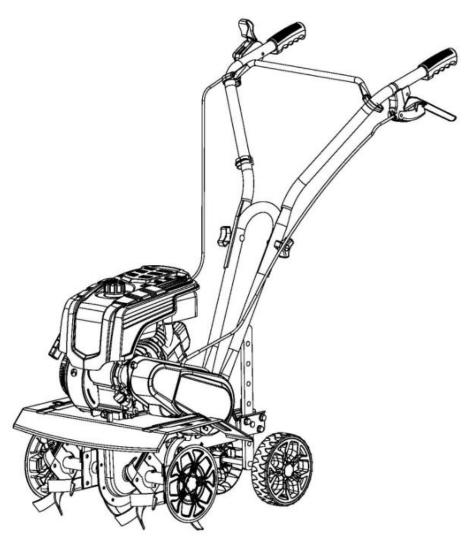


# **GT45 Tiller**Instruction manual





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

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# Congratulations on your purchase of a GAMA GARDEN petrol tiller

# SAFETY RULES

Read these instructions carefully and familiarize yourself with the controls on the machine and how they are used and the applicable safety instructions. Persons who are not familiar with these instructions should not use the machine.

Save these instructions for future reference.

- The machine is only intended for household use.
- Never use the machine when you are tired or under the influence of drugs, alcohol or medication.
- The machine must not be used by persons under 16. Keep other people, especially children, and pets at a safe distance from the work area.
- The machine must only be used as it is intended to be used and in accordance with these instructions.
- The manufacturer cannot accept any liability for damage resulting from modifications to the machine that have not been approved by the manufacturer.

# When working

- Always wear suitable clothing, safety gloves, approved safety glasses and non-slip shoes.
- Turn off the engine before filling with fuel. Only fill with fuel outdoors, never indoors.
- Keep away from sparks or naked flames, and do not smoke nearby.
- Keep your hair, clothing, hands, jewellery and other foreign objects away from moving parts. Do not touch the engine, gearbox or silencer as these parts become very hot during operation.
- Switch off the engine in the following situations.
  - After finishing the work.
  - Prior to maintenance, adjustment, changing accessories, etc.
  - When moving the machine from one place to another.
- Store the machine and fuel containers out of the reach of children, away from ignition sources such as open flames and equipment that can emit sparks.
- Allow the machine to cool before putting it away. Only use spare parts and accessories recommended by the manufacturer.
- Repairs must only carried out by an authorized service center.

## Safety devices

- Always check that all the safety devices are correctly fitted and in working order before use.
- Never dismantle or bypass the machine's guards and other safety devices.

## Clutch lever

The rotating blades stop when the clutch lever is released.

### Guard

Protects the user from soil and objects that are thrown out by the rotating blades.

### Crossbar

Prevents the user from coming too close to the rotating blades



# Warning symbols

• Description of the symbols found on the machine.



Read these instructions before use



Risk of personal injury and/or damage to objects in the vicinity. Keep other people, especially children, and pets at a safe distance from the work area.

Never use the machine without the

guards fitted.



Keep your hands and feet away from moving parts – risk of serious personal injury and/or death.



Switch off the engine, release the spark plug lead from the spark plug and allow the machine to cool before cleaning and/or maintenance.

- Symbols
- Description of the symbols found on the machine.



### Refueling

Position: on the fuel tank cap

OHV

### Overhead valve engine

Position: On the valve guard



**IMPORTANT: Risk of burn injury** 

Position: on the valve guard

START

Placement of the starter cord handle

•

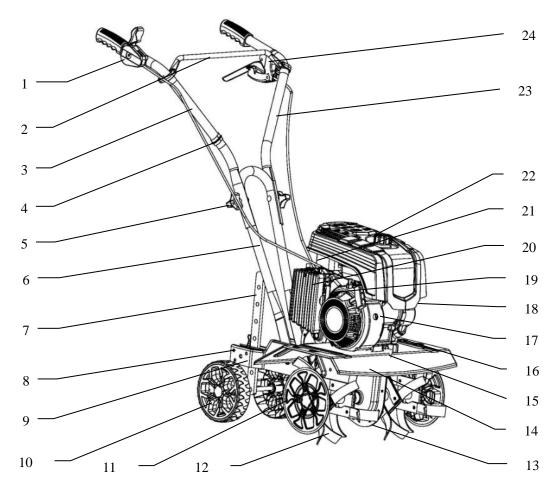
- Please take care of the information with following typical symbols:
- DANGER: This symbol indicates a hazardous situation which, if not avoided, will result in death or serious injury.
- **WARNING:** This symbol indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- CAUTION: This symbol indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



# **TECHNICAL DATA**

	TYPE			
	Engine type	G87		
	Displacement (cc)	87		
	Max. power (kW)	1.5		
Engine	Idle Speed (r/min)	1800		
TECHNICAL DATA	Rating Speed (r/min)	3600		
	Fuel capacity (L)	1.8		
	Oil capacity (L)	0.35		
	Spark plug	F7RTC		
Tiller TECHNICAL DATA	Size(L×W×H) (mm)	1100×470×1100		
	G.W/N. W (kg)	31/34		
	Rotating blade speed (r/min)	100-200r/min		
	Rotating blade diameter (mm)	260		
	Working depth (cm)	5-30		
	Working width (cm)	45		
	Sound level (dB)	93		

# **OVERVIEW**



- 1. Throttle lever
- 2、Crossbar

9、Pin

5、Knobs

- 13、Gearbox 14. Protective guard
- 17 Engine Switch
- 21 Choke Control Lever 22 Fuel Tank Cover

- 6. Bottom Hanle
- 10、Wheel
- 18 Fuel Cock

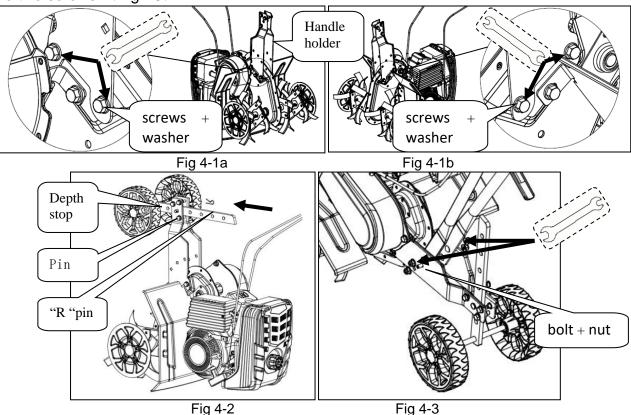
- 3. Upper handle (R)
- 7、Depth stop
- 11 Side disc
- 15、Oil Drain Plug
- 19 Recoil Starter
- 23、Upper handle (L)

- 4、Clip
- 8. Handle holder
- 12. Rotating blade
- 16、Oil Dipstick
- 20 \ Air Cleaner
- 24. Clutch lever

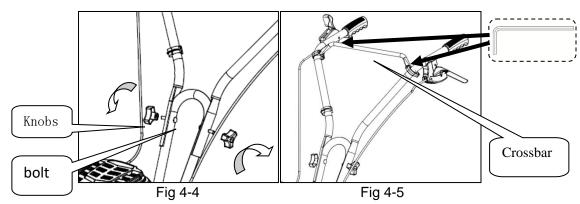
# ASSEMBLY& USE.

# 1、 ASSEMBLY

- 1.1 Take out all the parts to check whether the parts are complete
- 1.2 Handle holder assembling: Place the machine on the ground, Insert screws (M8 x
- 14) , each with (Spring washer) , When assembled, the four screws can be tightened by hand, and then tightened with a wrench. (Fig4-1a, b)
- 1.3 Take out the Depth stop, Insert Place the depth stop in the bracket, and align the holes with each other and lock in place with pin ( $\emptyset$ 10×40) and "R"pin. The bottom edge of the blades should touch the ground.
- 1.4 Lower handle assembling: Insert lower handle into the Handle holder, Insert square neck bolt (M8X20)and the Spring washer into the bracket and lower handle, then tighten with Self-locking nut; (Fig4-3)
- 1.5 Upper handle assembling: Insert square neck bolt (M8X40) into the lower handle and Upper handle (L) (R), then tighten with knob nut; (Fig4-4)
- 1.6 Crossbar assembling: Use the wrench, Unscrew the fastening screws installed on the left and right armrests (There are nuts below, please be careful not to lose), Take two pieces of plastic through the middle rungs of the buckle, fixed in two on the arm, then tighten the two screws. (Fig4-5)





