

User's Manual

Tiller

Model:

CEDRUSGLX-GT65-2L

CEDRUSGLX-GT65-2B&S



FOR YOUR OWN SAFETY

BEFORE USING THE MACHINE, READ AND UNDERSTAND THE
ENTIRE OPERATOR'S MANUAL.



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The instruction manual is an integral part of the machine, supplied with the device.
Please read it carefully before undertaking any activities with the tiller.

WARNING STICKERS

Warning and information signs are located on the tiller to inform the user about the safe and correct operation of the machine.

1.

NIEBEZPIECZEŃSTWO

Kontakt z obracającymi się ostrzami może spowodować poważne obrażenia. Trzymaj dłonie, nogi i odzież z dala, podczas pracy silnika.

OSTRZEŻENIE	OSTRZEŻENIE
ABY UNIKAĆ POWAŻNYCH OBRAŻEŃ <ul style="list-style-type: none"> - przeczytaj instrukcję obsługi przed rozpoczęciem pracy - zapoznaj się z funkcjami przycisków sterujących - przestrzegaj reguł bezpieczeństwa podczas pracy - nigdy nie pozwalaj na obsługę maszyny przez dzieci lub osoby do tego nieprzeszkolone - wyłącz silnik przed podjęciem napraw lub prac konserwacyjnych - utrzymaj osoby postronne z dala od maszyny - trzymaj się z dala od wirujących części urządzenia - należy zachować szczególną ostrożność podczas cofania lub ciągnięcia maszyny do siebie - benzyna jest łatwopalna i wybuchowa. Zatrzymać silnik. Unikać wysokich temperatur, iskier i otwartego ognia podczas tankowania 	OSTRZEŻENIE <p>Urządzenie może wytwarzać iskry, które mogą wywołać pożar wokół suchej roślinności. Operator powinien skontaktować się z lokalnymi organami od ustaw pożarowych lub przepisów dotyczących tych wymogów, które obowiązują na danym terenie.</p>

2.

OSTRZEŻENIE

Przeczytaj i postępuj zgodnie z instrukcją przed podjęciem pracy z urządzeniem.

Benzyzna jest łatwopalna. Pozwól silnikowi ochłodzić się przed tankowaniem.

Silnik wydzielą tlenek węgla, **NIE PRACUJ** maszyną w zamkniętych pomieszczeniach.

Obszar tłumika może przekraczać 66° C. Nie dotykaj gorących elementów.

3.

SPRAWDZIĆ CZY NIE MA WYCIEKÓW LUB ROZLANEGO PALIWA NA URZĄDZENIU

ZATRZYMAĆ SILNIK PRZED TANKOWANIEM

4.

UWAGA

Należy uzupełnić olej silnikowy przed podjęciem pracy maszyną.

Max 600ml
Min 500ml
SAE10W-30

6.

SPRZĘGŁO: NAPĘD W PRZÓD

ROZŁĄCZONE ZAŁĄCZONE

7.

SPRZĘGŁO: NAPĘD W TYŁ

ROZŁĄCZONE ZAŁĄCZONE

5.

OSTRZEŻENIE

KOŁA DZIAŁAJĄ JAKO HAMULCE

- zawsze upewnij się przed rozpoczęciem pracy z glebogryzarką, że koła są załączone
- koła działają jako hamulce, aby utrzymać glebogryzarkę z kontrolowaną prędkością
- rozłączone koła tylko wtedy gdy silnik jest wyłączony

DZIAŁANIE

Przeczytaj instrukcję obsługi w celu uzyskania informacji dotyczących rozpoczęcia pracy z glebogryzarką:

1. Ustaw dźwignię zwalniającą napęd w pozycji neutralnej.
2. Ustaw maszynę tak, aby ostrzami nie dotykała ziemi.
3. Sprawdzić położenie kół i ich blokad.
4. Ustaw dźwignię ssania w pozycji „ssanie”.
5. Ustaw dźwignię gazu do pozycji jazdy.

8.

0,6 L

SAE 80W -90

1. Danger!

Contact with rotating blades can cause injury. Keep hands, feet and clothing away from the engine while it is running.

Warning!

To avoid serious injury:

- Read the operator's manual before starting work
- Familiarize yourself with the functions of the controls
- Follow safety rules during operation
- Never allow children or untrained persons to operate the machine
- Turn off the engine before performing repairs or maintenance
- Keep bystanders away from the machine
- Stay away from rotating parts
- Use extreme caution when reversing or pulling the machine towards you
- Gasoline is flammable and explosive. Stop the engine. Avoid high temperatures, sparks and open flames when refueling.

Warning!

The machine can create sparks which could cause fires around dry vegetation. The operator should contact local fire authorities or local fire regulations regarding these requirements that apply in the area

2. Warning!

Read and follow all instructions before operating this machine.

Gasoline is highly flammable. Allow the engine to cool before refueling.

Engine exhaust contains carbon monoxide. DO NOT operate the machine in an enclosed area.

The muffler area can become extremely hot. Do not touch hot components.

3. Check for leaks or spilled fuel on the unit.

Stop the engine before refueling

4. Note!

The engine oil must be refilled before operating the machine.

5. Warning!

The wheels act as brakes

- Always make sure the wheels are engaged before starting to work with the tiller
- The wheels act as brakes to keep the tiller at a controlled speed
- Disengaged wheels only when the engine is switched off

Operation:

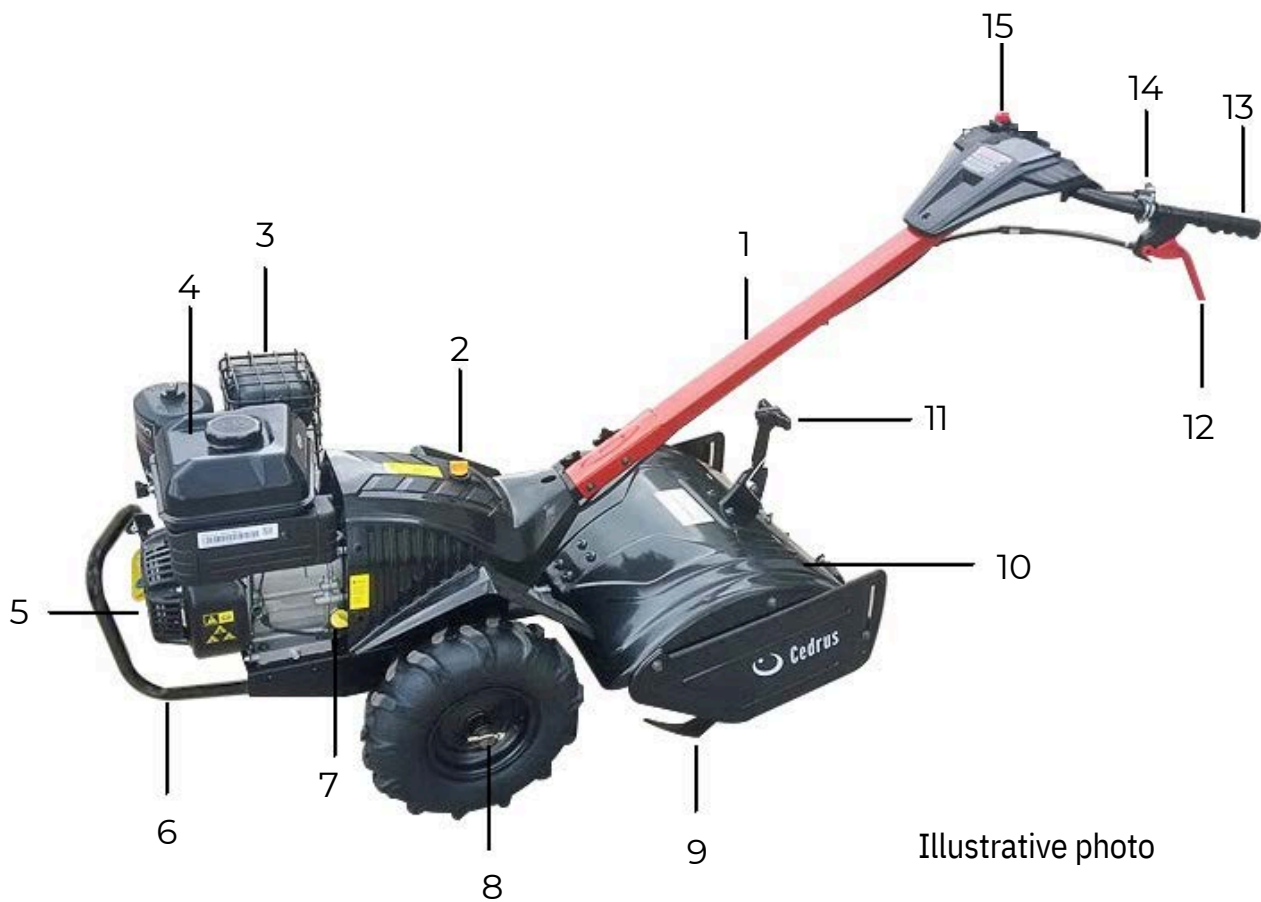
Read the operator's manual for information on how to start working with the tiller:

1. Set the drive release lever to the neutral position
2. Position the machine so that the blades are not touching the ground.
3. Check the position of the wheels and their locks.
4. Set the choke lever to the "choke" position.
5. Set the throttle lever to the drive position.

6. Clutch: Forward gears disengaged; engaged

7. Clutch: Reverse gear disengaged; engaged

MACHINE CONSTRUCTION

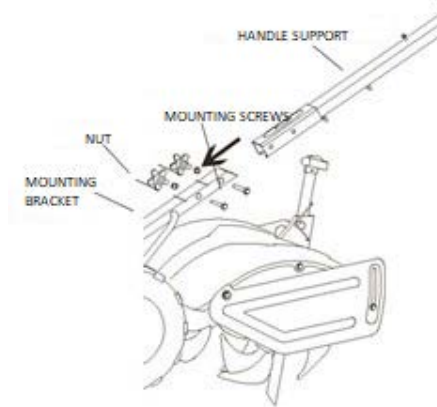


Illustrative photo

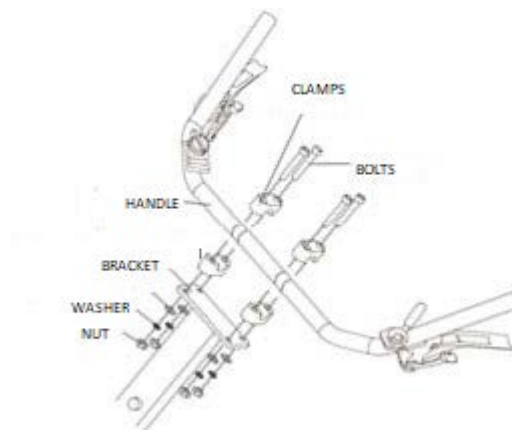
1	Handle support	9	Tiller blades
2	Gearbox oil filler	10	Blades cover
3	Muffler	11	Working depth adjustment lever
4	Fuel tank	12	Drive lever
5	Starter	13	Handle
6	Tubular bumper	14	Engine throttle lever
7	Engine oil filler cap/ dipstick	15	Engine switch
8	Wheel locking pin		

Tiller assembly

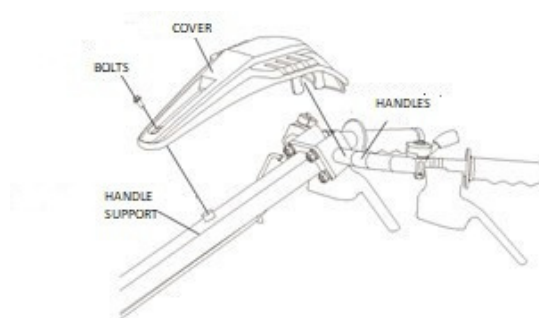
1. The handle support should be inserted into the mounting bracket and secured with screws.



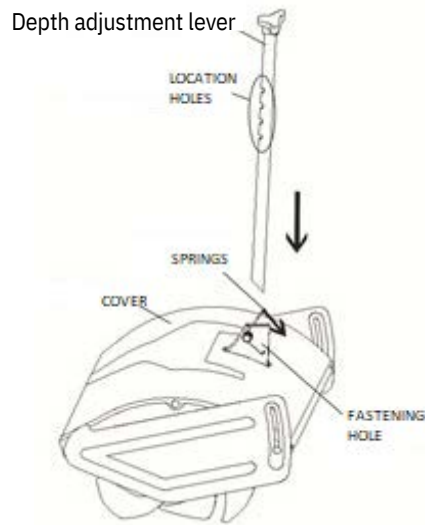
2. Attach the handle to the bracket.



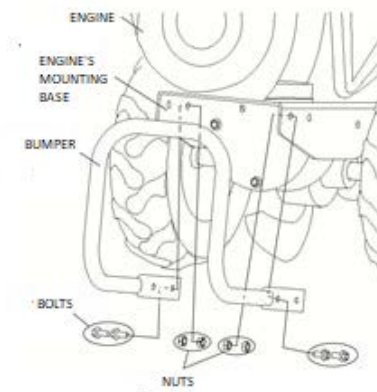
3. Secure the cover with the screw.



4. Attach the depth adjustment lever to the handle, the locating holes must be at the front as shown in the drawing.



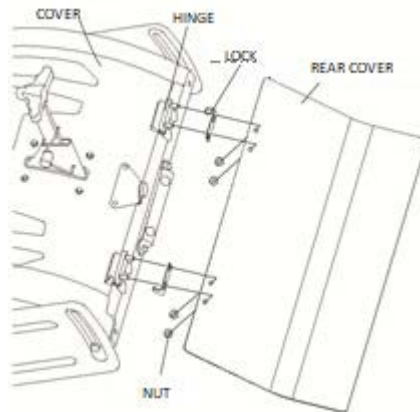
5. Attach the bumper as shown in the drawing.



6. Insert the cable hook into the hole and then secure it as shown in the drawing.



7. Attach the rear cover to the hinges.



8. Install the tiller wheels on the axles accordingly, they have a directional tread. The wheels have a drive lock position, during which they are disconnected from the gearbox and engine. We can then make free turns and roll the machine to another place, this function can be performed with the engine on or off.

NOTE! The wheel locks can only be engaged and disengaged when stationary and with the engine switched off. You cannot lock just one wheel, as this could damage the gearbox.

NOTE! The tiller is delivered without oil in the engine. Remember to refill it before starting the machine, otherwise it may damage it.

Tiller's elements

STARTER – To start the engine, pull the starter rope gently.

IGNITION SWITCH – It controls the engine ignition system, the ON position allows it to be started and the OFF position allows it to be turned off.

FUEL VALVE – regulates its fuel flow, ON position before starting the engine and during work, OFF position after work has been finished.

THROTTLE LEVER – regulates the engine speed.

CHOKE LEVER – Setting this lever to the “choke” position makes it easier to start a cold engine; once the engine has warmed up, move the lever back to ensure the correct fuel mixture during operation.

DRIVE LEVER – allow you to engage the blade and wheel drive after pressing them. One engages the forward drive, the other engages the reverse drive, they must not be pressed simultaneously. Releasing the lever from the handle will disconnect the tiller drive.

DEPTH ADJUSTMENT LEVER – allows you to set the knives to the desired working depth. By tilting the lever back, you change the height by moving it up or down.

NOTE! The above adjustments are performed only when the machine is stationary.

Before starting

Before starting and starting work with the machine, remember about work safety and user safety.

Wear proper work clothes to work. Avoid loose clothing that can get caught in the rotating parts of the machine. Work in solid, non-slip footwear.

Engine check

- If the machine has an oil air filter, it must be soaked in engine oil.
- Check the oil level in the engine and transmission, maintain the appropriate level.

WARNING! Starting the engine when any of the above guidelines are not followed will result in engine damage.

- Check for any oil or fuel leaks.
- Keep the air filter clean.
- Check the fuel level.

Checking the machine

- Check the machine for any signs of damage.
- All guards should be in place and machine connections should be tightened securely
- Remove debris from the machine

Throttle lever

It is used to control the engine speed. When the machine is not working under load, it should be set to the "tortoise" position, which reduces the engine speed. This will reduce fuel consumption, excessive noise and extend the engine's life. When the machine is working under load, the lever should be set to the "hare" position, which increases the engine speed and makes work easier.

Starting the engine

Before starting, check the oil level in the machine on a level surface, if necessary, top up to the required amount. The machine is started according to the instructions contained in the attached operating instructions.

WARNING! Remember the safety rules given in the operating instructions. Engine exhaust fumes contain poisonous carbon monoxide, which is dangerous to humans. Do not start the machine in closed or poorly ventilated rooms.

Engine Starting Procedure

- Set the fuel valve lever to the "ON" position
- Set the choke lever to the "CLOSED" position for starting a cold engine, when the engine is already warm the lever is set to the "OPEN" position.
- Set the engine switch to the "ON" position.
- Set the throttle lever to the middle position (half of the maximum speed).
- Make sure that the drive clutch levers are set to the neutral position.
- Engage the wheel locks.
- Start the engine by pulling the starter rope. Pull it out until resistance is felt, then pull briskly to start.
- Allow the starter handle to return freely to its place.

NOTE! The blade drive engagement lever must not be engaged when starting the engine.

OPERATION

WARNING! Contact with rotating parts of the tiller can cause serious bodily injury. Be especially careful during operation, keep hands and feet away from rotating parts. When attempting adjustments, maintenance or cleaning, stop the engine.

1. Start the engine according to the instructions in the owner's manual.
2. Press the drive lever to start operation.

3. After releasing the lever, the drive is disconnected, if the blades continue to rotate, adjust the cable accordingly or contact the service.

4. Engaging the reverse gear causes the machine to move towards the operator, special care should be taken then. When using this gear, the engine speed should be set to the lowest level and make sure that the lever engaging the forward movement is in the free position.

CAUTION! Do not press both clutch levers against the handle at the same time.

When starting to work with the machine, rest the blades on the ground and press them firmly with the handle. Engaging the clutch lever causes the blades to rotate and the machine to work. Engaging the blade drive may cause the handle to change position, it should be held firmly and securely.

The machine should be tilted slightly backwards during operation, which will allow for better work results. If the machine jerks, press the handle down to better sink the blades.

Be especially careful when moving backwards with the machine. In the event of tripping and tipping over, let go of the handle, the machine blades will stop when the clutch is released.

The working knives must not be engaged when turning or when moving outside the work area.

NOTE! If you need to clean the knives during operation, proceed as follows:

- Disengage the blade drive by releasing the clutch lever
- Switch off the engine
- Remove the spark plug cable
- Wait a few minutes for the engine to cool down

When cleaning the knives, use work gloves.

Engine stop

- Reduce engine speed to minimum
- Set the engine ignition switch to the "OFF" position

AFTER WORK

1. Inspect the machine, check for loose (tighten if necessary) or damaged parts.
2. Clean the machine of dirt.
3. Check the working knives.
4. Follow the engine operating instructions to properly finish working with it.
5. Remove the spark plug wire.

INSPECTIONS AND MAINTENANCE

Before starting any work related to the operation and maintenance of the machine, turn off the engine

and remove the spark plug cable for safety purposes. All work, even with the engine switched off, should be carried out in a well-ventilated room or outdoors. Be especially careful with parts of the engine and muffler that heat up during operation; wait until they cool down before starting any work.

Be careful when cleaning the engine, do not use gasoline or other flammable substances. Avoid sources of fire when working on the engine.

