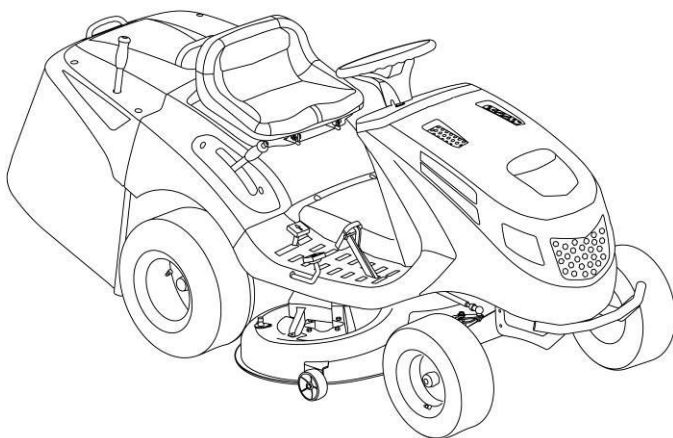


LAWN-TRACTOR

XCT 92
XCT 102

OWNER'S MANUAL



WARNING!
Read this manual carefully before using the machine



INTRODUCTION

Dear Customer,

Thank you for having chosen one of our products. We hope that you will get complete satisfaction from using your new machine and that it will fully meet all your expectations.

This manual has been written to help you become familiar with the machine and use it safely and efficiently. Do not forget that it is an integral part of the machine, so keep it close at hand for future reference and pass it on to the purchaser if you sell the machine.

This new lawn tractor has been designed and built in compliance with current standards, and is safe and reliable if used for cutting and collecting grass following the instructions given in this manual (**proper usage**). If you use the machine in any other way or ignore the instructions for safe use, maintenance and repair, it is considered "**incorrect usage**". In this case, the warranty is automatically voided and the Manufacturer is not held responsible for damage or injury to oneself or others.

Since we regularly improve our products, you may find slight differences between your machine and the descriptions contained in this manual. Modifications can be made to the machine without notice and without the obligation to update the manual, although the essential safety and function characteristics will remain unaltered. If in doubt, do not hesitate to contact your dealer. And now enjoy your work!

AFTER-SALES SERVICE

This manual gives all the necessary instructions for using the machine and carrying out basic maintenance.

Any adjustments or maintenance operations not described in this manual must be carried out by your Dealer or a specialized Service Centre. Both have the necessary knowledge and equipment to ensure that the work is done correctly without affecting the safety of the machine.

If you wish, you can ask your dealer to prepare a maintenance programme personalised to your needs. This will help you keep your new purchase in peak performance and maintain its value over time.

TABLE OF CONTENTS

1. SAFETY	3
Regulations for using the machine safely	
2. IDENTIFICATION OF THE MACHINE AND COMPONENTS	7
How to identify the machine and its main components	
3. UNPACKING AND ASSEMBLY	9
How to remove the packing and assemble loose parts	
4. CONTROLS AND INSTRUMENTS	14
Position and functions of all the controls	
5. HOW TO USE THE MACHINE	17
Instructions for working efficiently and safely	
5.1 Safety recommendations	17
5.2 Why the safety devices cut in	17
5.3 Preliminary operations before starting work	18
5.4 Using the machine	18
5.5 Using on slopes	24
5.6 Transporting the machine	24
5.7 Lawn maintenance	24
6. MAINTENANCE	26
All the information for maintaining the machine in peak efficiency	
6.1 Safety recommendations	26
6.2 Programmed maintenance	26
6.3 Checks and adjustments	28
6.4 Dismantling and replacing parts	28
7. SPECIFICATIONS	30
A summary of the main specifications of your machine	

1. SAFETY

1.1 HOW TO READ THE MANUAL

Some paragraphs in the manual containing important information regarding safety and operation are emphasized in the following ways:

⚠ WARNING or **IMPORTANT** *These give details or further information on what has already been said, in the aim to prevent damage to the machine.*

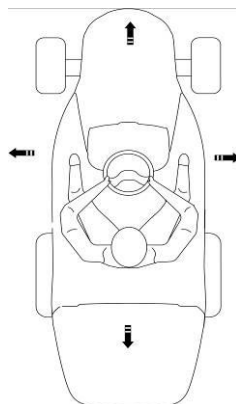
⚠ WARNING *Non-observance will result in the risk of injury to oneself or others.*

⚠ DANGER *Non-observance will result in the risk of serious injury or death to oneself or others.*

This manual describes various versions of the machine.

NOTE *Positions on the machine, such as “front”, “back”, “left” or “right” hand side, refer to the direction of forward travel.*

IMPORTANT *For all operations regarding the use and maintenance of the engine or the battery not described in this manual, refer to the relevant manuals which form an integral part of all the documentation supplied with the machine.*



1.2 GENERAL SAFETY REGULATIONS



***Read carefully
before using the machine.***

A) TRAINING

- 1) **Read the instructions carefully.** Be familiar with the controls and how to use the equipment properly.
- 2) Never let children or people unfamiliar with these instructions use the machine. Local regulations can restrict the age of the user.
- 3) **Never mow while people, especially children, or pets are nearby.**
- 4) Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- 5) Do not carry passengers.
- 6) All drivers should seek and obtain professional and practical instruction. Such instruction should emphasise:
 - the need for care and concentration when working with ride-on machines;
 - you cannot use the brake to regain control of a ride-on machine sliding down a slope. The main reasons for loss of control are:
 - insufficient wheel grip;
 - overspeeding;
 - inadequate braking;
 - the type of machine is unsuitable for its task;
 - unawareness of the effect of ground conditions, especially slopes;
 - incorrect hitching and load distribution.

B) PREPARATION

- 1) **While mowing, always wear sturdy**

footwear and long trousers. Do not operate the equipment barefoot or wearing open sandals.

- 2) Thoroughly inspect the area where the equipment is to be used and remove all objects which can be ejected from the machine.

- 3) **DANGER! Petrol is highly flammable:**

- store fuel in containers specifically designed for this purpose;
 - refuel outdoors only and do not smoke while refuelling;
 - **add fuel before starting the engine. Never remove the cap of the fuel tank or add petrol while the engine is running or when the engine is hot;**
 - if you spill petrol, do not start the engine and move the machine away from the area of spillage. Do not create any source of ignition until the petrol vapours have evaporated;
 - put back and tighten all fuel tank and container caps securely.
- 4) Replace faulty silencers.
 - 5) **Before use**, always inspect the machine to check that the blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance.
 - 6) On multi-bladed machines, remember that the rotation of one blade can cause other blades to rotate.

C) OPERATION

- 1) Do not start the engine in a confined space where dangerous carbon monoxide fumes can collect.
- 2) Mow only in daylight or good artificial light.
- 3) Before starting the engine, disengage the blades and shift into neutral.
- 4) **Do not use on slopes of more than 10° (17%)**

5) **Remember there is no such thing as a “safe” slope.** Travelling on grass slopes requires particular care. To guard against overturning:

- do not stop or start suddenly when going up or downhill;
- engage the drive slowly and always keep the machine in gear, especially when travelling downhill;
- machine speeds should be kept low on slopes and during tight turns;
- stay alert for humps and hollows and other hidden hazards;
- **never mow across the face of the slope.**

6) Use care when pulling loads or using heavy equipment:

- use only approved drawbar hitch points;
- limit loads to those you can safely control; maximum load 200kg
- do not turn sharply. Use care when reversing;
- use counterweight(s) or wheel weights whenever advised in the instructions manual.

7) Disengage the blades before crossing surfaces other than grass.

8) **Never use the machine with damaged guards, or without the safety protective devices in place.**

9) **Do not change the engine governor settings or overspeed the engine.**

Operating the engine at excessive speed can increase the risk of personal injury.

10) Before leaving the driving seat:

- disengage the blades and lower the attachments;
- go into neutral and apply the parking brake;
- stop the engine and remove the ignition key.

11) **Disengage the blades, stop the engine and remove the ignition key:**

- before clearing blockages or unclog-

ging the collector channel;

- before cleaning, checking or servicing the machine;

- after striking a foreign object. Inspect the machine for damage and make repairs before restarting and operating the machine;

- If the machine starts to vibrate abnormally (check for the causes immediately).

12) Disengage the blades for transport or whenever they are not in use.

13) **Stop the engine and disengage the blades:**

- before refuelling;
- before removing the grass-catcher.

14) Reduce the throttle during engine run-out. If the engine is provided with a shut-off valve, cut off the fuel when you have finished mowing.

D) MAINTENANCE AND STORAGE

1) Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.

2) Never store the equipment with petrol in the tank inside a building where fumes may reach an open flame or spark.

3) Allow the engine to cool before storing in any enclosure.

4) To reduce fire hazards, keep the engine, silencer, battery compartment and petrol storage area free of grass, leaves, or excessive grease.

5) Check the grass-catcher frequently for wear or deterioration.

6) **Replace worn or damaged parts for safety purposes.**

7) If the fuel tank has to be drained, this should be done outdoors.

8) On multi-bladed machines, remember that the rotation of one blade can cause other blades to rotate.

9) When the machine is to be stored or left unattended, lower the cutting deck.

1.3 SAFETY LABELS

Your machine must be used with care. This is why labels with illustrations have been placed on the machine, to remind you of the main precautions to take during use.

These labels are to be considered an integral part of the machine.

Should a label come off or become illegible, contact your dealer to replace it. Their meaning is explained below.

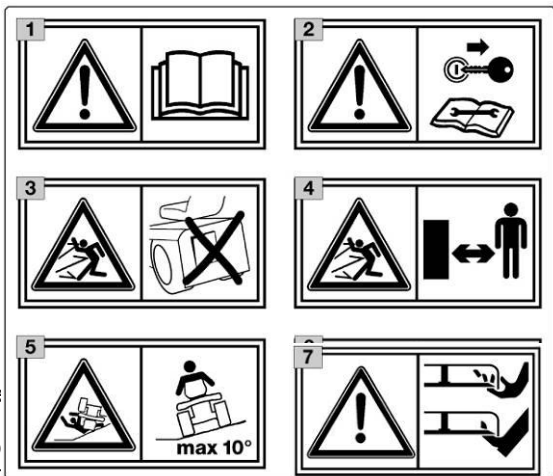
1 Warning: Read the instructions before operating this machine.

2 Warning: Disconnect the ignition key and read the instructions before carrying out any repair or maintenance work.

3 Danger! Ejected objects: Do not operate without the stone-guard or grass-catcher in place.

6 Danger! Dismemberment: Make clear of the machine at all time when e

7 Danger of cutting yourself. Blad

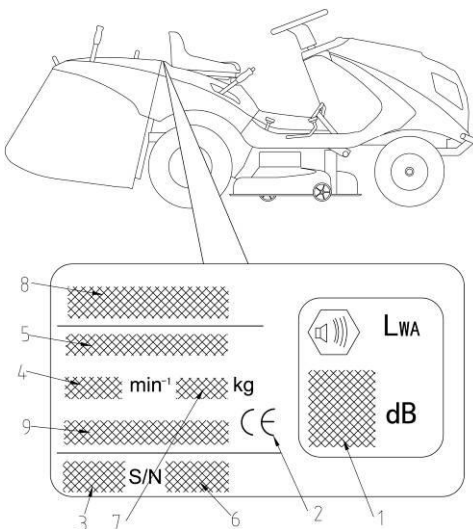


2. IDENTIFICATION OF THE MACHINE AND COMPONENTS

2.1 IDENTIFICATION OF THE MACHINE

The label located near the battery housing has the essential data of each machine.

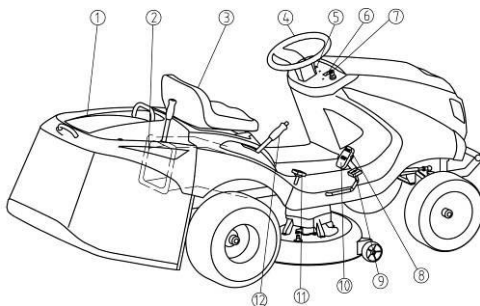
1. Acoustic power level according to directive 2000/14/CE
2. Conformity mark according to directive 98/37/EEC
3. Year of manufacture
4. Engine speed in r.p.m (if indicated)
5. Type of machine
6. Serial number
7. Weight in kg
8. Name and address of manufacturer
RD1 Ltd 0800731266
9. Cutting width and engine power



2.2 IDENTIFICATION OF MAIN COMPONENTS

The main components of the machine as following:

1. Grass-catcher:.
2. Grass unloading pipe
3. Driving seat
4. Front steering wheels.
5. Headlight switch
6. Blade engage switch
7. Engine switch
8. Park tread board
9. Go ahead tread board
10. Brake tread board
11. Retroversion tread board
12. Cutting height adjust lever



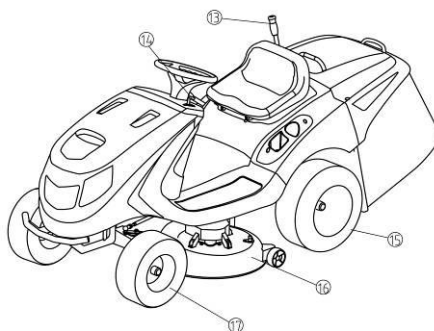
13. Grass bag overturn lever

14. Engine throttle;

15. Rear wheel

16. Blade deck

17. Front wheel



3. UNPACKING AND ASSEMBLY

For storage and transport purposes, some components of the machine are not installed in the factory and have to be assembled after unpacking. Follow the instructions below.

IMPORTANT

The machine is supplied without engine oil or fuel. Before starting the engine, fill with oil and fuel following the instructions given in the engine manual.

3.1 UNPACKING

When unpacking the machine, take care to gather all individual parts and fittings, and do not damage the cutting deck when taking the machine off the pallet.

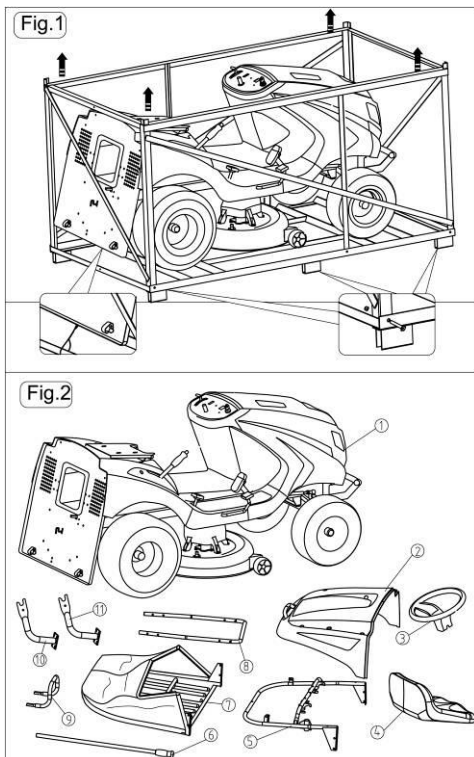
Please remove the 6 bolts at the bottom of the packaging shelf at first, then you can lift up the upper frame so as to free the machine (operation to be performed by two people). And cut the fixed wire at the front and the rear of the tractor frame, then you move out the machine from the pallet. (☛fig.1)

The packaging contains(☛fig.2)

1. the machine;
2. the grass-catcher cover board
3. the steering wheel;
4. the seat;
5. the upper bracket
6. the overturn lever
7. the grass-catcher;
8. the front bracket
9. the handle of the catcher
- 10.the left support of the catcher
- 11.the right support of the catcher

-an envelope containing:

- the instruction manual and documents
- nuts and bolts
- starter keys

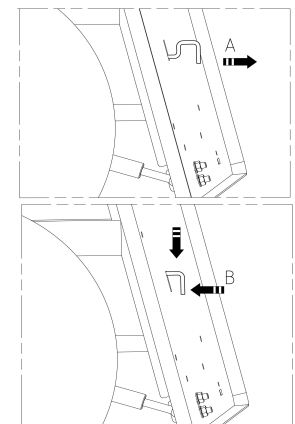


NOTE

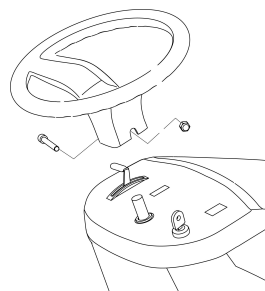
To prevent damage to the cutting deck, raise it to its maximum height and take utmost care when taking the machine off the pallet.

NOTE

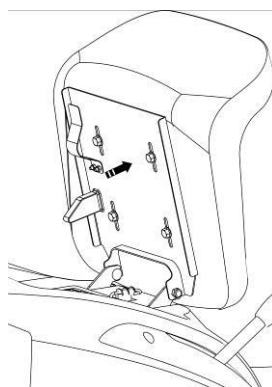
On hydrostatic drive models: to make it easier to move or take the machine off the pallet, put the transmission disengagement lever in position «B»

**3.2 FITTING THE STEERING WHEEL**

Put the machine on a flat surface and straighten up the front wheels. Fit the steering wheel onto the protruding shaft with the spokes directed towards the seat.

**3.3 FITTING THE SEAT**

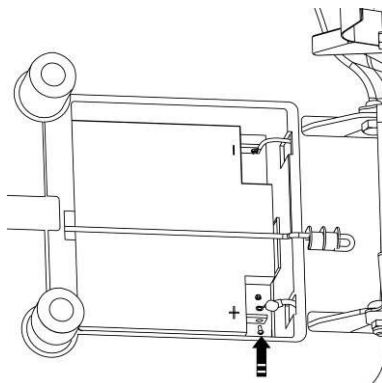
Mount the seat on the plate using the screws



3.4 CONNECTING THE BATTERY

First connect the red wire to the positive pole (+), using the screws supplied as shown.

Apply silicone grease to the terminals and check that the protective cap for the red wire is in place.

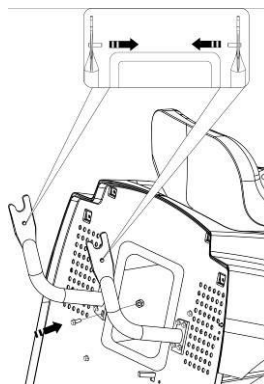


3.5 FITTING THE SUPPORT OF THE CATCHER

Using the nuts and the bolts inside the attached envelope to fit the two supports at the rear frame.

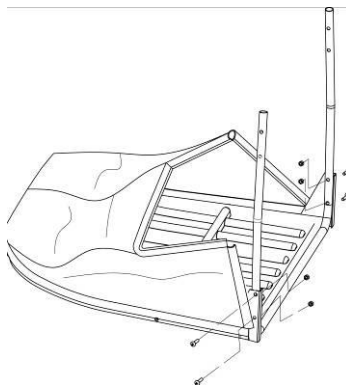
NOTE

Pay attention to the difference between the pin at the left support and the pin at the right one. Wrong assemble way will bring on fail to put the grass-catcher

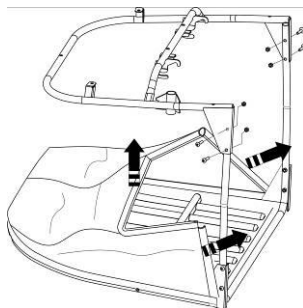


3.6 ASSEMBLE THE GRASS-CATCHER

3.6.1 Put the front bracket inside the grass-catcher, then use the nuts and the bolts inside the attached envelope to fit it at the front side of the grass-catcher.



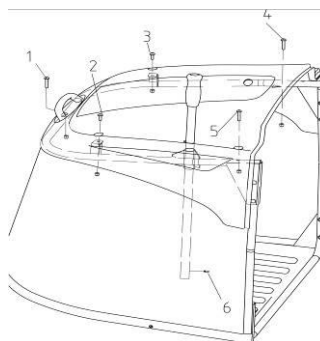
- 3.6.2 Using the nuts and the bolts to fit the upper bracket at the front bracket.
Clip the bag at the front bracket.



- 3.6.3 Using the nuts and the bolts to fit the the grass-catcher cover board at the upper bracket .

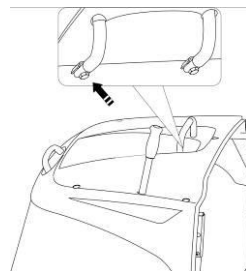
The bolts contains(⚙fig):

1. M6x30;
2. M6x16;
3. M6x16;
4. M6x30;
5. M6x30;



Put the overturn lever into the grass-catcher cover board and insert the spring pin(6) using a hammer.

- 3.6.4 Put the handle of the catcher into the grass-catcher cover board and use two screws to fit it at the upper bracket .



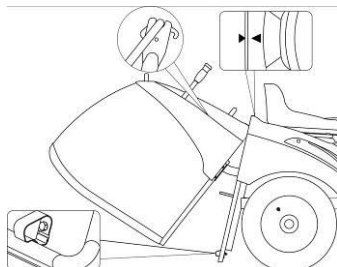
3.6.5 Fitting the protection at the exit (grass-catcher)

⚠ WARNING *Never use the machine without*

having fitted the exit guards!

Attach the grass-catcher to the brackets and centre it up with the rear plate, so that the two reference marks coincide.

Make sure that the lower pipe of the grass-catcher opening is attached to the pawl.



3.7 Filling with oil and fuel

NOTE *The engine manual indicates what type of oil and fuel you can use.*

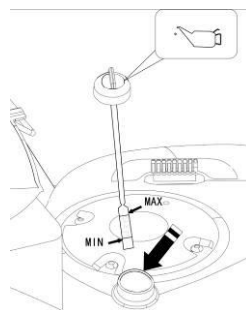
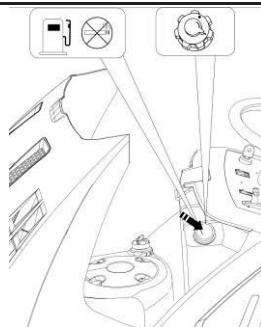
With the engine off, check the oil level. According to the instructions in the engine manual, this must be between the MIN and MAX marks on the dipstick.

Refuel using a funnel, but do not completely fill the tank. The tank's capacity is about 6 litres.

⚠ DANGER *Refuelling should be carried out in an open or well-ventilated area with the engine off. Always remember that petrol fumes are inflammable.*

**DO NOT USE A NAKED FLAME
TO LOOK INSIDE THE TANK AND DO
NOT SMOKE WHEN REFUELLING.**

IMPORTANT *Do not drip petrol onto the plastic parts to avoid damaging them. In the event of accidental spills or leaks, rinse immediately with water. The warranty does not cover for damage to plastic parts of the bodywork or the engine caused by petrol.*



4. CONTROLS AND INSTRUMENTS

4.1 STEERING WHEEL

Turns the front wheels. (➡ 2. 2-4)

4.2 THROTTLE

This regulates the engine's r.p.m. The positions are indicated on a plate showing the following symbols:



«CHOKE»

cold starting



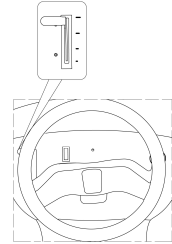
«SLOW»

for minimum engine speed



«FAST»

for maximum engine speed



- The «CHOKE» position enriches the mixture so must only be used for the time necessary when starting from cold.
- When moving from one area to another, put the lever in a position between «SLOW» and «FAST».
- When cutting, shift into «FAST».

4.3 BLADE ENGAGEMENT AND BRAKE CONTROL

The switch allows you to engage the blades using the electromagnetic clutch:

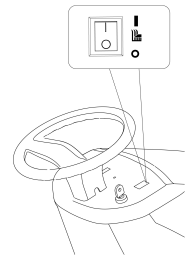


«A» Pressed = Blades disengaged



«B» Pulled = Blades engaged

If you engage the blades without taking the necessary safety precautions, the engine shuts down and cannot be restarted.



4.4 HEADLIGHT SWITCH (➡ Fig1)

For turning on the headlights when the key is in the «ON» position.

IMPORTANT

Light on the lawnmower is only for aux. illumination. Please only operate the lawnmower in good daylight.

4.5 KEY IGNITION SWITCH (➡ Fig2)

This key operated control has three positions:



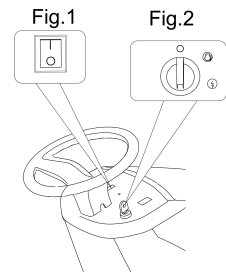
«OFF»

everything is switched off;



«ON»

activates all parts;



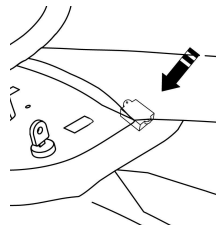


«START» connects the starter motor.

If you release the key on «START», it will automatically return to «ON».

4.6 SOUND WARNINGS

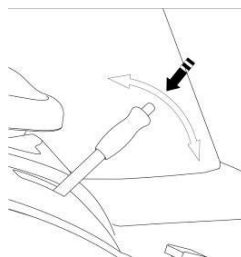
- The sound warning signals that the grass-catcher is full



4.7 CUTTING HEIGHT ADJUSTMENT LEVER



There are seven positions for this lever (shown as «1» to «7» on the label), which correspond to various heights between 3 and 8 cm.

- To go from one height to another, press the release button at the end of the lever.



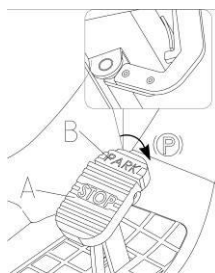
4.8 PARKING BRAKE

This brake stops the machine from moving when it has been parked. There are two positions:

-  «A» = Brake off
-  «B» = Brake on

The brake is applied by pressing the pedal A right down then pressing the pedal B. When you take your foot off the pedal it will be blocked by the lever in the lowered position.

To disengage the parking brake, press the pedal A. The lever will return to free position.

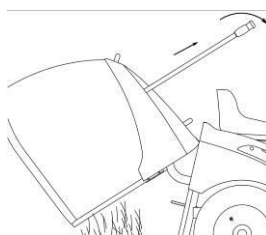


NOTE

The engine only can be started at the parking position.

4.9 LEVER FOR TIPPING THE GRASS-CATCHER

This pull-out lever tips and empties the grass-catcher. This means less work for the operator.



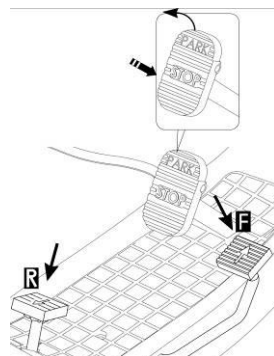
4.10 DRIVE PEDAL

This pedal engages drive in the wheels and controls the machine's forward and reverse speeds.

- To engage forward drive, press it towards «F» with your toe-cap. As you increase the pressure on the pedal, the speed of the machine increases.
- Reverse is engaged by pressing the pedal with the heel towards «R».

IMPORTANT

Only shift into reverse when the machine has stopped moving. Only press it towards «F» or «R» when release the park pedal.



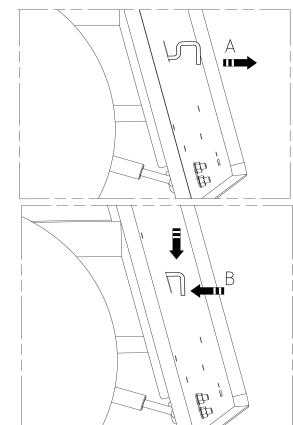
4.11 HYDROSTATIC TRANSMISSION DISENGAGEMENT LEVER

This lever has two positions as shown on the label:

- «A» = Transmission engaged: for all uses, when moving and during cutting;
- «B» = Transmission disengaged: this makes it much easier to move the machine by hand, **with the engine turned off.**

IMPORTANT

To avoid damage to the transmission unit, this operation must be carried out only when the engine has stopped.



5. HOW TO USE THE MACHINE

5.1 SAFETY RECOMMENDATIONS

**DANGER**

The machine must only be used for the purpose for which it was designed (cutting and collecting grass).

Do not tamper with or remove the safety devices fitted on the machine.

REMEMBER THAT THE USER IS ALWAYS RESPONSIBLE FOR DAMAGE AND INJURY TO OTHERS. Before using the machine:

- *read the general safety regulations (1.2), paying particular attention to driving and cutting on slopes;*
- *carefully read the instructions for use, make sure you are familiar with the controls and know how to stop the blades and the engine quickly;*
- *never put your hands or feet next to or beneath the rotating parts and always keep away from the exit.*

Do not use the machine when in a precarious state of health or under the effect of medicine or any other substances that can reduce your reflex actions and your ability to concentrate.

It is the user's responsibility to assess the potential risk of the area where work is to be carried out, and to take all the necessary precautions to ensure his own safety and that of others, particularly on slopes or rough, slippery and unstable ground.

Do not leave the machine on high grass with the engine running to avoid the risk of starting a fire.

**WARNING**

This machine must not be used on slopes steeper than 10° (17%) (5.5). If the machine is likely to be used mostly on sloping ground (never steeper than 10°), fit counterweights (supplied on request 8.1) beneath the cross-member of the front wheels. These improve stability at the front and reduce the chances of tipping over.

IMPORTANT

All the references relating to the positions of controls are described in chapter 4.

5.2 WHY THE SAFETY DEVICES CUT IN

The safety devices work in two ways:

- they prevent the engine from starting if all the safety requirements have not been met;
 - they stop the engine if even just one of the safety requirements is lacking.
- a)** To start the engine, it is necessary that:
- the transmission is in “neutral”;
 - the blades are not engaged;
 - the operator is seated and the parking brake is engaged.
- b)** The engine stops when the operator leaves his seat.

NOTE

The blades will stop when the machine go reverse by press it towards «R».

5.3 DIRECTIONS BEFORE STARTING WORK(☛3.3)

Before starting to mow, it is necessary to carry out several checks and operations to ensure you can work efficiently and in maximum safety.

5.3.1 Seat adjustment

To change the seat position, loosen the four fixing bolts and slide it along the slots. Once you have found the right position, tighten the four screws.

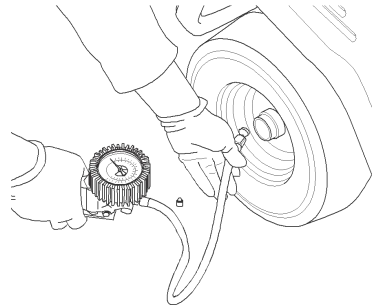
5.3.2 Tyre pressure

Having the right tyre pressure is the main condition for ensuring that the cutting deck is horizontal and mows evenly.

Unscrew the valve caps and connect a compressed air line with a gauge to the valves. The pressures are:

FRONT 1.0 bar (15 x 6.0-6)

REAR 1.2 bar (18 x 8.5-8)



5.3.3 Checking the fuel and oil(☛3.7)

5.3.4 Checking machine safety and efficiency

1. Check that the safety devices function as described (☛ 5.2).
2. Check that the brake is in perfect working order.
3. Do not start mowing if the blades vibrate or if you are unsure whether they are sharp enough. Always remember that:
 - A badly sharpened blade pulls at the grass and causes the lawn to turn yellow.
 - A loose blade causes unwanted vibrations and can be dangerous.

**WARNING**

Do not use the machine if you are unsure whether it is working safely or efficiently. If in doubt, contact your Dealer immediately to make the necessary checks and repairs.

5.4 USING THE MACHINE

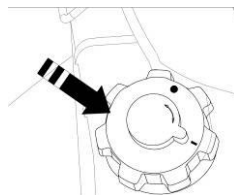
5.4.1 Starting

**DANGER*****The engine must be started in an open or well-ventilated area!******ALWAYS REMEMBER THAT EXHAUST GASES ARE TOXIC!***

To start the engine:

- open the fuel stopcock (to “I”)
- disengage the blades (☛ 4.3);
- Operate the parking brake (☛ 4.8);
- when starting from cold, move the throttle to the «CHOKE» position shown on the label;
- if the engine is already warm, position the lever between «SLOW» and «FAST»;
- put in the ignition key and turn to «ON» to make electrical contact, then turn to «START» to start the engine;
- release the key once the engine has started.

When the engine has started, move the throttle to «SLOW».

**IMPORTANT**

The choke must be closed as soon as the engine is running smoothly. Using it when the engine is already warm can foul the spark plugs and cause the engine to run erratically.

NOTE

If there are engine starting problems, do not insist as you can risk running the battery flat and flooding the engine. Turn the key to «OFF», wait for a few seconds and then repeat the operation. If the malfunction persists, refer to the engine manual

IMPORTANT

Always bear in mind that the safety devices prevent the engine from starting if safety requirements have not been met (☛ 5.2). In these cases, once the situation has been corrected, the key must first be turned back to «OFF» before the engine can be restarted.

5.4.2 Starting and moving without mowing

This machine has not been approved for use on public roads.**WARNING*****It has to be used (as indicated by the highway code) in private areas closed to traffic.***

When moving the machine, the blades must be disengaged and the cutting deck raised as high as possible

Position the throttle between «SLOW» and «FAST»,

Disengage the parking brake and release the brake pedal (☛ 4.8).

Press the drive pedal (☛ 4.10) in direction «F» and reach the required speed by gradually increasing pressure on the pedal and working the throttle.

**WARNING**

Drive must be engaged as described (☛ 4.10)) to prevent sudden engagement from causing tipping up and loss of control of the vehicle, particularly on slopes.

5.4.3 Braking

The machine already slows down considerably by just releasing the drive pedal.

5.4.4 Reverse

IMPORTANT *Reverse must be engaged only when the machine has stopped moving.*

When the machine has stopped moving, start reversing by pressing the drive pedal in direction «R» (➡ 4.10).

5.4.5 Grass cutting

To start cutting:

- move the throttle to «FAST»;
- raise the cutting deck as high as possible;
- engage the blades (➡ 4.3);
- start moving forwards on the grass very slowly and with utmost caution, as already described;
- regulate the cutting height and speed considering the conditions of the lawn (the height, density and dampness of the grass).

⚠ WARNING *When cutting on sloping ground, reduce your speed to ensure safe conditions.*

NOTE *This machine has not been approved for mowing when it go reverse. The blades will stop when the machine go reverse by press the drive pedal towards «R».*

Whatever the conditions, always reduce the speed if you notice a drop in engine speed – if you travel too fast compared to the amount of grass being cut, you will not be able to mow the grass well.

Disengage the blades and raise the cutting deck as high as possible whenever you need to get past an obstacle.

5.4.6 Emptying the grass-catcher

NOTE *This operation can only be done with the blades disengaged, otherwise the engine stops.*

Do not let the grass-catcher become too full as this may block the collector channel.

When the grass-catcher is full you will hear a sound warning. At this point:

- disengage the blades (➡ 4.3) and the sound will stop;
- lower the engine speed;
- stop moving forward;
- engage the parking brake on slopes;
- pull out the lever and tip up the grass-catcher to empty it; (➡ 4.9)
- close the grass-catcher so that it hooks onto the pawl.

5.4.7 Unblocking the collector channel

Cutting very tall or wet grass, particularly at excessively high speed, can clog up the collector channel. If this happens proceed as follows:

- stop moving forward, disengage the blades and stop the engine;
- remove the grass-catcher or stone-guard;
- remove the grass cuttings; you can reach them from the exit of the collector channel.



WARNING

This job must only be performed with the engine turned off.

5.4.8 End of mowing

When you have finished mowing, disengage the blades, lower the engine speed and ride the machine with the cutting deck raised as high as possible.

5.4.9 End of work

Stop the machine, move the throttle to «SLOW» and turn off the engine by turning the key to «OFF».

When the engine has stopped, close the fuel stopcock (☛ 5.4.1).



WARNING

To avoid backfire, position the throttle on «SLOW» for 20 seconds before stopping the engine.

Always take out the ignition key before leaving the machine unattended!



IMPORTANT

To keep the battery charged, do not leave the key in the «ON» position when the engine is not running.

5.4.10 Cleaning the machine

After use, clean the outside of the machine, empty the grass-catcher and shake it to remove grass and other debris.



WARNING

Always empty the grass-catcher and do not leave containers full of cut grass inside a room.

Clean the plastic parts of the body with a damp sponge using water and detergent, taking care not to wet the engine, the electrical parts or the electronic circuit board located under the dashboard.

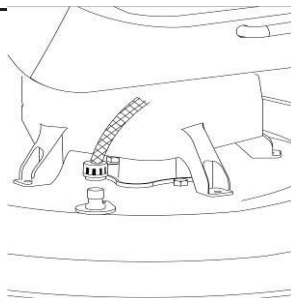


IMPORTANT

Never use hose nozzles or harsh detergents to clean the body-work or the engine!

When washing the inside of the cutting deck and the collector channel, the machine must be on firm ground with:

- the grass-catcher or stone-guard fitted;
- the operator seated;
- the engine running;
- the transmission in neutral;
- the blades engaged.



Connect a water hose to each of the pipe fittings (1) one at a time and run water through each one for a few minutes, with the blades moving.

When washing, the cutting deck should be lowered right down. Take off the grass-catcher, empty and rinse it, and then put it in a position where it can dry quickly.

5.4.11 Storage and inactivity for long periods

If you intend not to use the machine for a long period (more than 1 month), disconnect the battery cables and follow the instructions in the engine instruction manual.

Empty the fuel tank by disconnecting the tube situated at the inlet of the fuel filter (1) and follow the instructions in the engine manual.



WARNING

Carefully remove any dry grass cuttings which may have collected around the engine or silencer to prevent their catching fire the next time the machine is used!

Put the machine away in a dry, sheltered place and preferably covered with a cloth

IMPORTANT

The battery must be kept in a cool and dry place. Before a long storage period (more than 1 month), always charge the battery, and then recharge before using again

The next time the machine is used, check that there are no fuel leaks from the tubes, fuel stopcock or carburettor.

5.4.12 Card protection device

The electronic circuit board has a self-resetting protector which breaks the circuit if there is a fault in the electrical system. It results in the stopping of the engine and the switching off of the lamp.

The circuit automatically resets after a few seconds but the cause of the fault should be ascertained and dealt with to avoid reactivating the protection device.

IMPORTANT

To avoid activating the protection device:

- *do not invert the leads on the battery terminals;*
- *do not use the machine without its battery or damage may be caused to the charging regulator;*
- *be careful not to cause short-circuits.*

5.4.13 Summary of main steps to follow when using the machine

To ...	You will need to ...
Start the engine (🔧 5.4.1)	Open the fuel stopcock, ensure that all the conditions allowing starting are met, and then turn the key.
Go forward (🔧 5.4.2)	press the drive pedal forward
Brake or stop (🔧 5.4.3)	Reduce the engine speed and press the brake pedal.
Reverse (🔧 5.4.4)	Stop the machine; press the drive pedal back
Cut the grass (🔧 5.4.5)	Fit the grass-catcher or stone-guard and apply the throttle; engage the blades and adjust the cutting height. press the drive pedal forward
Empty the grass-catcher (🔧 5.4.6)	Stop moving forwards, disengage the blades and pull out the lever to tip up the grass-catcher.
Unblock the collector channel (🔧 5.4.7)	Stop moving forwards, disengage the blades and turn off the engine. Remove the grass-catcher and clean the collector channel.
Finish mowing (🔧 5.4.8)	Disengage the blades and reduce the engine speed.
Stop the engine (🔧 5.4.9)	Reduce the engine speed, wait a few seconds, turn the key and close the fuel stopcock.
Store the machine (🔧 5.4.10)	Engage the parking brake, remove the key and, if necessary, wash the machine, the inside of the cutting deck, the collector channel and the grass-catcher

5.5 USING THE MACHINE ON SLOPING GROUND

Only mow on slopes with gradients up to the maximum already mentioned.



> 15°



> 15°



> 10°

Lawns on a slope have to be mowed moving up and down and never across them. When changing direction, take great care that the wheels facing up the slope do not hit any obstacles (such as stones, branches, roots, etc.) that may cause the machine to slide sideways, tip over or make you lose control.



DANGER

REDUCE SPEED BEFORE ANY CHANGE OF DIRECTION ON SLOPES, and always apply the parking brake before leaving the machine at a standstill and unattended.



WARNING

Start moving forwards very carefully on sloping ground to prevent the risk of tipping over. Reduce the forward speed before going on a slope, particularly downhill.



DANGER

Never use reverse to reduce speed going downhill: this could cause you to lose control of the vehicle, especially on slippery ground.

5.6 TRANSPORTING



WARNING

If the machine is transported on a truck or trailer, use suitable equipment for lifting and enough people for the weight involved and the type of lifting system used. The machine must never be lifted by rope and tackle. During transport, close the fuel stopcock, lower the cutting deck, apply the parking brake and fasten the machine securely with ropes or chains to the hauling device.

5.7 LAWN MAINTENANCE

1. To keep a lawn green, soft and attractive, it should be cut regularly without damaging the grass. A lawn can be composed of different types of grass. If the lawn is cut frequently, grass and roots grow more vigorously, forming a solid grassy bed. If the lawn is cut less frequently, higher grass and weeds start growing (plus daisies and clovers, etc.).

2. It is always better to cut the grass when dry.

-
3. The blades must be in good condition and well sharpened so that the grass is cut straight without a ragged edge that leads to yellowing at the ends.
 4. The engine must run at full speed, both to ensure a sharp cut of the grass and to get the necessary thrust to push the cuttings through the collector channel.
 5. The frequency of mowing should be in relation to the rate of growth of the grass. The grass should not be left to grow too much between one cut and the next.
 6. During hot and dry periods, the grass should be cut a little higher to prevent the ground from drying out.
 7. The best height of the grass on a well-kept lawn is approx. 4-5 cm. With one cut, you do not need to remove more than a third of the total height. If the grass is very tall, it should be cut twice in a twenty-four hour period – the first time with the blades at maximum height, possibly reducing the cutting width, and the second cut at the desired height.
 8. The appearance of the lawn will improve if you alternate cutting in both directions.
 9. If the collector system tends to get blocked with grass, you should reduce the forward speed as it may be too high for the condition of the grass. If the problem persists, the probable causes are either badly sharpened blades or deformed wings.
 10. Be very careful when mowing near bushes or kerbs as these could distort the horizontal position of the cutting deck and damage its edge as well as the blades.

6. MAINTENANCE

6.1 SAFETY RECOMMENDATIONS



WARNING

Before cleaning or doing maintenance work, take out the ignition key and read the relevant instructions. Wear adequate clothing and work gloves whenever your hands are at risk.



WARNING

Never use the machine with worn or damaged parts. Faulty or worn-out parts must always be replaced and not repaired. Only use original spare parts: Parts that are not of the same quality can damage the equipment and affect your safety and that of others.

IMPORTANT

Never dispose of used oil, fuel, batteries or other pollutants in unauthorised places!

6.2 PROGRAMMED MAINTENANCE

Operation	Hours	Completed (Date or Time)							
1. MACHINE									
1.1 Check of fastening and sharpness of blades	25								
1.2 Blade replacement	100								
1.3 Transmission belt check	25								
1.4 Transmission belt replacement ²⁾	—								
1.5 Blade belt check	25								
1.6 Blade belt replacement ²⁾	—								
1.7 Drive adjustment and check	10								
1.8 Blade brake and engagement check	10								
1.9 Bolt and screw check	25								
1.10 General lubrication ³⁾	25								
2. ENGINE ₁₎									
2.1 Engine oil change								
2.2 Air filter cleaning and check								
2.3 Air filter replacement								
2.4 Fuel filter check								
2.5 Fuel filter replacement								
2.6 Spark plug contacts check and cleaning								
2.7 Spark plug replacement								

See the engine manual for the full list and frequency.
At the first signs of wear, contact your dealer to replace the part.
General lubrication of all joints should also be carried out whenever the machine is to be left unused for a long period.

The above table is there to help you maintain your machine's safety and performance. It shows the main maintenance and lubrication operations and their frequency. To the right of each item, there is a box where you can write the date or after how many operating hours the work was carried out.

⚠ WARNING *All checks, adjustments and replacements not described in chapters 6.3 and 6.4 of this manual must be carried out by your Dealer or a specialized Service Centre. Both have the necessary knowledge and tools to ensure that the work is carried out correctly without affecting the safety of the machine.*

6.2.1 Summary of main situations where servicing operation may be required

Whenever ...	You will need to ...
The blades vibrate	Contact Your Dealer
The blades tear the grass and the lawn becomes yellow	Contact Your Dealer
The cut is uneven	Align the cutting deck (➡ 6.3.1).
The blades engage in an abnormal way	Contact Your Dealer
The machine does not brake	Contact Your Dealer
Forward movement is erratic	Contact Your Dealer

6.2.2 Engine

IMPORTANT

Follow all the instructions in the engine manual.

To empty the engine oil, unscrew the oil plug when refitting the plug, make sure the seal is positioned correctly.

6.2.3 Battery

The battery must be carefully maintained to ensure long life. The machine battery must always be charged:

- before using the machine for the first time after purchase;
- before leaving the machine disused for a long period;
- before starting up the machine after a long period of disuse.

Carefully read and observe the battery recharging instructions in the booklet provided with the battery. Failure in following the instructions or in charging the battery could permanently damage the battery cells.

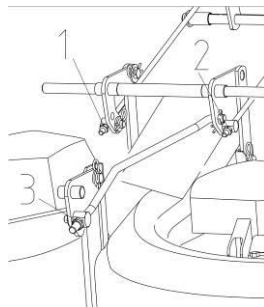
A flat battery **must** be recharged as soon as possible.

IMPORTANT

*Recharging must be done using a battery charger at **constant voltage**. Other recharging systems can irreversibly damage the battery*

6.3 CHECKS AND ADJUSTMENTS

- Place the machine on flat ground and check the tyre pressure;
- Put 26 mm blocks under the front edge of the deck and 32 mm blocks under the rear edge,
- Adjust the nut 1 and nut 2 to keep the deck in touch with the 32mm blocks.
- Adjust the nut 3 to keep the deck in touch with the 26mm blocks.

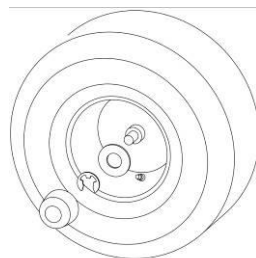


6.4 DISMANTLING AND REPLACEMENT

6.4.1 Replacing wheels

Stop the machine on flat ground and put a block under a load-bearing part of the frame on the side that the wheel is to be changed.

The wheels are held by a snap ring which can be eased off with a screwdriver.



NOTE

If you have to replace one or both rear wheels, make sure they have the same diameter, and check that cutting deck is horizontal to prevent an uneven cut.

IMPORTANT

Before remounting the wheel, apply grease to the axle. Put the snap ring and supporting washer (2) back in place.

6.4.2 Replacing and repairing the tyres

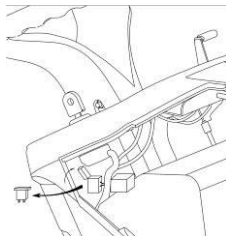
The tyres are “Tubeless” and so all punctures must be repaired by a tyre repairer following the procedures required for this kind of tyre.

6.4.3 Replacing the bulbs

The bulbs (18W) have a bayonet fitting and are installed in the bulb holder which can be taken out by turning it anti-clockwise.

6.4.4 Replacing a fuse

The machine is fitted with 10A fuses.
When it blows, the machine stops ,
the dashboard light switches off,
and the battery gradually runs out,
the machine will have problems starting.



6.4.5 Dismantling, replacing and remounting the blades

⚠ WARNING *Always wear work gloves when handling the blades.*

⚠ WARNING *Damaged or bent blades must always be replaced; never try to repair them! ALWAYS USE ORIGINAL BLADES BEARING THE SYMBOL "TOPSUN"! Make sure the blades are correctly balanced. The blades are different and rotate in different directions, so make sure you put them back in the right place by referring to the code stamped on the outside of each blade.*

1. Dismantling

1a = screw with right thread (loosen anti-clockwise)

1b = screw with left thread (tighten clockwise)

2. Original spare parts

Only the following pairs of blades can be used on this machine:

2a: 0606665 ; 2b: 0606668

3. Remounting

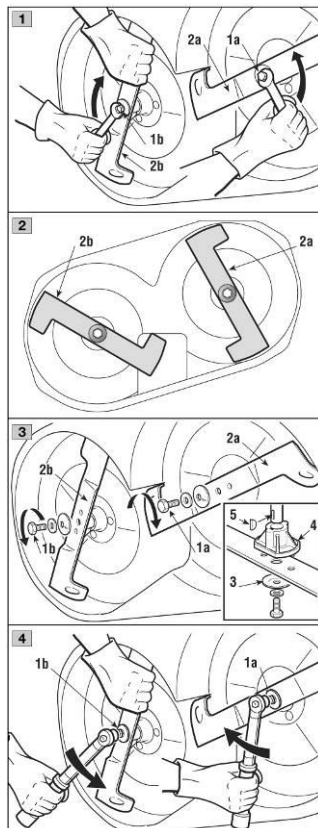
Check that the concave part of the cushion disc (3) presses against the blade. Remount the shaft hubs (4), making sure that the keys (5) are securely lodged in place.

4. Tightening the screws

1a = screw with right thread (tighten clockwise)

1b = screw with left thread (tighten anti-clockwise)

Tighten with a **torque wrench** calibrated to 40-45 Nm.



6.4.6 Replacing the belt

The belt replacement must be carried out at a Licensed Service Centre.

⚠ WARNING *Replace the belts as soon as they show obvious sign of wear! ALWAYS USE GENUINE REPLACEMENT BELTS!*

7. SPECIFICATIONS

TECHNICAL DATA:

Blade screw tightening torque.....	40 Nm
Electrical system	12 V
Battery	18 Ah
Cutting height	from 3 to 9 cm
Cutting width	102 cm (XCT102)
Cutting width	92 cm (XCT92)
Front tyres size	15 x 6.00-6
Rear tyres size.....	18 x 8.50-8
Front tyre pressure.....	1.0 bar
Rear tyre pressure	1.2 bar
Net weight	220 kg(XCT102), 210 kg(XCT92)

Forward speed (at 3000 min-1):

in Forward gear	from 0 to 8.8 km/h
in Reverse	from 0 to 3.8 km/h

Machine Dimensions:

