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

Operating Instructions No. 998 430GB 12.14
Please complete:

Machine Type No.: ......................
Identification No.: ....................................................
Engine Type: ............................
Engine No.: ..................................
Date of Purchase: .......................  

For name plate, refer to p3/fig. A/12. 
For Engine type and number, refer to p38/fig. B/7. 
Please state these data when ordering spare parts to avoid wrong deliveries. 

Only use original Agria spare parts! 
Specifications, figures and dimensions stated in these instructions are not binding. No claims can be derived from them. We reserve the right for improvements without changing these instructions. 

This delivery comprises: 
- Operating instructions 
- Engine operating instructions 
- Shrub clearing machine  
  - basic machine 
- Swath curtain with support 

Please observe that only those activities of the engine are described here which are required for operating the shrub clearing machine. All other information on the engine may be taken from the enclosed engine operating instructions! 

Symbols, Name Plate

Symbols

⚠️ Warning – Danger 
ℹ️ Important information 
❓ Choke 
⛽ Fuel 
🛢️ Oil 
-pres Engine Start 
-pres Motordrehzahl 
-pres Engine Stop 
-pres Air filter 
-pres Visual check 
-pres Mowing drive 
-pres Wheel drive 
-fast Fast 
-slow Slow 
-pres Open (unlocked) 
-pres Closed (locked) 
-pres Lifting point, fixing point for recovery and tieing up 
→ see engine operating instructions 
→agria·Service←  
= contact your agria workshop
Designation of Parts

Fig. A

1 Clutch lever for mowing drive (safety fitting)
2 Clutch lever for wheel drive (safety fitting)
3 Speed control lever
4 Handlebar
5 Tommy bar nut
6 Engine
7 Front cover (protective cover)
8 Swath curtain (protective cover)
9 Mowing rotor
10 Mowing knife
11 Wheel
12 Name plate/ID No.
13 Shifting yoke (only 8000 622)
14 Rear protection liner (protective cover)
Recommendations

Lubricants and Anti-Corrosive Agents:

Use the lubricants specified for engine and gearbox (see “Specifications”).

We recommend using Bio-lubricating oil or Bio-lubricating grease for “open” lubrication points or nipples (as specified in the operating instructions).

We recommend using Bio-slushing oil to preserve machines and attachments (do not apply on painted covers). You can brush or spray the oil.

Anti-corrosive agents are environmentally friendly and degrade fast.

Using ecologically safe Bio-lubricants and Bio-anti-corrosives, you contribute to environmental protection and to the well-being of humans, animals and plants.

Fuel:

This engine runs smoothly on commercial unleaded regular and supergrade petrol (including E10).

Do not add oil to petrol.

If, for environmental reasons, you use unleaded petrol, make sure the fuel is drained completely when shutting down the engine for more than 30 days. This is to prevent resin residue from depositing in the carburetor, fuel filter, and tank. Or add a fuel stabilizer to the fuel.

For further instructions refer to “Engine Preservation”.

Maintenance and Repair:

The trained mechanics of your agria workshop expertly carry out any maintenance and repair work.

You should only carry out major maintenance work and repairs on your own, if you have the proper tools and knowledge of machines and internal combustion engines.

Do not hammer against the flywheel with a hard object or metal tools as it might crack and shatter in operation, causing injuries and damage. Only use suitable tools to pull off the flywheel.
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Shrub clearing machine
Preparations for working

1. Keep the packaging, as it offers optimal protection during transportation

2. Set the steering bar (A/4) to working height
   ➔ vers. 8000 612 page 18
   ➔ vers. 8000 622 page 19

3. Thread the swath curtain (A/8) onto the swath curtain rod

4. Place the swath curtain rod with the swath curtain fitted into the square tube on the shrub clearing machine
5 Read and note the HONDA engine operating instructions

6 Fill in engine oil
   ➔ see operating instructions for HONDA engine

7 Check engine oil level
   ➔ see operating instructions for HONDA engine

8 Fill in fuel
   ➔ see operating instructions for HONDA engine
1. Safety Instructions

Before starting the engine, read the operating instructions and note:

Warning

This symbol marks all paragraphs which affect your safety. Pass all safety instructions to other users and operators.

Due Use

The shrub clearing machine is constructed solely for the cutting of thin non-wooded scrub as well as grass and similar plants in land & forest management, green spaces, and other such areas. The lower mowing rotor disk must move smoothly across the surface of the ground during use. However it is not intended for lawn areas in parks! (Due use)

Any other type of operation is considered undue. The manufacturer is not liable for any damages resulting from undue use, for which the risk lies with the user alone.

The brush mower is not intended for use if the rotary mowing plate does not move smoothly across the surface of the ground.

Due use includes compliance with manufacturer’s instructions on operation, maintenance and repair.

Any unauthorized changes to the shrub clearing machine render manufacturer liability null and void.

General Instructions on Safety and Accident Prevention

Basic Rule:

The standard accident prevention regulations must be adhered to, as well as all other generally accepted rules governing operational safety, occupational health and road traffic regulations.

For drives on public roads, the national traffic code applies.

Accordingly, check the shrub clearing machine for road and operational safety each time you take up operation.

Only persons familiar with the shrub clearing machine and instructed on the hazards of operation are allowed to use, maintain and repair the shrub clearing machine.

Teenagers of 16 years or younger may not operate the shrub clearing machine!

Only work in good light and visibility.

Operator’s clothes should fit tight. Avoid wearing loose fitting clothes. Wear solid shoes.

Note the warning and instruction signs on the shrub clearing machine for safe operation. Compliance is for your own safety.

When transporting the shrub clearing machine on vehicles or trailers outside the area to be mowed, ensure that the engine is turned off. Provide for a sufficient protection of cargo.

Careful with rotating tools – keep at a safe distance!
1. Safety Instructions

Beware of coasting tools. Before you start any maintenance or repair on them, wait until tools have come to a complete stop.

Foreign powered parts shear and crush! Riding on the attachment during operation is not permitted.
Do not change settings of governor. High engine speed increases risk of accidents.

Working Area and Danger Zone

The working area is the whole of the area to be worked upon. The user is liable to third parties in the working range.
Staying in danger zone is not permitted.
Check the working area before you start it. Watch out for children and animals.
Before you start work, clear the area from any foreign object. During operation, always watch out for further objects and remove them in time.
For operation in enclosed areas, ensure that a safety distance is kept to enclosures to prevent damage to tools.

Operation and Safety Devices

Before you start the engine
Become familiar with the devices 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 positioned to provide protection.

Starting the engine
Do not start engine in closed rooms. The carbon monoxide contained in the exhaust fume is extremely toxic when inhaled.
Before you start the engine set all operating elements to neutral or idling position.
For starting the engine, do not step in front of the shrub clearing machine.

Operation
Never leave the operator’s position at the steering handle while shrub clearing machine is at work.
Never adjust the operating handles during work – danger!
1. Safety Instructions

During operation the operator must keep at a distance as defined by the steering handle, especially when turning the machine.

Riding on the implement during operation or in transport is not permitted.

If clogging occurs in the cutting section, turn off the engine and clean the cutting section with an appropriate tool.

In case of damage to the shrub clearing machine, immediately turn off the engine and have it repaired.

If steering causes problems, immediately bring the shrub clearing machine to a halt and turn it off. Have the malfunction removed without delay.

To prevent the shrub clearing machine from sliding on slopes, make sure it is secured by another person using a bar or a rope. This person must be located at a higher position than the vehicle and at a safe distance from the attachment at work.

If possible, always work horizontally on the slope.

End of Operation

Never leave the shrub clearing machine unattended with the engine running.

Before you leave the shrub clearing machine, turn off the engine.

Secure shrub clearing machine against unauthorized use. If shrub clearing machine is equipped with ignition key, remove the key. For all other versions, remove spark plug connector.

Mowing Attachment

Handle with care! Sharp blades of the mowing knives may cause injuries!

To exchange the mowing knife make sure that you turn screws away from cutting edges.

For grinding the mowing knives, always wear safety goggles and gloves.

Maintenance

Never carry out any maintenance or cleaning with the engine running.

Before you work on the engine, always remove spark plug connector (petrol engine only).

Check regularly and, if necessary, replace all protecting devices and tools subject to wear and tear.

Replace damaged cutting tools.

Always wear safety gloves and use proper tools when exchanging cutting tools.

Do not carry out repairs like welding, grinding, drilling, etc. on structural and safety-relevant parts (e.g. coupling devices)!

Keep shrub clearing machine clean to avoid risk of fire.

Check nuts and screws regularly for tight fit and re-tighten, if necessary.

After maintenance and cleaning, ensure that you re-install all safety and protective devices and adjust them properly.

Only use original Agria spare parts. All other commercial spare parts must correspond to quality and technical requirements specified by Agria.
1. Safety Instructions

Storage

It is not allowed to store the shrub clearing machine in rooms with open heating.

Never park the shrub clearing machine in closed rooms with fuel left in tank. Fuel vapours are hazardous.

Engine, Fuel, and Oil

Never let the engine run in closed rooms. Extreme danger of intoxication! For the same reason, also replace damaged exhaust parts immediately.

Caution with hot engine parts!

The exhaust and other engine parts become very hot, if the engine runs and immediately after turning off. Hold for sufficient distance from hot surfaces and keep children away from the running engine.

Be careful when dealing with fuel. Great danger of fire! Never refill fuel close to open fire, inflammable sparks or hot engine parts. Do not refill fuel in closed rooms. Do not smoke when refilling!

Refill only with the engine switched off and cooled down.

Do not spill any fuel, use a proper filling device.

In case of fuel spillage, pull the shrub clearing machine away from the spillage before you start the engine.

Make sure fuel is of specified quality.

Store fuel in approved cans only.

For safety reasons the petrol tank and fuel cap should be replaced regularly.

Store anti-corrosive agents and stabilizing liquids out of reach of children. If sickness and vomiting occur, see a doctor. If fuel has contacted eyes, rinse them thoroughly, avoid inhaling of vapours.

Read and observe enclosed instructions.

Before you dispose of opened and seemingly empty pressurised tins make sure they are completely empty. Empty them in ventilated places safe from spark formation or flames. If necessary, dispose of tins in hazardous waste deposits.

Be careful when draining hot oil, danger of burns.

Make sure oil is of specified quality. Storage is in approved cans only.

Dispose of oil, greases, and filters seperately and properly.

