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

Operating Instructions No. 998 784-A 07.08
Symbols, Name Plate

Please complete:

<table>
<thead>
<tr>
<th>Machine Type No.:</th>
<th>Engine Type:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID/Machine No.: ............</td>
<td>Engine No.: ...........</td>
</tr>
<tr>
<td>Date of Purchase: ..........</td>
<td></td>
</tr>
</tbody>
</table>

For name plate, refer to page 3/fig. A/25
For engine type and number, refer to page 46/fig. B/3
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 agria
- Operating instructions Engine
- Bildup mower
- Tool kit

\(\text{agria - Service} = \text{contact your agria-workshop}\)

- Lifting point, fixing point for recovery, tying up, towing away

Symbols

- Warning – danger
- Attention
- Important Information
- Choke
- Engine
- Engine Start
- Engine Stop
- Engine speed
- Engine oil level
- Transmission oil
- Fuel
- Fuel filter
- Forward
- Reverse
- Fast
- Slow
- Engage cutter element
- Disengage cutter element
- Park brake
- Closed (locked)
- Open (Unlocked)
- Tyre air pressure
- Infinitely linear
Designation of Parts

Brush Cutter 4500 Hydro
Designation of Parts

Fig. A:

1. Handlebar
2. Tool kit
3. Fuel tank
4. Belt guard cover
5. Front frame
6. Locking bolt
7. Front wheel
8. Front tarpaulin guard
9. Mulch housing
10. Rubber cap strips (on either side) on the mulch housing (only vers. 85 cm)
11. Rubber cap strip on the gear
12. Drive wheel
13. Lug for lashing down and lifting (on either side)
14. Engine
15. Crank for cutting height adjustment
16. Clamping lever for handlebars height adjustment
17. Handle for handlebars lateral adjustment
18. Mulching drive shifting lever
19. Engine shut-off switch - only version 85 cm (4500 031)
20. - version 71 cm (4500 021) - Speed adjusting lever
   - CHOKE
   - Engine shut-off switch
   - version 85 cm (4500 031) - Speed control lever

21. Driving speed lever
22. Steering brake lever left
23. Steering brake lever right
24. Safety circuit lever left and right
25. Name plate, ID/Machine No.
26. Y Locking lever for driving control
27. Z Locking lever for park brake
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Note fold-out pages!

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**Recommendations**

**Maintenance and Repair**

The trained mechanics of your agria workshop carry out expert maintenance and repair.

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 for pulling the flywheel.

**Fuel**

**Petrol Engine**

This petrol engine runs smoothly on commercial un**leaded regular petrol**.

*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 residues from depositing in the carburetor, fuel filter, and tank. Or add a fuel stabilizer.

For further instructions refer to „Engine Preservation“.
1. Safety Instructions

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

**Warning**

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

**Due Use**

The brush cutter agria has been designed for mowing use in farming and forestry for example for grass maintenance (due use).

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

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

Any unauthorized changes to the tool carrier 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 latest traffic code applies.

Accordingly, check the tool carrier for road and operational safety each time you take up operation.

Only persons familiar with the tool carrier and instructed on the hazards of operation are allowed to use, maintain and repair the tool carrier.

Young persons of 16 years or younger may not operate the tool carrier!

Only work in good light and visibility.

Operator’s clothes should fit tightly. Avoid wearing loosely fitting clothes. Wear solid shoes.

Note the warning and instruction signs on the tool carrier for safe operation. Compliance is for your own safety.

When transporting the tool carrier on vehicles or trailers outside the area to be cultivated, the engine must be switched off and you must wait until the knives have stopped rotating completely.

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

Due to its centrifugal mass, the cutter blade can follow up. During that time, do not stay too close to the mower housing. Only when the cutter blade is completely standing still and the spark plug connector has been withdrawn, works on the brush cutter are permitted.

Foreign powered parts shear and squeeze!

Riding on the machine during operation is not permitted.

Match operating speed to conditions.

Do not change settings of governor. High engine speed increases risk of accidents.

Working Area and Danger Zone

The user is liable to third parties working within the brush cutter’s working range.

Staying in the danger zone is not permitted.

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

Check the immediate surroundings of the machine 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.

Be careful when mowing; ensure that the cutter blades does not seize obstacles such as border stones, enclosures, roots etc.

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 shut off the engine quickly and safely in an emergency situation.

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.

Be careful upon starting and during mowing; do not come directly close to the cutting section with your hands or feet.

When starting, it is not permitted to bring the brush cutter into an upright position or to tilt it.

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

**Operation**

Never leave the operator's position while the brush cutter is at work.

The carrying of additional persons is not allowed.

If clogging occurs in the cutting section, shut off the engine, withdraw the spark plug connector and clean the cutting section with an appropriate tool.

In case of damage to the brush cutter, immediately shut off the engine and have it repaired.

Should the machine start to vibrate in an unusually strong manner, an immediate inspection is necessary.

If steering causes problems, immediately bring the brush cutter to a halt and shut it off. Have the malfunction eliminated without delay.

Driving speed must always be adjusted to suit the surrounding conditions. When driving uphill or downhill and driving across a slope avoid sudden turns. When driving in curves switch off the differential lock.

If possible, always work across the slope.

Pay careful attention to hills, dips and other unforeseen dangers.

Stop the cutting tools before crossing surfaces other than grass.

Never operate machines with damaged or unfitted safety protection gear.

**End of Operation**

Never leave the brush cutter unattended with the engine running.

Before you leave the brush cutter, shut off the engine, close the fuel cock, engage the parking brakes and secure against rolling away.

Before you leave the ride-on brush cutter fully lower the cutting tools.

Secure brush cutter against unauthorized use, remove the ignition key.

**Mowing Equipment**

In cases of improper operation the sharp blades of the cutter blades pose a considerable danger of injury. Wear protective gloves when working on the cutter blades.

When changing the cutter blades ensure that the screwing movement leads away from the blade edges.

