

电话(TEL)
0573-83225888-503

网址(Http)
www.yattool.com

名称/料号	说明书8458-4334094-001	颜　色				K
制作日期	2016-10-26	专　色				
尺　　寸	A5(148.5x210mm)					
运用软件	PDF					
客　　户	CH171	页　数	20 张A4纸			
材质,表面处理	70g双胶纸	备　注	黑白印刷			
设计人员	张妹珍		说明书排版上下不要留太多白,			

CHALLENGE
1800W Chain Saw

6088617
(Model: YT4334-01)

Original Manual

After Sales Support
UK/Ireland
0333 300 1614



challenge®

WARNING Important-Please read these instructions fully before starting assembly.

These instructions contain important information that will help you get the best from your product, ensuring it is assembled correctly and safely. If you need help or have damaged or missing parts, call the Customer Helpline on 0333 300 1614.

V0 Oct 2016

CONTENTS

GENERAL POWER TOOLS SAFETY WARNINGS.....3
SPECIAL SAFETY INSTRUCTIONS FOR CHAIN SAW.....5
SYMBOLS.....8
DIAGRAM.....10
PARTS LIST.....10
INTENDED USE.....11
ASSEMBLY.....12
OPERATION.....16
CLEANING AND MANTENIANCE 26
TECHNICAL DATA.....34
TROUBLESHOOTING 35
GUARANTEE 36
RECYCLING AND DISPOSAL.....36
PLUG REPLACEMENT.....37

GENERAL POWER TOOLS SAFETY WARNINGS



WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.
Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work Area Safety

a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

Personal Safety

a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

GENERAL POWER TOOLS SAFETY WARNINGS

Personal Safety (continued)

e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

Power Tool Use and Care

a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**
Power tools are dangerous in the hands of untrained users.
e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

Service

a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.



WARNING! This machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medicalimplants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before operating this machine.

SPECIAL SAFETY INSTRUCTIONS FOR CHAIN SAW

- **Keep all parts of the body away from the saw chain when the chain saw is operating. Before you start the chain saw, make sure the saw chain is not contacting anything.** A moment of inattention while operating chain saws may cause entanglement of your clothing or body with the saw chain.
- **Always hold the chain saw with your right hand on the rear handle and your left hand on the front handle.** Holding the chain saw with a reversed hand configuration increases the risk of personal injury and should never be done.
- **Wear safety glasses and hearing protection. Further protective equipment for head, hands, legs and feet is recommended.** Adequate protective clothing will reduce personal injury by flying debris or accidental contact with the saw chain.
- **Do not operate a chain saw in a tree.** Operation of a chain saw while up in a tree may result in personal injury.
- **Always keep proper footing and operate the chain saw only when standing on fixed, secure and level surface.** Slippery or unstable surfaces such as ladders may cause a loss of balance or control of the chain saw.
- **When cutting a limb that is under tension be alert for spring back.** When the tension in the wood fibres is released the spring loaded limb may strike the operator and/or throw the chain saw out of control.
- **Use extreme caution when cutting brush and saplings.** The slender material may catch the saw chain and be whipped toward you or pull you off balance.

Carry the chain saw by the front handle with the chain saw switched off and away from your body. When transporting or storing the chain saw please always fit the guide bar cover. Proper handling of the chain saw will reduce the likelihood of accidental contact with the moving saw chain .

- **Follow instructions for lubricating, chain tensioning and changing accessories.** Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- **Keep handles dry, clean, and free from oil and grease.** Greasy, oily handles are slippery causing loss of control.
- **Cut wood only. Do not use chain saw for purposes not intended. For example: do not use chain saw for cutting plastic, masonry or non-wood building materials.** Use of the chain saw for operations different than intended could result in a hazardous situation.

Causes and Operator Prevention of Kickback

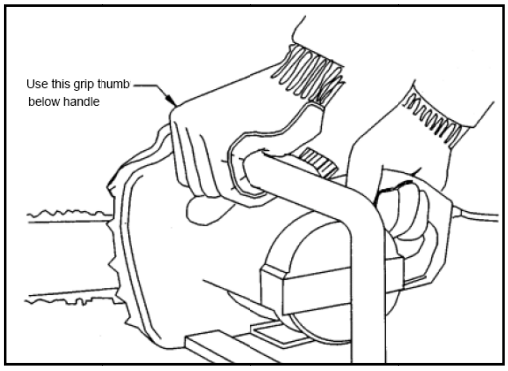
Kickback may occur when the nose or tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain in the cut.
Tip contact in some cases may cause a sudden reverse reaction, kicking the guide bar up and back towards the operator.
Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator.
Either of these reactions may cause you to lose control of the saw which could result in serious personal injury. Do not rely exclusively upon the safety devices built into your saw. As a chain saw user, you should take several steps to keep your cutting jobs free from accident

SPECIAL SAFETY INSTRUCTIONS FOR CHAIN SAW

Causes and Operator Prevention of Kickback (continued)

or injury.
Kickback is the result of tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

- **Maintain a firm grip, with thumbs and fingers encircling the chain saw handles, with both hands on the saw and position your body and arm to allow you to resist kickback forces.** Kickback forces can be controlled by the operator, if proper precautions are taken. Do not let go of the chain saw.



- **Do not overreach and do not cut above shoulder height.** This helps prevent unintended tip contact and enables better control of the chain saw in unexpected situations.
- **Only use replacement bars and chains specified by the manufacturer.** Incorrect replacement bars and chains may cause chain breakage and/or kickback.

Follow the manufacturer's sharpening and maintenance instructions for the saw chain. Decreasing the depth gauge height can lead to increased kickback.

Recommended:

- Use a residual current device with a tripping current of 30mA or less
- During the cutting operation, the supply cord must be securely positioned to prevent the cord from snagged on branches and the like.
- The first-time user should, as a minimum practice, cutting logs on a saw-horse or cradle.

Lubrication System

- The chain is automatically lubricated.
- Use only new chain oil specifically formulated for chainsaws.
-

WARNING! Never use wasted oil, low quality oil, or insufficient oil. This could damage the pump; the bar and the chain may result in serious personal injury

- Check oil level before each work session, refill if less than full.

If the lubrication system does not work properly, check if the oil filter and all oil-ways are clean and free from obstructions. If it is still not working, contact an authorised service centre.

SPECIAL SAFETY INSTRUCTIONS FOR CHAIN SAW

Safety Chain Brake

Kickback is a phenomenon whereby the tip of the saw flies quickly and uncontrollably upwards towards the operator. It happens with little or no warning and can be caused by cutting with the blade tip, if the saw gets pinched in it's cut, or if the saw contacts debris.
The risk of kickback can never be completely eliminated but it can be reduced by:

- Ensuring the work area is free of debris.
- Not allowing the chain to get pinched.
- Not cutting with the danger area at the tip of the saw .see illustration below.



Intended Use/Not intended Use

This chain saw is only designed for cutting of brushes, trunks or timber beams up to a diameter according the guide bar length.
It is only allowed to cut wood. Every other use of the machine is a not intended use. Furthermore a professional use for tree services is strictly forbidden.
During the use of the chain saw the user has to arrange for personal protective equipment according to the manual and also to the named pictograms on the chain saw. Parts of the intended use are also the details in the manual regarding safety warnings and references for use / maintenance. People/User who work with the chain saw or make maintenances on it must be familiar with the manual. It is only allowed to assemble on the chain saw the manufacturers original or approved spare parts (guide bar; saw chain, spark plug e.g.) as well as the allowed combinations of guide bar / saw chain as named in the manual.
The user and not the manufacturer is liable for every accident which results from a combination of not intended use or a not allowed change of the construction on the machine.
The chain saw is only intended to use outdoor.

Residual Risks

Even with the intended use of the appliance there is always a residual risk, which can not prevented. According to the type and construction of the appliance the following potential hazards might apply:
- Contact with exposed saw teeth of the saw chain (cutting hazards)
- Access to the rotating saw chain (cutting hazards)
- Unforeseen, abrupt movement of the guide bar (cutting hazards)
- Flung out of parts from the saw chain (Cutting / injection hazards)
- Flung out of parts of the work piece
- Inhalation of work peace particles,
- Skin contact with the oil,
- Loss of hearing, if no required ear protection used during work.

SYMBOLS

IMPORTANT: Some of the following symbols may be used on your tool. Be sure to study them and learn their meaning. Proper interpretation of these symbols will allow you to use the machine more effectively and reduce the risk of accident.



Indicates danger, warning or caution.



WARNING – To reduce the risk of injury, user must read instruction manual.



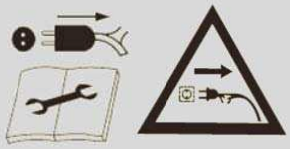
Wear ear protection, eye protection and helmet when using the product.



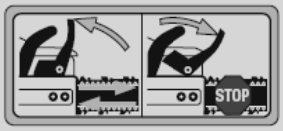
Wear gloves and safety boots to protect against electric shock



Protect the machine from the damp and never expose it to rain.



SWITCH OFF: Remove plug from mains before cleaning or maintenance
SWITCH OFF: Remove plug from the mains immediately if the cable is damaged or cut.



Make sure the "chain brake" is disengaged.

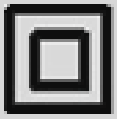
SYMBOLS



Keep children at a distance of not less than 10m from the work area



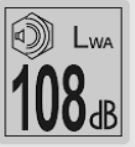
Conforms to relevant safety standards.



This product is double insulated electrically



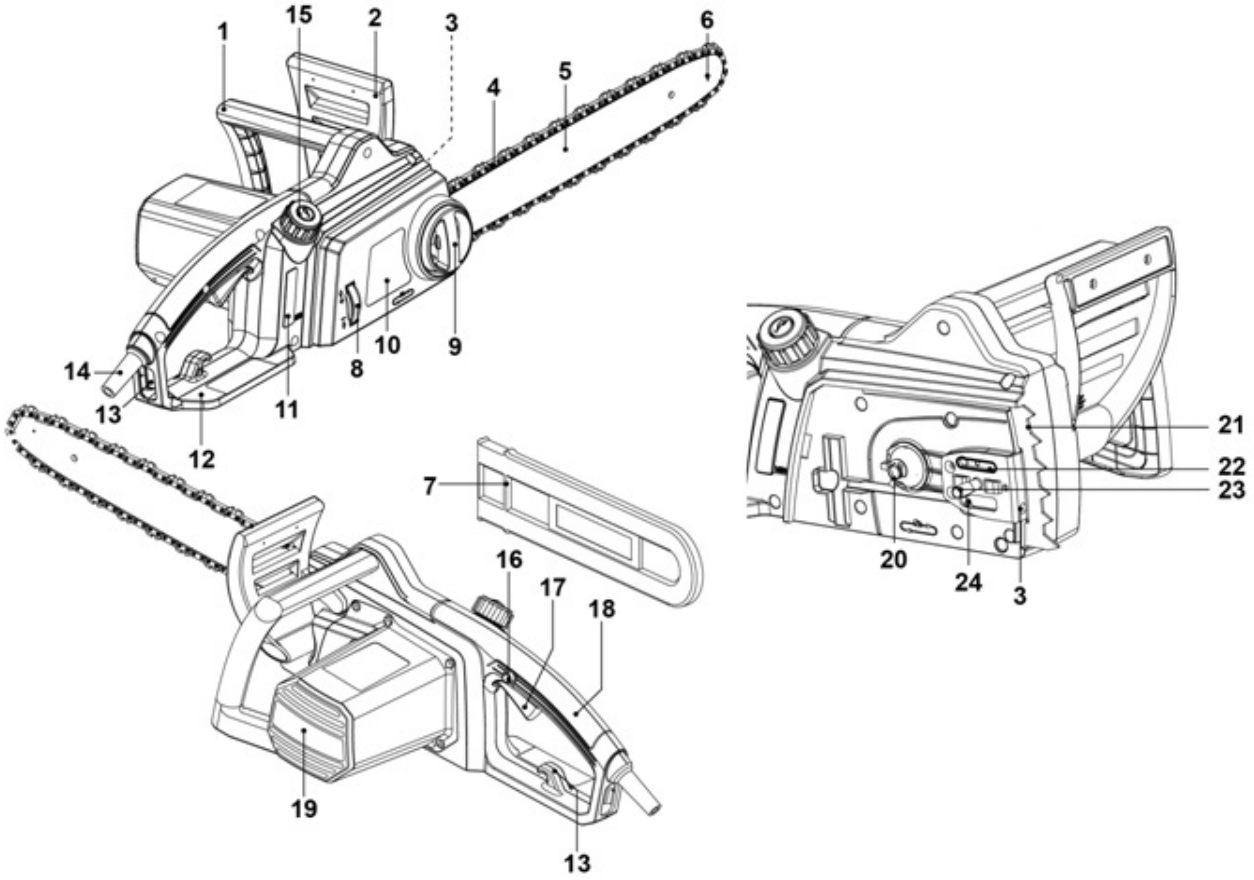
WEEE symbol. Tools that are no longer usable should not be disposed of with household waste but in an environmentally friendly way. Please recycle where facilities exist. Check with your local council authority for recycling advice.



Guaranteed sound power level (tested according to Directive 2000/14/EC as amended by 2005/88/EC)

DIAGRAM

Fig. A



PARTS LIST

(See Fig. A)

1. Front Handle
2. Front Guard/Chain Brake
3. Anti-skid teeth
4. Saw Chain
5. Guide Bar
6. Sprocket Nose
7. Guide Bar Cover
8. Adjustable knob for Chain Tension

PARTS LIST

(See Fig. A, continued)

9. Press Knob for Guide Bar Tension
10. End Cover
11. Oil Level Window
12. Rear Guard
13. Cable Strain Relief
14. Power Cord with Plug
15. Oil Tank Cap
16. Lock-off Button
17. On/Off Switch
18. Rear Handle
19. Air Vents
20. Drive Sprocket
21. Spike Bumper
22. Oiling Port
23. Bolt
24. Tension Pin

Remark: Above are all assembled in the standard delivery.

INTENDED USE

This chain saw is designated with a rated input of 1800 Watts. The product is intended for cutting logs with a thickness of max. 326mm. It must not be used for cutting other materials, such as plastics, stone, metal or wood that contains foreign objects.

The product may only be used with the guide bar/saw chain combination stated in these instructions. It is not permitted to use other types or sizes.
Vertical and horizontal cuts can be performed with this product. Longitudinal sections can only be cut by professionals.

This product should not be used outside of domestic premises e.g. for cutting firewood in forested areas. The product should not be used on masonry and material that are harmful to health.
This product is intended for private domestic use only, not for any commercial trade use. It must not be used for any purposes other than those described.

ASSEMBLY

Unpacking

1. Unpack all parts and lay them on a flat, stable surface.
2. Remove all packing materials and shipping devices if applicable.
3. Make sure the delivery contents are complete and free of any damage. If you find that parts are missing or show damage do not use the product but contact your store. Using an incomplete or damaged product represents a hazard to people and property.
4. Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.

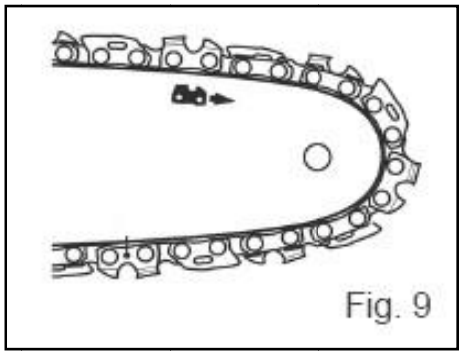
Chain Tensioning Check

WARNING! Unplug the product from the power source before adjusting the saw chain tension! The cutting edges of the saw chain are sharp. Always wear protective gloves when handling the chain!

NOTE: The chain and bar have been already assembled on the machine when you get it out of box. If disassembled chain and bar for replacement, please read the maintenance part in this manual for details.

Always maintain proper chain tension! A loose chain increases the risk of kickback! A loose chain may jump out of the guide bar groove! This may injure the operator and damage the chain! A loose chain will cause rapid wear to the chain, guide bar and sprocket!
Tensioning the chain too tightly will overload the motor and cause damage, and insufficient tension can cause chain derailing, whereas a correctly tightened chain provides the best cutting characteristics and prolonged working life! The chain life mainly depends upon sufficient lubrication and correct tensioning!

Check the chain tension using one hand to lift the saw chain (4) against the weight of the product. The correct chain tension is achieved when the saw chain can be lifted by approximately 2-4mm from the guide bar (5) in the centre (Figs. 9, 10).


Fig. 9

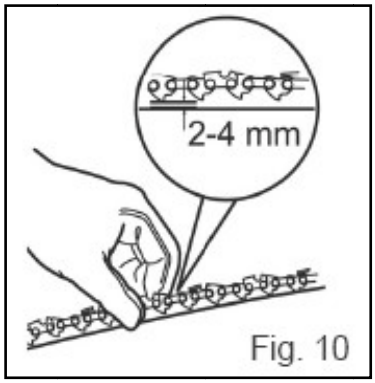


Fig. 10

ASSEMBLY

Chain Tensioning Check (continued)

If loose chain is found before use, please follow up the instruction below.
(If tight chain is found before use, please do the opposite to the below instruction.)

Firstly slightly tighten the Knob (9) clockwise. (Fig.7)
Do not tighten the locking nut completely and saw chain tensioning is required first.

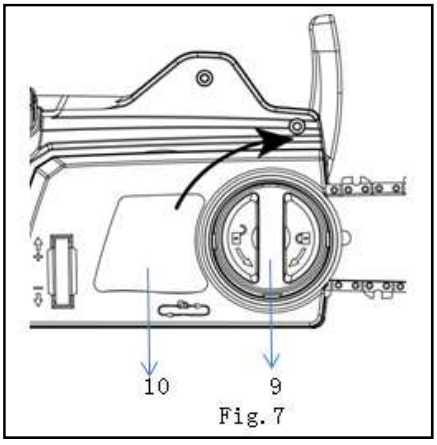


Fig.7

NOTE: The saw chain (4) has not yet been tensioned. Tension the chain as described under "Saw chain tensioning". After operating the product for approximately 1 hour, adjust the chain tension again.

Saw Chain Tensioning
Always check the saw chain tension before use, after first cuts and regularly during use approximately every five cuts. After initial operation, new chains can lengthen considerably. This is normal during the break-in period and the interval between future adjustments will lengthen quickly.

Set the product on a suitable flat surface.
Turn the tension knob (8)clockwise until the chain "tie straps" are adjust touching the bottom edge of the guide bar(5) Fig.(8).

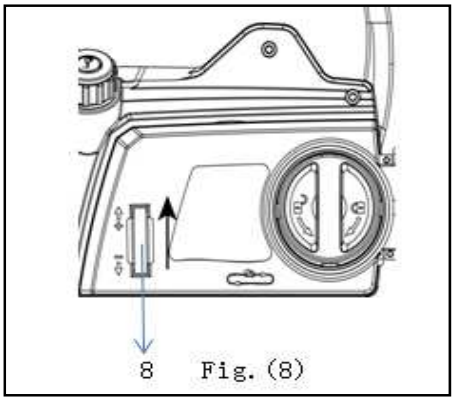


Fig. (8)

ASSEMBLY

Chain Tensioning Check (continued)

Turn the knob (9) clockwise to tighten the cover (10) completely (Fig.11).

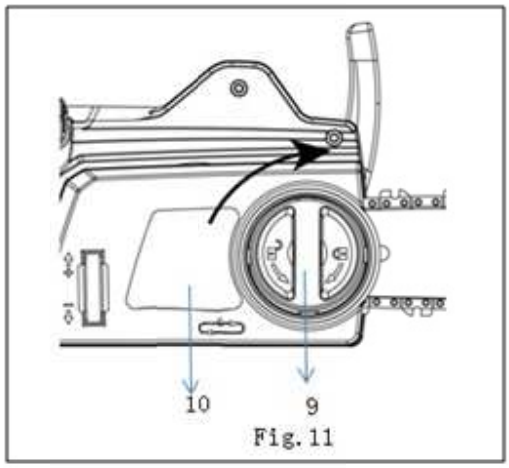


Fig. 11

Lubrication

WARNING! The product is not filled with oil. It is essential to fill the product with oil before using it! Never operate the product without chain oil or with an empty oil tank, as this will result in extensive damage to the product!

Never operate the bar and chain without lubrication oil!

Operating the products dry or with too little oil will decrease cutting efficiency, shorten the product life span and cause rapid wear to the chain and bar from overheating! Insufficient oil is evident by smoke or bar discoloration! Adequate lubrication of the saw chain during cutting operations is essential to minimize friction with the guide bar. Your product is equipment with an automatic oiling system! The oiling system automatically delivers the proper amount of oil to the bar and chain!

Set the product on any suitable surface with the tank cap(15) facing upwards.

Unscrew and remove the tank cap(15), then add the lubricant into the tank. Use a proper funnel with a filter to prevent debris entering the tank and to avoid spilling and overfill and leave approximately 5mm of space to the lower edge to allow the lubrication to expand (Fig.12).

Check the oil level window (11) prior to start-up and regularly during operation. Refill oil when the oil level is lower than "MIN" marking (Fig. 13).

Wipe up spilled lubricant with a soft cloth and refit the tank cap (15).

NOTE: Always dispose of lubricant, used oil and objects contaminated with them in accordance with local regulations.

ASSEMBLY

Lubrication (continued)

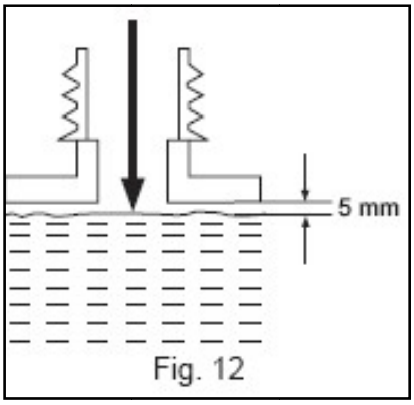


Fig. 12

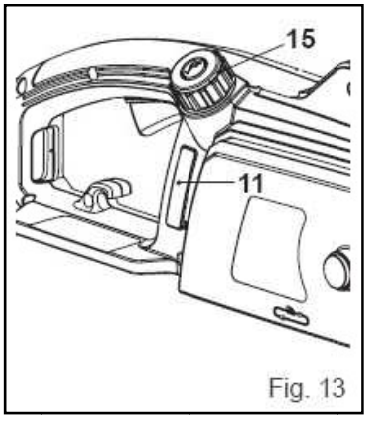


Fig. 13

Connection to the Power Supply

WARNING! For your safety, it is required that the plug attached to this product is always connected to an extension cable! The extension cable must be suitable for outdoor use with sockets protected against water splashing! Ensure the extension cable is of the proper size and type for your product (>/= 1.5mm^2)!

The extension cable must always be used with the cable strain relief! Do not use the product without an extension cable connected. Always use a residual current supply (RCD) protected supply!

Make sure the on/off switch (17) is in its off position.
Double the extension cable, about a foot from the end and hook the loop over the cable strain relief (13). Gently pull on the cord to ensure that it is firmly attached at the handle (Fig.14,15).
Connect the extension cable to a suitable socket.
Your product is now ready to be used.

WARNING! Check the voltage! The voltage must comply with the information on the rating label!

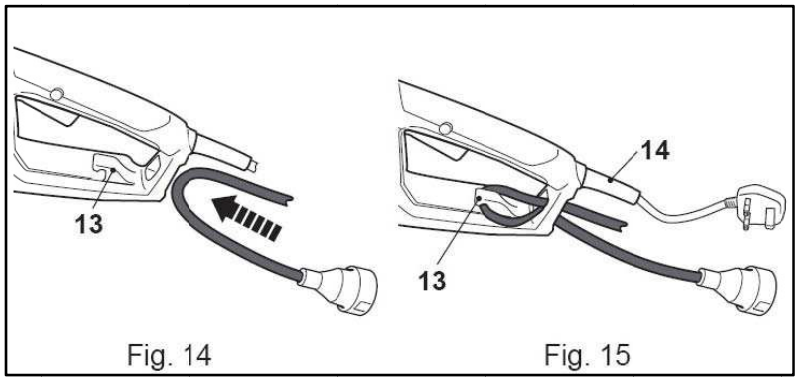


Fig. 14 Fig. 15

OPERATION

Check that you have noted all the following instructions:

- Before starting you must have fully read and understood the entire instruction manual.
- Working with this product is demanding' therefore ensure you are physically and mentally fit to complete the job safety.
- Ensure that you have all the accessories and tools needed for assembly and operation.
- Make sure that you wear suitable personal protective equipment.
- Ensure that no unauthorized people, especially children, and pets are nearby or could enter the working area.
- Ensure that the product is free from damage and that it is not worn.
- Make sure that safety devices and accessories are correctly fixed.
- Double check that all assembly tools have been removed from the product before use.
- Undertake periodic structural checks of this products; do not use it if you have any doubts about its suitability for its intended purpose.

WARNING! For your own and the safety of other people you must read and follow the safety instructions in following section "In more detail – Technical and legal information – Safety Warnings."

Chain Brake

The chain brake is a safety mechanism activated by the front guard (2). When kickback occurs the chain stops immediately.

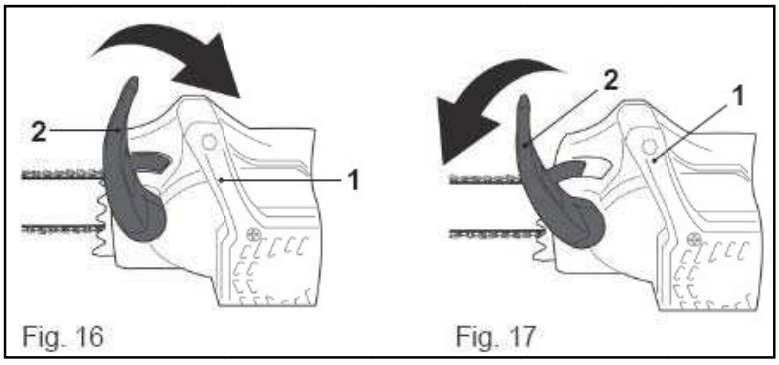


Fig. 16 Fig. 17

The chain brake (2) in the engaged disengaged position, the product can be operated (Fig. 16).
The chain brake (2) in the engaged position, the saw chain is stopped as soon as the chain brake is activated (Fig. 17).

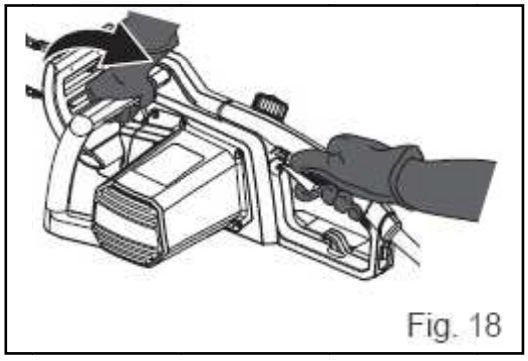
Chain Brake Test

The following functional check should be carried out before each use. The purpose of the chain brake test is to reduce the possibility of injury due to kickback.
Make sure the chain brake (2) is disengaged. Disengage the chain brake (2) by pulling it

OPERATION

Chain Brake (continued)

back towards the front handle(1) (Fig.16).
Place the product on any suitable flat surface, make sure the saw chain (4) is not touching the surface or other objects and connect it to the power supply as described.
Grasp the front handle (1) with your left hand. Your thumb and fingers should encircle the handle (18) with your right hand. Your thumb and fingers should encircle the handle (Fig. 18).
Press the lock-off button (16) with your right thumb, then fully squeeze in the on/off switch (17) with your index finger and hold it in position.
While the motor is running, activate the chain brake (2) by moving your left hand forward against the chain brake(2). The saw chain (4) and motor should stop immediately.


Fig. 18

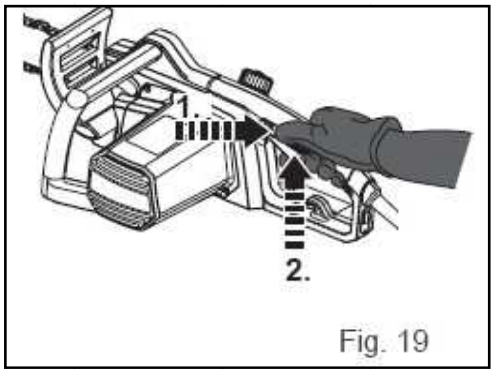


Fig. 19

NOTE: The motor will not start if the chain brake is in the engaged position.

WARNING! If the saw chain and motor fail to stop when the chain brake is engaged, take the product to the nearest authorized dealer or service centre! Do not use the product if the chain brake is not working properly!

The chain brake should not be used for starting and stopping the product during normal operation!

On/Off Switch

Make sure the safety chain brake (2) is disengaged (see above Fig. 16).
Grip the product with both hands, your left hand holding the front handle(1) do not hold the chain brake) and your right hand holding the rear handle(18).
Press the lock-off button (16) and hold it in position.
Squeeze in the on/off switch (17) to switch the product on (Fig.19).
Release the on/off switch (17) to switch the product off.

OPERATION

General Operation

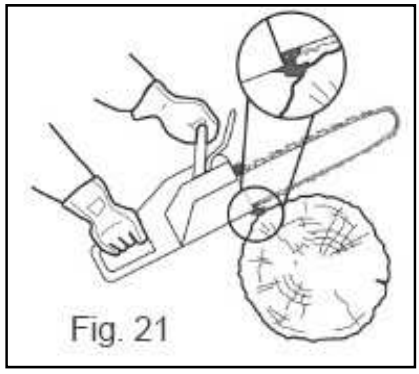
Check the product, its power cord and plug as well as accessories for damage before each use. Do not use the product if it is damaged or shows wear.
Double check that accessories and the guide bar/saw chain are properly fixed.
Always hold the product by its handle. Keep the handle dry to ensure safe support.
Ensure that the air vents are always unobstructed and clear. Clean them if necessary with a soft brush. Blocked air vents may lead to overhearing and damage the product.
Switch the product off immediately if you are disturbed while working by other people entering the working area. Always let the product come to complete stop before putting it down.
Do not overwork yourself. Take regular breaks to ensure you can concentrate on the work and have full control over the product.

Basic Operating/Cutting Procedure

To become proficient attend a recognized chain saw training course to learn how to operate chain saws safely and effectively. Familiarize yourself with all the controls and switches. Practice all movements with the product switched off.
Always hold the products firmly with both hands. Hold the front grip with your left hand and the rear grip with your right hand. Fully grip both handles at all times during operation. Never operate the product using only one hand.
Ensure the power cord is located to the rear, away from the chain and the wood and is positioned so that it cannot be caught on branches or similar objects during cutting.
Only use the product with a secure stance. Hold the product to the right-hand side of your body (Fig. 20).

The Saw chain (4) must be running at full speed before it makes contact with the wood. Use the spike bumper (21) to secure the product onto the wood before starting to cut and use it as a leverage point while cutting (Fig. 21).


Fig. 20


Fig. 21

Reset the spike bumper at a low point when cutting thicker logs by pulling the product slightly backwards until the gripping teeth release, and then reposition at lower level to continue

OPERATION

Basic Operating/Cutting Procedure (continued)

sawing. Do not remove the product completely from the wood.

Do not force the saw chain while cutting. Let the chain do the work using the gripping teeth to apply minimal leverage pressure.

Do not operate the product with your arms fully extended or attempt to saw areas which are difficult to reach, or while on a ladder. Never use the product above shoulder height (Fig. 22).

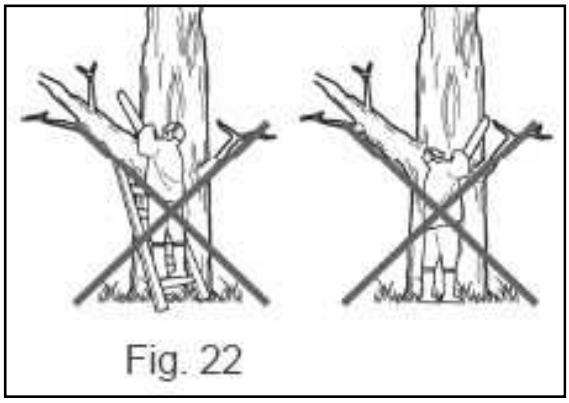


Fig. 22

Optimum sawing is achieved if the chain speed remains constant during cutting.

Be careful when reaching the end of the cut. The weight of the product may change unexpectedly as it cuts free from the wood. This can cause accidents to the legs and feet. Always remove the product from a wood cut while the product is running.

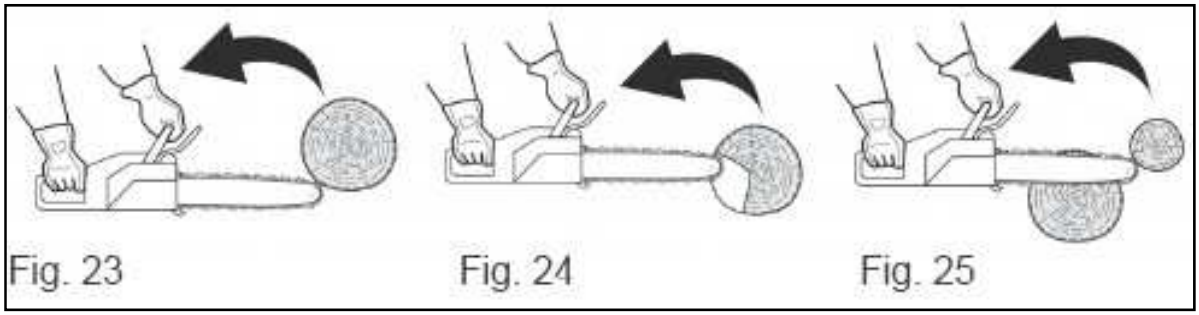
Kickback

WARNING! Beware of kickback! Kickback can lead to dangerous loss of control of the product and result in serious or fatal injury to the operator or anyone standing close by! Always be alert because rotational kickback and pinch kickback are major product operational dangerous and the leading cause of most accidents!

Kickback may occur if the nose or the tip of the guide bar touches an object, or if wood pinches the saw chain in the cut.
In some cases, contact with the tip of the guide bar(5) may cause a lightning-fast reverse reaction, kicking the guide bar up and back toward the operator (Figs. 23, 24, 25).

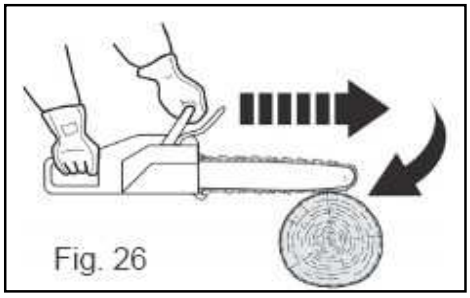
OPERATION

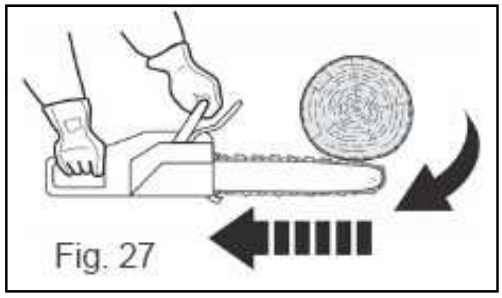
Kickback (continued)



Pinching of the saw chain (4) along the bottom of the guide bar (5) may pull the product forward away from the operator (Fig. 26)

Pinching of the saw chain (4) along the top of the guide bar (5) may push the guide bar rapidly back toward the operator (Fig.27).





Any of these reactions may cause a loss of control over the product, which could result in serious personal injury or even death.

With a basic understanding of "kickback", the element of surprise can be reduced or eliminated. Sudden surprise contributes to the majority of accidents.
Keep a good firm grip on the product with both hands, your right hand on the rear handle (18) and your left hand on the front handle (1), when the motor is running. Maintain a firm grip with your thumbs and fingers encircling the handles. A firm grip will help you reduce "kickback" and maintain control of the product.

You should read all the safety warnings and user instructions carefully before attempting to operate this product.

To Avoid Kickback:
Saw with the guide bar at a flat angle.
Never work with a loose, widely stretched or heavily worn chain.

OPERATION

Kickback (continued)

Ensure the chain is sharpened correctly.
Never saw above shoulder height.
Never work with the tip of the guide bar.
Always hold the product firmly with both hands.
Always use a low kickback chain.
Apply the metal gripping teeth for leverage.
Ensure correct chain tension.

Felling a Tree

When bucking and felling operations are being performed by two or more persons at the same time, the felling operations should be separated from the bucking operation by a distance of at least twice the height of the tree being felled. Trees should not be felled in a manner that would endanger any person, strike any utility line or cause any property damage. If the tree does make contact with any utility line, the company should be notified immediately.

The product operator should keep on the uphill side of the terrain as the tree is likely to roll or slide downhill after it is felled.

An escape path should be planned and cleared as necessary before cuts are started. The escape path should extend back and diagonally to the rear of the expected line of fall (Fig. 28).
Before felling is started, consider the natural lean of the tree, the location of larger branches and the wind direction to judge which way the tree will fall.

Remove dirt, stones, loose bark, nails, staples and wire from the tree.

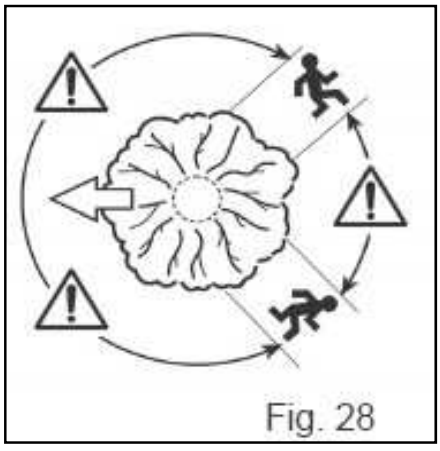


Fig. 28

OPERATION

Felling a Tree (continued)

Notching Undercut
Make the notch (Fig. 19 B) 1/3 the diameter of the tree, perpendicular to the direction of falls (Fig. 29). Make the lower horizontal notching cut first. This will help to avoid pinching either the saw chain or the guide bar when the second notch is being made.

Felling Back Cut
Make the felling back cut(Fig. 29 A) at least 50mm higher than the horizontal notching cut. Keep the felling back cut parallel to the horizontal notching cut. Make the felling back cut so enough wood is left to act as a hinge. The hinge (Fig. 29 C) wood keeps the tree from twisting and falling in the wrong direction. Do not cut through the hinge.

As the felling gets close to the hinge, the tree should begin to fall. If there is any chance that the tree may not fall in desired direction or it may rock back and bind the saw chain, stop cutting before the felling back cut is complete and use wedges of wood, plastic or aluminium to open the cut and drop the tree along the desired line of fall.

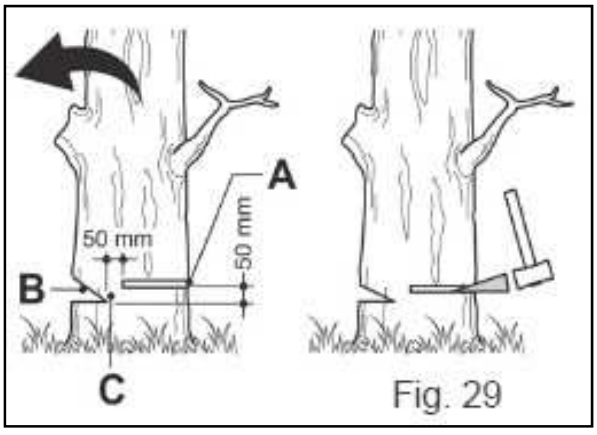


Fig. 29

Limbing and Pruning

When the tree begins to fall remove the product from the cut, stop the motor, put the product down, then use the retreat path planned. Be alert for overhead limbs falling and watch your footing.
Limbing is removing the branches from a fallen tree. When limbing leave larger lower limbs to support the log off the ground. Remove the small limbs in one cut (Fig. 30). Branches under tension should be cut from the bottom up to avoid binding the product.

OPERATION

Limbing and Pruning (continued)

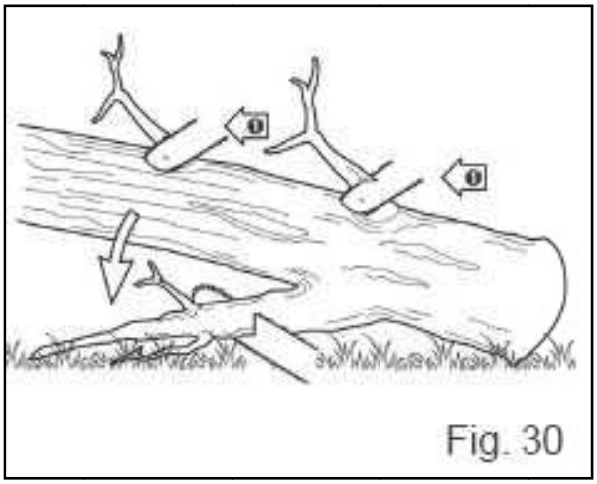


Fig. 30

WARNING! Never climb into a tree to limb or prune! Do not stand on ladders, platforms, logs, or in any position which may cause you to lose the balance or control of the saw! When pruning trees, it is important not to make the flush cut next to main limp or trunk until you have cut off the limb further out to reduce the weight! This prevents stripping the bark from the main member!

WARNING! If the limbs to be pruned are above chest height, hire a professional to perform the pruning!

Cutting Spring Poles

A spring pole is any log, branch, rooted stump, or sapling which is bent under tension by other wood so that it springs back if the wood holding it is cut or removed.
On a fallen tree, a rooted stump has a high potential of springing back to the upright position during the bucking cut to separate the log from the stump.
Watch out for spring poles, they are dangerous.

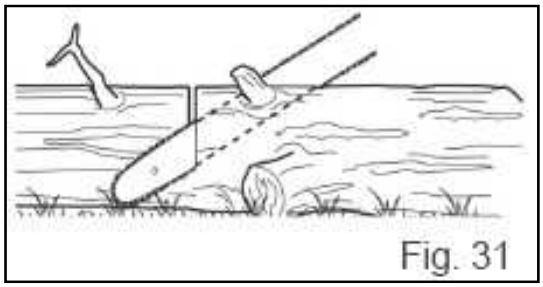
Bucking a Log

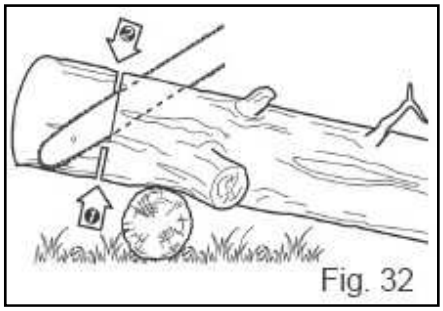
Bucking is cutting a long into lengths. It is important to make sure your footing is firm and your weight is evenly distributed on both feet. When possible, the log should be raised and supported by the use of limbs, logs and chocks.
Follow the simple directions for easy cutting. When the log is supported along its entire length (Fig. 31), it is cut from the top (overbuck).

When the log is supported on the end (Fig. 32), cut 1/3 the diameter from the underside (underbuck). Then make the finished cut by overbucking to meet the first cut.

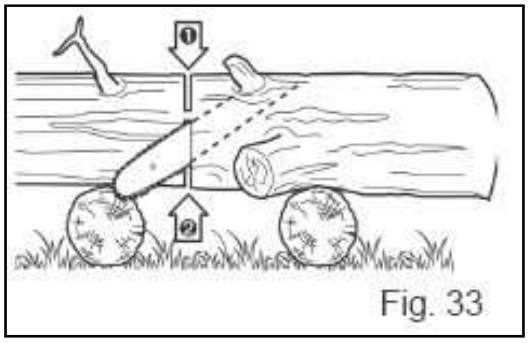
OPERATION

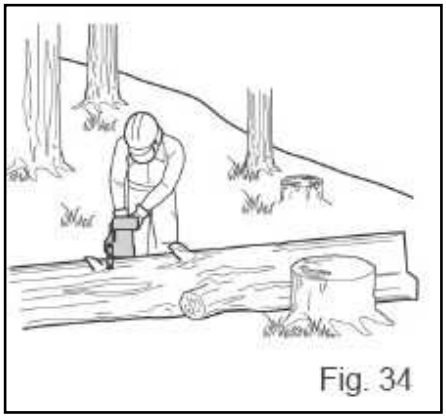
Bucking a Log (continued)


Fig. 31


Fig. 32

When the log is supported on both ends (Fig. 33), cut 1/3 the diameter from the top (overbuck). Then make the finished cut by underbucking the lower 2/3 to meet the first out.


Fig. 33


Fig. 34

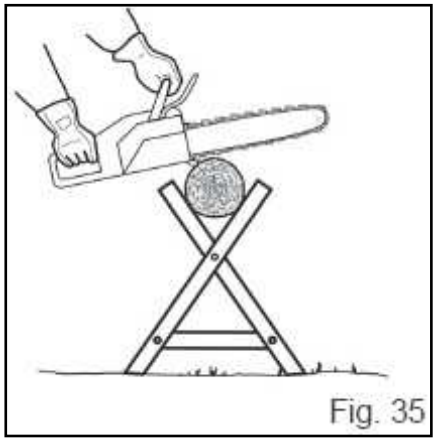
When bucking on a slope always stand on the uphill side of the log (Fig. 34). When "cutting through", to maintain complete control release the cutting pressure near the end of the cut without relaxing your grip on the product handles. Don't let the chain contact the ground. After completing the cut, wait for the saw chain to stop before you move the product. Always stop the motor before moving from the tree to tree.

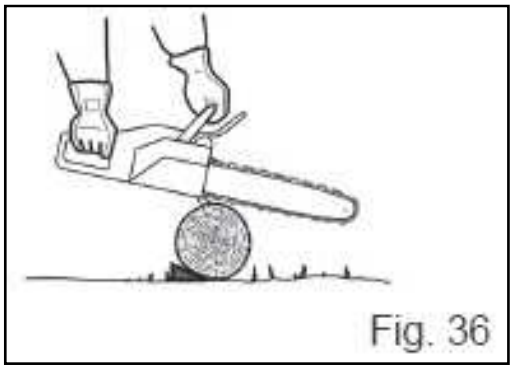
Support small logs on a sawing stand or another log while bucking (Fig. 35).

If the diameter is large enough for you to insert a soft bucking wedge without touching the chain, you should use the wedge to hold the cut open to prevent pinching (Fig. 36).

OPERATION

Bucking a Log (continued)


Fig. 35


Fig. 36

After Use

Switch the product off, disconnect it from the power supply and let it cool down.
Check, clean and store the product as described below.

CLEANING AND MAINTENANCE

The Golden Rules for Care

WARNING! Always switch the product off, disconnect it from power supply and let the product cool down before performing inspection, maintenance and cleaning work!

Keep the product clean. Remove debris from it after each use and before storage.
Regular and proper cleaning will help ensure safe use and prolong the life of the product.
Inspect the product before each use for worn and damaged parts. Do not operate it if you find broken and worn parts.

WARNING! Only perform repairs and maintenance work according to these instructions! All further works must be performed by a qualified specialist!

General Cleaning

Clean the product with a dry cloth. Use a brush for areas that are hard to reach.
In particular clear the air vents(19) after every use with a cloth and brush.
Remove stubborn dirt with high pressure air (max. 3 bar).

NOTE: Do not use chemical, alkaline, abrasive or other aggressive detergents or disinfectants to clean this product as they might be harmful to its surfaces.

Check for worn or damaged parts. Replace worn parts as necessary or contact an authorized service centre for repair before using the product again.

Sprocket Nose
NOTE: It is not necessary to remove the saw chain (4) to lubricate the sprocket nose(6). Lubrication can be done on the job.

Clean the sprocket nose(6).
Using a disposable lube gun, insert the nose of the needle into the lubrication hole (Fig. 37 A) and inject grease until it appears on the outside edge of the sprocket(6) (Fig. 37).

Make sure that the chain brake(2) is deactivated. Rotate the saw chain(4) by hand. Repeat the lubrication procedure until the sprocket(6) has been greased.

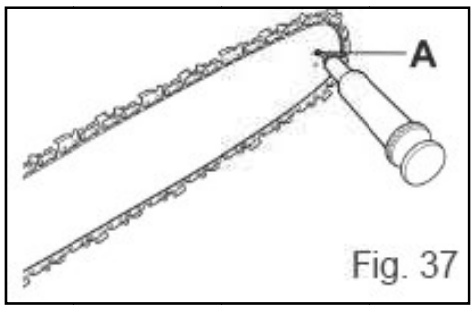


Fig. 37

CLEANING AND MAINTENANCE

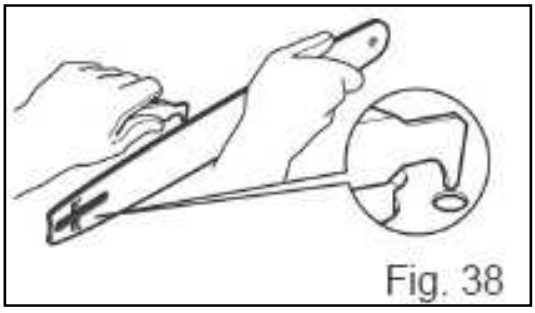
Guide Bar and Saw Chain Maintenance

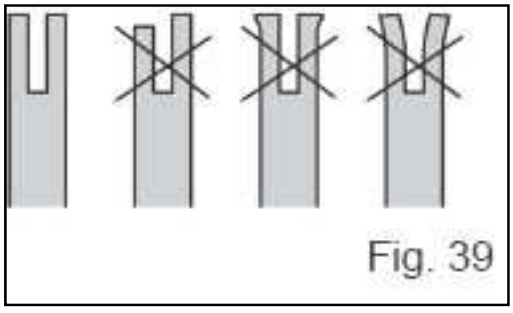
Most guide bar problems can be prevented merely by keeping the product well maintained. Incorrect filling and non-standard cutter and depth gauges settings are the causes of most guide bar problems, primarily resulting in uneven bar wear. As the bar wears unevenly, the rails widen, which may cause the chain to clatter and make it difficult to complete straight cuts. If the guide bar is insufficiently lubricated and the product is operated with a saw chain which is too tight, this will contribute to rapid bar wear. To help minimize bar wear, maintenance of the guide bar as well as the saw chain is recommended.

Disassemble the guide bar and saw chain in reversed order from assembly.
Check the oiling port (22) for clogging and clean if necessary to ensure proper lubrication of the guide bar and saw chain during operation. Use a soft wire small enough to insert into the oil discharge hole.

NOTE: The condition of the oil passages can be easily checked. If the passages are clear, the chain will automatically give off a spray of oil within seconds of the product starting. Your product is equipped with an automatic oiling system.

Check the drive sprocket (20). If it is worm or damaged due to strain, have it replaced by an authorized service agent.
Clear residue from the rails on the guide bar (5) using a screwdriver, putty knife, wire brush or other similar tool. This will keep the oil passages open to provide proper lubrication to the bar (5) and chain(4) (Fig. 38).
Check the guide bar "rail" for wear: Hold a ruler (straight edge" against the side of the guide bar and "cutter side plates". If there is a gap between the ruler and guide bar the guide bar "rail" is normal. If there is no gap (ruler flush against the side of the guide bar) the guide bar "rail) is worn and needs to be replaced with a new one of the same type (Fig. 39).
Turn the guide bar 180° to allow even wear, thereby extending the life span of the guide bar(5).
Check the saw chain for possible wear and damages. Replace it with a new one if required. Experienced users can sharpen a dull saw chain (see section "Saw chain sharpening" below).
Refit the saw chain (4) and the guide bar (5) as described under "Assembly".


Fig. 38


Fig. 39

CLEANING AND MAINTENANCE

Saw Chain Sharpening

NOTE: Never saw with a blunt chain. The saw chain is blunt if you have to push the product into the tree and the chips are very small.

Have your chain (4) sharpened professionally at authorized service centre or sharpen the chain yourself using a proper sharpening kit. Also observe the sharpening instructions supplied with the sharpening kit.

WARNING! Only sharpen the saw chain yourself if you are trained and have experience! Use proper tools to sharpen the saw chain!

The height difference between the tooth and ridge is the cutting depth. When sharpening the saw chain (4) you have to consider the following points (Fig. 40).

- File angle
- Cutting angle
- File position
- Diameter of round file
- File depth

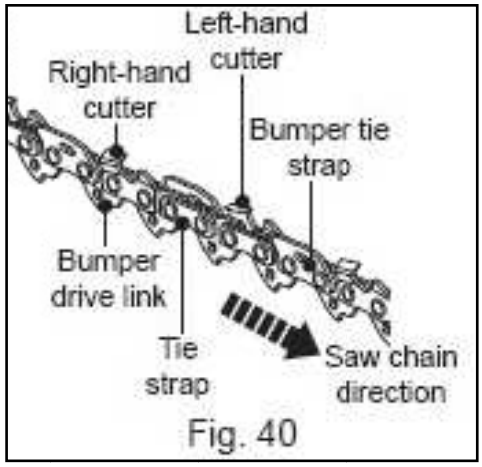


Fig. 40

To sharpen the chain, proceed as follows:

- Use protective gloves.
- Ensure the chain is correctly tensioned.
- Engage the chain brake to lock the chain on the bar.

Use a round file, whose diameter is 1.1 times the cutting tooth depth. Make sure 20% of the file diameter is above the cutter's top plate.

A file guide is available from most reputable tool merchants and is the easiest way to hold the file at the correct position.

CLEANING AND MAINTENANCE

Saw Chain Sharpening (continued)

File at an angle perpendicular to the bar, and at an angle of 25° to the direction of travel(Fig.41).

File the each tooth from the inside towards outside only. File one side of the chain first than turn the saw around and repeat the process.

Sharpen each tooth equally by using the same number of strokes.

Keep all cutter lengths equal. Check the safety depth gauge height every 5 sharpenings. If the depth gauges are also trimmed it is essential that the original profile is restored.

Use a dept gauge measuring instrument to check the height of the depth gauge. Depth gauge measuring jigs are available from most reputable tool merchants (Fig. 42).

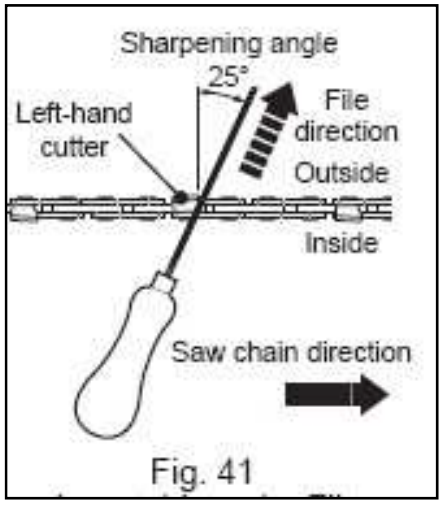


Fig. 41

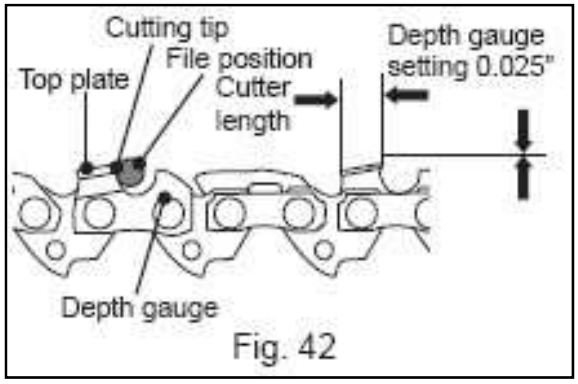


Fig. 42

Chain and Bar Replacement

Assemble the guide bar and saw chain before operation. Follow the operating instructions step-by-step and use the pictures provided as a visual guide to easily assemble the product. Warning! Read all the instructions carefully! Do not connect the product to the power supply until it is completely assembled! Always wear gloves during assembly!

Use only the guide bar (5) and saw chain (4) according to the technical data of the product.
Place the product on a suitable flat surface with the cover (10) facing upwards.
Remove the cap (9), loosen the retaining nut (9) anticlockwise with Knob (8) and remove the cover (10) (Fig.1)
Spread the saw chain (4) out with the cutting edges of the chain pointing in the rotational direction and side the chain into the groove around the guide bar. (Fig.2)

CLEANING AND MAINTENANCE

Chain and Bar Replacement (continued)

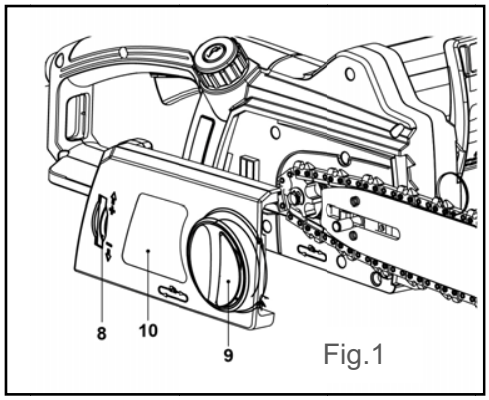


Fig.1

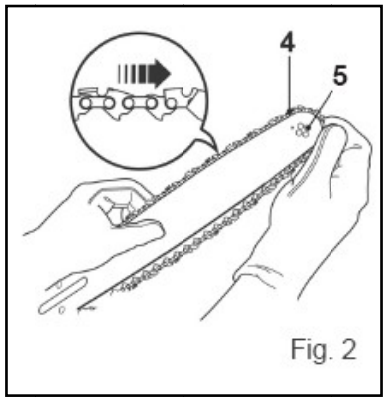


Fig. 2

WARNING! Always use a saw chain designed as "low-kickback" or a saw chain which meets the low-kickback requirements! A standard saw chain (a chain which does not have the kickback reducing guard links) should only be used by an experienced professional operator! Nevertheless, a low-kickback saw chain does not completely eliminated kickback! A low-kickback or "safety" chain should never be regarded as complete protection against injury! Therefore always use a low-kickback saw chain in conjunction with other kickback protection devices such as front guard/chain brake!

Align the guide bar (5) and saw chain (4) assembly with the drive sprocket (20) and bolt (23). Lay the saw chain around the drive sprocket and when lower the guide bar to install it to the bolt. (Fig. 5, 6)

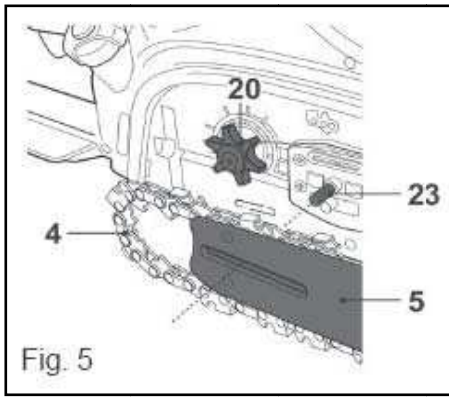
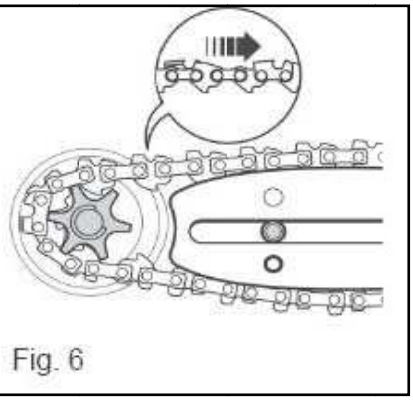


Fig. 5


Fig. 6

CLEANING AND MAINTENANCE

Chain and Bar Replacement (continued)

Replace the cover (10) and slightly tighten the Knob (9) clockwise. (Fig.7) Do not tighten the locking nut completely, saw chain tensioning is required first.

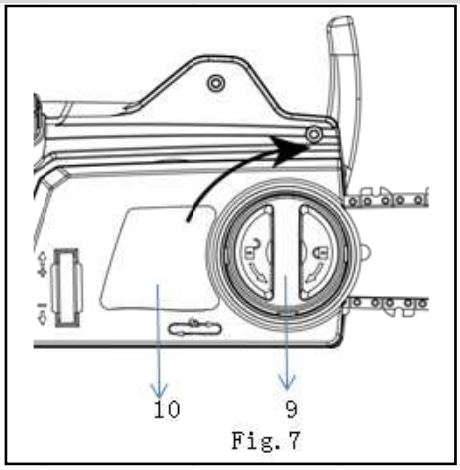


Fig. 7

NOTE: The saw chain (4) has not yet been tensioned. Tension the chain as described under "Saw chain tensioning". After operating the product for approximately 1 hour, adjust the chain tension again.

Saw Chain Tensioning

Always check the saw chain tension before use, after first cuts and regularly during use approximately every five cuts. After initial operation, new chains can lengthen considerably. This is normal during the break-in period and the interval between future adjustments will lengthen quickly.

WARNING! Unplug the product from the power source before adjusting the saw chain tension! The cutting edges of the saw chain are sharp. Always wear protective gloves when handling the chain!

Always maintain proper chain tension! A loose chain increases the risk of kickback! A loose chain may jump out of the guide bar groove! This may injure the operator and damage the chain! A loose chain will cause rapid wear to the chain, guide bar and sprocket!

Tensioning the chain too tightly will overload the motor and cause damage, and insufficient tension can cause chain derailing, whereas a correctly tightened chain provides the best cutting characteristics and prolonged working life! The chain life mainly depends upon sufficient lubrication and correct tensioning!

CLEANING AND MAINTENANCE

Chain and Bar Replacement (continued)

Set the product on a suitable flat surface.
Turn the tension knob (8)clockwise until the chain "tie straps" are adjust touching the bottom edge of the guide bar(5) Fig.(8).

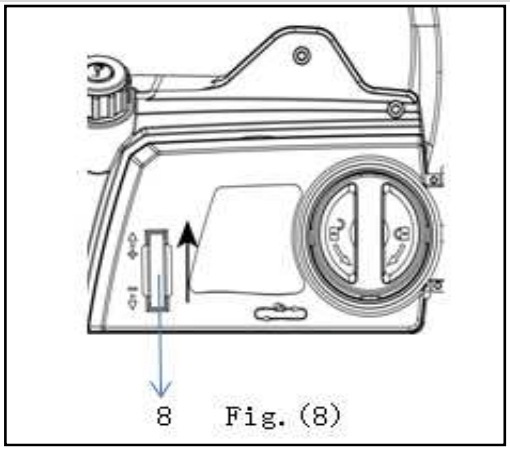


Fig. (8)

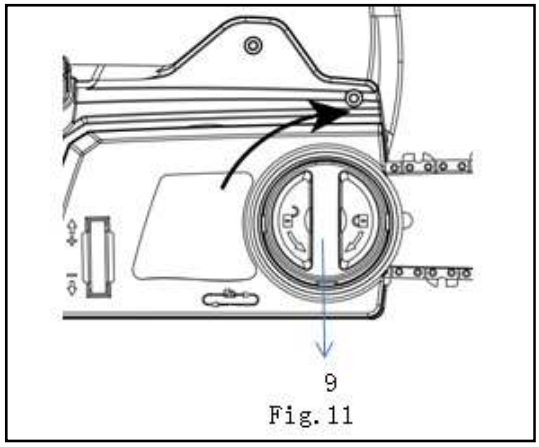
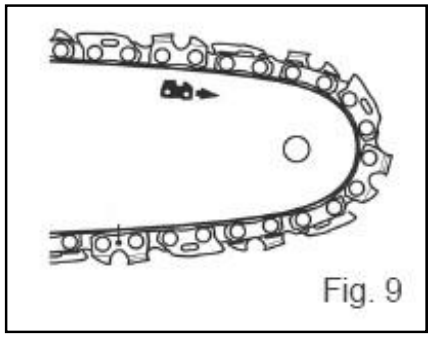


Fig. 11

Check the chain tension using one hand to lift the saw chain(4) against the weight of the product. The correct chain tension is achieved when the saw chain can be lifted by approximately 2-4mm from the guide bar (5) in the centre (Figs. 9, 10).


Fig. 9

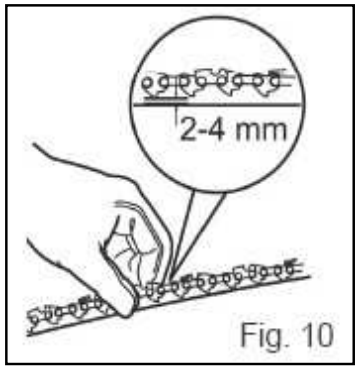


Fig. 10

Turn the knob (9) clockwise to tighten the cover (10) completely (Fig.11).

Power Cord

If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a safety hazard.

Repair

This product does not contain any part that can be repaired by the consumer. Contact a qualified specialist to have it checked and repaired.

CLEANING AND MAINTENANCE

Storage

Clean the product as described above.
Store the product and its accessories in a dry, frost-free place.
Always store the product in a place that is inaccessible to children. The ideal storage temperature is between 10 to 30° C.
We recommend using the original package for storage or covering the product with a suitable cloth to protect it against dust.

Transportation

Switch the product off and disconnect it from power supply before transporting it anywhere.
Attach transportation guards, if applicable.
Always carry the product by its handle.
Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles.
Secure the product to prevent it from slipping or falling over.

TECHNICAL DATA

Rated Voltage	220-240V~ 50Hz
Power input power	1800W
Rated no load speed	8580 min^{-1}
Guide bar length	360mm
Guide bar type	OREGON 140SDEA041
Saw chain type	OREGON 91PJ052X
Volume of oil tank	100ml
Front handle a_h	5.944m/s^2, K=1.5m/s^2
Rear handle a_h	4.644m/s^2, K=1.5m/s^2
Sound pressure level L_{PA}	91.70dB(A) K=2.5dB(A)
Sound power level L_{WA}	102.70dB(A) K=2.5dB(A)
Guaranteed sound power level L_{WA}	108dB(A)
Protection class	II ⧈
Degree of protection	IPX0
Machine weight	5.6kg

The declared vibration value has been measured in accordance with a standard test method and may be used for comparing one product with another.
The declared vibration may also be used evaluate the exposure for the user caused by vibration in advance.

TROUBLESHOOTING

Suspected malfunctions are often due to causes that the users can fix themselves. Therefore check the product using this section. In most cases the problem can be solved quickly.

WARNING! Only perform the steps described within these instructions! All further inspection, maintenance and repair work must be performed by an authorised service centre or a similarly qualified specialist if you cannot solve the problem yourself!

Fault	Cause	Remedy
Motor does not run	No electricity	Check socket, cables and plugs. Damaged cable: Have repaired by a service agent. Do not patch cables with insulation tape. Damaged switch: Have repaired by a service agent. See section on chain brake.
	Worn carbon brushes	Carbon brushes need replacing.
Chain does not move	Chain brake	Check the chain brake and release if necessary.
Poor cutting performance	Blunt saw chain	Sharpen or replace the saw chain.
	Chain tension	Check chain tension.
	Saw chain fitted incorrectly	Check saw chain
Chain jumps off guide bar	Chain tension	Check chain tension.
Chain works with difficulty	Chain tension	Check chain tension.
Chain becomes hot	Chain lubricant	Check oil level. Check chain lubrication.

GURANTEE

1. This product has been manufactured to a high quality standard. It is guaranteed against faulty materials and workmanship for warranted years from purchase, please retain your till receipt as proof of purchase.

2. If the product is found to be defective within the relevant time period, we will either replace all defective parts or, at our discretion, replace the unit free of charge with the same item or items of a greater value and/or specification.

3. This guarantee does not cover defects caused by or resulting from:
- Misuse, abuse or neglect,
- Trade, professional or hire use,
- Repairs attempted by anyone other than our authorized repair centre (call 0333 300 1614);

4. In the unlikely event that this product does develop a fault please call the helpline.

5. This guarantee does not affect your statutory rights.

RECYCLING AND DISPOSAL



The product comes in a package that protects it against damage during shipping. Keep the package until you are sure that all parts have been delivered and the product is function properly. Recycle the package afterwards.
Old products are potentially recyclable under WEEE and do not, therefore, belong in your household rubbish. You are requested to assist us and our contribution to saving resources and protecting the environment by handing in this appliance at an equipped collection centre (if there is one available).

PLUG REPLACEMENT

(UK & IRELAND ONLY)
If you need to replace the fitted plug then follow the instructions below.
IMPORTANT
The wires in the mains lead are colored in accordance with the following code:
Blue = Neutral
Brown = Live
As the colors of the wires in the electrical cord of this appliance may not correspond with the colored markings identifying the terminals in your plug, proceed as follows. The wire which is colored blue must be connected to the terminal which is marked with N. The wire which is colored brown must be connected to the terminal which is marked with L.

WARNING! Never connect live or neutral wires to the earth terminal of the plug. Only fit an approved 13Amp BS1363/A plug and the correct rated fuse
.
NOTE: If a molded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket.

