

PETROL 4-IN-1 GARDEN MULTI-TOOL SET

PGT 4 in 1-S



Read these operating instructions carefully before use.

Matrix GmbH
Postauer Str. 26
D-84109 Wörth/Isar
Germany
Fax: +49 (0) 8702/45338 98
E-Mail: info@matrix-direct.net



Original Operating Instructions
PETROL 4-IN-1 GARDEN MULTI-TOOL SET

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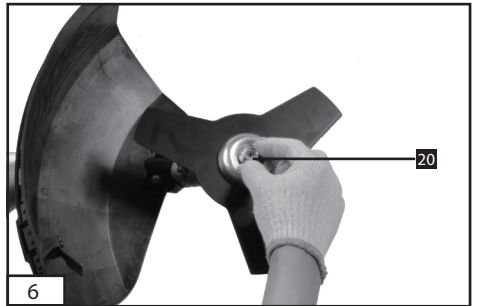
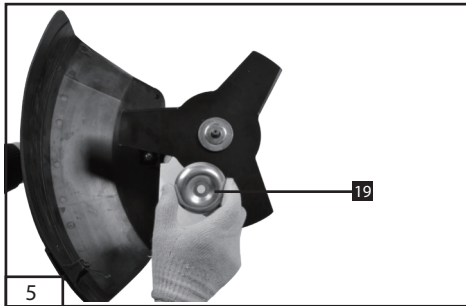
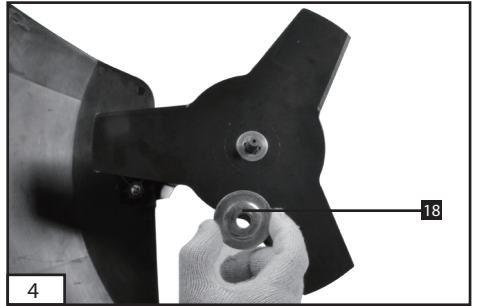
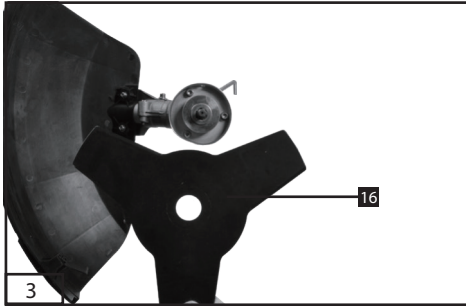
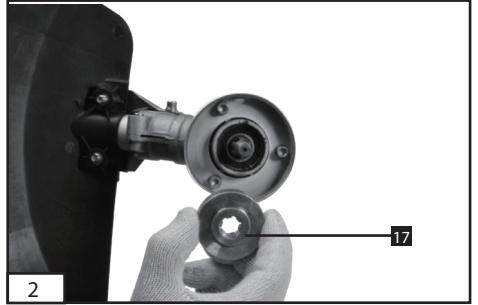
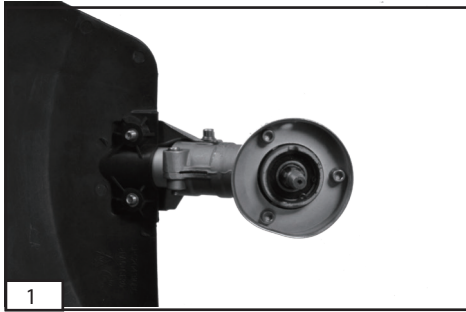


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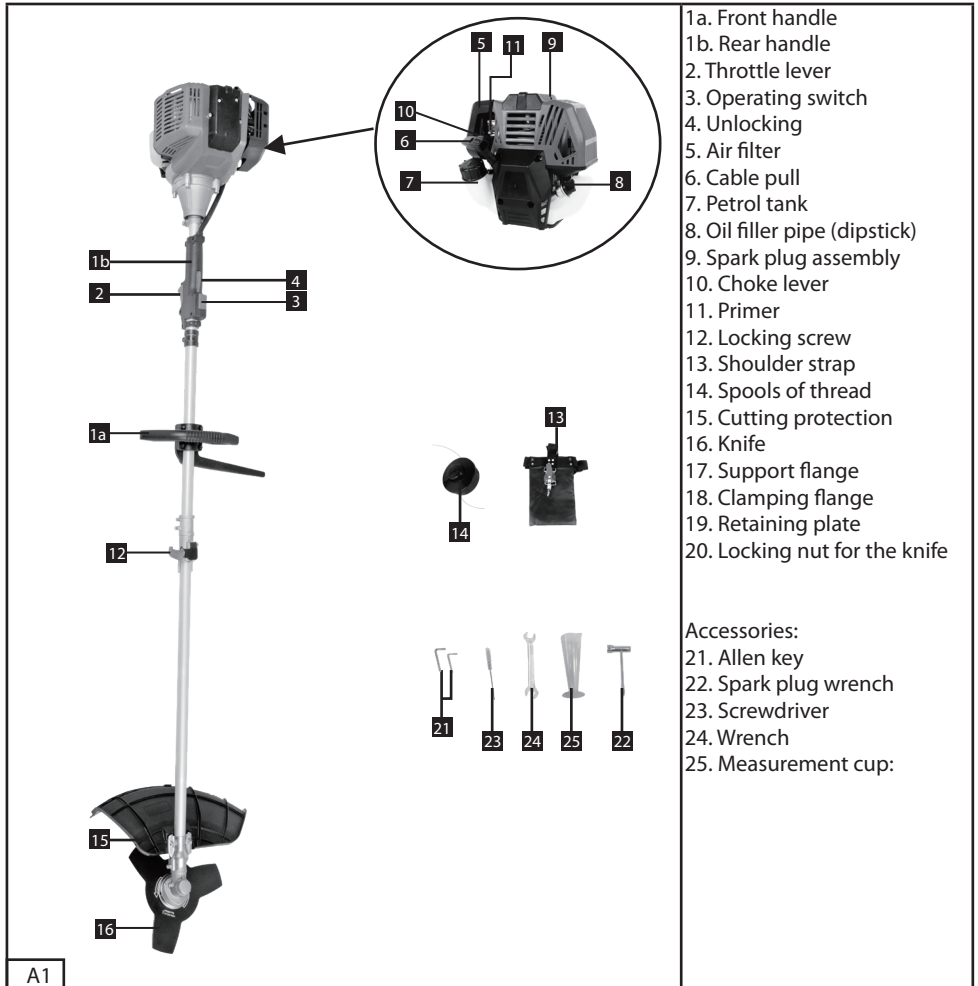
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1. Device

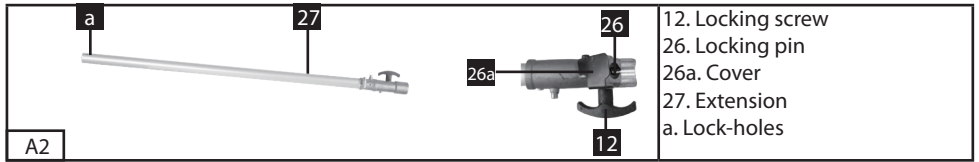
Universally applicable brush cutter- grass trimmer-pole-mounted powered pruner-combination tool for a perfect maintenance of garden and green areas. With just one device, you can do lawn care, tree care and gardening.

1.1 Scope of delivery

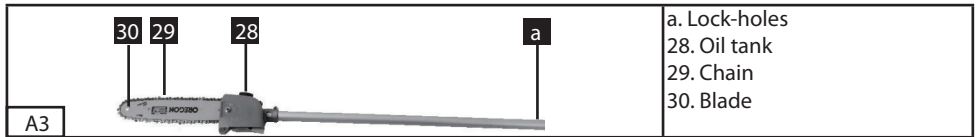
1.1.1 Power unit and accessories



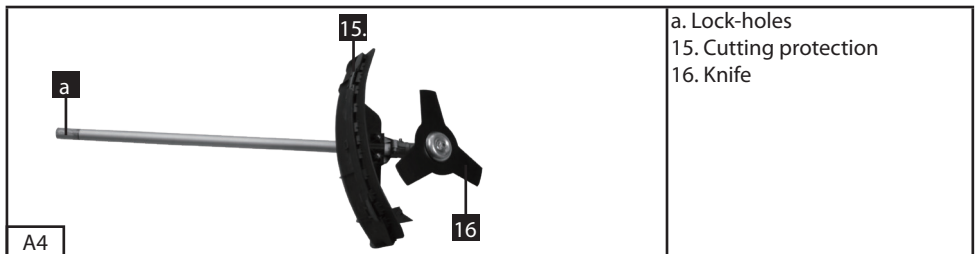
1.1.2 Extension



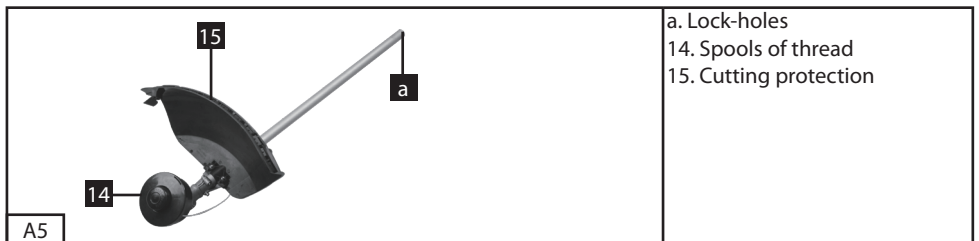
1.1.3 Pole-mounted powered pruner



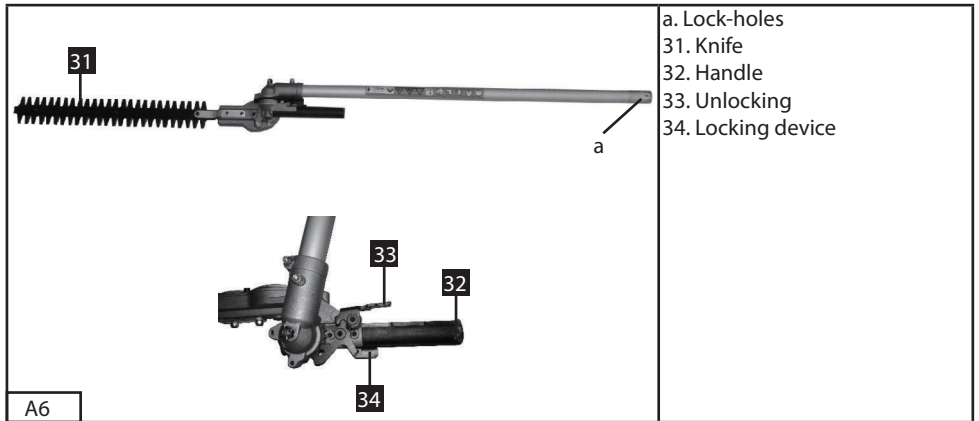
1.1.4 Brush cutter



1.1.5 Grass trimmer



1.1.6 Hedge trimmer



2. Safety instructions and warnings

This device complies with the mandatory safety regulations for internal combustion engines.

Read the instructions carefully before operating the machine.

An improper use can lead to damage to persons and property.

Persons who are not familiar with the instructions, may not operate the device. Keep the safety instructions in a safe place.

Children and adolescents under 16 are not allowed to use the device. Adolescents over the age of 16 who work under the guidance of a trained person are allowed to use it.

Make sure that there are no persons or animals in the vicinity of the work area (minimum distance of 15 m). Foreign matter such as stones may be present in the cut and whirled-up grass. You are responsible for the safety of your work area and are liable for damage to persons or property.

Petrol brush cutters should not be started or used near persons or animals.

Do not use the device if you are tired, ill, or unfocused, under the influence of alcohol or drugs. Inattentiveness can lead to serious injury.

Wear personal protective equipment to protect yourself from hazards to your safety and health. This includes, inter alia, wearing approved goggles, ear protection, protective gloves, non-slip foot protection and protective clothing. Never work with the device with sandals or even barefoot.

When carrying out forestry work, always wear an approved safety helmet.

Do not wear loose clothing or jewellery. Wear long pants to protect your legs. For long hair use a headgear. Loose clothing, jewellery, or long hair could get caught by the moving parts.

Wear suitable tight, tight-fitting work clothing.

Keep body parts and clothing away from the cutting tool when starting or operating the engine.

Make sure that you have a firm and secure footing when working. Avoid going backwards with the unit because of the risk of stumbling.

Avoid abnormal body posture.

Prolonged use of petrol brush cutters can lead to a vibration-induced circulatory disorder (white-finger disease). White-finger syndrome is a vascular disease in which the small blood vessels in the fingers and toes cramp up, similar to seizures. The affected areas are not supplied with sufficient blood any more and appear extremely pale. Information on the duration of the use cannot be given in this case, since this may vary from person to person. The following factors can influence this phenomenon:

Circulatory disorders of the hands of the operator, low external temperatures, long hours of use. Therefore, it is recommended to wear warm work gloves and to take regular breaks.

Dispose of the device, accessories and packaging as well as the oil and petrol used in the locations intended for them and so this will provide you with an environmentally friendly recycling.

This little effort benefits our environment. The exhaust gases of internal combustion engines are poisonous and can lead to suffocation, among other things.

The device may be used only outdoors. Fill the fuel tank only outdoors or in sufficiently ventilated areas.

Petrol and petrol fumes are highly flammable. Keep the device away from flammable materials and sources of ignition, such as ovens or stoves. The resulting exhaust gases are poisonous and stifling!

CAUTION Fire hazard!

Petrol and petrol fumes are highly flammable! The waste oil must be disposed of in accordance with the applicable regulations.



Do not smoke while you refuel or operate the device.



Dry up any spilled petrol immediately.

Start the device only at a location away from the refuelling point.

Make sure that the lid of the tank is always tightly closed. Pay attention to possible leaks.

While the engine is running or when the engine is hot, do not open the fuel cap or refill fuel.

Open the tank cap slowly, so that petrol fumes can escape.

Make sure the handles are dry, clean, and free of petrol mixture.

Do not use the device without exhaust and properly installed exhaust protection.

Do not touch the exhaust. Danger of burns.

Use only the fuel recommended in the manual.

Store petrol only in designated containers in a safe place.

Caution! Petrol and oil may leak if used incorrectly, stored improperly or if there is a damage. Take precautions to prevent environmental damage in such a case. For example, oil and petrol can be absorbed with special binders.

In case of fire, use CO2 extinguishers to smother the fire. Foam, powder or sand are also suitable for extinguishing small fires. Never extinguish petrol and oil fires with water. Risk of explosion! In case of emergency, contact your fire department!

Always stand below the cutting tool when cutting on the slope.

Always make sure that there are no objects or similar things accumulate in the cord head in the protective hood or in the engine.

Do not use wire or the like in the thread spool. Work only in daylight or under good artificial lighting.

Before each use, check the device and its components and protective devices for damage or wear and, if necessary, carry out the necessary repairs. Never put devices of protection and safety out of operation. Do not use the device, if damage or signs of wear and tear have become apparent.

Keep the tools clean and functional, in order to be able to work better and safer.

Always keep the device away from the body when working.

Always switch off the device during breaks from work and relocations, wait for the cutting tool to stop and switch off the engine.

Never leave the device unattended at the workplace. Store the device in a safe place during work interruptions.

Do not be distracted while working with this device. Through that, you could lose control of the tool.

Never use the device in rainy, humid or wet conditions and do not store it outdoors.

If the device gets wet, wait for it to dry completely before using it again.

Locate and remove foreign objects from the workspace before working with this equipment. If you still encounter a foreign object while cutting, turn off the device and remove it.

In the event of a blockage due to foreign material (stone, grass collection), turn off the device and remove it with a blunt object. Never remove blocking foreign bodies with your fingers, as this may result in serious injury.

Always keep the running device away from the body.

Do not overload the machine or perform any work for which it is not intended.

Make sure that the ventilation openings are always free of dirt.

Keep the device out of the reach of children.

Store the device in a safe and dry place.

After impact or other damage, check the machine for damage.

Especially when trimming lawn edges, gravel borders and the like, please note particularly that stones and soil can be ejected from the cutting threads.

Never cross roads or paths when the device is switched on.

Never cut hard objects such as stones, etc. to prevent personal injury or damage to the device.

Never use the device without a protection guard.

Never stop the cutter with your hands. Always wait until it stops by itself.

Guide the thread head as close to the ground as possible.

Cut only grass that grows on the ground. Grass in cracks or on stones may not be cut.

Always make sure that there are no objects or similar things accumulate in the cord head in the protective hood or in the engine.

Operate the device only with protection guard.

Always switch off the appliance from before you turn it off.

Pay attention to the risk of injury in the area of the cutting device, which serves to cut off the thread.

Risk of blowback! There is always a risk of blowback if the cutting blade touches branches or other objects. The brush cutters will be uncontrollable and can be pushed with great force in the direction of the operator.

Do not use the device without exhaust and properly installed exhaust protection. Do not touch the exhaust. Danger of burns.

Do not use wire or the like in the spools of thread.

Never cut hard objects such as stones, etc. to prevent personal injury or damage to the device. Never use the device without a protection guard.

Always use only the original thread. Never use a metal wire instead of the nylon thread.

The petrol brush cutter is intended for trimming grass or grass, for cutting scrub, shrubs, bushes and young trees in the private sector, dependent on the mounted cutting tool.

The device may not be used for other purposes.

The manufacturer does not assume any liability in case of improper use as well as changes to the machine.

Please also pay attention to the safety instructions, the instructions for installation and operation, as well as the operating instructions and the other generally applicable accident prevention regulations.

The appliance and cutting tools must be regularly and properly inspected and maintained. Damage must be repaired by a specialist workshop. Use only accessories recommended by the manufacturer.

Let your device repaired only by qualified personnel and only with original spare parts. This will ensure that the safety of the device is maintained.

Make sure that the cutting tool is stationary, when the engine is at idle mode.

Check this regularly and do not use the machine, if you see a movement in idle mode. Take the machine to a specialist workshop for checking and repairing. The adjustment of the idle speed should also be done only in a specialist workshop.

CAUTION: The cutting tool rotates for a few seconds after switching off the machine.

Lay down the appliance only after the cutting tool has come to a standstill and the engine has been switched off.

Replace a damaged cutting tool with a new one immediately.

Always use only the original thread. Never use a metal wire instead of the nylon thread.

The appliance and cutting tools must be regularly and properly inspected and maintained. Damage must be repaired by a specialist workshop.

Use only accessories recommended by the manufacturer. The use of accessories, especially cutting accessories and protective devices, which are not recommended by the manufacturer, can lead to serious injuries and property damage. Let your device to be repaired only by qualified personnel and only with original spare parts. This will ensure that the safety of the device is maintained.

Kickback – blowback

When working with metal cutting knives, it may lead to a blowback of the whole device or to a sudden forward movement, if solid objects (trees, twigs, stones, or the like) are touched.

This blowback occurs without warning and can lead to loss of control over the device and endanger the user and bystanders. There is special hazard looming in areas where visual inspection is difficult and there is dense vegetation.

So please maintain control in the event of a blowback

- Always hold the device firmly with both hands while working.
- Make sure that you are standing securely. Keep your feet comfortably spread and always count on a possible blowback.
- Do not overestimate yourself and maintain balance at all times while working.
- Before you begin to cut, the cutting blade should have reached full working speed.

Stones and rubble could be thrown up while clearing vegetation and cause severe injuries. Make sure that the protective hood is securely mounted.

If rotating parts (cutting knives) are improperly fastened, this can lead to serious accidents. Before starting work, check the cutting blade for tightness.

Other risks

Even if you operate this device properly, there will still be other risks. The following risks may occur in connection with the style and design of this power tool:

1. Health risks, which resulted due to hand-arm

vibrations, if the device is used for a longer period or if it is not properly handled or maintained.

2. Injuries and property damage caused by spinning tool attachments that are unexpectedly thrown out of the machine due to sudden damage, wear, or improper attachment.

3. For an adequate protective equipment during the use, care must be taken in accordance with the operating instructions. All other usages are ruled out. Any damage or injury resulting from misuse is the responsibility of the user / operator and not the manufacturer. Use only 3-teeth blades suitable for the machine as mentioned in the operating instructions.

Frequent use of vibrating devices may cause nerve damage to persons whose blood circulation is compromised (e.g., smokers, persons with diabetics).
If you notice any unusual disturbances, stop working immediately and consult a doctor.
Observe the following instructions to reduce the risks:

1. Keep your body, especially your hands, warm in cool weather.

2. Take regular breaks, moving your hands to increase blood flow.

3. Keep changing work positions regularly to avoid a one-sided load on the body and to prevent health damage.

Make sure that the device vibrates as little as possible by ensuring regular maintenance and by fixed parts on the device.

Do not smoke while you refuel or operate the device.

Wipe up any spilled fuel immediately.

Examine the device for any leaks.
Do not use the device if you find any leaks.

While the engine is running or if the engine is hot, do not open the fuel cap and do not refill fuel.

Do not touch the exhaust. Danger of burns.

Use only the fuel recommended in the manual.

Store petrol only in designated containers in a safe place.

Always switch off the device before putting it away.

Work only in daylight or under good artificial lighting.

Carry out a visual inspection of the device before each use.

Check if all screws and connecting parts are tight.
Always hold the device firmly with both hands.

Before each use, check the device and its components and protective devices for damage or wear and, if necessary, carry out the necessary repairs. Never put protection and safety devices out of operation. Do not use the device if damage or signs of wear and tear have become apparent.

Keep the tools clean and functional, in order to be able to work better and safer.

Always keep the device away from the body when working.

Always switch off the device completely during work interruptions and relocation, wait for the chain saw to stop and put on the chain guard.

Never leave the device unattended at the workplace. Store the device in a safe place during work interruptions.

Do not be distracted while operating the device. If you are distracted you could lose control of the device.

Never use the device in rainy, humid or wet

conditions and do not store it outdoors.

Do not use the chainsaw in the vicinity of flammable liquids or gases and in wet or humid environments. Failure to do so may cause fire or explosion.

Work only in suitable light conditions.

You are responsible for the safety of your work area.

Caution! Some tools / cutting tools have sharp edges and tips. Be especially careful when handling them and wear protective gloves to protect yourself from injury!

Ensure a secure footing and wear non-slip, high-heeled closed shoes.

Protect the device from rain and moisture. When the engine is running, always hold the saw firmly with both hands.

Use the claw as a starting point for each cut, always start cutting with the saw chain running.

Make the cut so that the saw does not get stuck in the wood.

Pay special attention to branches under tension.

Pull the device out of the wood only with a running saw chain.

Never work above the shoulder level or with the device with one hand.

Always stand outside the direction of fall. Stay on slopes above the tree to be felled. Do sawing work on a tree that stands on a slope, always on the side, never from above or below.

Always pay attention to the fall direction of the parts to be separated.

Never position the tip of the rail for cutting and never saw with the rail's tip - risk of blowback!
- There is always danger of blowback, when the tip of the rail touches wood or other objects. The chain saw will become uncontrollable and can be pushed with great force in the direction of the operator.

Always saw through only one branch at a time. When cutting to length, pay attention to adjacent trunks.

Do not use the appliance as a lever to move objects. Always use the chain guard during transport and storage.

Secure the device during transport to avoid fuel loss, damage or injury.

Warning!

Keep passers-by away from the running device, but never work alone.

Stay within earshot of others if you need help. Stop the engine immediately when someone approaches you.

Make sure that the saw chain does not come into contact with foreign objects such as stones, fences, nails or similar objects. These objects could be flung out, injuring the user or the person passing by or damage the saw chain.

National regulations may restrict the use of the device.

Do not use the machine in any position from which it may come within the radius of 10 m of high-voltage power lines.

For an adequate protective equipment during the use, care must be taken in accordance with the operating instructions. All other usages are ruled out. Any damage or injury resulting from misuse is the responsibility of the user / operator and not the manufacturer. Use only 3-teeth blades suitable for the machine as mentioned in the operating instructions.

Disconnect the spark plug before carrying out any work on the device itself (e.g., transport, installation, conversion, cleaning and maintenance)!

2.1 Markings on the device

Explanation of the symbols

The following symbols are used in this manual and / or on the device:



Warning / Caution



Read the operating instructions before use



Caution with regard to electric cables.
Keep at least 10 m distance



Beware of recoil



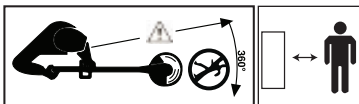
Use safety glasses, protective helmet and ear protection



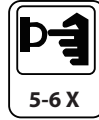
Wear safety shoes



Wear safety gloves



The distance between the machine and third parties must be at least 15 m.



Primer





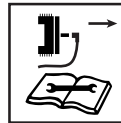
Beware of hot surfaces



Guaranteed sound power level



During cold start, position the choke lever  to close the choke.
For a warm start, position the choke lever  to open the choke..



In case of repairs, remove spark plug connector



Beware of parts thrown away

WARNING!

- Use petrol of 93 octane or higher, with special 4-stroke engine oil.
- Use pure petrol.
- Check the oil level before starting.



Attention! Risk of injury!



Device manufactured in accordance with European directives.

2.2 Intended use

Brush cutter, grass trimmer

The petrol brush cutter is intended to trim lawns or grass, to cut scrub, shrubs, bushes and young trees in the private area, depending on the mounted cutting tool.

The device may not be used for other purposes.

The manufacturer does not assume any liability in case of Improper use as well as changes to the machine.

-Please also note the safety instructions, the instructions for installation and operation, as well as the other generally applicable accident prevention regulations.

Pole-mounted powered pruner

The petrol pole-mounted powered pruner is in accordance with the latest technology and the recognized technical safety rules. However, improper or incorrect use may present a hazard to life and limb of the user or a third party or a damage to the device itself and/or other property assets.

The petrol pole-mounted powered pruner is a portable, hand-held device equipped with a cutting set attached to a shaft. This pruner is designed exclusively for pruning trees and / or other wood from the ground. The inserted cutting set is a saw chain with guide rail.

This device is designed for private or home use only and may not be used in a continuous operation for commercial purposes. Any other use or use going beyond this is considered as improper use. The risk is borne by the user. Intended use also includes observing the operating and installation instructions as well as observing the maintenance conditions.

3. Technical data

Engine:

Engine Type:	4-stroke engine; air cooled
Engine power (max.):	0.7 kW
Displacement:	31 cm ³
Max. engine speed:	10500 min ⁻¹
Volume (fuel tank):	650 cm ³ (0.65 l)
Normal or premium petrol	
Start System:	Rewind starter
Speed range at idle mode:	2700-3400 min ⁻¹
Speed at engagement:	4700 min ⁻¹
Spark plug:	TORCH, A5RTC/A7RTC
Oil specification:	4-stroke engine oil 15W40

Pole-mounted powered pruner

Weight with chainsaw and empty tank:	7.3 kg
Cutting length:	10"
Chain Clearance:	3/8"
Chain thickness:	0.050"
Chain type:	91P040X/OREGON
Guide rail type:	100SDEA318/OREGON
Max. engine speed with chain saw	10500 min ⁻¹
Noise level according to EN ISO 22868 and ISO 3744	

Sound pressure level L_{pA} :	90.28 dB(A)
Sound power level L_{WA} :	105.27 dB (A)

Uncertainty K:	2.5 dB (A)
Guaranteed sound power level L_{WA} :	114 dB (A)
Vibration level according to EN ISO 22867	
Front handle:	3.527 m/s ²
Rear handle:	6.874 m/s ²
Uncertainty K:	1.5 m/s ²

Brush cutter and grass trimmer

Weight without cutting accessories with empty tank:	7.3 kg
Cutting diameter:	255 mm (brush cutter) 430 mm (grass trimmer)
Thicket knife:	ø255 x ø25.4 x 1.4 mm, 3 teeth, max. 10000 min ⁻¹
Cutting thread / spools of thread:	ø2.4 mm, max. 10000 min ⁻¹

Rotational speed of the cutting accessory at max. engine speed:

7850 min⁻¹ (brush cutter)
6750 min⁻¹ (Grass trimmer)

Noise level according to EN ISO 22868 and ISO 3744

Sound pressure level (cutter) $L_{pA,av}$: 91.61 dB(A)

Sound pressure level
(grass trimmer) $L_{pA,av}$: 92.63 dB(A)

Uncertainty K: 2.5 dB(A)

Sound pressure level
(brush cutter) $L_{pA,av}$: 103.62 dB (A)

Sound pressure level
(grass trimmer) $L_{pA,av}$: 105.06 dB (A)

Uncertainty K: 2.5 dB (A)

Vibration level according to EN ISO 22867

Vibration levels (brush cutter) $a_{hv,eq}$:

Front handle: 5.587 m/s²

Rear handle: 6.890 m/s²

Vibration levels (grass trimmer) $a_{hv,eq}$:

Front handle: 5.277 m/s²

Rear handle: 7.665 m/s²

Uncertainty K: 1.5 m/s²

Hedge shears

Blades for hedge shears:

Knife spacing: 20 mm,
Max. cutting length 365 mm.

Noise level according to EN ISO 22868 and ISO 3744

Sound pressure level L_{pA} : 88.76 dB (A)

Sound power level L_{WA} : 103.50 dB (A)

Uncertainty K: 2.5 dB (A)

Vibration level according to EN ISO 22867

Front handle: 5.065 m/s²

Rear handle: 3.516 m/s²

Uncertainty K: 1.5 m/s²

Guaranteed sound power level L_{WA} : 114 dB (A)

Angle range

The angle of the hedge trimmer can be adjusted from 80 ° to -90 ° with respect to the shaft tube.

Note: The specified vibration value has been determined according to a standardized test procedure and can be used to compare different devices with one another.

Wear ear protection to prevent hearing damage.

In addition, this value is suitable in order to be able to estimate loads for the user caused by vibrations in advance.

Warning! Depending on how you use the device, the actual vibration values may differ from those specified.

Take measures to protect against vibration.

Take into account the entire workflow, including times when the tool operates without load or is switched off.

Suitable measures include regular maintenance and care of the device and the insertion tools, keeping hands warm, regular breaks and good planning of work processes.

4. Installation and commissioning

Note:

Before attaching cutting accessories, first remove the transport protection.

When replacing the spools of thread or knife, do not remove the cutting guard (15).



To avoid the risk of unintentional starting, pull out the spark plug connector.

4.1 Brush cutter-Grass trimmer-Pruner-Hedge trimmer-Combination Device: Handle

Assembly 1	Assembly	
	<p>Secure the handle (1a) to the drive unit with the 4 fixing screws (a) and the nuts (b) of the drive-unit (c)</p>	

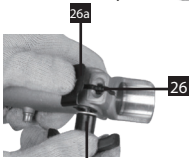
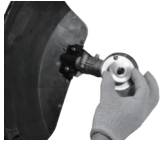
4.2 Brush cutter-Grass trimmer-Pruner-Hedge trimmer-Combination Device: Grass trimmer



RISK OF INJURY

CAUTION: Always wear protective gloves when working on and around cutting tools.

Assembly 2	Assembly	
	<p>To use the device as a grass trimmer, the cutting guard (15) and spools of thread (14) must be mounted.</p>	



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- Fix the cutting guard (15) with the screws to the holder on the shaft (if not already mounted). In addition, the protective cover with knife must be attached to the protective cover for the cutting edges.
 - Lock the shaft of the brush cutter at the intended place with a screwdriver or with the provided Allen key (21).
 - Using the spark plug wrench (22), loosen the locking nut for the blade (16) by turning it clockwise (if already mounted).
 - Remove the locking nut (20), the clamping flange (18) and the holding plate (19) for the thicket knife. Keep these parts safe.
 - Leave the support flange (17) on the shaft.
 - Lock the shaft of the brush cutter at the intended place with a screwdriver or with the provided Allen key (21).
 - Turn the thread spool (14) counter-clockwise onto the shaft.
- CAUTION: Left-hand thread

Connecting the drive unit and assembly:

Insert the ends of the assemblies to be connected. Make sure that the locking pin (26) locks in place. Check pulling apart on a trial and error basis. Fold down the cover (26a) and secure the assemblies by tightening the locking screw (12).

Release of drive unit and assembly:

Loosen the locking screw (12). The cover (26a) jumps back. Hold the locking pin (26) pressed underneath the cover and loosen the modules by carefully pulling them apart simultaneously.

4.3 Brush cutter-Grass trimmer-Pruner-Hedge trimmer-Combination Device: Brush cutter

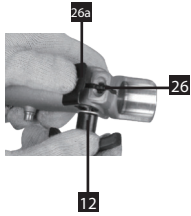


RISK OF INJURY

CAUTION: Always wear protective gloves when working on and around cutting tools.
 - Risk of blowback! There is always a risk of blowback, if the blade tip touches branches or other objects. The brush cutters will be uncontrollable and can be pushed with great force in the direction of the operator.

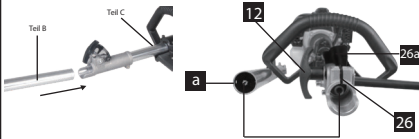


Assembly 3	Assembly	
<p>A8</p>	<p>To use the device as a brush cutter, the protective cover for the cutting edges and the thickener knife must be mounted.</p> <p>Do not remove the protective cover for the cutting edges (15) when you replace the thread spool (14) or blade (16).</p> <ul style="list-style-type: none"> - Fix the protective cover for the cutting edges (15) with the 4 screws on the holding device on the shaft (if not already mounted). - Mount knife (16) as shown in figures 1-6. - Lock the shaft of the brush cutter at the intended place with a screwdriver or with the provided Allen key (21). - Turn the spools of thread (14) clockwise off the shaft (if already mounted). - Leave the support flange (17) on the shaft. - Place the thickener knife (16) on the supporting flange (inscription facing the user). - Place the clamping flange (18) and the retaining plate (19) (observe alignment) on the thickener blade (16). 	



- Lock the shaft of the brush cutter at the intended place with a screwdriver or with the provided Allen key (21).
 - Turn the hexagon nut anti-clockwise onto the shaft and tighten with the spark plug wrench (22).
CAUTION: Left-hand thread

Connecting the drive unit and assembly:



Insert the ends of the assemblies to be connected. Make sure that the locking pin (26) locks in place. Check pulling apart on a trial and error basis. Fold down the cover (26a) and secure the assemblies by tightening the locking screw (12).

Release of drive unit and assembly:

Loosen the locking screw (12). The cover (26a) jumps back. Hold the locking pin (26) pressed underneath the cover and loosen the modules by carefully pulling them apart simultaneously.

Caution! The knife may only be ground by a qualified and experienced specialist. Incorrectly ground blades increase the risk of breakage and cracking.

4.4 Brush cutter-Grass trimmer-Pruner-Hedge trimmer-Combination Device: Pole-mounted powered pruner

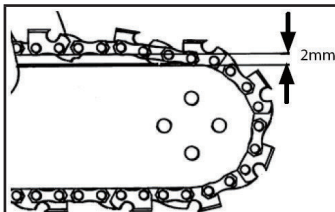


RISK OF INJURY



CAUTION: Always wear protective gloves when working on and around cutting tools.

Assembly 4	Assembly
	<p>Before you can start with the tree care, it is necessary to mount the saw chain and the blade to the device. The chain (29) is very sharp-edged. Be sure to wear safety gloves when mounting the chain (29).</p> <ol style="list-style-type: none"> 1. First, remove the chain guard from the blade unit. 2. Then turn the locking screw on the cutting head (d) counterclockwise with the wrench (24) and remove the upper housing cover. 3. Insert the saw chain into the groove guide of the blade unit (30). Start at the top of the blade if possible. Be sure to pay attention to the correct cutting direction. There are direction arrows, which must coincide with the running direction on the blade on the blade unit and in the inner housing below the sprocket. <p>Now place the saw chain around the sprocket (e) and place the blade unit on the pin of the cocking slide (f). Make sure that the bolt engages in the corresponding opening on the blade. If necessary, turn the tensioner screw (g).</p> <p>To ensure the even wear of the chain blade, the chain blade (30) should be turned after 8 - 10 working hours.</p> <p>Always pay attention to the correct chain tension and check it before every use of the device.</p> <p>A loose chain could come off the groove guide of the blade unit and cause serious injury. Furthermore, a loose chain also increases the risk of blowback.</p> <p>In addition, blade, chain and sprocket wear out faster.</p>
A9	



Adjustment of the chain tension:

1. First, slightly tighten the locking screw on the sprocket cover.
 2. The screw of the clamping device (g) is located below the chain link on the front of the device head. Use the supplied spark plug wrench (22) to turn it in the appropriate direction to increase or decrease the tension on the chain. Turning clockwise: Tension of the chain is increased. Turning counterclockwise: Tension of the chain is relaxed.
- AA correct chain tension can be detected by the fact that the saw chain rests evenly at each point of the blade unit and does not sag or overstress.
3. If the chain tension is correct, retighten the sprocket cover lock knob. New chains expand. Check the new chain after a few minutes of operation. Let the chain cool down and then adjust the chain tension again if necessary.

Fill in oil:

The prerequisite for perfect function and long product life is regular lubrication. Therefore check the oil tank every time before using this device and refill with oil if necessary. Proceed as follows:

1. Open the cap of the oil tank (28). Remove oil residue and other contaminants by rubbing the filler cap and oil filler neck with a cloth.
2. Fill environmentally friendly and biodegradable chain lubricating oil into the oil tank (28) and then close it again. To minimize the risk of fire, make sure that there are no oil residues outside the container when filling. Always use a funnel to fill.

Never use waste oil for chain lubrication.

Used oil does not have the necessary lubricating properties, is harmful to the environment and causes skin cancer after prolonged and repeated skin contact. Use only lubricating oil, which has sufficient resistance to aging so that it does not become resinous and form solid deposits that could damage the device.

Always adhere to the specified oil intervals. This device must be re-supplied with oil after a working time of max. 15 minutes.

Adjustment of flow of the oil

Caution:

An increase in oil throughput speeds up oil consumption, leading to more frequent checks / refills.

To ensure adequate lubrication, it may be necessary to check the oil level more frequently than when refilling the fuel tank.

The guide rail and the chain are automatically lubricated by a pump that works when the chain turns.

The pump is factory set to provide a medium flow rate. However, it can be set in the field. Temporary increase in oil flow is often desirable when cutting hardwood and resinous wood.

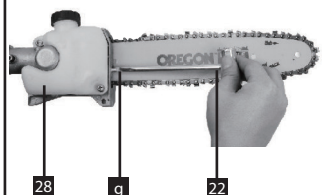
Set the pump as described below:

1. Stop the engine and make sure the stop switch is in the "STOP" position.
2. Place the device on the side with the oil tank on top. See the image A10.
3. Using a screwdriver, turn the adjusting screw of the oil-throughput in the desired direction

- In the clockwise direction : Reduce lubrication
- Counter-clockwise: Increase lubrication

Caution:

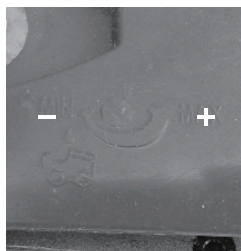
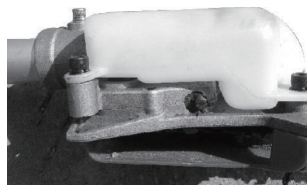
The adjusting screw of the oil flow must be pressed slightly while turning, otherwise the pump and screw will be damaged.



28

g

22



A10

4.5 Brush cutter-Grass trimmer-Pruner-Hedge trimmer-Combination Device: Pole-mounted powered pruner



RISK OF INJURY



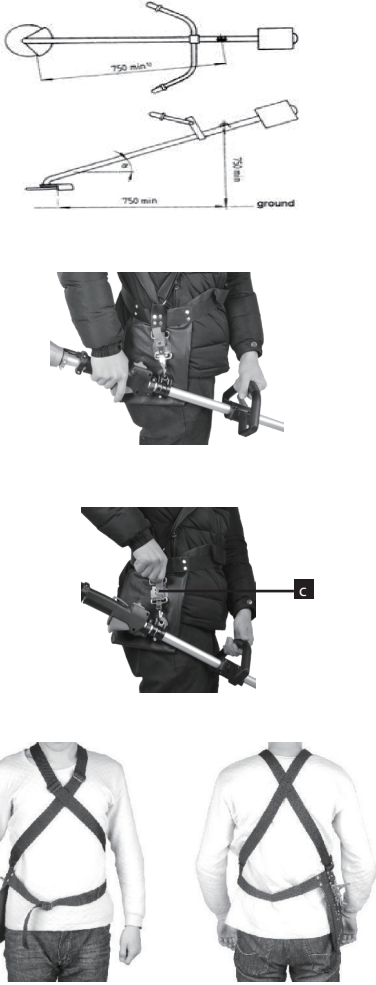

CAUTION: Always wear protective gloves when working on and around cutting tools.

<p>Assembly 5</p> <p>30 29 28 a</p> <p>26a 26 12</p> <p>Tail B Tail C 12 a 26a 26</p>	<p>Assembly</p> <p>Remove transport cover.</p> <p>Connecting the drive unit and assembly:</p> <p>Insert the ends of the assemblies to be connected. Make sure that the locking pin (26) locks in place. Check pulling apart on a trial and error basis. Fold down the cover (26a) and secure the assemblies by tightening the locking screw (12).</p> <p>Release of drive unit and assembly:</p> <p>Loosen the locking screw (12). The cover (26a) jumps back. Hold the locking pin (26) pressed underneath the cover and loosen the modules by carefully pulling them apart simultaneously.</p>	
<p>A11</p>		


4.6 Brush cutter-Grass trimmer-Pruner-Hedge trimmer-Combination Device: Extension (only pole-mounted powered pruners)

Assembly 6	Assembly	
	<p>Remove transport cover.</p> <p>Connecting the drive unit, extension and assembly:</p> <p>Insert the ends of the assemblies to be connected. Make sure that the locking pin (26) locks in place. Check pulling apart on a trial and error basis. Fold down the cover (26a) and secure the assemblies by tightening the locking screw (12). Carry out procedure separately for drive unit and extension.</p> <p>Release of drive unit, extension and assembly:</p> <p>Loosen the locking screw (12). The cover (26a) jumps back. Hold the locking pin (26) pressed underneath the cover and loosen the modules by carefully pulling them apart simultaneously. Carry out procedure separately for drive unit and extension.</p>	
A12		

4.7 Mounting the carrying belt system

Assembly 7	Assembly
	<p>Checks before use: Distance from the shoulder strap suspension to the cutting tool min. 750mm Distance of the cutting tool from the ground when using as trimmer 0-300mm and when using with thicket knife 100-300mm. The fuel tank should be filled up to half with normal or premium petrol with 93 octane or higher. Always keep a safe distance between yourself and the cutting tool while working. The petrol brush cutter / trimmer / pole-mounted powered pruner unit must be used with the carrying strap (13). First of all, balance the machine when it is switched off.</p> <ul style="list-style-type: none"> - Put on the carrying strap (13). - Adjust the strap length in such a way that the snap hook (b) is about a hand's breadth below the right hip. - Hang the petrol brush cutters on the snap hook (karabiner). - Let the machine sway. <p>The cutting tool may just touch the ground during normal working posture. With the engine running, attach the device to the snap hook (b) of the harness.</p> <p>Safety flap on the shoulder strap CAUTION! In an emergency, the safety flap (c) can be pulled on the carrying strap (13). The machine is then released immediately from the shoulder strap (13) and falls to the ground.</p> 
A13	

4.8 Fuel and engine oil

 **CAUTION! Turn off the device, allow it to cool and unplug the spark plug before refuelling with fuel and engine oil.**

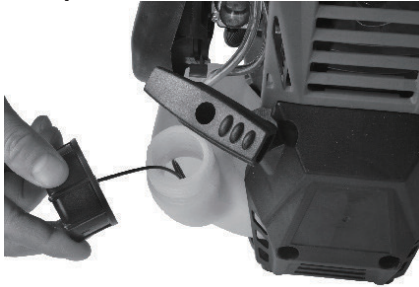
The machine is equipped with a 4-stroke engine. Use only regular or premium grade petrol with 93 octane or higher.

Before starting the scythe, fill the engine with 4-stroke engine oil 15W40.

Caution: Do not use fuel that is older than 2-3 months.

In case of longer breaks from work, empty the tank and refill before starting work.

Fill in petrol

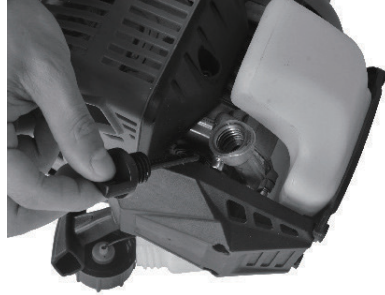


- Slowly unscrew the lid of the tank (7) so that pressure and petrol vapours can escape safely.
- It is best to fill the fuel with a funnel and tighten the lid again.

Fill in engine oil and check oil level

- Place the appliance on a level ground.
- Turn off the oil tank cap with dipstick (8) and add oil to the tank.
- To check the oil level, wipe the dipstick with a clean cloth and put it back into the tank as far as it will go.
- After pulling out, read off the oil level on the dipstick. The oil level must be in the marked field between the minimum and maximum marks.

- Wipe off any spilled oil and close the oil tank cap again.





5. Operation

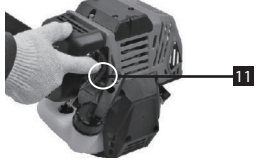
5.1 Starting the Brush cutter-Grass trimmer-Pruner-Hedge trimmer-Combination Device




Start the petrol multi-tool set for garden only when an attachment is connected!
Remove the appropriate transport protection and inspect the device for good operating condition. Never use a damaged, poorly adjusted or badly maintained or incompletely and safely mounted device.

 <p>A14</p>	Set the operating switch (3) to On-position "I".
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 <p>A15</p>	Place the choke lever (10) at "OFF" position.
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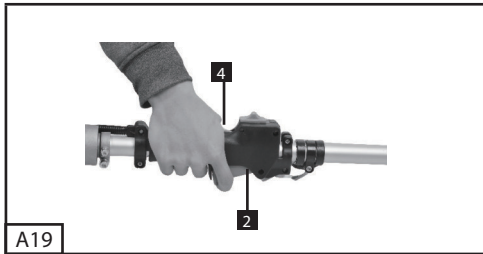
 <p>A16</p>	Press primer (11) 5 to 6 times.
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 <p>A17</p>	<ul style="list-style-type: none">• Start the machine by controlled pulling at the cable control (6).• Press the device with the second hand on the ground. <p>CAUTION: Never put your foot on the shaft or kneel on it.</p>
--	---



Once the device is running, the choke lever (10) can be returned to the "ON" position.

CAUTION. The cutting device continues to still rotate for a few seconds after stopping the engine. Hold both handles firmly up to the complete standstill of the cutting device.



Now press the release button (4) and then the throttle lever (2) until the device runs smoothly and has reached full speed.

Start with warm engine

- Corresponds to the procedure as for the cold engine. The choke lever always stays in the "ON" position.

5.2 Stop and switch off

Release the throttle (2).

- Allow the engine to return to idle mode without gas and let the device to run for 10 to 15 seconds.

- Set the operating switch (3) on the operating handle to "O".

6. Working with the brush cutter / grass trimmer

- Familiarize yourself with the operation and control when the appliance is switched off the first time you work with a petrol brush cutter.

- The petrol brush cutter is designed in such a way that it is controlled by the operator only on the right side of the body.

- Always hold the petrol brush cutters by the handles with both hands firmly.

- Hold the control handle with your right hand and the handle of the handrail with your left hand.

- Always make sure that the cutting tool continues to rotate for a short time after the throttle has been released.

- Always ensure proper engine idling so that the cutting tool does not turn when the throttle is depressed.

- Always work at high speed, through which you will have the best cutting result.

- Control the device from left to right and back with an evenly curved movement.

Then cut the next track.
 Caution: Always return the device to its original position before cutting the next length.

- If you hit against a stone or tree while working, turn off the engine and disconnect the spark plug

connector, then inspect the petrol brush cutters for damage.

Caution: Always be extra cautious when working in difficult terrain and on slopes.

When the grass is tall, cut in stages so as not to overload the device. First cut the tips, then work in stages.

Always wear protective goggles and ear protection and wear a protective helmet during forestry work.

6.1 Mowing with a string trimmer head

- Use the thread cassette for obtain a clean cut even on uneven surfaces, at fence posts and near trees.

-- Carefully lead the trimming thread to an obstacle and cut with the thread tip around the obstacle. When the trimming string comes into contact with stones, trees and walls, the thread frays prematurely or breaks.

- Never replace the plastic thread with a metal wire - risk of injury!

6.2 Mowing with thicket knife

- Use the thicket knife to comb through thickets, wild growth, young trees (maximum 2 cm trunk diameter) and tall grass.

- When using metal cutting tools there is always a risk of blowback if the tool hits a solid obstacle (stones, trees, branches, etc.). The device is thrown back against the direction of rotation.

- In the case of wild growth and scrub, "dip" the thicket knife from above. As a result, the material to be cut is chopped.

CAUTION: Take extra care with this technique, because the greater the distance of the cutting tool to the ground, the greater the risk that cutting material and foreign objects are thrown sideways.

For an adequate protective equipment during the use, care must be taken in accordance with the operating instructions. All other usages are ruled out. Any damage or injury resulting from misuse is the responsibility of the user / operator and not the manufacturer. Only use 3-teeth blades suitable for the machine as mentioned in the operating instructions.

- To sift through young stocks of trees and for cutting grass, run the device such as a brush cutter close to the ground.

CAUTION: Misuse and abuse can damage the thicket knife and cause serious injury from parts slung away.

- In order to reduce the risk of accidents caused by thickets, observe the following points:

- Never cut shrubs or wood larger than 2 cm in diameter.

- Avoid contact with metal bodies, stones, etc.

- Check the thicket knife regularly for damage. Never use a damaged thicket knife once again.

-- If there is noticeable dulling of the thicket knife, it must be sharpened in accordance with the instructions by a qualified specialist. If noticeable imbalance, the thicket knife must be replaced.

6.3 Trim lines in automatic mode

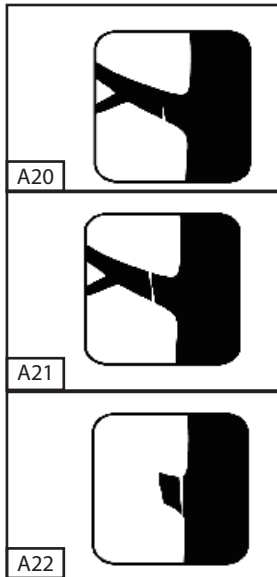
The petrol brush cutter comes with a filled thread cassette.

The thread wears off during work.

To feed new thread, press the trigger on the thread cassette firmly on the ground with the motor running.

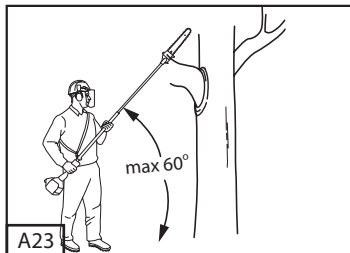
The thread is automatically released by the centrifugal force. The blade on the cutting guard trims the trimming thread to the correct length.

7. Working with the pole-mounted powered pruner unit



7.1 Precautions during the sawing procedure

In order to reduce the risk of injury and accident as much as possible, it is important to be sufficiently informed about the sawing procedures and precautionary measures for accident prevention. Therefore, read the following instructions carefully and observe the safety instructions in chapter 2 during your entire work process:



- Never stand directly under the branch you want to saw off. The danger of the branch unexpectedly falling on you is very great. In general, it is recommended to set the branch saw at an angle of 60° to the branch.

- Hold the appliance firmly with both hands during the cutting process and always ensure that the machine is in an equilibrium position and that it is strong.

- Never try to operate your tool with one hand. Losing control of your tool can result in serious injury or death. Never work on a ladder, a tree branch or other from an unsafe ground.

- Do not saw strong branches in one cut, but always in several steps.

- Place the saw chain on the branch for cutting.

- Apply light pressure to guide the unit, but do not overload the engine.

- Adhere to the cutting technique given in chapter 7.2 to avoid injuries and to not sustainably damage your trees.

Clear the work area before cutting off disturbing branches and undergrowth. Then create a retreat area, away from the place where cut branches can fall, and remove all obstacles there. Keep the work area clear, remove the cut branches immediately. Pay attention to your position, the wind direction and the possible fall direction of the branches. Be prepared for fallen branches to strike back. Place all other tools and equipment at a safe distance from the branches to be cut, but not in the blowback area.

Always observe the condition of the tree.

Look for decay and putrefaction in the roots and branches. If these are rotten inside, they can unexpectedly break away and fall off while cutting. Also look for broken and dead branches that could be released by the shock and fall on you. For very thick or heavy branches, make

a small incision below the branch first, before working from top to bottom, to prevent it from breaking off.

7.2 Basic cutting technique

Heavy branches break off easily while sawing and tear away long strips of bark from the trunk, which permanently damages the tree.

The following cutting technique can significantly reduce this risk:

1. Saw about 10 cm of the branch from the trunk, at the bottom of the branch (see Fig. A20).

2. Make another cut of about 15 cm from the top of the trunk.

Saw until the branch breaks off. The risk of a damage to the bark at the trunk does not exist anymore (see Fig. A21).

3. Finally, remove the remaining branch stump (see Fig. A22), with a clean cut from above along the trunk.

In order to minimize the damage to the tree, we also recommend sealing the area of the cut with tree wax.

7.3 Dangers due to reactive forces

Reactive forces occur while operating the saw chain. The forces applied to the wood act against the operator. They occur when the running chain comes in contact with a solid object such as a branch or is trapped. These forces can lead to loss of control and injuries. Understanding the formation of these forces can help you to avoid the moment of shock and loss of control. This saw is designed in such a way that the blowback effects are not as noticeable as with conventional chainsaws.

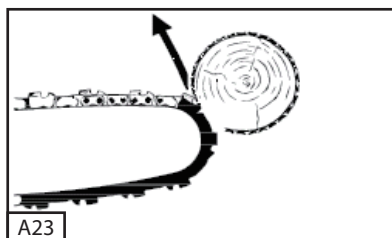
Nevertheless, always keep a firm grip and a good footing to keep control of the tool in case of doubt.

The most common effects are:

- Blowback,
- Recoil,
- Retraction.

Blowback

The blowback can occur when the running saw chain at the upper quarter of the guide rail hits on a solid object or is jammed.



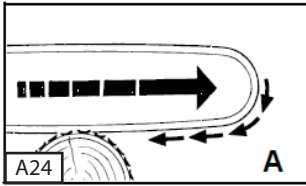
The cutting force of the chain exerts a rotational force on the saw in the opposite direction to the chain's movement. This leads to an upward movement of the guide rail.

Avoid blowback

The best protection is to avoid situations that lead to blowbacks.

1. Always keep an eye on the position of the upper guide rail.
2. Never let this place come in contact with an object. Do not cut anything with it. Be particularly careful near wire fences and while cutting small, hard branches, into which the chain can easily jam.
3. Cut only one branch at a time.

A = Retraction

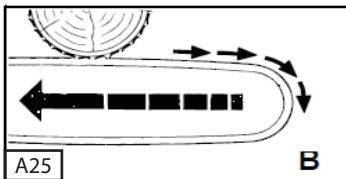


The retraction occurs when the chain suddenly gets stuck on the underside of the rail, because it gets jammed or hits a foreign object in the wood. The chain then pulls the saw forward. The retraction often happens when the chain does not run at full speed when in contact with the wood.

Avoid retraction

1. Be aware of the forces and situations that can cause the chain to stick to the underside of the rail.
2. Always start cutting with the chain running at full speed.

B = Recoil



The recoil occurs when the chain suddenly gets stuck on the top of the rail because it gets caught or hits a foreign object in the wood. The chain could then press the saw against the operator with a jerk. Recoiling often happens when the top of the rail is used for cutting.

Avoid recoil

- Risk of blowback! There is always a risk of blowback, if the blade tip touches branches or other objects. The brush cutters will be

uncontrollable and can be pushed with great force in the direction of the operator.

1. Be aware of the forces and situations that can cause the chain to jam to the top of the rail.
2. Do not cut more than one branch at a time.
3. Do not tilt the rail aside when pulling it out of a cutting gap, otherwise the chain could become trapped.

8. Cleaning, maintenance, transport and storage



RISK OF INJURY



CAUTION: Always wear protective gloves when working on and around cutting tools.



To avoid the risk of unintentional starting, pull out the spark plug connector.

8.1 Cleaning

Use a damp cloth to clean the plastic parts. Do not use detergents, solvents or sharp objects.

Due to technical reasons, wet grass and weeds wrap around the drive axle under the cutting protection.

Remove them, otherwise the engine will overheat due to excessive friction.

8.2 Maintenance

8.2.1 Regular checks

Please note that the following information refers to normal use. Under certain circumstances (longer daily work, heavy dust load, etc.), the specified intervals shorten accordingly.

Before starting work and after each tank filling:

Check for loose attachments, especially on the cutting set and shoulder strap, fuel leaks and damaged parts, such as for example cracks in cutting unit (visual inspection).

Also, visually inspect each time the device is dropped and after any other impact to identify significant defects.

Weekly examination: Gear lubrication (also as required).

If necessary: Tighten accessible fastening screws and nuts.

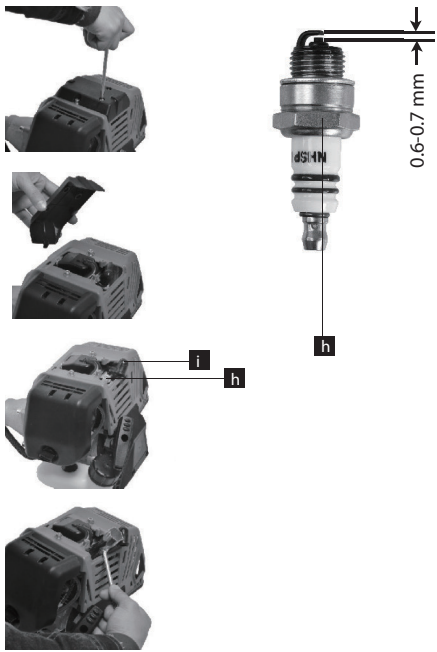
You will avoid excessive wear and damage to the device if you follow the instructions in this manual.

The user is responsible for all damage caused by non-observance of the instructions given in this manual.

This also applies to unauthorized modifications to the device, use of unauthorized spare parts, add-on parts, work tools, non-conforming and improper use, consequential damage through the use of defective components.

Always keep the device and all cutting equipment and protective equipment in good working condition.

8.2.2 Change of spark plug

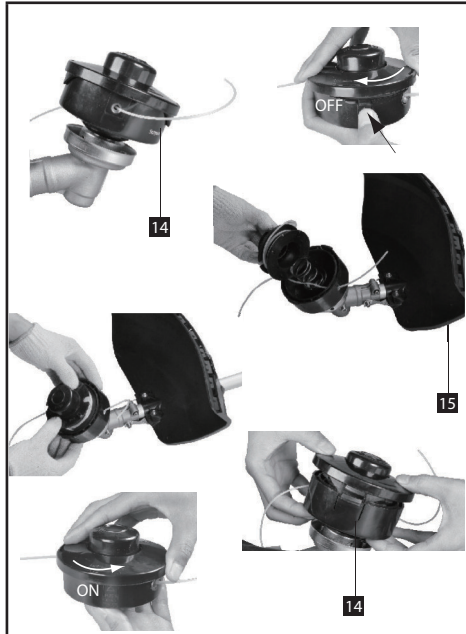
 <p>A26</p>	<p>Check the electrode gap of the spark plug (h) at least once a year or if starting is difficult on a regular basis. The correct distance between the starting flag and the ignition contact is 0.6-0.7 mm.</p> <ul style="list-style-type: none">- Wait till the engine has cooled completely.- Remove the 2 locking screws on the housing with the screwdriver (23) and open the housing of the spark plug assembly.- Remove the spark plug cap (i) from the spark plug (h) and unscrew the spark plug with the spark plug wrench (22) supplied.- In case of excessive wear of the electrode or in case of very strong encrustation, the spark plug must be replaced with one of the same type. Strong encrustation on the spark plug may be due to: Too much oil in the petrol mixture, bad oil quality, overaged petrol blend or clogged air filter.- Turn the spark plug (h) completely into the winding manually. Avoid tilting the spark plug.- Tighten the spark plug (h) with the spark plug wrench (29) supplied.- When using a torque wrench, the tightening torque is 12-15 Nm.- Insert the spark plug connector (i) correctly on the ignition plug.- Attach the spark plug assembly housing to the device with 2 locking screws.
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8.2.3 Wearing parts

Even when used as intended, some components are subject to normal wear and tear.

These components must be replaced regularly depending on the type and duration of use. These parts include the cutting tool and the retaining plate.

8.2.4 Changing spools of thread



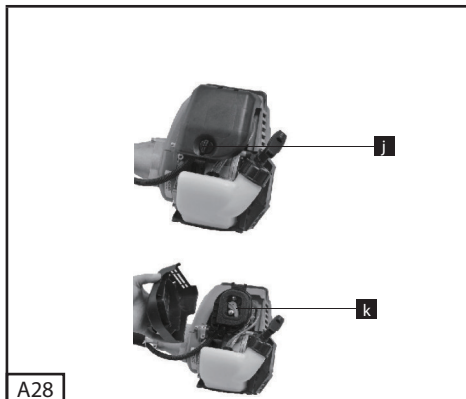
To avoid the risk of unintentional starting, pull out the spark plug connector.

- Pull off the cover for the spools of thread by pressing the retaining tabs off the spools of thread (14)
- Move the cover for the spools of thread to the "off" position. Remove the spools of thread with the thread residue and the compression spring.
- Remove the used winding (bobbin).
- Take the new thread spools and pull out 10 cm of both threads.
- Now place the thread spools of thread (14) on the tapered spring and guide both threads through the eyes on the spools of thread case.
- Now place the thread spool cover on the new spools of thread. Turn them so that the notches on the thread spool cover align with the eyelets in the spools of thread case.
- Now push the thread spool cover together with the thread spools until it snaps into the thread housing. Then put the thread spool cover in the "On" position.

Because of the blade in the cutting guard (15), the trimming thread is shortened to the correct length when the machine starts up again.

A27

8.2.5 Air filter cleaning



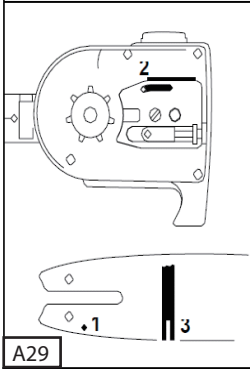
After prolonged work, you should clean the air filter (5). Dust and pollen clog the pores of the foam filter.

- Remove the cover (j) and wash the filter (k) in slightly soapy water. Caution: Do not use petrol or solvents.
- Dry the filter before reinserting it.

To avoid shortening the life of the engine, a damaged air filter must be replaced immediately.

A28

8.2.6 Care of the guide rail



• Turn over the rail each time you sharpen or replace the chain. This will avoid one-sided wear of the rail, especially at the top and bottom. Clean the following regularly:

- 1 = the opening for the oil supply
- 2 = the oil channel
- 3 = the running groove of the rail

8.2.7 Maintenance and sharpening of the saw chain

The properly sharpened chain

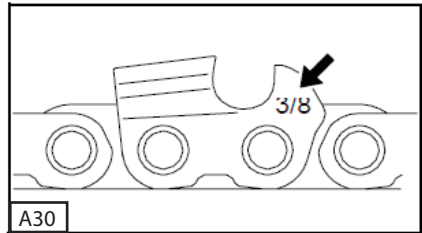
A properly sharpened chain goes effortlessly through the wood and requires very little pressure. Do not work with a dull or damaged saw chain. It increases the physical effort, increases the vibrations and leads to unsatisfactory results and higher wear.

- Clean the chain.
- Check for breaks in the links and damaged rivets.
- Replace damaged and worn chain parts with matching spare parts, which you can trim to the shape and size of the original parts if necessary.
- Sharpening a chain should only be done by experienced users!

Pay attention to the angles and dimensions given below. If the saw chain is not properly sharpened or the depth gauge is too small, there is a higher risk of blowback effects and resulting injuries!

The saw chain cannot be fixed on the guide rail. It is therefore best to take the chain off the rail and then sharpen it.

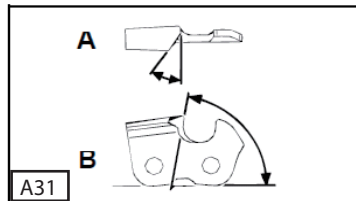
- Select a sharpening tool suitable for the chain pitch. See "Technical data" for the approved chain pitches.



The chain pitch (e.g., 3/8 ") is marked in the depth gauge of each blade.

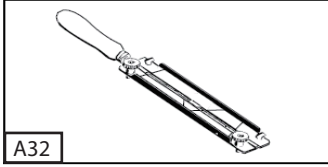
Use only special files for saw chains! Other files have the wrong shape and the wrong cut.

Select the diameter of the file according to your chain pitch. Be sure to observe the following angles when sharpening the chain's blades.



- A = filing angle
- B = angle of the side plate

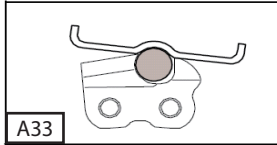
The angle must also be maintained for all knives. In case of uneven angles, the chain will run irregularly, wear out quickly and break prematurely.



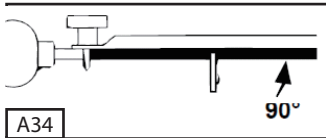
A32

Since these requirements can only be met with sufficient and regular practice:

- Use a file holder
A file holder must be used by hand to sharpen the saw chain manually. The correct filing angles are marked on it.



A33



A34

- Hold the file horizontally (at the correct angle to the guide rail) and file according to the angle mark on the file holder. Support the file holder on the top plate and the depth gauge.
- Always file the knife from the inside out.
- The file sharpens only in the forward movement. Lift it off when moving backwards.
- Do not touch the straps and dynamic parts with the file.
- Continue to rotate the file regularly to avoid one-sided wear.
- Take a piece of hard wood to remove the ridges from cut edges.

All blades must be of the same length, otherwise they are of different heights. As a result, the

chain runs irregularly and it increases the risk of breaking.

8.2.8 Gear lubrication



A35

Check the grease filling approx. every 25 operating hours.

- Unscrew the screw plug with a suitable cross-headed screwdriver.
- If no further grease can be seen on the screw, fill approx. 5 g of universal grease (DIY store) into the gear housing and close the filling hole again.

Make sure that the gearbox housing is never completely filled with grease.

8.2.9 Carburetor adjustment

The factory setting for the carburetor is for optimum performance. Should an improved setting be necessary, please contact a specialist workshop.

8.2.10 Trimming knife with string



A36

- If the trimming string is no longer cut cleanly when lengthening, hone down the cutting edge with a file. File in one direction and at the specified angle.

8.3 Transport

Disconnect the spark plug connector before transport and empty the oil tank and fuel tank to prevent leakage.

In order to prevent damage and / or injury, remove the last cutting set installed before each transport and store it in a designated transport protection.

Clean and maintain the device before transport (see above) and secure it from slipping.

For a longer transport, it is recommended to remove the extension (27) from the drive unit.

8.4 Storage / Winter storage

Clean and service the device before storage.

To ensure that the Brush cutter-Grass trimmer-Pruner-Hedge trimmer-Combination device works without any problem again after a long period of storage, you should note the following:

- Empty the fuel tank (7) before storage.
- Start the engine and let it run up to a standstill.
- When the engine has cooled, remove the spark plug.
- Fill a small spoonful of 4-stroke engine oil into the spark plug opening and pull the cable slowly several times.

As a result, soot deposits are blown out and the piston and cylinder are lubricated.

- Store the Brush cutter-Grass trimmer-Pruner-Hedge trimmer-Combination device

in a dry place, out of the reach of children and without risk of fire.

8.4.1. Restart after longer work breaks

1. Check the spark plug, replace it if necessary

and screw it into the opening.

2. Pull the cable quickly several times to clean the engine compartment of oil and debris.

3. Fill normal or premium petrol with 93 octane or higher in the gas tank.

9. List of recommended cutting tools and guards

1. Cutting protection (Fig.A1-15)
(For installation see Fig.7)
2. Thread spools (Fig.A1-19)
(For installation, see Fig.7)
3. Thicket blade (Fig.A1-11)
(For assembly see Fig.8)
4. Oregon chain (Fig.A3-22)
5. Oregon blade (Fig.A3-23)

Genuine accessories and spare parts can be obtained from your Matrix service centre.

10. Working with petrol hedge trimmer

The hedge-trimmer with articulated arm is designed for high performance and reliability, without compromising on quantity, ease of use, safety or durability.

Safety Instructions



Danger!

The hedge trimmer with articulated arm is not insulated against electric shock! Approaching or making contact with power cables with the hedge trimmer may result in death or serious injury. Keep the hedge trimmer at least 10 meters away from power cords or branches that touch power cables. An articulated hedge trimmer may cause serious injury if wrongly used, inserted or handled. In

order to minimize the risk of personal injury, you must have the device under control at all times and observe all safety instructions during use. Do not allow a person who has not been trained or given instructions, to work with the device.

Notes on use



Read the operating instructions carefully before switching on the device.

Incorrect use may result in personal injury or property damage. Persons who have not familiarized themselves with the operating instructions must not use the device. Keep the manual in a safe place. Children and adolescents may not use the device.



Always wear a helmet to avoid head injuries while using the device.

Also wear protective goggles and ear protection. We also recommend wearing a face shield as additional protection for face and eyes.



Wear non-slip work gloves for holding the hedge trimmer better. Wear sturdy shoes with anti-slip sole for a secure footing.

Safety shoes with steel caps are recommended. Wear tight-fitting clothing that still allows you freedom of movement.



Do not use this device or other powered devices if you are tired, sick, or under the influence of alcohol, medication, or other substances that may affect your ability or judgement.

A distance of at least 10 meters to the hedge trimmer must be maintained to bystanders, so that they are not hit by falling objects or flying small parts.



Never cut branches over your head. The severed branches could hit you and cause serious injury.

Warning!

Do not allow a person who has not been trained or given instructions, to work with the device. Before use, make sure that the cutting attachment is properly installed and secured. Do not use a hedge trimmer or cutting attachment if they are damaged or warped. Replace or repair the components before use. Make sure that there are no objects near the hedge trimmer before starting the engine. Turn off the engine immediately and inspect the device for damage if it hits a hard object or the device gets caught. Do not use the device if it is broken or damaged.

Pay attention to the springback when cutting off a branch under tension, so that you will not be injured when the branch springs back.

Turn off the device immediately if it begins to vibrate or shake suddenly. Check the device for broken, missing or incorrectly mounted components or attachments.

Do not smoke near the hedge trimmer and do not light a fire. Keep the hedge trimmer away from excessive heat. The engine fuel is highly flammable and a fire can cause serious personal injury and damage to property.

Never use the hedge trimmer with articulated arm without silencer.

Ensure adequate ventilation when using the hedge trimmer with articulated arm. The exhaust fumes can cause serious injury or death. Never start the engine indoors.

Make sure that there are no missing or loose locks and that the stop switch and throttle levers are working properly.

If the hedge trimmer gets locked, switch off the engine immediately. Push the branch or bough aside and free the hedge trimmer.

Before using the hedge trimmer with articulated arm, make sure that the blades are properly aligned. Never align the blades with the engine running.

Make sure that no fuel leaks from the tank, from the lid, from the fuel line and the carburetor or from other parts that could leak fuel. Repair the device when fuel leaks and make sure there is no leak.

Safety instructions for blowback and jamming

Warning!

Through blowbacks or jamming, you could lose control over the hedge trimmer and injure yourself seriously. Do not rely solely on the integrated safety device of the hedge trimmer. You must take various measures to prevent accidents or injuries.

1. Be prepared for blowbacks or jamming. Avoid or eliminate the element of surprise. Surprise moments contribute to accidents.
2. Hold the hedge trimmer firmly with both hands when the engine is running. A good grip reduces the effects of blowbacks or jamming and keeps control of the device.
3. Make sure that the area where you work is free of obstacles.
4. Cut at a high speed.
5. Use only the replacement blade or equivalent one provided by the manufacturer.

Warning!

The hedge trimmer with articulated arm must not be transported or put down with the engine running. The running engine could accidentally accelerate and thus cause the blade to vibrate. If the hedge trimmer is to be carried with an articulated arm, the cutting attachment must be in the transport position. See A 37.



Caution!

The safety devices of the hedge trimmer should

not be manipulated or deactivated. Use only original parts and accessories for repair and maintenance of this equipment.

Do not make any unauthorized changes to the hedge trimmer with articulated arm.

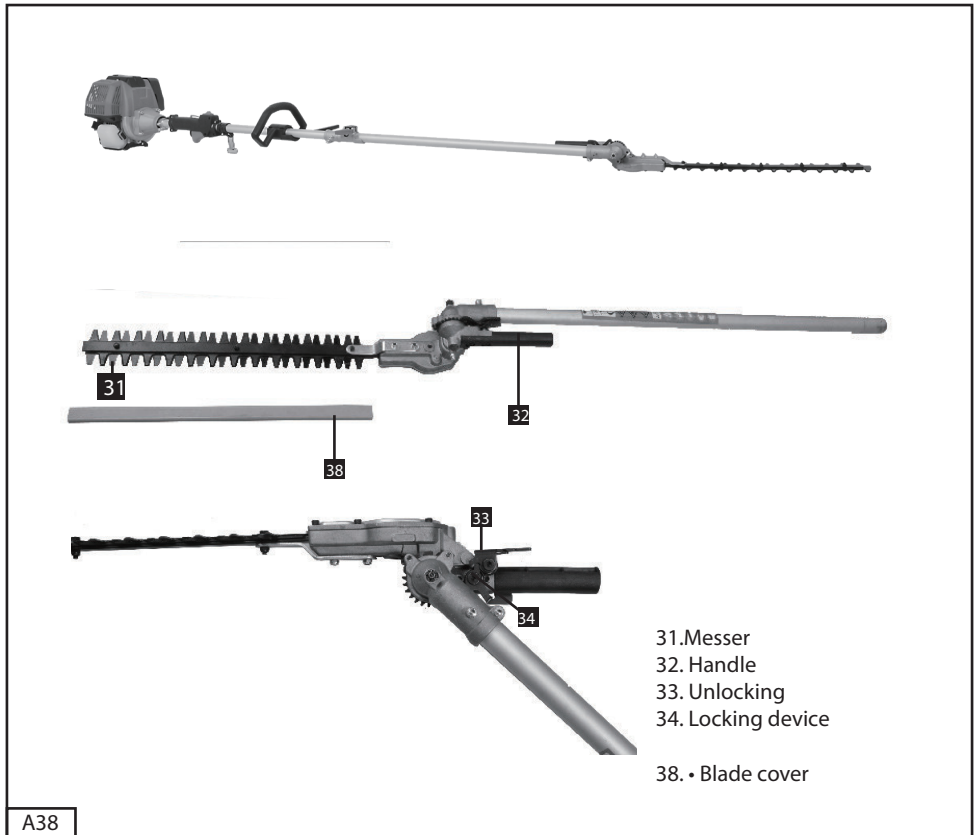
When transporting in a vehicle, the hedge trimmer must be secured in such a way that fuel does not escape or the device cannot be damaged.

Remove garbage and small parts from your work area to ensure a secure footing.

Keep the blades sharp and properly aligned.

Keep the hedge trimmer with articulated arm as clean as possible. Remove loose twigs, mud, dirt, etc.

Product description of the cutting attachment for hedge trimmer



Before the assembly

Use Figure 3 as a reference and familiarize yourself with the hedge trimmer and its various components. Understanding the device ensures excellent performance, longer life and safe use. Check the completeness of all components of the device before mounting the unit.

- Cutting attachment
- blade cover
- Operation manual
- Tool set for routine maintenance

Check all components and make sure that no components are damaged.



Warning!

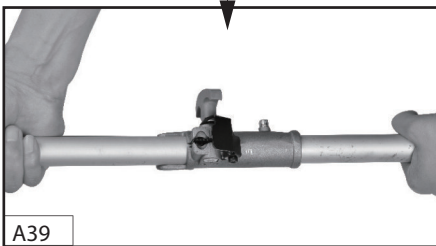
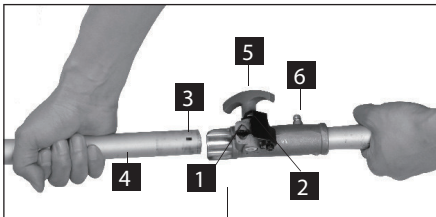
Do not make any unauthorized alterations or modifications to your hedge trimmer with articulated arm or its components.

Assembly of the pipes

1. Place the tube with the drive head (lower pipe) and the upper pipe on a clean, even surface, so that both ends can be inserted into each other. The tube with the drive head (lower pipe) and the bolt guard of the upper pipe must point upwards.

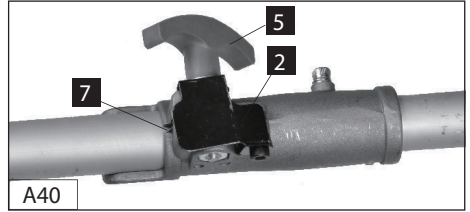
Caution! The open ends of the tubes must be clean and free of dirt!

2. Loosen the screw of the connector.
3. Press the latch down and push the tube with the drive head (lower tube) into the connector as far as it will go. Release the latch. Slide the top tube back and forth until it snaps into the connector. See A 39.



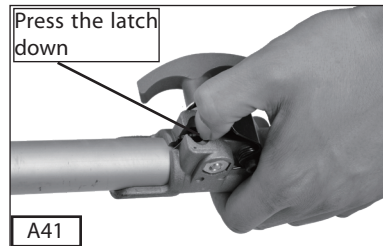
- 1). Latch
- 2). Latch protection
- 3). Indent
- 4). Tube with drive head (lower pipe)
- 5). Connecting piece
- 6). Screw of the upper tube
- 7). Screw of the connecting piece

4. If the two tubes are connected to one another, slide the latch guard into the notch and tighten the screw on the connecting piece. See A 40.



Disassembly of the tubes

1. Place the hedge trimmer on a clean, even surface and loosen the screw of the connecting piece. Pull the latch protection out of the notch.
2. Press the latch down. This triggers the locking of the connector. See A41.



3. Pull the upper tube out of the connector.

Assembly of the cutting attachment



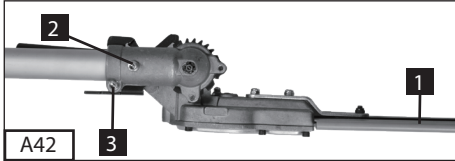
Warning!

The blades are very sharp. Do not handle the blades if the blade cover is not covered. Wear gloves always, if you work with the blade or in its vicinity.

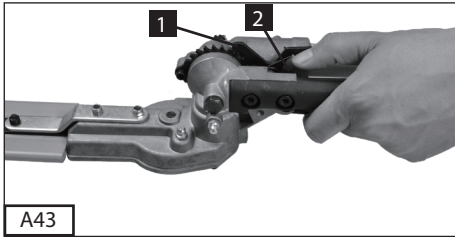
1. Make sure the cutting attachment is locked in the storage / transport position (folded back) and the blade cover is pulled over the blades.
2. Push the outer tube into the clamping of the gearbox housing as far as it will go. The outer tube must be pushed completely into the gearbox housing. If you feel resistance in front of the stop, turn the outer tube until the wedges of the inner main shaft (drive shaft) engage in the

gearbox housing and please push the outer tube as far as it will go.

3. Turn the gearbox / cutting attachment so that the indexing screw is aligned upright over the hole. The cutting attachment is found in the reverse position (in the storage / transport position).



- 1). Blade cover is overlaid
- 2). Align with hole in outer tube and tighten index screw
- 3). Finally tighten the clamping screw



- 1). Place the hand guard in such a way that the tip of the cutting attachment is in the recess (if the hedge trimmer is in the storage / transport position).
- 2). Tighten the clamping

4. Use an Allen wrench (4 mm) to first tighten the index screw of the gearbox housing and then the clamp screw.

5. Align the hand guard in such a way that the tip of the cutting attachment lies in the recess. Make sure that the cutting attachment is not jammed in the recess. Then tighten the screw of the hand guard with a screwdriver.

Adjustment of the hedge trimmer with articulated arm



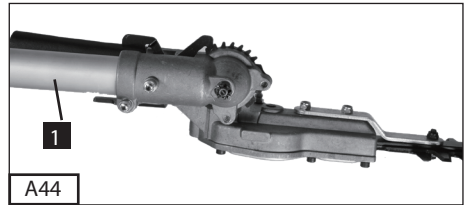
Warning!

The knives are very sharp. Do not touch the blades with your bare hands. Do not rub the blades against your body.

The hedge trimmer with articulated arm must not be switched on or used, when the cutting attachment is in storage / transport position. Always wear gloves when working with the hedge trimmer.

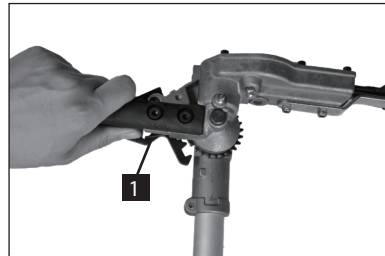
Lay the hedge trimmer on a level, even surface. The engine should be on the tank guard. Make sure the blade cover is overlaid.

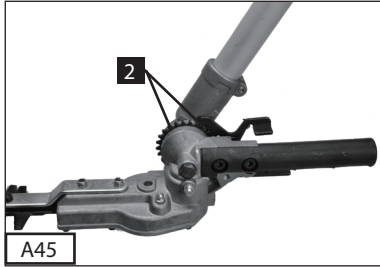
1. Hold the handle that is directly behind the hand guard with your right hand. Hold the hedge trimmer's locking lever with your left hand, see A 44.



1. Locking lever
Important! The lock prevents the bolt from being accidentally released.

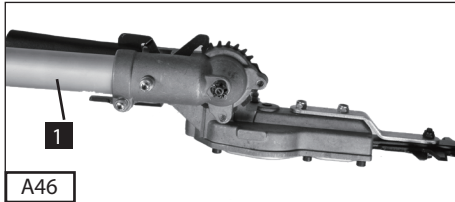
2. Press the unlocking device with your left index finger. Press the unlocking device with your left thumb. See A 45.





- 1). Unlocking
- 2). Locking device

3. While pressing the locking device, turn the hedge trimmer with the locking lever until it aligns with the outer tube (180° angle). See A 46.

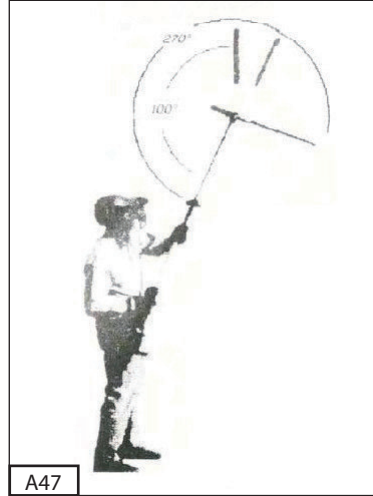


4. Release the unlocking device and the locking device and make sure that the unlocking device and the locking device lock again.
5. Remove the blade cover. Now you can start the engine.

Adjust the hedge trimmer to the desired cutting angle

Warning!

Do not touch the blades when the engine is running. The blade can vibrate even when the engine is idling.



Various blade angles are possible. The hedge trimmer can be adjusted in 12 different angles from 80° to -90° with respect to the outer tube, see A 47. On the previous page, you will learn how to set them. After each adjustment, make sure the lock is securely locked in place.

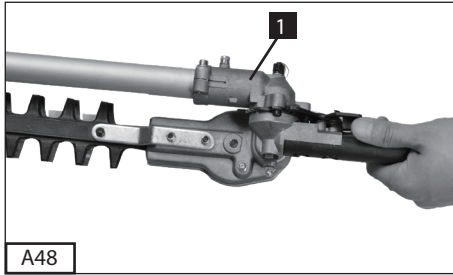
Prepare the hedge trimmer for storage or transport

Warning!

If you bring the hedge trimmer to the storage position, the engine should not run.

1. When the engine is off, pull the blade cover over the blade.
2. Turn the hedge trimmer in such a way that it runs parallel to the tube (see steps on the previous page). Make sure that the locking device and the unlocking device are securely engaged. See A 48.

3. Make sure that the blade cover is overlaid before storing or transporting the unit.



1). Gearbox turned to the storage / transport position

Safe use

The device is designed for cutting hedges. Do not use the device for any other purpose. Do not try to cut through stone, metal, plastic or other hard objects.

Use of the hedge trimmer for other purposes may result in personal injury or serious personal injury.

Preparation:

- Wear suitable protective clothing and protective gear; see section "Safety instructions".
- Select the working position, which is most suitable to protect you from falling objects (branches, etc.).
- Start the engine.
- Put on the belt.

Never stand directly under the branch you wish to cut. Watch out for falling branches. Remember that a branch can spring back on the ground after the fall.

Working position:

Hold the control lever with your right hand and the shaft with your left hand. Your left arm should be stretched out in a comfortable position.

Caution: Rest, when you feel exhausted.

Applications

Preparations

Use pruning shears to remove thick branches first.

Cutting sequence

If a round cut is necessary, perform the cut in several steps.

Cutting techniques

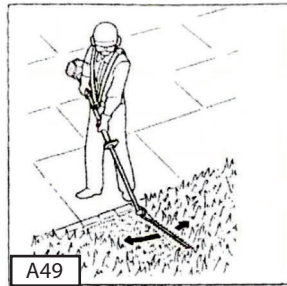
Vertical cut:

Move the blade up and down in a curve at the hedge. Use both sides of the blade.

Horizontal cut:

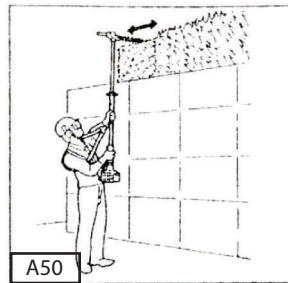
Hold the blade at an angle of 0° to 10° and move the hedge trimmer in a horizontal direction.

Move the blade in an arc to the edge of the hedge so that the waste falls to the ground.



Horizontal cut

Cut close to the ground in a standing position, e.g. low bushes A 19.



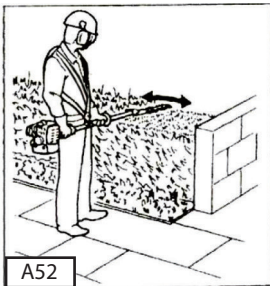
Overhead cut

Hold the shank straight and set a 90° angle of the sword to intersect the top of a hedge A 50.



Vertical section

Cut, without standing directly next to the hedge, z. B. if there is a bed between operator and hedge A 51.



Horizontal cut

Please cut, without standing directly in front of the hedge, e.g. when cutting across a bed A 52.

Operation of the hedge trimmer with articulated arm



Always wear a helmet to avoid head injuries while using the device.

Tie your long hair above shoulder level.

Always wear safety goggles and ear protection.

We also recommend wearing a face shield as additional protection for face and eyes.

Wear non-slip work gloves to hold the hedge trimmer better. Wear tight-fitting clothing that still allows you freedom of movement. Never wear shorts.

Always operate the device with both hands A 53.



A54

Always stand safe and do not stretch too much. Always keep your balance during work. Persons standing must be at least 10 meters away from the hedge trimmer so that they are not cut by the blades or hit by falling objects or flying small pieces.

Wear sturdy shoes with anti-slip sole for a secure footing. Safety shoes with steel caps are recommended A 54.

Daily maintenance

Warning! Always wear gloves when working with the hedge trimmer.

- Remove debris and dirt from the hedge trimmer blades. Lubricate the blade before and after use, and after refuelling. Check the blades for damage or misalignment.
- Check the entire device for leaking fuel or lubricant.
- Check if the nuts, bolts and screws (except the adjusting screws on the carburetor) are firmly fixed.



Warning! Before servicing, repairing or cleaning the device, make sure that the engine and cutting attachment are switched off. Disconnect the spark plug connection before performing any service or maintenance.

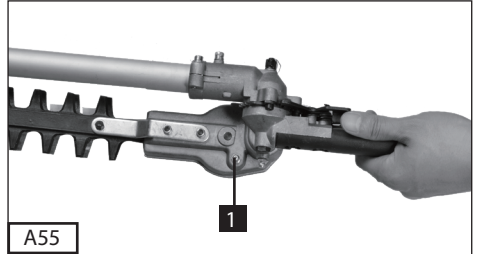
Components that are not original may not work

properly with the device and may result in property damage and personal injury.

Maintenance after 10-15 operating hours

- Lubricate the hedge trimmer's transmission housing by injecting one or two strokes of lithium grease into the gearbox with a grease gun with hand lever. See A 55.

Caution! Excessive lubrication can lead to stiffness of the gearbox and leakage of grease.



A55

1). Lubrication point of the gearbox housing

Maintenance after 50 operating hours

After every 50 hours of operation (more often in dusty and dirty environments):

- Remove and clean the cylinder cover and remove dirt and debris from the cooling fins of the cylinder.
- Lubricate the gearbox housing.

Long-term storage

If the device is not used for 30 days or more, prepare it for storage as follows:

- Clean all external components and apply a thin layer of oil to all metal surfaces.

Caution! If petrol is left in the carburetor for a longer period of time, it can result in a hard start and increased maintenance and service costs.

- Completely drain the fuel from the carburetor and the fuel tank.

- Remove the spark plug and add approx. 3 ml of oil to the cylinder via the spark plug holder.

Tighten the recoil starter 2 to 3 times slowly, so that the oil is distributed evenly in the engine. Reinstall the spark plug.

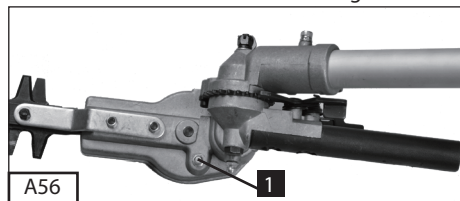
- Before storing the device, you must replace worn or damaged components. Pull the blade cover over.

- Remove the air cleaner from the carburetor and clean it with soap and water thoroughly. Rinse and dry thoroughly. Put a few drops of oil on the air purifier and distribute it. Mount the air cleaner again.
- Store the device in a clean, dust-free location.

Caution!

Do not remove the D-shaped shim from the clamping of the gearbox housing! The shim prevents damage caused by excessive tightening of the clamping screw.

1. Loosen the clamping screw of the gearbox housing.
2. Remove the index screw from the gearbox.




3. Pull the gearbox out of the tube. Use a grease gun and pump lithium grease (about 10 g) into the lubricating hole of the gearbox until old grease comes out of the gearbox (A 56). This grease exits into the cavity of the outer tube. Remove excess grease and put the gearbox housing into the outer tube. Make sure that the index screw is snapped into the outer tube lock. Tighten both screws.

11. Fault and rectification

Fault	Possible Cause	Troubleshooting
The engine does not start	<ul style="list-style-type: none"> - Air filter dirty - Fuel filter clogged - Lack of fuel supply - Fault in the fuel line - Starting device is defective - Flooded engine - Spark plug connector not plugged in - No ignition spark. - Engine defective - Carburetor defective 	<ul style="list-style-type: none"> - Clean / replace air filter - Clean or replace the fuel filter - Carry out the refuelling. - Check fuel line for creases or damage - Contact the service point. - Remove, clean and dry the spark plug; then pull the starter rope several times; reinstall the spark plug - Check the spark plug connector for correct fit - Clean or replace the spark plug - Check the ignition cable for damage - Contact the service point - Contact the service point
Engine starts and stops working	<ul style="list-style-type: none"> - Wrong carburetor setting (idling speed) 	<ul style="list-style-type: none"> - Contact the service point
Engine starts, but cutting tool stops	<ul style="list-style-type: none"> - Cutting tool is blocked - Internal error (drive shaft, gearbox) - Defective coupling 	<ul style="list-style-type: none"> - Switch off the engine and remove the object - Contact the service point - Contact the service point
Device works intermittently (splutters)	<ul style="list-style-type: none"> - Carburetor is set incorrectly - Spark plug is sooty - On / Off switch defective 	<ul style="list-style-type: none"> - Contact the service centre - Clean or replace the spark plug - Contact the service centre
Smoke development	<ul style="list-style-type: none"> - Wrong fuel - Carburetor is set incorrectly 	<ul style="list-style-type: none"> - Use regular or premium petrol with 93 octane or higher - Contact the service centre
Device does not work at full power	<ul style="list-style-type: none"> - Machine is overloaded - Air filter is dirty - Carburetor is set incorrectly - Silencer clogged 	<ul style="list-style-type: none"> - Do not press with force while mowing / trimming. - Clean or replace the air filter - Contact the service centre - Check the exhaust
The brush cutter does not work at full power	<ul style="list-style-type: none"> - Blade dull or damaged - Material to be cut is too high (device overload) 	<ul style="list-style-type: none"> - Sharpen or replace cutting blade - Cut grass gradually
The grass trimmer does not work at full power	<ul style="list-style-type: none"> - Cutting line too short or damaged - Device is overloaded because grass is too high 	<ul style="list-style-type: none"> - Follow or replace the cutting line - Cut grass gradually

Cutting thread is not adjusted	- Thread spools empty	- Replace the spools of thread
The pole-mounted powered pruner unit does not saw, pluck or vibrate	- Chain tension too high - Chain dull! - Chain installed incorrectly - Worn out the chain	- Check and adjust chain tension - Regrind or replace chain - Refit the chain - Renew the chain
Saw chain gets hot or saw chain lubrication does not work	- No oil in the tank - Oil supply clogged - Chain tension too high - Chain dull	- Refill oil - Clean the oil supply line - Set chain tension - Regrind or replace chain

12. Environmental protection

 Do not simply dispose of the device, accessories and packaging in the dustbin, but carry it to an environmentally friendly recycling. It is therefore best to bring unused devices to a material yard in your area.

This little effort benefits our environment.

Original declaration of conformity



Matrix GmbH
Postauer Str. 26
D-84109 Wörth/Isar
Germany
Fax: +49 (0) 8702/45338 98
E-Mail: info@matrix-direct.net

EN

hereby declares the following
conformity under the EU Directive and
standards for the following article

PETROL 4-IN-1 GARDEN MULTI-TOOL SET/PGT 4 in 1-S

**Trimming lawns or grass, cutting of scrubs, shrubs, bushes
and young trees as well as cutting of branches of upright
trees**

- | | | | |
|-------------------------------------|---------------------|-------------------------------------|-----------------------|
| <input checked="" type="checkbox"/> | 2006/42/EC | <input type="checkbox"/> | 2002/96/EC |
| <input checked="" type="checkbox"/> | 97/68/EC_2004/26/EC | <input type="checkbox"/> | R&TTED 1999/5/EC |
| <input type="checkbox"/> | 93/68/EEC | <input checked="" type="checkbox"/> | 2000/14/EC_2005/88/EC |
| <input checked="" type="checkbox"/> | 2014/30/EU | <input type="checkbox"/> | 95/54/EC |
| <input type="checkbox"/> | 2002/95/EC | <input type="checkbox"/> | 73/23/EWG |

EN ISO 11806-1:2011; EN ISO 11680-1:2011; EN ISO 10517:2009+A1; EN ISO 14982:2009; EN ISO 12100:2010;

Noise emission 2000/14/EC, Annex III & 2005/88/EC, guaranteed sound power level: $L_{WA}=114$ dB (A), conformity assessment procedures: 2000/14 / EC Annex V

Model number: BM 50404822 0001

EEC type-examination procedure according to Annex IX of EC-Directive 2006/42 / EC

Notified Body: TÜV Rheinland LGA Products GmbH, Tillystrasse 2, 90431 Nuremberg (ID No. 0197)

Authorized person to the storage of the technical documents:

Matrix GmbH
Postauer Str. 26
D-84109 Wörth / Isar
Germany

Wörth/Isar, 26.032019
Art.-No.: 310,550,630

Tino Switon (Managing Director)

WARRANTY

EN

WARRANTY

This appliance is a quality product. It was designed in compliance with current technical standards and made carefully using normal, good quality materials.

The warranty period is 24 months and commences on the date of purchase, which can be verified by the receipt, invoice or delivery note. During this warranty period all functional errors, which, despite the careful treatment described in our operating manual, are verifiably due to material defects, will be rectified by our after-sales service staff.

The warranty takes the form that defective parts will be repaired or replaced with perfect parts free of charge at our discretion. Replaced parts will become our property. Repair work or the replacement of individual parts will not extend the warranty period nor will it result in a new warranty period being commenced for the appliance. No separate warranty period will commence for spare parts that may be fitted. We cannot offer a warranty for damage and defects on appliances or their parts caused by the use of excessive force, improper treatment and servicing.

This also applies for failures to comply with the operating manual and the installation or spare and accessory parts that are not included in our range of products. In the event of interference with or modifications to the appliance by unauthorised persons, the warranty will be rendered void. Damages that are attributable to improper handling, over loading, or natural wear and tear

are excluded from the guarantee.

Damages caused by the manufacturer or by a material defect will be corrected at no charge by repair or by providing spare parts.

The prerequisite is that the equipment is handed over assembled, and complete with the proof of sale and guarantee.

For a guarantee claim, only use the original packaging.

That way, we can guarantee quick and smooth guarantee processing. Please send us the appliances post-paid or request a Freeway sticker. Unfortunately we will be unable to accept appliances that are not postpaid. The warranty does not cover parts that are subject to natural wear and tear. If you wish to make a warranty claim, report faults or order spare parts or accessories, please contact the after-sales centre below:

Subject to change without prior notice.

Matrix GmbH Service

· Postauer Str. 26 · D – 84109 Wörth/Isar
· Tel.: +49 (0) 1806/841090 · Fax: +49 (0) 8702/45338 98
· e-mail: service@matrix-direct.net

PETROL 4-IN-1 GARDEN MULTI-TOOL SET/PGT 4 in 1-S

EN WARRANTY

Purchased at: _____
in (city, street): _____
Name of customer: _____
Street address: _____
Postal code, city: _____
Telephone: _____
Date, signature: _____
Fault description: _____