Protective glasses and protective gloves must be worn when sharpening the cutter blades.

**Maintenance**

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

After switching off the drive, the brush cutter may continue to coast due to its centrifugal mass. Do not go too near to the brush cutter during this time. Only when it has come to a complete standstill can it be worked upon.

Before you work on the engine, always remove spark plug connector.
1. Safety Instructions

Check regularly and, if necessary, replace all protecting devices and tools subject to wear and tear.
Replace damaged cutting tools.
Observe maintenance intervals of the cutter blades.
Always wear safety gloves and use proper tools when exchanging the cutter sections.
Repair work, such as welding, grinding, drilling etc., is not allowed to be carried out on load-bearing, safety-critical parts.
Keep brush cutter clean to avoid risk of fire.
Check nuts and bolts regularly for tight fit and re-tighten, if necessary.
Ensure that you re-install all safety and protective devices and adjust them properly after maintenance and cleaning.
Only use original agria spare parts. All other commercial spare parts must correspond to quality and technical requirements specified by agria.

Storage

It is not allowed to store the brush cutter in rooms with open heating.
Never park the brush cutter 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 pipe immediately.
Be careful when handling 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 shut off and cooled down.
Do not spill any fuel, use a proper filling device (e.g. funnel).
In case of fuel-spillage, pull the brush cutter away from the spillage before you start the engine.
Make sure fuel is of specified quality.
Store fuel in approved cans only.
Liquids leaking under high pressure, e.g. fuel, can penetrate the skin and cause severe injuries. Immediately see a doctor.
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.
1. Safety Instructions

Before you dispose of opened and seemingly empty pressurised tins (e.g. of assist-starting liquids) 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 used is of specified quality. Storage is in approved cans only.

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

Tyres and Tyre Air Pressure

When working on wheels, make sure tool carrier is parked properly and secured against rolling off.

Any repairs are to be carried out by trained mechanics only and with the appropriate tools.

Regularly check tyre air pressure. Excessive pressure may cause bursts.

Re-tighten attachment bolts of drive-wheels or check tightness when doing maintenance work.

Electrical System

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

Explanation of Warning Signs

**Attention:**
Carefully read operator's manual before handling the machine. Observe instructions and safety rules when operating.

Shut off engine and remove spark plug connector before cleaning, performing maintenance or repair work.

During operation keep at a safe distance from cutter blades.

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

Danger - flying objects; keep safe distance from the machine as long as the engine is running.

Do not open or remove safety shields while engine is running.

Use sprag before machine is uncoupled or parked.

Stay clear of hot surfaces.

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

Before each fuel fill, shut off the engine and wait until it has cooled off.

**Signs**

When working with the machine, wear individual protective ear plugs.

Wear protective gloves.

Wear solid shoes.

Check engine oil level.

Explanation of Prohibition Signs

- No open fire
- Do not smoke!
- Do not spray with water
- Do not start the engine in closed rooms!
2. Specifications

Machine

Dimensions (mm)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>4500 021 (71 cm)</th>
<th>4500 031 (85 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1.160</td>
<td>1.460</td>
</tr>
<tr>
<td>BF</td>
<td>110</td>
<td>90</td>
</tr>
<tr>
<td>BH</td>
<td>650</td>
<td>650</td>
</tr>
<tr>
<td>BM</td>
<td>820</td>
<td>985</td>
</tr>
<tr>
<td>BR</td>
<td>870</td>
<td>850</td>
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<tr>
<td>( h )</td>
<td>890</td>
<td>920</td>
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<tr>
<td>HH</td>
<td>820 ± 230</td>
<td>890 ± 230</td>
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<tr>
<td>l</td>
<td>1.640</td>
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<td>L</td>
<td>2.240</td>
<td>2.500</td>
</tr>
<tr>
<td>RH</td>
<td>780</td>
<td>660</td>
</tr>
<tr>
<td>SH</td>
<td>50 - 105</td>
<td>50 - 105</td>
</tr>
<tr>
<td>PH</td>
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<td>430 kN</td>
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<tr>
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<td>330 kN</td>
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<td>VHR</td>
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</tr>
<tr>
<td>( \beta )</td>
<td>45°</td>
<td>38°</td>
</tr>
<tr>
<td>( \delta R )</td>
<td>45°</td>
<td>45°</td>
</tr>
</tbody>
</table>
### 2. Specifications

#### Brush cutter 71 cm

**4500 021**

<table>
<thead>
<tr>
<th><strong>Driving axle:</strong></th>
<th>Hydrostat gear</th>
</tr>
</thead>
</table>
| **Driving speeds:** | Forward: 0 - 6,0 km/h  
Reverse: 0 - 3,0 km/h |
| **Oil for hydrostat:** | permanent oil volume |
| **Steering:** | Single-wheel multiple disc clutch brake |
| **Tyres:** | rear: 16x6.50-8 wide track field tyre  
front: Caster 215x55 mm full rubber with ball bearings |
| **Tyre air pressure:** | front: 0,6 - 1,0 bar  
rear: 0,6 - 1,0 bar (4PR) |
| **Fuel tank capacity:** | approx. 7,0 l |
| **Weight:** | Empty weight: (with fuel tank filled up): 203 kg (4500 021) |
| **Cutter unit:** | Rotary mower with reciprocating knife system  
Working width: 710 mm  
Cutting height: steplessly from 50 to 105 mm |
| **Optional:** | Mulching kit 4549 021  
Cutting height: steplessly from 60 to 115 mm |

#### Brush cutter 85 cm

**4500 031**

<table>
<thead>
<tr>
<th><strong>Driving axle:</strong></th>
<th>Hydrostat gear</th>
</tr>
</thead>
</table>
| **Driving speeds:** | Forward: 0 - 6,0 km/h  
Reverse: 0 - 3,0 km/h |
| **Oil for hydrostat:** | permanent oil volume |
| **Steering:** | Single-wheel multiple disc clutch brake |
| **Tyres:** | rear: 5.00-10 field tyre  
front: Caster 260x60 mm full rubber with ball bearings |
| **Tyre air pressure:** | front: 0,6 - 1,0 bar  
rear: 0,6 - 1,0 bar (4PR) |
| **Fuel tank capacity:** | approx. 7,0 l |
| **Weight:** | Empty weight: (with fuel tank filled up): 230 kg (4500 031) |
| **Cutter unit:** | Rotary mower with reciprocating knife system  
Working width: 850 mm  
Cutting height: steplessly from 50 to 105 mm |
| **Optional:** | Mulching kit 4549 031  
Cutting height: steplessly from 60 to 115 mm |
2. Specifications

**Petrol Engine for 71 cm**

**Manufacturer:** ................. Honda  
**Type:** .................. GXV 340 UT2 DN4

**Bore:** ......................... 82 mm  
**Stroke:** .................. 64 mm  
**Cubic capacity:** ............ 337 ccm  
**Output:** .................... 8,1 kW at 3600 rpm  
**Max torque:** ................. 24 Nm at 2500 rpm

**Construction:** ........ Fan-air-cooled  
Spark ignition engine with overhead valves, vertically crankshaft  
**Spark plug:** .............. NGK BPR5ES  
Spark plug gap 0,76 mm

**Ignition:**  
Electr. magnetic ignition, contactless  
Radio remote screened .......... as per VDE 0879

**Fuel:** ....................... unleaded regular petrol  
min. octane number 85 - 91 RON (refer to fuel recommendations)

**Fuel consumption:** .... 313 g/kWh  
**Fuel filter:** .............. feul-online

**Air filter:** .......... Dry filter element with foamed preliminary filter  
**Carburettor:** ............ Throttle valve type

**Rated speed:** ................. 3200 rpm  
**Top no-load speed:** ............ 3350 rpm  
**Idling speed:** .................. 1200 rpm

**Lubrication:** ... Pressure and spinning

**Engine oil:** Filling quantity approx. 1,1 l  
(if changed with filter)  
Multi-grade oil  
at ambient temperature -15° bis +45°C:  
SAE 10W-40 API-SF, SG (or higher)

**Operability on Slopes:**  
Engine is suited for use on slopes (with oil level at “max” = upper level mark)  
possible up to 20° inclination (37%)  

**Noise level:**  
Noise level at operator’s ear ............ \( L_{PA} = 88 \text{ dB} \)  
acccordance with EN 836 appendix B and EN ISO 3744  

**Acoustic power level:** ...... \( L_{WA} = 100 \text{ dB} \)  
acccordance with EN 836 and EN ISO 11201  

**Vibration acceleration value:**  
Hand-arm vibration  
on handlebar: ............ \( a_{HW} = 1,48 \text{ m/s}^2 \)  
in accordance with EN 836/A2 and DIN EN ISO 20643
2. Specifications

Petrol Engine for 85 cm

Manufacturer: .......... Briggs & Stratton
Type: ..... Vanguard OHV 16HP V-Twin

Bore: ........................................ 68 mm
Stroke: ..................................... 66 mm
Cubic capacity: .............. 480 ccm
Output: ............ 11,9 kW (16 SAE-PS)

Max torque: ............... 33 Nm

Construction: ........ Fan-air-cooled Spark ignition engine with overhead valves, V-mounted double-cylinder and vertically crankshaft

Spark plug: BOSCH FR8DC (706 09)
................. CHAMPION RC12YC
Spark plug gap 0,76 mm

Ignition:
Electr. magnetic ignition, contactless
Radio remote screened .......... as per VDE 0879

Valve clearance (engine cold):
Intake ......................... 0.05 mm
Outlet .............................. 0.10 mm

Fuel:.................................
Commercial ..............................
.............................. unleaded regular petrol
min. octane number 85 - 91 RON
(refer to fuel recommendations)

Fuel consumption: ........ 312 g/kWh
Fuel filter: ................. fuel-online

Air filter: .......... Dry filter element with foamed preliminary filter

Carburettor: ................. Horizontal float carburettor

Rated speed: ..................... 3200 rpm
Top no-load speed: .......... 3350 rpm
Idling speed: .................... 1750 rpm

Lubrication:
.. Pressure lubrication, full flow oil filter
Oil filter .................... filter cartridge

Engine oil: Filling quantity approx. 1,6 l
(if changed with filter)
Multi-grade oil
at ambient temperature -15° bis +45°C:
SAE 10W-40 API-SF, SG (or higher)

Operability on Slopes:
Engine is suited for use on slopes (with oil level at “max” = upper level mark) possible up to 20° inclination (37%)

Noise level:
Noise level at operator’s ear .......... $L_{PA} = 89$ dB
accordance with EN 836 appendix B and EN ISO 3744
Acoustic power level: ...... $L_{WA} = 101$ dB
accordance with EN 836 and EN ISO 11201

Vibration acceleration value:
Hand-arm vibration on handlebar: ............ $a_{hw} = 3,4 \text{ m/s}^2$
in accordance with EN 836/A2 and DIN EN ISO 20643
3. Devices and Operating Elements

The brush cutter agria 4500 Hydro is suited for use in farming and forestry as well as grass maintenance, such as for example the mowing of grass and meadows.

**Engine**

- The **four-stroke petrol engine** runs on commercial unleaded petrol (refer to fuel recommendations page 6).

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.

**Ignition System**

The **petrol engine** is equipped with a contactless ignition system. We recommend to have necessary check-ups done by an expert only.

**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-speed**

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

**Air Filter**

The air filter purifies the air intake. A clogged filter reduces engine output.
3. Devices and Operating Elements

**Version 4500 021**
71 cm

**Speed adjusting lever**
The lever (A/26) is used in the illustrated positions for the following:
- Switching engine OFF
- Engine speed stepless from min. to max.
- Choke, for engine cold starts

---

**Version 4500 031**
85 cm

**Choke**
- for engine cold starts
- operating position

**Engine Shut-off switch**

![Engine Shut-off switch diagram]

0 = Off - engine shut off
I = Operating position

**Speed adjusting lever**
The lever (A/26) is used in the illustrated positions for the following:
- Engine speed stepless from min. to max.
3. Devices and Operating Elements

**Safety circuit**

- **A** Engine shut-off position "0" (both levers not pressed).
- **B** Operating position (at least one lever pressed down and held)

*Do not fasten safety circuit lever*

*Release the safety circuit lever in an emergency, the lever will automatically go to STOP position!*
3. Devices and Operating Elements

Transmission

The agria brush cutter is equipped with a hydrostatic drive.

Driving Control

- The driving speed forward or reverse is steplessly set or changed with the forefinger or the thumb at the driving lever (A/27).
- The 0 setting is engaged when the marking on the driving lever is level with the "0" in the illustration and hits the the spring catch.
- When turning the driving lever forwards, the driving speed is steplessly increased forwards and accordingly backwards, if the driving lever is turned backwards and down.

\[\text{The engine can only be started if the driving switch is set to "0"!}\]

Mulching Drive

The mulching drive is switched on and off by using the eccentric lever (A/24)

\[\text{switch on}\]
Swing the eccentric lever (A/24) back and over dead centre.

\[\text{switch on}\]
Swing the eccentric lever (A/24) down.

\[\text{The engine can only be started if the driving switch and mulching drive is set to "0" and both steering levers are set to "park brake" and are locked into place!}\]

-Safety circuit!
3. Devices and Operating Elements

**Steering Brake**

By use of the steering brake levers (A/28 and A/29) the drive to the inside-facing wheel is switched off and then braked, the outside-facing wheel maintains its speed.

**Steering lever settings**

- **A**  **Wheel drive on**
  - Steering lever pushed down
  - both locking levers (Y, Z) opened

- **B**  **Wheel drive off**
  - Steering lever in the central position
  - both locking levers (Y, Z) opened

- **C**  **Steering brake on**
  - wheel drive switched off
  - Steering lever pushed up to the stop
  - both locking levers (Y, Z) opened

- **D**  **Coasting Operation**
  - wheel drive switched off
  - both steering levers in the central position
  - locking lever (Y) set to locked position

- **E**  **Park brake**
  - wheel drive switched off
  - both steering levers pushed up to the stop
  - locking lever (Z) set to locked position

**Quick stop**

- By moving both steering levers (A/28 + A/29) to the central position the operating drive is switched off

- By moving both steering levers to the stop the driving wheels are braked (application recommended, for instance when engine is overloaded)
  - the equipment drive (PTO shaft) remains unaffected.
3. Devices and Operating Elements

Handlebar

Do never adjust operating handles during working – risk of accidents!

Handlebar – Height Adjustment

- Unfix clamping lever A on either side until the ratchets are free.
- Bring left and right handlebar to the desired height and introduce into the respective ratchet.
- Tighten clamping lever A again.

Handlebar – Lateral Adjustment

From its normal position (centre position), the handlebar can be turned by about 20° to the left or right.

- Handle (A/23) pulled back
  - Handlebar locking bolt is unlocked
  - Handlebar can be turned to the left or right
- Release handle and slightly move handlebar to the left and right until the locking bolt is engaged.
3. Devices and Operating Elements

![Diagram of cutting height adjustment and front wheels]

**Cutting Height Adjustment**

60 mm - 115 mm stepless

*For this flip the crank handle (A/21) upwards higher = Turn clockwise*  
*lower = Turn anti-clockwise*  
*Flip the crank handle back down after adjusting = Security against unintentional adjustment.*

**Front wheels**

The front wheels may be adjusted using the locking bolts (A/6) to:

- **A Moveable position**  
  Bolts turned upwards and facing back  
  = light steering on even surfaces

- **B Rigid position**  
  in running wheel central position (movement directly ahead)  
  Bolts turned downwards, facing forward and locked  
  = better control of the sides on slopes

**Fixing Points**

For towing away, recovering and tying down and to ensure a safe transport, use the fixing points  

on the tubular frame at the front and the lugs (A/13) at the rear.
4. Commissioning and Operation

Commissioning

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/Diesel 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 engine is not filled completely with engine oil!

Before you operate the engine the first time, fill in engine oil, do not fill over max.!
4. Commissioning and Operation

Before starting the engine

1. Sufficient fuel is filled into the tank?
2. Air filter clean?

3. Check the engine oil level

4. Check all bolts and nuts for tight fit

Only take machine into operation with all protective devices mounted and positioned to provide protection!

Check safety circuit

Careful when starting the engine in closed rooms! Ensure good ventilation and fast escape of exhaust fumes. Exhaust fumes contain carbon monoxide which acts toxic when inhaled.

Do not touch the hot engine - danger of burns!

Do not touch or remove the ignition line and spark plug connector while the engine is running.
Starting the Engine

Wear individual protective ear plugs and solid shoes!

Mount spark plug connector

1. Open fuel tap
   (only version 71 cm)

2. Set the engine shut-off switch to operating position
   (only version 85 cm)

3. Set driving speed to position neutral "0"

4. Set mulching drive to " 0"

5. Set both steering levers to "park brake" and lock

The engine can only be started if the driving switch and mulching drive is set to "0" and both steering levers are set to "park brake" and are locked into place! -Safety circuit!

