Operating Instructions
for agria® Cleanstar Sweeper

Type 6100 Compact 80 cm
Type 6100 Comfort 100 cm  with Reverse Gear and Variator

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>Engine Type:..........................</td>
</tr>
<tr>
<td>Engine No. ...........................</td>
</tr>
<tr>
<td>Date of Purchase: ....................</td>
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</tbody>
</table>

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

For engine type and number, refer to p46/fig. C/7.

Please state these data when ordering spare parts to avoid wrong deliveries.

Only use original agria spare parts!

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

Amount of delivery:
- Operating instructions
- Base machine
- Handlebars with attachment bolts
- Tool kit

Symbols

- Warning – Danger
- Important information
- Choke
- Fuel
- Oil
- Engine Start
- Engine Stop
- Brush drive
- Wheel drive
- Wheel drive engaged
- Wheel drive disengaged
- slow
- fast
- Open (unlocked)
- Closed (locked)

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Your agria-workshop
Designation of Parts

Figure A

Figure B

Cleanstar Sweeper
**Designation of Parts**

**Figures A and B**

1. Pawl for clutch lever (Comfort version)
2. Clutch and F/R lever for wheel drive engagement (Comfort version)
3. Safety circuit lever (Comfort version)
4. Clutch lever and safety circuit lever for wheel drive engagement (Compact version)
5. Clutch lever for brush drive
6. Speed control lever
7. Rod that pivots the implement
8. Height adjustment crank
9. V-belt cover
10. Notched plate to lock the rod
11. Main guard
12. Coupling pin for implement attachment
13. Extension guard
14. Rotary brushes
15. Worm gear (wheel drive)
16. Wheel dog
17. Drive wheel
18. V-belt housing cover (rear)
19. V-belt housing
20. Engine base plate
21. Knob screw for handlebars height adjustment
22. Engine
23. Handlebars
24. Dial for manual speed adjustment of rotary brushes (Comfort version)
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Note fold-out pages!

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**Recommendations**

**Lubricants and Anti-Corrosive Agents:**

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

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

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

Anti-corrosive agents are environmentally friendly and degrade fast.

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

**Fuel:**

This engine runs smoothly on **conventional unleaded regular and super-grade petrol**.

Do not add oil to petrol.

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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 see “Engine Preservation”.

**Maintenance and Repair:**

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

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

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

1) Attaching the handlebars
- Remove the knob screws (21) on both sides.
- Pivot the handlebars (24) to the rear to align the central locking pin with the threaded holes in the knob screws.
- Attach both knob screws (21) using the discs (22) (the tapered end goes in first. The discs may be fixed to the knob screws).
- Adjust the handlebars to the desired working height (see instructions on page 20).
- Attach cables and electric lines with clips (28) to the handlebars.

2) Fitting the belt cover
- Remove R-clip (26)
- Remove the crank (8)
- Remove the spacer (29)
- Attach the belt cover and lock it by fitting the spacer (29), crank (8) and R-clip (26).

3) Attaching the rod
- Attach the rod (7) with bolt (30) and two R-clips (31).

4) Mounting extension guards (Comfort version)
- Attach an extension guard to either side of the main guard (11) to match the machine’s working width, using three hex head bolts and locking nuts for each guard.

5) Attaching the rotary brushes (Comfort version)
See page 22 for details

6) Starting up
See page 27 for details
1. Safety Instructions

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

Warning

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

Due Use

The sweeper has been designed for all common applications and tasks in amenity areas and winter road clearance (due use).

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

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

Any unauthorized changes to the sweeper render manufacturer liability null and void.

General Instructions on Safety and Accident Prevention

Basic Rule:

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

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

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

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

Teenagers of 16 years or younger may not operate the sweeper!

Only work in good light and visibility.

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

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

When transporting the sweeper on vehicles or trailers outside the area to be swept, 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.
1. Safety Instructions

Riding on the machine during operation is not permitted.

Operation and Safety Devices

Before You Start the Engine

Become familiar with the devices and operating elements and their functions. Above all, learn how to turn the engine off quickly and safely in an emergency. Ensure that all protective devices are mounted and positioned to provide protection.

Starting the Engine

Do not start engine in closed rooms. The carbon monoxide contained in the exhaust fume is extremely toxic when inhaled.

Before you start the engine set all operating elements to neutral or idling position.

For starting the engine, do not step in front of the sweeper and the implement.

Operation

Never leave the operator’s position at the handlebars while sweeper is at work.

Never adjust the operating handles during work – danger!

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

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

Working Area and Danger Zone

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

Staying in the danger zone is not permitted.

Check the immediate surroundings of the sweeper before you start it. Watch out for children and animals.

Careful! Dirt and stones may get airborne during sweeping. People and animals must keep out of this area. Watch out for vehicles, window panes and other objects to avoid damage.

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.
1. Safety Instructions

If clogging occurs in the brushes or in the implement, turn off the engine and clean the brushes or the implement with an appropriate tool.

In case of damage to the sweeper or to the implement, immediately turn off the engine and have it repaired.

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

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

If possible, always work horizontally on the slope.

End of Operation

Never leave the sweeper unattended with the engine running.

Before you leave the sweeper, turn off the engine.

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

Implements

Only mount implements with the engine and the implement drive switched off.

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

For mounting and dismounting implements bring stands into proper position and ensure stability.

Secure sweeper and implements against rolling off (wheel chocks).

Beware of injuries while coupling implements.

Mount implements as specified and only couple at specified points.

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

Weights

Always fit weights onto appropriate weight mounting devices.

Snow Clearing

Ensure snow dozer is mounted correctly! Wear slip-proof shoes.

When pivoting the snow dozer watch out for crush and shear points. Adjust working speed to conditions. Operator may be injured when the machine hits an obstacle.
1. Safety Instructions

Maintenance and Cleaning

Never carry out any maintenance or cleaning with the engine running.
Before you work on the engine, always remove spark plug connector (petrol engine only).
Check regularly and, if necessary, replace all guards and tools subject to wear and tear.
Keep sweeper and implement clean to avoid risk of fire.
Check nuts and bolts regularly for tight fit and re-tighten, if necessary.
After maintenance and cleaning, ensure that you re-install all safety devices and guards and adjust them properly.
Only use original agria spare parts. All other commercial spare parts must correspond to quality and technical requirements specified by agria.

Storage

It is not allowed to store the sweeper in rooms with open heating.
Never park the sweeper 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!
Be careful when dealing with fuel. Great danger of fire! Never refill fuel close to open fire, inflammable sparks or hot engine parts. Do not refill fuel in closed rooms. Do not smoke when refilling!
Refill only with the engine switched off and cooled down.
Do not spill any fuel, use a proper filling device.
In case of fuel spillage, pull the sweeper away from the spillage before you start the engine.
Make sure fuel is of specified quality.
Store fuel in approved cans only.
Store anti-corrosive agents and stabilizing liquids out of reach of children. If sickness and vomiting occur, see a doctor. If fuel has contacted eyes, rinse them thoroughly, avoid inhaling of vapours.
Read and observe enclosed instructions.
1. Safety Instructions

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

Be careful when draining hot oil, danger of burns.

Make sure oil 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 sweeper 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 when mounting weights or implements.

**Electrical System and Battery**

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

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**Explanation of Warning Signs**

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

**With engine running, keep at a safe distance. Dirt and stones may get airborne during sweeping. People and animals must keep out of this area.**

**Signs**

- When working with the machine, wear individual protective ear plugs.
- Wear protective gloves.
2. Specifications

agria Cleanstar Sweeper

**Dimensions:**

![Diagram of Cleanstar Sweeper dimensions]

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>760 mm</td>
</tr>
<tr>
<td>b</td>
<td>610 mm</td>
</tr>
<tr>
<td>e</td>
<td>1205 mm</td>
</tr>
<tr>
<td>h</td>
<td>960–1060 mm</td>
</tr>
<tr>
<td>l</td>
<td>1370 mm</td>
</tr>
<tr>
<td>L Collector</td>
<td>1800 mm</td>
</tr>
<tr>
<td>L Snow dozer</td>
<td>1760 mm</td>
</tr>
<tr>
<td>A</td>
<td>800 or 1000 mm (depending on brush version)</td>
</tr>
<tr>
<td>S</td>
<td>430 mm</td>
</tr>
</tbody>
</table>

**Weights:**

**Base machine:**
- Compact 80 cm .......... approx. 78 kg
- Comfort 100 cm .......... approx. 85 kg

**Collector:**
- 80 cm .................. approx. 11.5 kg
- 100 cm .................. approx. 13.0 kg

**Snow dozer blade:**
- 80 cm .................. approx. 11.0 kg
- 100 cm .................. approx. 13.5 kg

**Tyres:** .................. 3.50-6 (field tyres)

**Tyre pressure:** ................. 0.8 bar

**Clutch:**
- There are two separately engageable V-belt clutches and idler pulleys fitted between engine and wheel drive/brush drive

**Compact version:**
- The rotary brushes are adjustable to one of two available speeds: 130 rpm or 230 rpm

**Comfort version:**
- Friction clutch for reversing
- Brush speed is adjusted steplessly via a variator from 100 rpm to 200 rpm

*Always use original agria V-belts (see wear parts list on page 42)*

**Transmission:**
- Wheel drive: .................... worm gear
- Brush drive: ..................... bevel gear

**Ground speeds:**
- Forward travel .................. 2.8 km/h
- Reverse travel (Comfort version only) .......... 1.8 km/h

**Handlebars:**
- height-adjustable without tools

**Noise level:**
- In accordance with 2000/14/EG
  - measured sound power level ............. 95 dB(A)
  - guaranteed sound power level .......... 96 dB(A)

**Vibration acceleration value:**
- on handlebar grip: .......... $a_{hvy} = 2.9 \text{ m/s}^2$
  - $K = 18.2$
- in accordance with ISO 5349 standard at 85% of rated engine speed with tools at work.
2. Specifications

Compact Version

Engine

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

Type: .............................. GCV 135 N2E

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

Bore: .................................. 64 mm

Stroke: .................................. 42 mm

Piston displacement: .......... 135 ccm

Output: .............................. 3.4 kW at 3600 rpm

Torque: .............................. max 9.7 Nm at 2500 rpm

Spark plug: ...... NGK BPR6ES Bosch
Spark plug gap: ............... 0.7–0.8 mm

Ignition:
Transistor trip coil, contactless;
ignition point: 20° before dead centre,
radio remote screened according to VDE 0879

Valve lash (engine cold)
Intake: ......................... 0.15 ± 0.04 mm
Outlet: .......................... 0.20 ± 0.04 mm

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

Fuel tank capacity: ............... 1.1 l

Fuel: ..................... Conventional petrol
Octane number min. 85 RON
(refer to fuel recommendations in this manual)

Air filter: ............... Dry element filter

Carburetor: ........... Float carburetor
Throttle valve type

Mixture control screw: ...... opened by approx. 1 turn in base setting

Top no-load speed: ............. 3250 rpm

Idling speed: ............. 1550–1850 rpm

Engine oil:
Filling quantity .............. approx. 0.55 l
Multi-grade oil SAE 10 W-40 SC, SF or higher quality grade

Operability on Slopes:
Engine is suited for use on slopes (with oil level at “max” = upper level mark)
Continuous operation possible up to 20° inclination (44%)
## 2. Specifications

### Engine

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

**Type:** ..................... GCV 160 N2E

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

**Bore:** .......................... 64 mm

**Stroke:** .......................... 50 mm

**Piston displacement:** .......... 160 ccm

**Output:** ......................... 4.1 kW
at 3600 rpm

**Torque:** ......................... max 11.4 Nm
at 2500 rpm

**Spark plug:** .......... NGK BPR6ES Bosch
Spark plug gap: ............... 0.7–0.8 mm

**Ignition:**
Transistor trip coil, contactless;
ignition point: 20° before dead centre,
radio remote screened according to
VDE 0879

**Valve lash (engine cold)**

<table>
<thead>
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<th>Intake</th>
<th>Outlet</th>
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### Starter

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

### Fuel tank capacity

**Fuel tank capacity:** .......... 1.1 l

**Fuel:** ....................... Conventional petrol
Octane number min. 85 RON
(refer to fuel recommendations
in this manual)

### Air filter

**Air filter:** ............... Dry element filter

### Carburetor

**Carburetor:** ............ Float carburetor
Throttle valve type

**Mixture control screw:** ..... opened by
approx. 1 turn in base setting

### Top no-load speed

**Top no-load speed:** ........... 3250 rpm

### Idling speed

**Idling speed:** .............. 1550–1850 rpm

### Engine oil

**Engine oil:**
Filling quantity ............... approx. 0.55 l
Multi-grade oil SAE 10 W-40
SC, SF or higher quality grade

### Operability on Slopes

**Engine is suited for use on slopes**
(with oil level at “max” = upper level
mark)
Continuous operation possible up to
20° inclination (44%)
3. Devices and Operating Elements

The agria Cleanstar sweeper is suited for application in amenity areas and winter road clearance. The following components are available for sweepers:

- Rotary brushes 80 cm coarse .......... agria item no. 6194 051
  fine .................. agria item no. 6194 061
- Rotary brushes 100 cm coarse .......... agria item no. 6194 151
  fine .................. agria item no. 6194 161
- Collectors 80 cm ............ agria item no. 6194 211
  100 cm .......... agria item no. 6194 221

The following implements are available for winter road clearance:

- Snow dozers
  80 cm ............ agria item no. 6196 011
  100 cm .......... agria item no. 6196 021

Engine

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

During the first 20 operating hours (break-in period) do not operate the engine at maximum speed.

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

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

Cooling System

The engine is fan-cooled. Therefore keep the grille on the recoil starter and the cooling fins on the 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 cleans the air as it is inducted. 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.

Speed Control Lever

(Engine-shut-off switch)

The speed control lever (A/6) on the handlebar sets the engine speed steplessly and actuates the CHOKE and the engine-shut-off switch. For the appropriate positions see the illustration.

The speed control lever also serves as engine safety circuit. In an emergency move the lever to position "STOP" to shut off the engine instantly.
3. Devices and Operating Elements
Compact Version

Safety Circuit Lever

The Cleanstar Compact sweeper has a safety circuit mechanism for wheel/brush drives integrated in the clutch lever.

- Stop position: Release the clutch levers (A/4 or A/5) to disengage either drive.

⚠️ Do not tie down the safety circuit lever.

The safety circuit lever also serves as engine safety circuit in an emergency. Upon release, the lever will automatically go to STOP position.

Clutch

Wheel drive and brush drive engagement is via a V-belt clutch. To engage the clutch, depress the wheel drive clutch lever (A/4) and the brush drive clutch lever (A/5). Upon release, the clutch levers will automatically move to position “0” (drives are disengaged).

Each clutch is operated individually and independently.
3. Devices and Operating Elements
Comfort Version

Safety circuit

The Cleanstar Comfort sweeper is equipped with a safety circuit lever.

- **Stop position:** Upon release of the lever – with wheel drive and brush drive engaged – the ignition system is switched off (engine is shut off).
  
  Caution – engine keeps running due to centrifugal mass.

- **Start position:** Pull the clutch lever (B/2) to start the machine and to interrupt work. Lock the lever with pawl (B/1) and move the brush drive lever (B/5) to position “0”.

- **Operating position:** Press the safety circuit lever (B/3) down to start operation.

⚠️ **Do not tie down the safety circuit lever.**

Information Icon

The safety circuit lever also serves as engine safety circuit in an emergency. Upon release, the lever will automatically go to STOP position.

Clutch

Wheel drive and brush drive engagement is via a V-belt clutch. To engage the clutch, depress the wheel drive clutch lever (B/2) and the brush drive clutch lever (B/5).

Each clutch is operated individually and independently.

The wheel drive clutch is combined with reverse speed engagement.
Wheel Drive

The Cleanstar Comfort sweeper has one forward and one reverse speed.

- Forward speed is engaged when the clutch lever is (B/2) released and the pawl is not locked.
- No gear is engaged when the clutch lever is pulled half way (B/2, pawl is locked).
- Reverse speed is engaged when the clutch lever (B/2) is pulled all the way.

It is possible to lock the clutch lever in position “0” with pawl (B/1).

**During slope operation always turn machine towards the slope.**

The levers are factory-set to a play of 1–2 mm to prevent the clutch from slipping during work.

Check the clutch play after the first operating hour and readjust the play if necessary (see maintenance instructions).

Brush drive

The brushes are driven by a V-belt clutch and a bevel gear.

Operate lever (B/5) to turn the brushes on/off:

- Depress the lever to turn them on. The engine starts driving the brushes.
- Push the lever (B/5) up to turn them off.

**Note:** Park the sweeper only when all drives are disengaged (see “Storage”, page 39) to avoid clutch problems.
3. Devices and Operating Elements

Handlebars

Handlebars Height Adjustment

- Unscrew the knob screws (21) on both sides until the notches are exposed
- Adjust the handlebars (24) to the desired height and notch them into the proper position.
- Re-tighten both knob screws (21).
3. Devices and Operating Elements

Drive Wheels

The drive wheels (3) are attached with dogs (1) and linch pins (2) to the shaft. This allows attachment and removal without tools.

Discs (4) are fitted between the gearbox and drive wheels.

Wheel Dogs

Wheel dogs are fitted to engage/disengage the wheels independently of the gearbox.

Pushing the Machine

Disengage the dogs to push the machine when the engine is shut off.

Turning Aid

Engage the dog on one wheel only for easier turning.

Engaging the Wheel Dogs

- Align the dog pins (2) with the appropriate holes (3) on the drive wheels.
- Turn the pins on their ends (1) by 90 degrees until the ends mesh into the slot. Turn each dog to either side until the pin locks completely into the hole.

Disengaging the Wheel Dogs

- Grab the end (1) of each dog pin to pull it out and rotate it by 90 degrees.
3. Devices and Operating Elements

Attaching the Rotary Brushes

Wear safety gloves to attach/remove the brushes. Danger of crushing.

1. Mount the discs onto both sides of the rotary brushes.
2. Push the anchorage fixture through the left rotary brush.
3. Push the anchorage fixture with the rotary brush through the drive shaft from the left - insert groove on rotary brushes into cam of the drive plate.
4. Slide right rotary brush onto anchorage fixture - insert groove on rotary brushes into cam of the drive plate.
5. Screw on and tighten hexagonal nut.

To remove the brushes, reverse the above order.
Mounting Extension Guards:
Attach the extension guards (13) to the main guard (11) to match brush width. Use three hex head bolts and lock nuts for each guard.

Sweeping Height Adjustment
The sweeping height is altered by adjusting the castor wheel.
- Turn the crank (8) to adjust the wheel height.
- Reduce the sweeping height only if absolutely necessary (to the height of X) to ensure clean sweeping and long service life of the brushes.

Dirt, powder snow ............. $x = 2–3\, \text{mm}$
Wet snow ....................... $x = \text{max } 8\, \text{mm}$

Side Adjustment
The brush can be angled to the right or left to sweep the rubbish or snow to one side.
- Fold the rod (7) forward until the notches are exposed.
- Pivot the rod to turn the brushes to the left or right.
- Fold the rod to the rear and down again and mesh it into the proper notch.
3. Devices and Operating Elements
Compact Version

Sweeping Speed

The speed of the rotary brushes is adjusted by changing the V-belt. Remove the cover (9) to do this.

Adjustment

Select a slow speed for dust sweeping

Select a fast speed for snow sweeping

Always shut off the engine and remove the spark plug connector to change the V-belt.

- Remove the R-clip (26).
- Remove the crank (8).
- Remove the belt cover (9) and spacer (29).
- Change the V-belt (27) to the right pulley and re-route it around the idler pulleys, see illustration.
- Reverse the above order to attach the cover, spacer, crank and R-clip.

Do not operate the engine without the belt cover mounted.
Sweeping Speed

The speed of the rotary brushes is steplessly adjusted via a variator.

Always engage the brush drive before you adjust sweeping speed.

Adjustment

Select a slow speed for dust sweeping: Turn the dial (25) in counter-clockwise direction.

Select a fast speed for snow sweeping: Turn the dial (25) in clockwise direction.

To adjust the speed from slow to fast, give the dial a maximum turn of 6 full turns.
3. Devices and Operating Elements

**Implements**

1) **Coupling Pin**
   Fit the coupling pins (12) to attach the collector or the snow dozer.
   - Attach the pins (12) together with washers and hex nuts to both sides of the main guard (and to extension guards on machines of 70 cm working width).

2) **Attaching the Collector**
   - Attach the collector by sliding its tubes onto the coupling pins from the top front.

3) **Emptying the Collector**
   - Take the machine to the dump area and fold the box upwards by pulling on its handle to the rear or on its frame from the front – the swept up material will now drop from the collector.
   **Alternatively**
   - Remove the collector upwards from its coupling pins and carry it to the dump area for emptying.

4) **Snow Dozer Assembly**
   - When attaching the snow dozer for the first time fit the stop (32) to the lower front of the main guard using the rod attachment bolts. The stop does not need to be removed for sweeping.

5) **Attaching the Snow Dozer**
   - Attach the snow dozer blade by sliding its tubes onto the coupling pins from the top front (12).
   - Operate the rod to pivot the blade like the rotary brushes.
   - To move the blade into transport position, lift it and rest it on the tang on the stop (32).
4. Commissioning and Operation

Commissioning the Machine

Please note that durability and operational safety of the engine depend to a large extent on its breaking-in. Always allow a cold engine to warm up for some minutes and never run it at full throttle at the beginning. Make sure the air filter is serviced regularly and to use clean fuel.

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!

For this purpose, park the machine in such a way that the engine is in a horizontal position. For oil filling quantity and quality refer to “Specifications”.

Check the oil level after filling.

Each time you take up operation

Check the engine oil level:

- Remove the oil fill plug (C/4).
- Clean the oil dip-stick with a clean rag, insert it again but do not screw it in.
- Remove the dip-stick and read the oil level. If necessary, fill engine oil up to the level mark “max”.

Ensure the oil fill plug is tightly screwed into the filler neck during engine operation.

Do not fill the fuel tank to the point of spillage. Instead, top up fuel to the top level mark to allow the fuel to expand.

Be careful when dealing with fuel.

- Fuel is easily inflammable and explosive in certain conditions!
- Never refill close to open fire, inflammable sparks or hot engine parts.
- Do not refill in closed rooms.
- Before each fuel fill, shut off the engine and wait until it has cooled off.

Do not smoke during filling and keep away from open fire and sparks.

Do not spill any fuel, use a proper filling device. If fuel is spilled on the ground, ensure the area is absolutely dry and the vapours have evaporated before you start the engine.
4. Commissioning and Operation

Starting the Engine
(with the engine in horizontal position)

- Check whether all guards are in proper position.

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

- Open the fuel tap (C/11).
- Set the speed control lever (A/6 or B/6) to “START” (“CHOKE”) position.
- Do not use the Choke when the engine is warm or in hot weather.
- Move the speed control lever to 1/3 position.

Compact Version:
- Leave the wheel drive engagement lever (A/4) in position “0” (start position).

Comfort Version:
- Pull the clutch lever (B/2) and lock it with pawl (B/1) (start position).
- Leave the brush drive engagement lever (A/4) in position “0” (start position).
- Pull the starting-rope on handle (C/2) until you feel the starter clutch engage. Then pull hard and fast to start the engine. After the start, let the rope glide back. Do not let it snap.

⚠️ Warning: To start the engine, step behind the handlebars and pull the starter rope towards the rear. Keep off the danger zone.
Shutting off the Engine

- Set the speed control lever to idling position and let the engine run with idling speed for approximately 1/2 minute.

- Move the speed control lever completely to the STOP position.

  For shutting off the engine, do **not** set the control lever to the CHOKE position – risk of fire!

- Close the fuel tap.

The speed control lever also serves as **engine shut-off lever**. When necessary, move the speed control lever to STOP to stop the engine.
4. Commissioning and Operation

Sweeping

- Start the engine as described in “Starting the engine”

**Check safety circuit function**
- Only operate the machine if safety circuit works!

- Wear individual protective ear plugs and solid shoes.
- Slowly depress the brush drive engagement lever (A/5 or B/5) and pull the throttle at the same time to start the brushes.

**Compact version:**
- Slowly depress the clutch lever (A/4); the sweeper travels forward.

**Comfort version:**
- Pull softly on the clutch lever that engages the wheel drive (B/2), unlock the pawl (B/1), release it slowly: the sweeper moves off in forward direction.

*After sweeping, disengage both drives and shut off the engine. The same applies for blockages.*

**Shut off the engine and disconnect the spark plug connector, if cleaning is necessary during operation.**

Check the immediate surroundings for foreign objects and for children and animals in particular.

Careful! Dirt and stones may get airborne during sweeping.

People and animals must keep out of this area.

Watch out for vehicles, window panes and other objects to avoid damage.

Snow Clearance

**Attach the snow dozer blade properly.**

Wear slip-proof footwear.

Working speed must suit conditions to prevent the operator is injured if the machine hits an obstacle.

**Danger zone**

*Keep out of the sweeper’s danger zone during starts and operation.*
5. Maintenance

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

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

To prevent accidental start while working on the rotary brushes or on the engine, always remove the spark plug connector from the spark plug.

Machine

Worm Gear of Wheel Drive

The worm gear is permanently lubricated. Lubricating and servicing is not necessary.

Worm Gear of Brush Drive

The worm gear is permanently lubricated to work for approximately 250 operating hours.

Oil change is not necessary if there are no leakages.

Suitable oil is SAE 90 transmission oil, approx. 0.3 l

V-Belts

Inspect the condition of the V-belts at least once per year.

- Remove the belt cover. For details see “Sweeping Speed”.
- Replace the V-belts when they are worn. Only use original agria V-belts!

Checking and Adjusting Clutch Play

Wheel and Brush Drive, Compact Version

- The clutches must be disengaged i.e. wheel and brush drive must come to a stop when the levers (A/4 or A/5) are released and in top position.

- When the lever is pushed down, the drive must be engaged and the V-belts must not slip. If necessary, adjust the cable on the cable setting screw (1).

Wheel Drive, Comfort Version

For smooth V-belt clutch operation ensure the play X on clutch lever (B/2) is set to 1–2mm. Check the clutch play while the drive is engaged.

Also ensure that the clutch is disengaged i.e. the wheel drive must come to a stop when the lever is in position ”0” (pawl is locked).

If the clutch play needs further adjustment, set it on the cable-setting screws.

- Undo locking nut (2)
- Adjust the setting screw (1) in such a way that the play on the lever is X = 1–2mm.
- Retighten the locking nut (2)

Brush Drive, Comfort Version

For checking and adjusting refer to “Brush Drive, Compact Version”. 
5. Maintenance

**Drive-wheels**
- Check the tyre pressure periodically. In particular, ensure that both tyres have equal pressures to give smooth riding.
- Attach the wheels with the pointed part of tread lugs showing in travel direction (seen from above) to obtain full traction.

**Wheel Shaft**
Apply bio-lubricating grease to the wheel shaft around the hub each time the machine was cleaned with a pressure washer or at least once per year.

**Sweeper**
- Check the anchorage fixture for tight fit *before each operation* and at intervals of 8 operating hours.
- Check the rotary brushes for wear at least after every 25 hours and replace them in good time. Minimum diameter is 250 mm.
5. Maintenance

Engine

Checking the Engine Oil Level

Before each operation and after 5 operating hours!

- Only with the engine shut off and in horizontal position.
- Clean the oil fill plug (C/4) and its immediate surrounding.
- Remove the oil fill plug, clean the dipstick with a clean rag and re-insert it all the way – do not screw it in.
- Remove the dip-stick and read the oil level.
- Refill oil, if the oil level is below the lower dip-stick mark. Refill engine oil (see “Specifications”) up to upper level mark on dip-stick.

Changing the Engine Oil

For the first time after 5 operating hours, after that after every 50 operating hours or annually (whatever comes first). Under high loads or at high temperatures, change the oil already after 25 operating hours.

- Remove drain and filler plug (C/4).
- To drain the oil, pivot the handlebars upwards. Tilt the machine backwards and to the left. Then drain the oil into a suitable container (fig. M). (We recommend to drain the fuel through the filler neck into a fuel can before draining the oil).
- Alternatively, use a suction pump to pump the oil from the machine.
- Dispose of the waste oil properly!

- Fill in fresh engine oil. For oil filling capacity and quality see specifications.
- Fill in the oil using a funnel or similar device if possible (fig. N).
- Only change oil while the engine is still warm, but not hot – danger of burns!
5. Maintenance

Air Filter

Clean the air filter insert at 3-month intervals but not later than 25 operating hours (earlier in very dusty conditions). To do this, proceed as follows:

- Clean the air filter and its surrounding area.
- Open the snap mechanism (2), fold down the filter cover (1) and remove it.
- Remove the paper element (3).
- Tap the element against a smooth surface or blow compressed air against the inside of the filter.

Never brush the filter because this would press the dirt into the fibres.

- Replace the filter element if it is extremely dirty.
- Inspect the filter element carefully for holes or other damage and replace it if necessary.
- Replace the filter element
- Attach the cover and snap the latches (4) into place.

Do not wash the paper element (tap it or blow it out)
5. Maintenance

**Fuel System**

- Each time you maintain the machine, check fuel hose, fuel tank, and carburetor for leakages and repair, if necessary. Immediately replace leaking or porous fuel hoses.
- Replace fuel hoses after every 2 years.
- Clean the fuel tank at 100-hour intervals.

![Fuel System Diagram](image)

**Excessive Fuel Supply**

- After excessive fuel supply to the engine, remove the spark plug, clean and dry it. Then crank the engine with the recoil starter a number of times. Afterwards screw the spark plug in and move the speed control lever to "FULL THROTTLE". Then start the engine via the recoil starter.
5. Maintenance

Spark plug

- After 50 operating hours, clean the spark plug and re-adjust the electrode gap to 0.7–0.8 mm. Only clean the spark plug using a wire brush and wash it out with a commercial cleaning agent.

- Replace the spark plug at **100-hour intervals** or when it shows significant wear or if the insulator is damaged.

Correct spark plug assembly:

Screw the spark plug into the cylinder head by hand. Then continue with a spark plug wrench. Turn wrench by 90° or at a torque of 20…30 Nm.

Checking the ignition sparks:

Remove the spark-plug, clean it and place it back into the plug connector. Use the lateral electrode to make contact with the engine, pull the starter rope and wait for sparking. If there are no sparks, replace the spark plug.

Cleaning the cooling fan grille

After prolonged operation, the cooling system may become clogged by dirt etc. To avoid any overheating and damage to the engine, regularly clean the cooling fan grille (C/3). Check before each operation!

Air cooling system

1) Clean the rotating strainer at **50-hour intervals** as a minimum (earlier in very dusty and trashy conditions). To do this, remove the recoil starter. See the illustration below.

2) Clean the internal cooling fins and surfaces at **100-hour intervals** as a minimum (earlier in very dusty and trashy conditions).
5. Maintenance

Governor

For smooth engine performance keep governor linkages, springs and actuating devices clean and free from dust and dirt. Do not bend or twist parts. (Governor linkages on carburetor C/6).

Exhaust system

Regularly clean the area around the exhaust (C/9) from grass, dirt, and inflammable deposits.

– Risk of fire!
Check before each operation.

Speed Control

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

For this adjustment:
→ agria - Service ←

Carburetor settings

To compensate for fuel, temperature, height or load variations, a slight carburetor re-adjustment may become necessary. Only let the engine run with the air filter and air filter cover mounted.

For any adjustments of the carburetor: → agria - Service ←
5. Maintenance

Safety circuit

Check the safety circuit function each time you take up operation and each time you maintain or service the machine.

Compact Version

- Upon release of the handle (A/4 or A/5) the wheel drive or the brush drive must come to a stop.

If necessary, adjust the levers by setting the cable-setting screws.

General

- Watch out for fuel and oil leakage and repair, if necessary.
- Regularly check bolts and nuts for tight fit and retighten, if necessary.
- Slightly grease all gliding and moving parts (e.g. speed control lever, hand lever bearing, etc.) with Bio-lubricating grease and Bio-slushing oil (refer to "Lubrication Chart", page 43).

Cleaning

After each cleaning (washing with water, especially with pressure washer) lubricate all lubrication points, oil and let the sweeper run for a short time to press water out.

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

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

Comfort Version, Wheel Drive

- Upon release of the handle (B/3) and with clutch engaged the engine must come to a stop.
- Check the electric lines and connections for good condition, replace, if necessary.

Comfort Version, Brush Drive

For checking and adjusting refer to “Compact Version”.

Stop

Stop
5. Maintenance

Storage

For longer periods of no operation

a) Clean thoroughly
Repair paint coat

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

C) Drive-wheels
Support drive-wheels in such a way that tyres have no ground contact. Pneumatic tyres are quickly destroyed, if left standing under load and uninflated.

d) Disengaging the Drives
Always park the Comfort version with wheel drives disengaged (position “0”) to avoid clutch problems.

The brush drive on the Comfort version and both drives on the Compact version are automacially disengaged as the levers are released (safety circuit function).

e) Parking
To avoid severe corrosion:
- to preserve the machine from atmosperic influences

f) Covering the machine
Protect the machine with cloth or a similar cover.

do not park the machine:
- in humid rooms
- in rooms where fertilizer is stored
- in stables or adjacent rooms.
## 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 doesn’t start</td>
<td>- Spark plug connector not connected&lt;br&gt; - Speed control lever not in position CHOKE&lt;br&gt; - Fuel tank empty or poor fuel&lt;br&gt; - Fuel line clogged&lt;br&gt; - Defective spark plug&lt;br&gt; - Engine too much fuel (“flooded engine”)&lt;br&gt; - Inleaked air due to loose caburetor and suction line</td>
<td>Connect spark plug connector&lt;br&gt; Move speed control lever to position “CHOKE”&lt;br&gt; Fill fresh fuel&lt;br&gt; Clean fuel line&lt;br&gt; Clean, adjust or exchange spark plug&lt;br&gt; Dry and adjust spark plug and start at FULL THROTTLE&lt;br&gt; Tighten attachment bolts</td>
<td>28&lt;br&gt; 28&lt;br&gt; 27&lt;br&gt; 36&lt;br&gt; 35&lt;br&gt;</td>
</tr>
<tr>
<td>Misfirings in engine</td>
<td>- Engine running in CHOKE range&lt;br&gt; - Loose ignition cable&lt;br&gt; - Clogged fuel line or poor fuel&lt;br&gt; - Vent opening in fuel tank cap clogged&lt;br&gt; - Water or dirt in fuel system&lt;br&gt; - Air filter clogged&lt;br&gt; - Carburetor misadjusted</td>
<td>Move speed control-lever to operating position, if necessary, adjust speed control&lt;br&gt; Fit connector tightly on spark plug, fix ignition cable retaining device&lt;br&gt; Clean fuel line, fill fresh fuel&lt;br&gt; Exchange fuel tank cap&lt;br&gt; Drain fuel and fill fresh fuel&lt;br&gt; Clean air filter or exchange&lt;br&gt; Re-adjust carburetor</td>
<td>28&lt;br&gt; 37&lt;br&gt; 27&lt;br&gt; 34&lt;br&gt; 37&lt;br&gt;</td>
</tr>
<tr>
<td>Excessive temperature in engine</td>
<td>- Low engine oil level&lt;br&gt; - Impaired cooling&lt;br&gt; - Air filter clogged&lt;br&gt; - Carburetor misadjusted</td>
<td>Refill oil immediately&lt;br&gt; Clean cooling fan grille, clean internal cooling fins&lt;br&gt; Clean air filter&lt;br&gt; Re-adjust carburetor</td>
<td>33&lt;br&gt; 36&lt;br&gt; 34&lt;br&gt; 37&lt;br&gt;</td>
</tr>
<tr>
<td>Misfirings in engine at high speeds</td>
<td>- Short firing intervals&lt;br&gt; - Incorrect idle mix&lt;br&gt; - Carburetor misadjusted</td>
<td>Adjust spark plug&lt;br&gt; Adjust carburetor&lt;br&gt; Re-adjust carburetor</td>
<td>36&lt;br&gt; 37&lt;br&gt;</td>
</tr>
<tr>
<td>Engine frequently stalls in idle</td>
<td>- Firing interval too long, defective spark plug&lt;br&gt; - Carburetor misadjusted&lt;br&gt; - Air filter clogged</td>
<td>Adjust or replace spark plug&lt;br&gt; Re-adjust carburetor&lt;br&gt; Clean air filter</td>
<td>36&lt;br&gt; 37&lt;br&gt;</td>
</tr>
</tbody>
</table>
| Engine does not run smoothly | - Speed control linkages are clogged or jammed | Clean speed control linkages | 37
## 6. Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Remedy</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine does not stop when set to stop</td>
<td>- Speed and engine stop are not properly adjusted</td>
<td>Readjust speed control</td>
<td>37</td>
</tr>
<tr>
<td>Engine output too low</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></td>
<td>- Air filter clogged</td>
<td>Clean the air filter</td>
<td>34</td>
</tr>
<tr>
<td>Wheel drive or brush drive does not stop with disengaged clutch</td>
<td>- Incorrect hand clutch lever adjustment</td>
<td>Adjust hand clutch lever</td>
<td>31</td>
</tr>
<tr>
<td>Excessive vibration</td>
<td>- Attachment bolts loosened</td>
<td>Tighten attachment bolts</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>- Loose anchorage fixture on rotary brushes</td>
<td>Immediately turn off engine!</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check anchorage fixture and all bolts and nuts for tightness, exchange damaged parts</td>
<td></td>
</tr>
</tbody>
</table>

* = For this purpose contact your agria workshop.
Electrical Wiring Diagram, Comfort Version

1 Engine
2 Magnet ignition system
3 Engine-off-switch
   (on speed control lever next to engine)
4 Connector pair
5 Switch in safety circuit lever
6 Switch in clutch lever

Varnishes, Wear Parts

agria Order No.

<table>
<thead>
<tr>
<th>Code</th>
<th>Item Description</th>
<th>Code</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>799 09</td>
<td>Fuel stabilizer pouch 5g</td>
<td>771 83</td>
<td>Oil suction pump</td>
</tr>
</tbody>
</table>

Varnishes

<table>
<thead>
<tr>
<th>Code</th>
<th>Item Description</th>
<th>Code</th>
<th>Item Description</th>
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</thead>
<tbody>
<tr>
<td>181 03</td>
<td>Spray varnish birch-green</td>
<td>712 98</td>
<td>Spray varnish red, RAL 2002</td>
</tr>
<tr>
<td>712 98</td>
<td>Spray varnish red, RAL 2002</td>
<td>509 68</td>
<td>Spray varnish black, RAL 9005</td>
</tr>
</tbody>
</table>

Wear Parts

<table>
<thead>
<tr>
<th>Code</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>761 98</td>
<td>Air filter element</td>
</tr>
<tr>
<td>759 99</td>
<td>Spark plug NGK BPR 6ES; BOSCH WR 7 DC</td>
</tr>
<tr>
<td>766 44</td>
<td>V-belt for wheel drive</td>
</tr>
<tr>
<td>762 81</td>
<td>Reverse gear flat belt</td>
</tr>
<tr>
<td>765 44</td>
<td>V-belt for brush drive</td>
</tr>
<tr>
<td></td>
<td>70 cm coarse</td>
</tr>
<tr>
<td></td>
<td>70 cm fine</td>
</tr>
<tr>
<td></td>
<td>90 cm coarse</td>
</tr>
<tr>
<td></td>
<td>90 cm fine</td>
</tr>
</tbody>
</table>

Emergency Tyre Repair:

<table>
<thead>
<tr>
<th>Code</th>
<th>Item Description</th>
<th>Code</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>713 13</td>
<td>Tyre repair gel bottle</td>
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</table>

Spare Parts List

<table>
<thead>
<tr>
<th>Code</th>
<th>Item Description</th>
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</thead>
<tbody>
<tr>
<td>997 152</td>
<td>Cleanstar sweeper type 6100</td>
</tr>
<tr>
<td>997 145</td>
<td>Honda Engines</td>
</tr>
</tbody>
</table>
Lubrication Chart

1 Engine oil 8 h (page 33)
2 Wheel shafts annually (page 32)
3 Lever bearings etc. annually (page 38)
## Inspection and Maintenance Chart

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</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></td>
<td>38</td>
</tr>
<tr>
<td>Check free play of levers</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Check air filter</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>Clean cooling grille</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>Check engine oil level, refill, if necessary</td>
<td>1 K K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>Clean exhaust</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>37</td>
</tr>
<tr>
<td>First engine oil change</td>
<td>1 W</td>
<td></td>
<td></td>
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<td></td>
<td>33</td>
</tr>
<tr>
<td>Subsequent oil changes</td>
<td>1 W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td>Clean engine, check bolts and nuts</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>Check wear of rotary brushes earlier if required</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>32</td>
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<tr>
<td>Clean air filter insert</td>
<td>W</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>Replace air filter insert, earlier, if required</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34</td>
</tr>
<tr>
<td>Clean spark plug, adjust gap</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>Replace spark plug</td>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>Clean guide plates, cooling fins, earlier, if required</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>Change oil in worm gear of brush drive</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Lubricate all gliding parts</td>
<td>3 K K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>Grease wheel-shaft</td>
<td>2 K K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Replace fuel hoses</td>
<td>W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>35</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  
**P** = Item no. in lubrication chart  
**W** = After 2 years
Designation of Parts

Fig. C

Honda GCV135 and GCV160 Engines

1 Fuel tank cap
2 Starter handle
3 Air strainer
4 Oil fill plug, dip-stick
5 Air filter
6 Carburetor / speed control governor
7 Engine type no. / identification no.
8 Spark plug / spark plug connector
9 Exhaust with guard
10 Fuel tank
11 Fuel tap
Designation of Parts

Fig. C
Conformity Declaration

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

Wir erklären, dass das Produkt Kehrmaschine
mit folgenden EG-Richtlinien übereinstimmt:
98/37/EG, 89/336/EWG, 2000/14/EG

Nous déclarons que le produit Balay
est conforme aux spécifications des directives CE suivantes:
98/37/CE, 89/336/CEE, 2000/14/CE

We herewith declare that the product Sweeper
conforms to the specifications of the following EC directives:
98/37/EC, 89/336/EEC, 2000/14/EC

verklaren dat het produkt Veegmachine
overeenkomt met de desbetreffende EG-richtlijn:
98/37/EG, 89/336/EG, 2000/14/EG

Angewendete Normen: Standards appliqués: Applied standards: De volgende normen
Angewandtes Konformitätsbewertungs- Conformity assessment procedure followed:
verfahren: Gevolgde overeenstemmingsbeoordelingsprocedure:

EN ISO 14982

Name und Anschrift der beteiligten benannten Stelle:
Le nom et l’adresse de l’organisme notifié:
Name and address of the notified body involved:

DLG e.V., Max-Eyth-Weg 1, D-64823 Groß-Umstadt

Garantiert Schallleistungspegel: Le niveau de puissance acoustique garanti: Guaranteed sound power level:
96 dB(A)

Möckmühl, 02.01.2002

Siegfried Arndt
Geschäftsführer
Director
Managing Director
Bedrijfsleider

Karl Graf
Entwicklung & Konstruktion
Développement et études
Research and Development
Ontwikkeling en constructie

Cleanstar Compact 6100 211; 6100 311
Cleanstar Comfort 6100 221; 6100 321
THE WINNING TEAM

Cutter bar mower  Tool Carrier  Ride-on Brushcutter

Motor hoe  One-Wheel Hoe  Two-wheel tractor

Sweeper  Scarifier  Multi-Purpose Machine

Contact your authorised agria dealer for service and prompt delivery of spare parts