

Assembly and Operating Manual



GEDA® GEDA® GEDA®
MINI 60 S MAXI 120 S MAXI 150 S

Scaffolding lifts

For the transport of burdens

Original Operating Manual





EU Declaration of Conformity

The manufacturer:

GEDA GmbH

Mertinger Strasse 60

86663 Asbach-Bäumenheim

hereby declares that the machine

Designation:	Construction hoist for material transport to erect scaffolding (Rope winch for temporary use on construction sites by authorised persons)		
Type:	MINI 60 S	Serial number:	15000 / 000620
	MAXI 120 S	Serial number:	11102 / 000630
	MAXI 120 S (110V/50Hz)	Serial number	14277 / 000630
	MAXI 150 S	Serial number:	10969 / 000630

Year of construction: Refer to name plate on the machine

is in compliance with all pertinent provisions of the following directives at the time of being put on the market.

Directives:

2006/42/EC Machinery Directive

2014/35/EU Low Voltage Directive

2014/30/EU EMC Directive

2000/14/EC Noise Emissions Directive

Conformity evaluation procedures applied:

Appendix VIII

Appendix IV

Appendix II

Appendix V

Applied (harmonised) standards:

EN ISO 12100:2010, EN 60204-1/32, Parts of: EN14492-2:2019

EC Type test certification procedure:

Type test certification

CA 846

European notified test site

0036

TÜV SÜD Industrie Service GmbH
Westendstrasse 199
80686 Munich

This declaration of conformity is valid for machines manufactured from the date of the type test certificate.

This EU conformity declaration becomes null and void if any changes are made to the aforementioned machine that have not been authorised by the manufacturer.

The authorised representative for technical documentation is the signatory. For address refer to manufacturer.



Asbach-Bäumenheim
Date 22.05.2023

Johann Sailer
CEO GEDA GmbH

(Date of the type test certificate)

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1 General information

1.1 Information on the operating manual

This operating manual is an essential aid to operating the machine **successfully and hazard-free** (refer to chapter 2.1 Residual risks, page 19).

This operating manual contains important instructions on how to operate the machine **safely, correctly and efficiently**. Compliance with these instructions helps to avoid hazards and increases the reliability and service life of the machine.

The operating manual must be **available at the machine at all times** and must be read and applied by every person commissioned to work on/with the machine, e.g.:

- operation, fault elimination during work, disposal of operating materials and auxiliary supplies,
- assembly, maintenance (servicing, general maintenance, repair) and/or transport.

You will come across a series of illustrations and symbols while reading this manual. These are intended to help you navigate and understand this manual. The different meanings are explained below.

Text format	Meaning
Bold type	Emphasises particularly important words/sections
• List	Identifies lists level 1
– List	Identifies lists level 2
(brackets)	Item numbers
➤ Task instruction	Task instructions for personnel. Always given in chronological order

Images

The illustrations used refer to a specific machine type. They may only constitute a schematic representation of other machine types. The fundamental function and operation are not affected by this.

The structural elements in this operating manual appear as follows and have the following meaning:

⚠ DANGER

Type and source of the hazard: Danger to life

Consequence: Death/serious injury

Probability: imminent

➤ Measure for preventing the hazard

⚠ WARNING

Type and source: Risk of injury

Consequence: Serious injury

Probability: possible

➤ Measure for avoiding

⚠ CAUTION

Type and source: Risk of injury

Consequence: Minor injury

Probability: possible

➤ Measure for avoiding

ATTENTION

Type and source: Damage to the machine

Consequence: Property damage

Probability: possible

➤ Measure for preventing the damage

Safe working

Type and source: Failure to comply with health and safety regulations

Consequence: Risk for life and limb

Probability: possible

➤ Observe these instructions and proceed with caution.



Indicates information on using the machine economically or instructions for correct working procedures.

1.2 Abbreviations

The following abbreviations may be used in the manual.

Abbreviation:		Abbreviation:	
Max.	maximum	Fig.	figure
min.	minimum	Nm	Newton metre
Min.	minutes	km/h	kilometres per hour
etc.	et cetera	mph	miles per hour
poss.	possible	incl.	including
e.g.	for example	if nec.	if. necessary
ml	Millilitre	i.e.	that is
mm	Millimetre	reg.	regarding
°C	degrees Celsius	RH	relative humidity
°F	degrees Fahrenheit	approx.	approximately
ft.	feet	Ø	diameter
ft/m	feet per minute	®	registered trademark
m/min	metres per minute	©	copyright
in.	inch	TM	trademark
.		%	per cent
lbs.	pounds	‰	per mil
lbf.-ft	pounds per feet	L _{PA}	sound pressure level
kg	kilogramme	L _{WA}	noise capacity level
L	litre	>	greater than
gal.	gallons	<	less than
kip.	kilopound	±	plus/minus

1.3 Identification data

Machine model:	GEDA MINI 60 S
Serial number:	15000_____ / 000620_____
Machine model:	GEDA MAXI 120 S
Serial number:	11102_____ / 000630_____
Machine model:	GEDA MAXI 120 S (110V)
Serial number:	14277_____ / 000630_____
Machine model:	GEDA MAXI 150 S
Serial number:	10969_____ / 000630_____
Year of construction:	refer to nameplate
Documentation version:	2022-10

1.4 Manufacturer's name and address

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1.6 Instructions for the operating company

This operating manual is an essential component of the machine. The operating company must ensure that operating personnel are **informed** about these guidelines.

The operating company must supplement the operating manual with **operating instructions** based on existing national regulations for accident prevention and for the **protection of the environment**, including information regarding supervisory and reporting duties that take account of company-related specifics, e.g. with reference to work organisation, work procedures and the personnel employed.

In addition to the mandatory **regulations for accident prevention and industrial safety** that apply both in the country of use and at the place of use, accepted professional rules for safe and competent working must also be observed.

The operating company must ensure that operating personnel wear **personal protective equipment** appropriate to the local conditions.

First aid equipment (first aid kit, etc.) must be kept within reach!

The operating company/user of the machine **must not make any changes, additions or modifications** to the machine that could impair safety without permission from the manufacturer! This also applies to installing and adjusting safety devices as well as welding on load-bearing components.

Any **replacement and wearing parts** that are used must correspond to the technical requirements stipulated by GEDA . This is ensured with **original replacement parts**.

Only employ **qualified and/or trained personnel** for the tasks described in this manual.

The operating company clearly defines the responsibilities of the personnel for operation/installation/maintenance.

The operating company is obliged to instruct all people authorised to use the machine in the correct way to handle the machine based on their respective range of activities and responsibilities using practical exercises, before they use it for the first time.

This **training** must be documented and **repeated at regular intervals**.

The legally permissible minimum age must be observed!

1.7 Intended use



The MINI 60 S and MAXI 120 S/150 S is suitable for temporary use on construction sites. Any other locations or intended uses require written approval.

Any other locations or intended uses require written approval from the manufacturer.

As a construction material hoist

- which is intended exclusively for putting up scaffolding and for transporting items and materials during construction work
- The lift must always be operated from outside the hazard zone.

The instructions, (refer to chapter 3 Technical data, page 26) must be observed and adhered to.

Any other use or any use going beyond this is not considered proper use.

The operating company/user of the machine is solely liable for any damage resulting from this. This applies equally to any unauthorised changes to the machine.

Intended use includes

- That the assembly, operation and maintenance provisions (assembly and operating manual) provided by the manufacturer are complied with).
- That the foreseeable misconduct of other persons is taken into consideration.
- That the national regulations are complied with.

1.8 Assembly, service/maintenance specialist

A person who, due to qualified professional education, training and experience, is able to recognise risks and potential hazards during assembly/maintenance/repair work on the machine and subcomponents and can rectify these by introducing appropriate measures.

1.9 Operating personnel

The machine may only be operated by persons who, based on their training, knowledge and practical experience, can ensure proper handling.

These persons must

- have been appointed by the operating company
- have been appropriately instructed and informed about the risks
- be familiar with the operating manual
- observe national regulations.

1.10 Improper use

The GEDA MINI 60 S and GEDA MAXI 120 S/150 S

- is not designed for permanent installation
- must not be operated by persons without instruction on the machine or by children The persons must be familiar with the operating manual.

Consequences of improper use of the machine

- Danger to life and limb of the user or a third party.
- Damage to the machine and other objects.

2 General safety information

The machine has been designed and built according to the state of the art and recognised safety rules.

Nevertheless, hazards for personnel or third parties and/or damage to machinery and other tangible assets can occur during use, e.g. if the machine:

- is operated by untrained or uninstructed personnel,
- is not used for the intended purpose,
- is assembled, operated and serviced inappropriately.

Attached notices and warning signs must be observed!

Consequences of failure to comply with safety instructions

Failure to comply with safety instructions can result in hazards for personnel as well as for the environment and the machine. Failure to comply can lead to any claims for damages becoming invalid.

2.1 Residual risks

There are still residual risks remaining from handling the machinery even when all safety conditions are complied with.

Everyone who works on and with the machine must be aware of these hazards and follow instructions that prevent these residual risks leading to accidents or damage.

- Do not remove safety stickers; replace any safety instructions that have become illegible.
- Injuries due to uncoordinated work methods.
- Hazards from a malfunction in the control system.
- Hazards when working on the electrical system.
- Hazards from damage to the load carrying equipment.
- Hazards due to toppling of an improperly secured load.
- Hazards due to high wind speeds > 72 km/h [USA max. 35 mph].
- Hazards due to incorrect anchoring of the vertical frame of the scaffolding.

2.2 Safety instructions for operating personnel

The operating manual must be kept within reach at all times **at the location where the machine is used**.

The machine may only be used in a technically flawless condition, **in accordance with the intended use, in a safety conscious manner, with awareness for the hazards** and in compliance with this operating manual! In particular, faults that could impair safety must be eliminated immediately!

In addition, the machine may only be operated when all **safety devices are installed and functioning!**

Check the machine for externally identifiable damage and defects **at least once each working day!** Immediately report any changes (including changes to the operating behaviour) to the office/person in charge. If necessary, shut down and secure the machine immediately! The **responsibilities** for different jobs within the context of operation and maintenance of the machine must be clearly defined and adhered to. This is the only way to avoid mistakes, especially in hazardous situations.

The relevant **rules for the prevention of accidents**, as well as other, generally recognised health and safety rules must be adhered to.

The hoist operator is obligated to wear **personal protective equipment** appropriate to the local conditions.

Switch-on and shut-down procedures, including emergency shut-down, must be observed in accordance with the operating manual for all work that affects operation and for conversions and adjustments to the machine and its safety devices.

WARNING

Risk of injury

- Wear personal protective equipment if required by the local regulations.



2.3 Safety instructions for transport

Immediately report **transport damage** and/or **missing parts** to the supplier.

During transport tasks, wear a **safety helmet, safety shoes and protective gloves!**

Never walk below suspended loads!

Only use **appropriate, standardised and tested lifting devices** (forklifts, cranes) and load attachment gear (lifting beam, round slings, lifting straps, rope slings, chains) for transport at the assembly site.

When selecting lifting and slinging equipment, always take into account the **maximum suspended loads!**

Dimensions and weights , (refer to chapter 3 Technical data, page 26).

Only load and transport **the carefully dismantled, packed and lashed machine.**

Always ensure that the machine is transported **without being knocked or jolted**. Ensure that the machine is stable during transport. Support the platform before strapping it down for transport.

Observe the **symbols on the packaging**.

Only attach gear to the **designated attachment points**.

Always **secure transported loads against falling or tipping over!**

The machine must only be transported/installed on foundations with sufficient load capacity.

Ensure that stable balance is maintained when transporting with forklift trucks.

2.4 Safety instructions for operation

Only operate the machine in accordance with the operating manual, **when it is in full working order, and in a safety and hazard-conscious manner.**

If **work is interrupted, switch the machine off at the main switch** and secure it with a padlock against being switched on again.

Fundamentally, the machine must be **secured against unauthorised use** (disconnect from power)!

In situations that present a **risk to the operating personnel** or the machine, shut down the machine by pressing the **EMERGENCY STOP** button.

Never stand under suspended loads. Ensure that the hazard zone is suitably cordoned off and labelled at the construction site.

Protection to prevent persons from falling must be provided at loading heights above 2.0 m. (Install landing level safety gates.)

Move load platform down and shut down machine at wind speeds of >72 km/h. (Wind force 7-8, wind breaks branches off trees, makes walking very difficult)

USA:

Travel the machine down and shut it down at wind speeds of > 35 mph (56 km/h).

2.5 Safety instructions for maintenance and troubleshooting

Operating personnel must be **informed** about how to carry out special work and repair work before starting.

Deadlines that are stipulated or stated in the maintenance manual for recurring **tests/inspections** must be adhered to.

The **maintenance area** must be **cordoned off** extensively as required! Before carrying out any maintenance work on the machine, always

- unload it,
- switch it off at the main switch.

All **maintenance and repair work** is only permitted with the **main switch turned off** or **with the mains plug disconnected**. Manual intervention while the machine is running can lead to serious injuries and is therefore prohibited. If it is necessary to **switch the machine on during** such work, this must only be done while **complying with special safety measures**.



For further instructions on maintenance, maintenance intervals and servicing, refer to the maintenance manual.

If the machine has been completely shut down for these tasks, it must be secured against being switched on unintentionally:

- Actuate the **EMERGENCY STOP** button
- Place a **warning sign** at the mains plug.

Any faults that could impair safety must be rectified immediately.

Workshop **equipment that is suitable for the specific work** is absolutely necessary for carrying out **maintenance and inspection work**. When carrying out maintenance tasks at greater heights, a fall protection system must be worn! Keep all handles, railings and the platform free from dirt and contamination.

When working below the platform, secure it using appropriate means (e.g. bolts, mast clamps)

Before starting service/repair tasks, **clean** any oil, operating fluids, contamination and maintenance products from the machine, paying special attention to connections and threaded connections. Do not use abrasive cleaning materials. **Screw connections that were released** during maintenance and inspection work must always be tightened again using the necessary **torques**!

Do not change, remove, bypass or bridge safety devices.

If it is necessary to dismantle safety devices during maintenance and repair work, the safety devices must be installed and checked immediately after completion of the maintenance and repair tasks!

Do not make any changes, additions or modifications to the machine. This also applies to the installation and adjustment of safety devices such as limit switches.

Immediately replace damaged or detached information and warning signs, as well as safety labels.

Ensure that operating and auxiliary materials, as well as replaced parts, are disposed of safely and in an environmentally friendly manner (refer to chapter 12 Disposal, page 89).



The aforementioned safety measures also apply to troubleshooting.

2.6 Safety when working on the electric system

If there are **faults on the electrical system** of the machine, it must be **shut down immediately using the main switch** and secured with a padlock or the mains plug must be disconnected!

Work on the electrical equipment of the machine must only be carried out by **qualified electricians** working in accordance with electrical engineering regulations! Only professional electricians may access the electrical system of the machine and carry out work on them. **Always keep the switch boxes closed** whenever they are left unattended.

Never work on live parts! System parts on which inspection, maintenance or repair work is to be carried out must be **disconnected from the mains power**.

Operating equipment that has been disconnected must be secured against being switched back on unintentionally or automatically (lock away fuses, block isolating switches, etc.). The disconnected electrical components must first be tested to ensure they are voltage-free, then earthed, short-circuited and isolated from neighbouring live components.

If **tasks have to be carried out on live components** (only in exceptional circumstances), an additional person must be present to operate the **EMERGENCY STOP** button or main switch in the event of an emergency. Use only insulated tools!

During repairs, ensure that **design features** are not **modified** so that they have a negative influence on safety. (e.g. creeping distances, clearances and distances must not be reduced by insulation).

Fault-free **earthing** of the electrical system must be ensured by a **protective earth system**.

3 Technical data

3.1 Operating and environmental conditions

The machine may only be operated when the following operating and environmental conditions are adhered to:

- Storage in dry rooms, in order to prevent corrosion.
- No jolts or vibrations.
- No abrasive, corrosive substances.
- The machine must be protected against pest damage (insects, rodents, etc.).
- Before transport/storage, the machine must be cleaned and checked for signs of damage.

Temperature range:	minimum	-20° C
	maximum	+40° C
Air humidity (relative):		80 % RH.

USA:

Temperature range:	minimum	-4° F / - 20 °C
	maximum	104° F / 40 °C
Humidity (relative):		80 % rh

Wind speed:

Operation/maintenance/repair	maximum	72 km/h [USA max. 35 mph]
Assembly:	maximum	45 km/h [USA max. 28 mph]

It may be necessary to cease or prohibit operation of the machine under extreme weather conditions, even if the operating and environmental conditions fall within the bounds of those stated. For example, if heavy frost and a storm occur together. In these cases, the operating company must provide appropriate regulations.

Do not use during storms (lightning)!

Atmosphere at the location of use during material transport

When transporting material, this must not lead to a concentration of abrasive/corrosive substances and of explosive fine dusts. If this cannot be safely excluded, the corrosion protection and/or the functional reliability of the electrical components must be checked at regular intervals and they should, if necessary, be replaced. Fine particulate matter must be removed.

3.2 Emissions

Sound capacity level L_{WA} : < 78 db (A)

3.3 GEDA MINI 60 S

3.3.1 Electrical connected loads

Mains voltage 230V/50Hz / 1Ph+N+PE

Capacity

1. Speed 0.25 kW at 900 min⁻¹

2. Speed 0.75 kW at 2700 min⁻¹

Current consumption (I_N) 2.6 A / 5.2 A

Switch-on period (ED) S3 (60%)

Protection class IP44

3.3.2 Speeds

Lifting speed

1. Speed max. 23 m/min

(starting / stopping without jerking)

2. Speed max. 69 m/min

(Travel)

3.3.3 Load capacity, dimensions and weights

Lifting capacity max. 60 kg

Weight

with 51m rope 50 kg

with 81m rope 55 kg

Packaging dimensions 0.63 m x 0.53 m x 0.48 m

(length × width × height))

3.3.4 Heights

Lifting height: 25 m / 40 m [82 ft / 130 ft]

3.4 GEDA MAXI 120 S

3.4.1 Electrical connected loads

Mains voltage	230V/50Hz / 1Ph+N+PE
Capacity	
1. Speed	0,45 kW at 900 min-1
2. Speed	1,35 kW at 2700 min-1
Current consumption (I _N)	5 A / 9 A
Switch-on period (ED)	S3 (60%)
Protection class	IP44

3.4.2 Speeds

Lifting speed	
1. Speed (starting / stopping without jerking))	max. 20 m/min
2. Speed (Travel)	max. 60 m/min

3.4.3 Load capacity, dimensions and weights

Lifting capacity	max. 120 kg
Weight	
with 51m rope	60 kg
with 81m rope	65 kg
Packaging dimensions (length × width × height)	0.63 m x 0.63 m x 0.65 m

3.4.4 Heights

Lifting height:	25 m / 40 m [82 ft / 130 ft]
-----------------	------------------------------

3.5 GEDA MAXI 120 S 110 V and 120 V

3.5.1 Electrical connected loads

Mains voltage	110V/50Hz / 1Ph+N+PE 120V/60Hz / 1Ph+N+PE
Capacity	
1. Speed	0.45 kW (50Hz) 0.5 kW [0.6 hp] (60Hz)
2. Speed	1,35 kW (50 Hz) 1.5 kW [1.8 hp] (60 Hz)
Current consumption (I _N)	6.7 A / 15.2 A
Switch-on period (ED)	S3 (60%)
Protection class	IP44

3.5.2 Speeds

Lifting speed	
1. Speed (starting / stopping without jerking)	max. 13 m/min (50Hz) max. 15 m/min [67 ft/min] (60Hz)
2. Speed (Travel)	max. 39 m/min (50Hz) max. 45 m/min [200 ft/min] (60Hz)

3.5.3 Load capacity, dimensions and weights

Lifting capacity	max. 120 kg [265 lbs]
Weight	
with 51m rope	60 kg [132 lbs]
with 81m rope	65 kg [143 lbs]
Packaging dimensions ((length × width × height)	0.63 m x 0.63 m x 0.65 m [2.07 ft x 2.07 ft x 2.13 ft]

3.5.4 Heights

Lifting height:	25 m / 40 m [82 ft / 130 ft]
-----------------	------------------------------

3.6 GEDA MAXI 150 S**3.6.1 Electrical connected loads**

Mains voltage	230V/50Hz / 1Ph+N+PE
Capacity	
1. Speed	0,45 kW at 900 min ⁻¹
2. Speed	1,35 kW at 2700 min ⁻¹
Current consumption (I _N)	5 A / 9 A
Switch-on period (ED)	S3 (60%)
Protection class	IP44

3.6.2 Speeds

Lifting speed	
1. Speed	max. 15 m/min
(starting / stopping without jerking)	
2. Speed	max. 45 m/min
(Travel)	

3.6.3 Load capacity, dimensions and weights

Lifting capacity	max. 150 kg
Weight	
with 51m rope	60 kg
with 81m rope	65 kg
Packaging dimensions	0.63 m x 0.63 m x 0.65 m
(length × width × height)	

3.6.4 Heights

Lifting height:	25 m / 40 m [82 ft / 130 ft]
-----------------	------------------------------

3.7 Wire rope

Ø / Type / standard	4.5 mm / FEC-PP -zn [k-1770 zS] / EN 12385-4:2008-06 [0.2 in]
Rope length	51 m or 81 m [167 ft or 266 ft]
Rope uptake capacity of the rope drum	81 m [266 ft]

3.8 Pivot arm



Only the pivot arm with re-inforcement (1) (welded gusset plate) is designed for a bearing capacity of 150 kg (see also imprint (2) on the pivot arm).

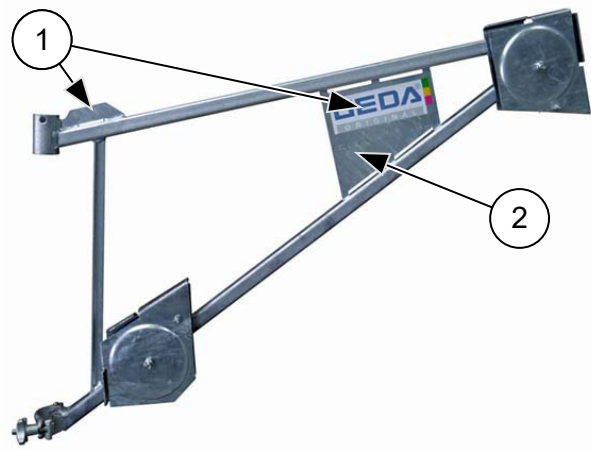


Fig. 1: Pivot arm

Load capacity	max. 150 kg [330 lbs]
Weight	11.7 kg [26 lbs]
Turning unit (Pivot radius)	0.85 m [2.8 ft]
Dimensions (length × width × height)	1,20 m x 0,70 m x 0,10 m [3.9 ft x 2.3 ft x 0.3 ft]



Pivot arms from previous models do not have a reinforcement (welded gusset plate) (2). They have a maximum load capacity of 60 kg and may be used only for the MINI 60 S.



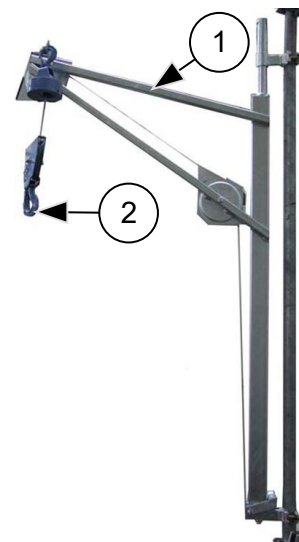
Fig. 2: Swivel arm without reinforcement (max. 60 kg load capacity)

3.9 Pivot arm 300 kg (660 lbs) and hook block 300 kg (660 lbs) for GEDA MAXI 150 S

By using the pivot arm 300 kg [660 lbs] and hook block 300 kg [660 lbs], the load capacity of the scaffolding lift GEDA Maxi 150 S can be doubled (pulley block principle).

Operation of the hoist is not changed by using the parts.

Only the lifting speed and height changes.



- 1 Pivot arm 300 kg [max. 660 lb]
Item No.: 01272
- 2 Hook block 300 kg [max. 660 lbs]
Item No.: 01273

Fig. 3: Pivot arm with hook block
300 kg [660 lbs]

Lifting capacity	max. 300 kg [660 lbs]
Weight	21 kg [64 lbs]
Pivot frame	0.85 m [2.8 ft]
Pivot radius	

Lifting speed (Maxi 150 S) with hook block

1. Speed (starting / stopping without jerking)	max. 7 m/min [23 ft/min]
2. Speed Travel	max. 22 m/min [72 ft/min]

Lifting heights with hook block

MAXI 150 S	Rope length	Lifting height
Winch installed <u>at bottom</u>	51 m [167 ft]	16 m [53 ft]
Winch installed <u>at bottom</u>	81 m [266 ft]	26 m [85 ft]

4 Equipment

4.1 GEDA MINI 60 S

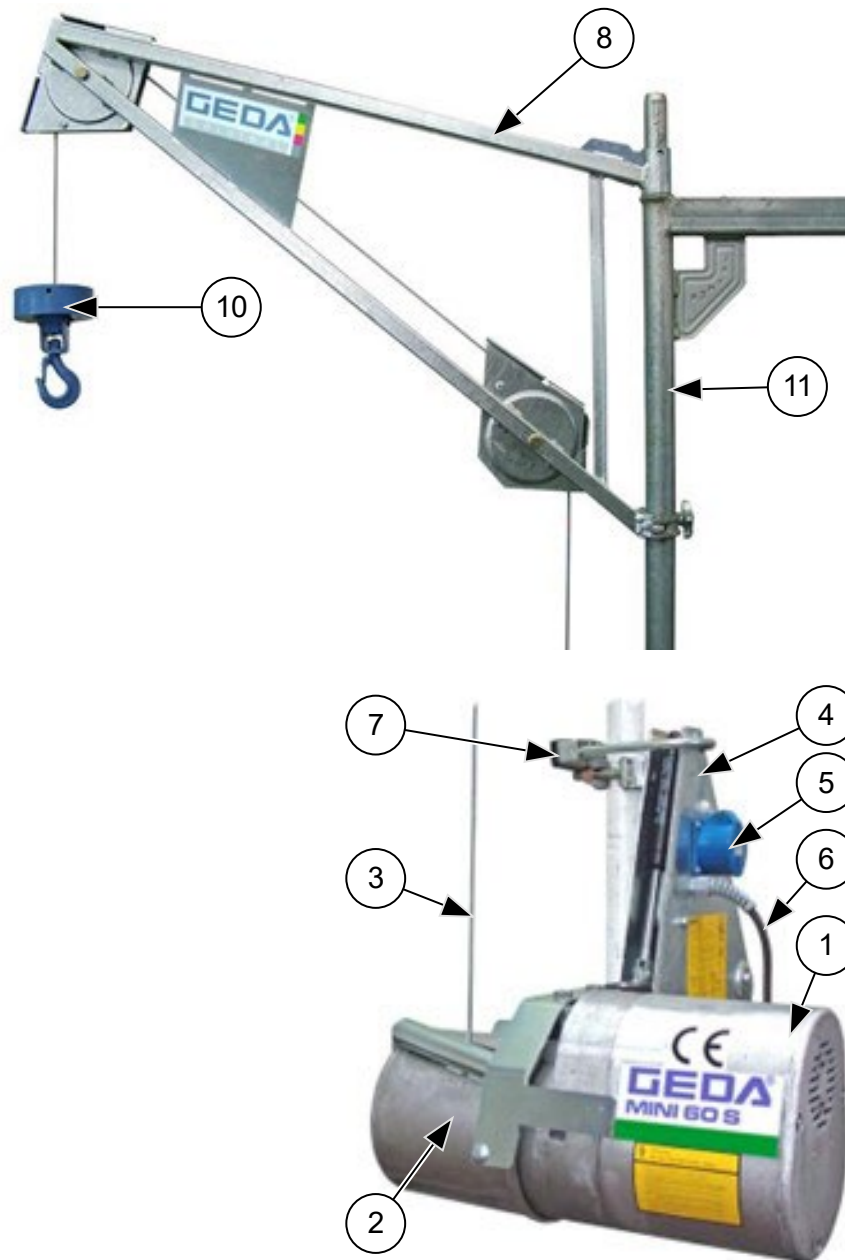


Fig. 4: Overview MINI 60 S

- | | | | |
|---|---|----|------------------------------------|
| 1 | Winch MINI 60 S | 6 | Mains supply line |
| 2 | Rope drum with drum flexible drum guard | 7 | Safety bar closure |
| 3 | Rope | 8 | Pivot arm |
| 4 | Tilting mechanism (limit stop) | 10 | Non-twisting device with load hook |
| 5 | Plug for control | 11 | Vertical frame (scaffolding) |

