

# **GASOLINE LAWNMOWER**

# **RAC4640PL-1**

# **Instruction manual**



WARNING: Read and understand all instructions and instructions.

# **RACING**

32, rue Aristide Bergès - ZI 31270 Cugnaux - France





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#### 1. SAFETY INSTRUCTIONS

## **Instructions**

- Read the instructions carefully. Be familiar with the controls and proper use of the equipment.
- Never allow children to use this mower. If the mower is given to an other people, also give this manual. Also make sure that this person uses this device only after receiving the necessary instructions. Local laws may restrict the age of the user.
- Never mow while people, especially children, or animals are nearby.
- Keep in mind that the operator or user is responsible for accidents or risks that may occur to other persons or their properties.

## **Preparation**

- During mowing, always wear safety shoes and long pants. Do not use the equipment barefoot or wearing sandals open.
- Carefully inspect the area where equipment is being used by removing all objects that may be affected by the machine.
- WARNING Gasoline is extremely flammable.
  - Add fuel before starting. Do not remove the fuel tank cap while the machine is running or when it is hot.
  - If the fuel has spilled or leaked, do not attempt to start the machine but move the machine away from the leakage area and avoid creating a source of ignition until the gasoline vapors has dissipated.
  - Refuel only outside and do not smoke during refueling.
  - Store fuel in tanks specifically designated for this purpose.
  - Replace the fuel tank or the defective gasoline plug securely.
- Replace defective mufflers.
- Before use, always inspect visually that the blades, blade assembly and blade lock are not worn or damaged. Replace blades and blade assemblies that are not in good condition to maintain balance.
- The blades must be balanced to ensure proper operation and to be able to work safely.

# **Operation**

- Do not use the machine in a confined space or hazardous carbon monoxide emissions can be collected.
- Mow only under daylight or under good artificial light.
- Avoid using the equipment on greasy grass, where possible.
- Always be sure of your walking on the slopes.
- Walk, never run.
- For lawn mowers, mow across slopes, never from top to bottom.
- Exercise extreme caution when changing direction on slopes.
- Stop the blades if the mower is to be tilted during transport when crossing surfaces other than grass, and when transporting the mower due to the area to be mowed.
- Do not mow on steep slopes.
- Use extreme caution when tipping or pulling the mower towards you.
- Never use the mower with defective guards, or without safety devices such as baffles and or collection bins, which are not in place.
- Do not change the motor configuration or increase the speed.
- For starting, disengage all blades, the gears must be in neutral, the traction control lever must be released. Set foot well away from the blades.
- Before starting the engine or starting the engine, carefully read and understand all instructions.
- Do not tilt the mower when starting the machine or turn on the engine, unless the mower needs to be tilted for starting. In this case, do not tilt it more than absolutely necessary and lift only the part that is furthest away from the user.
- Do not start the machine by standing in front of the ejection
- Do not place hands or feet near or under rotating parts. Keep clean the mouth of the grass extractor.

- Never take or carry the mower while the machine is running.
- Stop the machine and remove the ignition key, disconnect the spark plug from the spark plug:
  - Before cleaning or unclogging the grass extractor.
  - Before checking, cleaning, and working on the mower.
  - After hitting an object. Inspect the mower for damage and repair before re-using the mower.
  - o If the mower begins to vibrate abnormally, stop the engine immediately and check according to previous recommendations.
- Stop the engine immediately:
  - Every time you leave the craft.
  - Before refueling.
- To stop the engine, reduce the throttle setting, turn off the ignition and release the operator presence grip, close the fuel cock (depending on the equipment).
- Move slowly when moving.

# Maintenance and storage

- Check, check and tighten all bolts, bolts, and screws to ensure that the equipment is in safe operating condition.
- Never keep the mower with gasoline in the tank in a building or vapors can cause a bright flame or spark.
- Allow the machine to cool before storing it in an enclosed area.
- To reduce the risk of fire, keep the machine clean without grass, without grease, the muffler and the engine cools, disconnect the battery if necessary and empty the fuel tank
- Check the grass catcher frequently, its condition or deterioration.
- Replace worn and damaged parts for safety.
- If the fuel tank is to be drained, it must be made outdoors.

## **Special safety instructions**

- Always use the mower with its pick-up bag and / or deflector in the intended position.
- Switch off the engine before emptying the pick-up bag or before changing the cutting height.
- While the engine is running, never put your hands or feet under the mower or under the grass ejection area.
- Before mowing, remove all foreign objects from the grass that can be propelled by the machine.
- Keep children and pets at a safe distance while using the mower.
- Never lift the mower when the engine starts.
- Alcohol, drug, as well as illness, fever and fatigue affect your ability to respond. Do not use
  power tools in such circumstances.
- Never change the rated speed of the motor.
- Never lift or carry the tool while the engine is running.
- Before starting the engine, release the drawbar.
- Before mowing, install the collection bag in its intended position.
- Do not use the mower in the event of rain or when the grass is wet.
- Never lift the rear of the mower when starting the engine and never place your hands or feet under the mower deck or in the rear ejection port while the engine is running.
- Turn off the engine and remove the spark plug cap in the following cases:
  - o Before operating under the mower deck or near the ejection opening.
  - o Before any maintenance, repair or verification.
  - Before transporting, lifting or storing the mower.
  - o If you leave the mower unattended or change the cutting height.
  - To remove and empty the collection bag.
- After striking a foreign object, turn off the engine and carefully inspect the mower for damage. Take the lawnmower to an authorized service center for repair if necessary.
- If the mower vibrates abnormally, try to understand the reason and bring your lawnmower to an authorized repair center.
- Regularly check that the bolts, nuts and screws are properly tightened for safe use of the mower.

- Do not use the tool where there is a risk of lighting.
- During the operation, the lawnmower emits exhaust gases; these gases are poisonous and care makes in danger the life of the operator. Do not inhale them. Do not approach of exhaust gases and wear a protection mask when using the tool.

## **Fuel Handling**

Use caution when handling fuels. They are flammable and the vapors are explosive.

Use only an approved container.

Never remove the fuel cap or add fuel while the machine is on. Turn off the unit and allow the engine and exhaust components to cool down before refueling.

Do not smoke.

Never refuel inside a room.

Never store the tool and the fuel tank indoors where there is a naked flame, such as near a water heater.

If fuel has spilled, do not attempt to start the machine, but move it away from the spill before starting to use it. Please clean up any spills.

Replace and tighten the fuel tank cap after refueling.

Follow strictly the instructions in this manual for filling the tool with fuel.

## **During maintenance and storage**

Switch off the tool and wait until it stops completely. Make sure that all moving parts are stopped. Allow the machine to cool before performing inspection, adjustments, maintenance, servicing and storage.

Store the tool where fuel vapor will not reach a flame or spark.

When transporting and storing the tool, always use a protection device to avoid fuel spillage, accidents and injuries.

#### Residual risks

Even if you use this product in compliance with all safety requirements, the potential risks of injury and damage remain. The following hazards may arise in the structure and design of this product:

There are adverse health consequences resulting from the emission of vibration if the product is used for long periods of time or not properly managed and properly maintained.

There are risks of injury and property damage due to attachments or broken the sudden impact of hidden objects when using cutting.

Risk of injury to persons and property caused by flying objects.

Prolonged use of this product exposes the operator to vibrations and can produce so-called "white finger" disease. To reduce the risk, wear gloves and keep your hands warm.

If any of the symptoms of "white finger syndrome" occur, seek immediate medical attention.

Symptoms of "white finger" include numbness, loss of sensitivity, tingling, tingling, and pain, loss of strength, color changes or skin condition. These symptoms usually appear on the fingers, hands or wrists. Risk increases at low temperatures.

Risk of loss hearing in case of prolonged use, specifically when a hearing protection is not used.

## Intended use

This model of thermal mower is designed for natural grass mowing. Any other use is prohibited. It is suitable only for private use in a garden or plot. Lawnmowers designed for private plots or gardens are those used for the maintenance of grassy areas and private lawns and should not be used in public areas, parks, sports, agricultural or forest areas.

# **Symbols**



Read the instructions.



Watch out for projections! Keep viewers away from work area.



Danger! Keep your hands and feet away from the cutting element!



Do not use the tool under rain. Blades continue to rotate after the engine stops.

Hazardous products. This machine uses petrol and oil. Be very careful when filling, operating and moving the mower. Wear eye and hand when refilling the mower with fuel or oil.



Wear protective equipment. Wear eye and hearing protection when using the tool.



Guarantee sound power level



Bar actions (stop and self-propelling)



Do not hold the handle of the grass catcher when the blade is still on rotation.

# 2. YOUR PRODUCT

# a. **Description**



- Self-propeller bar
   Handlebar
   Operator control lever
   Throttle control
- 5. Lower bar
- 6. Hook
- Grass catcher

- 8. Flap9. Fuel tank10. Starter rope11. Cutting height lever12. Oil dipstick
- 13. Air filter box

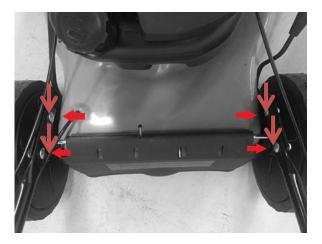
# b. Technical data

Model	RAC4640PL-1
Nominal power	2.4kW
Displacement	135cm <sup>3</sup>
Max engine speed	2850/min
Cutting width	460mm
Volume of the collection bag	501
Weight	32kg
Engine type	DY1P64F
Blade type	DY0608-12
Fuel tank capacity	1,3l
Oil tank capacity	0,61
Sound pressure level	Lpa: 85dB(A), K=3,0 dB(A)
Guaranteed Sound Power Level	Lwa: 96dB(A)
Sound power level	Lwa: 95dB(A)
Vibration value	Max. 7m/s², K=1,5m/s²

# 3. ASSEMBLY

# a. Handles/bar

Install the lower bar on the tool and screw it with the 4 screws and nuts (2 on each side).



- Combine the upper handle and the lower handle and put the screw. Install then the hook on the screw and then fix the handle with the 2 wing nuts.





- You can attach the cables with the clip supplied with the machine.



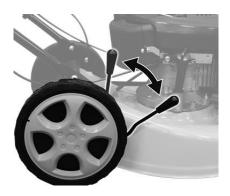
# b. Grass catcher

- Open and hold the flap. Insert the grass catcher and attach it to the bar with the hooks. The flap should fit securely.
- To remove the grass catcher, remove the hooks from the bar and remove the tray.



# c. Setting of the cutting height

According operation to be performed, adjust the desired cutting height; Grasp the lever, pull it to the right and then lower it to decrease the cutting height or raise it to increase the cutting height



## 4. FILLING FUEL TANK

## a. Filling tank

WARNING! Gasoline is extremely flammable.

Store fuel in specially designed cans for this purpose.

Fill the fuel tank only outdoors and before starting the engine. Do not smoke when filling the fuel tank or handling fuel.

Never open the fuel tank cap and never add fuel while the engine is running or when it is hot.

If fuel has spilled, do not start the engine any further, move the tool away from where the fuel has been spilled, and be careful not to create a spark or flame until the fuel vapors have dissipated.

Fully close all fuel tank and fuel canisters.

Before tilting the mower to maintain the blade or drain the oil, empty the fuel tank.

WARNING: Never fill the fuel tank indoors, while the engine is running, or before the engine has cooled down for at least 15 minutes after use.

CAUTION: Do not use unapproved gasoline, such as E15 and E85. Do not mix the oil with gasoline or modify the engine to operate with alternative fuels. The use of unapproved fuels will damage the engine parts and will void the engine warranty. To protect the fuel system from scale formation, add a fuel stabilizer to the fuel. All fuels are not identical. If startup or performance problems occur, change supplier or fuel brand. This engine is certified to run on gasoline. Emission control for this engine is via the EM (Engine Modifications) system.

At altitudes above 1524 m, a gasoline with a minimum octane rating of 85/85 AKI (89 RON) is acceptable. To remain emission compliant, high altitude adjustment is required. Use without this setting will reduce performance, increase fuel consumption and emission levels.

Use of the engine at altitudes less than 762 m with high altitude setting is not recommended.

Fuel must meet the following criteria:

- Clean, new and lead-free gasoline.
- A minimum octane rating of 87/87 AKI (91 RON). For use at high altitudes, see below
- A gasoline containing up to 10% ethanol is acceptable.
- Remove the fuel tank cap. Add fuel.



- Close the fuel tank with the cap.

Do not overfill. Wipe off any fuel that has overflowed before starting the engine.

# a. Engine oil

Recommended oil: We recommend the use of high quality detergent oil classified for SF, SG, SH, SJ or higher. Do not use special additives.

# Filling oil tank

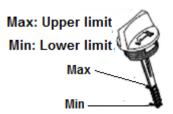
- Open the oil tank.
- Fill directly the oil in the tank. Do not overfill.



- Close the oil tank. Wipe any spillage.

# Checking the oil level

Check the oil level when the engine is off and horizontal.



- Remove the plug / dipstick from the oil tank and wipe it off.
- Insert the oil tank plug / dipstick into the tank neck as shown, without screwing it in, and then remove it to check the oil level.
- If the oil level is near or below the lower limit of the dipstick, remove the dipstick and fill the recommended oil reservoir up to the upper limit of the dipstick (bottom edge of the dipstick). Do not overfill.
- Replace the oil tank plug / dipstick.

## a. Starting the tool

Before starting and using the mower, check for the presence and operation of safety devices. Also, check the condition of the blade and its securing bolt. If necessary, replace or repair defective items. Use only genuine original parts.

If possible, mow only when the grass is dry. If the grass is wet or excessively long, perform two cutting passes. Make the first pass at maximum cutting height to avoid overloading the mower. The second pass should be made at the required finished height. If grass builds up beneath the mower's chassis, stop the engine and remove the spark plug's cap before cleaning the underside of the cutter deck.

- Slide the throttle lever to and for several times to ensure that it is moving smoothly and correctly.
- Start the mower in a clear, level area. Do not start the engine if the cutting blade is resting on rough and uncut grass as this may cause difficulties at start-up.
- For a cold start, move the throttle lever to the position marked: START

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- For a hot start, move the lever to the position marked: RUN



- Stand behind the handlebars. Move the operator control lever positioned in front of the handlebars rearwards so that the lever is resting against the handlebars. Take hold of the starter handle firmly with the other hand.



- Pull back the starter until you feel resistance and then pull the handle firmly and briskly to turn the engine
- Repeat the above procedure as necessary until the engine starts.
- When starting from cold, gradually move the throttle lever to the full throttle position after a few moments of running.

# b. Self-propelling

The mower can be self-propelled when in use. When the transmission is operated, the rear wheels turn automatically. Push and hold the traction bar forward.



Release this bar to stop this function.

# c. Stopping

To stop the mower, release the operator control lever. The engine and the blade will stop turning automatically.

If there is a build-up of grass beneath the chassis, stop the engine, remove the spark plug's cap and wait until the engine has cooled before clearing the grass.

#### 6. MAINTENANCE AND STORAGE

Before working on the cutting system of the machine, switch off the engine and remove the spark plug's cap.

#### a. Cleaning the mower

- Cut grass is damp. Regular cleaning after each use will ensure better functioning of the mower and reduce the risk of corrosion or seizure.
- Having finished mowing, allow the engine to cool then remove accumulated grass clippings from and around the engine with a brush.
- Clean the grass collection bag annually with a brush or gentle spray of water.
- Disconnect the spark plug's cap and tilt the mower on its side with the air filter and carburettor uppermost.
- Remove any remaining cut grass from the cutting system with a scraper and a brush.
- Reposition the mower onto its four wheels.
- Do not use a pressure washer or hot water to clean the mower. Be careful to avoid soaking parts such as the engine, air cleaner, wheel bearings and metal fastenings. Dry off the machine before storing by leaving it running for a few minutes on a flat, clear surface to prevent corrosion or seizure.

## b. Storing the mower

Store your mower in a dry, well-ventilated area, away from flames, sparks or heat sources. If the storage area is accessible to children, immobilise the machine by disconnecting the spark plug's cap. Storing the mower beneath a tarpaulin or similar cover is not recommended as it may cause a build - up of condensation resulting in corrosion of the mower.

## Extended shutdown and winter storage

Thoroughly clean the mower. Ideally, run the engine outdoors until the fuel tank is empty. Alternatively, empty any remaining fuel using a fuel suction pump.

Dispose of discarded fuel safely and responsibly, remembering that petrol vapours can cause explosion or fire. Run the engine until any remaining fuel is consumed. Allow the engine to cool. Check the condition and cleanliness of the air cleaner. Remove the spark plug from the engine and pour a tablespoon of engine oil into the cylinder. Gently pull the starter rope several times to turn over the engine, distributing the oil to protect the cylinder over winter. Replace and tighten the spark plug.

## At the start of the new season

Remove the spark plug and gently clean off any carbon deposits from the tip with a small copper wire brush, finishing off with petrol. Allow the spark plug to dry. Pull the starter rope several times to expel excess oil from the cylinder. Replace and tighten the spark plug. Fill the fuel tank with unleaded petrol. Turn over the engine until it starts.

## Before transporting the mower

Thoroughly clean the mower. Empty the fuel tank using a suction pump. Dispose of discarded fuel safely and responsibly, remembering that petrol vapours can cause explosion or fire. Run the engine until any remaining fuel is consumed.

Allow the engine to cool. Remove the grass collection bag. Loosen the quick release and fold down the top section of the handles taking care not to bend the cables.

To avoid scratching the mower, insert corrugated cardboard or similar padding between the upper and lower handlebars and the engine.

Due to the mower's weight, use ramps or seek assistance when lifting or loading the mower.

#### c. Mower maintenance

#### **Cutting system**

Before and after each mowing session, check that the blade, its attachment bolts and drive shaft are not damaged or excessively worn. Never try to straighten a bent blade. Replace a damaged, worn or bent blade as soon as possible. Use only genuine parts. Excessive vibration when mowing is a good indication of a problem with the cutting system.

WARNING: Vibration from a bent or damaged blade can cause costly damage to the mower. Working with an excessively worn blade wastes fuel and can lead to injury if the blade becomes detached from the machine.

## Sharpening the blade

For best mowing results, have the edges sharpened and the blade balanced at least once a year by a specialist service dealer or agent.

## Removing the blade

Wear appropriate protective gloves to prevent possible injury when handling the blade. Disconnect the spark plug cap and tilt the mower on its side with air filter and carburettor side uppermost.

Holding the blade firmly in one hand, use a spanner or socket to loosen the blade screw.

#### Mounting the blade

Wear appropriate protective gloves to prevent possible injury when handling the blade. Disconnect the spark plug cap and tilt the mower on its side with air filter and carburettor side uppermost.

Check that all components (the blade, key, blade holder, screws and washers) are present, clean and in good condition.

Position the blade on its support with the cooling fins facing the engine.

Check the correct alignment and matching of pads with the blade. The blade must be positioned precisely on its stand.

Tighten the screws connecting all of the components. Make a final visual check that all parts are present and aligned before tightening the fixing bolt very firmly with a wrench while holding the blade firmly in one hand (NB wear suitable gloves).

#### Spark plug

Check the spark plug initially after the first five hours of mower use. Thereafter, maintenance of the spark plug should take place every 25 hours.

Remove the spark plug cap using a rotary motion and then remove the spark plug with the wrench provided.

Clean off any carbon deposits using a copper brush and check the electrode gap with a feeler gauge.

Replace and retighten the serviced spark plug and replace the cap.

If the spark plug is worn or damaged, replace with a new spark plug of the same or suitable type for the engine.

## Air Filter

An air filter in poor condition will reduce the performance and life of the engine while making it harder to start. Regular checks are therefore essential, especially when using the mower in dusty conditions. Check and clean the air filter every 25 hours of use or more often if the engine is used in a dusty environment.

Remove the air box lid and carefully remove the foam filter cartridge. Clean the cartridge in a small bowl of warm water containing a few drops of washing up liquid until it is perfectly clean and free from all traces of grease and dust. Rinse the filter cartridge in clean water and then squeeze gently to remove most of the water. Let it air dry until it is completely dry. WARNING: Never clean the foam cartridge in petrol, white spirit or other solvents. These products will degrade the filter cartridge.

Clean the cover and inside of the air box with a clean lint - free cloth. Apply a uniform layer of oil to the outside of the cartridge filter with a brush (you can use clean engine oil for this).

Insert the filter cartridge into its housing and replace the air box lid, ensuring that each component is in place and properly installed. If the filter cartridge is damaged or is very dirty, replace it using a genuine part.

WARNING: Do not twist the cartridge to clean foam, as you could damage it. This mower is equipped with a dual filtration system comprising a foam pre - filter and a cartridge filter paper.

The maintenance of a foam pre - filter is identical to that of a foam cartridge filter, as described above. The cartridge filter paper should be cleaned with a vacuum cleaner. If it is dirty or contaminated with oil or petrol, replace it.

Clean the cover and inside of the air box with a clean cloth. Evenly apply a thin layer of oil to the outside of the cartridge filter with a brush (you can use clean engine oil for this). Replace the filter cartridge in its housing and then replace the lid of the air box, ensuring that each component is in place and properly installed.

## Adjusting the transmission cable

In its transmission - engaged position, the mower's advance lever is pushed fully towards the handlebar. An incorrectly - adjusted transmission cable can cause premature wear to the mower's drive system.

If the transmission cable is too tight, it will be difficult to move the advance lever towards the handlebars. Conversely, if the transmission cable is not tight enough, the transmission will function poorly and will lack power.

To adjust the tension of the cable transmission, increase or reduce the length of the adjustment device using the key. Check the effectiveness of the transmission and the resistance of the lever.

Once proper adjustment has been reached, secure the adjustment device by tightening the lock nuts.

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## Declares that the machine named below

GASOLINE LAWNMOWER
RAC4640PL-1
Serial number:

# **Complies with the following European Directives:**

Machinery Directive 2006/42/EC EMC Directive 2014/30/EU

# Other applicable guidelines:

Noise Directive 2000/14/EC Annex VI and 2005/88/EC

Guaranteed Sound Power Level	96dB(A)
Sound power level	95dB(A)

# **Applicable harmonized standards:**

EN ISO 5395-1: 2013 EN ISO 5395-2: 2013 EN ISO 14982: 2009

## Notified body

Intertek Testing & Certification Ltd. (Notified Body 0359)
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Cugnaux, 15/10/2018

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