Electrical System

Persons having a pacemaker must not touch live parts of ignition system when the engine is running.
1. Safety Instructions

Explanation of Warning Signs

Attention:

1. Carefully read operator's manual before handling the machine. Observe instructions and safety rules when operating.
Before any cleaning, maintenance, and repair work switch off the engine and pull spark plug connector.

2. Before each fuel fill, shut off the engine and wait until it has cooled off. No open fire! Do not smoke!

3. The exhaust fumes contain breath poisons - keep distance. Never let the engine run in closed rooms.

4. During operation keep at a safe distance from mowing knives.

5. Wait until all machine components have completely stopped before touching them.

6. Danger - flying objects; keep safe distance of at least 30 m from the machine as long as the engine is running.

7. Risk of tipping over! Do not drive on slopes greater than 20°.

8. When working with the machine, wear individual protective ear plugs and safety goggles.
Wear solid shoes.

9. Check engine oil level at least after 8 operating hours.

Wear protective gloves.
2. Specifications

2.1 Shrub clearing machine: ........................................ Type 8000 612

Working width: .............................................................................................................. 58 cm

Engine: 4-stroke petrol ohv engine ............................................... Honda GCV160
Max. output: at 3,600 rpm ................................................................. 4.1 kW (5.5 PS)
Torque: ................................................................. max. 11.4 Nm at 2,500 rpm
Lowest no-load speed: ................................................................. 1,550 - 1,850 rpm
Top no-load speed: ................................................................. 3,000 ± 100 rpm
Fuel: . unleaded petrol, octane number at least 91 RON (also E10)
Tank capacity: .............................................................................................................. 0.91 l
Fuel consumption: ................................................................. 310 g/kWh
Air filter: ....................................................................................................................... Dry filter
Spark plug:......................................................... NGK BPR6ES; BOSCH WR7DC
Engine oil: ................................................................. Filling quantity approx. 0.55 l
SAE 10 W-40, SG, SF or higher quality grade

Mowing Drive: .............................................. V-belt clutch with built-in cutter brake
................................................................. Mowing rotor with 4 revolving knives running on bearings

Travelling Drive ........................................................................................................ Worm gear,
........................................................................................................ Gearbox oil SAE 90

Travelling speed: ....................................................................................................... 2.8 - 3.5 km/h

Driving wheels: Tyre ..................................................................... 3.50-6 AS or 13x5.00-6 AS
Tyre air pressure ........................................................................................................ 0.8 bar

V-belt: Travelling Drive ........................................................................... 10x475 Li ZX
Mowing Drive .................................................................................. A13x1480LW

Steering handle: .................................................. height-adjustable without tools

Operability on Slopes: ................................................................. max. 20°

Noise level at operator’s ear In accordance with EN 11201: .......... LpA= 84 dB
Sound level in accordance with EN ISO 3744:1995

measured: ................................................................. LWA= 90.3 dB
guaranteed: ........................................................................................................ LWA= 92 dB

Vibration value in accordance with ISO 5349: .............................................. 3.4 m/s²

Cutting range: ................................................................. Grass stalks to thin, non-wooden scrub

Weight: ...................................................................................................................... 60 kg

Dimensions: ...........................................................................................................
..................................................................................................................... l = 1360 mm
..................................................................................................................... b = 650 mm
..................................................................................................................... h = 960 mm
2. Specifications

2.2 Shrub clearing machine: .................................................... Type 8000 622

Working width: ................................................................. 64 cm

Engine: 4-stroke petrol ohv engine .................................. Honda GCV190
Max. output: at 3,600 rpm .......................................... 4.8 kW (6.5 PS)
Torque: max. 13.7 Nm at 2,500 rpm
Lowest no-load speed: 1,550 - 1,850 rpm
Top no-load speed: 3,000 ± 100 rpm
Fuel: unleaded petrol, octane number at least 91 RON (also E10)
Tank capacity: 0.91 l
Fuel consumption: 310 g/kWh
Air filter: Dry filter
Spark plug: NGK BPR6ES; BOSCH WR7DC
Engine oil: Filling quantity approx. 0.55 l
SAE 10 W-40, SG, SF or higher quality grade

Mowing Drive: V-belt clutch with built-in cutter brake
Mowing rotor with 4 revolving knives running on bearings

Travelling Drive: Worm gear, Gearbox oil SAE 90
Travelling speed: 2.8 - 3.5 km/h
Driving wheels: Tyre 3.50-6 AS or 13x5.00-6 AS
Tyre air pressure: 0.8 bar
V-belt: Travelling Drive 10x475 Li ZX
Mowing Drive A13x1490LW

Steering handle: height-adjustable without tools

Operability on Slopes: max. 20°

Noise level at operator's ear in accordance with EN 11201: LpA = 77.2 dB

Sound level in accordance with EN ISO 3744:1995
measured: LWA = 91.1 dB
guaranteed: LWA = 92 dB

Vibration value in accordance with ISO 5349: 3.4 m/s²

Cutting range: Grass stalks to thin, non-wooden scrub

Weight: 62 kg

Dimensions: l = 1400 mm
b = 660 mm
h = 1150 mm
3. Devices and Operating Elements

The shrub clearing machine is constructed solely for the cutting of thin non-wooded scrub as well as grass and similar plants in land & forest management, green spaces, and other such areas. The lower mowing rotor disk must move smoothly across the surface of the ground during use. However it is not intended for lawn areas in parks! (Due use)

3.1 Engine

The four-stroke petrol engine runs on commercial petrol (refer to fuel recommendations p6).

During the first 20 operating hours (break-in period) do not use engine to maximum power.

Even after break-in period never use engine at higher speed than necessary for the work in hand.

High engine speed is harmful to any engine and considerably affects its durability. This applies especially for no load operation. Any overspeed (have the engine roar) can result in immediate damage.

Cooling System

The cooling system is fan-cooled. Therefore keep screen at recoil starter and cooling fins of cylinder clean and free from sucked-in plant trash.

Idling running speed

Always ensure that idling-speed is adjusted correctly. With the speed control lever set to idle, the engine is supposed to run smoothly and without run-out at low engine speed.

Air Filter

The air filter purifies the air intake. A clogged filter reduces engine output.

Ignition System

The engine is equipped with a maintenance-free, contactless electronic ignition system.

We recommend to have necessary check-ups done by an expert only.

Choke

The operation of the choke is built into the speed control lever.

Close the choke for cold starts.

Open the choke for warm starts and operation.

Fuel tap

The fuel tap (B/11) is on the carburetor.
3.2 Speed control lever
(Engine Shut-off Switch)
The speed control lever (A/3) on the steering handle serves to control engine speed, to set the CHOKE and to stop the engine. For positions see fig.

The speed control lever also serves as an emergency shut-off. In an emergency, move the lever to position “STOP” to shut off the engine fast!

3.3 Safety circuit
The shrub clearing machine is fitted with safety clutch levers for mowing and travelling operation.

- **Stop position:** When the clutch lever is released (A/1 or A/2) the drive in question is switched off.

The clutch levers also serve as an emergency shut-off.
The clutch levers must be let go in dangerous situations which require quick switching-off, they then swing automatically to the "STOP" position! - the mowing and travelling drive will be switched off.

3.4 Travelling Drive
The travelling drive is transmitted through the gearbox to the driving wheels.

Switching is carried out using the clutch lever (A/2) on the steering bar.

The driving wheels are fitted with a ball-bearing overriding clutch, so that turning when operating the mower is easier.
3. Devices and Operating Elements

3.5 Mowing Drive

The mowing mechanism is driven by use of a V-belt gearbox and V-belt clutch. Switching is made through the clutch lever (A/1) on the steering bar.

The mowing mechanism consists of a rotary disk on which three high-grade steel knives are mounted on moveable bearings to mow the grass.

The underside of the rotary disk glides above the ground.

The mowing knives have blades on both sides so that the knife can be turned around once.

The blunt sides can be sharpened and slight bending corrected. Replace badly damaged or bent knives with new ones.

⚠️ Only operate the shrub clearing machine if all knives are correctly fitted and tightened into place and if all protective coverings and safety fittings have been placed into the safety position and are in working order!

3.6 Switching to Mowing

The mowing drive is switched on by pulling the clutch lever (A/1) on the steering handle.

The clutch lever is fitted with a locking strap to prevent unintentional engaging. Before pulling the clutch lever (A/1) the locking strap must be pressed down.

The mowing drive is switched off by releasing the clutch lever (A/1) - safety fitting - and is within a short time braked by the cutter brake.

3.7 Switching to Travelling

The travelling drive is switched on by pulling the clutch lever (A/2) on the steering handle.

The travelling drive is switched off by releasing the clutch lever (A/2) - safety fitting.

3.8 Shifting yoke vers. 8000 622

Both drives can be switched on together using the shifting yoke (A/13).

Before switching on press the locking strap on the clutch lever (A/1) for mowing drive.

On releasing the shifting yoke (A/13) the mowing and travelling drives will be switched off.
3. Devices and Operating Elements

3.9 Steering Handle

Adjusting the steering:
- Turn the tommy bar nut (A/5) (in an anti-clockwise direction) until its catches are free
- Swing the steering (A/4) to the required height
- Tighten up the tommy bar nut (A/5) (in a clockwise direction)

3.10 Transportation Position

Shut off the engine and withdraw spark plug connector.
Wear protective gloves.
The steering (A/4) can be swung into a space-saving position for transportation
- Steering handle → Kap. 3.9

Only operate the shrub clearing machine if the steering is fixed in the working position!
3. Devices and Operating Elements

3.11 Slinging grips

The grasping points A and B are intended for lifting and loading of the machine and for attaching the holding rope when working on slopes.

⚠️ Only use fully functional loading straps! Never walk or remain under moving loads.

Danger!

Do not lift the shrub clearing machine by the front cover (A/7)!
3. Devices and Operating Elements
4. Commissioning and Operation

4.1 Commissioning the Machine

Please note that durability and operational safety of the engine depend to a large extent on its breaking-in. Always allow a cold engine to warm up for some minutes and never run it at full throttle at the beginning.

Please note: for the first 20 hours of operation (break-in period) do not use the engine at full power.

Make sure you check and maintain air filters regularly and use clean fuel. Only use branded petrol.

Only use fresh, clean fuel (not older than 3 months) and approved fuel cans to be purchased in special shops. Rusty sheet metal cans or fuel cans not suited for petrol are not permitted.

For the first commissioning or after longer periods of no operation, fill fuel tank to maximum to avoid starting problems.

Be careful when dealing with fuel.

Fuel is easily inflammable and explosive in certain conditions!

- Do not refill in closed rooms.
- Before each fuel fill, shut off the engine and wait until it has cooled off.
- Never refill close to open fire, inflammable sparks or hot engine parts.
- Do not smoke during filling!
- Do not spill any fuel, use a proper filling device.

Do not cause fuel tank to overflow, but leave a 5 mm margin for the fuel to expand.

Note: For reasons of transport, the machine is not filled with engine oil!

Before you operate the engine the first time, fill in engine oil

Please observe the references of the engine operating instructions!
4. Commissioning and Operation

Only start up the shrub clearing machine if all protective coverings and safety fittings have been placed into the safety position and are in working order!

4.2 Starting the Engine

Do not start engine in closed rooms! Exhaust fumes contain carbon monoxide which acts toxic when inhaled.

Keep feet away from coupled attachment.

Protective covers mounted?

1. Check engine oil level
2. Mount spark plug connector
3. Air filter clean?
4. Fuel quantity in tank sufficient?
5. Open the fuel tap
6. Cold engine:
   Move the speed control lever (A/3) to position "CHOKE"
7. Warm engine:
   Set speed control lever to 1/3 throttle
   Set both clutch levers (A/1 + A/2) to position "0"
8. Start engine from a position outside the hazardous area
9. after the start push speed control lever to position "min"

Caution with hot engine parts!
The exhaust and other engine parts become very hot, if the engine runs and immediately after turning off. Hold for sufficient distance from hot surfaces and keep children away from the running engine.
4. Commissioning and Operation

4.3 Shutting off the Engine

1. Set both clutch levers (A/1 + A/2) to position "0"

2. Set speed control lever (A/3) to "min", let the engine run for about 30 seconds

3. Set speed control lever to "STOP"

4. Close the fuel tap (B/11)

5. Withdraw spark plug connector (B/8) - protection against unauthorised use!

⚠️ Have the engine cooled down before parking the shrub clearing machine in closed rooms.

⚠️ Do not move the choke lever to CHOKE position to shut off the engine – danger of fire!

-To down the machine for a long period of time, do not press the engine shut-off switch to stop the engine. Instead, close the fuel tap and operate the engine until it comes to a stop by lack of fuel. This is to ensure the carburetor is empty and to avoid resin deposits.

The speed control lever also serves to shut off the engine in an emergency situation. If necessary, move this lever to position “STOP” to shut off the engine.
4. Commissioning and Operation

4.4 Driving

1. Start engine as described in “Starting the Engine”
2. Wear individual protective ear plugs and solid shoes
3. Set speed control lever (A/3) to about 1/2 throttle
4. Engage travelling drive
   - pull the clutch lever (A/2) up to the handle
5. Operate the speed control lever according to the travelling speed

4.5 Stopping

1. Disengage travelling drive
   - Release the clutch lever (A/2)
2. Set speed control lever (A/3) to "min"
4. Commissioning and Operation

4.6 Mowing

1. Start engine as described in “Starting the Engine”
2. Wear individual protective ear plugs, safety goggles and solid shoes
3. Set speed control lever (A/3) to "max"
4. Engage mowing drive
   1. Press locking strap
   2. Pull the clutch lever (A/1) up to the handle:
      The lever should be pulled slowly for two-thirds of its travel so that the mowing rotor has sufficient time to start rotating and the engine does not come to a standstill. The starting up of the mowing rotor may be accompanied by a slipping of the V-belt and the accompanying noise.

Once the mowing rotor has been set in motion, the clutch lever should be pulled right up to the handle.

5. Engage travelling drive
   • Pull the clutch lever (A/2) up to the handle
   
   When turning or when moving the mower in reverse it is not necessary to switch off the mowing drive, so that the energy in the rotating rotor is not unnecessarily wasted.

4.7 Stopping

1. Disengage mowing drive and travelling drive
   • release both clutch levers (A/1 and A/2)
2. Set speed control lever (A/3) to "min"

   After mowing or in case of clogging:
   Disengage travelling drive - the mower comes to a stop, the mowing rotor still continues to move and cuts itself free, afterwards switch off mowing drive

3. Shut off the engine
4. Commissioning and Operation

4.8 Danger zone

⚠️ Keep out of the mower’s danger zone during starts and operation. Watch out especially for children and animals.

The machine operator is responsible for accidents or any danger caused to other people or their property.

For this reason the operator must ensure that both other people and animals are at a safe distance of at least 30 m from the machine.

If the operator should notice that a person or animal is standing within this area, the machine must be shut down without delay and must not be operated again before the area is free again.

Before starting work any foreign objects must be removed from the area to be worked upon. Look out for any objects during operation.

4.9 Mowing on slopes

⚠️ Do not drive on slopes greater than 20°.

- Risk of tipping over!

To prevent the mower from sliding on slopes, make sure it is secured by another person using a bar or a cord. This person must be located at a higher position than the vehicle and at a safe distance from the attachment at work!

For operation on banks, always turn machine towards the slope!
4.10 Notes for Mowing

The shrub clearing machine is intended for the mowing of grass stalks and thin, non-woody scrub. However it is unsuitable for lawn areas in parks.

The grassy area is mowed at a high rotational speed by four flexibly mounted knives in the mowing rotor and the cut grass is pressed against the expelling curtain, which places it into swaths.

When mowing you should move around the area to be mowed in an anti-clockwise manner so that the shrub clearing machine throws the cut grass onto the right side, which has been previously mowed.

If the area to be mowed is too thick, overgrown, is rotten or trodden down underneath, it will be necessary to reduce the working width to a suitable amount so that the cuttings do not begin to build up in front of the mower.

If this still happens, switch off the travelling drive so that the mower can expel the cuttings which have gathered together. However, if the space between the mowing rotor and the expelling area is blocked, both the travelling and the mowing drive must be switched off, the motor brought to rest and the space cleaned.

The height of the stubble is governed by the lower disk and cannot be adjusted. The disk follows the form of the ground. It can therefore happen that when mowing highly uneven areas the stubble height in the whole field is inconsistent.

When mowing please ensure that the lower disk is always on the ground and does not fly to one side.
5. Maintenance

Apart from adhering to operating instructions for shrub clearing machine, it is also important to observe the following maintenance instructions.

**Warning:** Only do maintenance work with the engine shut off. Always remove spark plug connector from spark plug, to avoid accidentally starting the engine while working on the shrub clearing machine or on the engine.

Always wear safety gloves, when working near mowing knives.

5.1 Engine

5.2 Cleaning the Cooling Screen

After long operation, dirt can clogg the cooling system. To avoid overheating and damage to the engine:

- Regularly clean cooling screen (B/3).
- Check each time before you take up operation!

5.3 Air-Cooling System

Clean internal cooling fins and surfaces at least every 100 operating hours (earlier in very dusty conditions), at the latest at the end of a season. Take off fan housing (B/12) when doing this.

5.4 Exhaust

Regularly clean surrounding parts of muffler (B/9). Free from grass, dirt and inflammable deposits.

- **Danger of fire!** Check each time before you take up operation.

Caution with hot engine parts!

The exhaust and other engine parts become very hot, if the engine runs and immediately after turning off. Hold for sufficient distance from hot surfaces and keep children away from the running engine.

5.5 Speed Actuating Devices

Devices for actuating engine speed must be adjusted correctly to start, operate and switch off the engine at correct speed rates.
5. Maintenance

5.6 Gearbox

- The driving gearbox must be constantly filled with SAE 90 gearbox oil.
- When cleaning always check if any oil has escaped from the gearbox. The inspection can be carried out through the two "peep-holes" in the rear part of the housing cover (D/6).
- If any oil has been found to have escaped, this must be removed immediately.

5.7 Drive-wheels

- Remove the drive wheels from the axle at the end of the season and clean them.
- Fill up the inner part of the hub (E/1) with new grease.
- Thoroughly lubricate the ground face of the bearing (E/2) and the surfaces of the overriding clutch (E/3).
- For full tractive power, mount wheels (A/11) with pointed parts of lugs showing in travel direction (wheels seen from above).
- Do not pull the nut (E/4) up to its limit - the wheel must be able to turn with a little play.
- Secure the nut with a new split-pin.
- Check the tyre air pressure (0.8 bar) regularly. For smooth driving, make sure that there is the same pressure in both tyres.

5.8 Bowden Cables

- Thoroughly lubricate the Bowden cables with Silicone oil.

5.9 Protection Liners

Inspect the swath curtain (A/8) and the rear protection liner (A/14 or D/11) every time before starting up and replace any damaged parts.

Only operate the machine if all protective coverings and safety fittings have been placed into the safety position and are in working order!
5. Maintenance

5.10 Knife Change

Shut off the engine

Withdraw spark plug connector

Wear protective gloves!

- Unscrew the nut (F/2) and remove the plate (F/4).
- When pulling out the screw (F/1) hold the cutter (F/3) and then pull the screw right down through the fitment hole in the lower disk.
- Take out the knife and either turn and put it back into place or replace with a new cutter.
- The knife has blades on both sides. The blunt knife can be re-sharpened and slight bends corrected. - Badly damaged or bent knives must be replaced by new ones.
- Inspect the screw for wear (F/1) and replace with a new one where necessary.
- Fitting stages are carried out in the reverse order.
- The safety plate (F/4) must be replaced by a new one - in some mowers the nut is secured by a split-pin, in such cases use a new split-pin.

Do not use the mower until all the knives have been fully fitted!

The manufacturer’s original design must be used for all replacement parts.

5.11 Re-grinding the Mowing Knives

Wear safety goggles and protective gloves
5. Maintenance

5.12 V-belt tension for Travelling Drive
- Remove lower cover (D/5)
- Loosen nuts (D/2)
- Tension the travelling drive V-belt (D/9) using the nut (D/3) so far until the V-belt can be pressed through for about another 10 - 15 mm and the mowing drive (D/8) remains loose
- Re-tighten the nuts (D/2)
- Replace the cover (D/5)

Do not tension the V-belt if the nuts (D/2) have not been loosened!

5.13 Switching for Travelling Drive
- The setting must be made in such a way that when the travelling drive is switched on the machine cannot be driven in a reverse direction.
- The setting is made using the Bowden cable screw (H/2) and the adjusting screw on the clutch lever (A/2).

5.14 Switching for Mowing Drive
Regularly inspect the setting of the tensioning roller for mowing drive
- Remove the front plastic cover (A/7) from the shrub clearing machine.

Only operate the machine if all protective coverings and safety fittings have been placed into the safety position and are in working order!
5. Maintenance

5.15 Changing V-belt

- Remove the front plastic cover (A/7) and the lower cover (D/5)
- Loosen the nuts (D/2 und D/3)
- Slide the engine towards the mowing rotor
- Remove the travelling drive V-belt (D/9)
- Remove the belt tensioning device (D/4)
- Take the mowing drive V-belt (D/8) from its pulley (D/10)
- Remove the mowing rotor pulley (G/2) from the hub (M6 screw, 3 M6 nuts)
- Remove mowing drive V-belt (D/8)
- Reassemble in reverse order of steps
- Tension travelling drive V-belt
  (see travelling drive V-belt tensioning)
- Check the position of the pulley
  (see Switching for Mowing Drive)
- Replace the front plastic cover (A/7) and lower cover (D/5)

Do not use commercial V-belts. Only use original Agria V-belts!

Only operate the machine if all protective coverings and safety fittings have been placed into the safety position and are in working order!
5. Maintenance

5.16 General Maintenance

1. Watch out for fuel and oil leakage, repair if necessary.

2. Regularly check screws and nuts for tight fit, re-tighten, if necessary.

5.17 Cleaning

Machine

After cleaning with air-compressed water jets immediately lubricate lubrication points on the machine and operate the machine for a short time to press out penetrated water.

Apply grease generously to leave a grease neck around bearing to prevent water, plant sap and dirt from penetrating.

Engine

Clean engine only with a cloth. Do not spray with water, as water might leak into ignition and fuel system causing malfunctions.

5.18 Disposal

If the machine is no longer to be used, both the remaining fuel and any oil must be drained into sealable containers. The equipment, including the drained liquids, must then be passed on to a re-cycling company for disposal.
### 6. Troubleshooting

**Observe safety instructions!** Have all serious malfunctions on the machine or engine repaired by your agria workshop. They have the proper tools. Improper repairs can only add to the damage.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Possible solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine does not start</td>
<td>- Spark plug connector not connected</td>
<td>Connect spark plug connector</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Choke is not in position CHoke</td>
<td>Set Choke-lever to position “CHOKE”</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>- Fuel tank empty or poor fuel</td>
<td>Fill fresh fuel</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>- Fuel line clogged</td>
<td>Clean fuel line</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Defective spark plug</td>
<td>Clean, adjust or exchange spark plug</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>- Engine too much fuel (&quot;flooded engine&quot;)</td>
<td>Dry and adjust spark plug and start at full throttle</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>- Inleaked air due to loose carburetor and suction line</td>
<td>Tighten attachment bolts</td>
<td></td>
</tr>
<tr>
<td>Misfirings in engine</td>
<td>- Engine running in CHOKE range</td>
<td>Set CHOKE-lever to operating position</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>- Loose ignition cable</td>
<td>Firmly connect spark plug connector to spark plug, fix ignition cable retaining device, firmly connect connector to ignition cable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Clogged fuel line or poor fuel</td>
<td>Clean fuel line, fill fresh fuel</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>- Vent opening in fuel tank cap clogged</td>
<td>Exchange fuel tank cap</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Water or dirt in fuel system</td>
<td>Drain fuel and fill fresh fuel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Air filter clogged</td>
<td>Clean air filter or exchange</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>- Carburetor misadjusted</td>
<td>Re-adjust carburetor</td>
<td>BM</td>
</tr>
<tr>
<td>Excessive temperature in engine</td>
<td>- Low engine oil level</td>
<td>Refill oil immediately</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>- Impaired cooling</td>
<td>Clean cooling fan grille, clean internal cooling fins</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>- Vent opening in fuel tank cap clogged</td>
<td>Exchange fuel tank cap</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Water or dirt in fuel system</td>
<td>Drain fuel and fill fresh fuel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Air filter clogged</td>
<td>Clean air filter</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>- Carburetor misadjusted</td>
<td>Re-adjust carburetor</td>
<td>BM</td>
</tr>
<tr>
<td>Misfirings in engine at high speeds</td>
<td>- Short firing intervals</td>
<td>Adjust spark plug</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>- Incorrect idle mixture</td>
<td>Adjust carburetor</td>
<td>BM</td>
</tr>
<tr>
<td>Engine frequently stalls in idle</td>
<td>- Firing interval too long, defective spark plug</td>
<td>Adjust or replace spark plug</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>- Air filter clogged</td>
<td>Clean air filter</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>- Carburetor misadjusted</td>
<td>Re-adjust carburetor</td>
<td>BM</td>
</tr>
<tr>
<td>Engine does not run smoothly</td>
<td>- governor linkages clogged or jammed</td>
<td>Clean governor linkages</td>
<td>BM</td>
</tr>
<tr>
<td>Engine does not stop when set to stop</td>
<td>- Engine shut-off switch not correct</td>
<td>Check setting of cabling, engine revolution settings</td>
<td>BM</td>
</tr>
</tbody>
</table>
### 6. Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Possible solution</th>
<th>Page</th>
</tr>
</thead>
</table>
| Engine output too low | - Air filter clogged  
- Loose cylinder head or damaged sealing  
- Poor compression | Clean air filter  
Tighten cylinder head, exchange sealing  
Have engine checked | BM  
* |
| Travelling drive or mowing drive does not stop when the clutch levers are released | - Incorrect hand clutch lever adjustment | Adjust switching for travelling or mowing drive | *  
31 |
| Excessive vibration | - Attachment bolts loosened  
- Mowing knife loosened, warped or incorrectly adjusted | Tighten attachment bolts  
Immediately turn off engine!  
Check all screws and nuts for tightness, exchange damaged parts, adjust V-belt tension | 30, 33 |

* = For this purpose contact your agria workshop.  
BM = Engine operating instructions
**Varnishes, Wear Parts**

**Fuel Stabilizer:**

- 79909 Fuel stabilizer pouch 5 g

**Varnishes:**

- 18103 Spray varnish birch-green spray tin 400 ml
- 71298 Spray varnish red, RAL 2002 spray tin 400 ml
- 50968 Spray varnish black spray tin 400 ml

**Wear Parts:**

- 76199 Air filter element set
- 75999 Spark plug NGK BPR6ES; Bosch WR7DC
- 479005 Mowing knife 58 cm (vers. 8000 612)
- 479045 Mowing knife 64 cm (vers. 8000 622)
- 479004 Knife screw
- 479046 Knife damping washer
- 77310 Securing disk SKM10 (for knife screw)
- 479000 V-belt for mowing drive A13x1480 LW
- 479073 V-belt for travelling drive 10x475 Li ZX
- 479002 Swath curtain
- 479003 Rear protection liner

⚠️ **Note:** Only use original Agria V-belts!
## Inspection and Maintenance Chart

<table>
<thead>
<tr>
<th>Task</th>
<th>Cycles</th>
<th>Minimum every 3 months</th>
<th>Minimum yearly</th>
<th>B</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check safety circuit function</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Check protection liners</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Check air filter</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>BM</td>
</tr>
<tr>
<td>Clean cooling-screen</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>BM</td>
</tr>
<tr>
<td>Check engine oil level, refill, if necessary</td>
<td>K K</td>
<td></td>
<td></td>
<td></td>
<td>BM</td>
</tr>
<tr>
<td>Clean surrounding parts of exhaust</td>
<td>K K</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Check mowing knives</td>
<td>K K K</td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>First engine oil change</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td>BM</td>
</tr>
<tr>
<td>Subsequent oil changes</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td>BM</td>
</tr>
<tr>
<td>Cleaning</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>Check bolts and nuts</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>Clean air filter insert</td>
<td>W W</td>
<td></td>
<td></td>
<td></td>
<td>BM</td>
</tr>
<tr>
<td>Replace air filter insert, earlier, if required</td>
<td>W</td>
<td>W*</td>
<td></td>
<td></td>
<td>BM</td>
</tr>
<tr>
<td>Clean spark plug, adjust gap</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td>BM</td>
</tr>
<tr>
<td>Clean air-cooling system, earlier, if required</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Check V-belt tension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Check V-belt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Replace spark plug</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>BM</td>
</tr>
<tr>
<td>Grease wheel hub and free-wheel</td>
<td>W W</td>
<td></td>
<td></td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Lubricate Bowden cables</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Check gearbox for escaping oil</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Replace fuel hoses</td>
<td>W*</td>
<td></td>
<td></td>
<td></td>
<td>BM</td>
</tr>
</tbody>
</table>

- **A** = Each time before you take up operation
- **B** = After each cleaning
- **BM** = see engine operating instructions
- **K** = Checks and maintenance to be executed by operator
- **W** = Maintenance to be executed by professional workshop
- **W*** = after 2 years
Designation of Parts

Fig. B

Engine HONDA GCV160 and GCV190

1 Fuel tank cap
2 Starter handle
3 Cooling screen
4 Oil filler plug, dip stick
5 Air filter
6 Carburetor, speed control device
7 Engine model ID No.
8 Spark plug, spark plug connector
9 Exhaust with exhaust guard
10 Fuel tank
11 Fuel tap
12 Fan housing
Conformity Declaration


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

Anhang VI

Name und Anschrift der beteiligten benannten Stelle:

NB 1017, TÜV CZ s.r.o., Novodvorská 994, 142 21 Praha 4 - ČR

Gemessener Schallleistungspegel:
Le niveau de puissance acoustique mesuré:
8000 612: 90,3 dB(A) / 8000 622: 91,1 dB(A)

Garantieter Schallleistungspegel:
Le niveau de puissance acoustique garanti:
8000 612: 92 dB(A) / 8000 622: 92 dB(A)

Möckmühl, den 31.01.2012

Siegfried Arndt
Geschäftsführer
Directeur
Managing Director
Bedrijfsleider

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

Herr Tigges ist bevollmächtigt die technischen Unterlagen zusammenzustellen. Monsieur Tigges est habilité à agencer la documentation technique. Mr. Tigges is authorized to assort the technical documents. De heer Tigges is gemachtig om de technische documentatie op te stellen.

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Your local agria specialist dealer: