



OPERATING INSTRUCTIONS

Electric pallet truck

HWE15 / HWE15-L / HWE18 / HWE20



Please read this manual before using the product and follow the instructions it contains!

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FOREWORD

Congratulations on the purchase of your new electric pallet truck HWE15 / HWE15-L / HWE18 / HWE20. The easy to use pallet truck has been manufactured from high quality materials, specially designed for long lasting and reliable use. For your own safety and for the correct operation of the lift truck, please read and follow these operating instructions before using the lift truck.

It is best to keep these operating instructions. Check the lift truck for transport damage. Damaged electric lift trucks must not be used.

The lift truck is used for electrical lifting and lowering as well as transporting goods. Improper handling may result in injuries or damage to the machine. The liability for damage resulting from improper use of the device or failure to observe the specifications and rules of conduct contained in this operating manual is excluded. The operator / user must ensure correct use, whereby it must be ensured that the electric lift truck is only used by trained and authorized persons.

SAFETY INSTRUCTIONS

- Read warning signs on the lift truck and instructions in this manual before use.
- Only operate the lift truck if you are familiar with it and have been trained to do so.
- Only use the lift truck when you have checked that it is in perfect condition. Pay particular attention to the wheels, drawbar, chassis, control unit, battery, etc.
- Do not use on heavily soiled floors or explosive environments.
- Only use on level ground. Do not work on slopes with a gradient of more than 5 %.
- Do not transport persons on the forks.
- Wear gloves when using it.
- When transport / lifting goods, all persons should keep a safety distance of 600 mm.
- Always distribute the weight of the goods evenly on both forks. Never use only one fork. The center of gravity of the goods should be in the middle of the two forks.
- Observe the goods during transport. If the goods become unstable and threaten to fall / tilt, stop operation immediately with the emergency stop button.
- Do not charge beyond the maximum capacity.
- Do not drive the cart while lifting or lowering goods.
- Suitable for indoor use at a room temperature between 0 °C and 40 °C
- Carry out the maintenance work according to the regular inspection.
- The battery should be charged in a dry and ventilated place and away from open fire.
- Modifications and changes to the device not approved by the manufacturer will void the warranty.

TECHNICAL DATA

GENERAL

Type	Unit	HWE15	HWE15-L	HWE18	HWE20
Brand		SolidHub			
Model		HWE15	HWE15-L	HWE18	HWE20
Rated capacity	kg	1500		1800	2000
Service weight (include battery)	kg	155	168	166	166
Lift height	mm	190			
Load centre	mm	600			
Axle centre to fork face	mm	950			
Wheel base	mm	1220	1875	1220	1220

WHEELS

Type	Unit	HWE15	HWE15-L	HWE18	HWE20
Wheels type		Polyurethan			
Driving wheel size	mm	ø 210 x 70			
Bearing wheel size	mm	ø 80 x 70			
Track width, rear, loading side	mm	400			
Wheels, number front / rear (x = driven)		1 x + 2 / 4			

DIMENSIONS

Type	Unit	HWE15	HWE15-L	HWE18	HWE20
Height drawbar in driving position, min. / max.	mm	600 / 1220			
Fork height, lowered	mm	85			
Overall length	mm	1540	2190	1540	1540
Length to fork face	mm	390			
Overall width	mm	560			
Form dimensions	mm	50 / 160 / 1150	50 / 160 / 1800	50 / 160 / 1150	50 / 160 / 1150
Width of forks	mm	560			
Min. ground clearance	mm	27			
Aisle width with pallet 1000 x 1200 across forks	mm	1790			
Aisle width with pallet 800 x 1200 along forks	mm	1740			
Min. turning radius	mm	1350	2000	1350	1350

DRIVE

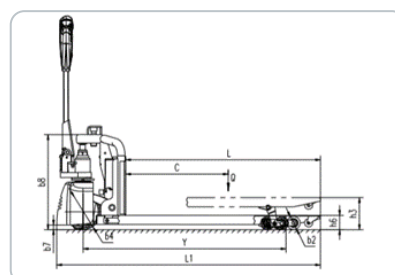
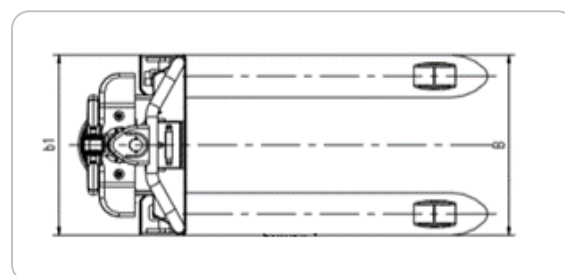
Type	Unit	HWE15	HWE15-L	HWE18	HWE20
Drive motor, output S2 60 min.	kw	0,75			
Lift motor rating at S3 15 %	kw	0,5			
Battery voltage / rated capacity	V/Ah	24 / 25			
Battery weight (+ / - 5 %)	kg	7,8 / 13,2			
Charger specification	V/A	24 / 10			

