

## Quick Tension System



QTH 10-12 gpm

- MANUALE DI ISTRUZIONI ED USO PER: MOTOSEGA IDRAULICA PER CEMENTI CALCESTRUZZI, MURATURA
- SAFETY AND USER MANUAL FOR: HYDRAULIC CHAINSAW FOR CONCRETE
- **Hidraulics Chainsaw 10-12 gpm**  
**Code A5M001**



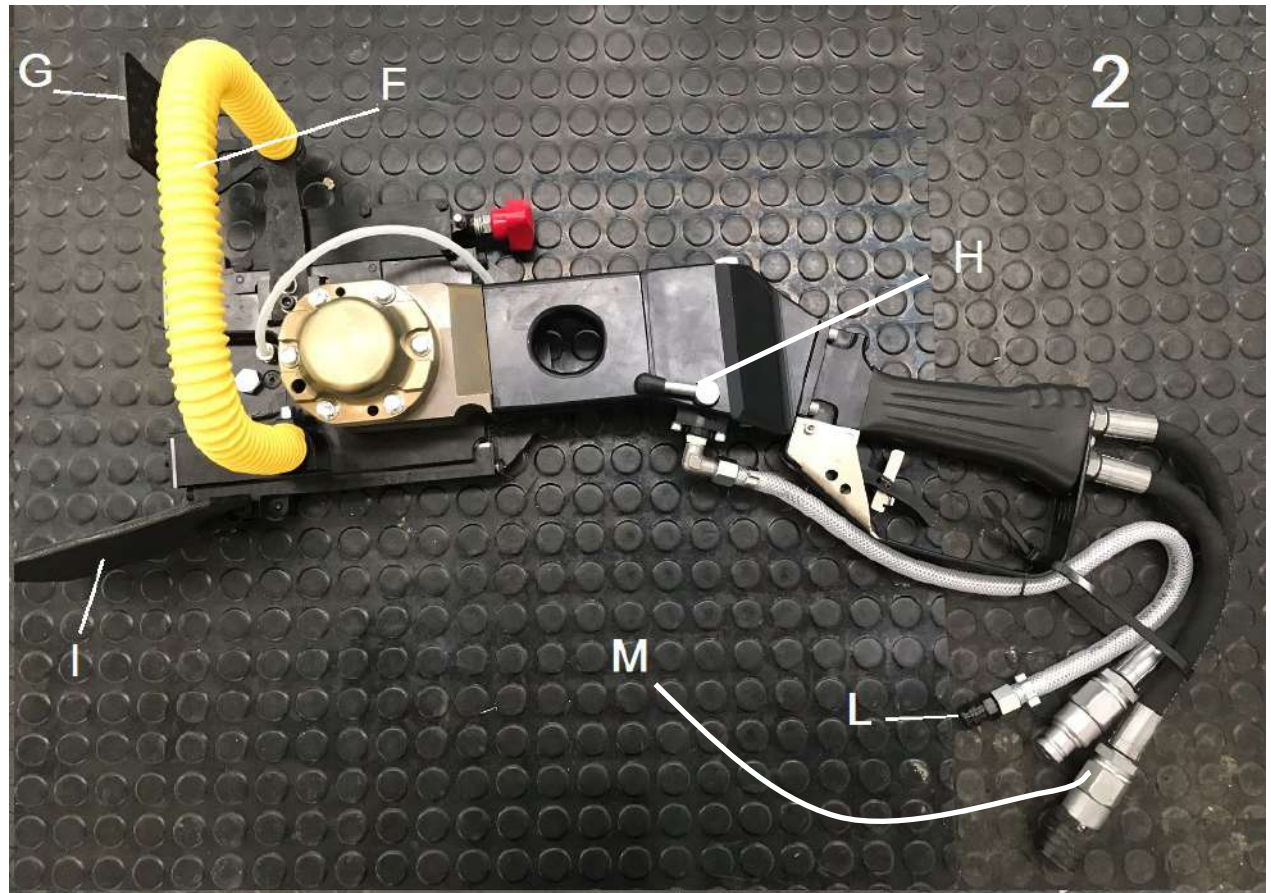
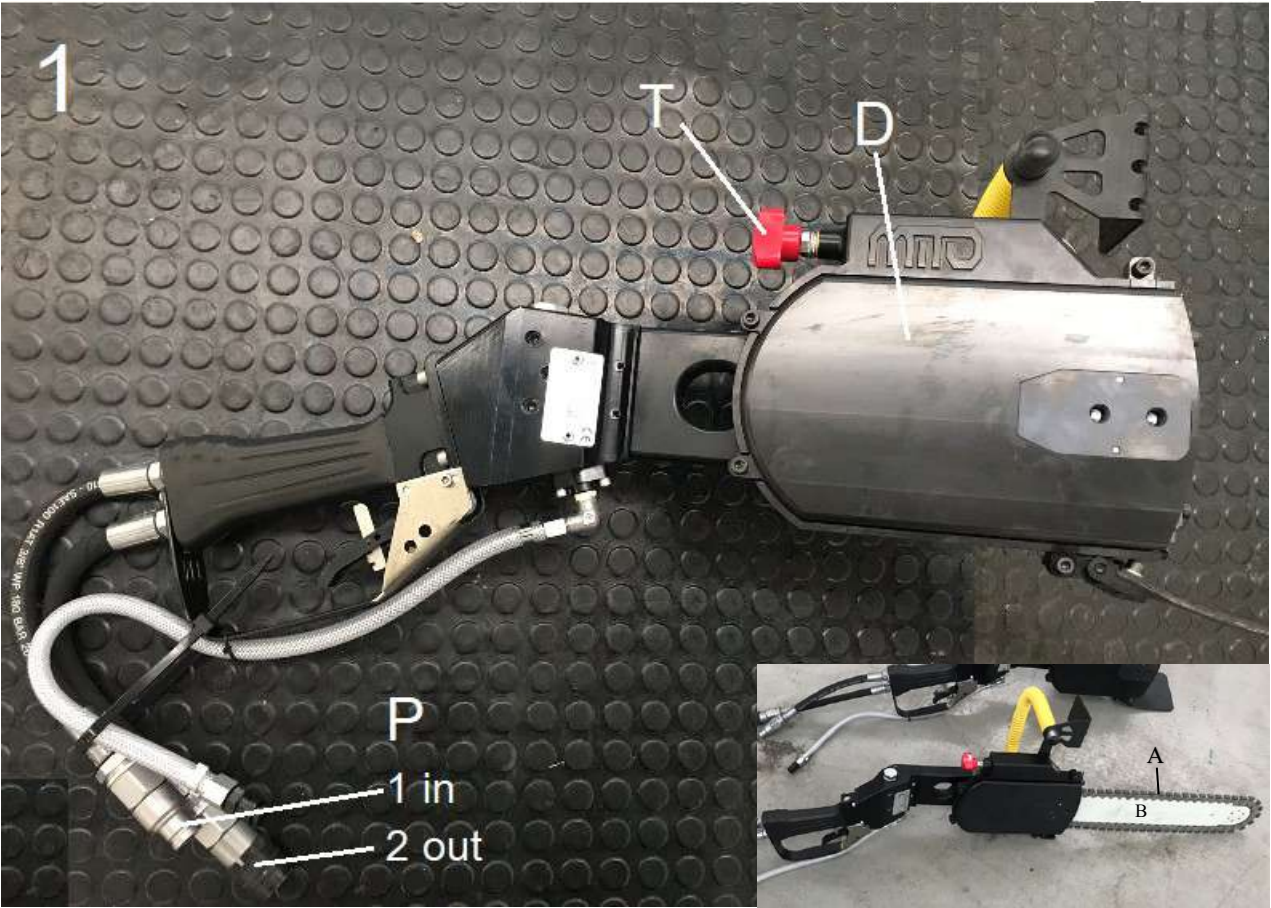
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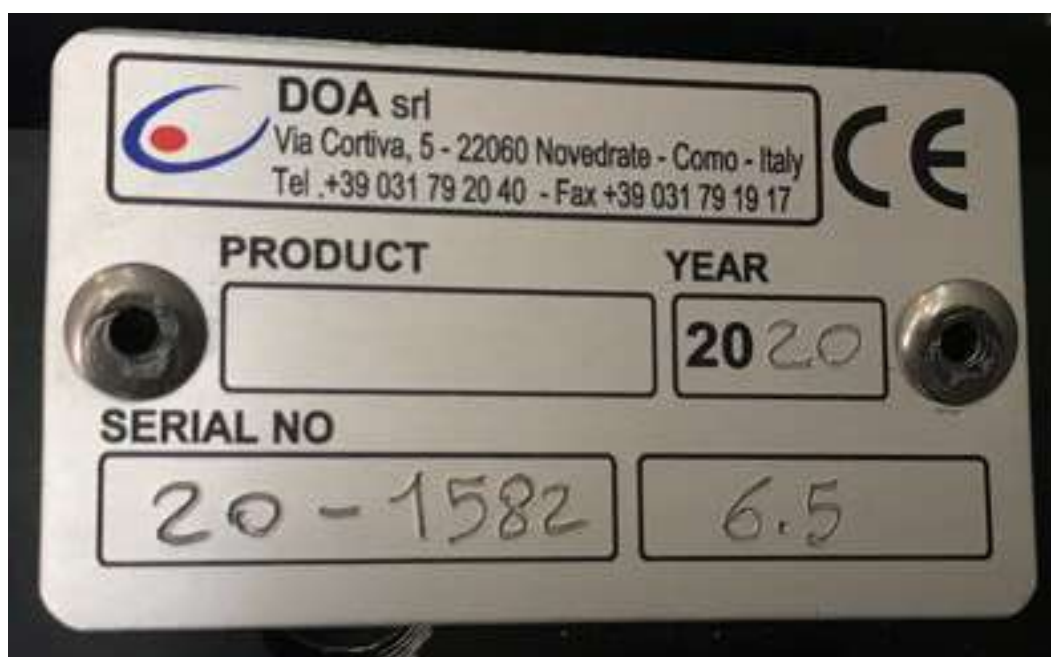




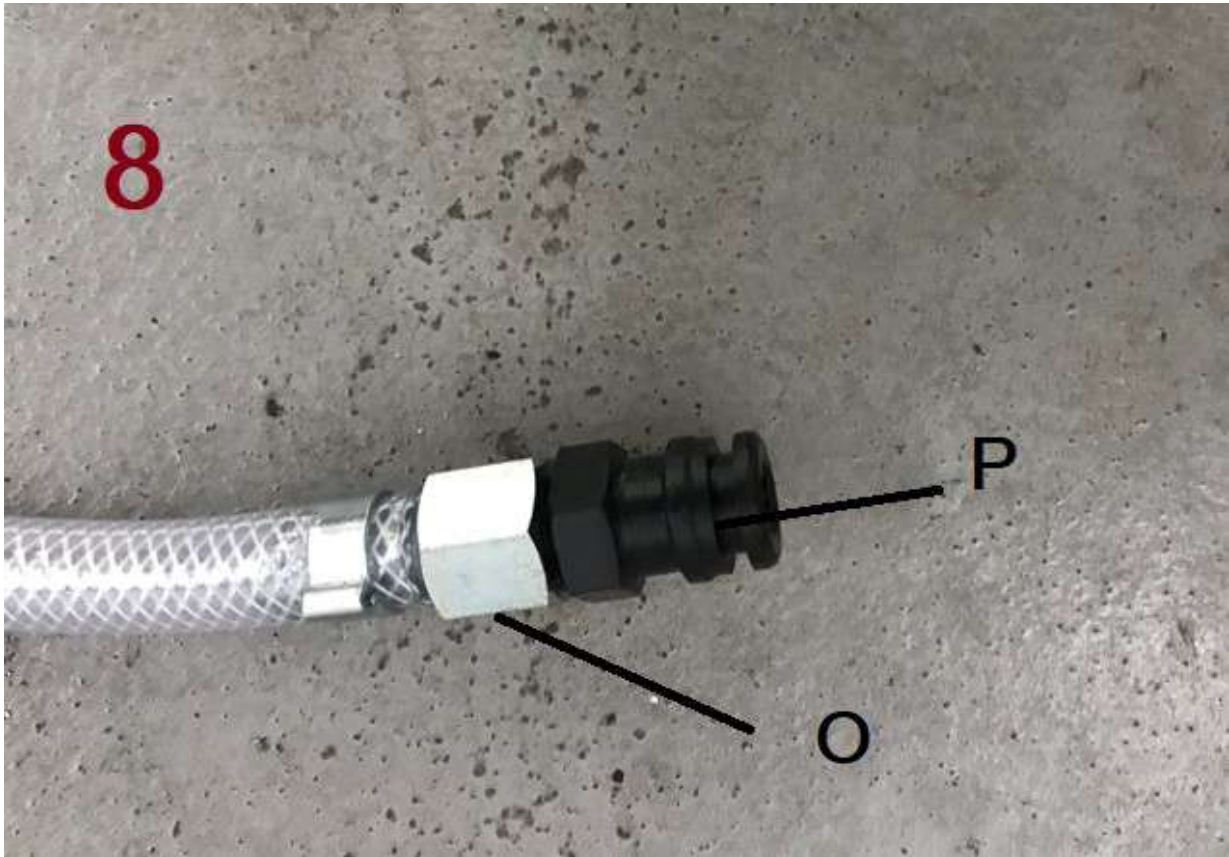


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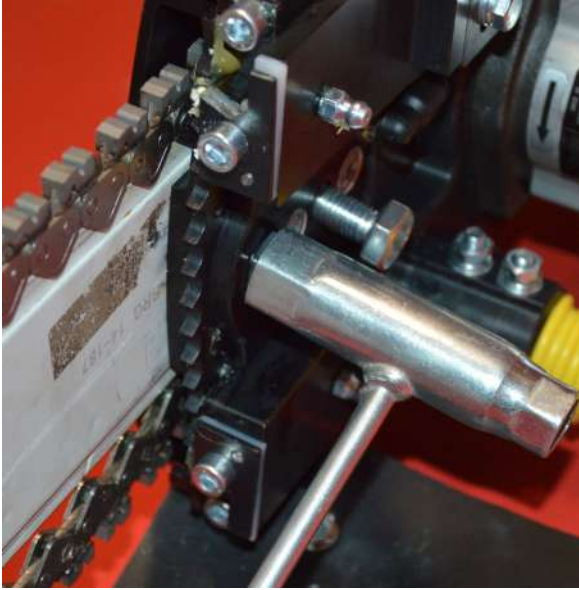


# Install new Guide Bar

7

11

11/A



11/B1



11/B



11/C



11/C1



11/D



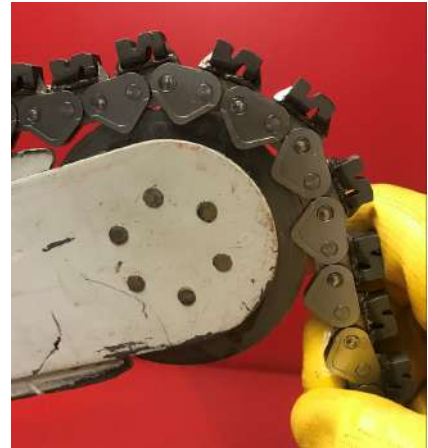
# Install New Chain

8

10

10/A

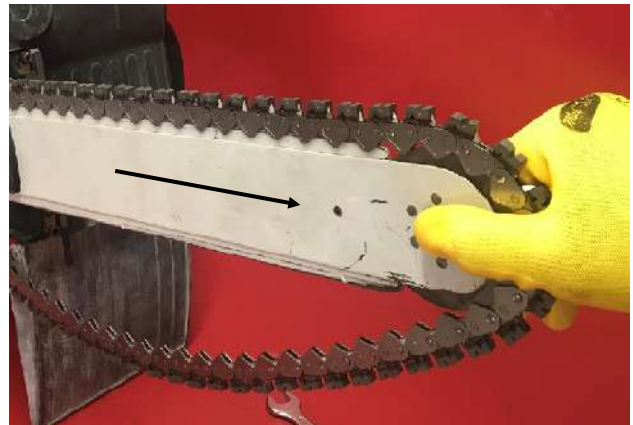
10/B



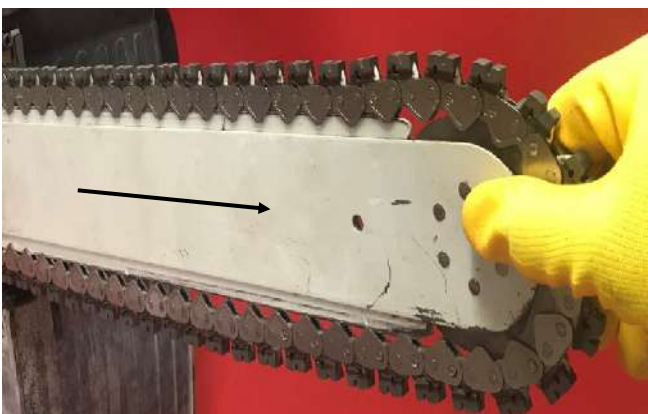
10/G



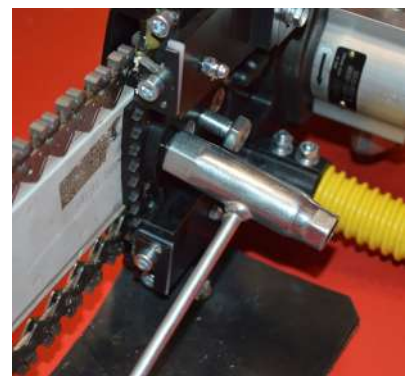
10/C



10/I



10/H



10/L





# Install New Sprocket

9

12

12/A

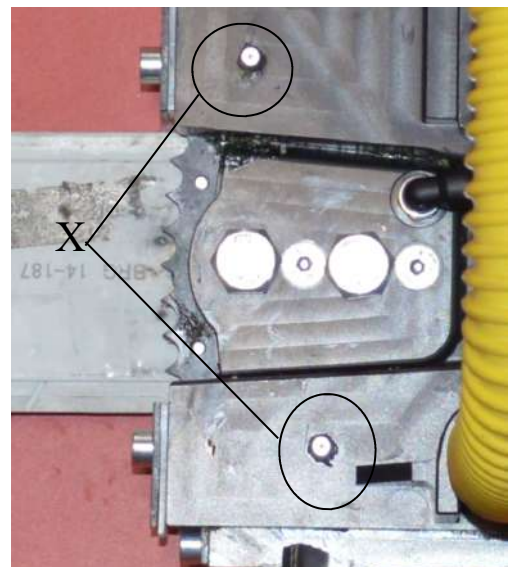


12/B

12/C



12/D



# CHAIN TENSION SUGGESTED

10

PLEASE The chain have a direction of cutting respect it



## VERY BAD

- Chain derails
- Bad cutting
- Life short
- Sprocket Life
- Snap chain

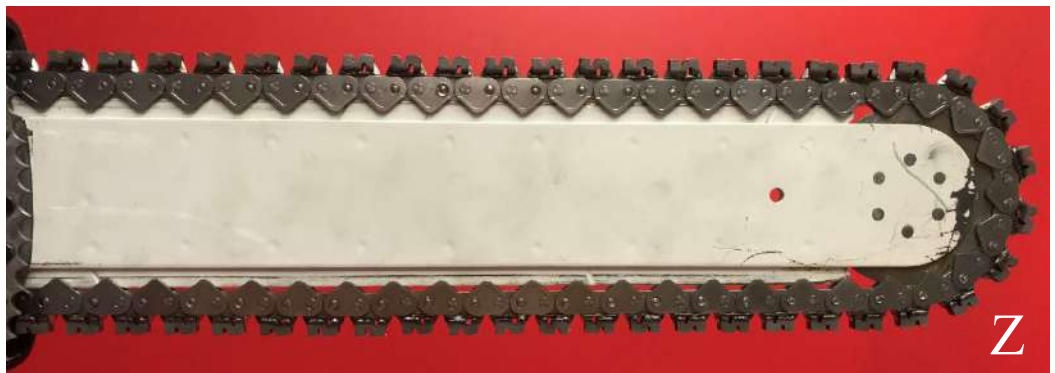


## BAD

- Bad cutting
- Life short
- Sprocket Life
- Snap chain



## PERFECT



## QT knob

Very easy to controll the corect tension of the chain for cutting. Please educate Yourself on this new cutting system





17



12

18



13



13/A



13/B



13/C



All the information provided comes with the intent to advise how manage the machine. This does not exclude the responsibility of the operator in using the machine in order to avoid any possible damage, especially to other operators as well as to themselves. The operator that will use this machine to cut concrete must be professional one and trained to use it. Operators have to be advised and aware of the danger or causes of accidents that can develop if machine is used improperly. The manufacturer declines all responsibility for damage caused to operators who will use the machine unconsciously.





Your MITO Hydraulics chainsaw is a power tool designed to perform straight cuts into concrete, reinforced concrete, stone, using the proper diamond chain and bar. The product needs sufficient clean water to operate and cool bar and chain through the water inlet system. Powerful and lightweight, this product is designed to perform finishing jobs by professional cutters and any kind of contractors. Follow general contractor, local and national regulations how to dispose of slurry generated during operating the saw.

Operator needs to be properly trained.



**Do not use this product to cut wood, plastic or other materials not listed above.**



**Do not use bars and chains different from the ones defined in this user manual.**

In the following text, figures are identified by numbers, details inside figures by letters. Figures are depicted on the first pages of this user manual.

A safety message alerts you to potential hazards which could injure you or others or cause property damage. The safety messages or signal words for product safety signs are **DANGER**, **WARNING** and **CAUTION**. Each safety message is preceded by a safety alert symbol and is defined as follow:

- **DANGER:** indicates an imminently hazardous situation which, if not avoided, will cause death or serious injury. This safety message is limited to the most extreme situations
- **WARNING:** Indicate a potentially hazardous situation which, is not avoided, could result in death or serious injury.
- **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices that may result in property-damage-only accident

In this manual all of them, DANGER, WARNING and CAUTION are marked with the symbol



## 1) General safety rules

**WARNING!** Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

### SAVE THESE INSTRUCTIONS

#### 1) Work area: CAUTION



- a) **Keep working 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. CAUTION



- 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 gear: always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, gloves, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Avoid accidental starting. Ensure the switch is in the off position before plugging in.** Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery and long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust related hazards.
- d) **Use auxiliary handles supplied with the tool.** Loss of control can cause personal injury.

#### 3) Power tool use and care. WARNING



- 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) **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.

- d) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation.** If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- e) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to get stuck and are easier to control.
- f) **Use the power tool, accessories and tools, 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.

## 5) Service

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

## 2) Safety rules for your chainsaw

### 2.1) Water supply: Safety rules

- In order to run properly, the chain needs to be cooled by water.
- 2.4) Checks and precautions to avoid structural damage and damage to a building

### 2.2) Checks and precautions to avoid structural damage and damage to a building. DANGER



Before operating, talk to the construction manager or the planner in order to make sure that cutting doesn't:

- damage the structure of the building and change the structural characteristics of the construction;
- damage any water or gas pipeline or any electric mains.



**DANGER** Particularly care if presence of gas pipeline, cutting iron sparks is present and can be a comburent for the gas

### 2.3) Checks and precautions to avoid damage caused by the fall of the cut out work piece. DANGER



- before operating, make sure that the possible falling of the cut out work piece doesn't make any damage. In any case, secure the area where the work piece can fall and signal the danger;
- if the possible fall of the cut out work piece can damage anybody or anything, make sure to have a proper system in place to secure it safely.

### 2.4) Fastening the work piece and size of the work piece

- if you are operating on a block not part of a structure, fasten it in order to prevent its movement. Prevent the work piece from shifting, moving or falling when you are cutting.

### 2.5) Suitable Bars and Chians

- Use bars and chains for wet cutting. Bars and chain for concrete, reinforced concrete, stone, are suitable for your product. Your product is not suitable to cut wood, plastics, metals (except reinforcing bars in concrete).



We suggest to use only bars and chains provided by BONOMI or authorized dealer.

### 2.6) Bars and Chains not to be used



Do not use bars and chains other than the ones suggested by BONOMI. Do not use chains for wood, tungsten carbide chains or chains for masonry. Chains for wood or masonry generate a kickback effect when plunging.

### 2.7) Protective devices

Before operating make sure to wear all safety devices listed below:



Always wear safety goggles



Always wear safety gloves



Always wear ear protection



Always wear safety shoes

### 2.8) Other safety directions.

#### WARNING



- **Keep handles (pointed with H and F in figures) dry and clean. Make sure there is no oil or grease on them.** Greasy or wet handles can lead to lose control of the chainsaw.
- **Make sure to firmly grip the product using both hands on handles (fig. 5).** Firmly hold the product with both hands till the chain has come to a complete stop.
- **When storing or transporting the product make sure the protecting cover (not present) is on the bar (B) and chain (A).**
- **When operating, keep proper footing and balance for a full control of the product.** Improper footing and balance, operating on ladders or on unstable structure can lead to serious injury or death.
- **When operating do not excessive stretch out your arms and do not perform cut higher than your shoulders.** Arms stretched too far out or cuts above shoulder height can lead to loss of control of the chainsaw.
- **Keep the chain sharp (see "Operating tips" paragraph).** A not dull chain leads to an excessive feed by the operator and this can lead to lose control of the product.
- **Do not use the product if the cover (D), the front panel (G), the slurry protector (I) or any other protection devices is damaged or not properly working.** Those devices prevent to get in contact with moving parts and to protect the operator from slurry and debris.
- **Do not use the product if chain, main sprocket and/or bar are damaged.**
- **When performing vertical cuts, do not operate using the product upside down (fig. 18).** Water and debris can hit the operator and can wrongly flow over the product leading to a possible danger. **For this reason do not perform overhead cuts!!!**
- **Do not place the bar and chain in a previously made cut performed with a narrower chain (less than 6 mm).** This can lead to a kickback.
- **Do not force the bar, during cutting, to torsion effort**

- **Do not force the bar, during cutting, to bending effort**

## 3) Checks before operating

### 3.1) Connection to a water supply

The chainsaw is equipped with a water inlet system (figure 8. Connect the chainsaw to a water supply using this system following those steps:

- Connect the water hose (O) to the quick hose connector (P fig8);
- Make sure there is no water leakage;
- the maximum pressure of incoming water is 3 bar (50 Psi);
- use just clean water;

## 4) Bar, chain and Sprocket

### 4.1) How to use the bar

- the bar (B) needs to be periodically flipped over in order to wear out evenly on both sides;
- the bar wears out. Usually you need to replace it every 2 to 3 times you replace a chain;

a correct chain (A) tension allows a longer bar life. See paragraph 4.2 and image U,V,Z page 10

### 4.2) How to use the chain. WARNING

- Chains usage lead to chain stretching;
- **An optimal chain tension reduces chain and bar wear and increases productivity and safety.**
- Check chain tension before use and stop periodically during operation to make sure the chain tension is correct;
- An excessive tension leads to higher friction, reducing cutting performance and increasing bar and chain wearing;
- A loose chain reduces cutting performance and can lead to the chain to disengage from the bar;
- Follow steps in paragraph 4.3) *Mounting and replacing bar and chain* to set the correct chain tension; see also movie on: <https://www.youtube.com/watch?v=pX1tBLgFTQU&t=4s>
- Check the chain more frequently when the chain is new since new chains have higher chain stretching.
- your hydraulic chainsaw machine is equipped with a rapid tensioning system called Quick Tensioning which greatly facilitates the chain tensioning manoeuvres and thanks to this the chain can work with the correct tension without the aid of particularly complicated mechanical manoeuvres, simply by operating the knob shown in figure 1, T
- Pay close attention to the use of this easy and immediate tensioning system and perform tension tests before cutting in order to get used to the tension system
- Never perform the tension by turning the knob shown in figure 1, T during the cutting
- The tensioning of the chain must be carried out with the guide bar pulled out of the cut and with the chain stopped. Once the ideal tension has been reached, as described in the following point 4.3 activate the hydraulic saw motion to check if the

tension reached is maintained. If the tension is optimal, as described in point 4.3, you can continue with the cutting operations.

- The correct maneuver is: Remove the guide bar from the cut, stop the engine visually check the conditions of extension of the chain with respect to the guide bar, (the correct chain tension is shown in figures U, V, Z in page 10) operate, if necessary, the tensioning operation of the chain by acting on the knob of fig. 1, T.

- Since the operation is very simple, it is recommended to avoid the over tension of the chain, the excessive tension of the chain is not recommended before starting the cut and can reduce the chain life



The equipment allows tensioning and give up the chain with a simple screwing or unscrewing operation of the indicated knob, it is therefore the operator's responsibility to realize that excessive tension can cause damage to the equipment as well as to people and damage the chain by cracking.

- We invite any operators to take good knowledge of the use of this easy system that on the one hand is very effective in terms of operator fatigue and cutting times on the other hand if used with abuse can induce the chain to work in conditions of overload and permanently damaging it, thus creating a dangerous condition.



### 4.3) Mounting and replacing bar and chain



Before mounting or replacing the bar (B) or the chain (A) make sure the chainsaw is unplugged (M) and the power pack is switch off. Do this operation in a safe place, use protective gloves and place the product on a stable surface.

Installing Chain (A) See figure 10, page 8, and follow these steps: or link to the movie <https://www.youtube.com/watch?v=pX1tBLgFTQU&t=4s>

1. Unscrew and remove the 2 side cover screw (10/I)
2. Remove the cover (11/B, 11/B1 pag. 7);
3. loosen the 10/I nut on the back of the machine the guide bar will be released and can slide back and forth and is free to change,
4. Using the, T tension knob. Return the sprocket to the initial position from 11C1 to 11C, page 7
5. Positioning the guide bar towards the sprocket 11/D in order to create the necessary space for inserting the chain,
6. Easily extract the old chain,
7. Insert the new chain on the guide bar 10/A and wind the chain around the 10/B guide bar head bearing, to have the chain saving at the back of the sprocket 10/G,
8. Install the chain on the sprocket proper position 10/C, **please note** the reverse chain made specifically for this machine has a sense of cutting, see fig Y page 10, make sure not to install the chain in the opposite direction,
9. If you install the chain in the wrong direction compromises the functionality of the same as well as damage it irreparably,
10. Repeat reverse step from point 4.3.9 to 4.3.1 to fix not permanently the cover.
11. Pull the guide bar by positioning the chain in a manual tension position, see page 8, Fig.10G to 10H and than Screw and fix the 2 nut 10/I on the back of the machine body and secure the guide bar to the machine body fig 10/I



12. Operate with the knob, T as indicated in 10/L and tension the chain respecting the indications given in the previous point 4.2
13. Position the closing cover 11/B, and tighten it with the 11/A, and 11/B1 screw,

#### 4.4 Installing Guide Bar (B) see figure 11, page 7, and follow these steps.

1. Unscrew the 2 front screw and the nut 11/A on the back of the machine, remove the cover. The guide bar will be released and removable 11/D
2. Using the tension knob, T bring the sprocket back to its initial position as shown in fig (11/C1 to 11/C on page 7)
3. Replace the new bar by positioning it in the predetermined position of the machine body itself fig. 11/D
4. reposition the Cover and temporarily tighten the nut on the back, 11/A making sure that the position of the bar is adequate to insert also the new chain
5. Proceed with the greasing of the machine using the special greasers on the back of the machine fig 12/D
6. continue the positioning and tensioning operations of the chain as indicated in the previous points
7. See page 13 for bar maintenance, control the correct movement of the head bearing and use pressure bearing grease to increase the life of the bar.

#### 4.4) Mounting and replacing the sprocket

The back main sprocket wears out and needs to be periodically replaced; replacement takes place usually every 2 to 3 chain replacements. See figure 12:



**DANGER:** Before starting, make sure the chainsaw is unplugged from the power source(M).

- Make sure to be in a safe place when performing this operation. Place the chainsaw on a stable surface;
- unscrew and remove the side cover screw (11/A, 11/B1, 11/B);
- remove the side cover of the machine fig 6 page 5
- Remove the retaining spring fig 12/A page 9 and remove the damaged sprocket (12/C);
- Clean the housing area of the shaft, leaving a veil of oil,
- Replace the old sprocket
- Proceed backwards by fitting the new sprocket, the retaining spring, as shown in figure 12/A
- Proceed accordingly with the operations described previously of replacing the chain and or the guide bar.

## 5) Operating instructions

### 5.1) Follow those steps:

To perform a cut, after having carefully read the paragraphs above and having checked grounding:

- with unplugged chainsaw, make sure the chain is correctly tightened;
- connect the hydraulic chainsaw at the power-pack hose with the 2 jack P1 and P2;
- Turn on the valve (H) letting water in your MITO machine will inflate the water in the bar and on the chain pushing the command handle (fig 3 – N) this handle is pushed automatically from your hand, when you will start to run the chainsaw pulling the second command handle (fig 4 O);
- Firmly hold the saw with both hands as shown in figure 5;
- Make sure the chain is not in contact with anything and then switch on the saw (N). In order to avoid an unintentional start, the switch is equipped with a *lock off* system. This means that you need to follow two steps (N and O) to switch on the chainsaw as shown in figure 3 and 4;

### 5.2) Cutting methods

- Lay out the cut with a marker: the cut must be straight;
- To start, plunge the nose of the cutting bar straight into material till you reach the desired cutting depth. Keep the bar perpendicular to the wall;
- Rock the saw when cutting (figure 15). This leads to leverage effect that makes cutting easier.
- Do not apply too much feed force. A good feed force leads to best cutting performance, excessive feed force leads to lower RPM and lower performance;
- Do not perform non-straight cuts and do not tilt side by side the chainsaw: these would lead to motor overload and damage bar and chains;
- To stop, release the switch (N);



**Warning:** the chain keeps running for some seconds after the switch has been released;

- Close the water valve (H);

### 5.3) Horizontal cuts

- You can perform either horizontal or vertical cuts. When cutting horizontally make sure the work piece does not press on the bar: use the product as shown in figure 17. Do not use the product with hand downward as shown in figure 16. When cutting an opening such as a window perform first horizontal cuts and then vertical ones.

### 5.4) Cutting reinforced concrete

- When cutting reinforced concrete rock the saw as shown in figure 15 in order to keep cutting concrete. This avoids that the segments gets polished reducing cutting effectiveness;
- Cutting rebar only is not allowed and sure you compromise the chain functionality and his integrity up to braking it.

### 5.5) Re-Sharpening the segments after cutting still bar for a long time

- If you experience reduced cutting effectiveness for polished segments, re-sharpen the segments using a sharpening stone (not included). Make sure the stone is properly fastened: see stone manufacturer directions. Perform re-sharpening with water, cutting a 1" cut in the sharpening stone.



**Warning:** do not perform re-sharpening holding the stone by hand or your feet.

## 6) Maintenance – Service - Warranty

### 6.1) Cleaning, maintenance and lubricating

At the end of the working day, perform the following operations:



**Warning:** do not clean you chainsaw with water jets or high pressure cleaner too many pressure can damage the machine;



**Warning:** remove bar and chain before proceeding with the following operations.

- Blow compressed air on the motor, in order to remove slurry. Use protective goggles when doing it.



**DANGER:** unplug from power source the chainsaw before proceeding with the following operations.

- Check the hydraulic connector to the hose and control if are well operating, if not should be changed, ask to your dealer
- With bar and chain off and after having disassembled the cover, remove the slurry from the chainsaw and add grease (12/D)
- Oil the chain tensioning system;
- spray, rotating the guide bar head bearing, with the suggested spray grease as shown in fig 13/A, 13/B, 13/C pag.13
- Dry bar and chain;
- Oil bar and chain;
- keep your product clean and dry, in particular its handles;
- never use solvents or other harsh chemicals to clean your product;
- gears are lubricated by lubricating oil and grease which are suited for any external temperature. You don't have to check the oil level or to fill it up.
- after use put your saw in a dry, safe and inaccessible place to children place.

### 6.2) Service

- Some components of your chain saw wear. It depends on how long you used the product and how heavy was the work. Bring your product to an authorized Bonomi service center for a check after 6 months if heavily used or every year if regularly used. Wearing parts are: bar, chain, back sprocket, brushes, rotor, power hoses, switch, sealing rings, bearings, and lubricants.

- any repairs must be carried out by Bonomi authorized service personnel only. Ask your dealer for the list of the Bonomi authorized service centers.
- We suggest to Use original Bonomi parts only.
- your core product serial number is stamped on the machine or printed on the data plate as shown in figure 7
- We suggest, No components of your Bonomi product (except bar, chain and back sprocket) can be replaced by the user. Replacement must be carried out by Bonomi authorized personnel only.
- **Bonomi Service Centers:** Ask your dealer for a Bonomi service centers address list.

### 6.3) Bonomi Warranty – 12 months

According to current European Directives, the manufacturer must provide a 12 month warranty on the product. Some countries may vary. Check with your local Distributor.

If your chainsaw is not functioning properly or has faulty workmanship or flaws in material within 12 months from the date of purchase Bonomi will replace, free of charge for the owner, defective components or, at Bonomi discretion, the whole product, if:

- The product has been purchased within 12 months: invoice or delivery certificates are needed to prove this;
- The product has not been misused. The product must have been used properly according to the directions provided in this user manual;
- no unauthorized people have operated on the product;

This warranty does not apply if malfunctioning is caused by worn out parts.

## 7) Operators Training

The product is easy to use, however a brief training allows better safety and performance.

Bonomi and some authorized distributors provide, free of charge, training sessions at their locations.

## 8) Package Contents

The chainsaw package includes, wrench and:

- User Manual.
- Wrench
- Documents: Data sheet, Exploded view drawing and spare parts list.

**Save these instructions for future consultation**

**WARNING:**  
**THE MANUFACTURER DECLINES ALL RESPONSABILITY**  
**IN CASE OF NO RESPECT OF THE ABOVE WRITTEN**  
**"SAFETY AND OPERATING INSTRUCTIONS".**

*Products to the end of their life.*



*The symbol on the left, that you can find on the product or on its packaging indicates that this product may not be treated as household waste. At the end of its life the products must be handed over to the applicable collection point for the recycling of electrical and electronic equipment.*

*Be sure that this product is disposed correctly. You will help prevent potential negative consequences for the environment and human health. For more detailed information about what to do when your product doesn't work and is not fixable, contact the dealer where you did purchase the product.*

*Your product has been introduced new on the market after August 13<sup>th</sup> 2005.*

*This manual is subject to modifications without notice.*