4.2 GEDA MAXI 120 S / 150 S

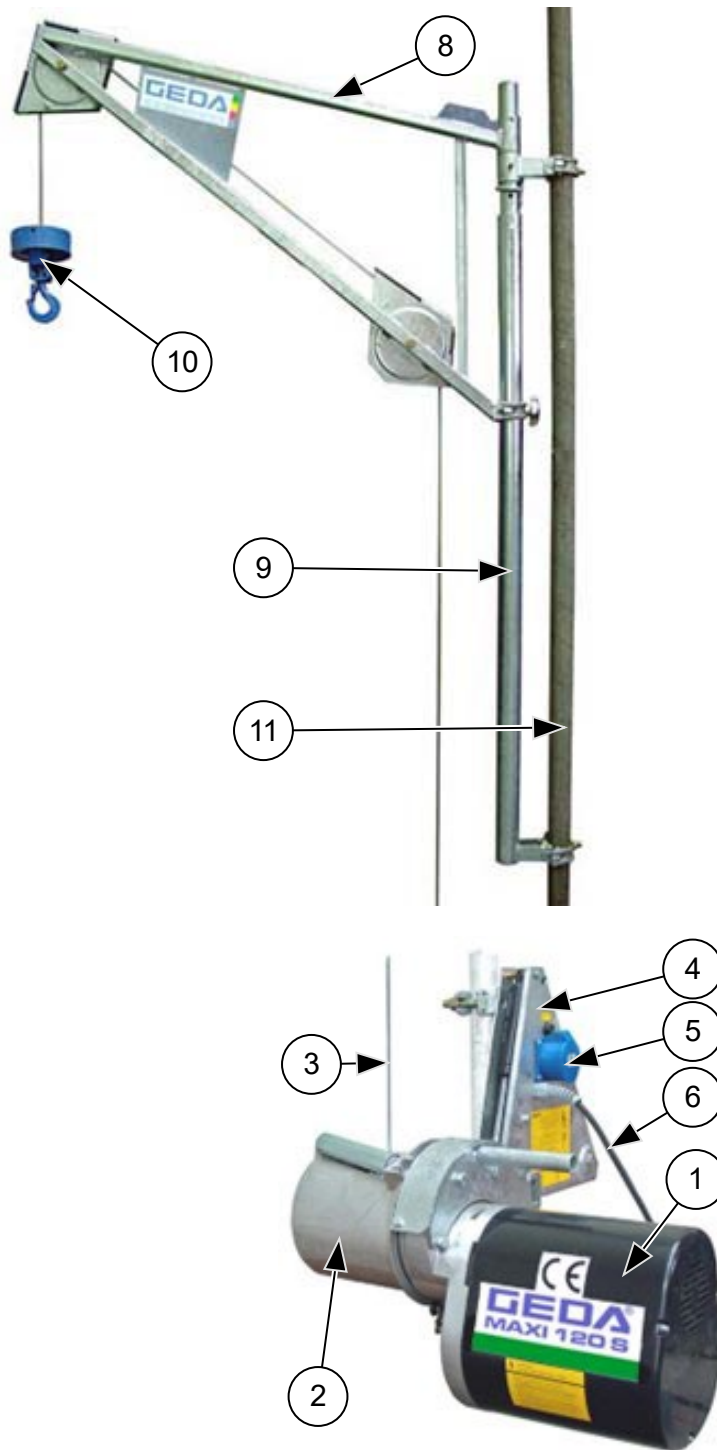


Fig. 5: Over view MAXI 120 S / 150 S

- | | | | |
|---|---|----|------------------------------------|
| 1 | Winch MAXI 120 S / 150 S | 6 | Mains supply line |
| 2 | Rope drum with drum flexible drum guard | 8 | Pivot arm |
| 3 | Rope | 9 | Pivot arm mounting MAXI 120 S |
| 4 | Tilting mechanism (limit stop) | 10 | Non-twisting device with load hook |
| 5 | Plug for control | 11 | Vertical frame (scaffolding) |

4.3 Ground control/manual control

Manual control

- 1 **EMERGENCY STOP-button**
- 3 **UP-button**
- 4 **DOWN-button**
- 5 Hanging bracket

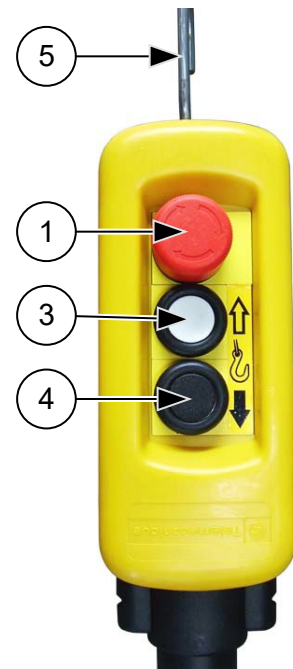


Fig. 6: Manual control „Standard“

The two-stage manual control is available with three lengths of line:

- Control 10 m
- Control 30 m
- Control 50 m

5 Accessories

5.1 Adapter

For adapting the pivot arm to a vertical frame (scaffolding) without protruding crossbar studs.

- 1 Adapter
- 2 Vertical frame scaffolding)
- 3 Pivot arm

Item No.: 01409

Weight: 0.6 kg [1.3 lbs]

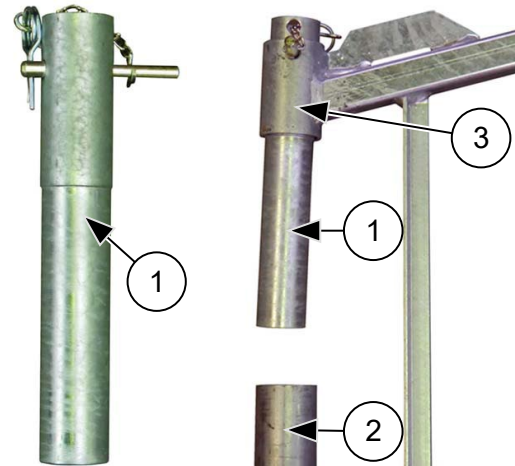


Fig. 7: Adapter for pivot arm

5.2 Pivot arm mounting for MINI 60 S

The pivot arm mounting serves for fastening the pivot arm between scaffolding levels.

Item No.: 01407

Lifting capacity: max. 60 kg

Weight: 8 kg [18 lbs]

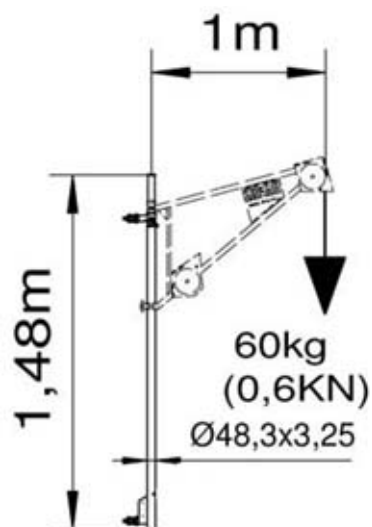


Fig. 8: Pivot arm mounting for MINI 60 S

5.3 Pivot arm mounting for MAXI 120 S / 150 S

The pivot arm mounting serves for fastening the pivot arm between scaffolding levels.

Item No.: 29497

Lifting capacity: max. 150 kg

Weight: 12.9 kg [28 lbs]

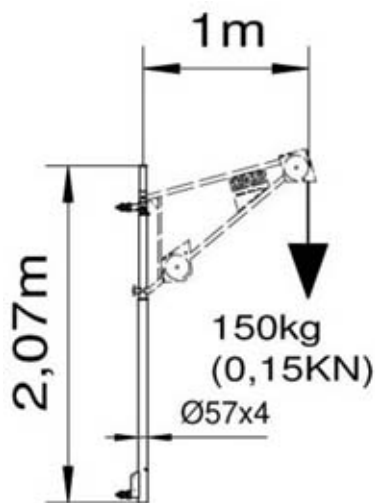


Fig. 9: Pivot arm mounting MAXI 120 S / 150 S

5.4 Universal pivot arm for MAXI 120 S / 150 S

The pivot arm mounting serves for fastening the pivot arm between scaffolding levels.

Item No.: 01267

Lifting capacity: max. 150 kg

Weight: 24.6 kg [54 lbs]

- 1 Pivot arm Item No.: 05711
- 2 Pivot arm mounting Item No. 29497

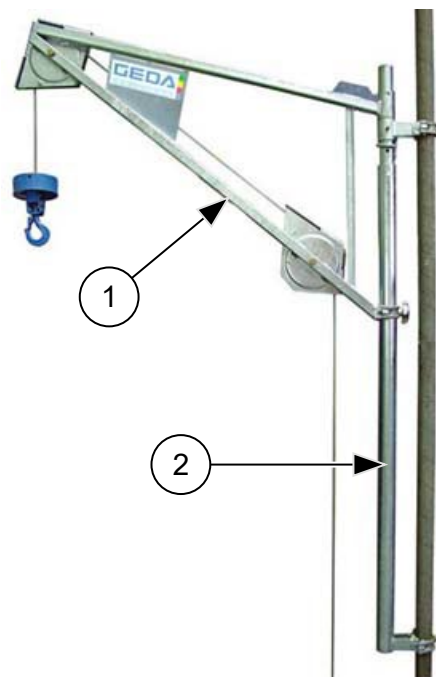


Fig. 10: Universal pivot arm

5.5 Shackle lock

Is used to secure the winch on the vertical frame (scaffolding).

Item No.: 01429
Weight: 1.1 kg [2.4.lbs]

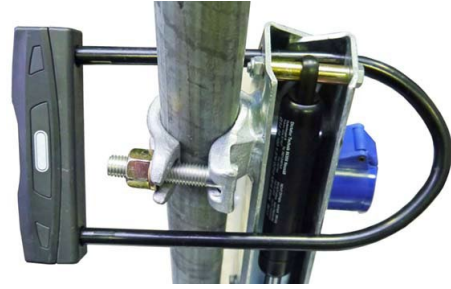


Fig. 11: Shackle lock

1. Guide the open shackle through the holes on the triangular frame and vertical frame (scaffolding).
2. Place the body of the lock on the shackle and close.

5.6 Transport frame

The "transportation frame" can be used for safer and easier transportation of the scaffolding lifts **GEDA MINI 60 S** and **GEDA MAXI 120 S/150 S**.

The machine is attached by bolts to the transportation frame on the scaffolding and can remain there.

Item No.: 47760
Weight: 19 kg [42 lbs]



Fig. 12: Transportation frame

- 1 Transportation frame
- 2 Machine mounting

The clamp lock (2b) secures the machine on the transportation frame (1).

As an option, the transportation frame can be removed after attaching the machine to the scaffolding.

For adaptation to different scaffolding, the machine mounting (2) can be attached by the eye bolt (2a) in three different positions. (Adjustment range 80 mm [31 in] upwards and downwards).

The machine must be moved by two persons to insert the machine in the transportation frame.

The holding positions are on the handle and triangular frame.

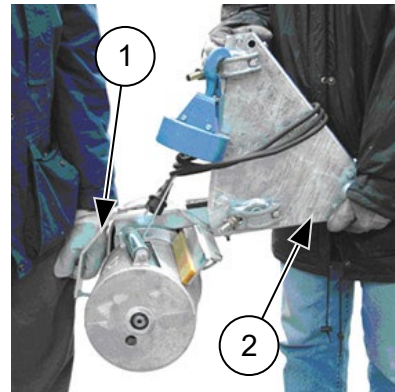


Fig. 13: Move the machine

Assembly

1. Place the machine in the transportation frame so that the triangular frame rests in the machine mounting (2).
2. Use the clamp lock (2b) to attach the machine in the transportation frame.
3. Drive the machine to the location of use.



Fig. 14: Transportation frame

4. Assemble the machine on the vertical frame of the scaffolding. (refer to chapter 7 Assembly, page 52)

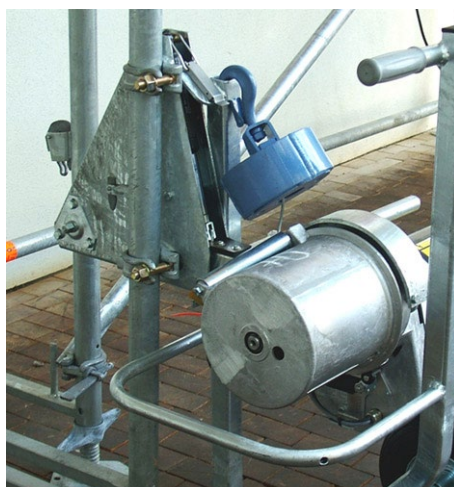


Fig. 15: Assemble transportation frame 1



Fig. 16: Assemble transportation frame 2

5. To remove the chassis, open the clamp lock (2b) and pull out the transportation frame.



Fig. 17: Transportation frame mounted

5.7 Landing level safety gate ECO S

Item no. 42500

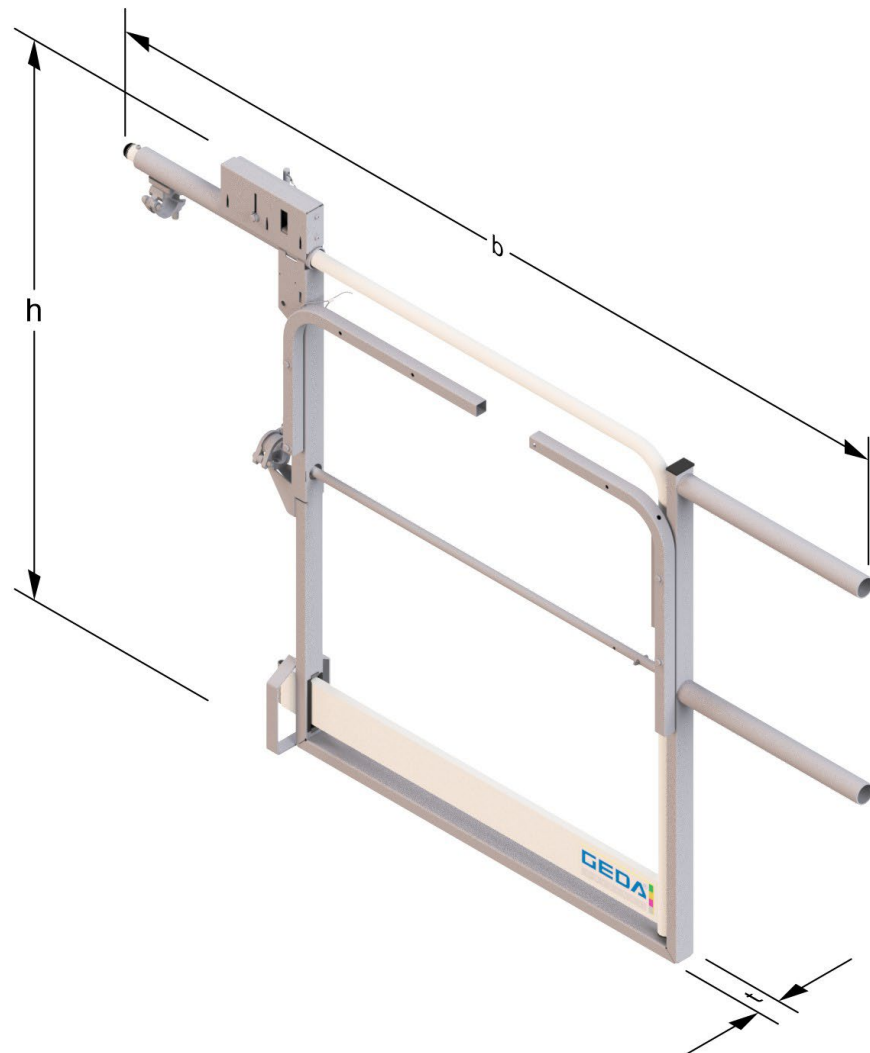


Fig. 18: Landing level safety gate ECO S

Width [closed] (b):	approx. 2.03 m
Depth (t):	approx. 0.15 m
Height (h):	approx. 1.3 m
Weight:	26 kg
Opening width:	max. 0.14m

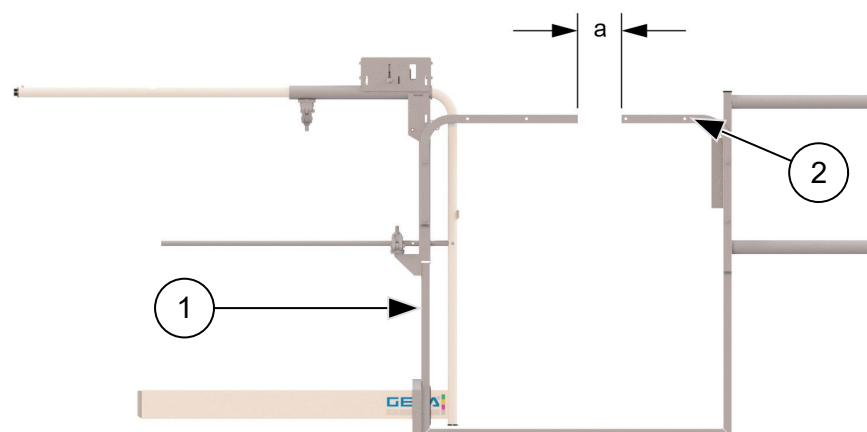


Fig. 19: Opening width ECO S

- 1 Landing level safety gate
- 2 Railing rope hoists



To adapt the aperture (a) to the wire rope swivelled in, the railing of the rope hoists (2) can be installed in two positions
The opening width (a) must not exceed 0.15 m (0.5 ft).

5.8 "Simple" loading point protection rails

Item No.:	01206
Width:	1.4 m [4.5 ft]
Weight:	29 kg [64 lbs]

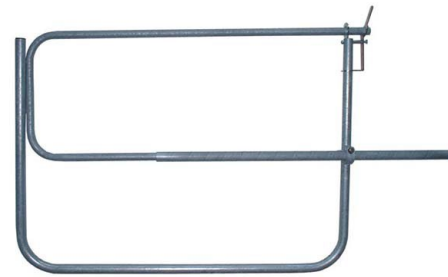


Fig. 20: "Simple" loading point protection rails

Assembly

1. Attach the landing-level safety gate to the scaffolding using suitable attachment devices (e.g. cross-couplings / parallel couplings).

a Aperture for rope:
max. 0,15 m [0.5 ft]

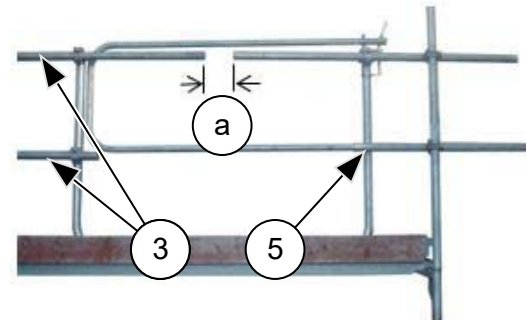


Fig. 21: Assembly loading point protection rails "Simple"
1

2. Align the upper railing pipes so that when the rope is swivelled in, it is guided through the aperture.

For large scaffold section widths, it may also be necessary to install a horizontal scaffolding pipe (3) to attach the gate.

Push on the bar (5a) when operating the scaffolding lift.

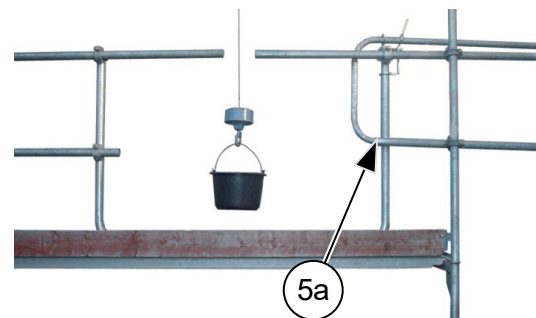


Fig. 22: Assembly loading point protection rails "Simple"
2

5.9 Small on-site main cabinet

Construction lifts must be operated via a building site mains distributor.
(Refer to national provisions)

5.10 Load carrying equipment

Slinging equipment

Slinging equipment is not part of the equipment included in the lifting gear which establishes a connection between the suspension equipment and load or suspension equipment and load carrying equipment.

Lifting equipment

Load carrying equipment is not a part of the equipment included in the lifting gear that can be connected to the suspension equipment of the lifting gear to accept the load. (BGR 500)

5.10.1 Load hook

Suitable for all scaffolding lifts

For transporting scaffolding parts.

Item No.: 01408

Lifting capacity: max. 30 kg [66 lbs]

Weight: 0.5 kg [1.1 lbs]



Fig. 23: Load hook

5.10.2 Hook carrier

Suitable for all scaffolding lifts

For 5 load hooks

Item No.: 01827

Lifting capacity: max. 150 kg [330 lbs]

Weight: 2.3 kg [5 lbs]

Delivery without load hook



Fig. 24: Hook carrier

5.10.3 Cable sling

Suitable for all scaffolding lifts

To accept multiple load hooks.

Item No.: 03066

Lifting capacity: max. 30 kg [66 lbs]

Weight: 0.1 kg [0.2 lbs]



Fig. 25: Cable sling

5.10.4 Hoist sling

Suitable for all scaffolding lifts

For transporting scaffolding parts.

Item No.: 01432

Lifting capacity: max. 500 kg [1100 lbs]

Weight: 0.5 kg [1.1 lbs]



Fig. 26: Hoist sling

5.10.5 Bucket hoist for 4 buckets

Suitable for MAXI 120 S / 150 S

For hanging 2 or 4 buckets.

Item No.: 01812

Lifting capacity: max. 150 kg [330 lbs]

Weight: 4 kg [9 lbs]

Dimensions: 0.44 m x 0.44 m

[1.4 ft x 1.4 ft]

Height 0.12 m [0.4 ft]



Fig. 27: Bucket hoist for 4 buckets



Only use suitable buckets!

5.10.6 Bucket support for 2 buckets

Suitable for all scaffolding lifts

For 2 round or oval buckets or 1 large oval bucket

Item No.: 01810

Lifting capacity: max. 75 kg [165 lbs]

Weight: 4.4 kg [10 lbs]

Internal dimensions:

0.66 m x 0.32 m [2.2 ft x 1 ft]

Height: 0.50 m [1.6 ft]

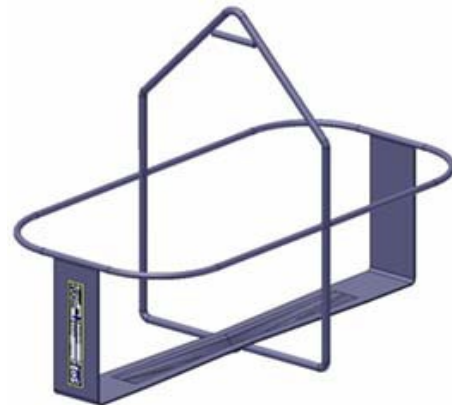


Fig. 28: Bucket support for 2 buckets

5.10.7 Bucket support for 4 buckets

Suitable for MAXI 120 S / 150 S

For 2 or 4 round or oval buckets

Item No.: 01811

Lifting capacity: max. 150 kg [330 lbs]

Weight: 9 kg [20 lbs]

Ø Bucket: max. 0.32 m [1 ft]

Dimensions: 0.85 m x 0.70 m

[2.8 ft x 2.3 ft]

Height: 0.48 m [1.6 ft]



Fig. 29: Bucket support for 4 buckets

5.10.8 65 litre tilting bucket

Suitable for MAXI 120 S / 150 S

Item No.: 01814

Lifting capacity: max. 150 kg [330 lbs]

Weight: 16 kg [35 lbs]

Volume: max. 65 litres [17 Gallon]

Internal dimensions:

0.50 m x 0.35 m [1.6 ft x 1.1 ft]

Height: 0,40 m [1.3 ft]

Overall dimensions:

0.61 m x 0.41 m [2 ft x 1.3 ft]

Height: 0.62 m [2 ft]

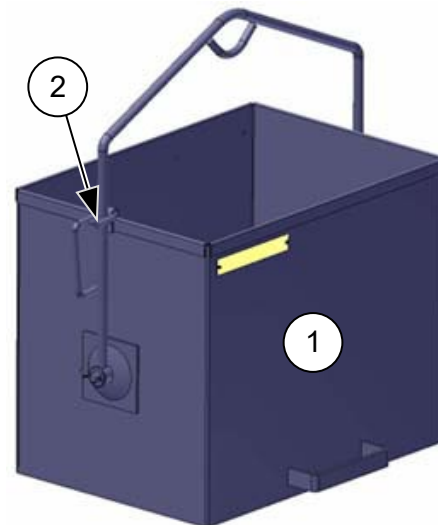


Fig. 30: Tilting bucket

- To tip out, open the safety device (2) and tilt bucket (1).

5.10.9 65 litre mortar silo

Suitable for MAXI 120 S / 150 S

Item No.: 01815

Lifting capacity: max. 150 kg [330 lbs]

Weight: 23,3 kg [51 lbs]

Volume: max. 65 litre [17 Gallon]

Overall dimensions:

0.74 m x 0.52 m [2.4 ft x 1.7 ft]

Height: 0.55 m [1.8 ft]

Ø Ring: max. 0.60 m [2 ft]



Fig. 31: Mortar silo

- Open flap with lever (1) for unloading.

5.10.10 Wire mesh cage with wooden palette

Suitable for MAXI 120 S / 150 S

Item No.: 01816

Lifting capacity: max. 150 kg [330 lbs]

Weight: 21 kg [46 lbs]

Internal dimensions:

0.64 m x 0.34 m [2.1 ft x 1.1 ft]

Height: 0.50 m [1.6 ft]

Overall dimensions:

0.70 m x 0.44 m [2.3 ft x 1.4 ft]

Height: 0.67 m [2.2 ft]

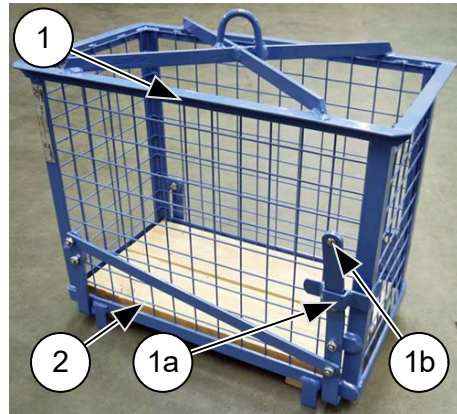


Fig. 32: Wire mesh cage

Loading

1. Stack the load on the pallet (2).
2. Raise the safety device (1a), pull the lever (1b) towards the centre of the cage.
3. Raise the cage (1) above the load until it rests on the pallet.
4. Turn the lever so it is vertical and slide the safety device (1a).

Unloading

1. Raise the safety device (1a), pull the lever (1b) towards the centre of the cage.
2. Raise the cage (1) above the load and place to the side.
3. Unload pallet (2).

5.10.11 Hoisting cage with wooden pallet

Suitable for MAXI 120 S / 150 S

Item No.: 01820

Lifting capacity: max. 150 kg [330 lbs]

Weight: 38 kg [84 lbs]

Internal dimensions:

0.95 m x 0.60 m [3.1 ft x 2 ft]

Height: 0.45 m [1.5 ft]

Overall dimensions:

1.01 m x 0.69 m [3.6 ft x 2.3 ft]

Height: 0,62 m

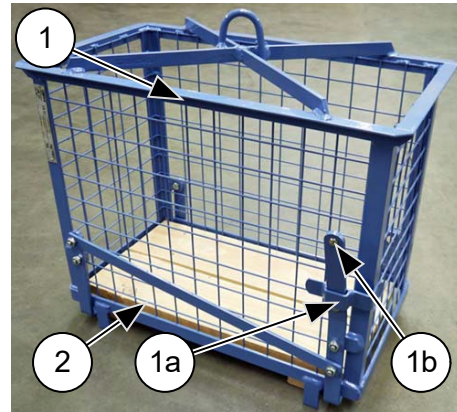


Fig. 33: Hoisting cage

Loading

1. Stack the load on the pallet (2).
2. Raise the safety device (1a), pull the lever (1b) towards the centre of the cage.
3. Raise the cage (1) above the load until it rests on the pallet.
4. Turn the lever so it is vertical and slide the safety device (1a).

Unloading

1. Raise the safety device (1a), pull the lever (1b) towards the centre of the cage.
2. Raise the cage (1) above the load and place to the side.
3. Unload pallet (2).

5.10.12 Slab grab

Suitable for MAXI 120 S / 150 S

Item no.: 01819

Lifting capacity: max. 150 kg [330 lbs]

Weight: 24 kg [53 lbs]

Loading dimensions:

1.33 m x 0.13 m [4.4 ft x 0.4 ft]

Height (adjustable):

1.31 m to 1.56 m [4.3 ft to 5.1 ft]



Fig. 34: Slab grab

6 Transport

ATTENTION

Damage to the machine

- The machine has to be transported by experienced and competent personnel.

6.1 Inspection on receiving the machine

- Check the shipment for transport damage and completeness according to the purchase order.
- Dispose of packaging/protective covers according to legal requirements or retain them for later transport.
- Immediately notify the freight carrier (haulage company) and dealer of any transport damage.

6.2 Transporting the machine

6.2.1 Transportation by persons

⚠ WARNING



Risk of injury caused by inexpert lifting, holding and carrying of the winch.

- The winch must always be carried by two people.

The carrying positions are on the handle (1) and triangular frame (2).

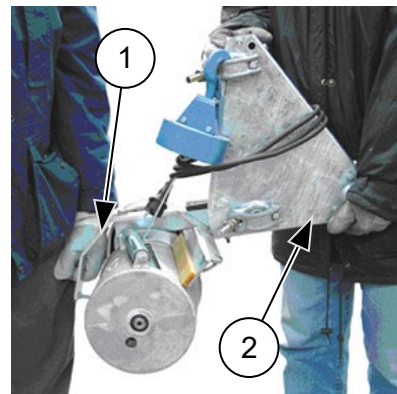


Fig. 35: Carrying the machine

6.2.2 Transportation using lifting equipment

⚠ DANGER



Risk of death from falling loads!

- Do not stand on/under suspended loads.
- Only lift loads at the anchor points.
- Only use suitable slinging/load handling devices.
- Do not lift stuck/jammed loads.
- Do not pull/drag loads at an angle.

If lifting equipment is available, there is an option for attaching the device to a load hook.

- Attach the load hook (3) in the holes provided for the safety bar closure.

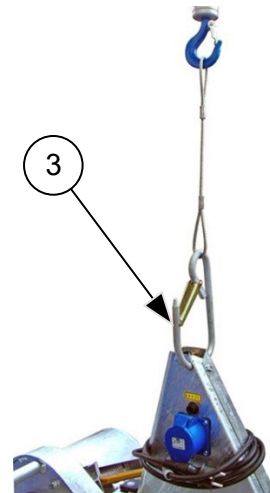


Fig. 36: Transport with lifting device

6.2.3 Transportation using a transportation frame

The transportation frame (4) is used for easier transportation of the winch in the stores and on the construction site.

The machine is attached by bolts to the transportation frame on the scaffolding and can remain there.



Fig. 37: Transportation using a transportation frame

7 Assembly

⚠ WARNING



Risk of injury

The hoist must be disassembled under supervision of an authorised person specified by the contractor!

7.1 Requirements for assembly personnel

The machine may only be assembled, operated and maintained by qualified persons who, based on their training, knowledge and practical experience, can ensure correct handling of the machine and who are aware of the risks associated with the scaffolding lifts. These persons must be instructed with the tasks of installation, dismantling and maintenance by the owner.

7.2 Safety instructions for assembly

⚠ DANGER



Risk of death from falling loads!

- Never remain inside the cordoned-off area during operation.
- Do not stand or work underneath the hanging load!
- Turn off the main switch and secure it against being switched on while work is being carried out inside the cordoned-off area.

Also follow the safety instructions, (refer to chapter 2 General safety information, page 19)!



- Before starting work at the place of use, acquaint yourself with the working environment, e.g. obstacles in the work and traffic areas and any required barriers between the construction site and public areas.
- Before each installation, check whether the wire rope, mains supply line and control with cable are in a serviceable condition. Do not operate the scaffolding lift if it is damaged! - Immediately replace any damaged parts.
- Cordon off the danger zone of the scaffolding lift (red-and-white chain, etc.) and label it with a warning sign.
- Fall protection must be provided at **a height of more than 2.0 m [6.5 ft]** to prevent persons from falling (install landing level safety gates if necessary).
- Observe the load capacity of the scaffolding lift.
- Wear personal protective equipment (e.g. hard hat, safety shoes, fall protection).

7.3 Assembly plan

The assembly plan shows the basic assembly stages and their chronological sequence. However, installation is always based on the detailed instructions in this manual and the approved installation drawings.

Depending on the working equipment available / number of installation engineers, and the construction-site conditions (e.g. crane), tasks may be carried out in parallel or the sequence of the installation steps may be changed.

If the sequence is changed, the amended installation plan must be checked by the operating company to ensure that it is sensible and that there are no potential hazards and must be subsequently approved.

Assembly plan	
	Assembling scaffolding lift <ul style="list-style-type: none"> Assemble the winch on the scaffolding support Align the winch Assemble the pivot arm vertically above the winch
	Electrical connection <ul style="list-style-type: none"> Connect the manual control Insert mains plug at the building site main cabinet.
	Assembling scaffolding lift <ul style="list-style-type: none"> Assembling the wire rope Cordon off / indicate the hazard area
	Secure the loading positions using fall protection <ul style="list-style-type: none"> Install protection made from parts of the scaffolding or install landing level safety gate
	Inspection after assembly <ul style="list-style-type: none"> Before commissioning each time, check the machine
	Instruct authorized personnel to use.

Legend		
mechanical	electrical	inspections

7.4 Assembling scaffolding lift

The machine must only be installed and deployed vertically!

The pivot arm is suspended on the upper end of the same vertical pipe as the winch.

⚠ WARNING



Risk of injury due to incorrect assembly

- To ensure reliable switching off on the swivel arm, the GEDA MINI 60 S, with a rope length of 81 m and operated with the maximum load capacity, must be installed with a lifting height > 15 m.

7.4.1 Installing the winch



If you should use scaffolding with other dimension, please contact your dealer or the manufacturer, who can offer you an adapter or special design.

The scaffolding lifts **MINI 60 S** as well as **MAXI 120 S** and **MAXI 150 S** are specifically designed for 1½" pipe scaffolding.

- Use the welded pipe clamps and loosely install the winch (1) on the vertical frame (2) of the scaffolding.
- Align so that the rope drum is parallel to the scaffolding.
- Fully tighten the pipe bolts.

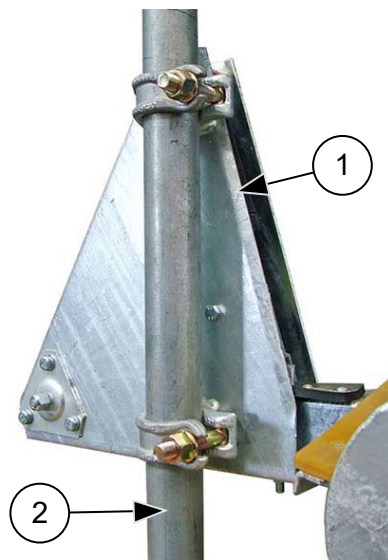


Fig. 38: Installing the winch

Tightening torque 50 Nm [37 lbf ft], width across flats (AF) 22 mm



The vertical frame (2) of the scaffolding on which the scaffolding lift is installed, must be aligned vertically.

7.4.2 Installing pivot arms

The pivot arm for the scaffolding lifts **MINI 60 S** and **MAXI 120 S/150 S** are the same, but have **different pivot arm mountings**, which must be used correctly for static purposes.

7.4.2.1 Pivot arm for MINI 60 S

The pivot arm, without pivot arm mounting, is only intended for installation on the uppermost scaffolding pipe.

1. Put the pivot arm (3) into the top level of scaffolding, on the protruding pipe of the vertical frame (4) (above the winch).

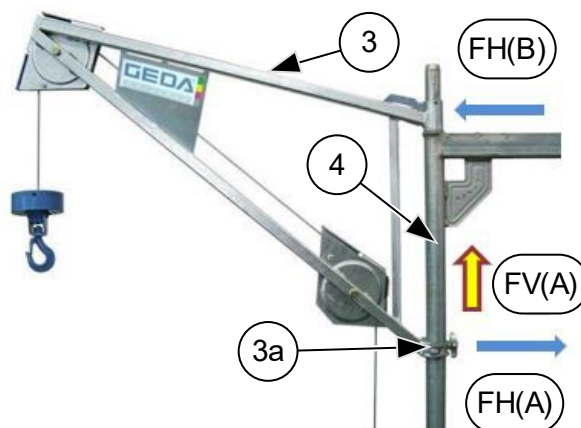


Fig. 39: Installing pivot arms for MINI 60 S

2. Rotate the pivot arm (3) towards the scaffolding to thread the wire rope and secure on the star handle (3a) against rotating.

For scaffolding without protruding crossbar studs on the vertical pipe, use the adapter Item No.: 1409.

It is connected to the pivot arm (1) and, thus, protrudes into the pipe of the scaffolding support.

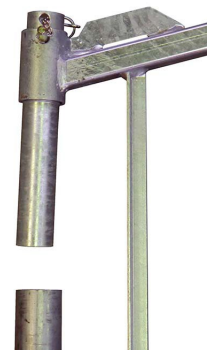


Fig. 40: Adapter Item No.: 1409



The vertical frame (3) on which the pivot arm hangs, must be anchored above and below to the building (tensile and compression proof anchor) and additionally secured with cross stays.

Anchoring forces:	FH(A)	FH(B)	FV(A)
60 kg	1644 N	1644 N	1664 N

7.4.2.2 Use with pivot arm mounting

The pivot arm mounting serves for fastening the pivot arm between scaffolding levels.

1. Attach the pivot arm mounting (5) for the MINI 60 S (with adjustable attachment at the top) to the vertical pipe (4) to that it points outwards from the scaffolding.
2. Place the pivot arm (3) and secure by fully tightening the star handle (3a).

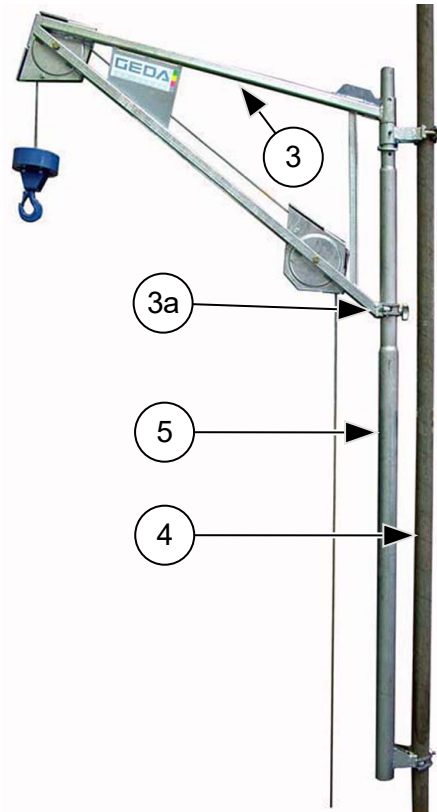


Fig. 41: Use with pivot arm mounting

The upper fastener of the pivot arm mounting is adjustable so that it can be adjusted in height in order to be able to swing inward the pivot arm (3) within the above scaffolding level.



It must be ensured that both fasteners of the pivot arm mounting are fastened as closely as possible to the intersections of the scaffolding.

The vertical frame (4), on which the pivot arm mounting with pivot arm is suspended, must be anchored above and below to the building (tensile and compression proof anchor) and additionally secured with cross stays.

Attention

Damage to the machine

- The pivot arm mounting item no. 1407 (see also the type plate on the pivot arm mounting) may only be used for the **GEDA MINI 60 S!**

7.4.2.3 Universal pivot arm for MAXI 120 S / 150 S

Universal pivot arm comprising of:

- Pivot arm with reinforcing Item No. 05711 and
- Pivot arm mounting for load capacity 150 kg Item No. 29497

The pivot arm mounting serves for fastening the pivot arm between scaffolding levels.

1. Attach the pivot arm mounting (6) for the MAXI 120 S/150 S (with adjustable attachment at the top) to the vertical pipe (4) so that it points outwards from the scaffolding.
2. Place the pivot arm (3) and secure by fully tightening the star handle (3a).

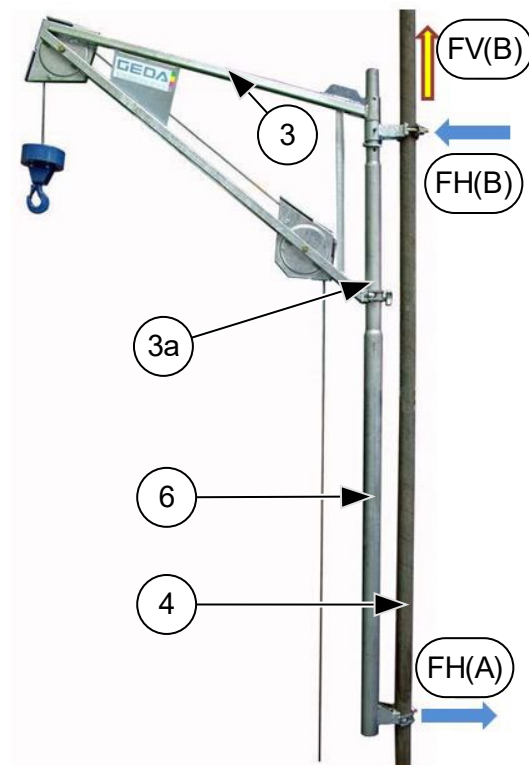


Fig. 42: Universal pivot arm

The upper fastener of the pivot arm mounting is adjustable so that it can be adjusted in height in order to be able to swing inward the pivot arm (3) within the above scaffolding level.



It must be ensured that both fasteners of the pivot arm mounting are fastened as closely as possible to the intersections of the scaffolding.

The vertical frame (4), on which the pivot arm mounting with pivot arm is suspended, must be anchored above and below to the building (tensile and compression proof anchor) and additionally secured with cross stays.

Anchoring forces:	FH(A)	FH(B)	FV(B)
120 kg	1320 N	1320 N	3496 N
150 kg	1650 N	1650 N	3470 N

7.4.2.4 Pivot arm 300 kg (660 lbs) and hook block 300 kg (660 lbs) for GEDA MAXI 150 S

The hook block 300 kg [660 lbs] Item No. 01273 is installed on the pivot arm 300 kg [660 lbs] Item No. 01272.

- Attach the pivot arm 300 kg (7) with adjustable attachment at the top) to the vertical pipe (4) so that it points outwards from the scaffolding.

The attachment of the upper pivot arm 300 kg [660 lbs] is adjustable, thus, it can be adjust-ed in height in order to be able to swing inward the upper rope pulley (7a) below the above scaffolding level.

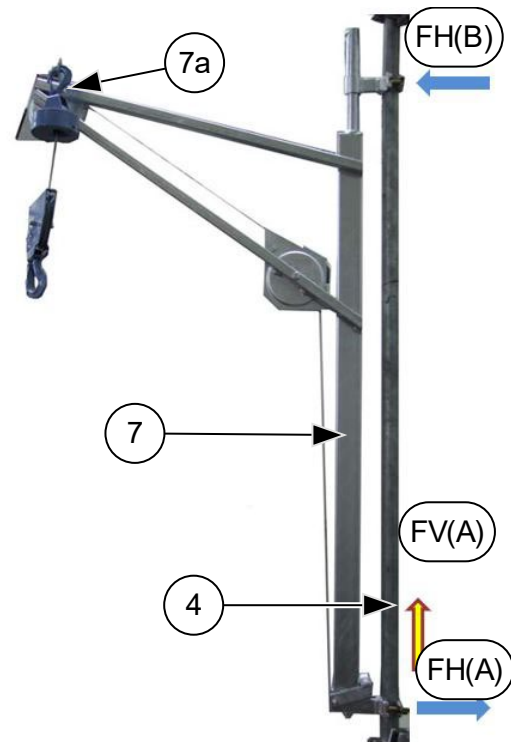


Fig. 43: Pivot arm 300kg for MAXI 150 S



It must be ensured that both fasteners of the pivot arm mounting are fastened as closely as possible to the intersections of the scaffolding.

The vertical frame (4), on which the pivot arm mounting with pivot arm is suspended, must be anchored above and below to the building (tensile and compression proof anchor) and additionally secured with cross stays.

Anchoring forces:	FH(A)	FH(B)	FV(A)
300 kg	2210 N	2210 N	5850 N
150 kg	1105 N	1105 N	2925 N

Swivelling the pivot arm

- Press down the locking device (7a) and swivel the pivot arm.

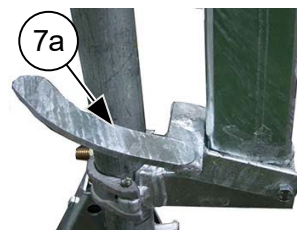


Fig. 44: Swivelling the pivot arm

Assembling the hook block

Assembling the wire rope (refer to chapter 7.4.2.6 Assembling the wire rope, page 61).

1. Hook the non-twisting device with load hook (8) of the wire rope into the eye (7b) of the pivot arm.

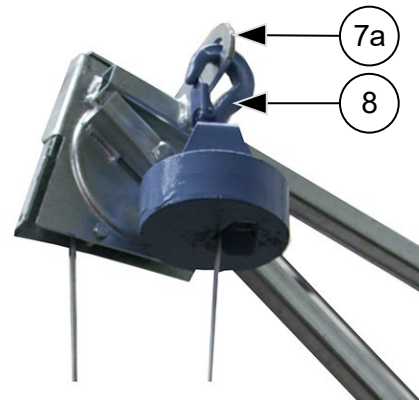


Fig. 45: Assembling the hook block 1

2. Remove the spring cotter pin on the locking pin (9a) of the hook block (9).
3. Pull out the locking pin from the hook block.
4. Remove the rope pulley (9b) of the hook block.

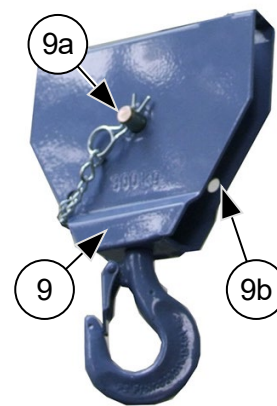


Fig. 46: Assembling the hook block 2

5. Guide the loop of the wire rope through the top aperture of the hook block.
6. Place the loop around the rope pulley (9b) and pull both back into the hook block (9).
7. Attach the rope pulley with the locking pin (9a).

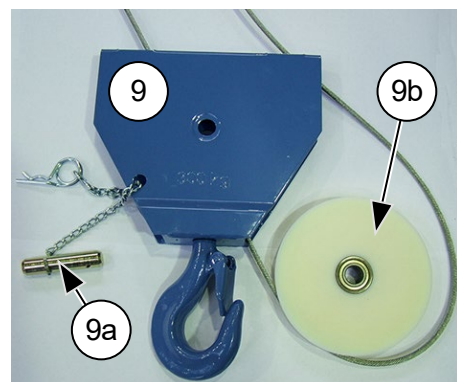


Fig. 47: Assembling the hook block 3

8. Secure locking pin (9a) with the spring cotter pin.



The pivot arm 300 kg (7) must only be operated when it is in the swung out position!

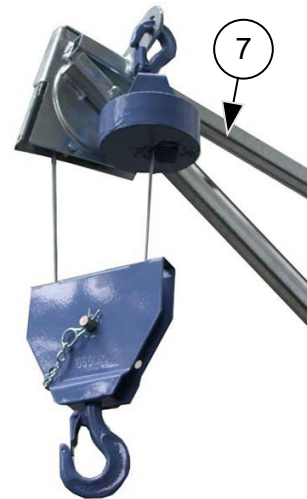


Fig. 48: Assembling the hook block 4

7.4.2.5 Electrical connection

A site distribution cabinet (in accordance with IEC 60439-4:2005) with fuse protection of the supply point

- min. 1 × 16 A slow-blow and a
- Residual Current Device (RCD) required.

As an extension to the mains feed line, connect a rubber hose line 3x2,5 mm² directly to the building site main cabinet without any adapters from other power consumers, in order to avoid a drop in voltage and, thereby, a loss of motor power.

Note for mains voltage 110 V / 50-60 Hz:

Extension: Rubber hose line 3 × 4.0 mm² [AWG No. 11].



Observe national regulations!

1. Connect the mains plug to the construction power distribution.
2. Connect the manual control to the socket (2).

1 Mains supply line



Fig. 49: Electrical connection

7.4.2.6 Assembling the wire rope

1. Tension the wire rope (10) vertically upwards and, simultaneously, press the **DOWN** button on the manual control.
→ In this position, the flexible drum guard (11) deactivates the slack rope switch.

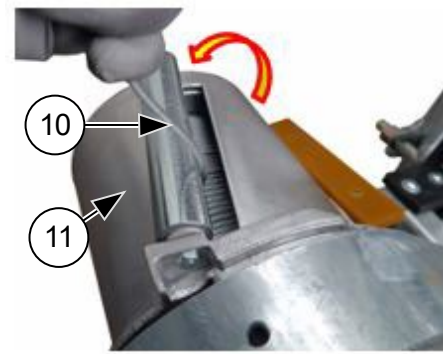


Fig. 50: Assembling the wire rope 1

2. Unwind sufficient rope from the rope drum for the assembly height.
3. Route the wire rope (10) to the pivot arm (3) and thread over the slots of the rope pulleys (12).

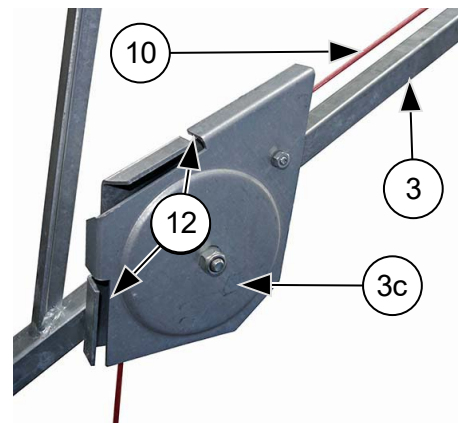


Fig. 51: Assembling the wire rope 2

4. Place the wire rope in the grooves of both rope pulleys (3c).
5. Release the pivot arm locking device, swivel the pivot arm (3) outwards and tighten the star handle (3a).

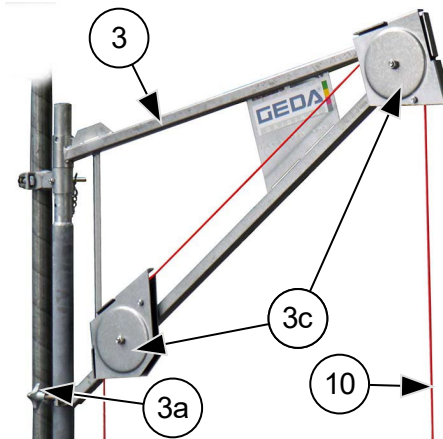


Fig. 52: Assembling the wire rope 3

Check

- Suspend and lift the load (observe the load capacity).
 - ✓ In the event of exceeding the load capacity and moving the rope weight against the pivot arm, the winch lifts itself and switches off the **UP**-movement.

7.4.2.7 Securing loading and unloading points

To prevent persons from falling, fall protection must be installed at **all** loading and unloading points where there is a risk of falling from a height of more than 2 m.



Assembly is described in the respective Assembly Manual for the landing level safety gate.

7.5 Check after assembly and before each operation

Check to ensure that:

- The specified maintenance work and inspection procedures have been carried out.
- The supply cable has an adequate cross section.
- No grease escapes at the gearbox.
- The length of rope is sufficient for the assembly height.
- Notices are present and legible.
- The danger zone at the lower loading point is cordoned off and indicated.
- Fall protection at the upper load positions is installed in accordance with the national regulations.

Carry out a test run **without load** and check to ensure that:

- The motor rotation direction agrees with the **UP**- and **DOWN**-buttons of the control points and that the **EMERGENCY STOP**-button interrupts travel.
- The wire rope indicates no damage.
- The flexible drum guard switches off when the rope is slack.
- The wire rope is correctly wound onto the rope drum.

Carry out a test run **with load** (refer to the load capacity) and check to ensure that:

- The motor brake correctly functions.
- If the load capacity is exceeded (raising the winch) and the rope weight is moved against the pivot arm, the **UP**-motion is switched off.


8 Operation

The MINI 60 S and MAXI 120 S/150 S may only be operated by a qualified person appointed by the operating company. This person must be familiar with the operating manual, have sufficient experience and be informed about the risks involved in handling lifting gear.

(refer to chapter 1.7 Intended use, page 17)

Operating personnel (refer to chapter 1.9 Operating personnel, page 18)

8.1 Safety during operation

⚠ DANGER	
	<p>Risk of death from falling loads!</p> <ul style="list-style-type: none"> ➤ Do not stand on/under suspended loads. ➤ Only lift loads at the anchor points. ➤ Only use suitable slinging/load handling devices. ➤ Do not lift stuck/jammed loads. ➤ Do not pull/drag loads at an angle.

Transporting persons is prohibited!

- Cordon off the danger zone around the lift and label it with warning signs.
- The lift must be operated from outside the danger zone.
- Before starting work at the place of use, acquaint yourself with the working environment, e.g. obstacles in the work and traffic areas and any required barriers between the construction site and public areas.
- Operating personnel must always be able to see the load handling device clearly and must monitor the load handling device during travel.
- Always secure the lift against unauthorised access! - At the end of a work shift or during breaks, keep the manual control safe and/or turn off the key switch on the manual control and remove the key.
- If the loaded load handling device stops during operation due to a malfunction, operating personnel must recover the load.
 - Never leave a loaded load handling device unattended!
- Do not load slinging/load handling equipment unevenly / on one side only.
- Do not stand or work underneath the load!
- Check for externally visible damage and defects at least once a day. Report any identified changes or malfunctions immediately to the company management or its authorised representative. If necessary, shut down and secure the lift immediately.

- Observe the national regulations for the prevention of accidents and the workplace requirements.
- Wear personal protective gear (e.g. hard hat, safety shoes).
- Position the load securely; material that may slip, is higher than the platform or could topple must be secured. (Also consider sudden gusts of wind.)
- Check ease of movement of the rope breakage safety device.
- Lift may only be operated in inclined position.
- The safety instructions, (refer to chapter 2 General safety information, page 19), must also be observed.
- Do not enter the load handling device!
- Stop operation in the following situations:
 - at temperatures below -20 °C and above +40 °C.
 - in the event of damage or other malfunctions
 - if recurring tests/intermediate tests have not been carried out, (refer to chapter 10.1 Inspections, page 75)

8.1.1 Safety check before starting work

Check at least once a day for externally recognisable damage and defects.

Report any changes or malfunctions detected immediately to the company management or its authorised representative.

If necessary, shutdown and secure the scaffolding lift immediately.

- Carry out a test run and check that the complete travel path is clear.
- During the test run, check the wire rope for signs of damage and wear.
- Check the mains supply cable and control lines for signs of damage.

The scaffolding lift must immediately stop when

- the **EMERGENCY STOP**-button is pressed.
- the **overload equipment** is activated.
- the **slack rope switch** has switched off.

8.2 Operation/function

The scaffolding lifts have two levels of speed, whereas the slow level is provided mainly for commencing the lifting or sinking movement without jolts.

For the most part the equipment should be operated in the fast level. It is also possible to stop more smoothly using the first speed level.

The control switch accordingly has two pressure points.



If the upward travel was automatically switched off because of an accumulation of slack in the cable, then the upward travel is only released after the cable was manually tightened.



Avoid excessive use of jog mode (= short motor pulses) as this reduces the service life of the motor.



If the pivot arm hoist should be operated from above, then it is possible by plugging in manual controls with long cables of 30 m [98 ft] or 50 m [164 ft]. (accessories)

- On the manual control, unlock the **EMERGENCY STOP**-button (1).

Ascent

- Lightly press the UP button (3) and press down after a short period.
 - ✓ Ascent only as long as the UP button is pressed. Ascent stops at the latest when the rope weight moves against the pivot arm.

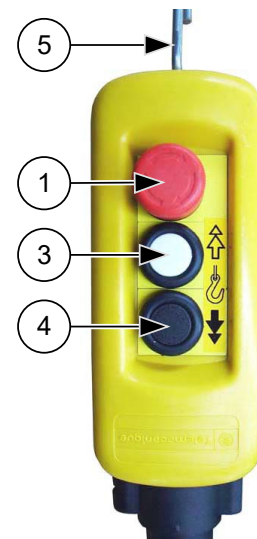


Fig. 53: Manual control 2-lifting speeds

Descent

- Lightly press the DOWN button (4) and press down after a short period.
 - ✓ Descent only as long as the DOWN button is pressed. Descent stops at the latest when the load is placed on the ground (rope slackens).

⚠ WARNING



Risk of injury from falling parts

Keep the suspended load under constant observation from the control position.

8.2.1 Functional description

The scaffolding lifts GEDA MINI 60 S und GEDA MAXI 120 S/150 S have two levels of speed, whereas the slow level is provided mainly for commencing the lifting or sinking movement without jolts. For the most part the equipment should be operated in the fast level. It is also possible to stop more smoothly using the first speed level. The control switch accordingly has two pressure points.

Control is carried out using the manual control, from outside the hazard area.

The length of the line for the manual control is 10 m [33 ft].

If the pivot arm hoist should be operated from above, then it is possible by plugging in manual controls with long cables of 30 m [98 ft] or 50 m [164 ft] (accessories).

- In the event of exceeding the load capacity and the rope weight moving against the pivot arm, the winch lifts itself and switches off the **UP** movement. Subsequently, it is possible to move in the **DOWN** direction.
- In the event of "Slack rope", the flexible drum guard switches off the control in both directions. If the upward travel was automatically switched off because of an accumulation of slack in the cable, then the upward travel is only released after the cable was manually tightened.
- The safety devices for the loading and unloading points are also included in the assembly of the hoist, (refer to chapter 7.4.2.7 Securing loading and unloading points, page 62).

The scaffolding lifts are especially designed for 1½" pipe scaffolding.

If you should use scaffolding with other dimensions, please contact your dealer or the manufacturer, who can offer you an adapter or special design.

Assembly example

MINI 60 S with pivot arm assembled on the protruding pipe of the vertical frame.



Fig. 54: Overview

CAUTION**Damage to the machine**

- The rope winches **GEDA MINI 60 S, MAXI 120 S/150 S** must only be used with a pivot arm using the rope winches!

8.3 Emergency shutdown

In situations that present a risk to operating personnel or the machine, the machine can be shut down by pressing an EMERGENCY STOP button.

An EMERGENCY STOP button is located on the manual control.



Fig. 55: EMERGENCY STOP button



EMERGENCY STOP slam buttons are equipped with a latching mechanism and remain active until they are manually unlocked again (turn red button to the right and pull it out).

8.4 Interrupting work – end of work

Switch off and secure the machine when interrupting work and at the end of a work shift.

1. Move the load down and place it on the ground.
2. Remove the manual control and keep it locked away.
3. Disconnect the mains plug.

9 Malfunctions – diagnosis – repair

⚠ WARNING



Risk of injury from incorrect troubleshooting and fault elimination

- Troubleshooting and fault elimination may only be carried out by persons specially trained and authorized for this purpose.
- Before troubleshooting, always move the car down and unload it if possible!
- Immediately discontinue operation if faults occur that endanger operational safety!

⚠ DANGER



Electric shock from live parts Components remain live even after activating the **EMERGENCY STOP** or switching off the machine at the main switch.

- For all work on electrical parts disconnect the mains supply upstream of the main switch.

9.1 Fault table

The following table lists potential malfunctions and the appropriate remedial action.

Malfunction	Cause	Remedial action
Winch does not move		
	Mains plug disconnected	Connect the mains plug
	Mains fuse	Check mains fuse and replace / switch on if necessary
	Control fuse	Check / correction (refer to chapter 9.2.2 Control fuse, page 71)
	EMERGENCY STOP -button pressed	Unlock the EMERGENCY STOP button
	Slack rope switch operated	Tension the wire rope (refer to chapter 9.2.3 Slack rope switch operated, page 72)
	Overtemperature of the drive motor	Wait until the drive motor has cooled down and reduce the load

Motor does not attain full performance		
	Voltage drop of more than 10%	Select a supply cable or extension cable with a greater cross section (refer to chapter 9.2.1 Motor is not delivering full power, page 71)
Winch only moves DOWN		
	Is the UP/overload limit switch functional	Check/replace the UP/overload limit switch
Tilting mechanism is folded up		
	Overload protection has triggered	Reduce the load
	Rope weight has moved against the pivot arm	Move downwards
Wire rope winds on one side of the rope drum		
	Vertical frame (scaffolding) not installed vertical	Use a spirit level to align the vertical frame (scaffolding)
	Winch not adjusted horizontal	Position the winch horizontally (refer to chapter 9.2.4 Wire rope winds on one side, page 73)

9.2 Rectify fault

9.2.1 Motor is not delivering full power

- Voltage drop of more than 10 % of the rated voltage.
- Select cable with larger cross-section.
- The integrated thermal switches turn off the control current when overloaded. Work can continue after a certain cooling down period (possibly reduce load).

⚠ CAUTION

Motor overload from overloading the machine

The motor heats up and the motor/brake service life is reduced.

9.2.2 Control fuse

Mini 60 S

To access the control fuses, remove the motor cover.
(3 x cap nuts width across flats AF 10 mm)

- 1 x fuse (5x20) 230V / T 250mA
- 1 x fuse (5x20) 230V / T 63mA

MAXI 120 S / 150 S

Control fuse (1) on the triangular frame of the winch.



Fig. 56: Control fuse

- 1 x fuse (5x20) 230V / T 2,0A

9.2.3 Slack rope switch operated

Cause:

The flexible drum guard prevents the wire rope becoming loose on the rope drum when placing the load on the ground.



The flexible drum guard switches off the control in both directions.

Action:

- Tension the wire rope (10) and position vertically.
- ✓ The flexible drum guard is put into the operating position and the load can again be moved upwards.

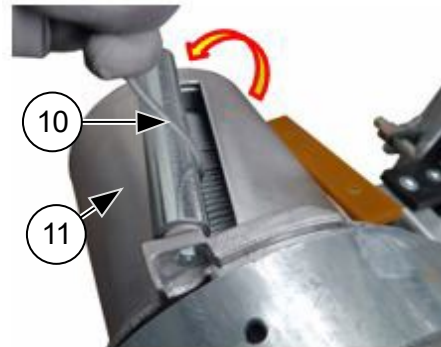


Fig. 57: Troubleshooting slack rope switch

9.2.4 Wire rope winds on one side

The rope must uniformly wind on the rope drum (each position of the rope). If the rope does not satisfactorily wind on, check to make sure that the vertical frame (scaffolding) is vertical and the inclination of the rope drum.

Check

- The vertical frame of the scaffolding, on which the scaffolding lift is installed, must be aligned vertically.
- The inclination of the rope drum must be adjusted.

The drive (rope drum) is set at the factory with an inclination of approx. 0.5° .

If, however, the wire rope should not wind satisfactorily, this setting must be checked.

- Place a spirit level on the top of the protective cover and check the horizontal position.
 - ✓ Horizontal top edge of the protective cover equates to approx. 0.5° inclination of the rope drum.



Fig. 58: Check rope winds

Changing the setting

Check the self-locking nut M12 (1) for correct seating (do not release).

- Release the three bolts M8 (2).
- Use the spirit level and set the inclination of the drive (see above).
- Keep the drive in the position set and fully tighten the three bolts.
- Check the rope winding.

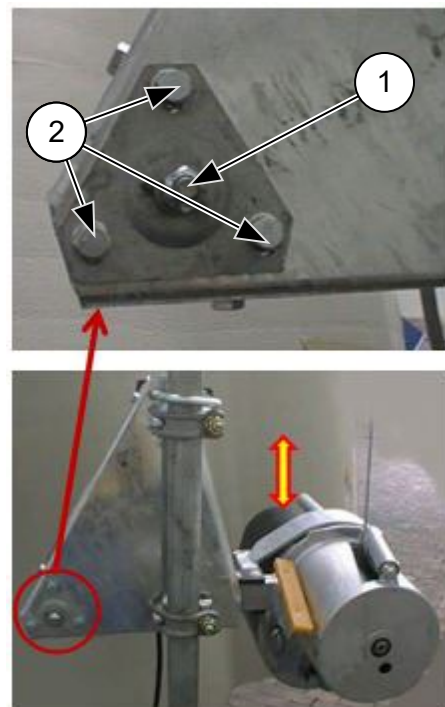


Fig. 59: Changing the setting

width across flats 13 mm)

9.3 Repair

ATTENTION

**Maintenance work carried out by untrained personnel**

- Repair work may only be carried out by trained and competent persons because it requires special expert knowledge and skills. Neither is explained in this Operating Manual.

When ordering spare parts, please provide the following:

- Type
- Year of construction
- Serial no.
- Operating voltage
- Quantity required



Spare parts must conform to the manufacturer's technical specifications! Only use original spare parts from GEDA.

For service or repair work, please contact our customer service department:

For the sales and customer service address, (refer to chapter 1.4 Manufacturer's name and address, page 15)

10 Maintenance - Checking - Cleaning

Safe working

Before all maintenance / servicing tasks, read the compl. manual.

Do not carry out any tasks if the type and scope of the tasks, the resulting hazards and any measures required to prevent these hazards are unclear. All unclear issues must be resolved before starting work. All safety instructions must be complied with.

It is imperative that workshop equipment suitable for the specific task is used for carrying out repair and maintenance tasks. When carrying out maintenance tasks at great heights, a fall protection system must be worn! Keep all handles, railings and the ground free from dirt and contamination.

10.1 Inspections



Inspections prior to operation, recurring inspections and intermediate inspections must be carried out according to national regulations.

During inspections, the relevant safety features of the hoist are checked by means of appropriate procedures according to the maintenance schedule or after specific incidents. Appropriate procedures are:

- Visual inspections
- Function and efficiency checks
- Checks using measurement and test equipment

The scope, nature and schedule of each check and the persons authorised to carry out the check, must be specified by the operating company.

Type of test	Inspection procedures
Checking by a trained person	Basic visual inspection and function check with few test steps and simple evaluation
Checking by a competent person	Checking due to special events/damage, e.g. <ul style="list-style-type: none"> • Assembly • Maintenance • Natural phenomena
Checking by an accredited inspection body (specialist)	Recurring check for systems / machines that must be monitored. Checking in accordance with national regulations

10.1.1 Documenting the results

The owner must document the results of the inspections. The documentation must be retained for a reasonable period of time – however at least for the entire lifetime of the machine.

- The results of the recurring inspections can be recorded in writing of this manual.
(refer to chapter 14 Documenting the checks, page 91)
- Verification confirming when the last inspection was completed must be attached to the machine.

10.1.2 Checks before initial operation

The following tests have already been carried out at the factory:

- Dynamic test with 1.1x useful load
- Electrical tests according to EN 60204.
- Function tests.

10.1.3 Checks after assembly/daily before starting operation

To guarantee safety when handling the machine, the person appointed by the operating company is obliged to carry out a daily inspection of certain machine areas / parts.

Defects detected must be immediately reported to the supervisor and rectified. Defects may only be rectified by trained personnel responsible for maintenance and servicing.

Always carry out visual inspections before function checks. Operation is prohibited until the defects are rectified.

The following points must be checked daily

- Visual check before start of work (refer to chapter 8 Operation, page 63).
- Clean the drum guard (rope drum) (keep free from snow and ice in winter).
- Keep the work area around the machine clear and clean.

For checks after each installation (refer to chapter 7 Assembly, page 52).

10.1.4 Recurring checks

Recurring inspections must be carried out in accordance with national regulations.



GEDA recommends that you carry out a recurring check at least once a year. In the event of increased use (e.g. multiple shift operation), carry out inspections at shorter intervals.

10.1.5 Checks after extreme weather conditions

Special test after temperatures below -30 °C [-22 °F]



If it is unclear whether the temperature fell below -30 °C [-22 °F], follow procedures as if this temperature had been reached when restarting the machine. Before carrying out the special test, temperatures must have been above -20 °C [-4 °F] for a minimum of 3 hours.

1. Clear ice and snow from the lift.
2. Turn on the main switch.
3. Press all EMERGENCY stop buttons and then unlock them again.
4. Check the safety catch on the load hooks.
5. Check that all limit switches are moving freely.

⚠ WARNING



Risk of injury due to damaged lift parts

Notify your supervisor immediately if any cracks or loose parts/loose threaded connections are identified. Clarify which further action needs to be taken with your supervisor.

Safety inspection of the lift by a qualified person. The safety inspection which checks for visible cracks, loose parts, loose threaded connections, etc. must also include an inspection of the pivot arm.

The safety inspection to check for visible cracks, loose parts, loose threaded connections, etc. must also include an inspection of the foundation and the wall anchors.

Operation is prohibited until safe conditions have been successfully restored.

- Carry out a test run without load and check the slack rope switch and overload protection.

Special check after a sand storm

Damage to the lift due to blockage of the ventilation openings.

- Clean ventilation slots, ventilation ducts and the fan impeller.

10.2 Inspection schedule

The inspections to be carried out on a daily basis before the start of operation are not included in the maintenance schedule. These are described in the Operation chapter in the instruction manual as these checks are carried out by the operating personnel.

The maintenance intervals given relate to one-shift operation (40 hours/week).

The intervals are to be modified according to any deviating operating times. The following inspections always include a check for proper function, wear, completeness and that there is no manipulation present.

Abbreviations used in the inspection plan

W = Week / M = Month / Y = Year / R/N = Remarks/Notice

● = Visual check / ■ = Check	W	1M	3M	1Y	R/N
Electrical components					
Check the control lines and mains supply cable for signs of damage.		●			
Abrasion protection for cables			●		
Function check of the manual control			■		
Switching mechanism and limit switch			■		
Check / tighten the firmness of the contacts				■	
Check the overload setting				■	
Protective earth measurement in accordance with EN 60204, Part 1				■ ¹	
Insulation measurement in accordance with EN 60204, Part 1				■ ¹	
Switch compartment (below the protective cover)					
Soiling, moisture, scorched areas				●	
Mechanical components					
Wire rope damage / wear	■				
Attachment devices (secure seating/tighten)	■				
Rope pulleys		■			
All covers available			●		
Deflection roller / drum guard			●		
Motor brake			■		
Grease escaping / anomalies gearbox			●		
Information signs (present / legible)			●		

● = Visual check / ■ = Check	W	1M	3M	1Y	R/N
Fall protection Attachment / aperture width			■		

1) = Maximum test intervals, which could be significantly shorter depending on place of use and national regulations.



Supplement the inspection schedule with information regarding maintenance/service/operating equipment/replacement/repair of component parts contained in the instructions provided by suppliers.

10.3 Checking for wear

10.3.1 Motor/motor brake

Carry out the following maintenance tasks in accordance with the manufacturer's instructions.

Motor:

- Cleaning
- Check the ball bearing, replace as necessary (if conspicuous noises when operating)
- Replace the shaft seal (if grease escapes)
- Clear the cooling air passage

Motor break:

- Measure the thickness of the brake lining, replace if necessary
- Measure operating clearance and adjust
- Armature disk
- Dog/interlocking

Test the braking distance:

1. Load the non-twisting device via the load hook with 110 % of the permitted load capacity of the winch.
2. Move up approx. 4 m [13 ft] subsequently move down. Stop the test load from a greater speed (2nd speed level) (press the **EMERGENCY STOP** button).
→ Overrun of the motor brake must not exceed 100 mm [4 in].

Adjust the motor brake

The working air gap is measured in the braking position between the anchor plate and the magnetic body. It increases due to wear.

If the wear of the brake pad is advanced to the point where the maximum possible air gap of 0,5 mm is reached, the brake must be readjusted because safe brake release can no longer be guaranteed.

This is evident by dwindling brake power or longer braking distance. The minimum thickness of the pad is 6,5 mm, and the working air gap should be set at 0,2 mm.

Working air gap (X) min. (adjusted)	Working air gap (X) max. (wear)	Thickness of pad min.
0,2 mm	0,5 mm	6,5 mm

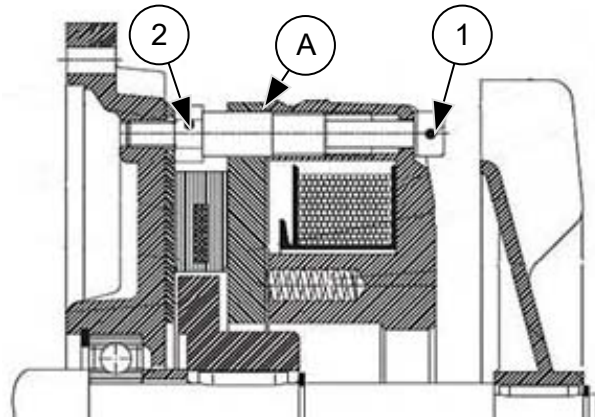


Fig. 60: Adjust the motor brake

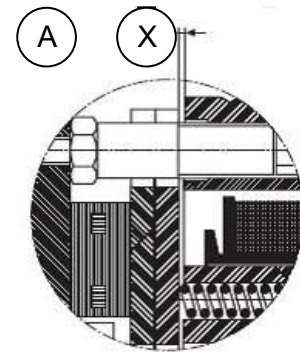


Fig. 61: Adjust the motor brake (Detail)

Coil 30 W / 105 V / approx.368 Ω

Adjusting the air gap:

1. Switch off drive power supply.
2. Release the attachment screws and remove the protective cover.
3. Pull dust protection ring out of the slot in the magnetic body and put over the end plate.
4. Use compressed air to remove output dust.
5. Release the cheese-head bolts (1) the cheese-head bolts must be replaced with new bolts at the latest after every second adjustment.
6. Set the air gap by turning the adjustment units / banjo bolts (2).



Make sure that the adjustment is uniform at all points.

