

Cordless Cylinder Mower

H222 v01: 02/11/20

Please read and retain these instructions for future reference



TECHNICAL DETAILS:

Rechargeable Lead-Acid Battery, 24V, 7AH

Charge time: 24 hours

Cutting Path: 16in

Working Time: 45 minutes after full charge

No Load Speed: 1000RPM

Low Noise Operation - Lwa 96dB

Cutting Capacity: 6000sq.feet per hour/557.40m² per hour

5 Cutting Blades

Adjustable Cutting Height: 2cm – 5.6 cm (13/16in – 2 3/16in)

Safety Switch

Grass Catcher (25L capacity)

Features Battery Display, Automatic Power off for Lower Battery

Wheel size: 10in (250mm)

Weight: 15.5kg with battery

WARNINGS / CAUTIONS:

When using an electrical appliance, basic safety precautions should be observed, including the following, to reduce the risk of the fire, electrical shock or injury:

1. Read the instructions carefully. Be familiar with the controls and the proper use of the mower.
2. This mower is not a toy.
3. Never allow children or people unfamiliar with these instructions to use the mower. Local regulations may restrict the age of the operator.
4. Never mow while people, especially children, or pets are nearby.
5. The operator or user is responsible for accidents or hazards occurring to other people at their property.
6. Mow only in daylight or in good artificial light.
7. Avoid operating the mower in wet grass, where feasible.
8. Walk, never run when operating.
9. Do not operate the mower when barefoot or wearing open-toed sandals.
10. Thoroughly inspect the area where the mower is to be used, and move any object which may jam or be thrown by the machine.

11. Always be sure of your footing on slopes, do NOT mow excessively steep slopes.
12. Mow across the face of slopes, never up and down.
13. Exercise extreme caution when changing direction on slopes.
14. Use extreme caution when reversing or pulling the unit towards you.
15. Do not put hands or feet near rotating parts. Keep clear of the discharge opening at all times.
16. Never pick up or carry the mower while the motor is running.
17. Stop the blade if the mower has to be tilted for transportation when crossing surfaces other than grass, and when transporting the mower to and from the area to be mowed.
18. Never operate the mower with defective guards, or without safety devices, for example deflectors.
19. Switch on the motor according to instruction and with feet well away from the blade.
20. Keep the mower on a flat, even surface when switching on.
21. Keep all nuts, bolts and screws tightened to ensure the equipment is in safe working condition.
22. Be careful when adjusting height, ensure that the battery is removed and keep fingers away from all moving parts.
23. Do not handle charger or unit with wet hands.
24. Use only as described in this manual.
25. DO NOT attempt to use the charger with any other product nor attempt to charge this product with another charger.
26. DO NOT damage the charger cord; never carry the charger by the cord or pull cord to disconnect from an outlet, grasp the plug and pull to disconnect.
27. Keep charger cord away from hot surfaces.
28. This product includes lead acid (Pb) batteries; do not incinerate batteries or expose to high temperatures, as they may explode.
29. Leaks from battery cells can occur under extreme conditions. If the liquid gets on the skin wash immediately with soap and water. If the liquid gets into the eyes, flush them immediately with clean water for a minimum of 10 minutes and seek medical attention.
30. Keep hair, clothing, fingers and all parts of body clear of moving parts.
31. Dress properly! Do not wear loose clothing or jewellery which can be caught by moving parts. Use of non-slip footwear is recommended.
32. DO NOT attempt to repair any damaged parts on this product unless you are qualified to do so.
33. DO NOT operate with wet hands.
34. DO NOT use any power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
35. Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying power tools with your fingers on the switches or plugging in power tools that have the switch on invites accidents.
36. DO NOT overreach. Keep proper footing and balance at all times.
This enables better control of the power tool in unexpected situations.

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USING THE LAWN MOWER

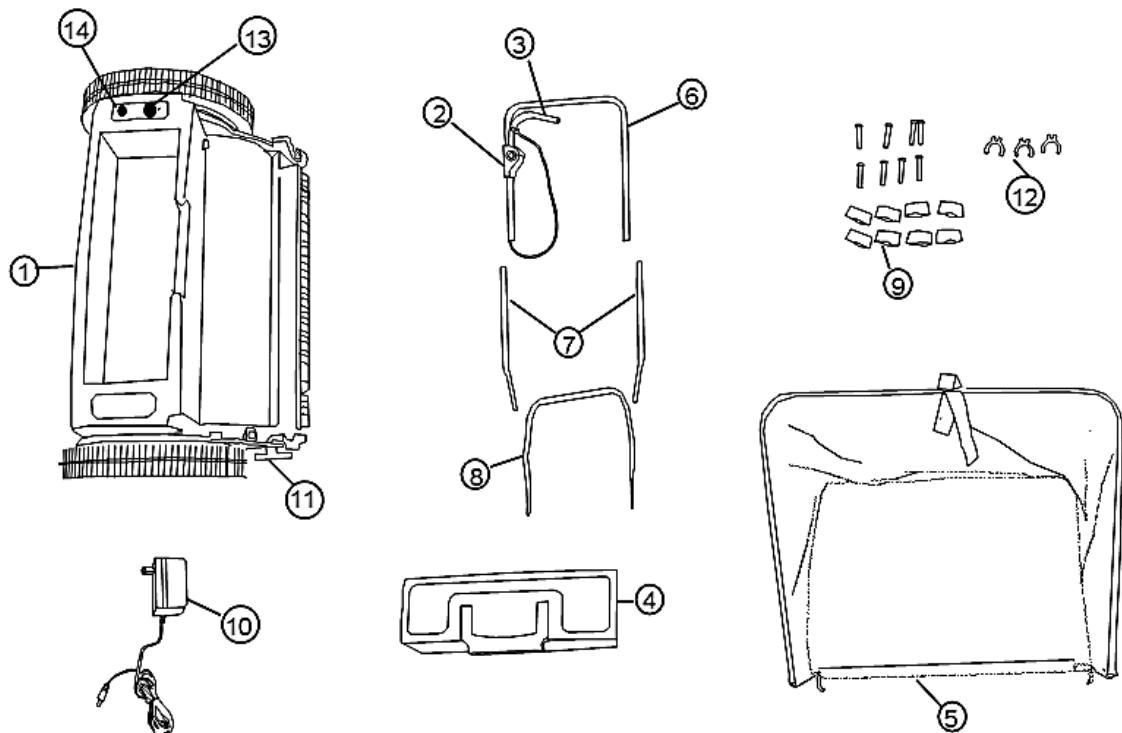
WARNING!

For safety reasons persons of less than 16 years of age or persons not familiar with these operating instructions must not use the lawn mower. For Domestic Use only.

This mower is designed for use on residential lawns. It is not designed for commercial use or for use in public facilities, parks, sporting grounds, roads, or in agriculture or forestry areas.

This mower is for cutting lawns only. It must not be used to trim hedges, bushes or shrubs, for cutting or pruning, or for any mowing where both wheels and the roller are not fully supporting the mower. Damage to blades or other parts of the machine caused by stones or other debris being "mown" up will not be covered under this warranty!

Always ensure the work area is clear before use.



- | | |
|----------------------------|----------------------|
| 1. Main Unit | 2. Safety Switch |
| 3. Level Switch | 4. Battery Pack |
| 5. Grass Catcher | 6. Upper Handle |
| 7. Middle Handle X 2 | 8. Lower Handle |
| 9. Nuts and Bolts x 8 | 10. Charging Adaptor |
| 11. Height Adjustment Knob | 12. Cable Clips X 3 |
| 13. On/Off Switch | 14. Reset Button |

ASSEMBLY

Unpack and remove the whole mower from packaging, and ensure all the parts are present.

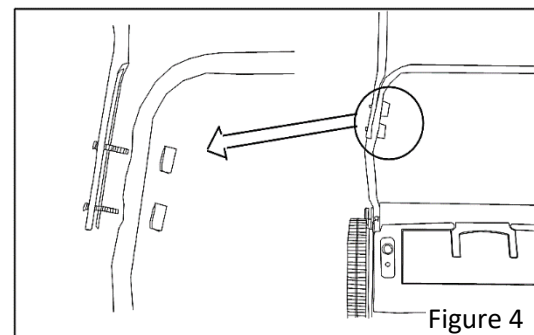
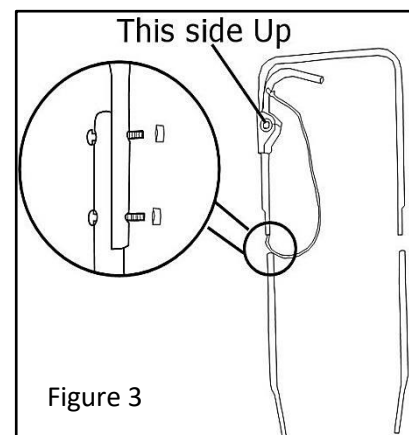
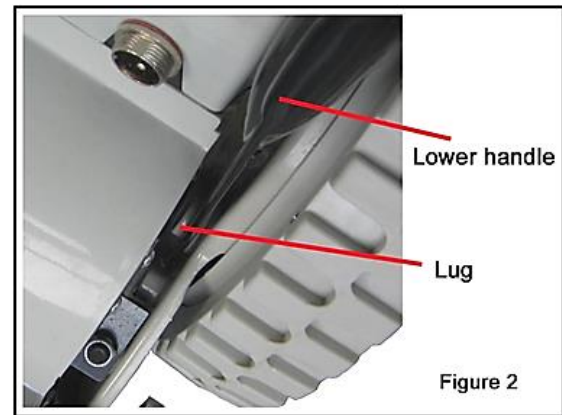
CAUTION: remove the battery before assembling the unit.

1. Set the cutting height to the highest setting. This will make it easier to attach the Lower handle section (8). It is easiest to fit the handle when the mower is flat on the ground and the handle is in a perpendicular position.
2. Fit the Lower handle (8) onto the two large lugs on the Main unit (1). Fit one side and then flex the other side of the handle until it fits the opposite lug. (See Figure 2).

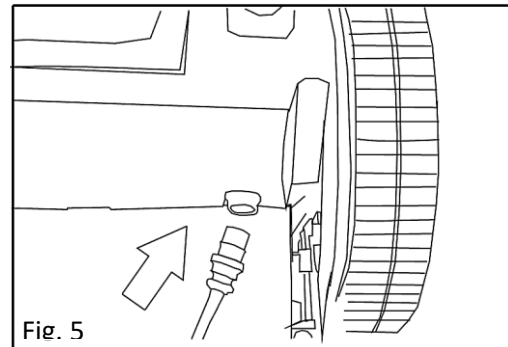
WARNING! Do not bend the lower handle to fit both ends at the same time as this may reduce the width of the lower handle section and it becomes insecure on the retaining pins.

Ensure both ends of the bottom handle are slotted over the two bottom lugs and are hard against the lug end stops to ensure these do not slip off. Bend slightly outwards if necessary and refit.

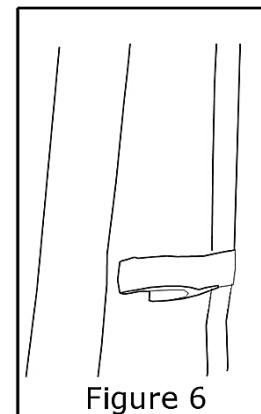
3. Assemble the Upper handle (6) to the Middle handle (7). Use two sets of the nuts and bolts (9) to secure in place. Make sure that the Upper handle (6) is facing up (safety button facing up) (see Figure 3). If you have incorrectly assembled this part, disconnect and re-assemble in the correct orientation.
4. Use two sets of the nuts and bolts (9) to assemble the Upper and Middle handle assembly to the Lower Handle (8). The nuts should be positioned on the inside of the handle and the bolts on the outside. (See Figure 4)



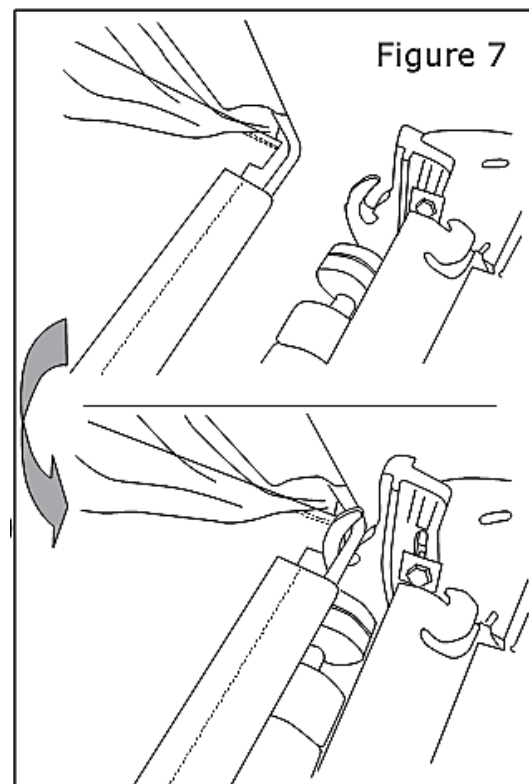
5. Once the Handle is assembled connect the plug on the handle cable to the socket on the Main unit. Tighten the screw ring to secure the cable. (See Figure 5)



6. Secure the cable to the handle using the three cable clips. (See Figure 6)



7. Attach the Grass catcher to the mower base.
Note: This mower can be used with or without the Grass catcher.
Step 1: Place the two Grass catcher side bars onto both sides of the Grass catcher Hooks as shown in Figure 7.



8. Step 2: Wrap the Security Belt, located on the back of the Grass catcher, around the centre joint of the Lower handles and lock buckle into place, as shown in Figure 8.
Note the length of the Security Belt can be adjusted by modifying the loop length. (See Fig 8)

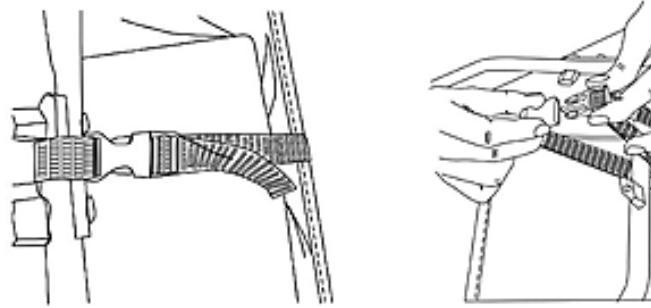


Figure 8

BATTERY CHARGING AND RECHARGING

Before first use charge the battery for 24 hours.

Warning: if the battery is damaged in any way do not attempt to charge it, and replace it immediately.

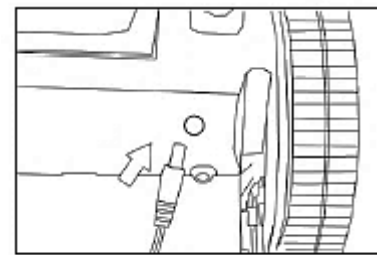
Do not charge battery in direct sunlight or in a hothouse/greenhouse or conservatory.

The battery does not have to be removed from the mower to be charged.

To charge the battery in the mower, plug the charger into the battery socket.

Plug the charger adaptor into a suitable electrical socket.

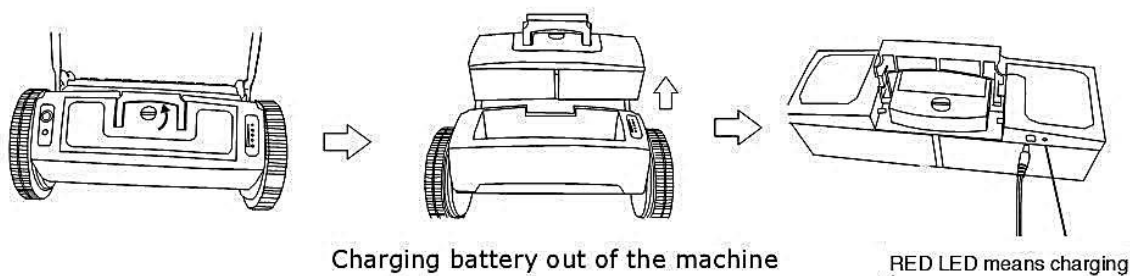
Once the battery is fully charged remove the charger connector from the battery and unplug the charger adaptor from the mains socket. Do not pull the charger by the cord.



Charging the battery in the mower

Charging battery out of mower

First turn the knob on the battery lid anti-clockwise, then raise the handle and lift battery out of the mower. Place the battery on a dry, flat and non-slip surface, and plug the charger connector into the battery socket. Charge the battery for 24 hours each time. Red LED light indicates that battery is charging, but will NOT turn off once battery is fully charged.



Charging battery out of the machine

RED LED means charging

CHARGING INSTRUCTIONS:

There are 5 LED on the main unit, the first three LEDs show the power capacity of the mower

During operation. When the first 3 LEDs turn off and the fourth LED becomes fainter, you are being reminded that the mower needs to be charged. The last LED is the charging indicator.

NOTES:

- To keep the battery in prime condition it is best to charge the battery after each use, and every 3 months if stored without use. After each use charge for 24 hours to ensure the battery is fully charged.

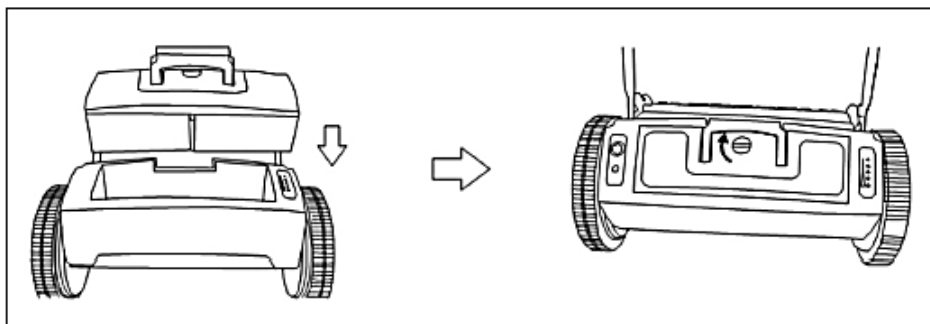


IMPORTANT: Charge the battery after each use. Never store the unit with a flat battery.

- The battery will not be damaged if it is charged for longer than 24 hours, but it is advisable not to leave it on for more than 48 hours, since this might shorten the battery life.
- Ensure the battery is fitted and locked correctly before mowing, or else, this product will not work and be damaged.
- Only use the charger supplied with this product. Do not attempt to charge this product with any other charger nor attempt to charge any product with this charger, as it can cause damage and will invalidate your guarantee.

Charging battery in mower

Lower it into the cavity on the top of the unit in the correct orientation. Ensure the handle is pressed down and then turn the knob on the lid clockwise. If the battery does not fit correctly, remove it and check there are no obstructions. Ensure that the machine is SWITCHED OFF when recharging battery. As a safety feature the battery will NOT recharge if the machine is switched on. The Red LED light on the Main unit indicates that the battery is charging, but will NOT turn off once battery is fully charged.



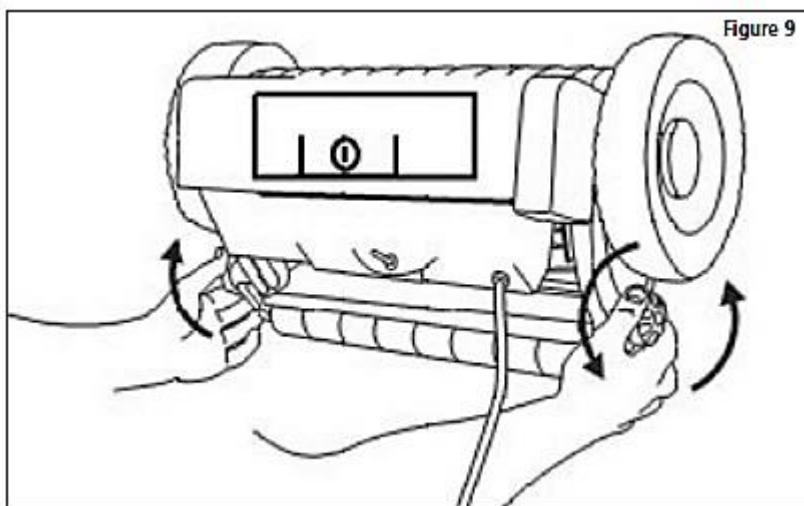
OPERATION

Cutting Height Adjustment

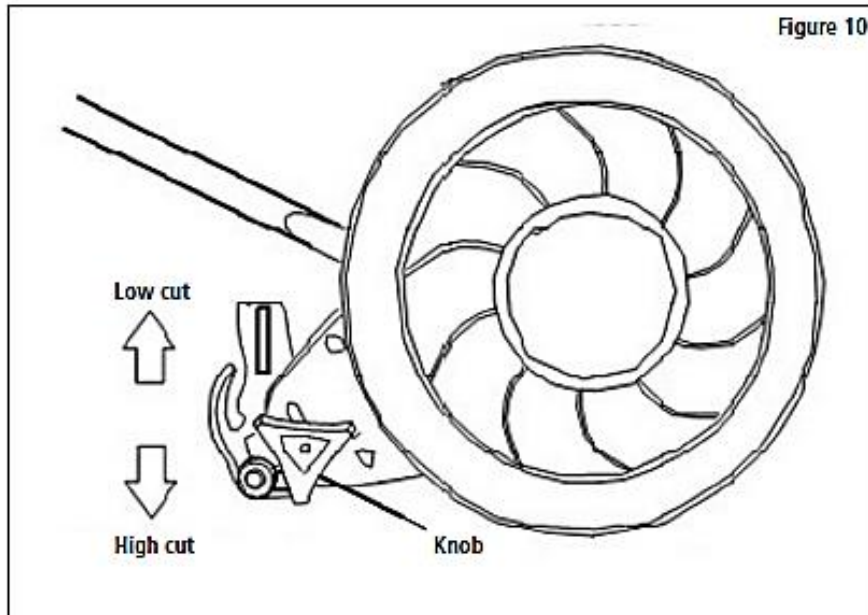
CAUTION: FOR SAFETY ENSURE THAT THE BATTERY IS REMOVED FROM THE UNIT BEFORE ADJUSTING THE CUTTING HEIGHT.

The cutting height of the unit may be adjusted from approximately 1in (2.5cm) up to approximately 2in (5cm). The mower has three height positions. To prevent overloading the mower when cutting long, thick grass it is recommended to make one cut at the highest setting, then another cut at a lower setting. Adjust the mower to the desired height as follows:

- (1) Ensure that the roller is fitted flat, it is recommended that the height is adjusted on a level surface. It is also recommended that the Grass catcher be removed as this will allow easier access to the adjustment knobs.
- (2) Loosen the two large knobs, one on each side of the mower body, to allow movement of the roller arms. It is not necessary to remove the knob. (See Figure 9)

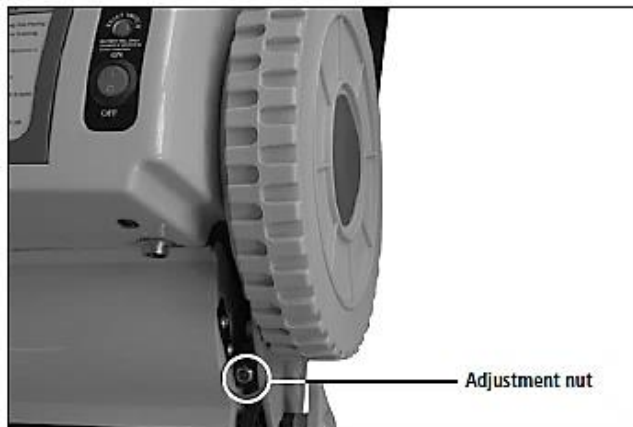


- (3) Slide the roller supports until the roller is at the required position, ensuring that it is level and the knobs are at the same height.
- (4) Tighten the knobs on both sides ensuring they are at the same height and properly secured. Low cut height - for short, dry grass; High cut height – for long, thick, or wet grass. (See Figure 10)



Blade Adjustment and Lubrication

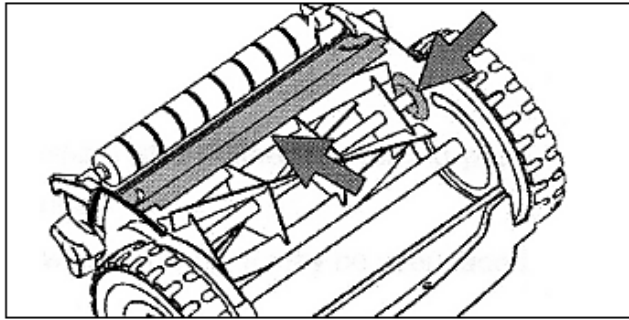
WARNING: Blades are extremely sharp, to avoid injury be careful not to touch blades when make adjustments. Remove the battery before adjusting the blades.



Blades have been pre-adjusted prior to leaving factory, mis-alignment can sometimes occur; this can be caused by blades being too loose or too tight against the cuttingbar. This can cause an uneven cut or make the mower hard to push.

To correct misalignment, adjustments to the cutting bar are needed. Each end of the cutting bar can be adjusted separately.

Turn the two adjustment nuts clockwise to tighten; this moves the cutting bar closer in towards the blade. Turn the two adjustment nuts anti-clockwise to loosen and move the cutting bar further away from the blade.



NOTE: Adjusting the nuts while making blade adjustments is a very sensitive procedure. A turn of 1/16in is considered a major adjustment. Before tightening one adjustment nut, make sure to adjust the opposite nut an equal amount.

Do not over-tighten adjustment nut, as this could damage cutting bar.

To check for correct adjustment insert a piece of paper between the cutting cylinder and the straight blade.

Check with a piece of paper at each end of the blade to ensure correct adjustment along the length of the blade. When the cutting cylinder is turned by hand the paper should be cut cleanly.

If the paper is not cut then gradually tighten the nuts until the paper can be cut cleanly.

To maintain maximum run time and smooth, efficient cutting performance, an oil or spray lubricant can be applied to the edge of the straight blade and the shaft bearings.

STARTING AND STOPPING

WARNING!

Before starting the mower, check within the blade area for any foreign objects and remove them.

Do not operate the mower on areas other than turf surfaces. The mower should be sitting on its wheels on a level part of lawn before starting operation.

- (1) To start the mower, first turn on the red on/off switch (13) on the Main unit to the ON position, then press the safety button (2) with one hand and pull the starting lever (3) back toward the handle grip with the other hand.
- (2) To stop the unit, just release the lever (3), the motor will switch off, then turn off the on/off switch (13) on the Main unit.
- (3) The mower may be restarted at any time with the same procedure.
- (4) The blades continue to rotate for a few seconds after the mower is switched off. Wait for the blades to stop turning before clearing any grass or putting your hands near the blades.

Reset Button (to be used if and when you overload the motor)

The reset button (14) on the main body of the machine is to prevent any damage occurring to the battery or the motor due to a current overload, such as from the blade jamming.

To restart the mower wait for a few seconds then press the reset button so that it is level with the mower casing.

If you use the Reset button (14) then following actions are recommended:

- (1) Do not force the unit to cut in thick or wet grass as this can overload the motor.
- (2) Make a first cut with a high cutting height then make a second cut with a lower cutting height. (See cutting height adjustment section on previous page).
- (3) Push the unit more slowly.
- (4) Check the blade is correctly adjusted so the grass is cutting cleanly.
- (5) Clean the blades and remove any grass or objects that may be causing the mower to stall.

MOWING:

- To obtain a clean cut, push the unit in straight lines (passes) at a deliberate walking pace. Overlap the passes to even the cut and to avoid any uncut strips.
- If you hear the motor in the unit change pitch dramatically while mowing, it may be overloaded. Attempting to force the mower to cut may damage the motor.
- Check to see if the grass is very thick or long, a first cut with height set higher will help reduce the load on the motor (See Cutting Height Adjustment section).
- Push the unit more slowly when cutting thick, long, or wet grass.
- The area of cut depends on the lawn conditions, grass thickness, grass length, moisture content, and height of cut.
- For the maximum area of cut it is recommended to cut the lawn more frequently, mow in dry conditions, select a high cutting height, and walk at normal speed.
- Start mowing around the edges of the area to be mowed, then cut the central area in strips.

Mowing using the grass catcher (supplied accessory)

- The grass catcher (5) collects the clippings as it mows. It attaches at the grass catcher hooks on the mower and by the strap to the mower handle. Mow using the same procedure as for normal mowing.

CLEANING & MAINTENANCE:

CAUTION: Remove the battery before carrying out any cleaning or maintenance. This will prevent you accidentally turning on the unit whilst cleaning it.

Check for any faults such as loose or damaged blades, loose fittings, and worn or damaged components. If necessary carry out any repairs before using the mower again.

Check that covers and guards are correctly fitted, and are not damaged in any way.

Clean the unit using a soft brush or cloth. Do not use abrasive material to clean the product or immerse it in water.

Do not pick up liquids or use on wet ground.

Do not use on concrete, tarmac or other rough surfaces.

Do not pick up pieces of string, stones or fabrics with the mower.

Be aware of raised areas in lawns such as paving stones or manhole covers that can damage the blades.

Clean the exterior of the machine thoroughly using a soft brush or cloth. Do not use water, solvents or polish. Spray the cutting cylinder and lower blade with a low viscosity oil, such as a spray oil. Brush away any build-up of grass or leaves on the blades.

STORAGE:

Before storing, remove the battery. Turn the unit on its side and clean the blade area. If grass cuttings are compacted in the blade area, remove with a wooden or plastic implement.

Remove all grass and debris, store the unit in a dry place, out of the reach of children, and oil the blades.

Do not place other objects on top of the machine.

Always charge the battery after use, and every three months if stored for a long period of time.

For storage in confined spaces the handles can be removed from the mower.

Disconnect the power cord and flex the lower handles to remove from the frame locating lugs.

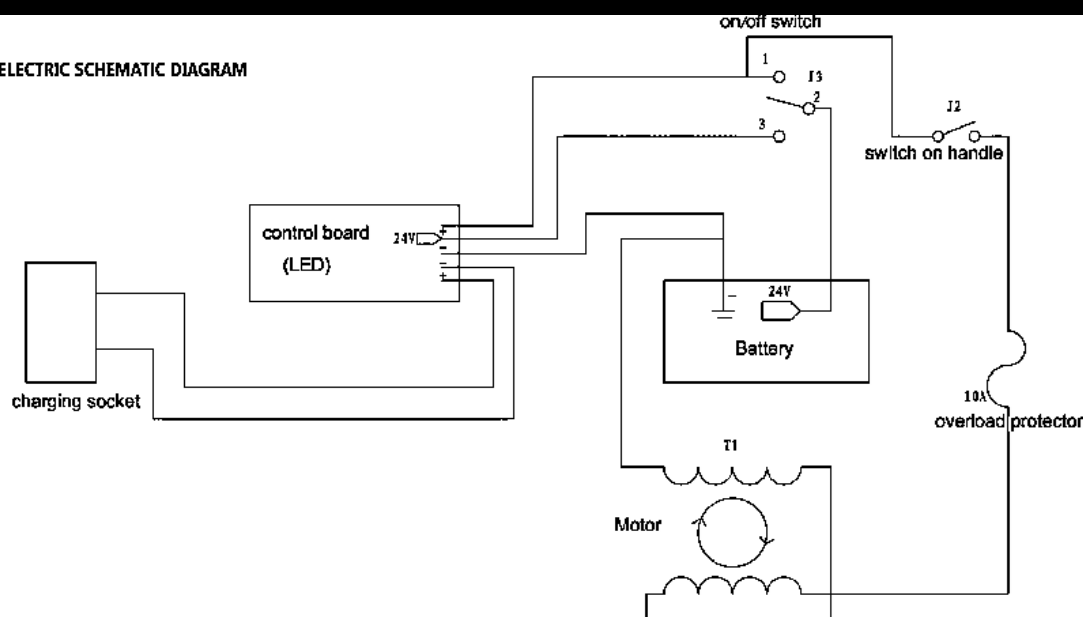
FOR SAFETY ENSURE THE BATTERY IS REMOVED FROM THE LAWNMOWER WHEN STORING. BATTERIES

- Keep batteries away from children and pets.
- Do not mix used and new batteries.
- Remove the batteries if left for long periods.
- Never dispose of batteries in a fire.
- Battery disposal, spent or expired batteries must be properly disposed of and recycled in compliance with local regulations. For detailed information, contact your local authority.
- Follow the battery manufacturer's safety, usage, and disposal instructions.

TROUBLESHOOTING:**CAUTION: FOR SAFETY ENSURE THE BATTERY IS REMOVED FROM THE LAWNMOWER.**

PROBLEM	POSSIBLE REASON	POSSIBLE SOLUTION
Mower fails to start	1. Battery flat	1. Recharge battery
	2. Battery is not fitted correctly.	2. Check the battery is correctly fitted and fully pushed down.
	3. Protective cut-out operated	3. Press reset button
	4. Faulty switch	4. Press the safety button (2) FIRST and then pull the lever switch (3) back, not at the same time
Does not cut grass	1. Poor blade adjustment	1. Tighten blade – see blade cutting adjustment
Stalls frequently	1. Poor blade adjustment	1. Tighten blade – see blade cutting adjustment
	2. Grass caught around blades	2. Remove any grass or debris that may be jamming the blade
Low cutting time	1. Battery flat	1. Recharge battery for 24 hours
	2. Blade too tight or dirty	2. Adjust blade or clean blade, oil blade and bearings
	3. Guard has build up of debris	3. Clean guard
	4. Grass thick, long or wet	4. Adjust to higher cut height, wait for dry conditions
	5. Cutting height too low	5. Set to higher cut height
Reset button operates frequently	1. Motor overloaded	1. Adjust cutting height to a higher setting and take a lighter cut
	2. Blade jammed	2. Push the mower more slowly
		3. Check blade is correctly adjusted so grass is cut cleanly
		4. Remove any grass/debris that may be causing a jam
Battery flat and will not recharge	1. Faulty charger	1. If the charger does not get warm then charger has fault. If charger gets warm then fault with battery. Call customer service helpline (0844 482 4400).
	2. Battery stored for long time without being charged.	2. Replacement battery.
Excessive noise	1. Blade and bearing require lubrication	1. Apply oil or lubricating spray to blade and bearing
	2. Blade too tight	2. Adjust blade

ELECTRIC SCHEMATIC DIAGRAM



DISPOSAL:

- Dispose of all packaging, paper, cartons and plastic, plastic bags in accordance with your local recycling regulations.
- At the end of the product's lifespan please dispose of it at an authorised household WEEE waste recycling centre.

DECLARATION OF CONFORMITY

Coopers of Stortford confirms the 24V Rechargeable Lawn Mower, H222, (Model No. MST-CM-24)

Conforms to the following European Directives and standards:-

Machinery Directive 2006/42/EC

EN 60335-1 & EN 60335-2-77

Low Voltage Directive 2014/35/EU

EMC Directive 2014/30/EU

Noise Directive 2000/14/EC & 2004/88/EC

Battery Directive 2013/56/EU, amending Directive 2006/66/EC

The Technical file in accordance with 2006/42/EC is available from:
Coopers of Stortford, 11 Bridge Street, Bishop's Stortford,
Hertfordshire, CM23 2JU

