CS4200 CHAINSAW

QUALCUT

POWER PRODUCTS LLC.

GARDEN MASTER SERIES

CS4200 CHAINSAW

42CC

OPERATING INSTRUCTIONS

CONTENTS

Description of symbols

The rating plate on your tool may show symbols. These represent important information about the product or instructions on its use.

Z1085 Conforms to relevant safety standards.

Wear hearing protection.
Wear eye protection.
Wear head protection.

Read these instructions for use carefully.

Wear safety footwear.

Wear safety gloves.

Warning.

Use at a distance of at least 10m from other people.

Explosive material.

Extremely hot surface. Do not touch a hot muffler, gear box or cylinder, you may get burned. These parts get extremely hot from operation and remain hot for a short time after the unit is turned off.

WARNING! Danger of kickback.

Do not operate unit in the rain.

Do not attempt to hold saw with one hand.

Do not use the point of the bar.

Hold saw properly with both hands.

Fuel inlet.
(Position: under the fuel tank cap.)

Chain oil inlet.
(Position: next to the oil tank cap.)

I On/Off.
O (Position: on the on/off switch.)
Setting the on/off switch to Off, stops the engine immediately.

RUN Run position.

START Start position (when engine is warm.)

CHOKE Start position (when engine is cold.)

Choke control
(Position: next to knob on the top cover)

H High run adjustment screw.

L Low run adjustment screw.

T Idle adjustment screw.
(Position: left side of machine close to pull start handle.)

Chain brake released (hollow arrow) and activated (solid arrow.) (Position: right side of machine, on chain drive cover.)

Specifications

Engine displacement:	42CC
Maximum engine power:	1500W
Engine type:	Air cooled single cylinder, two stroke cycle
Recommended maximum engine speed at idling:	2800 - 3400 rpm
Maximum engine speed with cutting attachment:	10000 rpm
Fuel type:	Unleaded petrol / 2 stroke oil (40:1)
Fuel tank capacity:	575ml
Oil tank capacity:	350ml
Spark plug:	NGK LD L8RTF TORCH BM6A CHAMPION CJ8
Oil feeding system:	Automatic Pump
Sprocket wheel:	6-Teeth x 9.53mm (3/8") pitch
Guide bar type:	Sprocket Nose
Guide bar cut length:	405mm (16")
Chain type:	Oregon 91VG, 91P (3/8" Pitch)
Chain pitch:	9.53mm
Weight (including guide bar and chain):	5.2kg
Sound power level:	116 dB (A)

Unpacking

Due to modern mass production techniques, it is unlikely that your Qualcut Chainsaw is faulty or that a part is missing. If you find anything wrong, do not operate the tool until the parts have been replaced or the fault has been rectified. Failure to do so could result in serious personal injury.

Contents of Carton

The Qualcut Chainsaw is supplied with the following accessories as standard.

- Chain
- Guide bar
- Guide bar cover
- Double ended wrench
- Screwdriver

WARNING: Beware of kickback. Hold chain saw firmly with both hands when using . For your own safety, please read and follow ALL safety precautions in this manual before attempting to operate your chainsaw. Improper use can lead to serious injury.

GENERAL SAFETY INSTRUCTIONS

Save these instructions.

1) Work Area

a) Keep work area clean and well lit. Cluttered and 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.

2) 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 safety equipment. Always wear eye protection. Safety equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

c) Remove any adjusting key or wrench before turning the tool on. A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.

d) Do not over-reach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

e) 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.

f) If devices are provided for the connection of dust extraction and collection facilities ensure that these are connected and properly used. Use of these devices can reduce dust-related hazards.

3) 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) Turn tool off completely 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 and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

4) Service

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

Additional Safety Rules for Petrol Chain Saws

NOTE: For safety reasons the chain saw is shipped with the chain brake fully engaged. This brake must be released before the saw becomes operational.

- Never cut into the ground.
- Never cut into wire fences.
- Never cut into samplings.
- Never cut into prepared wood.
- Use the chain saw to cut only wood.
- It is advisable to provide a support for the chain saw when cutting branches. Do not cut using the bar point and beware of branches under tension.
- Children under 18 must not use chain saws.
- Keep people away from the chain saw when in use.
- Check the following conditions before beginning work:
  - There should be no people in the felling area.
  - Make sure there is a second person within calling distance.
  - The working area should be free from obstacles.
- Wear suitable clothes which do not hinder movement.
- Use specific protection during operations involving head, hands, feet, eyes and ears.
- It is recommended the use of a helmet with a visor during felling, branch cutting and chopping operations.
- Wear gloves with an external protection when using the chain saw.
- Use ear protection to prevent hearing injuries.
- Wear safety boots when using the chain saw.

Chainsaws pose a very significant health and safety risk even to careful and trained operators.

- Use the bar cover when moving the chain saw away from the working site.
- During transport the brake must be applied to avoid accidental start-up.
- Do not use the chain saw in rainy or windy conditions or in poor light.
- Find a suitable position before beginning work.
- When working on slopes, the saw operator must stand beside or above the wood to cut, i.e. felled trees.
- Use the chain saw holding it firmly with both hands.
- Make a wedge-shaped cut before felling the tree, then the felling cut leaving a hinge for the felling direction.
- Beware of any falling branches after felling operations.
- Beware of wood splinters when cutting chopped wood.
- Ensure your chain saw is suitable for the job.
- Never work above shoulder level or reach out to cut a branch: ensure you have stable footing at all times.
- Do not operate in a hazardous location. Such areas include where there is a risk of explosion of petrol fumes, leaking gas or explosive dust.
- Do not operate in a confined area. Exhaust gases, smoke or fumes could reach dangerous concentrations.
- Protect your tool. This chain is NOT WEATHERPROOF and should not be exposed to direct sunlight, high ambient temperature and damp, wet or high humidity conditions.
- Take care not to spill fuel. When refuelling the chain saw ensure that the motor has been switched off. Prevent the spilling of fuel as this may also ignite with the hot motor. Never refuel whilst the engine running.
- Be careful where you store the chain saw. Store the tool in a dry area away from flammable liquids.
- Keep your distance. The chain saw emits exhaust fumes. Ensure bystanders keep a safe distance.
- Operating instructions and instructions for common cutting tasks, including the use of personal protection equipment, the need for adequate training and the risks involved when operating the unit while tired, ill or under the influence of alcohol or other drugs.
- Ensure you use oil-mix fuel. Ensure that you mix 40 parts unleaded fuel to 1 part 2-stroke oil. If not, the engine will overheat and cause damage to your chain saw.
- Never fill fuel tank indoors. Never fill fuel tank when engine is running or hot. Do not smoke when filling fuel tank.

Kickback Safety Precautions

Kickback may occur when the tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain. If the bar tip or point contacts, it can produce a rapid reverse reaction, kicking the guide bar up and back towards the operator. This is known as **rotational kickback.**

Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator. This is known as **pinch kickback.**

Take the following steps to help avoid accident or injury:

- Reduce the element of surprise by understanding what causes kickback.
- Keep a firm grip on the chain saw using both hands, the right hand on the rear handle and the left hand on the front handle when the motor is running. A firm grip will help maintain control.

- Do not let go whilst the motor is running.
- Make sure that the area of operation is free of obstructions.
- Use high speeds when cutting.
- Do not let the point of the guide bar contact a log, branch or any other object.
- Do not over-reach or cut above shoulder height.
- Carefully follow the sharpening and maintenance instructions given in this manual.
- Use only replacement bars and chains specified by the manufacturer.

⚠ DANGER! BEWARE OF KICKBACK!

Kickback can lead to dangerous loss of control of the chain saw and result in serious or fatal injury to the saw operator or to any-one standing close by. Always be alert. Rotational kickback and pinch kickback are major chain saw operational dangers and the leading cause of most accidents.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Due to the nature and ferocity of a petrol driven chainsaw no PPE can provide 100% protection aginst chainsaw cuts.

Equipment specifically designed for use with a chainsaw should be worn, consisting of:

- A safety helmet with mesh visor and ear defender to protect against falling / thrown debris and the high levels of noise generated.

- Gloves with additional protective guard material on the back of the left hand to defend against chain whip in the event of breakage.

- Trousers or chaps with leg protection incorporate into the front / side. In case of contact with a moving chainsaw the clogging material is designed to stop the chain before it penetrates fully through into the flesh.

- Safety boots with a good non-slip tread incorporating protection to toes and shins.

- High visibility jacket. Some jackets incorporate the clogging material like the trousers, but in any event should be close fitting.

All this equipment should be tested to relevant international and European Standards and marked accordingly. The gloves boots and trousers should be additionally marked with a symbol, also indicating the chain speed to which they have been tested.

HOLDING THE CHAINSAW

Do not be afraid to hold the chainsaw power head close in to the body. In this position the weight of the saw will be easy to bear and in the event of a kick-back will be more controllable.

Firmly grip the rear handle pulling it tight in to hip / thigh. With the left hand grip the front handle with thumb on the underside. In this position with the body turned slightly towards the saw, should a kick-back occur, the left arm will be stronger to brace against the force of the kick-back or if unable to withstand, the chainsaw should avoid the face / head.

Try to work at hip height, bend the knees instead of the back. This will be more comfortable and a safer stance to adopt.

OPERATIONAL SAFETY

This chainsaw has been especially designed for tree maintenance and should therefore only be used by trained operators when working on trees.

1. Never operate a chain saw when you are fatigued, ill, or upset, or under the influence of medication that may make you drowsy, or if you are under the influence of alcohol or drugs.
2. Use safety footwear, snug fitting clothing and eye, hearing and head protection devices. Use the vibration-proof glove.
3. Keep the saw chain sharp and the saw, including the AV system, well maintained. A dull chain will increase cutting time, and pressing a dull chain through wood will increase the vibrations transmitted to your hands. A saw with loose components or with damaged or worn AV buffers will also tend to have higher vibration levels.
4. Always use caution when handling fuel. Wipe up all spills and then move the chain saw at least 3 m from the fueling point before starting the engine.
5. Eliminate all sources of sparks or flame (i.e. smoking, open flames, or work that can cause sparks) in the areas where fuel is mixed, poured, or stored.
6. Do not smoke while handling fuel or while operating the chain saw.
7. Do not allow other persons to be near the chain saw when starting or cutting. Keep bystanders and animals out of the work area. Children, pets and bystanders should be a minimum of 10 m away when you start or operate the chain saw.
8. Never start cutting until you have a clear work area, secure footing, and a planned retreat path from the falling tree.
9. Always hold the chain saw firmly with both hands when the engine is running. Use a firm grip with thumb and fingers encircling the chain saw handles.
10. Keep all parts of your body away from the saw chain when the engine is running.
11. Before you start the engine, make sure the saw chain is not contacting anything.
12. Always carry the chain saw with the engine stopped, the guide bar and saw chain to the rear, and the muffler away from your body.
13. Always inspect the chain saw before each use for worn, loose, or damaged parts. Never operate a chainsaw that is damaged, improperly adjusted, or is not completely and securely assembled. Be sure that the saw chain stops moving when the throttle control trigger is released.
14. All chain saw service, other than the items listed in the Owner's Manual, should be performed by competent chain saw service personnel. (E.g., if improper tools are used to remove the flywheel, or if an improper tool is used to hold the flywheel in order to remove the clutch, structural damage to the flywheel could occur which could subsequently cause the flywheel to disintegrate.)
15. Always shut off the engine before setting it down.
16. Use extreme caution when cutting small size brush and saplings because slender material may catch the saw chain and be whipped toward you or pull you off balance.
17. When cutting a limb that is under tension, be alert for spring-back so that you will not be struck when the tension in the wood fibers is released.
18. Never cut in high wind, bad weather, when visibility is poor or in very high or low temperatures. Always check the tree for dead branches which could fall during the felling operation.
19. Keep the handles dry, clean and free of oil or fuel mixture.
20. Operate the chain saw only in well ventilated areas. Never start or run the engine inside a closed room or building and potentially explosive atmosphere. Exhaust fumes contain dangerous carbon monoxide.
21. Do not operate the chain saw in a tree unless specially trained to do so.
22. Guard against kickback. Kickback is the upward motion of the guide bar which occurs when the saw chain at the nose of the guide bar contacts an object. Kickback can lead to dangerous loss of control of the chainsaw.
23. When transporting your chain saw, make sure the appropriate guide bar scabbard is in place.
24. Never touch the cover, guide bar, saw chain or nut with bare hands while the engine is in operation or immediately after shutting down the engine. Doing so could result in serious burns because of high temperature.

Kickback Safety Precautions for Chain Saw Users

⚠ DANGER! BEWARE 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 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 personal injury.

Do not rely exclusively on the safety devices built into your saw. As a chain saw user you should take several steps to keep cutting jobs free from accident or injury.

1. With a basic understanding of kickback you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
2. Keep a good grip on the saw with both hands, the right hand on the rear handle, and the left hand on the front handle, when the engine is running. Use a firm grip with thumbs and fingers encircling the chain saw handles. A firm grip will help you reduce kickback and maintain control of the saw.
3. Make certain that the area in which you are cutting is free from obstructions. Do not let the nose of the guide bar contact a log, branch, or any other obstruction which could be hit while you are operating the saw.
4. Cut at high engine speeds.
5. Do not overreach or cut above shoulder height.
6. Follow the manufacturer's sharpening and maintenance instructions for the saw chain.
7. Only use replacement bars and chains specified by the manufacturer or the equivalent.

Effects of Vibration

If you continue to use high-vibration tools these symptoms will probably get worse, for example:

- The numbness in your hands could become permanent and you won't be able to feel things at all;
- You will have difficulty picking up small objects such as screws or nails;
- The vibration white finger could happen more frequently and affect more of your fingers.

Protecting your Body from Vibration

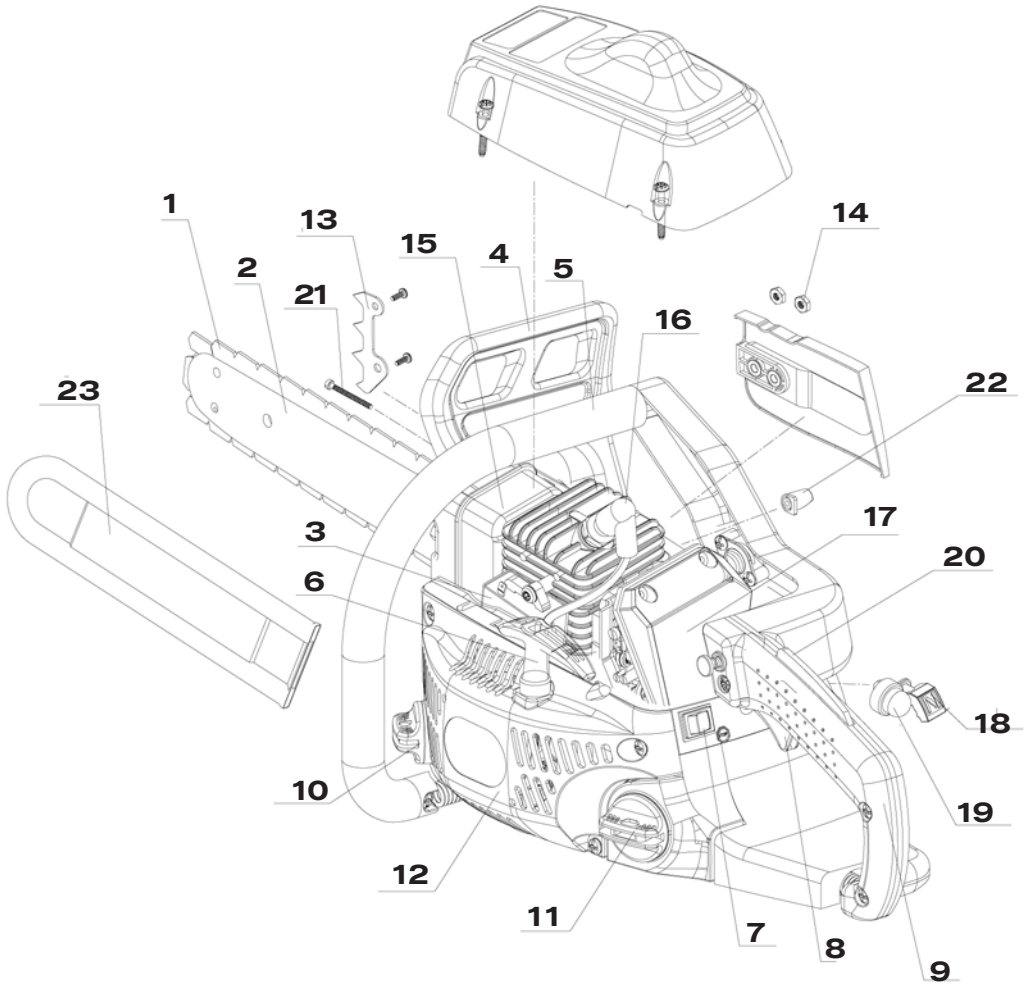
Please observe the following matter, in order to protect the health of your body:

1. Always use the right tool for each job (to do the job more quickly and expose you to less hand-arm vibration).
2. Check tools before using them to make sure they have been properly maintained and repaired to avoid increased vibration caused by faults or general wear.
3. Make sure cutting tools are kept sharp so that they remain efficient.
4. Reduce the amount of time you use a tool in one go, by doing other jobs in between.
5. Avoid gripping or forcing a tool or workpiece more than you have to.
6. Store tools so that they do not have very cold handles when next used.
7. Encourage good blood circulation by:
   - Keeping warm and dry (when necessary, wear gloves, a hat, waterproofs and use heating pads if available);
   - Giving up or cutting down on smoking because smoking reduces blood flow; and massaging and exercising your fingers.

Disposal

- When you dispose of the machine, do not disassemble the machine.
- When you dispose of the machine, fuel, chain oil, be sure to follow your local regulations.

CS4200 CHAINSAW PARTS DIAGRAM



1. Saw chain
2. Guide Bar
3. Spark Arrester Screen
4. Chain Brake Lever
5. Front Handle
6. Starter Handle
7. Stop Switch
8. Safety Trigger
9. Rear Handle
10. Oil Tank cap
11. Fuel Tank Cap
12. Starter Cover
13. Bucking Spike
14. Bar Retaining Nuts
15. Muffler Shield
16. Spark Plug
17. Air Cleaner Cover
18. Choke Lever
19. Primer Bulb
20. Throttle/Trigger
21. Saw Chain Adjustment Screw
22. Chain Catcher
23. Guide Bar Cover

ASSEMBLING YOUR CHAINSAW

Tools For Assembly

You will need these tools to assemble your chain saw:

1. Combination wrench-screwdriver (contained in your user's kit).
2. Heavy duty work gloves (user supplied).

Assembly Requirements

⚠ **WARNING! DO NOT start saw engine until unit is properly prepared.**

Your new chain saw will require adjustment of chain, filling the fuel tank with correct fuel mixture and filling the oil tank with lubricating oil before the unit is ready for operation.

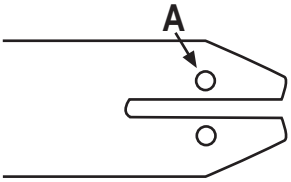
Read the entire user manual before attempting to operate your unit. Pay particular attention to all safety precautions.

Your user manual is both a reference guide and handbook provided to furnish you with general information to assemble, operate and maintain your saw.

Installing Guide Bar

⚠ **WARNING: Always wear protective gloves when handling chain.**

To ensure the bar and chain receive oil ONLY USE THE ORIGINAL STYLE BAR with the passage hole (A).

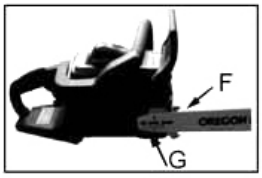


1. Make sure the chain brake lever is pulled back into the disengaged position.

2. Remove the bar retaining nut(s) (b). Remove chain brake cover (c) by pulling straight out, some force may be required.
   NOTE: Discard the two plastic washers as they are only used for shipping.

3. Using a screwdriver, turn the adjustment screw (d) counterclockwise until the tang (e) (projecting prong) is to the end of its travel.

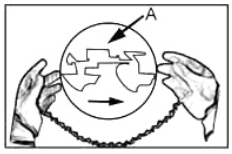
4. Place the slotted end of the guide bar over the bar bolt (f). Slide guide bar behind clutch drum (g) until the guide bar stops.



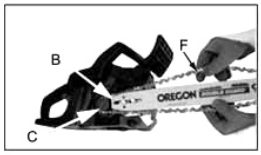
Installing Saw Chain

Always wear heavy duty gloves when handling saw chain or making saw chain adjustments

1. Spread chain out in a loop with cutting edges (a) pointing clockwise around loop.



2. Slip the chain around the sprocket (b) behind the clutch (c). Make sure the links fit between the sprocket teeth.



3. Guide the drive links into the groove (d) and around the end of the bar.

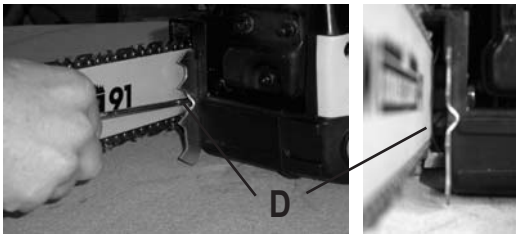
NOTE: The chainsaw may droop slightly on the lower part of the bar. This is normal.

4. Pull guide bar forward until chain is snug. Ensure all drive links are in the bar groove.
5. Install the clutch cover making sure the tang is positioned in the lower hole in the guide bar. Make sure the chain does not slip off the bar. Install the bar retaining nut hand tight and follow tension adjustment instructions in the next sections.

Saw Chain Tension Adjustment

Proper tension of saw chain is extremely important and must be checked before starting as well as during any cutting operation. Taking the time to make needed adjustments to the chainsaw results in improved cutting performance and prolonged chain life.

Adjusting Saw Chain



1. Hold nose of guide bar up and turn adjustment screw (d) clockwise to increase chain tension. Turning screw counterclockwise will decrease amount of tension on chain. Ensure the chain fits snugly all the way around the guide bar.

2. After making adjustment, and while still holding nose of bar in the uppermost position, tighten the bar retaining nuts securely. Chain has proper tension when it has a snug fit all around and can be pulled around by gloved hand.

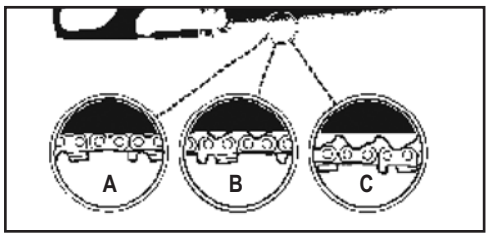
Note: if chain is difficult to rotate on guide bar or if it binds, too much tension has been applied. This requires minor adjustment as follows:

A. Loosen the bar retaining nuts so they are finger tight. Decrease tension by turning the bar adjustment screw counterclockwise slowly. Move chain back and forth on bar. Continue to adjust until chain rotates freely, but fits snugly. Increase tension by turning bar adjustment screw clockwise.

B. When saw chain has proper tension, hold nose of bar in the uppermost position and tighten the 2 bar retaining nuts securely.

Caution: a new saw chain stretches, requiring adjustment after as few as 5 cuts. This is normal with a new chain, and the interval between future adjustments will lengthen quickly.

Caution: if saw chain is too loose or too tight, the sprocket, bar, chain, and crankshaft bearings will wear more rapidly.



This diagram shows information concerning correct cold tension (A), correct warm tension (B) and as a guide for when chainsaw needs adjustment (C).

CHAIN BRAKE MECHANICAL TEST

Your chain saw is equipped with a chain brake that reduces possibility of injury due to kickback. The brake is activated if pressure is applied against brake lever when, as in the event of kickback, operator's hand strikes the lever. When the brake is actuated, chain movement stops abruptly.

⚠ **WARNING: The purpose of the chain brake is to reduce the possibility of injury due to kickback; however, it cannot provide the intended measure of protection if the saw is operated carelessly. Always test the chain brake before using your saw and periodically while on the job.**

To Test Chain Brake

1. The chain brake is disengaged (chain can move) when brake lever is pulled back and locked. Be sure the chain brake latch is in the off position.

2. The chain brake is engaged (chain is stopped) when brake lever is in forward position and the chain brake latch is in the on position. You should not be able to move chain.

Note:The brake lever should snap into both positions. If strong resistance is felt, or lever does not move into either position, do not use your saw.take it immediately to a professional service center for repair.

FUEL AND LUBRICATION

Fuel

5L Fuel = 125ml 2 Stroke Oil = 40:1 Ratio

Use regular grade unleaded gasoline mixed with 40:1 custom 2 cycle engine oil for best results. Some conventional gasolines are being blended with oxygenates such as alcohol or an ether compound to meet clean air standards. The engine is designed to operate satisfactorily on any gasoline intended for automotive use including 96 Octane gasolines.

⚠ **WARNING: Never use straight gasoline in your unit. This will cause permanent engine damage and void the manufacturer's warranty for that product. Never use a fuel mixture that has been stored for over 90 days.**

⚠ **WARNING: 2 cycle lubricant must be a premium grade oil for 2-cycle air cooled engines mixed at a 40:1 ratio. Do not use any 2-cycle oil product with a recommended mixing ratio of 100:1. If insufficient lubrication is the cause of engine damage, it voids the manufacturer's warranty.**

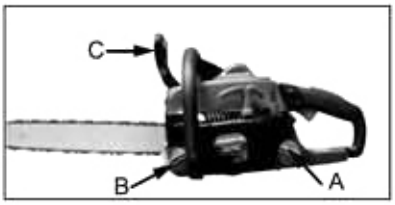
Chain and Bar Lubrication

Always refill the chain oil tank each time the fuel tank is refilled. We recommend using our replacement Chain & Bar. Always use good quality Chain bar / Lube Oil, which contains additives to reduce friction and wear and to assist in the prevention of pitch formation on the bar and chain.

OPERATION

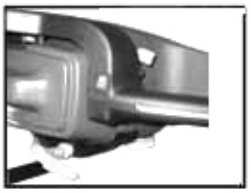
Engine Pre-start Checks

WARNING: Never start or operate the saw unless the bar and chain are properly installed.



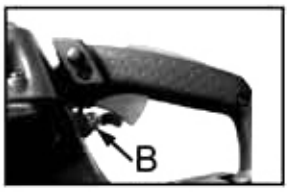
1. Fill the fuel tank (a) with correct fuel mixture.
2. Fill the oil tank (b) with correct chain and bar oil.
3. Be certain the chain brake is disengaged (c) before starting unit.

Starting the Engine

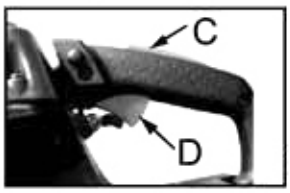


1. To start the saw, push the switch (on/off switch) to the on (i) position.

2. Pull out the choke (a) to the point where it latches in place.



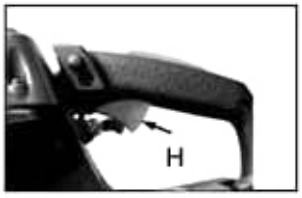
3. Push the primer bulb (b) 10 times.



4. Squeeze safety trigger and gas throttle, and hold.

5. Place the saw on a firm and level surface. Hold the saw securely with your foot as illustrated. Pull sharply on the starter 4 times.watch the chain in case it runs.

Note: If the engine sounds as if it wants to start before the 4th pull end the pulling on the starter and proceed as described in the next step.



6. Push in the choke (e) as far it will go.

7. Hold the saw securely and tug sharply on the starter 4 times. The engine should start before the end of this step.

8. Let the engine run for 10 seconds to warm up. Press the trigger (h) and put it into idle.

9. If the engine does not start up, repeat the above steps.

Re-starting a Warm Engine

1. Make sure the on/off switch is in the "i" position.
2. Pull out the choke to the point where it latches in place.
3. Depress the primer bulb 7 times.
4. Set the throttle latch.
5. Pull the starter rope rapidly 4 times. The engine should start.
6. Push in the choke as far it will go.
7. Release the throttle latch.

Stopping Engine

1. Release trigger and allow engine to return to idle speed.

2. Push the i/o (on/off) switch to o (off) to stop engine.

Note: for emergency stopping, simply activate chain brake and switch the i/o (on/off) switch to o (off).

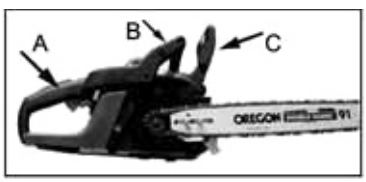
Chain Brake Operational Test

Test the chain brake periodically to ensure proper function.

Perform a chain brake test prior to initial cutting, following extensive cutting, and definitely following any chain brakeservice.

Test chain brake as follows:

1. Place saw on a clear, firm, flat surface.
2. Start engine.
3. Grasp the rear handle (a) with your right hand.



4. With your left hand, hold the front handle (b) [not chain brake lever (c)] firmly

5. Squeeze the throttle trigger to 1/3 throttle, then immediately activate the chain brake lever (c)

⚠ WARNING: Activate the chain brake slowly and deliberately. Keep the chain from touching anything and don't let the saw tip forward.

6. Chain should stop abruptly. When it does, immediately release the throttle trigger.

⚠ WARNING: If chain does not stop, turn engine off and take your unit to the nearest authorised service centre for service.

7. If chain brake functions properly, turn the engine off and return the chain brake to the disengaged position.

Saw Chain / Bar Lubrication

Adequate lubrication of the saw chain is essential at all times to minimize friction with the guide bar. Never starve the bar and chain of oil. Running the saw with too little oil will decrease cutting efficiency, shorten saw chain life, cause rapid dulling of chain, and cause excessive wear of bar from overheating. Too little oil is evidenced by smoke, bar discoloration or pitch build-up.

Note: saw chain stretches during use, particularly when it is new, and it will occasionally be necessary to adjust and tighten it. New chain will require adjustment after about 5 minutes of operation.

Automatic Oiler

Your chain saw is equipped with an automatic clutch driven oiler system. The oiler automatically delivers the proper amount of oil to the bar and chain. As the engine speed increases, so does the oil flow to the bar pad.

There is no flow adjustment. The oil reservoir will run out at approximately the same time as the fuel supply runs out.

⚠ WARNING: Don't put pressure on the saw when reaching the end of the cut. The pressure may cause the bar and chain to rotate. If the rotating chain strikes some other object, a reactive force may cause moving chain to strike the operator.

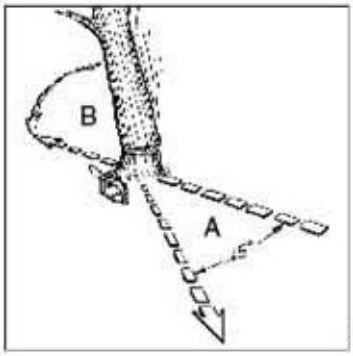
FELLING

Felling is the term for cutting down a tree. Small trees up to 6-7 inches (15-18cm) in diameter are usually cut in a single cut. Larger trees require notch cuts. Notch cuts determine the direction the tree will fall.

Felling a Tree

⚠ **WARNING: A retreat path (a) should be planned and cleared as necessary before cuts are started. The retreat path should extend back and diagonally to the rear of the expected line in the fall.**

Caution: if felling a tree on sloping ground, 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.



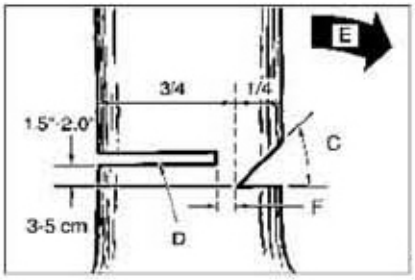
Note: direction of fall (b) is controlled by the notching cut. Before any cuts are made, consider the location of larger branches and natural lean of the tree to determine the way the tree will fall.

⚠ **WARNING: Do not cut down a tree during high or changing winds or if there is a danger to property. Consult a tree professional. Do not cut down a tree if there is danger of striking utility wires; notify the utility company before making any cuts.**

General Guidelines for Felling Trees

Normally felling consists of 2 main cutting operations, notching (c) and making the felling cut (d). Start making the upper notch cut (c) on the side of the tree facing the felling direction (e). Be sure you don t make the lower cut too deep into the trunk.

The notch (c) should be deep enough to create a hinge (f) of sufficient width and strength. The notch should be wide enough to direct the fall of the tree for as long as possible.



⚠ **WARNING: Never walk in front of a tree that has been notched.**

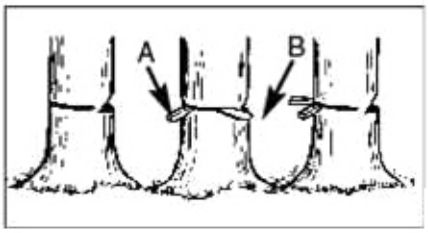
Make the felling cut (D) from the other side of the tree and 1.5 - 2.0 inches (3-5 cm) above the edge of the notch (C)

Never saw completely through the trunk. Always leave a hinge. The hinge guides the tree. If the trunk is completely cut through, control over the felling direction is lost.

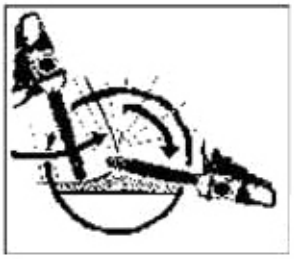
Insert a wedge or felling lever in the cut well before the tree becomes unstable and starts to move. This will prevent the guidebar from binding in the felling cut if you have misjudged the falling direction. Make sure no bystanders have entered the range of the falling tree before you push it over.

⚠ **WARNING: Before making the final cut, always re-check the area for bystanders, animals or obstacles.**

Felling Cut



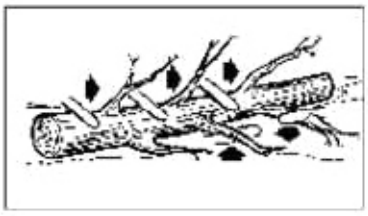
1. Use wooden or plastic wedges (g) to prevent binding the bar or chain (h) in the cut. Wedges also control felling



2. When diameter of wood being cut is greater than the bar length, make 2 cuts as shown

WARNING: As the felling cut gets close to the hinge, the tree should begin to fall. Whe tree begins to fall, remove saw from cut, stop engine, put chainsaw down and leave area along retreat path.

LIMBING



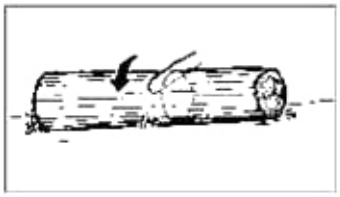
Limbing a tree is the process of removing the branches from a fallen tree. Do not remove supporting limbs (A) until after the log is bucked (cut) into lengths

Branches under tension should be cut from the bottom up to avoid binding the chain saw.

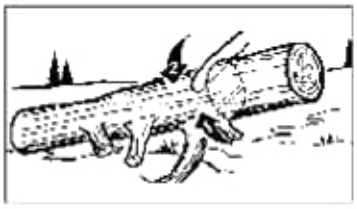
WARNING: Never cut tree limbs while standing on tree trunk.

BUCKING

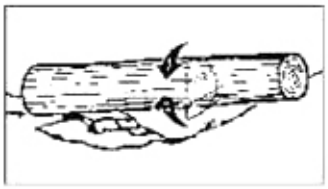
Bucking is cutting a fallen log into lengths. Make sure you have a good footing and stand uphill of the log when cutting on sloping ground. If possible, the log should be supported so that the end to be cut off is not resting on the ground. If the log is supported at both ends and you must cut in the middle, make a downward cut halfway through the log and then make the undercut. This will prevent the log from pinching the bar and chain. Be careful that the chain does not cut into the ground when bucking as this causes rapid dulling of the chain. When bucking on a slope, always stand on the uphill side.



1. Log supported along entire length: Cut from top (overbuck), being careful to avoid cutting into the ground



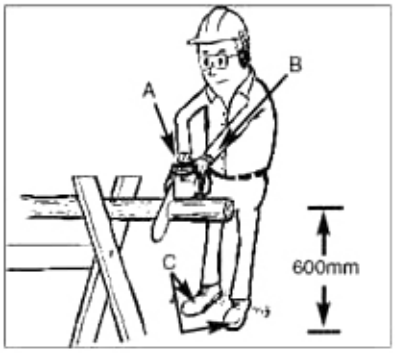
2. Log supported on 1 end: First, cut from bottom (underbuck) 1/3 diameter of log to avoid splintering. Second, cut from above (overbuck) to meet first cut and avoid pinching



3. Log supported on both ends: First, overbuck 1/3 diameter of log to avoid splintering. Second, underbuck to meet first cut and avoid pinching

Note: the best way to hold a log while bucking is to use a sawhorse. When this is not possible, the log should be raised and supported by the limb stumps or by using supporting logs. Be sure the log being cut is securely supported.

Bucking using a sawhorse



For personal safety and ease of cutting, the correct position for vertical bucking is essential

VERTICAL CUTTING:

A. Hold the saw firmly with both hands and keep the saw to the right of your body while cutting.

B. Keep the left arm as straight as possible.

C. Keep weight on both feet.

CAUTION: While the saw is cutting, be sure the chain and bar are being properly lubricated.

MAINTENANCE

All chain saw service, other than items listed here in your user manual maintenance instructions, should be performed by a professional.

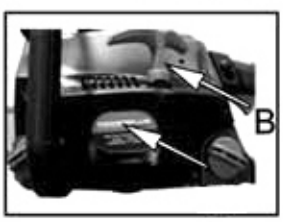
Preventative Maintenance

A good preventive maintenance program of regular inspection and care will increase life and improve performance of your chain saw. This maintenance checklist is a guide for such a program. Cleaning, adjustment, and parts replacement may be required, under certain conditions, at more frequent intervals than those indicated.

Maintenance checklist		Each use	Hours of Operation	
Item	Action		10	20
Screws/nuts/bolts	Inspect/tighten		✓	
Air filter	Clean or replace			✓
Fuel filter/oil filter	Replace		✓	
Spark plug	Clean/adjust/replace		✓	
Spark arrester screen	Inspect		✓	
Fuel hoses	Inspect Replace as required		✓	
Chain brake components	Inspect Replace as required	✓		

AIR FILTER

Cleaning Air Filter:



1. Remove screws holding air filter cover in place, remove the top cover (b) by loosening the cover retaining screws. Cover will lift off.

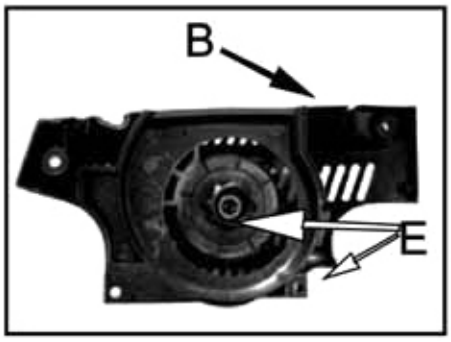
2. Lift the air filter (c) out of air-box (d)

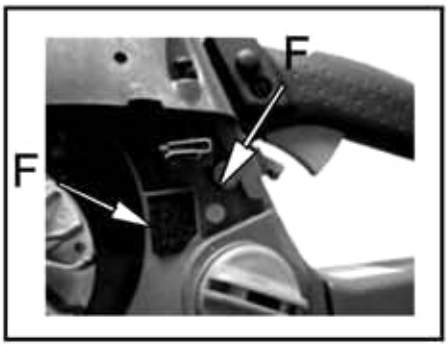
3. Clean air filter. Wash filter in clean, warm, soapy water. Rinse in clear, cool water. Air dry completely.

⚠ **WARNING: Never operate saw without the air filter. Dust and dirt will be drawn into engine and will damage it. Keep the air filter clean!**

Note: it is advisable to have a supply of spare filters.

4. Install air filter. Install engine / air filter cover. Make sure latch (e) latch (f) and cover fit properly. Tighten the cover retaining knob securely.





⚠ **WARNING: Never perform maintenance when the engine is hot, to avoid any chance of burning hands or fingers.**

FUEL FILTER

Replacing Fuel Filter:

1. Remove the fuel tank cap.

2. Bend a piece of soft wire to from a hook at the end.

3. Reach into fuel tank opening and hook fuel line. Carefully pull the fuel line toward the opening until you can reach it with your fingers.

Note: do not pull hose completely out of tank.

4. Lift filter (A) out of tank

5. Pull filter off with a twisting motion. Discard filter.

6. Install new filter. Insert end of filter into tank opening. Make sure filter sits in bottom corner of tank. Use a long screwdriver to aid in filter placement if necessary.

7. Fill tank with fresh fuel / oil mixture. See section fuel and lubrication. Install fuel cap.

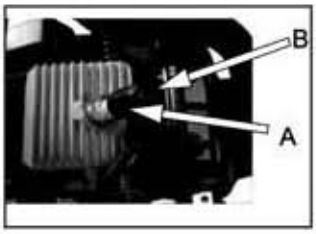
⚠ **WARNING: Never operate saw without a fuel filter. The fuel filter should be replaced after each 20 hours of use. Drain tank completely before changing filter.**

SPARK PLUG

Replacing Spark Plug:

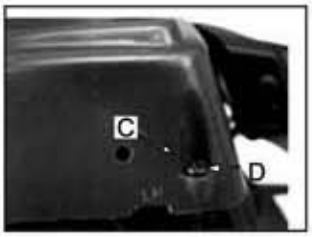
Note: for efficient operation of saw engine, spark plug must be kept clean and properly gapped.

Type of spark plug: NGK LD L8RTF TORCH BM6A
CHAMPION CJ8



1. Push stop switch down.

2. Remove knob (a) holding air filter cover in place, remove the top cover (b) by loosening the cover retaining screws. Cover will lift off.



3. Disconnect the wire connector (c) from the spark plug (d) by pulling and twisting at the same time

4. Remove spark plug with spark plug socket wrench.

Do not use any other tool

5. Check electrode gaps with wire feeler gauge and set gaps to .025" (.635mm) if necessary.

6. Reinstall a new spark plug.

Note: a resistor spark plug must be used for replacement.

Note: this spark ignition system meets all requirements of the interference-causing equipment regulations.

CARBURETOR

The carburetor was pre-set at the factory for optimum performance.

If further adjustments are necessary, please take your unit to the nearest qualified service technician.

SPROCKET TIP

Caution: the sprocket tip on your new saw has been pre-lubricated at the factory. Failure to lubricate the guide bar sprocket tip as explained below will result in poor performance and seizure, voiding the manufacturer's warranty.

Lubrication of the sprocket tip is recommended after 10 hours of use or once a week, which ever occurs first. Always thoroughly clean guide bar sprocket tip before lubrication.

Tools for lubrication:

The lube gun (optional) is recommended for applying grease to the guide bar sprocket tip. The lube gun is equipped with a needle nose tip which is necessary for the efficient application of grease to the sprocket tip.

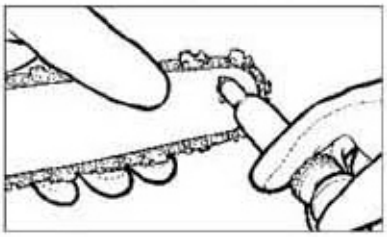
To lubricate sprocket tip:

⚠ **WARNING: Wear heavy duty work gloves when handling the bar and chain.**

1. Press the stop switch down.

Note: it is not necessary to remove the saw chain to lubricate the guide bar sprocket tip. Lubrication can be done on the job.

2. Clean the guide bar sprocket tip.



3. Using the lube gun (optional), insert needle nose into the lubrication hole and inject grease until it appears at outside edge of sprocket tip

4. Rotate saw chain by hand. Repeat lubrication procedure until the entire sprocket tip has been greased.

CHAIN MAINTENANCE

Chain tension:

Check the chain tension frequently and adjust as often as necessary to keep the chain snug on the bar, but loose enough to be pulled around by hand.

Breaking in a new saw chain:

A new chain and bar will need chain readjustment after as few as 5 cuts. This is normal during the break-in period, and the interval between future adjustments will begin to lengthen quickly.

⚠ **WARNING: Never have more than 3 links removed from a loop of chain. This could cause damage to the sprocket.**

Chain lubrication:

Always make sure the automatic oiler system is working properly. Keep the oil tank filled with good quality chain, bar and sprocket oil.

Adequate lubrication of the bar and chain during cutting operations is essential to minimize friction with the guide bar.

Never starve the bar and chain of lubricating oil. Running the saw dry or with too little oil will decrease cutting efficiency, shorten saw chain life, cause rapid dulling of chain, and lead to excessive wear of bar from overheating. Too little oil is evidenced by smoke or bar discoloration.

Chain sharpening:

Chain sharpening requires special tools to ensure that cutters are sharpened at the correct angle and depth. For the inexperienced chain saw user, we recommend that the saw chain be professionally sharpened by the nearest professional service center. If you feel comfortable sharpening your own saw chain, special tools are available from the professional service center.

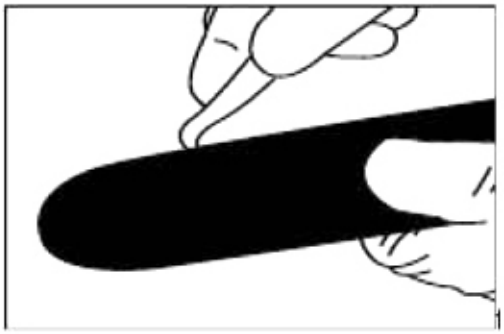
GUIDE BAR

Frequent lubrication of the guide bar (railed bar which supports and carries the saw chain) sprocket tip is required. Proper maintenance of the guide bar, as explained in this section, is essential to keep your saw in good working condition.

Most guide bar problems can be prevented merely by keeping the chain saw well maintained. Insufficient guide bar lubrication and operating the saw with chain that is too tight will contribute to rapid bar wear. To help minimize bar wear, the following guide bar maintenance procedures are recommended.

The bar should be reversed every 8 working hours to ensure uniform wear. Keep the bar groove and lubrication hole clean using a bar groove cleaner (optional) check the bar rails frequently for wear and, if necessary,

Remove the burs and square-up the rails using a flat file.



WARNING: Never mount a new chain on a worn sprocket or self-aligning ring.

Bar wear - turn guide bar frequently at regular intervals (for example, after 8 hours of use), to ensure even wear on top and bottom of bar.

Oil passages - oil passages on the bar should be cleaned to ensure proper lubrication of the bar and chain during operation.

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 starting the saw.your saw is equipped with an automatic oiler system.

CHAIN SHARPENING

Chain sharpening requires special tools to ensure that cutters are sharpened at the correct angle and depth. For the inexperienced chain saw user, we recommend that the saw chain be professionally sharpened by the nearest professional service center. If you feel comfortable sharpening your own saw chain, special tools are available from the professional service center. For non-experienced users of the chain saw, we recommend to have thechain sharpened by a specialist in any authorised service.

WARNING: When having wrong sharpened chain, there may occur a higher danger of kickback.

1. To sharpen the saw chain, use the suitable sharpening tools:

- round chain file ø5/32" (4mm).

- file leading

- chain measuring calibre.

These tools can be bought in any specialsed stores.

2. To gain well shaped sawdust particles, use sharp chain. If there appears wooden powder, you must sharpen the saw chain.

WARNING: All cutting teeth must be similarly long. Different lengths of teeth can cause rough run of the chain or it's rupture as well.

3. Minimum length of the teeth must be 4mm. If they are shorter, remove the saw chain.

4. Angles, which the teeth are under, must be followed.

5. To sharpen the chain basically, make 2 to 3 pulls of the file from the inside out.

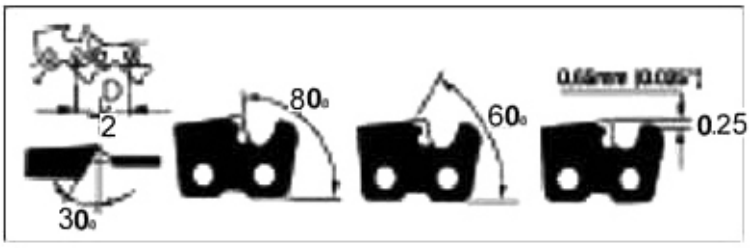
WARNING: After sharpening cutting teeth 3 or 4 times, have the saw sharpened by any authorised service. They will sharpen the depth limiter as well, which provides the distance.

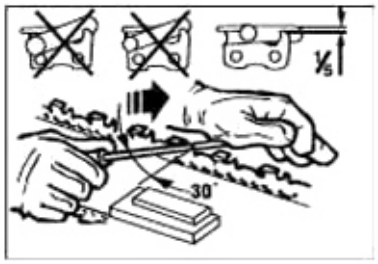
Chain sharpening - the pitch of the chain is 3/8" lopro x .050".

Sharpen the chain using protective gloves and a round file of ø5/32" (4mm).

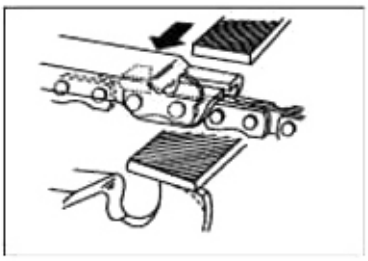
Always sharpen the cutters only with outward strokes

After sharpening, the cutting links must all have the same width and length.





WARNING: A sharp chain produces well defined chips. When your chain starts to produce sawdust it's time to sharpen.



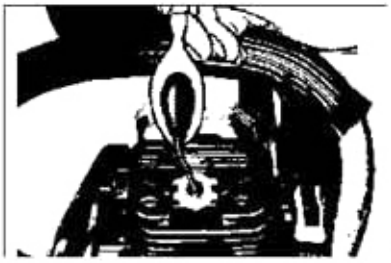
After every 3-4 times the cutters have been sharpened you need to check the height of the depth gauges and, if necessary, lower them using the flat file and template supplied optional, then round off the front corner.

WARNING: Proper adjustment of the depth gauge is as important as proper sharpening of the chain.

STORING A CHAINSAW

Caution: never store a chain saw for longer than 30 days without performing the following procedures. Storing a chain saw for longer than 30 days requires storage maintenance. Unless the storage instructions are followed, fuel remaining in the carburetor will evaporate, leaving gum-like deposits. This could lead to difficult starting and result in costly repairs.

1. Remove the fuel tank cap slowly to release any pressure in tank. Carefully drain the fuel tank.



2. Start the engine and let it run until the unit stops to remove fuel from carburetor.

3. Allow the engine to cool (approx. 5 minutes).

4. Using a spark plug wrench, remove the spark plug.

5. Pour 1 teaspoon of clean 2-cycle oil into the combustion chamber. Pull starter rope slowly several times to coat internal components. Replace spark plug.

Note: store the unit in a dry place and away from possible sources of ignition such as a furnace, gas hot water heater, gas dryer, etc.

Removing a unit from storage

1. Remove spark plug.

2. Pull starter rope briskly to clear excess oil from combustion chamber.

3. Clean and gap spark plug or install a new spark plug with proper gap.

4. Prepare unit for operation.

5. Fill fuel tank with proper fuel / oil mixture. See fuel and lubrication section.

TROUBLESHOOTING

Problem	Probable cause	Corrective action
Unit won't start or starts but will not run.	Incorrect starting procedures. Incorrect carburetor mixture adjustment setting. Fouled spark plug. Empty fuel tank. Primer bulb was not pressed enough.	Follow instructions in the user manual. Have carburetor adjusted by an authorized service center. Clean/gap or replace plug. Fill fuel tank with properly mixed fuel. Press primer bulb fully and slowly 10 times.
Unit starts, but engine has low power.	Fuel filter is plugged. Incorrect lever position. Dirty spark arrestor screen. Dirty air filter. Incorrect carburetor mixture adjustment setting service dealer.	Replace the fuel filter. Move to run position. Replace spark arrestor screen. Remove, clean and reinstall filter. Have carburetor adjusted by an authorized service center.
Engine hesitates.	Incorrect carburetor mixture adjustment setting. Air filter is plugged. Old or improperly mixed fuel.	Have carburetor adjusted by an authorized service center. Replace or clean the air filter. Drain gas tank/add fresh fuel mixture. Have carburetor adjusted by an authorized service center.
No power under load.	Incorrect carburetor mixture adjustment setting. Old or improperly mixed fuel. Air filter is plugged. Fouled spark plug. Incorrectly gapped spark plug.	Drain gas tank (see storage)/add fresh fuel mixture. Replace or clean the air filter. Replace or clean the spark plug. Clean/gap or replace plug.
Runs erratically.	Plugged spark arrestor. Dirty air filter.	Clean or replace spark arrestor. Clean or replace air filter.
Smokes excessively.	Incorrect carburetor mixture adjustment setting. Incorrect fuel mixture.	Have carburetor adjusted by an authorized service center. Use properly mixed fuel(40:1 mixture).

WARRANTY

QUALCUT CS4200 42CC 16" CHAINSAW

Whilst every effort is made to ensure your complete satisfaction with this tool, occasionally, due to the mass manufacturing techniques, a tool may not live up to our required level of performance and you may need the assistance of our service department.

This product is warranted for a 12 month period for home domestic use from the date of the original purchase. If found to be defective in materials or workmanship, the tool or the offending faulty component will be replaced free of charge with another of the same item. A small freight charge may apply. Proof of purchase is essential.

We reserve the right to reject any claim where the purchase cannot be verified.This warranty does not include damage or defects to the tool caused by or resulting from abuse, accidents, alterations or commercial or business use. It also does not cover any bonus items or included accessories. Only the chainsaw is covered under this warranty.

Please ensure that you store your receipt in a safe place. Conditions apply to the above warranty.

1. **DURATION:** The manufacturer warrants that it will repair or replace, at no charge for parts or labour, the QUALCUT Chainsaw, if proven defective in material or workmanship, during the following time period(s) after date of original retail purchase:

   For 1 Year:
   The QUALCUT Chainsaw (excluding accessories)

2. **WHO GIVES THIS WARRANTY (Warrantor):**

   EUROQUIP
   109 Bolt Road
   Stoke, Nelson
   New Zealand 7011
   Service Line ++64 3 547 8409

3. **WHO RECEIVES THIS WARRANTY (Purchaser):**

   The original purchaser of this QUALCUT Chainsaw.

4. **WHAT IS COVERED UNDER THIS WARRANTY:**

   Defects in material and workmanship which occur within the duration of the warranty period.

5. **WHAT IS NOT COVERED UNDER THIS WARRANTY:**

A. Implied warranties, including those of merchantability and FITNESS for a particular purpose are limited in duration to this express warranty. After this period, all risks of loss, from whatever reason, shall be on the purchaser.

B. ANY INCIDENTAL, INDIRECT, OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE OR MALFUNCTION OF THIS PRODUCT.

C. This warranty does not apply to any accessory or consumable items included with the product which are subject to wear from usage; the repair or replacement of these items shall be at the expense of the owner. These items include, but are not limited to: bar, chain, spanners, bucking spikes, etc. In addition, this warranty does not extend to any damage caused by the untimely replacement or maintenance of any of the previously listed CONSUMABLE parts.

D. Any failure that results from accident, purchaser's abuse, neglect or failure to operate products in accordance with instructions provided in the owner's manual(s) supplied with the product.

E. Pre-delivery service, i.e. assembly and adjustment.

6. **RESPONSIBILITIES OF WARRANTOR UNDER THIS WARRANTY:** Repair or replace, at Warrantor's option, products or components which have failed within duration of the warranty period.

7. **RESPONSIBILITIES OF PURCHASER UNDER THIS WARRANTY:**

A. Please call your re-seller or the number listed above for warranty assistance.

B. Provide dated proof of purchase and maintenance records.

C. All generators must be delivered or shipped to the nearest Service Agent or re-seller. Freight costs, if any, must be borne by the purchaser.

D. Use reasonable care in the operation and maintenance of the products as described in the owner's manual(s).

E. No warranty costs incurred will be considered for, or covered if Euroquip has not been contacted and prior permission for repair / replacement has been granted.

8. **WHEN WARRANTOR WILL PERFORM REPAIR OR REPLACEMENT UNDER THIS WARRANTY:**

   Repair or replacement will be scheduled and serviced according to the normal work flow at the servicing location and depending on the availability of replacement parts.

CS4200 CHAINSAW

Congratulations on your new QUALCUT Product.
We are proud to have you as our customer and will strive to provide
you with the best service and reliability in the industry.
This product is backed by our extensive warranty
and world-wide service network.

EUROQUIP, 109 Bolt Road, Stoke, Nelson, New Zealand 7011
Euroquip NZ: 0800 387 678, Euroquip Australia: 1-800 -040947
info @euroquip.co.nz