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

Operating Instructions No. 998 415GB-B 09.18
Symbols, Name Plate

Please complete:

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

For name plate, refer to p3/fig. A/38. For engine type and number, refer to p3/fig. B/6.

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:**
- Single wheel power hoe
  - basic machine
  - handlebar with tensioning lever
- Tool kit
- Original operating instructions
- Original engine operating instructions
- Machine identity card (in connector cover on the outside of the cardboard box).

**The completed machine identity card is to be sent back to Agria-Werke.**

**Symbols**

- Warning – Danger
- Caution
- Important information
- Choke
- Fuel
- Oil
- Engine Start
- Engine Stop
- Engine oil level
- Air filter
- Hoeing drive
- fast
- slow
- open
- Closed
- Visual check
- Wear protective gloves
- Wear safety shoes

⇒ agria - Service ← = contact your agria workshop
Designation of Parts

Fig. A
21 Handlebar
22 Speed control lever
23 Tool kit
24 Safety lever
25 Clutch lever
26 Tensioning lever for handlebar side adjustment
27 Hexagonal screw for handlebar height adjustment
28 Square nut for handlebar height adjustment
29 Gear shift lever for speed ratios
30 Shift lever for tilling drive
31 Location nut for front weight mounting
32 Cap for chain gear housing
33 Tilling attachment
34 Oil filler screw/oil control screw mechanical gearbox
35 Oil drain screw mechanical gearbox
36 Hexagonal screw for drive-wheel
37 Drive-wheel
38 Name plate/machine identification no.

Fig. B
1 Air filter
2 Carburetor
3 Fuel tank cap
4 Fuel tank
5 Choke lever
6 Engine type and number
7 Starter handle
8 Cooling-air screen
9 Exhaust with protecting device
10 Spark plug/spark plug connector
11 Filler screw plug for engine oil-controlling opening
12 Engine oil drain plug
13 Fuel tap
14 Engine Shut-off Switch
Index

Amount of Delivery .......... 2
Designation of Parts .......... 3
Assembly Instructions ......... 6

1. Safety Instructions .......... 7–12
   Due Use .......................... 7

2. Specifications
   Dimensions ........................ 13
   Power Hoe ........................ 13
   Hoeing Drive ................. 13
   Noise Level ...................... 13
   Vibration Acceleration Value ... 13
   Engine ............................ 14
   Operation on Slopes .......... 14

3. Devices and
   Operating Elements
   Speed control Lever .......... 16
   Engine Shut-off Switch ......... 16
   Safety Circuit ................... 16
   Clutch .......................... 17
   Gearbox ......................... 17
   Steering Handle ............... 18
   Tilling Tool .................... 19
   Drive-Wheels ................... 20
   Front Weight .................... 20
   Leaf Deflector ................ 21

4. Commissioning and
   Operation
   Commissioning the Machine .... 22
   Starting the Engine .......... 23
   Tilling .......................... 24 - 25
   Switching off the Engine .... 26
   Danger zone ..................... 26
   Working on slopes .......... 27
   Ridging .......................... 28
   Safety references for the handling .. 28

5. Maintenance
   Engine .................................. 30
   Air Cooling System ................. 30
   Exhaust ................................ 30
   Mechanical Gearbox ................. 31
   Safety Circuit ....................... 32
   Switching Engine off ............... 32
   Clutch Play ........................ 32
   Handlebar Side Adjustment ....... 33
   General Maintenance ............... 34
   Cleaning ........................... 34
   Storage ............................. 35

   Maintenance Chart ............... 36

   Electrical Wiring. ............... 36

   Recommendations
   Lubricants, Anti-Corrosive Agents .. 37
   Fuel .................................. 37
   Maintenance and Repair .......... 37

6. Troubleshooting ............. 38 - 39

   Varnishes, Wear Parts .......... 39

7. Decommissioning,
   Disposal ............................... 40

   Inspection and
   Maintenance Sheet ............... 41

   Conformity Declaration ......... 43

Note fold-out pages!
Fig. A + B ............................ 3

Single Wheel Hoe agria 3100 5
Instructions for Unpacking
and Assembly

1. Open top of cardboard box.

2. Mount handlebar
   - Unscrew hexagonal screws (3 + 4).
   - Place handlebar (1) onto locking disk and hold – make sure that bowden cables and electric cables are not twisted or squeezed.
   - Insert threaded bolt (6) of tensioning lever into steering bar joint and handlebar. Push threaded bolt in from below.
   - Move tensioning lever to the left and screw hexagonal nut (4) onto threaded bolt until hexagonal nut fits into triangular relief on handlebar.
   - Move tensioning lever backwards to centre position and press down (tension). Now the handlebar must be firmly jammed with steering bar. If this is not the case, screw hexagonal nut (4) further down (for adjusting tensioning lever, refer to page 33).

3. If handlebar jamming is not sufficient, screw hexagonal nut (3) onto bolt and lock with hexagonal nut (4).

4. Place nut cap (2).

5. Fasten bowden cables with clamps (7) onto handlebar rods.

6. Fit the hoeing tools and adjust hoeing skid (refer to page 19).

7. Mount protective hood (refer to page 19).

8. Carry out all steps for starting-up (refer to page 22) and see operation instructions for Honda engine!
1. Safety Instructions

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

Warning

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

Due Use

The machine meets both the current state of the art and the safety regulations applicable at the time of its placing on the market within the terms of its proper use.

The single wheel hoe is a hand-controlled automatic single-axle machine which can drive and/or pull various implements in accordance with the Agria sales list (due use).

The single wheel hoe hoe is intended for use in turning over the ground in landscape gardening (including the leisure sector). The area to be covered must be in line with the usual size of such areas in landscape gardening. (Due use)

Any other type of use is considered undue. The manufacturer is not liable for any damages 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 single wheel hoe render manufacturer liability null and void.

The machine must be operated by trained personnel in accordance with the rules given in the operating instructions.

All forms of use not according to the intended purpose and all forms of work with the machine not described in these instructions constitute an unauthorized misuse and fall outside the limit of legal liability of the manufacturer.

During usage not according to the intended purpose:
- people are endangered,
- the machine and other assets of the operator may be damaged,
- the functioning of the machine may be impaired.

Reasonably predictable misuse

Predictable forms of misuse or improper handling are:
- removal or manipulation of the protective and safety equipment
- the use of non-approved attachments
- not keeping to service intervals
- a lack of measurement and testing for the early recognition of damage - a lack of replacement of worn parts
- incorrectly or poorly carried out maintenance and repair work
- use not according to the intended purpose
- working with defective electrical or mechanical equipment.
1. Safety Instructions

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 travelling on public roads, the current traffic code applies.

Check the single wheel hoe for road and operational safety each time you take up operation.

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

Teenagers of 16 years or younger may not operate the single wheel hoe!

Only work in good light and visibility.
Operator's clothes should fit tight. Wear long pants. Wear safety shoes.

Note the warning and instruction signs on the single wheel hoe for safe operation. Compliance is for your own safety.

When transporting the single wheel hoe on vehicles or trailers outside the area to be cultivated, ensure that the engine is turned off.

Careful with rotating tools – keep at a safe distance!

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.

Attachments and their weight affect the driving, steering, braking, and tip-over characteristics of the single wheel hoe. Therefore, ensure steering and braking functions are sufficient. Match operating speed to conditions.

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

Working Area and Dangerous Area

The user is liable to third parties in the work area (entire plain to be machined).

Staying in the hazardous area of the single wheel hoe is not permitted.

Check the immediate surroundings of the single wheel hoe 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 operation

Become familiar with the devices and operating elements and their functions. Above all, learn how to turn off the engine quickly and safely in case of an emergency.

Ensure that all protective devices are mounted and positioned to provide protection.

With no attachment mounted, make sure PTO-shaft is covered with the protective cap.
1. Safety Instructions

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 single wheel hoe and the attachment.

Operation
Never leave the operator’s position at the steering handle while single wheel hoe is at work.
Never adjust the steering handles during work – danger!
For any operation do not leave the operator’s position as defined by the steering handle, especially not when you turn the machine.
Riding on the attachment during operation or in transport is not permitted.
If clogging occurs in the attachment, turn off the engine and clean the attachment with an appropriate tool. There may be a tension in the drive area due to the clogging, therefore eliminate the clogging carefully.
In case of damage to the single wheel hoe or to the attachment, immediately turn off the engine and have it repaired.
If steering causes problems, immediately bring the single wheel hoe to a halt and turn it off. Have the malfunction removed without delay.
Depending on the state of the ground (vegetation, dampness ...), special footwear must be worn so that the operator does not slip or fall.

To prevent the single wheel hoe 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 at a safe distance from the attachment at work.
If possible, always work horizontally to the slope.

End of Operation
Never leave the single wheel hoe unattended with the engine running.
Before you leave the single wheel hoe, turn off the engine. Then close fuel tap. Secure single wheel hoe against unauthorized use – remove spark plug connector.

Attachments
Only mount attachments with the engine and attachment drive switched off.
Always use appropriate tools and wear gloves when changing attachments and parts thereof.
For mounting and dismounting attachments bring support leg into proper position and ensure stability.
Secure single wheel hoe and attachments against rolling off (wheel wedge).
Beware of injuries when coupling attachments. Proceed with extreme caution.
Mount attachments as specified and only couple at specified points.
Secure single wheel hoe and attachment against unauthorized use and rolling off when you leave the machine. If necessary, install transport or security devices and secure.
1. Safety Instructions

Hoeing Attachment
When hoeing and tilling on difficult ground (stony, hard etc.) the machine may give sudden jerking movements in an upward and forward direction and therefore extra care should be taken under these conditions.
Adjust protective hood of hoeing attachment so that only those parts of tools which penetrate the soil are not covered.
When hoeing, make sure hoeing skid is adjusted properly.

Weights
Fit weights properly and at specified points.

Maintenance
Only trained specialist personnel who are able to perform professional maintenance and repair work may carry out this work.
Never carry out any maintenance or cleaning with the engine running.
In addition, always remove spark plug connector before you work on the engine.
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 single wheel hoe and attachment clean to avoid risk of fire.
Check nuts and screws 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.
A thorough functional test must be carried out after maintenance work.

Storage
It is not allowed to store the single wheel hoe in rooms with open heating.
Never park the single wheel hoe 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.
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.
1. Safety Instructions

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

In case of fuel-spillage, push the single wheel hoe 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 replace fuel tank caps and other tank caps if damaged.

Only discharge fuel in the open and into suitable containers.

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 (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.

Wear appropriate protective gloves or use protective skin cream when working with oil, fuel and grease.

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 tyres, make sure two-wheel tractor 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.

Use appropriate tyre air pressure for operation with implements.

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 Signs and Warning Signs

Check engine oil level at least every 8 hours.

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

Tilt the single wheel hoe forward to an angle of max. 45° and do not transport and store on its side. There is a danger that engine oil could leak into the cylinder and combustion chamber.

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

Do not work without protective covers mounted. Before starting the engine, bring covers into proper position.

With engine running, keep at a safe distance from hoeing tools!

Stay clear of hot surfaces.

The exhaust fumes contain breath poisons - keep distance.

Warning: danger of fire - before each fuel fill, shut off the engine and wait until it has cooled off - no open fire.

Before any cleaning, maintenance, and repair work switch off the engine and pull spark plug connector.
2. Specifications

Machine Dimensions:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>340 mm</td>
</tr>
<tr>
<td>b</td>
<td>620 mm</td>
</tr>
<tr>
<td>c</td>
<td>1030 mm</td>
</tr>
<tr>
<td>d</td>
<td>710 mm</td>
</tr>
<tr>
<td>h</td>
<td>ca.700 - 900 mm</td>
</tr>
<tr>
<td>l</td>
<td>1360 mm</td>
</tr>
<tr>
<td>A</td>
<td>100 - 500 mm</td>
</tr>
<tr>
<td>e</td>
<td>&gt; 150 mm</td>
</tr>
<tr>
<td>f</td>
<td>&gt; 500 mm at h = 800 mm</td>
</tr>
</tbody>
</table>

Vibration acceleration value:
on handlebar: \( a_{\text{hw}} = 5.9 \, \text{m/s}^2 \)
(in accordance with EN 709 and EN 1033)

Noise level:
Noise level
at operator’s ear ................. 83 dB(A)
(in accordance with EN 709)

Empty weight .........................
(with full fuel tank): .......... approx. 58 kg

Type: ......................................... 3100

tyre: .................................. 3.00-4 (field tyre)
tyre air pressure: .................. 0.8 bar

Clutch: ...................... Multi-plate clutch, running in oil bath

Gearbox: 2-speed mechanical gearbox with 1 roller chain to wheel and tilling shaft respectively.

Oil filling quantity: ........ approx. 0.6 l
Transmission oil BP TFJD - GL4

Lubricant filling quantity:
Travelling drive chain housing ............... approx. 150 g
Tilling drive chain housing ............... approx. 150 g
Transmission flow grease
(e.g. BP Energrease LS-EP00)

Travelling Speeds:
1st gear ................................. 2.7 km/h
2nd gear ................................. 4.8 km/h

Tilling shaft speed:
1st gear ................................. 196 rpm
2nd gear ................................. 350 rpm

Tilling work width: .............. 10–50 cm
depending on tilling attachment version = accessory

Accessories:
 ............... Tilling attachment 10–50 cm
 ............... Ridging attachment 2152 011
 ............... Front weight 3128 011
 ............... Leaf deflector 2130 031
2. Specifications

**Engine**

**Manufacturer:** ....................... Honda

**Type:** ....................... GX160 UT2-QHQ4

**Version:** ....................... Fan-air-cooled
                                 1-cylinder-4-stroke engine (petrol)

**Bore:** ............................ 68 mm
**Stroke:** ........................... 45 mm
**Cubic capacity:** .................. 163 ccm

**Compression:** ........................ 8.5 : 1

**Output:** .................. 4.0 kW at 3600 rpm

**Max. torque**
................................. 10.3 Nm at 2500 rpm

**Spark plug:** .............. BOSCH WR 7DC
                                 NGK BPR6 ES
**Spark plug gap:** ........... 0.7 - 0.8 mm

**Ignition system:** ................. Contactless
                                 electronic magnet ignition,
                                 ignition point is pre-set, radio remote
                                 screened according to VDE 0879

**Valve lash** (engine cold):
**Intake:** ............ 0.15 mm ± 0.02 mm
**Outlet:** ............. 0.20 mm ± 0.02 mm

**Starter:** ...................... Recoil starter

**Fuel tank capacity:** ................... 3.1 l

**Fuel:** Standard regular grade petrol for
         motor vehicles, octane number see
         engine operating instructions

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

**Carburetor:** ............ Throttle valve type

**Mixture control screw:** .................
..... opened approx. 2 1/8 turns in base
     setting

**Rated speed:** ................... 3600 rpm
**Top no-load speed:** ........... 3850 rpm
**Idling speed:** ............. 1250 - 1600 rpm

**Engine oil:** ........................
Filling quantity ................. approx. 0.6 l
.......................... Multi-grade oil SAE 10 W-40
.......................... SJ or higher quality grade

**Operability on Slopes:** ... < 20° (37%)
(with oil level at “max” = upper level
mark).
3. Devices and Operating Elements

The agria 3100 single wheel hoe is a motorised unit for turning over the ground and may also be used with an implement.

The implements approved in the Agria sales list are available for use.

Motor

The 4-stroke engine runs on conventional petrol (see fuel recommendations of p37).

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

Cooling system is fan-cooled. Therefore keep screen at recoil starter and cooling ribs 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.

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.

Please observe that only those activities are described here which are required for operating the single wheel hoe.

All other information on the engine may be taken from the enclosed engine operating instructions!
3. Devices and Operating Elements

**Speed Control Lever**

The speed control lever (A/22) on the steering handle is for stepless setting of engine speed from min. = idle to max. = full throttle.

**Engine Shut-off Switch**

The machine is equipped with an electric shut-off switch (B/14). On pressing the switch, the ignition is turned off (engine is shut off).

- Position „O“ = Engine off
- Position „I“ = Operation

The engine shut-off switch also serves as an emergency shut-off. Set the switch to “O” for fast shut-off.

**Safety circuit**

The machine is equipped with a safety lever.

1. **Stop position:** When safety lever (B/1; C/1) is not operated the clutch is disengaged but the engine continues to run.

2. **Operating position:** for operation press the safety lever (B/1; C/1) down, actuating the connection between the engine and the gearbox.

   - The safety circuit must be operated in two steps:
     1. Flip locking ratchet upwards (release)
     2. Push safety lever downwards.

     If the drive to the wheels and the cultivator is switched on, the wheels and the cultivating tools begin to turn, therefore do not press the safety lever down until the drives are set at 0 and the clutch lever is in the disengaged position.

   **Caution:** Do not manipulate safety circuit and tie down safety lever.

   The safety lever also serves as an emergency shut-off. In an emergency release it. The lever automatically goes to STOP position.
3. Devices and Operating Elements

**Clutch**

The machine is decoupled ("0") when you pull the hand clutch lever (A/25).

Coupling takes place when the manual clutch lever is released and the pawl is open ("I").

To avoid clutch slipping away during operation, a clutch play is factory-set on the hand lever.

After the first operating hour, the clutch play has to be checked and, if necessary, re-adjusted.

→ Maintenance

**Gearbox**

Only shift with machine decoupled.

Only move levers with your hands.

**Speed Ratios**

Speed ratios of wheel and tilling drive are engaged with gear shift lever (A/29).

0 = neutral (idling speed)
I = 1st gear
II = 2nd gear

**Tilling Drive**

The tilling drive is secondary to the 2-speed mechanical gearbox. This means that the tilling drive can only be engaged when the 1st or 2nd gear is engaged.

The tilling drive is engaged/disengaged with shift lever (A/30).
3. Devices and Operating Elements

Steering Handle

Steering handle height adjustment

- Unscrew hexagonal screw (2) from square clamping piece (3) and remove from steering bar joint.
- Adjust handlebar to desired height and insert into proper boring in steering bar joint.
- Insert hexagonal screw and screw into square clamping piece and tighten. (Ensure that snug of clamping piece locks into long hole of location in steering bar joint).

Steering handle side adjustment

- Pull tensioning lever upwards (1), swivel handlebar to desired position and fit into proper toothing.
- Press tensioning lever back down (tension).
3. Devices and Operating Elements

Tilling Tools

1 Mounting Tilling Tools

Wear protective gloves.

- Mount tilling tools (1 + 2) onto the tilling shaft (6). Tine blades must point into rotating direction (forwards). Mount both tools in such a way that tines of both tools pointing to the housing are staggered and not parallel to the tines on the opposite side.

- Insert tensioning screw (3) from right to left, fit toothed washer (4) and tighten with hexagonal nut (5).

2 Hoeing Skid

1 For heavy soil and coarse tilling:

2 For light soil and fine tilling:

3 For sandy soils:

! No tilling without skid!

Protective Hood

3 Mounting Protective Hood

- Slide protective hood with the hook in hood carriers.

- Hang tensioning spring into spike plate and fold tensioning lever back.

! No tilling without protective hood!

! The hood flap (K) must fall down on its own, service where necessary!
3. Devices and Operating Elements

Drive-Wheels

The single wheel hoe has a centrally fitted rubber drive-wheel as standard equipment.

Mounting Drive-Wheel

- Insert single-wheel shaft (1) into shaft bearing. Push in from left to right (in travel direction).
- Fit drive-wheel (2) onto shaft end.
- Fasten with hexagonal screw (3) and counternut (4). For this purpose, push screw through borings in hub and wheel shaft.

Mount drive-wheel with pointed parts of lugs showing in travel direction (forward).

Front Weight

(Item no. 3128 021)

Only mount weight with engine and muffler cooled down – danger of burns!

Mounting Front Weight

Mount the front weight (1) in front on the engine support and fasten with hexagonal screw (3), washer (2) and hexagon nut (4).
3. Devices and Operating Elements

Leaf Deflector

(Item no. 2130 031 for 16–38 cm work width)

For working in row cultivations, the above deflector can be used to deflect leaves and plant parts.

Mounting Leaf Deflector

- Use a drill of Ø 8.5–9 mm and the included template to drill the holes “a” into tilling hood.
- Push ball pivots (2) into holes (push outside in) and fasten with washers (3) and counternuts (4).
- Press ball cups of leaf deflector (1), located on both sides at the rear, onto ball pivots until these lock into place.

- Tie both ends of included synthetic rope (5) onto leaf deflector and place bow over the machine and steering handle near the handlebar grips.

Dismounting Leaf Deflector

- Use a screwdriver (or similar tool) and press ball cups off the ball pivots.
- The ball pivots can remain in place for re-mounting the leaf deflector.

Operation

For easy turns, slightly lift the leaf deflector with the rope (5).
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.

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

Before you operate the engine the first time, fill in engine oil (see Honda operating instructions)!

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.

In case of fuel-spillage, pull the single wheel hoe away from the spillage before you start the engine.

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 with engine oil!

Before you operate the engine the first time, fill in engine oil (see Honda operating instructions)!

Please observe that only those activities are described here which are required for operating the single wheel hoe. All other information on the engine may be taken from the enclosed engine operating instructions!
### 4. Commissioning and Operation

#### Starting the Engine

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

- **Protective covers mounted?**
- **Tilling tool attached correctly?**

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 (B/13)
6. **Cold** engine:
   - Move the choke lever (B/5) to position “CHOKE”
7. **Warm** engine:
   - Do not use the CHOKE (operating position)
8. Flick the engine shut-off switch (B/14) to “I”
9. Move the speed control lever (A/22) to a central position (between idling speed and full throttle)
10. Start engine from a position outside the hazardous area
   - Pull the starter rope on the handle until the starter clutch engages. Then pull **hard and fast** to pull the rope all the way out. After the start, let the rope glide back. Do not let it snap back.
11. CHOKE (B/5) to operation position

**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

Tilling

1. Starting engine

Check safety circuit function - Only operate the machine if the safety circuit is working!

Wear individual protective ear plugs and safety shoes.

2. Pull hand clutch lever (A/25)

3. Move gear shift lever (A/29)
   for coarse tilling:
   – to slow speed “I”
   for fine tilling:
   – to fast speed “II”

4. Move shift lever for tilling drive (A/30) to position “tilling”

5. Slowly release hand clutch lever while pressing the throttle – the single wheel hoe moves forward and tilling tools start working.

Never leave the operator’s position at the steering handle while the machine is at work.

During all operation with the single wheel hoe, especially when turning, the operator must keep at a safe distance as defined by the steering handle.

Do not clean tilling tools with the engine running. Switch off the engine and remove spark plug connector.

If clogging occurs, turn off the engine and clean the attachment with an appropriate tool (wooden stick).
4. Commissioning and Operation

**Change of work-site**

1. Pull hand clutch lever
2. Turn off tilling drive, position “0”
3. Move speed shift lever to I or II
4. Slightly lift the rear of single wheel hoe on the handlebar for tilling tools not to touch the ground, max. 10 cm from ground.
5. Slowly release hand clutch lever while pressing the throttle slightly – single wheel hoe drives forward and tilling tools stop turning.

**End of Tilling**

1. Set speed control lever to idling position (min.)
2. Pull hand clutch lever and hold
3. Move lever for gear shift and tilling to position “0”
4. Commissioning and Operation

Switching off

1. Move speed control lever (A/22) to idling gas position and let engine run idle for approx. 1/2 minute

2. Move engine-off-switch (B/14) to position “O”

3. Close fuel tap (B/13)

4. Withdraw spark plug connector (B/10) - protection against unauthorised use - and secure the single wheel hoe against rolling away

Have the engine cooled down before parking the power hoe 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.

Never leave the machine unattended with the engine running.

When a cleaning must be carried out during the work, shut off the engine and pull spark plug connector for safety reasons.
4. Commissioning and Operation

**Danger zone**

⚠️ Keep out of the machine’s danger zone during starts and operation!

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 working range (the whole of the area to be worked upon).

![Danger zone diagram](image)

Danger zone power hoe

<table>
<thead>
<tr>
<th>V</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 m</td>
<td>1 m</td>
</tr>
</tbody>
</table>

**Working on Slopes**

⚠️ Depending on the state of the ground (vegetation, dampness ...), special footwear must be worn so that the operator does not slip or fall.

Work with the machine always transversely the slope but never up- or downslope because the machine can roll over by sudden thrust of the rotary hoe or can be pushed away downslope by the rotary hoe.

When hoeing and milling in difficult soils (stony, hard etc.) a jerky movement of the machine can be affected, therefore special care is required.
4. Commissioning and Operation

Ridding with Ridger

Required Accessories
Tilling tool
............. Alternatively 28, 32 and 38 cm
Front weight
............................... Item no. 3128 011
Ridger with protective hood
............................... Item no. 2152 011

Mounting Ridger

• Remove hood.
• Mount special protective hood (1) for ridding.
• Insert stem of ridger (2) into skid beam pocket of hood and fasten with hexagonal screw (4).

• Pre-adjust slanting of ridger with hexagonal screw (3). Ridding depth depends on the slanting angle of the ridger – the more the ridger slants backwards the deeper is the working depth.
• Mount front weight.

Ridding

• Commission single wheel hoe as described in “Tilling”.
• After a few metres of cultivation, adjust the desired ridding depth. For this purpose, adjust slanting of the ridger and the height-adjustable slip-heel (5) with hexagonal screw (3).
• Adjust the desired ridding width by adjusting the mouldboards with the clamping screw (6).

1 Special protective hood for ridding
2 Ridger
3 Clamping screw for ridger
4 Adjusting screw for slant adjustment
5 Slip heel
6 Clamping screw for mouldboard adjustment
7 Tilling tool
4. Commissioning and Operation

Safety references for the handling

- Do not run the engine in closed areas, in which dangerous carbon monoxide can accumulate itself.
- Always wear safety shoes and long trousers during working. Do not operate the machine bare-footed or in lightweight sandals.
- Check completely the area, on which the machine is used, and remove all articles, which can be out-thrown by the machine.
- Only work at daylight or good lighting.
- Always pay attention to a safe stand on slopes.
- Only lead the machine in the step speed.
- Always work transverse to the slope, never slope up or downward.
- Be particularly careful, if you change the driving direction on slopes.
- Do not work on excessively steep slopes.
- Be particularly careful, if you turn the machine around or pull it to itself.
- When hoeing and tilling on difficult ground (stony, hard etc.) the machine may give sudden jerking movements in an upward and forward direction and therefore extra care should be taken under these conditions.
- Do not change the basic adjustment of the engine or overspeed the engine.
- Start the engine carefully according to the instructions of the manufacturer and respect on sufficient distance from the feet to the tools.
- Never lead hands or feet to or under turning parts.
- Never lift or carry the machine with running engine.
- The engine is to be turned off: - if you leave the machine; - before you refuel.
- Close the fuel tap after working.
- Never keep the machine with petrol in the tank within a building, in which possibly petrol vapors with open fire or sparks can come into contact or catch fire.
- If the tank is to be emptied, this is to be accomplished outdoor.
- Let the engine cool down, before you store the machine in closed areas.
- Replace for safety reasons worn out or damaged parts.
5. Maintenance

Apart from adhering to operating instructions for power hoes/multi-purpose machines, it is also important to observe the following maintenance instructions.

Only trained specialist personnel who are able to perform professional maintenance and repair work may carry out this work.

⚠️ 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 machine or on the engine.

Always wear safety gloves, when working on tilling tools.

Wear appropriate protective gloves, if necessary use skin protection products, when working with oil, fuel and grease.

Caution with hot engine parts!

The machine will operate reliably at all times, if it receives proper servicing. After each operation clean the machine and, especially, the tilling tools.

⚠️ Please observe that only those activities are described here which are required for operating the single wheel hoe. All other information on the engine may be taken from the enclosed engine operating instructions!

Cleaning the Cooling-Air Screen

After long operation, dirt can clogg the cooling system. To avoid overheating and damage to the engine, regularly clean cooling-air screen (B/8). Check each time before you take up operation!

Air-Cooling System

Clean internal cooling fins and surfaces at least every 100 operating hours (earlier in very dusty conditions).

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.
5. Maintenance

Mechanical Gearbox

1. Check transmission oil level in gearbox before you commission the machine and after every 25 operating hours. With the machine parked in horizontal position and with the screw plug unscrewed, the oil level must be visible in the filling opening (A/34). Add transmission oil, if necessary.

2. Change transmission oil in mechanical gearbox after the first 25 operating hours and then after every 50 operating hours. Keep oil filling opening (A/34) and drain screw (A/35) and surrounding parts extremely clean to prevent dirt from penetrating into the gearbox.

For oil quality and quantity, refer to “Specifications”.

Wheel and Tilling Drive

The Wheel and Tilling Drives are prelubricated with 150 g transmission flow grease respectively.

If no lubricant losses are visible on external housings and sealings, lubrication is not required.

3. Checking Lubrication

- Open housing cap (A/32).
- Crank wheel and tilling shaft 6 revolutions respectively. If the two chains are wet with flow grease (visual check), lubrication is alright. If necessary, add flow grease.

Note: There are two chain housings!

→agria - Service←

Drive-Wheel

Check tyre air pressure (0.8 bar) frequently.
5. Maintenance

Safety circuit
Check before each operation and each time you maintain the machine.

- The clutch on the machine must disengage when releasing the lever (A/24).

⚠️ The engine continues to run.
⇒ agria - Service

Engine Shut-off Switch
Check engine shut-off switch (B/14) before each operation and each time you do maintenance work on the machine.

- The engine shut-off switch in position “O”, the engine must come to a stop.
- Check electric lines and connections.
⇒ agria - Service

Hand Clutch Lever
Each time you take up operation check the free play or adjustment and readjust, if necessary (especially during the break-in period after commissioning the machine and after exchanging the clutch linings).

X = 2 - 3 mm (Clutch play)

Adjustment is carried out using the bowden cable adjusting screw on the hand clutch lever:

- Loosen counter-nut (2)
- Set bowden cable adjusting screw (1) as required
- Re-tighten the counter-nut (2) against the lever bearing (locking).
5. Maintenance

Tensioning Lever for Handlebar Side Adjustment

If the tensioning lever (1) for handlebar side adjustment is pressed down, but the handlebar is still not jammed sufficiently, readjustment is necessary.

Adjustment

- Remove nut cap (4).
- Loosen top hexagonal nut [(3) conternut] about 2 turns.
- Open tensioning lever (1) = swivel upwards while pressing the handlebar onto the locking disk.
- Twist tensioning lever to the left until bottom hexagonal nut (2) is released from triangular relief.
- Clockwise screw in hexagonal nut (2) 1/6 to 5/6 turns, as required.
- Fit hexagonal nut (2) back into triangular relief, move tensioning lever back to centre position and tension.
- Check jamming. If it is still not satisfactory, repeat adjustment.
- Tighten top hexagonal nut (3) – lock and put on nut cap (4).
5. Maintenance

General

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

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

3. Once a year and after cleaning slightly grease all gliding and moving parts (e.g. clutch lever at the gear case, etc.) with Bio-lubricating grease and Bio-slushing oil.

4. Tilt the single wheel hoe forward to an angle of max. 45° and do not transport and store on its side. There is a danger that engine oil could leak into the cylinder and combustion chamber.

Cleaning

Engine

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

Machine

After each operation immediately clean the tilling tools and the protective hood. Therefore dismount the protective hood. Grease all gliding parts with Bio-lubricating grease and Bio-slushing oil.

After cleaning the machine with a pressure washer immediately lubricate all lubrication points and shortly operate the machine to press the water out.

Apply grease generously to leave a grease ring around bearings to prevent water, plant sap, and dirt from penetrating.
5. Maintenance

Storage

For longer periods of no operation prepare the machine for storage. Proceed as follows:

a) Clean thoroughly

Repair paint coat.

b) Spray all shining parts and the hoeing tools with Bio-slushing oil.

c) Engine preservation

- Drain fuel outdoors in a appropriate container completely or fill fuel tank and add fuel stabilizer (Agria-No. 799 09).
- **Observe directions for use.**

Let engine run for approx. 1 minute.

- Change the engine oil
- Fill a tea-spoon of engine oil (approx. 0.03l) 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 engine every 2–3 weeks (spark plug connector disconnected). Then set the piston to compression again.

d) Drive-wheel

Support the drive-wheel in such a way that the tyre has no ground contact. Pneumatic tyres are quickly destroyed, if left standing under load and unsupported.

e) Storage

Because of severe corrosion **do not park** the machine

- in humid rooms
- in rooms where fertilizer is stored
- in stables or adjacent rooms.

f) Protect machine

with cloth or a similar cover.
A = Each time before you take up operation
B = After every cleaning, especially with a high-pressure cleaner
J = yearly

Electrical Wiring

1 Engine flywheel
2 Ignition coil unit
3 Spark plug
4 Engine shut-off switch

sw = black
Lubricants and Anti-Corrosive Agents:

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

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

We recommend using bio-slushing oil for preservation of machines and implements (do not apply on painted external covers). Oil can be brushed or sprayed on.

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 wellbeing 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

Major maintenance and repair actions may only be undertaken by trained personnel who are capable of carrying out professional repair and maintenance work.

Minor maintenance and repair work should only be undertaken by yourself if you possess the necessary tools and training for machines and combustion engines.

Only use genuine Agria replacement parts.

Carry out a thorough functional test after maintenance work.
## 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>Remedy</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>23</td>
</tr>
<tr>
<td></td>
<td>Choke is in position CHOKE</td>
<td>Move choke lever to position “CHOKE”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fuel tank empty or poor fuel</td>
<td>Fill fresh fuel</td>
<td>BM</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 (“flooded engine”)</td>
<td>Dry and clean spark plug and start at full throttle</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>Inleaked air due to loose caburetor and suction line</td>
<td>Tighten attachment screws</td>
<td></td>
</tr>
<tr>
<td>Misfirings in engine</td>
<td>Engine running in CHOKE range</td>
<td>Move choke lever to operating position</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Loose ignition cable</td>
<td>Firmly connect spark plug connector to spark plug, fix ignition cable bracket, fit connector tightly on 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>BM</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 screen, clean internal cooling fins</td>
<td>30</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>Speed control linkages clogged or jammed</td>
<td>Clean speed control linkages</td>
<td>BM</td>
</tr>
<tr>
<td>Engine does not stop when set to stop</td>
<td>Defective engine-stop-line, earth missing</td>
<td>Check line and connection, check earth contact</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Defective engine-shut-off Switch</td>
<td>Exchange engine shut-off switch</td>
<td></td>
</tr>
</tbody>
</table>
6. Troubleshooting

Varnishes, Wear Parts

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Possible solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine output too low</td>
<td>- Air filter clogged</td>
<td>Clean air filter</td>
<td>BM</td>
</tr>
<tr>
<td></td>
<td>- Loose cylinder head or damaged gasket</td>
<td>Tighten cylinder head, exchange gasket</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>- Poor compression</td>
<td>Have engine checked</td>
<td>*</td>
</tr>
<tr>
<td>Clutch does not decouple</td>
<td>- Hand clutch lever misadjusted</td>
<td>Adjust clutch free play</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>- Safety circuit misadjusted</td>
<td>Re-adjust safety circuit</td>
<td>*</td>
</tr>
<tr>
<td>Clutch slips</td>
<td>- Hand clutch lever misadjusted</td>
<td>Adjust clutch free play</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>- Safety circuit misadjusted</td>
<td>Re-adjust safety circuit</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>- Worn out clutch linings</td>
<td>Exchange clutch linings</td>
<td>*</td>
</tr>
<tr>
<td>Excessive vibration</td>
<td>- Loosened screws</td>
<td>Tighten fastening screws</td>
<td>34</td>
</tr>
</tbody>
</table>

*= For this purpose contact your agria workshop!

BM = Honda operating instructions

Varnishes, Wear Parts

Agria Order No.

- 799 09 Fuel stabilizer pouch 5 g
  
 ⚠️ Please read and observe enclosed instructions!

Emergency Tyre Repair

- 713 13 Tyre sealing gel Terra-S bottle 1 l

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

Wear Parts

- 761 99 Air filter element set
- 759 99 Spark plug NGK BPR6 ES
- 009 16 O-ring 16 x 22 x 1.5 (Transmission oil control plug)
- 536 48 O-ring of housing cap (oil change)
- 254 97 Hoeing blade, left
- 254 98 Hoeing blade, right

Spare Parts

- 997 010 Single wheel hoe3100
- 997 145 Engine Honda
7. Decommissioning, Disposal

Decommissioning

If the single wheel hoe is no longer used, professional decommissioning should be carried out.

⚠️ To avoid injury when decommissioning the tool carrier unit must be parked in a stable position and secured against tipping over and rolling away.

 Wear protective gloves.

Disposal

After decommissioning the remaining fuel and oil must be discharged and disposed of in a correct and environmentally-friendly manner.

The agria single wheel hoe is made from valuable raw materials which can be reused by recycling.

Hand over the device for disposal, together with its remaining technical liquids, to a recycling company.
## Inspection and Maintenance Sheet

<table>
<thead>
<tr>
<th>Task</th>
<th>P</th>
<th>A</th>
<th>5</th>
<th>8</th>
<th>25</th>
<th>50</th>
<th>100</th>
<th>J</th>
<th>B</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check safety circuit</td>
<td>11</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Check switching engine off</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Check free play of levers</td>
<td>10</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>58-25</td>
</tr>
<tr>
<td>Check air filter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>32</td>
</tr>
<tr>
<td>Clean cooling-screen</td>
<td>5</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Clean surrounding parts of exhaust</td>
<td>2</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>30</td>
</tr>
<tr>
<td>Check engine oil level, refill, if necessary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>BM</td>
</tr>
<tr>
<td>Clean governor linkages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>BM</td>
</tr>
<tr>
<td>First engine oil change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>BM</td>
</tr>
<tr>
<td>subsequent oil changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>BM</td>
</tr>
<tr>
<td>Cleaning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>34</td>
</tr>
<tr>
<td>Check bolts and nuts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>34</td>
</tr>
<tr>
<td>Check oil level in mechanical gearbox</td>
<td>3</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>58-25</td>
</tr>
<tr>
<td>First oil change in mechanical gearbox, subsequent oil changes</td>
<td>4</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>BM</td>
</tr>
<tr>
<td>Clean air filter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>BM</td>
</tr>
<tr>
<td>Replace air filter element earlier, if required!</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>BM</td>
</tr>
<tr>
<td>Clean spark plug, adjust gap</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>BM</td>
</tr>
<tr>
<td>Clean fuel filter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>BM</td>
</tr>
<tr>
<td>Lubricate all gliding parts</td>
<td>9</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>34</td>
</tr>
<tr>
<td>Replace spark plug</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>BM</td>
</tr>
<tr>
<td>Clean air-cooling system, earlier, if required!</td>
<td>6</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>Check lubrication of chains for wheel and tilling drive</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>31</td>
</tr>
<tr>
<td>Replace fuel hoses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W*</td>
<td>BM</td>
</tr>
</tbody>
</table>

**Key:***

- **A** = Each time before you take up operation
- **B** = After every cleaning, especially with a high-pressure cleaner
- **J** = Min. yearly
- **K** = Checks and service to be executed by operator
- **W** = Maintenance to be executed by professional workshop
- **F** = Maintenance should be carried out by your **agria** workshop
- **BM** = See engine operating instructions
- **P** = Item in lubrication chart
- ***** = After two years
**EC Declaration Conformity**

### EG-Konformitätserklärung
**EC Declaration of Conformity**

<table>
<thead>
<tr>
<th>D</th>
<th>F</th>
<th>GB</th>
<th>NL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wir erklären, dass das Produkt</td>
<td>Nous déclarons que le produit</td>
<td>We hereby declare that the product</td>
<td>Wij verklaren dat het produkt</td>
</tr>
<tr>
<td>agria-Werke GmbH</td>
<td>Bittelbronner Str. 42</td>
<td>D-74219 Möckmühl/Württ.</td>
<td></td>
</tr>
</tbody>
</table>

**Triebnadel**
- Fraise à roue motrice
- Motor hoe with drive wheel
- Eenwielige motorhak

**EG- Konformitätserklärung**

<table>
<thead>
<tr>
<th>3100 353</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Folgende harmonisierte Normen (oder Teile davon) oder techn. Spezifikationen wurden angewendet:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Möckmühl, den 01.09.2010</td>
</tr>
</tbody>
</table>

_Siegfried Arndt, Geschäftsführer_  
_Rudolf Tigges, Leiter Entwicklung & Konstruktion_

_Herr Tigges ist bevollmächtigt die technischen Unterlagen zusammenzustellen._

_Monsieur Tigges est habilité à agencer la documentation technique._

_Mr. Tiggès is authorized to assort the technical documents._

_De heer Tigges is gemachtig om de technische documentatie op te stellen._

_Anschrift/adresse/address/adres: agria Werke GmbH, Bittelbronner Str. 42, D-74219 Möckmühl_