



Lift trolley Lift&Drive **Original instructions**  It is important that you read and understand the manual before using the lift trolley. Do you have any questions? – Please contact the distributor or the manufacturer.

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Keep platform in lower position when moving.





Do not stand under the load platform.



lifter for people.



Charge at least 8 hours every night.

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# **1** Description of the lift trolley

Lift&Drive is an ergonomically designed lift trolley to simplify handling, lifting and transportation of goods. The lift trolley can be equipped with different types of load carriers, such as load platform, prong, fork, squeeze tool, turn unit or customized solutions. The goods are placed on the load carrier, and by pressing the buttons on the remote control the load carrier is adjusted to the desired height. The lift trolley is powered by rechargeable batteries.

The lift trolley is only to be used indoors in well-lit environments on level surfaces.

Additional technical documentation can be ordered from Pronomic.

## 1.1 Warranty

The warranty is valid for one (1) year from the date of delivery for defects in material and manufacturing. For the warranty to be valid maintenance must have been carried out in accordance with this manual. The warranty does not cover normal maintenance, settings, adjustments or associated labour costs. Damage due to misuse or incorrect use of the equipment will void the warranty.

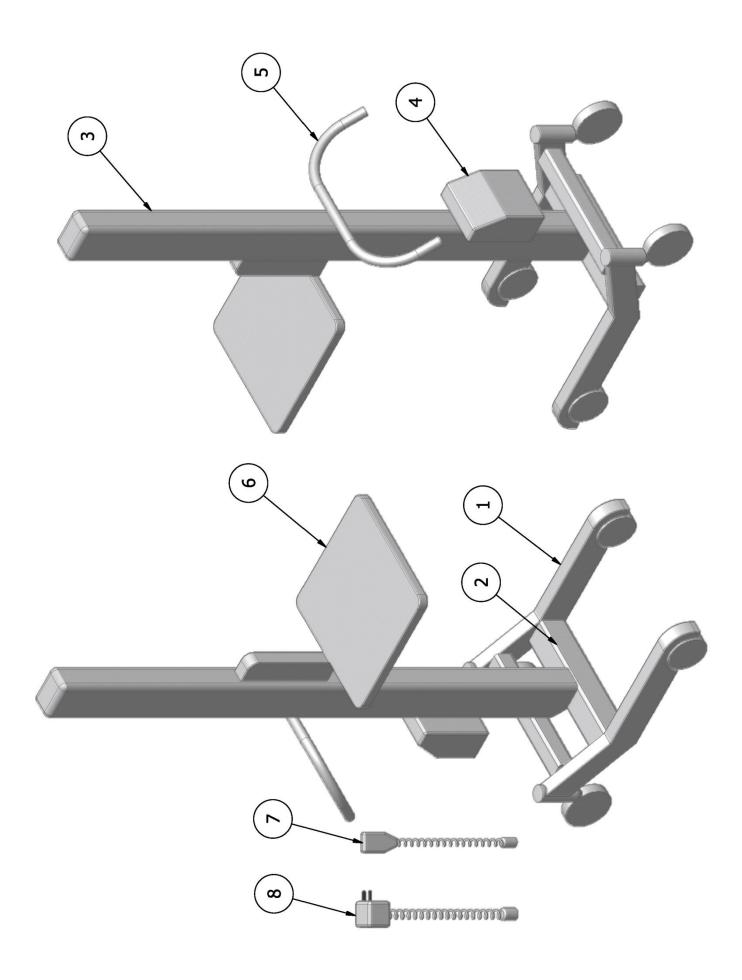
## **1.2** Components

The lift trolley consists of a number of modules. The locations of these are shown in the image on the next page. Please contact Pronomic for information regarding part numbers.

1	Wheel frame	4	Power pack	7	Remote control
2	Cross-member	5	Handlebar	8	Charger
3	Column	6	Load carrier		

The appearance of the load carrier may differ from the image.

The wheel frame and the cross-member are integrated on some models.



# 2 Assembly

Protective footwear should be used when assembling the lift trolley, to prevent injuries if parts are dropped.

- 1. Place the wheel frame and cross-member on the floor.
- 2. Slide the column onto the bracket on the cross-member. The screw bar on the bracket fits the slots on the back of the column.
- 3. Fit the power pack into the slot on the back of the column. Move it downwards until it stops. Tighten the dome nuts/black knob. Plug the motor cable contact into the matching socket on the power pack.
- 4. Fit the handlebar into the slot on the back of the column and lock it in a desired height. Connect the remote control to its socket on the power pack.
- 5. Press the up button on the remote control to make the column go down to its lowest position. The column should stand directly on the cross-member.
- Tighten the nuts on the back of the cross-member, but not too hard (15 Nm), with a 13 mm wrench.
- 7. Attach the load carrier with the supplied screws and washers in the slide of the column.
- 8. Perform a static load test, with 1.25 x the maximum load.(Move the load carrier to the middle of the column and apply the load.)
- 9. The lift trolley is now ready to use.

## 2.1 Disassembly and scrapping

To disassemble the lift trolley, follow the instructions in section *Assembly*, but in reverse order.

When the lift trolley is due for scrapping the machine, complete with batteries, should be handed in to a recycling centre or Pronomic to ensure reuse and safe handling of all parts.

# 3 Using the lift trolley

If the load is left on the lifter for some time it may be necessary to lower the load before it can be raised.

## 3.1 Handlebar

To achieve a good working position the handlebar should be adjusted to a correct height. The handlebar can easily be adjusted in height by loosening the black knobs on the handlebar. To lock the handlebar at the selected height the knobs are turned clockwise.

Never put arms through the handlebar to reach something on the load carrier, as this may pose a crush hazard.

## 3.2 Remote control

The load carrier is raised and lowered by pressing the buttons on the remote control or by controlling the lever on the stepless remote control. The remote control has either two or four buttons or a stepless lever and is used as shown below.



The remote control should be placed to allow the user to easily press the buttons or to control the lever. The bracket for the remote control is fitted to the handlebar. The bracket can easily be moved by turning the black knob counter-clockwise. The bracket can be locked in any position on the handle by turning the knob clockwise. The bracket can be tilted to any angle on the handlebar. The remote control can be removed from the bracket.

## 3.3 Power pack

Modifying the power pack is dangerous. The device may not be sealed in any way. It should not be exposed to splashed or running water.

## 3.4 Brakes

On lift trolleys equipped with central brake the brake is applied by moving the brake bar to its lowest position.

On lift trolleys with individually braked wheels the brakes are applied by pressing down the lever on each wheel separately.

## 3.5 Directional lock

On lift trolleys equipped with central brake the directional lock is activated by moving the brake bar to its highest position. This locks the rear wheels in a position that only allows the lift trolley to move straight forward or backward

## 4 Safety

Use the protective equipment (e.g. protective footwear) required to handle the goods.

The stated maximum load may not be exceeded.

The lift trolley must not be used for lifting people.

Note the crush hazard between the load carrier and the wheel frame or floor when raising and lowering the load carrier. Do not keep hands or other body parts under the load.

## 4.1 Storage and transport

During storage and transport the remote control and motor cable should be disconnected. The lift trolley should be secured during transport to avoid the risk of tipping over.

## 4.2 Movement

The load carrier should always be lowered as low as possible to ensure safe and stable handling. Be extra cautious when passing thresholds, cords and other objects on the floor. The movement of heavy loads can be easier when using the directional lock. The handlebar should

be gripped in a way so that the hands are not hurt when passing edges, walls or protruding objects.

## 4.3 Loading and unloading

The user is responsible for ensuring that the lift trolley is loaded correctly.

Always apply the brake when loading/unloading.

The centre of gravity of the goods should always be centred on the load carrier and as close to the column as possible, for maximum stability.

The load carrier should be positioned at the correct height before loading/unloading. To allow a good working position the load should be pushed or pulled off and on the load carrier.

