

Translation of the original Operating Instructions

Remote-controlled High Grass Rotary Mulcher agria 9600-112

9600 211, -221



Before commissioning please read the operating instructions and note the safety and warning information!



Operating Instructions No. 998 480GB 07.20



Nameplate

Please enter here:

Machine art. no.:
ID/machine no.:
Engine type:
Engine no.:
Date of purchase:

For nameplate see page 4, Fig. A/18

Petrol engine: For engine no. see page 75, fig. C/7, D/7

Please provide this information for each spare parts order, to prevent errors in delivery.

Only use genuine Agria spare parts!





























The technical data, illustrations and dimensions provided in these operating instructions are non-binding. No claims may be derived from them. We reserve the right to make improvements without amending this manual.

Scope of delivery (please check):

- Remote-controlled rotary mulcher
- Remote control including original operating instructions, rechargeable battery and carrying strap
- Spare battery and battery charger
- Original Operating Instructions
- Original engine operating instructions
- Machine identity card
(in envelope on the machine)

Please complete the machine identity card and return to Agria-Werke.

Symbols

	Warning symbol, reference to danger point		Attachment point for recovery, lashing, towing
	Attention		See separate engine operating instructions
	Important information		Operating instructions
	Machine stop		The information on the battery and in these operating instructions must be complied with.
	Engine start		Wear eye protection
	Engine stop		Wear protective gloves
	Engine idle speed n/min		No smoking!
	Engine oil		Fire, naked flame and smoking prohibited
	Engine oil level		Keep children away from acid, batteries and chargers
	Fuel		Warning of hot surfaces
	Fast		Explosive substances
	Slow		Do not dispose of as domestic waste
	Cutting height adjustment		Send to recycling facility for disposal
	Cutter on		
	Cutter off		

- **agri^a-Service** - = contact your agri^a service centre

Designation of parts Fig. A

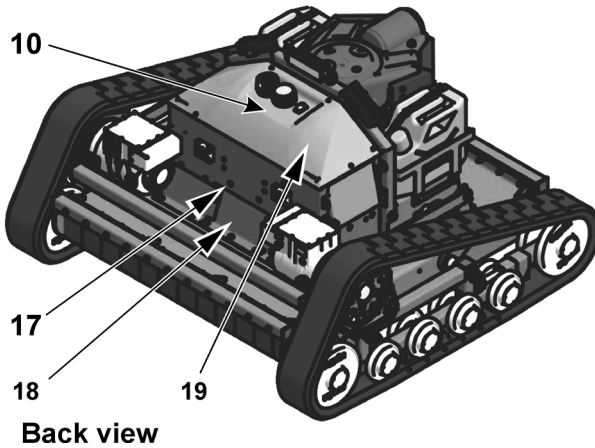
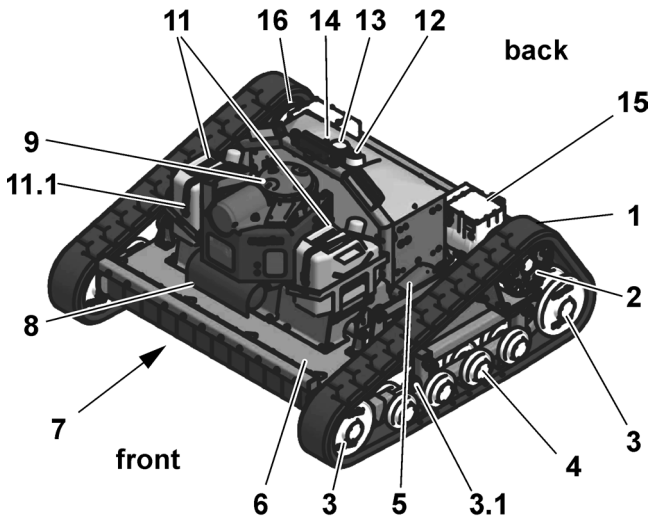


Fig. A:

- 1 Crawler track
- 2 Driving wheel
- 3 Guide wheel
- 3.1 Clamping nut
- 4 Travelling wheel
- 5 Linear drive for cutting height adjustment
- 6 Mowing deck
- 7 Mower coupling
- 8 Exhaust
- 9 Engine
- 10 Aerial
- 11 Removable fuel can
- 11.1 Tension strap for removable fuel can
- 12 EMERGENCY STOP switch
- 13 Signal light
- 14 Ignition switch
- 15 Electric motors
- 16 Transmission
- 17 Generator
- 18 Nameplate (ID/machine no.)
- 19 Starter battery

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1 Safety Instructions

Before commissioning, please read the operating instructions and note:

Warning symbol



This symbol has been used throughout these operating instructions to highlight all sections relevant to your safety. Also pass on all safety instructions to other users.

Intended use

The machine meets the current state of the art and complies with the applicable safety regulations at the time of marketing within the context of the approved use. In terms of design it was not possible to eliminate either the foreseeable misuse or the remaining risk without limiting the functionality in accordance with the regulations.

The **agri**a 9600 remote-controlled high grass rotary mulcher comes with a mulcher which is ideal for cutting and mulching grass, herbaceous vegetation and woody growth up to one year old (intended use).

The machine is intended for working on gradients of up to 55°.

Any other use is considered to be contrary to the intended purpose. The manufacturer is not liable for any damages resulting from such use and the risk is entirely the user's own.

Intended use also includes observance of the operating, servicing and maintenance conditions stipulated by the manufacturer.

Unauthorized changes to the machine, especially to the safety equipment, may lead to increased levels of danger, which would rule out any manufacturer liability for resulting damage.

Damages resulting from the use of unapproved batteries are expressly excluded from the warranty.

The machine must be operated as directed in the operating instructions. Other operators must given instruction if required.

Any improper use or execution of activities of the machine not described in these instructions constitutes unauthorized misuse and is not within the statutory limits for liability of the manufacturer.

Improper use of the machine can endanger people and may result in damage to the machine or other property of the operator. It can also impair the functionality of the machine.

Reasonable foreseeable misuse

Foreseeable misuse and improper handling include inter alia:

- Transport of people and objects
- Removal or manipulation of protective and safety devices
- Failure to observe maintenance intervals
- Failure to replace wearing parts
- Incorrectly executed maintenance or repair work
- Improper use.

General safety and accident prevention regulations

Basic rule:



Familiarize yourself with the entire contents of these operating instructions before commissioning the machine.

Be aware of the local conditions when using the machine and always distinguish between safe and unsafe use.

Please observe the relevant accident prevention regulations as well as the generally recognized rules pertaining to safety, occupational health and traffic laws.

The use of public transportation routes is subject to the Road Traffic Act in its latest version.

Please check the traffic and operating safety of the machine before each commissioning!

The machine may only be used, serviced and repaired by persons who are familiar with it and have been instructed in the hazards involved.

The appliance may only be used by responsible adults who know these operating instructions and are familiar with the appliance. It must not be used by inexperienced persons or children.



Never use the machine in the presence of children or animals.

Never let children play with the machine, it is not a toy.

Only use the machine when there is sufficient ambient light and never use it when under the influence of alcohol, medications or drugs.

The affixed warning and information signs provide important information for

safe operation; please observe them for your own safety!

The engine must be switched off for transport on motor vehicles or trailers outside the working area.

Be careful with rotating tools - keep a safe distance!

Be careful with coasting tools. Before you start working on them, wait until they have come to a complete stop!

There is a risk of crushing and shearing on power-operated parts!

Riding on the implement during operation is not permitted.

Match the operating speed to the conditions.

Do not adjust the setting of the engine speed governor. A high speed increases the risk of accidents.

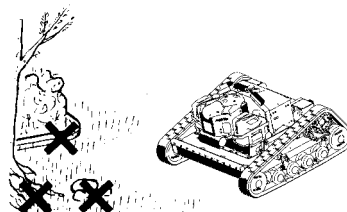
Working area and danger zone

The working area is the entire area to be worked on. The user is responsible for third parties in the working area.

Staying in the danger zone of the machine is not permitted (see page 36).



Keep children and third parties away from the working area of the machine. Stop the machine immediately if people approach the working area.



Before you start work, check the entire

working area for foreign objects (stones, cables and hoses etc.) and remove them. Parts catapulted by the machine blades can hit people and cause serious injuries.

Watch out for further foreign objects, e.g., stones, tree stumps, bottles etc. during operation and mowing and if necessary, remove them in good time.

For operation in enclosed areas, ensure that a safety distance is kept from edges to prevent damage to the machine.

Operation and protective devices

Before you start work

Familiarize yourself with the equipment and operating elements and their functions. Above all, learn how to turn the engine off quickly and safely in an emergency!

Ensure that all protective devices are mounted and properly adjusted!

Before each start-up check the functioning of all parts and protective devices. Replace any damaged parts - have this done by a specialist workshop if necessary. For your own safety, only use original Agria spare parts.

Suitable shoes must be worn depending on the type of ground surface (vegetation, humidity ...), so that the operator does not slip or fall.

Startup

Before you start the engine, read the engine instruction manual carefully and check that sufficient oil and petrol are present.

The remote control must be switched on and fully charged before use.

Do not start the engine in closed rooms, the exhaust fumes contain carbon monoxide, which is very toxic if inhaled!

Before starting the engine, set all operating elements to neutral or idle position.

Do not step in front of the machine to start the engine.

Do not use assist-starting liquids when using electrical assist-starting devices (jumper cable). Danger of explosion!

Operation

Only work in light conditions that guarantee an adequate view of both machine and working area.

Familiarize yourself with the appliance and remote control on flat, even surfaces first of all, and operate the control slowly. Ensure that you have plenty of room and operate the various functions such as forward/reverse, direction changes and ascending/descending slopes slowly.



Avoid dangerous spots and operation on wet or damp surfaces where water may collect unseen. Operation in rain or with wet grass will generally lead to an inferior mulching result due to clogging of the cuttings. Always bear in mind that the appliance is equipped with live electrical and electronic components.

The remote control has a range of around 300 m.

However, do not let the machine out of your sight when it is in operation. Your view of the machine can be concealed by banks, bushes, hills and the like. Losing visual contact with the machine can be very dangerous for people, objects and for the machine itself.



Keep a suitable distance from the machine during operation. Do not approach the running appliance and never place your hands or feet underneath the appliance or cutting mechanism.

Keep a proper footing and hold the remote control firmly in your hand, to avoid losing control of the appliance.

Set up the operating conditions of the machine so that the machine is not overloaded. Reduce the speed if necessary.

Never put yourself or the machine in a position where the machine could slip or tip over and run over you.



Always move the machine so that the front is not directed at people or objects. Take the rebound of cuttings or foreign objects into account when operating close to walls or obstacles.



STOP

Switch off the drive of the operating elements when crossing particularly gritty surfaces.



Wear safety goggles and a dust mask when working on dusty surfaces. Use protective gloves when carrying out work on the machine.



Always switch the engine off and wait for the blades to stop before approaching the machine. Never approach the machine from below on sloping terrain.



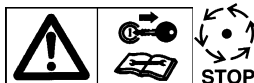
STOP

Before cleaning and other work on the machine switch off the engine, appliance

and remote control and wait for the blades to stop.

Important: Actuation of the EMERGENCY STOP switch on the remote control switches off all parts of the machine immediately.

The appliance also cuts out immediately if the distance between the remote control and the machine is too great or in the event of disturbances in the transmission frequency. Always keep your distance to the machine so that you can safely monitor, control and influence it at all times.



Clear blockages on the appliance using a stick or suitable tool after the machine and engine have come to a stop, the ignition switch is switched off and after removing the key or spark plug connector as well as switching off the remote control.



If the machine hits a foreign object, switch off the engine, appliance and remote control, wait for the blades to stop, check for damage and repair any damaged parts before switching the appliance on again.




Always keep the appliance in a clean, well-kept and properly maintained condition. This will maintain its efficiency and ensure safe operation. Keep the remote control clean and dry and avoid oil and grease residues.

Work with sharp blades. If the blades need to be replaced or sharpened, wear protective gloves to carry out the relevant activities.

Keep the safety signs and instruction manual in good condition; exchange or replace them if necessary.

Operation on slopes

 Do not work on slopes on which the appliance could tip over. This could cause serious damage to the appliance or other objects and injuries to bystanders.

Work across the slope along the contour line and in an upwards direction when turning, if possible.


Watch out for holes, furrows, elevations and other objects, to prevent slipping or tipping over.

Bear in mind that high grass can conceal obstacles, hazards and small animals.

Avoid working on wet ground in steep terrain. Special care should be taken in the area of ditches and river banks.

Additional safety instructions for children and animals

Children can easily mistake this appliance for a toy. Therefore, never leave the machine or the remote control unattended.

 Bear in mind that children and animals may appear in places where you don't expect them. Be particularly careful when approaching areas that are not open to view, bushes, trees or other objects, which could obstruct your view of children or animals.

Finishing work

Never leave the machine unsupervised while the engine is running.

Switch the engine off before leaving the machine. Then close the fuel tap(s) (if available).

Take care not to park the hot machine in the blazing sun.

To protect against unauthorized use, remove the keys from the remote control

and protect the machine against rolling away.

Maintenance

Only trained specialist personnel, who can carry out professional maintenance and repair, may carry out this work.

Do not carry out maintenance and cleaning with the engine running.

When working on the engine always remove the ignition key (if present) and also the spark plug connector in the case of petrol engines.

Protective devices and tools that are subject to wear and tear must be regularly inspected and replaced if necessary!

Damaged cutting tools must be replaced!

When replacing cutting tools use suitable tools and protective gloves.

Do not carry out repairs such as welding, grinding or sharpening, drilling etc. on structural, safety-relevant parts!

Disconnect the battery before commencing welding work.

During welding work, make sure that the electrical and electronic components of the machines are not influenced.

Keep the machine and attachments clean, to avoid the risk of fire.

Regularly check nuts and bolts for tightness and retighten if necessary.

After maintenance and cleaning, ensure that the protective devices are re-installed and properly adjusted!

Only use genuine Agria spare parts.

Carry out a functional and safety test after completing the work.

Storage

Never store the machine in rooms with open heating.

Do not park the machine in closed rooms with fuel left in the tank. Fuel vapours are hazardous.

Engine, fuel and oil

Do not run the engine in a closed room. There is a high risk of poisoning! Therefore always replace damaged exhaust parts.

Handle hot engine components with caution!

The silencer and other engine parts get very hot when the engine is running and are still hot directly after the engine is switched off. Keep a sufficient distance from hot surfaces and keep children away from the running engine.

Caution is needed when handling fuel. There is an increased risk of fire. Never handle fuel near open flames, ignitable sparks or hot engine parts.

Only replace cans with the engine switched off and cooled down.

Make sure fuel is of the specified quality.

When replacing cans, make sure that the fuel connections are refitted tightly to the can caps.

Never fill the fuel tank to the brim. Fuel expands when the temperature rises.

Always ensure that there is sufficient space in the fuel tank for the fuel to expand.

In the interests of safety, replace the fuel tank cap and other tank caps if damaged.

Store anti-corrosion agents and stabilizer fluids out of the reach of children. If sickness and vomiting occur, consult a doctor immediately. In the event of contact with the eyes rinse immediately with plenty of water. Avoid inhaling vapours.

Read and observe enclosed instructions!

Before disposing of opened and seemingly empty pressurized tins make sure they are completely empty. Empty them in a well-ventilated area safe from sparks and flames. Dispose of tins as hazardous waste if necessary.

When working with oil, fuel and grease wear suitable protective gloves and use skin protection agents if necessary.

Be careful when draining hot oil, danger of burns.

Make sure the oil used is of the specified quality. Store in approved containers only.

Dispose of oil, fuel, grease and filters separately and properly.

Electrical system and battery

When working on the electrical system always disconnect the battery (negative terminal).

Ensure that the battery is connected correctly - first the positive terminal and then the negative terminal! Reverse the sequence when disconnecting!

Only use specified fuses. If the rating of the fuses used is too high, the electrical system may be irreparably damaged - danger of fire!

Always cover the positive terminal with the specified cover or terminal cap.

Additional safety instructions for batteries

Never charge the appliance in the rain or in damp rooms. Remove the battery cable from the battery before all maintenance and cleaning. Only use the batteries specified in these instructions. The batteries must not be opened or damaged, or stored near heat sources.



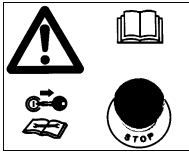
Any leaking substances are corrosive and can cause damage to eyes and skin. Do not inhale vapours or gases, as they may be toxic.

When handling batteries always take care that tools, rings, bracelets or keys do not inadvertently cause a short circuit across the terminals. This may result in burns.

Danger: The substances contained in batteries are electrically conductive and corrosive and damaging to eyes and skin. Wear safety goggles and protective clothing to protect your eyes and skin. Wash hands thoroughly after contact. After contact with the eyes, immediately rinse the eyes with plenty of water and consult a doctor.

ATTENTION: Only use genuine batteries. Other batteries can cause damage to the machine or personal injury. The batteries supplied with this machine are sealed and maintenance-free and can be overturned without any risk of fluid leakage. Several hours may be required to charge a completely discharged battery.

Description of warning and mandatory symbols

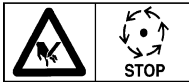


Before commissioning the machine, read and observe the operating instructions and safety instructions.

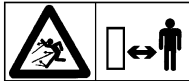
Before carrying out cleaning, maintenance or repair work switch off the engine, operate the EMERGENCY STOP switch and remove the key switch from the remote control.



Keep a safe distance from the blades when the engine is running!



Only touch machinery parts when they have come to a complete stop.



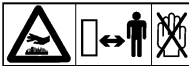
Be careful of catapulted parts, particularly on stony ground. Keep a safe distance when the engine is running.

Remove foreign objects from the working area.

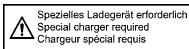


When working with the machine wear individual protective ear plugs

- Wear safety shoes.



Handle hot engine components with caution!



Special charger required.



Warning of hand injuries.



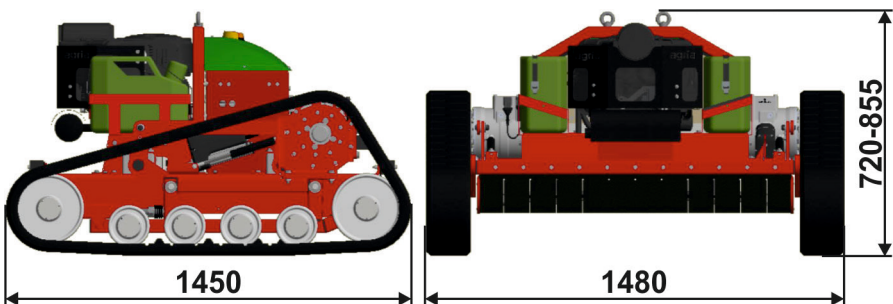
Do not spray with water!

2 Technical Data

Remote-controlled rotary mulcher

- Traction drive:**..... Infinitely variable electrical drive for crawler track 48 V
- Travel speeds:**..... Forward 0 - 10 km/h
Reverse 0 - 10 km/h
- Brake:**..... Electro-mechanical safety brake
- Ground pressure:**..... 181 g/cm² (18.1 kPa)
- Mulch drive:**..... V-belt with clutch
- Speed of blade shafts:**..... 3150 rpm
- Blade:**..... Sickle blade, 2 x ø 560 mm
- Area capacity:** approx. 5000 m²/h at 5 km/h
- Control:**..... Electrical, remote control with joystick
- Remote control range:**..... max. 300 m
- Normal working range of remote control:** max. 100 m
- Ambient temperature:**..... -5 to +40 °C
- Acoustic output level:** L_{WA} = 107.3 dB according to EN ISO 3744
- Sound pressure level:** . L_p = 78 dBA in idle mode at **1 m** distance, ear height **1.5 m**
- Sound pressure level:** L_p = 85 dBA when running at **3 m** distance
- Sound pressure level:** L_p = 85 dBA in mowing mode at **5 m** distance
- Bearing lubricant:** Permanent lubrication
- Weight: (with full fuel canister)** 653 kg
- Cutting height adjustment:** 50-185 mm
- Ground clearance:** 50-185 mm
- Cutting width:**..... 112 cm

Dimensions (mm):



Petrol engine Briggs & Stratton

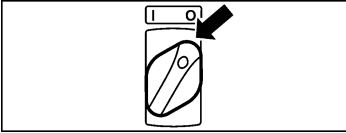
Engine:	Briggs & Stratton Model 44T8
Designation:	Series 8270
Design:	Air-cooled, 2-cylinder, 4-stroke, OHV petrol engine with electronic fuel control system and twin-chamber float-type carburettor
Bore x stroke:	79.2 x 73.4 mm
Displacement:	724 ccm
Power:	17.9 kW (24.3 PS) at 3600 rpm
Torque:	53.45 Nm at 2800 rpm
Sparking plug:	Champion XC92YC Electrode gap: 0.76 mm
Ignition:	Electronic magneto ignition, contactless, air gap 0.20 - 0.30 mm, radio-interference-suppressed to VDE 0879
Valve play: (with cold engine)	Inlet and outlet 0.10 ... 0.15 mm
Starting device:	Electric starter 12 V
Generator:	16 A
Battery:	12 V 72 Wh
Fuel:	Commercially available car petrol, Octane rating see engine operating instructions
Fuel consumption:	313 g/kWh
Fuel can capacity:	2 x 10.0 l
Air filter:	Cyclone air filter system with cartridge and foam pre-filter
Operating speed:	3600 rpm
Idle speed:	1800 rpm
Lubrication:	Forced-feed circulation lubrication
Engine oil:	Multigrade oil, filling quantity: 1.9 l at ambient temperature -15 ... +45 °C: SAE 10W-40, API classification SF, SG, SH, SJ or higher

Petrol engine Kawasaki

Engine:	Kawasaki
Designation:	FS730V-EFI
Design:	Air-cooled, 2-cylinder, 4-stroke, OHV petrol engine with electronic fuel injection
Bore x stroke:	78 x 76 mm
Displacement:	726 cc
Power:	17.7 kW (24.0 PS) at 3600 rpm
Torque:	53.4 Nm at 2400 rpm
Sparking plug:	NGK BPR4ES Electrode gap: 0.75 mm
Ignition:	electronic, radio-interference-suppressed to VDE 0879
Valve play: (with cold engine)	Inlet and outlet 0.10 ... 0.15 mm
Starting device:	Electric starter 12 V
Generator:	16 A
Battery:	12 V 72 Wh
Fuel:	Commercially available car petrol, Octane rating see engine operating instructions
Fuel consumption:	322 g/kWh
Fuel can capacity:	2 x 10.0 l
Air filter:	Double element air filter with cartridge and foam pre-filter
Operating speed:	3600 rpm
Idle speed:	1800 rpm
Lubrication:	Forced-feed circulation lubrication
Engine oil:	Multigrade oil, Filling quantity: 1.9 l without oil filter change 2.1l with oil filter change at ambient temperature -10 ... +45 °C: SAE 10W-40, API classification SI, SJ

3 Devices and Operating Elements

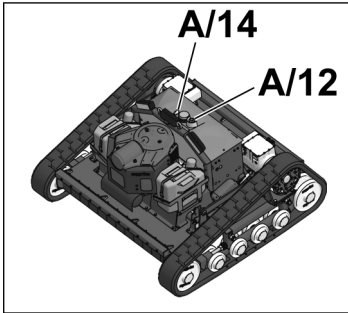
Preparation of the machine



- Remove the machine from the packaging.
- Packaging should be recycled in an environmentally friendly manner.
- Make sure that the machine is switched off with the ignition switch on the machine (A/14) in position O.

Basic functioning of the system

Machine



The complete unit comprises two main components: the machine for mulching and the radio remote control.

The machine is intended for mulching grass, herbaceous vegetation, and woody growth with a diameter of 2.5 cm and maximally one year old.

The machine has a petrol engine, which drives the generator and the mulching device. The generator supplies the electric motors which drive the crawler tracks.

The control unit and the radio receiver are located in a covered electric box.

The machine is equipped with an EMERGENCY STOP switch (A/12). The ignition switch (A/14) is also located on the machine.

Remote control



All other commands are issued via the remote control transmitter during normal operation. The engine speed and the cutting height adjustment can be preset on the remote control, even while the engine is off.

During operation the travel speed, cutting height, engine speed and the mulch drive clutch are controlled via the remote control.

An EMERGENCY STOP switch is also installed on the remote control (B/11).

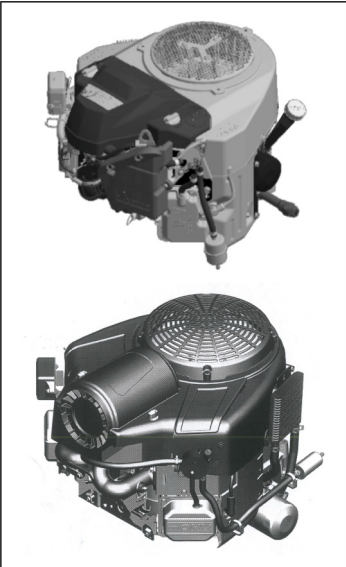
The appliance uses the frequencies approved in the country of use.

The range of the remote control is around 300 m maximum with optimal conditions such as battery level, obstacles in the radio link, disturbances and interference from the environment etc.

The usual working range of the remote control is approx. 100 m, depending on the conditions.

In the interests of safety the remote control is set so that the engine is switched off as soon as the machine leaves the range. This distance may therefore vary with different conditions.


Petrol engine



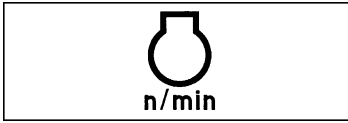
The **four-stroke petrol engine** is to be used with standard petrol (see chapter Startup, page 35).

During the first 20 hours of operation (running-in period) do not use the engine at full power.

The rule of never using the engine at a higher speed than necessary for the work in hand applies even after the **running-in period**.

 High speeds are detrimental to all engines and significantly reduce their service life. This especially applies for no-load operation! Over-revolving the engine (letting it roar) can result in immediate damage.

Idle speed



Always ensure that the engine idle speed is adjusted correctly. When idle speed is selected with the remote control, the engine should run at the recommended speed, so that the machine can be easily moved with the electric gear motors without mulching.



If the pre-set idle speed is not reached, the electronics of the traction drive control unit switches off.

For example, switching on the mulch drive or when running too fast through cuttings that are too high may lead to reduced speed. This reduced speed switches off when the speed of the traction drive control unit is too low.

A respective **complete restart of the remote control and the machine** is necessary here.

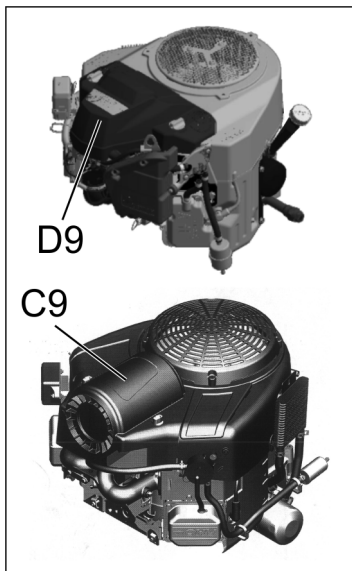
Ignition system

The petrol engine has a contactless electronic ignition system. We recommend that any necessary inspections are carried out by a professional.

Cooling

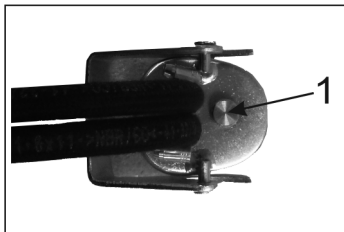
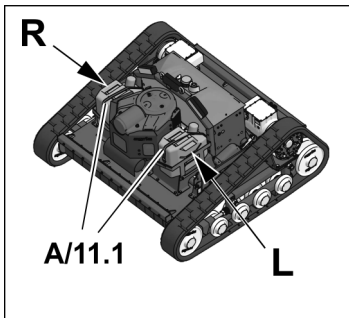
The engine is fan-cooled. Always keep the fan grille (C/1, D/1) on the engine free from cuttings and dirt.

Air filter



The air filter (C/9, D/9) cleans the incoming air. A clogged filter will reduce the engine output.

Removable fuel can



i Change the can only on a level ground. Always ensure that a can is closed (even when empty) when you transport it.

As viewed in the direction of travel, first the right can is emptied (R) and then the left one (L).

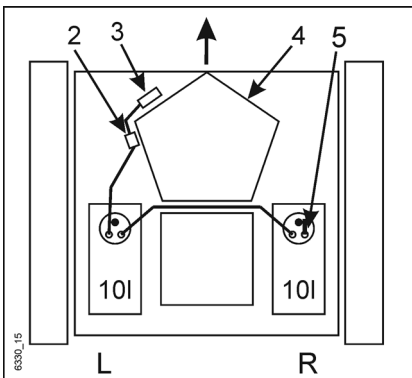
i Ensure for the correct seating of the seals. Always keep the venting screws (1) on the can sets closed.

The ventilation is only carried out via the right can.

If only the left can is emptied, this indicates that the fuel system has a leak.

After changing the can, route the fuel lines back into an area that is protected against foreign objects. In doing so, avoid chafe points on the fuel hoses.

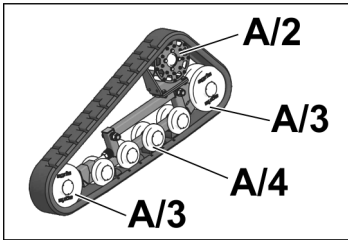
When moving the machine, especially during transport, the canister must always be secured with the tension strap (A/11.1) against unintentional movements.



Only use genuine agria 10 l canisters!
At high ambient temperatures, the canisters may only be filled up to three quarters!

- (2) Fuel filter
- (3) Fuel pump
- (4) Petrol engine
- (5) Bleeding hose

Traction drive



Crawler drives

The machine is driven by crawler drives. The crawler tracks run on the drive sprockets (A/2), guide wheels (A/3), and travelling wheels (A/4). The crawler tracks are tensioned with the guide wheels. The crawler track tension is adjusted with the tightening screws on the adjustable mountings of the guide wheels.

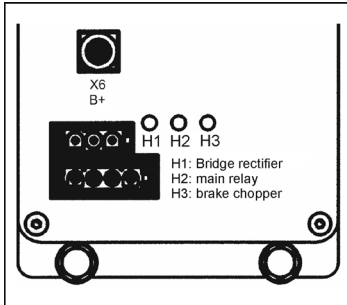
Transmission and electric motors

The drive wheels (A/2) of the crawler drives are located on the transmission shafts (A/16). The transmissions are driven by electric motors. The power for the electric motors is generated by the generator (A/17). The speed of the electric motors and the travel speed of the machine are controlled via the remote control.

Mower drive

The blades are driven by the petrol engine via an electromagnetic clutch with V-belt pulley and a V-belt. The electromagnetic clutch is located on the alternator shaft underneath the V-belt pulley for the petrol engine.

Power control module



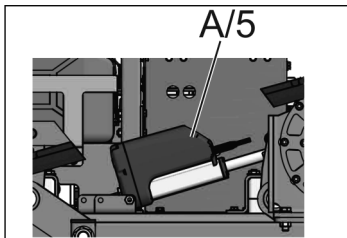
The power control module converts the excess generator energy of the electric motors into heat during overrun operation and thus prevents an overload of the electronic components.

H1 lights up (permanently when machine is switched on): A voltage of 48 V is applied to the generator - if not, check either the line to the generator or the generator.

H2 lights up (permanently when switched on): A voltage of 12 V is applied to the power electronics - if not, check the battery.

H3 lights up (only if the power control module is active): Voltage is applied to the power control module, for example when descending a slope without load.

Cutting height adjustment

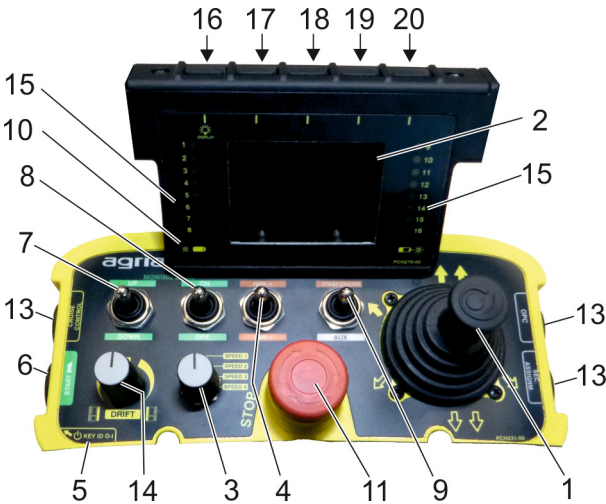


The cutting height can be adjusted from 50 to 200 mm. The values are entered on the remote control with the mowing deck up / down button (B/7), and the linear drive (A/5) moves the mowing deck accordingly.

⚠ Make sure that no objects (tools, wood, etc.) are located on the mowing deck during lifting, as this could cause damage to the machine, especially the electric motors.

Remote control

The machine is controlled via the remote control.



(1) **Joystick**

The travel direction and travel speed are controlled with the joystick.

(2) **Display**

The machine settings and the strength of the radio signal are shown on the display.

(3) **Travel speed range**

The machine's top speed is adjusted in four levels with the travel speed selector switch. Speed levels 1-2-3-4 correspond to 2.5-4-6-10 km/h. Levels 1, 2 and 3 are intended for working, level 4 for moving without mulching.

(4) **Engine speed**

The engine speed is adjusted from idle speed (min.) to operating speed (max.) with the 'rpm' switch.

(5) **Key switch**

The remote control is switched on and off with the key switch.

(6) **Release**

The green 'release' button activates radio contact between the remote control and the machine.

(7) **Mowing deck up/down**

The 'mowing deck' switch is used to adjust the cutting height.

(8) **Mowing drive on/off**

The mowing drive switch switches the mowing drive on and off via an electromagnetic clutch.

(9) **Engine on**

The petrol engine is started with the 'engine on' switch.

(10) **Green LED, radio connection**

Quick flashing of the LED indicates that the radio connection is interrupted or is being restored, slow flashing indicates that the radio connection is present.

(11) **EMERGENCY STOP switch**

When the EMERGENCY STOP switch is pressed, the petrol engine and the moving drive of the machine are switched off.

(12) **Red LED, functioning of the transmission unit and battery condition**

Illumination of the red LED indicates insufficient battery charging or another error within individual functions.

(13) These buttons are not assigned for using the rotary mulcher.

(14) **Drift**

With the help of drift it is possible to make one crawler belt run faster than the other. This facilitates driving straight lines on slopes.

(15) **Warning lights**

The warning lamps light up in case of errors.

(16) **Escape**

Backlight, is currently not used.

(17) **Menu**

Menu for changing sides.

(18) **"up"**

Moves the cursor upwards.

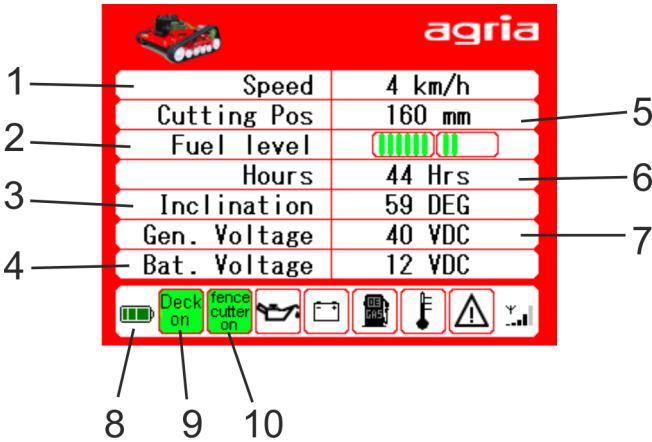
(19) **"down"**

Moves the cursor downwards.

(20) **Enter**

Moves/fixes cursor.

Display on remote control



The following machine states and settings are shown on the display:

- (1) Travel speed
- (2) Tank filling level
- (3) Slope
- (4) Battery voltage
- (5) Cutting height
- (6) Hours of operation counter
- (7) Generator voltage
- (8) State of charge of the battery in the remote control
- (9) Mowing drive on/off
- (10) Side mower on/off

Electrical system

The machine's electrical system controls the electrical drive system and the petrol engine by converting the operator's inputs on the remote control.

The machine's electrical system consists of the remote control receiver, the programmable logic control and the power electronics as well as relays and fuses.

The remote control receiver and the power electronics are located in the electrical box under the hood. Open the intermediate bottom of the electrical box to view the power electronics. (A/6).

Electro-mechanical safety brake

The machine is equipped with an electromechanical safety brake. The electromechanical safety brake is applied when the machine is at a standstill, and it prevents the machine from rolling on. Take additional safety measures, e.g. by using chocks, and do not leave the machine unattended.

If the machine is to be towed away for recovery, release the electromechanical safety brake. To release the electromechanical safety brake manually, push the release lever sideways, away from the brake, see page 44. In this case the petrol engine must not on any account be run or started.

Batteries




The machine's starter battery is located under the hood of the electrical box.

This 12V battery (A/19) for the starter is charged from the engine via a generator.

Connect the red battery cable to the positive terminal and the black one to the negative terminal.


The positive terminal (red cable) must be covered to prevent short circuit.

 **Short circuit and damage to the outer skin of the battery can cause rapid discharge and extreme heating of the battery!**

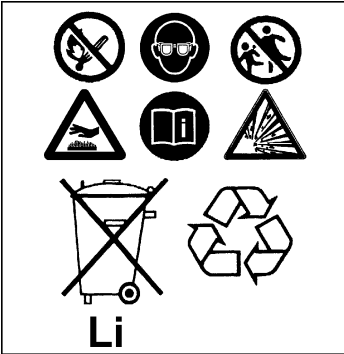
 **Only replace this battery with an original battery.**

The remote control is powered by a Li-Ion rechargeable battery. The charger as well as a spare rechargeable battery necessary for this are enclosed.

 **Only use original Agria or autec rechargeable batteries.**

 **An insufficient battery charge level leads to errors in the radio transmission.**

Instructions for correct conditioning of the rechargeable batteries for the remote control



1. To achieve the optimum autonomy values for the rechargeable batteries you should initially carry out three completely charge/discharge cycles.
2. Charge the rechargeable batteries again for at least 12 hours before first commissioning.
3. To preserve the conditioning state, charge the rechargeable batteries every two months, even if they have not been used.
4. Charge the rechargeable batteries in a dry, ventilated area.
Never charge the rechargeable batteries in proximity to moisture, heat sources, open flames or chemical products.
5. Do not allow rechargeable batteries to discharge completely before recharging if possible.
6. Store rechargeable batteries in frost-free conditions.

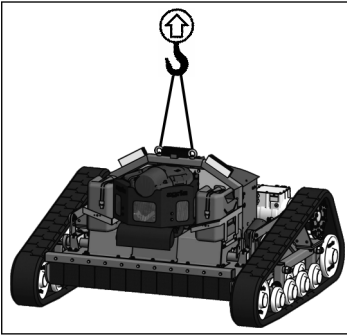
Rechargeable battery charger



Only charge the rechargeable batteries of the remote control using the charger provided.

The electrical cables of the charger must be intact. Damaged cables must be replaced by a professional immediately.

Attachment points



Straps must be fastened to the attachment points for towing, recovery, securing for safe transport and loading the machine.

Lashing to other points may result in damage.

Check straps for damage and replace if necessary!

Do not use sharp-edged load carrying equipment (e.g. sharp-edged hooks, eyes etc.)!



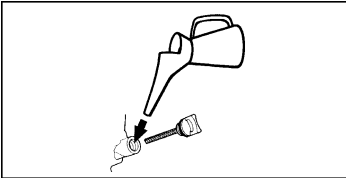
**Never walk or stand under suspended loads.
Danger to life!**

4 Commissioning and Operation

Commissioning

Please note that the engine's service life and operational reliability are heavily dependent on the running-in time. Always allow a cold engine to warm up for a few minutes first of all and do not run up to full power immediately.

During the first **20** hours of operation (running-in period) do not use the engine at full power.



Attention: The engine is not filled up with engine oil for transport reasons!

Fill the engine with engine oil before first commissioning, but do not go beyond the maximum level!



Engine operating instructions

To avoid starting problems, the fuel can must be completely full for first commissioning and after prolonged periods of non-operation.

This engine runs smoothly with conventional **unleaded regular and premium petrol (also E10)** as well as **Super plus**.

Do not add oil to petrol.

Only use fresh, clean fuel (no older than 3 months) and only use approved fuel cans available from specialist dealers. Do not use rusted metal cans or plastic containers which are not fuel-resistant.



Always remember good filter care and clean fuel. Use only branded petrol.



Caution is needed when handling fuel.



Petrol is highly flammable and explosive under certain conditions!



Do not refuel in closed rooms.



Never refuel near naked flames, ignitable sparks or hot engine parts.



No smoking when refueling!



To fill the fuel can, always remove from the machine. Only change cans with the engine switched off and cooled down.

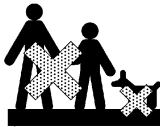


Always observe the information for the removable fuel cans on page 24.

Danger zone

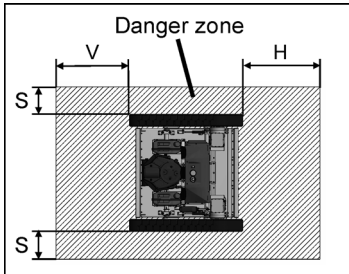


Staying in the danger zone of the machine during startup and operation is not permitted.



If the operator notices that people or animals are in the working area, the machine must be switched off immediately and not restarted until this area is clear.

The user is responsible for third parties in the working area (entire area to be worked on).



Danger zone

Remote-controlled high grass rotary mulcher

V	H	S
4 m	4 m	1 m



Never approach the machine from below on sloping terrain.

Starting the appliance - basics

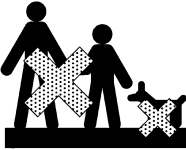


Check tightness of nuts and bolts, especially the blade fixing screws - see page 55.

< 3 m



The acoustic pressure level is less than 85 dB(A) from a distance of more than 3 m. If you are regularly closer to the machine than 3 m you should use protective ear plugs.



Before starting the machine, make sure that no children or animals are in the working area.



The working area must also be free of objects which could come into contact with the blades or other rotating parts. These could cause serious personal injuries and damage to property or to the appliance itself.

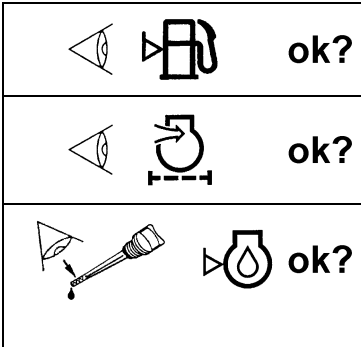
Check that the safety devices provided are functioning properly before commencing work.


- Interference could be caused by third parties in the vicinity using the same frequency. Make sure that no active transmitters in the same frequency band are present in your vicinity.
- Make sure that the battery of the remote control is fully charged.
- Make sure that the fan filter is free of cuttings or other soiling.
- Before starting the blade drive make sure that the blades can rotate freely. If the rotation of the blades is impeded (by foreign bodies), the blade drive could be damaged.





Read the operating instructions of the remote control carefully before use.

Before starting the engine




→  Engine operating instructions


→  Engine operating instructions


→  Engine operating instructions

or page 47

→  Engine operating instructions

or page 47

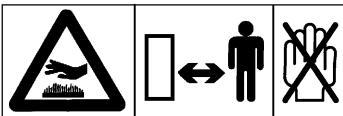
 **Only put the machine into operation after all protective devices have been mounted, are functional and in protection position.**

 **Never start or allow the engine to run in enclosed rooms or rooms that are not ventilated.**




It is essential to ensure for sufficient ventilation and a quick extraction of the exhaust fumes. The exhaust fumes contain carbon monoxide that is highly toxic when inhaled.

Handle hot engine components with caution!



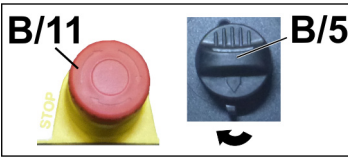
The silencer and other engine parts get very hot when the engine is running and are still hot directly after the engine is switched off. Keep a sufficient distance from hot surfaces and keep children away from the running engine.

 **When the petrol engine is running, do not touch or remove the ignition cable or spark plug connector.**

Starting the petrol engine



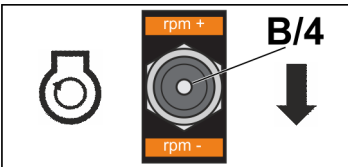
1 Release the EMERGENCY STOP switch (A/12) on the machine (turn it to the left), and switch on the machine ignition with the ignition switch (A/14) - beep sound.



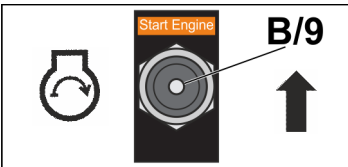
② Release the EMERGENCY STOP switch (B/11) on the remote control (turn it to the right) and switch on the remote control with the key switch (B/5) on the left-hand side of the remote control (turn key to the right).



③ Press and hold the green release button (B/6) on the left-hand side of the remote control for 2 seconds. The remote control LED (B/10) flashes quickly at first, and then slowly when the radio connection is established. The display starts up on the display screen. The strength of the radio signal is indicated by the bar at the bottom right of the display.



④ Decrease the engine speed with the 'rpm' switch (B/4) until the servomotor for throttle regulation has reduced to idle speed. As soon as you can hear that the engine speed is no longer changing, idle mode is reached.



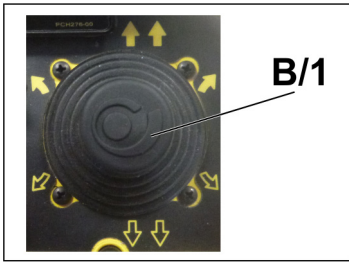
⑤ Press the engine start switch (B/9) on the remote control upwards until the engine starts.

i If the pre-set idle speed is not reached, the electronics of the traction drive control unit switches off.

For example, switching on the mulch drive or when running too fast through cuttings that are too high may lead to reduced speed. This reduced speed switches off when the speed of the traction drive control unit is too low.

A respective **complete restart of the remote control and the machine** is necessary here.

Working with the machine



① Move the machine to the working area and stop with the mowing deck over a clear space.

Use the joystick (B/1) to adjust the forward speed of the machine and steer it.

From the perspective of the operator standing behind the machine in the direction of travel, slowly move the joystick:

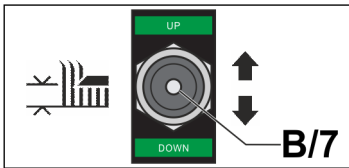
- up = forward
- down = reverse
- to the left = left, - to the right = right.

The machine's speed depends on the position of the joystick.

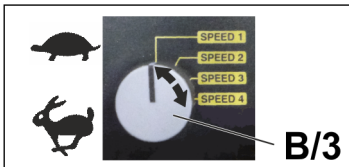
Use the joystick on the remote control carefully and avoid sudden changes of direction.



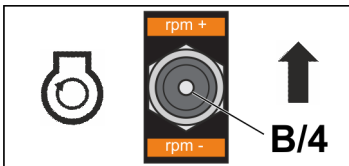
Move the machine slowly, so that you can become familiar with the machine and check that the commands are executed correctly. Note that the direction commands must be executed in reverse when driving backwards.



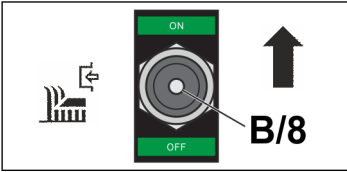
② Set the required cutting height with the mowing deck up / down switch (B/7). The cutting height is shown on the display (B/2). It can be changed during operation and also when the engine is off.



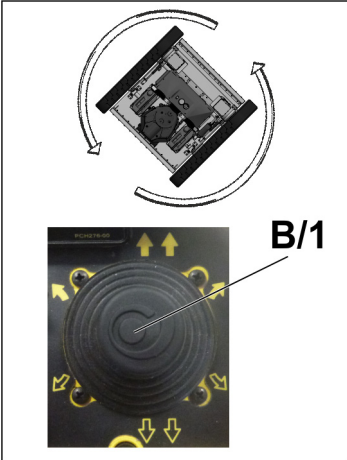
③ Select the travel speed range with the travel speed selector switch (B/3). Choose position 1 to 3 for mulching, depending on the vegetation. Only use position 4 to move the machine without mulching.



④ Increase the engine speed to **full throttle** with the rpm switch (B/4) (press + rpm).



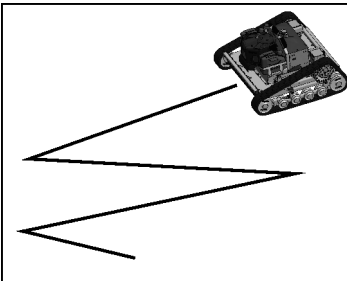
5 Switch on the mowing drive with the 'mowing drive' switch (B/8) and move to the area to be worked on.



The machine can be turned on the spot. This is done in zero-turn mode.

To switch to zero-turn mode, a direction (right or left) must be selected on the joystick B/1.

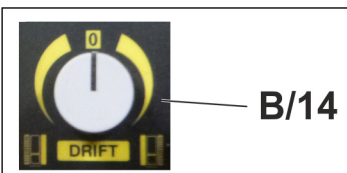
Zero-turn is only possible if the travel speed is minimal but not 0, i.e. after the joystick is moved fully to the right or left, it must also be moved slightly forward or back.



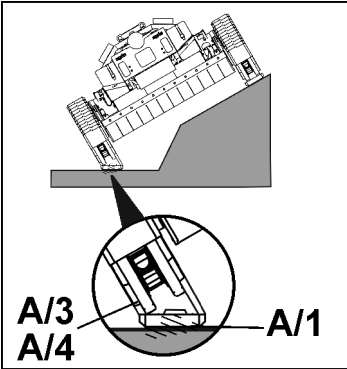
! To prevent undue damage to ground and vegetation, avoid abrupt steering manoeuvres.

Improve your skills in handling the machine on slopes with a smaller gradient first of all, and only tackle steeper slopes when you have more experience.

- Negotiate steeper slopes predominantly along the contour line (across the slope), so that a wide zig-zag line effectively results.
- You can work both forward and in reverse in contour line mode. As 180 °turns of the machine are not necessary, the area capacity increases significantly.



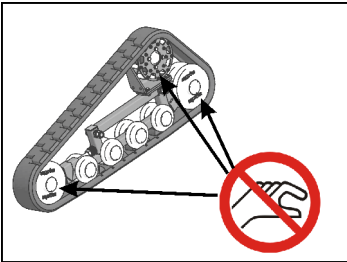
The drift is an adjustment of the crawler belt speed. One crawler belt is controlled so that it runs slower than the other. Drive along the slope and turn the control button on the remote control towards the side of the slope. If the machine travels a straight shift line on a slope at constant speed with the joystick in a straight position, the drift is correctly adjusted.



! Wherever possible avoid situations where, due to the terrain, not all wheels (A/3 and A/4) of the running gear are in contact with the crawler track (A/1), for example on embankments or when passing through ditches.

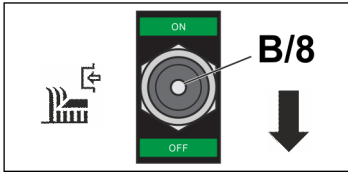
There is an increased risk that the machine may slip off the crawler tracks and the crawler tracks may jam on the machine.

As you can see opposite, such a situation always arises when the machine inclination and the contact area of a crawler track are at different angles.

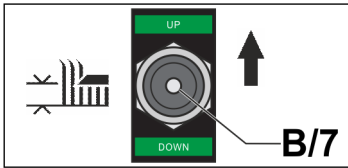


! Keep your hands away from the crawler track mechanisms while the machine is in operation.

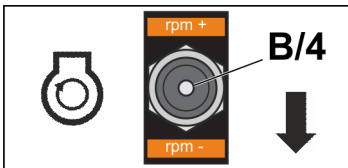
Stopping the machine



❶ Switch off the mowing drive with the mowing drive switch (B/8).



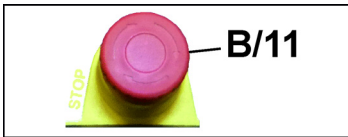
❷ Raise the mowing deck completely with the mowing deck switch (B/7).



❸ Before switching off the engine, decrease the engine to idle speed with the rpm switch (B/4).

Park the machine in a safe place.

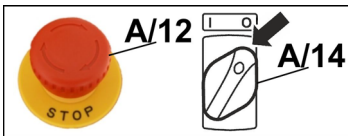
The engine can be switched off either on the machine or with the remote control.



Switching off the engine with the remote control:

The engine can only be switched off with the remote control by pressing the EMERGENCY STOP switch (B/11).

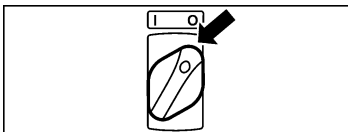
Wait until the engine has stopped.



Switching off the engine on the machine:

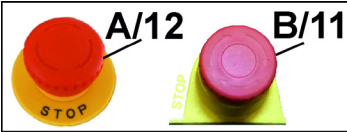
Either position the ignition switch (A/14) to "O" or press the EMERGENCY STOP switch (A/12).

Wait until the engine has stopped.



❶ Do not forget to switch off the ignition with the ignition switch (A/14), even if the engine has been switched off with the remote control, because the starter battery could be discharged.

The telemetry module (option) needs a few minutes to shut down. After that it puts itself into sleep mode; no further action is necessary.



Also operate the EMERGENCY STOP switches (A/12 and B/11) of the remote control and machine and leave them pressed down, as the batteries may gradually self-discharge under certain circumstances.



Pressing an EMERGENCY STOP switch (A/12 or B/11) in case of emergency causes the engine and the mulching drive to switch off immediately.

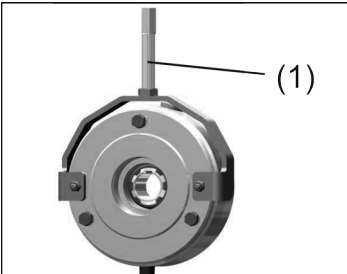


Attention: The braking distance of the machine depends on the ambient conditions. This is particularly important when you drive downhill.



First allow the engine to cool down before storing in closed rooms.

Moving the machine



If the machine must be moved for towing or recovery with the engine switched off, release the electromechanical safety brake.

To release the electromechanical safety brake manually, push the release lever (1) away in the direction of the electric motor.



Make sure that the petrol engine is turned off and is not started as long as the braking effect of the drive motors is disabled.

Also see Devices and Operating Elements page 31.

5 Maintenance and Repair



As well as observing the operating instructions valid for the machine, it is equally important to pay due attention to the following instructions on care and maintenance.

Larger maintenance and repair tasks may only be carried out by trained specialists who can carry out professional maintenance and repair.

You should only undertake smaller maintenance and repair tasks yourself if you have the relevant tools and training for machinery and combustion engines.

Only use genuine Agria spare parts.

Carry out a functional and safety test after completing the work.

Lubricants and anti-corrosive agents

Use the lubricant specified for the engine (see "Technical Data").

We recommend using **bio-anti-corrosive oil** to preserve machines and attachments (do not apply on painted covers). The oil can be brushed or sprayed on.

Bio-lubricants and bio-anti-corrosive agents are environmentally friendly, as they are quickly biodegradable.

By using bio-lubricants and bio-slushing oil you act environmentally responsible, protecting the environment and promoting the well-being of humans, animals and plants.



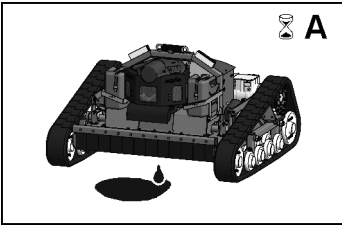
Ensure that the engine is switched off and the key is removed from the remote control prior to carrying out all service and maintenance work!



Wear protective gloves when working on the blades!

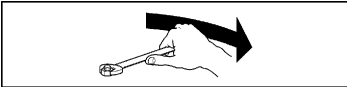
When working with oil, fuel and grease wear suitable protective gloves and use skin protection agents if necessary.

General



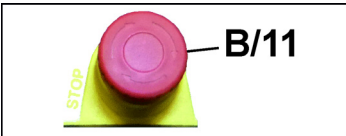
Before each start-up check for escaping fuel and oil and eliminate the cause.

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Regularly check nuts and bolts for tightness and retighten if necessary.

Check EMERGENCY STOP switches



Check EMERGENCY STOP switch on the remote control at each start-up

Switch on ignition and remote control. When you press the EMERGENCY STOP switch (B/11) on the remote control, the remote control must switch off and the green LED (B/10) will flash rapidly.



Check EMERGENCY STOP switch on the machine at each start-up

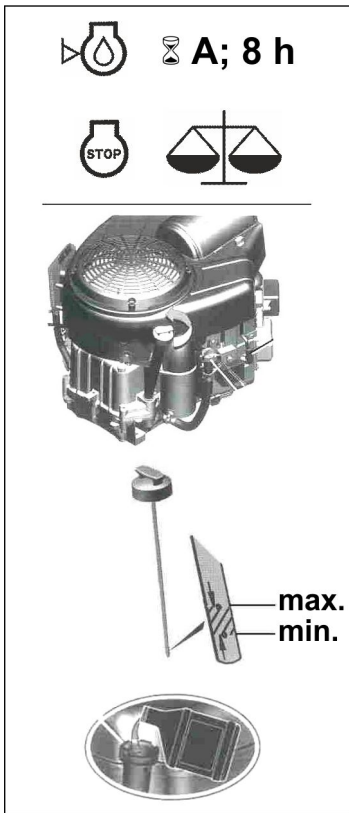
Switch on ignition and remote control. When you press the EMERGENCY STOP switch (A/12) on the machine, the remote control must switch off and the green LED (B/10) will flash rapidly.

! On no account continue working with the machine if the EMERGENCY STOP switches are not functioning correctly. In this case switch the ignition off and contact

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Petrol engine


Check engine oil level Briggs & Stratton Series 8270



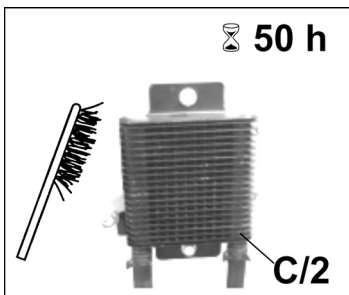
Before each start-up and after 8 hours of operation

- only with the engine switched off and on level ground

➔  Engine operating instructions

 Engine oil level below "min." and above "max." will result in engine malfunctions and even engine failure!

Clean oil cooler



Clean the cooling fins of the oil cooler (C/2) with a brush or compressed air every **50** hours of operation.

Change engine oil Briggs & Stratton Series 8270

(5 h); 50 h; J



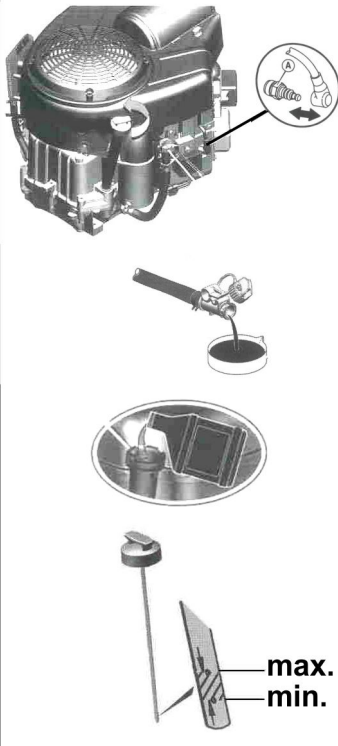
➔ Engine operating instructions

For the first time after **5** hours of operation, then after **50** hours of operation or **annually**, depending on which occurs first

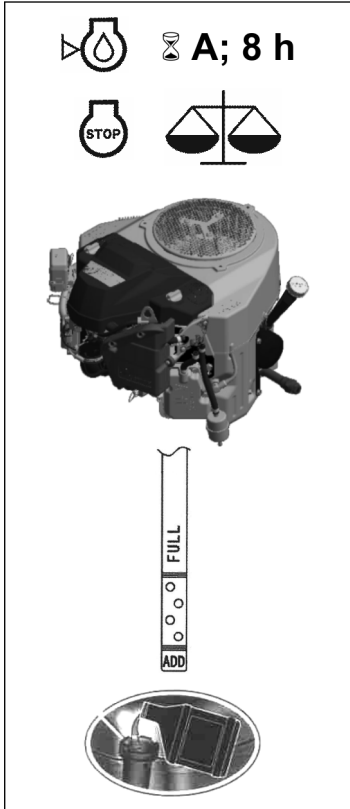
- while the engine is still warm, but not hot **danger of burns!**

- Clean oil filler nozzle (C/13, D/13) and surrounding area.
- Detach the oil drain hose from the engine side.
- Unscrew and remove the oil drain cap. Carefully lower the oil drain hose into an approved container and allow the oil to drain out.
- Fit the oil drain cap and secure the oil drain hose on the engine side.
- Ensure proper disposal of the old oil.
- Pour in fresh engine oil and check the engine oil level.
- Run the engine, check the oil level again and top up if necessary.

- For engine oil quality see "Technical Data" page 17.





Check engine oil level Kawasaki FS730V



Before each start-up and after 8 hours of operation

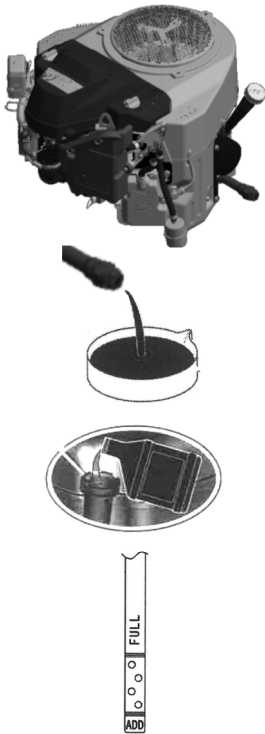
- only with the engine switched off and on level ground

➔  Engine operating instructions

 Engine oil level below "min." and above "max." will result in engine malfunctions and even engine failure!

Change engine oil Kawasaki FS730V

⌚ (8 h); 100 h; J



Engine operating instructions

For the first time after **8** hours of operation, then after **100** hours of operation or **annually**, depending on which occurs first

Always replace the oil filter together the engine oil every operating 200 hours.

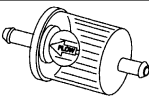
Change the engine oil while the engine is still warm, but not hot - **Danger of burns!**

- Clean oil filler nozzle (C/13, D/13) and surrounding area.
- Unscrew and remove the oil drain cap. Carefully lower the oil drain hose into an approved container and allow the oil to drain out.
- Fit the oil drain plug.
- Dispose of the used oil properly.
- Pour in fresh engine oil and check the engine oil level.
- The oil filling quantity is 2.1 l if the oil filter is replaced.
- The oil filling quantity is 1.8 l if the oil filter is not replaced.
- Run the engine, check the oil level again and top up if necessary.

- For engine oil quality see the page with "Technical Data" 17.

Fuel filter

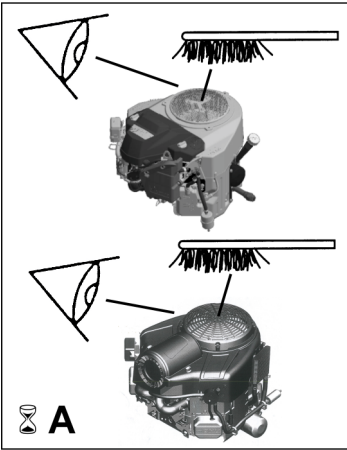
⌚ J



Replace the fuel filter (C/3, D/3) annually.

Note flow direction!

Fan grille



After long periods of operation the cooling system may become clogged with dirt or plant particles. Clean the fan grille (C/1, D/1) regularly to prevent overheating and engine damage. Check before each start-up!

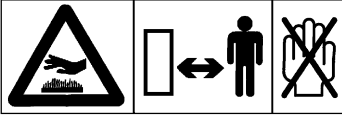
Air cooling system



- 1.) Clean rotating fan wheel at least every **50** hours of operation (sooner in case of heavy dust and plant debris accumulation); remove the fan housing to do this.
- 2.) Clean the interior cooling fins and surfaces at least every **100** hours of operation (sooner in case of heavy dust and plant debris accumulation).

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Exhaust system and speed governor



Regularly check the exhaust system (A/8), governor lever, linkage and governor springs for soiling and plant debris and clean with a brush or compressed air if necessary. **Danger of fire - due to dirty exhaust system!**

Check before each start-up.

Replace damaged exhaust parts.

The speed governor must be correctly adjusted in order to start, operate and stop the engine at the correct speed.

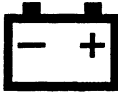
- agria-Service -

All further maintenance and care of the engine instructions



Engine operating

Battery



Check state of charge of the battery every 100 h

Make sure that the ignition is switched off and that no current consumers are running. Consumers that are not permanently disconnected will cause a gradual voltage drop.

Check the battery (A/19) with a voltage tester. The voltage must be above 12.4 V. If the voltage is too low, charge the battery and repeat the test.

If the battery does not retain sufficient charge although it is not used, it must be replaced.

Observe the instructions of the battery manufacturer!

Special charger required!

Charging:

Remove the battery from the machine, for this purpose, disconnect it starting at the negative terminal.

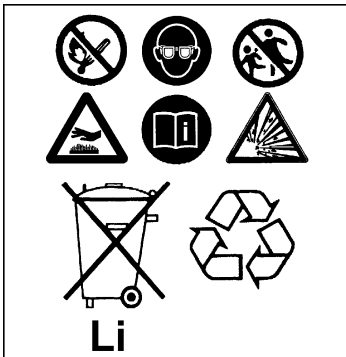
Connect the positive terminal of the battery to the positive output of the charger, and likewise for the negative connection.

Switch on the charger only after you have connected the battery.


Recommended charging current: 1/10 A of battery capacity Ah.

For recharging use a charger with a constant charging voltage of 14.4 V.

The battery is fully charged when the charging voltage has not increased in 2 hours.



Battery maintenance

- Keep the battery clean and dry.
- Only sweep the battery.
- Do not open the battery.
-  Never leave the battery discharged! Avoid sparks and open flames near batteries. Do not damage the housing! Only use specified fuses. Using incorrectly dimensioned fuses destroys the electrical system – **Risk of fire!**

Putting the battery out of service

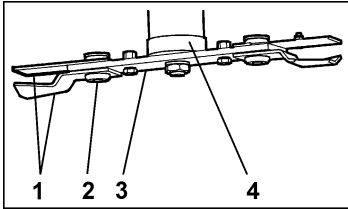
- Charge battery, store in a cool place and disconnect negative terminal from the machine.
- Regularly check state of charge and recharge if required.

Disposal

- Dispose of old batteries at the appropriate collection point (store and transport in a stable position to prevent damage to housing).
- Never dispose of batteries in domestic waste!

Machine

Blades



Check blades for wear and damage every 25 hours of operation

1. Move blades to the highest position of the cutting height adjustment. Switch engine off.
2. **Switch ignition off and remove the spark plug connector!**
3. Check the blades (1), retaining screws (2), blade carrier (3) and the blade shaft (4) for damage. You can rotate the blade shaft manually, so that you can check all blades.



Wear protective gloves!

4. Replace damaged blades.
The replacement of blades (1) should only be carried out by a specialist workshop. Contact - **agriA-Service** - if the blade shaft is damaged.

Blade replacement

If it is evident that the blades (1) are too worn for further use, they must be replaced.



Switch off the ignition and remove the spark plug connector!



Wear protective gloves!

Disassembly / assembly of the blade carrier (3) with wrench size 37.

To remove the blades, unscrew the retaining screw (2). Mount new blades.

After changing the blade, secure the screws with screw lock (e.g., Loctite 270).



Always replace blades on a blade carrier (3) in pairs - left and right simultaneously.

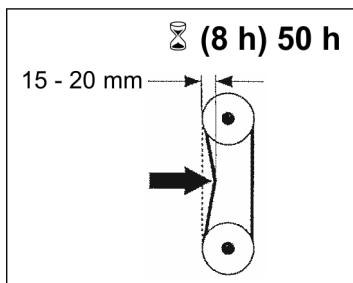
The arrangement of the blades must be as mounted in the original layout.

Check blade drive V-belt

Make sure that the ignition is switched off. The V-belt is located in the mowing deck and can be accessed by opening the covers under the fuel cans.



Check the V-belt tension after first putting into service after **8 hours of operation**, then after every **50 hours of operation**.

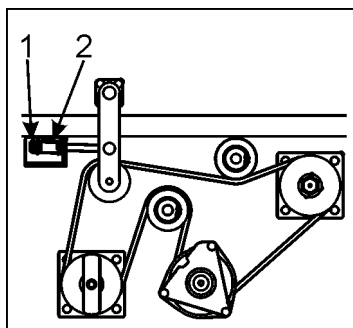


Correct V-belt tension:

The V-belt gives way by approximately 15 to 20 mm when you press your thumb on it.

Adjustment and belt replacement should be carried out by a specialist workshop or

- agria-Service -



To tension the V-belt, proceed as follows:

1. Ensure correct seating of the V-belt as shown in the figure.
2. Tighten the V-belt with tension nut (1) size 24.
3. Make sure that the tension spring (2) is under tension but not tightened on the block.

Check the V-belt for wear and damage.

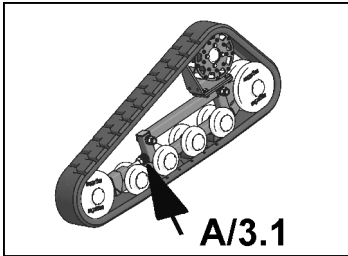
Replace the V-belt if it is damaged.

Replacement of the belt should only be carried out by a specialist workshop or **- agria-Service -**

Crawler tracks

Check crawler track tension each day

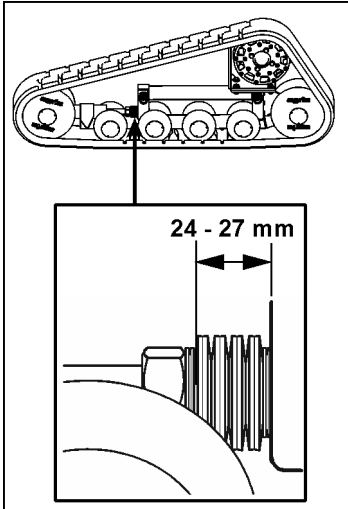
The crawler tracks must be firmly positioned on the wheels. They may need to be tensioned or loosened.



Setting the crawler track tension

Then set the crawler track tension using the clamping nut (A/3.1).

Use the open-ended spanner size 36.



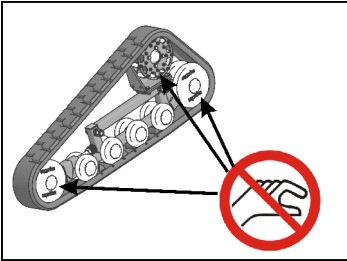
The tensioning of the crawler tracks must be set so that measured from the plate spring assembly a dimension of 24 – 27 mm is reached from the front to the frame.



Insufficient track tension is the main cause of losing the tracks.



Intensive sun radiation during work leads to a significant elongation of the crawler tracks and thus to a reduction of the track tension.



Check crawler tracks for damage

Check the crawler tracks (A/1) for damage with the ignition switched off and the spark plug connector removed. Start the engine and move the machine forward, so that you can check the other part of the crawler tracks.

⚠ Keep your hands away from crushing points when moving the machine!

Switch off the engine and ignition and remove the spark plug connector before continuing the inspection!

Repeat the instructions above, until you have checked the entire length of both crawler tracks. Change the crawler tracks if they are damaged.

The crawler tracks must only be changed in a specialist workshop
or - **agri^a-Service** -

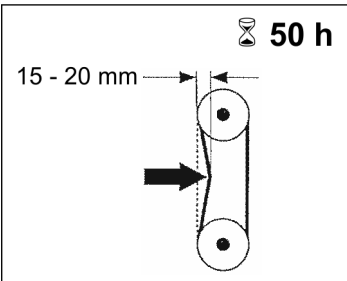
Traction drive generator

Checking the V-belt tension on the generator

Make sure that the ignition is switched off.

The V-belt is located in the mowing deck and can be accessed by opening the covers under the fuel containers.

Check the V-belt tension after every **50 hours of operation**. For correct V-belt tension see section below.

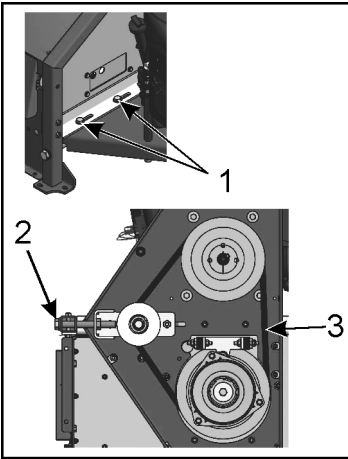


i Correct V-belt tension:

The V-belt gives way by approximately 15 to 20 mm when you press your thumb on it.

Adjustment and belt replacement should be carried out by a specialist workshop or

- **agri^a-Service** -



To tension the V-belt, proceed as follows:

1. Unscrew both fixing screws (1) size 17.
2. Tension the V-belt (2) size 24.
3. Check tension here (3).
4. When the desired tension is reached, tighten fixing screws (1) again (40 Nm).

Check the V-belt for wear and damage.

Replace the V-belt if it is damaged.

Replacement of the belt should only be carried out by a specialist workshop or - **agri**a-Service -

Remote control



Charging the rechargeable battery of the remote control

Charge the rechargeable battery of the remote control daily after finishing work using the charger provided.

The rechargeable battery is located in the lower part of the remote control.

Replacing the rechargeable battery of the remote control

If the rechargeable battery of the remote control no longer maintains an adequate charge or runs down too quickly, it must be replaced. The expected service life of a rechargeable battery is 3 to 6 years. This also depends on the conditioning.

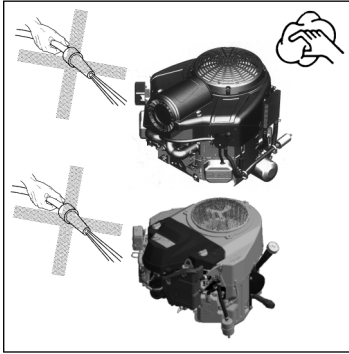
The battery is located on the bottom of the remote control. You can remove the battery by pushing it towards the contacts and lifting it up. Install the battery by pushing it towards the contacts and inserting it downwards. Ensure that the battery is placed correctly.

Further information on the remote control



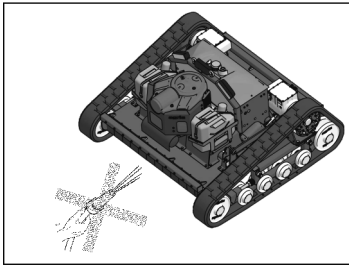
Remote control

Cleaning



Engine

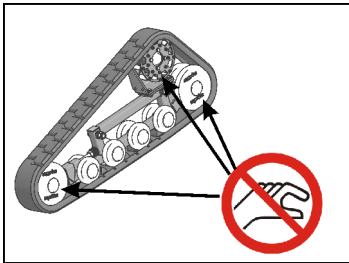
Only clean the engine with a cloth. Do not spray with water, as water could enter the ignition and fuel system and cause malfunctions.



Machine

Sweep thoroughly immediately after each use.

Do not wash the machine with a high-pressure cleaner.



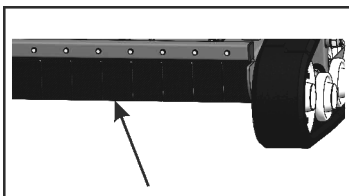
Clean the track running gear of grass and other residues.

Clean the drive sprockets, guide wheels and travelling wheels of the crawler track of grass and plant debris with a stick or other suitable tool.



Never use your hands!

Clean the machine, particularly electrical components, fan grille and petrol engine of grass, leaves and other objects.



Clean the stone chip protection at the front and rear of the mower deck.

The stone chip protection must be undamaged and move freely back to its original position.



Only a free and undamaged stone chip protection can prevent the mowing material or foreign bodies from being thrown away.

Storage

Please note the following points for storing the machine:

- Clean the machine thoroughly as described.
- Switch the machine off and disconnect the positive terminal if necessary. Operate the EMERGENCY STOP switches on machine and remote control and leave them pressed down, as under certain circumstances the batteries may gradually self-discharge. Remove batteries from the remote control.



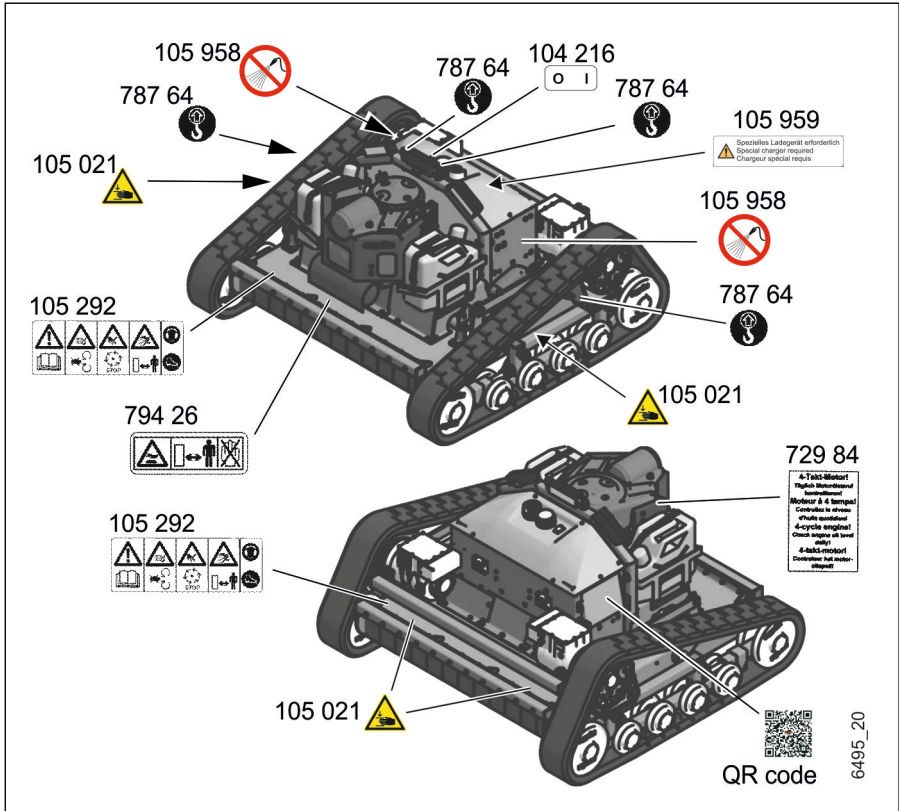
- Protect the machine against rolling away and against unauthorized use.
- Switch off the ignition switch (A/14) and remove the key of the remote control (B/5).



- Store the machine in a clean, dry area. The area should be free of corrosive substances such as fertilizer or salt, well ventilated and safe from access by children or third parties.
- Do not cover the machine with a plastic sheet or similar. The moisture accumulating underneath can lead to greater corrosion.

Labels

Worn and missing warning and mandatory symbols for operating and safety instructions must be replaced.



- 729 84 Four-stroke engine - check oil daily
- 787 64 Attachment point
- 794 26 Warning symbol for hot parts
- 105 292 Warning symbol set for rotary mulcher
- 105 021 Warning of hand injuries
- QR code If your mobile phone has the function for reading the **QR code**, you are able to access the operating instructions for this machine at all times.
- 105 958 Do not spray with water
- 105 959 Special charger required
- 104 216 I O

6 Troubleshooting and Remedies



Observe the safety instructions! Faults on the machine or on the engine that make a major intervention necessary must always be repaired by a specialist agria workshop that have the necessary tools. Incorrect intervention will only lead to damage.

Rotary mulcher

Fault	Possible cause	Remedy	Page
Blade shaft does not turn	V-belt of blade drive too loose	Re-tension V-belt	56
	V-belt of blade drive defective	Replace V-belt	56
	Blade blocked by foreign object	Remove foreign object	
	Cable to clutch defective	Check wiring and replace if necessary	
	Clutch defective	Replace clutch	
The crawler tracks do not move when the joystick is operated	Crawler tracks are blocked by grass residues or other foreign objects	Remove residues or blockage	61
	Wiring on electric motors defective	Check wiring and replace if necessary	
	Wiring on generator defective	Check wiring and replace if necessary	
	Traction drive control unit off due to low engine speed	New start of the remote control and the machine, engine speed to full speed.	39
The crawler tracks run more slowly than they should	Crawler tracks are hampered by grass residues or other foreign objects	Remove residues or blockage	61
The mowing deck cannot be raised	Linear drive defective	Repair or replace linear drive	
	Foreign objects on the mowing deck	Remove foreign object	27
	Wiring to linear drive defective	Check wiring and replace if necessary	

Fault	Possible cause	Remedy	Page
The mowing deck cannot be lowered	Linear drive defective	Repair or replace linear drive	
	Wiring to linear drive defective	Check wiring and replace if necessary	
Radio connection is interrupted during operation	Distance between remote control and machine is too great	Do not allow the distance to become too great	20
Excessive vibration	Fixing screws loose	Tighten fixing screws	46
	Imbalance on blade shaft	Check blade shaft and blades, replace blades if necessary	55

Petrol engine

Fault	Possible cause	Remedy	Page
Electric starter works but petrol engine does not start	Fuel container empty or unsuitable fuel	Fill fuel container with fresh fuel	35
	Fuel line clogged	Clean fuel line	
	Spark plug connector not mounted	Mount spark plug connector	BM
	Spark plug defective	Clean, adjust or replace spark plug	BM
	Too much fuel in engine (flooded)	Clean and dry spark plug, start with FULL THROTTLE	BM
	Air filter soiled	Clean air filter	BM
	Air infiltration through loose carburettor and intake pipe	Tighten fixing screws	BM
Electric starter is not working	Electric starter or solenoid switch defective	Replace electric starter or solenoid switch - agria-Service -	
	Flat battery	Charge or replace battery	
	Ignition switch defective	Replace ignition switch - agria-Service -	
	Error in wiring or control	Check cables and replace if necessary - agria-Service -	
Petrol engine misses	Ignition cable loose	Connect spark plug connector securely to ignition cable, attach spark plug connector securely to spark plug	BM
	Fuel line clogged or unsuitable fuel	Clean fuel line, fill with fresh fuel	
	Water or dirt in fuel system	Drain fuel and fill with clean, fresh fuel	35
	Air filter soiled	Clean or replace air filter	BM
	Carburettor out of tune	Adjust carburettor - agria-Service -	BM

Fault	Possible cause	Remedy	Page
Petrol engine gets too hot	Insufficient engine oil	Top up engine oil immediately	47/BM
	Cooling air system restricted	Clean cooling air system	51
	Air filter soiled	Clean air filter	BM
	Carburettor incorrectly adjusted	Adjust carburettor - agria-Service -	BM
Petrol engine has insufficient power	Air filter soiled	Clean air filter	BM
	Cylinder head loose or gasket damaged	Tighten cylinder head, replace gasket - agria-Service -	
	Insufficient compression	Have engine checked - agria-Service -	
The cans were not emptied in the correct order	Error in the fuel system	Close the venting screws on the can set	24
		Leak rectified	

Remote control

Fault	Possible cause	Remedy	Page
The green LED of the FB does not light up when pressing the unlocking button. The rechargeable battery and the key switch are inserted.	The rechargeable battery is flat	Insert charged rechargeable battery.	60
The green LED of the remote control flashes rapidly.	No radio connection	Move the transmitter closer to the receiver unit	20
The red LED of the remote control illuminates for 2 seconds and then the remote control switches off.	The transmitter is not working correctly.	Save the address: - Press EMERGENCY STOP - Press and hold release button until green LED goes out - Release EMERGENCY STOP - agriA-Service -	
The red LED of the remote control flashes once during startup.	The EMERGENCY STOP switch is actuated or defective.	Deactivate EMERGENCY STOP switch. If the message remains - agriA-Service -	46
The red LED of the remote control flashes twice during startup.	At least one of the operating elements relating to the commands D2-D20 and SAFETY is active or defective.	Return the operating elements to normal position. If the message remains - agriA-Service -	
The red LED of the remote control flashes three times during startup.	The battery is flat.	Insert charged rechargeable battery.	60
The red LED of the remote control flashes four times during startup.	At least one of the operating elements relating to the commands A1-A8, L1-L8, H1-H8 and SAFETY is active or defective. See remote control operating instructions	Return the operating elements to normal position. If the message remains - agriA-Service -	

FB = Remote control, BM= See separate operating instructions for engine

7 Decommissioning / Disposal

If the machine will not be further used, it must be correctly decommissioned.



To avoid injuries during decommissioning, park the machine in a stable position and protect it against tipping over and rolling away.



Wear protective gloves.

After decommissioning, the remaining fuel and oil must be drained and disposed of in a correct and environmentally compatible manner.



The machine consists of valuable raw materials, which can be recycled and reused.

Take the machine including the remaining technical fluids to a recycling facility for disposal.



Dispose of old batteries and electrical/electronic parts in accordance with the applicable legal provisions. Do not dispose of as domestic waste.

Inspection and Maintenance Overview

	Engine	After every ... operating hours (h)									J	B	R	Page ■	Page ●	
		A	2	5	8	25	50	100	200	300						400
Check function of machine EMERGENCY STOP switch	K											46				
Check function of remote control EMERGENCY STOP switch	K											46				
Machine ignition switch Check function	K											43				
Check operating functions of remote control	K											43				
Clean fan grille	K											51				
Check or top up engine oil level	K		K									47/ BM				
Check fuses	K															
Check air filter	K			K								BM				
Check nuts and bolts for tightness	K			K								46				
Clean exhaust and surrounding parts	K			K								52				
Check blades and blade fixing for wear and damage	K			K								55				
Check track tension	K			K								57				
First engine oil change	■ ●		W	W								BM BM				
Change engine oil	●						W			W		BM				

	Engine ■ ●	After every ... operating hours (h)										J	B	R	Page ■	Page ●	
		A	2	5	8	25	50	100	200	300	400						
Change engine oil and oil filter	■ ●						W				W			BM			
Clean air prefilter	■ ●				K		K						K K	BM			
Check crawler tracks for damage					K									57			
Check V-belt					K		K							56/ 58			
Cleaning					K							K		61			
Clean fan wheel Clean inside of cooling fins						W		W						51			
Clean engine oil cooler						W								47			
Change air filter insert	■ ●							W			W		W	BM			
Check state of charge of battery							W							53			
Change fuel filter								W				W	W	50			
Change spark plugs								W					W	BM			
Check blade shaft										F				55			
Check valve clearance	■ ●									W		W		BM			
Check clutch										F							
Change blades													W	55			
Change belt of blade drive													W	56			
Change crawler tracks													W	57			
Change battery of remote control													K	60			

All other inspection and maintenance tasks on the engine →



Engine

- A = before each start-up
- B = after each cleaning, especially with a high-pressure cleaner
- BM = See separate operating instructions for engine
- F = maintenance tasks should be performed by your **agri^a** service centre
- J = at least annually
- K = inspection and maintenance tasks can be performed by the operator
- R = as required
- W = maintenance tasks can be performed by a specialist workshop
- ! = observe execution
- = Briggs & Stratton 8270 petrol engine
- = Kawasaki FS730V petrol engine

Designation of parts Fig. B

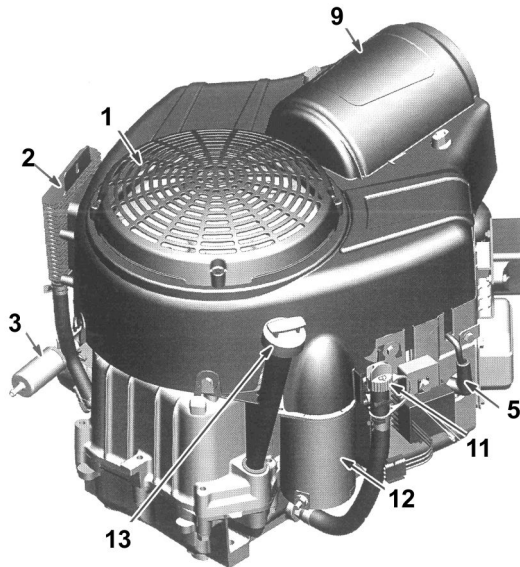
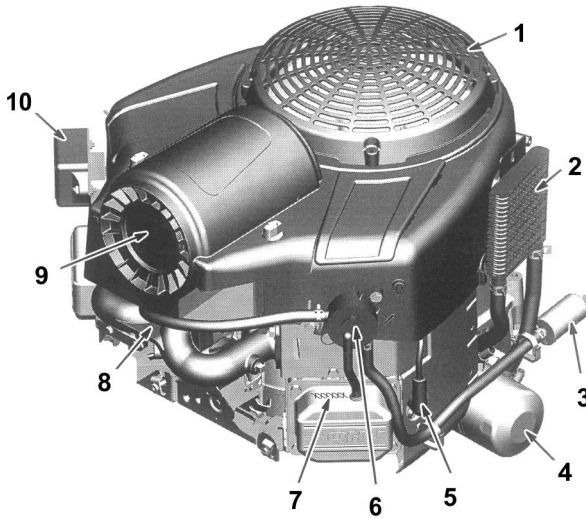


- 1 Joystick
- 2 Display
- 3 Travel speed range
- 4 Engine speed
- 5 Key switch
- 6 Release
- 7 Mowing deck up/down
- 8 Mowing drive on/off
- 9 Engine on
- 10 Green LED, radio connection
- 11 EMERGENCY STOP switch
- 12 Red LED
- 13 Reserve buttons (not assigned)
- 14 Drift
- 15 Warning lights
- 16 Escape (not assigned)
- 17 Menu
- 18 "up"
- 19 "down"
- 20 Enter

Designation of parts Fig. C

- 1 Fan grille
- 2 Oil cooler
- 3 Fuel filter
- 4 Oil filter
- 5 Spark plug/spark plug connector
- 6 Fuel pump
- 7 Engine no.
- 8 Carburettor
- 9 Air filter
- 10 Control unit
- 11 Quick oil drain
- 12 Starter
- 13 Oil filler nozzle/dipstick

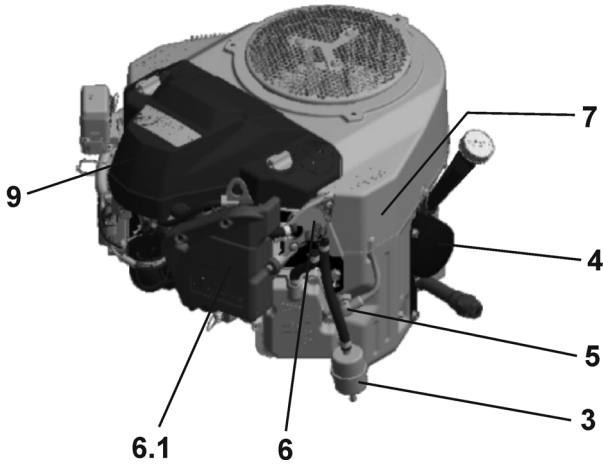
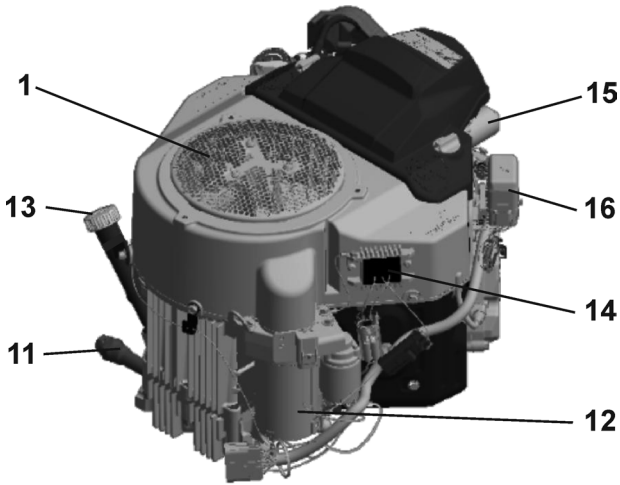
Designation of Briggs & Stratton Series 8270 parts Fig. C



Designation of parts Fig. D

- 1 Fan grille
- 3 Fuel filter
- 4 Oil filter
- 5 Spark plug/spark plug connector
- 6 Pre-feed fuel pump
- 6.1 Electric fuel pump
- 7 Engine number
- 9 Air filter
- 11 Quick oil drain
- 12 Starter
- 13 Oil filler nozzle/dipstick
- 14 Regulator
- 15 Electric throttle valve
- 16 Fuses

Designation of Kawasaki FS730V parts Fig. D



Paints, Charger, Wear parts

Agria order no.

Petrol engine fuel stabilizer:

673 50 Fuel stabilizer 250 ml

Paints:

181 03 Spray paint, birch green Spray can 400 ml

712 98 Spray paint red, RAL 2002 Spray can 400 ml

509 68 Spray paint black, RAL 9005 Spray can 400 ml

Charger for starter battery:

9679 111 Charger 12 V

Wear parts:**Machine**

100 850 Sickle blade top

100 166 Sickle blade bottom

108 820 Blade drive V-belt

109 154 Generator V-belt

104 961 Crawler track

105 469 Remote control battery

B&S engine

789 81 Fuel filter

410 274 Air filter, cyclone

106 550 Sparking plug

716 23 Engine oil filter

Spare parts lists:

997 137 Briggs-&-Stratton engine

997 148 Kawasaki engine

Declaration of Conformity

**EG-Konformitätserklärung
EC Declaration of Conformity**

**CE Déclaration de conformité
EG conformiteitsverklaring**

(D)

Wir

(F)

Nous

(GB)

We

(NL)

Wij

**Agria-Werke GmbH
Bittelbronner Str. 42, D-74219 Möckmühl/Württ.**

erklären, dass das Produkt

déclarons que le produit

herewith declare that the
product

verklaren dat het produkt

**Ferngesteuerter
Hochgras-Sichelmulcher**

**Girobroyeur pour herbe
haute radiocommandé**

**Remote-controlled High
Grass Rotary Mulcher**

**Afstandbestuurbare
hooggras-sikkelmulcher**

9600 211, -221

mit allen einschlägigen
Bestimmungen der EG-
Maschinenrichtlinie
2006/42/EG in
Übereinstimmung ist.
Die Maschine ist auch in
Übereinstimmung mit allen
einschlägigen Bestim-
mungen der folgenden
EG-Richtlinien:

est conforme à toutes les
exigences respectives
selon la directive relative
aux machines **2006/42/CE**.
La machine est aussi
conforme à toutes les
exigences respectives
selon les directives CE
suivantes:

conforms to all relevant
specifications of the
Directive on Machinery
2006/42/EC.
It is also conform to all
relevant specifications of
following EC directives:

voldoet aan de
desbetreffende bepalingen
van de EG-machinerichtlijn
2006/42/EG.
De machine voldoet ook
aan de desbetreffende
bepalingen van het
volgende EG-richtlijnen:

2004/108/EC; 1995/5/EC

Folgende harmonisierte
Normen (oder Teile davon)
oder techn. Spezifikatio-
nen wurden angewendet:

Les normes harmonisées
(ou extraits de celles ci) ou
les spécifications
techniques suivantes ont
été appliquées:


Following harmonized
standards (or parts of it) or
technical specifications
have been applied:

De volgende
geharmoniseerde normen
(of delen ervan) of
technische specificaties
werden toegepast:

**DIN EN ISO 12100: 2010; DIN EN ISO 5395-1+2: 2014; EN 12733: 2018;
DIN EN ISO 13849-1: 2008;
EN 15011: 2011; EN 13557: 2004; prEN 280: 2011**

Möckmühl, den 28.05.2020


Klaus Mies
Geschäftsführer
Directeur
Managing Director
Bedrijfsleider


Manfred Beek
Leiter Entwicklung & Konstruktion
Responsable développement et études
Head, Research and Development
Hoofd ontwikkeling en constructie

Herr Beek ist bevollmächtigt die technischen Unterlagen zusammenzustellen.
Monsieur Beek est habilité à agencer la documentation technique.
Mr. Beek is authorized to assort the technical documents.
De heer Beek is gemachtigd om de technische documentatie op te stellen.
Anschrift/adresse/address/adres:
Agria-Werke GmbH, Bittelbronner Str. 42, D-74219 Möckmühl



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