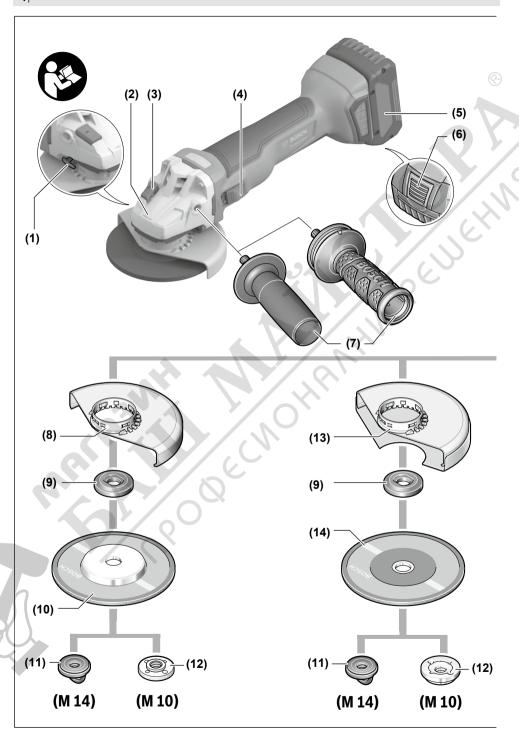
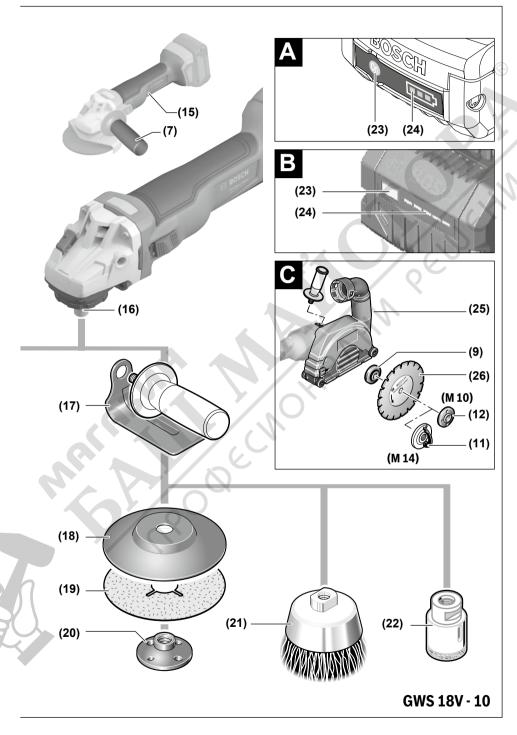


GWS 18V-10 Professional HEAVY



- en Original instructions
- fr Notice originale
- pt Manual original
- zh 正本使用说明书
- zh 原始使用說明書
- th หนังสือคู่มือการใช้งานฉบับ ต้นแบบ
- id Petunjuk-Petunjuk untuk Penggunaan Orisinal
- vi Bản gốc hướng dẫn sử dụng
- ar دليل التشغيل الأصلى
- د فترچه راهنمای اصلی fa





Bosch Power Tools 1 609 92A 51Z | (13.09.2019)

English

Safety instructions

General Power Tool Safety Warnings

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 mainsoperated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

- Keep work area clean and well lit. Cluttered or 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.

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 personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal iniuries.
- ▶ Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising 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, ensure these are connected and properly used. Use of dust collection 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 and/or the battery pack from the power tool 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, taking into account the working conditions and the work to be per-



formed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Battery tool use and care

- ► Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- ► Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- ▶ When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- ► Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

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.

Safety information for the angle grinder

Safety Warnings common for Grinding, Sanding, Wire Brushing or Abrasive Cutting Off operations

- ➤ This power tool is intended to function as a grinder, sander, wire brush or cut-off tool. 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.
- Operations such as polishing are not recommended to be performed with this power tool. Operations for which the power tool was not designed may create a hazard and cause personal injury.
- ➤ Do not use accessories which are not specifically designed and recommended by the tool manufacturer.

 Just because the accessory can be attached to your power tool, it does not assure safe operation.
- ► The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly apart.
- ➤ The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled.
- ► Threaded mounting of accessories must match the grinder spindle thread. For accessories mounted by flanges, the arbour hole of the accessory must fit the locating diameter of the flange. Accessories that do not

- match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control
- ▶ Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, backing pad for cracks, tear or excess wear, wire brush for loose or cracked wires. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no load speed for one minute. Damaged accessories will normally break apart during this test time.
- ➤ Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.
- ▶ Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control.
- ➤ Do not run the power tool while carrying it at your side. Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- Regularly clean the power tool's air vents. The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- ► Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- ▶ Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

Kickback and Related Warnings

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating access-

Bosch Power Tools 1 609 92A 51Z | (13.09.2019)



ory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding.

For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions. Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- ➤ Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.
- ► Never place your hand near the rotating accessory.

 Accessory may kickback over your hand.
- ➤ Do not position your body in the area where power tool will move if kickback occurs. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- ► Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory.

 Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- Do not attach a saw chain woodcarving blade or toothed saw blade. Such blades create frequent kickback and loss of control.