## 5 Maintenance

In order for the lift trolley to function properly it is important that maintenance is carried out in accordance with what is described below. The stated service intervals are applicable during normal use and charging once a day. Further use requires more frequent service intervals.

Only spare parts supplied or approved by Pronomic may be used.

After disassembly/assembly of the column or load carrier a load test should be performed, see section *Assembly*.

## 5.1 Every day

#### 5.1.1 Charging

Only chargers supplied or approved by Pronomic AB may be used.

The charger must not be exposed to water. Handle the charger with care.

The lift trolley must be in a normally ventilated area when it is being charged.

Always connect the charger to the lift trolley before connecting to the mains power.

The batteries should be recharged every night for at least 8h at a time. In order to avoid complete discharge, which damages the batteries, the batteries should also be charged when the lift trolley is not used for an extended period of time, e.g. during weekends and holidays.

When the battery charger is connected to the lift trolley and main power, there is a yellow/orange light on the charger, indicating on-going charging. When the batteries are fully charged the light turns green. The lift trolley can remain connected to the charger indefinitely without risk of overcharging, preferably until next use. Do not use the lift trolley before the charger indicator turns green.

On the power pack a flashing bar on the voltage indicator means that the batteries need charging. The lift trolley will not perform a lift while the voltage indicator are flashing. If the lift trolley is left

unused for about 10 minutes sleep mode is activated and the voltage indicator turns black. The lift trolley is restarted by pressing any button on the remote control. When the lift trolley is restarted from sleep mode after charging it takes about two minutes before the voltage indicator shows fully charged. The lift trolley should not be used until the indicator on the actual charger turns green (4-8h).

If the lift trolley is used in more than one shift per day an extra power pack per shift is necessary in order to secure fully charged and healthy batteries. A mark-up system with numbers helps the operators using the right power pack on the right shift and therefor avoiding damaging the batteries permanently.

## 5.2 Every year, or when needed

## 5.2.1 Cleaning

Clean the lift trolley using detergent suitable for painted surfaces, aluminium and stainless steel. Follow the instructions on the detergent. Wipe the lift trolley dry after cleaning. Do not use hose or high-pressure jet as this may damage the electronics and the paint.

#### **5.2.2 Electrical connections**

Check all connections and repair any damage or wear. If needed, replace with new parts.

#### 5.2.3 Wear of machine parts

Check the parts of the machine in order to identify any cracking or wear.

## 5.2.4 Nuts and bolts

Make sure all nuts and bolts are tightened.

#### 5.2.5 Lift column

Lift the column from the cross-member.

Clean the brush stripes and wipe the column clean.

Remove the four corner screws at the top of the column. (Not the three in the middle)

Pull out, wipe and lubricate the lift screw with new ball bearing grease.

Put the lift screw back and tighten the screws.

Check the coupling, by making sure the sleeve and the hub located inside the column and inside the cross-member are intact and in working order.

Put the lift column back and perform load test, see section Assembly.

## 5.2.6 Wheels

Make sure all wheels run smoothly.

Lubricate the bearings.

Check that the tire rubber is intact.

#### 5.2.7 Brakes

Check that the breaks work.

#### 5.2.8 Knobs for handlebar and bracket for remote control

Check that the knobs loosen and tighten correctly.

#### 5.2.9 Replacing the fuse

The fuse is located inside the power pack. A wiring diagram for the lift trolley is attached to the inside of the lid of the power pack. Before removing the lid, by loosening the screws, the user should apply the brakes and wear protective footwear. Be extra cautious when opening the power pack. If the device is tilted after the lid has been removed, the batteries can slide out of the power pack and harm the user.

#### 5.2.10 **Replacing the batteries**

Batteries may be replaced by a person with basic technical knowledge. When changing batteries protective footwear should be used the brakes should be applied. To open the power pack, see section *Replacing the fuse*. Used batteries should be handed in to a recycling centre.

#### 5.2.11 **Plates and decals**

fy that the following plates and decals are attached and fully readable.					
Plate/decal	Description	Placement			
CE Decal	Decal with CE mark and year	At the back of the cross-			
	of manufacture	member			
Serial number	Decal with serial number	At the back of the cross-			
Senarhumber		member			
Model	Decal with text stating the	At the top on both the left and			
Wodel	model of the lift trolley	the right side of the column			
	Decal with text stating the	Clearly visible on the power			
Maximum load	maximum load and that	pack			
	lifting people is not allowed	ματκ			
	Striped decal with an image	On the wheel frame			
No feet	to warn against placing feet	(2 pcs)			
	on the wheel frame				
	Decal with image showing	On the cross-member			
Not for lifting people	that lifting people is not	(2 pcs)			
	allowed				

Safety information	Decal with text informing about safety and contact information	Clearly visible on the power pack
	IIIIOIIIIatioii	

#### 5.3 Trouble shooting

The lift trolley is designed for safe and efficient operation, provided that routine maintenance is carried out in accordance with the instructions given. If problems arise, some guidance is provided below. If the problem persists after action has been taken – Please contact service technician or Pronomic.

#### If the load carrier does not move at all, or very slowly:

- Verify that the maximum load is not exceeded.
- Charge the batteries.
- Check that the battery charger works. A light should be visible on the charger when plugged into the mains power.
- Check if the fuse inside the power pack needs to be replaced.
- Check the battery voltage and replace batteries if the voltage after 8 hours of charging is less than 25 volts.

#### If the lift trolley sounds strange:

- Make sure the lift trolley is correctly assembled, see section Assembly.
- See section *Maintenance*.

## 6 Technical specifications

Model	Lift&Drive 130P
Maximum load	130 kg

Batteries	Vented lead batteries
Nominal battery voltage	24 V DC
Mains voltage	230 V AC 50 Hz or 115 V AC 60 Hz
Noise	The noise level does not exceed 70 dB(A)
Vibration	Vibrations do not exceed 2.5 m/s <sup>2</sup>
Test factor for static testing	1.25

## 7 Attachments

Attachments can be divided into groups. Below is a list of approved attachments.

If the lift trolley is modified or equipped with other attachments, a supplementary risk analysis must be carried out by the person issuing the declaration of conformity with directive 2006/42/EC.

Category	Part number	Description
Platform / fork	15012	Platform for 15000/16000, with folding plate
	15018	Topp late, steel, for 70E/90E platform
	15322	Plate for, Platform, 90IE
	15324	Frame for, Platform, 90JE
	15338	Frame for, Platform, 90IE
	15370-15372	Customized fork
	16020	Load platform, stainless, frame only
	16038	Load platform, frame only
	16338	Load platform 90IES, frame only, stainless
	17229	V-block, drawing 17171
	17233	Turntable for V-block (plate)
	17710	Platform Scale, 500x450mm to 15000/20000
	17720	Counting Scale, 500x450mm to 15000/20000
	17730	Roll-on platform for 15000/20000 with locking
	17740	Roll-on load platform side feed 15000/20000 locking
	19510	Load platform for 19500
	21851-21854	Load platform for 90IE/P/130P
Prong	17241	Pin for roll-handling, 17000/17005
U	19201	Pin for roll handling, 160Kg (19000)
Squeeze tool	19472	Squeeze & Turn, 60 kg, without arms, 90P/130P
•	19473	Squeeze & Turn, 60 kg, with arms, 90P/130P
	19476	Squeeze & Turn, 110 kg, without arms, 175P/225P
	19477	Squeeze & Turn, 110 kg, with arms, 175P/225P
	19478	Squeeze & Turn, 110 kg double without arms 175/225
	19479	Squeeze & Turn, 110kg double with arms, 175/225
Expander	17940	Expand&Turn Light 40kg, 70-80mm(3 inches)
•	17972	Pneumatic Expander max 60 Kg electrical Turn
	19980	Pneumatic, Expand & EL-turn 19000, 70-80mm, 160kg
Turn unit	19470	Turn 0x, with motor control, 90P/130P
	19471	Turn 2x, with motor control, 90P/130P
	19474	Turn 4x, with motor control, 90/130P
	19475	Turn 0x, with motor control, 175P/225P
	19480	Turn 2x, with motor control, 175P/225P
Column	17182B	Telescopic mast extension for 90P/130P, 70 kg, 18V
	19285	Telescopic column for 19500, el, 160 Kg
Miscellaneous	15013	Checklist holder
	15014	Refuse bag holder, single
	15015	Refuse bag holder, double
	15016	Shelf 225x125 mm, for 15000/16000
	15017	Writing pulpit, reversed, for 15000/16000
	15019	Angle for paper holder
	15024	Holder for box
	15080	Ladder for 15000
	17230	Bracket for Battery charger
	20080A	Ladder for 60P/90P/130P and 70E/90E
	220066	HT Turn, no slip ring, with control unit
	220067	HT Turn, no slip ring, with control unit
	220007	

## 7.1 Lift&Drive attachments

The following table lists the attachments that are approved for each lift trolley model.

			/	/	/	/	/	/	/	/
		154	opt	ogit	SOF	old	1308	158	258	358×
15012	X	x	x	x	x	×			$\leftarrow$	
15012	x	x	x	x	x	x	Х	х		
15013	X	x	X	X	X	X	x	x		
15015	X	x	X	X	X	X	x	x		
15015	x	X	X	X	X	X	X	x		
15010	X	x	X	X	X	x	x	x		
15018	~	X	x	X	χ	A	A	~		
15019	х	х	X	X	х	X				
15024	x	x								
15080	x	x								
15322			х	x						
15324				x						
15338			x							
15370-15372			X							
16020	х	Х								
16038	X	X		х						
16338			х							
16041-16044	х	х								
16048-16049			х	x						
17182					х	x				
17231	х	х	х	х	х	x				
17241	х	х	Х	x	x	x				
17710	х	х	х	x	х	x				
17720	х	х	х	x	х	x				
17730			х	x	х	x				
17740			х	x	х	x				
17940			х		х	х				
17972					х	х				
17980							х	х		
19511							X	х		
19201							х	х		
19285							х	х		
19470					х	х				ĺ
19471					х	х				1
19472					х	х				1
19473					х	х				1
19474					х	х				1
19475							Х	х		
19476							х	х		
19477							х	х		
19478							х	х		
19479							Х	Х		
19480							Х	Х		
20205A-10			Х	Х	Х	Х				
20080	х	х	х	х	х	х				
21851-21854			х	Х	х	х				
220066-220069							Х	х	х	1
220100							х	х	х	1
			1					<u>ı</u>	· · · · ·	L

#### 8 EC Declaration of conformity of the machinery ORIGINAL (In accordance with 2006/42/EC, Annex II 1A)

Manufacturer	Pronomic AB
	Box 5504
	192 05 Sollentuna
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Authorized to compile the	Samuel Pierre, Pronomic AB, BOX 5504, 192 05 Sollentuna, Sweden
technical file	

#### Applied EC directives:

2006/42/EC	Machinery Directive
2014/30/EU	EMC Directive

#### Applied standards:

SS-EN ISO 12100:2010	Safety of machinery - General principles for design – Risk assessment and risk reduction (ISO 12100:2010)	
SS-EN 349+A1:2008	Safety of machinery - Minimum gaps to avoid crushing of parts of the human body	

We hereby declare that the above-referenced machine, built and equipped with attachments included in this manual, is in conformity with the applicable conditions stated in the directives and standards.

Sollentuna, 2020-06-05

Joakim Stannow, Pronomic AB

The lift trolley has been modified and/or equipped with attachments as follows:

After modification a supplementary risk analysis has been performed and the machine is certified to be in conformity with the directives and standards above.

Place, date	
Name	Company

## **Test protocol for Lift & Drive**

Model	Max load (kg)
130P	130

This machine has undergone a dynamic load test with the above mentioned load as well as a static load test with a testfactor of 1.25x its max load.

This machine has performed flawlessly during the load test.

.....

Serial number

.....

Signature, Inspector

Place, date

Pronomic AB – SWEDEN Box 5504 192 05 Sollentuna

Distributed by: