





-  **IMPORTANT:** This cutting machine is capable of causing serious bodily harm. Failure to observe the following safety instructions could result in serious injury or death..
-  **WARNING:** In order to prevent accidental starting when setting up, transporting, adjusting or making repairs, always disconnect spark plug wire.
-  **WARNING:** Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to cause cancer and birth defects or other reproductive harm.
-  **CAUTION:** Muffler and other engine parts become extremely hot during operation and remain hot after engine has stopped. To avoid severe burns on contact, stay away from these areas.

1. GENERAL OPERATION AND SAFETY RULES

- Read the instructions carefully. Be familiar with the controls and the proper use of the equipment.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
- Only allow responsible individuals, who are familiar with the instructions, to operate the machine.
- Thoroughly inspect the area where equipment is to be used and remove all objects which can be thrown by the machine.
- Never mow while people (especially children) or pets are nearby.
- While mowing, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals
- Do not pull mower backwards unless absolutely necessary. Always look down and behind before and while mowing backwards.
- Never operate the lawnmower with defective guards, or without safety devices, for example deflectors and/or grass catchers, in place
- Only use accessories approved by manufacturer.
- Stop the blade(s) when crossing gravel drives, walks, or roads.
- Stop the engine and disconnect the spark plug:
 - before clearing blockages or unclogging the 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 lawnmower starts to vibrate abnormally (check immediately).
- Shut the engine off and wait until and the blade comes to complete stop before removing grass catcher.
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Never operate machine in wet grass. Reduced footing could cause slipping, keep a firm hold on the handle and walk, never run.
- Disengage the self-propelled mechanism before starting the engine.
- Replace faulty silencers.
- Always wear safety goggles or safety glasses with side shields when operating mower.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Tall grass can hide obstacles.
- Do not trim near drop-offs, ditches or embankments. The operator could lose footing or balance.
- Do not mow excessively steep slopes.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

- Be alert and turn machine off if children enter the area.
- For wheeled rotary machines, mow across the face of slopes, never up and down.
- Never allow children or people unfamiliar with these instructions to use the lawnmower. Local regulations can restrict the age of the operator.
- **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 or when the engine is hot
 - 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 vapours have dissipated
 - replace all fuel tanks and container caps securely
- 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.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage. Allow machine to cool before storing.
- Exercise extreme caution when changing direction on slopes.
- Never attempt to make wheel height adjustments while the engine (motor) is running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Do not change the engine governor setting or over speed the engine.
- Use extreme caution when reversing or pulling the lawnmower towards you.
- Stop the blade(s) 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.
- Disengage all blades and drive clutches before starting the engine.
- Start the engine or switch on the motor carefully according to instructions and with feet well away from the blade(s).
- Do not tilt the lawnmower when starting the engine or switching on the motor, except if the lawnmower has to be tilted for starting. In this case, do not tilt it 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.
- Never pick up or carry a lawnmower while the engine is running.
- Reduce the brake setting during engine shut down and, if engine is provided with a shut-off valve, turn the fuel off at the conclusion of mowing. Go slow when using a trailing seat.

ASSEMBLY/PRE-OPERATION

Read these instructions and this manual in its entirety before you attempt to assemble to operate your new lawnmower.

IMPORTANT: The lawn mower is shipped **WITHOUT OIL OR GASOLINE** in the engine. Your new lawn mower has been assembled and tested at the factory.

REMOVE LAWN MOWER FROM CARTON

Roll lawn mower out of carton and check carton thoroughly for additional loose parts.

INSTALL ATTACHMENTS

Your lawn mower was shipped ready to be used as rear bag mower.

SET UP YOUR MOWER

IMPORTANT: Unfold handle carefully so as not to pinch or damage control cables.

1. Raise handles until lower handle section locks into place at mowing position.
2. Remove protective padding, raise upper handle section into place on lower handle and tighten both handle knobs.
3. Remove handle padding holding operator presence control bar to upper handle.
4. Side discharge function: please install the side Discharge Cover (Figure 1).

Only Mulching: please remove the side discharge cover. (Figure 2).

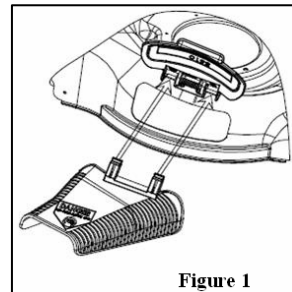


Figure 1

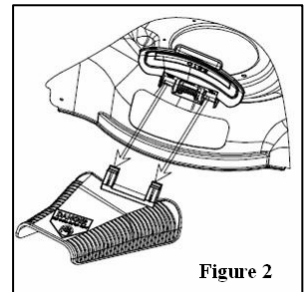
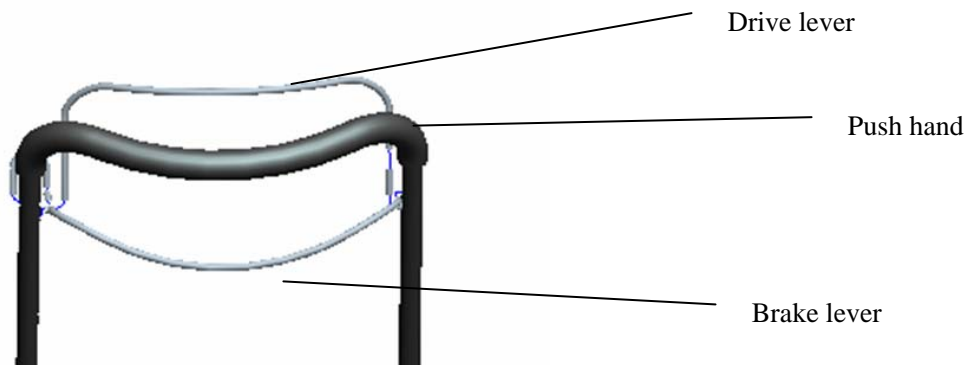


Figure 2

Operation



Brake lever - must be held down to the handle to start the engine. Release to stop the engine.

Starter handle - used for starting engine.

Drive control lever - used to engage power-propelled forward motion of lawn mower.

USE YOUR LAWNMOWER ENGINE SPEED

The engine speed was set at the factory for optimum performance. Speed is not adjustable.

DRIVE CONTROL

- Self-propelling is controlled by holding the operator presence control bar down to the handle and pushing the drive control lever forward until it clicks; then releasing the lever.
- Forward motion will stop when the operator presence control bar is released. To stop forward motion without stopping engine, release the operator presence control bar slightly until the drive control disengages. Hold operator presence control bar down against handle to continue mowing without self-propelling.

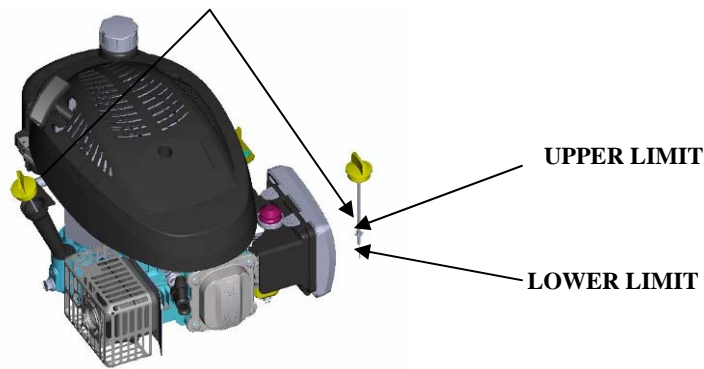
ADJUST CUTTING HEIGHT

Raise wheels for low cuts and lower wheels for deeper cuts. Adjust cutting height to suit your requirements. The medium position is best for most lawns.

BEFORE STARTING ENGINE, ADD OIL

Before each subsequent use the oil level must be check and if necessary topped up with **500ml** SAE30 engine oil.

OIL FILLER CAP / DIPSTICK



Your lawnmower is shipped without oil in the engine. For type and grade of oil to use, see “ENGINE” in the Maintenance section of this manual.



CAUTION: DO NOT overfill engine with oil, or it will smoke heavily from the muffler on startup.

1. Be sure lawnmower is level.
2. Remove oil dipstick from oil fill spout.
3. Insert and tighten dipstick.

IMPORTANT:

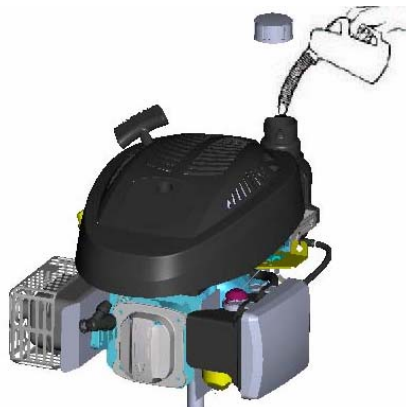
- Check oil level before each use. Add oil if needed. Fill to full line on dipstick.
- Change the oil after every 25 hours of operation or each season. You may need to change the oil more often under dusty, dirty conditions. See “TO CHANGE ENGINE OIL” in the Maintenance section of this manual.

ADD GASOLINE

- Fill fuel tank to bottom of tank filler neck. Do not overfill. Use fresh, clean, regular unleaded gasoline. Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.



CAUTION: Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.



⚠ CAUTION: Alcohol blended fuels (called gasohol or using ethanol or methanol can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Empty the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information.

Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

START ENGINE

To start the engine, first make sure that the spark plug and that the machine is filled with sufficient oil and petrol.

NOTE: Due to protective coating on the engine, a small amount of smoke may be present during the initial use of the product and should be considered normal.

NOTE: In cold conditions, it is necessary to push the prime button on the air filter before pulling the starter coil (Please see form 1). We also should put more fuel to mix with air for easy start. When you push the prime button, it will pump the fuel direct from carburetor to burning housing.

Primer only for cool engine use

Temperature	Push time
<0°C	2~3
0°C~10°C	1~2
>10°C	0~1

Form 1

NOTE: In cold conditions, it may be necessary to repeat priming steps.

STOP ENGINE

- To stop engine, release operator presence control bar.

⚠ WARNING! The blade will continue to rotate for a few seconds after the engine has stopped. Disconnect the spark plug cap if the lawnmower is to be left unattended.

MOWING TIPS

- Under certain conditions, such as very tall grass, it may be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of grass clippings. It may also be necessary to reduce ground speed and/or run the lawnmower over the area a second time.
- For extremely heavy cutting, reduce the width of cut by over lapping previously cut path and mow slowly.
- Pores in cloth grass catchers can become filled with dirt and dust with use and catchers will collect less grass. To prevent this, regularly hose catcher off with water and let dry before using.

- Keep top of engine around starter clear and clean of grass clippings and chaff. This will help engine air flow and extend engine life.

MAINTENANCE

IMPORTANT-Regular, careful maintenance is essential for keeping the safety level and original performance of the machine unchanged in time.

- 1) Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition. Regular maintenance is essential for safety and performance.
- 2) Never store the equipment with fuel in the tank inside a building where vapour may reach a flame or a spark or a source of extreme heat.
- 3) Allow the engine to cool before storing in an enclosed space.
- 4) To reduce the fire hazard, keep the engine, exhaust silencer, battery compartment and fuel storage area free of grass, leaves, or excessive grease. Do not leave containers with grass cuttings in rooms.
- 5) For reasons of safety, do not use the equipment with worn or damaged parts. Parts are to be replaced and not repaired. Use genuine spare parts (blades should always bear the symbol). Parts that are not of the same quality can damage the equipment and be dangerous for your safety.
- 6) If the fuel tank has to be drained, this should be done outdoors and when the engine is cool.
- 7) Wear strong work gloves when removing and reassembling the blade.
- 8) Check the blade's balance after sharpening.
- 9) Check the self-closing guard and grass-catcher frequently for wear and deterioration.
- 10) Whenever the machine is to be handled, transported or tilted you must:
 - Wear strong working gloves
 - Grasp the machine at the points that offer a safe grip, taking account of the weight and its distribution

CLEANING

Carefully clean the machines with water after each cut; remove the grass debris and mud accumulated inside the chassis to avoid their drying and thus making the next start-up difficult.

The paintwork on the inside of the chassis may peel off in time due to the abrasive action of the cut grass; in this case, intervene promptly by touching up the paintwork using a rustproof paint to prevent the formation of rust that would lead to corrosion of the metal.

Remove the transmission casing by removing the screws and clean around the transmission and drive belts with a brush or compressed air once or twice a year.

Once every season, the drive wheels should be cleaned internally. Remove both wheels. Clean the gear wheel and the wheel gear rim of grass and dirt using a brush or compressed air.

CHANGING BLADES

To replace the blade, undo the screw.

Empty the oil tank before removing the blade



Reinstall as illustrated. Tighten the screw properly. Tightening torque 45 Nm.

When replacing the blade, the blade screw should also be replaced.

CHANGE OIL

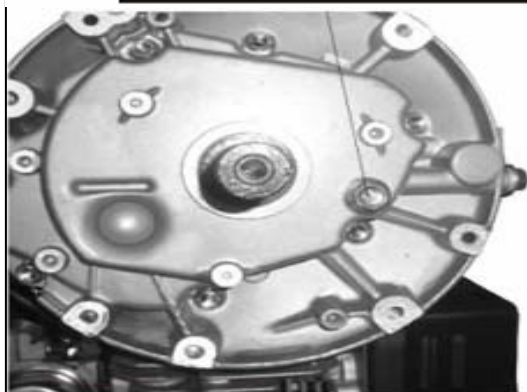
1. Stop the engine and wait until engine has cooled
2. Disconnect spark plug wire and keep away from spark plug.
3. When engine is still warm, remove oil drain plug (A).
Drain oil into a proper container. (Fig.12)
4. Clean the oil drain plug before restoring it back.
5. Place engine level. Remove dipstick. Add new recommended oil about 0.3L slowly to upper limit on dip stick. Do not overfill.
6. Replace dipstick



WARNING: Prevent skin contact with used engine oil. Wash your skin with soap and water after oil change.

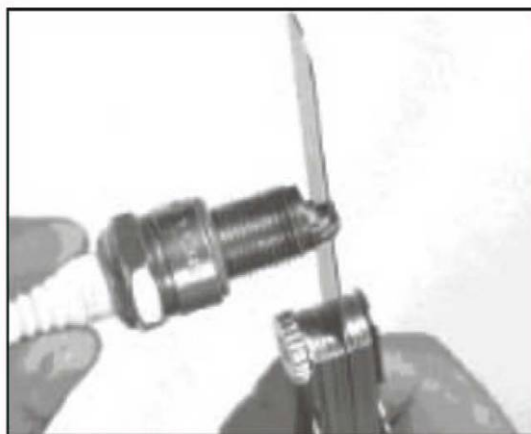


CAUTION: Used oil is a hazardous waste product. It is suggested to bring used oil to your local recycling center with properly sealed container a sealed container to your local recycling center. Do not discard with household waste.



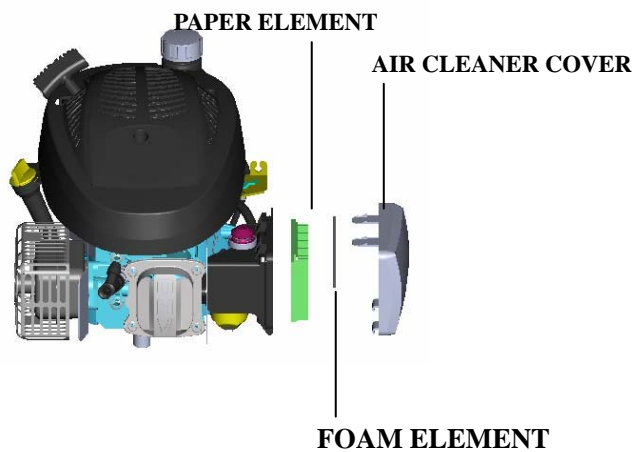
Spark Plug

Once the engine has cooled, remove the spark plug and clean the plug with a wire brush. Using a feeler gauge, set the gap to 0.75mm (0.030"). Refit the spark plug taking care not to over tighten.



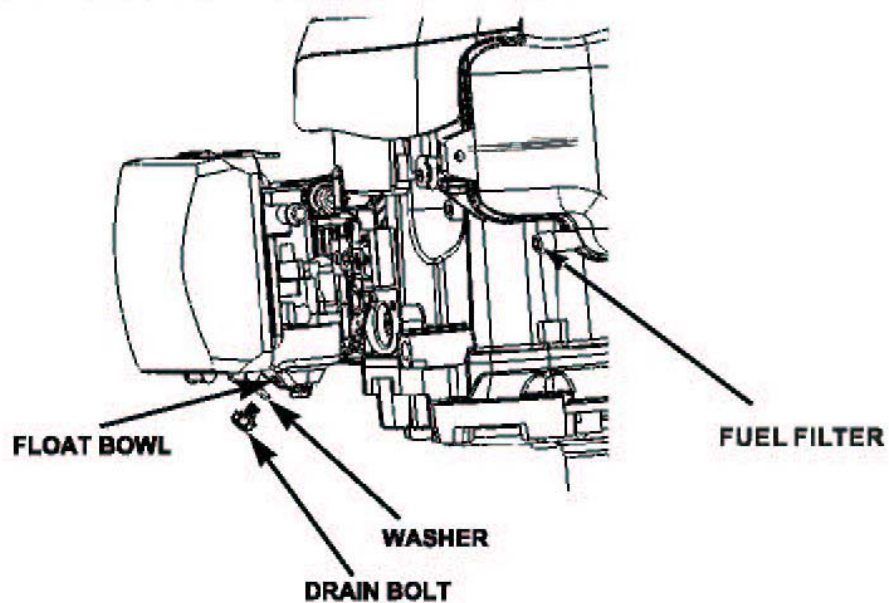
Air Filter

Unclip the air filter cover and remove the sponge filter element. To avoid objects falling into the air intake, replace the air filter cover.



DRAINING THE FUEL TANK AND CARBURETOR

1. Place an approved gasoline container below the carburetor, and use a funnel to avoid spilling fuel.
2. Remove the drain bolt, then move the fuel valve lever to the ON position.
3. After all the fuel has drained into the container, reinstall the drain bolt and washer. Tighten the drain bolt securely.



MAINTENANCE SCHEDULE

REGULAR SERVICE PERIOD		Before Each Use	First Month or 5 Hrs	Every 3 Months or 25 Hrs	Every 6 Months or 50 Hrs	Every Year or 100 Hrs	Every Two Years or 250 Hrs	Page
ITEM Perform at every indicated month or operating hour interval, whichever comes first.								
Engine oil	Check	O						8
	Replace		O		O			
Air cleaner	Check	O						9
	Replace			O				
Spark plug	Check-adjust					O		8
	Replace						O	
Flywheel brake pad (A types)	Check				O			Shop manual
Fuel tank and filter	Clean					O		Shop manual
Fuel tube	Check	Every 2 years (Replace if necessary)(3)						Shop manual
Valve clearance	Check-adjust					O		Shop manual
Combustion chamber	Clean	After every 200 hours (3)						-

TROUBLE SHOOTING

ENGINE WILL NOT START	Possible Cause	Correction
1. Check fuel.	Out of fuel.	Refuel
	Bad fuel; engine stored without treating or draining gasoline, or refueled with bad gasoline	Drain the fuel tank and carburetor (p.5). Refuel with fresh gasoline.
2. Remove and inspect spark plug.	Spark plug faulty, fouled, or improperly gapped.	Replace the spark plug (p.8).
	Spark plug wet with fuel (flooded engine).	Dry and reinstall spark plug.
3. Take engine to an authorized our servicing dealer, or refer to shop manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary.
4. Push the prime button	In cold condition	Push the prime button.

ENGINE LACKS POWER	Possible Cause	Correction
1. Check air cleaner	Air cleaner elements clogged.	Clean or replace air cleaner elements (p.9).
2. Check fuel	Bad fuel; engine stored without treating or draining gasoline, or refueled with bad gasoline.	Drain the fuel tank and carburetor (p.5). Refuel with fresh gasoline.
3. Take engine to an authorized our servicing dealer, or refer to shop manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary.

Tune up Specifications

ITEM	SPECIFICATION	MAINTENANCE
Spark plug gap	0.028-0.031 in (0.7-0.8 mm)	Refer to page 8.
Valve clearance (cold)	IN:0.06 ± 0.02mm EX;0.08 ± 0.02mm	See your authorized dealer
Other specifications	No other adjustments needed.	

STORAGE

The same petrol must not remain in the tank for more than one month.

Thoroughly clean the mower and store it indoors in a dry place.

THE ENVIRONMENT

In order to protect the environment, we recommend that the following points should be given special consideration:

- Always use pure unleaded petrol.
- Always use a funnel and/or a petrol can with a level control to avoid spillage when refilling the fuel tank.
- Do not fill the fuel tank completely.
- Do not overfill with engine oil.
- When changing the oil, ensure that all the used oil is collected. Avoid spillage. Take the used oil to a recycling unit.
- Do not dispose of used oil filter in a garbage can. Take it to a recycling unit.
- Replace the silencer if faulty. When carrying out repairs, always use original spare parts.
- Always seek professional help when the carburetor requires adjustment.
- Clean the air filter according to directions.
- When, after many years of service, your machine needs to be replaced or is no longer required, we recommend that the machine is returned to you distributor for recycling.

SYMBOLS

The following symbols can be found on the machine to remind you of the care and attention that are required during use. The symbols mean:

	<p>Read Operator's Manual</p>		<p>DANGER – Rotating blades. Keep hands and feet out of openings while machine is running.</p>		<p>Warning! Keep hands and feet clear of the cutting deck when the machine is running.</p>
	<p>Keep Bystanders Away</p>		<p>Before you work on the cutting equipment, remove the spark plug socket.</p>		<p>Warning! Before starting any repair work, remove the spark plug cable from the spark plug.</p>
	<p>Remove objects that could be thrown by the blade.</p>		<p>Warning! Keep other persons at a safe distance when using this lawnmower.</p>		

SERVICING

Genuine spare parts are supplied by service workshops and by many dealers. We recommend that you take the machine to an authorized service station for annual servicing, maintenance and inspection of safety equipment. For service and spare parts, please contact the dealer where the machine was purchased.