

RURIS RR240, 241, 242 BRAVO BRUSHCUTTER





Content

1. Introduction	3
2. Safety instructions.....	4
2.1 Labels on the machine	4
3. Brushcutter overview.....	5
4. Technical data.....	6
5. Assembly	7
6. Fuel supply	12
6.1 The mixture	12
6.2 Supply.....	13
6.2 Fuel handling safety	14
7. Commissioning	14
7.1 Running-in.....	17
8. Pre-operation checks	17
9. Brushcutter using	18
9.1 Mowing methods	19
9.2 Blade Types	23
9.3 Warnings.....	24
9.4 Digital Monitoring	25
10. Maintenance	31
10.1.1 Maintenance table	32
11. Storage of the BRUSHCUTTER	33
12. Declarations of conformity.....	34



1. INTRODUCTION

Dear Customer!

Thank you for your decision to purchase a RURIS product and for your trust in our company! RURIS has been on the market since 1993 and during all this time it has become a strong brand, which has built its reputation by keeping promises, but also by continuous investments aimed at helping customers with reliable, efficient and quality solutions.

We are confident that you will appreciate our product and enjoy its performance for a long time. RURIS does not offer its customers only machines, but complete solutions. An important element in the relationship with the customer is the counselling both before and after the sale, as RURIS customers have at their disposal a whole network of partner stores and service points.

To enjoy the purchased product, please read the user manual carefully. By following the instructions, you will be guaranteed a long use.

The RURIS company is continuously working on the development of its products and therefore reserves the right to modify, among other things, their form, appearance and performance, without having the obligation to communicate this in advance.

Thank you once again for choosing RURIS products!








Customer information and support :

Phone: **0351.820.105**

e-mail: **info@ruris.ro**

2. SAFETY INSTRUCTIONS

2.1 LABELS ON THE MACHINE

	<p>Danger!</p>
	<p>Do not use the brushcutter at a distance of less than 15 m near other people!</p>
	<p>Risk of bodily injury to people near the brushcutter!</p>
	<p>Attention to the blade or trimmer head!</p>
	<p>Read the user manual!</p>
	<p>Use protective helmets!</p>
	<p>Use protective gloves!</p>

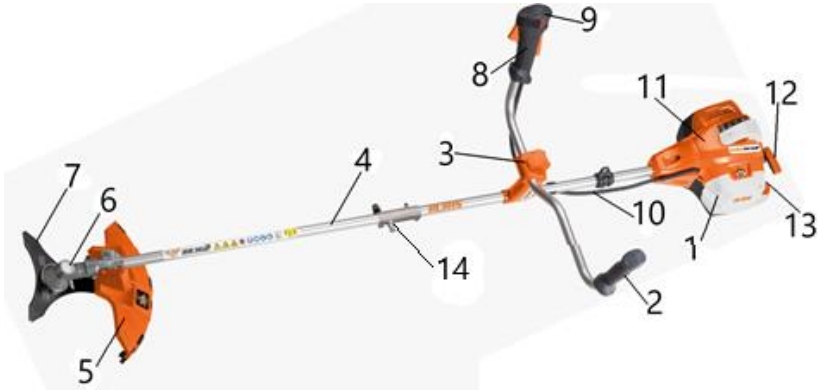


Use protective boots or shoes !

3. BRUSHCUTTER OVERVIEW

1. Air filter
2. Handles
3. Handle support
4. Transmission pipe
5. Protective shield
6. Reducer head
7. Blade
8. Throttle lever
9. On/off switch
10. Electric wiring
11. Engine
12. Starter
13. Fuel tank

14. Transmission fixing clamp



4. TECHNICAL DATA

Model	240 BRAVO	241 BRAVO	242 BRAVO
Engine	Khumma concept, 2 strokes	Khumma concept, 2 strokes	Khumma concept, 2 strokes
Maximum engine power	1 hp	1 hp	1 hp
Cylinder capacity	24 cc	24 cc	24 cc
Fuel	Unleaded gasoline	Unleaded gasoline	Unleaded gasoline
Fuel mixture	25 ml of oil/ liter of gasoline	25 ml of oil/ liter of gasoline	25 ml of oil/ liter of gasoline
Fuel tank capacity	600 ml	600 ml	600 ml
Start-up	Manual	Manual	Manual
Transmission shaft	Flexible	Rigid	Rigid, modular – Ergo Comfort

Digital monitoring	Yes, with 6 functions: Total working time, partial working time, hour, rpm, counter with air filter cleaning/change warning, counter with spark plug change warning, counter with reducer greasing warning	Yes, with 6 functions: Total working time, partial working time, hour, rpm, counter with air filter cleaning/change warning, counter with spark plug change warning, counter with reducer greasing warning	Yes, with 6 functions: Total working time, partial working time, hour, rpm, counter with air filter cleaning/change warning, counter with spark plug change warning, counter with reducer greasing warning
Accessories	Trimmer head and 2 teeth blade	Trimmer head and 3 teeth blade	Trimmer head, 2 teeth blade and 3 teeth blade
Cutting width	255 mm	255 mm	255 mm
Harness	Single belt	Single belt	Single belt
Handle support	With axial adjustment	With axial adjustment	With axial adjustment
Weight	3.8 kg	3.9 kg	4.0 kg

Maximum power is the power of the engine, at idle, without air filter and muffler.

Net weight is without fuel, without cutting tools, without shields, without command and control elements.

5. ASSEMBLY

Before installation and commissioning, you must ensure that the brushcutter is correctly assembled according to the assembly plan and follow the instructions in this user manual. Only then you can proceed to actual commissioning.

Coupling the transmission to the engine unit (for models that do not have a coupled transmission)



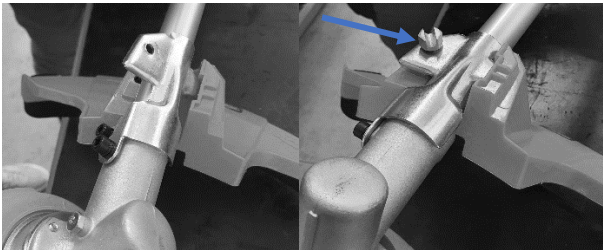
Connect the transmission to the engine unit using the screws and washers provided.

Fitting the handles

Loosen the screws located on the clamp, by unthreading, until it is free from the thread, then fix the handles in the working position.



Mounting the protective shield

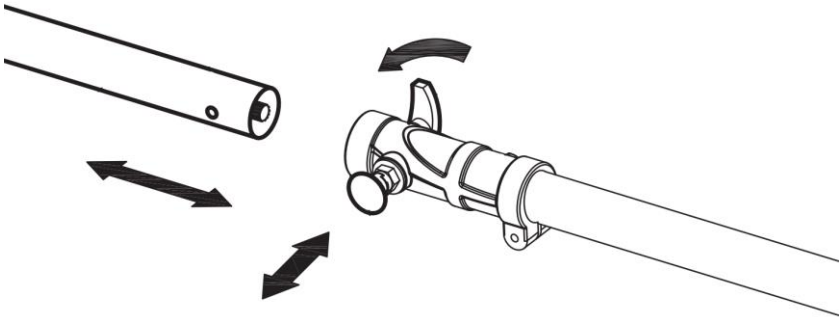


Fit the protective shield to the fixing points and firmly tighten the locking screw.

This has the role of protecting the user from hard bodies that can bounce during use as well as as the role of load limiter.

Careful! Do not use the brushcutter without this protection shield.

Transmission coupling



For modular transmissions that come in two segments, they must be joined together using the fixing clamp and lock nut.

Assembly - disassembly of the blade and trimmer head

To proceed properly you will need to have the following necessary tools at hand: the hex key with blocker and the wrench in the brushcutter equipment.

The assembly-disassembly order is shown in fig. 7

Use the hex key with blocker supplied with the brushcutter and position it in the locking hole of the reducer head and in the locking hole of the spacer in fig. 7 poz. 5.

Use the wrench supplied with the brushcutter, secure the lock nut and turn counterclockwise to tighten, or clockwise to loosen.

The 3-teeth blade (item 4 Fig. 7) can be installed on any side with double cutting edge.

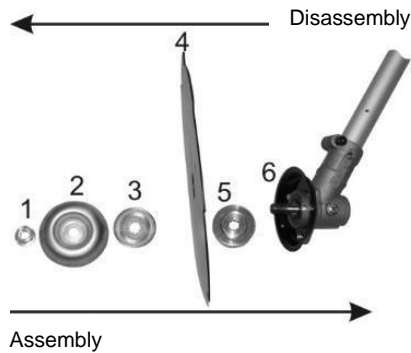


Fig. 7

Check that the whole assembly is correctly installed and that the blade is firmly tightened without axial or transverse play.

When installing the trimmer head, items 1, 2, 3 and 4 in Fig. 7 are not used. The hex key with blocker (pos. 5, Fig. 7) is used, which helps locking the shaft of the reducer head, and the trimmer head is then threaded, counterclockwise, by hand, with the help of the wrench and tighten strongly.

If you fail to do so, you should immediately visit your nearest Ruris authorized service point to have this problem solved.

Harness assembly

To install the harness you will need to position it on the shoulders and then secure it.

The harness can be easily attached to the user's body by means of fast-type adjusting elements, without the user wasting time or discomfort during operation.

With rapid adjustment, the user can start working immediately.

In order to position the brushcutter correctly in the harness, make sure that it is in balance and does not touch the ground.

To balance the brushcutter in relation to the harness and height of the user, you will need to perform the following maneuvers:

- make sure that the belt is located one palm width below the user's hip
- position the brushcutter in the safety of the harness and leave it free



- if the brushcutter is not in balance and touches the ground surface with the blade or the brushcutter tends to be tilted towards the engine you will need to reposition the located fixing system on the transmission pipe of the brushcutter to the engine or the blade until you find the balance point of the brushcutter.

In this case the operation will be done easily without supporting the brushcutter on the hands.

6. FUEL SUPPLY

6.1 THE MIXTURE

ATTENTION!

1. Gasoline is flammable. Avoid open flames near fuel. Stop the engine and let it cool before refueling.
2. RURIS engines are lubricated with oil specially made for air-cooled 2-stroke gasoline engines. If you do not use **an API TC class oil** or a higher class, during the warranty period, you risk losing the warranty.
mixture ratio : 1l gasoline + 25ml oil 2 strokes. Gas emissions are controlled by the fundamental parameters and components of the engine (eg: carburetor, ignition timing, muffler)
3. These engines are certified to run on unleaded gasoline.

4. Make sure you use gasoline with a minimum octane number of 95.
5. Unleaded gasoline is recommended to reduce air pollution in order to protect the environment.
6. Poor quality gasoline or oils can damage the sealing rings, fuel intake hoses, piston, rings, cylinder or engine fuel tank.

Recommended mixing rate	
Mixing rate	
Gasoline liters	1 2 3 4 5
MI oil for 2-stroke engines	25 50 75 100 125

- measure exactly the amount of gasoline and for oil we recommend using a graduated syringe.
- homogenization is done by stirring the mixture in a fuel container without impurities.
- put the gasoline in a clean fuel container.
- pour in all the oil and mix well.
- place a clear label on the outside of the container to avoid confusion with other containers.

6.2 SUPPLY

Place the brushcutter on a work table, unscrew the fuel tank cap and pour in the fuel mixture. You can find information about the volume of the fuel tank in the table in the "TECHNICAL DATA" chapter. Do not use fuel stored in the tank for more than 7 days.

NOTE: Do not use the machine until the fuel in the tank is completely finished. Refuel before it is completely finished. If you find that the engine is running at a high speed and the fuel in the tank is about to run out, stop the engine and refuel. Start the engine and let it idle, or at a low speed, for 30 seconds. These are the basic requirements for using a two-stroke engine.



6.2 FUEL HANDLING SAFETY

CAUTION



This fuel is extremely flammable. Do not smoke or bring flame or sparks near fuel.

! IMPORTANT

1. Stop the engine before refueling.
2. Using the wrong oil can lead to clogging of the spark plug, clogging of the muffler or sticking of the piston rings.
3. Move at least 3 meters away from the fuel point before starting the engine.
4. Using an improper fuel will cause severe damage to the internal parts of the engine in a short time.

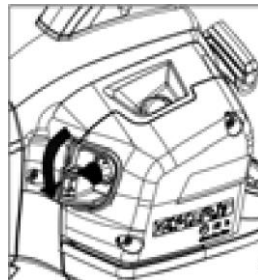
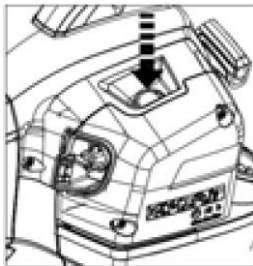
7. COMMISSIONING

Before putting the mower into operation, you must ensure that the following conditions are met:

- within a radius of 5 meters on either side of the brushcutter, there are no persons or objects with which it could come into contact;
- the brushcutter is placed in a horizontal position on the ground;
- the cables are assembled correctly;
- the handles are correctly installed and fixed;
- the reducer head has Vaseline graffitiated on the screw;

- the mixture of Ruris 2tt Max oil or an API classification oil: TC or higher and fuel is correctly proportioned 25 ml oil / 1 liter fuel (unleaded gasoline);
- the mixture is made in a special container and homogenized for 1 minute, the mixture cannot be used with an age of more than 7 days in optimal conditions.
- the engine has enough fuel to start;
- the throttle lever is fully operated and in the intermediate position for cold start and locked;
- the switch on - off is positioned "I" (start)
- the blade is installed and fixed correctly, provided with the safety nut;
- the protection shield is installed correctly
- all the screws of the brushcutter are tightened firmly.

Starting the engine



Prime the gasoline carburetor by 5-7 successive presses of the gasoline pump.

Place the shock flap in the closed position and the switch in the ON position





EN

Hold the brushcutter firmly with your left hand and pull the starter rope with your right hand.

The pulling of the rope must be done in two stages. The first stage will be done by gently pulling the starter until the rope is pre-tensioned. The second stage will be by constant pulling. The pull is performed until you hear the first start symptom. After the first starting symptom stop pulling the starter rope and switch the shock flap to the open position

At this point pull the starter rope in the same manner previously explained until the engine starts at full speed.

To idle the engine, press the throttle lever and then release.

ATTENTION! Do not pull suddenly the starter because you risk damaging the entire starter assembly.

Pulling is always done by pretensioning the starter rope.

Stopping the engine

Stopping the brushcutter engine is done as follows:

- Release the throttle lever and allow the engine to run for about 1 minute.
- Turn the switch to the OFF position.

Checks required if the brushcutter does not respond to commands

When the engine won't start:

When the engine does not start:

1. Check that the on / off switch is in the "I" position.
2. Check if there is enough fuel.
3. Check that the priming pump is full of gasoline.
4. Check the spark plug for spark.

5. Check that the fuel mixture is not older than 7 days in optimal conditions.

WARNING: If the brushcutter does not respond to commands or does not work properly, you must contact an authorized Ruris service immediately.

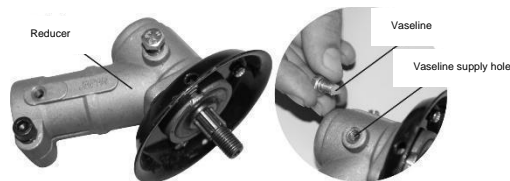
7.1 RUNNING-IN

Running-in should be done at idle and not under load. Three tanks of gasoline at idle, no load. At intervals of 10-15 min, it accelerates to maximum, for 10-15 sec, to evacuate the unburnt oil from the muffler

8. PRE-OPERATION CHECKS

Make sure that:

- The brushcutter is installed correctly and completely.
- The fuel mixture respects the indicated proportion of oil and gasoline: 25 ml of oil/1 liter of gasoline
- The oil used is RURIS brand: RURIS 2TT -MAX or an API classification oil: TC or higher
- The reducer head is filled with RURIS vaseline, the indicated level is given by the vaseline located on the top of the screw in the supply area according to the installation method shown below according to figure 1. Its capacity is approx. 20 grams



- Installing the blade or trimmer head is done correctly according to the information in Fig 1.1

- The drive of the reduction transmission is done by operating the throttle lever at maximum.
- Check that the protection shield is fixed correctly.

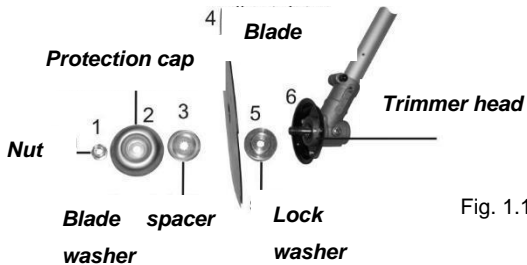


Fig. 1.1

Assembly - disassembly of the blade and trimmer head

Careful! When assembling the cutting blade, use the lock hex key to unscrew the tightening nut clockwise. After installing the cutting blade, make sure that the nut is well tightened and the cutting blade is well fixed, guided and has no deformations or cracks on its surface, otherwise replace it.

9. BRUSHCUTTER USING

RURIS brushcutters brand are products that allow you to easily choose the mowing mode, without having to perform successive adjustment or maintenance maneuvers. Brushcutters create a unitary body with the user and provide maximum comfort and perfect operation.

In order to be able to use the brushcutter in optimal working conditions, you will need to check before starting the mowing operation if there are objects wood stumps, stones,

wires, mosses, etc. on the mowing surface, objects with which the cutting disc may come into contact.

If you find such objects you will have to remove them from the surface to be mowed. At the same time, unevenness or other elements that could endanger your safety during exploitation will have to be highlighted by markings in those areas.

Careful! To be able to operate the brushcutter safely, you will have to read the user manual and follow the markings on the parts of the brushcutter.

It is forbidden to use the brushcutter without a harness.



Make sure that before starting the operation, there are no people or animals within a radius of at least 15 meters that you could injure because at the maximum speed of the cutting disc through contact with the gravel in the ground or other objects they can be projected .

After you have started the mower and positioned it in the safety of the harness, you can proceed to its operation. For your safety, avoid contact of the blade with stones or hard objects.

The transmission start-up is done by operating the throttle lever to the maximum, during the mowing process, without fluctuations that create shocks in the transmission and cause its premature wear.

9.1 MOWING METHODS

1. Spiral mowing method or number 9
 - Start mowing from the outside of the surface, at the same time choose your mowing mode, you can mow to the right or left. It is recommended not to mow in both directions, as you risk stepping on the mowed hay in the direction of return, according to the fig. 10



Fig. 10

2. Straight mowing method

Before you start mowing, set a point of reference to which you are going to move. The mowing can be done by orienting the handles consecutively to the right or left depending on the actual way of mowing

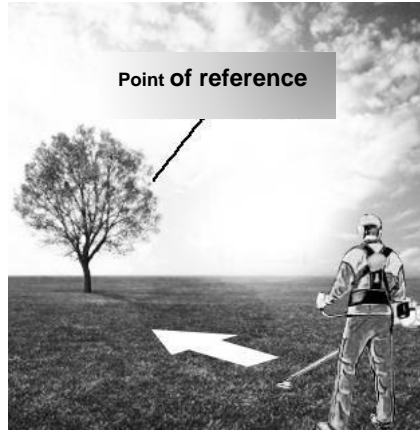


Fig. 11

3. Mowing method in slope or ramp

- In order to be able to safely mow, position yourself perpendicular to the axis of the slope and always lean on the ramp foot, according to fig. 12



Fig. 12

4.

