

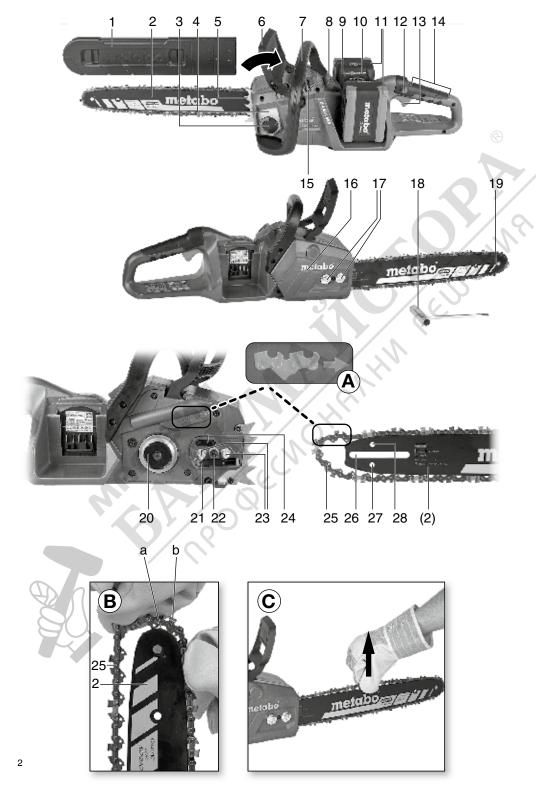
MS 36-18 LTX BL 40





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1 13.		MS 36-18 LTX BL 40 *1) Serial Number 01613
Ú	V	36 (2x18)
L _{max}	cm (in)	40 cm (16")
L	cm (in)	36 (14")
v _K	m/s	22
K _T	-	3/8" LP
K _A	-	56
Ks	mm (in)	1,1 (0.043)
V _{Oel}	ml	200
m ₁	kg (lbs)	3,2 (7.1)
m ₂	kg (lbs)	4,0 (8.8)
S	-	2
a _h /k _h	m/s ²	4,1/1,5
L _{pA} /k _{pA}	dB(A)	86 / 3,0
L _{WA} /K _{WA}	dB(A)	101 / 2,2
L _{WA(G)} *5)	dB(A)	103

*2) 2014/30/EU, 2006/42/EC, 2000/14/EG, 2011/65/EU
*3) EN 62841-1:2015, EN 62841-4-1:2020, EN IEC 63000:2018
*4) DEKRA Testing and certification GmbH, Handwerkstraße 15, 70565 Stuttgart, Notified Body No. 0158

2022-01-26, Bernd Fleischmann
Direktor Produktentstehung & Qualität (Vice President Product Engineering & Quality)
*6) Metabowerke GmbH - Metabo-Allee 1 - 72622 Nuertingen, Germany

Original instructions

1. Declaration of Conformity

We declare and accept sole responsibility for ensuring: these cordless chainsaws, identified by their type and serial number *1), conform to all relevant provisions of the directives *2) and standards *3), Technical Documents for * 6)

2000/14/EC: Conformity assessment procedures in accordance with Annex V.

Named office *4). Guaranteed sound power level LWA(G) *5) - see page 3.

For UK only:

We as manufacturer and authorized person to Cp compile the technical file, see *6) on page 3, hereby declare under sole responsibility that these cordless brush cutters, identified by type and serial number *1) on page 3, fulfil all relevant provisions of following UK Regulations S.I. 2016/1091, S.I. 2008/1597, S.I. 2012/3032, S.I. 2001/1701 and Designated Standards EN 62841-1:2015, EN 62841-4-1:2020, EN IEC 63000:2018

S.I. 2001/1701: Conformity assessment procedures in accordance with Schedule 8.

Approved Body(2008/1597): 0673 Technology International (Europe) Limited 56 Shrivenham Hundred Business Park, Shrivenham, Swindon, SN6 8TY United Kingdom Guaranteed sound power level LWA(G) *5) on page 3.

2. Specified Conditions of Use

The chainsaw is designed for cutting through tree trunks, branches, squared timber and similar objects and for felling and delimbing trees.

The user bears sole responsibility for any damage caused by inappropriate use.

Generally accepted accident prevention regulations and the enclosed safety information must be observed.

3. General Safety Information



For your own protection and for the protection of your power tool, pay attention to all parts of the text that are marked with this symbol!



WARNING – Read the operating instructions to reduce the risk of injury.

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.

Always include these documents when passing on your power tool.

4. Special safety instructions

General chain saw safety warnings

- a) Keep all parts of the body away from the saw chain when the chain saw is operating. Before you start the chain saw, make sure the saw chain is not contacting anything. A moment of inattention while operating chain saws may cause entanglement of your clothing or body with the saw chain
- b) Always hold the chain saw with your right hand on the rear handle and your left hand on the front handle. Holding the chain saw with a reversed hand configuration increases the risk of personal injury and should never be done.
- c) Hold the chain 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 chain 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 chain saw in a tree, on a ladder, from a rooftop, or any unstable support. Operation of a chain saw in this manner could result in serious personal injury.
- f) Always keep proper footing and operate the chain saw only when standing on fixed, secure and level surface. Slippery or unstable surfaces may cause a loss of balance or control of the chain 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 chain 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 chain saw by the front handle with the chain saw switched off and away from your body. When transporting or storing the chain saw, always fit the guide bar cover. Proper handling of the chain saw will reduce the likelihood of accidental contact with the moving saw chain.
- 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) Cut wood only. Do not use chain saw for purposes not intended. For example: do not use chain saw for cutting metal, plastic, masonry or non-wood building materials. Use of the chain saw for operations different than intended could result in a hazardous situation.

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- I) Do not attempt to fell a tree until you have an understanding of the risks and how to avoid **them.** Serious injury could occur to the operator or bystanders while felling a tree.
- m) Follow all instructions when clearing jammed material, storing or servicing the chain saw. Make sure the switch is off and the battery pack is removed. Unexpected actuation of the chain 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 chain saw user, you should take several steps to keep your cutting jobs free from accident or injury.

Kickback is the result of chain 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 chain saw handles, with both hands on the saw. and position your body and arm to allow you to resist kickback forces. Kickback forces can be controlled by the operator, if proper precautions are taken. Do not let go of the chain saw.
- b) Do not overreach and do not cut above shoulder height. This helps prevent unintended tip contact and enables better control of the chain saw in unexpected situations.
- c) Only use replacement guide bars and saw chains specified by the manufacturer. Incorrect replacement guide bars and saw 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 Instructions:

Pull



If the pronged stop of the chainsaw is not placed against the wood to be cut and - when cutting at the lower edge of the guide rail - the guide rail jams, or if the chainsaw meets a hard

object in the wood, the chainsaw can be pulled forward. For this reason, whenever possible, always place the pronged stop of the machine against the wood.



Caution! There is a risk of injury when working with the machine.



WARNING - General hazards!



Read the operating instructions.



Wear protective goggles.





Wear ear protectors.



Do not expose to rain.



Always use the chainsaw with both hands.



Always use the chainsaw with both hands.



Be aware of the chainsaw kickback and do not touch the point of the guide rail. Note the safety information about the kickback and measures for avoiding it.



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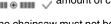
Be aware of the chainsaw kickback and do not touch the point of the guide rail. Note the safety information about the kickback and measures for avoiding it.



🚵 📾 🚫 Use battery packs with the same capacity.



Use battery packs that have the same amount of charge.



The chainsaw must not be used in the rain. Never leave the machine outdoors in rainy weather!

When working with the chainsaw, wear working gloves, suitable footwear, leg protection, eye and ear protectors.

When working in areas where there is possibility of head injuries, wear a helmet and when felling and delimbing trees, wear an additional face mask.

Ensure the chainsaw is correctly tensioned. A loose chainsaw can jump up and cause serious or even fatal injuries.

To prevent accidental starting: Always remove the battery packs before checking the chain tension, retightening the chain, changing the chain, eliminating faults and prior to every change of workplace.

Remove the battery packs from the machine before making any adjustments, changing tools, maintaining or cleaning.



Protect battery packs from water and moisture!

Do not expose battery packs to fire!

Do not use faulty or deformed battery packs!

Do not touch or short circuit battery pack contacts!

A slightly acidic, flammable fluid may leak from defective Li-lon battery packs!



If battery fluid leaks out and comes into contact with your skin, rinse immediately with plenty of water. If battery fluid leaks out

with pienty of water. It pattery fluid leaks out and comes into contact with your eyes, wash them with clean water and seek medical attention immediately!

If the machine is defective, remove the battery pack from the machine.

Transport of Li-Ion battery packs:

The shipping of Li-Ion battery packs is subject to laws related to the carriage of hazardous goods (UN 3480 and UN 3481). Inform yourself of the currently valid specifications when shipping Li-Ion battery packs. If necessary, consult your freight forwarder. Certified packaging is available from Metabo.

Only send the battery pack if the housing is intact and no fluid is leaking. Remove the battery pack from the machine for sending. Prevent the contacts from short-circuiting (e.g. by protecting them with adhesive tape).

Reducing dust exposure:

WARNING - Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

This also applies to dust from other materials, such as some timber types (like oak or beech dust), metals, asbestos. Other known diseases are e.g. allergic reactions, respiratory diseases. Do not let dust enter the body.

Observe the relevant guidelines and national regulations for your material, staff, application and place of application (e.g. occupational health and safety regulations, disposal).

Collect the particles generated at the source, avoid deposits in the surrounding area.

Use suitable accessories for special work. In this way, fewer particles enter the environment in an uncontrolled manner.

Use a suitable extraction unit.

Reduce dust exposure with the following measures:

- do not direct the escaping particles and the exhaust air stream towards yourself or nearby persons or towards dust deposits,
- use an extraction unit and/or an air purifier,
- ensure good ventilation of the workplace and keep it clean using a vacuum cleaner. Sweeping or blowing stirs up dust.
- Vacuum or wash protective clothing. Do not blow, beat or brush protective gear.

5. Overview

See page 2.

- 1 Chainsaw guard
- 2 Guide rail (saw rail)
- 3 Sealing cap (chain lubricating oil)
- 4 See-through oil tank
- 5 Pronged stop
- 6 Hand protection
- 7 Bow handle
- 8 Battery pack release button
- 9 Capacity indicator button *
- 10 Capacity and signal indicator *
- 11 Battery packs *
- 12 Safety switch (against unintentional starting) Note: It is located outside the gripping area of the hand and can be recognised by the raised bit in the handle area)
- 13 Trigger
- 14 Trigger grip (gripping area)
- 15 Felling bar (for precise targeting)
- 16 Chain wheel cover
- 17 Nuts (captive)
- 18 Combination wrench
- 19 Lubrication hole
- 20 Chain wheel
- 21 Chain tensioning pin
- 22 Clamping screw (chain tension)
- 23 Stud bolt
- 24 Oil channel
- 25 Sawing chain
- 26 Guide rail slot
- 27 Bore
- 28 Guide rail oil inlet bore

6. Initial Operation

6.1 Fitting guide rail and sawing chain, setting chain tension

See illustration on page 2.

WARNING! Remove the battery packs (11) . Unintentional start-up can cause serious injuries. The motor must be stationary.



Wear protective gloves.

1. Loosen the captive nuts (17) and take off the chain cover (16).

^{*} depending on equipment/not included in scope of delivery

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 Turn the clamping screw (22) anti-clockwise as far as the stop to bring the chain clamping pin (21) into its left final position.

3. Mount the sawing chain (25) on the guide rail (2): See page 2, fig. A:

The cutting edges of the sawing chain cutters (b) must point in the direction of rotation. **Observe the symbol on the machine.**

See page 2, fig. B:

Hold up the guide rail (2) at its front end and position the sawing chain (25) such that the teeth (a) of the deflector star of the guide rail engage in the chain links and the chain-driving links are seated in the quide rail groove.

 Then place the sawing chain (25) around the chain wheel (20) and mount the guide rail with its slot (26) on to the two stud bolts so that (23) the chain tensioning pin (21) engages in the bore of the (27) guide rail.

Refit the chain wheel cover (16) (insert rear first and then fully fit) and screw on the nuts (17) but do not tighten yet.

 Turn the clamping screw (22) clockwise until the sawing chain no longer sags at the lower edge of the guide rail. Raise the front end of the guide rail while doing this.

 Šee page 2, fig. C: The sawing chain is correctly tensioned if it lies on the guide rail, in the middle of the guide rail it can be lifted 3 to 4 mm from the upper edge of the guide rail, it can still be moved easily by hand, without sticking.

After clamping the sawing chain, raise the front end of the guide rail and tighten the nuts (17).

6.2 Chain lubricating oil

The chainsaws are delivered ex works without an oil filling. Prior to initial operation of the machine, the oil reservoir must be filled with lubricating oil.

A

Use original Metabo chain lubricating oil only. Never use old oil!

To fill with oil, unscrew the sealing cap (3). When filling the oil, ensure that no dirt gets into the oil reservoir. The oil level can be checked using the see-through oil tank (4).

Depending on the outside temperature, one filling of the oil reservoir is sufficient for the machine to be operated for 20 to 40.

6.3 Allow new sawing chain to run-in

Before sawing with a new sawing chain, allow it to run in for 2-3 minutes.

After the run-in time, check the chain tension (as specified in chapter 6.1) and retighten the sawing chain if necessary.

6.4 Checking chain lubrication

A

Never work without chain lubrication! Refill promptly.

If the sawing chain is running dry, the guide rail and sawing chain are rendered unusable within a short time. It is therefore essential to check the oil level in the reservoir every time before starting work.

To check the chain lubrication, hold the chainsaw with the guide rail (and sawing chain running) at a safe distance of about approx. 20 cm over a light-coloured base, e.g. a spread-out newspaper). If increasingly large oil mark appears on the light-coloured base, the chain lubrication is working perfectly.

6.5 Chain brake

The integrated chain brake brings the sawing chain to a standstill within< 0.2 of a second if...

- the hand protection (6) is moved either manually to its front position, or during work with the chainsaw with the back of the operator's hand (due to a back-kick), or
- the chainsaw is switched off by releasing the trigger (13).

If the quick brake of the chainsaw is tripped through actuation of the hand protection (6), do not allow the chainsaw motor to run with the hand protection in this position for unnecessarily long periods. Switch off the machine. Guide the hand protection back to its initial position.

Before operating the chainsaw, always check that the chain brake is in perfect working order (by actuating the hand protection (push forwards) and by releasing the trigger). Have the machine repaired if braking time is lengthened.

6.6 Battery pack

Charge the battery pack (11) before use.

Recharge the battery pack if performance diminishes.

Instructions on charging the battery pack can be found in the operating instructions of the Metabo charger.

Battery packs have a capacity and signal display (10) (depends on design variant):

- Press the button (9), the LEDs indicate the charge
- The battery pack is almost empty and must be recharged if one LED is flashing.

Removing and inserting the battery pack Removing:

Press the battery pack release (8) button and remove the battery pack (11).

Inserting:

Slide in the battery pack (11) until it engages.

7. Use

7.1 Holding machine correctly, Switching on and off

Mhen the chainsaw is switched on, the operator must keep good footing and hold the machine firmly. The guide rail must not touch any objects.

Switching on

Note: The hand protection (6) must be in its initial position when the machine is switched on, i.e. pressed in the direction of the arrow (fig., page 2) against the bow handle (7).

Note: The chainsaw has no protection against unintentional activation (safety switch (12)).

To switch on:

- 1. Hold the machine with your left hand on the front bow handle (7).
- 2. Hold the machine with your right hand on the switch handle (14).
- Hold the handles between thumb and fingers.
 Make sure that your left hand is holding the front bow handle (7) and your thumb is underneath the bow handle (7).
- Using your right thumb, press the locking safety switch (12).
- 5. With the safety switch (12) pressed in, actuate the trigger (13) and
- 6. release the safety switch (12).

Switching off:

To switch off release the trigger (13). (This causes the safety switch (12) to move back to locking position.)

7.2 Working with the chainsaw

Before starting work, always check that the chainsaw is in perfect working order. The following are particularly important:

- Guide rail fitted correctly
- Sawing chain has the correct tension,
- Chain lubrication works
- Chain brake works properly.
- Never work with a blunt or worn sawing chain.
- Only use the machine when undamaged and complete.

Before using the machine for the first time, the operator should conduct a trial by sawing through a tree trunk on a cutting block or similar object.

Sawing tree trunks, branches and similar materials

Never attempt to free a jammed saw with the motor running. Use wooden wedges to free the sawing chain.

Clamp smaller pieces of wood firmly before sawing.



When sawing, the left arm should be almost fully extended. Guide the machine so that body parts are outside the imaginary "X" line formed by the guide rail and its extension.

Place the pronged stop (5) of the chainsaw against the wood before starting the machine by holding it on the bow handle (7) and pulling up the switch handle (14).

If wood is not cut through during a cutting operation,

- apply light pressure to the bow handle (7) and continue sawing; pull the
- machine back slightly when doing this.

- set the pronged stop (5) deeper (the saw must not be removed from the cut) and
- end the cut by pulling up the switch handle. Pull the chainsaw out of the wood only with the sawing chain running.

To maintain full control of the machine at the actual "cut-through" point, reduce press-on force towards the end of the cut without loosening your firm hold on the chainsaw handles. Ensure that the sawing chain does not touch the ground. After completing the cut, switch off the machine, wait for the sawing chain to come to a stop before removing the chainsaw. Always switch off the chainsaw before moving from tree to tree.

When sawing wood which is lying on the ground, ensure that the guide rail does not touch the ground because this would cause the sawing chain to become blunt very quickly.

When sawing on a hillside, always stand above the tree trunk, as the trunk can roll away.



Cutting a tree trunk to length

This is the process of sawing a felled tree into sections. Ensure you have good footing and your body weight is balanced equally over both feet. If possible, branches, beams or wedges should be placed under the tree trunk for support. Following the instructions for "Sawing tree trunks, branches and similar materials."

When the entire length of the tree trunk is evenly supported, start sawing from above as already described.



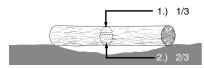
If the tree trunk is supported at one end only as shown, first cut through a third of the trunk diameter from the bottom side, then cut through the remainder from above level with the undercut.



If the tree trunk is supported at both ends as shown, first cut through a third of the trunk diameter from the

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top side, then cut through the remaining 2/3 from the bottom side level with the top cut.



Delimbing trees

This is the process of cutting branches from a felled tree. In the case of large, downward-growing branches that support the tree, cut up the tree trunk before delimbing. Cut off smaller branches with a single cut as shown in the illustration. Branches that are under tension should be cut from below to avoid jamming the saw.



Felling a tree

If two or more people are cutting and felling at the same time, the distance between the felling and cutting people should be at least twice the height of the tree being felled. When felling trees, it must be ensured that other people are not exposed to danger, that no utility lines are hit and that no property damage is caused. If a tree comes into contact with a utility line, the utility company must be immediately informed.

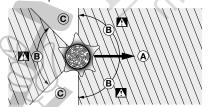
When sawing on a hillside, the operator of the chainsaw should stay in the area above the tree being felled, as the tree will probably roll or slide downhill after felling.

Before felling, an escape route should be planned and if necessary cleared. The escape route should lead diagonally back from the expected fall line, see illustration.

A = Felling direction

B = Danger zone

C = Escape area



Before felling, the natural inclination of the tree, the position of large branches and the wind direction must be taken into account when defining the felling direction of the tree.

Dirt, stones, loose bark, nails, clamps and wire must be removed from the tree.

Cutting a notch:

Cut a notch (A) at right angles to the felling direction to a depth of 1/3 of the tree diameter, as shown in the illustration.





First cut the bottom, horizontal notch cut. This prevents the sawing chain or guide rail sticking when making the second notch cut.

Cutting a felling cut:

Start the felling cut (B) at least 50 mm above the horizontal notch cut, see illustration. Execute the felling cut parallel to the horizontal notch cut. Make the felling cut deep enough so that a breaking bar (C) remains in position and can act as a hinge. The bar prevents the tree from turning and falling in the wrong direction. Do not saw through the bar. Width of the bar (C): 50 mm.

When the felling cut approaches the bar, the tree should start to fall. If it becomes apparent that the tree will possibly not fall in the desired direction, or inclines back and the sawing chain jams, interrupt the felling cut and use wedges made of wood, plastic or aluminium to open the cut and return the tree back to the desired felling line.

When the tree starts falling, remove the chainsaw from the cut, switch it off, set it down and leave the danger zone via the planned escape route. Watch out for falling branches and take care not to stumble.

Retensioning the sawing chain

When working with the chainsaw, the sawing chain expands as a result of heat. It then starts to sag and can jump out of the guide rail groove.

Check the chain tension (as specified in chapter 6.1) and retighten the sawing chain if necessary.

If the sawing chain is retensioned when it is hot, at the end or work it must be slackened because otherwise cooling could result in high contraction tension.

Insufficient chain lubrication

If the oil reservoir is still almost full after chainsaw operation of around 20 minutes, it may be that the oil channel (24) of the machine, or the oil inlet bore (28) of the guide rail, is obstructed and has to be cleaned.

Transporting the machine (after use)

- Remove the battery packs .
- Keep hands away from the safety switch (12).
- Mount the protective covers (1) supplied on the guide rail.

8. Storage

Slide the protective cover (1) onto the guide rail (2). Remove the battery packs. Clean machine. Store in a secure place out of the reach of children.

9. Maintenance and Cleaning

WARNING! Remove the battery packs (11) . Unintentional startup can cause serious injuries. The motor must be stationary.

Cleaning

Clean and suction the machine's ventilation slots. If necessary, blow out with dry compressed air. After a longer period and very frequent use, it is recommended that the inside of the machine is cleaned by Customer Service.

Sawing chain

Working with a blunt sawing chain causes premature wear of the sawing chain, the chain wheel and the guide rail. It can also cause the sawing chain to break. It is therefore important that the sawing chain is sharpened in good time.

Sharpening should be carried out by a specialist workshop.

The sawing chain cutters have the following angles: cutting angle = 55°, sharpening angle = 30°. A 4.5-mm round file is required to sharpen the sawing chain. Use a flay file to file the depth gauge to a height of 0.64 mm.



Replace the sawing chain if:

- The length of the cutting edges is less than 5 mm.
- There is too much space between the driving links and the rivets.
- The cutting speed is too slow.
- The cutting speed cannot be increased even after sharpening the sawing chain multiple times.

For replacement sawing chains, refer to the Accessories chapter.

Guide rail

Occasionally, some ball bearing grease must be applied (with a grease gun, not provided) through the lubrication holes (19) for the deflector star at the front end of the guide rail.

The lower edge of the guide rail is particularly susceptible to wear. To avoid one-sided wear of the guide rail, it should be turned every time the sawing chain is sharpened. If necessary: Debur the edges and file the edges flat with a flat file.

You should also take this opportunity to clean the groove and the oil inlet bores (28) of the guide rail.

Replace the guide rail if

- The groove does not match the height of the driving links (which must never touch the underside).
- If the inside of the guide rail is worn and the sawing chain tends towards one side as a result.

If the guide rail is replaced, the sawing chain must also be replaced. For replacement guide rails, refer to the Accessories chapter.

Chain wheel

If the chain wheel (20) shows signs of greater wear (deep indentations), it must be replaced.

See the chapter on Repairs.

10. Accessories

Use only original Metabo or CAS (Cordless Alliance System) battery packs and accessories.

Use only accessories that fulfil the requirements and specifications listed in these operating instructions.

Fit accessories securely. If the machine is operated in a holder: secure the machine well. Loss of control can cause personal injury.

Bio-chainsaw adhesive oil Order no.: 628441000

Chain (as a replacement) Order no.: 628439000

Guide rail (as a replacement) Order no.: 628437000

Chargers: ASC 145 DUO, ASC 55, etc.

Battery packs with different capacities. Buy battery packs only with voltage suitable for your power tool.

5.5 Ah (LiHD), order no.: 625368000 etc.

5.2 Ah (Li-lon), order no.: 625028000 etc.

For a complete range of accessories, see www.metabo.com or the catalogue.

11. Repairs



Repairs to electrical tools must ONLY be carried out by qualified electricians!

Contact your local Metabo representative if you have Metabo power tools requiring repairs. For addresses see www.metabo.com.

You can download a list of spare parts from www.metabo.com.

12. Environmental Protection

Observe national regulations on environmentally compatible disposal and on the recycling of disused machines, packaging and accessories.

Battery packs may not be disposed of with regular waste. Return faulty or used battery packs to your Metabo dealer!

Do not allow battery packs to come into contact with water!

Only for EU countries: never dispose of power tools in your household waste!
According to European Directive 2012/19/EU on Waste from Electric and Electronic Equipment and implementation in national law, used power tools must be collected separately and recycled in an environmentally-friendly manner.

Discharge the battery pack in the power tool before disposal. Prevent the contacts from short-circuiting (e.g. by protecting them with adhesive tape).

13. Technical Data

Explanatory notes on the specifications on page 3. Subject to change in accordance with technical progress.

U = Voltage of battery pack

 $L_{max} = Guide rail length$

L'''a = Usable blade cutting length

v_K = Chain speed in idling K_T = Sawing chain, spacing

K_A = Sawing chain, number of driving links
 K_T = Sawing chain, driving link thickness

V_{Oil} = Oil reservoir volume

m₁ = Weight (without oil, guide rail, sawing

chain, battery pack)

m₂ = Weight (with guide rail, sawing chain, full oil tank, without battery pack)

S = Cut protection class

Measured values determined in conformity with FN 62841.

Permitted ambient temperature during operation: -20 °C to 50 °C (limited performance with temperatures below 0 °C). Permitted ambient temperature for storage: 0 °C to 30 °C.

Recommended ambient temperature when charging: 0 °C (32 °F) to 40 °C (104°F).

== direct current

The technical specifications quoted are subject to tolerances (in compliance with relevant valid standards).

Emission values

These values make it possible to assess the emissions from the power tool and to compare different power tools. The actual load may be higher or lower depending on operating conditions, the condition of the power tool or the accessories used. Please allow for breaks and periods when the load is lower for assessment purposes. Arrange protective measures for the user, such as organisational measures based on the adjusted estimates.

<u>Vibration total value</u> (vector sum of three directions) determined in accordance with EN 62841:

a_h = Vibration emission value (sawing hardwood trunk)

K_h = Uncertainty (vibration)

Typical A-effective perceived sound levels:

L_{pA} = sound pressure level acoustic power level

K_{pA}, K_{WA/WA(G)}= uncertainty

L_{WA(G)} = guaranteed acoustic power level as per 2000/14/EC



During operation the noise level can exceed 80 dB(A).



Wear ear protectors!