Nothing but **HEAVY DUTY.**®



M12 FHS

Original instructions


M12 FHS


Milwaukee
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Milwaukee





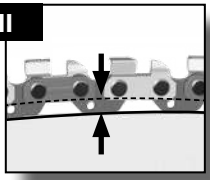

OIL



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II



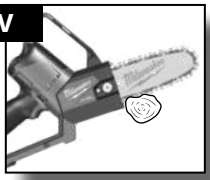
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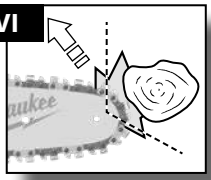
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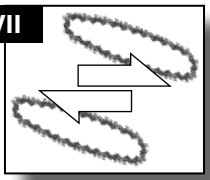
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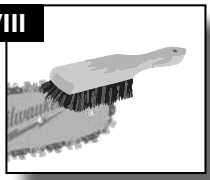
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VII



VIII



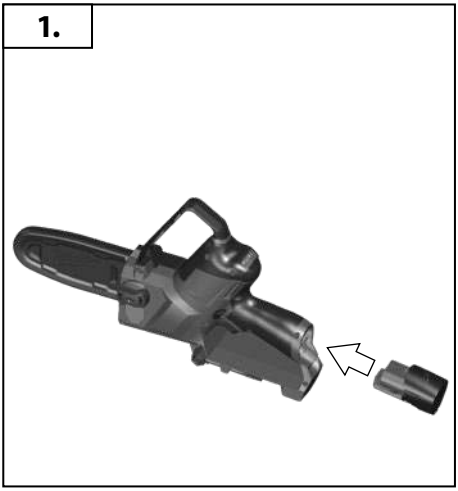
IX Technical Data, Safety Instructions, Specified Conditions of Use, Declaration of Conformity, Batteries, Maintenance, Symbols

Please read and save these instructions!

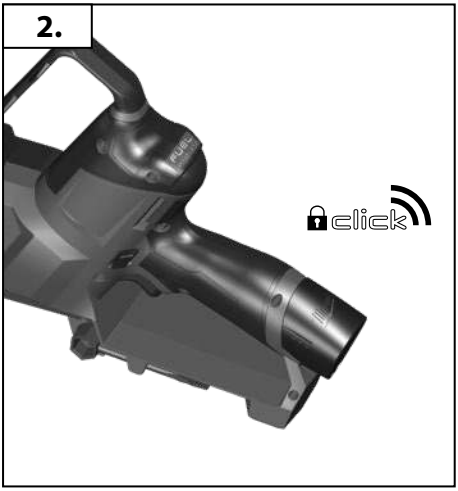


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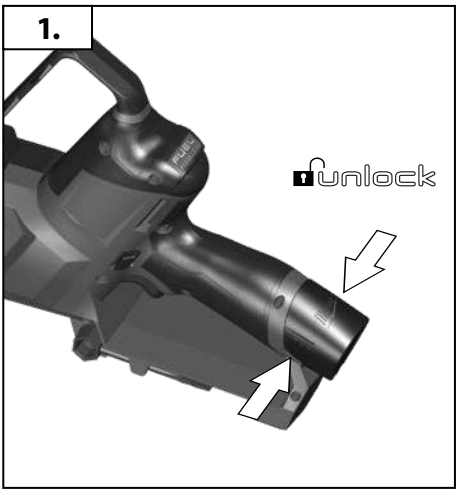
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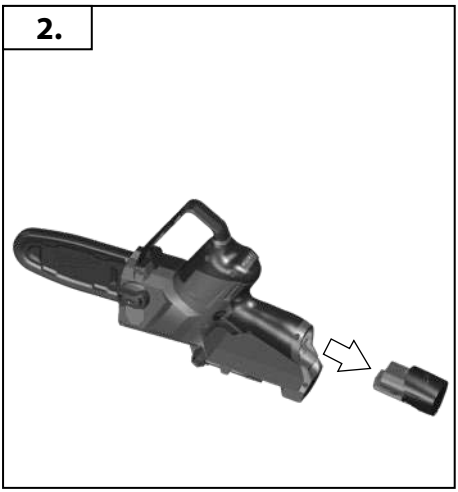
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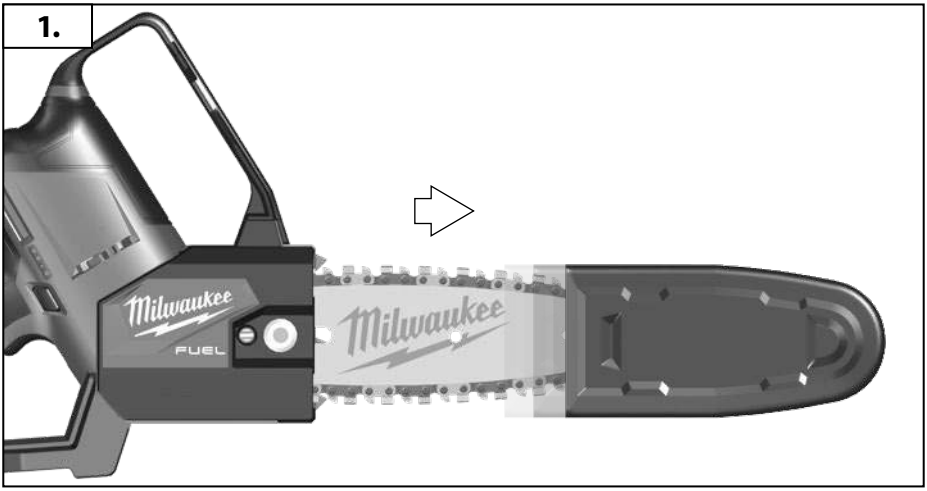


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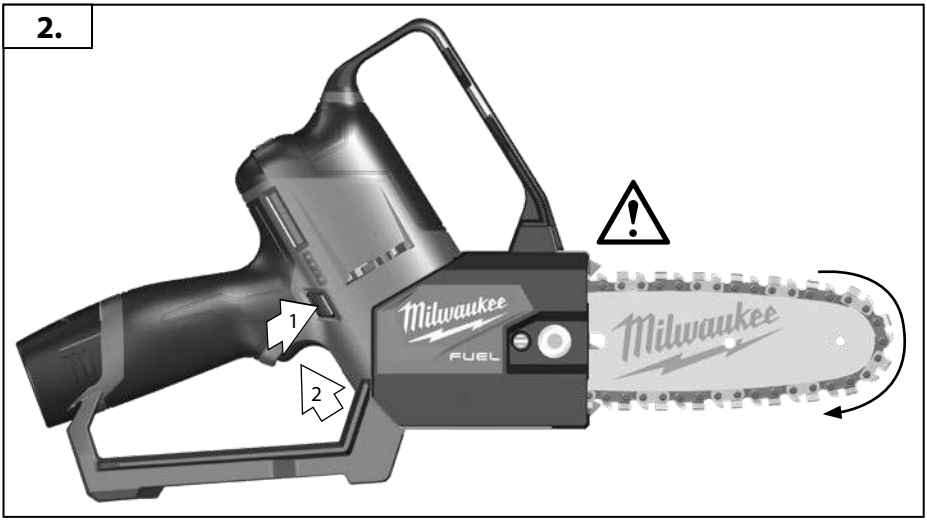







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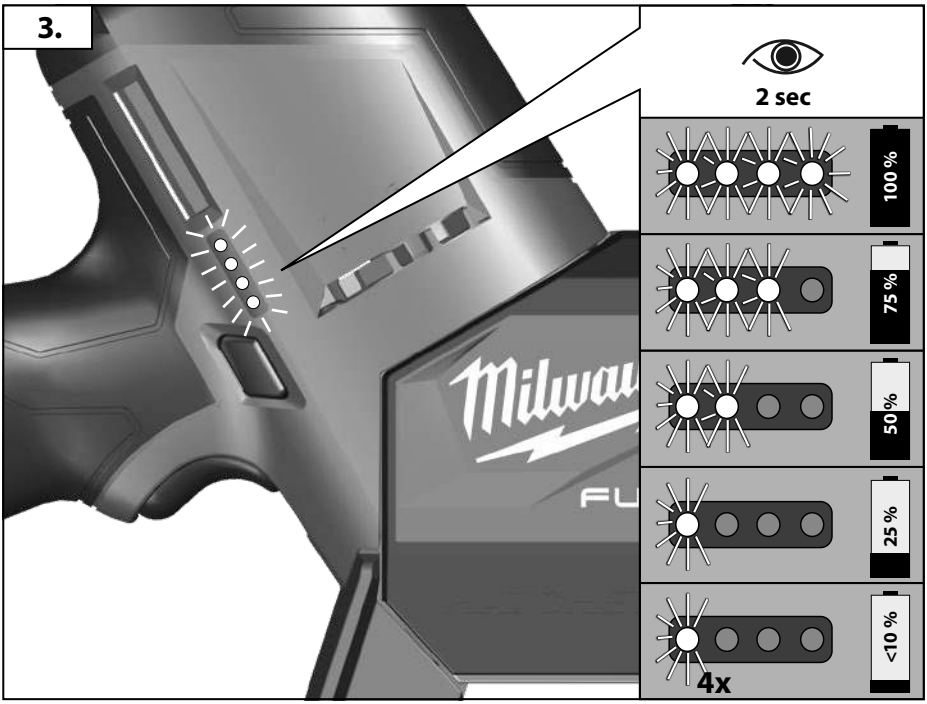

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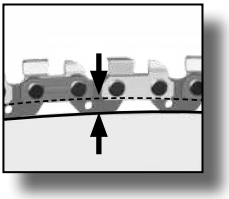






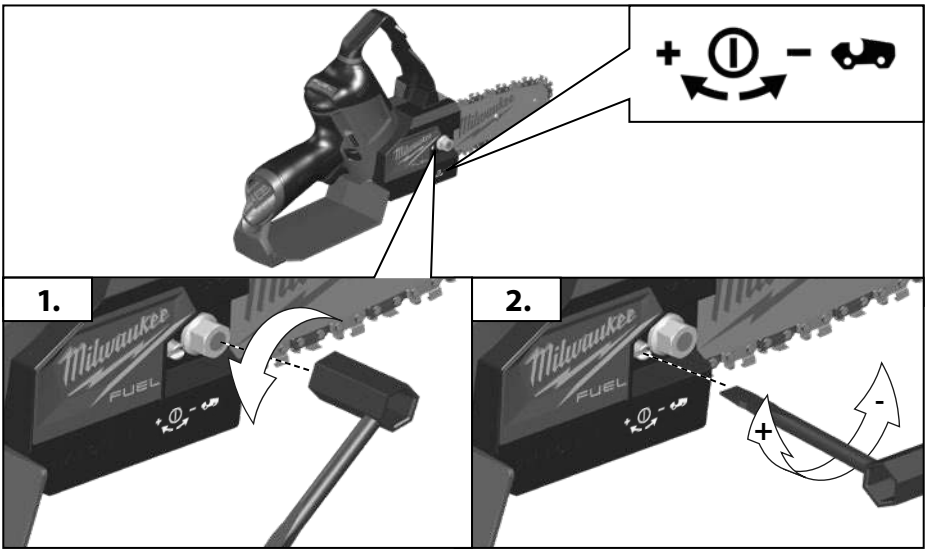
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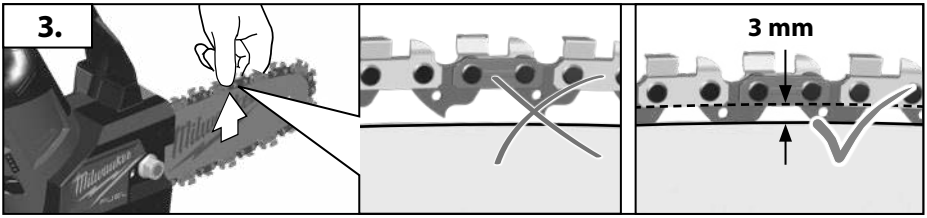


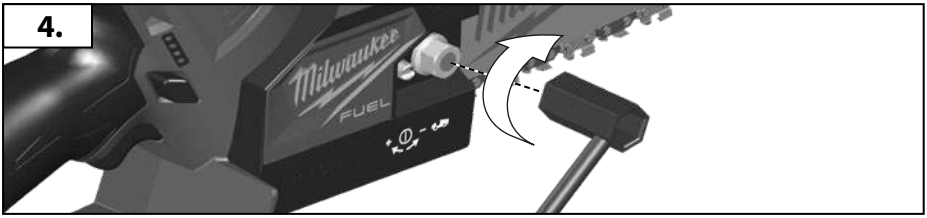





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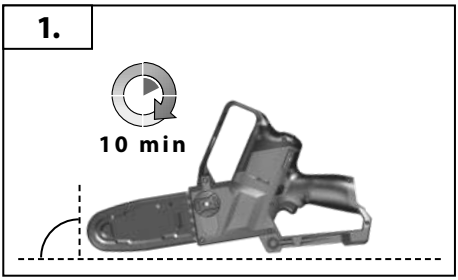

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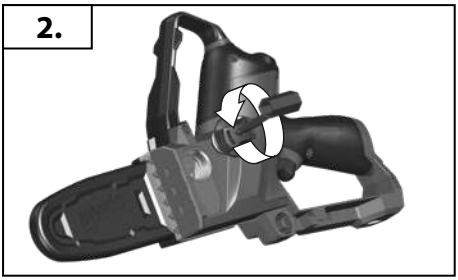


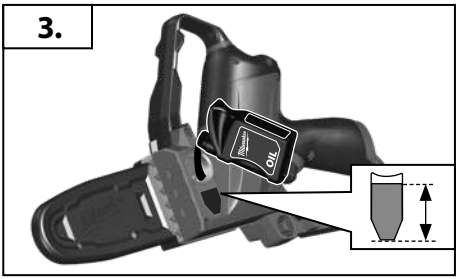


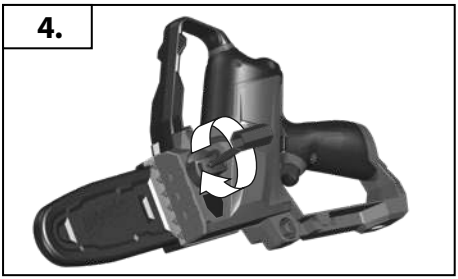


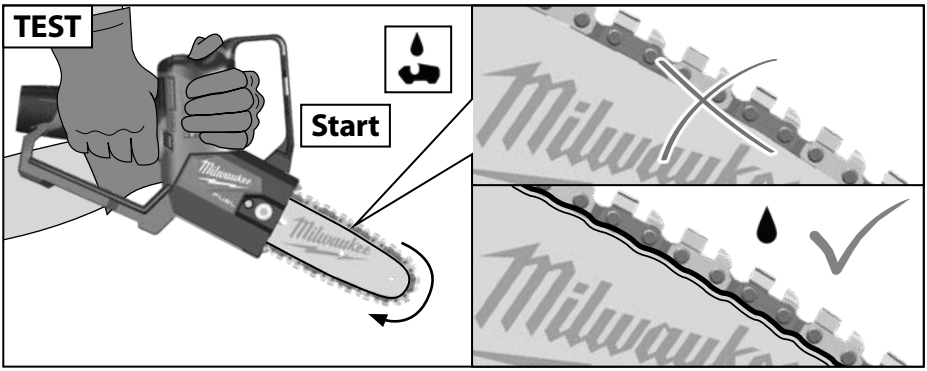
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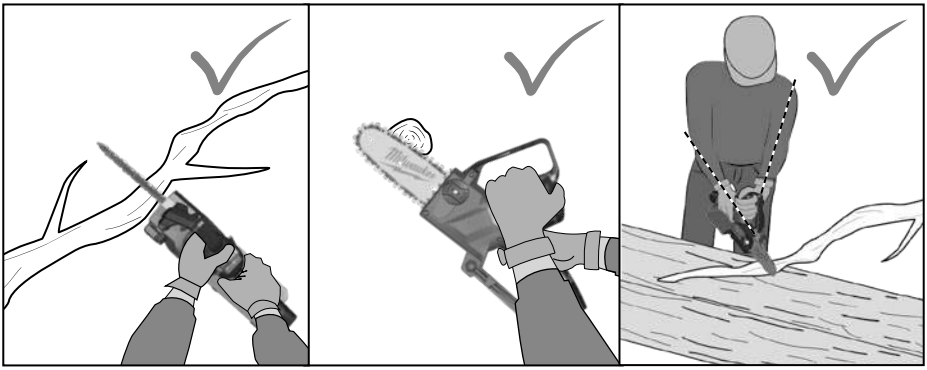


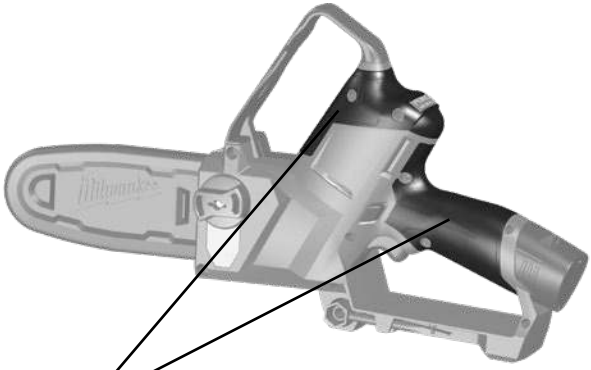





START
STOP



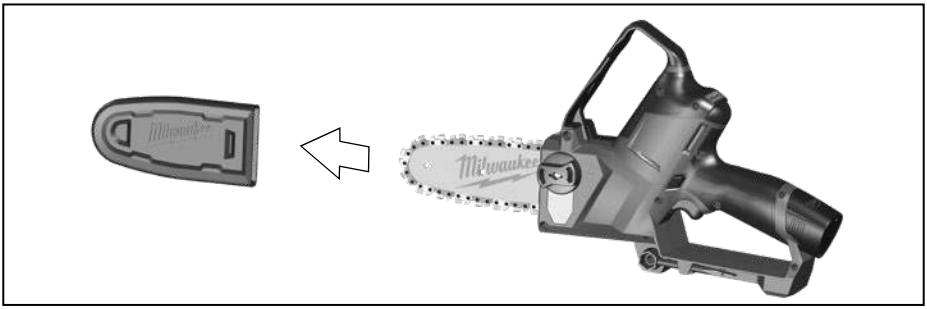



Insulated gripping surface

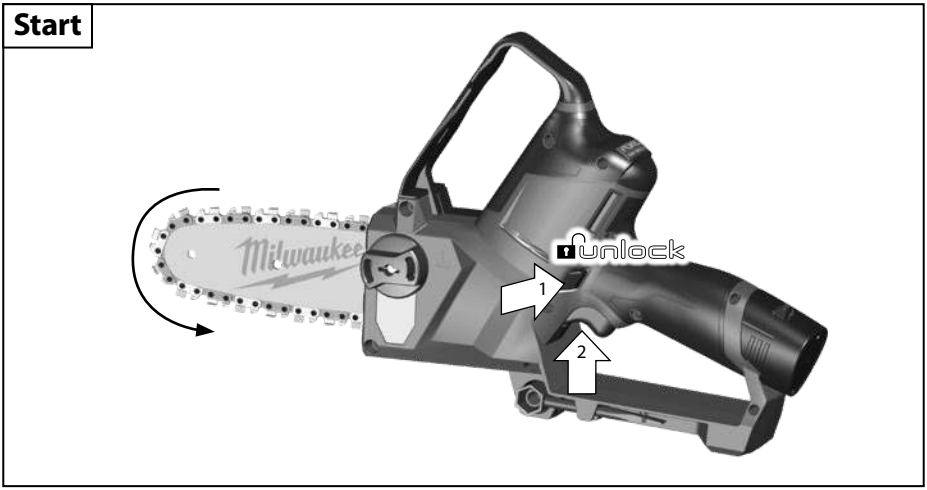




START STOP
IV



Start

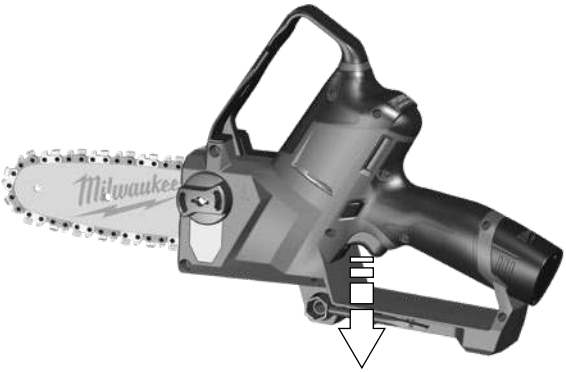


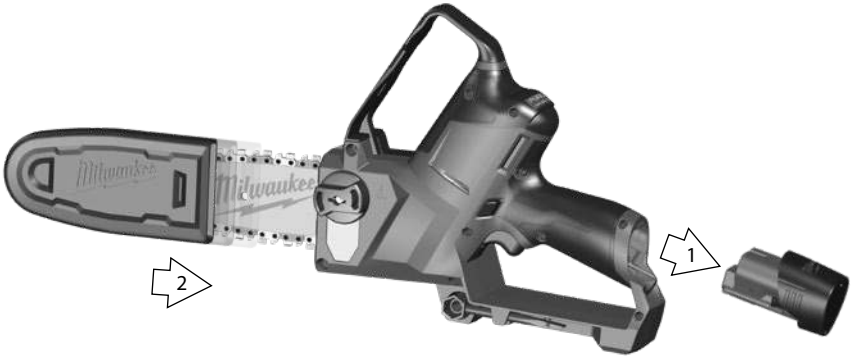
Carry out a test cut





Stop





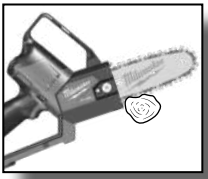




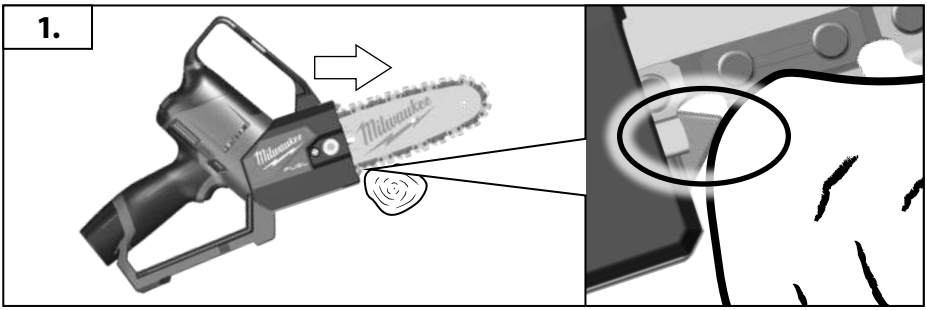
START STOP

IV

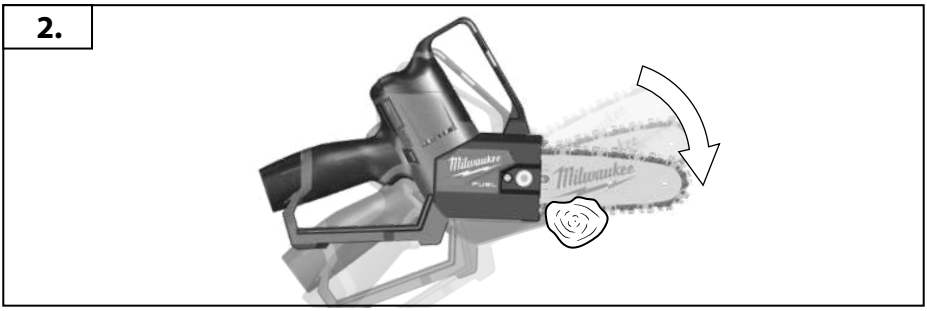
Restart protection:
When switched on, the machine will not start up after the battery is inserted again.

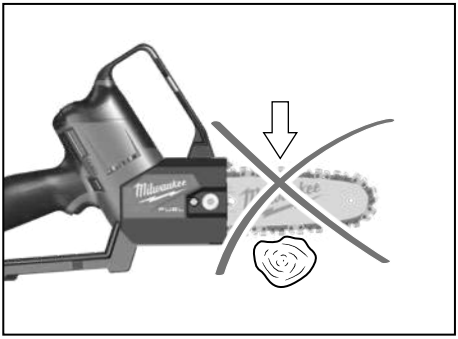


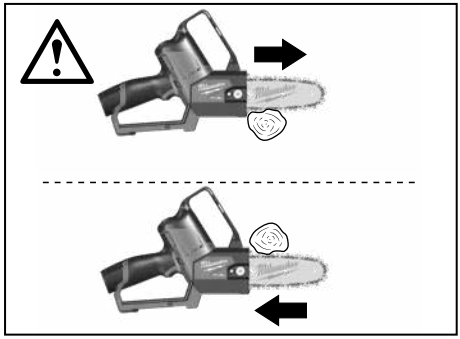


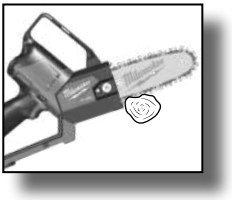

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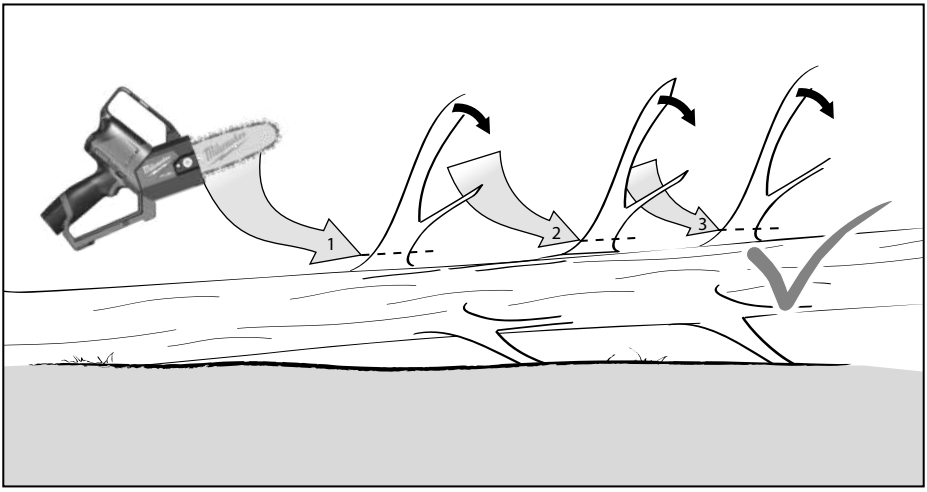


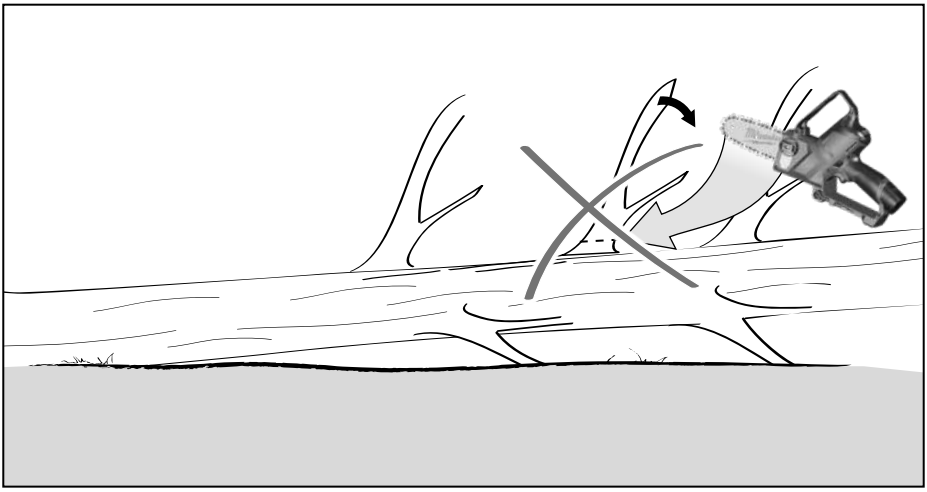


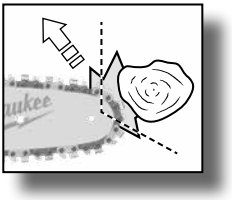




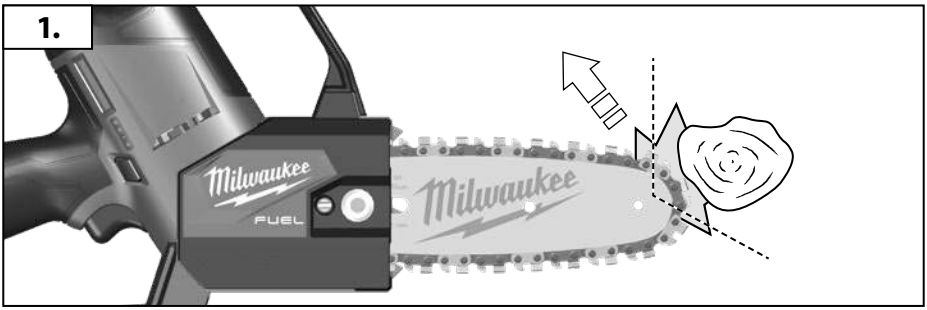
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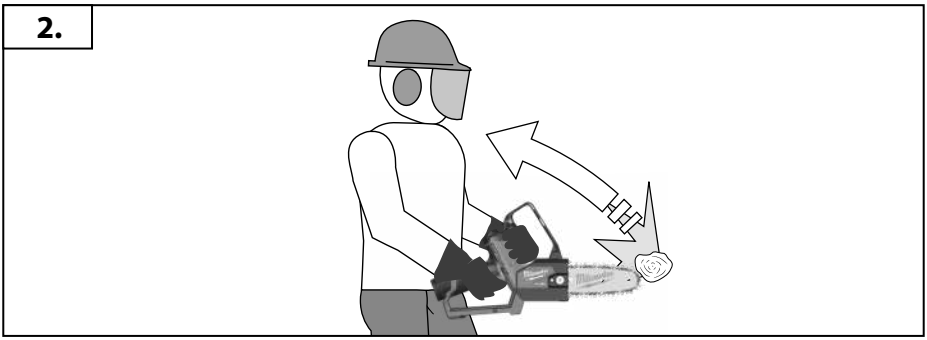


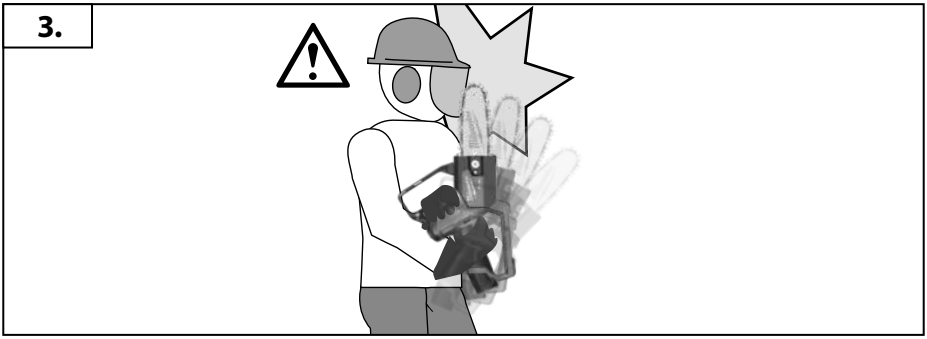




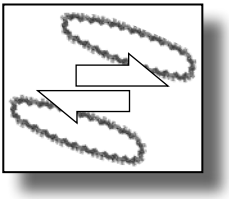



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VI

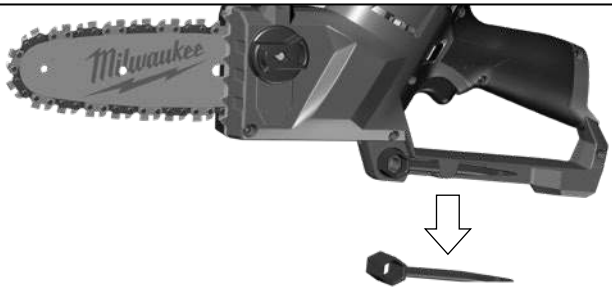




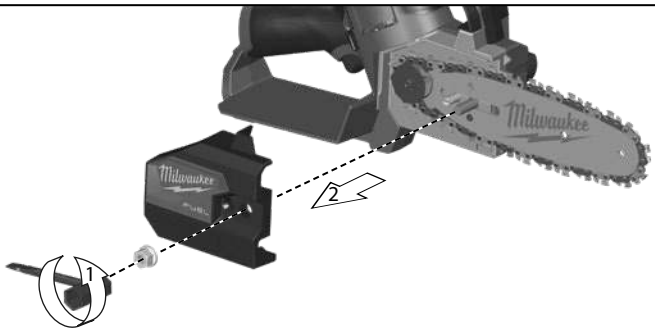


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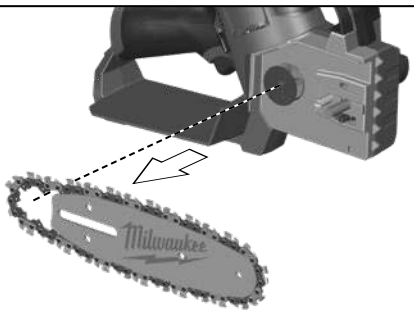
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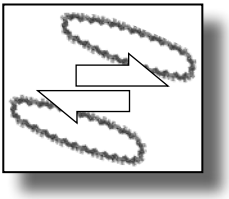


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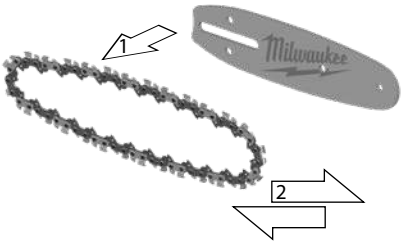




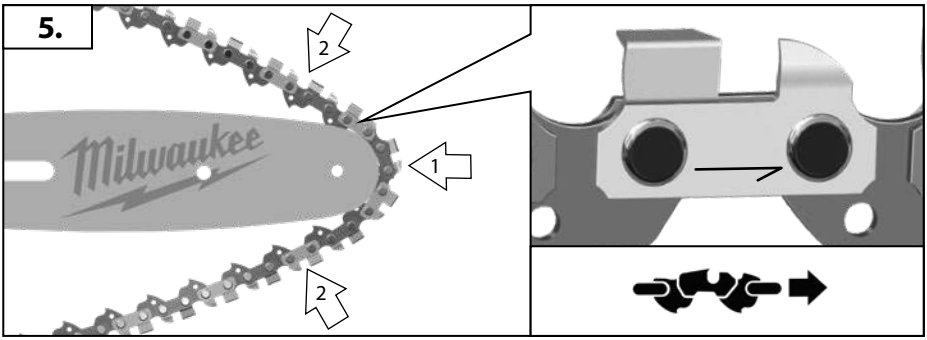




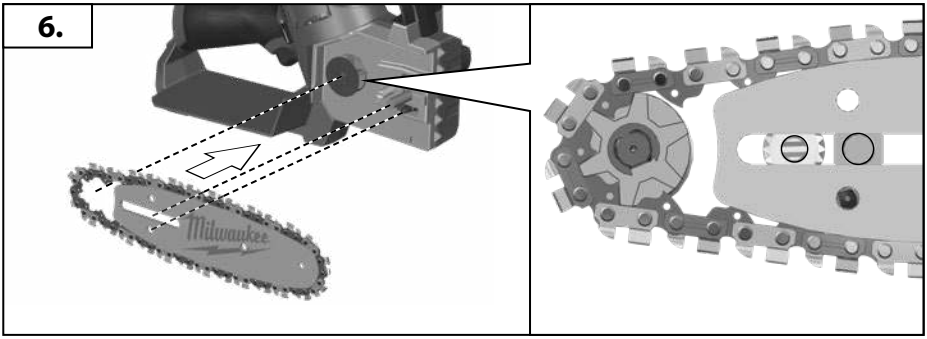
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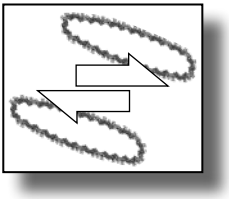


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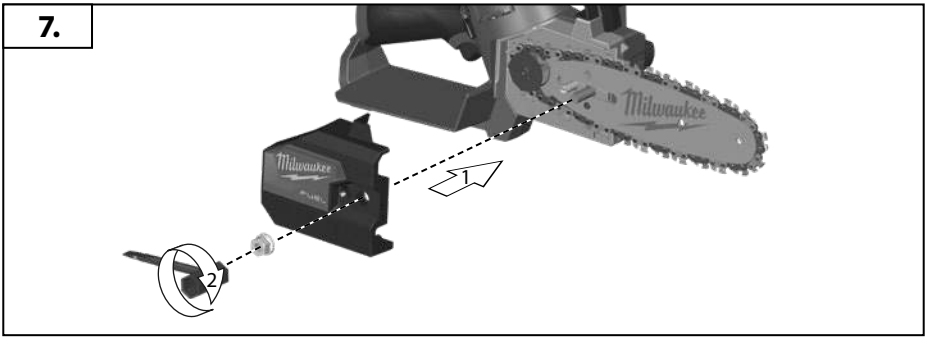




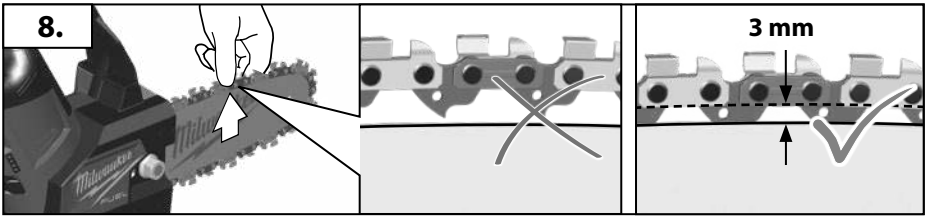


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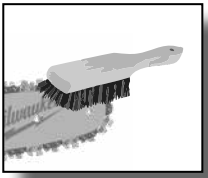
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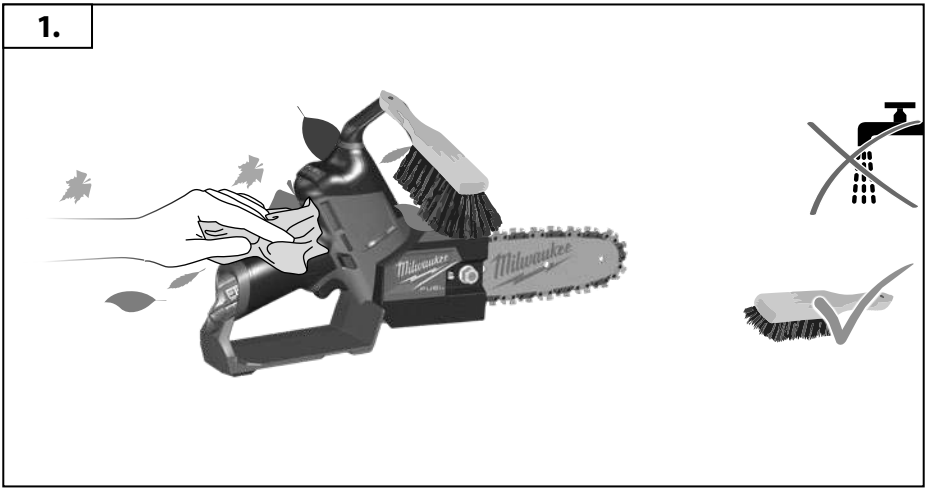




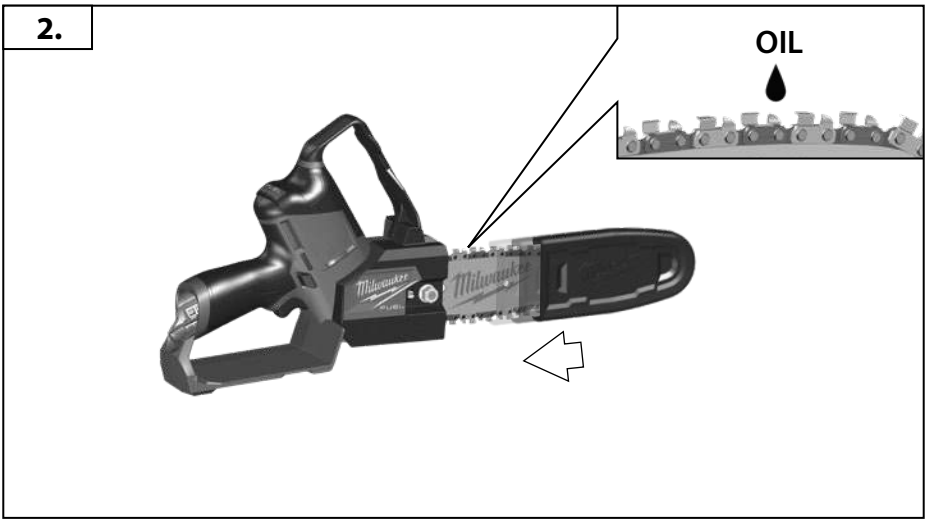


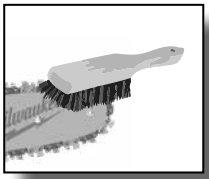


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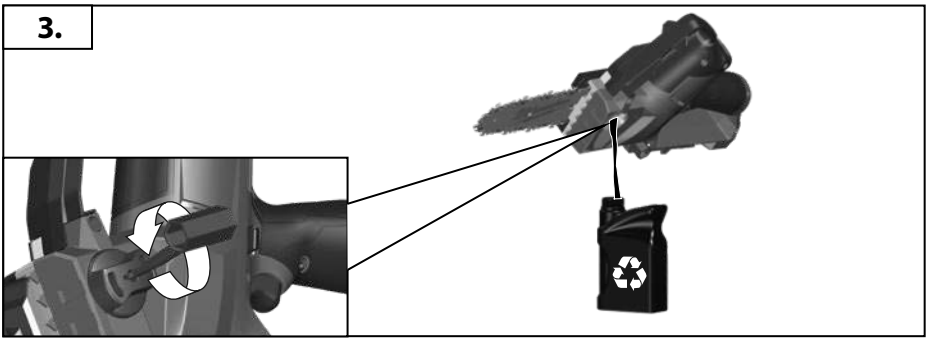




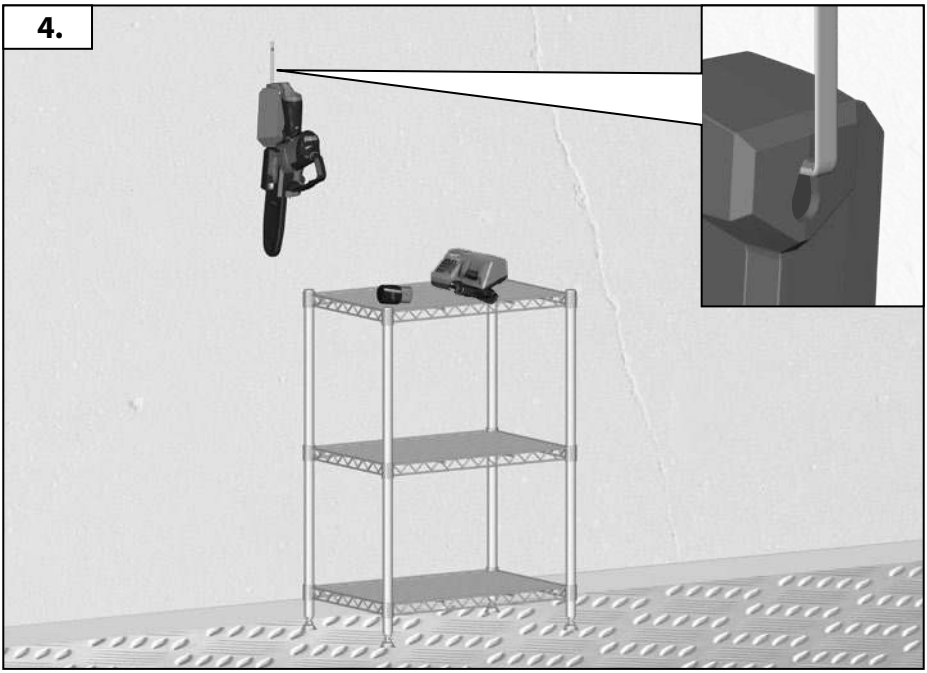


VIII

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4.



TECHNICAL DATA Pruning Saw	M12 FHS
Production code	4772 90 01 000001-999999
No-load chain speed	5 m/s
Bar length max.	6 ″ / 15 cm
Usable cutting length	5,5 ″ / 14 cm
Battery voltage	12 V
Weight according EPTA-Procedure 01/2014 (Li-Ion 2,0 Ah ... 6,0 Ah)	2,0 kg – 2,3 kg
Recommended Ambient Operating Temperature	-18°C ... +50°C
Recommended battery types	M12B...
Recommended charger	C12C; M12C4; M12-18...
Chain oil tank capacity	50 ml
Noise information Measured values determined according to EN 62841. Typically, the A-weighted noise levels of the tool are:	
Sound pressure level (Uncertainty K=3dB(A)) Sound power level (Uncertainty K=3dB(A)) **Wear ear protectors!**	73,6 dB(A) 86 dB(A)
Vibration information Vibration total values (triaxial vector sum) determined according to EN 62841	
Vibration emission value a_{hv}	6,1 m/s^2
Uncertainty K=	1,5 m/s^2

WARNING

The vibration and noise emission level given in this information sheet has been measured in accordance with a standardized test given in EN 62841 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

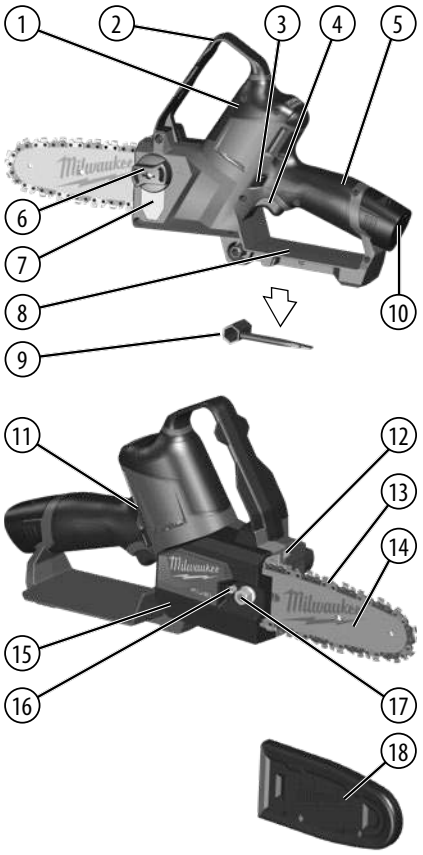
The declared vibration and noise emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration and noise emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration and noise should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration and/or noise such as: maintain the tool and the accessories, keep the hands warm, organization of work patterns.

Wear ear protectors. Exposure to noise can cause hearing loss.

KNOW YOUR PRUNING SAW



IX

Device description

1. Front handle
2. Front Hand Guard
3. Lock-Off Device
4. Power switch
5. Rear Handle
6. Chain Lubricant Cap
7. Chain Oil Tank
8. Rear Hand Guard
9. Combination Wrench
10. Battery
11. Battery Level Indicator
12. Spiked Bumper
13. Saw Chain
14. Guide Bar
15. Drive Sprocket Cover
16. Chain Tension Screw
17. Bar mounting nut
18. Guide Bar Cover

WARNING!

Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

GENERAL PRUNING SAW SAFETY WARNINGS

a) Keep all parts of the body away from the saw chain when the pruning saw is operating. Before you start the pruning saw, make sure the saw chain is not contacting anything. A moment of inattention while operating pruning saws may cause entanglement of your clothing or body with the saw chain.

b) Always hold the pruning saw with your right hand on the rear handle and your left hand on the front handle. Holding the pruning saw with a reversed hand configuration increases the risk of personal injury and should never be done.

c) Hold the pruning saw by insulated gripping surfaces only, because the saw chain may contact hidden wiring. Saw chains contacting a „live" wire may make exposed metal parts of the pruning saw „live" and could give the operator an electric shock.

d) Wear eye protection. Further protective equipment for hearing, head, hands, legs and feet is recommended. Adequate protective equipment will reduce personal injury from flying debris or accidental contact with the saw chain.

e) Do not operate a pruning saw in a tree, on a ladder, from a rooftop, or any unstable support. Operation of a pruning saw in this manner could result in serious personal injury.

f) Always keep proper footing and operate the pruning saw only when standing on fixed, secure and level surface. Slippery or unstable surfaces may cause a loss of balance or control of the pruning saw.

g) When cutting a limb that is under tension, be alert for spring back. When the tension in the wood fibres is released the spring loaded limb may strike the operator and /or throw the pruning saw out of control.

h) Use extreme caution when cutting brush and saplings. The slender material may catch the saw chain and be whipped toward you or pull you off balance.

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

j) Follow instructions for lubricating, chain tensioning and changing the bar and chain. Improperly tensioned or lubricated chain may either break or increase the chance for kickback.

k) Keep handles dry, clean, and free from oil and grease. Greasy, oily handles are slippery causing loss of control.

l) Cut wood only. Do not use pruning saw for purposes not intended. For example: do not use pruning saw for cutting metal, plastic, masonry or non-wood building materials. Use of the pruning saw for operations different than intended could result in a hazardous situation.

Follow all instructions when clearing jammed material, storing or servicing the pruning saw. Make sure the switch is off and the battery pack is removed. Unexpected actuation of the pruning saw while clearing jammed material or servicing may result in serious personal injury.

Causes and operator prevention of kickback:

Kickback may occur when the nose or tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain in the cut.

Tip contact in some cases may cause a sudden reverse reaction, kicking the guide bar up and back towards the operator.

Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator.

Either of these reactions may cause you to lose control of the saw which could result in serious personal injury. Do not rely exclusively upon the safety devices built into your saw.

As a pruning saw user, you should take several steps to keep your cutting jobs free from accident or injury.

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

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

b) Do not overreach and do not cut above shoulder height. This helps prevent unintended tip contact and enables better control of the pruning saw in unexpected situations.

c) Only use replacement guide bars and chains specified by the manufacturer. Incorrect replacement guide bars and chains may cause chain breakage and/or kickback.

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

ADDITIONAL SAFETY AND WORKING INSTRUCTIONS

It is recommended to cut logs on a saw-horse or cradle when operating the machine for the first time.

Ensure all guards, handles, and spiked bumper are properly fitted and are in good condition.

Persons using the pruning saw should be in good health.

The operator should be alert, have a good vision, mobility, balance, and manual dexterity. If there is any doubt, do not operate the pruning saw.

Do not start using the pruning saw until you have a clear work area, secure footing, and a planned retreat path away from a falling tree. Beware of the emission of lubricant mist and saw dust. Wear a mask or respirator, if required.

Do not cut vines and/or small undergrowth.

Always hold the pruning saw with both hands during operation. Use a firm grip with thumbs and fingers encircling the pruning saw handles. Right hand must be on the rear handle and left hand on the front handle.

Before starting the pruning saw, make sure the saw chain is not contacting any object.

Do not modify the pruning saw in any way or use it to power any attachments or devices not recommended by the manufacturer for your pruning saw.

There should be a first-aid kit containing large wound dressings and a means to summon attention (e.g., whistle) close to the operator. A larger more comprehensive kit should be reasonably nearby.

An incorrectly tensioned chain can jump off the guide bar and could result in serious injury or fatality. The length of the chain depends on the temperature. Check the tension frequently.

You should get used to your new pruning saw by making simple cuts on securely supported wood. Do this whenever you have not operated the saw for some time. To reduce the risk of injury associated with contacting moving parts, always stop the motor, apply the chain brake, remove the battery pack and make sure all moving parts have come to a stop before:

- cleaning or clearing a blockage
- leaving the machine unattended
- installing or removing attachments
- checking, conducting maintenance or working on the machine

The size of the work area depends on the job being performed as well as the size of the tree or work piece involved. For example, felling a tree requires a larger work area than making other cuts, i.e., bucking cuts, etc. The operator needs to be aware and in control of everything happening in the work area.

Do not cut with your body in line with the guide bar and chain. If you experience kickback, this will help prevent the chain coming into contact with your head or body.

Do not use a back-and-forward sawing motion, let the chain do the work. Keep the chain sharp and do not try to push the chain through the cut.

Do not put pressure on the saw at the end of the cut. Be ready to take on the weight of the saw as it cuts free from the wood. Failure to do so could result in possible serious personal injury.

Do not stop the saw in the middle of a cutting operation.

Keep the saw running until it is already removed from the cut. Do not fix the on/off switch in the „on" position when using the saw hand-held.

Remove the battery pack before starting any work on the appliance.

WARNING! To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your tool, battery pack or charger in fluid or allow a fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach containing products, etc., Can cause a short circuit.
Use only System M12 chargers for charging System M12 battery packs. Do not use battery packs from other systems.

Never break open battery packs and chargers and store only in dry rooms. Keep dry at all times.

Push and pull

The reaction force is always opposite to the direction the chain is moving. Thus, the operator must be ready to control the tendency for the machine to pull away (forward motion) when cutting on the bottom edge of the bar and the push backwards (towards the operator) when cutting along the top edge.

Saw jammed in the cut

Stop the pruning saw and make it safe. Do not try to force the chain and bar out of the cut as this is likely to break the chain, which may swing back and strike the operator. This situation normally occurs because the wood is incorrectly supported which forces the cut to close under compression, thereby pinching the blade. If adjusting the support does not release the bar and chain, use wooden wedges or a lever to open the cut and release the saw. Never try to start the pruning saw when the guide bar is already in a cut or kerf.

Skating / Bouncing

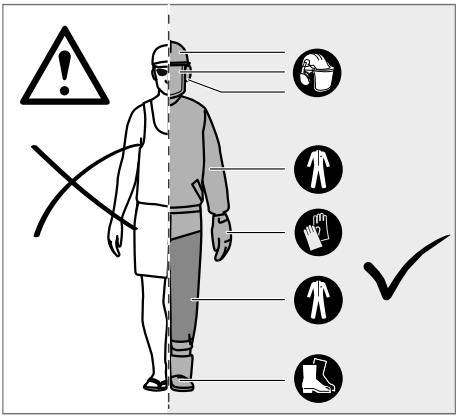
When the pruning saw fails to dig in during a cut, the guide bar can begin hopping or dangerously skidding along the surface of the log or branch, possibly resulting in the loss of control of the pruning saw. To prevent or reduce skating or bouncing, always use the saw with both hands make sure the saw chain establishes a groove for cutting. Never cut small, flexible branches or brushes with your pruning saw. Their size and flexibility can easily cause the saw to bounce towards you or bind up with enough force to cause a kickback. The best tool for that kind of work is a hand saw, pruning shears, an axe or other hand tools.

IX

Personal protective equipment

Wear a helmet at all times when operating the machine. A helmet, equipped with mesh visor, can help reduce the risk of injury to the face and the head if kickback occurs. Wear ear protectors. Exposure to noise can cause hearing loss.

Good quality personal protective equipment, as used by professionals, will help reduce the risk of injury to the operator. The following items should be used when operating the machine:



Safety helmet

should comply with EN 397 and be CE marked

Hearing protection

should comply with EN 352-1 and be CE marked

Eye and face protection

should be CE marked and comply with EN 166 (for safety glasses) or EN 1731 (for mesh visors)

Gloves

should comply with EN381-7 and be CE marked

Leg protection (chaps)

should comply with EN 381-5, be CE marked and provide allround protection

pruning saw safety boots

should comply with EN ISO 20345:2004 and be marked with a shield depicting a pruning saw to show compliance with EN 381-3. (Occasional users may use steel toe-cap safety boots with protective gaiters which conform to EN 381-9 if the ground is even and there is little risk of tripping or catching on undergrowth)

pruning saw jackets for upper body protection

should comply with EN 381-11 and be CE marked

WARNING!

Consequences of improper maintenance, removal or modification of safety features like the chain brake, ignition switch, hand guard (front and back), spiked bumper, chain catcher, guide bar, low kick-back saw chain may cause the safety features to not function correctly, thus increasing the potential for serious injury.

Spiked Bumper

The integral bumper spike may be used as a pivot when making a cut. It helps to keep the body of the pruning saw steady while cutting. When cutting, push the machine forward until the spikes dig into the edge of the wood, then by moving the rear handle up or down in the direction of the cutting line it can help ease the physical strain of cutting.

Guide Bar

Generally, guide bars with small radius tips have somewhat lower potential for kick-back. You should use a guide bar and matching chain which is just long enough for the job. Longer bars increase the risk of loss of control during sawing. Regularly check the chain tension. When cutting smaller branches (less than the full length of the guide bar) the chain is more likely to be thrown off if the tension is not correct.

INSTRUCTIONS CONCERNING THE PROPER TECHNIQUES FOR BASIC FELLING, LIMBING AND CROSS-CUTTING

Understanding the forces within the wood

When you understand the directional pressures and stresses inside the wood you can reduce the “pinches” or at least expect them during your cutting. Tension in the wood means the fibers are being pulled apart and if you cut in this area, the “kerf” or cut will tend to open as the saw goes through. If a log is being supported on a saw horse and the end is hanging unsupported over the end, tension is created on the upper surface due to the weight of the overhanging log stretching the fibers. Likewise, the underside of the log will be in compression and the fibers are being pushed together. If a cut is made in this area, the kerf will have the tendency to close up during the cut. This would pinch the blade.

Limbing a tree

Limbing is removing the branches from a fallen tree. When limbing, leave larger lower limbs to support the log off the ground. Remove the small limbs in one cut. Branches under tension should be cut from the bottom up to avoid bindingthe pruning saw.

Cutting springpoles

A springpole is any log, branch, rooted stump, or sapling which is bent under tension by other wood so that it springs back if the wood holding it is cut or removed.

On a fallen tree, a rooted stump has a high potential of springing back to the upright position during the bucking cut to separate the log from the stump. Watch out for springpoles, they are dangerous.

WARNING! Springpoles are dangerous and could strike the operator, causing the operator to lose control of the pruning saw. This could result in severe or fatal injury to the operator. This should be done by trained users.

RESIDUAL RISK

Even when the product is used as prescribed, it is still impossible to completely eliminate certain residual risk factors. The following hazards may arise in use and the operator should pay special attention to avoid the following:

- Injury caused by vibration
  Always use the right tool for the job. Use designated handles. Restrict working time and exposure.
- Damage to hearing due to exposure to noise
  Wear hearing protection and limit exposure.
- Injury caused by contact with exposed saw teeth of the chain
- Injury caused by thrown-out pieces of the workpiece (wood chips, splinters)
- Injury caused by dust and particles
- Injury to the skin caused by contact with lubricants
- Parts ejected from the saw chain (cutting/injection hazards)
- Unforeseen, abrupt movement, or kickback of the guide bar (cutting hazards)"

RISK REDUCTION

- It has been reported that vibrations from handheld tools may contribute to a condition called Raynaud's Syndrome in certain individuals. Symptoms may include tingling, numbness, and blanching of the fingers, usually apparent upon exposure to cold. Hereditary factors, exposure to cold and dampness, diet, smoking and work practices are all thought to contribute to the development of these symptoms. There are measures that can be taken by the operator to possibly reduce the effects of vibration:
- Keep your body warm in cold weather. When operating the unit wear gloves to keep the hands and wrists warm.
- After each period of operation, exercise to increase blood circulation.
- Take frequent work breaks. Limit the amount of exposure per day.
- Protective gloves available from professional pruning saw retailers are designed specifically for pruning saw use which give protection, good grip and also reduce the effect of handle vibration. These gloves should comply with EN 381-7 and must be CE marked.

If you experience any of the symptoms of this condition, immediately discontinue use and see your doctor.

WARNING! Injuries may be caused, or aggravated, by prolonged use of a tool. When using any tool for prolonged periods, ensure you take regular breaks.

SPECIFIED CONDITIONS OF USE

The cordless pruning saw is only intended for use outdoors.

For safety reasons, the pruning saw must be adequately controlled by using two-handed operation at all times.

The pruning saw is designed for cutting branches, trunks, logs, and beams of a diameter determined by the cutting length of the guide bar. It is only designed to cut wood. It is only to be used by adults who have received adequate training on the hazards and preventative measures/actions to be taken while using the pruning saw.

Do not use the pruning saw for any purpose not listed in the specified conditions of use. It is not to be used for professional tree services. The pruning saw is not to be used by children or by persons not wearing adequate personal protective equipment and clothing.

WARNING! When using the pruning saw, the safety rules must be followed. For your own safety and that of bystanders, you must read and fully understand these instructions before operating the pruning saw. You should attend a professionally organized safety course in the use, preventative actions, first-aid, and maintenance of pruning saws. Please keep these instructions safe for later use.

WARNING! pruning saws are potentially dangerous tools. Accidents involving the use of pruning saws often result in loss of limbs or death. It is not just the pruning saw that is the hazard. Falling branches, toppling trees, and rolling logs can all kill. Diseased or rotting timber poses additional hazards. You should assess your capability of completing the task safely. If there is any doubt, leave it to a professional tree surgeon.

Do not use this product in any other way as stated for normal use.

OPERATION

WARNING! The saw chain is sharp. Always wear protective gloves when performing maintenance to the chain.

Adjusting the chain tension

Remove the battery pack before you do any work on the pruning saw.

To increase the chain tension, turn the chain tensioning screw clockwise and check the chain tension frequently. To reduce the chain tension, turn the chain tensioning screw counterclockwise and check the chain tension frequently.

The chain tension is correct when the gap between the cutter in the chain and the bar is about 6,8 mm. Pull the chain in the middle of the lower side of the bar downwards (away from the bar) and measure the distance between the bar and the chain cutters. Tighten the bar mounting nut by turning it counter clockwise.

Note Do not over-tension the chain - excess tension will cause excessive wear and will reduce the life of the chain and could damage the bar. New chains could stretch and loosen during initial use. Remove battery pack and check chain tension frequently during the first two hours of use. The temperature of the chain increases during normal operation causing the chain to stretch. Check the chain tension frequently and adjust as required. A chain tensioned while warm may be too tight upon cooling. Make sure that the chain tension is correctly adjusted as specified in these instructions.

Adding the chain lubricating oil

WARNING! Never work without chain lubricant. If the saw chain is running without lubricant, the guide bar and the saw chain can be damaged. It is essential to frequently check the oil level in the oil level gauge and before starting to use the pruning saw.



Keep the reservoir more than ¼ full to ensure sufficient oil is available for the job.

Note It is recommended to use a vegetable based chain oil when pruning trees. Mineral oil may harm trees. Never use waste oil automotive oil, or very thick oils. These could damage the pruning saw. Clear surface around the oil cap to prevent contamination.

1. Unscrew and remove the cap from the oil tank.
2. Pour the oil into the oil tank and monitor the oil level gauge.
3. Put the oil cap back on and tighten it up. Wipe away any spillage.

Holding the pruning saw

Always hold the pruning saw with your right hand on the rear handle and your left hand on the front handle. Grip both handles with the thumbs and fingers encircling the handles.

Starting the pruning saw

Before starting the pruning saw, you should install the battery pack in the pruning saw.

restart protection

The power tool is supplied with a restart protection.

This prevents the switched-on power tool from starting by itself when the battery pack is inserted and from restarting after a switch-off function of the battery pack.

If the guide bar is outside of the wood switch off the machine and switch it back on again in order to continue to work.

If the guide bar is inside of the wood wait until the saw chain comes to a complete stop. Make sure that the switch is in the off position. Remove the battery pack from the machine and the guide bar from the cut. Insert the battery pack and then switch the machine back on again, in order to continue to work.

TRANSPORTATION AND STORAGE

Always lightly oil the chain when storing to prevent rust. Always empty the oil tank when storing to prevent leakage.

Stop the machine, remove the battery, and allow it to cool before storing or transporting.

Clean all foreign materials from the machine. Store the machine in a cool, dry, and well-ventilated place that is inaccessible to children. Keep away from corrosive agents, such as garden chemicals and de-icing salts. Do not store outdoors.

Fit the guide bar cover before storing the machine or during transportation.

For transportation in vehicles, secure the machine against movement or falling to prevent injury to persons or damage to the machine.

MAINTENANCE

WARNING! Use only Milwaukee accessories and Milwaukee spare parts. Failure to do so can cause possible injury, contribute to poor performance, and may void your warranty.

Use only Milwaukee accessories and Milwaukee spare parts. Should components need to be replaced which have not been described, please contact one of our Milwaukee service agents (see our list of guarantee/service addresses).

WARNING! Servicing requires extreme care and knowledge and should be performed only be a qualified service technician. For service, we suggest you bring the machine to your nearest MILWAUKEE service station for repair. When servicing, use only identical replacement parts. **WARNING!** Remove the battery before adjustment, maintenance or cleaning. Failure to do so could result in serious personal injury. You may only make adjustments or repairs described in this manual. For other repairs, contact the authorised service agent.

Consequences of improper maintenance may cause the chain brake and other safety features to not function correctly, thus increasing the potential for serious injury.

Keep your pruning saw professionally maintained and safe.
• Sharpening the chain safely is a skilled task. Therefore, the manufacturer strongly recommends that a worn or dull chain is replaced with a new one, available at your MILWAUKEE service agent. The part number is available in the product specification table in this manual.

Follow instructions for lubricating and chain tension checking and adjustment.

After each use, clean the machine with a soft dry cloth.

Remove any chips, dirt and debris in the battery bay.

Check all nuts, bolts, and screws at frequent intervals for security to ensure the machine is in safe working condition. Any part that is damaged should be properly repaired or replaced by an MILWAUKEE service station.

Replacing the guide bar and saw chain

Wear protective gloves.

1. Remove the battery pack
2. Remove the guide bar cover
3. Remove the bar mounting nut using the combination wrench provided.
4. Remove the old chain with the guide bar
5. Put the new chain in the correct direction onto the bar and make sure that the drive links are aligned in the bar groove.
6. Attach the bar to the pruning saw and loop the chain around the drive sprocket.
7. Replace the chain cover and bar mounting nut.
8. Finger-tighten the bar mounting nut. The bar must be free to move for chain tension adjustment.
9. Adjust the chain tension. Refer to the “Adjusting chain tension” section.
10. Hold the tip of the guide bar up and tighten the bar mounting nut securely.

WARNING! A dull or improperly sharpened chain can cause excessive motor speed during cutting which may result in severe motor damage.

WARNING! Improper chain sharpening increases the potential of kickback.

WARNING! Failure to replace or repair a damaged chain can cause serious injury.

WARNING! The saw chain is sharp. Always wear protective gloves when performing maintenance to the chain.

Maintenance schedule

Daily check	
Bar lubrication	Before each use
Chain tension	Before each use and frequently
Chain sharpness	Before each use, visual check
For damaged parts	Before each use
For loose fasteners	Before each use
Guide Bar	Before each use
Complete saw	After each use

Replacement parts (Bar and chain)

Manufacturer	MILWAUKEE	OREGON
Chain	4932 4784 27	90F028XTT
Guide Bar	4932 4801 68	616812

Chain must be fitted with bar from the same manufacturer according to above combinations.

Exploded view

If needed, an exploded view of the tool can be ordered. Please state the Article No. as well as the machine type printed on the label and order the drawing at your local service agents or directly at: Techtronic Industries GmbH, Max-Eyth-Straße 10, 71364 Winnenden, Germany.

BATTERIES

Battery packs which have not been used for some time should be recharged before use.

Temperatures in excess of 50°C (122°F) reduce the performance of the battery pack. Avoid extended exposure to heat or sunshine (risk of overheating).

The contacts of chargers and battery packs must be kept clean.

For an optimum life-time, the battery packs have to be fully charged, after use.

To obtain the longest possible battery life remove the battery pack from the charger once it is fully charged.

For battery pack storage longer than 30 days: Store the battery pack where the temperature is below 27°C and away from moisture Store the battery packs in a 30% - 50% charged condition Every six months of storage, charge the pack as normal.

No metal parts must be allowed to enter the battery section of the charger (short circuit risk).

BATTERY PACK PROTECTION

In extremely high torque, binding, stalling and short circuit situations that cause high current draw, the tool will stop for about 2 seconds and then the tool will turn OFF.

TRANSPORTING LITHIUM BATTERIES

Lithium-ion batteries are subject to the Dangerous Goods Legislation requirements.

Transportation of those batteries has to be done in accordance with local, national and international provisions and regulations.

The user can transport the batteries by road without further requirements.

Commercial transport of Lithium-Ion batteries by third parties is subject to Dangerous Goods regulations. Transport preparation and transport are exclusively to be carried out by appropriately trained persons and the process has to be accompanied by corresponding experts.

When transporting batteries:

Ensure that battery contact terminals are protected and insulated to prevent short circuit. Ensure that battery pack is secured against movement within packaging. Do not transport batteries that are cracked or leak. Check with forwarding company for further advice.

EC-DECLARATION OF CONFORMITY

We declare under our sole responsibility that the product described under "Technical Data" fulfills all the relevant provisions of the directives

2011/65/EU (RoHS)
2006/42/EC
2014/30/EU
2000/14/EC,
2005/88/EC
and the following harmonized standards have been used:
EN 62841-1:2015
EN 55014-1:2017+A11:2020
EN 55014-2:2015
EN IEC 63000:2018

Notified body, 0366, VDE Prüf- u. Zertifizierungsinstitut, Merianstraße 28, D-63069 Offenbach, Germany has carried out the EC type approval and the certificate No. is 40052228.

Measured sound power level: 86 dB(A)
Guaranteed sound power level: 89 dB(A)

Conformity assessment procedure according to Annex V of 2000/14/EC amended by 2005/88/EC.

CE Winnenden, 2021-08-17



Alexander Krug / Managing Director
Authorized to compile the technical file

Techtronic Industries GmbH
Max-Eyth-Straße 10, 71364 Winnenden, Germany

GB-DECLARATION OF CONFORMITY

We declare as the manufacturer under our sole responsibility that the product described under "Technical Data" fulfills all the relevant provisions of the regulations:
S.I. 2012/3032 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012, S.I. 2008/1597 The Supply of Machinery (Safety) Regulations 2008, S.I. 2016/1091 Electromagnetic Compatibility Regulations 2016, S.I. 2001/1701 The Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001
and the following designated standards have been used:

BS EN 62841-1:2015
BS EN 55014-1:2017+A11:2020
BS EN 55014-2:2015
BS EN IEC 63000:2018

Approved body, 0673, Technology International (Europe) Ltd., 56 Shrivenham Hundred Business Park, Shrivenham, Swindon, SN6 8TY, United Kingdom, has carried out the UK type approval and the certificate No. is 03122021.

Measured sound power level: 86 dB(A)
Guaranteed sound power level: 89 dB(A)

Conformitiy assessment procedure according to S.I. 2001/1701 Schedule 8.

Winnenden, 2022-02-23



Alexander Krug / Managing Director
Authorized to compile the technical file

Techtronic Industries GmbH
Max-Eyth-Straße 10, 71364 Winnenden, Germany

IX

SYMBOLS


CAUTION! WARNING! DANGER!


Remove the battery pack before starting any work on the appliance.


Please read the instructions carefully before starting the machine.


Weare a protective helmet.
Wear ear protectors!
Use safety glasses.


Always wear protective clothing and footwear.


Wear safety shoes with cut protection, grippy sole and steel toe!


Wear gloves!


Never expose tool to rain.


Not use one-handed


Always use pruning saw two-handed


Beware of pruning saw kickback and avoid contact with bar tip


Rotate to adjust chain tension


Chain running direction

V
Voltage

⎓
Direct Current

v_0
No-load chain speed


Guaranteed sound power level 89 dB(A)


Do not dispose of waste batteries, waste electrical and electronic equipment as unsorted municipal waste. Waste batteries and waste electrical and electronic equipment must be collected separately.

Waste batteries, waste accumulators and light sources have to be removed from equipment.

Check with your local authority or retailer for recycling advice and collection point.

According to local regulations retailers may have an obligation to take back waste batteries and Waste electrical and electronic equipment free of charge.

Your contribution to re-use and recycling of waste batteries and waste electrical and electronic equipment helps to reduce the demand of raw materials.

Waste batteries, in particular containing lithium and waste Electrical and electronic equipment contain valuable, recyclable materials, which can adversely impact the environment and the human health, if not disposed of in an environmentally compatible manner.

Delete personal data from waste equipment, if any.

CE
European Conformity Mark

UK CA
British Conformity Mark


Ukraine Conformity Mark

EAC
EurAsian Conformity Mark



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