

# **Battery Powered Barrow**

**Operator's Manual** 

MODEL NUMBER: TPM350E

**SERIAL NUMBER:** 

Both model number and serial number may be found on the main label. You should record both of them in a safe place for future use.

## **FOR YOUR SAFETY**

READ AND UNDERSTAND THE ENTIRE MANUAL BEFORE
OPERATING MACHINE

GR

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## **INTRODUCTION**

Your new battery powered wheelbarrow will more than satisfy your expectations. It has been manufactured under stringent quality standards to meet superior performance criteria. You will find it easy and safe to operate, and with proper care, it will give you many years of dependable service.



Carefully read through this entire operator's manual before using this unit. Take special care to heed the cautions and warnings.

#### **Specifications**

Item No.		TPM350E
Motor		1000W
Hopper Cap	acity	240 L
Load Capac	ity	500 kg
Forward spe	eed	0~6 km/h
Reverse speed		0~1.5 km/h
Drive Wheels		4.00-8
Steer Whee	ls	5.00-6
Sound power level	Measured	87.63 dB(A) k=2.5 dB(A)
(LwA)	Guaranteed	89 dB(A)
Sound pressure level		67.63 dB(A) k=2.5 dB(A)
Vibrating level on handlebar grips		2.47 m/s <sup>2</sup> k=1.5 m/s <sup>2</sup>
Weight		144 kg

The declared vibration total value and the declared noise emission values have been measured in accordance with a standard test method (EN 62841) and may be used for comparing one tool with another. The declared vibration total value may also be used in a preliminary assessment of exposure.

#### Warning!

The vibration and noise emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used, in particular, what kind of work piece is machined.

It is necessary to identify safety measured to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time)

Try to minimize the impact of vibration and noise. Exemplary measures to reduce vibration exposure include wearing gloves while using the tool, limiting working time, and using accessories in good condition.

#### **RECYCLING AND DISPOSAL**

This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or check with your local authority or local stores for advice of environmental safe recycling.

## **SYMBOLS**

The rating plate on your machine may show symbols. These represent important information about the product or instructions on its use.



Coution! Ignoring the safety signs and warnings applied on the machine as well as ignoring the security and operating instrutions can cause serious injuries and even lead to death.



Read these instructions carefully.



Wear eye protection.
Wear hearing protection.



Wear protective gloves.



Wear safety footwear.



Do not remove or tamper with the protection and safety devices.



Protect the machine from moisture and wetness.



Never tilt the machine on soft ground or in an inclined position.



No Smoking!

No open flames, embers or sparks near the batteries, as there is a risk of explosion and fire!



Be aware, objects may be thrown while in use.





#### Caution!

Risk of leakage of lead acid solution!





Risk of explosion and fire, avoid short circuits! Metal parts of the battery cell are always live, therefore do not place foreign objects or tools on the battery.



Danger!

Electric shock risk!



High temperature. Do not touch!

Crushing hazard!



Maintain a sufficient safety distance from the moving parts.

Do not put any part of your body between chassis and hopper while hopper is falling down.



Risk of tipping over!



The maximum permitted incline is 15%.



Always turn off the engine before starting maintenance.



Do not use for transporting persons.



The maximum uphill angle of the machine is 30%.



The maximum parking angle is 20%.



Keep bystanders away.

## **SAFETY**

#### **General Safety Rules**



Read all safety warnings, instructions, illustrations and specifications provided with this battery powered barrow. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

## Save all warnings and instructions for future reference.

#### Work area safety

- 1. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- 2. Do not operate battery powered barrows in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. The machine create sparks which may ignite the dust or fumes.
- 3. Keep children and bystanders away while operating the machine. Distractions can cause you to lose control.

#### **Electrical safety**

1. Do not expose the machine to rain. Water entering a machine will increase the risk of electric shock.

#### Personal safety

- Stay alert, watch what you are doing and use common sense when operating the machine.
   Do not use the machine while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating battery powered barrows may result in serious personal injury.
- 2. Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- 3. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to battery pack.

- 4. Remove any adjusting key or wrench before turning the machine on. A wrench or a key left attached to a rotating part of the machine may result in personal injury.
- 5. Do not overreach. Keep proper footing and balance at all times. This enables better control of the machine in unexpected situations
- 6. Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- 7. Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.
- 8.Do not operate the utility machine in the rain. This may result in the loss of control, slipping and falling which may increase the risk of personal injury.

#### Battery powered barrow use and care

- Do not force the battery powered barrow.
   Use the correct battery powered barrow
   for your application. The correct battery
   powered barrow will do the job better and
   safer at the rate for which it was designed.
- 2. Do not use the machine if the switch does not turn it on and off. Any battery powered barrow that cannot be controlled with the switch is dangerous and must be repaired.
- 3. Store idle battery powered barrows out of the reach of children and do not allow persons unfamiliar with the machine or these instructions to operate it. Battery powered barrows are dangerous in the hands of untrained users.
- 4.Maintain battery powered barrows and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the battery powered barrow's operation. If damaged, have the machine repaired before use. Many accidents are caused by poorly maintained machines.

- 5. Use the battery powered barrow in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the battery powered barrow for operations different from those intended could result in a hazardous situation.
- 6. Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

#### Battery use and care

- 1. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- 2. Use battery powered barrows only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 3. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- 4.Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- 5. Do not use a battery pack that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- 6.Do not expose a battery pack to fire or excessive temperature. Exposure to fire or temperature above 130 °C may cause explosion.
- 7. Follow all charging instructions and do not charge the battery pack outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

#### Service

- 1. Have your battery powered barrow serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the battery powered barrow is maintained.
- 2. Never service damaged battery packs. Service of battery packs should only be performed by the manufacturer or authorized service providers.

#### Safety warnings

- 1. Do not use the machine in bad weather conditions, especially when there is a risk of lightning. This decreases the risk of being struck by lightning.
- 2. While operating the machine, always wear non-slip and protective footwear. Non-skid, closed-toed safety boots and shoes will reduce the risk of injury.
- 3.Inspect pathway before hauling objects/ materials. Familiarizing yourself with the pathway and ensuring it is wide enough to safely navigate the machine under load will help reduce losing control of the machine.
- 4. Use extreme caution on slippery, loose and unstable terrain. Wet and slippery surfaces, such as wet grassy areas, snow or ice, and loose and unstable terrain, such as sand or gravel surfaces, may cause the machine to lose traction and may adversely affect steering, braking and stability.
- 5. Do not operate the machine on excessively steep slopes. This reduces the risk of loss of control, slipping and falling which may result in personal injury. Slopes greater than the maximum recommended grade and side grades may increase the risk of instability and may adversely affect the ability to stop safely.
- 6. When working on slopes, always be sure of your footing, always work across the face of slopes, never up or down, and exercise extreme caution when changing direction. This reduces the risk of loss of control, slipping and falling which may increase the risk of personal injury.

- 7. Whenever possible, use level areas for stopping, loading and unloading and never leave machine unattended on a slope. The machine is more unstable when resting on a slope than when resting on a level surface.
- 8. When stopping on slopes, face the machine uphill or downhill and block unbraked wheels. The machine is less stable when facing across a slope. Unbraked wheels, especially those of the castor-type, can potentially turn and roll downhill even while the front wheel parking brake is set.
- 9. When leaving the machine unattended, set parking brake once the machine is located in a safe stopping area. The parking brake prevents unwanted movement of the front wheel and can improve stability.
- 10. Ensure the hopper is in its down position and hoppers and dump-gates are secured in place when not dumping the load and when storing the machine. Unsecured hoppers or dump-gates can unexpectedly open or shift.
- 11. Ensure all locking screws are tightly secure before using. Locking screws on the wheels and open-type carrier front and side walls must be secure to prevent unwanted movement of these adjustable parts of the machine.
- 12. Never operate the machine in an overloaded condition. Make sure the machine has the proper capacity rating for the objects or materials that have to be hauled. Excessive loads will make the machine more difficult to maneuver and stop, will increase stopping time and distance, and may increase the risk of instability.
- 13. Use containers and tie-downs to secure loads. Loose and/or insecure loads are more likely to shift which can result in loss of stability and control.
- 14. Always maintain a firm grip on handles. Loss of control can increase the risk of personal injury.

- 15. Engage the lock-out system when not in use. The lock-out system prevents unwanted, powered use of the machine, such as by children or other untrained or unauthorized persons. With the lock-out system engaged, electric power cannot be turned "on".
- 16. Remove safety disabling device when not in use or performing maintenance. The safety disabling device prevents unwanted, powered use of the machine, such as by children or other untrained or unauthorized persons, or when performing maintenance. Without the safety disabling device, electric power cannot be turned "on".

#### **Dump safety warnings**

- 1. Do not reach into the dumping mechanisms with your hands, other parts of the body, or insert any other objects into it while operating the dump. Contact with the dump mechanism while in use may increase the risk of serious personal injury or death.
- 2. When dumping, be alert for unexpected movement of the machine, either moving backward or the handles coming upward. It is recommended to brace the machine by using braking systems and operator control of the handles. Parking and service brakes help prevent unexpected movement of the machine. Upward movement of the handles can increase the risk of serious personal injury.
- 3. Ensure the intended dumping zone and sufficient area around it is clear and safe for dumping. Provide barriers to persons and property as necessary to limit spread of dumped materials. Dumped materials, such as rocks and bricks, can quickly and easily spread or roll away from the intended dumping zone and increase the risk of serious personal injury or damaging nearby property.

#### **Specific Safety Rules**

Thoroughly inspect the area to be worked, keep the working area clean and free of debris to prevent tripping. Operate on a flat level ground.

Never place any part of your body where it would be in danger if movement should occur during assembly, installation, and operation, maintenance, repairing or moving.

Keep all bystanders, children, and pets at least 23m (75 feet) away. If you are approached, stop the unit immediately.

Do not mount anything on the dump box and never carry passengers

Never park the machine in a place with unstable ground which could give way, particularly when it is full.

Disengage clutch lever before starting the engine.

Start the engine carefully according to instructions and with feet away from the moving parts.

Never leave the operating position when the motor is running.

Always hold the unit with both hands when operating. Keep a firm grip on the handlebars. Be aware that the machine may unexpectedly bounce upward or jump forward if the machine should strike buried obstacles such as large rocks or roots.

Walk, never run with the machine.

Do not overload the machine capacity. Drive at a safe speed, adjusting the speed to the slope of the land, the surface conditions of the road, and the weight of the load.

Use extreme caution when in reverse or pulling the machine towards you.

Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.

On soft ground, drive at the first forward/ reverse gear. Do not rapidly accelerate, turn sharply or stop. Pay the utmost attention when working on frozen ground as the machine may tend to skid.

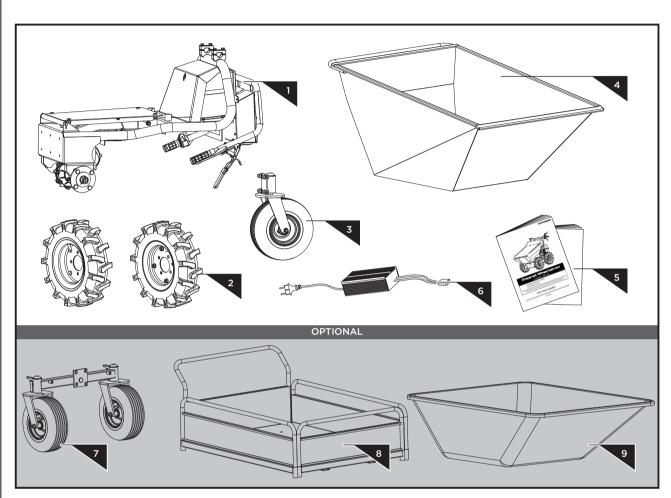
Do not operate the machine in confined areas where there may be a risk of crushing the operator between the machine and another object.

When operating on a slope, whether moving forward or in reverse, always make certain that the weight is evenly balanced. Always move in directions parallel with the slope.

When dumping the contents of the hopper, the center of gravity will change continuously and the ground conditions will be essential for the stability of the machine. Use extra caution and control when dumping the hopper on e.g. wet clay.

## **CONTENTS SUPPLIED**

The battery powered barrow wheelbarrow comes partially assembled and is shipped in carefully packed package. After all the parts have been removed from the package, you should have:



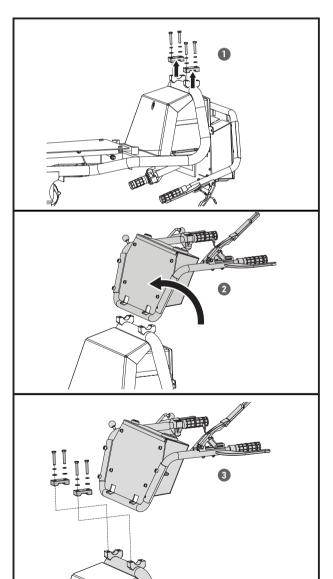
- 1. Main Frame
- 2. Driving Wheels
- 3. Steer Wheel
- 4. 6 Side Hopper
- 5. Operator's Manual
- 6. Charger
- 7. Optional Dual Steer Wheels Kit
- 8. Optional Flat Bed Hopper
- 9. Optional 4 Side Hopper

## **ASSEMBLY**

This battery powered barrow was partially assembled at the factory. To assemble your machine follow the below instructions.

#### **Handle Frame Assembly**

- 1. Screw out pre-mounted bolts and take off the upper handle clamp blocks and washers.
- 2. Turn the handle frame in the direction as shown in figure 2.
- 3. Put the bottom part of the handle frame into the grooves of lower clamp blocks at the position of holes. Attach the upper clamp blocks, align the holes, and secure it with the bolts and washers.



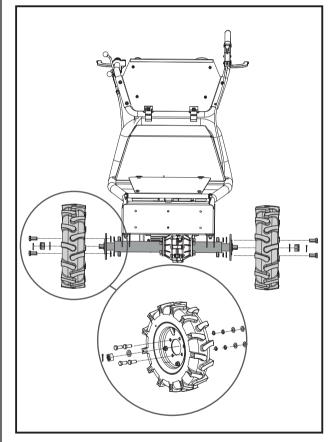
#### **Driving Wheels Assembly**

Remove the bolts, nuts and washers prescrewed on flanges.

Slide one wheel onto the axle, making sure the side with inflation nozzle on the hub faces outwards. Align the holes and fasten it with the four bolts, nuts and washers as shown in the figure.

Slide the washer and the thin slotted nut onto the axle and secure the connection by the cotter pin.

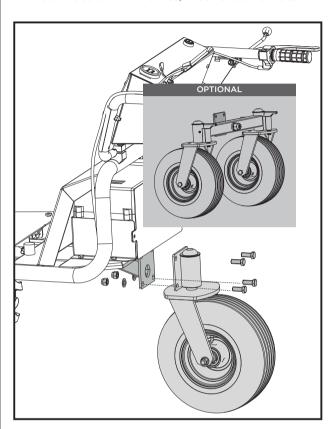
Repeat the same steps for the other wheel.



#### Steer Wheel(s) Assembly

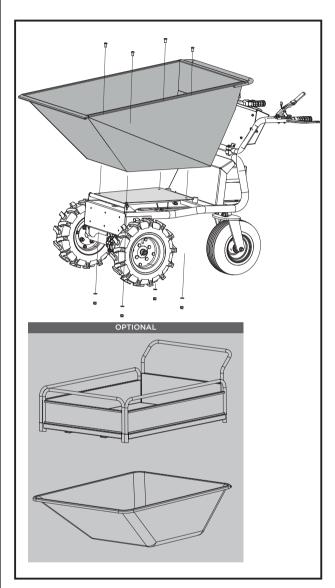
Screw out the pre-mounted bolts on wheel(s) bracket.

Mount the rear wheel(s) to the main frame as shown in the figure and align the holes. Secure the connection with bolts, washers and nuts.



#### **Hopper Assembly**

Screw out the pre-mounted bolts from the base plate of the chassis. Place the hopper onto the base plate, align the holes and fix it with the bolts, washers and nuts.



# **KNOW YOUR MACHINE Features and Controls** Direction Toggle Switch Battery Capacity Display Electric Key Switch Safety Lever Speed Regulating Handle Electric Motor Battery Unit Steer Wheel Battery Charging Port Driving Wheel

#### **Electric Key Switch**

Turn the key switch 1/4 turn clockwise to close the circuit and start the electric motor. Turn the key switch anticlockwise to break the circuit and switch off the electrical system.

#### **Battery Capacity Display**

The capacity display shows the voltage and remaining capacity of the batteries. The batteries must be charged if the remaining capacity is lower than 50%.

#### Safety Lever

Press the lever to start the motor and make the barrow available for traveling;

Release the lever to brake the machine.

#### **Direction Toggle Switch**

The toggle switch controls the driving direction.

By toggling forward" — ", the barrow moves forwards;

by toggling backward"—", the barrow moves backwards.

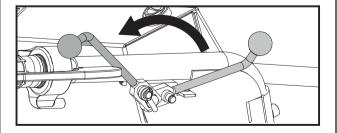
#### **Speed Regulating Handle**

After selecting the driving direction, while pressing the safety lever on left handlebar, rotate the speed regulating handle anticlockwise to drive the barrow.

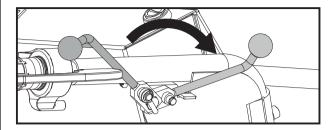
The driving speed can be continuously regulated by the handle. The actual speed depends on the rotation angle of the handle. The bigger the rotation angle, the faster the speed.

#### **Hopper Tipping Lever**

This lever controls tipping of the hopper. Swing the lever backwards to unlock the hopper.



After tipping the load, swing the lever forward to lock the hopper.



#### **Battery Charging Port**

To charge the batteries, unplug the power cable and plug the charger's connection cable to the socket of the power cable.

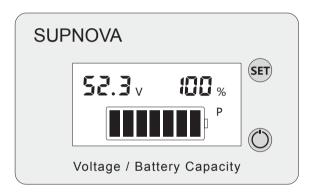
This is also the power connection point between battery and controller, so unplugging the power cable will cut off the power the supply.

#### Operation

#### Before using

Check before turning on the machine and make sure

- 1. The tire pressure is within the specified range.
- 2. The bolts and connecting parts of the whole machine are firmly fixed.
- 3. Battery cable and electric lines are correctly connected and no visible damage.
- 4. Battery housing and connections must be dry.
- 5. Battery capacity and voltage is normal.



#### Moving forward

- 1. Turn the key switch 1/4 turn clockwise to close the circuit and start the electric motor.
- 2. Select forward direction on the direction toggle switch."

  "
- 3. Press the safety lever to start the motor.
- 4. While pressing the safety lever on left handlebar, rotate the speed regulating handle anticlockwise to drive the barrow. The driving speed can be continuously regulated by the turning the handle. The actual speed depends on the rotation angle of the handle. The bigger the rotation angle, the faster the speed.

#### Moving backward

- 1. Release the speed regulating handle and toggle the direction switch backwards."

  "
- 2. Pressing the safety lever on left handlebar, rotate the speed regulating handle anticlockwise to move the barrow backwards.

#### Stop

Release the safety lever to stop the barrow.

Turn the key switch anticlockwise to break the circuit and switch off the electrical system.

#### **Dumping**

- 1. Stop the machine and swing the hopper tipping lever backwards to unlock the hopper.
- 2. Tip the hopper manually and move it back after dumping is finished.
- 3. Swing the hopper tipping lever forwards to lock the hopper.

#### Manual driving

If the battery capacity is too low, the barrow can only be driven manually. Press the safety lever to release the brake and push the barrow forward or backward manually.

#### **Battery Charging**

When the battery capacity display shows the remaining capacity lower than 50%, the batteries must be charged.

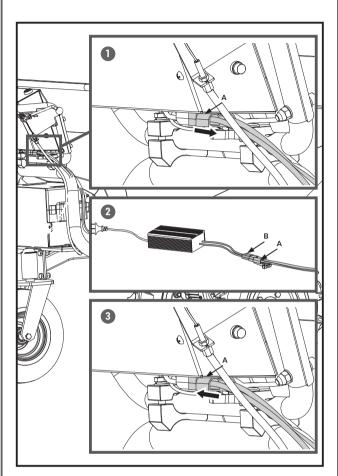
Unplug the power cable A and plug the charger's connection cable B to the socket of cable A. Connect the mains power supply.

Please note the positive and negative poles are connected correctly!



New batteries' capacity is around 70-80% and can be charged after use. For the first 3 times of charging, it should not be less than 10 hours, but not more than 12 hours each time; after that, 6-10 hours each time.

After finishing charging, cut off the mains power supply, unplug the charger's connection cable B and plug power cable A back to the original position.



## **MAINTENANCE**

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual for maintenance procedures.

1. Before performing any maintenance procedure or inspection, stop the motor.



- 2. To prevent accidental movement of the machine, always turn the key switch to off position and disconnect the battery plug whenever the barrow is not in use.
- 3. Disconnect the battery before removing or replacing any electrical components.

#### Adjustment of Hopper Locking Cable

After long time use, the cable will be stretched and get longer, which will cause the hopper to be locked or unlocked incorrectly.

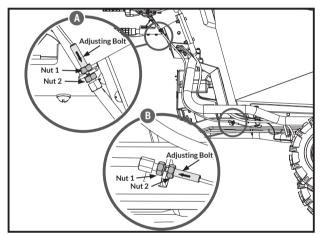
Therefore, the length of the cable requires to be adjusted.

There are two adjusting positions, A and B.

If the cable is too long, loosen Nut 1 and Nut 2 to screw the adjusting bolt in the direction shown in the figure. Hold it in position and tighten Nut 1 and Nut 2.

If the cable is too short, adjust it in the opposite direction.

The adjusting way is the same for position A and B. Either position is workable



#### Adjustment of Brake Cable

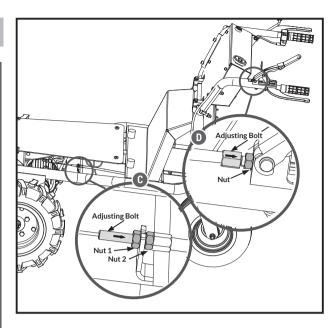
After long time use, the brake cable will be stretched and get longer, which will cause the brake failure or the brake plate cannot touch the power-off contact switch.

Therefor, the length of the cable needs to be adjusted. There are two adjusting positions, C and D.

If the cable is too long, loosen Nut 1 and Nut 2 to screw the adjusting bolt in the direction shown in the figure. Hold it in position and tighten Nut 1 and Nut 2.

If the cable is too short, adjust it in the opposite direction.

The adjusting way is the same for position C and D. Either position is workable.



## Maintenance of charger and batteries

#### Charger

The charger is integrated in the machine.



Never touch the live contacts of the batteries and the charger!

Keep the charger clean. Dirt creates the risk of electric shock.

Before each use, check the charger, cable and plug. Do not use the charger if you find any damage. Do not open the charger yourself and have it repaired only by qualified personnel using only original spare parts. Damaged chargers, cables, and plugs increase the risk of electric shock.

Do not operate the charger on an easily flammable surface or in a flammable environment. There is a risk of fire due to the heating of the charger during charging.

#### **Batteries**

Check the batteries for damage at regular intervals.

Keep the batteries in a dry, well-ventilated place. Protect them from moisture, water and

direct sunlight. For a long service life of the batteries, storage at a room temperature of approx. 15 - 20 ° C is advantageous.

With unfavorable weather condition, we recommend removing the batteries from the machine and storing them in closed rooms until the next use.

Always charge the batteries on a level surface. It is best to only charge the batteries when they are installed.

Check the charge status at regular intervals.

If the machine is not used for a long time, charge the batteries every month. If the batteries are kept empty for a long time, they can be damaged and the charging capacity can be greatly reduced.

Do not immediately charge after long-distance driving. Please wait for 10-30 minutes until the batteries cool before charging, which can extend the battery life.

With increasing age, the capacity of the batteries will decrease even with good care.

#### Warning!

1. Dispose of defective batteries in an environmentally friendly manner at the authorized collection points. Disposal with household waste is prohibited!

Use suitable protective gloves when disposing of defective batteries.



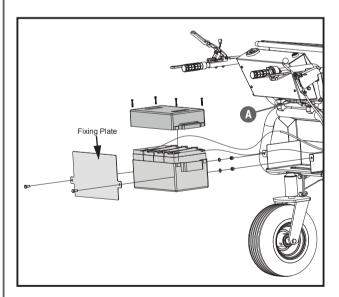
- 2. Do not charge or store the batteries in a damp environment or in high humidity!
- 3. Never expose the batteries, the charger or the machine to adverse environmental conditions (e.g. moisture, excessive ambient temperature, ignition sources or open fire, dust, vapors, solvents)!
- 4. Use the original charger only!
- 5. Do not remove the speed limit of the controller, otherwise it will reduce the battery life!

#### **Battery Replacement**

If the batteries are no longer functional, replace with new batteries as following instructions.

Battery type: 4 x 12V/25AH lead-acid batteries

- 1. Unplug the power cable A, unscrew the bolts, nuts and washers of the fixing plate and take it off.
- 2. Take out the battery box. Loosen the four bolts on top side of the battery box and remove the cover.
- 3. Disconnect all the wires of the batteries and replace the old batteries with new ones.
- 4. Connect the new batteries in series to a battery unit.
- 5. Connect the red wire to the positive pole of the battery unit and black wire to the negative pole.
- 6. Reassemble the battery box and mount it back to the bracket.
- 7. Plug the power cable A back to the original connector of the controller.





Please note the positive and negative poles are connected correctly!

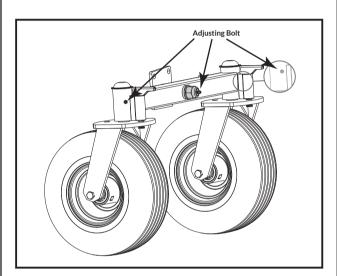
## Lubrication(For Optional Dual Steer Wheels Kit Only)

This dual steer wheels kit is already lubricated at factory, so no need to lubricate before use.

After using for a period of time, if the wheels do not rotate flexibly, add grease through these 3 lubrication points.

This offers a longer service life and the best possible mobility of the wheel suspension.

Any commercially available multipurpose grease is suitable for this application.



## **STORAGE**

If the battery powered barrow is not used for a long period of time, the following instructions should be strictly observed:

- 1. When storing for several days up to a month, it is advisable to only leave the batteries on the charger if the barrow is to be used again in the foreseeable future (several days).
- 2. Check the batteries regularly and recharge them if necessary to avoid discharging them completely.

If the storage time is longer than 30 days,

- •Do not leave the batteries connected to the charger.
- •Cover the barrow and store it on flat ground in a clean, dry building that has good ventilation.
- •When decommissioning (e.g. in winter),

keep the batteries in a charged state (55 - 75%) in a dry room.

- •Charge the battery once a month. Before charging, check the cables for dirt and loose contacts.
- •When restarting the machine, fully charge the batteries.
- 3.Inspect for any loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts.

Failure to observe can lead to deep discharge of the batteries. No guarantee can be given for deeply discharged batteries. Self-discharge - Due to mainly chemical processes in gas-tight cells, the batteries discharge themselves, depending on the time of the charge state and the ambient conditions (temperature,

This results in a correspondingly shorter driving distance with an electric drive.

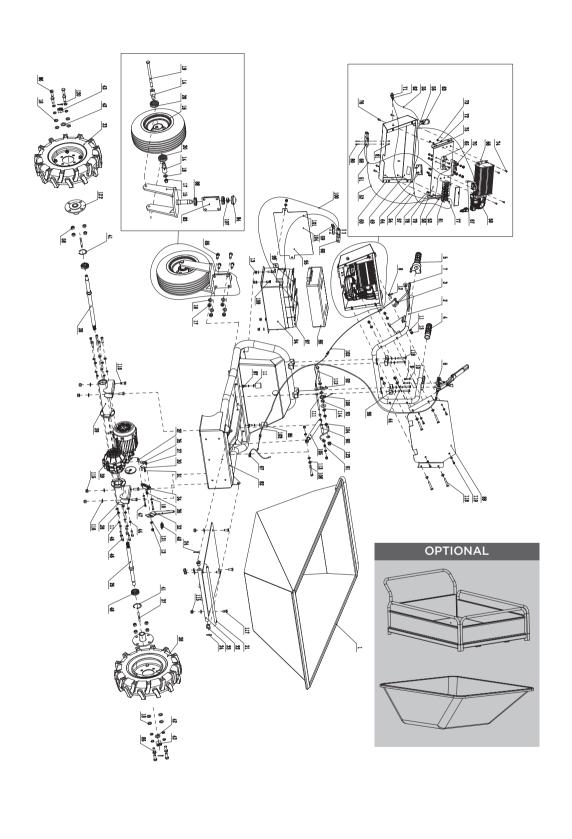


humidity).

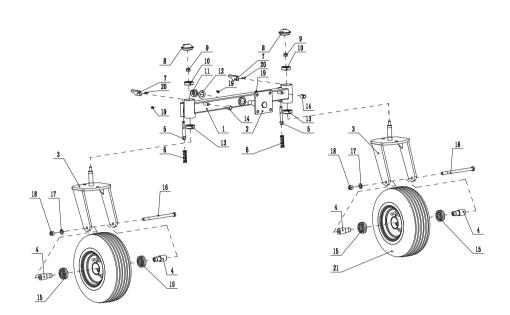
## **TROUBLE SHOOTING**

Problem	Cause	Remedy
Machine does not run or does not perform well	<ol> <li>Key switch not switched on.</li> <li>Parking brake active.</li> <li>Batteries almost empty.</li> <li>Motor not powered on.</li> <li>Fuse blown.</li> </ol>	<ol> <li>Turn on the switch.</li> <li>Press the safety lever to release the parking brake</li> <li>Charge batteries.</li> <li>The external cables or internal wires are in poor contact or disconnected</li> <li>Replace the fuse.</li> </ol>
No battery capacity display	<ol> <li>Batteries empty.</li> <li>Loose electrical connections or defective wiring.</li> <li>Key switch not switched on.</li> </ol>	<ol> <li>Charge batteries.</li> <li>Check cable for tight fit and tighten if necessary. Replace damaged cables with new ones</li> <li>Turn on the switch.</li> </ol>
Brake Failure	1. Loose brake plate. 2. Brake pads severely worn.	<ol> <li>Retighten the fixing bolts of the brake plate to a proper braking state.</li> <li>Replace with new brake pads.</li> </ol>
Hopper cannot be locked	Locking hook not in place	Adjust the length of the hopper locking cable to make the hook in place.
Machine generates unusual vibrations	Worn or worn tires     Loose screws due to intense stress	<ol> <li>Check tire tread and pressure, replace tires</li> <li>Check that all screws are tight, especially those on the drive</li> </ol>

## PARTS SCHEDULE



## **Optional Dual Steer Wheel Kit**



## Parts List

No.	Description	Q'ty
1	Hopper	1
2	Handle Frame	1
3	Hopper Tipping Lever	1
4	Left Handle Sleeve	1
5	Speed Regulating Handle	1
6	Safety Lever	1
7	Ball Knob M8x25	1
8	Lever Shaft	1
9	Screw M6x30	2
10	Washer 6	8
11	Washer 8	28
12	Circlip 8	1
13	Locknut M8	13
14	Axle Sleeve for Steer Wheel	2
15	Steer Wheel Bracket	1
16	Steer Wheel 13x5-6	1
17	Locknut M12	5
18	Washer 12	9

No.	Description	Q'ty
19	Hex Bolt M12x180	1
20	Bearing 6304-2RS (Included in steer wheel)	2
21	Rotating Shaft	1
22	Base Plate	1
23	Sleeve for Rotating Shaft	2
24	Cotter Pin	2
25	Short Axle	1
26	Long Axle	1
27	Bush	2
28	Sleeve for Short Axle	1
29	Sleeve for Long Axle	1
30	Plunger End Plate	1
31	Plunger	2
32	Braking Plate	1
33	Driving Wheel (Right)	1
34	Plunger Housing	1
35	Friction Plate	2
36	Spring for Braking Plate (Small)	1

No.	Description	Q'ty
37	Key A 5x50	2
38	Driving Wheel (Left)	1
39	Electric Motor	1
40	Spring for Braking Plate (Big)	1
41	Circlip 47	2
42	Washer 20	2
43	Thin Nut M20x1.5	2
44	Spring Washer 8	14
45	Spring Washer 6	2
46	Screw M8x30	10
47	Screw M6x40	2
48	Bearing 6005-2Z	2
49	Electrical Box	1
50	Electrical Installation Board	1
51	Cable 5 Assy	1
52	Cable 6 Assy	1
53	Cable 7 Assy	1
54	Wire 1 Assy	1
55	Wire 2 Assy	1
56	Wire 3 Assy	1
57	Wire 4 Assy	1
58	Nut M12	8
59	9-pin Connector	1
60	Sealing Strip	2
61	6-post Terminal 45A	1
62	Tubular Fuse Box 10A	1
63	Key Switch 10A	1
64	Battery Capacity Display 48V	1
65	Fuse Box 50A	1
66	Controller	1
67	Brake Power Off Cable	1
68	Connector 50A	2
69	Connector Lever	1
70	Fuse 50A	1
71	Fuse 10A	1
72	Washer 5	4
73	Nut M5	4
74	Screw M5x10	4
75	Rivet Nut M6x15	8
76	Screw M6x16	4

No.	Description	Q'ty
77	Screw M4x12	2
78	Nut M4	2
79	Washer 4	2
80	Screw M3x20	4
81	Nut M3	4
82	Chassis	1
83	Mounting Plate	1
84	Shaft Cap	1
85	Rubber Shock Absorber	2
86	Hex Bolt M12x30	12
87	Hex Bolt M8x16	2
88	Bearing 6005-2RZ	2
89	Electrical Box Fixing Plate	1
90	Long Bush	1
91	Short Bush	1
92	Locking Hook	1
93	Spring Sleeve	1
94	Battery Box 1	1
95	Battery Box Fixing Plate	1
96	Battery Box Cover	1
97	Lead-acid battery 12Vx25Ah	4
98	Handle Clamp Block	2
99	Cable 1 Assy	3
100	Cable 3 Assy	1
101	Cable 4 Assy	1
102	Hopper Locking Cable	1
103	Braking Cable	1
104	Wire Rope	1
105	Gas Spring	1
106	Torsion Spring	1
107	Lock Round Nut GUK20x1	1
108	Hex Bolt M8x70	1
109	Hex Bolt M8x20 /8.8	6
110	Hex Bolt M10x25	4
111	Hex Bolt M8x130	1
112	Hex Bolt M10x100	1
113	Nut M8	1
114	Thin Nut M10	2
115	Locknut M10	9
116	Washer 10	11

No.	Description	Q'ty
117	Screw M10x20	4
118	Screw M8x45	4
119	Screw M6x16	4
120	Cotter Pin 3x35	2
121	Washer 8	1
122	Axle Flange	2

#### Optional Dual Steer Wheel Kit

No.	Description	Q'ty
1	Wheels Main Bracket	1
2	Mounting Plate	1
3	Steer Wheel Bracket	2
4	Axle Sleeve	4
5	Pin	2
6	Spring	2
7	Pin Handle	2
8	Shaft Cap	2
9	Locknut M10	2
10	Bearing 6004-2Z	2
11	Locknut M20	1
12	Washer 20	1
13	Bearing 32004	2
14	Column Sleeve	2
15	Bearing 6304-2RS (Included in steer wheel)	4
16	Hex Bolt M12x180	2
17	Washer 12	2
18	Locknut M12	2
19	Oil Nozzle M6	3
20	Elastic Cylindrical Pin 4x20	2
21	Steer Wheel 13x5-6	2



#### **UKCA DECLARATION OF CONFORMITY**

We Titan Pro Ltd - DT11 7FP (Importer) declare that the product:

**Designation**: Battery Powered Barrow

Model(s): TPM350E

**Type/Serial No.:** As per rating label on machine

**Complies with the following machinery directives:** 

2014/30/EU

The conformity assessment procedure followed was in accordance with:

EN IEC 61000-6-1:2019, EN IEC 61000-6-2:2019, EN 61000-6-3:2007+A1

#### **Notified Bodies**

TÜV Rheinland LGS Products GmbH

#### Address(es)

Tillystraße 2 – 90431 Nürnberg

**Authorised Signatory & Technical File Holder** 

Date:

09/02/2023

Signature:

Name: Mr. Charles Abbott

**Position:** Director

**Company:** Titan Pro Ltd

**Address** 

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