

User Guide

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HABEGGER HIT manual hoist device

HIT-06
HIT-10
HIT-16
HIT-32



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Introduction

You have made a good choice with the HABEGGER HIT hoist device. You may already know how your newly-acquired hoist device works. However, we at Jakob AG recommend that you read these operating instructions carefully before you start using your device! It contains all of the essential information required to avoid risks and repair costs and increase the service life of your hoist device.

Always keep these operating instructions at the place where the hoist device is in use and make sure everything who uses it has read and adheres to these instructions. They must be accessible to all operating personnel in order to avoid handling errors.

In addition to the operating instructions and the accident prevention regulations applicable in the country of use, compliance with the recognized technical rules for safety and professional conduct is required.

We hope you enjoy and are successful working with a product from Jakob AG.

EG-Konformitätserklärung*Déclaration de conformité CE*

EC declaration of conformity



Wir / Nous / We

Jakob AG
Dorfstrasse 34
CH-3555 Trubschachenerklären hiermit, dass die Maschine
déclarons par la présente que la machine
hereby declare that the device**HIT-06****HIT-10****HIT-16****HIT-32**

in seiner Konzipierung und Bauart sowie in den von uns in Verkehr gebrachten Ausführungen den grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Richtlinie Maschinen entsprechen.

Bei nicht bestimmungsgemässer Verwendung, sowie bei nicht von uns freigegebenen Umbauten oder Änderungen, verliert diese Erklärung ihre Gültigkeit.

Zudem verliert diese Konformitätserklärung ihre Gültigkeit, wenn die Bestimmungen der Betriebs- und Instandhaltungsanleitung nicht befolgt oder missachtet werden.

satisfait aux exigences fondamentales de la directive machines CE en matière de sécurité et de santé, tant du point de vue de sa conception et de sa construction que pour toutes les versions que nous avons mises sur le marché. En cas d'utilisation non conforme ou de modification ou transformation non approuvées par nous, cette déclaration perd sa validité. Cette déclaration perd également sa validité en cas de non-respect des instructions d'utilisation et de maintenance.

conforms to the health and safety requirements of the EC Machinery Directives in its conception and design, as well as in the version placed on the market by us. In the event of improper use, as well as modifications or changes which are unauthorised by us, this statement loses its validity. This declaration of conformity also loses its validity if the relevant user guide and maintenance manual are not followed or are violated.

Zutreffende EG-Richtlinie:

Directive CE concernée:

Applicable EC directives:

EG-Richtlinie Maschinen 2006/42/EG

Angewandte harmonisierte Normen:

Normes harmonisées appliquées:

Applied harmonised standards:

EN 13157: 2010-07**EN 1808: 2015-07****EN ISO 12100: 2011-01****Stv. Leiter Technik**

Suppléant du chef technique / deputy Head of Technology

Thomas Gerber

Leiter Seil- & Hebetchnik

Chef câbles et levage / Head of Hoisting and Lifting

Urs Schneider

1 General description

The HIT hoist devices are for pulling, lifting, lowering and securing loads.

A special original Habegger rope (identifiable by the blue strand and interior marking tape) of any length can be used as lifting tackle.

These ropes are suitable for all lifting, pulling, lowering and securing work.

The required rope diameter can be found on the type plate, the casing and the pressing clamping jaw on the rope.

The drive is actuated manually using a manual lever. The level pipe is attached to the corresponding lever on the hoist device and secured against slipping by turning it.

Role:

The wire rope of any length is guided straight through the HIT hoist device and gripped by two pairs of clamping jaws. The clamping jaw force on the clamping jaws increases proportionately to the tensile force of the rope.

By manually moving one of the drive levers back and forth, the rope is pushed backward or forward in the longitudinal direction of the device without slipping or jerking, depending on the selection of the gear lever. While the rope is moving, one pair of clamping jaws is always open while the other (closed) pair moves the rope in the desired direction.

Under a static load, both pairs of clamping jaws automatically close. The load is distributed to both clamping jaws.

Transporting persons

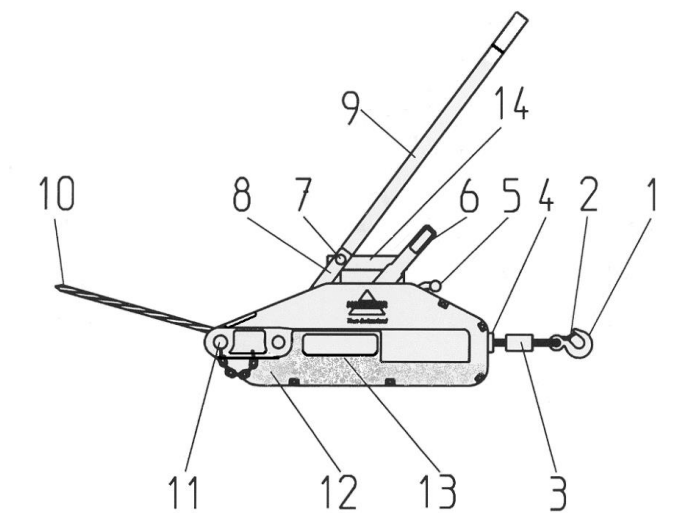
Is only permitted if the following prerequisites have been fulfilled:

- Use of a HABEGGER HIT-06, HIT-10, HIT-16, or HIT-32 with reduced load-bearing capability
- Use of a safety gear on an additional safety line (in accordance with EN 1808)
- The system for transporting persons (pull-up work platform or similar) complies with the applicable safety regulations.
- The hydraulic drive for the HABEGGER HIT-16 and HIT-32 may not be used to transport persons.

The HABEGGER HIT hoist device is then a component of the system; the manufacturer is responsible for construction in compliance with regulations and the operator is responsible for the safe operation, based on the operating instructions for the system.

1.1 Components

- | | |
|------------------------|---------------------------------------|
| 1 Load hook | 8 Forward motion lever |
| 2 Safety catch | 9 Telescope lever |
| 3 Clamp | 10 Loose rope end |
| 4 Rope lead in | 11 Anchoring bolt |
| 5 Jaw opening lever | 12 Housing |
| 6 Reverse motion lever | 13 Typeplate |
| 7 Shear pin (overload) | 14 Carrying handle (only HIT 16 / 32) |



2 General safety rules



Only use the hoist device if it is in proper working order and in compliance with the operating instructions. The HABEGGER HIT hoist devices comply with the current state-of-the-art.

Laws, regulations and safety equipment do not offer protection against carelessness and negligence! Before you work with the hoist device, you must carefully read and comply with the following safety instructions.

It's about your safety!

2.1 Safety information in this operation manual

For hazards, notes and important information, the following symbols and descriptions are used:



- Notices are particularly important information which you must comply with when operating the equipment for its intended use.



- Caution! Note indicates hazard for the machine, machine parts and the environment.



- Danger! Note referring to hazards to health and the life of the operator and other persons in the working area of the motor-driven rope pulling machine.

2.2 Intended use

The hoist device is for pulling, lifting, lowering and securing loads and tightening tether and guiding lines.



- The hoist devices may only be used to transport persons in compliance with the special requirements.

2.3 Authorized operators

The hoist device must only be used by a specialist person who is authorized. As the operating company for the hoist device, make sure that the operation manual is made accessible to the operator and ensure that they have read and understood it.

2.4 liability and warranty provisions

The liability and warranty provisions of the general T&C of Jakob Rope Systems apply. Especially T&C points 10 and 11.

2.5 Behavior in an emergency situation

Before starting work, always inform yourself whether and where there is a mobile phone network or where a traditional telephone is available. Check the availability of a first-aid box.

2.6 Product specific hazards



- The rope can get hot during lowering

2.7 Preparation

2.7.1 Location



- When working, always make sure the device is on solid ground and the area is secured.
- You need enough room to move. Make sure you have enough space to stand.
- Never stand on ladders.
- If the location is unsuitable, use a deflector and choose a better location.
- When installing the machine take care that no external hazards can act on the rope pulling machine, the traction rope, the load and the operator personnel. (e.g. falling objects, passing vehicles, electrical overhead lines, and so on)

2.7.2 Anchoring



- Fixate the device to the anchoring bolts with sufficiently strong straps or slings.
- Do not use damaged wire rope straps or textile anchoring loops.
- Rope coupling and safety catches must not be able to autonomously release when the rope is loose.
- The machine must be able to adjust freely in the pulling direction of the rope. Otherwise there is a risk of the housing breaking!
- Never support the hoist device on the rope guiding sleeve or the casing.
- When using the device at the same place for a longer period: Check the anchors regularly!
- The anchor point must withstand the expected tensile force (check in advance, if needed).

2.7.3 Load



- The efficiency of deflection devices must be considered when designing the system.



- The pulling force must not be greater than the rated pulling force of the machine.
- The inherent stability of the load must be guaranteed, to prevent sliding off or tipping during the work.
- Pay attention to obstacles, which could cause the load to tip or become stuck.
- Uncontrolled loading (e.g. buckets, containers) during the lift or at interim positions is prohibited.
- When tensioning and anchoring, take into account possible stress spikes (in static condition) due to external influences.
- Excessive impacts and loading on the pulling machine (e.g. anchoring of moving machinery, wind and so on) must be prevented by the use of a strain relief rope.

2.7.4 Traction rope

The pull rope properties are decisive with respect to the reliability of the clamping jaw system. Rope structure and inherent strength (transverse compressive strength, impact resistance) must resist the loads which occur.



- Only suitable **original HABEGGER** ropes (identifiable by the blue strand and interior marking tape) must be used.
- The pulling rope must not be lubricated, and must be kept clean.
- The rope diameter must match that on the type plate.
- Damage of the rope: crushed, unwound, non-circular, kinked ropes or ropes with strand breaks or tangles must not be used. (**ISO 4309**) Otherwise, the rope may bunch up (bird-caging) in the hoist device. Then the load cannot be raised nor lowered.
- Ropes with broken wires: remove broken wires carefully and correctly.
- Rope connections, sleeves, compression heads, short splices and so on must not run through the drive system.
- When deflecting the rope over sharp edges, obstacles and so on protect the rope using suitable floor rollers or supports made of wood or plastic.
- For lengths greater than **20 m** the loose rope end (10) must be rolled up properly (rollers, reels). Rope twists, tangles, kinks etc. must be avoided!
- Welding work on the draw hook or rope are prohibited. When performing welding work on electrical equipment at another location, make sure the welding current is never conducted via the pull rope or device.
- Replace or repair hooks if the safety catch is missing.
- The traction rope itself may not be used to attach a load

2.7.5 Inserting rope



- Wear gloves when using hoist devices and wire ropes

2.8 Working

2.8.1 General



- Operating levers can only be activated by hand or using the attached hydraulic drive.
- When working make sure that neither the housing nor the rope are deflected or tilted by objects or obstacles.



- Do not stand in the hazard zone of loads, deflectors, hoists and ropes!
- Working under suspended, unsecured loads is prohibited
- Secure suspended loads against rotating
- Either the forward or the reverse gear level may be actuated, but never both levers simultaneously.

2.8.2 Pulling and lifting



- If the forward gear level is actuated with too much force, the shearing pin will break and prevent the hoist device from being overloaded (see Chapter 5). The load will still be securely held.



- Observe the rope during the movement.

- Observe the movement of the load.



- Only use original Habegger brass shearing pins.
Stronger shearing pins can result in the hoist device overloading and breaking.
- Always suspend the load in the center of the hook. The tip of the hook must not bear the load.
- Refrain from uncontrolled loading (e.g. buckets, containers) during the working stroke or in resting positions or: monitor the rope tensile strength using a gage.
- When using guy ropes, safety lines, guiding ropes and anchor ropes, check the tensile force (if necessary, continuously) using a suitable gage.
- Take care of voltage peaks (in a static state) from external influences (wind, snow, ice).
- Do not let the load fall on a slack rope.
- In situations where the work cannot easily be seen: Observations by assistants, if necessary with radio contact.
- Never pull the load hook against the casing.
- The loose rope end (10) must be able to exit the pulling machine unhindered.

2.8.3 Lowering



- The loose rope end (10) must be able to run freely and without deformations and tangles into the machine



- Before the loose rope end (10) reaches the device (min. 0.5 remaining length): Stop the rope from pulling out.

2.9 Decommissioning



- The pulling rope must be unloaded during decommissioning.
- Loads must be secured.

2.1 Storage and transport



- The device must be transported on pallets, secured against sliding and tilting.

3 Design and function

3.1 Technical specifications

Hoist device	HIT 6	HIT 10	HIT 16	HIT 32
Nominal tensile force when transporting material *	6 kN	10 kN	16 kN	32 kN
Nominal force when transporting persons *	5 kN	8 kN	12 kN	24 kN
Overload protection *	approx. 9 kN	approx. 15 kN	approx. 24 kN	approx. 48 kN
Nominal rope diameter	6.4 mm	8.4 mm	11.2 mm	16.2 mm
Nominal rope breaking load *	30 kN	50 kN	80 kN	160 kN
Rope weight (without hook)	0.16 kg/m	0.25 kg/m	0.41 kg/m	0.90 kg/m
Rope fed per double stroke	30 mm	55 mm	60 mm	30 mm
Manual leverage when transporting material at nominal load	250 N	300 N	350 N	500 N
Manual leverage at nominal load when transporting persons	210 N	240 N	265 N	375 N
Telescope lever pipe Length min. max.	nein 450 mm	nein 655 mm	ja 670 mm 1080 mm	ja 670 mm 1080 mm
Inherent weight without rope	4.2 kg	6.5 kg	12 kg	22.5 kg
Dimensions: Width Length Height	100 mm 352 mm 210 mm	100 mm 430 mm 242 mm	120 mm 550 mm 300 mm	150 mm 685 mm 330 mm
Reserve shearing pins	in the clamping jaw opening lever		in the handle	
Rope Ø	6.4 mm	8.4 mm	11.2 mm	16.2 mm
Min. rope diameter at nominal load	5.8 mm	7.6 mm	10.1 mm	14.6 mm
Permissible rope strength *	6 kN	10 kN	16 kN	32 kN
Rope breaking load *	30 kN	50 kN	80 kN	160 kN
Rope safety when transporting material	> 5	> 5	> 5	> 5
Rope safety when transporting persons	> 6	> 6	> 6	> 6
Permissible temperature range for use and storage	-20°C bis +50°C			

* 1 kN corresponds to approximately 102 kg

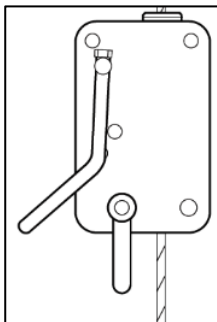
3.2 Options

3.2.1 Safety gear

BLOCSTOP BS, hand operated

Safety gear BS	BS 15.301	BS 20.303	BS 20.301	BS 35.30
Suitable for manual hoist device	HIT-06	HIT-10	HIT-16	HIT-32
Load-bearing capability when transporting persons *	6 kN	8 kN	12 kN	24 kN
Rope D on the safety gear	8.3 mm	9.5 mm	11.5 mm	16.3 mm

* 1 kN corresponds to approximately 102 kg

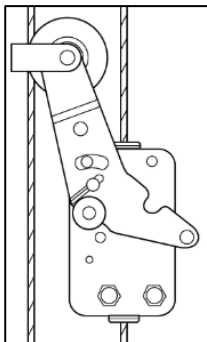


While lifting a load or tensioning a wire rope the rope passes through the BLOCSTOP. There is no need to operate the BLOCSTOP. For lowering the load or releasing the wire rope the BLOCSTOP is opened by lifting the operating lever upwards.

Blocstop BSA, automatic slack wire rope device

Safety gear BSA	BSA 15.301	BSA 20.303	BSA 20.301	BSA 35.30
Suitable for manual hoist device	HIT-06	HIT-10	HIT-16	HIT-32
Load-bearing capability when transporting persons *	6 kN	8 kN	12 kN	24 kN
Rope D on the safety gear	8.3 mm	9.5 mm	11.5 mm	16.3 mm

* 1 kN corresponds to approximately 102 kg

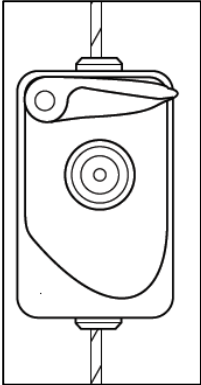


The BLOCSTOP can only be used on a secondary safety wire rope in parallel with a main suspension wire rope. The BLOCSTOP is rigidly mounted and operated by the tensioned suspension wire rope. This system not only protects against suspension wire rope failure or hoist malfunction but also against excessive slope of the cradle.

Blocstop BSO, overspeed

Safety gear BSO	BSO 500	BSO 1020	BSO 2050
Suitable for manual hoist device	HIT-06	HIT-10	HIT-16
Load-bearing capability when transporting persons *	5 kN	8 kN	20 kN
Rope D on the safety gear	8 mm	9 mm	14 mm

* 1 kN corresponds to approximately 102 kg



The BLOCSTOP protects against hoist failure and, if mounted on a separate safety wire rope, against suspension wire rope failure. This BLOCSTOP operates at a certain "speed limit" which is directly related to the speed of the wire rope passing through the BLOCSTOP.

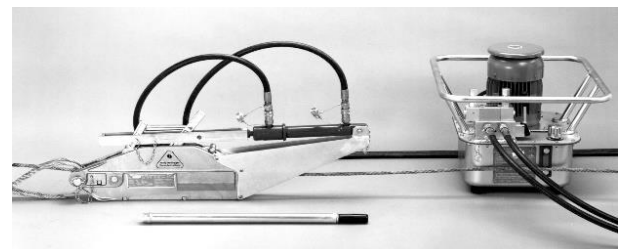
3.2.2 Storage

Case and store box



3.2.3 Hydraulic drive

Hydraulic drive (only for HIT-16 and HIT-32)



3.2.4 Hook

	HIT-06	HIT-10	HIT-16	HIT-32
Hook	4356.1002.0 (WLL 1.0t)		4356.1004.0 (WLL 1.6t)	4356.1006.0 (WLL 3.2t)
Swivel load hook	4357.1001.0 (WLL 1.0t)		4357.1601.0 (WLL 1.6t)	4357.3200.0 (WLL 3.2t)
Shur-Loc hook	4353.2000.0 (WLL 2.0t)		4353.3202.0 (WLL 3.2t)	
Shur-Loc swivel load hook	4359.1000.0 (WLL 1.0t)		4359.2000.0 (WLL 2.0t)	-
Use with				
Folding split pin	2202.1001.1			
or				
Split pin	2201.1618.1			

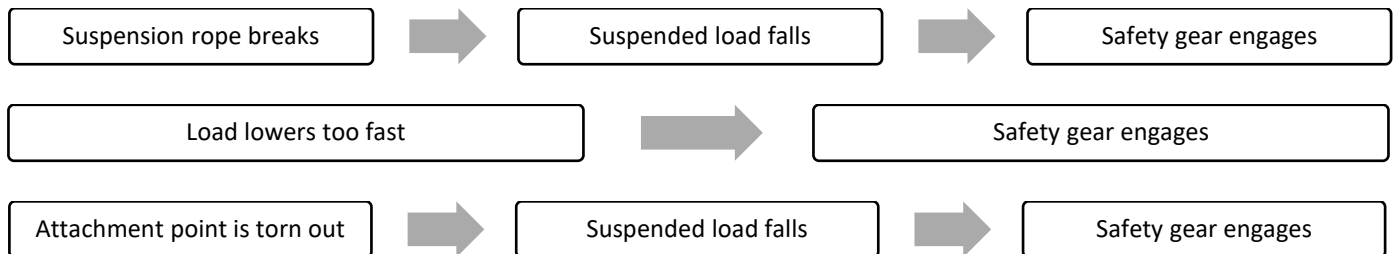
4 Operation

4.1 Preparation

4.1.1 Transporting persons

The hoist has been approved for transporting persons in accordance with EN1808. The operator must also install a safety gear or a second, redundant rope system.

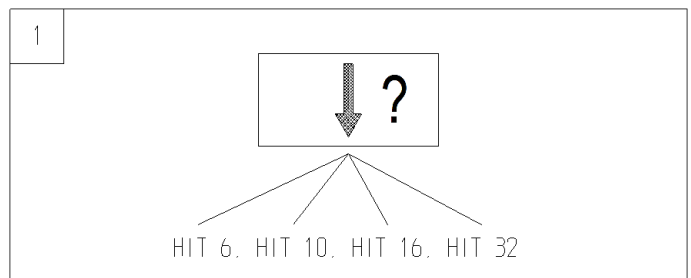
Errors that result in the safety gear to activate:



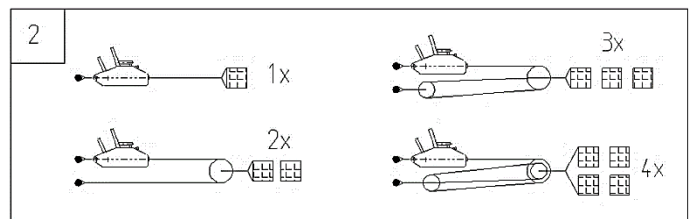
If the hoist device is used with other components, the entire rope structure must comply with Standard EN1808.

4.1.2 Selecting device

- Estimate or measure the tensile force based on the load to be moved, Image 1.
- Then, set the minimum size of the hoist device.
- Select the appropriate rope for the hoist device.

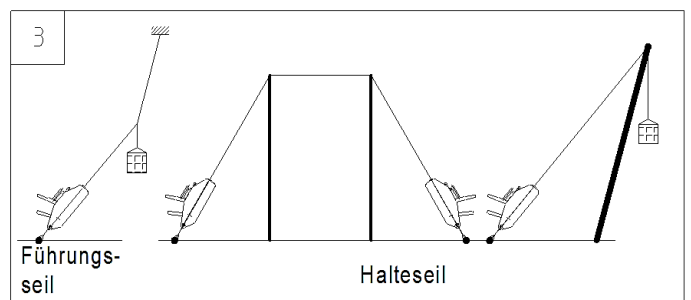


- If necessary, reduce the tensile force using rope pulleys, Image 2.



4.1.3 Anchoring

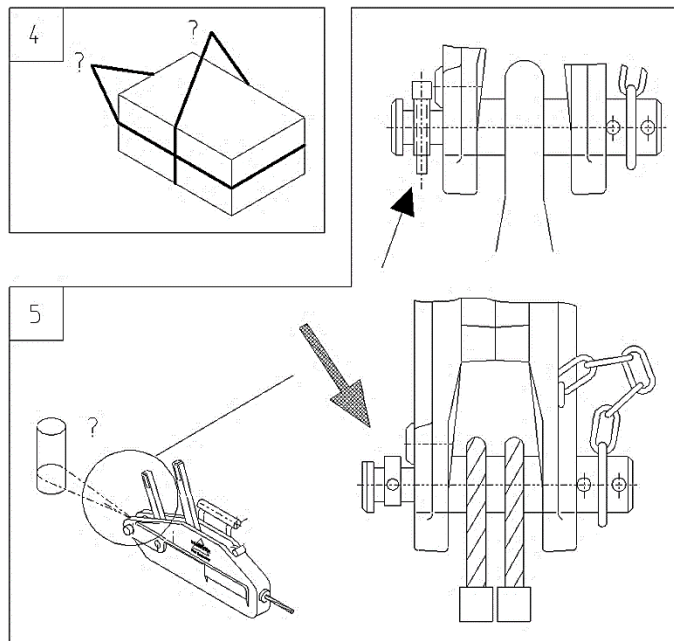
- Define the location and anchoring options for the hoist device.



The best anchor points are:	- Solid objects and constructions - Concreted rings - Eyelets or rods
Natural anchoring points:	- Heavy/strong boulders - Trees - Other suitable objects
Technical anchor points:	- Habegger field anchor with posts - Rock anchor, concrete anchor - Round wood anchor in ground - These anchors depend very much on the ground conditions.

4.1.4 Load

- Define options for attaching the load and prepare lifting tackle, Image 4.
- Suspend the hoist device with suitable lifting tackle so it can adjust freely in the direction of the tension, Image 5, left.
- Slide the anchor bolts into the casing slot.
- Secure it properly by rotating it twice by 180°.
- When using textile slings, use swivel hooks and secure load bolts with a lynch pin, Image 5, above.



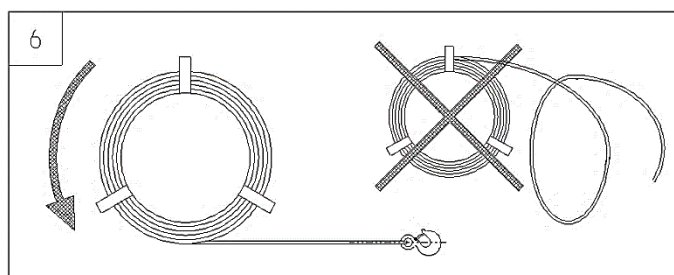
4.1.5 Traction rope

- Unwinding and winding up the rope must be done properly according to ISO 4309.

Matching accessories:

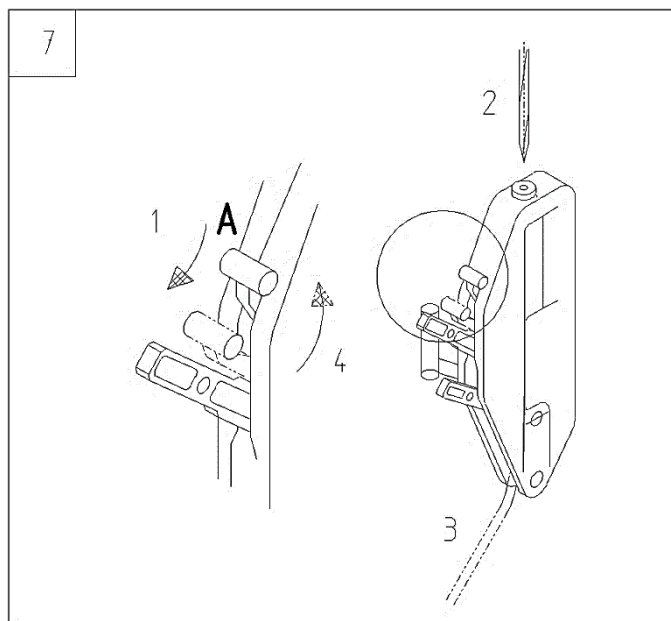
Rope reel and carrying tube

- Uncoil the rope from the winch by turning the winch. Image 6
- Securely attach the load hook on the pull rope using appropriate lifting tackle.



4.1.6 Inserting rope

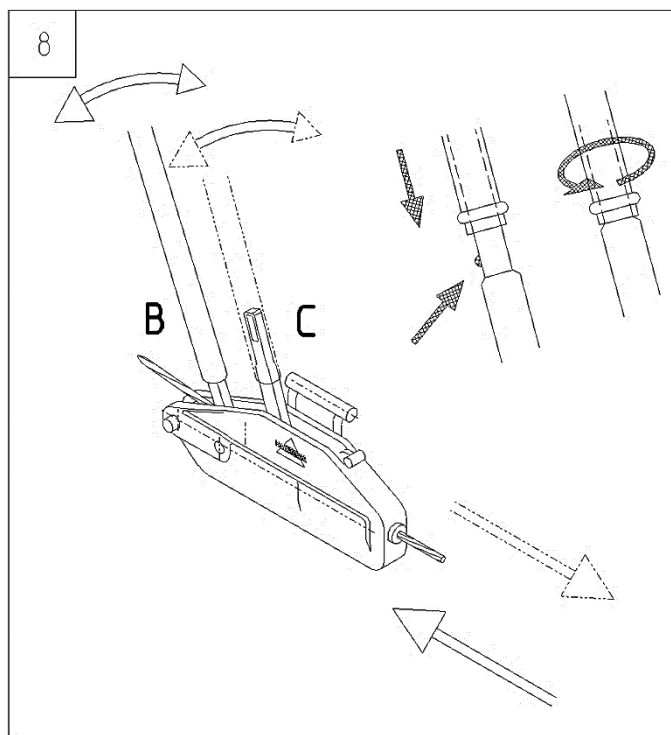
- Swivel both actuation levers toward the rope intake side.
- Press the clamping jaw opening lever (A) to the middle of the hoist device, Image 7 (1) and lock it in the upper position.
- Hold the level tightly to prevent it from unintentionally snapping back.
- Straighten the end of the rope (2) with the end approx. 200 mm long.
- Insert the end of the rope into the rope guide and push the rope in until it protrudes from the other side. Guide the rope through above the anchor bolt (as shown on the type plate).
- Pull the end of the rope (3) through the device until the rope is in the desired position.
- Take the clamping jaw opening lever (A) out of the locked position, Image 7 (4). Hold the level tightly to prevent it from unintentionally snapping back.



4.2 Working

4.2.1 Pulling, lifting and lowering

- Place the lever pipe on the forward gear lever (B) on the hoist device and secure it by turning it in any direction, Image 8, right.
- Move the rope forward by moving the lever back and forth with long, even movements.
- To lower it, place the lever pipe on the reverse gear lever (C) on the hoist device and secure it by turning it in any direction, Image 8.
- Move the rope backward by moving the lever back and forth with long, even movements.



4.3 Decommissioning

4.3.1 Taking rope out of the machine

If the pull rope is not bearing a load, it can be removed from the hoist as follows:

- Swivel the forward/reverse gear level toward the rope intake side.
- Press the clamping jaw opening lever (A) from the operating position to the middle of the hoist device and lock it into place, Image 7. Hold the level tightly to prevent it from unintentionally snapping back.
- Pull the wire rope out of the device.
- Put the clamping jaw opening lever (A) back into the operating position, Image 7. Hold the level tightly to prevent it from unintentionally snapping back.

4.4 Storage and transport

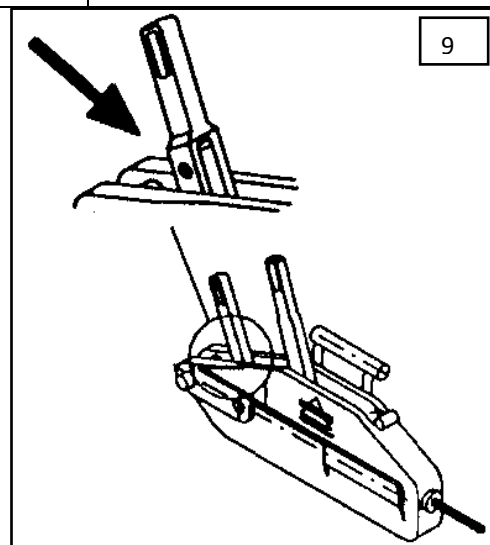
The device must be stored in a dry place. During transport and storage, the device must be covered against dust.

5 Faults

Faults	possible cause	Measure
Shear off the overload protection	Rope force too high	Reduce the load or use rope hoists Replace shearing pin *
Rope jams in device	Rope damaged or kinked, jammed at the clamping jaws (bird-caging) Incorrect rope used Rope discharge jammed, rope run against anchor bolt	Replace rope or send the device to Jakob AG or an authorized repair shop for repair Use original Habegger rope. Ø according to type plate Clear the rope discharge
Rope not being transported, Rope just goes back and forth	Rope worn out or incorrect rope diameter used	Replace rope or use original Habegger rope
Functional fault	Device dirty, Foreign object inside	Take device apart (casing), clean, grease
Casing bent or broken	Device was unable to adjust freely in the direction of the tension.	Send the device to Jakob AG or an authorized workshop for repair.
Anchor bolts or casing bent	Anchoring bolts not properly inserted or not properly secured	Send the device to Jakob AG or an authorized workshop for repair.
Load hook bent open	Incorrect load	Replace load hook
Icied	Cold	Defrost with hot air blower

* Replace shearing pin

- If necessary, remove some of the load until the shearing bolt is outside the casing, Image 9.
- Unlock and pull off the lever pipe by turning it.
- Hit broken pieces of the pin out of the bore using a punch and hammer.
- Remove the reserve pin from the clamping jaw opening lever (HIT 6/10) or handle (HIT 16/32).
- Line up the bores on the lever pieces and hammer in the new shearing pin.



6 Maintenance

The following items of inspection and maintenance work must be carried out:

Work	when starting work	as needed	Remarks
General visual inspection: - casing - anchor bolts and retaining disc	X X		
Screw inspection		X	After first use or modification
Cleaning		X	If necessary, disassemble the casing and remove dirt/foreign objects The unit must be properly assembled and locked
Lubrication		X	Lubricate with graphite grease. The clamping jaws and rope must remain dry.
Rope: - Visual inspection - Compression sleeve - Eye hook with securing device - Diameter check	X	X	According to ISO 4309 Inspection for deformations, damage, cracks or wire breaks Max 10% smaller than rated diameter
Rope: Cleaning		X	

Device, rope and accessories must be checked at least **every 2 years** (see sticker on the device) by an expert certified by Jakob AG.

When doing so all parts are checked for deformation, wear and cracks. The test results must be entered in the inspection log.

The tests must be arranged by the operating company.

In addition to this, additional tests must be arranged by an expert according to the local regulations as well as after harsh use conditions, at a shortened interval.



7 Spare parts

The list of spare parts for the hoist devices can be found on the last pages of these instructions.

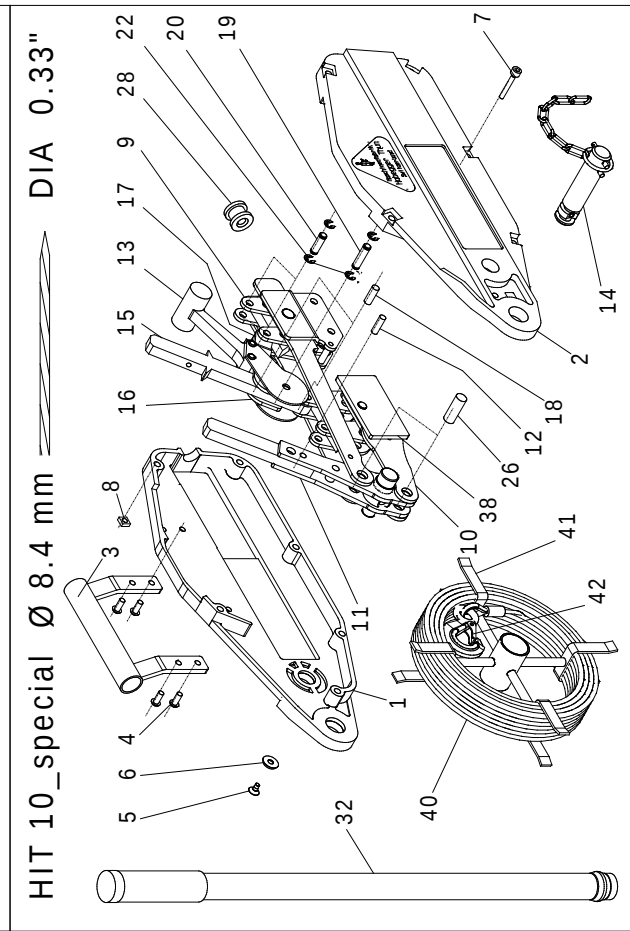
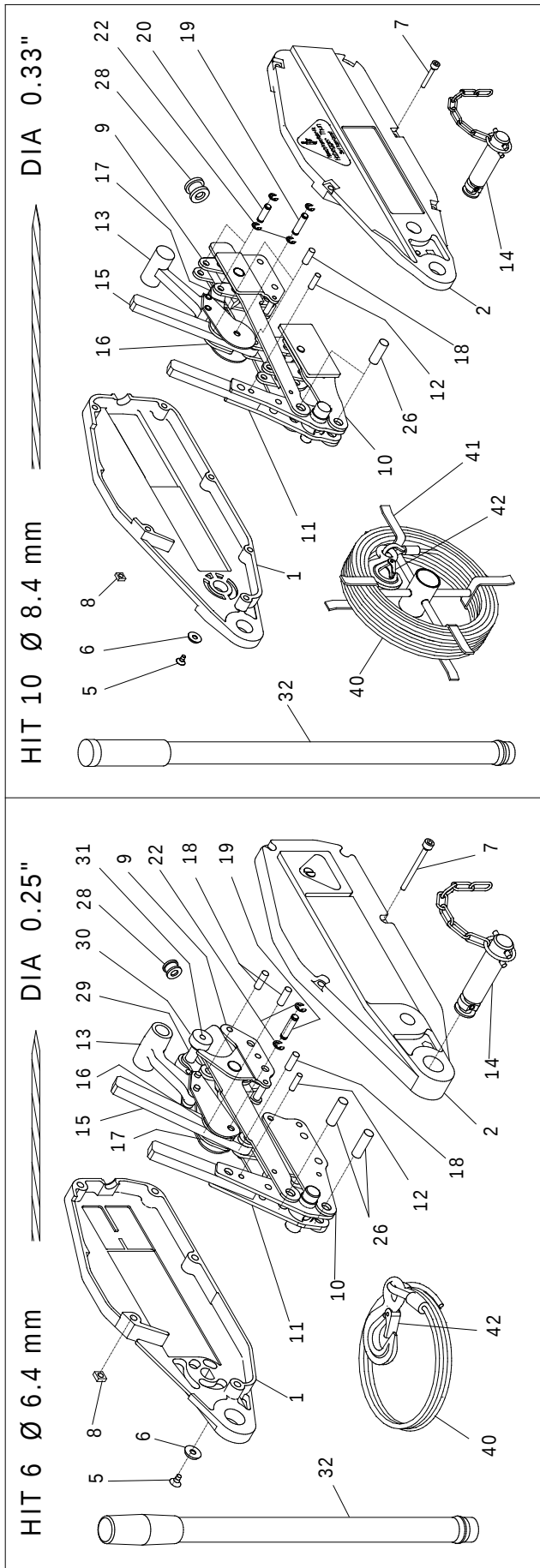
8 Disposal

Comply with national disposal regulations.

When disassembling the device, separate defective parts by material type as much as possible in order to recycle them:

Store or recycle metal and plastic parts separately.

Remember, protecting the environment and recycling materials benefits us all.



HIT 10 special

- Traggriff & spezial Rückwärtsganghebel
- Poignee & levier marche arrière spezial
- Carrying handle & spezial lever reverse motion
- Maniglia & leva retromarciaspiale

HIT 6 / 10 / 10 special

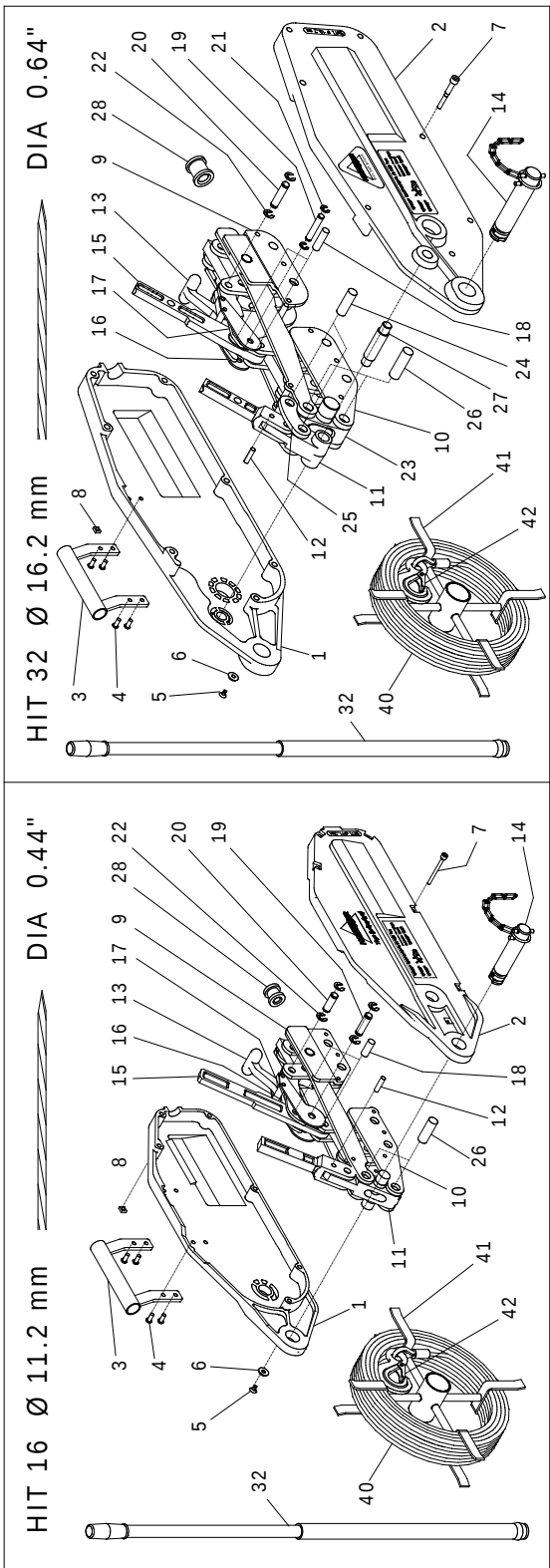
Ersatzteilliste		Liste de pieces de rechange				HIT 6		HIT 10		HIT 10 special	
Beschreibung		Description	Pos	Qty	Ref. No	Qty	Ref. No	Qty	Ref. No	Qty	Ref. No
Gehäuse rechts komplett		Carter droit complet	1	1	00601	1	00701	1	00761	1	00761
Gehäuse links mit Firmenschild		Carter gauche complet	2	1	00602	1	00702	1	00702	1	00702
Traggriff		Poignée de portage	3						00855	1	00855
Halbrundniet 6 x 14		Rivet 6 x14	4						2401.1608.1	4	2401.1608.1
Senkschraube 90° M6 x 10		Vis à tête 90° M6 x 10	5	1	0543.1403.1	1	0543.1403.1	1	0543.1403.1	1	0543.1403.1
U-Scheibe		Rondelle	6	1	2003.1010.1	1	2003.1010.1	1	2003.1010.1	1	2003.1010.1
Zyl.Schraube		Vis à tête cyl.	7	5	0308.1409.1	6	0318.1410.1	6	0318.1410.1	6	0318.1410.1
4-kt. Mutter M6		Ecrou M6	8	5	1801.1003.1	6	1801.1003.1	6	1801.1003.1	6	1801.1003.1
Vordere Zange komplett		Bloc mâchoire avant	9	1	00603	1	00703	1	00703	1	00703
Hintere Zange komplett		Bloc mâchoire derrière	10	1	00604	1	00704	1	00704	1	00704
Hebel Vorwärtsgang komplett		Levier de marche avant cpl.	11	1	00605	1	00705	1	00705	1	00705
Abscherstifte		Goupilles de sécurité	12	1	00632	1	00252	1	00252	1	00252
Backenöffnungshebel komplett		Poignée de débrayage cpl.	13	1	00606	1	00706	1	00706	1	00706
Ankerbolzen komplett		Boulon d'ancrage complet	14	1	00707	1	00707	1	00707	1	00707
Hebel Rückwärtsgang		Levier de marche arrière	15	1	00637	1	00739	1	00762	1	00762
Rückschubhebel rechts		Bielle droite de com. arrière	16	1	00638	1	00740	1	00740	1	00740
Rückschubhebel links		Bielle gauche com. arrière	17	1	00639	1	00741	1	00741	1	00741
Bolzen Rückwärtsganghebel		Axe de com. marche arrière	18	3	00640	2	00742	2	00742	2	00742
Bolzen Backenöffnungshebel		Axe de débrayage	19	1	00641	1	00743	1	00743	1	00743
Bolzen Rückschubhebel		Axe de commande arrière	20			2	00732	2	00732	2	00732
Sicherungsscheibe RS6		Circlip pour arbre RS6	22	2	2907.1009.0	6	2907.1009.0	6	2907.1009.0	6	2907.1009.0
Zugachse		Axe de traction	26	2	00643	2	00733	2	00733	2	00733
Seilführhülse		Entrée de câble	28	1	00644	1	00744	1	00744	1	00744
Distanzhülse		Douille	29	1	00649						
Führungsrolle		Rouleau de guidage	30	2	00651						
Zyl.Stift		Goupille cylindrique	31	1	2211.2117.0						
Hebelrohr		Levier télescopique	32	1	00660	1	00750	1	00750	1	00750
Seil		Câble	40		02602	1	01004	1	01004	1	01004
Seilhaspel Gr.1		Dévidoir	41			1	00280	1	00280	1	00280
Sicherungsklinke 1t		Cliquet de sécurité	42		4354.1000.1	1	4354.1000.1007	1	4354.1000.1	1	4354.1000.1
Koffer		Mallette	50		00670		70		00770		00770

HIT 6 / 10 / 10 special

Spare parts list			Lista parti di ricambio				HIT 6		HIT 10		HIT 10 special	
Description	Descrizione	Pos	Qty	Ref. No	Qty	Ref. No	Qty	Ref. No	Qty	Ref. No	Qty	Ref. No
Right hand casing complete	Carter destra completa	1	1	00601	1	00701	1	00701	1	00761	1	00761
Left hand casing with name pl.	Carter sinistra con targhetta	2	1	00602	1	00702	1	00702	1	00702	1	00702
Carrying handle	Maniglia	3								00855	1	00855
Button head rivet 6 x 14	Chiodo a testa tonda 6 x 14	4								2401.1608.1	4	2401.1608.1
Countersunk screw 90° M6x10	Vite testa svasata 90° M6 x 10	5	1	0543.1403.1	1	0543.1403.1	1	0543.1403.1	1	0543.1403.1	1	0543.1403.1
Washer	Rondella	6	1	2003.1010.1	1	2003.1010.1	1	2003.1010.1	1	2003.1010.1	1	2003.1010.1
Socket head cap screw	Vite a testa cilindrica	7	5	0308.1409.1	6	0318.1410.1	6	0318.1410.1	6	0318.1410.1	6	0318.1410.1
Square nut M6	Dado quadro M6	8	5	1801.1003.1	6	1801.1003.1	6	1801.1003.1	6	1801.1003.1	6	1801.1003.1
Front gripper assembly	Ganasce di bloccaggio anteriori	9	1	00603	1	00703	1	00703	1	00703	1	00703
Rear gripper assembly	Ganasce di bloccaggio posteriori	10	1	00604	1	00704	1	00704	1	00704	1	00704
Forward motion lever complete	Leva marcia avanti completa	11	1	00605	1	00705	1	00705	1	00705	1	00705
Shearing pin	Spina di sicurezza	12	1	00632	1	00252	1	00252	1	00252	1	00252
Jaw opening lever, complete	Leva apertura ganasce completa	13	1	00606	1	00706	1	00706	1	00706	1	00706
Anchor bolt complete	Bullone di ancoraggio completo	14	1	00707	1	00707	1	00707	1	00707	1	00707
Lever reverse motion	Leva retromarcia	15	1	00637	1	00739	1	00739	1	00762	1	00762
Back-push lever right-hand	Leva indietro reggio destra	16	1	00638	1	00740	1	00740	1	00740	1	00740
Back-push lever left-hand	Leva indietro reggio sinistra	17	1	00639	1	00741	1	00741	1	00741	1	00741
Bolt reverse motion lever	Bullone leva retromarcia	18	3	00640	2	00742	2	00742	2	00742	2	00742
Bolt jaw opening lever	Bullone leva apertura ganasce	19	1	00641	1	00743	1	00743	1	00743	1	00743
Bolt back-push lever	Bullone leva indietro reggio	20			2	00732	2	00732	2	00732	2	00732
Locking washer RS6	Rondella di sicurezza RS6	22	2	2907.1009.0	6	2907.1009.0	6	2907.1009.0	6	2907.1009.0	6	2907.1009.0
Pull spindle	Asse di trazione	26	2	00643	2	00733	2	00733	2	00733	2	00733
Pope insertion guide sleeve	Boccola guida della fune	28	1	00644	1	00744	1	00744	1	00744	1	00744
Distance socket	Manicotto distanziatore	29	1	00649	1							
Guide roller	Rullo di guida	30	2	00651								
Cylinder pin	Spina cilindrica	31	1	2211.2117.0	1							
Lever	Leva telescopica	32	1	00660	1	00750	1	00750	1	00750	1	00750
Rope	Fune	40		02602	1	01004	1	01004	1	01004	1	01004
Reel	Crociera	41			1	00280	1	00280	1	00280	1	00280
Safety latch	Nottolino di sicurezza	42		4354.1000.1	1	4354.1000.101	1	4354.1000.101	1	4354.1000.1	1	4354.1000.1
Case	Valigia	50		00670		0770		0770		00770		00770

HIT 16

HIT 32



Pos	Beschreibung	Pos	Beschreibung	Pos	Beschreibung
1	Gehäuse rechts komplett	12	Abscherstifte	23	Zenterwelle
2	Gehäuse links mit Firmenschild	13	Backenöffnungshebel komplett	24	Zugachse
3	Traggriff	14	Ankerbolzen komplett	25	Zuglasche
3.1	Schutzstopfen TL-4-225	15	Hebel Rückwärtsgang	26	Achse
4	Halbrundniet 6 x 14	16	Rückschubhebel rechts	27	Hebelachse
5	Senkschraube 90° M6 x 10	17	Rückschubhebel links	28	Seilführhülse
6	U-Scheibe	18	Bolzen Rückwärtsganghebel	32	Hebelrohr
7	Zyl. Schraube	19	Bolzen Backenöffnungshebel	40	Seil
8	4-kt. Mutter M6	20	Bolzen Rückschubhebel	41	Seilhaspel
9	Vordere Zange komplett	21	Sicherungsscheibe RS8	42	Sicherungsklinke
10	Hintere Zange komplett	22	Sicherungsscheibe RS9	50	Aufbewahrungskasten
11	Hebel Vorwärtsgang komplett				

HIT 16 / 32

Ersatzteilliste			Liste de pièces de rechange		Spare parts list		Lista parti di ricambio		HIT 16		HIT 32	
Description	Description		Descrizione	Pos	Qty	Ref. No	Qty	Ref. No	Qty	Ref. No		
Carter droit complet-	Right hand casing complete		Carter destro completo	1	1	00801	1	00801	1	00901		
Carter gauche complet.	Left hand casing complete		Carter sinistro con targhetta	2	1	00802	1	00802	1	00902		
Poignée de portage	Carrying handle		Maniglia	3	1	00855	1	00855	1	00855		
Bouchon de protect. TL-4-225	Protective plug TL-4-225		Spina di protezione TL-4-225	3.1	2	3984.0225.0	2	3984.0225.0	2	3984.0225.0		
Rivet 6 x 14	Button head rivet 6 x 14		Chiodo a testa tonda 6 x 14	4	4	2401.1608.1	4	2401.1608.1	4	2401.1608.1		
Vis à tête 90° M6 x 10	Countersunk screw 90°		Vite a testa svasata 90° M6	5	1	0543.1403.1	1	0543.1403.1	1	0543.1403.1		
Rondelle	Washer		Rondella	6	1	2003.1010.1	1	2003.1010.1	1	2003.1010.1		
Vis à tête cyl.	Socket head cap screw		Vite a testa cilindrica	7	6	0318.1413.1	7	0318.1413.1	7	0318.1515.1		
Ecrou	Square nut M6		Dado quadro	8	6	1801.1003.1	7	1801.1003.1	7	1801.1004.1		
Bloc mâchoire avant complet	Front gripper assembly		Ganasce di bloccaggio anteriori	9	1	00803	1	00803	1	00903		
Bloc mâchoire derrière com.	Rear gripper assembly		Ganasce di bloccaggio posteri.	10	1	00804	1	00804	1	00904		
Levier de marche avant	Forward motion lever compl.		Leva marcia avanti completa	11	1	00805	1	00805	1	00905		
Goupille de sécurité	Shearing pin		Spina di sicurezza	12	1	00835	1	00835	1	00835		
Poignée de débrayage com.	Jaw opening lever, complete		Leva apertura ganasce compl.	13	1	00806	1	00806	1	00906		
Boulon d'ancrage complet	Anchor bolt complete		Bullone di ancoraggio completo	14	1	00807	1	00807	1	00907		
Levier de marche arrière	Lever reverse motion		Leva retromarcia	15	1	00843	1	00843	1	00940		
Bielle droite de com. arrière	Back-push lever right-hand		Leva indietreggio destra	16	1	00844	1	00844	1	00941		
Bielle gauche com. arrière	Back-push lever left-hand		Leva indietreggio sinistra	17	1	00845	1	00845	1	00942		
Axe de com. marche arrière	Bolt reverse motion lever		Bullone leva retromarcia	18	2	00846	2	00846	2	00943		
Axe de débrayage	Bolt jaw opening lever		Bullone leva apertura ganasce	19	1	00847	1	00847	1	00944		
Axe de commande arrière	Bolt back-push lever		Bullone leva indietreggio	20	1	00848	1	00848	1	00945		
Circlip pour arbre RS8	Locking washer RS8		Rondella di sicurezza RS8	21	2	2907.1012.0	2	2907.1012.0	2	2907.1011.0		
Circlip pour arbre RS9	Locking washer RS9		Rondella di sicurezza RS9	22	4	2907.1012.0	2	2907.1012.0	2	2907.1012.0		
Vilebrequin centrale	Centre shaft		Albero centrale	23	1		1		1	00957		
Axe de traction	Pull spindle		Asse di trazione	24	2		2		2	00949		
Eclisse de traction	Pulling strap		Stecca di trazione	25	2		2		2	00948		
Axe	Pull spindle		Asse	26	2	00849	2	00849	2	00947		
Axe de levier	Lever spindle		Asse leva	27	1		1		1	00950		
Entrée de câble	Pope insertion guide sleeve Tele-		Boccola guida della fune	28	1	00850	1	00850	1	00951		
Levier télescopique	scopic lever		Leva telescopica	32	1	00860	1	00860	1	00860		
Câble	Rope		Fune	40		01104		01104		01202		
Devidoir	Reel		Crociera	41		00280		00280		00281		
Clicket de sécurité	Safety latch		Nottolino di sicurezza	42		4354.1500.1		4354.1500.1		4354.3000.1		
Caisse de rangement	Store box		Cassa di conservare	50		060.477.300		060.477.300		060.477.301		