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GSR18V-52 | GSB18V-52

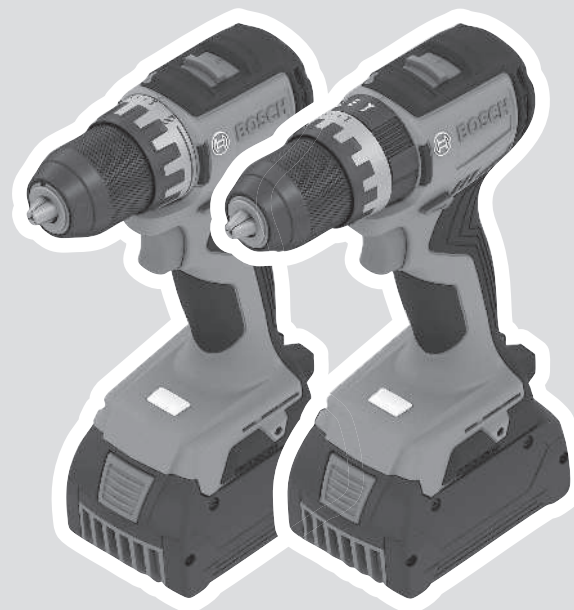
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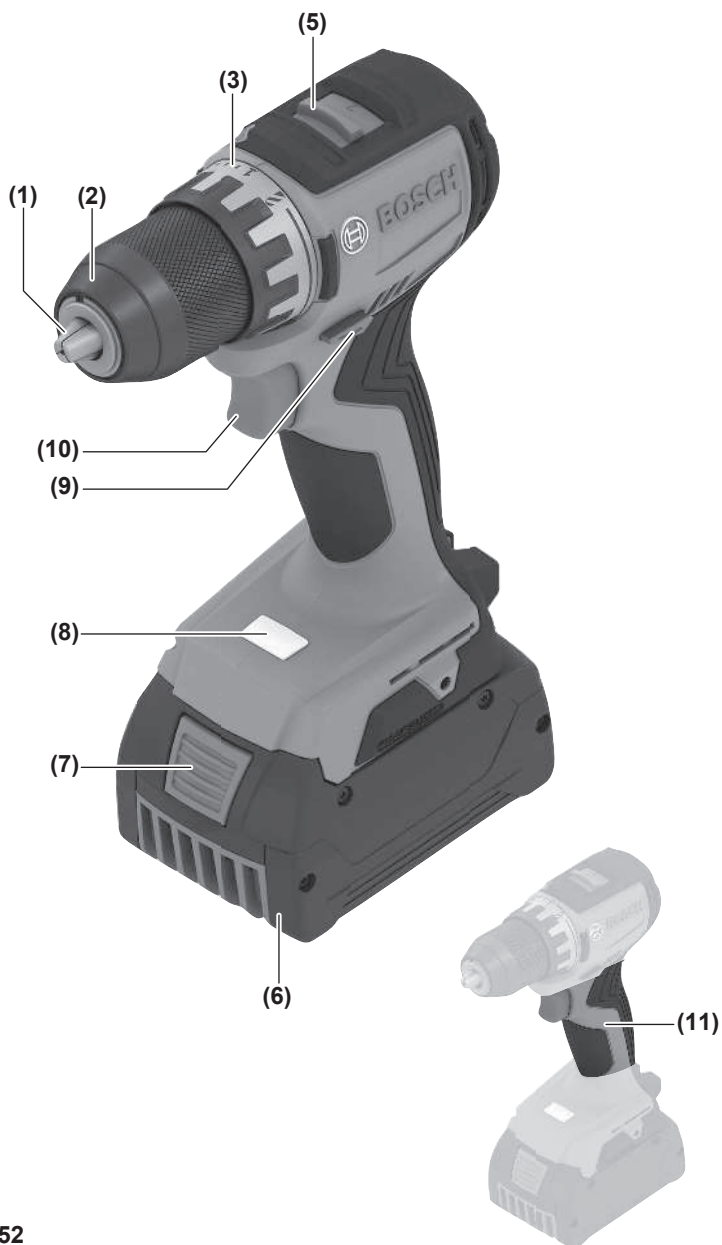
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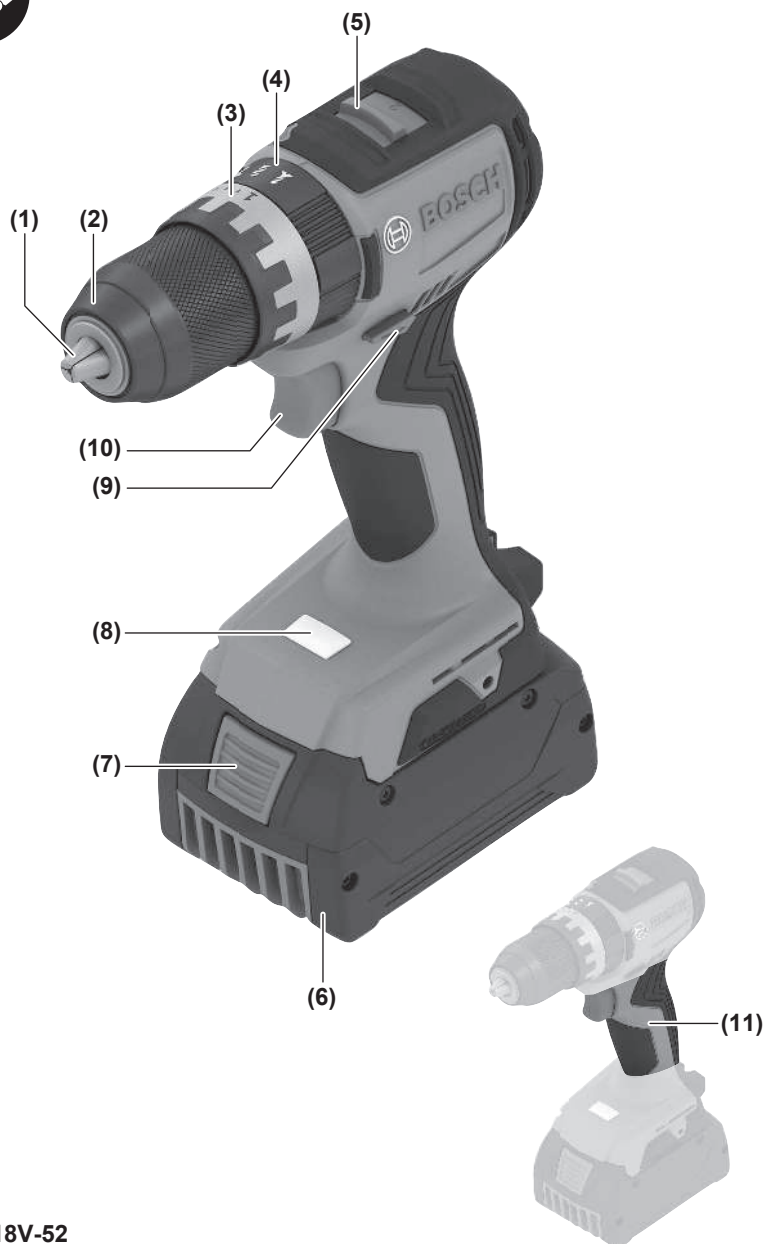


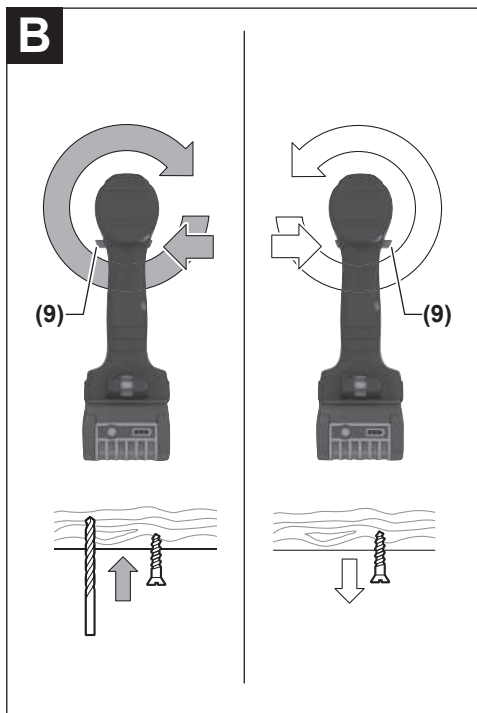
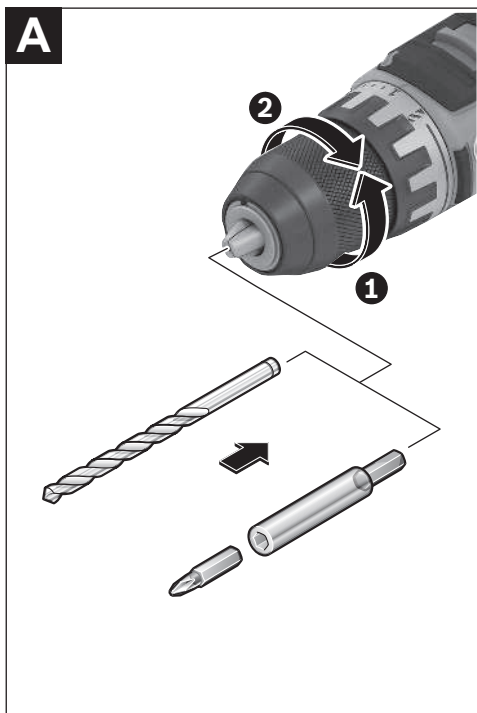
en Original instructions





**GSR18V-52**

**GSB18V-52**



English

Safety Instructions

General Power Tool Safety Warnings

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

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (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

- ▶ **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase 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 a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- ▶ **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 and clothing 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.
- ▶ **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

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 remove the battery pack, if detachable, 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 and accessories. 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 performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- ▶ **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

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.
- ▶ **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- ▶ **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion.
- ▶ **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

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.
- ▶ **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

Safety information for drills and screwdrivers

Safety instructions for all operations

- ▶ **Wear ear protectors when impact drilling.** Exposure to noise can cause hearing loss.
- ▶ **Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting accessory or fasteners may contact hidden wiring.** Cutting accessory or fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

Safety instructions when using long drill bits

- ▶ **Never operate at higher speed than the maximum speed rating of the drill bit.** At higher speeds, the bit is likely to bend if allowed to rotate freely without contacting the workpiece, resulting in personal injury.
- ▶ **Always start drilling at low speed and with the bit tip in contact with the workpiece.** At higher speeds, the bit is likely to bend if allowed to rotate freely without contacting the workpiece, resulting in personal injury.

- ▶ **Apply pressure only in direct line with the bit and do not apply excessive pressure.** Bits can bend causing breakage or loss of control, resulting in personal injury.

Additional safety warnings

- ▶ **Hold the power tool securely.** When tightening and loosening screws be prepared for temporarily high torque reactions.
- ▶ **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- ▶ **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.
- ▶ **Always wait until the power tool has come to a complete stop before placing it down.** The application tool can jam and cause you to lose control of the power tool.
- ▶ **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.
- ▶ **Do not modify or open the battery.** There is a risk of short-circuiting.
- ▶ **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.
- ▶ **Only use the battery in the manufacturer's products.** This is the only way in which you can protect the battery against dangerous overload.



Protect the rechargeable battery against heat, e.g. including prolonged sun exposure, fire, water, and moisture. There is a risk of explosion and short circuit.

- ▶ **Switch the power tool off immediately if the application tool becomes blocked. Be prepared for high torque reactions which cause kickback.** The application tool becomes blocked when it becomes jammed in the workpiece or when the power tool becomes overloaded.

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 driving and loosening screws and for drilling in wood, metal, ceramic and plastic. The GSB is also designed for impact drilling in brick, masonry and stone.

Product Features

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

- (1) Tool holder
- (2) Keyless chuck

- (3) Torque presetting ring
 - (4) Operating mode presetting ring (**GSB18V-52**)
 - (5) Gear selector switch
 - (6) Rechargeable battery^{a)}
 - (7) Battery release button^{a)}
 - (8) Worklight (LED)
 - (9) Rotational direction switch
 - (10) On/off switch
 - (11) Handle (insulated gripping surface)
- a) **This accessory is not part of the standard scope of delivery.**

Technical Data

Cordless Drill/Driver		GSR18V-52	GSB18V-52
Article number		3 601 JS0 0..	3 601 JS0 1..
Rated voltage	V	18	18
Rated no-load speed n_0 ^{A)}			
– First gear	min ⁻¹	0–500	0–500
– Second gear	min ⁻¹	0–1 900	0–1 900
Max. torque, hard screwdriving application according to ISO 5393 ^{A)}	Nm	70	73
Impact rate ^{A)}	min ⁻¹	–	27 000
Max. drilling diameter (1st/2nd gear)			
– Masonry	mm	–	10
– Steel	mm	10	10
– Wood	mm	35	35
Chuck capacity	mm	1.5–13	1.5–13
Max. screw diameter	mm	10	10
Weight ^{B)}	kg	0.92	0.98
Recommended ambient temperature during charging	°C	0 to +35	0 to +35
Permitted ambient temperature during operation ^{C)} and during storage	°C	–20 to +50	–20 to +50
Compatible rechargeable batteries		GBA18V... GBA 18V... ProCORE18V... EXPERT18V... EXBA18V... CORE18V...	GBA18V... GBA 18V... ProCORE18V... EXPERT18V... EXBA18V... CORE18V...
Recommended battery chargers		GAL18... GAL 18... GAL 36... GAL12V/18... GAL 12V/18... GAX 18... EXAL18...	GAL18... GAL 18... GAL 36... GAL12V/18... GAL 12V/18... GAX 18... EXAL18...

A) Measured at 20–25 °C with rechargeable battery **GBA 18V 4.0Ah**

B) Without rechargeable battery (you can find the battery weight at www.bosch-professional.com.)

C) Limited performance at temperatures < 0 °C

Values can vary depending on the product, scope of application and environmental conditions. To find out more, visit www.bosch-professional.com/wac.

Noise/vibration information

Noise emission values determined according to **EN 62841-2-1**.

GSR18V-52:

Typically, the A-weighted noise level of the power tool is: Sound pressure level **78 dB(A)**; sound power level **86 dB(A)**. Uncertainty K = **5 dB**.

Wear hearing protection!

GSB18V-52:

Typically, the A-weighted noise level of the power tool is: Sound pressure level **89 dB(A)**; sound power level **97 dB(A)**. Uncertainty K = **5 dB**.

Wear hearing protection!

Vibration values $a_{h,D}$ (continuous vibrations), p_F (repeated shock vibrations) and uncertainty K determined according to **EN 62841-2-1**:

GSR18V-52:

Drilling in metal: $a_{h,D} = 1.6 \text{ m/s}^2$ (K = **1.5 m/s**²), $p_{F,D} = 66 \text{ m/s}^2$, (K = **8 m/s**²)

GSB18V-52:

Drilling in metal: $a_{h,D} = 1.5 \text{ m/s}^2$ (K = **1.5 m/s**²), $p_{F,D} = 50 \text{ m/s}^2$, (K = **4 m/s**²)

Impact drilling into concrete: $a_{h,D} = 12.6 \text{ m/s}^2$ (K = **1.5 m/s**²), $p_{F,D} = 714 \text{ m/s}^2$ (K = **127 m/s**²)

The vibration level and noise emission value given in these instructions have been measured in accordance with a standardised measuring procedure and may be used to compare power tools. They may also be used for a preliminary estimation of vibration and noise emissions.

The stated vibration level and noise emission value represent the main applications of the power tool. However, if the power tool is used for other applications, with different accessories or is poorly maintained, the vibration level and noise emission value may differ. This may significantly increase the vibration and noise emissions over the total working period.

To estimate vibration and noise emissions accurately, the times when the tool is switched off or when it is running but not actually being used should also be taken into account. This may significantly reduce vibration and noise emissions 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 accessories, keeping their hands warm, and organising workflows correctly.

Rechargeable battery

Bosch sells some cordless power tools without a rechargeable battery. You can tell whether a rechargeable battery is included with the power tool by looking at the packaging.

Charging the battery

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

Note: Lithium-ion rechargeable batteries are supplied partially charged according to international transport regulations. To ensure full rechargeable battery capacity, fully charge the rechargeable battery before using your tool for the first time.

Inserting the Battery

Push the charged battery into the battery holder until it clicks into place.

Removing the Battery



To remove the rechargeable battery, press the battery release button and pull the battery out. **Do not use force to do this.**

The rechargeable battery has two locking levels to prevent the battery from falling out if the battery release button is pressed unintentionally. The rechargeable battery is held in place by a spring when fitted in the power tool.

Battery charge indicator

Note: Not all battery types have a 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  or  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.

Rechargeable battery type GBA 18V... | GBA18V...



LED	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... | EXPERT18V... | EXBA18V... | CORE18V...




LED	Capacity
5 × continuous green light	80–100 %
4 × continuous green light	60–80 %
3 × continuous green light	40–60 %


LED	Capacity
2 × continuous green light	20–40 %
1 × continuous green light	5–20 %
1 × flashing green light	0–5 %


Battery defect risk detection

EXPERT18V... | EXBA18V...

In addition to the state of charge of the rechargeable battery, the LEDs on the battery charge indicator can also indicate the risk of a battery defect.

To activate the function, press and hold the button for the battery charge indicator  for 3 seconds. The analysis of the battery is signalled by a moving light on the battery charge indicator. The result of is shown on the battery charge indicator.

 **1 LED:** The rechargeable battery has a high defect risk. Performance and runtime may already be reduced. Replacing the rechargeable battery is recommended.

 **5 LEDs:** The rechargeable battery is in good condition and has a low defect risk.

Please note: The rechargeable battery defect risk assessment works in a binary manner and offers a simplified status assessment, indicating either that the rechargeable battery is in good condition or that the rechargeable battery has an increased defect risk. A percentage of the battery status is not shown.

Recommendations for Optimal Handling of the Battery

Protect the battery against moisture and water.

Only store the battery 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.

Assembly

- **Before carrying out any work on the power tool (e.g. maintenance, tool change etc.), remove the battery from the power tool.** There is risk of injury from unintentionally pressing the on/off switch.
- **Wear protective gloves when changing tools.** The application tool and the drill chuck can become hot when used for long periods.

Changing the Tool (see figures A)

The drill spindle is locked when the on/off switch (10) is not pressed. This makes it possible to change the application tool in the drill chuck quickly, conveniently and easily.

Open the keyless chuck (2) by turning it in the direction of rotation ① until the tool can be inserted. Insert the tool.

Firmly tighten the keyless chuck (2) by turning it by hand in the direction of rotation ② until you hear a click. This will automatically lock the drill chuck.

The lock will disengage again if you turn the sleeve in the opposite direction to remove the tool.

You should always use a universal bit holder when using screwdriver bits.

Dust/Chip Extraction

Do not perform work without taking dust-reducing measures. Using a suitable dust extraction attachment will reduce exposure to harmful dust. Provide good ventilation at the workplace. Always use suitable breathing protection. Use a dust extraction system that is suitable for the material wherever possible. The regulations on the materials being machined that apply in the country of use must be observed.

► **Avoid dust accumulation at the workplace.** Dust can easily ignite.

Requirements for the Dust Extractor

Recommended hose nominal diameter	mm	28
Required vacuum pressure ^{A)}	mbar hPa	≥ 220 ≥ 220
Required flow rate ^{A)}	l/s m³/h	≥ 28 ≥ 100.8
Recommended filter efficiency	Dust class M ^{B)}	

A) Power value at the power tool's dust extractor connection

B) According to IEC/EN 60335-2-69

Refer to the dust extractor's instructions. If there is reduced suction power, stop working and eliminate the cause.

Belt clip

You can use the belt clip to hang the power tool on a belt, for example. You then have both hands free and the power tool is always at hand.

Operation

Setting the rotational direction (see figure B)

The rotational direction switch (9) is used to change the rotational direction of the power tool. However, this is not possible while the on/off switch (10) is being pressed.

Right rotation: To drill and to drive in screws, press the rotational direction switch (9) through to the left stop.

Left Rotation: To loosen and unscrew screws and nuts, press the rotational direction switch (9) through to the right stop.

Setting the Operating Mode

Drilling



GSR18V-52

Set the torque presetting ring **(3)** to the "drilling" symbol to achieve the maximum torque for drilling and screwdriving.

GSB18V-52

Set the operating mode presetting ring **(4)** to the "drilling" symbol to achieve the maximum torque for drilling and screwdriving.

Screwdriving



GSR18V-52

Set the torque presetting ring **(3)** to the required torque.

GSB18V-52

Set the operating mode presetting ring **(4)** to the "screwdriving" symbol.

Set the torque presetting ring **(3)** to the required torque.

Impact drilling



GSB18V-52

Set the operating mode presetting ring **(4)** to the "impact drilling" symbol.

Switching on/off

To **start** the power tool, press and hold the on/off switch **(10)**.

The LED **(8)** lights up when the on/off switch **(10)** is lightly or fully pressed, meaning that the work area is illuminated in poor lighting conditions.


To **switch off** the power tool, release the on/off switch **(10)**.


Adjusting the speed

You can adjust the speed of the power tool when it is on by pressing in the on/off switch **(10)** to varying extents.

A light pressure on the on/off switch **(10)** results in a low rotational speed. Increased pressure on the switch causes an increase in speed.

Preselecting the Torque

The torque presetting ring **(3)** can be used to preselect the required torque in stages. When the correct setting is used, the application tool will be stopped when the screw is driven flush into the material or once the set torque has been reached. In position , the overload clutch is deactivated, e.g. for drilling or driving in large screws. The maximum torque is reached at this position.

When unscrewing screws, it may be advisable to select a higher setting or the  symbol.

Mechanical gear selection

- **Only operate the gear selector (5) when the power tool is not in use.**

- **Always push the gear selector switch as far as it will go.** Otherwise, the power tool may become damaged.

You can preselect two speed ranges with the gear selector **(5)**.

Gear selector switch (5) position	Speed	Torque	Application range
1	Low	High	For heavy-duty applications: e.g. drilling and screwdriving with large diameters
2	High	Low	For light-duty applications: e.g. drilling and screwdriving with small diameters

Temperature-dependent overload protection

In normal conditions of use, the power tool cannot be overloaded. If the power tool is overloaded or the permitted battery temperature is exceeded, the speed will be reduced. The power tool will not run at full power output again until the permitted battery temperature has been reached.

Fully automatic spindle lock (Auto-Lock)

The drill spindle, and therefore the tool holder, are locked when the on/off switch **(10)** is not pressed.

This enables screws to be screwed in even when the battery **(6)** is empty and allows the power tool to be used as a screwdriver.

Practical advice

- **Only apply the power tool to the screw when the tool is switched off.** Rotating application tools can slip off.
- Before screwing larger, longer screws into hard materials, it is advisable to pre-drill a pilot hole with the core diameter of the thread to approx. 2/3 of the screw length.
- An auxiliary tool can be used to remove the screwdriver bit or universal bit holder.

Maintenance and Service

Maintenance and Cleaning

- **Before carrying out any work on the power tool (e.g. maintenance, tool change etc.), remove the battery from the power tool.** 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.**

After-Sales Service and Application Service

Great Britain

Tel. Service: (0344) 7360109

GB Importer:

Robert Bosch Ltd.
Broadwater Park
North Orbital Road
Uxbridge
UB9 5HJ

Malaysia

Tel.: (03) 79663194

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

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!

Only for EU countries and United Kingdom:

Electrical and electronic equipment or used batteries that are no longer suitable for use must be collected separately and disposed of in an environmentally friendly manner. Use the designated collection systems. Incorrect disposal may cause harmful effects on the environment and human health, due to the potential presence of hazardous substances.

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