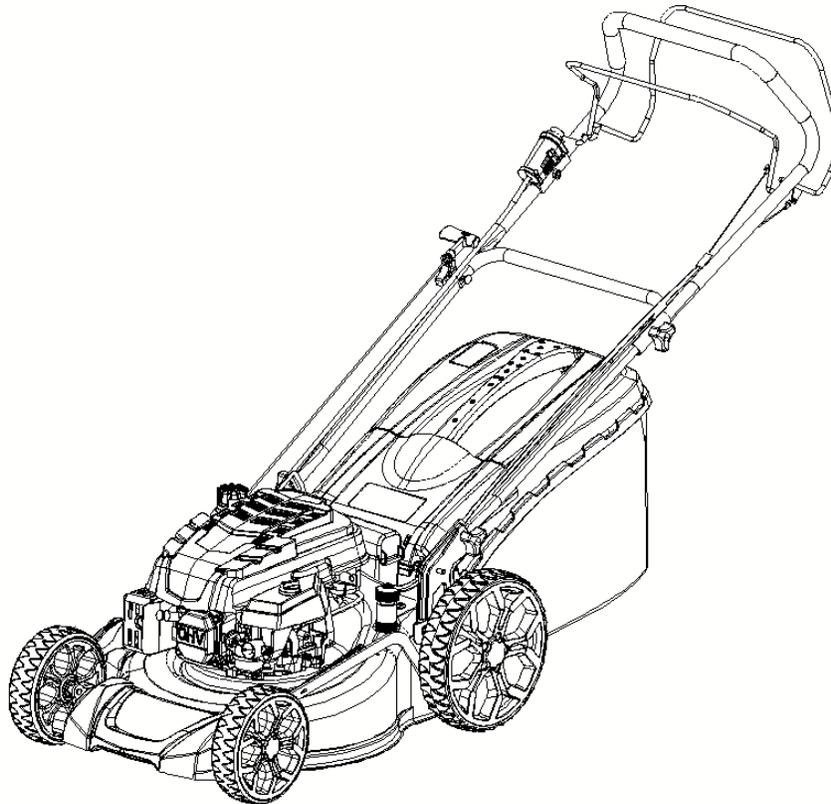


Instruction manual

**GLM 46P Basic/Premium GLM 46P-1 Basic/Premium
GLM 48P Basic/Premium GLM 48P-1 Basic/Premium
GLM 51S Basic/Premium GLM 51ES Basic/Premium**



Please read these instructions carefully and make sure you understand them before using this machine.



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SAFETY RULES



IMPORTANT: This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

I. Training

- Read the instructions carefully. Be familiar with the controls and the proper use of the equipment.
- Never allow children or people unfamiliar with the instructions to use the lawnmower. Local regulations may restrict the age of the operator.
- Never mow while people, especially children, or pets are nearby.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

II. Preparation

- While mowing, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
- Thoroughly inspect the area where the equipment is to be used and remove all objects which may be thrown by the machine.
- **WARNING** - Petrol is highly flammable.
 - Store fuel in containers specifically designed for this purpose.
 - Refuel outdoors only and do not smoke while refueling.
 - Add fuel before starting the engine. Never remove the cap of the fuel tank or add petrol while the engine is running.
 - Add fuel only when the engine is cold

- If petrol is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until petrol vapors have dissipated.
- Replace all fuel tanks and container caps securely.
- Replace faulty silencers.
- Before using, always visually inspect to see 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.

III. Operation

- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.
- Mow only in daylight or in good artificial light.
- Avoid operating the equipment in wet grass, where feasible.
- Always be sure of your footing on slopes.
- Walk, never run.
- For wheeled rotary machines, mow cross the face of slopes, never up and down.
- Exercise extreme caution when changing direction on slopes.
- Do not mow excessively steep slopes.
- Use extreme caution when reversing or pulling the lawnmower towards you.

- Stop the blade if the lawnmower has to be tilted for transportation when crossing surfaces other than grass, and when transporting the lawnmower to and from the area to be mowed.
- Never operate the lawnmower with defective guards, or without safety devices, for example deflectors and/or grass catchers, in place.
- Do not change the engine governor settings or overspeed the engine. Operating the engine at excessive speed may increase the hazard of personal injury.
- Disengage all blade and drive clutches before starting the engine.
- Start the engine carefully according to instructions and with feet well away from the blade.
- Do not tilt the lawnmower when starting the engine, except if the lawnmower has to be tilted for starting. In this case, do not tilt more than absolutely necessary and lift only the part which is away from the operator.
- Do not start the engine when standing in front of the discharge chute.
- Do not put hands or feet near or under rotating parts.
- Keep clear of the discharge opening at all times.
- Never pick up or carry lawnmower while the engine is running.
- Stop the engine and disconnect the spark plug wire:
 - before cleaning blockages or unclogging chute;

- before checking, cleaning or working on the lawnmower;
- after striking a foreign object. Inspect the lawnmower for damage and make repairs before restarting and operating the lawnmower;
- if the lawnmower starts to vibrate abnormally (check immediately).
- Stop the engine:
 - whenever you leave the lawnmower;
 - before refueling.
- Reduce the throttle setting during engine shut down and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of mowing.
- Go slow when using a trailing seat.

IV. Maintenance and storage

- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- Never store the equipment with petrol in the tank inside a building where fumes may reach an open flame or spark.
- Allow the engine to cool before storing in any enclosure.
- To reduce the fire hazard, keep the engine, silencer, battery compartment and petrol storage area free of grass, leaves, or excessive grease.
- Check the grass catcher frequently for wear or deterioration.
 - Replace worn or damaged parts for safety.
- If the fuel tank has to be drained, this should be done outdoors.

These symbols may appear on your machine or in the literature supplied with the product. Learn and understand their meaning.



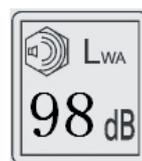
CAUTION



BEWARE OF



**DO NOT REMOVE SHIELDS
WHILE ENGINE IS RUNNING**



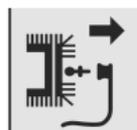
SOUND POWER LEVEL



**READ OWNERS
MANUAL**



**KEEP BYSTANDERS
AWAY**



**REMOVE SPARK PLUG LEAD
BEFORE MAINTENANCE**



PROTECTION



**DANGER, KEEP HANDS
AND FEET AWAY**



**BEWARE OF
TOXIC GASES**



HOT SURFACES



OIL



FUEL

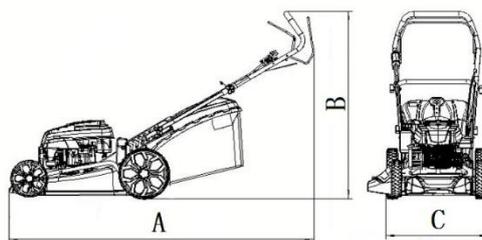


FAST



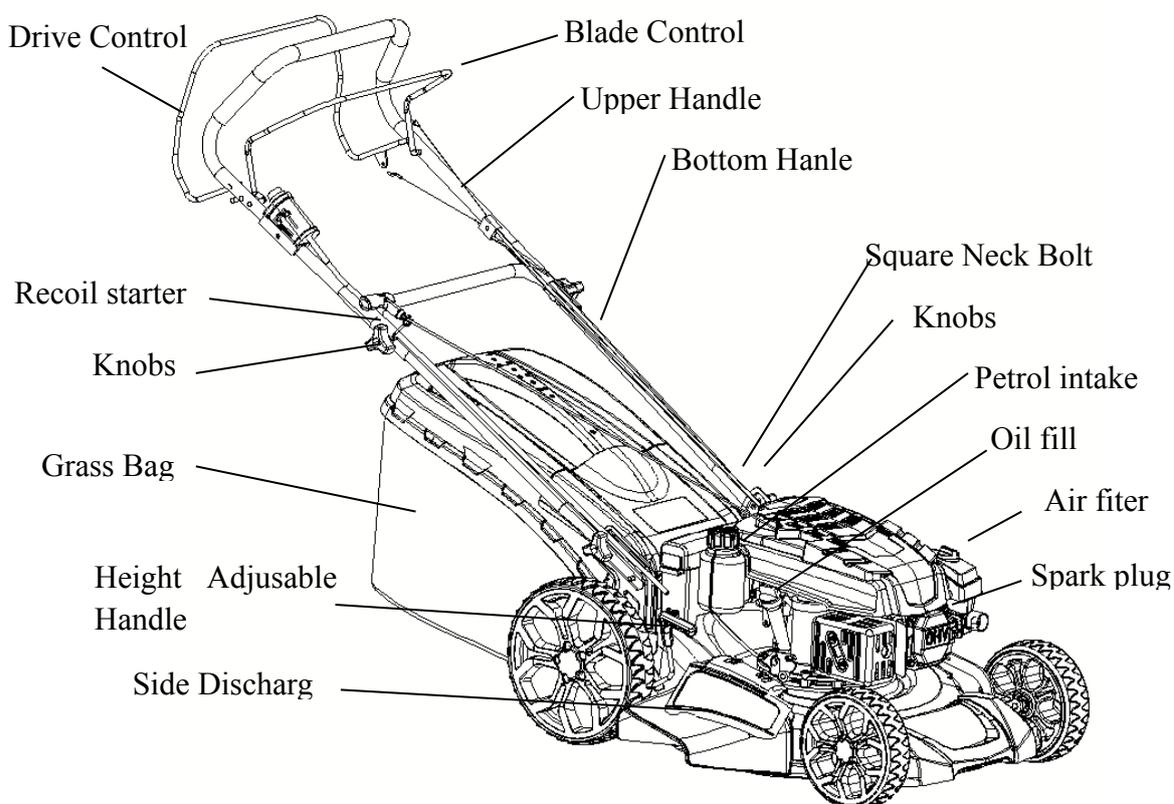
SLOW

TECHNICAL DATA



Type	GLM 46P / GLM 46P-1 Basic	GLM 48P / GLM 48P-1 Basic	GLM 51 S Premium
A	159 cm	164 cm	166cm
B	103 cm	103cm	103cm
C	54 cm	54 cm	56 cm
Sound power level	96 d(B)A	96 d(B)A	98 d(B)A
Max. power	1.9 kW/2900 rpm	1.9 kW/2900 rpm	2.7kW/3050rpm
Max. torque	6.0N.m/2800 rpm	6.0N.m/2800 rpm	9.7N.m/2800rpm
Displacement	139 cc	139 cc	173cc
Wheel drive	-/3.6 km/h	-/3.6 km/h	3.6 km/h
Spark plug	F7RTC (TORCH)	F7RTC (TORCH)	F7RTC (TORCH)
Fuel capacity	1.3L	1.3L	1.5L
Oil capacity	0.5L	0.5L	0.6L
Oil type	10W-30	10W-30	10W-30
Grass catcher	70 L	70 L	70 L
Working width	460 mm	480 mm	510 mm
Cutting height	30-80mm	30-80 mm	30-80 mm
Weight	32Kg / 34Kg	34Kg / 36Kg	38 Kg
Type	GLM 46P / GLM 46P-1 Premium	GLM 48P / GLM 48P-1 Premium	GLM 51 ES Premium
A	161 cm	164 cm	166cm
B	103 cm	103cm	103cm
C	54 cm	54 cm	56 cm
Sound power level	96 d(B)A	96 d(B)A	98 d(B)A
Max. power	1.9 kW/2900 rpm	2.7kW/3050rpm	2.7kW/3050rpm
Max. torque	6.0N.m/2800 rpm	9.7N.m/2800rpm	9.7N.m/2800rpm
Displacement	139 cc	173cc	173cc
Wheel drive	3.6 km/h	3.6 km/h	3.6 km/h
Spark plug	F7RTC (TORCH)	F7RTC (TORCH)	F7RTC (TORCH)
Fuel capacity	1.3L	1.5L	1.5L
Oil capacity	0.5L	0.6L	0.6L
Oil type	10W-30	10W-30	10W-30
Grass catcher	70 L	70 L	70 L
Working width	460 mm	480 mm	510 mm
Cutting height	30-80 mm	30-80 mm	30-80 mm
Weight	32Kg / 34Kg	34Kg / 36Kg	40 Kg

OVERVIEW (Some type may different from drawing)

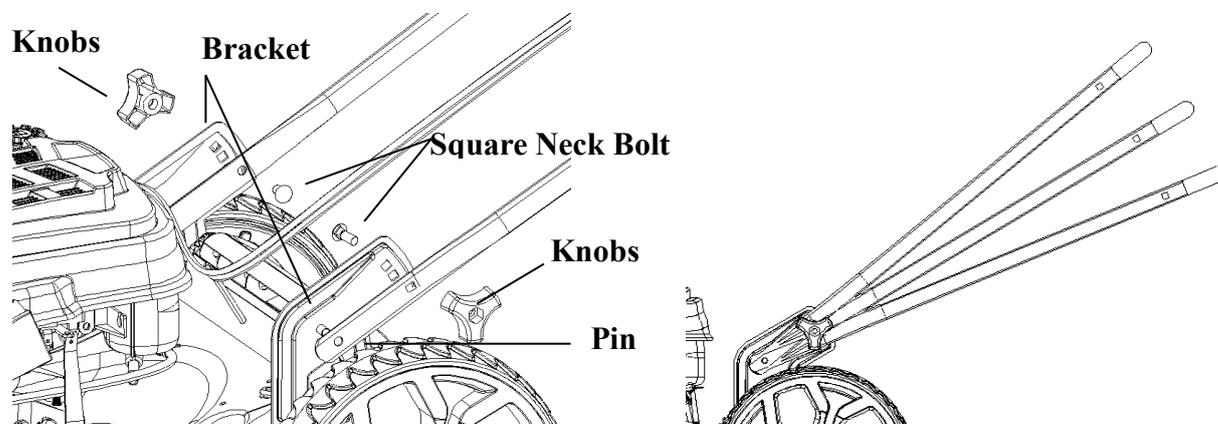


ASSEMBLING

1. Lower handle assembling

- Insert pin into the round hole of lower handle from both left and right side.
- Insert square neck bolt (M8X16) into the bracket and lower handle, then tighten with knob nut.

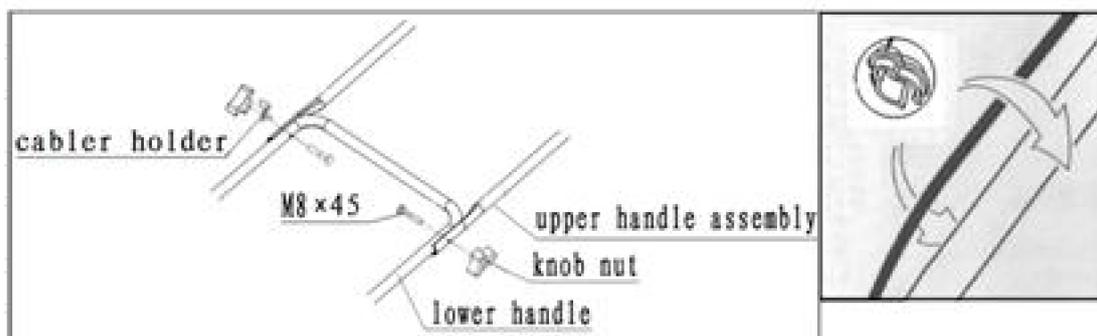
NOTE: The handle level (high, medium or low) can be adjusted by setting of



square neck bolt in one of the three holes on the bracket.

2. Upper handle assembling

- Insert bolt (M8X60) into left handle holder, lower handle and upper handle assembly in turn, then tighten with knob nut.
- Insert bolt (M8X60) into right handle holder, lower handle, upper handle assembly and start rope hook in turn, then tighten with knob nut.
- Fasten cables with the clips on the handle rod.



3. Grass catcher assembling

- Hold up the rear cover and fit the grass catcher.

4. Grass collection setting:

1) For rear bagging

- Grass catcher box installed.

2) For rear discharging

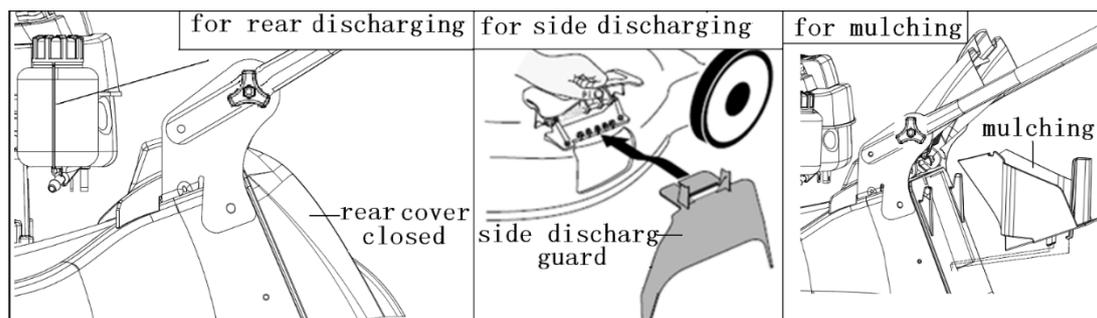
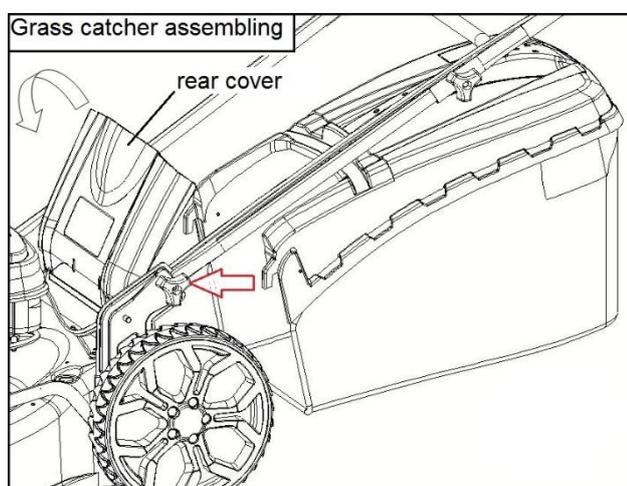
- stall grass catcher.
- close the rear cover.

3) For side discharging

- Rear cover closed.
- side discharge guard installed.

4) For mulching

- Lift the rear cover and hold up, insert mulching.
- Rear cover closed.



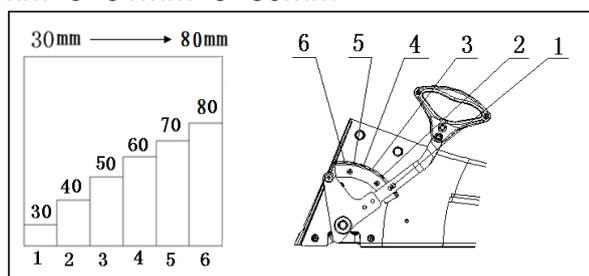
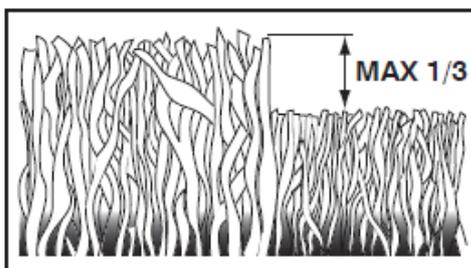
5. Working depth setting



Only when mower is stationary and rotating blade has come to complete standstill.

Mow the lawn twice weekly during the most active periods of growth. Never cut more than 1/3 of the length of the grass, especially during dry periods. Mow with a high cutting height setting the first time. Examine the result and lower the mower to the desired setting. Mow slowly or mow the grass twice if it is very long.

1=30mm 2=33mm 3=36mm 4=43mm 5=51mm 6=60mm

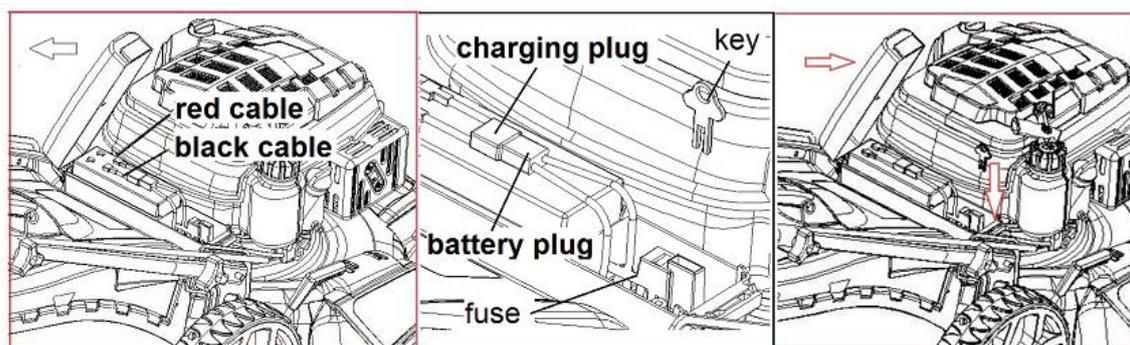


6. Assembling of battery case (if with)

- 1) Unlock the lock catch and open the battery case cover.
- 2) Insert the reeds on the power cables into the corresponding battery tabs by colors.
- 3) For the first use of machine or after the long-time non-use of machine, unplug the charging plug at the battery connecting cable and charge the battery by a charger, till the battery is fully charged (it will take approximately 8~9h).
- 4) Take out the key from the parts bag and insert the key into the corresponding hole in the battery case.
- 5) Cover the battery case cover and lock the lock catch.

Note: If a fuse is burnt, replace it timely.

Note: If the machine fails to start by motor, attempt to start the machine by using the hand disc.



1. Add fuel: See the Technical data table for the fuel characteristics. Add fuel only when the engine is cold.

- Place the lawnmower level.
- Clean around the filler cap
- Remove the filler cap
- Using a clean funnel, fill tank to approximately 5 mm below the inner edge of the filler neck, being careful not to spill fuel.
- Tighten the filler cap back and clean any spilled fuel.

NOTE: not on gravel or similar. Fill the tank with petrol, not oil-blended. Lead-free petrol may be used.

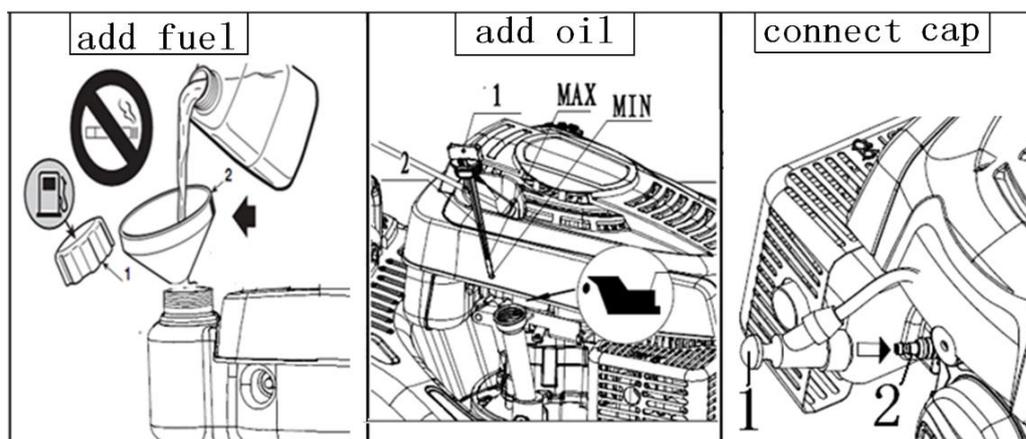
Do not fill with petrol while the engine is running.

2. Add oil: See the Technical data table for the oil to be used.

- Place engine level.
- Clean around oil fill.
- Remove the filler cap, clean the tip of the dipstick, insert and tighten down.
- Remove dipstick again and check the oil level that must be between the "MIN" and "MAX" marks.
- If oil is required, add oil of the same kind up to the "MAX" mark, being careful not to spill any outside the oil fill.
- Close the filler cap and wipe off any spilled oil.

3. Spark plug cap

Connect the cap of cable to the spark plug, making sure that there is no grass or dirt either inside the cap or on the spark plug terminal.



4. Starting engine:

Always start the engine with the lawnmower traction device (if equipped) disengaged.

- a) Push down the button three times.
- b) Close blade control handle

c) Then pull cord rapidly (If your lawn mower is equipped with starter push “start” button)

d) When engine starts, release the recoil starter.

NOTE: If the engine does not start, repeat whole starting procedure.

NOTE: If the engine starts but does not keep running, repeat the whole starting

Starting the engine (hot starting)

Follow the whole cold-starting procedure.



WARNING! Keep your hands away from the silencer and surrounding areas that can become extremely hot. While the engine running, do not get loose-fitting clothing (ties, scarves, etc.) or hair closer to the top part of the engine.

IMPORTANT : inclines can prevent malfunctioning of engine. Do not operate your lawn mower over 13° inclination angle.

5. Drive

• Forward drive is engaged and disengaged with the drive control at the top of the handle.

6. Stopping during operation

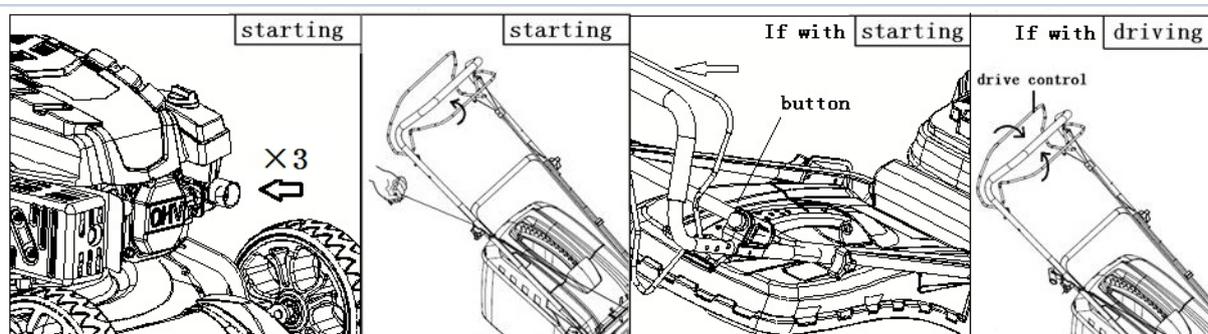
Release the blade control handle to stop the engine.

7. Stopping at the end of operation

a) Release the blade control handle to stop the engine.

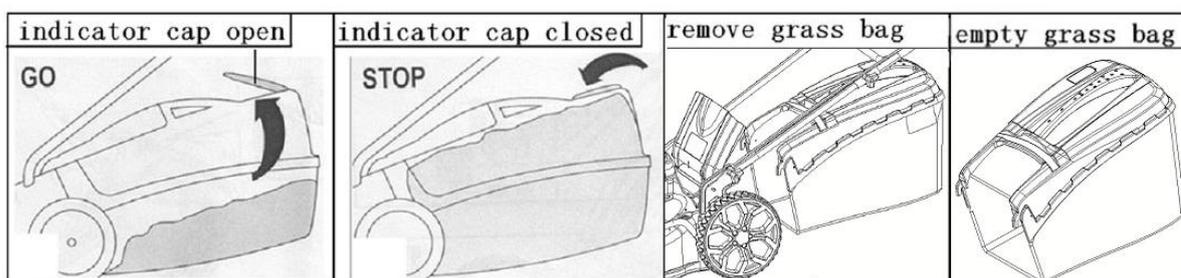
b) Once the engine has cooled, disconnect the spark plug cap.

c) Remove any grass build-up from the engine, in particular from the silencer, to reduce fire hazard.



OPERATION

1. The mower should not be used on ground that slopes more than 13°. This could cause engine lubrication problems.
2. To empty grass catcher: when the indicator cap is closed, the grass catcher is full. Please empty it.
3. To remove grass box:
 - Release engine brake control to stop engine
 - Lift up rear cover and remove the grass catcher by handle.
 - Empty the grass catcher.



- Do not drag the bag when emptying, it will cause unnecessary wear.

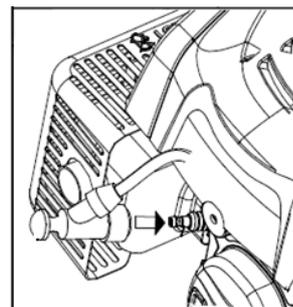
4. Clean up the grass inside chassis with water when the mower is used:
(if your lawn mower is equipped with hose plug)

- Open hose cover
- Insert the hose into quick connector through hose cover.
- Tighten hose cover.
- Connect the quick coupling with the outlet connector on the chassis by rotating the fastening clip as indicated.
- Open faucet and clean the mower 30 - 60 seconds
- Shut down the mower.
- Wipe up the mower with dry cloth.



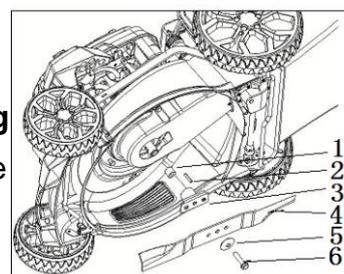
MAINTENANCE AND STORAGE

Always remove the spark plug lead before repair, cleaning or maintenance work. After 5 hours running time, tighten screws and nuts. Check the oil. **The spark plug must be at the highest point on the mower when it is tilted up.** Clean mower thoroughly after each mowing with cloth or brush. Do not spray with water. Keep mower in a dry room.



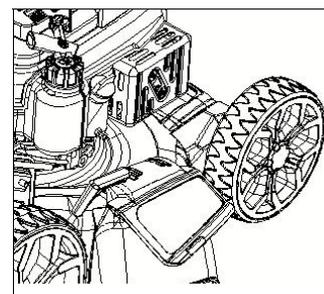
• Annually (After end of season)

Grinding and balancing the cutter blade. **Remove the sparkplug lead.** Fitting and removing the blade require the use of protective gloves. Unscrew the cutter blade and deliver it to a service workshop for grinding and balancing. Tighten the screw properly when reassembling.



Drain fuel from tank to prevent build-ups inside the tank.

Change oil after each season or after 25 hours running time. Run the engine warm, remove the spark plug lead. Remove the drain plug from bottom of engine and drain oil. Fill with new oil.



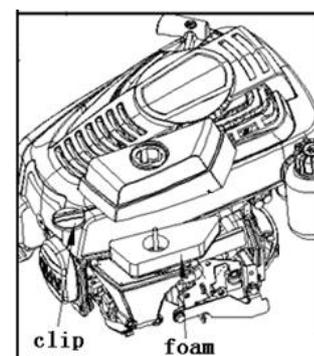
• Cleaning the air filter.

Keep the filter clean and oil saturated. Replace it if broken, cut or with damaged parts.

IMPORTANT: Never use compressed air to clean the filtering element.

- Clean around the filter cover
- Release the clip; remove the cover and the foam element.
- Wash the foam element in liquid detergent and water. Squeeze dry in a clean cloth.
- Saturate the foam element with 2 table-spoons of clean engine oil and squeeze it a few times to distribute the oil evenly.
- Remove excess oil with a clean cloth.
- Clean the interior of the air cleaner housing from any dust and grass, making sure that they do not enter the intake manifold.
- Install the foam element in its housing and close the cover.

If the foam element has been replaced, proceed to oil the new filter as described above in sections.



GENERAL INFORMATION

Transport

Remove spark plug lead. Empty the petrol tank. Before public transporting, engine oil and petrol must be removed.

TROUBLESHOOTING

PROBLEM	LIKELY CAUSE	SOLUTION
Hard starting	No fuel	Check and top up
	Stale fuel or build-ups in tank	Empty fuel tank and refill with fresh fuel
	Spark plug disconnected	Check that the spark plug cap fits well over the plug terminals
	Dirty electrodes or incorrect gap	Check
	Air filter clogged	Check and clean the air cleaner
	Incorrect oil for the season	Replace with proper oil
	Fuel evaporation in the carburetor (vapor lock) due to high temperatures	Wait for a few minutes then start again
Inconsistent working	Fault in carburation	Contact a Licensed Service Centre
	Stale fuel or build-ups in tank	Empty fuel tank and refill with fresh fuel
	Dirty electrodes or incorrect gap	Check
	Air filter clogged	Check and clean the air cleaner
Loss of power while mowing	Fault in carburation	Contact a Licensed Service Centre
	Air filter clogged	Check and clean the air cleaner
	Governor out of phase with respect to the accelerator	Adjust the cable

Guarantee terms

Please carefully retain the guarantee card completed by the seller, or the proof of purchase.

Pre-conditions for the 24-month guarantee entitlement:

- Deployment of the device solely for private use.

The guarantee is reduced to 12 months in the commercial sector or leasing business.

- Proper handling and observance of all information given in the operating manual, which forms part of our guarantee terms.

- Observance of the prescribed maintenance intervals

- No unauthorized alteration of the design.

- Presentation of the completed guarantee card and/or proof of purchase.

This guarantee does not extend to normal wear-and-tear on blades, blade mounting components or friction disks, running wheels/tyres air

filters spark plugs and spark plug connectors. Any guarantee claim shall be immediately void in the event of unauthorized repairs. Faults and defects, which can be traced to material or manufacturing faults will be rectified exclusively by our contracted workshops (the seller has the right to remedy a defect) in your vicinity or by the manufacturer if the latter is closer. Any claims going beyond the provision of a guarantee are ruled out. Any transport damage should be reported not to us but to the shipper in question since, otherwise, any compensation claims the shipper would be voided.



This symbol on the device or the packaging indicates that the product shall not be managed as household waste. Please dispose of it at the collecting place assigned for the collection of electrical and electronic devices. By proper management of superseded products you can help prevent the environment and human health from damage which would occur if you do not follow the proper way of waste disposal. The recycling of the materials helps in the preservation of the natural resources. For further information on the recycling of the product, please turn to the competent authorities, the local waste collecting service provider or the shop where this product was bought.

Information concerning the packaging materials

The used packaging materials must be thrown into the relevant waste collector.