6. Cold engine: set speed adjusting lever to max and put CHOKE to "CHOKE" position

Warm engine: Set speed control lever to max

7. Start the engine with the recoil starter

8. Once the engine has started, let it warm up for some time. Slowly push choke back into operating position.
4. Commissioning and Operation

**Driving**

Start the engine Pos. 1 - 8

9 Set the engine revolutions to "max"

10 Set both steering levers to "drive"

- Steer according to the description on page 21

11 Move the driving levers **slowly** either forwards or backwards (depending on the driving direction)

- the driving speed increases as the driving levers are moved further

**Mulching**

Start the engine and drive Pos. 1 - 11

12 Switch the mulching drive slowly and evenly to "I"  

Stop the machine while the engine is running:

- driving speed to "0"
- pull park brake and lock
- mulching drive to "0"

- **Only adjust the cutting height when the knives are at a standstill!**
- **Turn off the mulching drive before moving across areas other than grass.**
- If a foreign object is hit, look for damage to the machine and carry out any necessary repairs before continuing to work with the machine. Worn or damaged cutting tools can be ejected!
- If the machine begins to vibrate unusually strongly an immediate check is necessary.
- Before any cleaning turn off the engine and pull spark plug connector for safety reasons!
**Danger Zone**

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

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

The user is liable to third parties working within the ride-on brushcutter’s working range.

**Working on Slopes**

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

- if possible, always work cross to the slope!
- Do not drive on slopes greater than 20°.

Please be aware that there is no such thing as a "safe" slope. Driving on grass-covered slopes requires particular attention. In order to protect against rolling over you should:

- only drive if the ground conditions allow - on damp grass there is insufficient adhesion for the wheels
- not suddenly stop or start if you are driving up- or downhill
- maintain a low driving speed on slopes and in sharp curves
- pay attention to mounds and dips and other dangers which may not be obvious.
**Shutting off Petrol Engine**

1. Reduce the engine speed to "min"

2. Set the mulching drive to "0"

3. Set both steering levers to "park brake" and lock

4. Run the engine for approx. 2 minutes at a slow speed before it is switched off.
   - Set the speed control lever to engine stopp respectively the engine shut-off switch to "0"

5. Wait until all moving machine parts have come to a standstill!

6. When leaving, secure the machine with chocks against rolling away!

7. Secure the machine against unauthorized use – disconnect spark plug connector!
Apart from observing all operating instructions, it is also important to pay attention to the following maintenance instructions.

Only do all maintenance work with the engine shut off and spark plug connector disconnected.

### Engine

#### 1. Checking Oil Level
- Each time you take up operation and after 8 operating hours
  
  Engine oil level below "min" and over "max" leads to engine failure or possibly a breakdown!

#### 2. Changing Engine Oil

After the first 5 operating hours, the following oil changes always after 25 - 50 operating hours

- While engine is still warm, but not hot – danger of burns!
- Clean oil filler tube, drain plug A, and surrounding parts.
- Dispose drain plug A and collect old oil in proper container.
- Dispose of old oil in the proper manner.
- Lock drain plug.
- Fill fresh oil B
  
  - For engine oil quality refer to “Specifications”

### Engine Oil Filter (version 85 cm)

Change oil filter cartridge (B/5) always after 100 operating hours

### Fuel filter (B/12)

Change always after 100 operating hours
5. Maintenance

Cooling System
After mowing for longer periods of time, clogging of plants and dust may occur in the cooling system. Sustained operation with the cooling system clogged lets the engine heat up and causes damage.

Clean engine only with a brush or compressed air. Do not spray with water.

- Always check cooling-air screen (B/11) and remove dirt and plants sucked in: Take off cooling-air screen and clean with a brush or compressed air.
- Clean fan system after every 100 hours of operation or at least once per year, preferably before the season starts. Take off fan case and clean cooling fins on both, cylinder and cylinder head, in addition to the fins and cooling-air screen.

→agria -Service←

Exhaust System and Governor
Check exhaust system (B/9), governor link, governor rod and governor springs on a regular basis for plant trash and clean, clean with a brush or compressed air if necessary. Danger of fire results when exhaust system is dirty.

Check each time before you put the brush cutter into operation.

Spark plug
For fitting and removing the spark plugs swing the handlebar to the right.

All other maintenance of the engine → engine
5. Maintenance

Machine

Hydrostat Gear
The hydrostat gear is permanently filled with lubrication oil and thus no oil change is necessary. If there are leaks →agria-Service←

Hydrostat Cooling Fan
The cooling fan is located above the hydrostat gear. Check the functionality of the cooling fan at least once per year and remove any dirt on the radiator grill. →agria-Service←

Tarpaulin Guard, Rubber Cap Strips
Always inspect for damage and wear before starting the machine and when carrying out service work and replace if necessary:

1. tarpaulin guard at the cutting section in front
2. rubber cap strips at the mulch housing (only version 85 cm)
3. rubber cap strip at the gear.

Do not operate either with damaged tarpaulin guard/rubber cap strips or without them fitted.
5. Maintenance

**Adjustments on Hand Levers**

Check clutch play or adjustments each time you operate the machine. If necessary, readjust (especially after commissioning the machine, during break-in period, and after exchanging the bowden cables).

**Handhebelspiel: X = 1-2 mm**

! = The Bowden cable must be placed in the hand lever support on bottom position!

**Adjustment:**

1. Remove retaining spring (2).
2. Remove cable end (3) and adjusting pin (4) out of bracket in hand lever.
3. Screw the adjusting pin (4) in or out to a play of X or idle is present in position 0.
4. Place cable end and adjusting pin back into bracket.
5. Fit retaining spring (2).

**Park Brake**

Every time you start operation, check the park brake on proper function = with the steering brake levers on both sides pulled in and locked

- The park brake must hold the machine on slopes of 25° if the pawl (Y) on either side is engaged.

**Adjustment:** on hand levers 1 - 3 to be undertaken alternately the setting of the wheel coupling.

**Wheel Coupling**

Each wheel must be uncoupled when the lokking lever is set inwards (Z).

**Adjustment:** to be made with the adjusting screws A.
5. Maintenance

Safety Circuit
Check dead stop for proper function each time you take up operation and each time you do maintenance work on the machine.
- The engine must not be capable of being started when the mulching drive is in operation or when the driving lever is not set to a neutral "0".
- When the operator leaves the position at the handlebars and the mulching drive is in operation or the movement drive is switched on, the engine must automatically come to a stop.
- Check electric conductors and connections for good condition, exchange, if necessary.

Engine-Off-Switch
Check engine-off-switch for proper function each time you do maintenance work on the machine.

1 Version 71 cm
- With the speed adjusting lever in position \( \text{STOP} \), the engine must automatically come to a stop.
- Check electric conductors and connections for good condition. \( \text{agria - Service} \)

2 Version 85 cm
- With the engine-off-switch in position \( \text{STOP} \) the engine must automatically come to a stop.
- Check electric conductors and connections for good condition. \( \text{agria - Service} \)

Cutter Brake
The brake which is integrated into the cutting tools ensures that, after switching off the engine (at max. engine speed) or when leaving the operating position (safety switch), the cutting tools will come to a complete stop at the latest after 7 seconds.
- Check cutter brake for proper function each time you take up operation.
- After every 100 hours check that the cutter coasting time \(< 7\) seconds, where necessary \( \text{agria - Service} \).
5. Maintenance

V-Belt
Always after **50** operating hours

- check V-belt for wear, change if necessary:
  
  A V-belt engine - hydrostat
  B V-belt engine - knife shaft

The V-belts are tensioned automatically through springs.

**Changing V-Belt**

V-belt **A**: Access from underneath at the rear

V-belt **B**:

- Remove the V-belt protector **C** on the mulch housing
- Remove the V-belt **A**
- Switch off mulching drive to "0" and take off the V-belt **B**
- Re-mount the V-belt **A**
- Re-mount the V-belt protector **C**

**Do not operate the machine without the protection device in place!**

**Driving Chains**

- Carry out a check by eye of driving chains **D** for dirt and grease, clean where necessary and **at least once per year** lubricate with Teflon spray. For this it is best to remove the chain protection covers.

Also lubricate driving chain after every cleaning with a high-pressure cleaner with Teflon spray and start it for a short while.

- Replace the chain protection covers!

**Do not operate the machine without the protection device in place.**
5. Maintenance

Lubricating points

Lubricate at the lubricating nipples 1 - 5 after each 100 operating hours or least once per year and after cleaning with a high-pressure cleaner.

1. Knife shaft bearing

2. Idler arm

3. On either side front frame bearing

4. On either side rocker bearing of the front wheels

5. On either side locking bolts of the front wheels

Drive-Wheels

- When commissioning the tool carrier and each time you change wheels, check and tighten wheel screws after the first 2 operating hours with 100 Nm. Proceed likewise when doing maintenance work.

- Check tyre air pressure regularly. For smooth driving, make sure that there is the same pressure in front and rear tyres respectively.
5. Maintenance

Knives

- Wear protective gloves.

**Attention: Never work with knives and blade supporting which are damaged!**

1. After every 50 working hours, at every change of knives and when there is an increase in vibration, check the knives, blade supporting and knife mounting parts for wear and damage.
   - Replace all parts which are damaged or appear badly worn!

**Should increased vibrations in the machine continue to occur**

→ agria - Service ←

- The knives are easily exchanged, are suspended loosely swinging and must remain freely suspended.

2. Only use original agria spare parts!

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Code (vers. 71 cm)</th>
<th>Code (vers. 85 cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 locking nut</td>
<td>006 66</td>
<td>006 66</td>
</tr>
<tr>
<td>2 disk</td>
<td>100 496</td>
<td>100 496</td>
</tr>
<tr>
<td>3 blade supporting</td>
<td>100 450</td>
<td>100 567</td>
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<tr>
<td>4 knife</td>
<td>100 166</td>
<td>100 166</td>
</tr>
<tr>
<td>4a knife (Mulchkit)</td>
<td>100 850</td>
<td>100 850</td>
</tr>
<tr>
<td>5 bushing</td>
<td>100 495</td>
<td>100 495</td>
</tr>
<tr>
<td>6 hexagon socket screw</td>
<td>002 53</td>
<td>002 53</td>
</tr>
</tbody>
</table>

3. Only use a hexagon socket screw (6) with a property class of **at least 8.8!**
   - Always exchange the locking nut (1) for a new one when changing the knives!

4. Always after 50 operating hours and at every change of knives check the tightening torque of the nuts and screws, and tighten where necessary:
   - nut on the blade supporting: 300 Nm
   - knife mounting screws: 45 Nm.

Brush Cutter 4500 Hydro 37
5. Maintenance

General Maintenance

- Watch out for fuel and oil leakage, especially from the engine, hydrostat gear and angular gear, and repair if necessary.

Regularly check bolts and nuts for tight fit and tighten them as necessary.

- Slightly grease all sliding and moving parts with bio-lubricating grease and bio-lubrication oil.

Cleaning

After every mulching application, immediately and thoroughly clean the cutting section with water. All sliding parts must then be greased with Bio lube oil or Bio grease.

After cleaning with a high-pressure cleaner, immediately lubricate the lubricating points at the machine and shortly operate the brush cutter so that the entered water is pressed out.

At the bearing points, a grease collar shall have emerged protecting the bearing point against entering of dirt, plant sap and water.

Clean engine only with a cloth. Avoid spraying with air-compressed water jets, as water might leak into ignition and fuel system causing malfunctions.

