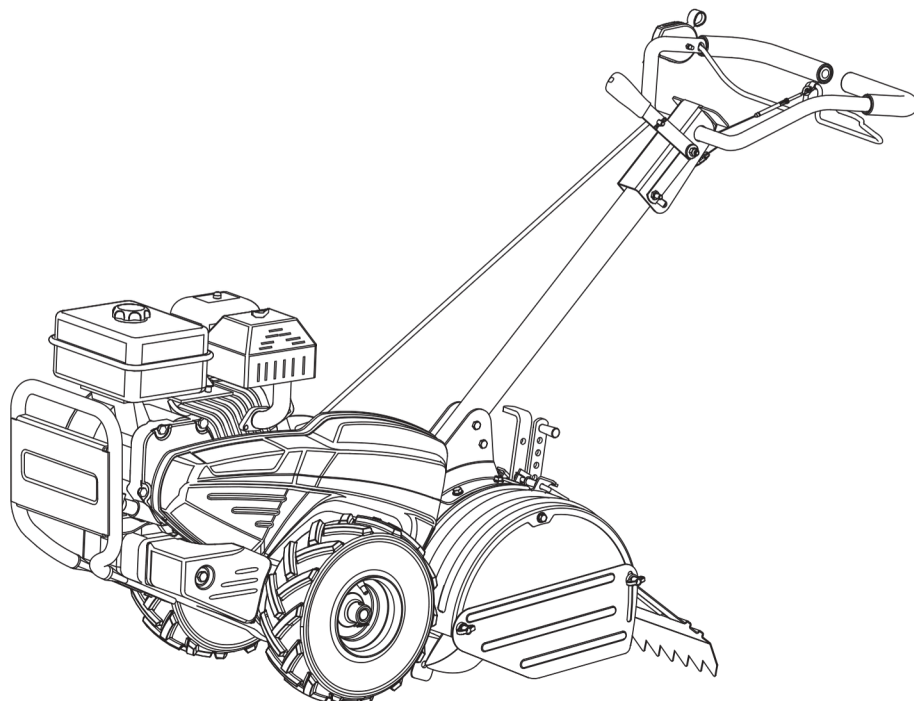


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Tiller

USER MANUAL

Model no: GL03PRO-B&S; GL03PRO-LC

Serial no: _____

Both the model number and serial number can be found on the nameplate. Please keep them and save them in a safe place for future reference.

FOR YOUR OWN SAFETY

PLEASE READ AND UNDERSTAND ENTIRE USER MANUAL
BEFORE OPERATING MACHINE



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Introduction

Your new tiller will meet all your expectations. The machine was created based on strict quality standards, which can guarantee incomparable performance. Operation of the device is simple and safe, and if the petrol tiller is properly handled, the device operator is guaranteed many years of efficient operation.



Please read the entire operating manual carefully before using the machine. Pay special attention to any highlighted warnings.

A tiller, also called a cultivator, is a machine intended for preparing land for growing plants, and is also irreplaceable for loosening and leveling large areas of land after digging it up. Rotary tillers are particularly useful when the soil is difficult to cultivate, compact and clayey. The machine must not be used for trimming bushes, chopping branches or mowing grass. Any use other than those expressly specified in this manual may damage the equipment and cause serious harm to the user.

The manufacturer is not liable for damage or injuries resulting from improper use of the equipment or from changes to the device's structure. All rules for safe use, accident prevention and hazard avoidance must be followed. Correct use of the device also includes respecting the operating, maintenance, storage and repair conditions established by the manufacturer. The device may be used, repaired and maintained only at authorized service points.



Rotary tillers are particularly useful for loosening and leveling compact and clayey soil that is difficult to cultivate.

The engine manufacturer is responsible for all aspects of engine performance, power ratings, diagrams, warranty and service. For more information, refer to the separate engine operating manual included with the machine and included in the packaging.

Technical specification

Model number	GL03PRO-B&S GL03PRO-LC
Displacement	196 cc, 6.5 HP, petrol
Gears	1 forward / 1 backward
Transmission	Koło łańcuchowe
No of rotations	190 / min
Working width	450 mm
Working depth	330 mm
Weight	93,5 kg B&S / 93 kg LC

Environmental cautions



Unnecessary materials should be recycled rather than thrown away. All tools, hoses and packaging should be sorted and taken to your local recycling center for environmentally safe disposal.

Symbols

The nameplate on the machine may contain various symbols that provide important product information or instructions for using the machine.



Read the user manual carefully



Remember to use hearing protection and safety glasses



Remember to wear protective gloves



Remember to wear appropriate footwear



Removal or tampering with safety devices or safeguards is prohibited.



Smoking or having open flames is not allowed.



Do not touch parts that are hot during operation. Serious burns may occur.



Keep your feet away from moving parts



Attention! Objects may be thrown while the machine is in use



Make sure that there are no children or unauthorized persons near the workplace.

Safety

General safety rules

Understand your machine

You should read and familiarize yourself with the operator's manual and placards on the machine to understand the limitations and potential hazards of its use.

Please carefully read and remember the functions of all buttons and their correct use. Make sure you know the procedure for stopping and turning off the machine immediately.

Please read carefully all instructions and safety notes contained in the engine manual included with the kit. Do not attempt to operate the machine until the operator is completely sure how to properly use the engine, how to maintain it, and how to avoid accidental injury and/or damage to the equipment.

If the equipment is to be used by someone other than the original purchaser or is to be loaned, rented or sold, always provide these instructions and all necessary safety information before operating the equipment. An informed user can prevent accidents or injuries that could injure you, other people, or damage property.

Do not force any operations and use the machine appropriately.

Personal security Children must not be allowed to use this machine. Keep children, pets and other people who are not using the appliance away from the work area. Be alert and turn off the device if anyone enters the work area. Place children under the watchful care of a responsible adult.

Do not operate the tiller under the influence of drugs, alcohol or medication. These substances could affect the ability to use the machine correctly.

Please remember to dress appropriately. You should wear long and thick trousers, shoes and gloves. Do not wear loose clothing, shorts or any jewelry. If the operator has long hair, make sure it is above the shoulders. Keep hair, clothing and gloves away from moving parts. Loose clothing, jewelry or long hair can become caught between moving parts of the machine.

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Protect your eyes, face and head from objects that may be thrown from the device.

Always wear safety glasses or safety glasses with side shields when working. Wear appropriate hearing protection.

Remember to keep hands and feet away from moving machine parts when using the machine. They can damage, cut or crush parts of the operator's body. Keep hands and feet away from all pressure points.

Do not touch parts that remain hot after using the machine. Allow parts to cool before performing any maintenance or making other adjustments or servicing the machine.

When operating the equipment, the operator must remain alert, watch what he is doing and use common sense.

Always keep your balance and do not lean over completely. Do not use the machine barefoot, in sandals or similar light footwear. Wear safety shoes to protect your feet and help you maintain balance on slippery surfaces. By standing steadily maintaining balance, the operator has greater ability to control the machine in the event of unexpected events.

Check the machine before use

Check before switching on. Do not remove the covers, restore them to a usable condition. Make sure all nuts, bolts, etc. are securely tightened.

If the tiller requires repairs or is in poor technical condition, it must not be used. Missing parts should be replaced, and damaged or faulty parts should be replaced before use. Check for fuel leakage. Take care of the good technical condition of the machine.

Do not use the machine if the switch does not respond (does not turn on/off). Any gasoline-powered device that cannot be controlled by the engine switch is dangerous and must be repaired.

Please remember to check that all adjustment keys have been removed from the working area before each turn on. A wrench placed near a working machine may result in personal injury.

Do not allow the machine to be started accidentally. Make sure it is turned off before transporting and performing maintenance work, as carrying out the above operations with the engine running may result in an accident.

If the machine vibrates unusually after starting, immediately turn off the engine and look for the cause. Vibration usually indicates a fault or problem.

Engine safety This machine is equipped with a combustion engine.

Do not use in forests or areas covered with brush unless the exhaust system is equipped with a spark arrestor.

Do not run the engine in an enclosed area. Exhaust gases are dangerous, they contain carbon monoxide, an odorless and deadly gas. The device should only be used in a well-ventilated outdoor area.

Do not tamper with the engine to run it at a higher speed. The maximum engine speed is set at the factory and is within safety limits. If in doubt, refer to the engine manual.

When working with the unit in dry locations, keep a Class B fire extinguisher as a precaution.

Fuel notes

The fuel is highly flammable and the vapors may explode if ignited. Please keep this aspect in mind to reduce the risk of serious injury.

When filling or emptying the fuel tank, use an appropriate fuel storage container. Perform these steps in a well-ventilated, open space. Do not smoke or create a spark in the immediate vicinity while refueling or working on the machine. Never refuel the device indoors.

Keep grounded conductive equipment (e.g. tools) away from exposed and active electrical parts of the machine to avoid creating a spark or electrical discharge that could ignite exhaust gases or fumes.

Before filling the tank, please remember to turn off the device and wait until the engine cools down. Do not unscrew the lid of the fuel tank or attempt to refuel when the engine is running or warmed up.

Do not use a machine that has leaks in the fuel system. Unscrew the lid from the fuel tank slowly and carefully to reduce (relieve) any pressure in the tank.

Do not overfill the fuel tank. Engine heat can cause fuel to rise, so do not fill the tank more than 1/2" below the bottom of the filler neck. This will provide room for the fuel to expand.

Replace lids or fuel tanks carefully, wiping off any fuel stains. Do not use the machine if the fuel tank cap is not properly attached.

Avoid creating a source of ignition for spilled fuel. If spilled, do not attempt to start the engine, remove the machine from the area of spill and avoid creating any source of ignition until the vapors have dissipated.

If you spill fuel on yourself or your clothes, wash your skin immediately and/or change your clothes. Store fuel in designated containers.

Store fuel in a cool and well-ventilated place, away from sparks, open flames and other sources of ignition.

Do not store fuel or a refueled machine inside a building where fumes may come into contact with sparks, open flames and other sources of ignition, e.g. boilers, fireplaces, clothes dryers, etc. Before storing the machine, wait until the engine has cooled down.

Detailed safety rules

Carefully inspect the area where you plan to work with the tiller. Remove all dirt and hard, sharp objects such as stones, sticks, glass, wire, bones, etc. The tiller must not be used in soil with large stones or foreign objects that may damage the machine.

Do not work in places where electric cables, telephone lines, water lines, gas lines, pipes or hoses are located underground. If in doubt, contact your utility or telephone company to locate underground cable locations.

Keep all bystanders, children and animals at least 23 m away. If anyone approaches, stop the device immediately.

The petrol tiller has a clutch. To check its operation, squeeze the steering lever and see if it automatically returns to the neutral position. If not, have the unit adjusted by qualified personnel.

Before starting the engine, disconnect the drive control lever.

Start the engine carefully according to the instructions, keeping your feet away from the blades. The blades remain stationary when the clutch is disengaged. If not, have the unit adjusted by qualified personnel.

When working on the machine, always stand behind it. Do not pass by or stand in front of the tiller when it is turned on.

Grip the steering wheel firmly with both hands and hold the handles firmly. It is possible for the machine to jump or jump forward unexpectedly when the blades hit buried obstacles such as large stones, roots or stumps.

If the tiller hits a foreign object, turn off the engine and disconnect the ignition cable to carefully inspect the machine for any damage. Any possible damage must be repaired before turning the machine back on and continuing operation.

Be especially careful when reversing or pulling the machine towards you.

Do not overload the machine by loosening too deeply in one pass across the job site or by moving too quickly.

The tiller must not be used in fast mode (high speed) when working on hard and slippery surfaces.

Be careful when working on hard ground as the blades may get stuck in the ground, causing the tiller to start moving. In this case, release the steering wheel so as not to restrict the machine.

Be careful when using the machine near fences, buildings and underground installations. Rotating blades may cause property damage or personal injury. Use extreme caution when working on gravel driveways, alleys or roads. Stay alert for hidden hazards or traffic. Watch out for passersby.

Do not leave the tiller unattended when the engine is running.

Always turn off the engine in case of delays or when moving from one place to another.

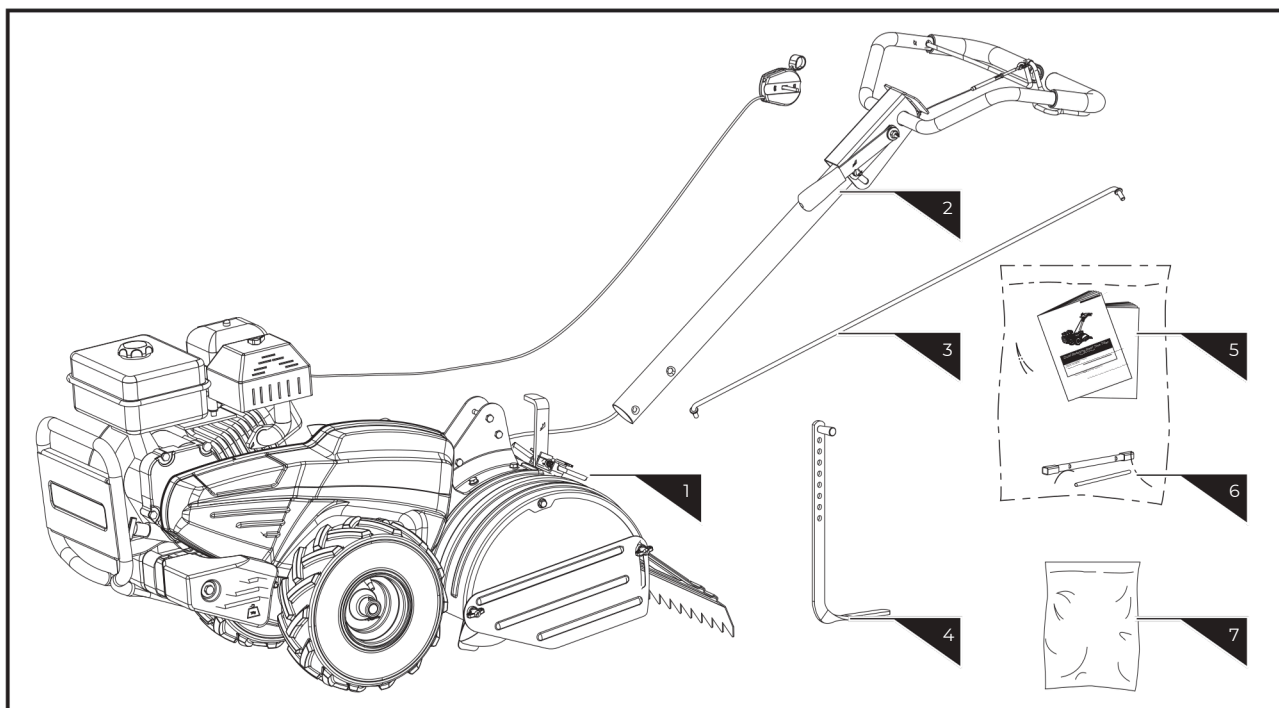
Keep the device clean. Plant residues and other materials may become trapped between the tiller blades. You should then turn off the engine and disconnect the spark plug before unscrewing the machine's blades.

To reduce exposure and the impact of vibration, work hours should be limited. You should take regular breaks to avoid chronic strain and allow your hands to rest.

Reduce the speed and force with which the same activities are performed. In the meantime, you should fill your time with activities that do not require the use of your hands.

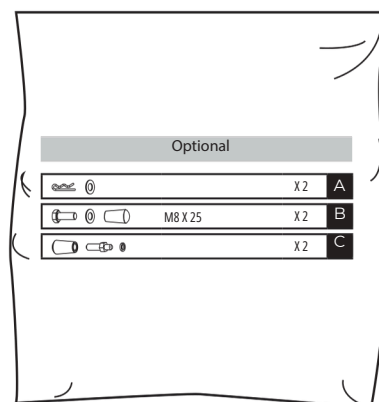
Set construction

This tiller is already partially assembled and shipped in a set that includes the following items:



1. Tiller
2. Handle
3. Gear shift cable
4. Depth setting lever
5. Machine and engine operation manual
6. Spark plug installation kit

7. Accessory bag containing:



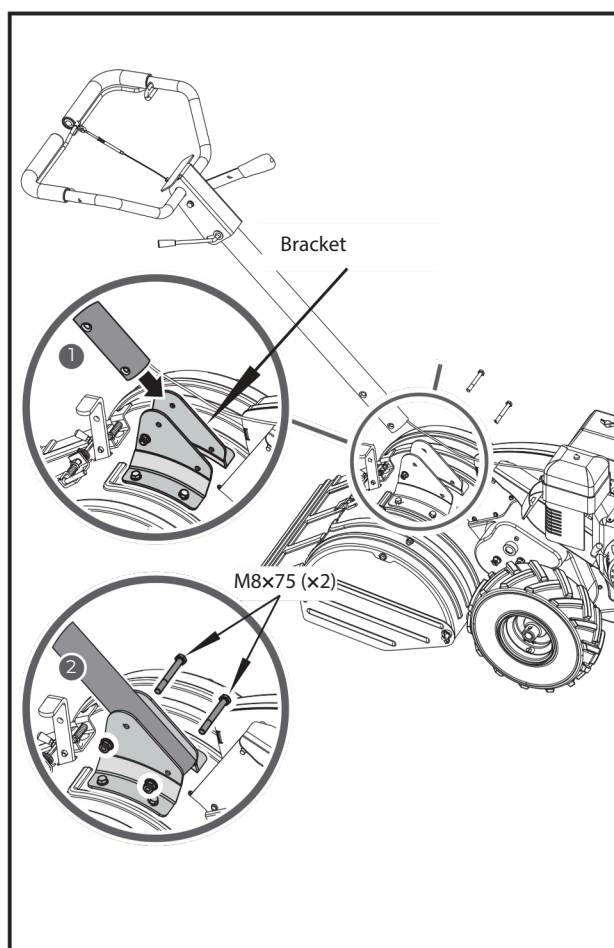
Assembly

The tiller was partially assembled at the factory. To assemble the machine, follow the instructions below:

Handle

M8X75 bolts and nuts were attached to the bracket for transportation purposes. First, dismantle the above-mentioned screws and nuts.

Then align the handle holes with those on the bracket to reinstall the M8X75 screws and nuts and tighten.

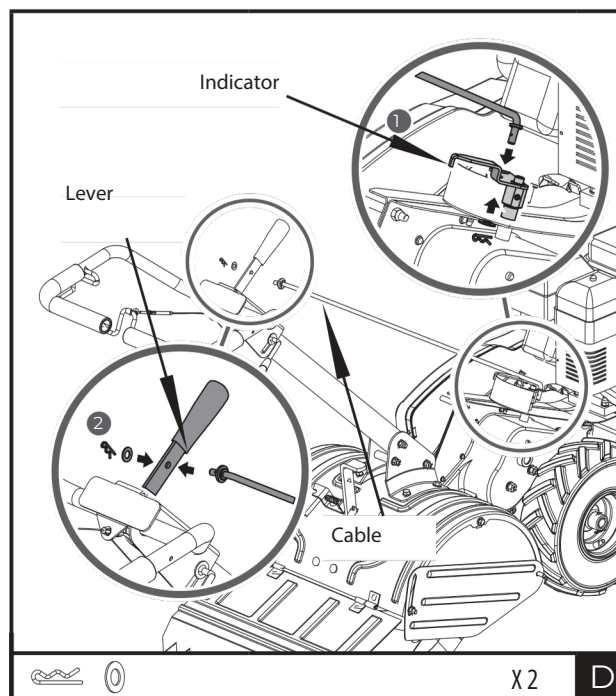


Gear stick

1. Insert the lower end of the shift cable into the shift lever indicator hole. Fasten with a clip and washer.

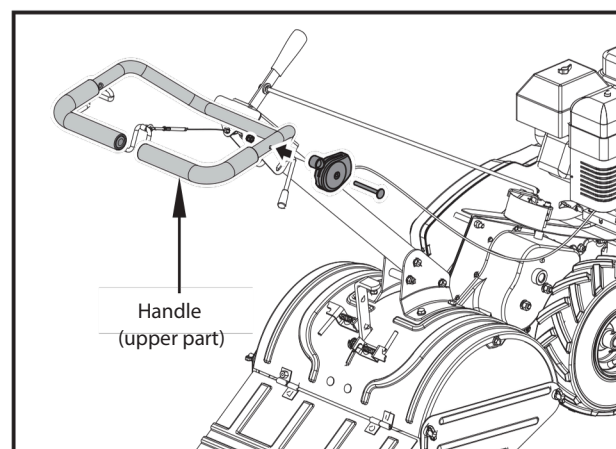
2. Insert the upper end of the cable into the shift lever indicator hole. Fasten with a clip and washer.

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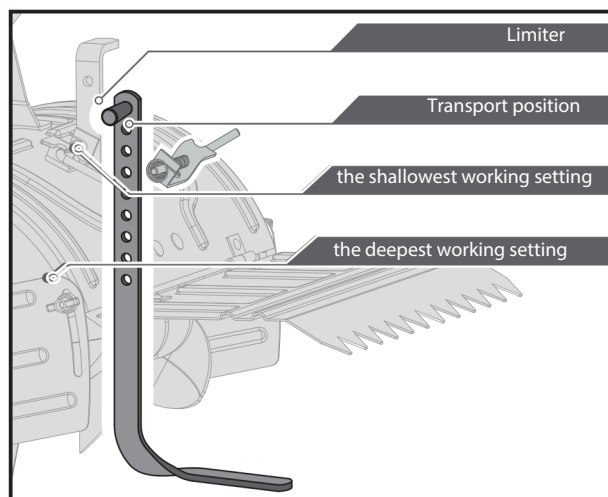
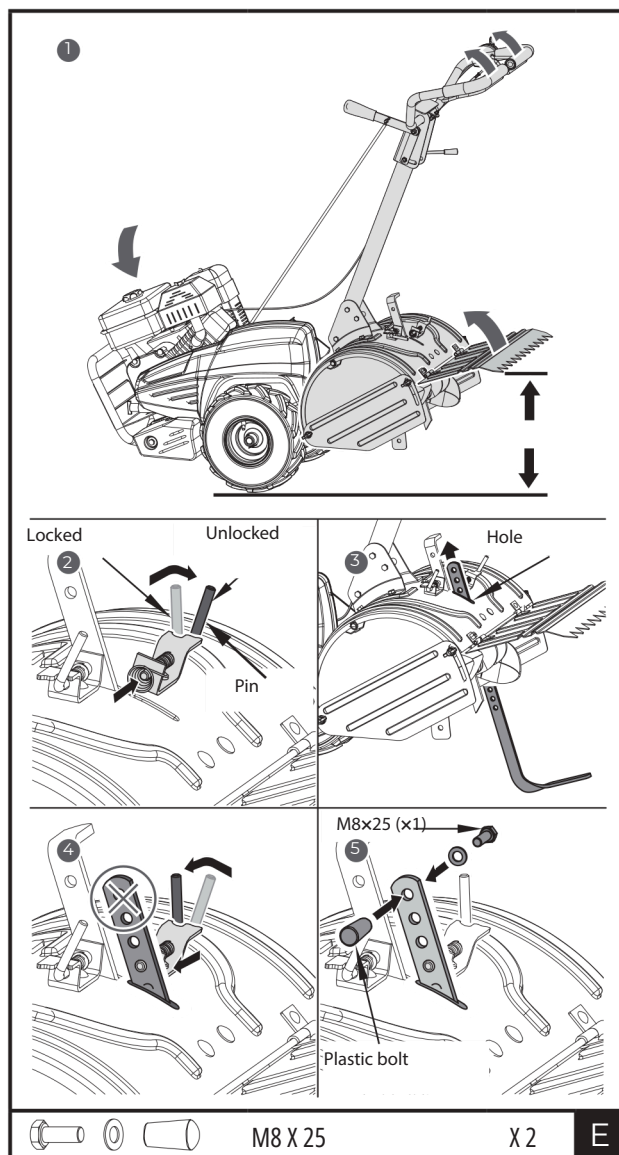
Throttle

An M6X60 bolt and nut were attached to the throttle for transportation purposes. First, dismantle the above-mentioned screws and nuts. Then align the holes on the throttle with those on the top of the handle. Reinstall the M6X60 screw and tighten with the nut. Pay attention to the degree of tightness and make sure that the throttle lever can be moved normally.



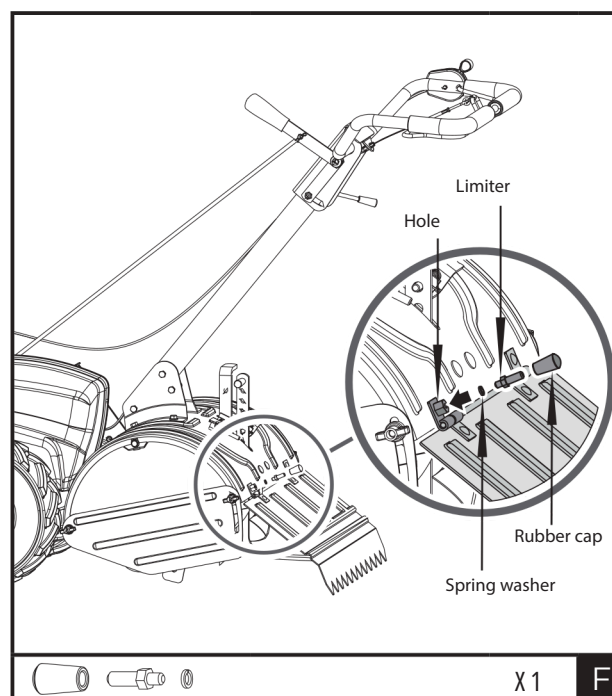
Depth setting lever

1. Tilt the machine forward.
2. Remove the pin, move the lever (fig. below) to the UNLOCK position. Fit the depth adjuster lever into the blade guard.
3. Move the pin to the fourth depth setting hole. At the same time, insert the pin and move the lever to the LOCK position.
4. Install the M8X25 screw, washer and plastic screw head into the first hole of the depth adjuster lever. As you screw in the screw, hold the plastic screw in place with pliers at the same time.
5. Set the depth adjuster lever to the desired tilling depth.



Height limiter

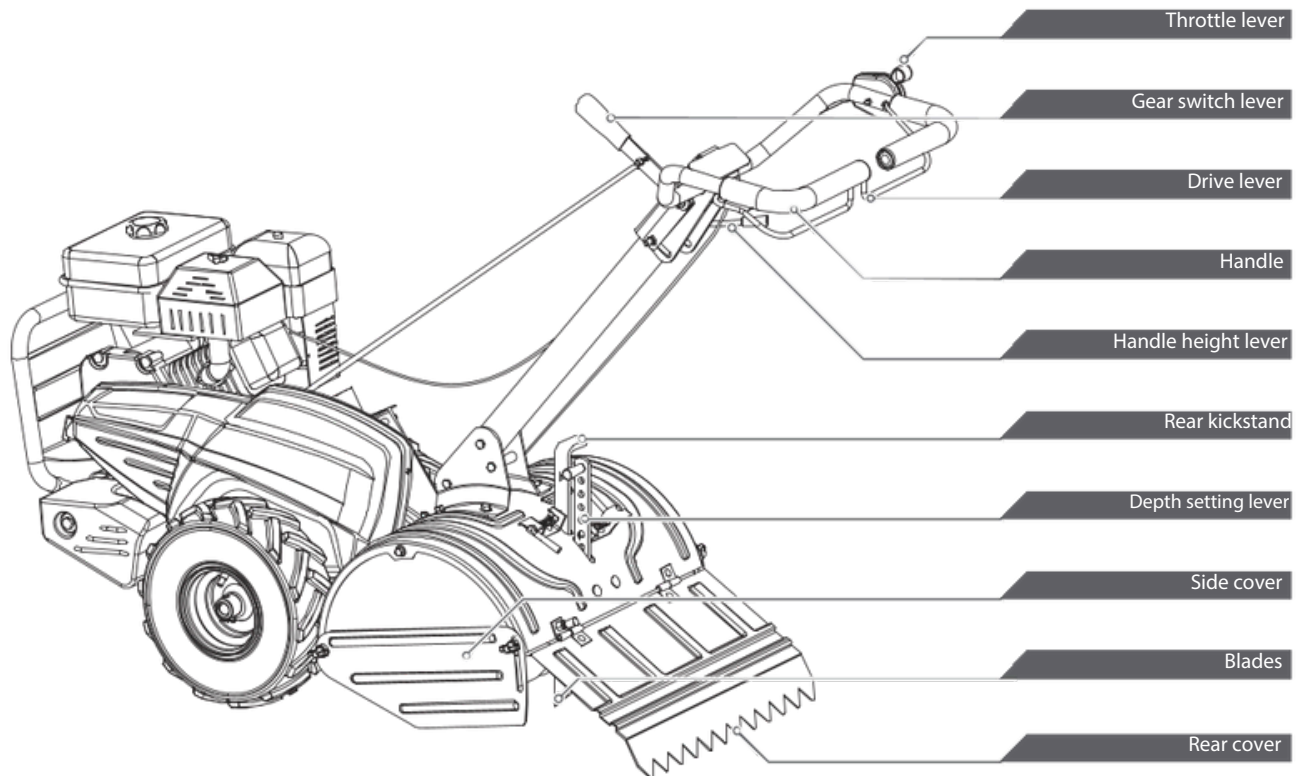
Screw the spring washer, stop and rubber cap into the hole on the back of the blade guard. Secure the hole with a 13 mm wrench while securing the screw (stop) with a 10 mm wrench.



Get to know the tiller

Functions and control

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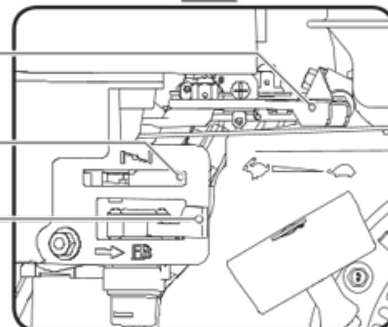
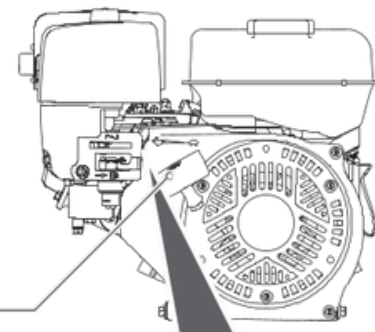


Starter handle


Throttle lever


Choke lever

Shut-off valve



Gear switch lever The gear lever has 5 positions: 3 for transport purposes only (without blade rotation) and 2 for operating the blades forward (F) or reverse (R):

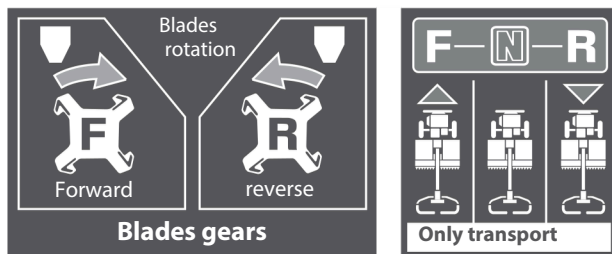
Moving the gear lever to the extreme left position "F" will cause the tiller blades to rotate clockwise after engaging the drive lever. This position is used for working on soft ground or cultivating previously loosened soil. 

» Moving the gear lever to the extreme left "R" position will cause the tiller blades to rotate counterclockwise when the drive lever is engaged. This position is for working on hard surfaces. 

» **FORWARD (F)** - move the lever indicator to position "F". Engage the drive control belt and the tiller will move forward

» **REVERSE (R)** - Move the shift lever indicator to the "R" position. Engage the drive control belt and the tiller will move backwards.

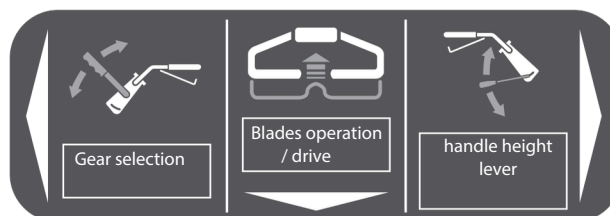
» **NEUTRAL (N)** - Release the control bar to stop the movement, then move the shift lever indicator to the "N" (Neutral) position.



Release the drive control lever before moving the shift lever to another position. Failure to follow this rule may result in damage to the tiller.

Handle

» The handle is used to control the tiller, and there are also control elements there, i.e. the drive lever, the throttle lever and the handle height lever.



Drive lever

» It allows you to switch on the drive of the blades and/or wheels of the machine

Handle height lever

» Unscrew this lever, move the handle up or down, and then attach the lever.

Rear kickstand

» Supports overall balance when loosening the soil in all conditions.

Depth setting lever

» It allows you to set the blades to the desired working depth

Rear cover

» Levels loosened soil

Side cover



» Can be positioned to protect small plants from being buried.

Starter handle

» It is used to start the engine

Shut-off valve

The fuel shut-off valve has two settings:

- » **CLOSE:**  valve closed; item used to operate, transport and store the device.
- » **OPEN:**  valve open, position used to start and use the device.



throttle lever

The throttle lever regulates the engine speed of the tiller and moves between three positions: FAST  SLOW 

» When the throttle lever is in the STOP position, the engine will stop.



Choke lever

The lever is used to start the carburetor and >> facilitates starting a cold engine. The lever can be set to the CLOSED  or OPEN  position



Do not use the choke lever to turn off the engine

Operation

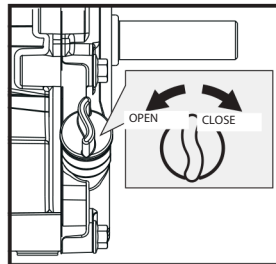
Pouring engine oil



The oil was emptied from the tank for shipment. Do not start the engine before adding oil. Information about oil can be found in the engine manual.

1. Make sure the tiller is placed on flat ground.

2. Remove the oil cap, remove the dipstick to add oil.



3. Using a funnel, add oil to the "FULL" level on the dipstick. Check your engine manual for tank capacity, oil recommendations and cap location.



DO NOT OVERFILL! Before starting the machine, check the engine oil level each time and top up if necessary.

Pouring fuel



The fuel is highly flammable and the vapors may explode if ignited. You can be seriously injured or burned when working with fuel. Please remember this aspect and handle fuel carefully.



Fill the fuel tank outdoors, never indoors. Gasoline vapors can ignite more easily if they are in an enclosed space, which could result in an explosion.

1. The engine must be turned off. Before adding fuel, wait at least 2 minutes for the engine to cool down. Remove the oil cap to top up the oil. (Check engine manual for tank capacity, oil recommendations and cap location).

WARNING: DO NOT OVERFILL THE TANK!

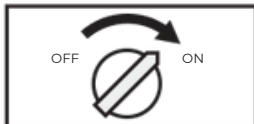


This device and/or its engine may contain fuel vapor capture system components that will only function properly when the fuel tank is filled to the recommended level. Overfilling can cause permanent damage to the engine and components of the engine tank fuel vapor absorption system, and filling the fuel to the recommended level provides the space necessary for possible fuel expansion. When filling the fuel tank, pay special attention not to overfill it. You should also use a portable gasoline container with a properly selected dispenser. Do not use a funnel or other device that would obstruct your view of the tank being filled.

- Reinstall the fuel filler cap and tighten. Always wipe up spilled fuel.

Starting the engine

- Set the fuel valve lever to the "ON" position.



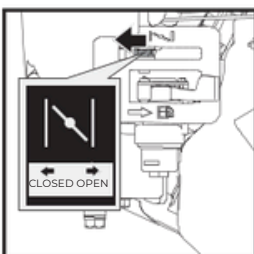
- Open the fuel shut-off valve.



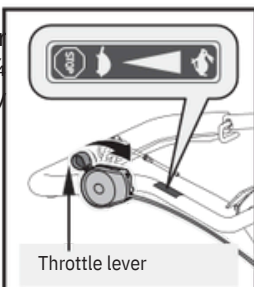
- Move the choke lever to the "CLOSED" position.



If the engine is still hot, there is no need to disconnect the choke.



- Move the throttle lever forward to approximately 1/4 of the scale (move it slightly towards maximum rpm).



- Pull the starter handle until the engine starts. Return the starter to the starting position after each pull. If necessary, repeat the above steps. After starting the engine, set the throttle to the "FAST" position before starting the unit.



The quick return of the starter cord (recoil) will pull the user's hand and arm toward the engine faster than it can be released. This can cause broken bones, fractures, bruises and sprains.

Tiller blades - gear lever

- Always release the drive lever before moving the shift lever to another position.
- The blades are activated by moving the gear lever to the gears that turn the blades backward (or to the forward rotation position), and then engaging the drive lever.



Driving forward - wheel drive, blades disabled; only transport

- Release the drive lever, move the shift lever to the "F" (forward) position. Grab the drive lever and the tiller will move forward.

Reverse driving - wheel drive, blades disabled; only transport



Do not stand directly behind the tiller

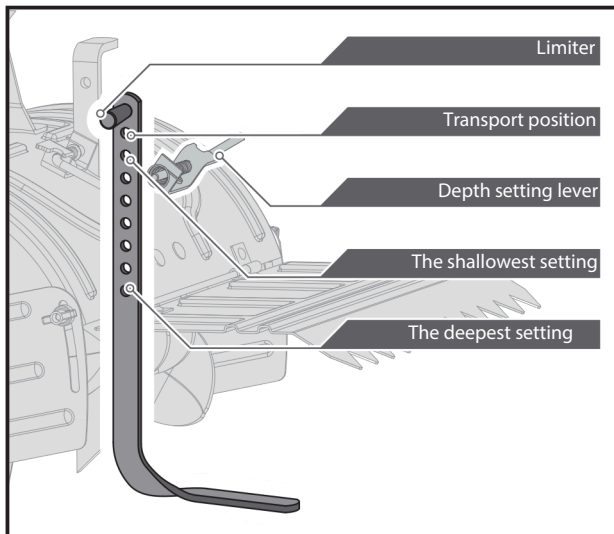
- Release the drive lever.
- Set the throttle lever to the "SLOW" position.
- Move the gear lever indicator to reverse gear - "R" position.
- Hold the drive lever handle and the machine will move backwards.

If you have difficulty moving the gear lever or cannot change gear, do one of the following:



- Squeeze the gear lever (clutch) for a moment and then release it.
- Gently move the tiller back and forth using the handles.

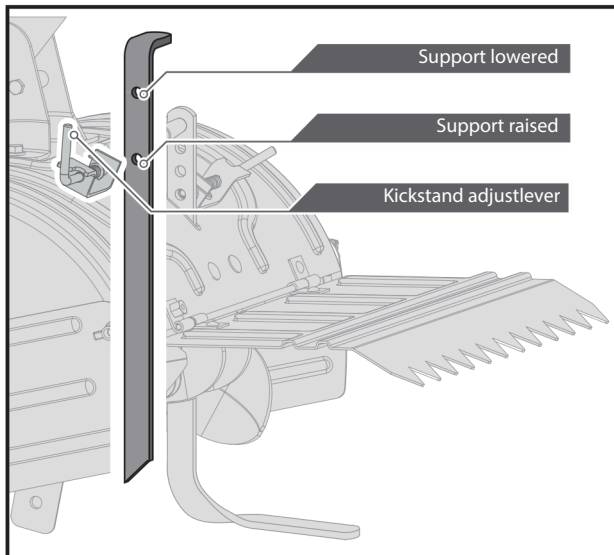
Depth setting lever

The depth adjuster lever can be raised or lowered to enable loosening and leveling of the ground in all conditions and easier transport of the tiller.



Rear kickstand

The rear stand should be raised when the tiller blades are moving counterclockwise . The rear support should be lowered when the tiller blades are moving clockwise .



Tiller operation

Cultivating means digging up, turning over and breaking up the soil and preparing the optimal ground for sowing. The best working depth is between 100 mm (4") and 150 mm (6"). The tiller will also clear the soil of unwanted vegetation, and the decomposition of this vegetation matter enriches the soil.


Avoid cultivating soil that is too dry, as it may crumble and turn into dust that does not retain water. The substrate should be watered a few days before cultivation. However, too wet soil will cause the soil to form lumps. You should wait 1-2 days after heavy rain until the soil dries out.

Better growth will be achieved in an area where the soil cultivation procedure was correct and the soil was used shortly after cultivation, which will maintain the appropriate level of moisture.

The type of soil and working conditions determine the actual working depth setting. With some types of soil and subsoil, the desired depth is reached the first time the work area is crossed. In other soils, the desired depth is achieved only by going two or three times. In the second case, the depth setting rod should be lowered before each subsequent pass through the garden. You should work alternately over the entire length and width of the area. Don't dig too deep on the first pass. If the machine jumps, allow it to move forward at a slightly faster pace.

If the tiller does not move forward and tries to dig in one place, rock it back and forth using the handles to move it forward.

Stones that appeared on the ground surface after cultivating the soil should be removed from the garden.

- Move the depth adjuster lever to unlock the setting. Then hold the stop to pull the rear support up to increase the working depth of the tiller. Insert the support adjuster lever pin into the rear support hole to lock it at the desired depth.
- Place the clutch lever indicator counterclockwise  while working on solid ground.
- Hold the drive lever at the handle to start the tiller. The wheels and blades will rotate.
- Set the throttle to the "FAST" position for deep loosening of hard soil. To cultivate, the throttle can be set to any desired speed, depending on which cultivation speed is desired.




IMPORTANT: Always release the drive lever before moving the shift lever to another position.

Turning

- Release the drive lever.
- Move the throttle to the "SLOW" position.
- Place the shift lever in the "F" (forward) position. The blades do not rotate.
- Raise the handle to raise the blades off the ground.
- Move the handle in the opposite direction of rotation, taking care to keep your feet and legs away from the tiller blades.
- Once you have completed the turn, release the drive lever and lower handle. Place the shift lever in the run position and move the throttle lever to the desired speed. To start the tiller, engage the drive lever by pulling it towards the handle.

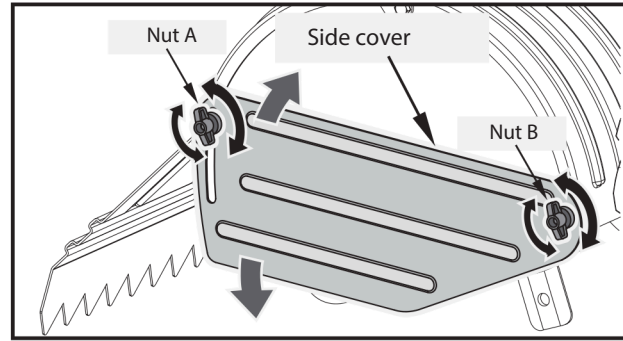
Cultivation

The machine loosens and digs up the soil around growing plants to eliminate weeds and aerate the soil. A depth of less than 50 mm (2") is optimal.

- Move the gear lever to the extreme left position "F", which will cause the tiller blades to rotate clockwise ; after operating the drive lever. This position is used to cultivate soft soil or previously loosened soil.
- Remove the depth adjuster lever and support adjuster lever pins to unlock the position. Hold the stop to pull the rear support up to increase the working depth of the tiller. Insert the stand adjuster lever pin into the rear stand adjuster hole to lock it in place at the appropriate depth. Place the rear support in the "Lower Position", lock it.
- Pull the drive lever towards the handle to engage it and start the tiller. The wheels and blades of the machine will begin to rotate.
- Set the throttle to the fast position for deep loosening. The throttle can be set to any desired speed, depending on how quickly or slowly the ground will be cultivated.
- The rear support should always be lowered when the machine's blades are moving clockwise.

Side covers

To protect small plants from being buried while the tiller is operating, the rear edges of the side guards are adjustable so that the guards can be raised for deep tilling and lowered for shallow tilling. To move the covers to the desired position (in both directions), loosen nuts A and B, move the cover and tighten the nuts.



Stopping the blades and drive

- Release the drive lever to stop movement.
- Move the gear lever to "N" (neutral).

Transporting the machine around



CAREFULLY! Before lifting or transporting the machine, wait until the engine and tiller have cooled down. disconnect the spark plug wire. Drain the gasoline from the fuel tank.



- Release the depth adjuster lever pin. Move the depth adjuster handle to the transport position (2nd hole from the top) to enable transport of the tiller. Insert the pin into this hole to lock the lever. This setting prevents the machine's blades from scraping against the ground.
- Place the shift lever in the "F" (forward) position to transport the machine.
- Engage the drive lever by pressing it against the handle to start the tiller. The blades do not rotate in this setting.
- Move the throttle to the desired speed.

Idle

Set the throttle to the "SLOW" position to reduce engine load when the tiller is not doing its job. Lowering engine speed will help extend engine life, save fuel and reduce noise levels.

Stopping the engine

In an emergency situation, turn the ignition switch to the "OFF" position to turn off the engine. Under normal circumstances, follow the procedure below:

1. Move the throttle lever to the "SLOW" position .
2. Release the clutch, move the gear lever to the "N" (neutral) position. Let the engine run for 1-2 minutes.
3. Turn the engine ignition switch to the "OFF" position.
4. Close the fuel valve to position  "OFF".



It is not recommended to suddenly stop the machine at high speed under heavy load. Doing so may damage the engine.



Do not move the choke lever to the "CLOSE" position to turn off the engine. There may be a risk of burns or engine damage.

Maintenance

Care and proper maintenance of the tiller will ensure a long life of both the machine and its individual components.

Protective actions

1. Turn off the engine and all control levers. The engine must be cold.
2. Place the throttle lever in the "SLOW" position, disconnect the spark plug ignition cable, secure it.
3. Check the general condition of the tiller. Check for loose screws, misalignment or overlapping of moving machine parts, cracked or broken parts, or any other conditions where the machine may not function properly.
4. Remove any unnecessary waste from the tiller using a soft brush, vacuum cleaner or compressed air. Then use a high-quality lubricant to lubricate all moving parts of the machine
5. Reconnect the spark plug wire.



Do not use pressure washers to clean the tiller as water may penetrate tight areas of the tiller and gearbox, causing damage to spindles, bearings, gears or engine. Using a pressure washer may shorten the life of the machine and reduce its efficiency.

Transmission

The gearbox was filled with the correct amount of grease at the factory. Unless there is evidence of leakage and the gearbox is serviced regularly, there is no need to fill the gearbox with additional lubricant.

Lubricating the machine

Lightly lubricate all moving parts of the tiller at the end of the season or every 25 hours of operation.

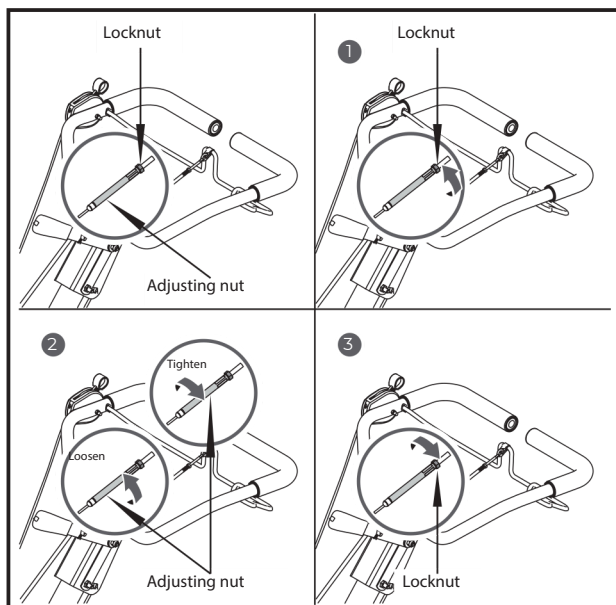
Clutch adjustment

» If you experience problems with engaging the clutch, follow these steps to properly adjust the cable tension.

1. Loosen the lock nut by turning it counterclockwise with an 8 mm wrench while holding the adjusting nut with a 6 mm wrench.

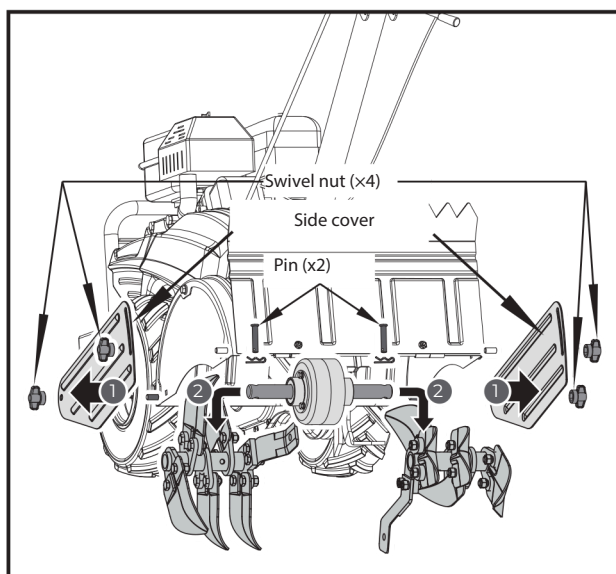
2. Tighten (or loosen) the cable by turning the cable adjustment nut clockwise (or counterclockwise) with a 6 mm wrench until the desired tightness is achieved.

3. Once the required tightness is achieved, tighten the locknut by turning it clockwise until it is tight.

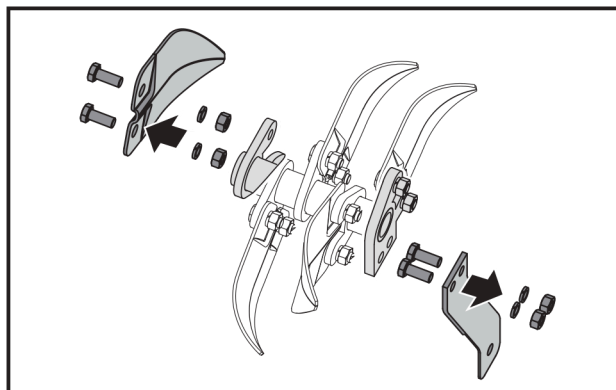


Replacing tiller blades

1. Remove the side cover of the tiller
2. Remove the blades assembly

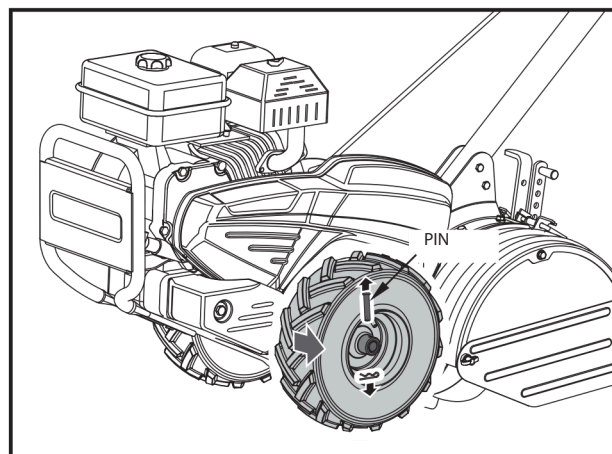


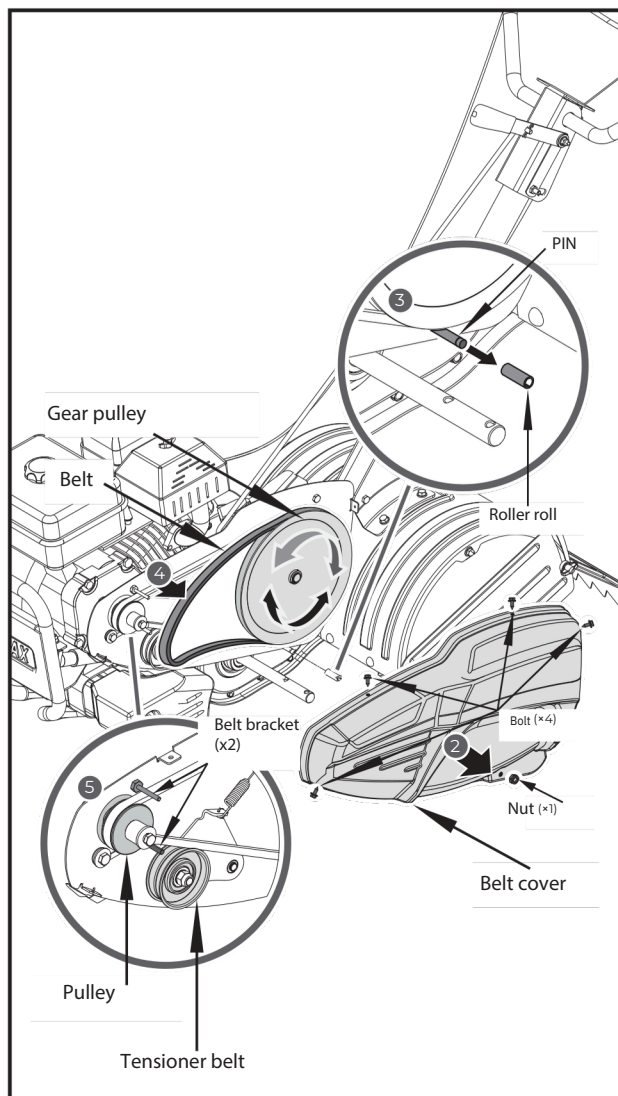
3. Remove each blade one by one.



Replacing the belt

1. Carefully support the machine so that the opposite wheel is 1" above the work surface. Remove the pin and wheel from the belt guard side of the machine, located on the opposite side of the engine.
2. Remove the four mounting screws and nut on the belt cover to expose the belt.
3. Slide the roller out of the pin below the pulley..
4. Remove the belt from the engine and idler pulley. Turn the gear pulley and gently pull the belt through the roller pin, removing it from the pulley.
5. To install a new belt, repeat the above process in reverse.





Engine maintenance

Before starting engine maintenance work, read the information contained in the engine manual included with the kit. The above-mentioned manual includes, among others: tips on engine maintenance, as well as other detailed information, e.g. on how to perform individual activities.

Storage

If the tiller will not be used for more than 30 days, please follow the following guidelines for storing the machine:

1. Empty the fuel tank. Stored fuel containing ethanol or methyl tert-butyl ether (MTBE) may become stale within 30 days. Stale fuel has a high rubber content, which can clog the carburetor and restrict fuel flow.
2. Start the engine. Let it run until the engine turns off. This ensures that there are no fuel residues in the carburetor. This helps prevent deposits from forming inside the carburetor and possibly damaging the engine.
3. While the engine is still warm, drain the oil and then pour fresh oil into the engine of the grade recommended by the engine manual.
4. Use only clean cloths to clean the outside of the tiller and to check whether the air vents are clear.



Do not use strong detergents or petroleum-based products to clean the plastic parts of the machine. Chemicals can damage the plastic surface of the tiller.

5. Check for loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts.
6. The tiller should be stored in a vertical position in a dry and clean place, in a well-ventilated room.



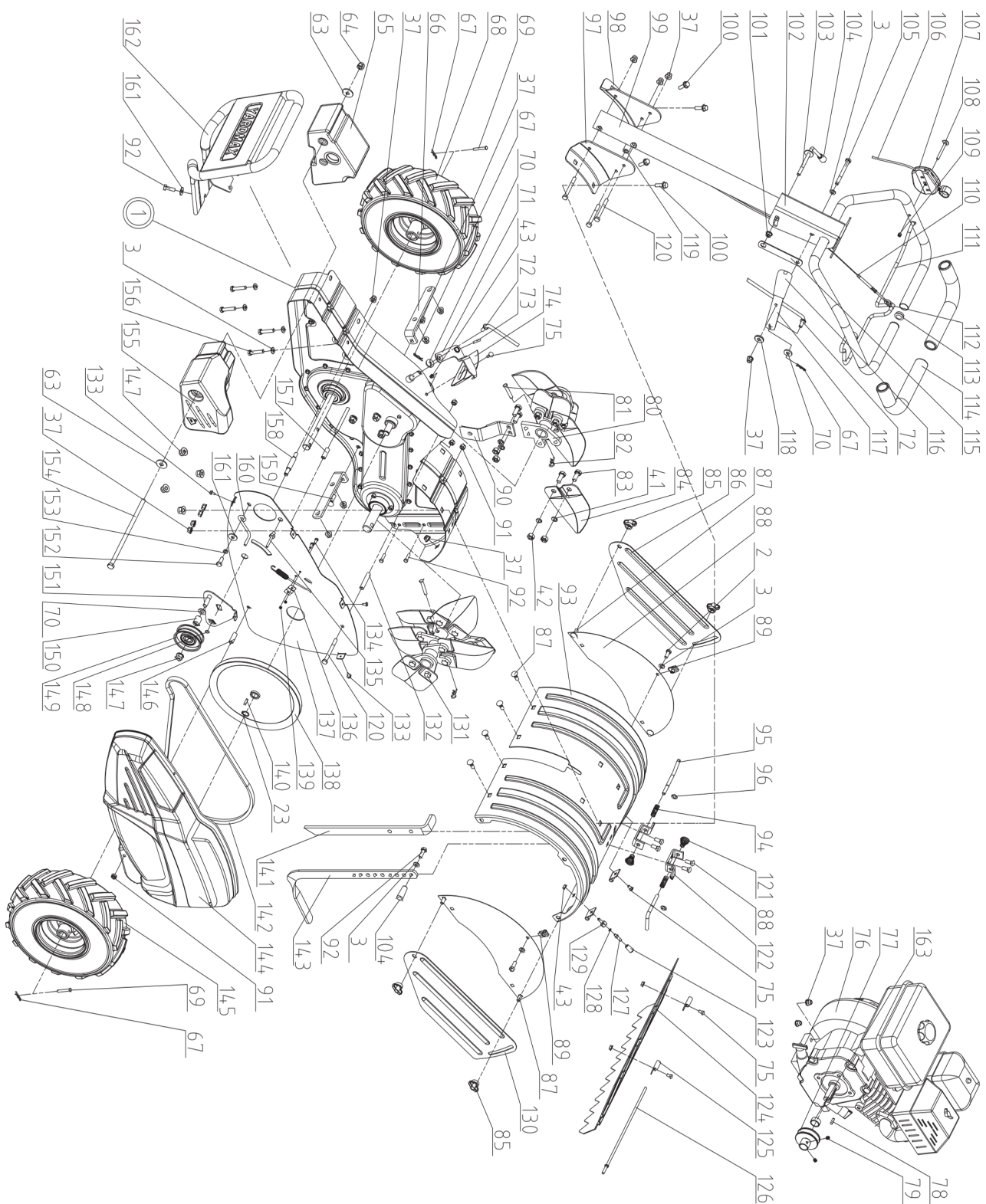
Do not store the appliance with fuel in a poorly ventilated area where fuel vapors may reach fire, sparks, warning lights or any other sources of ignition.

Troubleshooting

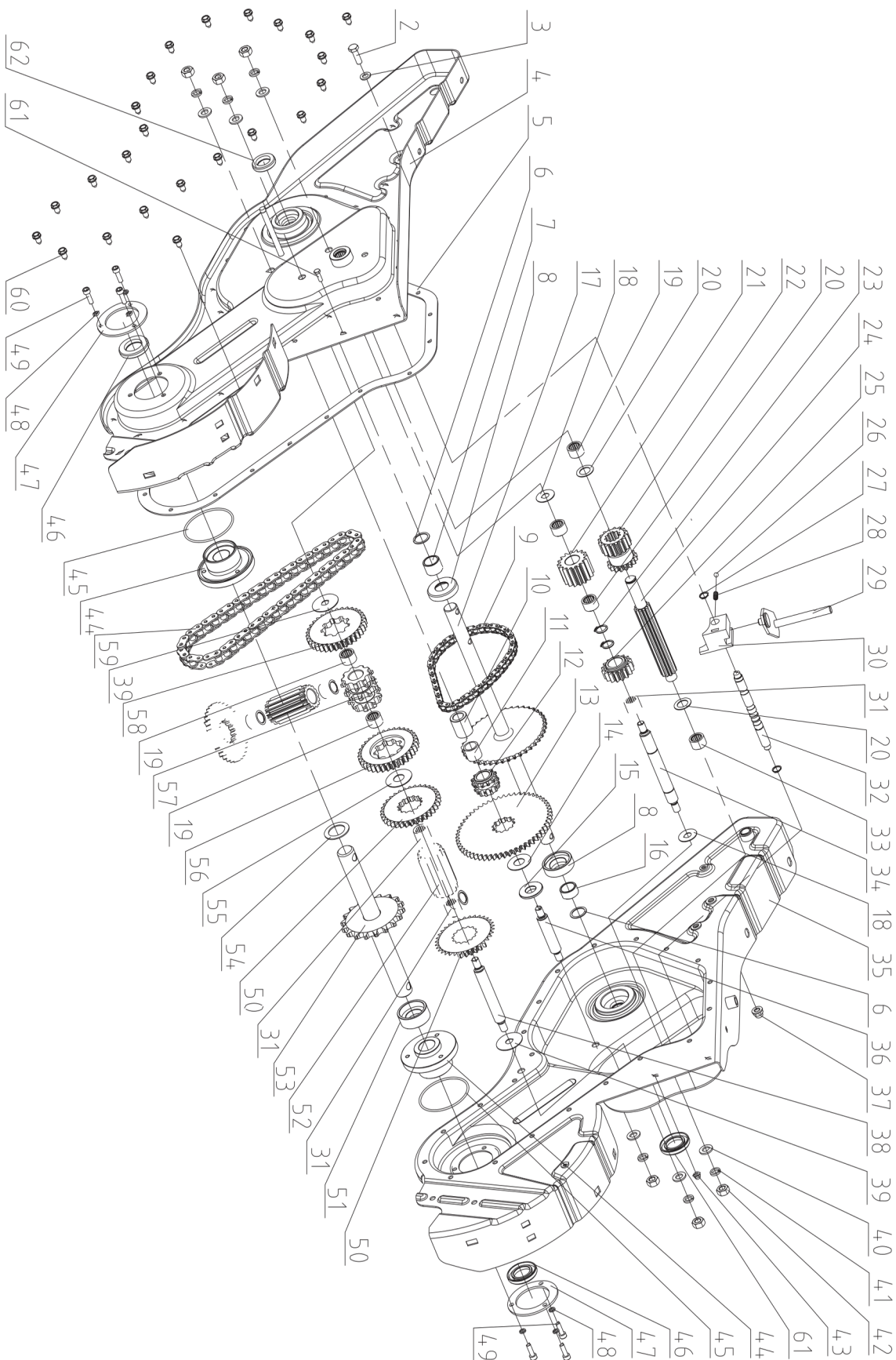
Problem	Possible cause	Recommended action
The engine won't start	The ignition cable is disconnected	Connect the ignition cable to the spark plug
	Out of fuel or the fuel has become stale	Fill the tank with fresh, clean fuel
	The engine and/or fuel valve is/are not in the "ON" position	Move the engine and/or fuel valve to the starting position
	The choke is not in the "CLOSE" position	The throttle must be set to the choke position ("CLOSE") if the engine is started from a cold state
	The fuel line is blocked	Clean the fuel line
	Dirty spark plug	Clean dirty parts, adjust/replace
	Flooded engine	Please wait a few minutes before restarting. Do not add fuel
	The belt tensioner lever is engaged	Turn off the belt tensioner lever
The engine runs irregularly	The ignition cable is loose	Connect and tighten the ignition cable
	The choke is in the "CLOSE" position	Move the choke lever to the "ON" position
	Blocked fuel line or stale fuel	Clean the fuel line. Fill the tank with fresh, high-quality fuel
	The air vent is clogged	Clean the air vent
	Water or debris in the fuel system	Empty the fuel tank thoroughly. Refill it with fresh fuel
	The air filter is dirty	Clean or replace the air filter
	The carburetor is incorrectly adjusted	Refer to the engine manual
The engine overheats	Low engine oil level	Fill the oil pan with the appropriate oil
	The air filter is dirty	Clean the air filter
	Restricted air flow	Remove the fan housing and then clean it thoroughly
	The carburetor is incorrectly adjusted	Refer to the engine manual
The engine does not stop even though the throttle lever is in the "OFF" position, or the engine speed does not increase properly even though the throttle lever is moved	Debris and debris block the lever acceleration mechanism	Dirt and waste must be removed
	Improper throttle lever setting	Refer to the engine manual to check and adjust the throttle lever
The blades move forward during starting	The clutch lever is not in the neutral position	The clutch control lever must be present in neutral to start the engine
Unable to control the machine during operation (machine jumps or jerks forward)	Cultivating working depth incorrectly set	Raise the blades for shallower operation by lifting the depth adjustment lever
	The engine runs too fast on hard surfaces	Set the throttle lever to a lower speed

The blades do not turn on	A foreign body is between the blades	Stop the machine completely, inspect and remove foreign particles.
	No pin connections	Replace pin connections
	The belt is frayed or worn	Replace the belt
	The pulley and gear are not properly aligned	Contact your dealer or representative

Parts diagram



Transmission



Parts list

No	Decription	Qty
1	Transmission	1
2	Bolt M8X20	1
3	Washer 8	12
4	Gearbox - welded construction	1
5	Rubber seal	1
6	Wear-resistant seal 1	2
7	Bushing I	1
8	Plug	2
9	Chain 06B-50	1
10	Bushing II	1
11	Bearing bushing 16X20X25	1
12	Drive chain Z12	1
13	Gear Z56	1
14	Wear-resistant seal 7	1
15	Washer	1
16	Wheel shaft bushing	1
17	Drive shaft - welded part	1
18	Wear-resistant seal 6	2
19	Bearing HK1614	5
20	Wear-resistant seal 3	3
21	Gear 4	1
22	Gear 1	1
23	Clamp 16	3
24	Multi-wedge 1	1
25	Gear 5	1
26	Steel ball 1/4" (6.35mm)	1
27	Multi-wedge 12	2
28	Spring	1
29	Gear lever element	1
30	Gear lever element	1
31	Bearing HK1620	3
32	Gear lever shaft	1
33	Bearing BK1614	1
34	shaft 3	1
35	Right part gearbox covers	1

No	Decription	Qty
36	Shaft 4 Locknut M8 Shaft 2	1
37	Wear-resistant seal 5 Flat	23
38	washer 12 Spring washer 10	1
39	Nut M10 Lock nut M6	2
40	Bushing O-Ring 73X2.65 Seal	30
41	FB-25X40X8 Washer Spring	30
42	washer 6 Screw M6X16 Gear	6
43	1	6
44	Strut	2
45	Gear 2	2
46	Blades shaft	2
47	Wear-resistant seal 2	2
48	Wear-resistant seal 4	6
49	Gear 3	6
50	Chain	2
51	Gear 3A	1
52	Chain 10A-50	2
53	Screw M6X12	1
54	Bolt M6X16	1
55	Seal FB-20X35X8	1
56	motor shaft washer	1
57	Locknut M10	1
58	Weight 2	1
59	Gear cover mounting bracket	1
60	Clamp 1.8	23
61	Wheel - right	1
62	Plug-in shaft B8X45 Flat	2
63	washer 10	2
64		1
65		1
66		2
67		4
68		1
69		2
70		3

No	Decription	Qty
71	Kierunkowskazy-konstrukcja spawana	1
72	Gear shift cable	1
73	Spring pin 5X30	1
74	Gear shift indicator board	1
75	Bolt M6X16	4
76	Engine	1
77	Engine block	1
78	Wrench B5X4.76X40	1
79	Screw M8X12	2
80	Blade mounting bracket	2
81	PIN B10X45	2
82	PIN R 2.5	2
83	Bolt M10X30	4
84	Blade 2	10
85	Swivel nut	4
86	Side cover 1	1
87	Bolt M8X20	12
88	Side blade cover	2
89	Spring nut - typ B M8	2
90	Blade 1	2
91	Locknut M8	3
92	Bolt M8X25	3
93	Blade cover	1
94	Spring	2
95	Pin	2
96	Clamp	2
97	Handle mounting bracket 2	1
98	Handle mounting bracket 1	1
99	Handle support	1
100	Bolt M10X25	4
101	Nut M8	1
102	Upper handle	1
103	Lock lever	1
104	Lever knob	2
105	Bolt M8X85	1
106	Gas/throttle cable	1
107	Gas/throttle cable set	1

No	Decription	Qty
108	Bolt M6X60	1
109	Locknut M6	1
110	Tension roller cable	1
111	Roller cable cable	1
112	Joint	1
113	Plug 25	2
114	Connecting element of the upper part	2
115	handles Gear connecting plate	1
116	Gear lever knob	1
117	Gear stick	1
118	Bushing	1
119	Additional connecting element	1
120	Bolt M8X75	4
121	Spring	2
122	Clamp for pins	2
123	Rubber cover	1
124	Rounded back cover	1
125	Hinge	4
126	Hinged handle	1
127	Stop pin	1
128	Spring nut 5	1
129	Bolt	1
130	Side cover 2	1
131	Bolt M10X25	16
132	Strut 3	1
133	Screw M5X10	4
134	Bolt M5X12	2
135	Zawór zabudowy międzykorzeniowej	1
136	Cable mounting clamp	1
137	Belt cover mounting bracket	1
138	Pulley	1
139	Locknut M5	2
140	Wrench A5X20	1
141	Depth adjustment lever 1	1
142	Belt 4LXP1308	1
143	Depth adjustment lever 2	1
144	Belt cover	1

No	Description	Qty
145	Wheel - left	1
146	Strut 2	1
147	Locknut 10	5
148	Clamp 9	1
149	Tension roller	1
150	Bushing	1
151	Wheel holder - welded construction	1
152	Bolt 5/16 - 24 UNF*25	1
153	Spring nut 8	1
154	Bolt M10X290	1
155	Weight 1	1
156	Bolt M8X40	4
157	Strut 1	1
158	Tension roller shaft	1
159	Bolt M8X30	1
160	Lock strap cable	1
161	Washer 8	2
162	Engine cover - welded structure	1
163	Strut4	1