7. Uniformly tighten the cheese-head bolts (1).
(Tightening torque = 5 Nm [3.68 lbf ft])
8. Using the feeler gauges, check the operating air gap of 0,2 - 0,3 mm [0.008 – 0.01 in] between the anchor plate and the magnetic body.



The working air gap must be the same size at every point, therefore the length must be checked at several points.

9. Check the adjustment units / banjo bolts (2) for secure seating.
10. Place the dust protective ring into the groove in the magnetic body
11. Insert a new profile seal at the gearbox housing and install the protective cover.
12. Carry out a function check.

10.3.2 Gearboxes

Check gearboxes at least every three months

1. Check for operating noises for possible damage to bearings.
2. Visual inspection for leakage from the seals.

Grease for gearboxes

Recommendation	Filling capacity	Change
DIVINOL Lithogrease 0 ARAL-Lub FD 00	160 g [5.6 oz] for MINI 60 S	approx. 3000 h
BP-Energrease HTO ESSO-Fibrax 370	500 g [17.5 oz] for MAXI 120 S/150 S	

Dispose of old lubricant in an environmentally-friendly manner.

10.3.3 Wire rope

10.3.3.1 Checking the wire rope

WARNING



Risk of injury when handling ropes/cables

- Always wear protective gloves when handling ropes.

When evaluating the damage (state of wear), the criteria listed in standard DIN ISO 4309 can be used as an aid.

Furthermore, the reason for the damage must be determined and any necessary corrective measures taken.

In extreme cases, a competent person can be called upon to inspect the wire ropes.



If a rope/cable is damaged, it must be replaced immediately.

10.3.3.2 Replacing the wire rope

⚠ WARNING**Risk of injury due to inexperienced maintenance when replacing the wire rope**

- Keep a sufficient distance to the wire rope intake area.
- Only the person guiding the wire rope may also control the machine at the same time!

Disassembly from the rope drum

1. For better access to the rope drum when replacing the rope, remove the rope cylinder (5) on the flexible drum guard.
2. Unwind the wire rope (1) up to the last two coils.
3. Loosen the cable clamp by loosening the central screw (4) in the main shaft.
4. First pull the wire rope out of the clamping position (3) then from the drum feed-through (2a) (push back the rope so that it relaxes).

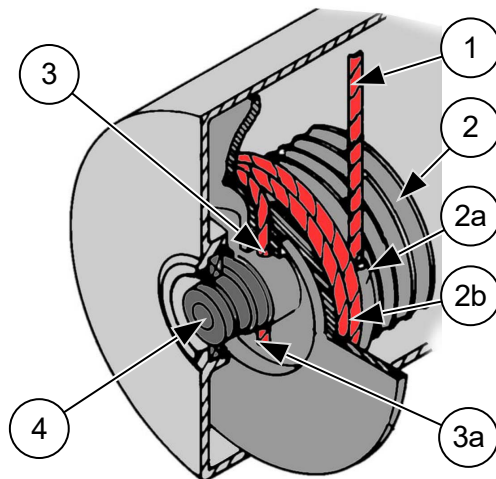


Fig. 62: Replacing the wire rope 1

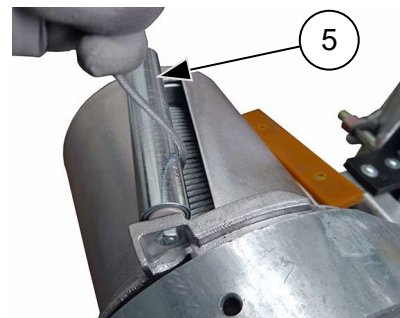


Fig. 63: Replacing the wire rope 2

Assembly on the rope drum

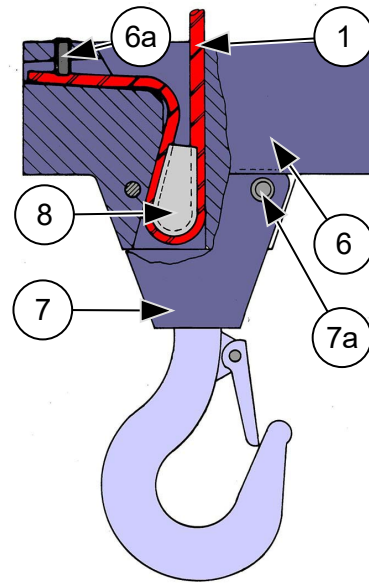
1. First place the wire rope (1) through the drum feed-through (2a).
2. Push through by approx. 1 m [3.3 ft] and place in the last two outer rope grooves (2b).
3. Place the wire rope in the hole at the clamping position (3) until it is visible from the opposite side (3a).
4. Use the central screw (4) and clamp the rope in the drive shaft.
5. Pull both loose rope coils (2b) fully tight.
6. Install the rope cylinder (5).
7. Coil the cable cleanly on the drum.



Measure sufficient rope length, as the last two rope windings must always remain on the cable drum.

Replacing the rope weight

1. Release the rope clamping screw (6a) and pull the wire rope (1) out of the hole on the side of the cable weight (6).
2. Remove one screw (7a) on the non-twisting device (7) and fold it to the side.

*Fig. 64: Replacing the rope weight*

3. Push back the rope wedge (8).
4. Lead the new rope in from above through the rope weight (6), make a loop, guide the rope end back and horizontally through the borehole.



Do not allow the wire rope to protrude at the circumference of the rope weight (6).

5. Use the clamping screw (6a) to firmly clamp the end of the rope. (Allen key size 3)
6. Place the rope wedge (8) into the loop and pull back the rope in the centre until rope wedge is secure.
7. Flip back the non-twisting device (7) and again attach with the screw (7a).

10.3.4 Non-twisting device with load hook

Check the non-twisting device with load hook for completeness, signs of cracks, deformation and corrosion.

1. The load hook (9) must rotate easily.



The non-twisting device must be attached to the rope weight by bolts(7a).

Replace bolts with spring fastenings (from earlier designs)!

The rope wedge must be suitable for the rope diameter
($\varnothing = 4.5 \text{ mm}$ [0.17 in]).

2. The hook aperture security (9a) must automatically, easily and completely close.
3. Attachment (rivet) of the security must not be damaged.

7 Non-twisting device

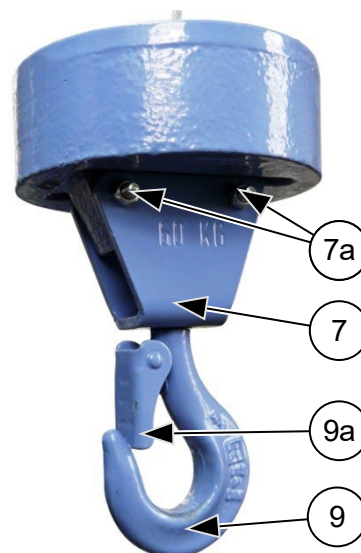


Fig. 65: Non-twisting device with load hook

The load hook must not indicate any serious deformation in the hook aperture:

- max. 10% expansion
- max. 5% wear

a2	b1	h1
24 mm	19 mm	22 mm
0.94 in	0.74 in	0.86 in

b2	h2	d1
15 mm	19 mm	16 mm
0.59 in	0.74 in	0.62 in

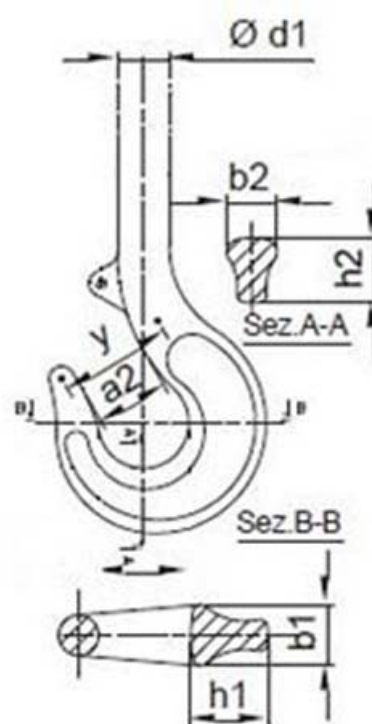


Fig. 66: Wear: Non-twisting device with load hook

10.3.5 Rope pulleys

Calculating wear

Wear is calculated using a calibrated vernier calliper.

In addition:

- Check the rope pulley for scoring, cracks and flaking.
- Check the play and condition of the bearing.



Fig. 67: Rope pulley Item No. 08176

Wear limit (1)	
Normal dimension	Wear dimension
9.5 mm	11 mm
0.37 in	0.43 in



10.3.6 Check the support elements and attachment devices

Check the supporting elements, such as the tilting arm, triangular frame, pivot arm and pivot arm bracket for corrosion, cracks and damage.

Check the bolts of the attachment clamps on the triangular frame, pivot arm and pivot arm bracket for correct seating.

Pipe clamps 1 ½"

Torque = **50 Nm [37 lbf ft]** width across flats (AF) = 22 mm

10.3.7 Load carrying equipment

Checking intervals

Load carrying equipment must be checked by a competent person at intervals of no more than one year (refer to the national regulations).

Inspection after special incidents

Load carrying equipment must be subjected to a special check by a competent person after damage or special incidents that could impair the load capacity, as well as after repair.

The scope of the special check is determined according to the scope of damage, the incident or repair.

Inspection procedures

The check before initial commissioning and regular checks are significantly visual and function checks.

The following must be inspected:

- The condition of the components and equipment.
- The intended assembly and use.
- The completeness and efficacy of the safety equipment.



Test verification must be kept for all checks on load carrying equipment.

11 Disassembly

The same regulations and safety instructions for assembly are applicable for disassembly. (refer to chapter 7 Assembly, page 52)

Disassembly is generally carried out in reverse order to installation; in addition, also observe:

- Cordon off danger zone and attach warning notices.
- First remove fall protection and close the three-part side protection of the scaffolding.

12 Disposal

At the end of its useful life, the machine may need to be inspected for operational safety in accordance with national regulations, disassembled correctly and scrapped in an environmentally friendly way according to national provisions.



It is prohibited to use parts from a machine that is being scrapped in other machines or to assemble such parts to produce a new machine.

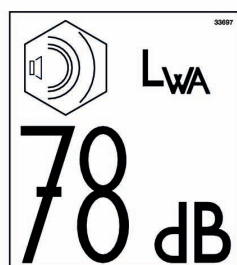
During disposal of the machine components, observe the following:

- Drain and dispose of oil/grease in an environmentally friendly way.
- Recycle metal parts.
- Recycle plastic parts.

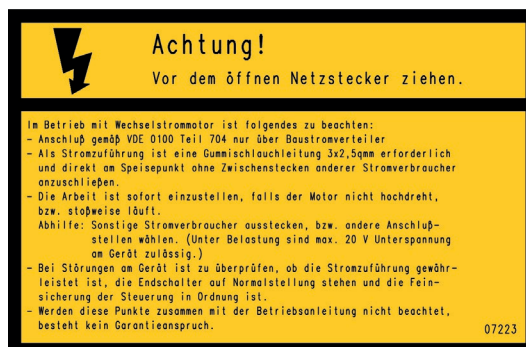
Recommendation:

Contact the manufacturer or commission a specialist company to handle disposal requirements in accordance with the applicable regulations.

13 Summary of instruction signs



Item No.: 33697



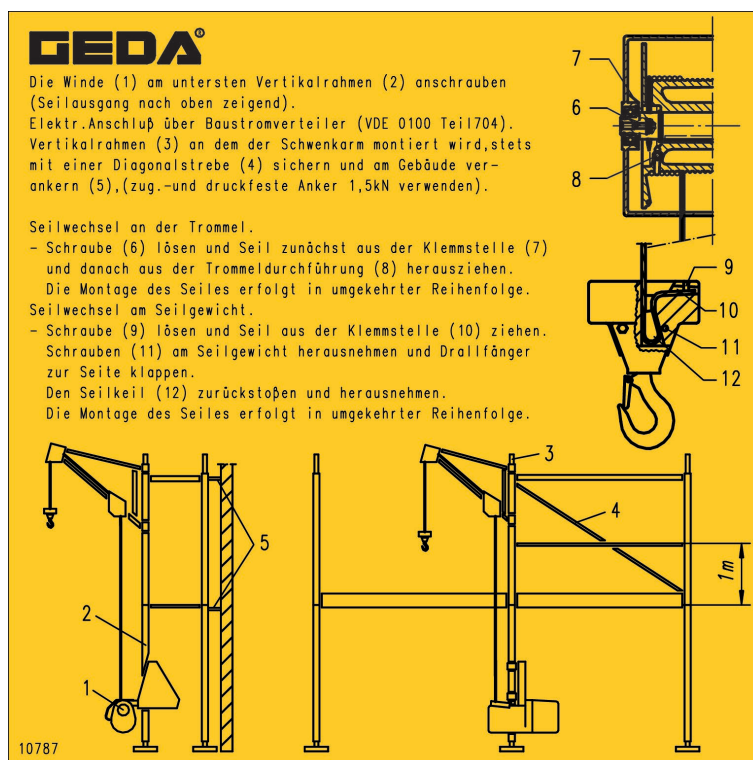
Item No.: 07223 (DE)

Item No.: 17849 (GB, USA)

Item No.: 19333 (FR)

Item No.: 19240 (PL)

Item No.: 21433 (NL)



Item No.: 10787 (DE)

Item No.: 26991 (GB, USA)

Item No.: 26879 (FR)

Item No.: 18822 (SE)

Item No.: 26878 (NL)

14 Documenting the checks

Documentation for <input type="checkbox"/> regular checks in accordance with the maintenance schedule <input type="checkbox"/> recurring check in accordance with national rules <input type="checkbox"/> unplanned check after specific events	
Name:	Serial number:
Year of construction:	
The hoist was checked on _____. As a result <input type="checkbox"/> none of <input type="checkbox"/> the following defects determined:	
Scope of inspection:	
Outstanding part checks:	
Continued operation is: <input type="checkbox"/> forbidden <input type="checkbox"/> permitted	Follow-up inspection is <input type="checkbox"/> required <input type="checkbox"/> not required
Place, date: <div style="text-align: center;"> Signature (Specialist/competent person*) *Name of competent person </div> Stamp Address Operating company:	
Operating company	
Defects acknowledged:	
Defects rectified:	

Documentation for <input type="checkbox"/> regular checks in accordance with the maintenance schedule <input type="checkbox"/> recurring check in accordance with national rules <input type="checkbox"/> unplanned check after specific events	
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Year of construction:	
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Continued operation is: <input type="checkbox"/> forbidden <input type="checkbox"/> permitted	Follow-up inspection is <input type="checkbox"/> required <input type="checkbox"/> not required
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Signature (Specialist/competent person*) *Name of competent person	
Stamp Address Operating company:	
Operating company	
Defects acknowledged:	
Defects rectified:	

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Defects rectified:	

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