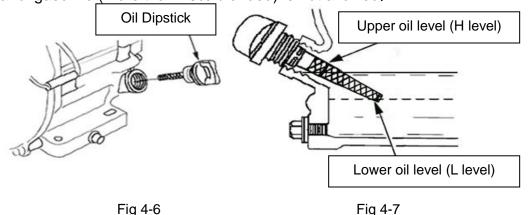


# 2. PREPARATIONS

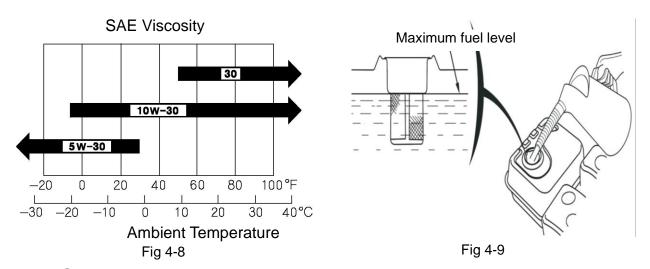
- 2.1. Check all screws joints on the machine, including the motor attachment..
- 2.2 Clutch adjustment (The clutch cable is adjusted at the factory. Any clutch cable readjustment can be carried out by the user.)
- 2.3. Always check the oil level before using the machine! Check the oil level when the engine has been stopped and is cold. (Please use oil pot to add engine oil of 350ml to the crankcase when oil level is too low.)
  - 2.3.1. Remove the oil dipstick from and wipe it dry; (Fig 4-6)
  - 2.3.2. Insert the dipstick into the oil filler (but no screw it in) to check the oil level;
- 2.3.3. Replenish the crankcase with the recommended type of oil until the oil level comes up to the upper most position of the refilled 350 ml if the existing oil level is found too low.; (Fig 4-7)
- 2.3.4 Recommended oil type: 4-stroke engine oil. (For normal operations at normal temperature, oil grade SAE 10W-30 is recommended.) (Fig 4-8)
  - 2.3.5. Insert the dipstick into the oil filler again and screw it in.

**A**WARNING:Machine damage may occur if the oil level exceed upper limit.

- 2.4. Checking fuel level:
- 2.4.1. Do not allow the fuel to overflow the fuel tank. The maximum fuel level is shown as below. Wipe up any spilled gasoline with a dry cloth immediately. (Fig 4-9).
- 2.4.2. It is recommended to use fresh, unleaded gasoline with an octane rating of 95. Use of ethanol gasoline (more than 10% blended) is not allowed.

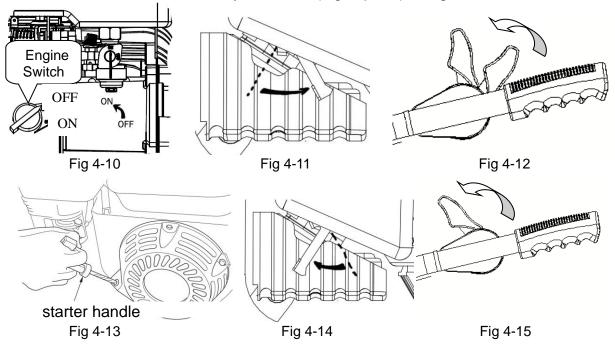






# 3. Start and stop

- 3.1 STARTING THE ENGINE
  - 3.1.1 Turn the fuel valve ON. (Fig 4-10)
  - 3.1.2 Close the choke lever.. (Fig 4-11)
- 3.1.3 Move the throttle lever from left (low speed) to left (high speed) to keep about 1/3 distance from the right (high speed). (Fig 4-12)
  - 3.1.4 Turn the engine switch to the" ON" position (Fig 4-10)
  - 3.1.5 Pull the starter handle lightly until resistance is felt, and then pull it briskly (Fig 4-13)
  - 3.1.6 Move the choke lever gradually to the" ON "position after the engine warms up. (Fig 4-14)
  - 3.1.7 Move the throttle lever fully to the left (high speed). (Fig 4-15)

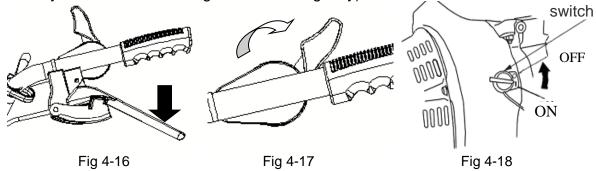




# 3.2 STOPPING THE ENGINE

- 3.2.1 unlock the Clutch lever. (Fig 4-16)
- 3.2.2 Move the throttle lever to the right end (low speed). (Fig 4-17)
- 3.2.3 Turn the engine switch to the "OFF" position. (Fig 4-18)

(pets at a safe distance from the work area. Turn the engine switch to the OFF position immediately to shut down the engine in an emergency)



# 4. **OPERATION**

Check that none of the parts are damaged before use.

Check that the guards are correctly installed.

Carefully inspect the area where the machine is to be used and remove any stones, wires, bones or other foreign objects.

Only use the machine in daylight, or in good artificial lighting.

Do not cultivate ground where there are large stones, or where there are mounds of earth or ditches.

**WARNING:** Fire hazard! Avoid sources of ignition, e.g. smoking, naked flames, electrical sparks, etc. when working

# 4.1 Working on slopes

**WARNING:**Risk of personal injury and/or material damage if the machine rolls over.

Be very careful when changing direction, and when on slopes. Work across slopes, never up or down.

Remove foreign objects from the area where the machine is to be used. Do not work close to large stones.

Do not use the machine on slopes with a gradient greater than 20%.

# 4.2 TRANSPORT

Transport over short distances

The wheels on the plough bar are used to transport between work areas.

Insert the plough bar in the bracket with the wheels facing down (fig.4-19).

Press down on the handle so that the rotating blades are lifted off the ground.

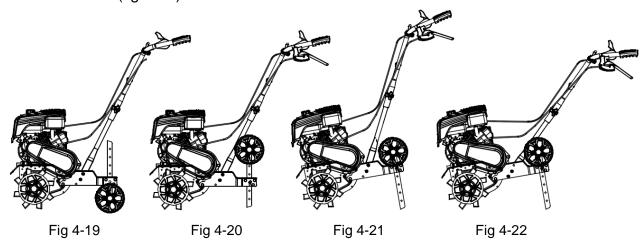
Move the machine with caution.

# 4.3. Adjusting the cultivating depth

The cultivating depth is controlled by the plough bar (depth of the stop), which is located below the handle. The transport wheels are mounted on the plough bar. When cultivating the plough bar is fitted with the wheels upwards (fig.4-19, fig.4-20).

- 4.1. Pull out the "R"pin, remove the pin and loosen the plough bar with the wheels from the mount.
  - 4.2. Insert the plough bar in the bracket with the wheels upwards. (fig.4-20)
- 4.3. Align the hole in the bracket with the hole in the plough bar and lock in place with the pin and screw.
  - 4.4. Lower the plough bar for a greater cutting depth. (fig.4-21)

The handle level (high or low) can be adjusted by setting of square neck bolt in one of the three holes on the bracket(fig.4-22)



# 4.4 CULTIVATING

**A**WARNING: Risk of material damage.

- 4.4.1. Start the engine (see start the engine section).
- 4.4.2. Press in the clutch lever on the handle to start the rotating blades.

WARNING:DO NOT USE THE MACHINE NEAR BURIED PIPES OR CABLES.

Do not cultivate too close to trees or their roots as these can damage and/or block the rotating blades.

Do not work on wet, muddy earth.

Hard clods of earth can block the rotating blades.

If the rotating blades are blocked, turn off the engine, loosen the spark plug lead, remove the blockage and check that the machine is not damaged.

The best result is achieved if you cultivate several times at greater and greater depths. The worked soil will then be spread evenly. Ideally work in vegetation that gives the soil nutrients.

Work across the previous working direction.

Adapt the cultivating depth to the soil. Hard soil should be processed multiple times

The use of the process should pay attention to the various parts of the work and sound,



check the parts of the connection is normal, does not allow the loosening of the phenomenon, such as the discovery of abnormal circumstances, should be checked to exclude parking It is strictly prohibited to install a tiller on the beach or gravel pile, so as not to damage the blade

After use, attention should be paid to clear the micro tillage machine on the soil, weeds, oil pollution attachments, keep the machine clean should prevent the dumping of micro tillage machine.

# •MAINTENANCE

# 1. Engine maintenance



# WARNING:

- •Shut down the engine before any maintenance.
- •Switch off the engine and wait until all moving parts have completely stopped.
- •We recommend that the machine is maintained by an authorized service center.
- •If you want the engine to maintain good performance, it is necessary to regularly check and adjust. Routine maintenance ensures long service life. The time required for maintenance and maintenance of the project, as shown in the following table

# **Maintenance Schedule**

Maintenance Schedule						
REGULAR SERVIO	CE PERIOD	Each time	20 Hrs or first month	50 Hrs or every 3 months	100 Hrs or every 6 months	300 Hrs or every year
Engine oil	Check level	0				Engine oil
	Change		0		0	
Air cleaner element	Check	0				Air cleaner element
	Clean			O(1)		
	Change					
Fuel cup	Clean				0	Fuel cup
Spark plug	Clean				0	Spark plug
Valve clearance	Readjust					Valve clearance
Fuel tank and fuel filter	Clean	Every 2 years (2)				
Fuel line	Change	Every 2 years (2) (between fuel tank and carburetor)				

o\*: Change paper filter element only.

Maintenance time depends on the frequency of use.

# 1.1. Changing engine oil

Warm up the engine and drain the oil to assure rapid and complete draining.



o(1): Service more frequently when used in dusty areas.

o(2): These items should be serviced by an authorized dealer, unless the owner has the proper tools and is mechanically proficient.

- 1.1.1 Remove the oil dipstick and the drain screw, then drain the oil.
- 1.1.2 Reinstall the drain screw and tighten it.
- 1.1.3 Place the engine in a level position and refill with recommended oil with capacity of 350 ml.
  - 1.1.4 Reinstall the oil dipstick and tighten it.

Be sure to keep the environment clean when disposing used engine oil. We suggest you collect the waste oil in a container to be sent to a waste disposal site or a recycling service center instead of spilling it in the garbage or on the ground.

# 1.2 Maintaining the air cleaner:

A dirty air cleaner will restrict air flow to the carburetor and result in less machine power. Service the air cleaner periodically to prevent carburetor malfunctions. More frequent maintenance will be necessary if the machine is working in an extremely dirty environment..

**WARNING:**Never run the machine without an air cleaner or with a damaged air cleaner. The dirt or dust if sucked into the engine may quicken engine wear.

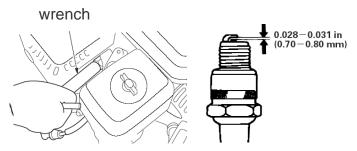
- 1.2.1 Unscrew the wing nut and remove the air cleaner cover.
- 1.2.2 Unscrew the wing nut and remove filter element and foam element.
- 1.2.3 Separate filter element from foam element.
- 1.2.4 Replace the element if damaged. Replace the paper filter element in accordance with maintenance schedule..
- 1.2.5 Clean the lower part of air cleaner, air cleaner cover and rubber gasket.
  - 1.2.6. Combine the filter element and foam filter element.
  - 1.2.7. Reinstall the air cleaner element and the cover

# 1.3 Maintaining the spark plug

CAUTION: The recommended type of spark plug is F7RTC.

**WARNING:** Take care not to touch the muffler due to high temperature on it's surface when the engine is running or just stops.

1.3.1 Remove the plug cap, Remove the spark plug by the wrench.



- 1.3.2 Thread the plug in by hand to prevent cross-threading.
- 1.3.3 Visually check the spark plug. Discard it if the electrode or insulation

ring is damaged or the insulator is broken or cracked. Check the plug gap with a feeler gauge. The gap should be 0.70 - 0.80 mm. Vary the gap by moving the side electrode if necessary..

- 1.3.4 Thread the plug in by hand to prevent cross-threading.
- 1.3.5 Tighten the spark plug with the wrench to compress the washer.
- 1.3.6 Reinstall plug cap



**CAUTION:** When installing the new spark plug, tighten the 1/2 ring after the washer is pressed. When the spark plug is used again, twist the 1/8 ring -I/4 ring after the washer is pressed.

**WARNING:** The spark plugs must be tightened or the spark plugs may be hot and damaged.

**WARNING:** If the engine is stopped, the temperature of the silencer will be very high.

# 2 Tiller Maintenance

During the operation of the micro tillage machine, due to the change of operation, friction and wear and load, bolt loosening and wear of parts can be connected. The engine power and fuel consumption increase, which seriously affect the normal use of the micro tillage machine. In order to reduce the occurrence of the above, it is necessary to carry out maintenance work on a regular basis, in order to maintain a good state of the micro tillage machine and extend its service life.

# **Maintenance Schedule**

manitoriano o o modaro					
Operating time Maintenance	Before using	8 hours	20 hours of operation or once a month.	Every 50 hours of operation or once a season.	· -
Check the nuts and bolts	•				
Check the oil level in the engine	•				
Change the engine oil		•	•	•	
Clean the rotating blades and side discs	•				
Lubricate rotating parts	•				
Cleaning the inside of the clutch	•				
Troubleshooting	•				
Drive system					•



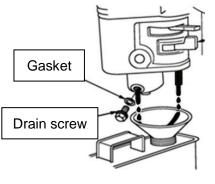
# 3、STORAGE

Make sure the storage area is free of moisture and dust.

- 3.1. Drain off the fuel.
- 3.1.1 Turn off the fuel valve and drain the fuel into a suitable container.
- 3.1.2 Turn off the fuel valve and remove the drain screw. Drain the fuel into a suitable container.
  - 3.1.3 Reinstall the drain screw.
- 3.2. Reinstall the fuel cup and drain screw and tighten them.
  - 3.3 Special treatment:
    - 3.3.1 Remove the spark plug.
    - 3.3.2 Pour one spoon of clean engine oil (5-10 ml) into cylinder...
    - 3.3.3 Pull the starter cord to distribute the oil inside the cylinder.
    - 3.3.4 Reinstall the spark plug.
    - 3.3.5 Pull up the starter handle until a resistance is felt. In that case, both the inlet valve and outlet valve is closed to prevent corrosion inside the engine. Pull back the starter handle gently.
  - 3.4. Cover up the machine to keep out dust.

# **TROUBLESHOOTING**

PROBLEM	CAUSE	ACTION	
	No petrol in the tank.	Fill the tank with clean, fresh	
		unleaded petrol.	
	Old petrol.	Drain cut the old fuel and fill the	
The engine	Old petrol.	tank with clean, fresh unleaded petrol.	
cannot be	Incorrect choke settings.	Close the choke.	
stared.	The spark plug lead is not	Connect the ignition cable to the	
Stareu.	connected to the spark plug.	spark plug.	
	The spark plug is dirty or	Clean the spark plug and check the	
	damaged, or the wrong electrode	, , ,	
	gap is set.	electrode gap. Replace, if necessary.	
	The spark plug lead is not	Connect the enerth plug lead to the	
The engine	connected correctly to the spark	Connect the spark plug lead to the	
The engine does not run	plug.	spark plug.	
	Old petrol. Water or	Drain cut the old fuel and fill the	
smoothly.	contamination in the fuel system.	tank with clean, fresh unleaded petrol.	
	Contaminated air filter.	Clean or replace the air filter.	
	The rotating blades are	Shut off the engine and disconnect	
The rotating	blocked by stones, clods of earth	the ignition cable from the spark plug.	
blades do not	or the like.	Clean the rotating blades.	
rotate.	Incorrectly adjusted clutch	Take the appliance to an authorized	
	cable.	service center.	





	The clutch is worn.	Take the appliance to an authorized
	THE CIGICITIS WOTT.	service center.
Heavy vibrations.	The retation blodes are	Shut off the engine immediately
	3	and disconnect the spark plug lead from
	damaged or not properly secured.	the spark plug. Replace damaged
		components.
	Loose screw connections.	Shut off the engine immediately
		and disconnect the spark plug lead from
		the spark plug. Tighten or replace the
		bolted joints.

# **GENERAL INFORMATION**

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

Pre-conditions for the 12-month guarantee entitlement:

- Deployment of the device solely for private use.

The guarantee is reduced to 6 months in the commercial sector or leasing business.

- -Proper handling and observance of all information given in the operatingmanual, 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 compensationclaims 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.

# In case of the need of any parts, questions or service instructions please contact:

- szerviz@gamagarden.eu
- +36 30 508-6563

Acquaer Ltd., 4900 Fehérgyarmat, Szatmári u. 11 certifies CE conformity of the above-mentioned product and that it complies with the technical data specified in the data plate and the "Operating instructions".

You can get detailed information about the CE declarations at: www.gamagarden.eu