Safety Warnings specific for Grinding and Abrasive Cutting-Off operations

- ► Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel. Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.
- ➤ The grinding surface of centre depressed wheels must be mounted below the plane of the guard lip. An improperly mounted wheel that projects through the plane of the guard lip cannot be adequately protected.
- ➤ The guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect operator from broken wheel fragments, accidental contact with wheel and sparks that could ignite clothing.
- Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.
- Always use undamaged wheel flanges that are of correct size and shape for your selected wheel. Proper

- wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.
- ➤ Do not use worn down wheels from larger power tools. Wheel intended for larger power tool is not suitable for the higher speed of a smaller tool and may burst.

Additional Safety Warnings specific for Abrasive Cutting Off operations

- ▶ Do not "jam" the cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut. Overstressing the wheel increases the loading and susceptibility to twisting or binding of the wheel in the cut and the possibility of kickback or wheel breakage.
- ➤ Do not position your body in line with and behind the rotating wheel. When the wheel, at the point of operation, is moving away from your body, the possible kickback may propel the spinning wheel and the power tool directly at you.
- ➤ When wheel is binding or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the cut-off wheel from the cut while the wheel is in motion otherwise kickback may occur. Investigate and take corrective action to eliminate the cause of wheel binding.
- ▶ Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully re-enter the cut. The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.
- ➤ Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback. Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.
- Use extra caution when making a "pocket cut" into existing walls or other blind areas. The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kickback.

Safety Warnings specific for Sanding operations

➤ Do not use excessively oversized sanding disc paper. Follow manufacturers recommendations, when selecting sanding paper. Larger sanding paper extending beyond the sanding pad presents a laceration hazard and may cause snagging, tearing of the disc, or kickback.

Safety Warnings specific for Wire Brushing operations

- ► Be aware that wire bristles are thrown by the brush even during ordinary operation. Do not overstress the wires by applying excessive load to the brush The wire bristles can easily penetrate light clothing and/or skin.
- ▶ If the use of a guard is recommended for wire brushing, do not allow any interference of the wire wheel or brush with the guard. Wire wheel or brush may expand in diameter due to work load and centrifugal forces.



Additional Safety Information



Wear safety goggles.

- Use suitable detectors to determine if there are hidden supply lines or contact the local utility company for assistance. Contact with electric cables can cause fire and electric shock. Damaging gas lines can lead to explosion. Breaking water pipes causes property damage.
- Do not touch grinding and cutting discs until they have cooled down. The discs can become very hot while working.
- Release the On/Off switch and set it to the Off position when the power supply is interrupted, e.g. when the battery pack is removed. This prevents uncontrolled restarting.
- ► Secure the workpiece. A workpiece clamped with clamping devices or in a vice is held more secure than by hand
- ► Do not open the battery. There is a risk of short-circuiting



Protect the battery against heat, e.g. against continuous intense sunlight, fire, dirt, water and moisture. There is a risk of explosion and short-circuiting.

- ▶ In case of damage and improper use of the battery, vapours may be emitted. The battery can set alight or explode. Ensure the area is well ventilated and seek medical attention should you experience any adverse effects. The vapours may irritate the respiratory system.
- ➤ Only use the battery with products from the manufacturer. This is the only way in which you can protect the battery against dangerous overload.
- ➤ The battery can be damaged by pointed objects such as nails or screwdrivers or by force applied externally. An internal short circuit may occur, causing the battery to burn, smoke, explode or overheat.

Product Description and Specifications



Read all the safety and general instructions. Failure to observe the safety and general instructions may result in electric shock, fire and/or serious injury.

Please observe the illustrations at the beginning of this operating manual.

Intended use

The power tool is intended for cutting, roughing and brushing metal and stone materials, as well as making holes in stone materials using diamond core cutters, without the use of water

A special protective guard for cutting must be used when cutting bonded abrasives.

Sufficient dust extraction must be provided when cutting stone.

With approved abrasive tools, the power tool can be used for sanding with sanding discs.

The power tool must not be used to grind concrete.

Product Features

The numbering of the product features refers to the diagram of the power tool on the graphics page.

- (1) Unlocking lever for protective guard
- (2) Direction of rotation arrow on housing
- (3) Spindle lock button
- (4) On/off switch
- (5) Battery^{A)}
- (6) Battery release button^{A)}
- (7) Auxiliary handle (insulated gripping surface)
- (8) Protective guard for grinding
- (9) Mounting flange with O-ring (M14)
- (10) Grinding disc
- (11) Quick-clamping nut with bar (M14)
- (12) Clamping nut (M10)
- (13) Protective guard for cutting^{A)}
- (14) Cutting disc^{A)}
- (15) Handle (insulated gripping surface)
- (16) Grinding spindle
- (17) Hand guard^{A)}
- (18) Rubber sanding pad^{A)}
- (19) Abrasive disc^{A)}
- (20) Round nut^{A)}
- (21) Cup brush^{A)}
- (22) Diamond core bit^{A)}
- (23) Button for battery charge indicator^{A)}
- (24) Battery charge indicator^{A)}
- (25) Extraction guard for cutting with a guide block^{A)}
- (26) Diamond cutting disc^{A)}
- A) Accessories shown or described are not included with the product as standard. You can find the complete selection of accessories in our accessories range.

Technical Data

Angle grinder	GWS 18V-10	GWS 18V-10	GWS 18V-10
Article number	3 601 JJ4 0	3 601 JJ4 0	3 601 JJ4 0

Bosch Power Tools 1 609 92A 51Z | (13.09.2019)



Angle grinder		GWS 18V-10	GWS 18V-10	GWS 18V-10
Rated voltage	V=	18	18	18
Rated speed ^{A)}	min ⁻¹	9000	9000	9000
No-load speed	min ⁻¹	-	_	Ō
Max. grinding disc diameter	mm	100	115	125
Grinding spindle thread		M 10	M 14	M 14
Max. thread length of grinding spindle	mm	22	22	22
Kickback stop		•	•	
Restart protection		•	•	4 / 7
Run-out brake		•	•	•
Speed preselection		_	_	7/-
Weight according to EPTA-Procedure 01:2014 ^{A)}				
 with additional low-vibration auxiliary handle 	kg	2.6-2.8	2.6-2.8	2.6-2.8
 with standard auxiliary handle 	kg	2.4-2.6	2.4-2.6	2.4-2.6
Recommended ambient temperature during charging	°C	0 to +35	0 to +35	0 to +35
Permitted ambient temperature during operation ^{B)} and during storage	°C	-20 to +50	-20 to +50	-20 to +50
Recommended batteries		GBA 18V ProCORE18V	GBA 18V ProCORE18V	GBA 18V ProCORE18V
Recommended chargers		GAL 18 GAX 18 GAL 36	GAL 18 GAX 18 GAL 36	GAL 18 GAX 18 GAL 36

- A) Depends on battery in use
- B) Limited performance at temperatures <0 °C

Noise/Vibration Information

Noise emission values determined according to **EN 60745-2-3**.

Typically, the A-weighted sound pressure level of the power tool is $79 \, \text{dB}(A)$. Uncertainty K = 3 dB. The noise level when working can exceed the volume stated. Wear hearing protection!

Vibration total values a_h (triax vector sum) and uncertainty K determined according to **EN 60745-2-3**:

Surface grinding (roughing):

 $a_h = 6.5 \text{ m/s}^2$, $K = 1.5 \text{ m/s}^2$,

Grinding with abrasive disc:

 $a_h = 3.5 \text{ m/s}^2, K = 1.5 \text{ m/s}^2.$

The vibration level given in these instructions has been measured in accordance with a standardised measuring procedure and may be used to compare power tools. It can also be used for a preliminary estimation of exposure to vibration.

The stated vibration level applies to the main applications of the power tool. However, if the power tool is used for different applications, with different application tools or poorly maintained, the vibration level may differ. This can significantly increase the exposure to vibration over the total working period.

To estimate the exposure to vibration accurately, the times when the tool is switched off or when it is running but not ac-

tually being used should also be taken into account. This can significantly reduce the exposure to vibration over the total working period.

Implement additional safety measures to protect the operator from the effects of vibration, such as servicing the power tool and application tools, keeping the hands warm, and organising workflows correctly.

Fitting

Battery Charging

 Use only the chargers listed in the technical data. Only these chargers are matched to the lithium-ion battery of your power tool.

Note: The battery is supplied partially charged. To ensure full battery capacity, fully charge the battery in the charger before using your power tool for the first time.

The lithium-ion battery can be charged at any time without reducing its service life. Interrupting the charging process does not damage the battery.

The lithium-ion battery is protected against deep discharge by the "Electronic Cell Protection (ECP)". When the battery is discharged, the power tool is switched off by means of a protective circuit: The application tool no longer rotates.

Do not continue to press the On/Off switch after the power tool has automatically switched off. The battery can be damaged.

Follow the instructions on correct disposal.

Removing the Battery

The battery **(5)** is equipped with two locking levels to prevent the battery from falling out if the battery release button **(6)** is pressed unintentionally. As long as the battery is inserted in the power tool, it is held in position by means of a spring.

To remove the battery (5), press the release button (6) and pull the battery out of the power tool. Do not use force to do this.

Battery charge indicator

The green LEDs on the battery charge indicator indicate the state of charge of the battery. For safety reasons, it is only possible to check the state of charge when the power tool is not in operation.

Press the button for the battery charge indicator s or s to show the state of charge. This is also possible when the battery is removed.

If no LED lights up after pressing the button for the battery charge indicator, then the battery is defective and must be replaced.

Battery model GBA 18V...



LEDs	Capacity
3× continuous green light	60-100 %
2× continuous green light	30-60 %
1× continuous green light	5-30%
1× flashing green light	0-5 %

Battery model ProCORE18V...



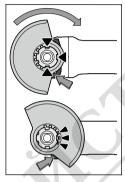
LEDs	Capacity	
5× continuous green light	80-100 %	
4× continuous green light	60-80 %	
3× continuous green light	40-60 %	
2× continuous green light	20-40 %	
1× continuous green light	5-20 %	
1× flashing green light	0-5 %	

Fitting Protective Equipment

 Remove the battery from the power tool before carrying out work on the power tool (e.g. maintenance, changing tool, etc.). The battery should also be re**moved for transport and storage.** There is risk of injury from unintentionally pressing the on/off switch.

Note: If the grinding disc breaks during operation or the holding fixtures on the protective guard/power tool become damaged, the power tool must be sent to the after-sales service immediately; see the "After-Sales Service and Application Service" section for addresses.

Protective guard for grinding



Place the protective guard (8) onto the holder on the power tool until the coding cams of the protective guard are aligned with the holder. When doing so, press and hold the unlocking lever (1).

Press the protective guard (8) onto the spindle collar until the shoulder of the protective guard is sitting on the flange of the prower tool and rotate the protective guard until it audibly

clicks into place.

Adjust the position of the protective guard (8) to meet the requirements of the operation. To do this, push the unlocking lever (1) upward and rotate the protective guard (8) into the required position.

- ▶ Always position the protective guard (8) such that all three cams on the unlocking lever (1) engage in the corresponding openings on the protective guard (8).
- Adjust the protective guard (8) such that sparking in the direction of the operator is prevented.
- The protective guard (8) must only be adjustable while the unlocking lever (1) is actuated. Otherwise, the power tool must not be used any more under any circumstances and must be sent to the after-sales service.

Note: The coding cams on the protective guard **(8)** ensure that only a protective guard that is suitable for the power tool can be fitted.

Protective guard for cutting

- Always use the protective guard for cutting (13) when cutting bonded abrasives.
- ▶ Provide sufficient dust extraction when cutting stone.

The protective guard for cutting (13) is fitted in the same way as the protective guard for grinding (8).

Extraction guard for cutting with a guide block

The extraction guard for cutting with a guide block (25) is fitted in the same way as the protective guard for grinding (8).

Side handle

Do not operate your power tool without the side handle (7).

Screw the side handle (7) on the left or right of the machine head depending on how your are working.



Low-vibration auxiliary handle



The low-vibration auxiliary handle reduces vibration, enabling the tool to be used safely and more comfort-

ably.

Do not make any alterations of any kind to the auxiliary handle.

Do not continue to use a damaged auxiliary handle.

Hand guard

Always fit the hand guard (17) when working with the rubber sanding plate (18) or with the cup brush/disc brush/flap disc.

Attach the hand guard (17) to the side handle (7).

Fitting the abrasive tools

- ▶ Remove the battery from the power tool before carrying out work on the power tool (e.g. maintenance, changing tool, etc.). The battery should also be removed for transport and storage. There is risk of injury from unintentionally pressing the on/off switch.
- ➤ Do not touch grinding and cutting discs until they have cooled down. The discs can become very hot while working

Clean the grinding spindle **(16)** and all the parts to be fitted. Lock the grinding spindle with the spindle lock button **(3)** before clamping and releasing the abrasive tools.

▶ Do not press the spindle lock button while the grinding spindle is moving. The power tool may become damaged if you do this.

Grinding/cutting disc with a diameter of 115 mm/125 mm

Pay attention to the dimensions of the abrasive tools. The diameter of the hole must match that of the mounting flange. Do not use an adapter or reducer.

When using diamond cutting discs, ensure that the arrow indicating the direction of rotation on the diamond cutting disc matches the direction of rotation of the power tool (see the direction of rotation arrow on the machine head).

See the graphics page for fitting instructions.

Use the quick-clamping nut (11) to secure the grinding/cutting disc without the need for additional tools.

Only use the quick-clamping nut (11) for grinding/cutting discs up to a maximum diameter of 125 mm.

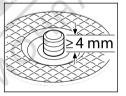
- The quick-clamping nut (11) may be used only for grinding or cutting discs.
- Only use quick-clamping nuts (11) that are in good working order and not damaged.
- When screwing on, make sure that the printed side of the quick-clamping nut (11) is not facing the grinding disc.
- Always secure a grinding/cutting disc using only the quick-clamping nut (11) supplied.



Press the spindle lock button (3) to lock the grinding spindle. To tighten the quick-clamping nut (11), fold up the bar and turn the quick-clamping nut firmly clockwise. Then fold down the bar to secure the quickclamping nut. It is not sufficient to tighten the disc along the edge.



Quick-clamping nuts (11) that are properly secured and not damaged can be removed by hand. To do this, fold up the bar and turn the quick-clamping nut firmly anticlockwise. If the quick-clamping nut is stuck, do not attempt to loosen it with a tool – always use a two-pin spanner.



After fitting the mounting flange and the grinding/cutting disc, the free thread length of the grinding spindle must be at least 4 mm.

Ensure that the abrasive tool is firmly seated, so that

it does not twist away from the spindle in the runout of the power tool.



A plastic part (O-ring) is fitted around the centring collar in the mounting flange (9). If the Oring is missing or damaged, the mounting flange (9) must be replaced before operation can resume.

➤ After fitting the abrasive tool, check that the abrasive tool is fitted correctly and can turn freely before switching on the power tool. Make sure that the abrasive tool does not brush against the protective guard or other parts.

Grinding/Cutting Disc with Diameter 100 mm The quick clamping nut with bar (11) is not recommended to be used with 100 mm cutting/grinding disc.

Pay attention to the dimensions of the abrasive tools. The diameter of the hole must match that of the hub flange. Do not use an adapter or reducer.

When using diamond cutting discs, ensure that the arrow indicating the direction of rotation on the diamond cutting disc



matches the direction of rotation of the power tool (see the direction of rotation arrow on the machine head).

See the graphics page for fitting instructions.

To fasten the grinding/cutting disc, screw on the clamping nut **(12)** and tighten with the two-pin spanner.

After fitting the abrasive tool, check that the abrasive tool is fitted correctly and can turn freely before switching on the power tool. Make sure that the abrasive tool does not brush against the protective guard or other parts.

Flan disc

► Always fit the hand guard (17) when working with the flap disc.

Rubber Sanding Pad

Always fit the hand guard (17) when working with the rubber sanding pad (18).

See the graphics page for fitting instructions.

Slide the rubber sanding pad (18) onto the grinding spindle (16).

Press the sanding sheet (19) firmly onto the underside of the rubber sanding pad (18).

Screw on the round nut **(20)** and tighten with a two-pin spanner.

Cup brush/disc brush

► Always fit the hand guard (17) when working with the cup brush or disc brush.

See the graphics page for fitting instructions.

The cup brush/disc brush must be screwed onto the grinding spindle until it rests firmly against the grinding spindle flange at the end of the grinding spindle thread. Tighten the cup brush/disc brush with an open-ended spanner.

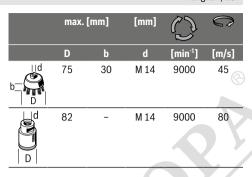
Approved abrasive tools

You can use all the abrasive tools mentioned in these operating instructions.

The permissible speed [min⁻¹] or the circumferential speed [m/s] of the abrasive tools used must at least match the values given in the table.

It is therefore important to observe the permissible **rotational/circumferential speed** on the label of the abrasive

	max.	[mm]	[mm]		
	D	b	d	[min ⁻¹]	[m/s]
d	100	7	16	9000	80
b D	115	7	22.2	9000	80
	125	7	22.2	9000	80
	100	-	-	9000	80
$\overline{\mathbb{X}}$	115	-	-	9000	80
	125		_	9000	80



Rotating the Machine Head (GWS 18V-10)

➤ Remove the battery from the power tool before carrying out work on the power tool (e.g. maintenance, changing tool, etc.). The battery should also be removed for transport and storage. There is risk of injury from unintentionally pressing the on/off switch.



The machine head can be rotated in 90° increments. In this way, the on/off switch can be brought into a more favourable handling position for particular applications, e.g. for left-handed tool users.

Completely unscrew the

four screws. Rotate the ma-

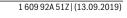
chine head carefully, **without removing it from the housing**, into the new position. Screw in and retighten the four screws.

Dust/Chip Extraction

Dust from materials such as lead-containing coatings, some wood types, minerals and metal can be harmful to one's health. Touching or breathing-in the dust can cause allergic reactions and/or lead to respiratory infections of the user or bystanders.

Certain dust, such as oak or beech dust, is considered carcinogenic, especially in connection with wood-treatment additives (chromate, wood preservative). Materials containing asbestos may only be worked by specialists.

- Provide for good ventilation of the working place.
- It is recommended to wear a P2 filter-class respirator.
 Observe the relevant regulations in your country for the materials to be worked.
- ► Avoid dust accumulation at the workplace. Dust can easily ignite.



Operation

Start-up

Inserting the battery

Push the charged battery (5) into the base of the power tool from the front until the battery is securely locked.

Switching on/off

To **start** the power tool, push the on/off switch **(4)** forward. To **lock** the on/off switch **(4)** in position, push the on/off switch **(4)** forward and down until it clicks into place.

To **switch off** the power tool, release the on/off switch **(4)**; or, if the switch is locked, briefly push the on/off switch **(4)** backward and down and then release it.

➤ Always check abrasive tools before using them. The abrasive tool must be fitted properly and be able to move freely. Carry out a test run for at least one minute with no load. Do not use abrasive tools that are damaged, run untrue or vibrate during use. Damaged abrasive tools can burst apart and cause injuries.

Kickback stop



If there is a sudden kickback in the power tool, e.g. jamming in a separating cut, the power supply to the motor will be interrupted electronically.

To **restart** the tool, set the On/Off switch **(4)** to the "off" position and then switch the power tool on again.

Restart protection

The restart protection feature prevents the power tool from uncontrolled starting after the power supply to it has been interrupted.

To **restart** the tool, set the on/off switch **(4)** to the off position and then switch the power tool on again.

Impact shutdown

The integrated impact shutdown switches the power tool off as soon as it hits the floor. To **restart** the tool, set the On/Off switch **(4)** to the "off" position and then switch the power tool on again.

Practical advice

- ➤ Exercise caution when cutting slots in structural walls; see the "Information on structural design" section.
- Clamp the workpiece if it is not secure under its own weight.
- Do not load the power tool so heavily that it comes to a stop.
- ▶ If the power tool has been subjected to a heavy load, continue to run it at no-load for several minutes to cool down the accessory.
- Do not use the power tool with a cut-off stand.
- Do not touch grinding and cutting discs until they have cooled down. The discs can become very hot while working.

If the power tool becomes electrostatically charged, the built-in electronics will switch the power tool off. Press the on/off switch (4) again to restart the power tool.

Rough grinding

▶ Never use cutting discs for rough grinding.

The best rough grinding results are achieved with a set angle of 30° to 40°. Move the power tool back and forth with moderate pressure. This will ensure that the workpiece does not become too hot or discolour and that grooves are not formed.

Flap disc

The flap disc (accessory) enables you to machine curved surfaces and profiles.

Flap discs have a considerably longer service life, lower noise levels and lower sanding temperatures than conventional grinding discs.

Cutting metal

Always use the protective guard for cutting (13) when cutting bonded abrasives.

When carrying out abrasive cutting, use a moderate feed that is suited to the material being machined. Do not exert pressure on the cutting disc and do not tilt or swing the power tool.

Do not attempt to reduce the speed of a cutting disc coming to a stop by applying pressure from the side.



The power tool must always work in an up-grinding motion. Otherwise there is a risk that it will be pushed **uncontrolled** out of the cut.

For best results when cutting profiles and rectangular tubing, start at the smallest cross section.

Cutting Stone (see figure C)

- ▶ Provide sufficient dust extraction when cutting stone.
- ▶ Wear a dust mask.
- The power tool may be used only for dry cutting/grinding.

For best results when cutting stone, use a diamond cutting disc.

When using the extraction guard for cutting with a cutting guide (25), the vacuum cleaner must be approved for vacuuming stone dust. Suitable vacuum cleaners are available from Bosch.



Switch on the power tool and position it with the front part of the cutting guide on the workpiece. Move the power tool with a moderate feed motion that is suited to the material being machined.

When cutting especially hard materials such as con-

crete with a high pebble content, the diamond cutting disc can overheat and become damaged as a result. This is clearly indicated by circular sparking, rotating with the diamond cutting disc.

If this happens, stop cutting and allow the diamond cutting disc to cool down by running the power tool for a short time at maximum speed with no load.

If work is noticeably slower and with circular sparking, this indicates that the diamond cutting disc that has become dull. You can resharpen the disc by briefly cutting into abrasive material (e.g. lime-sand brick).

Information on structural design

Slots in load-bearing walls are subject to DIN 1053 part 1 or country-specific regulations. These regulations must be observed under all circumstances. Seek advice from the responsible structural engineer, architect or construction supervisor before starting work.

Recommendations for optimal handling of the battery

Protect the battery against moisture and water.

Only store the battery only within a temperature range of -20 to 50 °C. Do not leave the battery in your car in the summer, for example.

Occasionally clean the ventilation slots on the battery using a soft brush that is clean and dry.

A significantly reduced operating time after charging indicates that the battery has deteriorated and must be replaced. Follow the instructions on correct disposal.

Maintenance and Service

Maintenance and Cleaning

- ▶ Remove the battery from the power tool before carrying out work on the power tool (e.g. maintenance, changing tool, etc.). The battery should also be removed for transport and storage. There is risk of injury from unintentionally pressing the on/off switch.
- To ensure safe and efficient operation, always keep the power tool and the ventilation slots clean.

Store and handle the accessories carefully.

Bosch Power Tools

After-Sales Service and Application Service

Our after-sales service responds to your questions concerning maintenance and repair of your product as well as spare parts. You can find explosion drawings and information on spare parts at: www.bosch-pt.com

The Bosch product use advice team will be happy to help you with any questions about our products and their accessories

In all correspondence and spare parts orders, please always include the 10-digit article number given on the nameplate of the product.

Cambodia

Robert Bosch (Cambodia) Co., Ltd Unit 8BC, GT Tower, 08th Floor, Street 169, Czechoslovakia Blvd, Sangkat Veal Vong Khan 7 Makara, Phnom Penh VAT TIN: 100 169 511 Tel.: +855 23 900 685

Tel.: +855 23 900 685 Tel.: +855 23 900 660 www.bosch.com.kh

People's Republic of China China Mainland

Bosch Power Tool (China) Co. Ltd. Bosch Service Center 567, Bin Kang Road Bin Kang District Hangzhou, Zhejiang Province China 310052

Tel.: (0571) 8887 5566 / 5588 Fax: (0571) 8887 6688 x 5566# / 5588#

E-Mail: bsc.hz@cn.bosch.com www.bosch-pt.com.cn

HK and Macau Special Administrative Regions

Robert Bosch Co. Ltd.
Flat B, 2/F, Yeung Yiu Chung No. 6 Industrial Building,
19 Cheung Shun Street
Cheung Sha Wan
Kowloon, Hong Kong
Customer Service Hotline: +852 2101 0235

Fax: +852 2590 9762 E-Mail: info@hk.bosch.com www.bosch-pt.com.hk

India

Bosch Service Center 69, Habibullah Road, (Next to PSBB School), T. Nagar Chennai–600077 Phone: (044) 64561816 Bosch Service Center 18, Community Center Phase 1, Mayapuri New Delhi–110064

Phone: (011) 43166190

Indonesia

PT Robert Bosch Palma Tower 10th Floor Jalan RA Kartini II-S Kaveling 6 Pondok Pinang, Kebayoran Lama Jakarta Selatan 12310 Tel.: (21) 3005-5800

www.bosch-pt.co.id

1 609 92A 517 | (13.09.2019)



Malavsia

Robert Bosch Sdn. Bhd.(220975-V) PT/SMY No. 8A. Jalan 13/6

46200 Petaling Jaya

Selangor

Tel.: (03) 79663194 Toll-Free: 1800 880188 Fax: (03) 79583838

E-Mail: kiathoe.chong@my.bosch.com

www.bosch-pt.com.mv

Pakistan

Robert Bosch Middle East FZE – Pakistan Liaison Office 2nd Floor Plaza # 10, CCA Block, DHA Phase 5

Lahore, 54810

Phone: +92(303)4444311 Email: Faisal.Khan@bosch.com

Philippines

Robert Bosch, Inc.

28th Floor Fort Legend Towers, 3rd Avenue corner 31st Street, Fort Bonifacio, Global City, 1634 Taguig City Tel.: (632) 8703871 Fax: (632) 8703870 www.bosch-pt.com.ph

Singapore

Powerwell Service Centre Ptd Ltd Bosch Authorised Service Centre (Power Tools) 4012 Ang Mo Kio Ave 10, #01-02 TECHplace

Singapore 569628 Tel.: 6452 1770 Fax: 6452 1760

E-Mail: ask@powerwellsc.com www.powerwellsc.com www.bosch-pt.com.sg

Thailand

Robert Bosch Ltd. FYI Center Tower 1, 5th Floor, 2525 Rama IV Road, Klongtoei,

Bangkok 10110 Tel.: 02 0128888 Fax: 02 0645802 www.bosch.co.th

Bosch Service – Training Centre La Salle Tower Ground Floor Unit No.2 10/11 La Salle Moo 16

Srinakharin Road Bangkaew, Bang Plee Samutprakarn 10540 Tel.: 02 7587555 Fax: 02 7587525

Vietnam

Branch of Bosch Vietnam Co., Ltd in HCMC 14th floor, Deutsches Haus, 33 Le Duan Ben Nghe Ward, District 1, Ho Chi Minh City

Tel.: (028) 6258 3690

Fax: (028) 6258 3692 - 6258 3694

Hotline: (028) 6250 8555

Email: tuvankhachhang-pt@vn.bosch.com

www.bosch-pt.com.vn

Rahrain

EA Juffali and Brothers for Technical Equipment Company. Kingdom of Bahrain, Al Aker - Block 0624 - Road 2403 -

Building 0055D Phone: +97317704537 Fax: +973177045257 Email: h.berjas@eajb.com.sa

Egypt

RBEG-LLC

22 Kamal Eldin Hussein Sheraton Heliopolis 11799 Cairo

E-mail: boschegypt.powertools@eg.bosch.com

Iran

Robert Bosch Iran 3rd Floor, No 3, Maadiran Building Aftab St., Khodami St., Vanak Sq. Tehran 1994834571 Phone: +9821-86092057

Iraq

Sahba Technology Group Al Muthana airport road Baghdad

Phone Bagdad: +964 (0) 7 901 930366 Phone Dubai: +971 (0) 4 422 1898 Email: duraid@sahbatechnology.com

Jordan

Roots Arabia – Jordan Al-Hurriyah Street, Al-Muqabalein Amman 11623, Jordan P.O. Box: 110068 Tel.: +962 6 4398990 E-mail: bosch@rootsjordan.com

Kuwait

Shuwaikh Industrial Area, Block 1, Plot 16, Street 3rd

P.O. Box 164 – Safat 13002 Phone: +965 - 2496 88 88 Fax: +965 - 2481 08 79 E-mail: josephkr@aaalmutawa.com

Lebanon

Tehini Hana & Co. S.A.R.L. P.O. Box 90-449 Jdeideh 1202 2040 Dora-Beirut

Phone: +9611255211

Email: service-pt@tehini-hana.com

Libya

El Naser for Workshop Tools Swanee Road, Alfalah Area

Tripoli

Phone: +218 21 4811184

Oman

Malatan Trading & Contracting LLC P.O. Box 131. Ruwi. Muscat Postal Code: 112, Sultanate of Oman Phone: +968 2479 4035/4089/4901

Mob: +968-91315465 Fax: +968 2479 4058

E-Mail: sudhirkumar@malatan.net

International Construction Solutions W.L.L.

P. O. Box 51. Doha Phone: +974 40065458 Fax: +974 4453 8585 Email: csd@icsdoha.com

Saudi Arabia

Juffali Technical Equipment Co. (JTECO) P.O.Box: 1049 - Jeddah 21431 - KSA Jeddah: 00966 (0) 12 692 0770 - Ext 433 Riyadh: 00966 (0) 11 409 3976 - Ext-30/34/39

Dammam: 00966 (0) 13 833 9565 E-mail: M.Zreik@eajb.com.sa

Svria

Dallal Establishment for Power Tools Damascus. Baramkeh street - Ibn Amer street. Phone: +963112241006 or 009631122414009

Mobile: 00963991141005 Email: rita.dallal@hotmail.com

United Arab Emirates

Central Motors & Equipment, P.O. Box 26255, Dubai

Dubai: 00971 (0) 4 3090920/3090930 Abu Dhabi: 00971 (0) 2 4017745 Sharjah: 00971 (0) 6 5932777 Al Ain: 00971 (0) 3 7157419

E- Mail: Mallappa.Madari@centralmotors.ae

Abu Alrejal Trading Corporation P.O. Box: 17024, Zubeiry St. Sana'a, Yemen

Tel: +967-1-20 20 10 Fax: +967-1-47 19 17

E-mail: tech-tools@abualrejal.com/yahya@abualrejal.com

Ethiopia

Forever plc

Kebele 2,754, BP 4806,

Addis Ababa

Phone: +251 111 560 600 Email: foreverplc@ethionet.et

Ghana

Robert Bosch Ghana Limited

21 Kofi Annan Road Airport Residential Area Accra

Tel. +233 (0)3027 94616

Kenya

Robert Bosch East Africa Ltd Mpaka Road P.O. Box 856 00606 Nairobi

Nigeria

Robert Bosch Nigeria Ltd. 52-54 Isaac John Street P.O. Box GRA Ikeja - Lagos

Tanzania

Diesel & Autoelectric Service Ltd. 117 Nverere Rd., P.O. Box 70839 Vingunguti 12109, Dar Es Salaam Phone: +255 222 861 793/794

Australia, New Zealand and Pacific Islands

Robert Bosch Australia Pty. Ltd.

Power Tools Locked Bag 66 Clayton South VIC 3169 **Customer Contact Center** Inside Australia:

Phone: (01300) 307044 Fax: (01300) 307045 Inside New Zealand: Phone: (0800) 543353 Fax: (0800) 428570 Outside AU and NZ: Phone: +61 3 95415555 www.bosch-pt.com.au www.bosch-pt.co.nz

Republic of South Africa Customer service

Hotline: (011) 6519600

Gauteng - BSC Service Centre

35 Roper Street, New Centre

Johannesburg Tel.: (011) 4939375 Fax: (011) 4930126 E-Mail: bsctools@icon.co.za

KZN - BSC Service Centre

Unit E. Almar Centre 143 Crompton Street Pinetown

Tel.: (031) 7012120 Fax: (031) 7012446

E-Mail: bsc.dur@za.bosch.com Western Cape - BSC Service Centre

Democracy Way, Prosperity Park

Milnerton

Tel.: (021) 5512577 Fax: (021) 5513223 E-Mail: bsc@zsd.co.za

Bosch Headquarters

Midrand, Gauteng Tel.: (011) 6519600 Fax: (011) 6519880

E-Mail: rbsa-hq.pts@za.bosch.com

Armenia, Azerbaijan, Georgia

Robert Bosch Ltd.

David Agmashenebeli ave. 61 0102 Tbilisi, Georgia











18 | Français

Tel. +995322510073 www.bosch.com

Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, Ilzhekistan

TOO "Robert Bosch" Power Tools, After Sales Service Muratbaev Ave., 180

050012, Almaty, Kazakhstan

Service Email: service.pt.ka@bosch.com

Official Website: www.bosch.com, www.bosch-pt.com

Transport

The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements. The batteries are suitable for road-transport by the user without further restrictions.

When shipping by third parties (e.g.: by air transport or forwarding agency), special requirements on packaging and labelling must be observed. For preparation of the item being shipped, consulting an expert for hazardous material is required.

Dispatch battery packs only when the housing is undamaged. Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging. Please also observe the possibility of more detailed national regulations.

Disposal



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



Do not dispose of power tools and batteries/rechargeable batteries into household waste!

Battery packs/batteries:

Li-ion:

Please observe the notes in the section on transport (see "Transport", page 18).

Français

Consignes de sécurité

Avertissements de sécurité généraux pour l'outil

AVERTISSEMENT

Lire tous les avertissements de sécurité et toutes les instructions.

Ne pas suivre les avertissements et instructions peut donner lieu à un choc électrique, un incendie et/ou une blessure sérieuse.

Conserver tous les avertissements et toutes les instructions pour pouvoir s'y reporter ultérieurement.

Le terme «outil» dans les avertissements fait référence à votre outil électrique alimenté par le secteur (avec cordon

d'alimentation) ou votre outil fonctionnant sur batterie (sans cordon d'alimentation).

Sécurité de la zone de travail

- Conserver la zone de travail propre et bien éclairée. Les zones en désordre ou sombres sont propices aux accidents.
- ▶ Ne pas faire fonctionner les outils électriques en atmosphère explosive, par exemple en présence de liquides inflammables, de gaz ou de poussières. Les outils électriques produisent des étincelles qui peuvent enflammer les poussières ou les fumées.
- Maintenir les enfants et les personnes présentes à l'écart pendant l'utilisation de l'outil. Les distractions peuvent yous faire perdre le contrôle de l'outil.

Sécurité électrique

- ▶ Il faut que les fiches de l'outil électrique soient adaptées au socle. Ne jamais modifier la fiche de quelque façon que ce soit. Ne pas utiliser d'adaptateurs avec des outils à branchement de terre. Des fiches non modifiées et des socles adaptés réduiront le risque de choc électrique.
- ➤ Eviter tout contact du corps avec des surfaces reliées à la terre telles que les tuyaux, les radiateurs, les cuisinières et les réfrigérateurs. Il existe un risque accru de choc électrique si votre corps est relié à la terre.
- Ne pas exposer les outils à la pluie ou à des conditions humides. La pénétration d'eau à l'intérieur d'un outil augmentera le risque de choc électrique.
- ➤ Ne pas maltraiter le cordon. Ne jamais utiliser le cordon pour porter, tirer ou débrancher l'outil. Maintenir le cordon à l'écart de la chaleur, du lubrifiant, des arêtes ou des parties en mouvement. Des cordons endommagés ou emmêlés augmentent le risque de choc électrique.
- Lorsqu'on utilise un outil à l'extérieur, utiliser un prolongateur adapté à l'utilisation extérieure. L'utilisation d'un cordon adapté à l'utilisation extérieure réduit le risque de choc électrique.
- Si l'usage d'un outil dans un emplacement humide est inévitable, utiliser une alimentation protégée par un dispositif à courant différentiel résiduel (RCD). L'usage d'un RCD réduit le risque de choc électrique.

Sécurité des personnes

- ▶ Rester vigilant, regarder ce que vous êtes en train de faire et faire preuve de bon sens dans votre utilisation de l'outil. Ne pas utiliser un outil lorsque vous êtes fatigué ou sous l'emprise de drogues, d'alcool ou de médicaments. Un moment d'inattention en cours d'utilisation d'un outil peut entraîner des blessures graves des personnes.
- Utiliser un équipement de sécurité. Toujours porter une protection pour les yeux. Les équipements de sécurité tels que les masques contre les poussières, les chaussures de sécurité antidérapantes, les casques ou les pro-



Robert Bosch Power Tools GmbH 70538 Stuttgart GERMANY

www.bosch-pt.com

1609 92A 51Z (2019.09) 0 / 120



1 609 92A 51Z

en fr pt zh zh th

vi ar fa

id