



## **ASSEMBLY & OPERATION**



NOTE: Read instruction handbook before operation this machine.



## **ASSEMBLY & OPERATION**

Action	Figure
ASSEMBLY	
Assembling the handle bar	See Fig. A1
Adjustment Handle's height	See Fig. A2
Assembling the grass collection bag	See Fig. B
Assembling the grass collection bag to the lawn mower NOTE: Depress the grass collection bag slightly to ensure that it is completely installed. NOTE: Take the mulching insert out of the lawn mower before fitting the grass collection bag.	See Fig. C1, C2, C3
Removing/emptying grass collection bag  <b>WARNING!</b> Always check the safety flap close the discharge outlet before using. Never lift the safety flap when the lawn mower is being used without fitted grass collection bag.	See Fig. D
Installing side-discharge chute	See Fig. E1 E2
Installing mulching insert	See Fig. F
Removing /fitting the battery pack NOTE: This machine will only run when 2 batteries are installed. It is recommended to use the same two batteries and charge the two batteries at the same time. When you use two batteries with different power, the machine will only run to the lower common denominator.	See Fig. G1, G2
Checking the battery charge condition NOTE: Fig. H1 only applies for the battery pack with battery indicator light.	See Fig. H1

<p>Charging the battery pack</p> <p>NOTE: The batteries are shipped uncharged. Each battery must be fully charged before the first mow. Always fully charge the two batteries at same time. More details can be found in charger's manual.</p>	<p>See Fig. H2</p>
<p>OPERATION</p>	
<p>Power indicator light See details in BATTERY STATUS part</p> <p>IMPORTANT: When only one light is illuminated, your battery is overly discharged, even though the machine may still be capable to work. Continuing to operate your machine with the battery in this discharged condition may reduce the life and performance of your battery. When no light is illuminated, at least one battery is not fully installed or battery may be defective, please double check the batteries are fully seated into position.</p>	<p>See Fig. J</p>
<p>Starting and Stopping</p>	<p>See Fig. K1, K2, K3</p>
<p>Adjusting the cutting height</p> <p> <b>WARNING!</b> Stop, release switch lever and wait until the motor stops before adjusting height. The blades continue to rotate after the machine is switched off, a rotating blade can cause injury. Do not touch rotating blades.</p>	<p>See Fig L</p>
<p>Storage</p>	<p>See Fig. M1, M2</p>

### **BATTERY STATUS (See Fig. J)**

- Before starting or after use, press the button beside the power indicator light on the machine to check the battery capacity.
- During operation, the battery capacity will be indicated automatically by the battery power indicator. The indicator constantly senses and displays the battery condition as follows.
- For the machine with 2 battery packs with different power, the power indicator light displays the battery condition with the lower one of the two batteries.

Battery power indicator status	Battery condition
Five green lights (  ) are illuminated	The two batteries are in a highly charged condition.
Two, three or four green lights are illuminated.	The two batteries have a remaining charge. The more lights are illuminated, the more battery capacity
Only one green light (  ) is illuminated.	The battery level of at least one battery pack is very low. Please check and charge the battery pack.
No light is illuminated.	At least one battery is not fully installed or battery may be defective.
Only one light is flashing twice per cycle.	At least one battery is over discharged (please refer to the battery charge condition), please recharge the two batteries at once before use again or storage.
Only one light is flashing three times per cycle.	At least one battery is hot, wait for them cool down before start again.
Only one light is flashing four times per cycle.	The machine is over load. Raise the cutting height or push slowly.

## MULCHING MOWING TIPS

When using the mulching plug, your new mower is designed to cut the grass clippings into small pieces and distribute them back into the lawn, using mulching fins located inside the mower deck.

Under normal conditions, the mulched grass will biodegrade quickly to provide nutrients to the lawn. Please review the following recommendations for optimum mulching performance,

1. Avoid mowing when the grass is wet from rain or dew. Wet grass may form clumps which interfere with the mulching action and reduce runtime. The best time to mow grass is in the late afternoon when the grass is dry and the newly cut area will not be exposed to direct sunlight.
2. For best mulching performance, set the cutting height to remove about one third of the grass blade length, ideally no more than 1.5" inches at one time. If the lawn is

overgrown, it may be necessary to increase the cut height to reduce the pushing effort and prevent overloading the motor. For extremely heavy mulching, it is advisable to first cut at a high cut height setting, and then re-cut to the final cut height. Otherwise, make narrower cuts and mow slowly.

3. For best performance, keep the mower housing free of built-up grass. From time to time turn off mower and wait for the blade to come to a complete stop. Then unplug the Safety Key(6) and turn mower on its side. Using an object such as a stick, wipe out any accumulation of grass in the blade area. Be careful of the sharp edges of the blade. Clean often in wet, new grass, and always after every use.
4. Certain types of grass or grass conditions may require that an area be mulched a second time to fully disperse the grass throughout the lawn. If cutting a second time, it is advisable to cut perpendicular (across) the first cut pattern. **DO NOT CHANGE CUT PATTERN IN ANY WAY THAT WOULD CAUSE MOWING DOWN A HILL.**
5. Change your cutting pattern from week to week. This will help prevent matting and graining of the lawn.

## **CUTTING AREA**

The cutting area can be affected by many factors including: cutting height, operation practices (ex: starting/ stopping), lawn moisture levels, grass length and thickness.

It is ideal for mowing  $\frac{1}{4}$  acre to  $\frac{1}{2}$  acre lot sizes

### **TIPS:**

1. Mowing the lawn frequently and reducing the amount of starting/stopping procedures will help conserve battery runtime. It is recommended to always use the same two batteries during operation with fully charged levels.
2. For the best cutting performance, it is recommended to only mow up to  $\frac{1}{3}$  or less of the current grass height at a time. Mow at a slower pace when cutting long/ thick grass to allow the mower to properly discharge the clippings.

## **MAINTENANCE**



**WARNING: Stop the mower and remove the safety key before removing the grass collection bag.**

### **NOTE:**

To ensure long and reliable service, perform the following maintenance procedures regularly. Check for obvious defects such as a loose, dislodged or a damaged blade, loose fittings, and worn or damaged components. Check that the covers and guards are all undamaged and are correctly attached to mower. Carry out any necessary maintenance or repairs before operating mower. If the

mower should happen to fail despite regular maintenance, please call our customer helpline for advice.

### **BLADE SHARPENING**

KEEP BLADE SHARP FOR BEST MOWER PERFORMANCE. A DULL BLADE DOES NOT CUT GRASS CLEANLY OR MULCH PROPERLY. WEAR PROPER EYE PROTECTION WHILE REMOVING, SHARPENING, AND INSTALLING BLADE. ENSURE THAT SAFETY KEY IS REMOVED.

Sharpening the blade twice during a mowing season is usually sufficient under normal circumstances.

Sand causes the blade to dull quickly. If your lawn has sandy soil, more frequent sharpening may be required.

REPLACE BENT OR DAMAGED BLADE IMMEDIATELY.

### **WHEN SHARPENING THE BLADE (See Fig. N)**

1. Make sure blade remains balanced.
2. Sharpen blade at the original cutting angle.
3. Sharpen cutting edges on both ends of blade to keep it balanced, removing equal amounts of material from both ends.

NOTE:

1. Be sure the mower is turned off and remove the key.
2. Place the mower in stand up storage mode

### **BLADE BALANCING (See Fig. O)**

Check balance of blade by placing center hole in blade O-1 over a nail or screwdriver shank O-2, clamped horizontally in a vise O-3. If either end of the blade rotates downward, file that end. Blade is properly balanced when neither end drops.

### **BLADE MAINTENANCE (See Fig. P1, P2)**

Replace your metal Blade after 50 hours mowing or 2 years, whichever is the sooner-regardless of condition.

Follow these procedures to remove and replace the Blade. You will need garden gloves (not provided) and a spanner wrench (not provided) to remove the Blade. Hold the Blade and unscrew the Blade Bolt counter-clockwise using a spanner wrench, and then remove the Blade.

To re-assemble, position the Blade with the cutting edges towards the ground. Then securely tighten the Blade Bolt.

### **STORAGE (SEE FIG. M1, M2)**

Stop the mower and always remove the Safety Key. Clean the exterior of the machine thoroughly using a soft brush and cloth. Do not use water, solvents or polishes. Remove all grass and debris, especially from the ventilation slots.

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

Store the machine in a dry place. Do not place other objects on top of the machine.

To aid storage, release the Handle knobs, and rotate or fold the Upper Handle.

### **FOR BATTERY TOOLS**

The ambient temperature range for the use and storage of tool and battery is 0o C-45oC (32o F-113o F).

The recommended ambient temperature range for the charging system during charging is 0o C-40o C (32o F-104o F).

# TROUBLE SHOOTING



Problem	Solution
<p>1. Mower doesn't run when switch lever is activated.</p>	<p>A. Check to make sure safety key has been installed and is fully seated and that button on switch housing is being completely pushed.</p> <p>B. Release switch lever to turn mower off. Remove safety key, turn mower over and check that blade is free to turn. If not free, return to an authorized servicer. Blade should turn freely.</p> <p>C. Has battery been fully charged? Plug in charger and wait for green light to come on.</p>
<p>2. Motor stops while mowing.</p>	<p>A. Release switch lever to turn mower off. Remove safety key, turn mower over and check that blade is free to turn. If not free, return to an authorized servicer. Blade should turn freely.</p> <p>B. Raise cutting height of wheels to highest position and start mower.</p> <p>C. Has battery been fully charged? Plug in charger and wait for green light to come on.</p> <p>D. Avoid overloading the mower. Slow down the cutting pace by pushing mower slower or raise the cut height. Or both.</p>
<p>3. Mower runs but cutting performance is unsatisfactory, or does not cut entire lawn.</p>	<p>A. Has battery been fully charged? Plug in charger and wait for green light to come on.”</p> <p>B. Release switch lever to turn mower off. Remove safety key. Turn mower over and check: Blade for sharpness - Keep blade sharp. Deck and discharge chute for clogging.</p> <p>C. Wheel height adjustment may be set too low for grass condition. Raise cutting height</p>



4. Mower is too hard to push.	A. Raise cutting height to reduce deck drag on grass. Check each wheel for free rotation.
5. Mower is abnormally noisy and vibrates.	<p>A. Release switch lever to turn mower off. Remove safety key. Turn mower on side and check blade to ensure it has not been bent or damaged. If blade is damaged, replace with a replacement blade. If the underside of the deck is damaged return mower to an Authorized service center.</p> <p>B. If there is no visible damage to the blade and the mower still vibrates: Release switch lever to turn mower off, remove safety key and remove blade. Rotate blade 180 degrees and retighten. If mower still vibrates, return the mower to an authorized service center.</p>
6. Battery charger LED's not on.	<p>A. Check plug connection.</p> <p>B. Replace charger.</p>
7. Battery charger LED does not flip to green.	A. Battery needs to be diagnosed. Take to authorized service center.
8. Mower not picking up clippings with the Grass Collection Bag.	<p>A. Remove mulch plate when bagging.</p> <p>B. Chute clogged. Release switch lever to turn mower off. Remove safety key. Clear chute of grass clippings.</p> <p>C. Too much cut grass. Raise cutting height of wheels to shorten length of the cut.</p> <p>D. Bag full. Empty bag more often.</p>
9. When mulching there are clippings visible.	<p>A. Too much cut grass. Raise cutting height of wheels to shorten length of the cut. Do not cut off more than 1/3 of total length.</p> <p>B. Check blade for sharpness. Always keep blade sharp.</p>

10. Low or diminished run-time after many uses	A. Return to Authorized Service location - may need new battery.
11. The battery charger LED flashes red and the battery can't be charged.	A. The battery overheats after continuous use. Remove battery from the charger and allow it to cool to 42oC or less.

**Warning**

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.

