



# **Instruction manual**

**Petrol Powered cultivator**

**Model: G T- 35**

## Dear Customer,

Thank you for choosing the „GAMA GARDEN” petrol cultivator.

Prior to starting to use the petrol powered cultivator\*, please read this instruction manual carefully and get acquainted with the controls in order to ensure proper and safe operation.

### Purpose

Cultivator application:

- soil cultivating and tilling in gardens (with the safety engineering instructions included in the instruction manual observed and the technical characteristics taken into consideration). The cultivator is designed for household application.

### Main technical characteristics:

<b>Model</b>	<b>GT- 35</b>
<b>Motor</b>	3HP
Type	Four-stroke, air-cooled, with top valve arrangement
Working cylinder volume, cubic centimetre	87
Sound power level dB (LwA)	96 dBA
Sound pressure level dB (LpA)	84 dBA. / K=1,5
Vibration value:	2,6 m/s <sup>2</sup> / K=1,5
Fuel tank volume, litre	1,5
Engine case volume, litre	0,4
Air filter	Made from durable, porous material
<b>Ignition system</b>	
Type	Electronic
Starting switch	Floating
Spark-plug	E7RTC
Gap between the electrodes, mm	0,7 – 0,8
<b>Controls</b>	
Starter	Manual, with automatic return of cord
Air valve control	Rotary
Fuel cock	
<b>Operating characteristics</b>	
Number of speeds	1, forward
Maximum tilling width, cm	25 / 46
Blade diameter, cm	26
Blades rotary speed, rev./min.	160
Weight of the unit (without packaging), kg	32

### For your safety

#### Use the cultivator properly.

Improper use of the cultivator means failure to observe the instructions of the manual.

The manufacturer will not assume any responsibility for injuries resulting from improper use of cultivator. In this case user will bear all responsibilities.

The manufacturer will not bear any responsibility for faults which occurred because the user made modifications arbitrarily in the structure of the cultivator.

### Principal safety engineering rules

Prior to the first use of the cultivator, read the instruction manual carefully. Other users must also be informed of those included in the instruction manual.

The instruction manual must be kept during the whole period of use of the cultivator.

In case of owner change, the instruction manual must be handed over to the new owner together with the cultivator.

(\*) – Hereinafter «cultivator».

## Principal safety engineering rules for the work performance

This chapter describes the principal safety engineering rules of work performance with the cultivator. The warnings concerning the users' safety and structural characteristics of the cultivator are included in the relevant chapters of the instruction manual.

### Prior to use of cultivator

The cultivator must not be used by persons who are under the influence of alcohol, drug or medicine.

Persons below 16 years of age must not use the cultivator.

Make sure that all unauthorised persons, including children and domestic animals, are staying outside the efficient range of the cultivator.

### During work performance with the cultivator

During work performance, wear protective clothing, secure footwear, goggles and gloves.

Do not refill the cultivator fuel tank while operating. Petrol may be refilled only outdoors.

Perform the work far away from open flames and sparks and avoid smoking.

Do not touch the rotary blades of the cultivator by your hand, foot or even your clothing. The cultivator motor, exhaust silencer and reducer will warm up during the work performance and cool down continually.

The engine can be stopped in the following cases:

- When the work performance with the cultivator is finished;
- During maintenance and adjustment operations;
- When the cultivator is relocated from a working site to another

Store the cultivator and the petrol in a place unreachable for children and at a safe distance from sparks, fire and radiators.

Prior to locating the cultivator in a closed room for permanent storage, wait for the motor to cool down entirely. The parts must be in compliance with the manufacturer's specifications. Use only original parts.

The cultivator may be repaired only by an authorised service repair shop.

## Safety engineering devices

### Clutch lever

When the clutch lever is released, the cultivator rotary blades will stop.

Do not change or block the operation of the clutch lever in any way.

### Guard

It will protect the user from injuries caused by pieces of soil flying out from under the cultivator rotary blades.



The guard must always be in a condition ready for service.

### Handlebar cross-tube

It will ensure the distance between the user and the cultivator rotary blades.


### Information on the cultivator

For ensuring safe operation and maintenance of the cultivator, each symbol can be seen on the device in the form of die stamped or projected picture.

	Place of fuel refilling. <b>Location:</b> on the fuel tank cover.
<b>OHV</b>	Indication of engine of top valve arrangement. <b>Location:</b> on the cover of the valve mechanism.
	<b>ATTENTION:</b> Hot surface! <b>Location:</b> on the cover of the exhaust silencer.
<b>START</b>	<b>Location:</b> on the handle of the pull cord.

<b>CHOKE RUN</b>	Air valve handle bar Positions: 1. CHOKE – fully closed. 2. RUN – fully open. <b>Location:</b> on the air filter cover.
<b>ON/OFF</b>	Fuel metering valve. Positions: 1. ON – open. 2. OFF – closed. <b>Location:</b> on the motor case.
<b>ON/OFF</b>	Starter switch. Positions: 1. ON – switched on. 2. OFF – switched off. <b>Location:</b> on the motor case.