Inspection schedule

		Before each use	After the first month/ first 10 hours	Each 3 months/ 50h	Each 6 months / 100h	Each year / 300h
Drive belt tension	Check	X				
Air filter	Replace	X				
	Check			X (*)		
Engine oil	Replace	X				
	Check /		X	X		
Belt tension	adjust		X (**) X		X (**) X	
Drive engagement cables	Check / adjust		X		X	
Oil in the transmission	Check	X				X
	replace			X		X

		Before each use	After the first month/ first 10 hours	Each 3 months/ 50h	Each 6 months / 100h / 300h	Each year
Spark plug	Check / adjust				X	
	replace					X
Valve clearance	Check / adjust					X (***)
Idle speed	Check / adjust					X (***)
Blades	Check / clean	X				
Mounting elements	Check / adjust	X				

(*) Check/replace the filter more often if the device is used in dusty air.

(**) If the belt shows signs of wear, replace it with a new one.

(***) Work performed at an authorized service center

A detailed maintenance schedule for the engine is available in the Engine Manual.

Refueling

- the engine must be switched off, you should wait if it is still hot
- refuel in a well-ventilated area or outside
- keep all sources of ignition away

1.Unscrew the fuel cap.

2.Fill the tank to the bottom of the neck. If you overfill the tank and fuel spills, wipe it off thoroughly and move away from the spill with the machine.

3.Close the fuel cap.

Lubrication

Control cables and wheel axles should be lubricated every 10 hours of operation or before long-term storage, preferably using 10W oil.

Adjusting the drive engagement cable

Correct cable tension is essential for proper machine operation. It should be adjusted after the first hour of operation and then every 2 hours

Engine oil level

- unscrew the engine oil filler cap/dipstick and then wipe it off
- check the oil level by inserting the cap/dipstick into its place and then pulling it out
- if the level is below the permissible standards, top up the oil to the upper limit of the engine oil dipstick
- screw on the cap/dipstick

Engine oil change

Drain the engine oil while it is still warm.

- prepare a container for draining oil and place it near the drain screw
- set the fuel valve to the "OFF" position
- unscrew the drain screw and drain the oil by tilting the machine slightly
- tighten the drain screw and refill the machine with new oil

CAUTION! Starting the engine with low or no oil level will result in damage.ñ.

Air filter

A dirty air filter reduces the power of the device and leads to its wear. Tillers often work in very dusty air, so it is necessary to follow the scheduled inspections. Check the filter each time before starting work and replace it every 25-50 hours of work, depending on its condition.

Depending on the type of engine used in the machine, there are different filters. Below are the basic rules, more detailed information in the Engine Operating Instructions.

Paper rectangular air filter

1. Unscrew the filter cover screw and remove it.
2. Remove the pre-filter (if equipped), clean it.
3. Replace the cardboard filter if it shows excessive wear.
4. Replace the pre-filter and reinstall the cover.

Paper oval air filter

1. Unscrew the filter cover screw and remove it.
2. Remove the filter.
3. Clean the pre-filter.
4. Replace the cardboard filter after 25 hours of operation or when its condition indicates excessive wear.
5. Install the filter cover.

If the machine is equipped with a pre-filter, it should be washed with water and detergent. Soak it in oil and squeeze out the excess. If we skip this step, the dry air filter will not absorb the right amount of dirt, which can damage the machine.

Blades

Before starting work, check their condition, replace damaged ones with new ones. To replace the blades, remove the safety pin and pin. Remove the working section and replace it with a new one. Remember to maintain the correct direction of the blades.

Spark plug

1. Remove the spark plug wire.
2. Unscrew the spark plug with a wrench and clean it thoroughly.
3. Replace the spark plug if it is damaged.
4. Check/adjust the gap between the electrodes, it should be 0.7-0.8 mm.
5. Screw the spark plug back into place.

Drive belts

We replace them according to a schedule, if they are too worn or damaged, replace them with new ones.

Drive gear

Before first use, check the gear oil level, if necessary top up with 80W90 oil, there should be 0.6 L in the gear. The drain plug is located at the bottom of the gearbox. Change the oil according to the schedule, check its level before each use.

