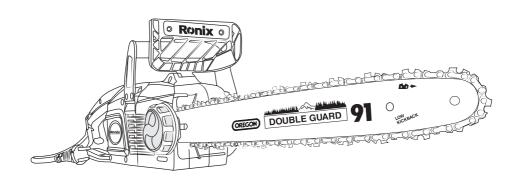


ELECTRIC CHAIN SAW 4740











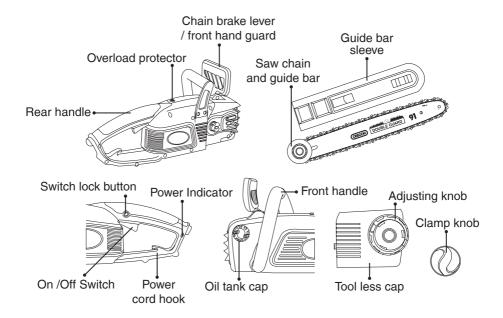


TECHNICAL SPECIFICATIONS

Model	4740
Power	2400W
voltage	220V
frequency	50Hz
Guide bar Length	40cm
Chain Speed	14M/S
Net Weight	5.1Kg
Parameter	Value
Type of model	4740
Supply voltage	220 V
Current frequency	50 Hz
Rated power	2.4 KW
Drive link count	57
Chain pitch	8/3"
Chain gauge	0.050" (1.3 MM)
Saw chain oil	SAE 10W30
Oil tank capacity	150 MI
Saw chain speed (no load)	14 M/s
Chain brake activation time	0.12 S
Guide-bar length	16 CM / 40"
Cutting length with guide-bar 400 mm (16")	390MM
Protection class	II



PART LIST



TECHNICAL DATA

Accessories: 5Meter Extension Cord

ORIGINAL INSTRUCTION MANUAL

Before operating the electric chain saw, please read carefully all instructions, recommendations and warnings and keep them safe for further reference for all who will use the fan heater.

In case you decide to sell or submit this product to a new owner, please make sure the "Instructions' Manual" is available with it, so that new owner can get acquainted with the relevant safety measures and operating instructions.



GENERAL GUIDELINES FOR SAFE OPERATION

Read all instructions carefully. Failure of the nature following instructions can cause electric shock, fire and / or severe injuries. Keep these instructions in a safe place.

1- Safe operation of electric chain saws.

Warning! Persons unfamiliar with instruction manual are not allowed to use chain saw.

Use the chain saw for cutting wood only.

The manufacturer is not responsible for losses and damages resulting from unintended use of the chain saw.

2- Workplace. Work area safety. Keep your workplace tidy and ensure it is well lit

Untidiness and insufficient illumination contribute to accidents especially when chain saws are in use. Keep children and bystanders away from the workplace.

Distraction may cause loss of control over the tool.

- 3- Safety when working with electricity.
- 3-1 Plug of the chain saw must be suitable for contact. In no case is allowed to modify the structure of the plug. When working with electrical zero, do not use plug adapters. Using original plugs and sockets reduces the risk of electric shock
- 3-2 Keep the chain saw away from rain and moisture.

Infiltration of water into the chain saw increases the risk of electric shock.

3-3 Do not use a power cord for the purposes for which it is not provided, for example to carry chain saw for cable or removing the plug from the outlet. Protect cords from heat, oil and contact with sharp edges or mobile points of machines. Damaged or twisted cables increase the risk of electric shock. 3-4 When you work with the chain saw outdoors, switch the machine only in installations equipped with electric switch "Fi" RCD (Residual Current Device). RCD must be no more than 30 mA.

Use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

3-5 If you operating with a chain saw in a damp location is unavoidable,



use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

Using the extension, designed for outdoor use reduces the risk of electric shock.

4- Personal safety.

Use safety equipment, such as work suit, protective glasses, protective shoes, protective helmet, earmuffs and protection leather gloves. Using safety equipment in appropriate conditions reduces risk of body injury. Do not overestimate your abilities. Stand firmly and keep your balance at all times.

It enables better control over the chain saw in unpredicted situations.

Do not wear loose clothing or jewellery. Keep your hair, clothes and gloves away from moving parts. Loose clothing, jewellery or long hair may be caught by moving parts.

5- Transportation and storage.

When carrying the chain saw put on the chain cover and switch on the chain brake. Carrying unsecured and operating chain saw may cause body injury. Carrying the chain saw is possible only when holding its front handle.

Other parts may not ensure appropriate grip and even cause injury. Inspect your chain saw. Check alignment and fixing of moving parts, check against part cracks and all other factors that may affect operation of the chain saw. Repair the chain saw before use if it is found damaged. Many accidents are caused by improper maintenance of machine.

Saw chain should be clean and sharp. Proper maintenance of sharp cutting edges of saw chain reduces the risk of jamming and makes operation easier.

6- Power tool use and care.

Check proper operation of the saw brake regularly. In emergency situation, non-operational brake may make saw chain disengagement impossible.

- 7- Safety operation.
- 7-1 Be concentrated, watch the actions carefully and act cautiously and



prudently. Do not use the chain saw when you are tired or under the influence of drugs, alcohol or narcotic drugs. A moment of distraction at work with chain saw may have the effect of extremely serious injuries.

- 7-2 Avoid the danger of incorporating the chain saw inadvertently. If you carry a chain saw, keep your finger on the trigger switch, or if you submit a voltage of grinding when turned on, there is the risk of accident.
- 7-3 Before you switch on the chain saw, that you are sure to remove all utilities and wrenches. Utilities, forgotten on rotating unit can cause injuries.
- 7-4 Avoid unnatural positions of the body. Work in a stable position of the body at any time and keep the balance. So you can control the chain saw better and safer if unexpected situations arise.
- 7-5 Well as a long time when you will not use the chain saw, unplug the plug from the electric installation. This measure eliminates the danger of triggering the grinding inadvertently.
- 7-6 Keep a chain saw in places where they cannot be reached by children. Do not allow them to be used by persons who are not familiar with how to work with them and have not read those instructions.
- 7-7 Keep your chain saw with care. Check whether the mobile units operate impeccable, if there is a broken or damaged item which distort or alter the functions of the chain saw. Before using the chain saw, make sure that the damaged parts to be repaired. Many accidents are caused by poorly maintained power tools and appliances.
- 7-8 Keep the power cords a safe distance from rotating work tools. If you lose control of the chain saw, the cable can be cut or fascinated by the working tool and it can cause injuries.
- 7-9 Never leave chain saw before working tool to completely stop its rotation. Rotary tool can touch the object, resulting in losing control of the chain saw.
- 7-10 Regularly clean the vent on your chain saw.
- 7-11 Do not use a chain saw near flammable materials. Flying sparks can cause the ignition of such materials.
- 7-12 Never put your hands near the rotary working tools. If the kick oc-



curs, the instrument can make you hurt.

7-13 Do not use the chain saw when the power cord is damaged. If during operation the cable is damaged, do not touch. Immediately disconnect the plug from the electric installation.

Damaged power cables increase the risk of electric shock.

Failure of the considered instructions may lead to electric shock, fire and / or severe injuries.

- 7-14 Be very careful at the end of a cut, because the chain saw having no support in processed material falls down due to its inertia, which may cause injuries.
- 7-15 When working for a long time, the saw operator may experience formication and numbness in fingers and hands. Stop working in such case, because numbness reduces precision in saw use.
- 7-16 In the appearance of signs of fatigue should immediately stop work.
- 7-17 Only one person can operate with the chain saw at a time. All other persons shall be away from working area of the chain saw. Especially children and animals should be away from working area.
- 7-18 When starting the saw, its chain must not rest on the processed material or touch anything else.
- 7-19 When working with the chain saw hold it with both hands by both handles. Keep firm body position.
- 7-20 Children and juveniles cannot operate the chain saw. Allow access to the saw only to adults who know how to handle the tool. This instruction manual should be given with the chain saw.
- 7-21 Before starting to cut set the chain brake lever in appropriate position (pull it to yourself). It is also hand guard.
- 7-22 Move chain saw away from the material being cut only when the cutting chain is working.
- 7-23 When cutting processed sawn wood or thin branches use support (sawing horse). Do not cut several boards at the same time (placed one on top of another), or material held by other person or held with foot.
- 7-24 Long objects should be firmly fixed before cutting.
- 7-25 When you working on sloping terrain stay with the face to slope.



7-26 When cutting through always use the bumper spike as a point of support. Hold the saw by the rear handle and guide with the front handle.

7-27 In case the cut cannot be completed in one run, pull the saw a little back, put the bumper spike in another place and continue the cut lifting rear handle slightly.

7-28 When cutting in horizontal plane, position yourself at an angle as close to 90° from cutting line as possible. Such operation requires concentration.

7-29 When the chain is pinched when cutting with the tip of the bar, the saw may recoil towards operator. Because of this effect cut with the straight part of the chain whenever possible. Then, in case of pinching, the recoil effect changes direction away from the operator.

7-30 Be very careful while cutting wood if there is the risk of splitting. Pieces of wood that are cut off can be flung in any direction (risk of body injury!).

7-31 Only trained persons should cut tree branches! Uncontrolled fall of a tree branch constitutes a risk of body injury!

7-32 Do not cut with tip of the guide bar (risk of recoil).

7-33 Pay special attention to branches under strain. Do not cut branches, which hangs freely, from below.

7-34 Always stand to the side of predicted fall line of the tree that is to be cut.

7-35 During a tree fell there is a risk that branches of the tree, or trees in proximity, will break and fall. Be very careful, otherwise a body injury may occur.

7-36 On a sloped terrain the operator should stay on upper part of the slope with respect to the tree being cut, never lower.

7-37 Watch out for logs that may roll down towards you.

7-38 Operating saw tends to rotate when tip of the chain guide bar touches processed material.

In such case the saw may get out of control and move towards the operator (risk of body injury!).

7-39 Do not use the saw above your shoulder level, or when standing on a tree, ladder, scaffold, trunk etc.



- 8 To prevent saw recoil follow below instructions.
- 8-1 Never start or guide a cut with the tip of the guide bar!
- 8-2 Always start cutting with saw previously switched on!
- 8-3 Ensure the cutting chain is sharp.
- 8-4 Never cut more than one branch at a time. When cutting off, watch out for surrounding branches. When cutting a tree through, watch out for nearby tree trunks.

CONSTRUCTION AND USE

Electric chain saw is a hand-held tool. The chain saw is a device driven by a single-phase commutator motor. The saw can be used for cutting down trees, cutting branches, firewood, wood for fireplace and other tasks where cutting wood is necessary.

Use the device according to the manufacturer's instructions only.

Noise level and vibration parameters:

The values are measured according to EN 60745-2-13:2009.

Sound pressure LpA = 96, 0 dB (A)

Sound power LwA = 105, 3 dB (A)

Uncertainty K = 3 dB

Wear ear protection! Wear earmuffs!

Vibration acceleration ah:

Front handle ah = 4.12 m/s2

Rear handle ah = 4,67 m/s2

Uncertainty K = 1.5 m/s2

PREPARATION FOR OPERATION

- 1- Prior to carrying the chain saw unplug the power cord from mains socket and slide chain cover onto guide bar and chain. When carrying the chain saw, hold it by front handle. If several cuttings are to be made, switch off the chain saw with the switch (1) between tasks.
- 2- Installation of guide bars and saw chain.

Chain saw should be disconnected from electric supply.

Use pin and adjustment screw for adjustment of chain tension. It is very



important that the bolt located on adjustment screw falls into hole in the guide bar during installation of the guide bar.

You can move the bolt to the front and back by turning the adjustment screw. Those parts must be set appropriately prior to starting guide bar installation in the saw.

Brake lever (7) must be in the upper (vertical) position.

Unscrew the guide bar fixing nut (12) and remove the casing.

Put the chain (8) onto driving chain wheel located behind the clutch.

Install the guide bar (9) (slide it behind the clutch) onto guiding screws and push towards driving chain wheel.

Put the chain (8) onto guide bar chain wheel from below.

Move the guide bar (9) away from the driving chain wheel, so chain guiding links are placed in the guide bar groove.

Ensure the pin of the chain tension adjustment screw is in the middle of the lower hole of the guide bar (9), adjust when necessary.

Place the casing in its place and fix by slightly tightening guide bar fixing nut (12).

Strain the chain appropriately using the chain tension adjustment screw (11). Chain tension is appropriate when the chain can be lifted by 3 to 4 mm in the middle of the guide bar in horizontal position.

Firmly tighten guide bar fixing screw (12) while holding the guide bar tip. Prior to guide bar and chain installation ensure that position of chain cutting blades is appropriate (correct position of the chain on the guide bar is shown on the tip of the guide bar). Always wear protective gloves during checks and installation of the chain to prevent cuts from sharp edges of the chain.

New chain requires start-up period, which lasts approximately 5 minutes. Chain lubrication is very important in this phase. Check chain tension after start-up period and readjust if necessary.

Check and adjust the chain tension frequently. Too loose chain can easily slide off the guide bar, guickly wear out or guickly wear out the guide bar. 3- Filling saw tank with oil.





Oil tank in new chain saw is empty. Fill the tank with oil prior to first use. Unscrew oil filler plug (5).

Pour in oil (be careful to avoid contamination of oil during filling of the tank). Screw oil filler plug (5).

Do not use oil that has been already used or regenerated, as this may damage the oil pump. Use SAE 10W/30 oil for the whole year or SAE 30W/40 in summer and SAE 20W/30 in winter.

■OPERATION AND SETTINGS

1- Switching on. Switching off.

The mains voltage must match the voltage on the rating plate of the saw. Switching on - press the switch lock button (4) and then switch button (1). In case the chain saw does not start, release the brake lever (7).

2- Switching off - release pressure on the switch (1). Release pressure on the switch button (1) to stop the chain saw. Strong sparking on the commutator may appear. This is normal and safe for chain saw operation.

When switched on, the chain saw starts to work with full speed.

3- Checking chain lubrication.

Check lubrication of the chain and oil level in the tank before starting to work. Switch on the saw and hold it above ground. If you see enlarging oil marks, the chain lubrication works well. If there are no oil marks or they are very small, use oil feed adjustment screw (13) to make appropriate adjustments.

In case the adjustment brings no effects, clean oil outlet, upper hole of chain tension and oil way or contact service.

Make adjustments when the saw is switched off, observe precaution measures and do not allow the guide bar to touch ground. Operate the



tool safely and maintain at least 20 cm distance from ground.

Use oil feed adjustment screw (13) to set amount of supplied oil accordingly to respective operating conditions.

MIN position - oil flow decreases.

MAX position - oil flow increases.

When cutting hard and dry wood and using whole length of the guide bar when making a cut, set the oil feed adjustment screw (13) to the MAX position.

You can reduce amount of oil supplied by turning oil feed adjustment screw (13) to MIN position, when cutting soft and damp wood, or when only part of the working length of the guide bar is used.

Depending on ambient temperature and amount of oil supplied, you can operate the chain saw for 15 to 40 minutes per one filling the oil tank.

4- Chain lubricants.

Durability of chain and guide bar depends heavily on quality of lubricant. Use only lubricants, which are designed for chain saws.

Never use regenerated or previously used oil for chain lubrication.

5- Guide bar.

Guide bar (9) is exposed to heavy wear especially in top and bottom part. To prevent side wear due to friction, it is recommended to turn over the guide bar every time the chain is sharpened. Clean the guide bar groove and oil holes on that occasion. Guide bar groove is rectangular. Check the groove against wear. Put rule to guiding strip and outer surface of a chain tooth. If you observe distance between, the groove is correct. Otherwise the guide bar is worn out and needs to be replaced.

6- Chain wheel.

Driving chain wheel is subject to especially heavy wear. Replace the chain wheel when you observe clear signs of wear of wheel teeth. Worn chain wheel additionally reduces durability of chain. Chain wheel should be replaced by authorized service workshop.

7- Chain brake.

The saw features automatic brake, which stops the chain in case of recoil during chain saw operation. The brake engages automatically when force



of inertia is applied to a weight located inside the brake casing. The chain brake can also be switched on manually, when the brake lever (7) is moved towards the guide bar (9). Switching the chain brake stops the chain movement in 0.12 sec.

8- Braking check.

Ensure the brake operates correctly before each use of the saw.

Put operating saw on the ground and open the throttle fully for 1 - 2 seconds to allow the saw engine to operate at its maximum speed.

Push the brake lever (7) forward. The chain should stop immediately.

In case the chain stops slowly or does not stop at all, replace the brake band and clutch drum before using the chain saw again.

To release the brake, pull the brake lever (7) towards the main handle (3) so you can hear sound typical of blockade snapping.

Ensure the chain brake operates correctly and the chain is sharp. It is very important for keeping potential recoil at a safe level.

In case the brake does not operate efficiently, adjust it or repair in authorized service site.

In case the engine operates at high speed with the chain brake switched on, the saw clutch will overheat. When the chain brake engages during operation of the engine, release the switch off immediately and stop the chain saw.

9- Chain tension adjustment.

Cutting chain tends to lengthen during operation due to higher temperature. Longer chain loosens and may slip off the guide bar. Loosen the guide bar fixing nut (12).

Ensure the chain (8) remains in the guiding groove of the guide bar (9). Use a screwdriver to turn the chain tension adjustment screw (8) clockwise, until the chain is strained appropriately (it should slightly hold the guide bar in horizontal position). Check the chain tension again (it should be possible to lift the chain by approximately 3 - 4 mm in the middle of the guide bar).

Tighten firmly the guide bar fixing nuts (12).

Do not over-tension the chain. Adjustment of overly heated chain may



lead to excessive tension when cooling down.

10- Operating the chain saw.

Before starting any planned task, familiarize yourself with section describing safe rules for chain saw operation. It is recommended to gain experience by cutting waste wood pieces. It will also allow to find out the chain saw possibilities.

Always observe safety regulations.

Use the chain saw only for cutting wood. Cutting other materials is forbidden.

Intensity of vibrations and recoil change depending on the type of wood being cut.

Do not use the chain saw as a lever to lift, move or split objects. When the chain is pinched in wood, switch off the engine and drive wooden or plastic wedge into the processed piece to release the chain saw. Start the tool again and commence cutting carefully.

Do not fix the saw to a stationary work station.

Attaching other devices, which are not allowed by the chain saw manufacturer, to the chain saw drive is forbidden.

It is not necessary to apply big force to the chain saw when using the tool. Apply light pressure only while the chain saw operates.

When the chain saw is pinched in kerf during cutting, do not remove it forcefully. It may cause loss of control over the chain saw, operator injury and/or damage to the chain saw.

Release the chain brake before starting to work.

Wait until engine reaches its full speed before starting to cut).

Keep maximum speed for the whole time.

Allow the chain to cut wood. Press down the saw lightly.

Stop pressing the saw at the end of the cut to avoid losing control over the tool.

11- Protection against recoil.

Recoil is movement of the guide bar of the chain saw up and/or back, which happens when the part of the chain on the guide bar tip encounters an obstacle.



Ensure the processed material is firmly fixed.

Use clamps to fix the material.

Hold the chain saw with both hands when starting up and during operation.

During recoil the chain saw cannot be controlled and the chain is loosened. Incorrectly sharpened chain increases risk of recoil.

Do not cut above level of your shoulders.

Avoid cutting with guide bar tip, it may cause sudden recoil - to the back and up. Always use complete safety equipment and appropriate working clothes when operating the chain saw.

Disassembly of protections, inappropriate operation, maintenance, improper guide bar or chain replacement may contribute to increase of risk of body injury in case of recoil. Never modify the saw in any way. By using modified chain saw, the user loses all warranty rights. Warranty voids also when the chain saw is used in accordingly to information contained in this manual.

12- Securing extension cord.

With the chain saw use only extension cords designed for outdoor applications. Cross section of the extension cord cores shall be at least 1.5 mm2. To ensure safe operation of the chain saw, put the extension cord in the power cord hook (2) in the rear handle (3), which eliminates unwanted tension of the extension cord when working. Use of extension cords longer than 30m causes reduction of chain saw power.

13- Cutting pieces of wood.

When cutting wood follow guidelines for safety of work and do as follows: Ensure the wood piece cannot be moved.

Use clamps to fix short pieces of material before cutting.

Cut wood or wood-like materials only.

Before cutting ensure the chain saw will not come into contact with stones or nails, as it could cause pulling the saw out and damage to the chain.

Avoid situations when working saw might touch wired fence or ground.

When cutting branches support the saw as much as possible and do not cut with the tip of the guide bar.



Watch out for obstacles such as protruding stumps, roots, hollows and holes in the ground, as they may be cause of an accident.

14- Felling a tree.

Felling trees require great experience. Do not perform activities for which you are not qualified!

Define the tree fall line. Consider wind, lean of the tree, location of heavy branches, complexity of work after tree fall and other factors.

When tidying area around the tree remember to ensure proper ground grip and escape

Predict and tidy up two escape paths at 45° angle, counting from the line opposite to expected line of the tree fall. There must be no obstacles on these paths.

The cutting is done by making three notches. Steering is done first notch, including upper and lower notch, and then ends with the felling notch. By proper placement of the three notches can be controlled direction. Make an initial upper notch at an angle, one third of the trunk diameter deep. Make a horizontal notch lower, to join the top. Perform overthrown notch horizontally from the opposite side of the guide and a little higher than lower surface of the notch.

Insert wedges on time to avoid pinching of the saw chain.

Fell the tree by driving a wedge rather than cutting through the whole trunk. When felling trees observe all safety rules and do as follows:

When the chain is pinched, switch off the chain saw and release the chain with a wedge. Wedge should be made of wood or plastic. Never use steel or cast iron wedge.

Falling tree may pull other trees.

Danger zone radius is 2.5 height of the falling tree.

If the operator is inexperienced or amateur it is recommended to have training rather than gaining the experience without supervision.

Do not fell trees when:

Conditions in danger zone cannot be determined due to fog, rain, snow or darkness.

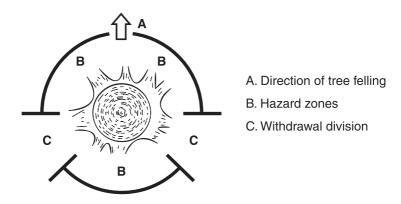
Line of tree felling cannot be determined due to wind or wind blows.



15- Cutting through trunks.

Press the bumper spike against the material and make a cut.

If the cutting cannot be finished even after the chain saw range is fully utilized, do as follows:



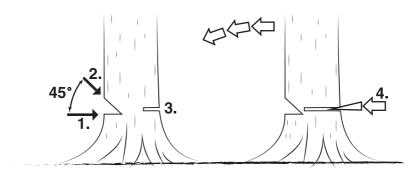
Move the guide bar back from the cut material to a certain distance (with cutting chain still operating) and move the main handle (3) a little down, support the bumper spike and finish the cut by lifting the main handle (3) a little.

16- Cutting a trunk lying on the ground.

Always keep good feet and ground grip. Do not stand on the trunk.

Watch out for possibility of the trunk rotation.

Observe manual guidelines related to work safety to avoid the chain saw recoil.





Always finish cutting at the side opposite to compressive stress to avoid pinching the chain in kerf.

Before starting to work check the stress direction in the trunk that is to be cut, to avoid pinching chain of the saw.

To eliminate stress, the first cut should be made at the tension side.

When cutting a trunk that is lying on the ground, first make a cut deep 1/3 of the trunk diameter, then turn the trunk over and finish cutting at the opposite side.

When cutting a trunk that is lying on the ground, do not allow to sink the cutting chain into the ground under the trunk. Negligence may cause immediate damage to the chain.

When cutting trunk that is lying on the slope, the operator should always be at the slope side above the trunk.

17- Cutting a trunk lifted above the ground.

In case the log is supported or placed on stable sawing horse, depending on the place of operation, make the cut 1/3 of the trunk diameter deep on the side under tension and finish cutting on the opposite side.

18- Trimming and cutting bushes and tree branches.

Start cutting branches of a felled tree at its base and continue towards top of the tree. Do small branches with a single cut.

First, check which way the branch bends. Then make a cut from the inside of the bend and finish cutting on the opposite side. Be careful, the branch being cut may spring back.

When trimming tree branches, always cut downward to enable free fall of cut branch. However, sometimes undercutting the branch from the bottom may be helpful.

Be very careful when cutting a branch that may be under stress. Such branch may spring aside and hit the operator.

Do not cut branches when climbing up the tree. Do not stand on ladder, platforms, logs or positions that may cause loss of balance and control over the chain saw. Do not cut above level of your shoulders. Always hold the chain saw with both hands.

19- Safe work with chain saw.



Never use the chain saw during rain and in moisture. Whenever the extension cord is damaged, remove its plug from mains socket immediately. Never use damaged power cord. Any damaged protective part should be repaired or replaced immediately.

■OPERATION AND MAINTENANCE

Unplug the power cord from the mains socket before commencing any activities related to installation, adjustment, repair or maintenance.

5- Storage.

Pay special attention to keep the ventilation holes of the engine casing pervious.

Clean plastic parts with mild detergent and a sponge.

You can proceed with maintenance actions only described within this instruction manual. Any other action can be carried out only by authorized service.

Do not make any changes in chain saw construction.

When not in use, chain saw should be stored clean, on flat surface, in dry place and beyond reach of children.

2- Guide bar and saw chain.

Check condition of the guide bar and chain every 5 hours of the saw operation.

Loosen and unscrew the guide bar fixing nut (12).

Remove the casing and disassemble guide bar (9) and chain (8).

Clean oil holes and groove in the guide bar (9).

Lubricate tip chain wheel of the guide bar (10) through the hole located on the guide bar tip. Check condition of the chain (8).

3- Chain sharpening.

Pay attention to cutting tools. Cutting tools should be sharp and clean, it allows efficient and safe operation. Operating the saw with blunt chain causes guick wear of the chain, guide bar and driving chain wheel, and breaking the chain in the worst case. That is why it is important to sharpen the chain on time.

Chain sharpening is a complex operation. Sharpening the chain by



yourself requires use of special tools and skills. It is recommended to entrust sharpening the chain to qualified persons.

