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

Please complete:

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

For name plate, refer to p3/fig. A/8.

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.

Scope of delivery:
- Operating instructions
- Power hoe
- Spanner WS 13 / 17
- Hex head wrench SW8

Symbols

⚠️  Warnings – danger
⚠️   Warning!
ℹ️   Important information

⚠️  Hoeing drive

⚠️  (max.) fast

⚠️  (min.) slow

⚠️  Stop

⚠️  Visual check

🚫  Do not spray with water!

agría - Service
= contact Your agria workshop
Part Designations

Fig. A

1 Engine
2 Push plate for lateral handlebar adjustment
3 Steering handle
4 Safety circuit lever
5 Turning direction switch
6 Revolution control adjusting wheel
7 Factory type plate
8 Steering handle height adjusting clamping lever (on the right side)
9 Mains plug
10 Cable gland for extension lead
11 R-clip on depth bar
12 Hoeing guard
13 Depth bar
14 Handle
15 Hoeing tools, right
16 Receiving hole for front wheel
17 Transmission oil fill/drain opening
18 Hoeing tools, left
19 Front wheel
20 Guard disc
21 Insulator
# Index

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope of delivery</td>
<td>2</td>
</tr>
<tr>
<td>Designation of parts</td>
<td>3</td>
</tr>
<tr>
<td>Unpacking and assembly</td>
<td>6</td>
</tr>
<tr>
<td>1. Safety instructions</td>
<td>7-10</td>
</tr>
<tr>
<td>2. Specifications</td>
<td>11</td>
</tr>
<tr>
<td>Dimensions</td>
<td></td>
</tr>
<tr>
<td>Power hoe</td>
<td>11</td>
</tr>
<tr>
<td>Hoe drive</td>
<td>11</td>
</tr>
<tr>
<td>Noise level</td>
<td>11</td>
</tr>
<tr>
<td>Vibration acceleration value</td>
<td>11</td>
</tr>
<tr>
<td>Engine</td>
<td>11</td>
</tr>
<tr>
<td>3. Machine and operating elements</td>
<td>12</td>
</tr>
<tr>
<td>Engine</td>
<td></td>
</tr>
<tr>
<td>Mains supply lead</td>
<td>12</td>
</tr>
<tr>
<td>Safety circuit</td>
<td>13</td>
</tr>
<tr>
<td>Turning direction switch</td>
<td>13</td>
</tr>
<tr>
<td>Steering handle</td>
<td>13</td>
</tr>
<tr>
<td>Hoeing tools</td>
<td>14</td>
</tr>
<tr>
<td>Depth bar</td>
<td>15</td>
</tr>
<tr>
<td>Front wheel</td>
<td>15</td>
</tr>
<tr>
<td>Ridging attachment</td>
<td>16</td>
</tr>
<tr>
<td>4. Commissioning and operation</td>
<td>17</td>
</tr>
<tr>
<td>Danger zone</td>
<td></td>
</tr>
<tr>
<td>Commissioning the machine</td>
<td></td>
</tr>
<tr>
<td>Extension lead</td>
<td>17</td>
</tr>
<tr>
<td>Hoeing</td>
<td>18</td>
</tr>
<tr>
<td>Handling of the extension lead</td>
<td>19</td>
</tr>
<tr>
<td>Shutting off the engine</td>
<td>19</td>
</tr>
<tr>
<td>5. Maintenance</td>
<td>20</td>
</tr>
<tr>
<td>Transmission</td>
<td></td>
</tr>
<tr>
<td>Safety circuit</td>
<td>21</td>
</tr>
<tr>
<td>General</td>
<td>21</td>
</tr>
<tr>
<td>Cleaning</td>
<td>21</td>
</tr>
<tr>
<td>Storage</td>
<td>22</td>
</tr>
<tr>
<td>Varnishes, wear parts</td>
<td>23</td>
</tr>
<tr>
<td>6. Troubleshooting</td>
<td>24</td>
</tr>
<tr>
<td>7. Inspection and maintenance chart</td>
<td>25</td>
</tr>
<tr>
<td>Electrical wiring</td>
<td>26</td>
</tr>
<tr>
<td>Conformity declaration</td>
<td>27</td>
</tr>
<tr>
<td>7. Inspection and maintenance chart</td>
<td></td>
</tr>
<tr>
<td>Conformity declaration</td>
<td></td>
</tr>
</tbody>
</table>

Note folding-out page!

Fig. A ........................................ 3
Unpacking and Assembly

1 Open the box top.

2 Mount handlebar

Remove the clamping lever (4) together with the washer (3) from the machine.

- Attach the steering handle (1) to its bearing (2), using the clamping lever (4) and washer (3) (ensure that cables and electric lines are not twisted or jammed).
- Adjust the handlebars to working height and lock the gears into mesh.
- Tighten the clamping lever.
- Connect the electric line to the screw joint (5 + 6).
- Remove the machine from the box or cut it open in 4 corners to fold down the sides.

3 Attach all hoeing tools and guards

4 Attach depth bar

5 Attach the front wheel

6 Carry out the start-up procedure
1. Safety Instructions

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

Warning

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

Due Use

The power hoe and the mounted implements authorized by the manufacturer have been designed for all common applications and tasks for soil cultivation in horticulture and park 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 power hoe 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.

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

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

Persons younger than 16 years are not permitted to operate the power hoe!

Only work in good light and visibility.

Do not use in rain, wet or damp weather!

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

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

When lifting or carrying the power hoe and when transporting the power hoe on vehicles or trailers outside the area to be cultivated, ensure that the engine is shut off.

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

High engine speed increases risk of accidents.

Working Area and Danger Zone

The user is liable to third parties working within the power hoe’s working range.

Staying in the danger zone is not permitted.

Check the immediate surroundings of the power 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. Only work at walking speed.
1. Safety Instructions

The power hoe may only be operated using 220-240 V 50/60 Hz alternating current. The extension lead and the cable drum must always be kept in a perfect condition. Check regularly!

The coupler plugs and other sockets must be made of rubber or covered in rubber and must meet DIN/VDE standard 0620. The extension lead should be kept away from the tools when work is being carried out.

Do not pull the coupler plug out of the socket using the lead but rather from the connector housing.

Do not allow the extension lead to rub against edges, pointed or sharp objects. Do not squeeze the lead through door or window frames. In order to carry out work the complete length of the lead must be unwound from the cable drum - danger of overheating!

Careful with rotating tools – keep at a safe distance!

The tools may be allowed to coast, depending on the centrifugal force at the motor. Do not approach the tools during this time. Work may only be carried out on the hoe when the tools have come to a standstill, the mains plug has been taken out and the capacitor is discharged.

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

Operation and Safety Devices

Before You Start the Engine

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

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

Operation

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

Never adjust the operating handles during work – danger!

For all works with the power hoe, in particular for turning, the machine operator must keep the distance to the machine given by the steering handles.

If clogging occurs in the hoeing tools, shut off the engine, withdraw the mains plugs and clean them with an appropriate tool.

In case of damage to the extension lead, immediately withdraw mains plug!

- Do not touch the power hoe before this is done!

In case of damage to the power hoe or to the implement, immediately shut off the engine and have it repaired.

During works on difficult, rocky or hard ground, there is the risk to lose control of the power hoe. Reckon with unexpected movements of the power hoe and disconnect the hoeing tools in time.

During works on slopes, there is the risk of slipping of the operator and/or the power hoe. Make sure that you are safely standing when operating the
1. Safety Instructions

power hoe. Make sure that the slipping power hoe does not jeopardise men, animals, valuable objects, or yourself or cause damage.

Do not work on excessively steep slopes. Be careful when changing the moving direction on slopes.

If, on inclined ground, there is an increased risk of slipping (from 10°), the power hoe must be kept in position by a second person using a rod or a rope. The accompanying person must stay above the vehicle at a sufficient distance to the working tools and on safe ground.

If possible, always work horizontally on the slope.

End of Operation

Never leave the power hoe unattended with the engine running.

Secure power hoe against unauthorized use. Withdraw mains plug.

Implement / Hoeing Tools

Only mount implements and hoeing tools with engine and implement drive shut off.

Always use appropriate tools and wear gloves when changing implements and parts thereof.

Secure power hoe and implements against rolling off (wheel chocks).

Beware of injuries while coupling implements. Work with particular care.

Hitch implements as specified and only couple at specified points.

Secure power hoe and implement against unauthorized use and rolling off when you leave the machine. If necessary, install transport or security devices and secure.

Hoeing

When hoeing, make sure the depth bar is adjusted properly.

Maintenance

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

Before you work on the engine, always remove mains plug.

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

Replace damaged hoeing tools.

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

Keep power hoe and implement 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 bring them into their protective position 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.

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 properly.

Electrical System

Persons having a pacemaker may not touch live parts when the engine is running.

Adjustments on electronics should be carried out only by agria-Werke, otherwise the product liability and the warranty claim will render null and void!
1. Safety Instructions

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

Before any cleaning, maintenance, and repair work shut off the engine and withdraw mains plug.

Do not use in rain, wet or damp weather!

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

Do not work without protective devices mounted. Before starting the engine, position protective devices to provide protection.

Danger – objects may be catapulted. Keep at a safe distance while engine is running.

In case of damage to the extension lead, immediately withdraw mains plug!

Signs

Do not use in rain!

Wear protective gloves.

Wear solid shoes.
2. Specifications

### Power Hoe agria 1000E

<table>
<thead>
<tr>
<th>Specification</th>
<th>Type 1000 611</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission:</td>
<td>worm gear drive</td>
</tr>
<tr>
<td>Oil filling quantity:</td>
<td>approx. 0.1 ltr.</td>
</tr>
<tr>
<td>Hoeing shaft speed:</td>
<td>steplessly forward 18 - 140 min(^{-1})</td>
</tr>
<tr>
<td></td>
<td>steplessly reverse 18 - 45 min(^{-1})</td>
</tr>
<tr>
<td>Working width:</td>
<td>approx. 70 cm</td>
</tr>
<tr>
<td>Handlebar:</td>
<td>without tools height adjustable</td>
</tr>
<tr>
<td>Front wheel:</td>
<td>Ø 200x 50 mm</td>
</tr>
<tr>
<td>Noise level:</td>
<td>Noise level at operator’s ear (EN 709, EN 1553): (L_{PA} = 64.8) dB</td>
</tr>
<tr>
<td></td>
<td>Sound power level (in accordance with directive 2000/14/EC): measured (L_{WA} = 78.3) dB guaranteed (L_{WA} = 82) dB</td>
</tr>
<tr>
<td>Vibration acceleration value:</td>
<td>on handlebar grip (in accordance with EN 709, EN 1033) (a_{hw} = &lt;1) m/s(^2)</td>
</tr>
</tbody>
</table>

### Engine

**Manufacturer:**

**Engine Type:**

- **Version:** Electric motor (Induction motor)
- **Supply voltage:** 230 V ~ 50 / 60 Hz
- **Output:** 1,6 kW at 3000 rpm max. speed 3220 rpm
- **Current consumption:** max. 9 A Mains fuse at least 16 A
- **Enlosure:** IP X4
- **Safety class system:** II screened according to VDE 0879

**Weight:** approx. 52 kg

**Dimensions:** (mm)

| a | 340 mm |
| b | 570 mm |
| c | 230 mm |
| d | 500 mm |
| e | 720 mm |
| h | approx. 1000 mm |
| l | approx. 1450 mm |
| A | 700 mm |
| k | >900mm at \(h=800mm\) |
3. Devices and Operating Elements

The power hoe agria type Farmhandy 500E is suited for soil cultivation in horticulture and park maintenance.

3.1 Engine, Drive

The tools' drive comes via an electric motor with a continuous revolution adjustment and a worm gear.

The electrical motor is protected from overload by a thermo-element in the motor. This switches the motor off automatically when it is overloaded, then take out the mains plug, after allowing a short cooling-down period of approx. 20 seconds re-insert the plug and the motor is ready to operate once more. Should the motor cut out once again after running for a short time the cooling-down period should be extended accordingly.

Any search for the cause of the overload should be made when the motor is switched off and the plug taken out. The cause is very often foreign bodies which are blocking the tools.

3.2 Mains Supply Lead

The lead (extension lead) needed to operate the power hoe may not have a quality level than rubber sheathed cable HO 5 RN-F. (at least 1,5 mm²) to DIN 57282 VDE 0282 or it must be proven to be suitable for use in the open, such as, for example, cable with a polyurethane sheathing to DIN VDE 0250 part 818.

Plugs and coupler plugs on mains supply leads must meet DIN VDE 0620. They must substantially consist of rubber or be covered in rubber.

Cable take-ups (cable drums) as per DIN VDE 0620 S for connecting power hoes to the mains must be fitted with a coupler plug (at the beginning) and a coupler socket (at the rolled up end of the cable).

Cable drums may consist of insulating material or metal. Metal parts with which you may come into contact, and which in the case of an error could take up current, must be connected to the protection cable.

When the power hoe is being used the whole of the length of the lead must be unrolled from the cable drum - danger of overheating!

The nominal cross-sectional area of extension leads (cable drums) must measure at least:

- for a lead of up to 60 m ...... 1,5 mm²
- for a lead of over 60 m ...... 2,5 mm²

Only use extension leads and cable drums which conform to the regulations.

As a protective measure the electrical feed must be fitted with a n Fi safety switch $L_{AN} = 30 \, mA$ (personal safety switch).
3. Devices and Operating Elements

3.3 Safety Circuit

The power hoe is equipped with an electric safety off-switch.

A. Engine off position (lever not pressed)

B. Operation position (lever pressed and held down)

Do not tie up safety circuit lever!

The safety circuit lever also serves to switch off in an emergency situation. Release the lever for fast switch-off. The lever automatically goes to position “STOP”!

3.4 Turning Direction Switch

Hoe drive:

\[ \uparrow \quad = \text{Turning direction forward} \]

\[ 0 \]

\[ \downarrow \quad = \text{Turning direction reverse} \]

3.5 Revolution Control Adjusting Wheel

Set the required revolutions on the adjusting wheel (A/7).

3.6 Steering handle

1. Height adjustment

- Loosen the clamping lever (1) until the teeth are disengaged.
- Adjust the steering handle to the desired height, re-match the gears (centre of tooth – centre of tooth space); then re-tighten the clamping lever.

2. Side adjustment

- Push down the pressure plate (2) while slightly lifting the steering handle (as shown in the figure); then swing it to the left or right.
- Release the pressure plate, slightly move the steering handle to the left and right until it locks into the toothing.
3. Machine and Operating Elements

3.7 Hoeing tools

Working width:

Base hoeing tools: ...... approx. 50 cm
Base hoeing tools and add-on tools: .............. approx. 70 cm

Fitting the hoeing tools

Only fit/remove the hoeing tools while the engine is shut off and the mains plug is removed! Wear safety gloves!

50 cm working width:

- Fit the base hoeing tools (8 and 10) onto both ends of the hoeing shaft.
- Ensure that the blades point into travelling direction. When fitting the second hoeing tool (either left or right), make sure the knives pointing to the housing are fitted in a staggered way to the knives fitted on the opposite end of the shaft.
- Attach the hoeing tools to the shaft using the hex head bolts (7) that go in the holes on the hubs and shaft.

70 cm working width:

- Fit the hoeing tools in the same way as described in 50 cm working width.
- Fit the add-on tools (6) in the hubs of the base tools.
- Secure them with the linch pin (2) which is inserted in the holes on hub and shaft (linch pin pointing in the contra-rotating direction).
- Attach the extension guards (4) using attachment bolts (9, 3 + 1).

Guard discs

The discs are to prevent shrubs and bushes from being damaged by the hoe and to protect young plants from being covered with soil. In addition, they offer protection for the operator when hoeing along field edges or fences.

- Fit the guard discs (5) in the outer hubs on the hoeing tools.
- Secure them with the linch pin (2) which is inserted in the holes on hub and shaft.
3. Machine and Operating Elements

3.8 Depth bar

The depth bar slows down the power hoe’s forward speed. The working depth is set by adjusting the depth bar as required. The deeper the depth bar setting, the deeper the working depth of the hoeing tools. There are two holes to set the bar (14) to the desired depth. Secure it with the R-clip (12).

Optional depth bar

This depth bar (accessory no. 1001 511) (1) is available as an option to improve depth control in loose soils. Remove the standard depth bar (A/14) and replace it by the optional depth bar, locking it with the R-clip (2).

3.9 Front wheel

For easier transport, use the front wheel. Push the wheel’s axle into the receiving bearing (A/17) and attach it with the pressure spring, washer and split pin in the order illustrated (fig. l).

You can leave the wheel on the machine during hoeing, if you pivot it up into hoeing position.

1 **Hoeing position:**
   - Pull the handle (A) to unlock the bracket
   - Pivot the bracket up and lock it.

2 **Travelling position:**
   - Correspondingly, pivot the bracket down and lock it.
3. Machine and Operating Elements

3.10 Ridging attachment

Required accessories:

1 coupling device
Item no. ............................... 1040 411

1 ridging body
Item no. ............................... 0252 011

Alternative:

1 pair of strake wheels
Item no. ............................... 0120 011

Assembly:

Remove any add-on tools from the hoe. Remove the two blades (8 and 9) that point outwards from each side of the machine. Each set of blades now changes sides and is attached for the blades to point inwards (as illustrated in fig.). This gives a working width of 36 cm and there is no need to use optional tools. Attach the guard discs. Remove the depth bar and fit the coupling device (12).

Insert the ridging body’s bar (1) in its bracket, insert the locking pin (2) as illustrated and secure it with an R-clip (3).

Adjust the ridging body’s (7) tilt via the hex head bolt (5). Set the body (7) to the desired ridging depth, then tighten the hex head bolt (4).

3. Strake Wheels

You can replace the hoeing tools by strake wheels (Accessory no. 0120 011) (15) to improve traction or ridging performance in cultivated soils. The strake wheels are attached in the same way as the hoeing tools: insert the hex head bolt in the holes on the hubs and the hoeing shaft.

Ridging

To use the power hoe for ridging, proceed as described in the paragraph on hoeing.

- To adjust the working depth, adjust the tilt of the ridging body bar’s in its bracket either by turning the adjuster screw (K/5) or by adjusting the runner (K/13) and the clamping screw (14).

- To adjust the working width, adjust the mouldboards (7) and the clamping screw (6).
4. Commissioning and Operation

4.1 Danger Zone

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

Warning: Do not clean the hoeing tools while the engine is running. Turn off the engine and remove the mains plug. Only remove jammed objects with a tool, e.g. a wooden stick.

Wear safety gloves!

If possible, always work horizontally on the slope.

If, on inclined ground, there is an increased risk of slipping (from 10°), the power hoe must be kept in position by a second person using a rod or a rope.

4.2 Commissioning

Place the power hoe on to the surface which is to be worked upon.

Protective covers mounted? Attachments attached correctly?

4.3 Attach the extension lead to the power hoe

Assembly sequence 1 - 3.

Only now insert the mains plug of the extension lead into the mains electrical socket.
4. Commissioning and Operation

4.4 Hoeing

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

🚫 Do not use in rain, wet or damp weather!

👟 Wear solid shoes.

1. Before you start working, remove all foreign objects from the area to be cultivated. While working, watch out for foreign objects. Before moving off, check the immediate surroundings, e.g. for children.

2. Turning front wheel into operating position ➔ 3.9

3. Push safety shifting lever (A/5)

4. Set switch (A/6) to "↑"

5. Set the required revolutions on the adjusting wheel (A/7)

6. For reverse:
   A. Release the safety shifting lever (A/5)
   B. Press down safety shifting lever again
   C. Set switch (A/6) to "↓"

Switching to forward movement: same procedure

Information:

Changing of the direction is only possible during operation by renewed use of the safety switch!

The motor cuts out automatically when overloaded ➔ 3.1
4. Commissioning and Operation

4.5 Handling of the Extension Lead

Start work in such a way that the power hoe is always pulling the extension lead behind it over the surface which has just been worked upon. During the work ensure that the extension cable is kept away from the tools and that no coils are formed from the cable.

In case of damage to the extension lead, immediately withdraw mains plug! - Do not touch the power hoe before this is done!

Do not transport or move the power hoe on concrete and asphalted ground with the hoeing tools still rotating. Instead, use the depth bar wheel and shut off the engine.

Release the safety circuit lever (A/5) in an emergency situation - engine is cut off.

Do not clean the tools while the engine is running. Turn off the engine and remove the mains plug and discharge the capacitor \( \rightarrow \) 4.6. Only remove jammed objects with a tool, e.g. a wooden stick.

4.6 Shutting Down

1. Release the safety shifting lever
2. Take the plug out of the mains socket.

After unplugging briefly operate the safety circuit lever and the turning direction switch so that the capacitor discharges,

short turning movements of the hoe tools are possible when carrying this out!
Apart from adhering to operating instructions for the power hoe, it is also important to observe the following maintenance instructions.

**Warning:** Only do maintenance work with the engine shut off.

To avoid accidentally starting the engine always remove the mains plug and discharge the capacitor while working on the machine or on the engine (Kap. 4.5). Adjustments on electronics should be carried out only by agria-Werke, otherwise the product liability and the warranty claim will render null and void!

The power hoe will operate reliably at all times, if it receives proper servicing. After each operation clean the power hoe, especially the hoeing tools. Lubricate all visible and moving parts now and then with Bio-lubricating oil or Bio-lubricating grease (steering handle pivot bearing, bearing of clutch hand lever), especially after cleaning the machine with a pressure washer.

### 5.1 Transmission

Check the **transmission oil level** every 8 operating hours. With the transmission housing in vertical position, the oil level must be visible within the filling opening.

**Transmission oil change**

First oil change after **50** hours, all further oil changes after **250** operating hours.

- Screw out the filler plug (A/18).
- Tilt the hoe forwards so that the used oil can be drained completely.
- Fill in fresh transmission oil (filling capacity and quality see specifications).
- Check the O-ring and replace if necessary.
- Screw in the filler plug (1) together with the O-ring (2) and tighten the plug.

Only carry out an oil change with the engine warmed up. Check the transmission for oil leakages. Any damaged or leaking seals and O-rings must be replaced immediately.
5. Maintenance

5.2 Safety circuit lever

Check the function of the safety circuit lever during each maintenance or repair work.

- When releasing the lever (A/5), the engine must be stopped automatically.
- Check all electrical lines and plug connections for their proper condition and replace all defective parts.

5.3 General

1. Watch out for oil leakages and remove them as necessary.

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

3. Slightly grease steering handle pivot bearing with Bio-slushing oil.

4. Check the electrical lines on the machine and the extension lead every time before you take up operation for their proper condition. Do not use if damaged and have them repaired by a specialist workshop.

5.4 Cleaning

1. Clean the engine only with a cloth, do not spray with water!

2. Clean hoe tools after use and where necessary spray down with water.

3. After each cleaning with a pressure washer grease steering handle pivot bearing and let power hoe run for a short time to press water out.
5. 5 Storage

For longer periods of no operation:

a) Clean thoroughly
Repair paint coat.

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

c) Storage
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.

Do not store the machine with the motor hanging downwards!

d) Covering the machine
with cloth or a similar cover.
5. Maintenance

5.6 Varnishes, Wear Parts

agria order no.

Varnishes:
181 03  Spray varnish, birch green  spray can  400 ml
712 98  Spray varnish red, RAL 2002  spray can  400 ml
509 68  Spray varnish black  spray can  400 ml

Wear parts:
009 16  O-ring for hoeing drive Ø16 x 22 x 2
711 65  Hoe blade, left
711 66  Hoe blade, right

Spare parts list:
997 007  Power hoe 1000
### 6. Troubleshooting

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

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Possible solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine does not run</td>
<td>- Safety circuit lever not pushed</td>
<td>Push safety circuit lever</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>- Overload fuse triggered</td>
<td>Remove mains plug, wait 20 sec and re-insert mains plug</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>- Mains plug not connected</td>
<td>Re-insert mains plug</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>- Mains fuse triggered</td>
<td>Re-activate mains fuse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Fi-protection switch triggered</td>
<td>Look for cause, activate Fi-protection switch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Defective supply lead</td>
<td>Exchange supply lead</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Cable connection loose at the switches</td>
<td>Re-instate cable connection</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>- Defective switch</td>
<td>Exchange switch</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>- Motor or electronic motor control defective</td>
<td>Exchange motor or electronics</td>
<td>*</td>
</tr>
</tbody>
</table>

| Excessive temperature in engine | - Impaired cooling | Clean internal cooling fins | * |

| Engine does not stop when set to stop | - Cable loose | Re-instate cable connection | * |
| | - Defective cable | Exchange cable | * |
| | - Defective switch | Exchange switch | * |

| Engine output too low | - Excessive temperature in engine | Clean cooling fins | |
| | - Supply lead too weak | Exchange supply lead | |

* = For this purpose contact your agria workshop.
# 7. Inspection and Maintenance Chart

<table>
<thead>
<tr>
<th></th>
<th>After operating hours</th>
<th>min. every 3 months</th>
<th>min. yearly</th>
<th>B</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check safety circuit function</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Check electric cables and plugs</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Clean engine, check bolts and nuts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>First transmission oil change,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>subsequent changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Lubricate all gliding parts</td>
<td></td>
<td></td>
<td>K</td>
<td>K</td>
<td>21</td>
</tr>
</tbody>
</table>

*A = Each time before you take up operation*

*B = After each cleaning*

*K = Checks and maintenance to be executed by operator*

*W = Maintenance to be executed by professional workshop*
Electrical Wiring

1 Relay module / board
2 Frequency converter
3 Potentiometer
4 Turning direction switch
5 Safety shifting lever

V = forward
R = reverse

bl blue
br brown
ge yellow
gn green
gr grey
rs pink
rt/bl red/blue
sw black
we white
Conformity Declaration

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

Wir erklären, dass das Produkt Motorhacke mit folgenden EG-Richtlinien übereinstimmt:

- 98/37/EG, 2004/108/EG, 73/23/EG, 2000/14/EG

Angewendete Normen: EN 709

Angewandtes Konformitätsbewertungsverfahren: Anhang VI

Name und Anschrift der beteiligten benannten Stelle: DLG e.V., Max-Eyth-Weg 1, D-64823 Groß-Umstadt

Gemessener Schalleistungspegel: 78,3 dB(A)

Garantieter Schalleistungspegel: 82 dB(A)

Möckmühl, 14.01.2005

Siegfried Arndt
Geschäftsführer
Managing Director
Bedrijfsleider

Matthias Wenzl
Leiter Entwicklung & Konstruktion
Head, Research and Development

agria Power Hoe 1000E

27
Your local agria specialist dealer: