

# ELECTRIC PALLET TRUCK

**JEFELPT15 JEFELPT20  
JEFELPT20RC**



## SAVE THESE INSTRUCTIONS

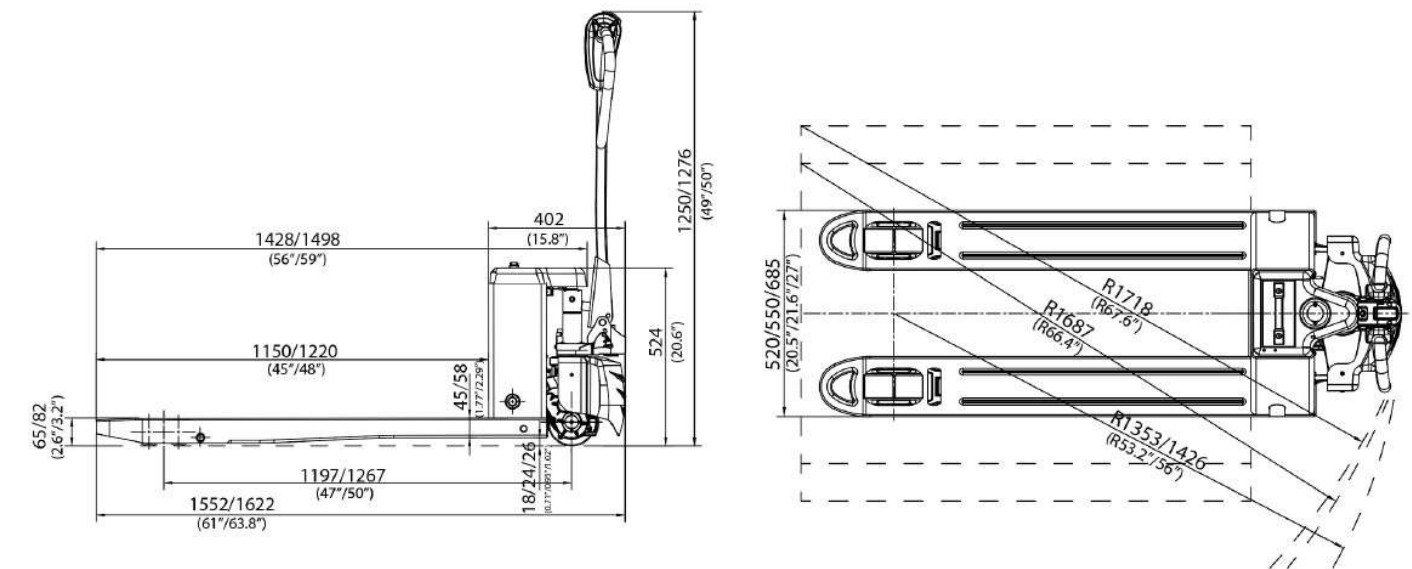
Please read and comply with these original instructions prior to the initial operation of your appliance and store them for later use or subsequent owners. Apart from the notes contained herein the general safety provisions and rules for the prevention of accidents of the legislator must be observed.

Warnings and notes that are attached on the appliance provide important notes for the safe operation.

**Specification**

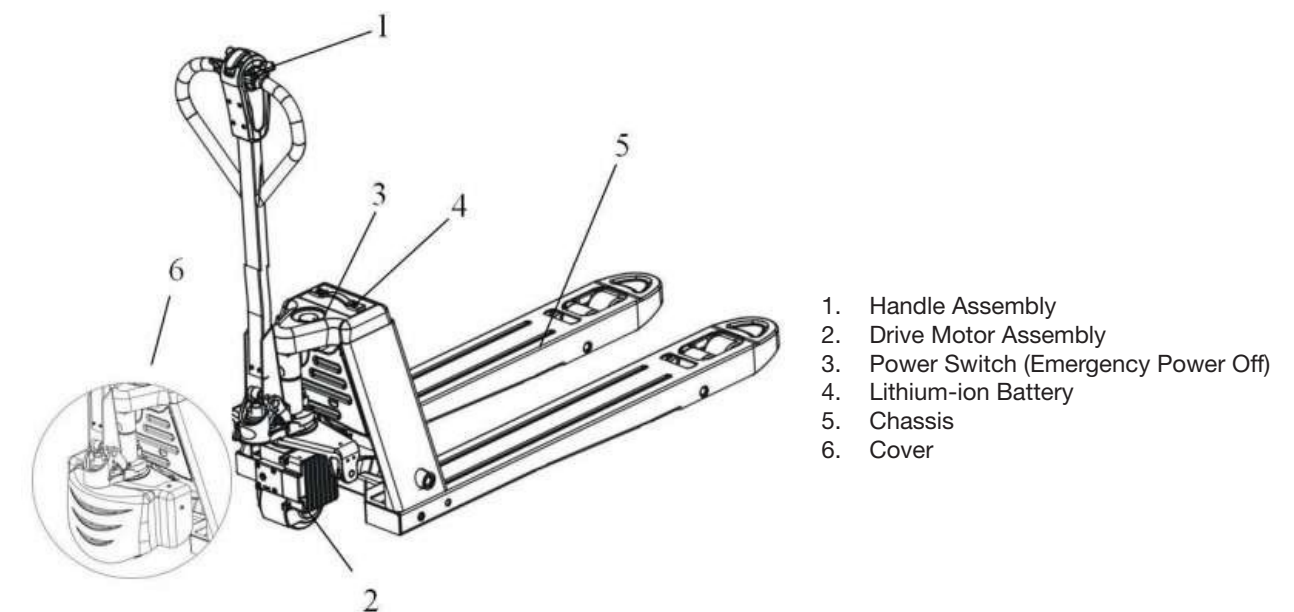
Model		JEFELPT15	JEFELPT20/RC	
<b>Characteristics</b>	Capacity kg (lbs)	1500kg (3300lb)	2000kg (4400lb)	
	Load Centre mm (in)	600mm (23.6")	600mm (23.6")	
	Overall fork width mm (in)	520/550/685 (20.5/21.6/27 )	520/550/685 (20.5/21.6/27 )	
	Fork Length mm (in)	1150/1220 (45/48 )	1150/1220 (45/48 )	
	Overall length mm (in)	1552/1622 (61/63.8)	1552/1622 (61/63.8)	
	Overall height of fork mm (in)	82±2 (3.2±0.8)	82±2 (3.2±0.8)	
	Max height of fork mm (in)	197 (7.8)	197 (7.8)	
	Overall height (with tiller) mm (in)	1276 (50)	1276 (50)	
	Rear Body Width mm (in)	520/550/685 (20.5/21.6/27 )	520/550/685 (20.5/21.6/27 )	
	Minimum turning radius mm (in)	1353/1426 (53.2/56)	1353/1426 (53.2/56)	
	<b>Performance</b>	Max traveling speed:km/h (mi) Laden	4 (2.5)	4 (2.5)
		Max traveling speed:km/h (mi) Unladen	5 (3.1)	5 (3.1)
		Gradeability: % Laden	6	6
		Gradeability: % Unladen	20	20
<b>Motor</b>	Traveling (kw)	DC 0.75 Brushless	DC 1.0 Brushless	
	Lifting (kw)	DC 0.8	DC 0.8	
<b>Battery</b>	Voltage (v)	48	48	
	Capacity/Type (Ah)	10Ah/15Ah Lithium	10Ah/15Ah Lithium	
<b>Brake Type</b>	Travel Brake	Regenerate	Regenerate	
	Brake	Electromagnetic	Electromagnetic	

**Overall Displacement Diagram**



**Components and Positioning**

The figure below indicate the terminology used to describe the main components of the truck and their location.



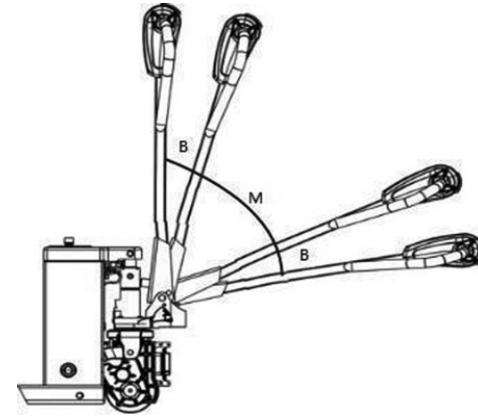
## Instructions.

### Steering Tiller

The steering tiller in position "M" enables the truck to be driven. If travel, lift, or lower is commanded with the steering tiller in position "B" the truck will not respond and the display will read **SRO ERR**.

Push the throttle in the direction of desire travel to move the truck. The more the trottle in the direction of desired travel to move the truck. The more the throttle is pressed, the faster the truck will move.

Operate the driving tiller to steer.



### Regenerative Braking

- Release the throttle
- It causes a deceleration due to braking of electric braking of the drive motor.

### WARNING!

When the throttle is released, it should return to neutral position immediately. If it does not, have the truck repaired immediately to reduce the risk of personal injury or property damage.

### Hard Braking

To brake the truck more quickly, do one of the following,

- Release the steering tiller.
- Move the steering tiller to position "B".
- Pull the steering tiller down to the lowest position.

It causes a deceleration due to braking of the electric braking of the drive motor.

### WARNING!

When the steering tiller is in position "B", the truck should stop moving until the throttle is pressed again. If the truck moves with the handle in position "B", have the truck repaired immediately to reduce the risk of personal injury or property damage.

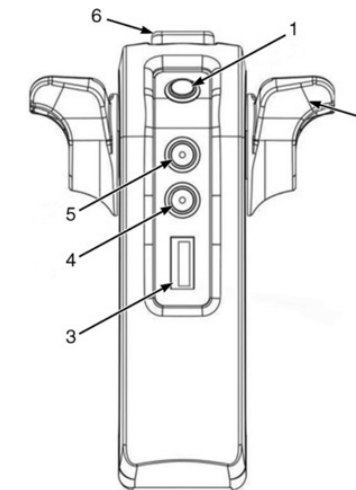
### Plug Braking

To brake quickly with more control, use controlled braking or "plugging".

- Release the throttle.
- Move the throttle in the direction opposite the current direction of travel.
- When the truck just begins to move in the opposite direction, release the throttle.

Note: Use hard braking or plugging when an unexpected situation arises and it is necessary to stop quickly.

## Instructions Cont.



1. Horn Button
2. Throttle
3. Battery Discharge Indicator (BDI), Hour meter, Fault Code display
4. Lower Button
5. Lift Button
6. Belly Switch - Reversing Button.

### Horn Button (POS.1)

Press the button to operate the horn.

### Throttle (POS.2)

The operation of the throttle permits traveling both in the operation side direction and in the fork side direction.

Turning the throttle towards the operation, the truck moves in the operation direction.

Turning the throttle toward the forks, the truck moves in the fork direction.

The truck speed increases proportionally according to the angle of rotation of the throttles.

Reversing the throttle causes a progressive deceleration of the truck to a stop due to the traction engine electrical braking (reverse braking or "Plugging").

On releasing the butterfly controls, they return to their neutral position, causing a progressive deceleration, due to the traction engine electrical braking, with subsequent engaging of the electromechanical brake (release brake)

### Lower Button (Pos.4)

Press the button to lower the forks.

### Lift Button (Pos.5)

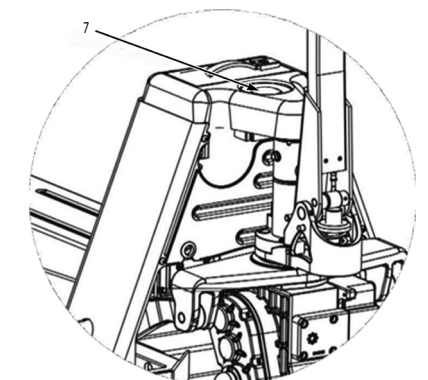
Press the button to lift the forks.

### Belly Switch - Reversing Button (Pos.6)

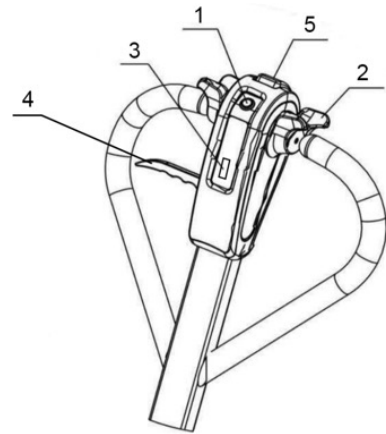
It is a device located at the tiller end to reverse the direction of travel when it is hit. It works during the truck travel on the operator direction. If Bumped, the truck reverses and stops immediately. To reset the truck functions it is necessary to turn the truck off and then on again.

### Power Switch (Emergency stop button) (Pos.7)

By pressing it, the battery supply is disconnected and all the electric controls are disable. **(Button down: Electrical system disconnected.)**



Instructions cont.



1. Horn Button
2. Throttle
3. Battery Discharge Indicator (BDI), Hour meter, Fault Code display
4. Relief Handgrip
5. Belly Switch - Reversing button.

**Horn Button (Pos.1)**

See previous page description.

**Throttle (Pos.2)**

See previous page description.

**Battery Discharge Indicator (BDI) and Error Code Indicator (Pos.3)**

The display screen will show remaining charge left in the battery and also will list any active fault codes.

**Relief Handgrip (Pos.4)**

Press down on the handgrip and press down on the handle to lift the pallet truck.  
Lift up the handgrip and the forks will lower down.  
The handgrip is in the middle and the pallet truck is in the driving position.

**Belly Switch - Reversing Button. (Pos.5)**

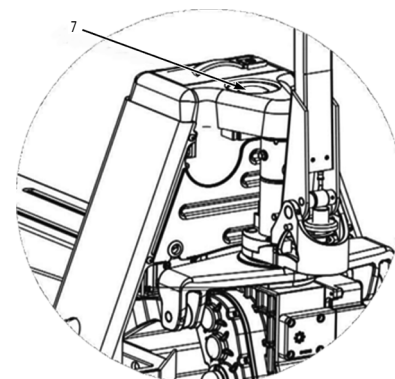
It is a device located at the tiller end to reverse the direction of travel when it is hit. It works during the truck travel on the operator direction. If bumped, the truck reverses and stops immediately. To reset the trucks functions it is necessary to turn the truck off and on again.

**Power Switch (Emergency Stop button (Pos.6)**

By pressing it, the battery supply is disconnected and all the electric controls are disabled (Button Down: electrical system disconnected.)

To reset, pull the button and move the tiller to the vertical position  
(Button Up: Electrical system connected)

By Pressing it, It also acts as an emergency brake the electromagnetic brake engages)



Instructions cont.

Smart Functions

**Up-right Drive**

Up-right drive allows the truck to be driven with the tiller in the fully vertical position. Use up-right drive to manoeuvre the truck in tight quarters.

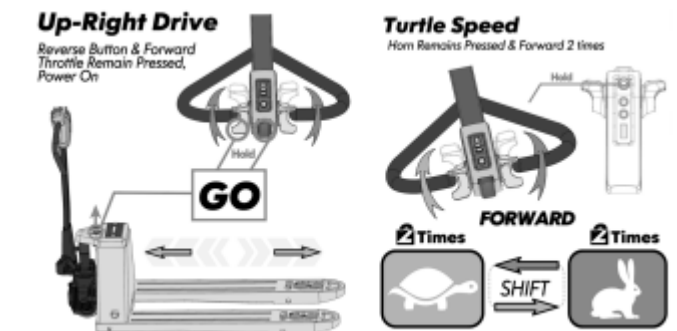
To activate up-right drive on trucks turn the truck off , put the tiller into the fully vertical position, then press and hold the Belly switch - reversing button and push the throttle towards the fork and hold. When the truck is powered on, it will start in up-right drive mode.

To activate up-right drive on truck with intelligence control handheld intelligent control. See Smart Function.

When up-right drive mode is active , the top speed is 2km/h (1.5 mph)

**Turtle Speed**

Turtle speed allows the truck to move at a reduced speed.  
Normal top speed for the pallet truck is 5km/h (3.1mph).  
When turtle speed is active, the top speed is 2km/h (1.5mph)  
To activate or deactivate turtle speed, hold the horn button, then press (but do not hold) the throttle towards the fork two times.



Repair Procedures

**Brake Release Mode (Service Mode)**

**Warning!**

The Break release mode is for service use only. To reduce the risk of personal injury, do not use brake release mode in normal operation.

The pallet truck is filled with an electromagnetic brake. When the truck has no power, the brake is closed and the truck will not move. If the truck has no power but must be moved to a service location, enter brake release mode so that the truck can be pulled manually.

1. Make sure the power is off and the power button is down.
2. Press and hold the Horn button, Then lift the power button to provide power to the truck,  
The Display will read no brake and the truck will beep to indicate the brake release mode is active.
3. Manually pull the truck to the service location.



⚠ **Engineering Mode (Brake Release)**  
Horn remains Pressed & Power on.

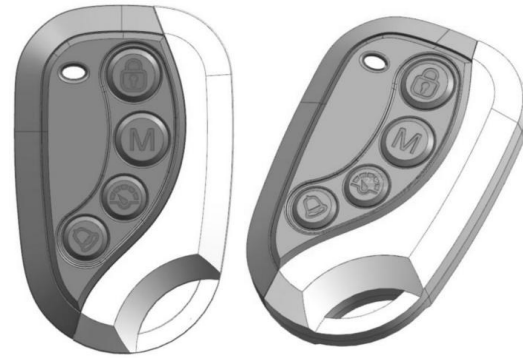


## Handheld Intelligent Control (JEFELPT20RC)

The optional intelligent control allows operation of some features of the truck using the handheld remote control. The remote control uses radio frequency (RF) technology, and is powered by an L828 (12V/27A) non-rechargeable alkaline battery. Each remote is tied to the specific truck.

To use the intelligent control, it must be within 2m (6.5ft). Press the function button on the control to use the features in the table.

If the LED on the remote control is dim or off, or if the buttons do not work, replace the battery in the remote control. If the button still does not work, the remote control may be damaged and should be replaced.



ICON	FUNCTION	DESCRIPTION
	Lock or Unlock	To lock the truck, press the Lock button once. The truck will beep once to indicate it is locked. To unlock the truck, turn truck power ON and press the Lock button twice. The truck will beep twice and the display will show the Unlock icon to indicate the truck is ready for operation.
	Up-right Drive	Press the Up-right Drive button to activate Up-right Drive mode. The truck will beep continuously and travel at a reduced speed with the handle in the upright position. Press the Up-right Drive button again to deactivate Up-right Drive mode. The truck will beep once and will now travel at normal speeds with the handle in the travel position.
	Travel Speed	Press the Travel Speed button to cycle through speed presets. <ul style="list-style-type: none"> <li>• One press - Level 1 - 0.5 km/h (0.3 mph)</li> <li>• Two presses - Level 2 - 1.5 km/h (0.9 mph)</li> <li>• Three presses - Level 3 - 2.5 km/h (1.5 mph)</li> <li>• Four presses - Level 4 - 3.5 km/h (2.2 mph)</li> <li>• Five presses - Level 5 - Full speed</li> </ul> The display indicates the selected speed. Travel Speed is limited until this setting is changed.
	Horn	Press and hold the Horn button to make the truck beep continuously. Release the Horn button to stop the truck from beeping.

### WARNING!

- Users have to check and do maintenance on regular basis.
- Rules of parking
  - No parking on the ramp.
  - The forks must be lowered completely.
  - Press down the emergency stop button.
- Before using the pallet truck
  - Users have to stand on the operational position.
  - Put handle in the driving position
  - Test lifting, steering, speed, operation, alarm and brake, to ensure all functions are normal.
- Ensure the availability of firefighting facility in the workplace. Do not use flare to check battery and hydraulic system.
- Check braking, driving, alarm and safety system on regular basis, maintain them in good working condition.
- Keep the nameplate and warning stickers clean and readable.
- Check and maintain lifting system regularly.
- Check and maintain hydraulic system regularly. Ensure no oil leak of cylinder, hydraulic valve and other hydraulic system parts.
- Park the electric pallet truck in clean areas, to ensure the lowest possibility of fire.
- Unauthorized modification is forbidden. Modification with manufacturer's consent should come with updated nameplate and warning stickers.

## Operating Instructions

**Note: When using the truck there are some operations that, in spite of all the safety precautions, may cause it to overturn unless performed with care.**

The main cause of tipping over,

- Turning too fast.
- Driving and turning on a slope.
- Driving with raised loaded.
- Driving with a side - positioned load.
- Driving on a slope with a load facing downwards.
- Loads out of size.
- Driving with swinging loads.
- When transporting liquids, the centre of gravity inside one of the containers loaded may change; this may cause the truck to tip up as a result of the force of inertia, for example when switching on, braking or on bends.
- Ramps or steps.
- Loading operation on a lorry, for example if the lorry engine is switched on while the forks are still raised above the loading area, if the ramp is not in the right position or if a truck wheel is beyond the edge/limit.
- Driving over rough ground.

### DANGER!

**If the truck should tip over, try and keep body parts as far as possible from the point of impact with the ground.**

### Basic Principal.

Because of the specific skills required, it is advisable that each individual operator follows a special training course, even if they have already obtained a license entitling them to drive lift trucks in general.

## Work Environment

The truck may only be used in suitable areas and normal environmental conditions. Do not operate the industrial truck outdoors in the event of adverse weather conditions or in hazardous areas.

Acceptable environmental conditions.

- Ambient temperature 0-45°C, prohibit cold storage use.
- Hard ground, flat, no sharp surface objects.
- Prohibit to use in heavy dusty environment.
- Prohibit to cross water, oil and muddy ground.
- Prohibit to caught in the rain, 10 minutes use in light rain.
- Prohibit to use in flammable, explosive, acid-base or other corrosive environments.

The pallet truck is a flat ground transport equipment as mentioned in this instruction. It is used for lifting and transporting goods. Users have to operate and maintain according to instruction rules. Using the product for applications not included in the instruction might cause damage to users, equipment or other property. Overload or unbalanced loading must be avoided. Loading capacity should strictly follow instructions on the nameplate or capacity diagram.

### Improper Lifting

The truck has been designed and constructed for the handling of material. The fork is not suited to lift or carry persons on the forks.

### Lifts

Never enter lifts without first having obtained permission from the person in charge.

Note: Check the load bearing capacity of the lift (it must be able to sustain the weight of the truck + operator + load if present)

- Approach the lift slowly.
- Only activate the lift after the truck is correctly centred and perfectly level, so that the lift is well balanced.
- Make sure that the forks or other parts of the truck do not protrude beyond the lift perimeter.

## LOADING INSTRUCTIONS AND PRECAUTIONS

Avoid loading material that may fall. You should bear in mind that the truck, even when it is equipped with a load backrest, offers a reasonable degree of protection for the operator against objects falling, but it cannot protect against all possible risks.

Only move stable loads with weights that can be supported by the truck (see summary identification data plate on the truck) Pick up the load so that its weight is well distributed and balanced on the fork.

Even if a load no greater than that indicated on the load capacity data plate affixed on the truck weights entirely on the tip of the fork, this could constitute a tipping hazard, The load must not excessively overreached the tip of the fork.

### Picking up the load from the ground

- Position the truck in line with the load to be lifted.
- Move slowly when moving the fork into position under the load and make sure that the load is correctly centred on the forks.
- After fitting the forks in the pallet, slightly lift the load just enough to move it.

### Putting down the load on the ground

- Put the load on the ground.
- Lower the forks
- Move slowly to remove the forks from the pallet.

**NOTE:** During all the operations of picking up/putting down the load, use the machine at the lowest speed allowed by the operation. Always make sure that the space in the aisle is sufficient, during operations of picking up / putting down goods, to prevent the operator from coming into contact with other persons working in the same aisle.

### Load Stability

#### Warning!

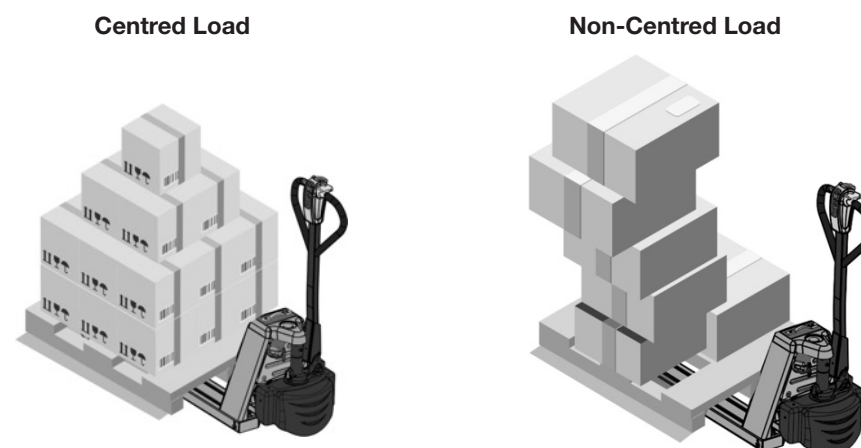
- Only work with stable loads.
- Never load unstable elements.
- Do not handle a load, composed of a number of separate parts, that may be at risk of falling.
- It is not permitted to carry swing loads.

### Positioning the load

Make sure that the weight of the load is equally distributed and balanced on the forks, so that the load will not overturn when going round a bend.

#### Warning!

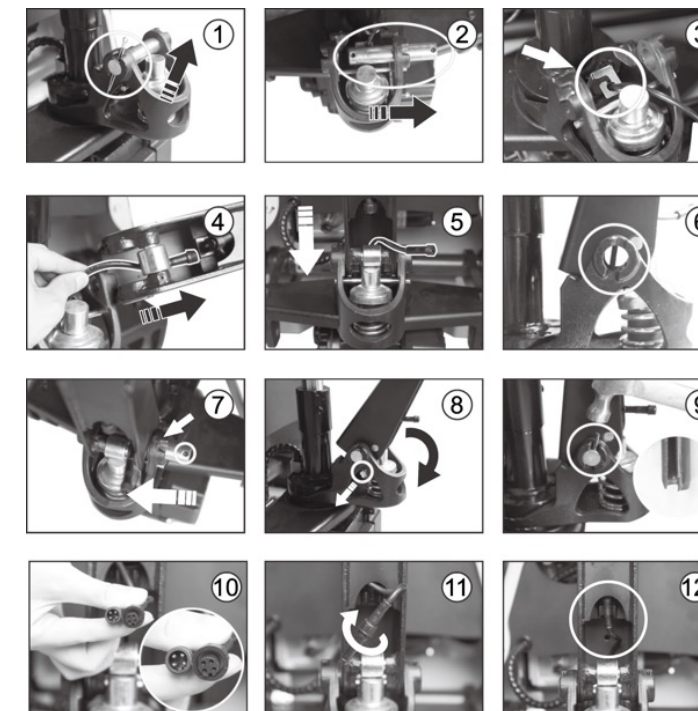
A load that is placed in an unbalanced position on the forks will increase the risk of overturning.



## First Time Set Up

### Install the Tiller Handle.

1. Handle numbers correspond to chassis numbers.
2. Disconnect the battery.
3. Remove handle shaft ( item 2 ) from Handle socket.
4. Put the chassis connector through wire supporting plate ( item 5 ) and lock hole.
5. Install handle assembly ( item 1 ) to handle socket. Be careful to avoid damaging the wire harness.
6. Install handle shaft through the handle assembly ad handle socket. Install spring pin ( item 3 ) to left side of handle shaft.
7. Press down on the handle assembly and remove spring holder ( item 4 ).
8. Connect and lock the wire harness from handle assembly to chassis connector.
9. Fix wire harness to wire holder ( item 6 ).
10. Reconnect the battery.



## BATTERY PROTECTION STOPPER INSTALLATION

1. Take out screw ( no.1 ), block ( no.2 ) and washer ( no.3 ) in the manual bag and combine these three items as shown.
2. Align the mounting hole and tighten the screw.



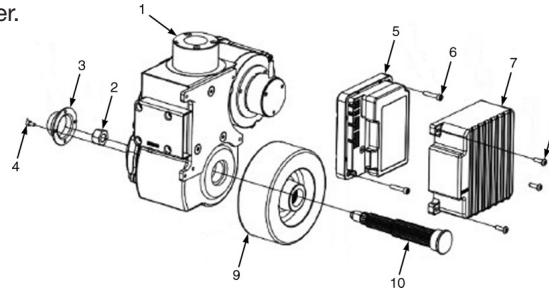
1. Put in the battery, rotate the anti-jumping stopper against battery and tighten the screw.
2. Loosen the screw and rotate the anti-jumping stopper in the opposite direction, and pull out the battery vertically.





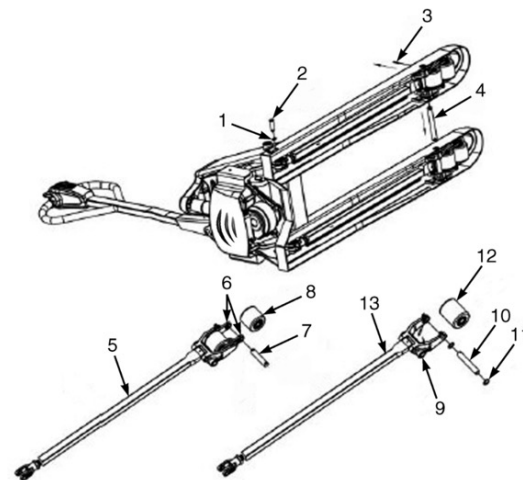
## Replace the drive wheel.

1. Disconnect the battery.
2. Support the truck on blocks so that the drive wheel (no.9) is off the ground.
3. Remove 3 bolts (no.8) from controller cover (no.7) then remove the controller cover.
4. Remove 4 bolts (no.4) from the nut cover (no.3) then remove the nut cover.
5. Remove Nut (no.2)
6. Gently tap the wheel shaft (no.10) and pull it out of the drive wheel.
7. Remove the drive wheel.
8. To install the drive wheel, perform these steps in reverse order.
9. Reconnect the battery.



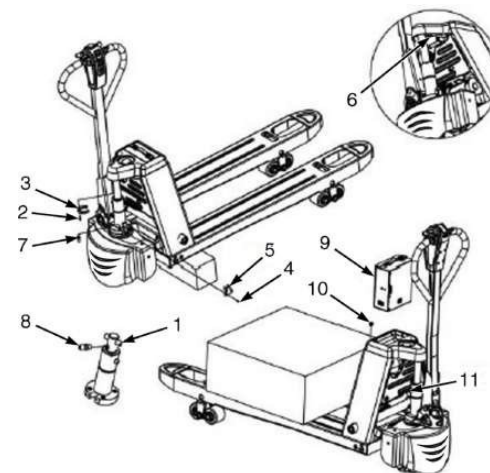
## Replace the Load wheel.

1. Turn off the truck, remove the battery, and turn over the truck. Be careful to avoid damaging the tiller handle.
2. Remove snap ring (no.1) with snap ring pliers, then remove the shaft (no.2)
3. Tap out the spring pin (no.3), then tap out the wheel fork shaft (no.4)
4. Remove the load wheel assembly (no.5) for tandem wheel, (no.13) for single wheel.
5. Tap out the spring pin (no.6 or 9), then remove the wheel shaft (no.7 or 10) and remove the load wheel.
6. Replace the load wheel (no.8 for tandem wheel, no.12 for single wheel). For single wheels, install nylon gasket (no.11)
7. Reinstall wheel shaft and spring pin.
8. Reinstall the load wheel assembly into the frame, then repeat steps 1 to 3 in reverse order to complete installation.



## Replace the Hydraulic Cylinder

1. Disconnect the battery.
2. Lower the forks completely, raise up the truck, and put a 200mm (8in) block underneath the ends of the fork closest to the main frame.
3. Remove screw (no.4) and remove wire clamp (no.5), then remove 4 screws (no.7) with hex wrench.
4. Remove the oil pipe (no.6), remove the piston rod shaft end (no.1) and shaft gland (no.3).
5. Press down the piston rod, allow the cylinder to separate from the frame, and remove the cylinder assembly from the truck.
6. Remove the oil pipe join (no.8) and install on the new cylinder assembly.
7. Place the new cylinder on the cylinder holder and install locking screw (no.7)



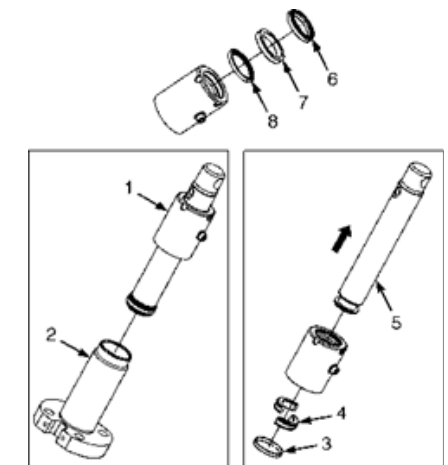
## Replace the Hydraulic Cylinder Cont.

8. Reinstall the pistol shaft, pull up on the piston rod, and connect the shaft gland to the frame.
9. Connect and tighten the oil pipe, then reinstall the wire clamp.
10. Take the truck off the 200mm (8") block, then remove the battery.
11. Open the screw on the tank, then fill the tank with LHV32 hydraulic oil, close the screw on the tank, then install and connect the battery.
12. Loosen screw (no.11), then use a truck to lift a pallet with a load of at least 500kg (1102lbs). Lift and lower the pallet 2 or 3 times to bleed air from the cylinder, then tighten the screw.
13. Reconnect the battery.

**CAUTION!** To avoid damage to the seal ring and oil leaks, always bleed the air from the cylinder after replacement.

## Replace the Seal Kit

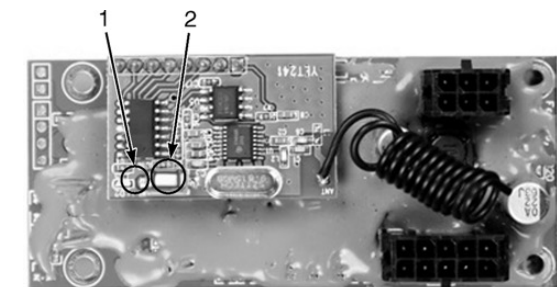
1. Disconnect the battery.
2. Use the hook head wrench to unscrew the upper part of the cylinder (no.1), and remove the upper part from the rest of the cylinder (no.2)
3. Remove guide ring (no.3) and guide sleeve (no.4).
4. Pull out pistol (no.4)
5. Remove dust ring (no.6), seal ring (no.7) and step seal (no.8). Replace all with new parts.
6. Reinstall piston into the top of the upper cylinder. Install in the direction of the arrow in the image, and be careful not to damage the seals.
7. Reinstall guide sleeve and guide ring. Reinstall upper cylinder into the rest of the cylinder.
8. Reconnect the battery.



## Replace the Handheld Intelligent Control

If the handheld intelligent control must be replaced for any reason, the current handheld intelligent control must be unpaired from the truck, and the new handheld intelligent control must be paired.

1. Turn on the truck.
2. Remove the cover to allow access to the display circuit board.
3. Press and hold the white button (no.2) on the circuit board until the red LED (no.1) turns off.



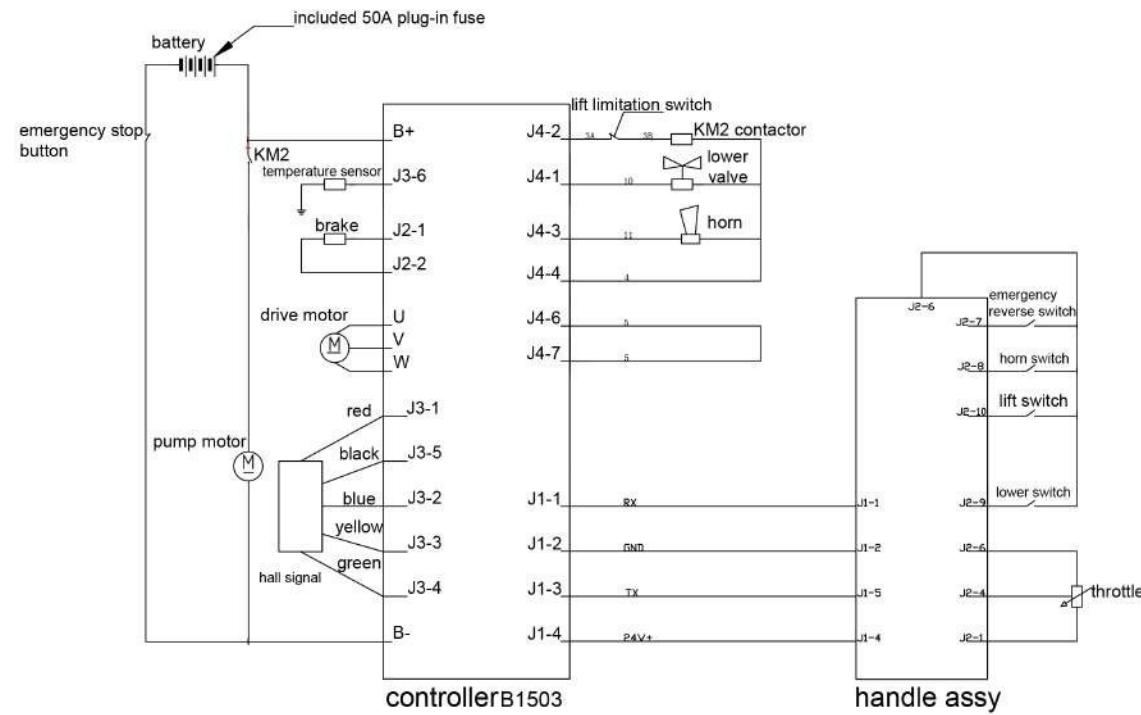
The current handheld intelligent control is unpaired from the truck and will not operate the truck anymore.

## Pair a new handheld intelligent control.

1. Ensure that the original handheld intelligent control is unpaired from the truck.
2. Press the white button on the display circuit board (no.2) once. The LED (no.1) will blink red once)
3. Quickly press any key on the handheld intelligent control.

The LED (no.1) will flash red 4 times to indicate that the new handheld intelligent control is paired to the truck.

## Wiring Diagram



## Hydraulic Schematic Components

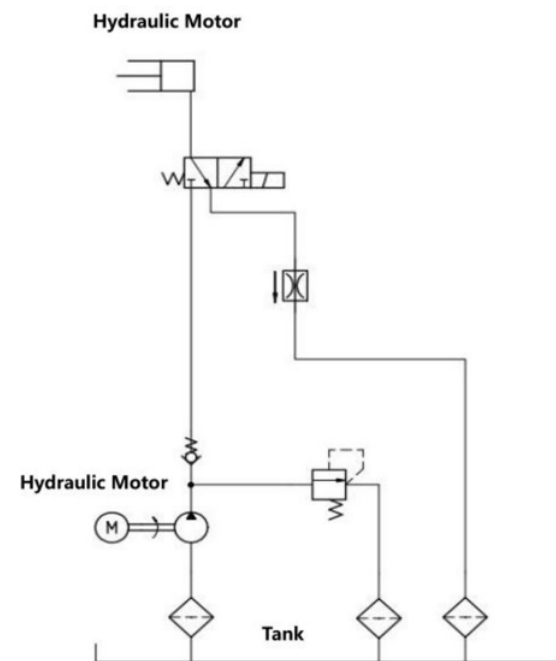
Item	Description	Item	Description
1	Tank	5	One-way valve
2	Oil filter	6	Solenoid valve
3	DC motor	7	Overflow valve
4	Gear pump	8	Built-in balancing valve

## Troubleshooting

### Observed Symptom Troubleshooting

Observed failure	Possible cause	Solution
No power	Loose terminal or bad switch connection causes interrupted current	Check battery and wire harness terminals, tighten screw connections, and keep switch contacts clear
Lift speed not uniform	Air in the hydraulic cylinder	Bleed air from cylinder as described in cylinder replacement procedure
No lift	Hydraulic oil is low	Fill with hydraulic oil L-HV32
	Low battery	Recharge battery
	Oil leaking	Inspect and repair hydraulic system, replace seal kit, or tighten oil pile connection screws
	Overload	Reduce the load weight
	Lift limit switch failure	Repair the limit switch
Abnormal noise during lifting	Hydraulic assembly is loose	Tighten the retaining screw
	Hydraulic motor or gear pump failure	Inspect hydraulic motor and gear pump

## Hydraulic Diagram



### Fault Code Troubleshooting.

When the controller detects a failure, a fault code is displayed on the display in the format **EER+nn**, where **nn** is the fault code number from the table.

Fault code	Description	Possible cause	Solution
SRO	Operation sequence wrong	Lift, lower, or travel commanded before handle is in the operation position	Turn truck power off and then on, and be sure to pull the handle into operating position before commanding lift, lower, or travel
11	Parameters incorrectly set	Parameters setting is incorrect	Adjust the parameters or replace the controller
12	Overcurrent	Motor short or controller fault or Hall signal interference	Replace motor or controller
14	M+ current zero bit detection error	Controller failure	Replace controller
15	- current zero bit detection error	Controller failure	Replace controller
16	Emergency reverse button has signal when turning on power	Emergency reverse button stuck or LCD monitor fault	Check or replace the belly switch



## Troubleshooting Cont.

### Fault Code Troubleshooting Cont.

Fault code	Description	Possible cause	Solution
18	Motor Hall fault	Motor Hall fault, connector fault or controller fault	Check the motor wiring, replace motor, or replace controller
19	Temperature sensor fault	Temperature sensor failure or open in sensor wiring	Check the motor wiring or replace the motor
21	Potentiometer fault	Potentiometer failure or fault in potentiometer wiring	Check the potentiometer wiring or replace the potentiometer
22	Overheat current limit	Controller overheated and within the current limit working state (derate)	Wait 15-25 minutes for the controller to cool before operating
23	Overheat protection	Controller overheated and shut down	Wait 15-25 minutes for the controller to cool before operating
25	Motor overheat limit	Motor temperature too high, output limited (derate)	Wait 15-25 minutes for the controller to cool before operating
26	Motor stalling	Motor stall protection active	Replace the motor
27	Brake fault	Brake failure, or open on brake wiring	Check and repair the brake wiring or replace the brake
29	Motor open	Open on motor cable or motor fault	Check and repair the motor cabling or replace the brake
31	Battery voltage low current limit	Low battery voltage and within the current limit working state (derate)	Charge or replace the battery
32	Low battery voltage protection	Low battery voltage and shut down	Charge or replace the battery
33	Over high battery voltage	Battery voltage too high	Wait 15-35 minutes for voltage to level before operating
35	Contactor error	Controller fault	Replace controller
38	Communication error	Display wiring fault or display fault	Check and repair display wiring, replace tiller handle harness, replace the display, or replace the controller
39	Version error	Controller version is incorrect	Replace controller

## Lithium-ion Battery user guide.

### Warning!

Please read carefully and follow these terms and conditions for installing and using the battery. Improper installation or use may cause excessive heat and other hazardous conditions. Failure to follow these instructions may pose risk to life or damage to property.

- Please read the battery warning label.
- Do not expose the battery to fire or heat.
- Do not use metal to connect the battery anode and cathode directly to short-circuit the battery.
- Do not disassemble the battery or change the battery structure.
- Do not immerse the battery in water. Keep it in a cool, dry environment when not in use.
- Do not turn battery upside down.
- Do not transport or store batteries with metal objects such as hair pins, coins or tools.
- Do not strike, drop, throw, crush, or step on the battery.
- Direct welding on batteries is prohibited.
- Do not pierce the battery with nails or sharp objects.

### Warning!

If battery leaks and electrolyte comes in contact with skin or clothing, rinse immediately with water.

If the battery emits a peculiar smell or heat, become discoloured or deformed, or shows any other abnormality during use, storage, or charging, immediately remove the battery from the device or charger to a safe place and stop using.

Keep batteries out of reach of children. Cover waste batteries with insulation with insulating paper to reduce risk of fire or explosion.

The Battery should be stored at room temperature and charged to about 30-50% of capacity. When storing for a long time, it is recommended to change the battery every 3 months to prevent over-discharge.

Do not use unauthorised equipment when charging and follow the instructions.

Do not use batteries of different manufacturers or models. Do not mix old and new batteries.

### Lithium-ion Battery Specification

<b>Model</b>	48V/10Ah; 48V/15Ah
<b>Capacity</b>	10Ah/15Ah
<b>Voltage</b>	48V
<b>Battery life</b>	800 -1000 cycles

### Lithium-ion Battery user guide.

Work environment			<0°C (<32°F)	0°C (32°F)	45°C (113°F)	55°C (131°F)	75°C (167°F)	High
Work environment temperature	Room temperature	Use condition	Prohibited	Use allowed		Prohibited		
		Discharge capacity		Normal discharge				
		Battery life impact		No impact				
Cold storage	Cold storage	Use condition	Cold storage use is prohibited					
		Discharge capacity						
		Battery life impact						
Battery temperature	N/A	Use condition	Prohibited	Use allowed		Prohibited		
		Discharge capacity		Normal discharge				
		Battery life impact		No impact	Capacity loss			
Charging environment temperature	N/A	Use condition	Prohibited	Charging allowed		Charging prohibited		
		Battery life impact						
Battery parameter setting	Approximately 20°C (Approximately 68°F)	Voltage	39.2V	43.5V	44.5V		54.6V	
		Power display	Black screen	0%	4%		100%	
		Vehicle condition	No output	Vehicle stops	Traction speed derate, charge symbol blinking		Normal	

### Battery Charger

The battery charger should be chosen according to the technical characteristics of the battery.

- Number of elements in the battery.
- Nominal capacity.
- Type: Lithium-ion
- Available power supply: voltage, frequency.
- Time available to perform charging.

1. The battery is prohibited to charge in less than 0 degrees Celsius otherwise it will cause serious battery recession, or even a security incident.
2. The battery is prohibited to charge at low temperatures, but can use in not less than -20 degrees Celsius environment. But the capacity will be inadequate, this is a normal phenomenon.

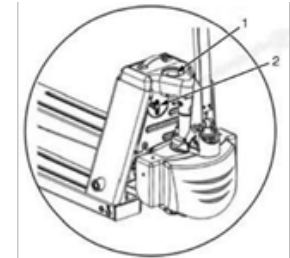
**Note:** Although the battery can be discharged at very low temperatures, but the process of taking battery out is easy to produce condensate water droplets, which will break the battery internal electronic devices and cause unpredictable dangers. If taken from the cold environment, battery needs to wait at least 4 hours to be charged.

### Battery Charger Cont.

3. The battery protection class is IP20, when installed in the machine, it is IP50. Please do not wash the battery directly with water.

It is strictly prohibited to use non-original chargers to charge the truck battery. It is strictly forbidden to use the pallet truck charger to charge other batteries.

- Take the truck to a recharge area.
- Turn off the truck, then press down the emergency power off (no.1)
- Disconnect the battery connector (no.2)
- Connect the charger to the battery connector and begin the charging cycle according to the battery and charger manufacturers instructions.



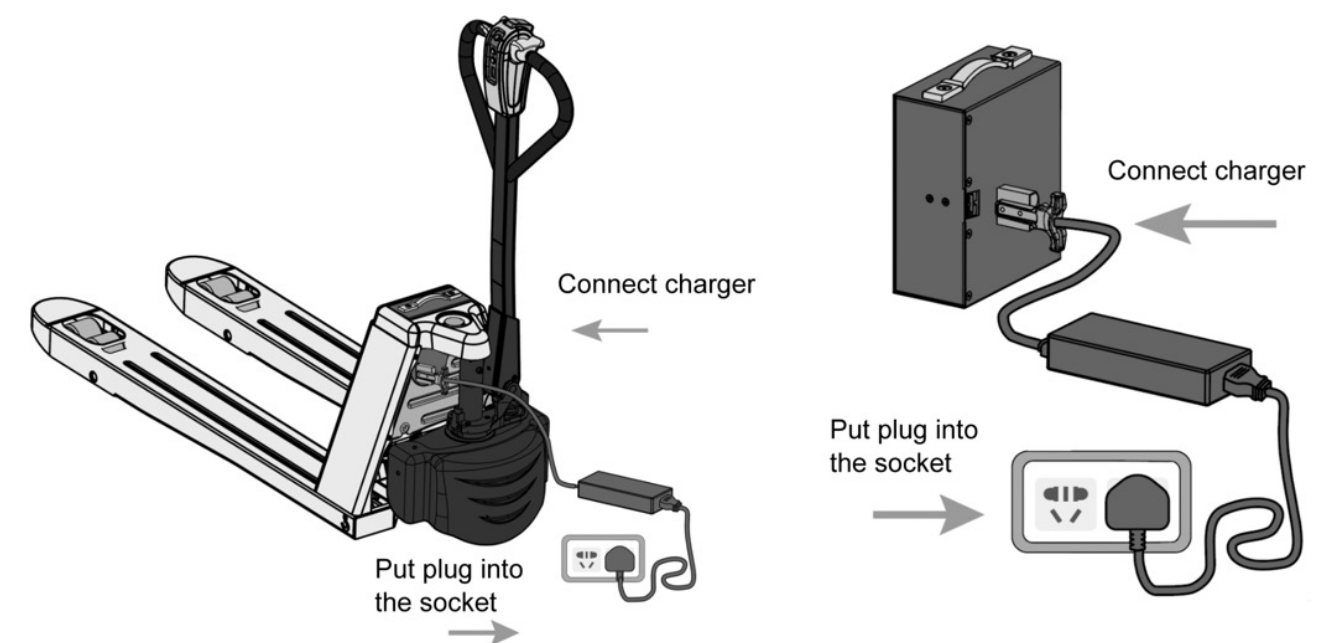
It is good practice to allow a battery to cool down after taking it out of service and before recharging.

### Charging Time

With a 48V/10Ah battery and a 2A external charger, it takes about 5 hours to achieve full charge.

With a 48V/15Ah battery and a 2A external charger, it takes about 3 hours to achieve full charge.

When the truck or a battery is in storage for an extended period, charge the battery to 30-50% state of charge every 3 months.



## EC Declaration of Conformity

We, Jefferson Professional Tools & Equipment, as the authorised European representative of the manufacturer, declare that this equipment conforms to the requirements of the following:



Machinery Directives 2006/42/EC Electromagnetic Compatibility 2014/30/EU  
EN ISO 12100:2010, EN ISO 3691-1:2015/A1:2020, EN 16307-1:2020, EN 1175:2020, EN 13059:2002+A1:2008,  
EN 12053:2001+A1:2008, EN 12895:2015+A1:2019

## UK Declaration of Conformity

We, Jefferson Professional Tools & Equipment, as the authorised UK representative of the manufacturer, declare that this equipment conforms to the requirements of the following:



BS EN 61000-6-2:2005 BS EN 61000-6-4:2007/A1:2011 BS EN 12053:2001+A1:2008 BS EN 13059:2002+A1:2008; BS EN 1175-1:1998+A1:2010 BS EN ISO 12100:2010; BS EN 16307-1:2013+A1:2015; BS EN ISO 3691-1:2015/AC:2016

### Notified Testing Body:

Ente Certificazione Macchine Srl  
Via Ca' Bella, 243 – Loc. Castello di  
Serravalle – 40053 Valsamoggia (BO)  
- ITALY

### Description:

ELECTRIC PALLET TRUCK  
JEFELPT15 JEFELPT20 JEFELPT20RC

### Signed:

Stephen McIntyre

Operations Manager

### Date:

2nd May 2024

### Name and address of manufacturer or authorised representative:

**Jefferson Professional Tools & Equipment**  
24 Lisgorgan Lane,  
Upperlands,  
BT46 5TE

**Tel:** +44 (0)1244 646 048 (UK)  
+353 (0)1473 0300 (ROI)

**Email:** info@jeffersontools.com