## Stickers showing the operations done by the controls

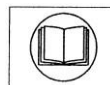
	Control of the rotation of the rotary blades When the handle of the rotary blade is pressed, the cultivator rotary blades start to rotate. <b>Location:</b> on the handle driving the rotary blades.
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## Warning symbols

There is a sticker containing warning symbols on the cultivator guard. Prior to starting the operation, get acquainted with these warnings and apply them during your work.



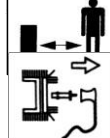
Prior to starting to use the cultivator, read the instruction manual, but mainly the section "For your safety".



Risk of injury by the rotary blades - Keep your hand and feet away at a safe distance from the rotary blades.



Risk of injury or risk of damaging the objects found nearby. Make sure that all unauthorised persons, including children and domestic animals are staying out of the efficiency range of the cultivator.



**DO NOT WORK WITHOUT THE GUARD BEING INSTALLED.** Prior to performing the cultivator maintenance, remove the cap of the high voltage line from the spark-plug of the motor.

## Symbols found in the instruction manual

The following symbols are found in the instruction manual:

### **Danger**

It draws the user's attention to such sources of danger which may cause injury to the user during the work performance with the cultivator.

### **Warning**

It draws the attention to such sources of danger which may cause damage to the cultivator in case of improper use.

## Arrangement of main parts of the cultivator



↵  
↵

1—Handle bar bracket, 2—Handle, 3—Clutch lever, 4—Handle, 5—Clutch cable, 6—Depth Limiter, 7—Transport wheel, 8—Throttle control, 9—Throttle cable, 10—Engine, 11—Deflector, 12—Tine. ↵

1 – Handle bar bracket, 2 - Handle, 3 – Clutch lever, 4 – Handle, 5 – Clutch cable  
6 – Depth limiter, 7 – Transport wheel, 8- Throttle control, 9 – Throttle cable  
10 – Engine, 11 - Deflector, 12 – Tine

Figure: 1.

## Assembly

### **Warning**

When unpacking the machine, be especially careful not to damage the clutch cable.

Assemble the cultivator in accordance with the figures found in the instruction manual.

### 1. Setting the plough iron bracket

1. In order to facilitate assembly of cultivator, place a support of 10-15 cm height under the front section of the guard (see: Figure 2).



Figure  
2

- By means of a 13 mm key, screw down and remove the six M8x12 bolts from the left and right side of the reducer (see: Figure 3).



M8x12 screw

Figure 3

- Place the plough iron bracket on the reducer, while placing the right section of the bracket between the reducer and the shield lug and the left section between the reducer and the guard clamp (see: Figure 4, 5).

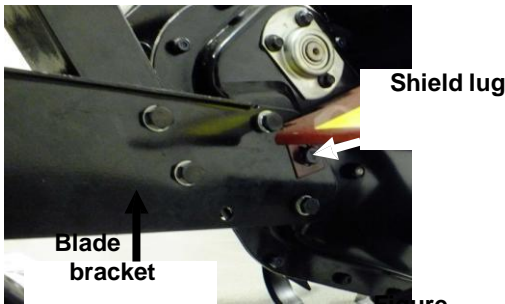


Figure 4

- Fit the plough iron bracket holes and the reducer holes (from which bolts have been removed as per Point 2) together, then screw in the six M8x12 bolts with washer by hand. Screw the central bolt in the reducer (from the right), installing it in the hole of the shield lug (see: Figure 4)

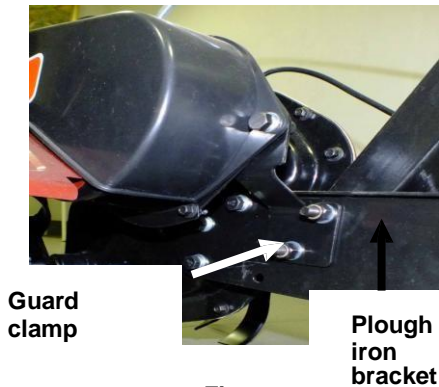


Figure 5

**Note:** USE ONLY M8X12 BOLTS.

**Warning!**

Do not tighten the six M8x12 bolts when performing Point 4.

- By means of a 13-mm key, holding the head of the bolts, screw off the M8 nuts with bolts of 13mm and remove the M8x90 bolts from the handlebar bracket.
- Insert the handlebar bracket in the plough iron bracket, and place the bolts removed as per Point 5 in the relevant holes of the brackets from outside.
- Using 13-mm keys, tighten all the bolts installed as per the previous point, starting with those fastening the plough iron bracket to the reducer.

## 2. Setting the plough iron in operating position

Tilling depth is defined by the position of the plough iron as compared to the bracket. There are wheels mounted on the plough iron for the transportation of the cultivator.

For performing the tillage, set the plough iron with wheel up.

### Setting the blade:

Depth of soil tilling is defined by the plough iron (tilling depth limiter), which can be found in the lower part of the cultivator, under the handlebar. There are wheels mounted on the plough iron for the transportation of the cultivator. For soil tilling, set the plough iron with wheel up (see: Figure 6).

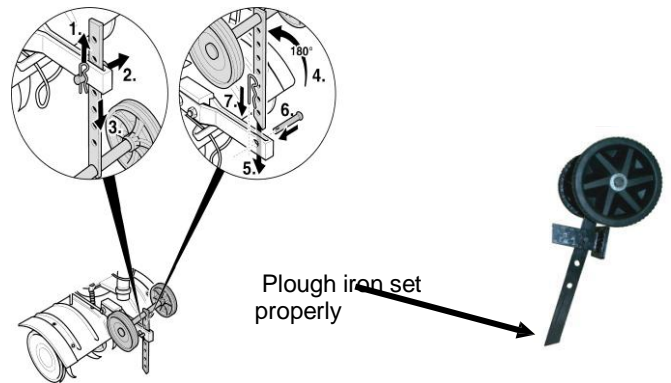


Figure 6

- Pull out the cotter pin (Point 1), remove the retaining pin (Point 2), then remove the plough iron with wheels (Item 3) from the jointing bracket.
- Place the plough iron in the bracket in such a way that wheels stand upwards (Item 4).
- Fit the hole of the bracket together with one hole of the plough iron (Point 5), fasten it with bolt pin (Item 6) and cotter pin (Item 7).

For increasing tilling depth, increase the length of plough iron lower part.

**Note:** For efficient work performance, make sure that plough iron is set properly as compared to the jointing bracket (see: addition to Figure 6).

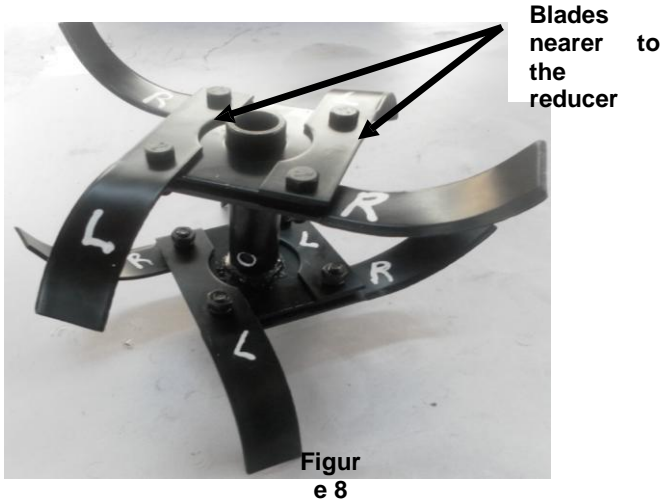
## 3. Assembly and installation of blades

Install the blades on the blade holder (Figure 7) using M8x25 bolts, Ø8 washer and M8 nut (Figure 8). This component is installed on the left side in the direction of travel. When installing the component, make sure that cutting edge of blades are set in accordance with the cultivator's direction of travel. If the component is properly assembled, then the curve of the blade nearer to the reducer will show from the reducer to the driver.

The right side element must be assembled in the same way, in opposite-hand view.



Figure 7

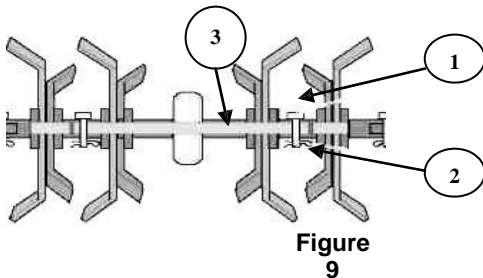


**Note:** on the blades of the component, embossed letters (L), (R) are found, meaning L- left-side blade, R-right-side blade.

#### 1. Setting the blades on the reducer

Place the blade holders (assembled with blades) on the reducer shaft (Figure 9, Item 3) from both sides, fit the holes of the reducer shaft with holes of blade holders, and fasten them with bolt pins and cotter pins (Figure 9, Item 1 and Item 2).

**Note:** set the cutting edges of blades in the direction of rotation.



#### 4. Setting the handlebar

The handlebar consists of the following (see: Figure 10):

- Right section of handlebar;
- Left section of handlebar;
- Cross-tube connecting the right and left side

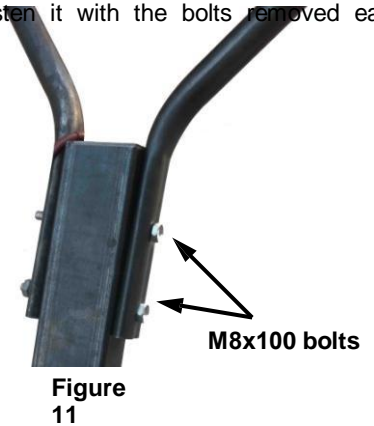


**Figure 10**

1. Fit the fastening holes of the left side and right side of the handlebar together with the holes found in the upper section of the handlebar holder, then fasten them with M8x100 bolts and nuts (see: Figure 11).
2. By means of a 4-mm key (not included in the scope of supply),

screw off and remove M5x20 bolts from the clamps (see: Figure 10) from the upper section of the handlebar, preventing the nuts from falling out.

3. Set the proper part of the cross-tube in the holes of the clamps, and fasten it with the bolts removed earlier.



**Warning**

*When installing the handlebar, do not turn over or break the control cable.*

#### 5. Adjusting the clutch cable tensioning

With the clutch lever being released (not pressed), pull the pull starter handle several times. During this, the blades should not turn over. If they still turn over, loosen the cable tensioning by means of the regulating sleeve.

1. Loosen the fastening nut (see: Figure 12, Item 2) and slightly screw the sleeve (Item 1) in the body (Item 3).
2. Strongly tighten the fastening nut to the body of the regulating sleeve.
3. Check the clutch cable for tensioning.



**Figure 12**

**Note:** In the following, in case of the drive-belt's wearing and elongating the tension can be set by means of the sleeve which is found in the clutch lever body (at the beginning, the sleeve is fully screwed in).

- For tightening the clutch cable, screw off the fastening nut (See: Figure 13) and slightly screw off the cable sleeve.



**Figure 13**

- Screw on the fastening nut and check the clutch cable again for proper tensioning.

## Operation

### Prior to the first use

#### **Warning**

CHECK THE TIGHTNESS OF ALL THREADED CONNECTIONS ON THE CULTIVATOR, INCLUDING THE FIXATION OF THE ENGINE.

### 1. Filling up the engine case with oil

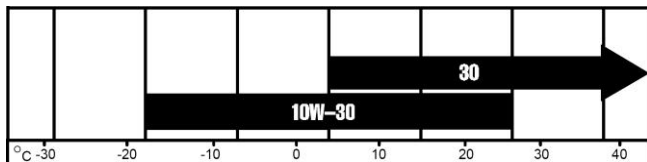
#### **Warning**

THE CULTIVATOR ENGINE CASE IS DELIVERED WITHOUT OIL!

Prior to the first start of the engine, fill up the case with oil of proper amount that is 0.4 litres.

The oil level should reach the lower level in the oil filling outlet when standing straight (see: Figure 14).

Choose the oil viscosity in accordance with the ambient temperature, using the diagram below:



The following codes must be found on the oil can: API "SF" or "SG", "SH", "SJ", "SL", "SM".

Under normal operating conditions and in normal temperature ranges, we recommend the following oil viscosity: SAE 10W-30.

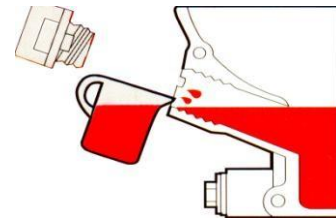
**Note:** The oil level check is done with cold engine not operating. Place the cultivator on a straight, horizontal surface, supported on the blades and the wheels.

1. Screw off the oil filler cover (see: Figure 14).
2. Check the oil level and fill it up if necessary.
3. Place back and screw in the oil filler cover.

### Order of checking the oil level:

#### **Warning**

The oil level must reach the lower level in the in the oil filling outlet.



**Figure 14**

## 2. Filling up the fuel tank with petrol

Filling-up of fuel tank with petrol is done prior to starting the engine. Do not open the fuel tank cover if the engine is hot or operating.

Prior to filling up with petrol, place the cultivator in a place where it is not subjected to the action of fire or spark.

### Safety engineering rules during operations with petrol

#### **Danger**

**Petrol and its vapour may easily flame up and explode!**

- Prior to filling up, stop the engine and wait until it cools down entirely.
- Wipe through all parts of the cultivator on which petrol dropped during the filling-up.
- Start the engine far away from the place where the filling-up was made and where the petrol flew out on the earth.
- Prior to starting the engine, make sure that the fuel tank is properly fastened and its cover is screwed tight.
- Store the petrol only in special, clean and closable cans.
- Do not let petrol get on your skin and do not inhale its vapours.

#### **Danger! Petrol must be stored in a place unreachable for children!**

- **DO NOT SMOKE** WHILE FILLING UP THE ENGINE WITH FUEL.
- For the prevention of fire, clean the cultivator components including the engine surface, the exhaust silencer and the fuel tank from grass. When filling up with petrol, use a clean funnel.
- The engine should be filled up with clean, fresh, non ethylated, lead free petrol of octane number at least 95.
- Fill up the petrol in such a way that its level does not exceed 1 cm distance from the upper edge of the mesh filter.
- **DO NOT USE CONTAMINATED PETROL OR PETROL MIXED WITH OIL.**

**Note:** In order to avoid unstable operation of the engine, always fill up the petrol in due time.

## Engine start-up

#### **Danger! Carbon monoxide poisoning will occur if you inhale the exhaust gases.**

DO NOT start the engine in closed premises.

Prior to the engine start-up:

- Check whether there is petrol in the fuel tank, and check the oil level in the engine case.
- Make sure whether the clutch lever is pressed on (whether it is blocked in pressed-on condition).

### Order of start-up:

1. Set the fuel feed lever to the right "ON" ("turned on") position (see: Figure 15).
2. Tightly fit the cap of the high-voltage cable on the spark-plug.
3. Set the switch in the "ON" position ("Turned on") (see: Figure 15).

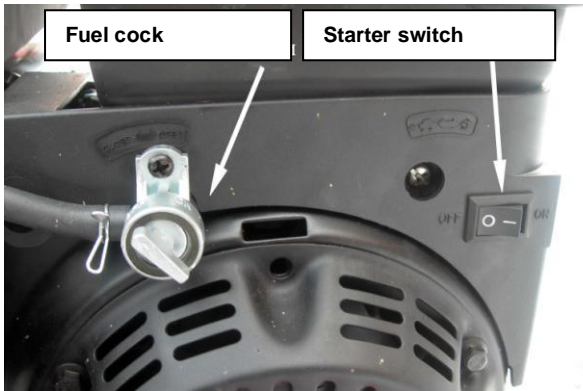


Figure 15

4. In case of starting cold engine, set the air valve switch of carburettor in "CHOKE" position ("fully closed") (see: Figure 16).

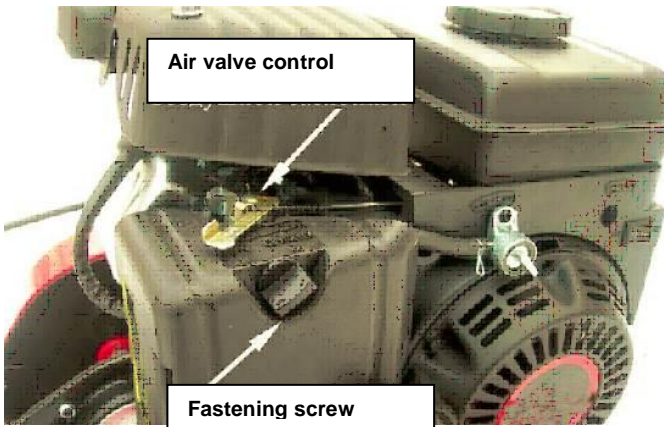


Figure 16

Pull slowly the pull handle until you feel opposition. After that, pull out the starter cord in its full length, negotiating the compression. Let the pull handle back in the starting position while holding it.

### **Warning!**

*Failure to comply with this requirement may result in mechanical damage of the starter.*

5. If the engine does not start, repeat those included in Point 4.
6. At low temperatures, warm the engine for 2-5 minutes in order to avoid unstable operation. When the engine has warmed through, turn the air valve switch in "RUN" position ("fully open").

### Engine stop

1. Release the clutch lever.
2. Set the starter switch in "OFF" ("Turned off") position (see: Figure 16).
3. Put the feed cock of the fuel feed system in "OFF" position ("closed").

### Cultivator use

#### **Danger!**

*Keep unauthorised persons and mainly children and domestic animals away in a safe distance from the operating cultivator.*

- Use only a cultivator absolutely free from any defect.
- Make sure that the shield is mounted properly and safely.
- Check the area where you wish to use the cultivator. Remove any object which may get underneath the blades and fly out from under the cultivator.
- Use the cultivator only daylight or with proper artificial lighting.
- Do not use the cultivator for tilling such soil where there can be found great stones, soil heaps, or ditches nearby.

#### **Danger: fire may occur!**

- Avoid open flame, spark sources and smoking during the use of the cultivator.
- **DO NOT USE THE CULTIVATOR WITH CLUTCH LEVEL NOT FULLY PRESSED IN SINCE IT WILL RESULT IN THE EARLY WEARING OF THE DRIVE-BELT.**

#### **Warning!**

*During the work performance, avoid blocking of the blades while the engine is running and the clutch is pressed in because it may cause damage to the cultivator.*

### 1. Cultivation

#### **Danger: the cultivator or other objects may get damaged.**

1. Start up the engine (see: section "Engine start-up").
  2. Press the clutch lever and hold in pressed position in order to start the cultivator blades.
- **DO NOT USE THE CULTIVATOR IN SUCH A PLACE WHERE GAS CONDUITS, ELECTRICITY SUPPLY CABLES OR OTHER UNDERGROUND COMMUNICATION CABLES CAN BE FOUND.**
  - Do not use the cultivator next to trees, since the root of the trees may become damaged and the cultivator blades may get blocked.
  - It is not recommended to work in damp soil.
  - Great, hard soil pieces may cause failure to the blades.
  - If foreign objects are caught under the blades (stones, bars, wires, etc.), then stop the engine and see whether the cultivator has got damaged.
  - **DO NOT USE THE CULTIVATOR IF IT HAS ANY OPERATING TROUBLE.**
  - The best result can be achieved with cultivation several times in higher and higher depths. It will allow the smooth spreading of the soil previously ploughed. Soil fertility will improve if plant residues are ploughed in the soil.
  - Go through the area to be cultivated in straight angle.
  - Adjust the tilling depth in accordance with the soil condition. Cultivate the hard soil several times.
  - For performing cultivation process, adjust smaller tilling depth.



## 2. Work performance on slopes

**⚠ Danger: Injury may occur as a result of the cultivator's turning over.**

- Apply special care during the change of direction. The cultivator can be moved transversely on a slope. Do not move the operating cultivator up and down the slope.
- **IT IS STRICTLY FORBIDDEN TO USE THE CULTIVATOR ON A SLOPE EXCEEDING 20%.**

### Transportation

The cultivator may be transported by any means of transport which can ensure cultivator integrity.

#### 1. Transportation in short distances

For transporting the cultivator from an area to be cultivated to another, use the wheels found on the plough iron.

1. Insert the plough iron in the bracket in such a way that the wheels are down.

**Note:** Setting the plough iron in transportation position is done in reverse order. See the section "Setting the plough iron".

2. Press the handlebar down in such a way that the blades do not touch the soil.
3. Relocate the cultivator carefully.

#### 2. Transportation in longer distances

**⚠ Warning!**

Do not carry the cultivator when turned over or turned on its side. Stand the cultivator on the blades and the wheels.

**⚠ Risk of injury!**

**Periodical maintenance:**

- Stop the engine.
- Remove the cap of the high-voltage cable from the spark plug.
- Wait for the engine to cool down entirely.

In case of transportation in a truck or a trailer, fix the cultivator in order to avoid injuries.

### Technical maintenance

For maintaining high level technical characteristics of cultivator, perform periodical maintenance operation. Periodical maintenance will help increase engine life and ensure trouble-free operation.

From the maintenance operations defined in hours or calendar periods, perform the one which becomes due earlier. In case of work performance under unfavourable circumstances, carry out the maintenance more frequently.

Prior to the maintenance of the cultivator:

**⚠ Risk of injury!**

- Stop the engine.
- Remove the cap of the high-voltage cable from the spark plug.
- Wait for the engine to cool down entirely.

**Before each use:**

- Check the oil level in the engine case. Fill up the oil until the proper level is reached, if necessary.
- Check the threaded connections for safe tightness. Tighten them if necessary.

**After each 5 hours' use:**

- Check the oil level in the engine case.

**Once in each season:**

- It is recommended to perform service of cultivator in a specialized service repair shop.

List of operations to be performed	After each use	Each 25 hour	Each 50 hours	Once in a season or each 100 hours	If necessary
Clean the guard and the blades	•				
Clean the air filter (**)			•		
Change the air filter					•
Change the oil in the engine case (*, **)		•			
Perform lubrication of blade-reducer shaft				•	
Check and clean the spark plug (***)		•			
Change the spark plug				•	
Clean the engine	•				•
Adjust the clutch cable					•
Change the blades					•
Change the cover of the fuel tank					•
Change the exhaust silencer					•
Check the tightness of threaded connections. Tighten them if necessary.	•				

(\*) The first oil change in the engine must be done **after two hours following the first work performance.**

(\*\*) If the engine works with higher load or under contaminated circumstances, the maintenance should be done more frequently.

(\*\*\*) The spark plug electrodes must not be scraped or polished with sand.

## Maintenance operations

### **⚠ Risk of injury in case of accidental start of engine!**

Prior to any work done with the cultivator:

- Stop the engine.
- Remove the cap of the high-voltage cable from the spark plug.
- Wait for the engine to cool down entirely.

## 1. Cleaning the cultivator

### **⚠ Risk of injury during maintenance of blades!**

It is recommended to wear protective gloves during maintenance of blades.

- Clean the guard and the blades after each use, then wash them with water and wipe them with a cloth.
- Clean the engine using a brush and a cloth.

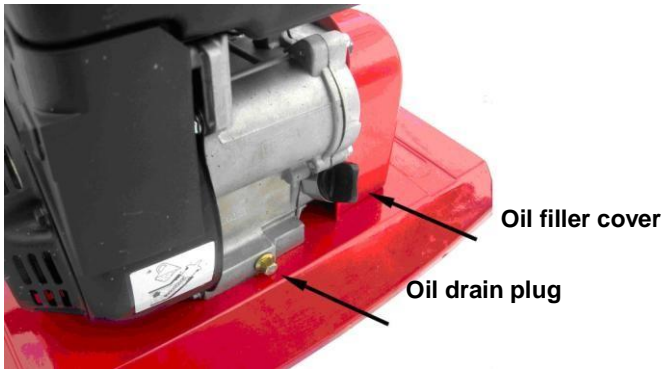
## 2. Oil change

**Note:** The oil draining can be made in an engine previously warmed up.

The first oil change must be done **after two hours following the first work performance.**

### **Order of the oil change:**

1. Screw off the oil filler cover.  
(See: Figure 17).
2. Screw off the cover of the oil drain and let out the used oil.
3. Replace the oil drain cover and screw it thoroughly.
4. Fill oil in the engine in the necessary amount and check the oil level.
5. Replace and screw up the oil filler cover.



**Figure 17**

**Note:** The oil change must be done more frequently if the engine is subject to greater load or higher temperature.

**Note:** The used oil must be recycled. It is recommended to drain the oil in a can and send it to a processing plant for regenerating.

**DO NOT DISPOSE THE CAN CONTAINING USED OIL AND DO NOT POUR THE OIL ON THE EARTH.**

## 3. Checking the fuel filter

(If there is any as per the specification)

The fuel filter can be found in the fuel tank where the fuel hose is connected to it.

### **Order of checking:**

1. Drain the petrol from the fuel tank.
2. Take off the fuel tank and remove the contamination and the water from it.
3. Check the condition of the fuel filter, and clean or replace it if necessary.

## 4. Removing and mounting the blades

### **⚠ Risk of injury during the maintenance of blades!**

Prior to any work done with the blades:

- Stop the engine.
- Wait until the blades stop.
- Remove the cap of the high voltage cable from the spark plug.
- Wait for the engine to cool down entirely.

### **Order of change of blades:**

1. Remove the pins, and take out the fastening elements which fix the blades to the driving shaft.
2. Remove the blades from the driving shaft.
3. Install the new blades in reverse order.

**Note:** The cutting edges of the blades should be directed in the direction of rotation

## 5 Maintenance of the reducer

The lubricating oil need not be changed during the whole life of the cultivator.

## 6. Maintenance of the engine

After each use, clean the engine from dirt using a brush and a cloth.

### **⚠ Warning!**

*In case of repair, use only original parts supplied by the manufacturer.*

*Use of non original parts may result in serious damage of the engine.*

## 7. Checking the spark plugs

For the normal operation of the spark plugs, ensure the necessary free distance between the electrodes and in addition clean the spark plug from residue of combustion.

The free distance between the electrodes is 0.7-0.8 mm.

### **Order of checking:**

1. Remove the cap of the high voltage cable from the spark plug and screw out the spark plug by means of a spark plug key.
2. Inspect the spark plug visually.
3. Clean the spark plug with a brush, if you wish to use it in the future.
4. Measure the free distance between the electrodes by means of a special sound (it should be purchased separately). Adjust the free distance if necessary, by gently bending the side electrode.
5. Check the skirt and threaded part of the plug.
6. Change the spark plug if it seems to be worn out or there is any crack on the insulator.
7. Replace the plug by hand force, then tighten it with plug key.

**⚠ Warning!**

**TIGHTEN THE SPARK PLUG THOROUGHLY!**

In case of failing to comply with this requirement, the spark plug will strongly warm up during operation and it will result in failure of the engine.

## 8. Maintenance of the air filter

**⚠ Warning!**

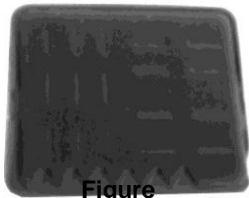
**DO NOT START THE ENGINE WITHOUT THE AIR FILTER IN PLACE!**

### Order of checking:

1. Screw down the bolts fastening the air filter cover (see: Figure 16).  
Remove the air filter cover.
- 2.
3. Remove the air filter (hereinafter: filter) (see: Figure 18).
4. Take out the plastic frame.
5. Check the filter for the level of contamination and possible foreign objects. Inspect it carefully for integrity, existence of holes and other injuries. Replace it if necessary.

**⚠ Warning!**

*It is strictly forbidden to use petrol or low temperature solvent for cleaning the filter. It may result in fire or explosion.*



**Figure  
18**

6. Wash the filter through in warm soap solution and dry it. Soak it in one spoon (~ 10 ml) of clean engine oil. Twist it in order for the oil to spread more evenly on the surface of the filter and there is no surplus.
7. Place the plastic frame in the air filter case.
8. Replace the filter and the air filter cover in reverse order then tighten the fastening screws strongly.

## Storage

**⚠ Danger!**

*Do not store the engine with petrol in the fuel tank in a closed room without ventilation, or in the vicinity of open flame and radiators.*

*Flashing of the petrol vapour may result in fire which involves danger!*

If you wish to withdraw the cultivator from use for a longer period, the following actions are to be taken:

1. Drain the petrol from the fuel tank in a can.
2. Drain the oil from the engine case (see the section: "Oil change in the engine case").
3. Remove dirt from surface of engine and cultivator then wipe it dry with a cloth.
4. By means of a cloth, apply thin layer of machine oil on all external metal surfaces.
5. Screw off the spark plug. Pour 10 gram of clean oil in the spark plug opening.
6. Cover the plug hole opening with a cloth.
7. Rotate the main shaft of the engine slowly by means of the starter cable handle.

