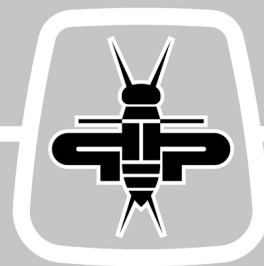


Grillo

AGRIGARDEN MACHINES



HR7 PRO - 11500

Tiller

OPERATOR'S MANUAL

EN



02040.2023.10

TABLE OF CONTENTS

1. Introduction	3	18. Storage and prolonged inactivity	17
2. Description and intended use	3	19. Available attachments.....	17
3. Use and safety decals.....	4	20. Technical assistance service	18
4. General safety rules	5	20.1 Assistance	18
5. General warnings to keep in mind.....	6	20.2 Identification data	18
6. Identification of machine controls and functions	7	20.3 Spare parts	18
7. Identification of machine components.....	8	20.4 Warranty	18
8. Technical specifications	9	20.5 How to order spare parts	18
9. Operating instructions.....	10	21. Transport warnings	18
9.1 Setting up the machine for use	10	22. Disposal	18
9.2 Checks to be carried out before starting the engine	10	Declaration of Conformity	19
9.3 Starting the engine	10		
9.4 Starting the machine.....	11		
9.5 Reversing	12		
9.6 Engine shutdown	12		
9.7 Work conclusion	12		
9.8 Ordinary machine cleaning.....	12		
9.9 Useful rules for correct use.....	12		
9.10 Sloping terrain	12		
10. Safety devices	13		
10.1 Active clutch	13		
11. Ordinary adjustments	13		
11.1 Handlebar setting	13		
11.2 Spur setting - tilling depth	13		
12. Extraordinary adjustments.....	13		
12.1 Adjusting the clutch lever and handlebar side adjustment lever	13		
13. Ordinary maintenance	14		
13.1 Engine maintenance.....	14		
13.2 Maintenance of machine body and rotary tiller.....	14		
14. Extraordinary maintenance	15		
14.1 Replacing hoes.....	15		
15. Troubleshooting guide.....	15		
16. Maintenance schedule	16		
17. Lubrication chart.....	16		

Translation of the original manual.
 All information, illustrations and technical specifications in this manual are based on the latest information available at the time of publication.
 Subject to change without prior notice.

1. INTRODUCTION

Dear Customer,
we thank you for the trust and preference you have placed in our Grillo tiller and we are confident that the use of your new machine will fully meet your requirements.

For optimal use and maintenance over time, please carefully read and follow the instructions in this booklet; this will enable you to obtain the best results and safeguard your purchase.

Please keep this manual, which should always accompany the machine as an integral part of it.

Reading the operator's manual is very important.

2. DESCRIPTION AND INTENDED USE

The tiller is a self-propelled, single-axle agricultural machine, normally equipped with a tiller for processing the soil. This machine is used to carry out soil preparation work (removal of weeds, tilling) and is used for small areas, finishing work, in orchard rows and in horticulture. The machine consists of a supporting frame on which an internal combustion engine driving a tiller is installed. The machine is controlled by an operator on the ground who follows its movement by guiding it via a handlebar, on which the controls are located.

Any other use is considered as improper use.

This machine must only be used by personnel who are familiar with its specific features, safety regulations and all that concerns accident prevention.

Any improper use of the machine will invalidate the warranty and relieve the manufacturer of all responsibility; any risk resulting from improper use will be borne by the user.

Maintenance and repair of the machine must be carried out by qualified personnel following the procedures specified by the manufacturer. Any alteration or tampering will invalidate the warranty and relieve the manufacturer of all responsibility for damage or accidents.

MARKINGS IN THE MANUAL

This manual contains warnings highlighted in bold and marked with these symbols:



This symbol and the text that follows it contain information that highlights possible, even very serious, risks to the safety of the operator and anyone working on the machine if they do not consider the written information and procedures.



This heading informs the operator of actions or conditions that could damage the machine.

Read these messages carefully to avoid injury or damage to the machine.

The retailer is responsible for inspecting the machine before delivery and for completing the inspection form "PRE-DELIVERY INSPECTION".

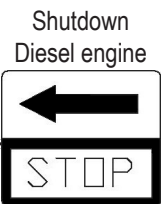
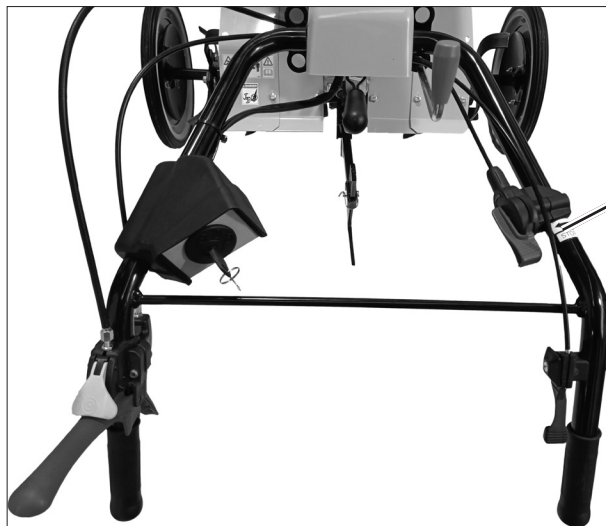
On this occasion the retailer will provide the customer with all the information necessary to use the machine.

The customer will receive the machine in optimum condition.

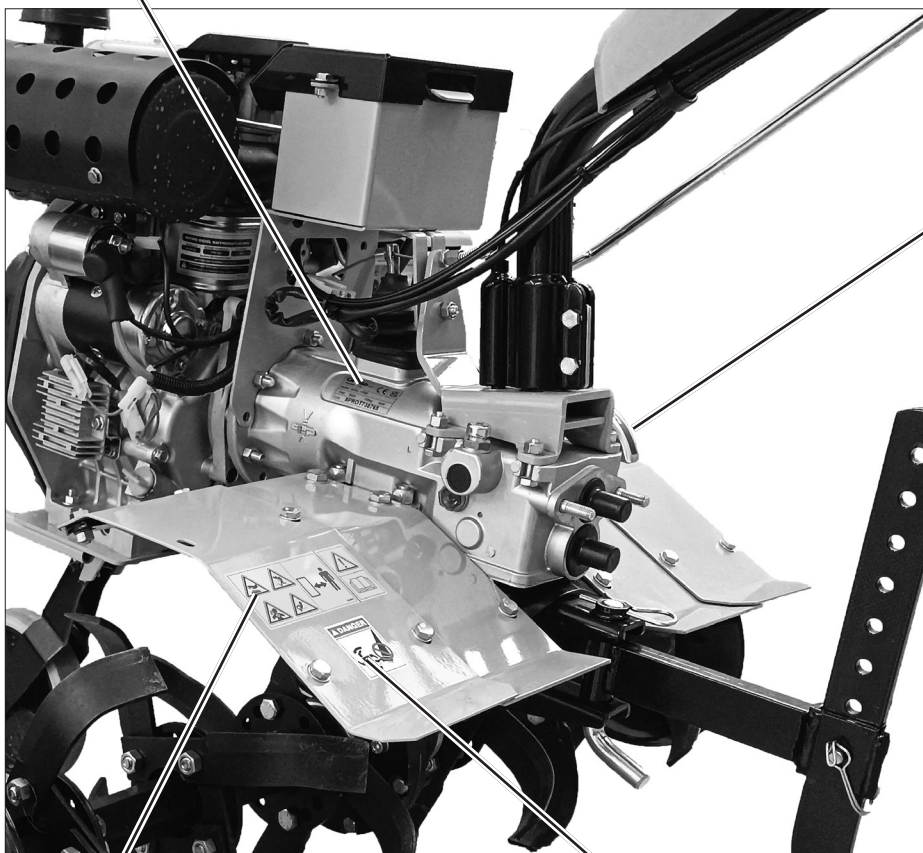
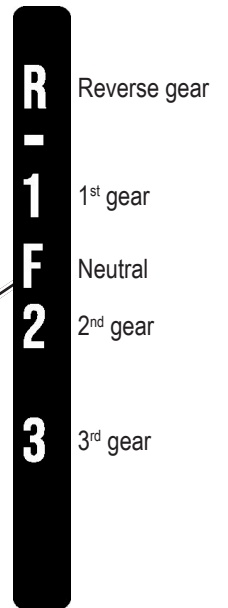
3. USE AND SAFETY DECALS



Serial number



Gear selector



Danger thrown objects Keep a safe distance

Danger of burns

Danger of gas inhalation



Danger transmission parts

Consult the manual



Risk of injury caused by moving parts

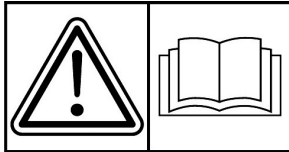
4. GENERAL SAFETY RULES

ACCIDENT PREVENTION RULES

On the machine and in this manual there are warnings and indications accompanied by this symbol:



it indicates the presence of a potential hazard for which particular caution should be taken for your own safety and for the safety of others who may be within the operating range of the machine.



