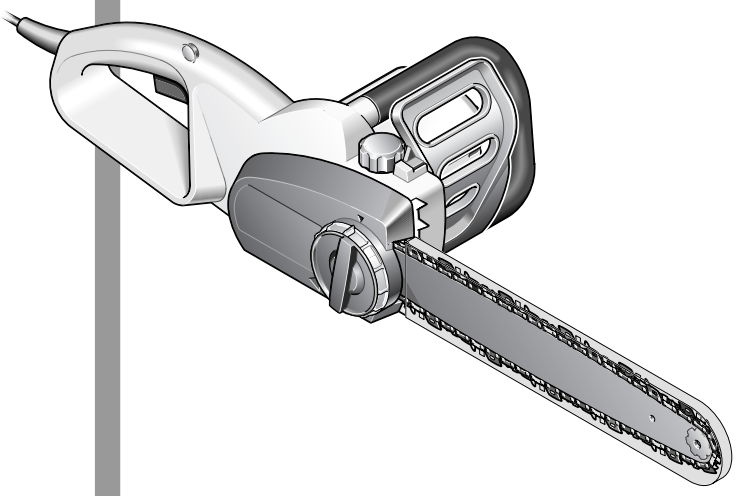
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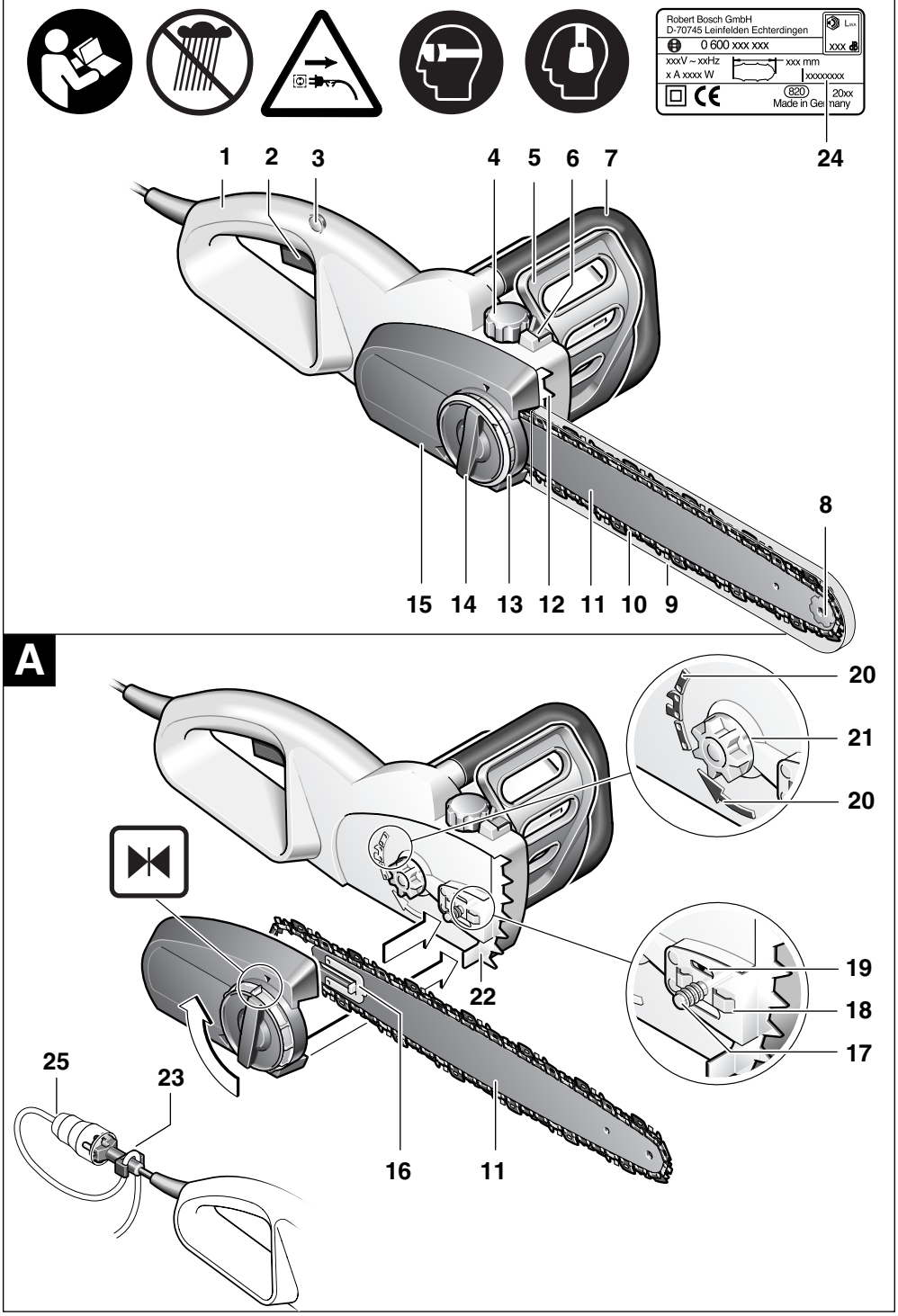
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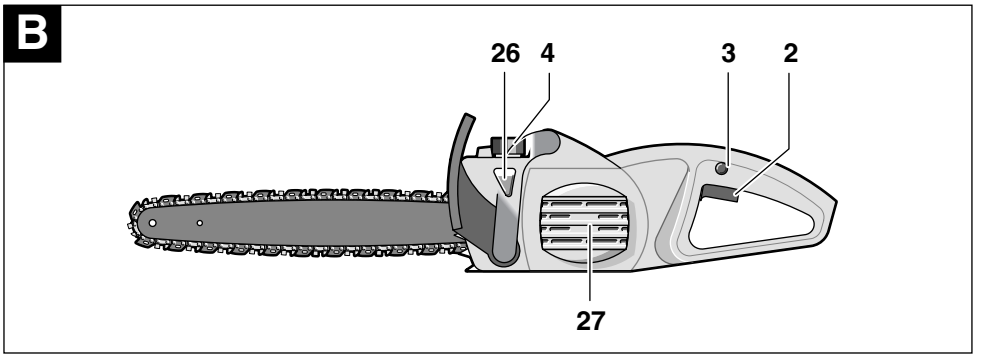
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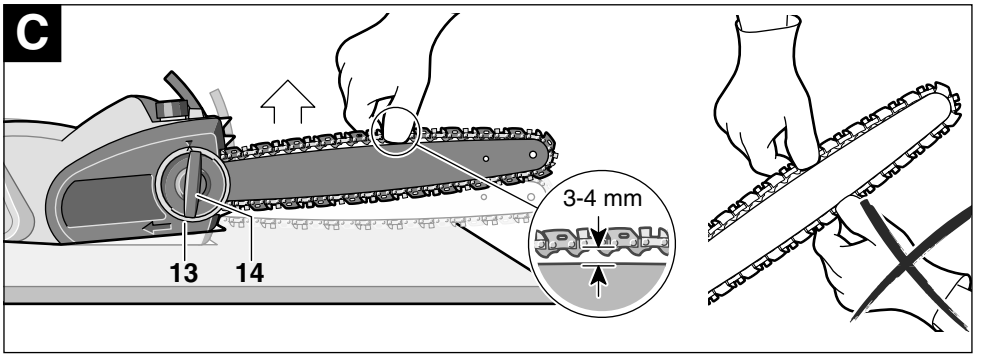
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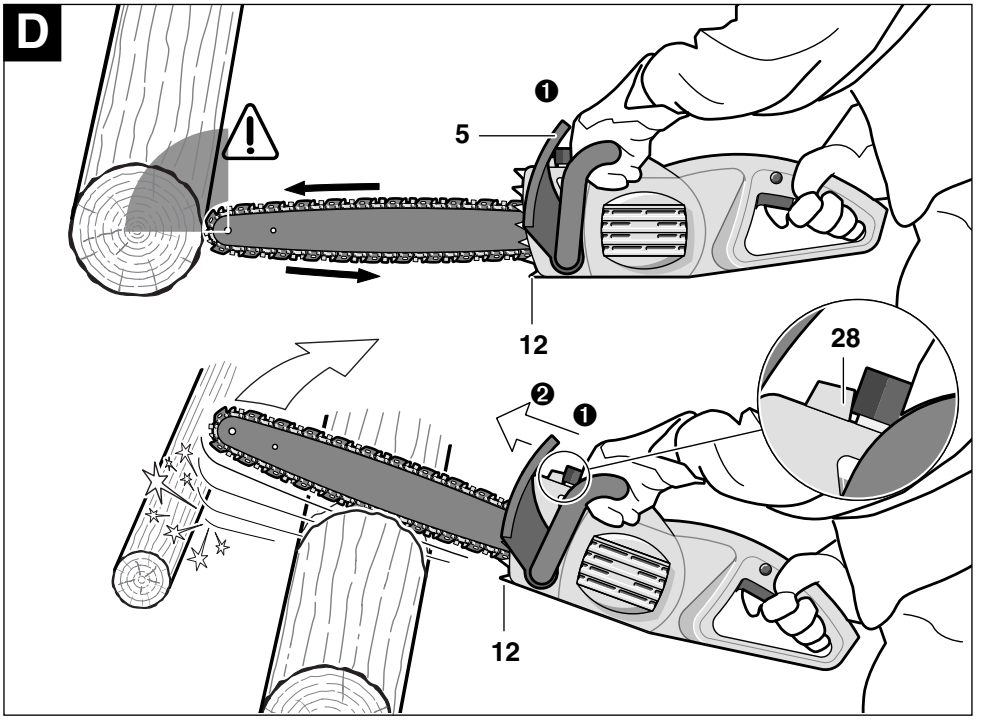
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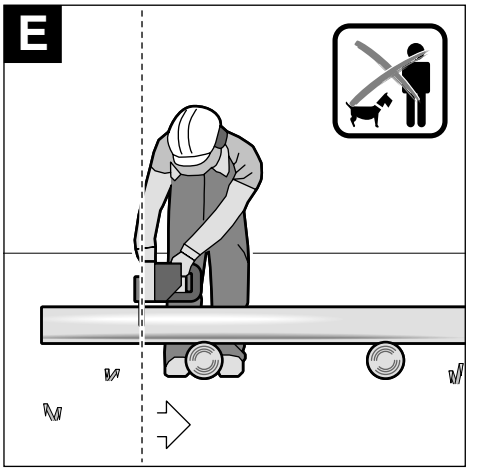


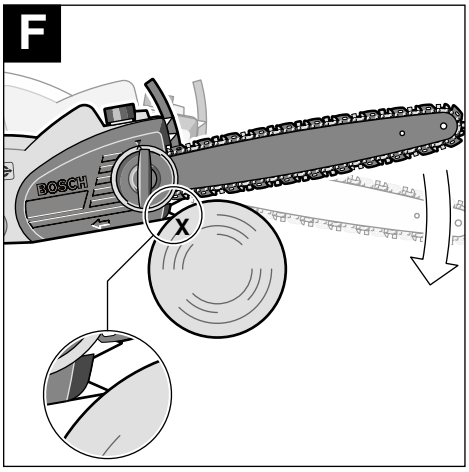

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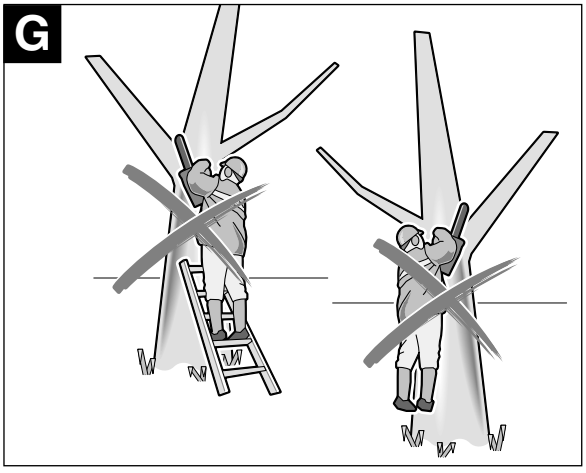

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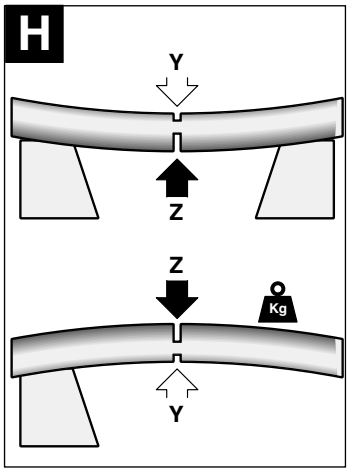

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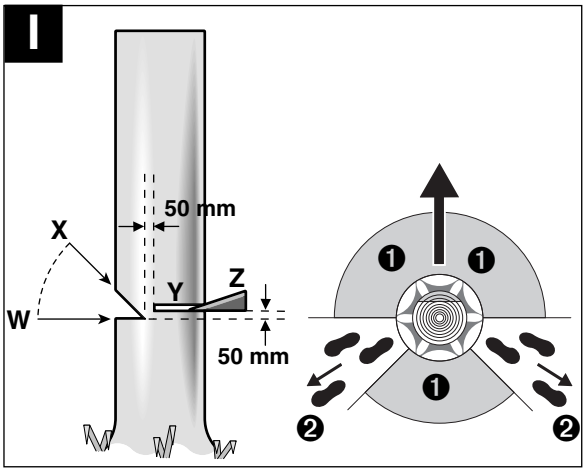

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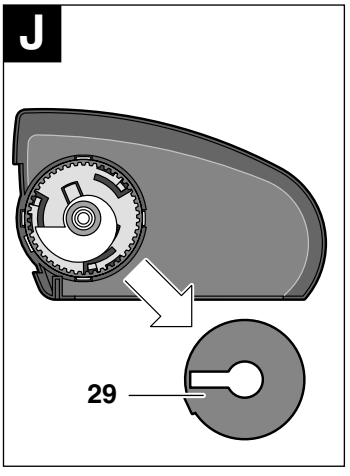

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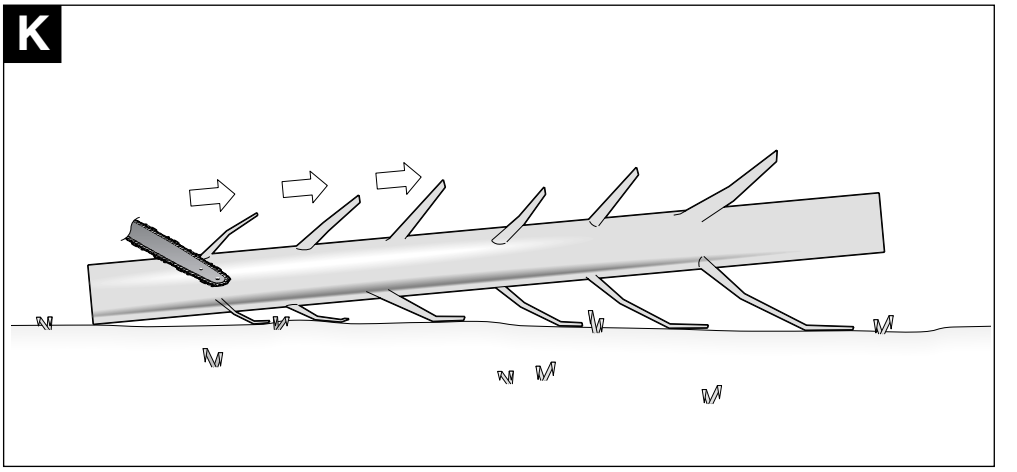

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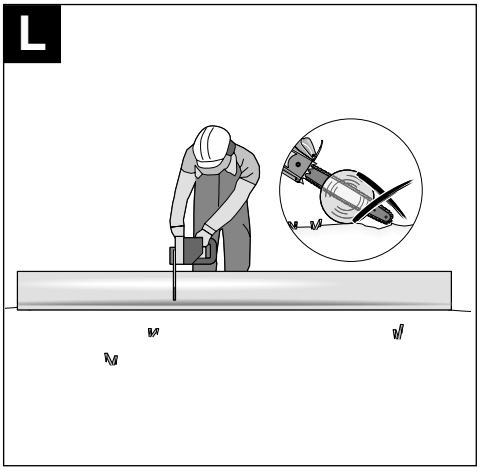

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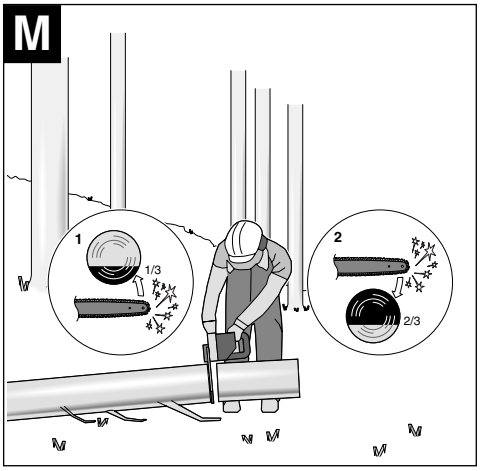
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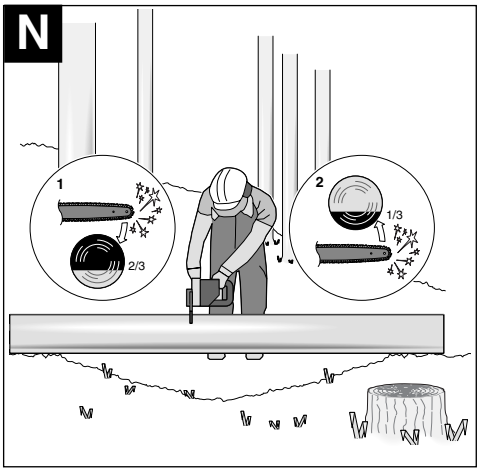
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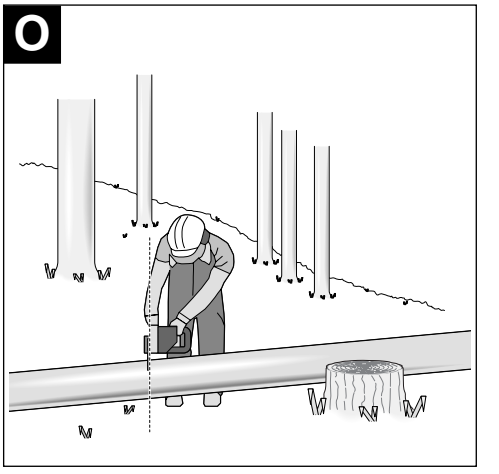
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Safety Notes

WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term “power tool” in the warnings refers to your mains operated (corded) power tool.

It is recommended that the first time user should have practical instruction in the use of the chainsaw and the protective equipment from an experienced operator and that the initial practice should be cutting logs on a saw horse or cradle.

Explanation of symbols:


Read instruction manual.


Do not expose to rain.


Remove the plug from the socket or mains immediately before carrying out any adjustments, servicing or maintenance or if the cable is damaged or cut.


Obtain and wear eye and ear protection at all times while operating the power tool.





The kick back brake and the run down brake stop the chain saw within short time.

Work area

- **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
- **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.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.
- **Children and juveniles, except above age 16, under supervision and for educational purposes, must not operate the chain saw, nor should persons unfamiliar with the saw or its handling (when borrowing).** Ensure operation manual is with the saw. Persons unfit or tired must not operate the chain saw.

Electrical safety

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

Personal safety

- **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.
- **Use safety equipment. Always wear eye protection.** Safety equipment such as dust masks, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **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.
- **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.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, en-**

sure these are connected and properly used. Use of these devices can reduce dust related hazards.

Power tool use and care

- **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.
- **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.
- **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **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.
- **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

Service

- **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.

Chain Saw Safety Warnings:

- **Keep all parts of the body away from the saw chain when the motor is operating. Before you start the 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.
- **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 reserved hand configuration increases the risk of personal injury and should never be done.
- **Wear safety glasses and hearing protection. Further protective equipment for head, hand, legs and feet is recommend.** Adequate protective clothing will reduce personal injury by flying debris or accidental contact with saw chain.
- **Do not operate a chain saw in a tree.** Operation of a chain saw in a tree, may result in personal injury.
- **Always keep proper footing and operate the chain saw only when standing on fixed, secure and level surface.** Slippery or unstable surfaces such as ladders may cause a loss of balance or control of the chain saw.
- **When cutting a limb that is under tension be alert for spring bac**k. 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.
- **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.
- **Carry the chain saw by the front handle with the saw chain stopped and the guide bar pointing to the rear. 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.
- **Follow instructions for lubricating, chain tensioning and changing accessories.** Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- **Keep handles dry, clean, and free from oil and grease.** Greasy, oily handles are slippery causing loss of control.
- **Cut wood only. Don't use chain saw for purposes not intended – for example – Don't use chain saw for cutting plastic, masonry or non-wood building materials.** Use of the chain saw for operations different then intended could result in a hazardous situation.

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 tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

- **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.
- **Do not over reach and do not cut above shoulder height.** This helps prevent unintended tip contact and enables better control of the chain saw in unexpected situations.
- **Only use replacement bars and chains specified by the manufacturer.** Incorrect replacement bars and chains may cause chain breakage and/or kickback.
- **Follow the manufacturer's sharpening and maintenance instructions for the saw chain.** Decreasing the depth gauge height can lead to increased kickback.

Technical data

Chain saw		**AKE 30-19 S**	**AKE 35-19 S**	**AKE 40-19 S**
Part number (typ)		3 600 H36 D..	3 600 H36 E..	3 600 H36 F..
Tool-less chain tensioning (SDS)		●	●	●
Rated power	[W]	1900	1900	1900
Chain speed (no load)	[m/s]	12	12	12
Chain bar length	[cm]	30	35	40
Nose sprocket		–	●	●
Kickback Brake		●	●	●
Run down brake		●	●	●
Chain type		3/8" - 90	3/8" - 90	3/8" - 90
Drive link thickness	[mm]	1.1 (0.043")	1.1 (0.043")	1.1 (0.043")
Amount of drive links		45	52	57
Oil reservoir capacity	[ml]	200	200	200
Automatic oiler		●	●	●
Metal gripping teeth		●	●	●
Weight without mains cable. approx. **	[kg]	4.2	4.3	4.4
Protection class		□ / II	□ / II	□ / II

**measured with chain bar and chain

Note: Please observe the order number of your machine. The trade names of individual machines can vary.

Inrush currents cause short-time voltage drops. Under unfavourable power supply conditions, other equipment may be affected. If the system impedance of the power supply is lower than 0.25 Ohm, disturbances are unlikely to occur.

Intended Use

The chain saw is intended for sawing of trees, tree trunks, branches, wooden beams, planks, etc. Cuts can be sawed with or across the grain. This product is not suitable for sawing mineral materials.

Introduction

This manual gives instructions on the correct assembly and safe use of your chain saw. It is important that you read these instructions carefully.

Delivered Items

Carefully remove the machine from its packaging and check for complete contents:

- Chain saw
- Cover plate
- Chain
- Chain bar
- Chain guard
- Chain oil (80 ml)
- Operating instructions

When parts are missing or damaged, please contact your dealer.

A Operating Controls

1 Rear handle
2 On/Off switch
3 Safety lock
4 Oil filler cap
5 Activation lever for kickback brake (hand guard)
6 Deactivation mark for kickback brake
7 Front handle
8 Nose sprocket
9 Chain guard
10 Chain
11 Chain bar
12 Gripping teeth
13 Tensioning ring (red)
14 Locking knob
15 Cover plate
16 Chain tensioning catch
17 Fastening bolt
18 Guide fins for chain bar
19 Oil outlet
20 Symbol for rotation and cutting direction
21 Drive sprocket
22 Chain catch bolt
23 Mains plug**
24 Serial Number

**Country specific

Not all of the accessories illustrated or described are included as standard delivery.

For Your Safety

Warning! Switch off, remove plug from mains before adjusting cleaning or if the cable is cut, damaged or entangled.

Caution! Do not touch rotating chain.

Do not operate chain saw near other people, children or animals. Do not operate chain saw after drinking alcohol or under the influence of intoxicating drugs or medication.

Electrical Safety

Your machine is double insulated for safety and requires no earth connection. The operating voltage is 230 V AC, 50 Hz (for non-EU countries 220 V, 240 V as applicable). Only use approved extension cables. Extension cords/leads should only be used if they comply with H07 RN-F types or IEC (60245 IEC 66).

If you want to use an extension cable when operating your product, only the following cable dimensions should be used:

– 1.0 mm^2: max length 40 m
– 1.5 mm^2: max length 60 m
– 2.5 mm^2: max length 100 m

It is recommended for increased electrical safety to use a Residual Current Device (RCD) with a tripping current of not more than 30 mA. Always check your RCD every time you use it.

For products **not sold in GB**: WARNING: For safety, it is essential that the mains plug **23** attached to the machine is fitted to the power supply cable **25** as shown.

The couplings of connection leads must be protected against splashes and the coupling sockets on the leads must be made of rubber or coated with rubber.

Fixing means for the connection leads must be used.

The connection lead must be inspected for signs of damage at regular intervals and may only be used if in perfect condition.

If the supply cord is damaged, it must be replaced by a Bosch Service Centre.

Products sold in **GB** only: Your chain saw is fitted with an approved 13 A (BS 1363/A) electric plug and is protected by a 13 A fuse (ASTA Approved to BS 1362).

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place by an authorized customer service agent.

The severed plug must be disposed of to avoid a possible shock hazard and should never be inserted into a 13 A socket elsewhere.

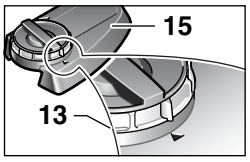
Assembly/Tensioning Chain

Do not connect the chain saw to mains before it is completely assembled.

■ Always use gloves when handling the chain.

A Chain and chain bar Assembly

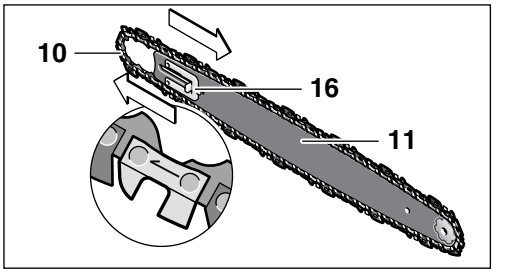
1. Unpack all parts carefully.
2. Align the two assembly arrows ⋈ on the tensioning ring **13** and cover plate **15**.



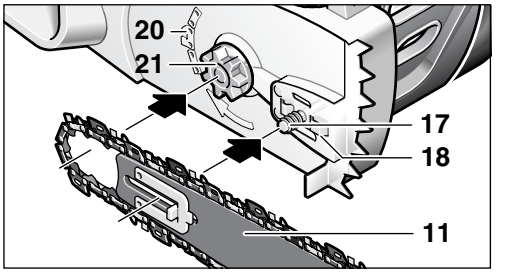
3. Place the chain saw on any suitable flat surface.

Use only genuine Bosch chains designed for chainbars with 1.1 mm groove (guage).

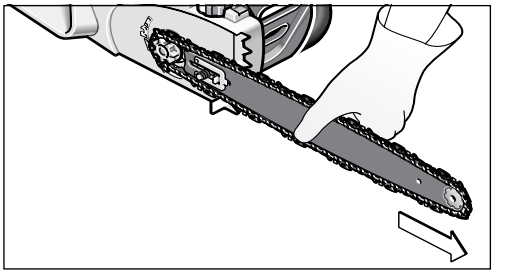
4. Slide the chain **10** in the slot around the chain bar **11**. Ensure chain is in correct running direction by comparing with chain symbol **20**. Ensure the chain tensioning catch **16** is facing outwards.



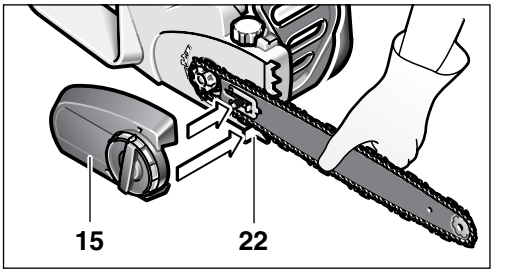
5. Fit the chain onto the drive sprocket **21** and guide the chain bar **11**, so that the fastening bolt **17** and the two guide fins **18** fit into the keyway of the chain bar **11**.



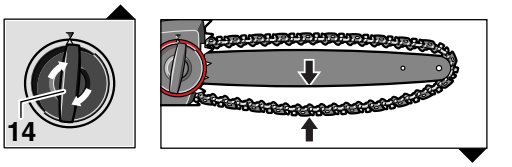
6. Check if all parts are seated properly and hold chain and chain bar in a level position.



7. Fit cover plate, check that arrows are still aligned and ensure that the chain catch bolt **22** fits into the groove of the cover plate **15**.



8. Screw on the cover plate **15** with the locking knob **14**.



The chain is not yet tensioned. Tensioning the chain applies as described under “Tensioning chain”, item 1 – 7.

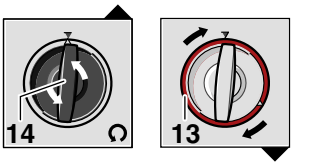
A Tensioning chain

Always check the chain tension before use, after the first cuts and regularly during use, approx. every 10 minutes. Upon initial operation, new chains can lengthen considerably.

The chain life of the saw chain mainly depends upon sufficient lubrication and correct tensioning.

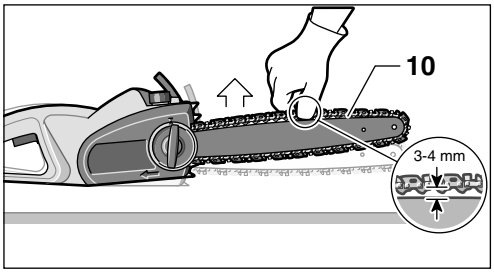
Avoid tensioning the chain if it is hot, as this will cause the chain to become overtensioned when it cools down.

1. Place the chain saw on any suitable flat surface.
2. Turn locking knob **14** approx. 1 – 3 turns anticlockwise to loosen the chain bar.
3. Check if the chain links are correctly located in the slot around the chain bar **11** and drive sprocket **21**.

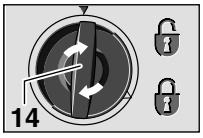


4. Turn the red tensioning ring **13** clockwise ratcheting until the correct chain tension is reached. The ratchet mechanism prevents the chain tension from loosening. The locking knob **14** may also turn, when turning the tension ring **13**. If the tensioning ring **13** is hard to turn, loosen the locking knob **14** once more anticlockwise.

5. The correct chain tension is reached when the chain **10** can be raised approx. 3 – 4 mm from the chain bar in the centre. This should be done by using one hand to raise the chain against the weight of the machine.



6. If the chain **10** is overtensioned, turn tensioning ring **13** anticlockwise to loosen the chain.
7. If the chain **10** is tensioned optimal, lock the chain bar **11** by tightening the locking knob **14** in clockwise direction. Do not use tools.



A B Lubrication

⚠ **Important: The chain saw is not supplied filled with oil. It is essential to fill with oil before use. Never operate the chain saw without chain oil or at an empty oil tank level, as this will result in extensive damage to the product.**

Chain life and cutting capacity depend on optimum lubrication. Therefore, the chain is automatically oiled during operation via the oil outlet **19**.

Filling oil tank:

– Set chain saw on any suitable surface with oil filler cap **4** facing upward.
– Clean area around the oil filler cap **4** with cloth, unscrew cap.
– Do not remove filter insert during filling.
– Add Bosch biodegradable chain saw oil until reservoir is full.
– Avoid dirt or debris entering oil tank, refit oil filler cap **4** and tighten.

⚠ **Important: To allow venting of the oil reservoir,small breather channels are provided between the oil filler cap and the strainer, to prevent leakage ensure machine is left in a horizontal position (oil filler cap 4 uppermost) when not in use.**

It is important to use only the recommended biodegradable oil to avoid damage to the chain saw. Never use recycled/old oil. Use of non approved oil will invalidate the warranty.

Starting and Stopping

Observe the correct mains voltage! The voltage of the power source must agree with the value given on the nameplate of the machine. Machines designated for 230 V can also be operated with 220 V.

Switching On and Off

Hold chain saw as described in “Cutting”.

For **switching on** the machine, press the lock-off button **3**, then fully press the On/Off switch **2** and hold in this position. The lock-off button **3** can now be released.

For **switching off**, release the On/Off switch **2**.

Do not stop chain saw after sawing by activating the front hand guard (kickback brake).

Kickback Brake/ Run Down Brake

The chain saw is equipped with two chain brake systems for user safety:

The **run down brake** automatically stops the chain and motor after the switch lever (On/Off) **2** is released.

The **kickback brake** is a safety mechanism activated through the front hand guard **5**, when kickback occurs. Chain stops immediately.

Perform an operational check from time to time. Push the front hand guard **5** to the front (position ❷) so that the red dot **28** becomes visible under the mark **6** and briefly switch on the chain saw. The chain must not start. In order to release the kickback brake again, pull back the front hand guard **5** (position ❶) so that the red dot **28** is covered under the mark **6**. (see figure **D**)

Cutting

Before Cutting

Before and periodically during cutting check as follows:

– Is the chain saw in a fail-safe condition?
– **B** Is the oil reservoir filled? Check oil level gauge **26** prior to starting and regularly during operation. Refill oil when oil level is low. The oil tank filling will last approx. 15 minutes, depending on sawing intensity and stops.

– Is the chain tension in order and is the chain sharp? Check chain tension every 10 minutes during operation. Upon initial operation, new chains can lengthen considerably. The condition of the chain influences the the cutting performance. Only a sharp chain protects from overload.
– Is the kickback brake deactivated and its function ensured?
– Are you wearing the necessary protective equipment? Wear safety glasses and hearing protection. Further protective equipment for head, hand, legs and feet is recommend. Adequate protective clothing will reduce personal injury by flying debris or accidental contact with saw chain.

D Kickback

Kickback is the sudden backward/upward motion of the chain saw, occuring when the chain (at the tip of the chain bar) comes in contact with a log or wood, or when the chain becomes jammed.

When kickback occurs the chainsaw reacts unpredicably and can cause severe injuries to the operator or bystanders.

Particular attention must be given when sawing sidewards, slanted or during length cuts, as the gripping teeth **12** usually can not be applied.

To avoid kickback:

– Saw with the chain bar at a flat angle.
– Never work with a loose, widely stretched or the heavily worn out chain.
– Ensure chain is sharpened correctly.
– Never saw above shoulder height.
– Never work with the tip of the chain bar.
– Always the hold chain saw firmly with both hands.
– Always use a Bosch low-kickback chain.
– Apply the metal gripping teeth **12** for leverage.
– Ensure correct chain tension.

General Behavior

D Always hold the chain saw firmly with both hands. Front grip with the left hand and rear grip with the right hand. Fully grip both handles at all times during operation. Never operate chain saw using only one hand. Ensure power cord is located to the rear, away from the chain and wood and so postioned that it will not be caught on branches or the like during cutting.

E Use the chain saw only with secure footing. Hold the chain saw at the right-hand side of your body.

F The chain must be running at full speed before it makes contact with the wood. Use the metal gripping teeth **12** to secure the saw onto the wood before starting to cut. Use the gripping teeth as a leverage point “X” while cutting.

Reset the gripping teeth at a lower point when sawing thicker logs by pulling the chain saw slightly backwards until the gripping teeth release, and reposition at lower level to continue sawing. Do not remove the saw completely from the wood.

Do not force the chain while cutting, let the chain do the work, using the gripping teeth **12** to apply minimal leverage pressure.

G Do not operate the chain saw with arms fully extended or attempt to saw areas which are difficult to reach, or on a ladder. Never use the chain saw above shoulder height.

Sawing is optimized when the chain speed remains steady during cutting.

Beware when reaching the end of the cut. The weight of the saw may change unexpectedly as it cuts free from the wood. Accidents can occur to the legs and feet.

Always remove the saw from a wood cut while the saw is running.

Cutting Logs

Observe the following safety instructions:

E **H** Support logs so that the face sides at the cut do not close in against each other, which would result in the chain being jammed or pinched.

Position and set short logs safely prior to sawing.

Saw only wood or wooden objects. When sawing, always take care to avoid hitting stones, nails, etc., as these could be thrown up or cause damage to the chain or serious injury to the operator or bystanders.

Keep a running saw clear of wire fencing or the ground.

Use of the saw to thin out branches or bushes is not approved.

Length cuts must be carried out with care, as leverage with the gripping teeth **12** is not possible. Saw at a flat angle to avoid kickback.

When working on a slope, operate above or to the side of the trunk or laying tree.

Be careful not to trip over tree stumps, branches, roots, etc.

H Cutting Wood under Tension

There is a high risk of accidents when sawing wood, branch or trees under tension. Be extremely careful. **Leave saw jobs like these to professionals.**

When sawing logs supported on both ends, start the cut from above **(Y)** about 1/3 of the diameter into the log and then finish the cut **(Z)** from below, in order to avoid splitting of the log or jamming of the saw. Avoid contact of the chain saw with the ground. When sawing logs supported on only one end, start the cut from below **(Y)** about 1/3 of the diameter into the log and finish the cut from above **(Z)**, in order to avoid log splitting or jamming of the chain saw.

I Felling Trees

Always wear hard hat to protect head against falling branches.

The chain saw can only be used to fell trees smaller in diameter than the length of the chain bar.

❶ Secure work area. Ensure no persons or animals are in the vicinity of the falling tree.

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

When cutting and felling operations are being performed by two or more persons, at the same time, the felling operations should be separated from the cutting operation by a distance of at least twice the height of the tree being felled. Trees should not be felled in a manner that would endanger any person, strike any utility line or cause any property damage. If the tree does make contact with any utility line, the company should be notified immediately.

The chain saw operator should keep on the uphill side of the terrain as the tree is likely to roll or slide downhill after it is felled.

❷ An escape path should be planned and cleared as necessary before cuts are started. The escape path should extend back and diagonally to the rear of the expected line of fall.

❸ Before felling is started, consider the natural lean of the tree, the location of larger branches and the wind direction to judge which way the tree will fall. Remove dirt, stones, loose bark, nails staples, and wire from the tree.

Notching Undercut: Make the notch **(X – W)** 1/3 the diameter of the tree, perpendicular to the direction of falls as Make the lower horizontal notching cut first. This will help to avoid pinching either the saw chain or the guide bar when the second notch is being made.

Felling Back Cut: Make the felling back cut **(Y)** at least 50 mm higher than the horizontal notching cut. Keep the felling back cut parallel to the horizontal notching cut. Make the felling back cut so enough wood is left to act as a hinge. The hinge wood keeps the tree from twisting and falling in the wrong direction. Do not cut through the hinge.

As the felling gets close to the hinge the tree should begin to fall. If there is any chance that the tree may not fall in desired direction or it may rock back and bind the saw chain, stop cutting before the felling back cut is complete and use wedges of wood, plastic or aluminium to open the cut and drop the tree along the desired line of fall.

When the tree begins to fall remove the chain saw from the cut, stop the motor, put the chain saw down, then use the retreat path planned. Be alert for overhead limbs falling and watch your footing.

To complete the felling operation, drive a wedge **(Z)** into the horizontal cut.

Beware of falling branches when the tree starts to move.

Limbing a Tree

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

Bucking a Log

L Bucking is cutting a log into lengths. It is important to make sure your footing is firm and your weight is evenly distributed on both feet. When possible, the log should be raised and supported by the use of limbs, logs or chocks. Follow the simple directions for easy cutting.

When the log is supported along its entire length as illustrated, it is cut from the top (overbuck).

M When the log is supported on one end, as illustrated, cut 1/3 the diameter from the underside (underbuck). Then make the finished cut by overbucking to meet the first cut.

N When the log is supported on both ends, as illustrated, cut 1/3 the diameter from the top overbuck. Then make the finished cut by underbucking the lower 2/3 to meet the first cut.

O When bucking on a slope always stand on the uphill side of the log, as illustrated. When "cutting through", to maintain complete control release the cutting pressure near the end of the cut without relaxing your grip on the chain saw handles. Don't let the chain contact the ground. After completing the cut, wait for the saw chain to stop before you move the chain saw. Always stop the motor before moving from tree to tree.

Maintenance

Before any work on the machine itself, pull the mains plug from the socket.

Note: To ensure long and reliable service, carry out the following maintenance regularly.

Regularly check for obvious defects such as loose, dislodged or damaged chain and chain bar, loose fixings and worn or damaged components.

Care has to be taken that the chain is loosened with the chain tensioning ring **13** before disassembly of the chain. Forgetting to loosen can damage the SDS mechanism.

Check that covers and guards are undamaged and correctly fitted. Carry out necessary maintenance or repairs before using the chain saw.

If the chain saw should happen to fail despite the care taken in manufacturing and testing, repair should be carried out by an authorized customer service agent.

Before returning, ensure all oil in the oil tank has been emptied by removing the sieve during emptying. Replace sieve.

For all correspondence and spare parts orders, always include the 10-digit part number (TYP) from the nameplate of the machine!

A Replacing/Changing Chain and Chain Bar

Fit the chain and chain bar as described in “Assembly and Tensioning Chain”.

The circular groove of the chain bar will wear particularly on the lower edge with time. When replacing the chain turn the chain bar 180° to allow even wear, thus extending chain bar life.

For SDS models only, reverse the chain tensioning catch **16** by removing the screws and refitting it on the opposited side.

Check drive sprocket **21**. If it is worn out or damaged due to strain, have it exchanged by an authorized Bosch service agent.

Sharpening Chain

Have your chain sharpened professionally at your Bosch approved service agent or sharpen the chain yourself using the Bosch sharpening kit or a Dremel power tool with the appropriate grinder (1453), both available at your Bosch approved service agent. Follow the sharpening instructions supplied with the sharpening kit.

Checking the Automatic Oiler

Proper functioning of the automatic oiler can be checked by running the chain saw and pointing the tip of the chain bar towards a piece of cardboard or paper on the ground. Caution: Do not touch the ground with the chain. Ensure safety clearance of 20 cm. If an increasing oil pattern developes, the automatic oiler is operating fine. If there is no oil pattern, despite a full oil reservoir, see “Fault Finding” or contact your Bosch approved service agent.

Accessories

Chain and Chain bar

AKE 30-19 S . . . . . F 016 800 259
AKE 35-19 S . . . . . F 016 800 260
AKE 40-19 S . . . . . F 016 800 261

Chain

AKE 30-19 S . . . . . F 016 800 256
AKE 35-19 S . . . . . F 016 800 257
AKE 40-19 S . . . . . F 016 800 258

Cleaning

Chain sharpening/cleaning kit . . . . . F 016 800 262
Chain oil 1 litre 2 607 000 181

Additional accessories

Gloves 2 607 000 134
Protective goggles . . . . . F 016 800 178
SNR 19 ear protectors
(sounding proofing level 19 dB (A)) . 2 607 990 042
SNR 24 ear protectors
(sounding proofing level 24 dB (A)) . 2 607 990 043

B Cleaning/Storage

Clean the moulded plastic housing of the chain saw using a soft brush and clean cloth. Do not use water, solvents or polishes. Remove all debris, especially from the motor cooling vents **27**.

Remove and brush clean the cover plate **15**, chain and chain bar after 1 to 3 hours of use.

Clean the area under the cover plate **15**, the drive sprocket **21** and chain bar assembly using a soft brush. Clean oil outlet **19** with a clean cloth.

J If the chain tensioning mechanism becomes difficult to operate, dismantle the protective lid **29** from inside the cover plate **15**. Turn locking knob **14** and red tensioning ring **13** against each other, so that debris is loosened from the mechanism and can be discarded. Carefully knock out debris. If mechanism is heavily clogged, use a soft brush or compressed air for cleaning. Do not use tools of any kind.

If the chain saw is to be stored for a longer period of time, clean chain and chain bar.

Store in a secure, dry place out of the reach of children. Do not place other objects on the chain saw.

To prevent leakage ensure machine is left in a horizontal position (oil filler cap **4** uppermost).

When storing machine in original packaging the oil tank must be completely emptied.

Fault Finding

The following table gives checks and actions that you can perform if your machine does not operate correctly. If these do not identify/remedy the problem, contact your service agent.

Warning: Switch off and remove plug from mains before investigating fault.

Symptom	Possible Cause	Remedy
Chain saw fails to operate	Kickback brake is activated No power Mains socket faulty Extension cord damaged Fuse faulty	Pull hand guard **5** back in position ❶ so that the red dot is covered Check power Use another socket Check cord, replace Replace fuse
Chain saw operates intermittently	Extension cord damaged Loose connection Internal wiring defective On/Off switch defective	Check cord, replace Contact service agent Contact service agent Contact service agent
Dry chain	No oil in reservoir Vent in oil filler cap clogged Oil passage clogged	Refill oil Clean cap Clean oil passage outlet
Kickback Brake/Run Down Brake	Brake does not stop chain	Contact service agent
Chain/chain bar overheats	No oil in reservoir Vent in oil filler cap clogged Oil passage clogged Chain is over tensioned Dull chain	Refill oil Clean cap Clean oil passage outlet Adjust chain tension Sharpen chain or replace
Chain saw rips, vibrates, does not saw properly	Chain tension too loose Dull chain Chain worn out Chain teeth are facing in the wrong direction	Adjust chain tension Sharpen chain or replace Replace chain Reassemble with chain in correct direction

Disposal

Power tools, accessories and packaging should be sorted for environmental-friendly recycling.

Only for EC countries:



Do not dispose of power tools into household waste!
According to the European Directive 2002/96/EC on waste electrical and electronic equipment and its incorporation into national law, products that are no longer suitable for use must be separately collected and sent for recovery in an environmentally-friendly manner.

After-Sales Service and Customer Assistance

Our after-sales service responds to your questions concerning maintenance and repair of your product as well as spare parts. Exploded views and information on spare parts can also be found under:
www.bosch-pt.com
Our customer consultants answer your questions concerning best buy, application and adjustment of products and accessories.

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E-Mail: info@hk.bosch.com

www.bosch-pt.com.cn

Declaration of Conformity

Measured values determined according to 2000/14/EC (1 m distance away) and DIN 50 144.

Typically the A-weighted noise levels of the product are: sound pressure level: 92 dB (A); sound power level: 103 dB (A).
Wear hearing protection!

The typical weighted acceleration is 11 m/s^2.

We declare under our sole responsibility that this product is in conformity with the following standards or standardization documents: EN 60 745, according to the provisions of the directives 98/37/EC, 2000/14/EC, 2004/108/EC.

EC Type Certification No. 210888100.01 CE by notified testing agency No. 0344.

2000/14/EC: The guaranteed sound power level L_{WA} is lower than 104 dB (A). Conformity assessment procedure according to Annex V.

Technical documentation retained by PT-LG/EAE at Stowmarket, England.

Leinfelden, 01.10.2007

Dr. Egbert Schneider Senior Vice President Engineering	Dr. Eckerhard Strötgen Head of Product Certification

ppa. i. V.

Robert Bosch GmbH, Power Tools Division

Subject to change without notice

安全规章

注意！必须阅读所有的安全指示。没有按照以下列举的说明操作机器将导致触电、着火和／或严重的伤害。

为了方便日后查阅，要好好保存本安全规章和指示。

以下所使用的定义〝电动工具〞，是指以电线驱动的电动工具（必须使用电线）。

本公司建议操作者在首度使用机器之前，必须先由经验丰富的专业人员以实际的例子，指导如何操作链锯，以及如何使用防护装备。最基本的练习就是在锯木架或其它的架子上锯树干。

有关图片标示的说明


详细阅读使用说明书。


做好防雨的措施。


设定和维修机器之前，或者当电线受损了、被割断了，都要马上拔出机器的电源插头。


操作电动工具时务必要佩戴耳罩和护目镜。





本机器配备了制止反弹装置和制止惯性转动装置，所以锯子的链条能够瞬间止动。

工作场所

- **工作场所要保持清洁、整齐。**混乱和黑暗的场地会引发事故。
- **不要在易爆环境，如有易燃液体、气体或粉尘的环境下操作电动工具。**电动工具产生的火花会点燃粉尘和气体。
- **使用电动工具时，不可以让儿童和旁观者靠近。**分心会造成操作失控。
- **儿童和青年人不可以操作链锯，例外的是被监督的 16 岁以上的培训者。不会操作链锯或经验不足的人，也不可以使用本机器。**本使用说明书要放在随手可及之处。过累或身体无法耐劳的人不可以使用本机器。

电气安全

- **电动工具插头必须和插座相配，绝不能擅自改装插头。需接地的电动工具不能使用转换插头。**未经改装的插头和相配的插座可以减少触电危险。
- **避免人体接触接地的表面，例如管道、散热片、电炉和冰箱。**如果您的身体接地会增加触电危险。
- **不得将电动工具暴露在雨中或潮湿环境中。**水进入电动工具会增加触电危险。
- **不得滥用电线。绝不能用电线搬运、悬挂电动工具或拔出电动工具的插头。让电动工具远离热、油、锐边或转动部件。**受损或缠绕的电线会增加触电危险。
- **在户外使用电动工具时，得使用适合户外使用的外接电线。**采用适合户外使用的电线可以降低触电的危险。
- **如果无法避免的，必须在潮湿的环境中使用电动工具，得使用电流断路开关 (FI)。**使用电流断路开关 (FI) 可以减低触电的危险。

人身安全

- **保持警觉，操作电动工具时要全神贯注于工作并保持清醒。当您感到疲倦，或在有药物、酒精或治疗反应时，不要操作电动工具。**操作电动工具时只要瞬间疏忽便会导致严重的人身伤害。
- **使用个人的防护装置并且要始终佩戴护目镜。**穿戴安全装置，例如参考工作状况使用防尘面具、防滑安全鞋、安全帽或听力保护装置等，能够减少人身伤害。
- **防止意外起动。确保开关在连接电源时处于关闭位置。**搬运工具时如果手指放在已经接通电源的开关上，或者在连接电源时开关位在开动的位置，都可能导致意外。
- **在开动电动工具之前，先拿掉所有的调节钥匙或扳手。**遗留在电动工具旋转零件上的扳手或钥匙会导致人身伤害。
- **不可以掉以轻心。时刻注意立足稳固并保持身体平衡。**这样才能够在意外情况下控制好电动工具。
- **著装适当。不要穿宽松衣物或佩戴饰品。衣服、手套和头发要远离旋转的部件。**宽松的衣物、佩饰或长发，可能会卷入转动的部件中。
- **如果机器提供了与排屑、集尘设备连接用的装置，要正确连接好上述设备并且要使用得当。**使用这些吸尘设备可以减少尘屑引起的危险。

细心地处理和使用电动工具

- **不要让电动工具超荷，根据用途使用适当的电动工具。**选用合适的电动工具，能够使您的工作更有效、更安全。

- **不可以使用开关故障的电动工具。**不能用开关来控制的电动工具是危险的必须送修。
- **在进行任何调节、更换附件或储存电动工具之前，必须从插座上拔掉插头。**这个防护措施可以防止机器意外起动。
- **将闲置不用的电动工具储存在儿童所及的范围之外，并且不要让不熟悉电动工具或对这些说明不了解的人操作电动工具。**电动工具在未经培训的用户手中是危险的。
- **细心保养电动工具。检查运动件是否调整到位或卡住，检查零件破损状况和影响电动工具运行的其它状况。如果损坏，应在使用前修理好电动工具。**许多事故是由维护不良的电动工具引发的。
- **保持切削刀具锋利和清洁。**保养良好的有锋利切削刃的刀具不易卡住而且容易控制。
- **按照使用说明书，考虑作业条件和进行的作业来使用电动工具、附件和工具的刀头等。**将电动工具由于那些与其用途不符的操作可能会导致危险。

维修

- **将您的电动工具送交专业维修人员修理。修理时只能使用原厂的备件进行更换。**这样才能够保证机器的安全性能。

关于链锯的警告提示:

- **身体上的所有部位都必须远离转动中的链条。开动电锯之前，必须确定链条不会接触任何物体。**操作链锯时只要一时疏忽，链条便可能割到衣服或身体。
- **使用右手握住链锯的后握柄，使用左手握紧链锯的前握柄。**用其它的姿势握持链锯会提高受伤的危险，勿尝试。
- **佩戴护目镜和耳罩。我们建议您在头、手、腿和脚上也佩戴防护装备。**穿戴合适的防护装备能够降低因为乱飞的锯屑和不小心接触链条，而造成的伤害。
- **不可以用链锯在树上锯割。**用链锯在树上锯割可能造成伤害。
- **确保立足稳固。当您站在坚固、安全、平坦的地面上时才可以使用链锯。**使用梯子时如果地面会滑或不稳固，可能让您失去平衡并且无法控制链锯。
- **锯割时纤维紧绷的树枝会回弹。**如果紧绷的纤维被释放了，树枝可能打到操作者和／或让操作者无法控制链锯。
- **在修剪树林中的下层木丛和幼木时得特别小心。**细的树枝可能被链条绊住并弹向您，或者让您失去平衡。
- **等待链条停止运转之后，再使用前手柄提携链锯，并且要以导引轨朝后的方式提链锯。搬运或储存链锯时一定要安装好防护罩。**小心地使用链锯可以降低接触转动中的链条的概率。
- **遵循有关润滑、安装链条和更换附件的指示。**如果未按照规定安装或润滑链条，链条可能会扯断或者会提高反弹的危险。
- **握柄要保持干燥、清洁，握柄上不可以有油脂。**粘满油脂的握柄很滑，容易造成操作失控。
- **只能锯木材，链锯只能用在合适的用途上。例如：不可以使用链锯锯割塑料、土墙或非木材的建材。**使用链锯从事不合适的用途，会产生危险状况。

反弹的原因和避免反弹的措施:

– 如果导引轨的尖端接触异物，或者因为木材弯折而让链条夹在锯缝中，都可能发生反弹。

– 导引轨的尖端如果接触异物，有时候会发生不预期的反弹反应。此时导引轨会向上翘起，并朝着操作者的方向冲撞。

– 如果链条夹在导引轨的上缘，导引轨可能快速地朝著操作者的方向回冲。

– 这些反应，都可能让您无法控制住链锯，而且本身也可能受重伤。不要只依赖链锯的安全防护设备。身为链锯的操作者，应该采取各种不同的防范措施来预防意外，如此才能够确保工作无伤害。

错误或者不当地使用电动工具，都会造成反弹。但是如果采取以下的防范措施是可以防范反弹的:

- **使用双手握牢电锯。持机时大拇指和其它的手指头要围住链锯的手柄。身体和手臂的姿势必须能够抵挡反弹力。**如果采取了合适的防范措施，操作者是能够控制住反弹力的。千万不可以放开链锯。
- **避免采用不寻常的站立姿势，不可以从事过肩锯割。**这样可以避免不小心碰触导轨尖端。而且在突发状况下，比较容易控制住链锯。
- **只能使用制造厂商规定的备用导轨和锯割链条。**使用了不正确的备用导轨和锯割链条，容易造成链条被扯断或反弹。
- **遵守制造厂商提供的有关磨利链条和维护链条的指示。**深度限制块如果太低了，容易造成反弹。

技术数据

链锯		AKE 30-19 S	AKE 35-19 S	AKE 40-19 S
定货号		3 600 H36 D..	3 600 H36 E..	3 600 H36 F..
快速安装链条，不必使用工具 (SDS)		●	●	●
额定输入功率	[瓦]	1900	1900	1900
链条速度（在无负载时）	[米 / 秒]	12	12	12
中插板的长度	[公分]	30	35	40
导向星形轮		–	●	●
反弹制止装置		●	●	●
惯性运转制止装置		●	●	●
锯刀链条种类		3/8 英寸 – 90	3/8 英寸 – 90	3/8 英寸 – 90
传导元件厚度	[毫米]	1,1 (0,043 英寸）	1,1 (0,043 英寸）	1,1 (0,043 英寸）
传动元件的数目		45	52	57
油的充填量 – 储备容器	[毫升]	200	200	200
自动链条润滑		●	●	●
爪形挡块		●	●	●
没有电线的重量 , 约 **	[千克]	4,2	4,3	4,4
绝缘等级		⧈ / II	⧈ / II	⧈ / II

** 测量时包含导轨和链条

指示: 请注意机器铭牌上的购物号。机器在销售市场上没有统一的商品名称。

开动机器时，电压会瞬间降低。在供电不理想的环境，可能影响其它的电器。如果电源阻抗小于 0.25 Ohm，便不会产生干扰。

按照规定使用机器

本机器适合用来砍树，锯割树干、树枝、木梁、木板等等。锯割时锯线可以顺著木材的纹路，也可以和木材的纹路交叉。本机器不适合锯割含矿物的物料。

序言

本使用说明书记载了链锯的正确安装方式和如何安全地操作链锯。因此详阅本使用说明书是非常重要的。

供货范围

小心地从包装箱中取出所有的部件，并检查以下各部件是否都齐全了:

– 链锯
– 盖子
– 锯割链条
– 中插板
– 链条保护罩
– 锯割链条附著油 (80 毫升）
– 使用说明书

如果缺少零件或零件损坏了，请接洽您的经销商。

A 机件

1 后手柄
2 起停开关
3 接通闭锁装置
4 油箱盖
5 反弹制止装置 – 释放开关（护手装置）
6 记号〞反弹制止装置被启动〞
7 前手柄
8 导向星形轮
9 链条保护罩
10 链条
11 中插板
12 爪形挡块
13 链条张紧环，红色
14 拧紧柄
15 盖子
16 链条的固定凸起
17 固定销
18 中插板 – 导引桥形接片
19 喷油嘴

20 转动方向和锯割方向记号

21 链条齿轮

22 链条捕捉销

23 插头 **

24 序列号码

** 因国而异

图解或说明上提到的附件，并非全部包含在供货范围中。

针对您的工作安全

注意！维修或清洁机器之前，或者当电线被割断了、受损了或缠绕在一起时，都要马上关闭链锯，并从插座上拔出插头。

小心！不要触摸转动中的链条。

不可以在人、儿童或动物的附近使用链锯。喝酒之后、服用毒品或麻醉药品之后也不可以使用链锯。

用电安全

为了顾虑操作安全，本机器具备了绝缘功能所以不须接地。电压是 230 V AC， 50 Hz （针对非欧盟国家，因为机型不同电压可能是 220 V 或 240 V ）。只能使用合格的延长线。只能使用 H07 RN-F 或 IEC (60245 IEC 66) 等种类的延长线。

操作本机器时如果必须使用延长线，该延长线的截面积必须符合以下的规定:

– 1,0 毫米平方: 电线长度不超过 40 米时

– 1,5 毫米平方: 电线长度不超过 60 米时

– 2,5 毫米平方: 电线长度不超过 100 米时

为了提高操作安全，本公司建议您使用最大 30 mA 剩余电流的 FI– 保护开关 (RCD)。每次使用前，都必须先检查 FI– 开关。

针对**非在英国**贩卖的产品的指示: 注意: 为了您的安全，必须参考插图来连接机器上的插头 **23** 和延长线 **25**。

延长线上的联结装置必须能够防水（水花）、由橡胶制成的或安装了橡胶套。

延长线上必须配备塞绳扣。

必须定期检查电线是否有损坏之处，只能使用完好的电线。

如果连接电线损坏了，只能把电线交给博世授权的维修厂修理。

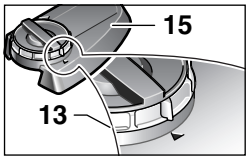
安装 / 张紧链条

必须先安装好链锯，接著才可以连接电源。

■ 装、卸链条时一定要穿戴防护手套。

A 安装中插板和链条

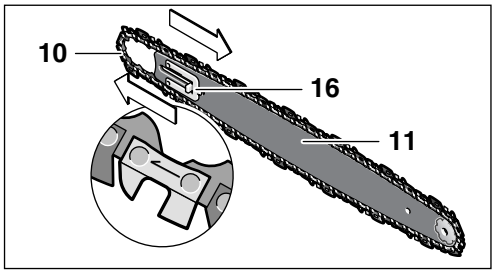
1. 小心地取出所有的零件。
2. 让盖子 **15** 上的箭头和链条张紧环 **13** 上的箭头对齐 ⋈。



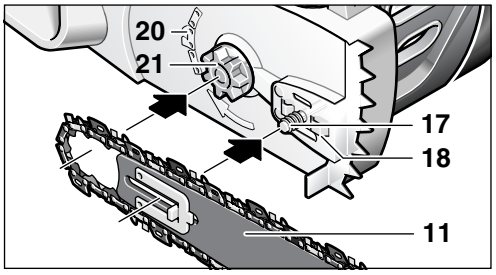
3. 把链锯放在平坦的表面上。

只能使用传动元件厚度（槽宽）为 1,1 毫米的链条。

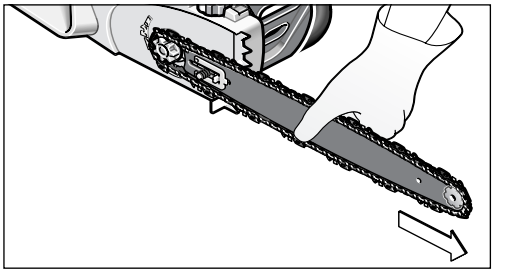
4. 把链条 **10** 放入中插板 **11** 的旋转槽中。安装时要注意正确的旋转方向。必须注意链条上的转动方向记号 **20**。检查链条的固定凸起 **16** 是否朝外。



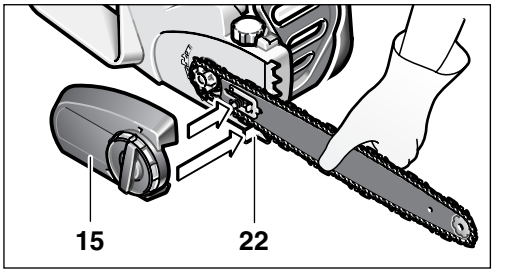
5. 把链条的传动装置安装在链条齿轮 **21** 上，接著再安装中插板 **11**。注意，固定销 **17** 前、后的两片中插板 – 导引桥形接片 **18**，必须凸出于中插板 **11** 的长孔中。



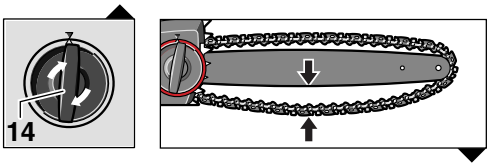
6. 检查，是否所有的零件都正确接合了，以及安装了链条的中插板是否能够固定在这个位置。



7. 正确地安装好盖子，并检查链条捕捉销 **22** 是否正确地位在盖子 **15** 上的捕捉销专用孔中。



8. 使用拧紧柄 **14** 稍微拧紧盖子 **15**。



现在仍未正式地拉紧链条。根据点 1–7 的指示 ″ 拉紧链条″ 来张紧链条。

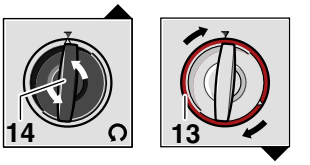
A 拉紧链条

在正式工作之前，在首度锯割之后都要检查链条的张力。锯割中途则要每 10 分钟检查一次。特别是新的链条在刚开始使用时，延展性会比较高。

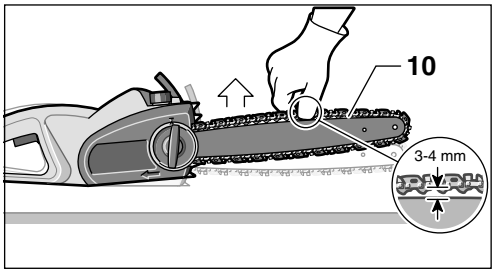
延长链条使用寿命的决定性因素是充足的润滑和正确的张力。

在链条变得非常炙热时不可以拉紧链条。因为冷却后链条会收缩，而造成链条紧绷在中插板上。

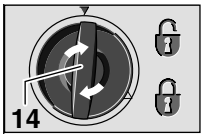
1. 把链锯放在平坦的表面上。
2. 朝着反时钟的转向将拧紧柄 **14** 拧转约 1 到 3 转，以便拧松中插板。
3. 检查链条的传动装置，是否正确地位在中插板 **11** 的导引槽中、是否正确地靠在链条齿轮 **21** 上。



4. 朝着顺时钟的转向拧转红色的链条张紧环 **13**，必须拧转到链条正确地张紧为止。机械的卡槽固定方式可以防止链条松开。如果拧转链条张紧环 **13** 时非常吃力，必须再朝着反时钟的转向拧松拧紧柄 **14**。当您调整链条张紧环 **13** 时，拧紧柄 **14** 是可以跟着转动的。
5. 如果能将链条的中间部位抬起约 3 到 4 毫米，则代表链条 **10** 已经被正确张紧了。检验时可以用手抓住链条来提起机器。



6. 如果链条 **10** 绷得太紧了，可以朝着反时钟的转向拧转链条张紧环 **13** 来放松链条。
7. 在正确地拉紧链条 **10** 之后，可以向右拧转拧紧柄 **14** 来夹紧中插板 **11**。



A B 润滑链条

⚠ **重要：交货时链锯中并未充填链条附著油。务必在使用机器之前先加油。操作链锯时如果未使用链条附著油，或者附著油的油量未到达最低量的记号，都会损坏链锯。**

链条的使用寿命和锯割功率，是由正确的润滑来决定的。因此在操作的中途，机器会自动从喷油嘴 **19** 在链条上喷射链条附著油。

充填油箱:

– 以油箱盖 **4** 朝上的方式，把链锯放置在合适的底座上。
– 使用一块干净的布把油箱盖 **4** 的周围擦干净，并拧开盖子。

– 填油时不可以取出过滤装置。
– 使用能够自然分解的博世有机链条附著油充填油箱。
– 注意，不可以让污垢掉入油箱中。再度拧入油箱盖 **4** 并关闭好油箱。

⚠ 重要：为了确保油箱和外界能够产生空气对流，在滤网和油箱盖之间有 4 条细微的平衡管道，所以可能会有少量的油从管道渗出。请注意，务必平放电锯（即以油盖 4 朝上的方式）。

本公司只建议您使用能够分解的有机附著油，来避免链锯受损。千万不可以使用回收的油或旧的油。如果使用未经许可的油，本公司将取消保修。

正式操作机器

注意电源的电压： 电源的电压必须和机器铭牌上标示的电压一致。标示了 230 伏的机器，也可以使用 220 伏的电压。

开动和关闭

根据〞使用链锯工作〞的描述来握持链锯。

开动机器，按下接通闭锁装置 **3**，接著把起停开关 **2** 按到底并让开关保持在这个位置。现在可以放开接通闭锁装置 **3**。

关闭机器，放开起停开关 **2**。

锯割完毕后，不可以使用前端的护手装置（启动反弹制止装置）来制止机器继续转动。

反弹制止装置／惯性运转制止装置

本链锯配备了两项防护装置:

在您放开起停开关 **2** 之后，**惯性运转制止装置**会制止链条转动。

反弹制止装置是一个机械式的防护装置。在机器反弹时，您可以使用前护手装置 **5** 来启动这个防护功能。链条在短时间内会停止转动。

不定时进行功能检验。向前推动前护手装置 **5**（位置 ❷），至能够看见记号 **6** 下方的红点 **28** 为止，接著开动链锯，此时链条应该不会转动。要解除反弹制止功能时，得向后拉回护手装置 **5**（位置 ❶），至无法看见记号 **6** 下方的红点 **28** 为止。(参考插图 **D**)

使用链锯工作

锯割之前

操作机器之前和锯割中途，必须执行以下的检查:

– 链锯的功能安全吗？
– **B** 油箱已经填油了吗？在工作之前以及工作中途定时检查油箱指标 **26**。如果油位降到油箱视窗的下缘，就要填油。一个油箱的油大概能够维持 15 分钟的工作，工作时间长短会受休息和操作的频繁程度影响。
– 正确地拉紧和磨利链条了吗？在锯割中途要每 10 分钟检查一次链条的张力。特别是新的链条在刚开始使用时，延展性会比较高。链条是否锋利会直接影响锯割的功率。只有使用锋利的链条才能够避免机器超荷。
– 已经启动了反弹制止装置，它得功能正常吗？
– 已经穿戴了需要的防护装备吗？佩戴护目镜和耳罩。最好也穿戴能够保护头、手、腿和脚的保护装备。穿戴了合适的保护服饰，可以降低被飞溅的锯屑割伤的危险。而且也可以避免意外地接触链条。

D 锯割反弹

所谓的锯割反弹，是指转动中的链锯突然向上弹并且往后跳。反弹一般发生在中插板的尖端和被锯割物接触时，或者链条被夹住时。

如果出现锯割反弹，机器会发生无法预期的反应，可能对操作者或站在锯割范围内的旁观者造成严重伤害。

从侧面锯割，斜锯和纵向锯割时要特别小心。因为此时无法使用爪形挡块 **12**。

避免锯割反弹:

– 锯割时要尽量摆平链锯。
– 不可以使用松动的、过度研展的或强烈磨损的链条工作。
– 根据描述磨利链条。
– 千万不可以从事过肩锯割。
– 不可以使用中插板的尖端锯割。
– 务必使用双手握牢链锯。
– 使用能够降低反弹的博世锯割链条。
– 使用爪形挡块 **12** 充当操纵杆。
– 留心正确的链条张力。

一般性的处理

D 使用双手握牢电锯。右手握住链锯的后握柄，左手握紧链锯的前握柄。持机时大拇指和其它的手指头要围住链锯的手柄。不可以单手锯割。电线要摆在机器的后端，并且要远离锯割链条和待锯割物。摆好电线，不可以让电线被树枝钩住。

E 操作链锯时务必确保立足稳固。把链锯放在身体的右侧。

F 链条在接触木材之前，必须先全速运转。接著把爪形挡块 **12** 放在木材上充电链锯的支撑。锯割时可以使用爪形挡块充电操作杆。

锯割粗的树枝或树干时，要把爪形挡块放在低的位置上。此时先稍微拔出链锯来松开爪形挡块，然后再把挡块放置在更低的位置。移动挡块时不可以把电锯从锯缝中拔出。

锯割时不可以重压链条，而是要操纵它。您可以透过爪形挡块 **12** 来制造轻微的杠杆压力。

G 不可以使用伸直的双臂操纵链锯。不要尝试在难抵达之处锯割。也不可以站在梯子上锯割。千万不可以从事过肩锯割。

避免因为超荷而使链条的速度减弱，这样才能够确保最佳的锯割效果。

锯割到锯线尽头时要特别小心。只要锯子一突出于锯线之外，它的转速便会突然改变。此时腿和脚可能会被割伤。

从锯线上拔出锯子时必须让链条继续转动。

锯割树干

请注意以下的安全规章:

E **H** 参考插图放好树干并且支撑好树干，不可以让锯缝自行关闭进而夹住链条。

短的木块在锯割之前先做适度调整并且要固定好木块。

只能锯割木制的物品。避免接触石头和钉子。因为他们会快速弹开、损坏链条，并且可能对操作者和附近的旁观者造成严重的伤害。

不可以让转动中的锯子接触铁丝篱笆或地面。

本锯子不适合锯割细的树枝。

进行纵向锯割时要特别小心，因为此时无法使用爪形挡块 **12**。锯子尽量摆平，以避免发生锯割反弹。

在斜坡上锯割时，要随时修剪处理上面或侧面的树干，或者散布在地面的锯割物。

注意树头、树枝和树根，不要被它们绊倒了。

H 锯割纤维紧绷的木材

锯割纤维紧绷的木材、树枝或树木时，非常容易发生意外，必须特别小心。**上述工作只能交给经过训练的专业人员执行。**

把木材的两端垫高。首先由上面 **(Y)** 锯割，锯深约为木材直径的三分之一。接着在同一处由下面 **(Z)** 将木材锯断。这样可以避免木材断裂，而且锯子也不会被夹住。锯割时链条不可以接触地面。如果木材只垫高一端，先由下 **(Y)** 往上锯割，锯深约为木材直径的三分之一。接着在同一处由上面 **(Z)** 将木材锯断。这样可以避免木材断裂，而且锯子也不会被夹住。

I 伐树

⚠ **务必戴上安全帽，来防范掉落的树枝。**

本链锯只能锯割树干直径小于中插板长度的树木。

❶ 确保工作范围的安全。在树木倾倒的范围内不可以有人或动物。

如果马达还继续运转的锯子被夹住了，不要尝试着将它拔出。必须使用木楔来取出锯割链条。

如果是两个人或多数人一起伐树，伐树的人和锯割的人之间的距离，必须至少是树木高度的两倍。伐树时必须注意；不可以危害到旁人，不可以撞到电线或造成财物损失。如果树木撞到电线，必须马上通知供电单位。

在斜坡上锯割时，链锯的操作者必须站在即将被锯割的树木的上方。因为被砍倒的树一般都会往下滚或往下滑。

❷ 砍伐之前必须先找好逃生的路线。可能的话要清除路线上的障碍物。逃生路线必须位在树木倾倒位置的斜后方。

❸ 砍伐之前要先观察树木的一些自然特征，较大的树枝的位置以及风向，以便推测树木的倾倒方向。清除树上的污垢、石头、松脱的树皮、钉子、钩子和铁丝等。

锯割楔形槽: 在树木的倾倒方向锯割一个和树干垂直的楔形槽 **(X–W)**，槽深大概是树干直径的 1/3。先锯割下部的水平锯缝，这样可以避免锯割第二道槽缝时，链条或导引轨被夹在树干中。

锯割伐木槽: 伐木槽 **(Y)** 必须位在楔形槽的水平锯缝的上方至少 50 毫米处。伐木槽必须和楔形槽的水平锯缝平行。锯割伐木槽时要留一道木梁（伐木木条），这道木梁有类似门上的折叶的功能。它可以防止树木转动并朝错误的方向倾倒。不可以锯穿这道木梁。

当伐木槽慢慢接近预留的木梁时，树木便会开始倾倒。如果发现树木可能不会朝预期的方向倾倒，或者树木向内弯曲并夹住链条，要停止锯割并使用木楔、塑料楔或铝楔来打开伐木槽，并且让树木朝着希望的方向倾倒。

如果树木开始倾倒了，先从锯缝中取出链锯，关闭机器、放下机器并从预定的逃生路线离开危险区域。注意掉落的树枝，不要被绊倒了。

把木楔 (**Z**) 放入水平的锯缝中，这样应该可以推倒树木。

当树木开始倒落时，必须注意掉落的树枝或树干分枝。

修剪树枝

K 在此是指修剪被砍伐的树木上的树枝。朝下并且支撑住树干的分枝先不要修剪。根据插图修剪小的树枝。采取由下往上的方式修剪纤维紧绷的树枝，以避免锯子被夹住。

锯短树干

L 这里是指分段锯割树干。锯割时务必确保立足稳固，要把身体的重量平均分摊到双腿上。可能的话要使用树枝、木梁或木楔放在树干下面充当支撑。遵循指示来减轻锯割的工作。

如果已经根据指示支撑好整个树干，便可以由上往下开始锯割。

M 如果树干如插图所示，只垫高一端。先从树干的下端锯割，锯深约为树干直径的 1/3。接着在同一处由上面将木材锯断。

N 如果树干是从两端垫高。首先由上面锯割，锯深约为木材直径的 1/3。接着在同一处由下面将剩下的 2/3 锯断。

O 如同插图上的描述，当您在斜坡上锯割时，一定要站在树木的上方。以便在 ″ 锯穿″ 树干时能够保持控制。锯割结束前要减弱下压的力量，但是仍然要紧握着链锯的手柄。注意，不要让链条接触地面。锯割完毕，必须等待链条静止后才能拔出链条。当您从一棵树前进到另一棵树时，一定要关闭链锯的马达。

维护和清洁

⚠ **进行所有的维修工作之前，要先拔出插头。**

指示：定期执行以下的维修工作，以确保机器的使用寿命和可信赖的运作功能。

定期检查链锯是否有明显的故障，例如松弛、挂在导轨之外或损坏的链条，松动的固定装置和已经磨损或损坏的组件。

拆卸链条之前，必须先使用链条拉紧环 **13** 来放松链条。如果忘记放松链条，可能造成 SDS 组件坏损。

检查盖子和防护装备是否功能正常，是否安装正确。使用链锯之前先做好必要的维修和修理工作。

虽然本公司生产的链锯在出厂之前都经过严格的品质检验，如果机器仍然发生故障，请将机器交给博世电动公司授权的客户服务处修理。

寄送链锯之前一定要先倒空油箱。此时先从油箱中取出滤网，待倒空油箱后再装回滤网。

查询和购买备件时，务必提供机器铭牌上标示的 10 位数物品代码。

A 更换 / 翻转链条和中插板

根据 ″ 拉紧链条″ 的指示来检查链条和中插板。

中插板的导引槽经过一段时间的使用后会磨损．更换链条时要把中插板旋转 180 度，来均衡中插板的磨损部位。

如果是 SDS 机型必须把链条的固定凸起 **16** 安装在中插板上。

检查链条齿轮 **21**。如果齿轮因为过度超荷而磨损或损坏，必须由顾客服务处的维修厂更换齿轮。

研磨链条

您可以把链条送到所有的博世电动工具公司授权的顾客服务处进行专业性的研磨。使用博世的链条研磨装置或者配备了 1453 研磨工具的 Dremel-Multi 研磨装置，您也可以自行研磨链条。请注意附带的研磨指示。

检查自动加油装置

您可以自行检查链条自动润滑装置的功能。检查时先开动锯子，并且把锯子的尖端朝向放在地上的纸箱或纸板。注意，链条不可以接触地面，必须保持 20 公分的安全距离。如果油迹逐渐增加，代表自动加油装置运作正常。即使油箱是满的，但是没有任何油迹，请参考 ″ 寻找故障原因″，或者把机器送交博世的顾客服务处检查。

附件

链条和中插板

AKE 30-19 S. . . . . F 016 800 259

AKE 35-19 S. . . . . F 016 800 260

AKE 40-19 S. . . . . F 016 800 261

锯割链条

AKE 30-19 S. . . . . F 016 800 256

AKE 35-19 S. . . . . F 016 800 257

AKE 40-19 S. . . . . F 016 800 258

清洁

链条研磨组件 / 清洁组件 . . . . . F 016 800 262

链条附著油， 1 公升. 2 607 000 181

其它的附件

手套 2 607 000 134

护目镜. . . . . F 016 800 178

SNR 19 耳罩
(噪音水平下降 19 dB (A)) 2 607 990 042

SNR 24 耳罩
(噪音水平下降 24 dB (A)) 2 607 990 043

B 清洁 / 储存

使用软毛刷和干净的布清洁链锯的塑料机壳。不可以使用水、溶剂和抛光剂。去除所有的污垢，特别是马达上的通气孔 **27**。

在使用 1 至 3 个小时之后，必须拆下盖子 **15**，中插板和链条，并且使用刷子清洁上述零件。

使用刷子清洁以下零件上的所有附著物：盖子 **15** 下面的部分，链条齿轮 **21** 和中插板的固定装置。使用干净的布清洁喷油嘴 **19**。

J 如果无法拧转盖子 **15** 下面的链条拉紧装置，先拿下盖子 **29**，转动拧紧柄 **14** 和链条张紧环 **13**，让链条拉紧装置内部的积垢松脱并向下掉落。轻敲盖子 **15**，如果拉紧装置上黏了太多污垢，必须使用软毛刷或压缩空气清洁，千万不可以使用任何工具。

如果必须长期储存链锯，得先清洁链条和中插板。

把链锯放在安全的地方让它自然干燥，链锯要存放在儿童无法取得之处。

为了防止机油外流，必须把机器放置在水平的位置（加油螺丝 **4** 必须朝上）。

如果把机器储存在贩卖包装中，必须先倒空油箱中所有的油。

寻找故障的原因

以下表格列出了机器的故障症状和针对该症状的补救措施。如果您无法借助本表格找出故障原因并排除机器的功能障碍，请向您的维修厂求助。

注意：寻找故障原因之前，先关闭机器并拔出电源插头。

症状	可能的原因	补救方法
链锯没有反应	反弹制止装置被启动了	把护手装置 **5** 拉回位置 ❶，至红点被盖住为止
	没电了	检查电源
	插头故障了	尝试其它的电源，可能的话则更换电源
	电线损坏了	检查电线，必要时更换电线
	保险丝坏了	更换保险丝
链锯工作时断断续续	电线损坏了	检查电线，必要时更换电线
	外部接触不良	找博世专业维修厂
	内部接触不良	找博世专业维修厂
	起停开关故障了	找博世专业维修厂
链条干燥	油箱中没有油	填油
	油箱盖子上的通气孔被堵塞了	清洁油箱盖子
	出油管道堵塞了	打通清油管道
反弹制止装置 / 惯性运转制止装置	无法制止链条继续转动	找博世专业维修厂
链条 / 导引轨很烫	油箱中没有油	填油
	油箱盖子上的通气孔被堵塞了	清洁油箱盖子
	出油管道堵塞了	打通清油管道
	链条张力太高	调整链条张力
	链条变钝	研磨或更换链条
链锯无法顺畅锯割、会震动、无法正确锯割	链条太松	调整链条张力
	链条变钝	研磨或更换链条
	链条磨损了	更换链条
	锯齿的朝向错误	重新安装链条，让锯齿朝着正确的方向

处理废弃物

必须以符合环保的方式，回收再利用损坏的电动工具、附件和废弃的包装材料。

只针对欧盟国家：



不可以把电动工具丢弃在一般的家庭垃圾中！

根据 2002/96/EG（欧洲有关处理旧电子和旧电器用品的法规），以及欧洲各国引用该法令的规定：废弃的电动工具必须分开收集，并且要以符合环保要求的方式回收再利用。

顾客服务和顾客咨询

本公司顾客服务处负责回答有关本公司产品的修理，维护和备件的问题。以下的网页中有爆炸图和备件的资料：

www.bosch-pt.com

博世顾客咨询团队非常乐意为您解答有关购买，使用和设定本公司产品及附件的问题。

有关保证，维修或更换零件事宜，请向合格的经销商查询。

中国大陆

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合格声明

测量值符合 2000/14/EG (1,0 米距离)和 DIN 50 144 的规定。

本机器的 A 类加权噪音水平一般为：声压水平 92 dB (A)，声功率水平 103 dB (A)。
请佩戴护耳罩！

评估加速度值通常为 11 米／平方秒。

本公司声明并单独保证，本产品符合以下的标准或文件的规定：根据 98/37/EG, 2000/14/EG, 2004/108/EG 等法规要求的 EN 60 745, 认证。

经由指定的 0344 号检验单位颁发的 EG- 建造样品检查证号 210888100.01 CE。

2000/14/EG: 保证的声功率水平 L_{WA} 低于 104 dB (A)。合格的评价过程参考附录 V。

技术文件是由位在英国的丝朵市 (Stowmarket) 的 PT-LG/EAE 所撰写。

莱斐登 (Leinfelden), 01.10.2007

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F 016 L70 558 - Rückseite Seite 1 Donnerstag, 15. Januar 2009 3:40 15

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F 016 L70 558 (2009.01) O / 28 **XXX**

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