Mowing method used for deforestation (fig. 13)

- Deforestation is always done with a perfectly chosen blade, depending on the shrubs to be cleared.
- For a safe deforestation you must always start from the edge of the mowing surface and never from inside the surface, to avoid possible accidents.

Fig. 13



5. Mowing method using trimmer head

- To use the trimmer head you must choose the perfect type of trimmer line for the surface to be mowed.
- The trimmer line that equips the trimmer head will finely grind the grass.
- The trimmer head can be used successfully in obstacle areas, for tree ventilation, in areas with curb-stones.

To manipulate the trimmer line, you will have to operate the trimmer head by pressing it on the ground or by tapping it lightly on the ground, according to fig.

14

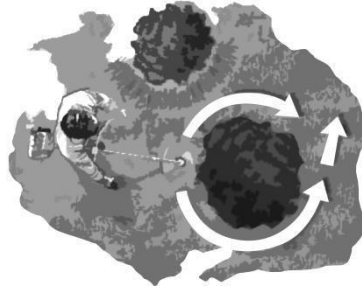







Fig. 14

This trimmer line handling operation will be performed at maximum engine speed.

9.2 BLADE TYPES

	<p>Trimmer head</p>	<p>Trimmer head with 2 trimmer lines whose length is automatically adjusted by self-cutting using the knife on the protection device also called the load limiter. It is used especially for mowing and landscaping works, in places with obstacles.</p>
	<p>Blade with 3 teeth</p>	<p>Made of steel, intended for mowing hard and dry grass on large areas.</p>
	<p>Blade with 4 teeth</p>	<p>Made of steel, intended for removing hard grass and grasses, on large areas.</p>
	<p>Blade with 8 teeth</p>	<p>Made of steel, intended for the cutting of shrubs, bushes and thin stems.</p>
	<p>Blade with 80 teeth</p>	<p>Made of steel, intended for the cutting of shrubs, bushes, thin stems and deforestation works.</p>


9.3 WARNINGS






- Refueling or greasing is NOT done with the engine running.
- The operation of the brushcutter in the field is done with breaks of 15 minutes, between fuel supplies. Continuous operation is prohibited!
- Anyone who does not know the machine and has never used it should read the user manual before working with the product.
- If you leave the brushcutter unattended, make sure that no unauthorized person can start it.
- When working with the brushcutter near a wall or curb, be sure to keep a safe distance.
- Prepare to work with adequate protective equipment. Before starting the work, inspect the ground, remove stones, wood, pieces of metal and any foreign matter.
- Before starting the engine, the user must ensure that it has a clear radius of at least 15 m in front of the brushcutter.
- Wipe off any fuel leaks from the brushcutter.
- Always fill the fuel tank when the engine is switched off and in a ventilated area. Do not smoke when doing this operation.
- Before starting the brushcutter, learn to stop the engine safely and use the machine correctly.
- Do not transport or clean the machine with the engine running.
- Do not work on a slope higher than 15 degrees.
- We do not take any responsibility for accidents in which the above has not been taken into account.










9.4 DIGITAL MONITORING


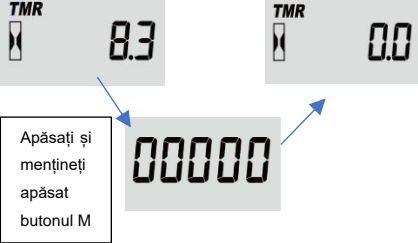

For correct operation of the tachometer, make sure that its wire is connected to the plug of the spark plug.


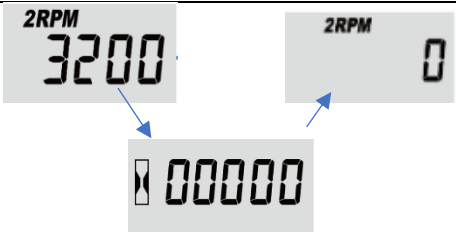
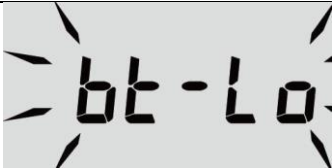
Note: Some of the tachometer functions can be reset before the time interval of the respective function is completed.


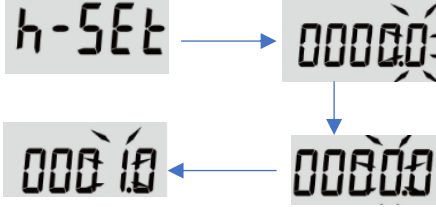

No.	Description of the function	view	Remarks
	Clean the air filter - After 5 hours of operation.	 <p>Intermittent CLEAN AIR FILTER</p> <p>Alternative</p>	User cannot set time interval.

1	When the countdown reaches 0.	 <p>Intermittent Alternative</p>	<p>The user can press the (M) button to remove the warning icon, then the count will restart from 5 hours. If the (M) button is not pressed, the warning icon remains on the screen.</p>
	Press the button to remove the warning icon.	 <p>Intermittent Alternative</p>	
2	Change the air filter -At 45 hours of operation.		User cannot set time interval.
	When the countdown reaches 0.		<p>The user can press the (M) button to remove the warning icon, then the count will restart from 45 hours. If the (M) button is not pressed, the warning icon remains on the screen.</p>
	Press the button to remove the warning icon.		

3	Change the spark plug -At 50 hours of operation.		User cannot set time interval.
	When the countdown reaches 0.		The user can press the (M) button to remove the warning icon, then the count will restart from 50 hours. If the (M) button is not pressed, the warning icon remains on the screen.
	Press the button to remove the warning icon.		
4	Reducer head greasing -After 20 hours of operation.	Intermittent  	The end user cannot set the time interval.
	When the countdown reaches 0.	Intermittent  	The user can press the (M) button to remove the warning icon, then the count will restart from 20 hours. If the (M) button is not pressed, the warning icon remains on the screen.
	Press the button to remove the warning icon.	Intermittent  	

No.	Description of the function	view	Remarks
1	Total operating hours.		Non-resettable.
2	TMR (resettable working time).	 <p data-bbox="415 948 524 1069">Apăsați și mențineți apăsat butonul M</p>	Hold down the (M) button to reset the working time to zero.
4	Clock.		24h mode. To adjust the clock, hold down the (M) button.

			When the display is flashing, adjust the hour and minute using the M and S buttons.
5	RPM (to view real-time RPM).		Displays current RPM in real time.
6	2 RPM. Shows the maximum RPM history. It is updated when the revs are higher than those shown on the screen.		Hold down the (M) button to reset the maximum RPM to zero.
7	Tachometer battery replacement reminder.		Low voltage, the display flashes "bt-lo" to remind to replace the battery with a new one, the warning icon will disappear after

			the battery is replaced.
8	Number of engine starts.		Records the number of engine starts.
9	Initial time settings. Settings can be made during the first hours of operation.		Use the M and S buttons to set an initial working time.
10	Stopping the tachometer.		The tachometer stops automatically in 5 minutes. The user can stop the tachometer by simultaneously pressing the M and S buttons.



10. MAINTENANCE

Before cleaning, inspecting or repairing your brushcutter, make sure the engine has stopped and is cool. Disconnect the spark plug to prevent accidental starting.

The user can only carry out maintenance and service interventions that are described in this manual. More complex interventions are carried out in an authorized service workshop.

To be able to sharpen the blade, as well as for other interventions, it is advisable to go to an authorized Ruris service.

Certain parts of the transmission work with Vaseline. It is necessary to top up with Vaseline and check the reducer head. The amount of Vaseline in the reducer head must be checked before each use.

If the blade does not cut properly, it can be sharpened or eventually replaced.

Air filter maintenance is done before each use. Open the air filter cover, remove the filter element and wash it with warm water and detergent. After it dries completely, it is mounted in place.

CAREFUL! No petroleum products are used to clean the filter. The damaged air filter must be replaced, otherwise the dust and impurities that can enter the carburetor and the engine unit, lead to their damage.

Always after running-in and post-warranty use only RURIS 2TT-MAX oil or an API classification oil: TC or higher

For any problems or misunderstandings on how to work with the brushcutter, contact the authorized RURIS distributor.

If you do not work with the brushcutter for more than 2 weeks you will have to empty the gas tank and start the brushcutter to consume the fuel from the carburetor. The next time you use it, you must fill it with a new mixture specified in the user manual.

10.1.1 MAINTENANCE TABLE

Maintenance device and Name of the operation				The term of execution of the maintenance operation					
Term		Running-in period		After running-in period					
Device	Operation	At 3 hours	Before each working period	5	20	45	50	100	Minimum once a year
Engine	Carburetor adjustments						y		
Air filter	Cleaning		x	x					
	Replacement					x			
Spark plug	Cleaning, Control	x							
	Replacement						x		x
Cooling	Cleaning		x						
Space of Combustion	Cleaning							y	
Carburetor	Cleaning							y	y
Gear (reducer)	Change vaseline or filling				x				x
Fuel filter	Replacement			At 25 hours					

x-user

y-authorized service

11. STORAGE OF THE BRUSHCUTTER

If you do not use the brushcutter for a longer time (over a week), proceed as follows:

- Clean the brushcutter
- Empty the fuel from the tank.
- Start the brushcutter and let it run until the fuel in the carburetor is finished and the brushcutter stops. This operation is necessary to prevent the gasoline from evaporating, which can cause the carburetor hole to become clogged by depositing the remaining oil.
- Store in a dry place out of the reach of children.
- The brushcutter should be stored in a dry, roofed place and protected from moisture.
- Lubricate all active metal parts with Vaseline.
- Do not store the brushcutter near flammable areas or near exits.

When you want to move the brushcutter over short or long distances, it is done with the engine off.

12. DECLARATIONS OF CONFORMITY

DECLARATION OF CONFORMITY CE



Producer: SC RURIS IMPEX SRL

Blvd. Decebal, no. 111, Administrative Building, Craiova, Dolj, Romania

Phone. 0351 464 632, www.ruris.ro, info@ruris.ro

Authorized representative: Eng. Stroe Marius Catalin – General Manager

Authorized person for the technical file: Eng. Florea Nicolae – Production Design Manager

Product description: BRUSHCUTTER performs mowing operations, the basic machine being the energy component and the mowing table with cutting blade and other accessories, the actual mowing and working equipment. The machine can also be used as a multifunctional aggregate.

Product: BRUSHCUTTER

Model	Type	Serial no	power max. motor	Working width
Ruris	RR240 BRAVO	xx RR240 0001 to xx RR240 9999	1 hp	255 mm
Ruris	RR241 BRAVO	xx RR241 0001 to xx RR241 9999	1 hp	255 mm
Ruris	RR242 BRAVO	xx RR242 0001 to xx RR242 9999	1 hp	255 mm

(where xx represents the last two digits of the year of manufacture)

Engine : thermal, on unleaded gasoline, 2 strokes

Start : manual

We, SC RURIS IMPEX SRL Craiova, manufacturer, in accordance with HG 1029/2008 - regarding the conditions for the introduction of cars on the market, **Directive 2006/42/EC - cars; safety and security requirements** , Standard EN ISO 12100:2010 – Machinery. Security, **EU Regulation 2016/1628 (amended by EU Regulation 2018/989) - the establishment of measures to limit gaseous emissions and polluting particles from engines** and HG 467/2018 regarding the application measures of the mentioned Regulation, we have certified the conformity of the product with the specified standards and we declare that it complies with the main safety and security requirements.

The undersigned Stroe Catalin, the manufacturer's representative, declares on his own responsibility that the product is in accordance with the following European standards and directives:

- **EN ISO 12100/2010/ SR EN ISO 12100: 2011** - Machine safety. Basic concepts, general design principles. Basic terminology, methodology. Technical principles
- **SR EN 12733: 2019/ EN 12733: 2018** - Agricultural and forestry machines. Brushcutters with pedestrian operator. Security
- **SR EN ISO 13857: 2020/ EN ISO 13857:2019** - Forestry machinery -- Mowers and portable lawnmowers -- Cutting device protection dimensions
- **EN ISO 22867: 2021** - Forestry and gardening machinery - Vibration test code for hand-held portable machines with internal combustion engine - Vibration at handles
- **EN ISO 22868: 2021-** Forestry and gardening machinery - Noise test code for hand-held internal combustion engine machines
- **SR EN ISO 3744: 2011 / EN ISO 3744:2011** - Forestry machines and machines for gardening. Acoustic test code for cars equipped with an internal combustion engine.

- **SR EN 14930+A 1: 2009/ EN 14930:2007+A1:2009** - Agricultural and forestry machines and machines for gardening. Hand-held cars with a pedestrian driver. Determination of the risk of contact with hot surfaces
- **SR EN ISO 11806-1 : 2022/ EN 11806-1:2022** – Agricultural and forestry machines. Safety requirements and tests for portable devices for clearing bushes and cutting grass powered by an internal combustion engine
- **SR EN ISO 14982: 2009 / EN 14982:2009** – Agricultural and forestry machines. Electromagnetic compatibility.
- **SR EN IEC 61000-6- 1: 2019 / EN 61000-6-1 :2019** – Electromagnetic compatibility general standards Immunity for residential, commercial and lightly industrialized environments
- **SR EN 55014-1 : 2017** - Electromagnetic compatibility. Requirements for household appliances, power tools and similar appliances. Part 1: Issue
- **SR EN 55014-2 : 2015** – Electromagnetic compatibility. Requirements for household appliances, power tools and similar appliances. Part 2: Immunity. Product family standard e
 - **Directive 2000/14/EC** (amended by Directive 2005/88/EC) – Noise emissions in the outdoor environment
 - **Directive 2006/42/EC** - regarding machines - placing machines on the market
 - **Direction 2014/30/EU** - on electromagnetic compatibility (HG 487/2016 on electromagnetic compatibility, updated 2019);
 - **EU Regulation 2016/1628 (amended by EU Regulation 2018/989)** - establishing measures to limit gaseous emissions and polluting particles from engines

Other Standards or specifications used:

- **SR EN ISO 9001** - Quality Management System
- **SR EN ISO 14001** - Environmental Management System
- **SR ISO 45001: 2018** - Occupational Health and Safety Management System.

MARKING AND LABELING OF ENGINES

Spark ignition gasoline engines received and used on RURIS equipment and machines, according to **EU Regulation 2016/1628 (amended by EU Regulation 2018/989)** and HG 467/2018 are marked with:

- Engine identification number – unique number

Model	Type	Euro no	Type	Engine concept	Manufacturer's brand and name
Ruris	RR270	e13*2016/1628*2021/1068SHA1/P*0508*01	1E33F-3	Khumma	ZZT CO LTD.

Ruris	RR360	e13*2016/1628*2021/1068SHA1/P*0508*01	1E33F-3	Khumma	ZZT CO LTD.
Ruris	RR400	e13*2016/1628*2021/1068SHA1/P*0508*01	1E33F-3	Khumma	ZZT CO LTD.

Note: the technical documentation is owned by the manufacturer.

Clarification: This declaration is in accordance with the original.

Validity period : 10 years from the date of approval.

Place and date of issue: **Craiova, 26.05.2022**

Year of application of the CE marking : **2022**

No. record: **437/26.05.2021**

Authorized person and signature:

Eng. Stroe Marius Catalin

General Manager of

SC RURIS IMPEX SRL



DECLARATION OF CONFORMITY EC

Producer: SC RURIS IMPEX SRL

Blvd. Decebal, no. 111, Administrative Building, Craiova, Dolj, Romania

Phone. 0351 464 632, www.ruris.ro, info@ruris.ro

Authorized representative: Eng. Stroe Marius Catalin – General Manager

Authorized person for the technical file: Eng. Florea Nicolae – Production Design Manager

Product description: BRUSHCUTTER performs mowing operations, the basic machine being the energy component and the mowing table with cutting blade and other accessories, the

actual mowing and working equipment. The machine can also be used as a multifunctional aggregate.

Product: BRUSHCUTTER

Model	Type	Measured sound power level	Guaranteed sound power level	Certification	Report no
Ruris	RR240 BRAVO	105.2dB	111 dB	INTERTEK	210100397SHA-001 Amd1
Ruris	RR241 BRAVO	105.2dB	111 dB	INTERTEK	210100397SHA-001 Amd1
Ruris	RR242 BRAVO	105.2dB	111 dB	INTERTEK	210100397SHA-001 Amd1

(where xx represents the last two digits of the year of manufacture)

Engine : thermal, on unleaded gasoline, 2 strokes

Start : manual

The **acoustic power level** is certified in accordance with the provisions of Directive 2000/14/CE amended by Directive 2005/88/CE and SR EN ISO 3744: 2011

We, SC RURIS IMPEX SRL Craiova as a manufacturer, in accordance with Directive 2000/14/EC (amended by Directive 2005/88/EC), HG 1756/2006 - on limiting the level of noise emissions in the environment produced by equipment intended for use outside the buildings, we have verified and certified the conformity of the product with the specified standards and declare that it complies with the main requirements.

The undersigned Stroe Catalin, the manufacturer's representative, declares on his own responsibility that the product is in accordance with the following European standards and directives:

- **Directive 2000/14/EC (amended by Directive 2005/88/EC)** – Noise emissions in the outdoor environment
- **SR EN ISO 3744:2011** - Acoustics. Determination of sound power levels emitted by noise sources using sound pressure

- **EN ISO 22868: 2021-** Forestry and gardening machinery - Noise test code for hand-held internal combustion engine machines
- **Directive 2006/42/EC** - regarding machines - placing machines on the market
- **Directive 2014/30/EU** on electromagnetic compatibility (HG 487/2016 on electromagnetic compatibility, updated 2019);
- **EU Regulation 2016/1628** (amended by EU Regulation 2018/989) - establishing measures to limit gaseous emissions and polluting particles from engines

Other Standards or specifications used:

- **SR EN ISO 9001** - Quality Management System
- **SR EN ISO 14001** - Environmental Management System
- **SR ISO 45001: 2018** - Occupational Health and Safety Management System.

Note: the technical documentation is owned by the manufacturer.

Clarification: This declaration is in accordance with the original.

Validity period : 10 years from the date of approval.

Place and date of issue: **Craiova, 26.05.2022**

Year of application of the CE marking : **2022**

No. record: **438/26.05.2021**

Authorized person and signature:

Eng. Stroe Marius Catalin

General Manager of
SC RURIS IMPEX SRL