All accident prevention rules in this manual are important and must be observed. Always keep the manual handy and read it carefully to learn how to use the machine safely. Do not allow anyone to use the machine without having received comprehensive instructions.

EXPLANATION OF WARNING DECALS

	<p>Keep a safe distance Keep people at least 15 m away when the machine is running.</p>
	<p>Danger of injuries caused by objects thrown by the rotation of the rotary tiller Do not work with the tiller on foreign bodies that can be thrown from the hoes, which can be very dangerous.</p>
	<p>Danger of burns Take particular care not to come into contact with hot engine parts.</p>
	<p>Danger of gas inhalation Exhaust fumes can cause serious damage to health or death. If it is necessary to start the engine in an enclosed area, use an extension piece to the exhaust pipe to blow out the fumes. Work in a well ventilated area.</p>
	<p>Risk of injury caused by transmission parts When the engine is running do not carry out maintenance and keep hands away from the indicated area.</p>

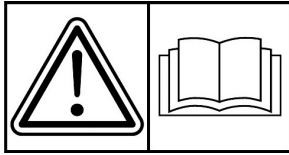
<p>▲ DANGER</p>	<p>Danger of injuries from moving parts Do not put your hands or feet under the rotary tiller when the engine is running.</p>
	<p>Fire hazard Handle fuel with care as it is highly flammable; do not refuel while smoking, near open flames or sparks, when the engine is running.</p>

PERSONAL PROTECTION EQUIPMENT



Before using the machine the appropriate personal protection equipment must be worn: body protection, protective gloves, safety footwear, hearing protection, goggles.

5. GENERAL WARNINGS TO KEEP IN MIND



WARNING: Read carefully before operating the machine.

Caution is the main requirement in accident prevention! Carefully read the following warnings when using the machine, even before starting work. Improper use can be dangerous. Observe the following precautions:

- Read this manual completely before starting and running the machine;
- Before handing the machine over to other people, make them aware of the safety rules and how to use the machine;
- Pay particular attention to the safety decals on the machine;
- Before starting work, always wear appropriate work clothes, long trousers, gloves, safety footwear, goggles;
- The use of hearing protection equipment is recommended when using the machine continuously. Use earplugs or earmuffs that comply with current regulations.

SAFETY IN THE WORKING ENVIRONMENT

- Before switching on the machine, check that there are no animals or people nearby, especially children; the minimum distance is 15 m;
- Before reversing, check that there are no people or obstacles behind the machine;
- Check the ground before tilling to ensure there are no stones, sticks or foreign bodies that could be thrown dangerously far away;
- Take care when working near a road, when there are passers-by;
- Do not work near ditches or embankments that may collapse under the weight of the machine, especially if the surface is uneven or wet;
- Take particular care when working on slopes, especially when turning. Do not work on excessively steep slopes;
- To avoid toxic exhaust fumes, do not use the machine in enclosed spaces.

DRIVING AND BEHAVIOURAL SAFETY

- Do not use the machine to transport people or animals;
- Children under 16 years of age must not use the machine;
- Do not use the machine when fatigued or under the influence of alcohol, drugs or medications that impair the physical or cognitive abilities of the operator;
- Be careful while driving and avoid abrupt turns, especially at high speed;
- Drive at low speed on uneven ground;
- Slow down on slopes and descents, and always steer slowly;
- Only work in sunlight or with good artificial light;
- Do not leave the machine on a slope;
- Do not use the tiller to crush metal, plastic, wood clippings or waste in general;
- Before starting to till, check that the hoes and rotary tiller nuts are fully tightened.

FURTHER SAFETY MEASURES

- If you hit a foreign object, disengage the tiller, switch off the engine, and inspect the hoes for damage. If they are damaged or deformed, they must always be replaced;
- If the machine begins to vibrate abnormally after a knock, immediately carry out a general check to identify the reason for the anomaly. If necessary, request the assistance of an authorised Grillo workshop;
- The rotation of the rotary tiller is very dangerous, never put your hands or feet under the rotary tiller when the engine is running;
- The guards installed on the machine (hoods, plastics, etc.) must not be removed when working;
- Before starting work, check that all safety devices are in working order. Do not tamper with or deactivate them;
- Do not operate the machine barefoot. Keep your feet well clear of the rotary tiller;
- Before checking, adjusting, repairing or simply cleaning the tiller, disengage the rotary tiller and switch off the engine;
- Do not change the engine settings, especially the maximum revs;
- Do not have anyone check the machine while you are driving with the engine running.

FUEL AND FIRE HAZARD

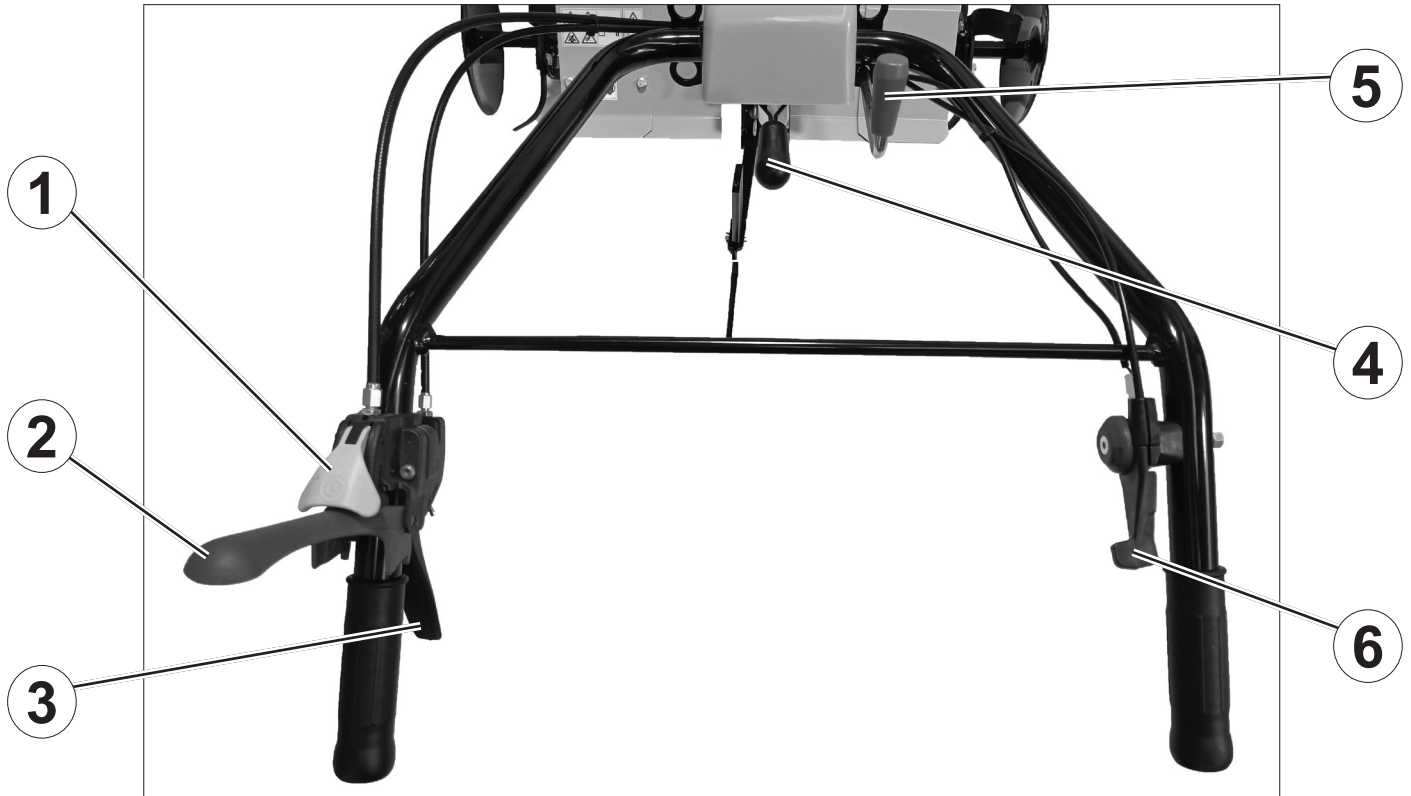
- Only refuel outdoors, always switch off the engine, stay away from sparks or flames, do not smoke! Securely replace tank and fuel container caps;
- Avoid fuel spills. After filling the tank clean up any spillage on the machine before starting the engine;
- Store fuel in containers specifically designed for this purpose;
- If it is necessary to empty the tank, do so outdoors or in a ventilated area;
- Caution! To reduce the risk of fire, always keep the engine, muffler, exhaust manifold, fuel tank area and fuel line clean and free from grass, leaves and dust;
- Do not store the machine in buildings where the fuel vapours could reach flames and sparks;
- Allow the engine to cool down before storing the machine in an enclosed area.

SAFE REPLACEMENTS

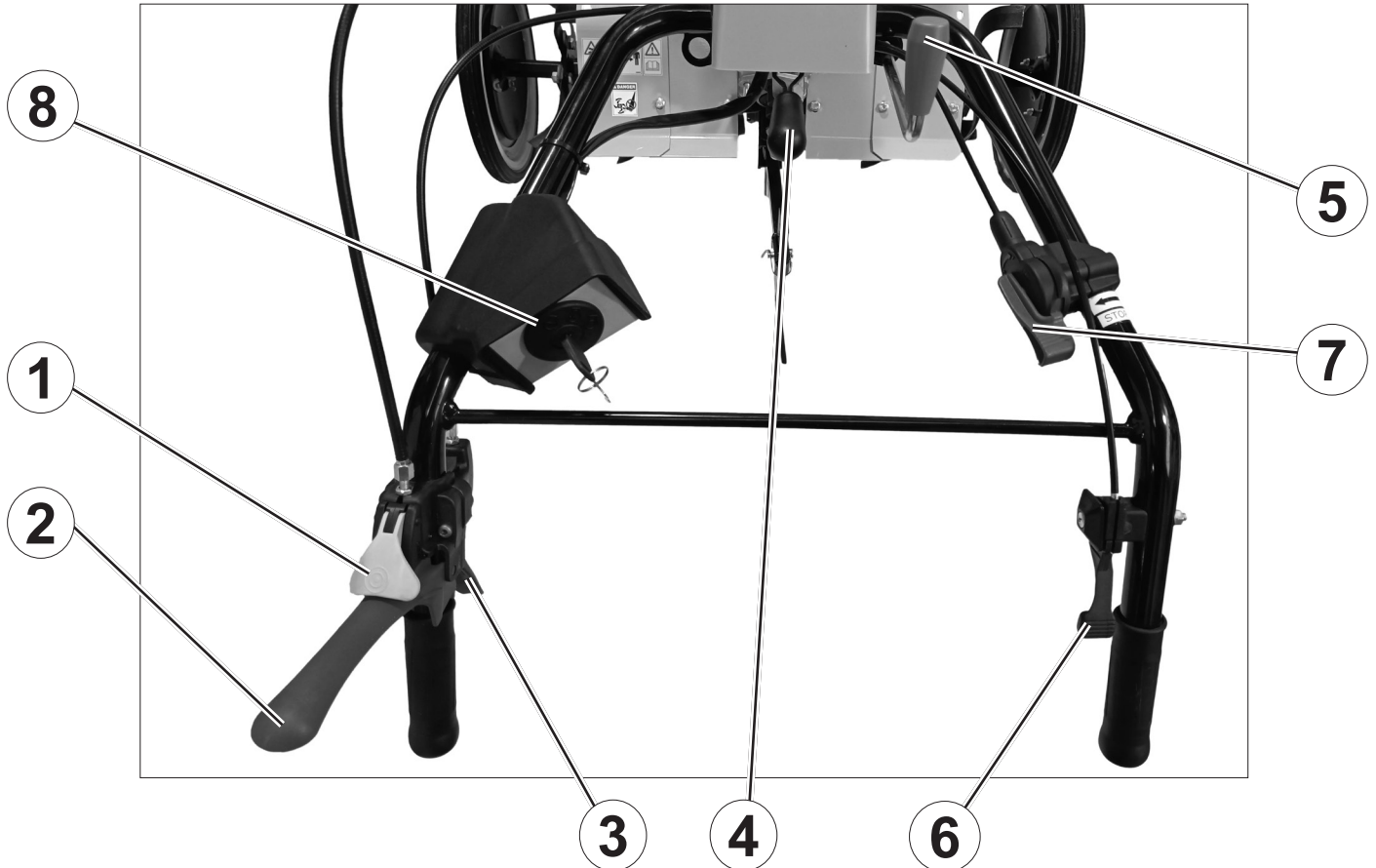
- Deformed or damaged hoes must always be replaced, never repaired;
- Always use genuine Grillo spare parts and accessories;
- Grillo machines are designed for the use of genuine Grillo accessories or accessories from authorised manufacturers. Do not install non-genuine accessories, accessories from unauthorised manufacturers, or accessories modified by unauthorised personnel on your machine.

6. IDENTIFICATION OF MACHINE CONTROLS AND FUNCTIONS

PETROL ENGINE



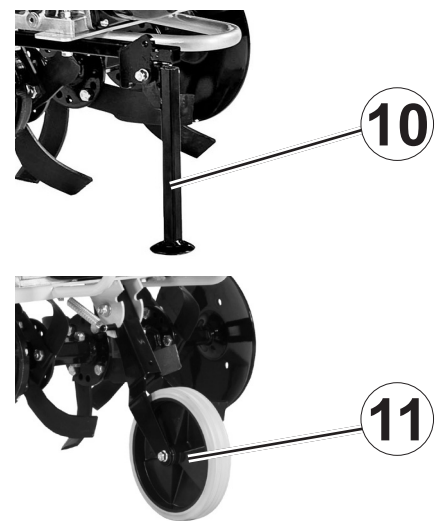
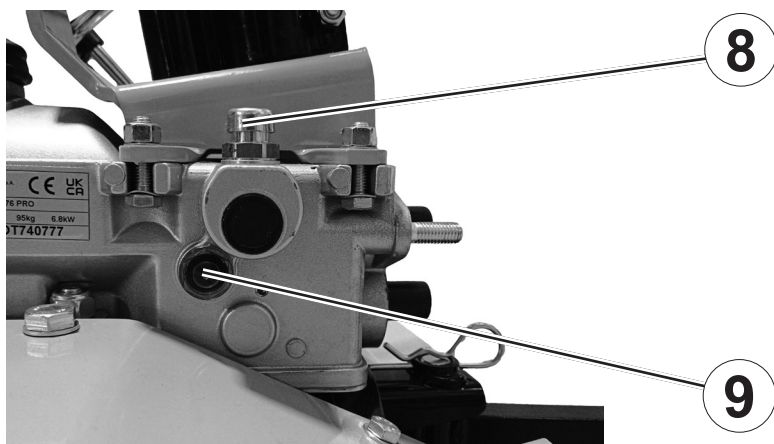
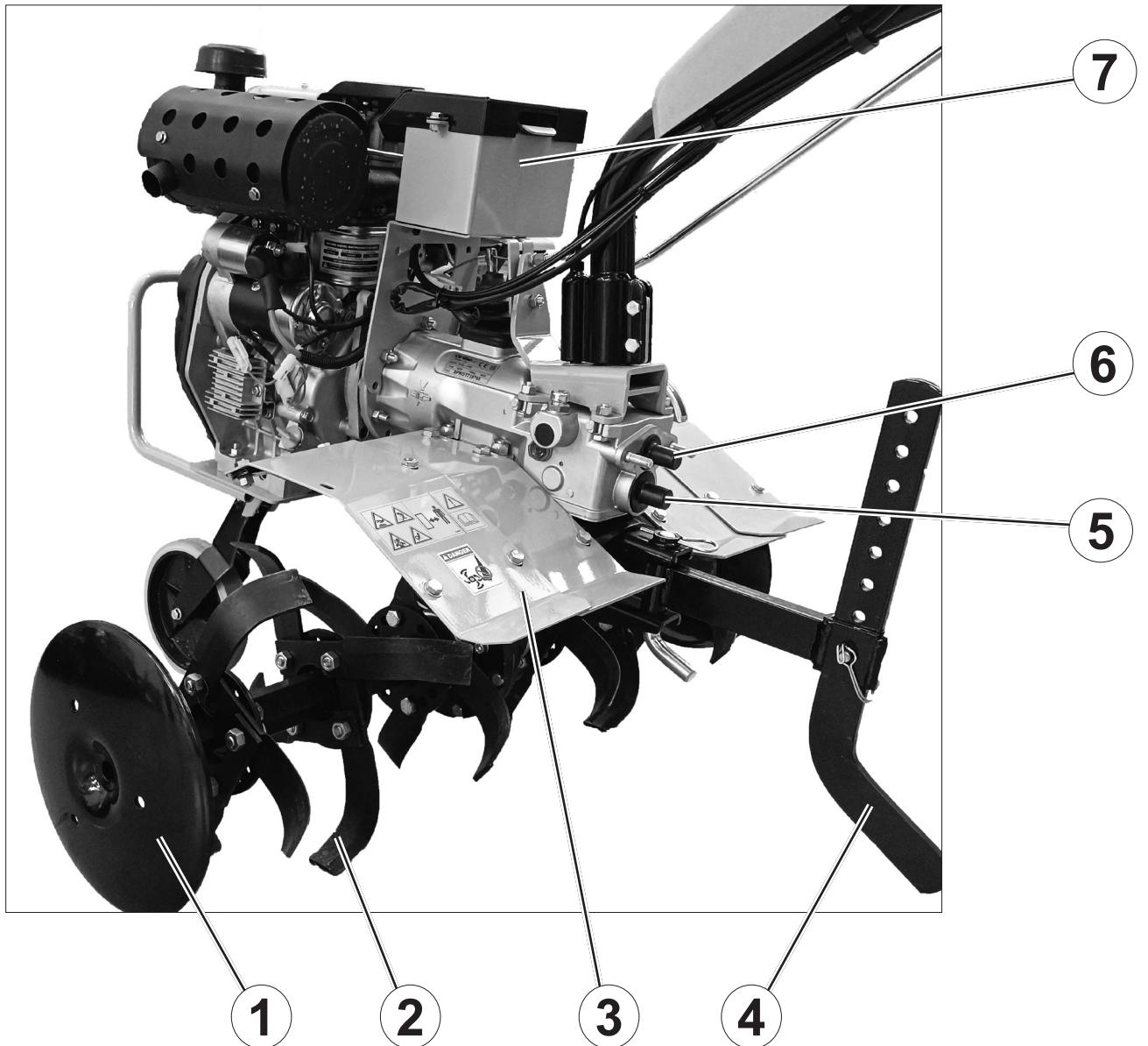
DIESEL ENGINE



1. SAFETY LOCK ON CLUTCH LEVER
2. CLUTCH LEVER
3. HANDLEBAR SIDE ADJUSTMENT LEVER
4. HANDLEBAR HEIGHT ADJUSTMENT LEVER

5. GEAR LEVER
6. THROTTLE
7. ENGINE SWITCH-OFF
8. STARTER PANEL

7. IDENTIFICATION OF MACHINE COMPONENTS



1. SIDE DISCS
2. HOE
3. ROTARY TILLER HOOD
4. ADJUSTABLE SPUR
5. SYNCHRONISED PTO
6. DIRECT PTO

7. BATTERY (ENGINE WITH ELECTRIC START)
8. GEARBOX OIL CAP
9. VISUAL GEARBOX OIL LEVEL
10. SUPPORT LEG
11. TRANSFER WHEEL

8. TECHNICAL SPECIFICATIONS

							
HR75 PRO	G 200 FA Loncin	4,1 kW (5,5 hp)	196 cc / 1	3 L		83 kg (183 lbs)	I 53 rpm II 123 rpm III 162 rpm R 3 km/h (1.8 mph)
HR76 PRO	G 300 FA Loncin	6,8 kW (9.3 hp)	302 cc / 1	6,1 L		95 kg (209 lbs)	
HR77 PRO	SH178 FA Norwick	4 kW (5.3 hp)	306 cc / 1	Diesel 3,5 L		97 kg (214 lbs)	
HR78 PRO						105 kg (231 lbs)	
11500	GX 200 Honda	4,1 kW (5.5 hp)	196 cc / 1	3,1 L		82 kg (181 lbs)	I 53 rpm II 123 rpm III 162 rpm R 3 km/h (1.8 mph)
	GX 270 Honda	6,3 kW (8.4 hp)	270 cc / 1	5,3 L		90 kg (198 lbs)	
						98 kg (216 lbs)	
	KD15 350 Kohler	5,5 kW (7.5 hp)	349 cc / 1	Diesel 4,3 L		110 kg (242 lbs)	
						121 kg (267 lbs)	

MODEL: HR7 PRO / 11500, tiller with horizontal axis.

CLUTCH: active conical clutch.

DRIVE: oil-bath gearbox with 3 forward + 1 reverse gear.

DRIVING SYSTEM: height and side adjustable handlebar, mounted on vibration dampers (11500 only).

SAFETY DEVICES: active clutch (immediate stop of the tiller when the lever is released).

PTO 1: direct engagement at engine speed, counter-clockwise rotation (spline 11 UNI 221).

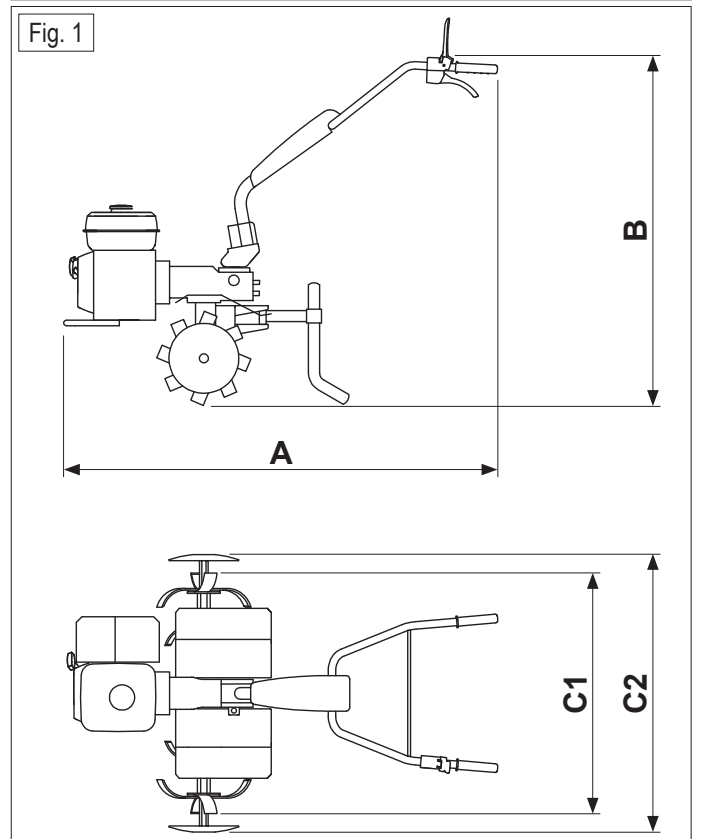
PTO 2: synchronised with the gearbox, clockwise rotation (spline 13 UNI 221).

STANDARD TILLER: Ø 32 cm (H37 PRO) - Ø 33 cm (11500), 24 hoes, adjustable, with adjustable spur.

AVAILABLE ATTACHMENTS:

- Rotary tiller extensions
- Tie rods for adjustable rotary tiller
- Adjustable rear-mounted furrower
- Tool carrier on which a single-row plough or turn-wrest plough can be installed
- Transfer wheels Ø 42 cm
- Wheel extensions and tyres 5.00-10
- Central transfer wheel (standard on HR7 PRO)

Fig. 1	A (cm)	B (cm)	C1 (cm)	C2 (cm)
HR7 PRO	138 - 165	125 - 90	58 - 85 - 111	72 - 99 - 125
11500	130 - 150	150 - 105	59 - 86 - 112	72 - 99 - 125



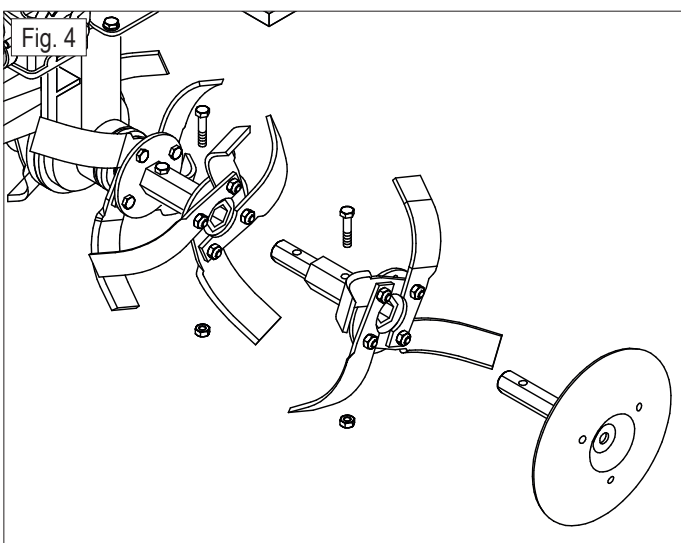
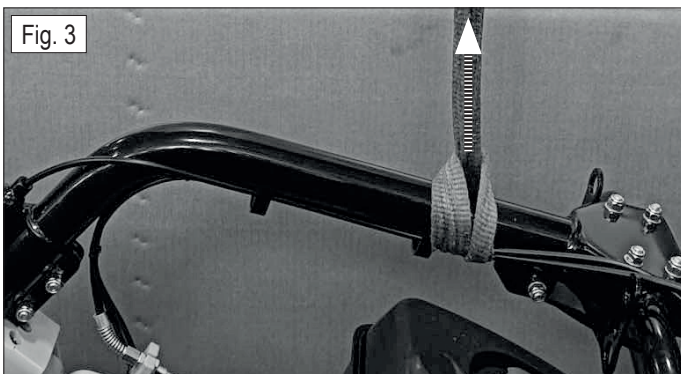
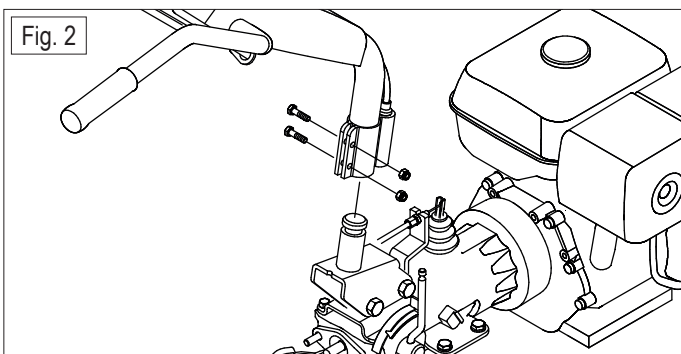
9. OPERATING INSTRUCTIONS

9.1 SETTING UP THE MACHINE FOR USE


To optimise packaging, the machine is delivered with the handlebar positioned over the engine and the tiller and protective hoods removed.

Carry out the following steps to prepare the machine for use:

- Check the integrity of the machine to ensure that it has not been damaged during transport;
- For machines that have the column disassembled from the gearbox unit, the column must be secured by fitting the connecting plate and the provided bolts (fig. 2) before removing the machine from the packaging;
- Remove the machine from its packaging, taking great care not to damage levers and cables. Use a hoist and sling of the appropriate capacity for the weight of the machine, attach the sling as indicated (fig. 3);
- Fit the tiller (fig. 4), rear spur, protective mudguards, gearbox rod and handlebar cover.




9.2 CHECKS TO BE CARRIED OUT BEFORE STARTING THE ENGINE

 **IMPORTANT:** the engine oil must be filled before starting the machine. Follow the instructions in the engine manual.

Before using the machine, check that:

1. The engine oil is level;
2. The gearbox oil is level;
3. The air filter is clean; if the air filter is in an oil bath, fill it with the same type of engine oil;
4. There is sufficient fuel in the tank;
5. The fuel tap on the engine is open (see engine manual).

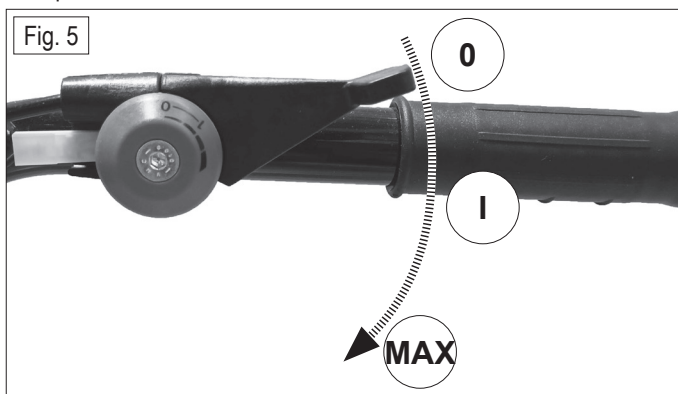
 **IMPORTANT:** check the fluid levels with the machine in a horizontal position.

For detailed fluid checks see 13. Ordinary maintenance.

9.3 STARTING THE ENGINE

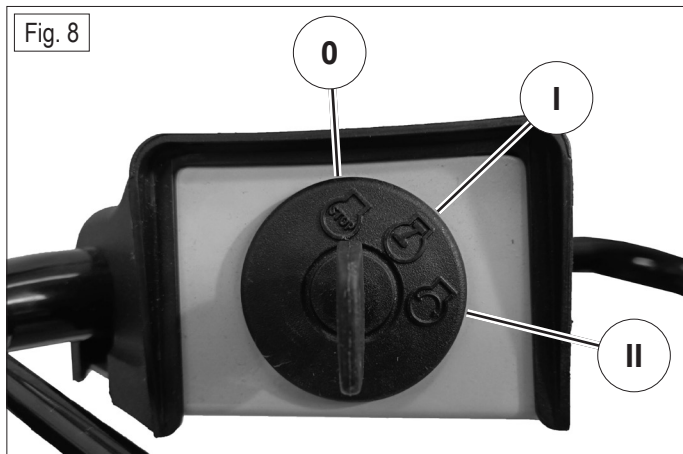
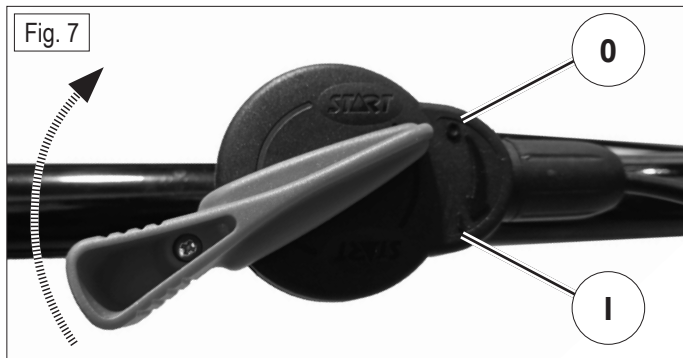
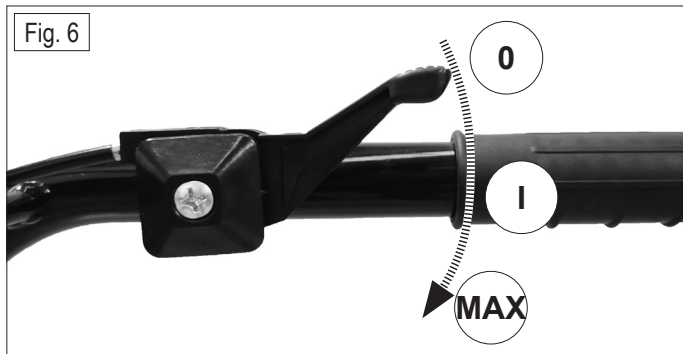
PETROL ENGINE

1. Set the throttle to halfway (fig. 5/l);
2. If the engine is cold, activate the choke lever on the engine (see engine manual);
3. Depending on the type of starter:
 - RECOIL STARTER
 - Slowly pull the recoil starter knob from the base until resistance to pulling is felt (see engine manual);
 - From the point of resistance, pull the knob vigorously. The engine will start;
 - ELECTRIC STARTER
 - Turn the ignition key on the engine clockwise (see engine manual);
 - If the battery is flat, the machine can also be started using the recoil starter knob; the ignition key must be in the ON position (see engine manual);
4. If the engine does not start, repeat from step 2 or verify the checks to be carried out before starting the engine;
5. Once the engine has started, return the choke lever to the home position.



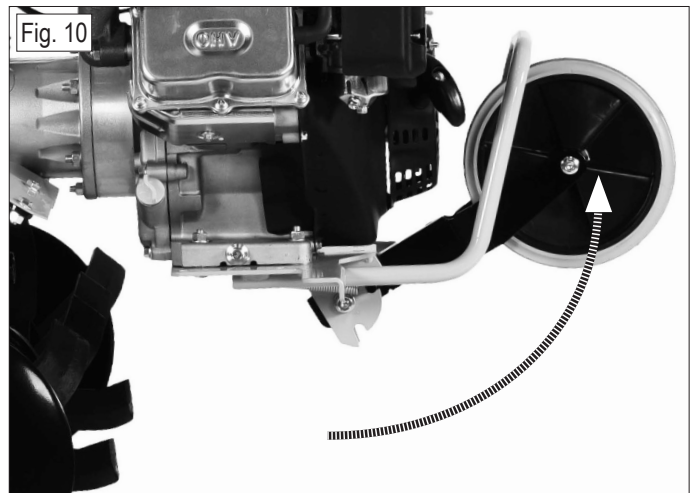
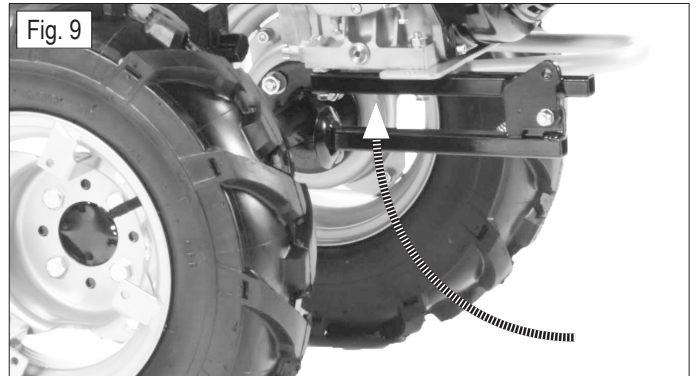
DIESEL ENGINE

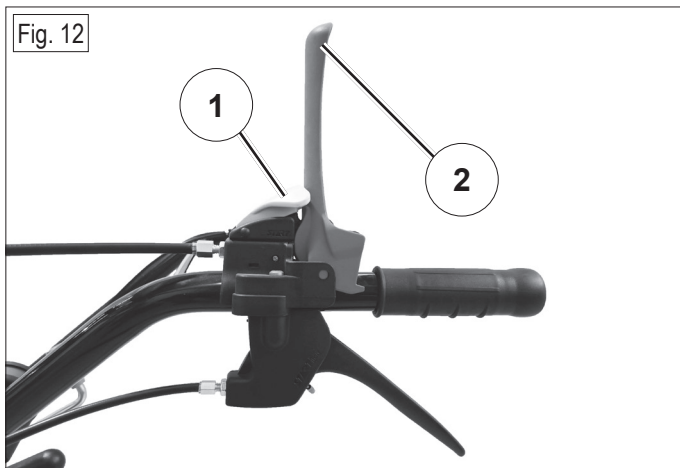
1. Set the throttle to halfway (fig. 6/l);
2. Set the start/stop switch of the diesel engine to position 1 (fig. 7/1);
3. Depending on the type of starter:
 - RECOIL STARTER
 - For engines equipped with a manual decompressor, lower the decompressor lever located above the engine (see engine manual);
 - Slowly pull the recoil starter knob from the base until resistance to pulling is felt (see engine manual);
 - From the point of resistance, pull the knob vigorously. The engine will start;
 - ELECTRIC STARTER
 - Fully turn clockwise the ignition key on the handlebar (fig. 8/II);
 - If the battery is flat, the machine can also be started using the recoil starter knob; the ignition key must be in the central position (fig. 8/I); this will recharge the battery;
4. If the engine does not start, repeat from step 2 or verify the checks to be carried out before starting the engine.



9.4 STARTING THE MACHINE

1. Bring the machine to the area to be tilled;
2. Start the engine;
3. Adjust the handlebar position (see 11.1 Handlebar setting);
4. If fitted, lift the support leg (fig. 9) or the transfer wheel (fig. 10);
5. Select the desired forward gear (1, 2 or 3, fig. 11) using the gear lever. If the gear does not engage immediately, do not force the lever, but give small clutch strokes and accompany the lever until the gear is fully engaged;
6. Set the throttle to maximum revs;
7. To move the machine forward, press in sequence the safety lock of the clutch lever (fig. 12/1), then the red clutch lever (fig. 12/2). The machine will start to move forward;
8. To stop travelling, simply release the red clutch lever, which will return to the STOP position with the safety lock engaged again.





CAUTION: never put hands or feet near the tiller when the tiller is in operation, the rotation of the hoes is highly dangerous; all spur adjustments must be made with the engine switched off.

IMPORTANT: do not work with the red lever partially engaged, but press it fully down until they touch the handle. This will avoid wear problems on the clutch.

9.5 REVERSING

CAUTION: Before driving the rotary tiller in reverse, always check that the ground behind you is clear and free of obstacles.

To drive the machine in reverse:

1. Make sure the area is clear of obstacles or obstructions;
2. Start the engine and set the throttle to halfway;
3. Select the reverse gear (fig. 11/R) using the gear lever. If the gear does not engage immediately, do not force the lever, but give small clutch strokes and accompany the lever until the gear is fully engaged;
4. Press in sequence the safety lock of the clutch lever (fig. 12/1), then the red clutch lever (fig. 12/2). The machine will start to move backward.

CAUTION: pay particular attention when reversing, in case of danger immediately release the red clutch lever: the machine will stop immediately.

9.6 ENGINE SHUTDOWN

PETROL ENGINE

Set the throttle to position 0 (fig. 5/0)

IMPORTANT: for machines with electric starters, turn the ignition key back to the OFF position after switching off the engine (see engine manual) to disconnect the battery. If the key remains in the ignition position with the engine switched off, there is a risk of completely draining the battery.

DIESEL ENGINE

Set the start/stop switch of the diesel engine to position 0 (fig. 7/0).

IMPORTANT: for machines with electric starter, turn the ignition key anti-clockwise (fig. 8/0) after switching off the engine to disconnect the battery. If the key remains in the starting position with the engine switched off, there is a risk of completely draining the battery.

9.7 WORK CONCLUSION

When work is finished, switch off the engine and, for machines with electric starter, remove the ignition key.

CAUTION: never leave the machine on a slope with the gearbox in neutral (fig. 11/F). If it is necessary to leave the machine on a slope, always select gear 1 (fig. 11/1)

9.8 ORDINARY MACHINE CLEANING

CAUTION: before starting any cleaning operation, always wear suitable clothing and protective goggles

CAUTION: when cleaning the rotary tiller, always make sure that the engine is switched off.

IMPORTANT: in order to reduce the risk of fire, it is important to keep the engine and muffler area clean of dust and dry grass residues.

At the end of each job, proper cleaning ensures a long service life for the machine and prevents most common inconveniences.

The best way to clean the machine is:

- With compressed air in the engine area;
- With water on the body parts and in the rotary tiller if necessary.

IMPORTANT: avoid wetting the engine linkages, cables and handlebar levers with a strong jet of water.

9.9 USEFUL RULES FOR CORRECT USE

The machine will work in optimum conditions if certain precautions are followed.

- Before starting work, check that the rotary tiller is perfectly clean, free of grass and dirt;
- Keep cables and levers clean of dirt and dust;
- Check the ground for stones, twigs, roots and other foreign bodies. Remove them if possible;
- When tilling, be careful and slow down if there are obstacles or areas of very hard ground;
- Pay attention if the engine revs decrease: working is overloaded, the tilling depth must be reduced (see 11.2 Spur setting - tilling depth);
- Hoes must not be damaged and must be fitted correctly (see 14.1 Replacing hoes);

IMPORTANT: the hoes must be fitted correctly.

Do not change the position of the hoes (see 14.1 Replacing hoes).

9.10 SLOPING TERRAIN

Steep terrain should be negotiated transversely as far as possible, taking great care when changing direction. Avoid tilling in particularly wet or slippery ground conditions.

CAUTION: avoid slopes that are too steep; for correct operation of the machine and for safety, observe the slope limits of the engine: max 25°.

10. SAFETY DEVICES

10.1 ACTIVE CLUTCH

The clutch has active engagement. This means that in an emergency, to stop the machine in forward or reverse, simply release the red clutch lever and the machine will stop immediately.

⚠ CAUTION: check frequently that the active clutch functions correctly. The machine must stop immediately when the red clutch lever is released.

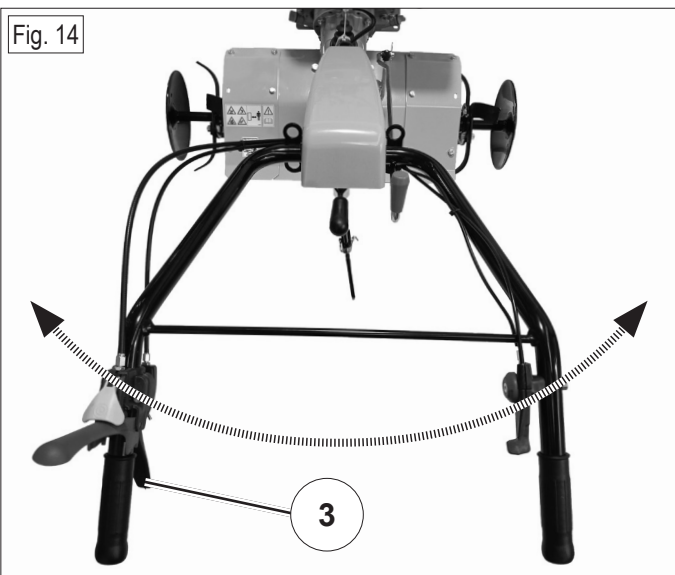
If the machine does not stop immediately check the adjustment of the clutch lever adjuster (see 12.1 Adjusting the clutch lever and handlebar side adjustment lever) or contact the service centre.

11. ORDINARY ADJUSTMENTS

11.1 HANDLEBAR SETTING

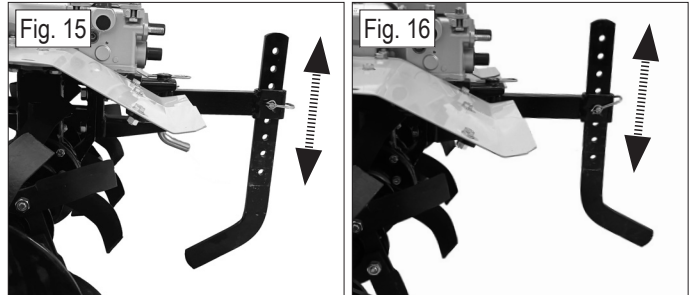
Before starting work, it is recommended to position the handlebars in the most comfortable position and with the greatest control over the machine. To adjust the height of the handlebar, push down the lever located at the base of the handlebar (fig. 13/4), then move the handlebar up or down. To lock the handlebar in the desired position, release the lever, making sure that its central pin engages in the notch.

To rotate the handlebar, press the relevant lever (fig. 14/3), then rotate the handlebar to the right or left. To lock the handlebar in the desired position, release the lever and if necessary adjust the position until the pin at the base of the column fits into one of the holes.



11.2 SPUR SETTING - TILLING DEPTH

The pressure of the operator on the handlebar controls the tilling depth. A greater or lesser depth can also be achieved by lowering or raising the rear spur. The lower the spur the shallower the tilling depth, and vice versa. To adjust the spur, the pin locked with a cotter pin must be removed. The spur can be locked with the pin in various positions. It is also advisable to turn the spur tip forwards when working in hard, compact soil (fig. 15); or to turn it backwards when the soil is not too firm (fig. 16).



On particularly hard soils, it is advisable to remove the side discs in order to make it easier for the hoes to penetrate the soil.

⚠ CAUTION: before adjusting the spur, switch off the engine.

12. EXTRAORDINARY ADJUSTMENTS

12.1 ADJUSTING THE CLUTCH LEVER AND HANDLEBAR SIDE ADJUSTMENT LEVER

Lever with the correct tension ensure that the actuators of the machine operate correctly.

For each lever, it is possible to change the tension of the connected cable by loosening the lock nut and unscrewing or loosening the adjuster in front of the lever to be adjusted (fig. 17).



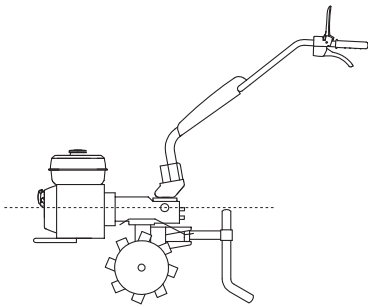
13. ORDINARY MAINTENANCE

⚠ CAUTION: always use suitable tools such as supports and safety devices if the machine or part of it has to be lifted.

- Always wear suitable clothing and work gloves before starting any cleaning, maintenance or repair work;
- Do not leave the machine during maintenance without safety devices or lifted, in places accessible to inexperienced people, especially children;
- Never dispose of used oil, fuel and any other pollutants into the environment!
- Regular maintenance helps to keep the machine in perfect working order.

⚠ CAUTION: before carrying out all control and maintenance operation, make sure that the engine is switched off.

🔧 IMPORTANT: check the fluid levels with the machine in a horizontal position.



For all maintenance and intervals: see 16. Maintenance schedule.
For all intervals, quantities and types of oil: see 17. Lubrication chart.

13.1 ENGINE MAINTENANCE

🔧 IMPORTANT: read the engine manual; check the engine periodically, keep the air filter clean and the engine oil level.

ENGINE AIR FILTER

Check and clean the air filter every 8 hours.

For engines with a dry air filter, check the cartridge and replace it if it is heavily clogged. Avoid cleaning the cartridge with air jets.

For engines with an oil bath air filter, change the oil if it is dirty. Use the engine oil suggested in the engine manual.

If working in very dusty environments, it is advisable to clean the air filter every 4 hours or as needed.

ENGINE OIL

🔧 IMPORTANT: it is essential to change the oil after the first 20 hours of operation. Then change the oil every 100 hours.

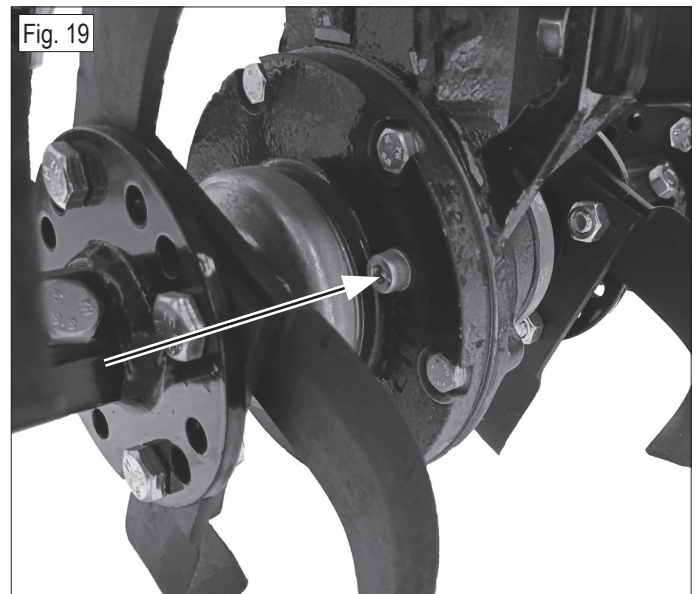
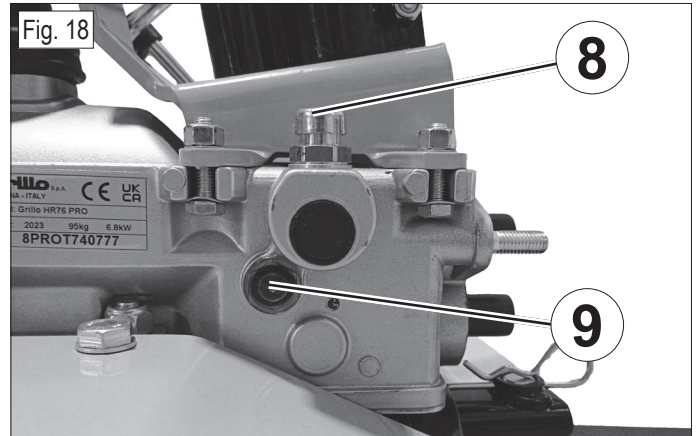
To check the oil level use the oil dipstick (see engine manual) when the engine is cold. When changing all the oil in the engine, follow the instructions in the engine manual for the quantity and type of oil.

13.2 MAINTENANCE OF MACHINE BODY AND ROTARY TILLER

GEARBOX OIL

Check the gearbox oil level every 50 working hours. Check that the oil level is at the centre of the transparent inspection plug located on the side of the gearbox (fig. 18/9); if necessary, top up oil from the plug located on the gearbox (fig. 18/8). If the oil is dark or has residue, proceed with changing it.

Change the gearbox oil every 200 working hours; use IP MELLANA 220 oil in a quantity of 1.4 litres. To drain the oil, first unscrew the plug on the gearbox (fig. 18/8) and then the plug on the tiller housing (fig. 19).



14. EXTRAORDINARY MAINTENANCE

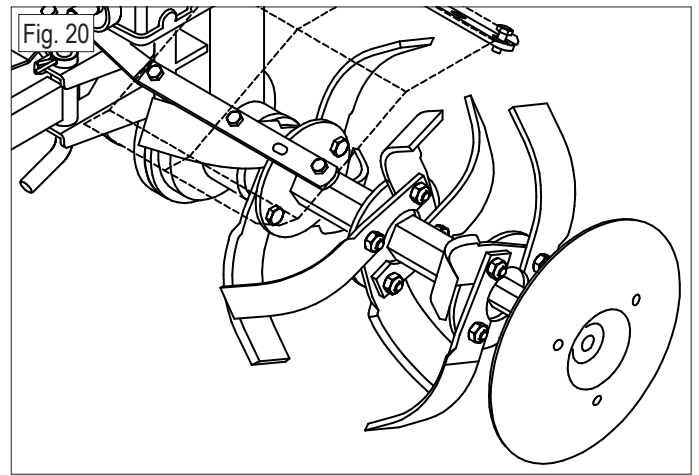
⚠ CAUTION: the operations contained in this chapter require technical skills and special equipment. It is advisable to contact an authorised Grillo centre.

14.1 REPLACING HOES

If a hoe is deformed or damaged, do not attempt to repair it, but replace it instead. Pay attention to the correct assembly of the hoes (fig. 20).

🔧 IMPORTANT: the hoes must be fitted correctly. Changing the position of the blades compromises the correct operation of the attachment.

⚠ CAUTION: the hoes are made of special material, which has been heat treated. Never weld broken or cracked hoes, they may break during use and be thrown from the tiller, causing serious damage.



15. TROUBLESHOOTING GUIDE

HR7 PRO / 11500 - TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
The engine does not start	Out of fuel	- Check the fuel level - Check that the fuel tap is open
	Combustion issues	- Clean or replace the air filter - Check that the carburettor jets are clean (petrol engine) - Check that the spark plug gives a spark (petrol engine)
	Throttle set to zero	- Set the throttle to halfway
	Engine cold, choke lever not activated (petrol engine)	- Activate the choke lever on the engine
	Start/stop switch in position 0 (Diesel engine)	- Set the start/stop switch to position 1
The engine starts, but the machine does not move forward	Insufficient cable tension of the clutch lever	- Act on the adjuster of the clutch lever, increasing the tension of the connected cable
The engine does not switch off	Throttle not in "0" position (petrol engine)	- Bring the throttle to the "0" position
	The electrical cable of the throttle is not properly connected to the engine (petrol engine)	- Check the throttle and its connection to the engine
	Start/stop switch not in position 0 (Diesel engine)	- Bring the start/stop switch to position 0
Drop in engine performance during tilling	Excessive tilling depth for the soil type	- Reduce the tilling depth by adjusting the spur
When the clutch lever is operated, the engine shuts down	Hoes blocked by an obstruction	- Check that there are no stones, logs or other elements blocking the rotation of the hoes

⚠ CAUTION: if problems persist after carrying out the actions described in this manual, contact the authorised service centre. Never attempt to carry out major repairs without having the necessary means and technical expertise.

IF YOU HIT A STONE OR ANOTHER FOREIGN BODY

1. Disengage the rotary tiller;
2. Switch off the engine;
3. Tilt the machine forward, lifting the rotary tiller;
4. Check the integrity of the hoes;
5. Check that no foreign body is trapped between the hood and the rotary tiller. If so, remove it.

16. MAINTENANCE SCHEDULE

HR7 PRO / 11500 - MAINTENANCE SCHEDULE					
MAINTENANCE ITEM		AT EVERY USE	WHICHEVER OCCURS FIRST		
			FIRST 20 HOURS OR WITHIN THE FIRST MONTH	EVERY 50 HOURS OR 6 MONTHS	EVERY 100 HOURS OR EVERY YEAR
Engine oil	Check the level	●			
	Change		●		●
Air filter	Check	●			
	Replace				*
Gearbox oil	Check the level			●	
	Change				●
Check that the engine intake grid is well cleaned		●			
Check hoe fixing			●	●	
Check tyre pressure (if present) 1,1 bar			●	●	

● recommended task

* task to be carried out if necessary

17. LUBRICATION CHART

HR7 PRO / 11500 - LUBRICATION CHART			
Engine oil	See engine manual		Change after the first 20 operating hours and then every 100 hours or once a year thereafter
Gearbox oil	IP MELLANA 220	1,4 L	Change every 100 hours or once a year

18. STORAGE AND PROLONGED INACTIVITY

Store the machine in a dry place and protected from the elements. Clean the machine of dirt and grass residues and if possible cover it with a tarpaulin when the engine is cold. If the machine is not to be used for an extended period of time (more than 1 month) drain the fuel.

19. AVAILABLE ATTACHMENTS

ROTARY TILLER EXTENSIONS

The tiller comes standard with a 99 cm wide adjustable tiller (including side discs).

By installing the tiller extensions, it is possible to increase the working width of the tiller to 125 cm (including side discs).

Fig. 21



TIE RODS FOR ADJUSTABLE ROTARY TILLER

It is possible to replace the tiller fixing bolts with the through-bolt that locks the tiller onto the tiller axle.

The package contains 3 tie-rods: 72 cm, 99 cm, 125 cm that allow the tiller to be adjusted to the desired width.

It is necessary to have the side discs fitted in order to use the tie rods.

Fig. 22



WHEEL EXTENSIONS AND 5.00-10 TYRES

The wheel extensions are fitted to the tiller axle and are necessary to allow the 5.00-10 tyres to be fitted.

They do not have a differential function.

Fig. 23



ADJUSTABLE REAR-MOUNTED FURROWER

The adjustable furrower is a tool especially designed to make furrows for sowing or irrigation.

The possibility of varying the position of the two wings allows the furrow width to be adjusted from a minimum of 10 cm to a maximum of 30 cm.

The depth achievable can vary from 10 cm to 20 cm.

If working in particularly hard soil, it is advisable to first carry out a tilling operation and then proceed to work with the furrower.

The spur must be removed in order to install the furrower. The furrower can be used in combination with the tiller or used individually by fitting the 5.00-10 tyres instead of the hoes.

Fig. 24



PLOUGHS

The ploughs are available in 2 types: single-row and 180° turn-wrest. The latter is particularly suitable when working in both directions (e.g. ridging in rows, vineyards or orchards).

The achievable furrow depth can vary between 10 cm and 15 cm depending on the terrain.

In order to fit the plough, the adjustable tool carrier must be fitted at the rear; to do so it is necessary to remove the spur support as well as removing the two hoe assemblies and fitting the 5.00-10 tyres with the necessary extensions.

Fig. 25



TRANSFER WHEELS

The side transfer wheels make it easier to move the machine.

They are fitted directly onto the side discs of the tiller.

They do not have a differential function and cannot be used with the plough or furrower.

Fig. 26



CENTRAL TRANSFER WHEEL

The front transfer wheel makes it easier to move the machine.

It is fitted as standard on the HR7 PRO and optional on the 11500.

The transfer or working position can be set without tools.

Fig. 27



20. TECHNICAL ASSISTANCE SERVICE

20.1 ASSISTANCE

This manual provides instructions for the use of the machine and for its routine maintenance.

For extraordinary maintenance, for all operations requiring technical skills and expertise, please contact your authorised Grillo dealer.

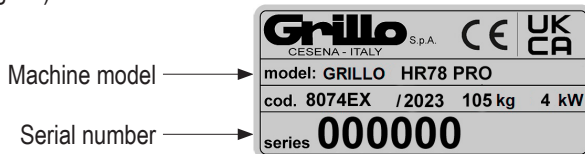
20.2 IDENTIFICATION DATA

If it is necessary to contact an authorised service centre, for maintenance information, always provide:

machine model

serial number

The machine's serial number plate is located on the left-hand side of the gearbox (fig. 28).



We advise the customer to note down this additional information in the spaces below. It may be useful for the service department.

PURCHASE DATE

GRILLO DEALER

20.3 SPARE PARTS

It is recommended to use only genuine spare parts to ensure product safety and durability.

20.4 WARRANTY

The warranty is provided in the manner and within the limits specified by current law. The retailer must hand over the machine's warranty certificate to the end customer, printing a copy of the registration from the Grillo website. Transport, servicing and wear parts remain at customer's expense. Any tampering or improper use not specifically authorised by Grillo will invalidate the warranty.

The engine follows the conditions specified by its manufacturer.

20.5 HOW TO ORDER SPARE PARTS

Contact our authorised centres.

Please indicate the serial number of the machine and the code of the component to be replaced.

It is possible to identify the part number by consulting the Grillo website: the spare parts tables of the machine will be available by entering the serial number.

21. TRANSPORT WARNINGS

⚠ CAUTION: make sure the engine is switched off.

LIFTING AND TRANSPORT

The tiller may not be driven on public roads. If the machine is loaded onto a transport vehicle, secure it properly with ropes and lower the handlebar if necessary. When lifting, ensure that cranes, hoists and ropes have sufficient lifting capacity for the weight of the machine.

22. DISPOSAL

Waste products such as waste oil or fuel, used lubricants, filters, or other such consumable parts can cause harm to people, animals and the environment. They must therefore be disposed of properly. Contact a recycling centre or your retailer for information on correct disposal.

The spare parts catalogues are available on line at http://www.grilloagrigarden.co.uk/spare_parts_lists
Le tavole ricambi sono disponibili online all'indirizzo http://www.grillospa.it/tavole_ricambi
Les vues éclatées son disponibles en ligne sur http://www.grillofrance.fr/vues_eclatees
Die Ersatzteillisten sind online verfügbar unter <http://www.grillodeutschland.de/ersatzteillisten>
Los despieces son disponibles on line en <http://es.grillospa.it/despieces>

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