

solo[®]

113/114

Instruction manual

Electric trimmer

Important!

Read this instruction manual carefully
before first operation and strictly observe
all safety regulations!



05

Dear Customer,

Congratulations for choosing this SOLO quality product.

SOLO's equipment design incorporates the latest technology to provide trouble free, extended service life. The utilization of high-grade materials and modern, state of the art manufacturing equipment assures consistently high quality.

Prior to operating the unit, please read the owner's manual carefully, and most importantly, observe all safety rules.

Your dealer will be glad to assist you with any questions.

CE Declaration of Conformity

SOLO Kleinmotoren GmbH, Stuttgarter Strasse 41, D-71069 Sindelfingen, certifies that the following product in the version as supplied

Description of product: Electric trimmer

Model/type description: **113, 114**

complies with the following EU guide lines:
98/37/EC, 2000/14/EC, 2004/108/EC and 2006/95/EC

Applied standards:

EN 786, EN 60335-1, DIN EN 60335-2-91,
EN 55014-1, EN 55014-2, EN 61000, EN 50366

Conformity assessment procedures (2000/14/EC):
Appendix VI

Name and address of the Notified Body:

CESMA
Via Gorizia, 49
42100 Reggio Emilia – ITALY

Registration number: 1232

Sound power level	113	114
guaranteed	96	96 dB(A)
measured	95,40	95,48 dB(A)

Year of the firsttime CE marking: 2005

Serial number, Build year → Type plate on the machine

This Declaration of Conformity will become invalid if the product is modified, changed or altered without prior approval.

Sindelfingen, 1st January 2008
SOLO Kleinmotoren GmbH


Wolfgang Emmerich
Managing Director

The following symbols are used in this manual and on the product:



Always handle this power tool with particular care



Read these operating instructions carefully before undertaking any maintenance, installation and cleaning steps



Wear ear defenders and a face shield before starting the motor.



Please note: objects may be thrown out and high



Maintain a minimum distance of 15 metres bystanders



Immediately pull the mains plug from its socket if the supply cable or extension cable are damaged



Never use this power tool in the rain



No use of metal cutting blades allowed. Use only permitted string head cutting tools for work process.



Wear protective gloves when handling and working with the equipment



Wear solid shoes, preferably safety shoes with a good profile



Electrical equipment is unsuitable for domestic waste. Have the equipment, accessories and packaging recycled in an environmentally responsible way.

Packaging

The packing materials used to protect the unit against damage during transportation are cartons made from pulp, which can be re-used or recycled.

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1. Safety regulations

1.1 Correct use / General safety instructions

The electric trimmer must only be used to cut grass, reeds, weeds and wild growth at ground level. The brushcutter must not be used for any other purposes (see chapter 5.1 "Scope of Application").



Read the operating instructions carefully before taking this equipment into service and keep them in a safe place. Use this power tool with particular caution.

Non-observance of safety instructions can lead to a risk to life. Also observe any regulations from your professional body. These operating instructions must always be available at the place of work. All individuals instructed to work with the equipment (including maintenance, care and repair), should read these instructions.

- You should request and receive instructions from the vendor on the safe operation if you are using this type of product for the first time.
- Never expose this power tool to rain. Never use this equipment in moist or wet conditions.
- Children and young persons under the age of 18 years may not work with this power tool, with the exception of young people over the age of 16 years who are being trained under supervision.
- Keep bystanders and animals away from the working area. Maintain a minimum distance of 15 m. When working near thickets, be aware that children and animals may be hidden there. Immediately stop the machine and the cutter if any person or animal comes close to the working area. The operator is responsible for any accidents or damage caused to individuals or property.
- This machine may only be passed on or lent to third parties if they are familiar with the safe use of this product and with these instructions. Always supply the manual with the machine.
- Ensure you are rested and in good health when using this machine.
- Persons under the influence of alcohol or drugs, including prescription drugs, are not allowed to use this machine, as their ability to quickly react to potential danger may be impaired.
- Never alter, change or modify any safety equipment or functional assemblies on this machine.
- Only use this machine if it is in good, safe condition. Always check the machine prior to use. **Risk of accident!**
- Only use those accessories and attachments that have been supplied by the manufacturer and that are expressly approved for attachment. When using a nylon head, never replace a plastic line with a steel line. Always use the appropriate guard with each cutter.
- Before replacing the cutting blades, always first stop the motor and pull the mains plug from its socket to prevent an accidental starting of the motor.
- The reliability and safe operation of your machine depend on the quality of parts used with the machine. Only use original spare parts. Original spare parts are identical with genuine production parts and guarantee best quality in material, dimensions, function and safety. Original parts and accessories are available from your specialist dealer. Your dealer has been supplied with appropriate documentation to determine the correct parts. Your dealer is frequently supplied with updates about improvements to the equipment. Please note that the use of non-original parts will void your warranty.
- Always store the machine in a safe place and in such a way that it will not pose any danger. Stop the motor when the machine is not used.

Persons who disregard safety instructions, operating or maintenance instructions may be liable for any damage or consequential losses.

1.2 Working clothes

To prevent injuries, always wear suitable clothing and safety equipment when working with this power tool. This clothing should be practically oriented to the application (for example a tight fitting work suit), but should not be confining.

Never wear scarves, ties, jewellery or other items of clothing, which might get caught in the equipment, in brush or on branches. Safely tie back long hair (use a cap, helmet or similar).



Wear sturdy shoes with a good profile - ideally safety shoes.

Wear protective gloves with non-slip palms.

Use ear defenders and/or a visor for protection against flying objects or objects caught up in the turbulence (protective goggles for example).

1.3 When transporting the equipment

- Always turn off the motor when transporting the machine.
- Never carry or transport the brushcutter with the motor running.
- Always cover the cutters with blade protectors, when transporting the equipment over longer distances.

1.4 Mains supply and extension cable

- Only extension cables approved for outdoor use with a minimum cross-section as shown here are permissible as mains extension cable.
 - DIN 57282/H07 RN-F
 - The cable connectors must be made from rubber or must be covered in rubber.
 - When using a cable reel, fully unreel all cable.
- Check whether the mains supply voltage matches the details on the type plate of the power tool.
- The mains socket must be protected at least by a 16 A fuse.
- For your personal safety, we recommend the use of a 30 mA RCD.

Cable length up to	Minimum cable cross-section
7 m	1,2 mm ²
15 m	1,6 mm ²
30 m	2,0 mm ²

1.5 Before connection to the mains supply

Before taking the power tool into use, check it fully for perfect condition.

- The ON/OFF switch must be able to move freely and must automatically return into the stop position.
- The cutters and guard must be tightly secured and in perfect condition.
- The mains cable, which is part of the equipment, and the extension cable must be in perfect condition.

Should the check reveal any irregularities or recognisable damage (also to the frame) or reduced efficiency of the machine, do not commence work. Take the power tool to a specialised workshop and have it checked.

1.6 Working with the machine

- Only use this power tool when it is complete and in a safe condition.
- Work conscientiously, thoughtfully and calmly, and do not endanger third parties.
 - Pay attention to good visibility and lighting conditions.
 - Always remain within earshot of other people who can provide help in case of emergency.
 - Plan for timely work breaks.
 - Pay attention to possible hazards and take appropriate precautions. Be aware that wearing ear defenders reduces the ability to perceive noise. This includes sounds alerting to danger such as signals, shouts, etc. that can go unnoticed.
 - Exercise caution when the ground is wet or covered in ice and snow, on overhangs, or uneven terrain. There is an increased risk of slipping!
 - Pay attention to the risk of stumbling and obstacles, such as tree roots and stumps, edges, etc. Pay particular attention to safety when working on slopes.
 - Before commencing work, check the working area for stones, broken glass, nails, wire or other solid objects and remove such debris to prevent them being picked up and thrown out by the cutting tool.
 - Ensure that, when you start the machine, it contacts neither objects nor the ground.
 - Always hold this power tool firmly in both hands, and ensure your safe and firm foothold.
 - Always hold the cutters below hip level. Never lift a rotating cutter off the ground.
 - Keep all parts of the body away from the rotating cutting tool.
 - Always keep the mains supply or extension cable away from the cutting tool.
 - Use a correct operating mode (see Chapter 5.2 "Correct brushcutter operation").
 - Please note that noise also impacts on the environment. Observe the quiet times that can vary from place to place.
- Stop the motor if you notice a difference in the operating characteristics of the brushcutter.
- The cutter continues to rotate for a short time after releasing the ON/OFF switch. Ensure that the cutter has come to a complete standstill before parking the machine.
- Before any contact with the cutter – even when clearing a blockage or jamming of the cutter – switch OFF the motor, wait until the cutter has come to a complete standstill and pull the mains plug from its socket.

1.7 Maintenance, cleaning and repairs

Only carry out those maintenance jobs and repairs, which are described in this manual. A specialised service centre will carry out all other jobs.

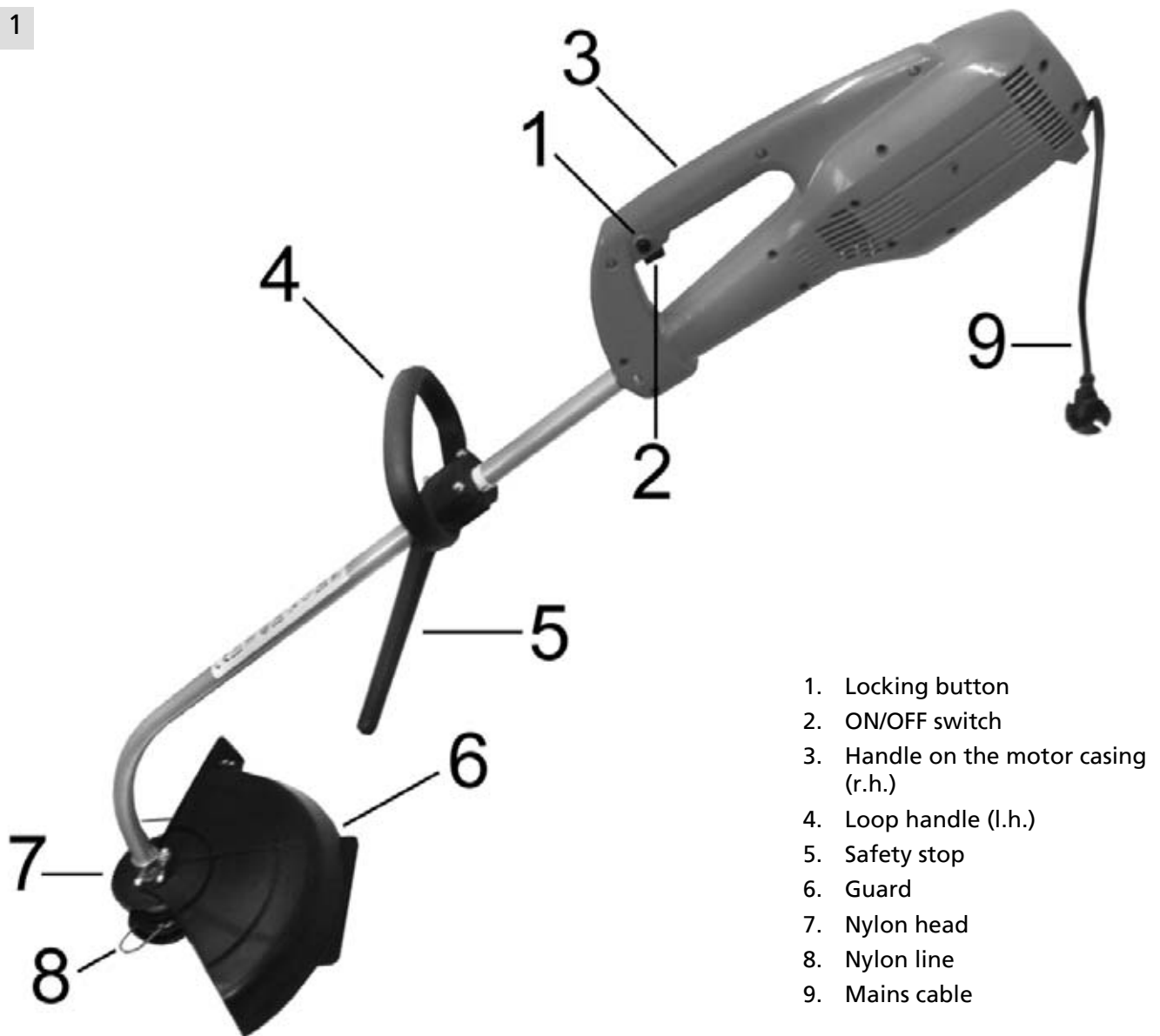
- Before cleaning, maintenance or repairs, always switch OFF the motor and pull the mains supply plug from its socket.
- For any repairs only use original parts from the manufacturer.
- Never hose down the power tool – not even for cleaning.

2. Standard delivery

- **Electric brushcutter** partially assembled; the following components are supplied separately and require assembly
- **Handle** and all parts required to complete the assembly
- **Guard, Guard bar**, line trimmer and all parts required to assemble the shield
- **Nylon head cutter** with all **assembly parts** required for fitting the nylon head
- **Retaining pin (allen wrench)**(for fitting the cutter)
- **Instruction manual**

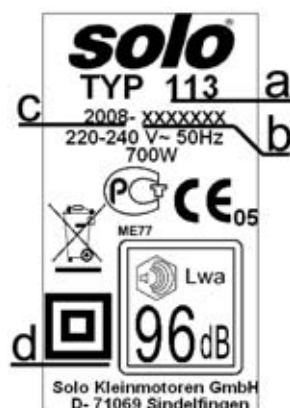
3. Control and function elements

Fig. 1



Type plate:

- a: Type designation
b: Serial number
c: Build year
d: Double-insulated

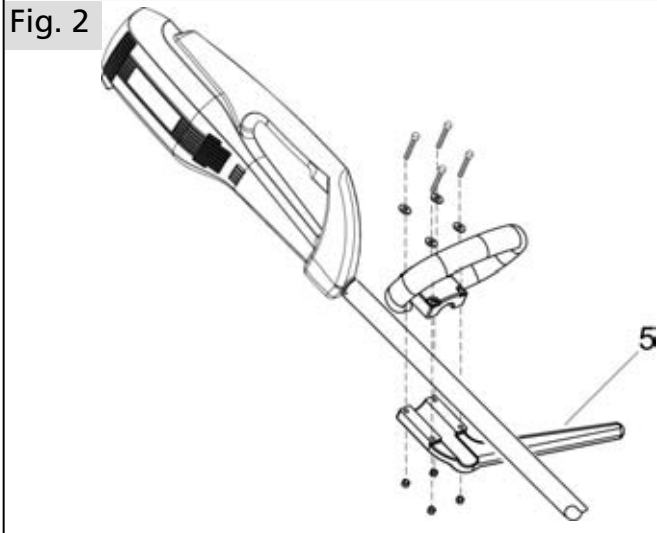


4. Preparing the equipment for use

For shipping purposes, the brushcutter is partly disassembled and has to be reassembled prior to use.

Only use the brushcutter after it has been fully assembled.

4.1 Loop handle assembly



- Install the safety stop (5) pointing to the left (viewed from the operator position).
- Initially tighten the screws only lightly.
- Push the handle, in accordance with your body size, into its optimum position.
- Then tighten the screws.

4.2 Fitting the nylon head



Lock the drive shaft with the locking pin (allen wrench). Wind the line head clockwise onto the drive shaft.

Note: When adjusting the cord length (see "Adjusting the cutting line", chapter 5.3), the cord trimming blade in the contact protector automatically cuts the cord end to the correct length, as soon as the tool is started.

Please note: Never start the brush cutter without fitted line trimming blade.

To replace the line head, unwind it, with the drive shaft blocked, by rotating it anti-clockwise.

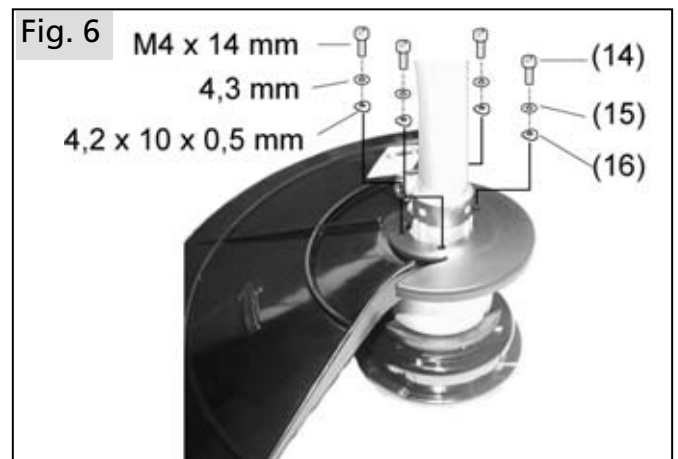
4.3 Shield installation



Guide the contact protector from the top over the shaft tube into the correct position. In the correct working position, the protector must point towards the user.



Also guide the fixing part over the shaft tube into its correct position, so that the open part of the ring points towards the user.



Secure the contact protector and fixing part with the four screws (14), washers (15) and spring washer (16).

4.4 Connection to the mains supply



Always secure the extension cable on the cable retainer (23) on the motor housing.

To isolate the equipment, always pull the mains plug from its socket, i.e. never pull on the cable to remove the plug.

5. Using your brushcutter

5.1 Scope of Application

Only use brushcutters equipped with a nylon head for cutting grass – particularly suitable around obstacles - and for trimming light weeds and wild growth near ground level. The nylon head is particularly suitable for a soft cut, e.g. for clean trimming around trees and posts.

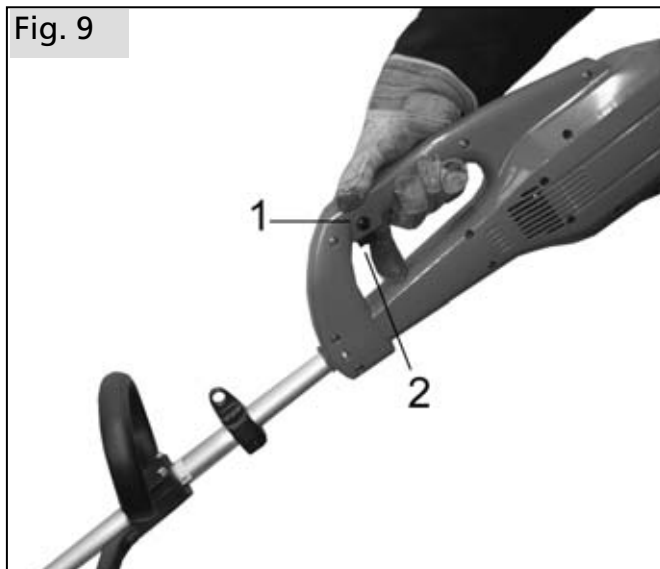
5.2 Correct brushcutter operation

Observe the relevant safety instructions when using the brushcutter.



Carry the power tool on your r.h. side.

Approach the area to be cleared with the motor switched OFF; then start the motor before dipping the cutter into the working area.



With your thumb, initially press the locking button (1) and then additionally the ON/OFF switch (2) with your index finger. Then release the locking button again. Release the ON/OFF switch to switch the motor OFF again.

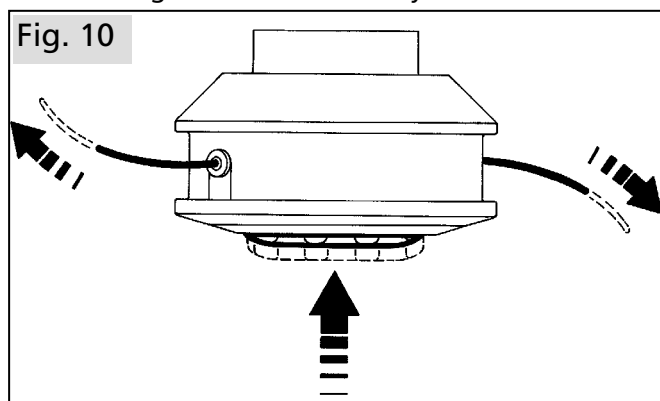
Dip the cutter 2/3 into the growth and use the equipment like a scythe by stepping forward in small steps and cutting from side to side.

Immediately switch OFF the motor, if you notice any unusual vibrations or cuttings have wrapped themselves around the cutting tool or have jammed near the guard. Reduce the cutting tool speed by pushing the cutter down onto the ground, until it has come to a complete standstill. Pull the mains plug from its socket and clear the cutting tool of grass, brush etc. Check the entire power tool for perfect condition.

When using the line head, only work with an approved line length. If the contact protection shield is properly fitted, cutting lines will always be trimmed to the permissible length (trimming blade integrated into the contact protection shield). There is a high risk of injury, and the motor is subjected to excessive loads leading to a risk of damage, if nylon lines are left too long.

5.3 Adjusting the cutting line

When using a semi-automatic nylon head:



(schematic diagram)

Several times, tip down the equipment with rotating nylon head onto covered ground. This dispenses nylon line in steps. Per release, approx. 30 mm line length will be dispensed. Excess line

lengths will be trimmed to size by the line trimming blade.

5.4 Troubleshooting

Fault	Possible cause	Remedy
Motor will not start	1.No power supply 2.Cutting tool jammed/blocked	1a.Check the mains supply and the extension cable. 1b. Check the mains socket (e. g. different equipment plugged in). 2. Pull the mains plug and clear the cutting tool.
The cutter does not rotate, even though the motor is running.	1.Flexible shaft broken 2.Flexible shaft incorrectly assembled	1. Contact your local specialist. 2. Contact your local specialist.
Cutting line will not unreel	1.Line spent 2.Line reel jammed, line twisted	1. Pull the mains plug and load a new cutting line. 2. Pull the mains plug, open the nylon head, rewind the line, clean the reel and re-assemble correctly.

6. Specification

Electric brushcutter		113	114
Motor type / Motor power	W	Electric motor / 700	Electric motor / 850
Mains voltage / frequency	V / Hz	230 AC / 50	
Protection class		II (double-insulated)	
Extension cable (accessory)		DIN 57282/H07 RN-F	
Rated speed of the cutter	$1/\text{min}$	7000-8000	7000-8000
Drive shaft – property / diameter	mm	Flexible / 6,2	
Shaft tube – material / diameter	Ø mm	Steel / 25	Aluminium / 25
Standard cutting tool		2-line nylon head; semi-automatic; square section and twisted line Ø 2.0 mm	
Cutting diameter	Ø mm	370	
Dimensions - Height / Width / Length	cm	149 / 49 / 35	
Weight w/o guard and cutting tool	kg	4,6	4,6
Weighted effective acceleration (EN 786 Appendix D) Handle r.h. side / handle l.h. side	m/s^2	6,16 / 4,32	6,07 / 6,18
Sound pressure level LP_{eq} (EN 786 Appendix E)	dB(A)	75,8	76,6
Sound power level $L_{W\text{eq}}$ (EN 786 Appendix E) actual / guaranteed 95%	dB(A)	95,40 / 96	95,48 / 96

7. Operating and maintenance instructions

7.1 General operating and maintenance instructions

The maintenance and the repair of modern machines as well as their safety-relevant assemblies require qualified specialised training and a workshop equipped with special tools and test equipment. Consequently the manufacturer recommends that all tasks not described in these operating instructions be carried out by a specialised workshop. That specialist has the required training, experience, and equipment at his disposal, to provide you with the most cost-effective solution for such work. He will provide additional help in word and deed.

After a running-in time of app. 5 hours, check all accessible screws and nuts for tightness and retighten them, if required.

Inspect the cutting tool regularly (short intervals) and when you notice unusual vibrations or the cutting area or guard has become jammed/blocked. For this switch OFF the motor, and the cutting tool must be at a complete standstill. Pull the mains plug and remove grass cuttings, brush etc. from the tool base.

7.2 Cleaning

Before cleaning always switch OFF the motor and pull the mains supply plug from its socket.



Never hose down this power tool.

- Clean cuttings from the cutting area with a hand-held brush.
- Only use a dry or slightly damp cloth to clean the entire machine. Never use solvents or abrasive cleaning agents. Before connecting the equipment to the mains supply, the motor casing and its interior must not be damp.

7.3 Shutdown and storage

Store the equipment in a dry secure location. Open flames and similar should not be nearby. Prevent unauthorised access – particularly by children.

8. Guarantee

The manufacturer guarantees trouble-free quality and will cover the cost of replacing parts which are found to be faulty in material or workmanship within the prescribed guarantee period after the date of purchase. Please note that specific guarantee conditions may vary from country to country. If in doubt, ask your equipment vendor. He is responsible for guarantee matters.

We hope you will understand that we cannot be liable for damage resulting from the following causes:

- Non-compliance with the operating instructions.
- Neglecting essential maintenance and repair work.
- Wear in normal use.
- Obvious overload by continuously exceeding the maximum performance limit of the product.
- Using non-authorised tools.
- Use of force, incorrect treatment, misuse and accidents.
- Damage from excessive heat due to dirt build-up around the cooling fan housing.
- Attempted adjustments and repairs by unqualified persons.
- Use of unsuitable spare parts or third party parts, if these are the cause of the defect.
- Damage caused by using the product in the hire or rental industry.

Normal cleaning, adjustments or maintenance work fall outside the guarantee provisions.

A service centre authorised by the manufacturer must carry out all guarantee work.

9. Parts subject to wear and tear

Various parts are subject to application-specific or normal wear and must be replaced in good time, when required. The following parts are subject to normal wear and are not covered by the manufacturer's guarantee:

- Cutting tools
- Lubricants
- Nylon line

In the best interest of continued technological progress we reserve the right to change the design and configuration of any product without prior notice.

For that reason, no claims can be accepted with reference to text and illustrations in this manual.

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