Graphic Symbols

Worn and missing stickers with operating and safety instructions must be replaced.
5. Maintenance

Storage

For longer periods of no operation proceed as follows:

a) Clean thoroughly
   Repair paint coat

b) Petrol engine preservation

see also Engine
   - Drain fuel completely or fill fuel tank and add fuel stabilizer (agria no. 799 09).
   - Observe enclosed instructions.
   Let engine run for approx. 1 minute.
   - Change the engine oil.
   - Fill a tea-spoon (approx. 0.03l) of engine oil into the spark plug opening. Slowly crank the engine.
   - Reinstall the spark plug and set the piston to compression via the recoil starter (pull the starter grip until resistance is felt) - valves are closed.
   - Slowly crank the engine after every 2–3 weeks (spark-plug connector is removed). Then set the piston to compression again.

c) V-Belt and Clutch

Always only shut down the machine with the mulching drive disengaged, otherwise problems could occur with the clutch as a result of deformed V-belts.

d) Parking

To avoid severe corrosion:
   - to preserve the machine from atmospheric influences
   - do not park the machine:
     - in humid rooms
     - in rooms where fertilizer is stored
     - in stables or adjacent rooms.

e) Covering the machine

Protect the machine with cloth or a similar cover.
Maintenance Schedule

A = Each time before you take up operation
B = After every cleaning with air-compressed water jets
J = Once a year

1. A; 8 h
2. 50 h
3. A; 50 h
4. 8 h
5. 200 h
6. 50 h
7. A; 8 h
8. 200 h
9. J
10. A
11. A
12. B; J
13. 2 h
14. 50 h
15. A
16. A; 50 h
17. 50 h
18. 100 h; B
# Inspection and Maintenance Chart

<table>
<thead>
<tr>
<th>Task Description</th>
<th>P</th>
<th>A</th>
<th>2</th>
<th>8</th>
<th>25</th>
<th>50</th>
<th>100</th>
<th>500</th>
<th>1000</th>
<th>J</th>
<th>B</th>
<th>p.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check safety circuit function</td>
<td>11</td>
<td>K</td>
<td>34</td>
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<tr>
<td>Check engine shut-off switch function</td>
<td>11</td>
<td>K</td>
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<tr>
<td>Check cutter brake for proper function</td>
<td>16</td>
<td>K</td>
<td>34</td>
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<tr>
<td>Check brake</td>
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<td>Check tarpaulin guard and rubber cap strips</td>
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<tr>
<td>Check air filter</td>
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<tr>
<td>Clean cooling-screen</td>
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<td>Tighten wheel screws</td>
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<tr>
<td>Clean surrounding parts of exhaust</td>
<td>7</td>
<td>K</td>
<td>31</td>
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<tr>
<td>Check engine oil level, refill, if necessary</td>
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<tr>
<td>Check bolts and nuts</td>
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<tr>
<td>Check V-belt</td>
<td>17</td>
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<tr>
<td>Clean spark plug and adjust</td>
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<td>Clean air filter</td>
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<td>K</td>
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<tr>
<td>Lubricate front frame bearing</td>
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<td>K</td>
<td>36</td>
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<td>K</td>
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<tr>
<td>Clean guide plates, cooling fins – earlier, if required</td>
<td></td>
<td>F</td>
<td>31</td>
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<td>F</td>
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<tr>
<td>Change engine oil filter (only vers. 85 cm)</td>
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<td>W</td>
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<td>Replace spark plug</td>
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<tr>
<td>Lubricate all sliding parts</td>
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<td>Lubricate driving chains</td>
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<tr>
<td>Check hydrostat cooling fan</td>
<td>9</td>
<td>W</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubricate front wheels</td>
<td>16</td>
<td>K</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **P** = Item in lubrication chart or maintenance schedule (page 40)
- **A** = Each time before you take up operation
- **B** = After each cleaning, especially with a high-pressure cleaner
- **J** = At least once per year
- **K** = Checks and maintenance to be executed by operator
- **W** = Maintenance to be executed by professional workshop
- **F** = Maintenance should be carried out by your agria workshop
- **BM** = Refer to engine operating instructions
### 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>Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petrol engine does not start</td>
<td>Spark plug connector not connected</td>
<td>Connect spark plug connector</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>CHOKE is not operated</td>
<td>Set choke lever to position CHOKE</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Engine shut-off switch is set to „0”</td>
<td>Set engine shut-off switch to „1”</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Safety circuit is not set to start position</td>
<td>Set safety circuit to start position</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Mulching drive not switched off</td>
<td>Switch off mulching drive</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Driving speed not in position neutral</td>
<td>Set driving speed to „0” neutral</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Park brakes not applied</td>
<td>Set both steering levers to &quot;park brake&quot; and lock</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Fuel tank empty or poor fuel</td>
<td>Fill fresh fuel</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Fuel line clogged</td>
<td>Clean fuel line</td>
<td>BM</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 clean spark plug and start at full throttle</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>Engine-off-line defective</td>
<td>Check line and connections</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Inleaked air due to loose caburetor and suction line</td>
<td>Tighten attachment bolts</td>
<td>F</td>
</tr>
<tr>
<td>Misfirings in petrol engine</td>
<td>Engine running in CHOKE range</td>
<td>Set CHOKE to operating position</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Loose ignition cable</td>
<td>Fit connector tightly on ignition cable, fix ignition cable retaining device, fit connector tightly on spark plug</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Clogged fuel line or poor fuel</td>
<td>Clean fuel line, fill fresh fuel</td>
<td>25</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>25</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 tempeature in petrol engine</td>
<td>Low engine oil level</td>
<td>Refill oil immediately</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Impaired cooling</td>
<td>Clean cooling fan screen, clean internal cooling fins</td>
<td>31</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>Misfirings in petrol 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>Petrol 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>Carburetor misadjusted</td>
<td>Re-adjust carburetor</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>Air filter clogged</td>
<td>Clean air filter or exchange</td>
<td>BM</td>
</tr>
</tbody>
</table>
## 6. Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petrol engine does not run smoothly</td>
<td>Speed control linkages clogged or jammed</td>
<td>Clean speed control linkages</td>
<td>31</td>
</tr>
<tr>
<td>Petrol engine does not stop when set to stop</td>
<td>Defective engine-stop-line</td>
<td>Check line and connection</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Earth missing</td>
<td>Check ground contact</td>
<td>F</td>
</tr>
<tr>
<td>Petrol engine output too low</td>
<td>Air filter clogged</td>
<td>Clean air filter or exchange</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>Loose cylinder head or damaged gasket</td>
<td>Tighten cylinder head, exchange gasket</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Poor compression</td>
<td>Have engine checked</td>
<td>F</td>
</tr>
<tr>
<td>No wheel drive</td>
<td>V-belt tension defective</td>
<td>Check V-belt tensioning device</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>V-belt defective</td>
<td>Change V-belt</td>
<td>35</td>
</tr>
<tr>
<td>Drive speed not regular</td>
<td>Hydraulic operation defective</td>
<td>Check and adjust cables and operating elements</td>
<td>F</td>
</tr>
<tr>
<td>Steering brake has no effect</td>
<td>Blockage in the steering operation by foreign bodies</td>
<td>Remove blockage on the steering handles and operating elements in the steering bar</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Steering brake misadjusted</td>
<td>Readjust</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Bowden cables defective</td>
<td>Change bowden cables</td>
<td>F</td>
</tr>
<tr>
<td>No mulching drive</td>
<td>V-belt tension defective</td>
<td>Check V-belt tensioning device</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>V-belt defective</td>
<td>Change V-belt</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Mulching drive misadjusted</td>
<td>Readjust</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>Bowden cables defective</td>
<td>Change bowden cables</td>
<td>F</td>
</tr>
<tr>
<td>Excessive vibration</td>
<td>Loosened attachment bolts</td>
<td>Tighten attachment bolts</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Knives damaged or unevenly worn</td>
<td>Replace knives</td>
<td>37</td>
</tr>
<tr>
<td>Mulching output suddenly declines</td>
<td>Dull knives</td>
<td>Change knives or re-sharpen them</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remove any burr with a hand grinding stone</td>
<td></td>
</tr>
</tbody>
</table>

*BM = see operating instructions engine*

*F  = [agria-Service]*
Electrical Wiring

1. Delta module
2. Dead man's switch left
3. Dead man's switch right
4. Engine Stop - for version 71 cm on the engine
   - for version 85 cm on the handlebar (A/25)
5. Mulching drive
6. Driving speed
7. Brake right
8. Brake left

bl = blue
br = brown
br/bl = brown/blue
sw = black
we = white
Designation of Parts

Fig. B

Petrol Engine

1 Air filter
2 Spark plug connector
3 Engine identification number
4 Fan housing
5 Engine oil filter (only version Briggs & Stratton Vanguard 16 HP)
6 Fuel tap (only version Honda GXV340)
7 Oil dip-stick, oil filler tube
8 Drain plug
9 Muffler
10 Starter grip
11 Screen fan
12 Fuel filter
13 Fuel pump (only version B&S Vanguard 16 HP)
14 Choke (only version B&S Vanguard 16 HP)

Varnishes, Wear Parts

agria Order No.

Fuel Stabilizer for Petrol Engine

799 09 Fuel stabilizer pouch 5 g

Varnishes

181 03 Spray varnish birch-green spray tin 400 ml
712 98 Spray varnish red, RAL 2002 spray tin 400 ml
509 68 Spray varnish black spray tin 400 ml

Emergency Tyre Repair:

713 13 Tyre sealing gel Terra-S Bottle 1 l.

Wearing parts:

100 476 Front tarpaulin guard 71 cm 100 589 Front tarpaulin guard 85 cm
100 587 Rubber cap strip 85 cm 100 479 Rubber cap strip on the drive
100 166 Knife 100 850 Knife (version Mulching kit)
100 495 Knife bush
100 506 V-belt Hydrostat
100 523 V-belt knife shaft (71 cm) 100 598 V-belt knife shaft (85 cm)

Wearing parts - engine:

<table>
<thead>
<tr>
<th></th>
<th>Honda</th>
<th>B&amp;S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spark plug</td>
<td>789 88</td>
<td>706 09</td>
</tr>
<tr>
<td>Filter element cpl.</td>
<td>&gt; engine No. 405 272</td>
<td>716 22</td>
</tr>
<tr>
<td>Filter element Set</td>
<td>&lt; engine No. 405 269</td>
<td></td>
</tr>
<tr>
<td>Foamed preliminary filter</td>
<td>&lt; engine No. 405 270</td>
<td>640 88</td>
</tr>
<tr>
<td>Engine oil filter</td>
<td>-</td>
<td>716 23</td>
</tr>
<tr>
<td>Fuel filter</td>
<td>789 81</td>
<td>789 81</td>
</tr>
</tbody>
</table>

Brush Cutter 4500 Hydro
Fig. B
Honda GXV 340

Briggs & Stratton Vanguard 16 HP
Conformity Declaration

EG-Konformitätserklärung
CE Déclaration de conformité
EC Declaration Conformity
EG conformiteitsverklaring

D
Wir erklären, dass das Produkt
für die Verwendung in der Land- oder Forstwirtschaft und Grünflächenpflege mit folgenden EG-Richtlinien übereinstimmt:

F
Nous déclarons que le produit
pour être utilisée dans le domaine agricole et forestier et pour l’entretien des espaces verts est conforme aux spécifications des directives CE suivantes:

GB
We herewith declare that the product
conforms to the specifications of the following EC directives:

NL
Wij verklaren dat het produkt
bestemd voor gebruik in de land- en bosbouw en grasverzorging overeenkomt met de desbetreffende EG-richtlijn:

4500 021
4500 031

98/37/EG, 89/336/EWG, 2000/14/EG
98/37/CE, 89/336/CEE, 2000/14/CE
98/37/EC, 89/336/EEC, 2000/14/EC
98/37/EG, 89/336/EG, 2000/14/EG

Angewendete Normen:
Standards appliquées:
Applied standards:
De volgende normen zijn toegepast:

DIN EN 12733: 2001-09
DIN EN ISO 3744: 1995

Möckmühl, 16.06.2006

Siegfried Arndt
Geschäftsführer
Directeur
Managing Director
Bedrijfsleider

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

Brush Cutter 4500 Hydro 47
Your local agria specialist dealer: