Qualcast 2000W Chain Saw

Instruction Manual

284156 (Model:YT4353-02)





After Sales Support

Helpline No 0333 2000 336

Web http://www.homebasespares.co.uk/

Important-Please read these instructions fully before starting assembly.

These instructions contain important information that will help you get the best from your chainsaw, ensuring it is assembled correctly and safely.

If you need help or have damaged or missing parts, call the Customer Helpline on **0333 2000 336**.

Contents

General power tools safety warnings	4
General Power Tool Safety Warnings	4
Work Area Safety	4
Electrical Safety	4
Personal Safety	4
Power Tool Use and Care	6
Safety Warnings Specific to the Product	6
Service	8
Additional safety points for your electric chain saw	9
Causes and Operator Prevention of Kickback	10
Intended Use / Not Intended Use	11
Residual Risks	11
Symbols	12
Parts list	13
Intended use	15
Preparation	15
Tensioning Chain	15
Lubrication	16
Kickback	18
Operation	19
Switching On And Off	19
Chain Brake	20
Stop The Chain Saw	20
Tips For Cutting	21
Trimming a tree	21
Felling a tree	22
Limbing a tree	23
Bucking a log	23

Contents

Cleaning and maintenance	24
Cleaning saw body	25
Care of guide bar	25
Normal guide bar maintenance	25
Sharpening the chain	26
Chain and chain bar assembly	27
Troubleshooting	30
Technical data	30
Accessories	32
Environmental protection	32
Plug replacement	33

General Power Tool 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.



WARNING! Read all safety warnings designated by the symbol and all instructions. 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) The use of a residual current device (RCD) when using this tool is recommended. 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.

Personal Safety (continued)

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 energising 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.

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.

Safety warnings specific to the product

a) 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.

b) 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.

Safety warnings specific to the product (continued)

c) 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.

d) Do not operate a chain saw in a tree.

Operation of a chain saw while up in a tree may result in personal injury.

e) 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.

f) 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.

g) 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.

h) 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, always fit the guide bar cover.

Proper handling of the chain saw will reduce the likelihood of accidental contact with the moving saw chain.

i) Follow instructions for lubricating, chain tensioning and changing accessories.

Improperly tensioned or lubricated chain may either break or increase the chance for kickback.

j) Keep handles dry, clean, and free from oil and grease.

Greasy, oily handles are slippery causing loss of control.

k) 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.

I) Causes and operator prevention of kickback

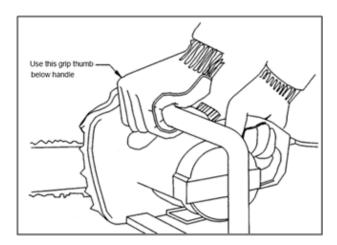
Kickback may occur when the nose or tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain in the cut. Tip contact in some cases may cause a sudden reverse reaction, kicking the guide bar up and back towards the operator. Pinching the saw chain along the top of the 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 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:

Safety warnings specific to the product (continued)

m) 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.

n) 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.

- o) Only use replacement bars and chains specified by the manufacturer. Incorrect replacement bars and chains may cause chain breakage and/or kickback.
- p) Follow the manufacturer's sharpening and maintenance instructions for the saw chain.

Decreasing the depth gauge height can lead to increased kickback.

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.

b)If the replacement of the supply cord is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard.

Additional Safety Points For Your Electric Chain Saw

- 1. 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.
- 2. 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.
- 3. 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.
- **4. Do not operate a chain saw in a tree.** Operation of a chain saw while up in a tree may result in personal injury.
- 5. 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.
- **6. 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.
- **7. 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.
- **8.** 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, always fit the guide bar cover. Proper handling of the chain saw will reduce the likelihood of accidental contact with the moving saw chain.
- **9. Follow instructions for lubricating, chain tensioning and changing accessories.** Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- **10. Keep handles dry, clean, and free from oil and grease.** Greasy, oily handles are slippery causing loss of control.
- **11.** 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.
- 12. Using of a residual current device with a tripping current of 30mA or less is recommended.

Additional Safety Points For Your Electric Chain Saw

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 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.

Additional Safety Points For Your Electric Chain Saw

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

Warnings Symbols



Indicates danger, warning, or caution.



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





Wear ear protection, eye protection, respirator and gloves when using the product.



Wear safety boots to protect against electric shock

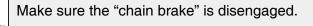


Do not expose to rain



Remove plug from the mains immediately if cable is damaged or cut







Conforms to relevant safety standards.



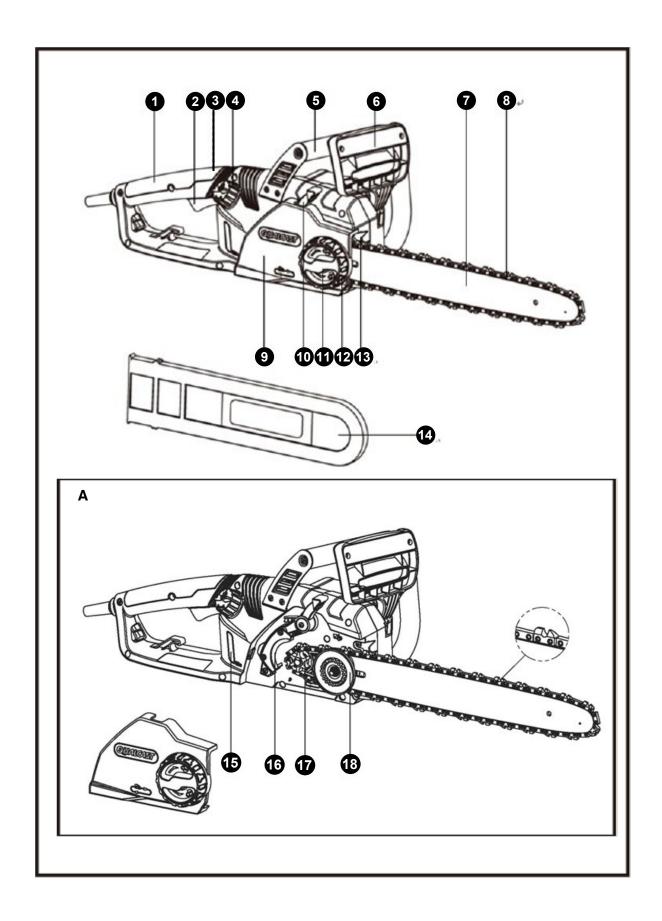
This class II symbol indicates that the product is correctly insulated. Grounding this machine is therefore unnecessary.



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)



Parts List

Parts

1 REAR HANDLE	11 CHAIN LOCKING KNOB

OACTIVATION LEVER FOR SHARPENING THE CHAIN

9CHAIN/BAR COVER

Remark: Above are all assembled in the standard delivery.

Intended Use

The chain saw is intended for sawing of trees, tree trunks, branches, wooden beams, planks, etc. Cuts can be sawed with or across the grain. This product is not suitable for sawing mineral materials.

Preparation

TENSIONING CHAIN

Always check the chain tension before use, after the first cuts and regularly during use, approx. every 10 minutes. Upon initial operation, new chains can lengthen considerably.



WARNING: Unplug chain saw from power source before adjusting saw chain tension.



WARNING: Cutting edges on chain are sharp. Use protective gloves when handling chain.



WARNING: Maintain proper chain tension always. A loose chain will increase the risk of kickback. A loose chain may jump out of guide bar groove. This may injure operator and damage chain. A loose chain will cause chain, chain bar, and sprocket to wear rapidly.

The chain life of the saw chain mainly depends upon sufficient lubrication and correct tensioning.

Avoid tensioning the chain if it is hot, as this will cause the chain to become over tensioned when it cools down.

Please note that the chain tension has been already adjusted ready for use, but kindly double check if the chain tension is correct. If the chain tension is incorrect, tighten or loosen the chain and bar to the best position. The machine can be used only on the condition that the chain tension is correct and the bar is fixed for safety.

The correct chain tension is reached when the chain a can be raised approx. 2–3mm from the chain bar in the centre. This should be done by using one hand in a glove to raise the chain against the weight of the machine. (See Fig. F)

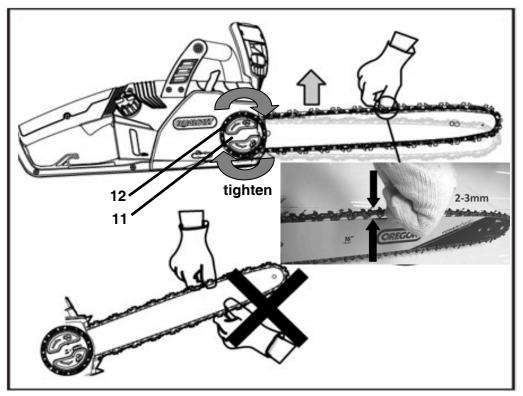
In case of too tighten chain and bar, please make the below action:

- 1. Loosen the chain bar by turning the chain locking knob 11 anticlockwise until it is slightly loose (usually half or one cycle away) (See Fig. F)
- 2. Loosen the chain tensioning knob (2) anticlockwise a little every time to check the chain tension until it is correct.
- 3. When the chain tension is correct, please fix the position of chain tensioning knob 12 by one hand while turning back the chain locking knob 11 clockwise by another hand to the end.

In case of too loose chain and bar, please make the below action:

- 1. Loosen the chain bar by turning the chain locking knob 11 anticlockwise until it is slightly loose (usually half or one cycle away) (See Fig. F)
- 2. Tighten the chain tensioning knob 2 clockwise a little every time to check the chain tension until it is correct.
- 3. When the chain tension is correct, please fix the position of chain tensioning knob **12** by one hand while turning back the chain locking knob **11** clockwise by another hand to the end.

TENSIONING CHAIN (continued)



F

LUBRICATION



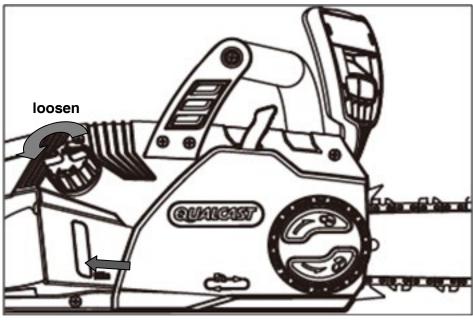
IMPORTANT: the chain saw is not supplied with lubricating oil itself but there is one bottle of lubricating oil(Hydraulic ISO 32) in the box for use. It is essential to fill with oil before use. Never operate the chain saw without chain oil or at an empty oil tank level (please check the oil level window on the chain saw), as this will result in extensive damage to the product.

Chain life and cutting capacity depend on optimum lubrication. Therefore, the chain is automatically oiled during operation via oil outlet.

The oil tank holds 150ml of oil, enough to lubricate the chain for 20-25 minutes of cutting. The oil tank level can be checked through the chain lubricant tank inspection window provided on the right side of the saw. (See Fig. G)

The oil supplied is complaint with REACH/Formulated product.

LUBRICATION (continued)



G

Filling oil tank:

- 1. Set chain saw on any suitable surface with oil filler cap facing upward.
- 2. Clean area around the oil filler cap with cloth unscrew cap.
- 3. Add chain saw oil until reservoir is full, do not overfill. Notice the oil level in the oil reservoir window on right side of the chain saw.
- 4. Avoid dirt or debris entering oil tank, refit oil filler cap (4) and tighten.



IMPORTANT: To allow venting of the oil reservoir, small breather channels are provided between the oil filler cap and the strainer, to prevent leakage ensure machine is left in a horizontal position (oil filler cap (4) uppermost) when not in use.

It is important to use only the recommended oil to avoid damage to the chain saw. Never use recycled/old oil. Use of non approved oil will invalidate the warranty.

Checking the automatic oil function:

Check the automatic operation of the chain lubrication by pointing the tip of the switched – on saw towards a piece of paper laying on the ground, if a patch of oil appears and becomes larger, then the automatic oil function is working. If there are no traces of oil even though the oil tank is full, then the automatic oil function is not working.

If the automatic oil function is not working, remove the chain bar and clean out the oil ways of the chainsaw and chain bar, on reassemble if the chainsaw is still not working, take the chain saw to an authorized dealer.

KICKBACK

Warning: 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 lightning fast 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 injury to user.

Kickback safety devices on this saw

This saw has a low-kickback chain and reduced kickback guide bar, both items reduce the chance of kickback, kickback can still occur with this saw.

Properly install front hand guard, this item can reduce injures from kickback, do not remove front hand guard, do not replace front hand guard with substitute.

The following steps will reduce the risk of kickback.

Use both hands to grip saw while saw is running. Use firm grip. Thumbs and fingers must wrap around saw handles.

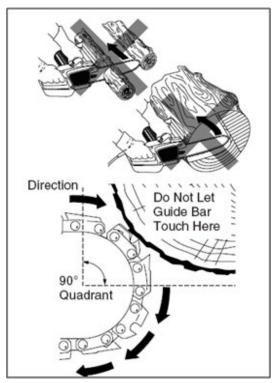
Keep all safety items in place on saw make sure they work properly.

Do not overreach or cut above shoulder height.

Keep solid footing and balance at all times.

Stand slightly to left side of saw. This keeps your body from being in direct line with chain.

Do not let guide bar nose touch anything when chain is moving



KICKBACK (continued)

Never try cutting through two logs at same time, only cut one log at a time.

Do not bury guide bar nose or try plunge cut(boring into wood using guide bar nose)

Watch for shifting of wood or other forces that may pinch chain.

Use extreme caution when re-entering a previous cut.

Use low-kickback chain and guide bar supplied with this chain saw. Only replace these parts with chains and guide bar listed in this manual.

Never use dull or loose chain, keep chain sharp with proper tension.

Do not hand sharpen chain on automatic chain sharpening (fast sharp) models.

Avoid jamming

Always cut into the compression wood first until the cut starts to close. Always make the compression cut beneath if the log or limb is suspended from one end, and on top if it is supported at both ends, cut from the other side towards the compression cut, make a habit of using a wedge to prevent the compression cut jamming tight on the chainsaw blade.

Operation

Switching on and off

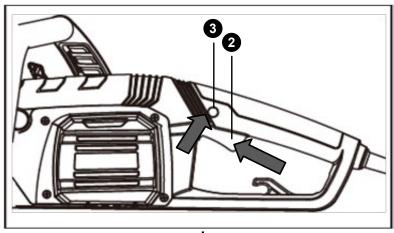


1. SWITCHING ON AND OFF (See Fig. I)

ATTENTION: Check the voltage and current supply: The voltage and current supply must comply with the ratings on the type plate.

For switching on the machine, press the lock-off 3 button, then fully press the on/off switch 2 and hold in this position. The lock-off button 3 can now be released.

For switching off, release the on/off switch 2. Do not stop chain saw after sawing by activating the front hand guard (chain brake).



Chain brake

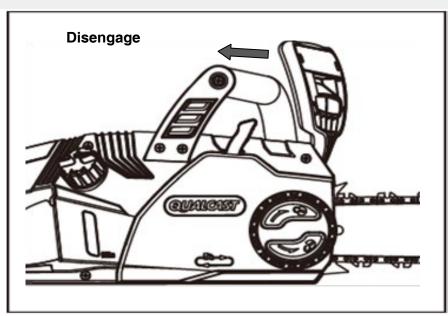
2. CHAIN BRAKE (See Fig. J)

WARNING! Check the voltage and current supply. The voltage and current supply must comply with the ratings on the type plate.



WARNING! Ensure the extension cord is of the proper size and type for your saw (≥ 1.5 mm2)

Make sure the chain brake level is disengaged. The motor will not start if the chain brake is in the engaged position. Disengage the chain brake level by pulling backward toward the front handle.



J

Grip the product with both hands, left hand holding the front handle (do not hold chain brake) and the right hand holding the rear handle. Press the lock-off button (3), then fully press the switch trigger (2) and hold in this position. The lock-off button can be released now.

NOTE: It is not necessary to maintain pressure on the lock-off button once the switch trigger is squeezed and the motor is running. The lock-off button is a safety device to avoid accidental starting.

STOP THE CHAIN SAW

3. STOP THE CHAIN SAW

- -Release the Trigger On / Off to stop the machine.
- -The chain stops completely after a few seconds.
- -Disconnect the plug source for safety.
- -When the machine is cooled down for several minutes, it is advised to put on the blade protection cover for longer storage.

TIPS FOR CUTTING

4. TIPS FOR CUTTING

- -Use the chain saw to cut wood (tree trunks, branches, planks and beams). Never use the saw for other materials.
- -Take care that chain does not come into contact with the ground or foreign materials other than wood.
- -When sawing, do not put pressure on the chain, but let it work with a slight leverage above wood
- -The best results are obtained when the cutting speed of the chain is not reduced by stress too intense.



Attention to the end of the cutting when the saw cut and finished it out of alignment, the weight changes unexpectedly. There is a risk of an accident for the legs and feet. Do not remove the chainsaw route only when the system is rotating.

- -While cutting, always:
- -Run the chainsaw motor at full revs, this makes the job safer, as these is less chance of pull-in or kick-back.
- -Position your body to the left of the chainsaw so if it kicks back uncontrollably. It goes over your right shoulder.
- -Keep a firm grip with your left hand on the front handle, with your thumb securely below the handle. The swivel of your wrist in a kick-back situation will activate the chain brake.
- -Make sure the chain is tensioned correctly.
- -Observe the size of wood shavings. If they become dusty your chain could need sharpening.

Trimming a tree (pruning)

Trimming a tree (pruning) (See Fig. K)

Warning: Avoid kickback. Kickback can result in severe injury or death.

Warning: Do not operate chain saw while In a tree, on a ladder or any other unstable surface In any awkward position. You may lose control of saw causing severe injury.

Warning: Do not cut limbs higher than your shoulders.

Trimming a tree is the process of cutting limbs from a living tree, makes sure your footing is firm keep feet apart. Divide your weight evenly on both feet. Follow directions below to trim a tree.

Make first cut 15 centimeters from tree trunk on underside of limb, use top of guide bar to make this cut. Cut 1/3 through diameter of limb. Move five to ten centimeters farther out on limb.

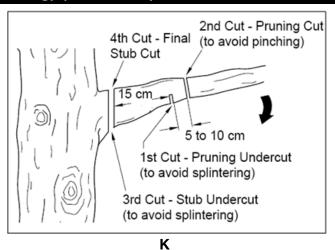
Make second cut from above limb. Continue cut until you cut limb off.

Make third cut as close to tree trunk as possible on underside of limb stub. Use top of guide bar to make this cut. Cut 1/3 through diameter of stub.

Make fourth cut directly above third cut. Cut down to meet third cut, this will remove limb stub.

CAUTION: Seek professional help if facing conditions beyond your ability.

Trimming a tree (pruning) (continued)



Felling a tree

Felling a tree (See Fig. L)

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 chain saw 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 as illustrated in Figure L.

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.

Notching undercut

Make the notch 1/3 the diameter of the tree, perpendicular to the direction of falls as illustrated in Figure L. 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.

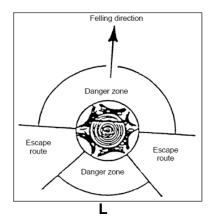
Felling back cut (See Fig. M)

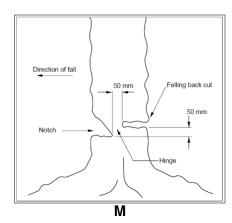
Make the felling back cut at least 50 mm higher than the horizontal notching cut as illustrated in Figure M. Keep the felling back cut parallel to the horizontal notching cut. Make the felling back cut so enough wood is left to act as a hinge. The hinge wood keeps the tree from twisting and falling in 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.

When the tree begins to fall remove the chain saw from the cut, stop the motor, put the chain saw down, then use the retreat path planned. Be alert for overhead limbs falling and watch your footing.

Felling a tree (continued)

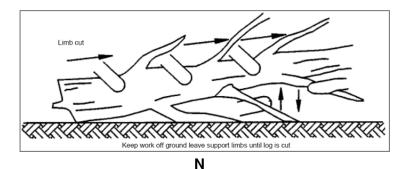




Limbing a tree

Limbing a tree (See Fig. N)

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 as illustrated in Figure N. Branches under tension should be cut from the bottom up to avoid binding the chain saw.



Bucking a log

Bucking a log (See Fig. O/Fig. P/Fig. Q/Fig. R)

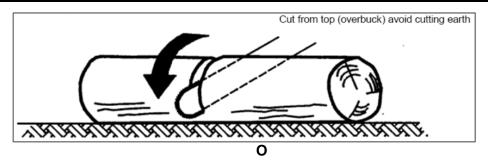
Bucking is cutting a log into lengths. It is important to make sure your footing is firm and your weight is evenly distributed on both feet. When possible, the log should be raised and supported by the use of limbs, logs or chocks. Follow the simple directions for easy cutting When the log is supported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

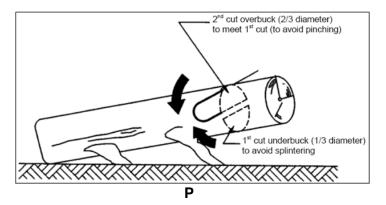
When the log is supported on one end, as illustrated in Figure P, cut 1/3 the diameter from the underside (underbuck). Then make the finished cut by overbucking to meet the first cut.

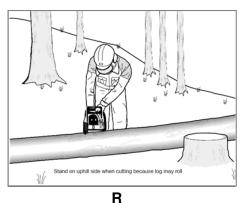
When the log is supported on both ends, as illustrated in Figure Q, cut 1/3 the diameter from the top (overbuck). Then make the finished cut by underbucking the lower 2/3 to meet the first cut.

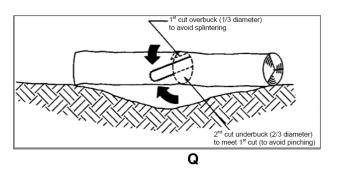
When bucking on a slope always stand on the uphill side of the log, as illustrated in Figure R. When "cutting through", to maintain complete control release the cutting pressure near the end of the cut without relaxing your grip on the chain saw handles. Don't let the chain contact the ground. After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

Bucking a log (continued)









Cleaning And Maintenance

Do not use water, solvents or polishes as medium for clearance and maintenance. Remove all debris, especially from the motor cooling vents.

Remove and brush clean the cover plate, chain and chain bar after 1 to 3 hours of use.

Clean the area under the cover plate, the drive sprocket and chain bar assembly using a soft brush.

Clean oil outlet with a clean cloth.

If the chain saw is to be stored for a longer period of time, clean chain and chain bar.

Store in a secure, dry place out of the reach of children.

Do not place other objects on the chain saw.

To prevent leakage ensure machine is left in a horizontal position (oil filler cap 4 uppermost). When storing machine in original packaging the oil tank must be completely emptied.

Cleaning And Maintenance

Cleaning saw body



Warning: unplug chain saw from power source before servicing, sever injury or death could occur from electrical shock or body contact with moving chain.

Warning: cutting edges o chain are sharp, use protective gloves when handling chain.

Warning: cleaning saw body.

Do not submerge saw in any liquids.

Do not use products that contain ammonia, chlorine, or abrasives.

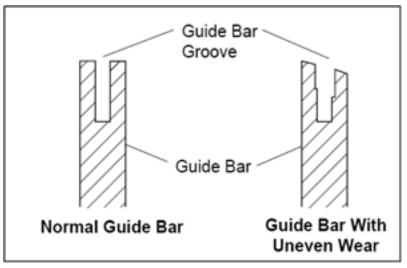
Do not use chlorinated cleaning solvents, carbon tetrachloride, kerosene, or gasoline.

Keep saw body clean, use a soft cloth dampened with a mild soap ad water mixture, wipe saw body to clean.

Care of guide bar (See Fig. S)

Uneven bar wear causes most guide bar problems, incorrect sharpening of chain cutter and depth gauge settings often cause this, when bar wears unevenly, it widens guide bar groove, this causes chain clatter ad river popping. Saw will not cut straight, replaces guide bar if this occurs.

Inspect guide bar before sharpening chain. A worn or damaged guide bar is unsafe. A worn or damaged guide bar will damage chain, it will also make cutting harder.



S

Normal guide bar maintenance (See Fig. T)

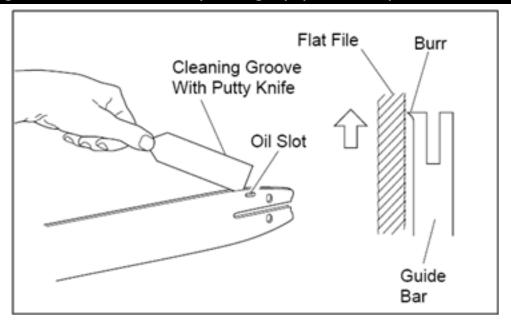
- 1. Remove guide bar from chain saw.
- 2. Remove sawdust from guide bar groove periodically. Use putty knife or wire,
- Clean oil slots after each day of use.
- 4. Remove burrs from sides of guide bar. Use flat file to make side edges square.

Replace guide bar when

- Bar is bent or cracked.
- Inside groove of bar is badly worn.

Cleaning And Manteniance

Normal guide bar maintenance (See Fig. T) (continued)



Т

Sharpening the chain

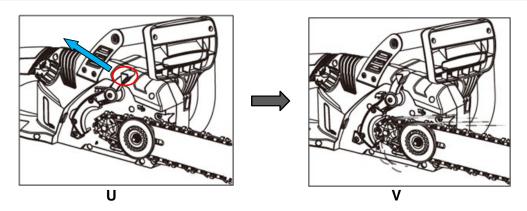
The machine is equipped with PowerSharp® sharpening system from Oregon®, integrated sharpening system, a fast and easy way to sharpen chain on the saw. It is time to sharpen the saw chain when cuts take longer or the wood chips become smaller, in extreme cases turning to saw dust.



IMPORTANT: THE POWERSHARP INTEGRATED SHARPENING SYSTEM IS FOR USE ONLY WITH POWERSHARPCHAIN.NEVER ATTEMPT TO SHARPEN OTHER CHAIN WITH THE INTEGRATED SHARPENER.DAMAGE TO THE CHAIN AND SHARPENER WILL OCCUR.

IMPORTANT: POWERSHARP CHAIN USES UNIQUE TOP-SHARPENING CUTTERS AND CAN ONLY BE SHARPENED WITH A GENUINE POWERSHARP SHARPENER.

With the saw at full speed, lightly lift the PowerSharp lever for 3 seconds (Fig.U). Spark will be visible when the cutters are in contact with the sharpening stone. (Fig V)



Cleaning And Manteniance

Sharpening the chain (continued)

Make a test cut to determine if the chain has been sufficiently sharpened. If not, repeat the sharpening procedure until the chain is sufficiently sharp.



CAUTION: SHARPENING WITH THE POWERSHARP SYSTME PRODUCES LOW ENERGY SPARKS.



WARNING: POWERSHARP SHOULD NOT BE USED IN THE PRESENCE OF EXPOSED, EXTREMELY FLAMMABLE MATERIALS SUCH AS GASOLINE AND ACETYLENE.

IMPORTANT: IT IS NORMAL OT SEE A SMLL AMOUNT OF SPARKS AND SMOKE DURING SHARPENING AS THE CUTTERS CONTACT THE STONE AND FRICTION HEATS THE CHAIN.

REPLACING THE SHARPENING STONE

The sharpening stone is designed to wear at the same rate as the chain. Always replace to the stone when replacing the chain, even if appears to have more life.



CAUTION: REPLACE POWERSHARP SAW CHAIN AND THE SHARPENING STONE AT THE SAME TIME. FAILURE TO DO SO COULD RESULT IN DECREASED PERFORMANCE OR DAMAGE TO THE CHAIN AND/OR SHARPENING STONE.

IMPORTANT: THE POWERSHARP INTEGRANTED SHARPENING SYSTEM IS FOR USE ONLY WITH POWERSHARP CHAIN

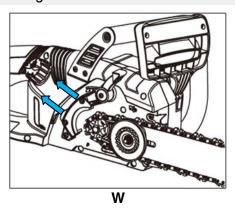
With the chainsaw off and cool and the power line removed from the power supply, remove the side cover by removing the side cover knob. Install the new sharpening stone as follows:

Remove the two screws holding the sharpening stone. Remove the stone (See Fig.W)

Make sure the Powersharp lever and surrounding area are free of debris.

Place the new stone in place. Replace the screws and tighten snugly.

Reinstall side cover and tighten the side cover knob.



CHAIN AND CHAIN BAR ASSEMBLY

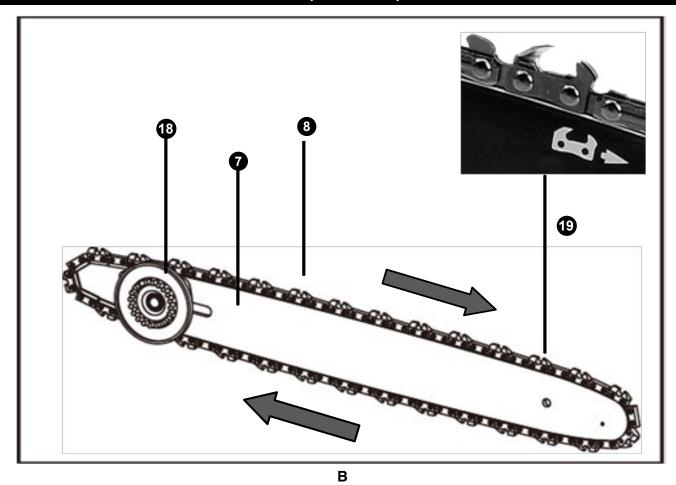


WARNING! Do not connect the chain saw to mains before it is completely assembled. Always use gloves when handling the chain.

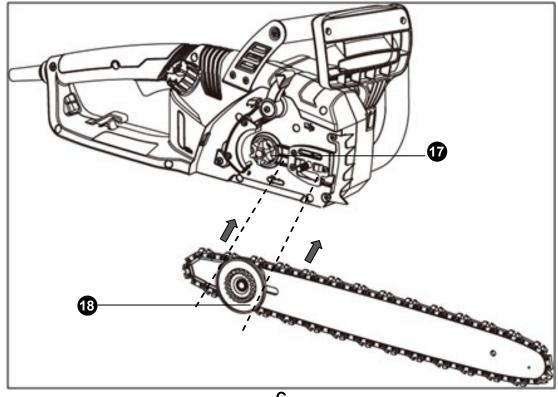
- 1. Unpack all parts carefully.
- 2. Place the chain saw on any suitable flat surface.
- 3. Slide the chain 8 in the slot around the guide bar 7 Ensure chain is in correct running direction by comparing with chain symbol 19. Ensure the guide wheel 18 is facing outwards. (See Fig. B)

Cleaning And Manteniance

CHAIN AND CHAIN BAR ASSEMBLY (continued)



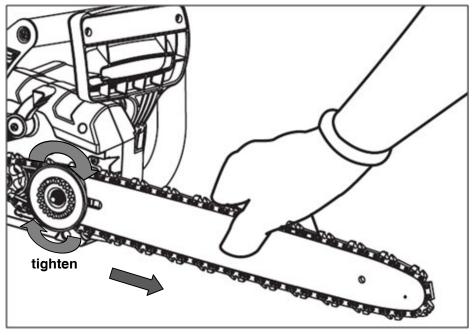
4. Fit the chain onto the drive sprocket 17 and guide the guide bar 7, so that the the central hole of guide wheel fit into the keyway of the guide bar 7. (See Fig. C)



Assembly

CHAIN AND CHAIN BAR ASSEMBLY (continued)

5. Check if all parts are seated properly and hold chain and guide bar in a level position. (See Fig. D)

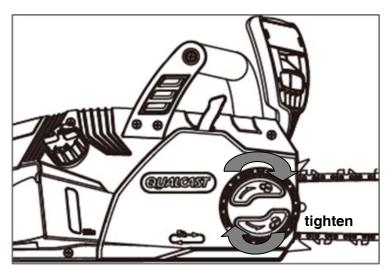


D

CHAIN AND CHAIN BAR ASSEMBLY (continued)

6. Fit the cover plate, ensure that the guide wheel 18 fits into the groove of the cover plate 12. (See Fig. A)

7. Tighten the chain cover by turning the chain locking knob 11 clockwise until it is close to fully tight (half or one cycle away to the most) (See Fig. E) and then tighten the chain tensioning knob 12 clockwise before tightening the chain locking knob 11 again to the most.



Ε



WARNING: The chain is not yet tensioned. Tensioning the chain applies as described under "TENSIONING CHAIN". The chain now needs to be inspected to make sure it is properly tensioned.

Troubleshooting

Never use tools with defective On/Off switches or defective Kickback brake(Hand Guard). In the case of all other types of technical faults, please contact helpline or local service center.

Technical Data

Product data

Voltage	220-240V~ 50Hz
Rated power	2000W
Bar length	40cm
Chain speed	13.5 m/s
Oil tank capacity	150ml
Chain pitch	3/8"
Number of chain links	56
Chain gauge	0.05"
Saw chain type	Oregon 91PS56X
Grinding stone	243-0177
Bar type	Oregon 160SDEA041
Protection class	II
Machine weight (chain & bar included)	6.6kg

Noise data

Sound pressure level LPA	93.99dB(A)
Sound power level LWA	104.32dB(A)
Guaranteed sound power level LWA	110dB(A)
Vibration ah	5.084m/s2 K=1.5m/s2

Technical Data

Vibration emission



WARNING! The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used dependant on the following examples and other variations on how the tool is used:

How the tool is used and the materials being cut or drilled.

The tool being in good condition and well maintained

The use the correct accessory for the tool and ensuring it is sharp and in good condition.

The tightness of the grip on the handles and if any anti vibration accessories are used.

And the tool is being used as intended by its design and these instructions.

This tool may cause hand-arm vibration syndrome if its use is not adequately managed.



WARNING! To be accurate, an estimation of exposure level in the actual conditions of use should also take account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Helping to minimize your vibration exposure risk.

ALWAYS use sharp chisels, drills and blades

Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate)

If the tool is to be used regularly then invest in anti vibration accessories.

Avoid using tools in temperatures of 100C or less.

Plan your work schedule to spread any high vibration tool use across a number of days.

- -That the declared vibration total value has been measured accordance with a standard test method and may be used for comparing one tool with another;
- -That the declared vibration total value may also be used in a preliminary assessment of exposure.
- -That the vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking accounts of all parts of operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time.)

Accessories

Lubrication oil 1 bottle with capacity 100ML Blade protection cover 1PC (already assembled) Bar 1PC (already assembled) Chain 1PC (already assembled)

We recommend that you purchase your accessories from the same store that sold you the tool. Use good quality accessories marked with a well-known brand name. Choose the type according to the work you intend to undertake. Refer to the accessory packaging for further details. Store personnel can assist you and offer advice.

Environmental Protection



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice

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.

