ET-SK	TRA-150-ET-SK	TRA-300-ET-SK	TRA-600-ET-SK
4	TRA-010-ET-LH	TRA-150-ET-LH	TRA-300-ET-LH	TRA-600-ET-LH
5	TRA-010-ET-GH	TRA-150-ET-GH	TRA-300-ET-GH	TRA-600-ET-GH
6	TRA-010-ET-EG	TRA-150-ET-EG	TRA-300-ET-EG	TRA-600-ET-EG

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