

# COBRA

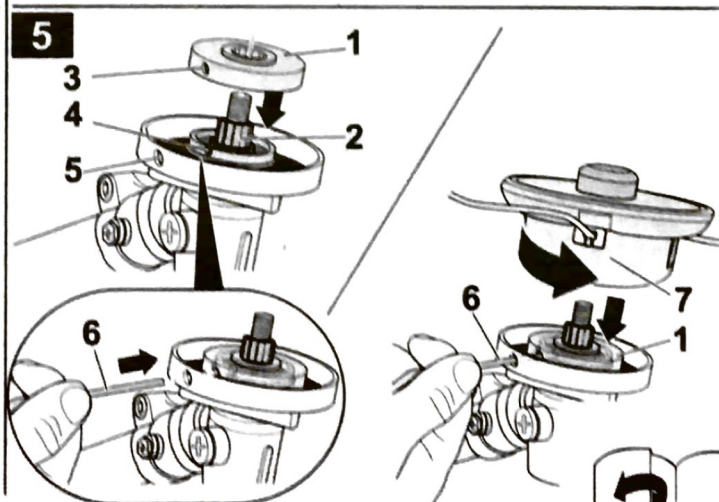
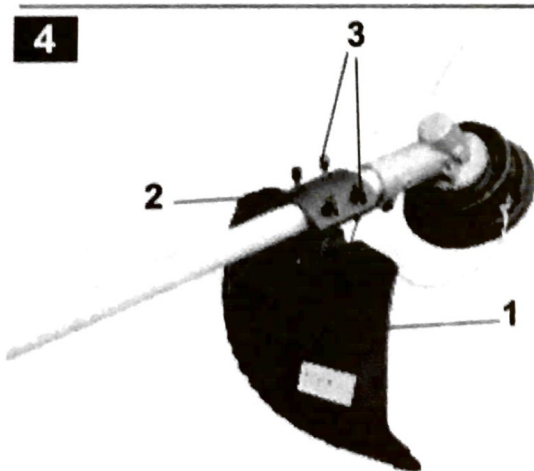
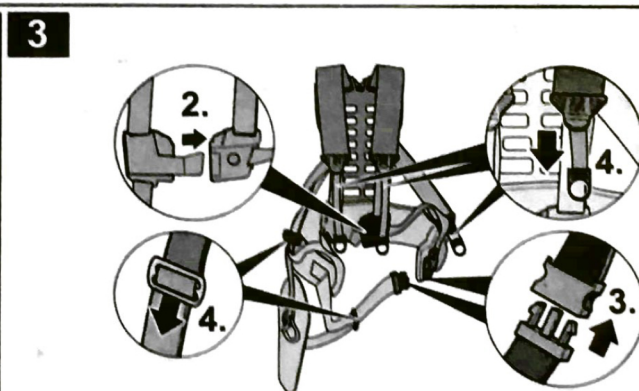
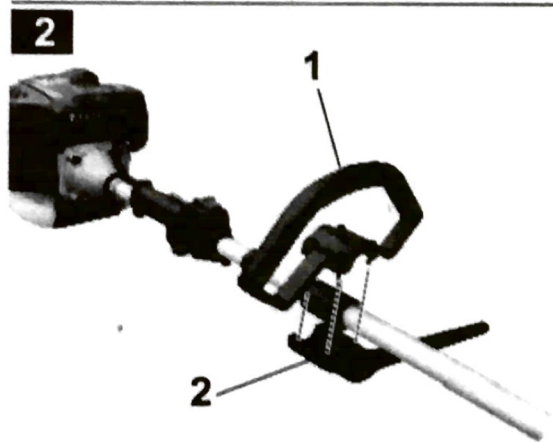
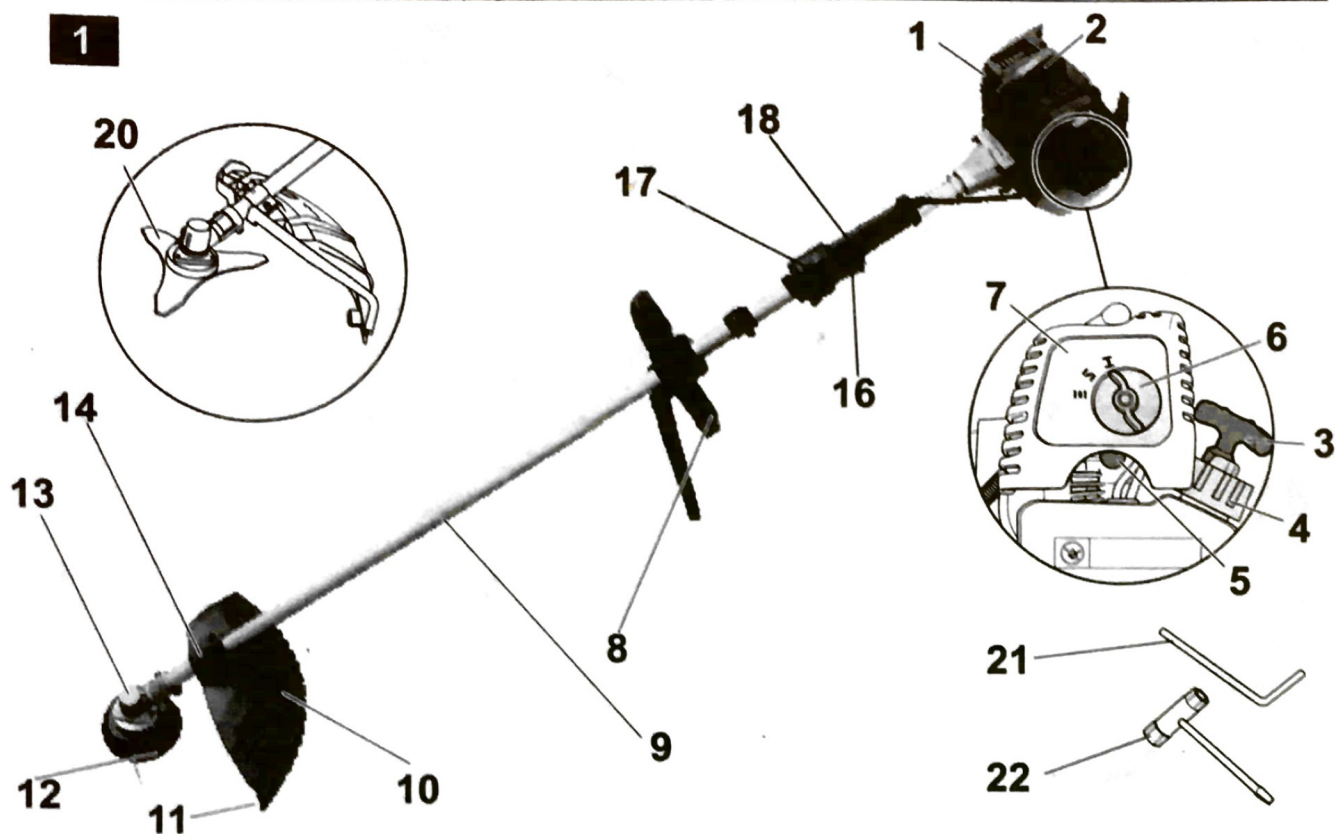
## OWNER'S MANUAL

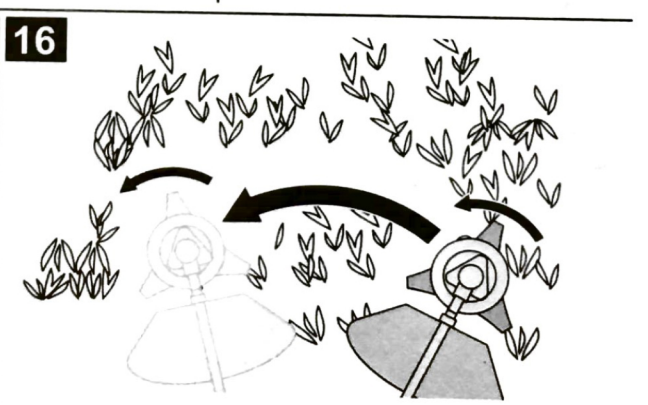
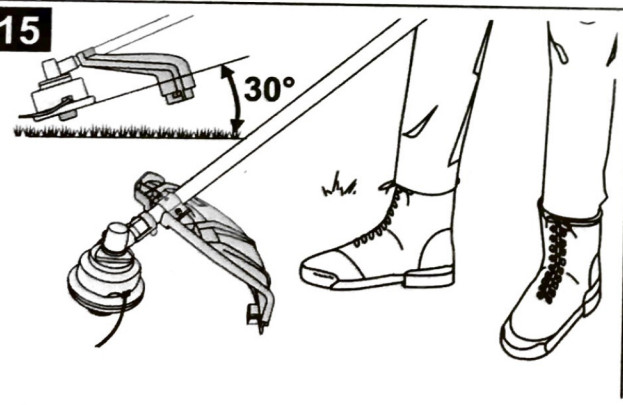
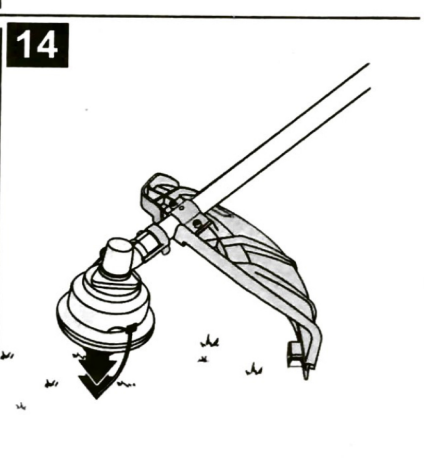
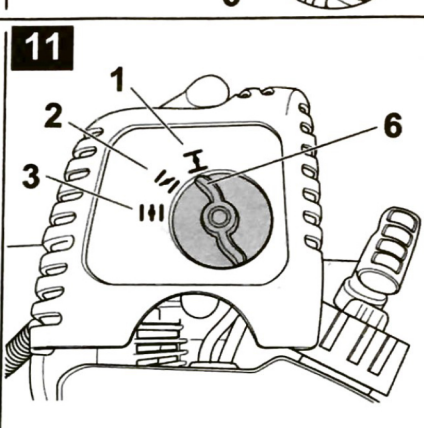
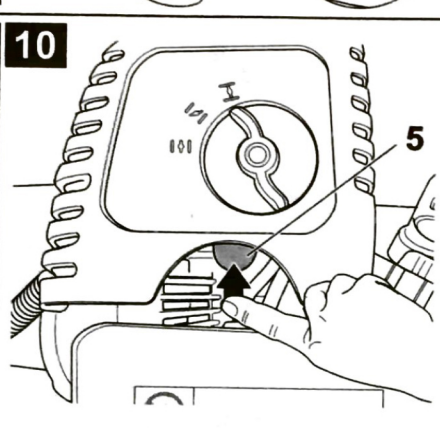
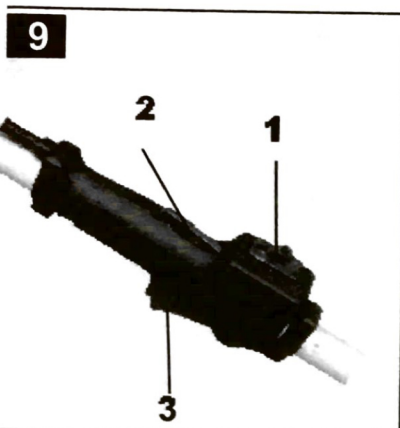
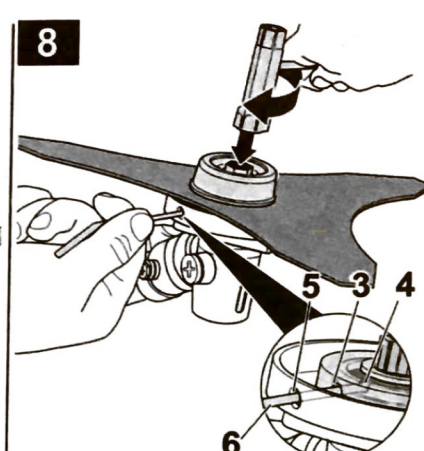
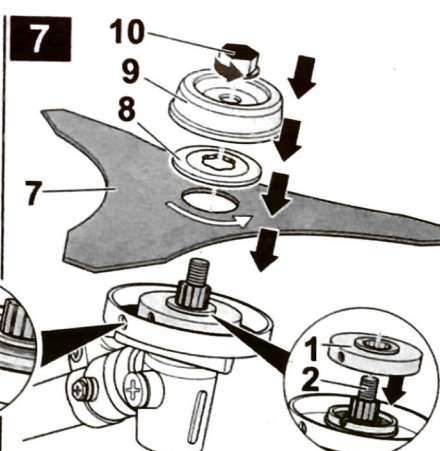
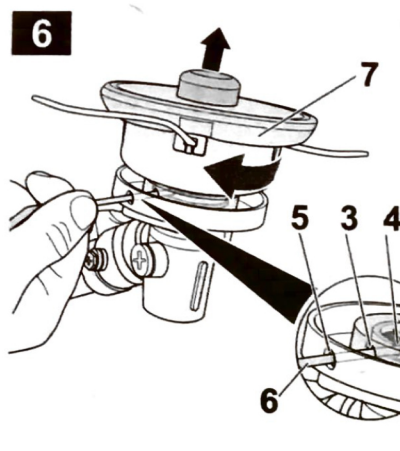
### BRUSH CUTTERS



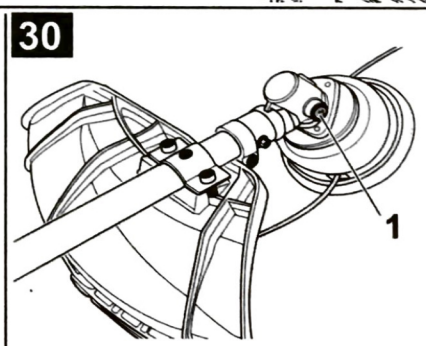
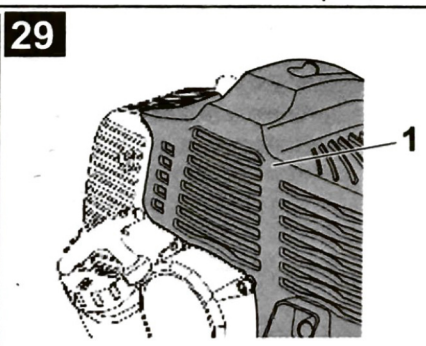
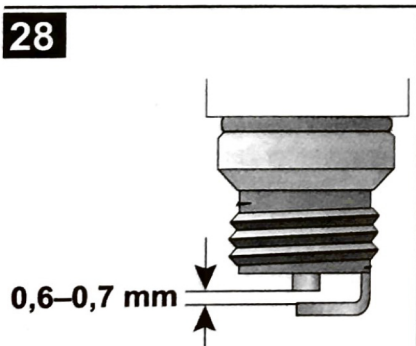
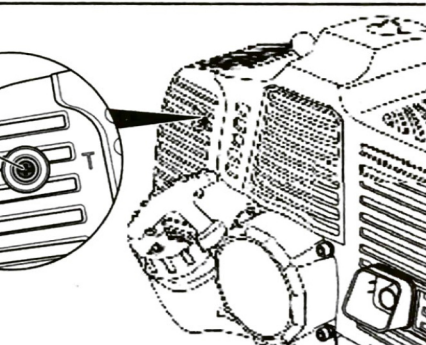
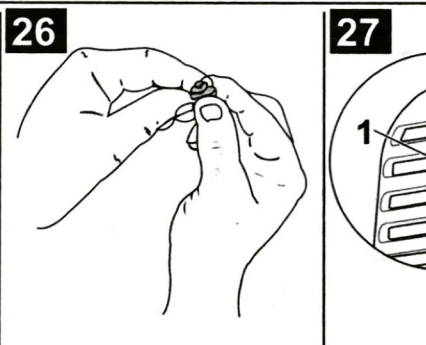
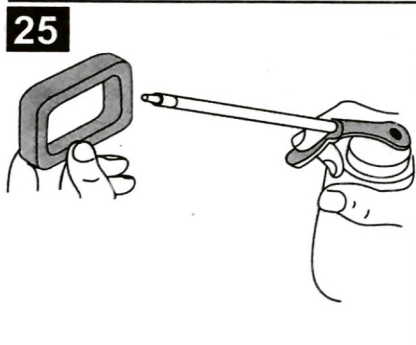
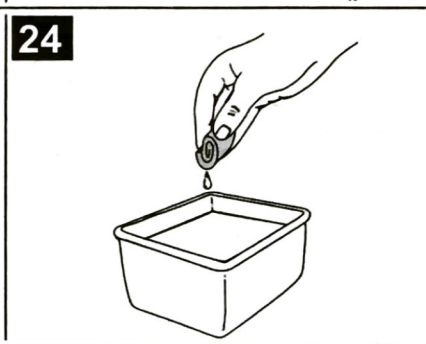
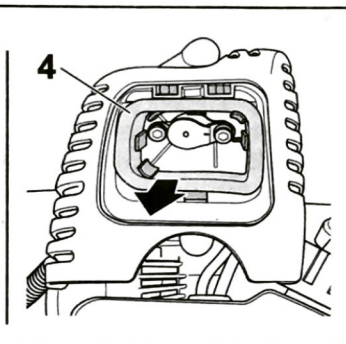
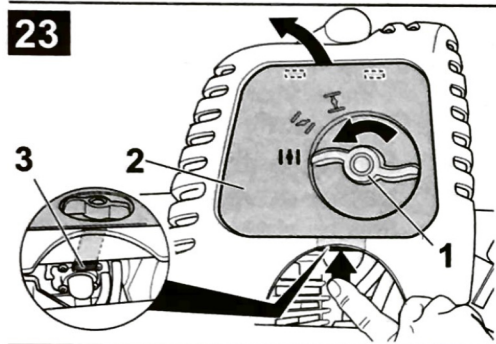
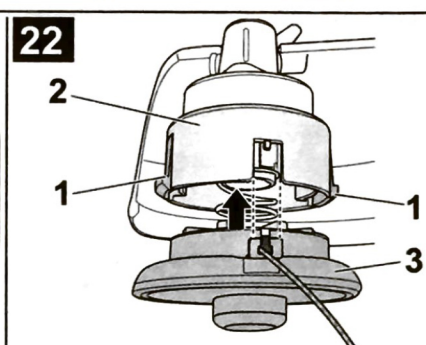
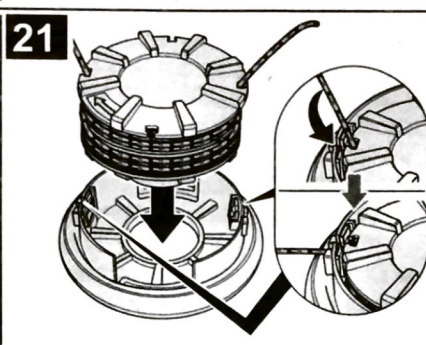
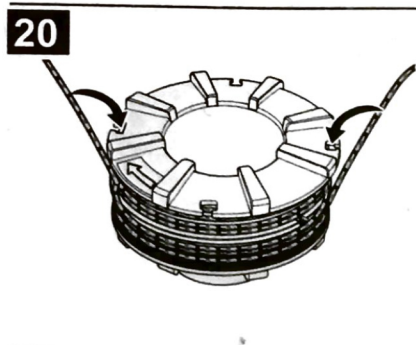
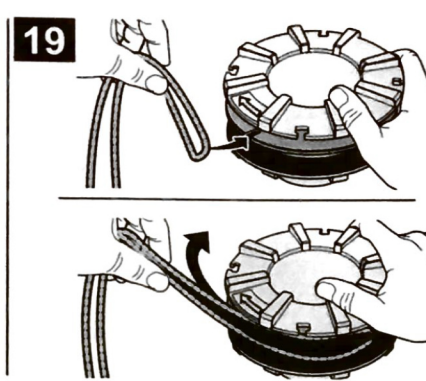
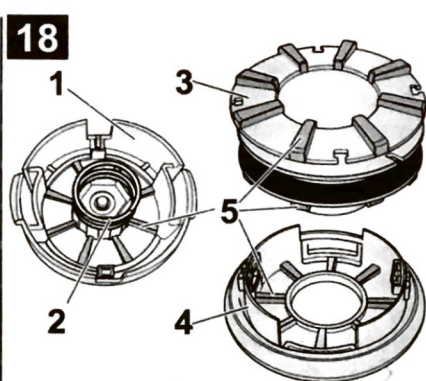
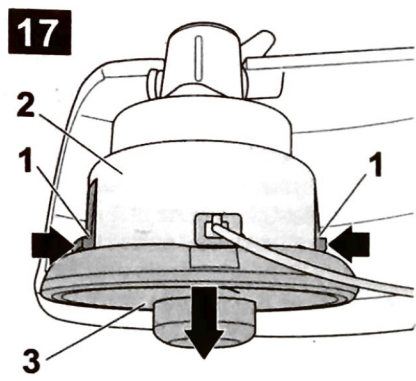
**⚠ Caution**

Before using our brushcutter, please read this manual carefully to understand the proper use of your unit.  
keep this manual handy.











## Contents

Safe operating practices . . . . .	4
Operating and display elements . . .	7
Installation manual . . . . .	7
Oil and petrol . . . . .	8
Operating . . . . .	8
Maintenance and cleaning . . . .	10
Transportation . . . . .	11
Warranty . . . . .	11
Troubleshooting . . . . .	12

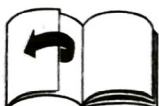
## Details on the ratings plate

Enter all information on the rating plate of your unit in the following field. You can find the rating plate near the engine.

These specifications are very important for subsequent identification when ordering spare parts and for customer service.


These and other details for your appliance can be found on the separate CE declaration of conformity that forms an integral part of these operating instructions.

## Illustrations



Fold out the illustrated pages at the start of the operating manual. Graphical representations may deviate in detail from the purchased unit.

## Safe operating practices

### Using the unit correctly

This unit is designed

- for private use,
- for trimming lawn edges and small inaccessible areas of grass (e.g. under bushes),
- for cutting wild growth, shrubs and undergrowth,
- according to the descriptions and safety instructions indicated in this operating manual.

Any other use is not as intended.

Improper use is not covered by the warranty and the manufacturer will reject any liability. The user is liable for all injuries to third parties and damage to their property.

Operate the unit only in the technical condition as stipulated and delivered by the manufacturer.

Arbitrary changes to the unit will exclude the manufacturer from any liability for resulting injury and/or damage.

## Read all instructions before operating

- Please read these instructions carefully. Familiarize yourself with the operation and handling of the unit.
- Do not use this unit if you are tired or ill or under the influence of alcohol, drugs or medication.
- Children and young people under 16 years of age must not operate the unit.
- This unit is not designed to be used by persons (including children) who have limited physical, sensory or mental abilities or who have no experience and/or knowledge of the unit, unless they are supervised by a person responsible for their safety or they have been instructed by the person how to use the unit.
- Children should be supervised to ensure that they do not play with the appliance.
- Check the unit before using it. Replace damaged parts. Check whether fuel is leaking out. Ensure that all connections are attached and tight. Replace cutting attachment parts which are cracked, flawed or damaged in any other way. Ensure that the cutting attachment has been installed correctly and attached securely. Ensure that the guard for the cutting attachment has been attached correctly and is in the recommended position. If these instructions are not followed, the user and bystanders may be injured or the unit damaged.

- Use only original replacement lines which have a diameter of 3,0 mm. Never use a metal-reinforced string, wire, chain, rope, etc. These may break off and become dangerous projectiles.
- Always be aware of the risk of injury to head, hands and feet.
- Depress the throttle. It must automatically return to the home position. Perform all settings and/or repairs before operating the unit.
- Before using the unit, always clear the area which you want to trim. Remove all objects such as stones, broken glass, nails, wire or string which could be ejected or become entangled in the cutting attachment. Remove children, bystanders and animals from the area. Keep children, bystanders and animals at a minimum distance of 15 m; there is always a risk of bystanders being hit by ejected objects. Bystanders should wear eye protection. If somebody approaches, immediately switch off the engine and cutting attachment.

## Safety instructions for petrol-driven units

Petrol is highly flammable and the vapours may explode if ignited. Take the following precautions:

- Store petrol in designated and permitted containers only.
- Keep ignition sources away from spilled petrol. Do not start the engine until the petrol vapours have evaporated.
- Before filling the tank, always switch off the engine and leave it to cool down. Never remove the tank cap or fill the tank while the engine is hot. Before using the unit, ensure that the tank cap is screwed on tightly. Slowly unscrew the tank cap to reduce the pressure in the tank gradually.
- Mix petrol and fill the tank in a clean, well ventilated outdoor area only where there are no sparks or flames. After switching off the engine, slowly unscrew the tank cap. Do not smoke while mixing petrol or filling the tank. Immediately wipe any spilled petrol off the unit.



- Before switching on the engine, carry the unit at least 10 m away from the filling station. While filling the tank or using the unit, do not smoke and keep sparks and naked flames out of the area.
- Replace damaged exhausts, fuel tanks, or filler caps.

### Operating the unit

- Never start the unit and never leave it running in a closed room or building. The inhalation of exhaust gases may be fatal. Use the unit outdoors only.
- Wear eye and ear protection when using the unit. If working in a dusty environment, wear a face or dust mask. A long-sleeved shirt is recommended.
- Wear thick, long trousers, boots and gloves. Do not wear loose clothing, jewellery, short trousers, sandals and do not walk barefoot. Pin your hair above your shoulders. If required, wear a hair net.
- The cutting attachment cover must always be attached when you use the unit as a lawn trimmer. Both trim lines must be pulled out and the correct line must be installed. The trim line must not be pulled out over the end of the cover.
- The unit has a clutch. The cutting attachment stops when the unit is running at no load. If it does not stop, have the unit adjusted by a mechanic at your authorised dealer.
- Before switching on the unit, ensure that the line spool/cutting blade cannot strike an object.
- Adjust the handle bar to your height so that you have the unit under control.
- Operate the unit in daylight or adequate artificial lighting only.
- Avoid starting the unit unintentionally. Be ready to operate the unit when you pull the starter rope. User and unit must be in a stable position when the unit is started. Follow the Start/Stop instructions.
- Use this unit for its designated purpose only.
- Do not stretch too far over the unit. Always have a secure footing and keep your balance.
- When operating the unit, always hold the unit firmly with both hands. Always hold both sides of the handle bar firmly.
- When operating the unit, always wear the shoulder belt.
- Do not use the unit in adverse weather conditions, e.g. if there is a probability of rain or a storm.
- Never change the engine settings preset at the factory.
- Keep away from naked flames, avoid creating sparks and do not smoke.
- Never operate the unit with a defective ignition switch.
- Keep your hands, face and feet away from all moving parts. Do not touch the cutting attachment while it is rotating and do not attempt to stop it.
- Do not touch the engine or muffler. These parts become very hot while the unit is being used. They remain hot for a short time even when the unit is switched off.
- Do not let the engine run quicker than required for cutting or trimming of lawn edges. Do not run the engine at high speed when it is not cutting.
- Always switch off the engine if you cannot start cutting immediately or if you are moving from one place to another.
- If unusual vibrations occur, switch off the engine immediately. Check the unit for damage. If the unit is damaged, contact a specialist company.
- If you strike or ensnare a foreign object, immediately switch off the engine and check whether the unit has been damaged. Never use the unit with loose or damaged parts.
- Before removing blockages or performing other work on the unit, switch off the engine and remove the spark-plug terminal.
- Stop and switch the engine off before performing maintenance or repairs or before changing cutting attachments. Also pull out the spark-plug terminal.
- Use only original spare parts for repairs. These parts can be purchased from your authorised dealer.
- Never use parts, accessories or attachments which are not authorised for this unit. Otherwise, the user may be seriously injured and the unit damaged. In addition, your warranty may be deemed null and void.
- Keep the unit clean and ensure that there are no plants or other objects caught between the cutting attachment and guard.
- To reduce the risk of fire, please replace damaged mufflers and spark extinguishers and remove grass, leaves, excess lubricants and layers of soot from the engine and muffler.
- Have all repairs carried out by a repair shop only.

### Working with the cutting blade (depending on model)

- Before operating the unit, please read all safety instructions carefully.
- Always keep the handle bar between the user and cutting attachment.
- NEVER cut material if the cutting blade is 75 cm or higher above ground level.
- The unit may recoil if the rotating blade strikes an object which cannot be cut immediately. Recoils may be strong enough to throw the unit and/or user in any direction and may cause the user to lose control of the unit. Recoils may occur without warning if the blade gets caught, jams or locks. This can easily happen in areas in which the material to be cut is difficult to see.
- Never use the undergrowth blade to cut undergrowth thicker than 12.7 mm. Otherwise, violent recoils may occur.
- When using the cutting blade, the cutting attachment cover must always be attached.
- Do not attempt to touch or stop the blade while it is rotating.



- A rotating blade may cause injuries, even when the engine has been switched off or the throttle has been released. Hold the unit firmly until the blade has come to a standstill.
- Do not run the engine at high speed when it is not cutting.
- If you strike or ensnare a foreign object, immediately switch off the engine and check whether the unit has been damaged. Have the repair damaged before continuing to use the unit. Do not use the unit with a bent, cracked or blunt blade. Throw away bent, twisted, cracked or broken blades.
- Do not sharpen the cutting blade. The sharpened tip of the blade may break off during operation. This may result in serious injuries. Replace the blade.

### After operating the unit

- Clean the cutting blades with a household detergent to remove any remnants. Lubricate the blade with machine oil to prevent rust.
- Store and lock away the blade securely to protect it from damage and unauthorised use.

### Other safety instructions

- As long as the tank still has petrol in it, never store the unit in a building where vapours could come into contact with sparks or naked flames.
- Leave the engine to cool down before transporting or conveying the unit. Attach the unit securely for transportation.
- Empty the fuel tank before transporting the unit.
- Store the unit in a dry condition, locked away or high up to prevent unauthorised use and damage. Keep the unit away from children.
- Never douse or splash the unit with water or other liquids. Keep the handle bar dry, clean and dust-free. Clean the unit after each use and follow the instructions for cleaning and storage.
- Dispose of waste petrol/oil or any packaging remnants in accordance with local regulations.

- Keep this manual. Read it frequently and use it to instruct other users. If you lend this unit to somebody else, also include this manual.

### Operating times

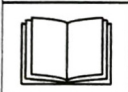
Observe the national/municipal regulations concerning times of use (if required, ask your local authority).

### Symbols on the appliance

This operating manual describes safety and international symbols and pictograms which may be displayed on this unit. Read this user handbook in order to familiarise yourself with all safety, installation, operating and repair instructions.



Attention!  
Before starting up the unit, read the operating instructions!



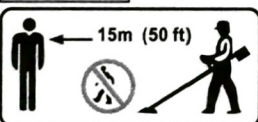
Wear eye, hearing and head protection.



While operating this unit, wear heavy duty boots and protective gloves.



Keep third parties away from the danger area!



Ejected objects and rotating parts may cause serious injuries!



Risk of injury from rotating parts!  
Keep hands and feet away from rotating parts.



Beware of hot surfaces!



Petrol/Oil!  
Always use clean and fresh lead-free petrol for mixing petrol. Use only authorised oil according to the operating manual for mixing petrol.



Do not fill up with fuel of specification E85!



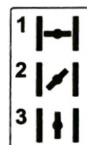
Maximum rpm  
Do not let the unit run more quickly than the maximum rpm.

**START** Ignition switch  
Cold start position

**I** Ignition switch  
On /run/start

**0** Ignition switch  
Off/stop

**Choke settings**  
1 – Full choke start position.  
2 – Half choke intermediate position.  
3 – Operating position.



Ensure that these symbols on the unit are always in a legible state.

### Symbols used in this manual

The following symbols are used in this manual:



**Danger**

They refer to dangers which are connected with the described activity and which may result in injury.



**Caution**

They refer to dangers which are connected with the described activity and which may result in damage to property.



**Note**

Indicates important information and application tips.



## Operating and display elements

### **Caution.**

#### **Damage to the appliance**

*This first describes the control and display functions. Do not execute any of these functions yet!*

Fig. 1

- 1 Exhaust cover
- 2 Spark plug
- 3 Starter handle
- 4 Tank cap
- 5 Intake pump/primer
- 6 Choke lever
- 7 Air filter cover
- 8 Handle bar
- 9 Shaft
- 10 Cutting attachment cover
- 11 Line cutting blade
- 12 Line coil
- 13 Gearbox
- 14 Holder for cutting attachment cover
- 15 Holder for cable harness
- 16 Throttle
- 17 Ignition switch
- 18 Throttle lock
  
- 20 Cutting blade with cutting attachment cover \*
- 21 Retaining bar \*
- 22 Socket wrench \*

\* depending on model

## Installation manual

### **Danger**

*Risk of injury from engine being started unintentionally.*

*Protect yourself from injury.*

*Before working on the engine:*

- Switch off the engine,
- Wait until all moving parts have come to standstill; the engine must have cooled down.
- Remove spark-plug terminal.

### **Disposal instructions**

Dispose of packaging remnants, old units, etc., in accordance with local regulations.

### **Installing and setting the handle bar**

Fig. 2

- Insert the handle bar (1) into the lower holder (2).
- Hook the upper retaining plate (3) into the openings (4) of the lower holder and secure with the toggle screw (5).
- Hold the unit in the operating position (Fig. 13) and position the handle bar until you have a secure footing.
- Tighten the toggle screw (5) firmly until the handle bar (1) is secure.
- Press the cable harness (6) into the holder (7).

### **Adjusting the carrying system (shoulder strap)**

Fig. 3

1. Place harness over your shoulders.
2. Close the catch on the chest belt. If required, readjust.
3. Close the catch on the abdominal belt. If required, readjust.
4. Adjust the shoulder, abdominal and chest belts to the correct length/width.
5. Latch the hook of the carrying system into the holder on the unit and adjust the attachment pad to a comfortable length.

### **Attaching the cutting attachment cover**

Fig. 4

- Attach cutting attachment cover (1) to the holder (2) using the two screws (3).
- Tighten screws firmly.

### **Attaching/removing the line head**

#### **Attaching the line head**

Fig. 5

- If attached, remove cutters and blade attachment parts beforehand. See "Removing the cutting blade".

- Push spacer (1) onto the drive shaft (2).  
Align the 3 openings in the spacer (3), the gearbox (4) and the gear cover (5).

### **Note**

If alignment is not correct, the line head cannot be attached/removed!

- Insert retaining bar (6) through the openings (3, 4, 5) in order to secure the gearbox.
- While holding the retaining bar (6), turn the line head (7) anti-clockwise (to the left) onto the drive shaft. Tighten line head firmly!

### **Note**

Ensure that the line head (7) is seated correctly on the spacer (1), i.e. centred and resting flat!

- Remove retaining bar from the gear head.

### **Remove the line head**

Fig. 6

- Align the openings (3, 4, 5). Insert retaining bar (6) through the openings and hold in position.
- Unscrew line head (7) clockwise (to the right) off the drive shaft.

### **Attaching/removing the cutting blade (depending on model)**

#### **Attaching the cutting blade**

Fig. 7

- If attached, remove the line head beforehand. See "Attaching/removing the line head".

### **Note**

When attaching the cutting blade for the first time, remove the blade attachment parts (blade holder (8), retaining bell (9), nut (10)) if attached. See "Removing the cutting blade".

- Push spacer (1) onto the drive shaft (2).  
Align the 3 openings in the spacer (3), the gearbox (4) and the gear cover (5) (Fig. 5).

### **Note**

If alignment is not correct, the cutting blade cannot be attached/removed!



- Insert retaining bar (6) through the openings (3, 4, 5) in order to secure the gearbox.
- While holding the retaining bar (6), attach the cutting blade (7) with blade holder (8), retaining bell (9) and nut (10) as follows:
  - Push cutting blade (7) onto drive shaft (2) and centre on the spacer (1).

**i Note**

Ensure that the cutting blade (7) is seated correctly on the spacer (1), i.e. centred and resting flat!

- Attach blade holder (8), retaining bell (9) and nut (10). Ensure that the blade holder is seated correctly in the toothing!
- Tighten nut firmly anti-clockwise (to the left) – tightening torque 37 Nm.

**i Note**

- Before tightening, check again that the cutting blade is seated correctly.
- If you do not have a torque wrench, tighten the nut firmly by hand. Then tighten the nut anti-clockwise (to the left) another half turn using a ring spanner.
- Remove retaining bar from the gear head.
- Remove guard (if fitted) from the cutting blade.

### Removing the cutting blade

Fig. 8

- Attach guard (if available) to the cutting blade.
- Align the openings (3, 4, 5). Insert retaining bar (6) through the openings and hold in position.
- Unscrew nut clockwise (to the right).
- Remove cutting blade (7), blade holder (8) and retaining bell (9) (Fig. 7).

## Oil and petrol

### Oil

Use quality oil only, API classification TC (TSC-3) which is offered for air-cooled two-stroke engines.

Mix the oil for two-stroke engines according to the instructions on the container, 1:25 (4 %).

### Petrol

**⚠ Danger**

*Under certain conditions petrol is extremely flammable and explosive.*

- Refuel only in a well ventilated area and with the engine switched off. Do not smoke and switch off all ignition sources in the vicinity of the tank or at the fuel storage depot.
- Do not overfill the fuel tank (there must be no fuel in the inlet nozzle). After filling up the petrol tank, ensure that the tank cap is closed and secured.
- When filling up the petrol tank, do not spill any fuel. Spilled fuel or petrol vapours may ignite. If fuel has been spilled, ensure that the area is dried before the engine is restarted.
- Prevent repeated or prolonged skin contact or inhalation of the vapours.

**⚠ Caution**

*Do not fill up with fuel of specification E85. If fuel of specification E85 (ethanol content >15 %) is used, the engine may be damaged.*

*The use of an unauthorised fuel will void the warranty.*

### See instructions on mixing oil and petrol

Age and/or incorrectly mixed fuel are the main reasons for the unit not running properly.

Always use clean, fresh unleaded petrol (no more than 60 days old, minimum octane number 91 ROZ). Follow exactly the instructions for the correct petrol/oil mixture. Correctly mix two-stroke engine oil and lead-free petrol, 1:25 (4 %). Do not mix directly in the tank.

### Fill the tank with petrol.

Fig. 1

- Remove tank cap (4).
- Fill fuel tank with petrol/oil mixture. Never overfill!
- Close fuel tank tightly.
- Move the unit approx. 10 m from the filling station/fuel container before starting the engine.

## Operation

**⚠ Danger**

*Do not hook the shoulder strap onto the unit until the engine has started.*

- Mix petrol (gasoline) with oil. Fill the tank with the mixture. See „Oil and petrol“.

### Starting the engine

#### Starting the cold engine.

Fig. 9

- Press throttle lock (2) and press the throttle (3) all the way and hold in position.
- Move the ignition switch (1) to the **START** position.
- Release throttle lock and throttle.

**i Note**

Both levers remain locked in the depressed position (cold start position).

- Slowly and fully press intake pump/primer (5) 6x (Fig. 10). The fuel must be visible in the pump. If this is not the case, keep pressing until fuel is visible.
- Move choke lever (6) to position 1/| (Fig. 11).
- Press the unit on the ground.
- Slowly pull on the starter cable (7) until it begins to resist. Then pull quickly and forcefully until the engine starts (Fig. 12). After starting the engine, do not let the pull-starter spring back, but slowly guide it back.
- Leave the engine running for approx. 1–2 minutes.
- Move choke lever (6) to position 2/| and leave the engine to warm up for another 1–2 minutes (depending on the outside temperature) (Fig. 11).



- Move choke lever (6) to position 3/4 (Fig. 11).
- Press throttle (3) and then release to deactivate the cold start lock (Fig. 9). The ignition switch automatically jumps back to position I/On. The engine runs at idling speed.

**i Note**

The unit has warmed up adequately when the engine accelerates without faltering.

**Starting with a warm engine**

- Move the ignition switch (1) to the I/On position (Fig. 9).
- Move choke (6) lever to position 3/4 (Fig. 11).
- Press the unit on the ground.
- Slowly pull on the starter cable (7) until it begins to resist. Then pull quickly and forcefully until the engine starts (Fig. 12).  
After starting the engine, do not let the pull-starter spring back, but slowly guide it back.

**i Note**

If the engine does not start, move the choke (6) to position 2/4. When the engine has started, move the choke (6) back to position 3/4 (Fig. 11).

**Stopp the engine**

Fig. 9

- Release throttle (3). Leave the idling engine to cool down.
- Move the ignition switch (1) to the 0/Stop position.

**i Note**

If the engine does not stop when the ignition switch is actuated, move the choke (6) to position 1/4 to force the engine to stop (Fig. 11). Before using the unit again, have the ignition switch checked by a repair shop!

**Holding the lawn trimmer**

Before using the unit, place yourself in the operating position (Fig. 13). Check the following:

- The user is wearing eye protection and the correct clothing.
- The shoulder belt has been set to the correct height.

- The handle bar has been set in such a way that you can grip it with both hands without having to stretch out your arms.
- The unit is below waist height.
- Hold the cutting attachment parallel to the ground so that the vegetation to be cut can easily be reached without the user having to bend forward.

**Setting the length of the trimmer line**

(depending on model)

You can release the trim line with the bump knob cutting attachment without stopping the engine. To release more line, tap the cutting attachment on the ground (Fig. 14) while running the lawn trimmer at a higher speed.

**i Note**

The trim line should always be at max. length. The shorter the trim line becomes, the more difficult it is to release.

Each time the head is bumped, approx. 25 mm of cutting line are released. A blade in the cutting attachment cover cuts the line back to the correct length if too much line is released.

It is best to bounce the bump head on bare ground or hard earth. If you attempt to release the trim line in tall grass, the engine may stall. Always keep the trim line fully extended. The shorter the trim line is, the more difficult it is to release.

**i Note**

Do not run the bump head along the ground.

The line may break by:

- becoming entangled with foreign objects,
- normal material fatigue,
- attempting to cut thick-stalked weeds,
- striking walls, garden fences, etc..

**Tips for best trim results**

- Keep the cutting attachment parallel to the ground.
- Use only the tip of the line for cutting, especially along walls.

If more than the tip is used for cutting, the cutting capacity is reduced and the engine may overload.

- Cut grass which is taller than 20 cm from the top down in small stages to prevent premature wear of the line and engine resistance.
- If possible, cut from left to right. Cutting to the right improves the cutting capacity of the unit. Grass clippings are then ejected by the user.
- Slowly move the lawn trimmer at the required height in and out of the cutting area. Walk either forwards and backwards or from side to side. Better results are achieved by cutting shorter pieces.
- Cut dry grass and weeds only.

The service life of the cutting line depends on the following:

- Follow the previous cutting tips,
- for the vegetation which is to be cut,
- where it is cut.

For example, a line wears out more quickly if it is cutting against a house wall than around a tree.

**Decorative cutting**

You will receive a decorative cut if you cut all vegetation around trees, posts, fences, etc.

Rotate the whole unit until you are holding the cutting attachment at an angle of 30° to the ground. (Fig. 15).

**Working with the cutting blade (depending on model)**

Before using the unit, place yourself in the operating position (Fig. 13). See "Holding the lawn trimmer".

Tips for working with the cutting blade:

- Cut rhythmically.
- Stand firmly but comfortably on the ground.
- Before you start cutting, set the unit to full speed. At full speed the blade has maximum cutting force and will therefore not jam so easily, stick or cause blade impacts which may result in serious injury to the user or other persons.
- When cutting, move the upper part of your body from right to left.



- Always release the throttle and reduce the engine to no load when you are not cutting.
- Rotate the unit in the same direction in which the blade is cutting. This promotes cutting.
- Move one or two steps to the next trimming area after swinging back the unit and stand firmly again.

Follow these instructions to prevent vegetation from wrapping itself around the blade:

- Cut at full speed.
- Swing from right to left into the vegetation which is to be cut (Fig. 16).
- When swinging back, avoid vegetation which has just been cut.

## Maintenance and cleaning

### **Caution**

*Before working on the unit:*

- Switch off the engine.
- Wait until all moving parts have come to standstill; the engine must have cooled down.
- Remove spark-plug terminal from the engine to prevent the engine from starting unintentionally.

*Have all repairs carried out by a repair shop only.*

*At the end of the season have the unit inspected and serviced by a specialist company.*

*Do not splash the unit with water, otherwise electric components may be damaged.*

*Clean the appliance after every use. Failure to clean the appliance can damage the materials and cause malfunctions.*

### **Installing the cutting line (depending on model)**

Always use a replacement cutting line with a diameter of 3,0 mm.

If using a cutting line which has a length other than the one indicated, the engine may overheat or misfire. There are two methods of replacing the cutting line:

- Winding a new line onto the spool
- Fitting a coil with a prewound line

### **Winding a new line onto the spool**

Fig. 17

- Press both retaining plates (1) of the spool housing (2) and remove the spool together with spool cover (3).

Fig. 18

- Clean spool housing (1), spring (2) and spool (3) together with spool cover (4). Use a clean cloth.
- Check the toothing (5) for wear on the spool housing (1), the spool (3) and on the spool cover (4). If required, replace damaged parts.
- Take approximately 3 metres of new trim line and fold in half.

### **Note**

Always use the specified line length! The line may not be released correctly if it is too long.

Fig. 19

- Insert the folded end of the trim line into the retaining plate of the spool.
- Wind the lines in tight, even layers onto the lower and upper halves of the spool. Observe the winding direction indicated on the spool!

Fig. 20

- Press the ends of the line into the two opposing retaining slots.

Fig. 21

- Insert the spool into the spool cover and feed the ends of the line through the opposing slots in the spool cover.

Fig. 22

- Press pre-assembled unit (3) out of the inner spool and spool cover into the spool housing (2) until the retaining plates (1) engage.

### **Fitting a coil with a prewound line**

Fig. 17

- Press both retaining plates (1) of the spool housing (2) and remove the spool together with spool cover (3).
- Take spool out of the spool cover.

Fig. 18

- Clean spool housing (1), spring (2) and spool cover (4). Use a clean cloth.
- Check the toothing (5) for wear on the spool housing (1) and on the spool cover (4). If required, replace damaged parts.

Fig. 21

- Insert a new spool into the spool cover and feed the ends of the line through the opposing slots in the spool cover.

Fig. 22

- Press pre-assembled unit (3) out of the inner spool and spool cover into the spool housing (2) until the retaining plates (1) engage.

### **Cleaning the air filter**

Clean and lubricate the air filter after every ten operating hours. This is an important part of maintenance. If the air filter is not serviced, the warranty will be deemed **null and void**.

Fig. 23

- Set choke lever (1) to position 3/4. The air filter cover can be removed in this position only.
- Open air filter cover: Press retaining plate (3) and remove cover (2).
- Remove the air filter (4).

Fig. 24

- Wash the filter with detergent and water. Flush out the filter thoroughly, leave to drip and dry completely.

Fig. 25

- Use adequately clean oil (SAE 30) to lubricate the filter easily.

Fig. 26

- Press on the filter to distribute the oil and remove excess oil.
- Install filter.
- Attach air filter cover again, ensuring that it engages.

### **Note**

If the unit is used without the air filter, the warranty will be voided.

### **Adjust carburettor**

Fig. 27

The idle speed can be set with the screw (1). This work may be carried out by a specialist workshop only.

### **Replace petrol filter (depending on model)**

If required – This work may be carried out by a specialist workshop only.



## Check/replace spark plug

Use only original spark plugs or ones approved by the manufacturer.

The correct electrode gap is **0,6–0,7 mm**. Every 25 operating hours take out the spark plug and check its condition.

- Stop the engine and leave it to cool down.
- Remove spark-plug terminal.
- Remove dirt from around the spark plug.
- Unscrew spark plug to the left with a spark plug wrench.
- Check/adjust the electrode gap of **0,6–0,7 mm** (Fig. 28).

### Note

Replace a damaged, sooted or dirty spark plug.

- Screw in spark plug and tighten to a torque of 12.3–13.5 Nm. Do not tighten too tightly.

## Cleaning the exhaust

Fig. 29

Clean the area under the exhaust cover (1) every 25 operating hours. To do this, the exhaust cover must be removed.

This work may be carried out by a specialist workshop only.

## Checking/topping up the grease in the gearbox

Fig. 30

Check the level of grease in the gearbox every 25 operating hours. To do this, remove the screw (1). If required, refill with a high-quality lithium grease.

This work may be carried out by a specialist workshop only.

## Cleaning the unit



### Caution

*Always keep the unit and ventilation slots clean and free of dirt.*

Use a small brush for cleaning the outside of the unit.

Do not use abrasive detergents. Household cleaners which contain aromatic oils such as pine oil or lemon as well as solvents such as kerosene may damage the plastic housing and handle.

Wipe housing with a damp cloth only.

## Storage

- Never store the unit with fuel in the tank or in a location where petrol vapours may be ignited by a spark or naked flame.
- Before storing the unit, leave the engine to cool down.
- Store the unit in a dry, closed room to prevent unauthorised use or damage. Keep the unit away from children.

## Long-term storage

If the unit is to be stored for a prolonged period, proceed as follows:

- Drain all the fuel out of the tank and pour into a container with the same two-stroke mixture. Do not use fuel which has been stored for longer than 60 days.
- Start the engine and leave running until it stops. This ensures that there is no fuel left in the carburettor.
- Leave the engine to cool down. Take out the spark plug and pour a high-quality engine oil or two-stroke oil into the cylinder. Slowly pull the starter rope to distribute the oil. Reinstall the spark plug.

### Note

Take out the spark plug and pour all the oil out of the cylinder before starting the unit after storage.

- Thoroughly clean the unit and check for loose and damaged parts. Repair or replace damaged parts and tighten loose screws, nuts and bolts. The unit can now be stored.
- Store the unit in a dry, closed room to prevent unauthorised use or damage. Keep the unit away from children.

## Transportation

- Before transporting the unit, leave it to cool down.
- Empty the fuel tank before transporting the unit. Filler cap must be closed tightly.
- Secure the unit to prevent it from shifting during transportation.

## Warranty

The warranty regulations issued by our company or the importer are valid in all countries. We shall repair any faults on your unit free of charge in accordance with the warranty, provided the fault was due to defective materials or manufacturing. If claiming under the warranty, please contact your seller or your nearest branch.



## Troubleshooting

Error	Cause	Remedial action
Engine does not start.	Ignition switch set to <b>0/Off</b> .	Set switch to <b>I/On</b> .
	Fuel tank empty.	Fill fuel tank.
	Intake pump not pressed down far enough.	Slowly press intake pump all the way down 10 times.
	Engine flooded.	Implement the starting process with the choke lever in the operating position.
	Old or incorrectly mixed fuel.	Empty the tank/fill with fresh fuel mixture.
	Dirty spark plug.	Replace or clean spark plug.
Engine does not run constantly at no load.	Air filter blocked.	Clean or replace air filter.
	Old or incorrectly mixed fuel.	Empty the tank/fill with fresh fuel mixture.
	Carburettor incorrectly adjusted.	Have the carburettor adjusted by a specialist company.
	Petrol filter dirty.	Have petrol filter replaced by a specialist workshop.
Engine does not accelerate.	Old or incorrectly mixed fuel.	Empty the tank / fill with fresh fuel mixture.
	Carburettor incorrectly adjusted.	Have the carburettor adjusted by a specialist company.
Strong vibrations.	Damaged cutting tools or drive parts.	Switch off the unit immediately. Have defective parts replaced by a specialist company.
Cutting head does release line.	Cutting head entangled with grass.	Stop the engine and clean the cutting attachment.
	No line in the cutting head.	Wind up new line.
	Coil jammed.	Replace coil.
	Cutting head dirty.	Clean coil and coil housing.
	Line fused together.	Pull apart, take out the fused part and wind up the line again.
	Line twisted when wound up.	Pull apart and wind up the line again.
	Not enough line released.	Tap the bump head and pull out the line until 10 cm of line is outside the cutting attachment.

If you have any further questions, please contact your authorised dealer on site.



9/ Declaration of Conformity

We, the importer Henton & Chattell Ltd NG2 3HW

Declare that the products:

PNBC350K (Cobra BC350K), PNBC350KB (Cobra BC350KB), PNBC450K (Cobra BC450K), PNBC450KB (Cobra BC450KB), PNBC530K (Cobra BC530K), PNBC530K (Cobra BC530K)

Complies with the following directives:

2006/42/EC – Machinery Directive

2004/108/EC- Electromagnetic Compatibility Directive

2000/14/EC amended by 2005/88/EC – Noise Emissions in the Environment by Equipment for use Outdoors Directive

The conformity assessment procedure followed was in accordance with:

Annex V of the Directive 2000/14/EC

Name of the Notified Body: Intertek Testing Services Ltd., Shanghai, Building No. 86, 1198 Qinzhou Road (North), Caohejing Development Zone, Shanghai 200133, China.

Verification Number: SH12091469-V2 Report Number: SH12091469-001

Measured sound power: 95dB (A)

Guaranteed sound power: 110dB (A)

Standards and technical specifications referred to:

EN ISO 11806:2011, EN ISO 11806:2008, EN ISO 14982:1998, EN ISO 3744:1995, ISO 11094:1991

Authorised signatory and technical file holder

Date: 7/6/13

Signature:

Name / title: Mr. Peter J. Chaloner / Managing Director

Henton & Chattell Ltd., London Road, Nottingham NG2 3HW UK