**Note:** Avoid any oil splash from the plug opening while rotating the main shaft.

8. Replace the spark plug. Do not connect the cap of the high-voltage cable.
9. Cover the cultivator and place it on a plane surface in a clean, dry room.
10. The cultivator may only be stored horizontally, supported on the blades and the wheels.

**⚠ Warning!**

*Do not transport a cultivator filled up with oil in a non horizontal position! In case of failing to keep to this requirement, the oil will get in the inlet (outlet) connection which will make it difficult to start the engine and result in high exhaust.*

## Possible operating failures and method of repair

In case of any possible failure, use the information found in the table for repair.

Failure	Cause	Method of repair
The engine cannot be started.	There is no petrol in the fuel tank.	Fill the fuel tank up with clean fresh, lead-free petrol.
	The petrol is old.	Drain the old petrol from the fuel tank and fill it with clean fresh, lead-free petrol.
	The engine is cold. The control of the carburettor air valve is in "RUN" ("Fully open") position.	Put the air valve control in "CHOKE" ("Fully closed") position.
	The fuel cock lever is in "OFF" position.	Put the fuel cock lever in the "ON" position.
	The cap of the high-voltage cable is not attached on the spark plug.	Attach the cap of the high-voltage cable on the spark plug.
	The spark plug has become contaminated or failed.	Clean and if necessary replace the spark plug. Check the free distance between the electrodes.
The engine does not smoothly operate.	The air valve control is set in the wrong position.	Set the air valve control in the "RUN" ("Fully open") position.
	There is an improper contact between the spark plug and cap of the high-voltage cable.	Attach thoroughly the cap of the high-voltage cable onto the spark plug.
	Old petrol. There is water and dirt in the fuel system.	Drain the old petrol from the fuel tank and fill it up with clean, fresh, lead-free petrol.
	Contaminated air filter.	Clean or replace the air filter.
Blades do not rotate	Blades are blocked by stones or larger soil pieces.	Stop the engine and remove cap of the high-voltage cable from the spark plug. Clean the blades.
	The clutch cable is wrongly adjusted.	Adjust the clutch cable. See the section: «Adjustment of clutch cable».
High level of vibration	Fixation of blades has loosened or blades have got damaged.	Stop the engine immediately and remove the cap of the high-voltage cable from the spark plug. Replace failed components.
	Fixing screws have come loose.	Stop the engine immediately and remove the cap of the high-voltage cable from the spark plug. Tighten or replace the bolts.

**ATTENTION:** For the clearing of faults not treated above, contact the authorised service repair shop.

The manufacturer reserves the right to modify the cultivator structure without previous notification for the improvement of consumer characteristics.

## **Terms of guarantee**

Please keep carefully the letter of guarantee completed by the seller, or the certificate of purchase. The GAMA GARDEN will provide 12 months' guarantee from the date of purchase. This guarantee is in compliance with the technological condition and the purpose of use / field of application. The following guarantee instructions will not influence customer's statutory rights.

### **Preconditions of the 12 months' guarantee:**

- The device is used exclusively for private purposes.

**The guarantee period will be reduced to half if the machine is used in the commercial sector and in the field of leasing business.**

- Our guarantee is provided under the condition that the machine is handled properly and the instructions given in the instruction manual are observed.

- The maintenance intervals determined are observed.

- It is forbidden to change the design without permission.

- Original GAMA GARDEN replacement parts / accessories are to be installed.

- The completed letter of guarantee and/or certificate of purchase are to be presented.

**This guarantee will not cover normal wear of blades, blade holding components, friction disks, rotating wheels/tyres, air filters, spark plugs, spark plug connectors and other wearing part. In case of performing any repair without permission, the whole guarantee will lose effect. Any damage occurred during transportation must be reported to the carrier instead of us, otherwise all claims for compensation towards the carrier will lose effect.**



This symbol found on the device or the packaging means that the product should not be put in the household waste. Please take your waste to the disposal site assigned for electrical and electronic devices. Through the proper handling of devices you will protect the environment and human health from damage caused by improper handling of waste. Recycling of materials will help preserve the natural resources. For further information on waste management, contact the competent authorities, the local waste disposal company or the shop where you purchased the product.

### **Information on the packaging**

The used packaging must be placed in the proper waste collection container.

GAMA Garden Kft., 4900 Fehérgyarmat, Szatmári Street, 11, declares that the device has CE marking (that is the device meets the requirements of the relevant international standards), and that it is in compliance with the data included in the Instruction manual and the data table. This statement is based on TÜV certification.