PERFORMANCE

Type	Unit	HWE15	HWE15-L	HWE18	HWE20
Travel speed, with / without load	km/h	4,5			
Max. gradeability with / without load	%	3 / 5			
Service brake		Electromagnetic			

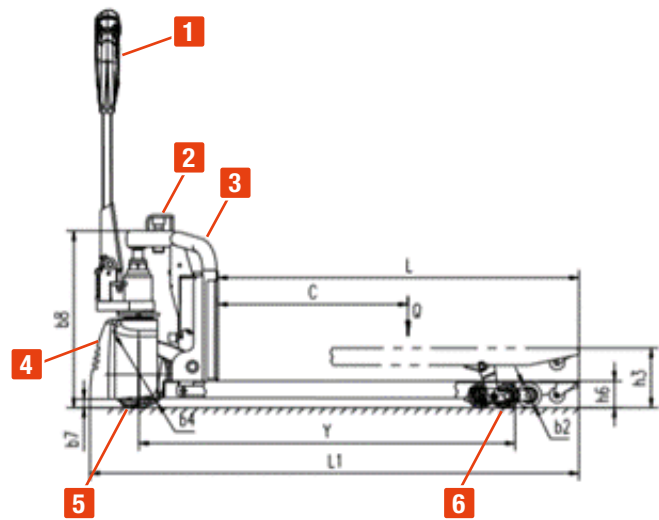
OTHERS

Type	Unit	HWE15	HWE15-L	HWE18	HWE20
Type of drive control		Curtis			
Noise exposure of the operator	dB(A)	≤ 74			
Steering type		Mechanical steering			



OVERVIEW OF MAIN COMPONENTS

No.	Name
1	Handle arrangement
2	Emergency stop button
3	Lithium-ion-battery
4	Actuator housing
5	Drive wheel
6	Tandem bike
7	Lowering button
8	Accelerator
9	Lifting button
10	Horn
11	Belly switch
12	Display
13	Password panel
14	Cancel button
15	Confirm button
16	Turtle speed switch



SAFETY DEVICES AND WARNING SIGNS

The lift truck has an emergency stop switch (2 / E) that stops all lifting, falling and driving functions and disables the electromagnetic brake. After actuating this function, pull the switch out again. Unlock the lift truck according to the operating instructions. For safety and against unauthorized use, the red button must be pressed. Follow the instructions on the safety stickers. Please replace damaged or missing safety stickers immediately.

MAINTENANCE

DAILY INSPECTION AND MAINTENANCE

Check the lift truck daily before use, paying particular attention to the wheels and axles. Foreign objects such as cloth / cloths etc. can jam the wheels or fork. After finishing work with the lift truck and before checking, unload the forks and lower them to the lowest position.

- Visual inspection for damage to pipes, wires, scratches, deformations or cracks.
- Check for leaks in the hydraulic system.
- Check the condition of the vehicle when driving straight ahead.
- Check the rollers for damage or corrosion.
- Check that the wheel moves smoothly.
- Press the emergency stop button to check the emergency brake function.
- Check brake function, check handle lever switch.
- Press the keys to check the lifting and lowering function.
- Check the horn.
- Check that all screws and nuts are tightened.
- Check the function of the key switch.
- Use engine oil or grease to lubricate all moving parts.

INSTRUCTION MANUAL

Please observe the warning and safety instructions when operating this lift truck. Make sure that you always look in the direction of travel and that no goods or objects obstruct or restrict your view. Make sure that the goods are placed stable and safe for transport in the middle of the fork.

SWITCH ON AND OFF

When you switch on the lift truck, it will initially be in standby mode. Enter your password and press the green confirmation button to fully power on the machine. When you start the truck for the first time, the password is 1234. After you finish your work, press the red button to return to standby mode. If the machine is not used for a longer period of time, we recommend to switch off the machine completely.

CHANGE PASSWORD

Switch on the lift truck. To change the password, enter the number 3232 and press the green confirmation button. When you see the letter O on the display, enter the current password and press the green button. The letter N should appear on the display. Now you can set a new password by entering it in the numeric keypad and press the green button to confirm.

RESET PASSWORD

Enter the number 123 while the lift truck is in standby mode and press the green button to confirm the entry. When you see the letter S on the display, enter the number 123 again and press the green button. The password has been reset to the factory settings. Use 1234 to unlock the pallet truck.

PARKING

Never park the lift truck on a slope or sloping terrain! This lift truck is equipped with an electromagnetic parking brake. When not in use, always set the fork to the lower position and park the lift truck in a safe area. Use the red button to secure the machine against unauthorized access.

LIFTING OF LOADS

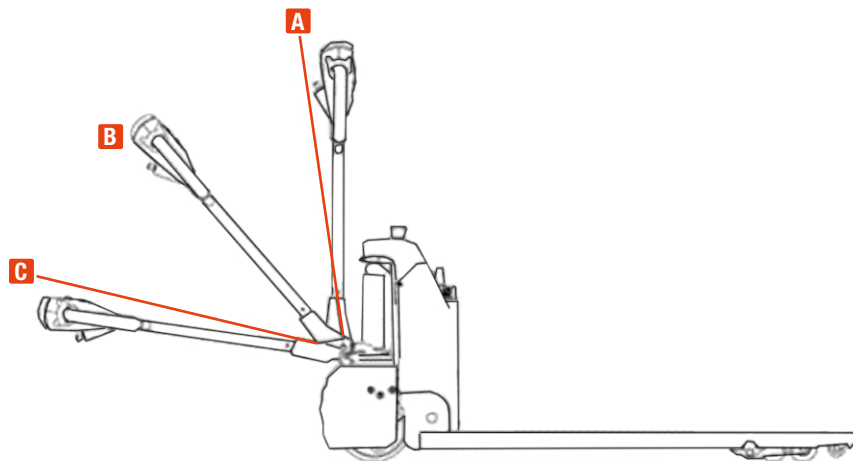
Never load the forklift beyond the specified capacity. The maximum load capacity of the HWE15 is 1500 kg, that of the HWE18 1800 kg and that of the HWE20 2000 kg. To move, place the fork completely under the goods to be lifted and press the lift button (9).

LOWERING OF LOADS

Press the down button (7) carefully. As soon as the weight has been reduced and the pallet stands securely, carefully pull out the fork.

CONTROL

Start the lift truck, bring the tiller to an inclined position "B". Operate the direction lever on the tiller (8): Forward "V" or Backward "R". By moving the direction lever carefully, you control the speed until the desired speed is reached. Position the directional lever in the middle to slow down the lift truck until it comes to a complete stop / park position. Always drive carefully and keep your eyes on the road - adjust the speed if necessary. Reduce the speed if necessary also by using the turtle switch.



APPLY BRAKES

The load braking performance depends on the ground conditions and the load of the lift truck. Activate the brake function as follows: By moving the directional lever (8) back to position "0" or by releasing this lever, the truck brake is activated, or by moving the directional lever in the opposite direction until it begins to move in the other direction. If the tiller is moved up "A" or down into the braking zone "C", the vehicle braking is activated. When the emergency stop switch is pressed, the handle is automatically moved to the braking zone and the parking brake is activated. The large red safety button on the head of the tiller allows this function to be triggered with the upper body as well. The lift truck slows down and comes to a standstill up to reverse "R".

TROUBLESHOOTING

If there is a fault and / or the lift truck does not work, please stop using the truck and press the emergency stop button (2). Immediately inform your service representative and / or contact customer service.

IN CASE OF EMERGENCY

In case of an emergency, press the emergency stop switch (2). All electrical functions are stopped. Keep a safety distance.

CHARGING AND REPLACING THE BATTERY

- Only qualified personnel should repair or recharge the battery. Please observe the operating instructions.
- These batteries are maintenance-free and must not be refilled with water.
- Battery recycling must comply with state laws and regulations. Please comply with these regulations.
- Improper handling, e.g. use near fire or gas, may cause an explosion! For this reason, storage of flammable materials or flammable liquids in the charging area of the battery is prohibited. Smoking is prohibited and the area must be well ventilated.
- Before charging the battery, place the lift truck in a safe position (parking position).
- Perform maintenance work before connecting the wiring harness correctly and trouble-free to other parts of the vehicle.
- The pallet truck is equipped with a lithium-ion battery; battery voltage 24 V; This battery belongs to the environmental protection battery, without chemical mercury and cadmium.
- Only use of the sealed lead battery is permitted.
- The battery has an operating temperature between 0 °C and 40 °C.
- The battery must be charged and discharged at least once a month.
- The battery must not be short-circuited, as this can permanently damage the battery.
- Do not incinerate or destroy batteries as this may result in the release or explosion of toxins or gases.
- If the battery has warmed up after use, please let it cool down in a ventilated environment before charging.

CHARGING THE BATTERY

The lithium-ion battery may only be charged with the supplied power supply unit. After approximately 3 hours (continuous load) the battery of the lift truck must be charged. Only charge the battery in well ventilated places. When charging is complete, disconnect the plug from the mains and the battery. If the battery is completely discharged, the charging process takes about 2.5 hours.

REGULAR INSPECTIONS

Only qualified and trained personnel may service the lift truck. Before maintenance, please remove any goods from the fork and bring it to the lowest position (parking position of the forks). Use only special cranes / hoists to lift the lift truck. Make sure to position an additional safety device (such as a jack, wedge or wood) under the lift truck. Special care must be taken when servicing the handlebars. The gas spring is under pressure. Carelessness during maintenance is a source of accidents.

Please use only approved original spare parts. Spare parts, including all oils, must be collected and processed in accordance with local environmental and health laws.

Please note that leakage of the hydraulic oil can lead to failure of the machine and possibly to an accident. Have only a technician trained for work on the pressure control valve carry out the work. If you need to replace a wheel, please follow the instructions above. The impeller must be round and must not show any abnormal wear. Regularly service the lift truck using the checklist provided in the user manual.

Maintenance technician: Maintenance and servicing should only be carried out by a maintenance technician trained by the manufacturer. After the service and maintenance work has been carried out, this must be recorded and signed in the service protocol.

Cleaning procedure: Do not use flammable liquids to clean the lift truck. All power to the unit must be turned off before cleaning. (emergency stop switch) Use soft air suction or compressed air, non-conductive and antistatic brushes for cleaning electrical and electronic components.

Wheels: The quality of the wheels has a considerable influence on the stability and handling of the lift truck. Changes to the wheels may only be made after consulting the manufacturer. The wheels must always be replaced in pairs.

Lifting chain and rollers: Chain and rollers wear quickly without good lubrication. Perform periodic lubrication according to the following maintenance table. Shorten the lubrication period under unfavourable operating conditions (such as in dusty environments).

Hydraulic oil line: The oil line must be replaced every 6 years. When changing the hydraulically mounted parts, the oil line should also be changed.

The respective inspection points (plus equipment identification) for the periodic inspections/thorough examinations are to be checked in an integrated manner in the associated inspection report of the lifting equipment, taking into account the mandatory fulfilment of the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER). (Recommendation: FEM4.004)

SAFETY REGULATIONS

Requirement for the operator: All employees who work with the lift truck must receive instruction on the device in advance. The employees must be familiar with the contents of the operating instructions. Untrained personnel is not allowed to operate the lift truck.

Error messages: If the vehicle has malfunctions or defects, this must be reported to the manufacturer. If there is any wear on the wheels or brakes, the lift truck must not be used until it has been completely repaired.

Safe operation and environmental protection: Inspection and maintenance must be performed in accordance with the time intervals on the maintenance list. Vehicle parts, especially safety devices, must not be changed without approval. All original spare parts have been checked by the quality assurance department. To ensure safety, only original spare parts from the manufacturer may be used. Old wear parts, oils and fuels must be disposed of in accordance with the environmental regulations of the respective country.

Safety regulations and warning signs: Safety regulations, warning signs and warning notices described in these operating instructions and on the lift truck must be observed.

Participation in road traffic: The lift truck may not be used in public places, except in special areas. Use in the elevator and manoeuvring on the loading area: if the elevator or a loading area has sufficient loading capacity, it is allowed to use the lift truck on these areas. If the elevator is also to be used by persons, it must be ensured that the elevator truck is parked in the elevator before persons enter the elevator.

Travel speed: The travel speed must be adapted to local conditions. The speed must be slowed down when turning, as well as when passing through narrow passages and doors. The operator must maintain control of the lift truck at all times.

Use on loading ramps: When driving on a ramp, make sure that the ramp is clean and non-slip. The goods must always point upwards on the ramp, thus preventing the goods from sliding down. It is not allowed to stop or turn around on a ramp.

CHECKLIST FOR MAINTENANCE / INSPECTION

		Monthly intervals			
		1	3	6	12
Brake					
1.1	Check the brake performance; if necessary, replace the brake discs or adjust the brake clearance			•	
Electrics					
2.1	Check display, display for function	•			
2.2	Check the alarm system and safety equipment		•		
2.3	Check if wires are damaged			•	
2.4	Check electrical connections and terminals		•		
2.5	Check the electric motor for noises		•		
Battery					
3.1	Check the battery voltage		•		
3.2	Visual inspection of the battery charging plugs			•	
3.3	Check for corrosion or damage		•		
3.4	Check if the battery case is damaged		•		
Mechanics					
4.1	Check the gearbox for abnormal noises			•	
4.2	Check the chassis for deformation and cracks		•		
4.3	Lubricating the steering		•		
4.4	Check that all screws are tightened securely		•		
4.5	Check the chassis and chain for corrosion, deformation or damage, replace the chain if necessary	•			
4.6	Check the wheels / rollers for deformation and/or damage, replace faulty wheels if necessary			•	
Hydraulics					
5.1	Check functionality		•		
5.2	Check the hoses, tubes and the interface for attachment, sealing and presence		•		
5.3	Testing of pistons and cylinders			•	
5.4	Checking the chain			•	
5.5	Check oil level			•	
5.6	Refilling the hydraulic oil				•
5.7	Check and clean hydraulic oil filter. Replace if necessary				•
5.8	Change hydraulic oil monthly (hydraulic oil HLP46)	•			
Battery charger					
6.1	Check whether the power cable or the power supply unit is damaged		•		
Functions					
7.1	Test of the signal tone	•			
7.2	Checking the Electromagnetic Brake with air gap	•			
7.3	Testing the emergency brake function	•			
7.4	Test of reverse braking and regenerative braking function	•			
7.5	Testing the large red emergency stop switch on the drawbar (belly switch)	•			
7.6	Check the steering function	•			
7.7	Check the lifting and lowering function	•			
7.8	Check the functions of the drawbar	•			
7.9	Check the key switch for damage	•			
Miscellaneous					
8.1	Check that all labels are legible and complete	•			
8.2	Perform a test run	•			

TROUBLESHOOTING

Problem	Reason	Solution
After pressing the button, the operating display does not light up	Power interruption due to loose contacts	Check the battery terminals and tighten the screws on all connections. The switch contacts should be free
The piston rod of the lifting oil cylinder does not extend at a constant speed	There is air in the cylinder	Start the process 2 - 3 times to get the air out of the cylinder
The lifting oil cylinder cannot be lifted	The hydraulic oil in the system is not sufficient	Top up hydraulic oil
	Battery charge is too low	Charge the battery
	Oil leaks from the machine	Inject, repair and replace the seals if necessary and tighten the screws on the oil line connections
	The machine was overloaded	Take goods off the fork to reduce the load
The machine produces an abnormal noise during up and down travel	Too little or dirty hydraulic oil in the system	Check the quality of the oil filled in and top up with clean oil
	The motor or housing is loose and causes friction	Tighten the loose screws
	The environment is very humid	Reduce the air humidity

SERVICE & CONTACT

Contact our product experts and find help and solutions for your product. Here you will find all contact information listed by country and language: www.topregal.co.uk/en/service

Responsible for the content:
 TOPREGAL GmbH
 Industriestrasse 3
 70794 Filderstadt
 GERMANY
www.topregal.com

UKCA Declaration of Conformity

The manufacturer

**TOPREGAL UK Ltd.
Carlton Drive Crumlin
Gwent NP11 4EA**

hereby declares that the following product

Product name:

**SolidHub Electric
pallet truck**

Type:

**HWE15-L, HWE15, HWE18,
HWE20**

Serial number:

HWE20-1000000000 - HWE20-9999999999

that the equipment is in conformity with the following relevant UK legislations and applied standards:

2006/42/EC Machinery Directive

EN ISO 12100

EN ISO 3691

EN 1175-1+A1

EN 16307-1+A1

Name and address of the person who is authorized, compile the technical documentation:

TOPREGAL UK Ltd.
Carlton Drive Crumlin
Gwent NP11 4EA



Place: Crumlin UK
Date: 21.01.2022

Juergen Effner
Chief Executive Officer

SolidHub