SAFETY RECOMMENDATIONS

The machine has been designed to provide safe and reliable operation under conditions consistent with the instructions in this manual. Before using the machine, read and understand the contents of this manual. Failure to follow this instruction may result in personal injury or damage to the equipment.

Training / Information

1. Familiarize yourself with the correct operation of the controls before using the machine. Learn to quickly turn off the engine.
2. The machine must always be used in accordance with the instructions in the operator's manual
3. Remember that the user is responsible for accidents or dangerous situations involving other people or their property. It is the user's responsibility to assess the potential risks associated with the terrain being cultivated and to take the necessary measures to ensure safety on slopes, uneven, slippery or built-up terrain.
4. Never allow children or people unfamiliar with the operating instructions to use the machine. Local regulations may specify a minimum age for the user.
5. Never work in the presence of people, especially children or animals, within a radius of 20 meters around the machine; the user must hold the handle at all times.
6. Do not use the machine after taking medication or substances that may reduce the speed of reaction or attention.
7. Exercise particular caution on difficult terrain, as the machine will operate less stably than on already cultivated ground.
8. Always wear sturdy, non-slip shoes and long, narrow trousers when working. Do not use the machine barefoot or in sandals. We recommend wearing ear protection.
9. The machine must be used for its intended purpose, i.e. for cultivating the soil. Any other use may be dangerous or lead to damage to the machine.

Preparation

1. Carefully inspect the area where the machine will be used and remove all objects that could be thrown by the machine (stones, wires, glass, metal objects, etc.)
2. Before use, always visually inspect the machine to ensure that tools and guards are not worn or damaged. Replace worn or damaged parts.
3. If the machine is equipped with an engine stop button, the engine stop electrical cables must be maintained in good condition to ensure that the engine stops.
4. Check for fluid leaks (petrol, oil, etc.)
5. Do not use the machine without the guard or protective covers and make sure they are properly tightened.

Operation

1. Never carry people on the machine.
2. Start the engine carefully and in accordance with the manufacturer's instructions.
3. Switch off the engine when the machine is left unattended.
4. Walk, never run, when operating the machine.
5. Pull the machine towards you or change direction (if available) with great care.
6. Keep a safe distance from rotating tools.
7. Do not place hands or feet near or under rotating parts.

Maintenance / Storage

1. Turn off the engine and disconnect the spark plug before any cleaning, inspection, tool change, adjustment or maintenance operation on the machine.
2. Nuts and bolts must be tightened to ensure safe operating conditions.

3.To reduce the risk of fire, keep the engine, muffler and fuel tank free of plant debris, excess grease or other substances that could ignite.

4.Have a damaged muffler replaced by an authorized service center.

5.Do not repair parts. Replace worn parts with new ones.

6.Replace tools using complete sets to ensure balance.

7.For safety reasons, do not modify the technical characteristics of the machine. Do not change the engine speed control settings or run the engine at excessive speed. Regular maintenance is essential for safety and maintaining performance.

8.Allow the engine to cool before storing the machine in an enclosed area.

Warning, danger! Gasoline is highly flammable:

1.Fuel must be stored in containers specifically designed for this purpose. Refuel outdoors only. Do not smoke while doing this.

2.Never remove the fuel cap and never refuel while the engine is running or hot.

3.If petrol is spilled on the ground, do not start the engine but move the machine away from the area to prevent the risk of ignition until the petrol fumes have dissipated.

4.Store the machine in a dry place. Never store the machine in a room where fuel fumes may come into contact with flames, sparks or sources of heat.

5.Install fuel and petrol can caps properly.

6.Limit the amount of fuel in the tank to minimize splashing.

7.Do not run the engine in confined areas where carbon monoxide fumes can collect.

8.Carbon monoxide can be fatal, ensure proper ventilation.

Movement and transportation

1. All operations performed on the machine, except for tillage, must be performed with the engine switched off and the spark plug disconnected.
2. Movement (except for tillage) must be carried out using the transport wheel.
3. When transporting the machine, do not lift it by yourself. The weight of the machine is given at the end of this manual. To ensure safety, use transport methods adapted to the weight of the machine and the situation.
4. The machine must be loaded onto a trailer and unloaded using a suitable loading ramp. The machine must be properly secured to ensure safety during transport.
5. Transport must be carried out with the engine switched off and the spark plug disconnected, using a trailer or other means of transport that ensures safety.

RESIDUAL RISK

When working properly with a tiller, we are also exposed to risks related to the machine's design. These can be minimized by following safety rules and acting with common sense.

During work, the following dangerous situations may occur:

- injury from a thrown object hidden in the ground
- machine recoil as a result of hitting a hard surface
- injury from thrown remnants of processed material
- other dangerous situations that may occur despite working in accordance with safety rules

ALWAYS FOLLOW THE SAFETY RULES IN THIS MANUAL!

TRANSPORT

Do not transport the tiller with a hot engine.

Turn the fuel valve to the “OFF” position before transporting.

Disconnect the spark plug wire.

When transporting the machine, try to keep it in the operating position.

STORAGE

Proper storage has a major impact on the life of the machine and its trouble-free start-up at the beginning of the next season. Let the machine cool down before cleaning it. Remember to always clean the engine with a dry cloth or brush, and lubricate the connecting elements with a small amount of oil.

1. Prepare the engine for storage according to the Engine Operating Instructions.
2. Clean the entire machine thoroughly.
3. Lubricate all parts exposed to rust with oil.
4. Inspect the general condition of the machine, repair any damage.
5. Store the machine in a well-ventilated area free from moisture and dust.
6. Set the fuel valve to the “OFF” position.
7. Remove any gasoline from the fuel tank for storage periods longer than 30 days.

Running the engine on stale fuel will cause problems with starting and proper operation.

TECHNICAL DATA

Model	CEDRUSGLX-GT65-2L	CEDRUSGLX-GT65-2B&S
Working width	500 mm	
Weight	80 kg	
Engine	Loncin	Briggs & Stratton
Capacity	196 cm ³	208 cm ³
Power	4.1 KW	4.8 KW
Engine rpm	3600	
Type	4-stroke, air-cooled, 1 cylinder	
Blades rotation speed	180 rpm	
Enigne oil	SAE-10W-30	
Fuel	Unleaded petrol LO95	

COMMON PROBLEMS AND HOW TO FIX THEM

Problem	Cause	Repair method
The engine has no power	Dirty air filter	Replace or clean the air filter according to the engine manual.
	incorrectly adjusted/dirty carburettor	Adjust or clean the carburetor
The engine is overheating	Poor air flow	Clean the engine cylinder
	Incorrect/damaged spark plug cap	Replace the spark plug cap with a new one designed for the engine
	Incorrect/damaged spark plug	Replace the spark plug with a new one according to the engine manual.
Engine runs erratically	Incorrect spark plug gap	Set the electrode gap to 0.7 – 0.8 mm
	Dirty air filter	Replace or clean the air filter according to the engine manual.

Irregular engine operation at higher RPMs	Incorrectly set spark plug gap	Set the electrode gap to 0.7 – 0.8 mm
The engine cannot be started	Engine switch in the "OFF" position Faulty	Switch to "ON"
	ignition module	Replace in service
	Fuel valve closed	Open the fuel valve
	Engine "flooded"	Set the engine speed to high and pull the starter rope several times until the engine starts.
	Choke lever set incorrectly	Set it properly, start the cold engine with the "choke"
	Incorrect/damaged spark plug	Replace the spark plug with a new one according to the engine manual.
	Engine speed control lever in incorrect position.	Move to the appropriate position
	Spark plug wire removed	Put it on the candle
	Oil level too low	Top up the oil level
	Dirty air filter	Replace or clean the air filter according to the engine manual.
	Old fuel	Replace with new one
The engine starts with difficulty	Contaminated fuel	Replace the fuel with new one
	Damaged fuel cap vent	Replace or clean
	Dirty air filter	Replace or clean the air filter according to the engine manual.