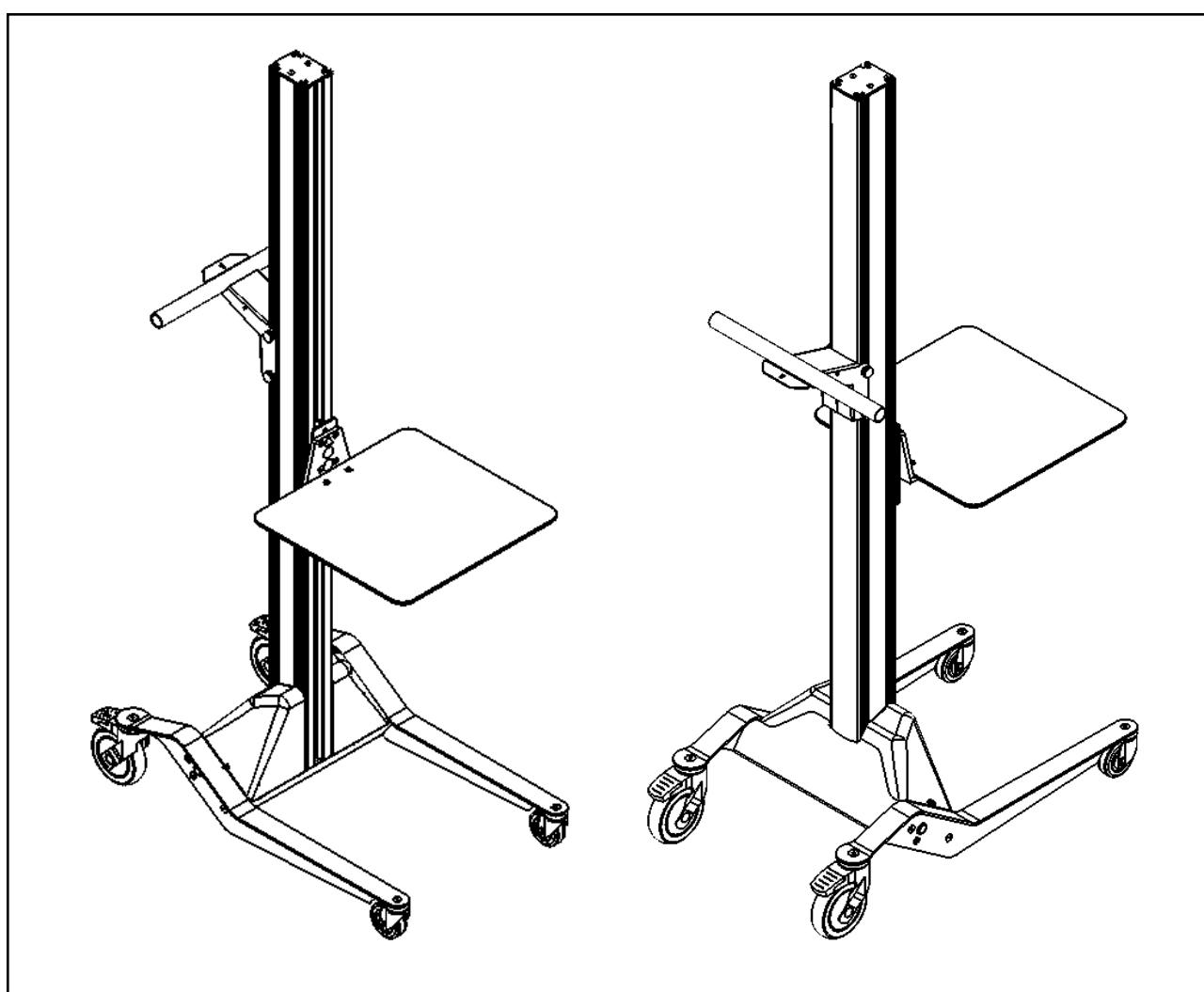


Electrical Lifter



**Declaration of Conformity according to:
Directive for machines
2006/42/EC**

Manufacturer: HOVMAND A/S
Rustkammervej 10
DK-4180 Sorø
Denmark

Description of machine: GO-Lift / AMEISE

Serial no.: _____

Directives: 2006/42/EC; 2014/30/EU; 2014/35/EU; 2011/65/EC

Standards: EN-12100:2011
EN-60204-1:2006 + A1:2009 + Corr.:2010
EN-61000-6-2:2005 + Corr.:2005
EN-61000-6-4:2007 + A1:2011
EN-50581:2012

The machines above are hereby assured to be in conformity with the essential requirements of the Directive for machines 2006/42/EC.

Signature:

Sorø 24/10-2018



Søren Hovmand
Managing Director
HOVMAND A/S

Sorø 24/10-2018



Resp. for doc.
Simon Rytman
Head of Development
HOVMAND A/S

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1. Typographic convention

The following cautionary symbols may be used in the manual and / or on the lift.



Warning!

This pictogram draws attention to the risk of personal injury.



Warning!

This pictogram draws attention to the risk of personal injury.

- There is a risk of getting your fingers crushed.



Warning!

This pictogram draws attention to the risk of personal injury.

- The lifter must not be used for lifting persons.



Warning!

This pictogram draws attention to the risk of personal injury.

- There should be no body parts below or near the lifting tool when operated up or down.



Warning!

This pictogram draws attention to the risk of personal injury.

- There should be no body parts on top of the front legs steel profile, when the lift is elevated or operated.

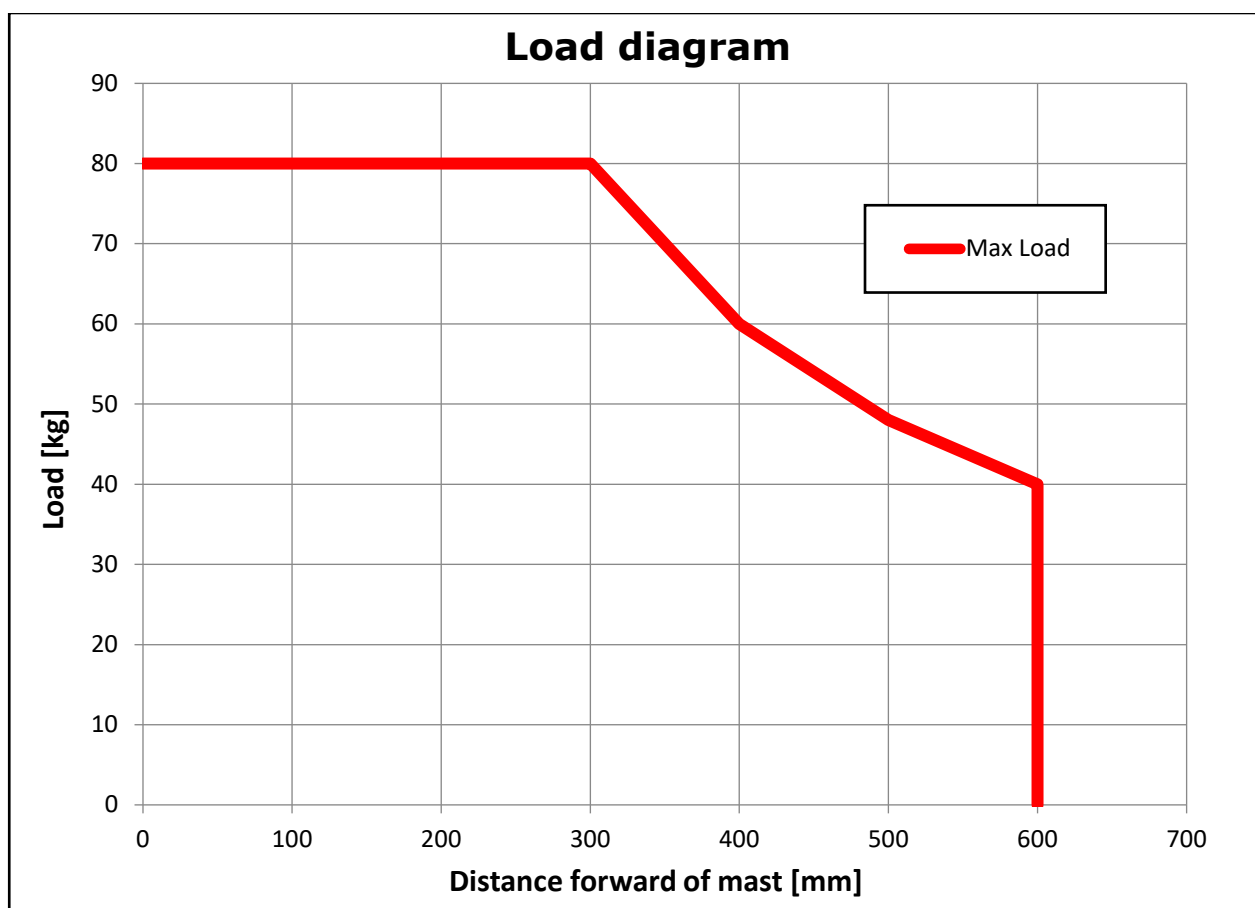
2. Specifications

	Lift
Weight (kg)	26
Max. load (kg)	80
Cladding class	IP41
Batteries	24V, 7,2Ah
Charger:	230V – 1,8 Amps
Charging time	8 hours (100%)
Sound pressure level	≤ 70 Db(A)
Vibration strength	≤ 2.5 m/s ²

3. Load diagram

Please note:

The design max. lifting load for the lifter, with load mass centre X mm forward of the mast, is illustrated below:



4. The lifter – a general description

- The lifter, is a battery-operated lifting device moved around manually, used to handle a wide variety of items, to reduce heavy and unnatural lifting from personal, the intention is to improve work life in regards of personal health and safety.
- The lifter consists of three main components:
 - 1. Mast:**
 - The mast is a lifting column, which is mounted on a set of “legs” and used to lift a tool plate.
 - The lifting function is gained from an electric motor, through a cambelt, which is moving a sledge inside the mast profile.
 - The connection between the motor and the cambelt, is through a “one way bearing”, which is a build in safety feature; hence the sledge is lowered only by gravity and not forced downwards by the motor.
 - 2. Legs:**
 - The legs are used to hold the mast in a vertical position and mounted with wheels, so that the lifter can be manually moved around on a flat, levelled floor.
 - The mast is mounted on the legs with bolts.
 - 3. Tool:**
 - The tool is a flat plate, which can be used to handle a variety of items within the load limit indicated.
 - The tool plate is mounted on the mast sledge with bolts.

5. General safety precautions during use

The following guidelines must be observed and followed when using a lift, to prevent personal injury:



- Under no circumstances should the lift elevate more than specified on the label.
- It is of most importance, due to personal safety, that the specific specified weight, load position, and height are respected and that the lift is not overloaded.



- The lift must not be used for lifting persons or live animals.



- No body parts near the sledge or tool at the mast or other lifting equipment when operated up/down.



- Secure that there is no person below the load, tool and lift when operated.



- There should be no body parts on top of the front legs steel profile, when the lift is elevated or operated.



- Only one person must operate the lift at a time.
- Only use the lift when operated on a hard-levelled surface during lifting or transporting loads.
- When transporting a cargo, the load should be lowered to the lowest possible position and secured in order ensure that the cargo cannot slide.
- Always secure the cargo on the lift when moving.
- When leaving or storing the lift, always ensure that the sledge is lowered to the lowest possible position and that the lift is free of any items or cargo.
- The load's center of gravity should always be behind the front wheels of the legs.
- Make sure that the tool is firmly attached to the sledge and no slack occurs in the bolt connection.
- The lifter is to be controlled at least once a year or according to laws, regulations, directives, working conditions and experience. The control shall be performed by the manufacturer or a skilled technician. Please check your local requirements.
- Do not lift or handle open containers containing corrosive fluids, harmful to people if spilled.
- Do not lift or handle explosives.

6. Exemption of liability

- The manufacturer cannot be held responsible for any modifications on the lift or attached equipment, not authorized by the manufacturer.
- Do only use original spare parts, otherwise the manufacturer cannot be held liable for the function and safety of the lift.
- The lifter must only be serviced by a qualified technician, otherwise the manufacturer cannot be held liable for the function and safety of the lift.

7. Residual risks

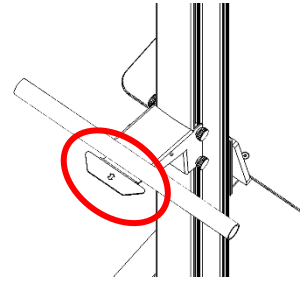
There are residual risks for extraordinary wear, material or product failure due to great impact from collision, misuse, obstacle interference, blockade of driveways, etc.; e.g. a faulty wheel bearing, as a result of a heavy collision.

8. Operating the lifter

The lifter is operated using the Paddle Switch, located on the lifter's handle. The Paddle Switch is used to operate the lifting and lowering function.

↑ The lifter will lift, while the Paddle Switch is lifted.

↓ The lifter will lower, while the Paddle Switch is lowered.



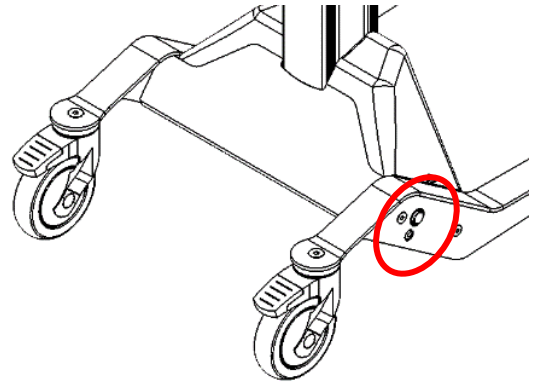
9. Batteries and charger

Batteries

The batteries are charged with the external charger.

Connect to the charging socket on the lifter and to a 230V / 110V – 50-60 Hz main.



The batteries should be charged daily, as total discharge can damage the battery or shorten its life. The "ON/OFF" button shall be in "ON" (pushed in) mode when charging.



Charger

The charger automatically charges the batteries and switches off when the batteries are fully charged. The batteries are fully charged after approx. 8 hours.

Charger indicator:

-  Red indicator: The charger is connected to main power and charging.
-  Green indicator: Float charging and ready for use.



Safety when charging



Use only original charger. Check that the wires are in good condition, connect the plug properly before applying power. Make sure there are no dirt or water in the plug or the inlet.

10. Construction and Materials

Mast	Aluminium – Anodised
Handle	Steel - Painted
Sledge	Steel - electro-galvanized
Sledge wheels	POM
Tool plate	Aluminium
Cover	ABS
Wheel frame	Steel - Painted
Front wheels	Steel, Polypropylen and Thermoplastic rubber
Rear wheels	Polypropylen and Thermoplastic rubber

11. Maintenance and Inspection

Ensure that the lift functioning as intended. If in doubt, do not use.

- The lifter must be free of dirt or debris which could affect safe operation
- Ensure all labels are present, without damage and are readable.
- Ensure no sign of wear, jarring sounds or visual defects.
- Ensure bolts, nuts and rivets should not be loose.
- Ensure correct operation of the brakes.
- Ensure the lifter moves freely on its wheel and the castors.
- Ensure control unit are in working order.

The yearly maintenance must be performed by a qualified technician.

The critical components listed below, must be replaced with the intervals stated, to make sure that the lifter is in safe, operational condition.

Critical components:

- **Cam belt**
 - Replace when / if any of the below points occur:
 - ✓ Any sign of wear, visual cracks, or miscolour.
 - ✓ Under normal use (Use < 20 lifts per day, in average over a year), replace after 8 years.
 - ✓ Under intensive use (Use > 20 lifts per day, in average over a year), replace after 4 years.
- **One way bearing**
 - Replace when / if any of the below point occur:
 - ✓ Any sign of wear, jarring sounds or visual defects.
 - ✓ Under **normal use** (Use < 20 lifts per day in average over a year), replace after 8 years.
 - ✓ Under **intensive use** (Use > 20 lifts per day, in average over a year), replace after 4 years.







12. Disposal

When disposing the lifter, make sure to sort the different materials by category, metal, electronic waste, batteries etc. Make sure to follow the local environmental legislations, and hand over the materials to the local recycling station.

- Note: The batteries contain lead and must be disposed accordingly!



13. Cleaning Instructions

Cleaning Instructions			
Ingress Protection Marking (IP)			
Model Approved IP Code:	IP 41	IP Code Description	
Solid particle protection	IP 4X	>1 mm	Most wires, slender screws etc., objects > 1,0mm
Liquid ingress protection	IP X1	Dripping water	Dripping water (vertically falling drops) shall have no harmful effect on the specimen when mounted in an upright position onto a turntable and rotated at 1 RPM.
Special Instructions / Precautions			
<ol style="list-style-type: none"> 1. Always wear the correct safety equipment 2. Lower the lifting tool, so that you don't risk a head injury when cleaning near the floor. 3. The battery charger must be disconnected from the main during cleaning. 			
Detergent Application			
	- Use a standard PH neutral cleaning detergent.		- Do not use Acid, Alkaline or harsh chemical products, these might weaken the drive belt and other sensitive components or leave marks on the surfaces.
Works Process			
	- The outer surfaces can be cleaned using a damp cloth.		- Do not use liquids to clean the lifter as this may have adverse effect on the electrical components.
	Key Inspection Points		
1.	Test that all functions are working properly, before the lifter is taken back into service.		
Document data			
Prepared by:	Nikolaj Olsen	Date Created:	01-02-2018
Revision:	-	Rev. Date:	-

14. Lifting equipment

14.1. Platform

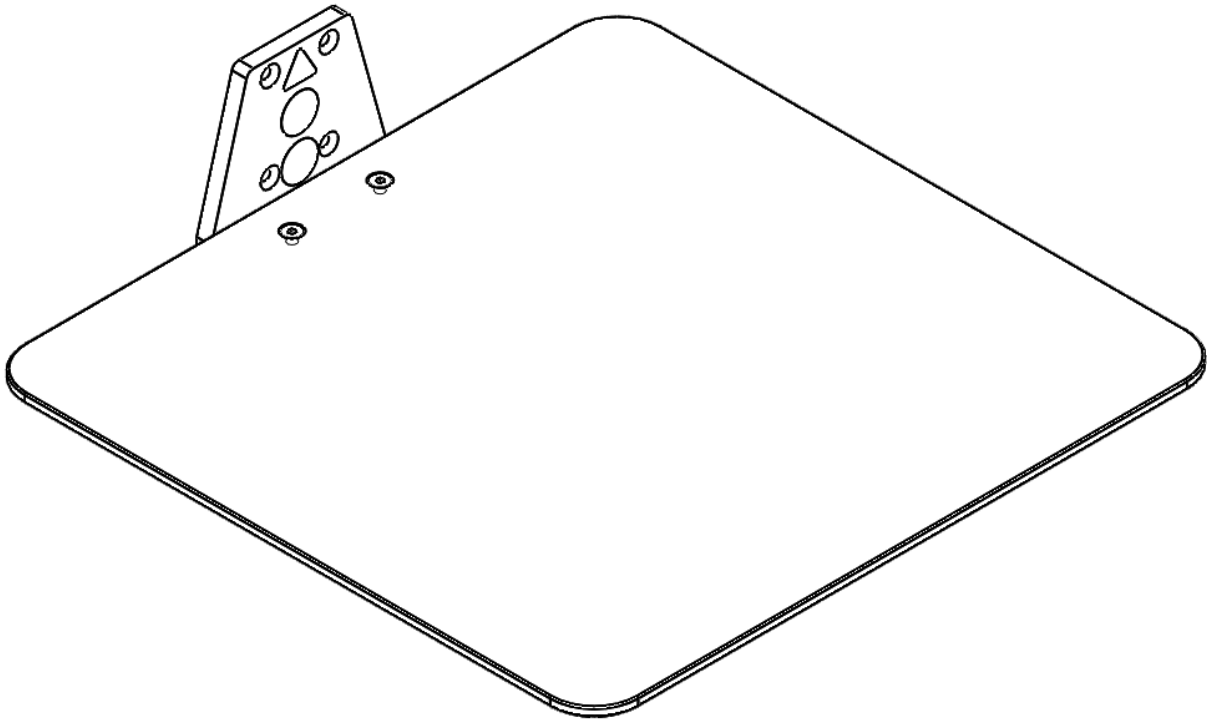
The platform can be used to handle various items or boxes.

Use the lifter to level the platform height with the object to be lifted. The object can, with little effort, be pulled onto the platform. The same method is used to get the object off the platform again.



Safety when using platform

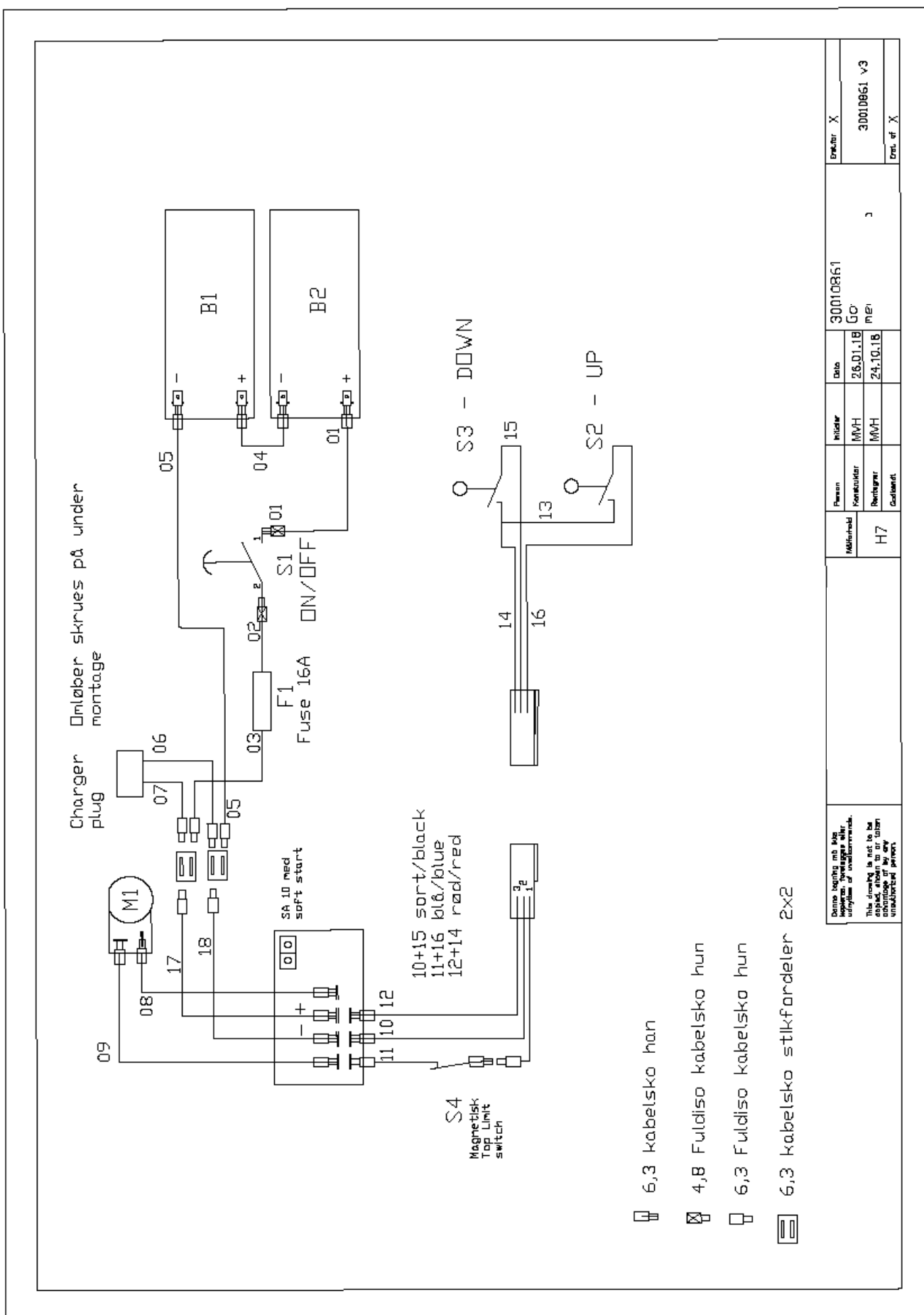
Boxes handled with the platform must not be substantially larger than the platform, as there is a risk of dropping the item.



15. Resolving faults

Fault type	Check the following	Solve
The timing belt jumps on the belt wheel (the belt is making crackling noises)	Is the belt slack?	Tighten the belt using the screws at the top of the mast.
	Is the belt worn?	Replace the belt.
The belt is skewed (the belt squeaks)	Is the belt running skewed in the track on the top cam wheel?	Adjust the screw at the top of the mast, on the side to which the belt is skewed.
	Is the belt worn?	Replace the belt.
The sledge jerks	Is there dirt in the mast on which the sledge runs?	Remove the dirt and wipe with alcohol.
	Is there dirt on the sledge wheels?	Remove the dirt or replace the wheels.
The lifter does not respond	Check whether the item being lifted is heavier than the lift's capacity	Remove the item.
	Check the main fuse or the on/off button	Replace the main fuse or press the button.
	Check that the batteries are charged	Connect the charger.
The lift works very slowly	Check the voltage of the batteries	Connect the charger.
	Check the charging frequency. Does the light quickly change to green when connected?	If the charger quickly changes to green, it could indicate that the batteries should be replaced or the fuse on the charger is broken or the main switch is off.

16. Electrical Wiring Diagram



17. Spare parts

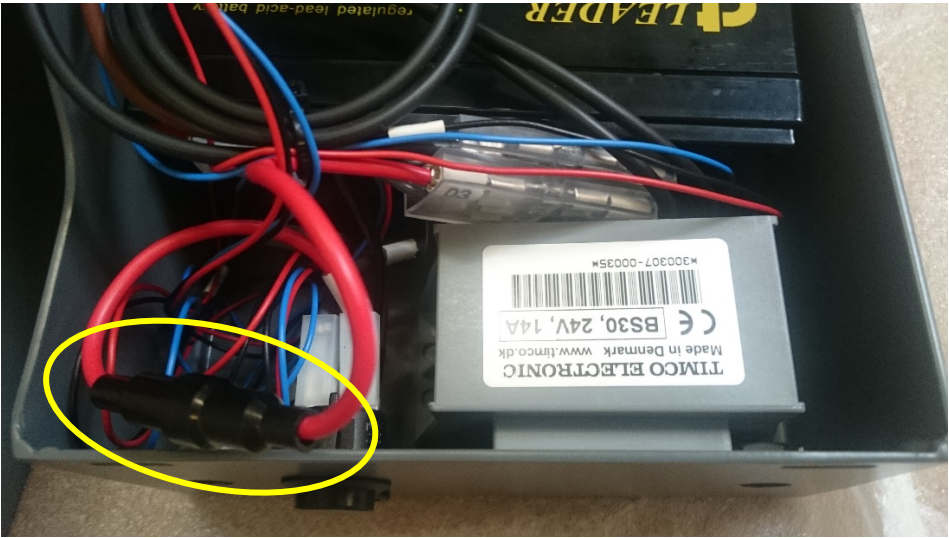
17.1. Replacement of main fuse



1. Remove plastic cover carefully



2. Locate fuse housing

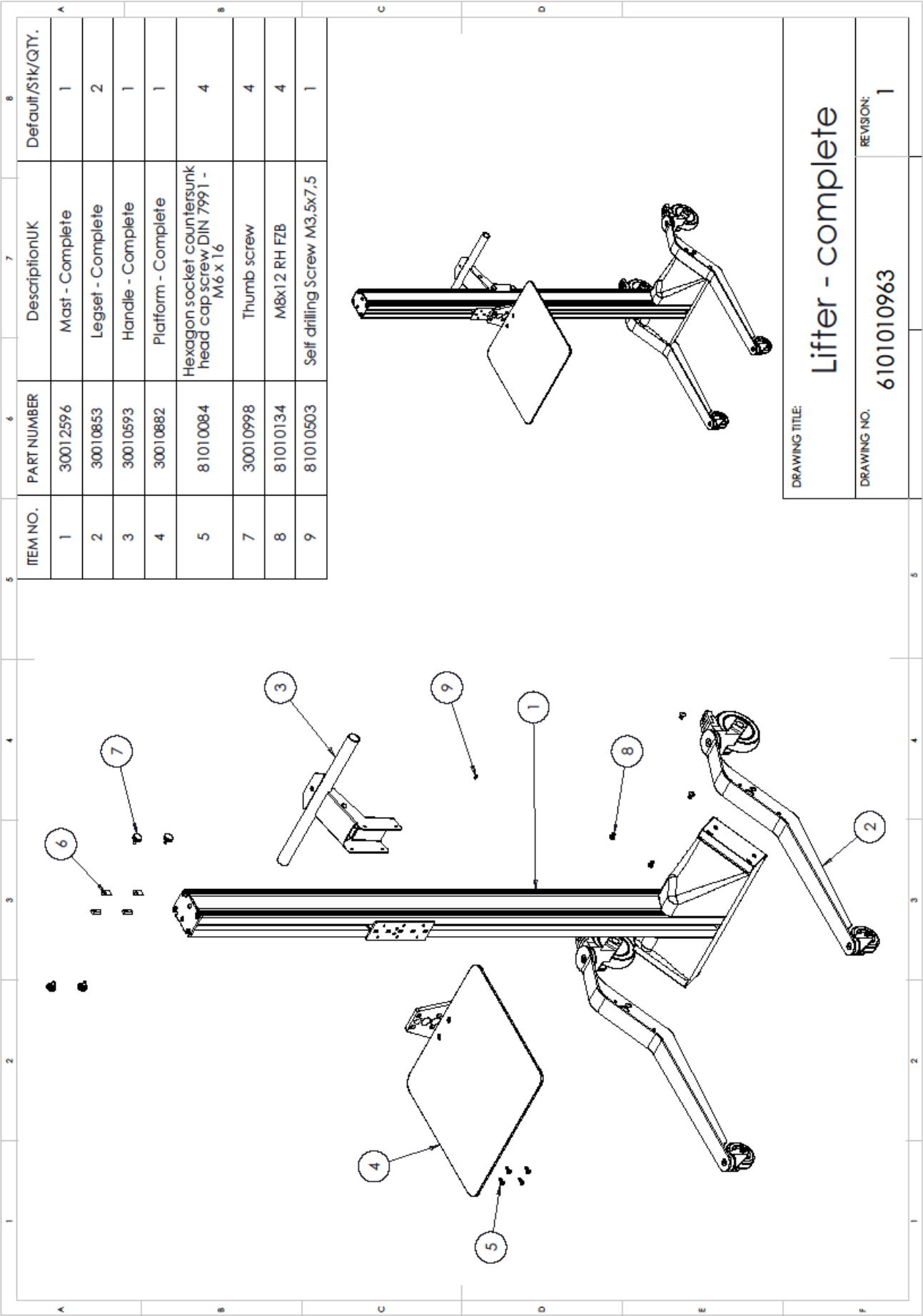


3. Open black fuse housing by unscrewing, to replace fuse

Spare part positions are with reference to "16 Electrical Wiring Diagram"

Position	Part number	Description	Quantity	Picture
F1	40002862	Fuse 230V T16	1	
F1	84280049	Fuse housing with wires	1	

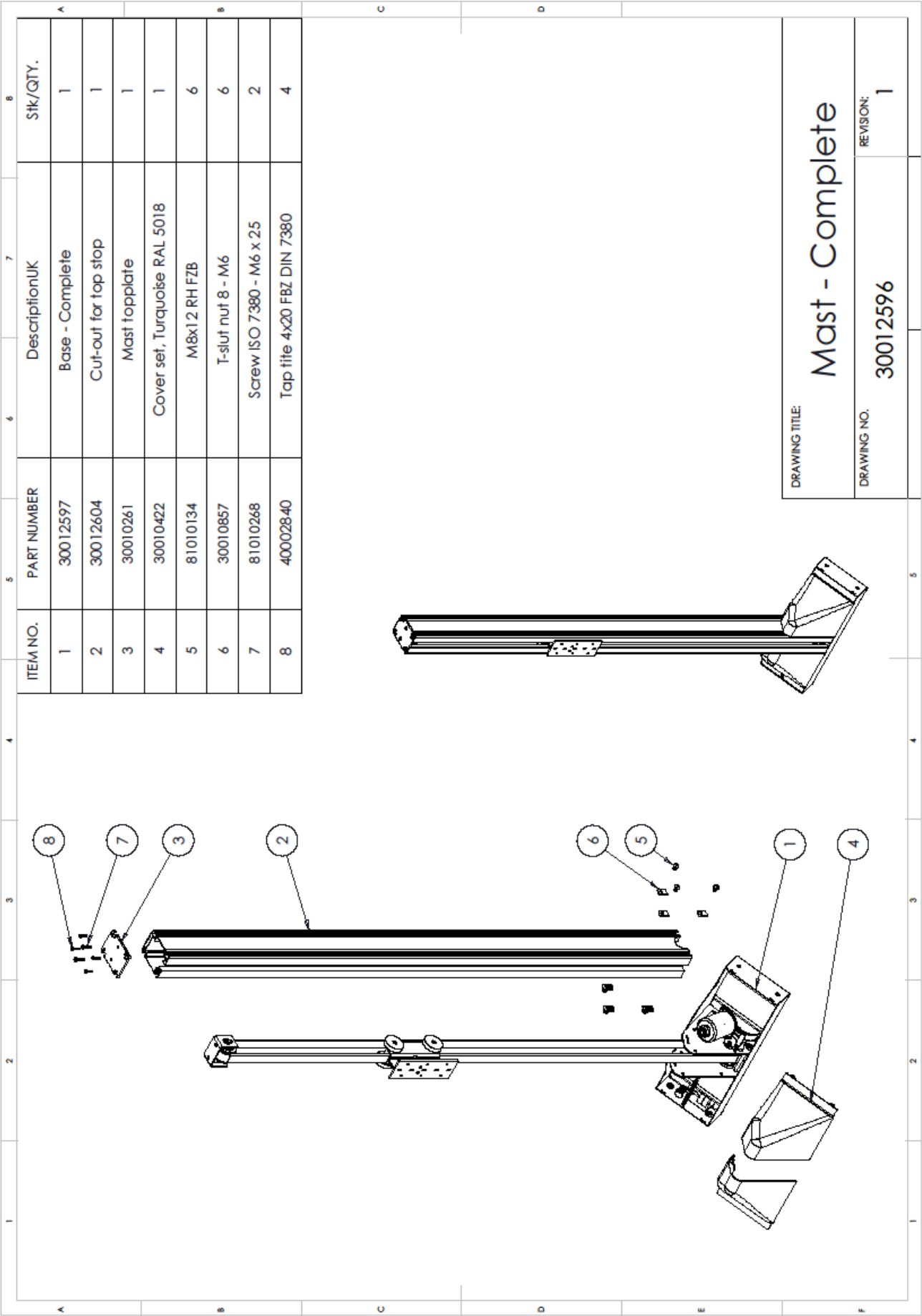
17.2. Lifter - Complete



DRAWING TITLE:
Lifter - complete

DRAWING NO. **6101010963** REVISION: **1**

17.3. Mast – Complete



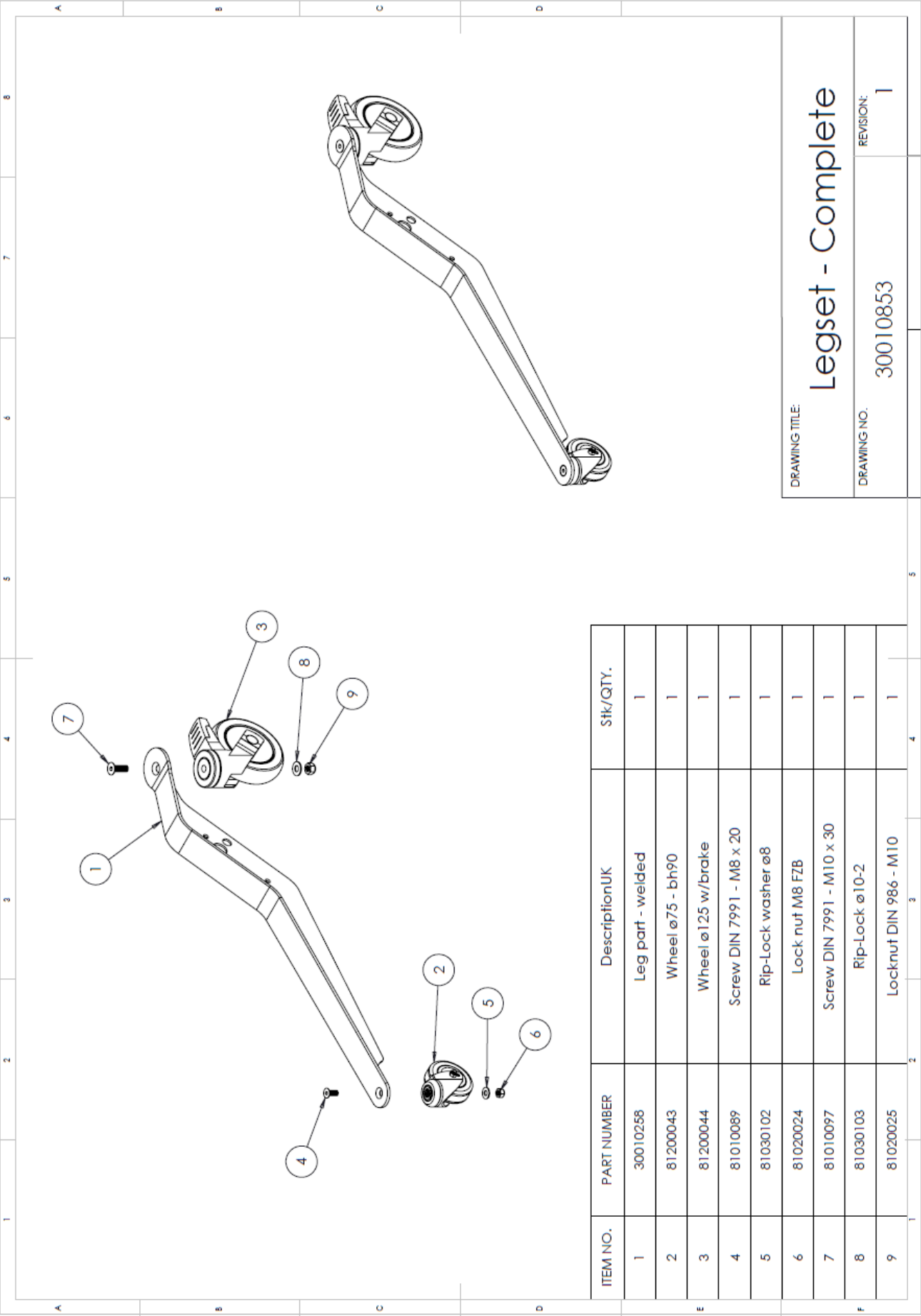
17.4. Base - Complete

ITEM NO.	PART NUMBER	DescriptionUK	STK/QTY.
1	30010136	Motor base - welded	1
2	30010260	Flange fitting for motor	1
3	30010142	Motor shaft _ for 16 tooth cam wheel	1
4	30010122	Shaft bushing	2
5	30010446	Shaft stop	1
6	40000163	Cam wheel AT10/16 - Complete	1
7	30010859	Control unit	1
8	40002889	Battery 12V 7,2 Ah	2
9	84100127	Switch black	1
10	40002828	Charge socket - panel mount	1
11	85020053	Motor_ DCK35 - SWF 405.088-1	1
12	30010147	Tooth belt AT10-25	1
13	30010848	Top wheel - Complete	1
14	30010844	Sledge - Complete	1
15	30010861	Wiring set - Complete	1
16	81190092	Bearing 6905 2RS	2
17	81020022	Lock nut M6 FZB	3
18	81010083	Screw DIN 7991 - M6 x 12	3
19	81010356	Screw DIN 912 - M3x6	2
20	81010472	Screw DIN 912 - M8x90	1
21	30012541	Holder for top stop	1
22	30009138	2,5 m ledning, sort	1
23	30012341	power magnet 20x10x2 - For GO-Lift topstop	2
DRAWING TITLE:			
Base - Complete			
DRAWING NO.			REVISION:
30012597			1

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17.6. Angled legs



18. Annual inspection

Date of inspection:

Controller:

Remarks:
