

### Robert Bosch GmbH

Power Tools Division 70764 Leinfelden-Echterdingen GERMANY

www.bosch-pt.com

1609 92A 117 (2015.04) T / 238 EURO



# GOP 14,4/18 V-EC Professional



- de Originalbetriebsanleitung
- en Original instructions
- fr Notice originale
- es Manual original
- **pt** Manual original
- it Istruzioni originali
- nl Oorspronkelijke gebruiksaanwijzing
- da Original brugsanvisning
- sv Bruksanvisning i original
- **no** Original driftsinstruks
- fi Alkuperäiset ohjeet
- **el** Πρωτότυπο οδηγιών χρήσης
- tr Orijinal işletme talimatı
- эксплуатации
- **uk** Оригінальна інструкція з експлуатації

pl Instrukcja oryginalna

cs Původní návod k používání

**sk** Pôvodný návod na použitie

hu Eredeti használati utasítás

**ru** Оригинальное руководство по

- **kk** Пайдалану нұсқаулығының түпнұсқасы
- ro Instrucțiuni originale
- **bg** Оригинална инструкция
- **mk** Оригинално упатство за работа

- sr Originalno uputstvo za rad
- sl Izvirna navodila
- **hr** Originalne upute za rad
- et Algupärane kasutusjuhend
- lv Instrukcijas oriģinālvalodā
- It Originali instrukcija
- ar تعليمات التشغيل الأصلية
- د فتزچه راهنمای اصلی **fa**















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GBA 14,4 V ...





GBA 18 V ...



AL 1820 CV (14,4 V/18 V)



**AL 1860 CV** (14,4 V/18 V)



2 608 661 637 (32 mm, 1x) 2 608 661 626 (32 mm, 5x) 2 608 661 638 (20 mm, 1x) 2 608 661 627 (20 mm, 5x) 2 608 661 639 (10 mm, 1x)

2 608 661 640 (20 mm, 1x) 2 608 661 628 (20 mm, 5x) 2 608 661 641 (10 mm, 1x)



2608661642 (Ø 85 mm)



HCS: 2 608 661 643 (Ø 85 mm, 1x)

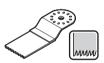
2 608 661 636 (Ø 85 mm, 1x)



2 608 190 060



2 608 661 644 (28 mm, 1x) 2 608 661 629 (28 mm, 5x)



BIM:

2 608 661 645 (32 mm, 1x) 2 608 661 630 (32 mm, 5x)



2 608 661 646



2608661647



2608661648 (78 mm)



2608000493

















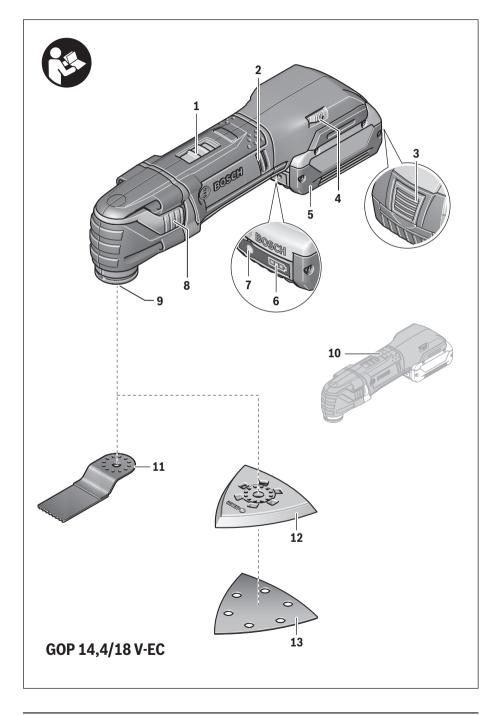
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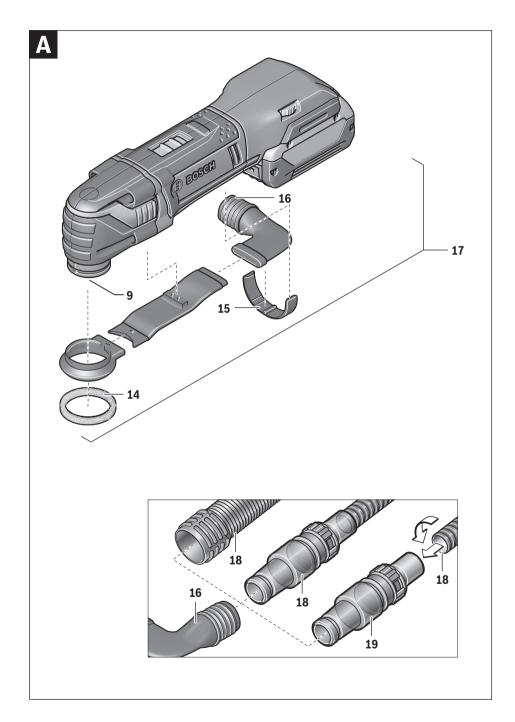




















Bosch Power Tools











Unter www.bosch-pt.com/ch/de können Sie online

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### **Transport**

Die enthaltenen Li-Ionen-Akkus unterliegen den Anforderungen des Gefahrgutrechts. Die Akkus können durch den Benutzer ohne weitere Auflagen auf der Straße transportiert werden. Beim Versand durch Dritte (z.B.: Lufttransport oder Spedition) sind besondere Anforderungen an Verpackung und Kennzeichnung zu beachten. Hier muss bei der Vorbereitung des Versandstückes ein Gefahrgut-Experte hinzugezogen werden.

Versenden Sie Akkus nur, wenn das Gehäuse unbeschädigt ist. Kleben Sie offene Kontakte ab und verpacken Sie den Akku so, dass er sich nicht in der Verpackung bewegt. Bitte beachten Sie auch eventuelle weiterführende nationale Vorschriften.

### Entsorgung



Elektrowerkzeuge, Akkus, Zubehör und Verpackungen sollen einer umweltgerechten Wiederverwertung zugeführt werden.

Werfen Sie Elektrowerkzeuge und Akkus/Batterien nicht in den Hausmüll!

### Nur für EU-Länder:



Gemäß der europäischen Richtlinie 2012/19/EU müssen nicht mehr gebrauchsfähige Elektrowerkzeuge und gemäß der europäischen Richtlinie 2006/66/EG müssen defekte oder verbrauchte Akkus/Batterien getrennt gesammelt und einer umweltgerechten Wiederverwendung zugeführt werden.

Nicht mehr gebrauchsfähige Akkus/Batterien können direkt abgegeben werden bei:

### Deutschland

Recyclingzentrum Elektrowerkzeuge Osteroder Landstraße 3 37589 Kalefeld

### Schweiz

Batrec AG 3752 Wimmis BE

### Akkus/Batterien:



### Bitte beachten Sie die Hinweise im Abschnitt "Transport", Seite 13.

### Änderungen vorbehalten.

## **English**

### **Safety Notes**

### **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

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
- ► 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
- ▶ 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 and 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 injuries.

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- ▶ 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
- ▶ 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.

### 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 eves, 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 Warnings for Cordless Multi-Cutters**

- ► Hold power tool by insulated gripping surfaces, 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.
- ▶ Use the machine only for dry sanding. Penetration of water into the machine increases the risk of an electric shock.
- ► Caution, fire hazard! Avoid overheating the object being sanded as well as the sander. Always empty the dust collector before taking breaks. In unfavourable conditions, e.g., when sparks emit from sanding metals, sanding debris in the dust bag, micro filter or paper sack (or in the filter sack or filter of the vacuum cleaner) can self-ignite. Particularly when mixed with remainders of varnish, polyurethane or other chemical materials and when the sanding debris is hot after long periods of working.
- ► Keep hands away from the sawing range. Do not reach under the workpiece. Contact with the saw blade can lead to injuries.
- ▶ Use appropriate detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance. Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage.
- ▶ When working with the machine, always hold it firmly with both hands and provide for a secure stance. The power tool is guided more secure with both hands.
- ▶ 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. Danger of short-circuiting.



Protect the battery against heat, e. g., against continuous intense sunlight, fire, water, and moisture. Danger of explosion.

▶ In case of damage and improper use of the battery, vapours may be emitted. Ventilate the area and seek medical help in case of complaints. The vapours can irritate the respiratory system.

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- ▶ Use the battery only in conjunction with your Bosch **power tool.** This measure alone protects 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 can occur and the battery can burn, smoke, explode or overheat.
- ▶ Wear protective gloves when changing application tools/accessories. Application tools/accessories become hot after prolonged usage.
- ▶ Do not scrape wetted materials (e.g. wallpaper) or on moist surfaces. Penetration of water into the machine increases the risk of an electric shock
- ▶ Do not treat the surface to be worked with solvent-containing fluids. Materials being warmed up by the scraping can cause toxic vapours to develop.
- ▶ Exercise extreme caution when handling the scraper. The accessory is very sharp; danger of injury.

### **Product Description and Specifica**tions



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

While reading the operating instructions, unfold the graphics page for the machine and leave it open.

### **Intended Use**

The machine is intended for sawing and cutting wooden materials, plastic, gypsum, non-ferrous metals and fastening elements (e. g., unhardened nails, staples). It is also suitable for working soft wall tiles, as well as for dry sanding and scraping of small surfaces. It is especially suitable for working close to edges and for flush cutting. Operate the power tool exclusively with Bosch accessories.

### **Product Features**

The numbering of the product features refers to the illustration of the machine on the graphics page.

- 1 On/Off switch
- 2 Venting slots
- 3 Battery unlocking button
- 4 Thumbwheel for orbit frequency preselection
- 5 Battery pack'
- 6 Battery charge-control indicator\*
- 7 Button for charge-control indicator\*
- 8 SDS lever for releasing the application tool
- 9 Tool holder
- **10** Handle (insulated gripping surface)
- 11 Plunge saw blade\*
- 12 Sanding plate
- 13 Sanding sheet\*
- 14 Felt ring of the dust extraction\*

- 15 Retaining clip of the dust extraction\*
- 16 Vacuum connection\*
- 17 Dust extraction\*
- 18 Vacuum hose'
- 19 Extraction adapter\*

\*Accessories shown or described are not part of the standard delivery scope of the product. A complete overview of accessories can be found in our accessories program.

### **Technical Data**

Cordless Multi-Cutter		GOP 14,4/18 V-EC
Article number		3 601 HB0 0
Rated voltage	V=	14.4/18
No-load speed n <sub>0</sub>	min <sup>-1</sup>	8000-20000
Oscillation angle, left/right	0	1.4
Weight according to EPTA-Procedure 01/2003	kg	1.7/1.7*
Permitted ambient temperature		
<ul><li>during charging</li><li>during operation** and</li></ul>	°C	0+45
during storage	°C	-20+50
Recommended batteries		GBA 14,4V GBA 18V
Recommended chargers		AL 18 GAL 3680

<sup>\*</sup> depending on the battery pack being used

### Noise/Vibration Information

Sound emission values determined according to EN 60745-2-4.

Typically the A-weighted noise levels of the product are: Sound pressure level 80 dB(A): Sound power level 91 dB(A). Uncertainty K = 3 dB.

### Wear hearing protection!

Vibration total values a<sub>h</sub> (triax vector sum) and uncertainty K determined according to EN 60745-2-4:

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

Sawing with plunge cut saw blade:  $a_h = 9.7 \text{ m/s}^2$ ,

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

Sawing with segment saw blade:  $a_h = 6.0 \text{ m/s}^2$ ,  $K = 1.5 \text{ m/s}^2$ , Scraping:  $a_h = 8.5 \text{ m/s}^2$ ,  $K = 1.5 \text{ m/s}^2$ .

The vibration level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure. The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or insertion tools or is poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.















<sup>\*\*</sup> Limited performance at temperatures < 0 °C

Technical data determined with battery from delivery scope.









An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period. Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

### **Declaration of Conformity**

We declare under our sole responsibility that the product described under "Technical Data" is in conformity with all relevant provisions of the directives 2011/65/EU, until 19 April 2016: 2004/108/EC, from 20 April 2016 on: 2014/30/EU, 2006/42/EC including their amendments and complies with the following standards: EN 60745-1, EN 60745-2-4.

Technical file (2006/42/EC) at: Robert Bosch GmbH, PT/ETM9, 70764 Leinfelden-Echterdingen, GERMANY

Henk Becker **Executive Vice President** Engineering

Helmut Heinzelmann **Head of Product Certification** PT/ETM9



Robert Bosch GmbH, Power Tools Division 70764 Leinfelden-Echterdingen, GERMANY Leinfelden, 19.02, 2015

### Assembly

### **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 supplied is partially charged. To ensure full capacity of the battery, completely charge the battery in the battery 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 procedure does not damage the battery.

### Removing the battery

The battery 5 is equipped with two locking levels that should prevent the battery from falling out when pushing the battery unlocking button 3 unintentionally. As long as the battery is inserted in the power tool, it is held in position by means of a

To remove the battery 5, press the battery unlocking button 3 and pull the battery out of the power tool toward the rear. Do not exert any force.

### **Battery Charge-control Indication**

The three green LEDs of the battery charge-control indicator **6** indicate the charge condition of the battery **5**. For safety reasons, it is only possible to check the status of the charge condition when the machine is at a standstill.

Press button 7 to indicate the charge condition. This is also possible when the battery 5 is removed.

LED	Capacity
Continuous lighting 3 x green	≥2/3
Continuous lighting 2 x green	≥1/3
Continuous lighting 1 x green	<1/3
Flashing light 1 x green	Reserve

When no LED lights up after pushing button 7, then the battery is defective and must be replaced.

### **Changing the Tool**

- ▶ Before any work on the machine itself (e.g. maintenance, tool change, etc.) as well as during transport and storage, remove the battery from the power tool. There is danger of injury when unintentionally actuating the On/Off switch.
- ▶ Wear protective gloves when changing application tools/accessories. Contact with the application tool/accessory can lead to injuries.

### Selecting the Application Tool/Accessory

· · · · · · · · · · · · · · · · · · ·			
Acces	sory	Material	
	HCS wood seg- ment saw blade*	Wooden materials, plastic	
	BIM segment saw blade*	Wooden materials, plastic, non-ferrous metals	
	HCS plunge cut saw blades, wood*	Wooden materials, plastic, gypsum and other soft materials	
	BIM plunge cut saw blades, metal*	Metal (e. g. unhard- ened nails, screws, smaller profiles), non-ferrous metals	
	BIM plunge cut saw blade, wood and metal*	Wood, metal, non- ferrous metals	
	HM-Riff segment saw blade*	Grouting joints, soft wall tiles, glass-fibre reinforces plastic	
	HM-Riff delta plate*	and other abrasive materials	
	Scraper, rigid*	Carpets, coverings	
* Optional accordant fo	rthe complete access	rios plazea can Dasch ac	

<sup>\*</sup> Optional accessory; for the complete accessories please see Bosch accessory programme.













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Acces	sory	Material
	Scraper, flexible*	Silicone and other elastic materials
	Base plate for sanding, series Delta 93 mm*	Depends on sanding sheet

<sup>\*</sup> Optional accessory; for the complete accessories please see Bosch accessory programme.

### Mounting/Replacing the Application Tool/Accessory

If required, remove an already mounted application tool/ac-

For this, open the SDS lever 8 to the stop (not further) and remove the application tool.

Mount the requested application tool/accessory (e.g. plunge cut saw blade 11) in such a manner on the tool holder 9 that the offset faces downward (see illustration on the graphics page; marking on the application tool/accessory is readable from above).

Turn the application tool/accessory to a position favourable for the respective job, and allow it to engage into the cams of the tool holder 9. 12 different positions are possible, each offset by 30°.

Close SDS lever 8 so that it faces against the housing of the power tool.

► Check the tight seating of the application tool/accessory. Incorrect or not securely fastened application tools/ accessories can come loose during operation and pose a hazard.

## Mounting/Replacing a Sanding Sheet on the Sanding

The sanding plate 12 is fitted with Velcro backing for quick and easy fastening of sanding sheets with Velcro adhesion.

Before attaching the sanding sheet 13, free the Velcro backing of the sanding plate 12 from any debris by tapping against it in order to enable optimum adhesion.

Position the sanding sheet 13 flush alongside one edge of the sanding plate 12, then lay the sanding sheet onto the sanding plate and press firmly.

To ensure optimum dust extraction, pay attention that the punched holes in the sanding sheet match with the holes in the sanding plate.

To remove the sanding sheet 13, grasp it at one of the tips and pull it off from the sanding plate 12.

You can use all sanding sheets, fleece pads/polishing cloth pads of the Delta 93 mm series of Bosch accessory program. Sanding accessories, such as fleece pads/polishing cloth pads, are attached to the sanding plate in the same manner.

### **Selecting the Sanding Sheet**

Depending on the material to be worked and the required rate of material removal, different sanding sheets are available:

Sanding disc	Material	Application	Grain size	
- All wooden materials (e. g., hardwood, softwood, chipboard, building board) - Metal materials	(e.g., hardwood, soft-	For coarse-sanding, e. g. of rough, unplaned beams and boards	coarse	40 60
	For face sanding and planing small irregularities	medium	80 100 120	
Paint best ∕ Voo		For finish and fine sanding of wood	fine	180 240 320 400
	For sanding off paint	coarse	40 60	
	For sanding primer (e. g., for removing brush dashes, drops of paint and paint run)	medium	80 100 120	
best 🐼		For final sanding of primers before coating	fine	180 240 320 400























### **Dust/Chip Extraction**

▶ Dusts 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 dusts can cause allergic reactions and/or lead to respiratory infections of the user or bystanders.

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

- As far as possible, use a dust extraction system suitable for the material.
- 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.
- ▶ Prevent dust accumulation at the workplace. Dusts can easily ignite.

### Connecting the Dust Extraction (see figure A)

For sanding, always connect the dust extraction.

Remove the application tool/accessory when mounting the dust extraction 17 (accessory).

If required, assemble the parts of the dust extraction 17 as shown in the figure. Position the assembled dust extraction onto the machine via the tool holder 9. Turn the dust extraction in such a manner that the cams of the dust extraction engage into the corresponding recesses on the housing. Fasten the dust extraction to the machine with the retaining clip 15 as shown in the figure.

Pay attention that the felt ring 14 is undamaged and faces tightly against the sanding plate 12. Replace a damage felt ring immediately.

Depending on the machine model, place a vacuum hose 18 (accessory) either directly onto the vacuum connection 16 or cut off the old hose end, screw the extraction adapter 19 (accessory) onto the hose end and insert it directly into the vacuum connection 16. Connect the vacuum hose 18 with a vacuum cleaner (accessory). An overview for the connection of various vacuum cleaners can be found at the end of these in-

The vacuum cleaner must be suitable for the material being worked.

When vacuuming dry dust that is especially detrimental to health or carcinogenic, use a special vacuum cleaner.

### Operation

### **Starting Operation**

### Inserting the battery

▶ Use only original Bosch lithium-ion batteries with the voltage listed on the nameplate of your power tool. Using other batteries can lead to injuries and pose a fire hazard.

**Note:** Use of batteries not suitable for the machine can lead to malfunctions of or cause damage to the power tool.

Insert the charged battery pack 5 from the rear into the base of the power tool. Press the battery pack completely into the base until the red stripe can no longer be seen and the battery pack is securely locked.

### **Switching On and Off**

To **start** the machine, push the On/Off switch **1** forward so that the "I" is indicated on the switch.

To switch off the machine, push the On/Off switch 1 toward the rear so that the "0" is indicated on the switch.

To save energy, only switch the power tool on when using it. The lithium-ion battery is protected against deep discharging

by the "Electronic Cell Protection (ECP)". When the battery is empty, the machine is switched off by means of a protective circuit: The inserted tool no longer rotates.

Note: If the machine should automatically switch off because of a discharged or overheated battery, make sure to set the machine's On/Off switch 1 to off. Charge the battery and allow it to cool down before restarting the machine. Otherwise the battery can become damaged.

### **Preselecting the Orbital Stroke Rate**

With the thumbwheel for preselection of the orbital stroke rate 4, you can preselect the required orbital stroke rate, even during operation.

The required stroke rate depends on the material and the working conditions and can be determined through practical testing.

### **Working Advice**

- ▶ Before any work on the machine itself (e.g. maintenance, tool change, etc.) as well as during transport and storage, remove the battery from the power tool. There is danger of injury when unintentionally actuating the On/Off switch.
- ▶ Wait until the machine has come to a standstill before placing it down.

Note: Do not cover off the venting slots 2 of the machine while working, as this reduces the working life of the machine.

### **Operating Principle**

Due to the oscillating drive the application tool/accessory oscillates up to 20000 times per minute at 2.8°. This allows for precise work in narrow spaces.



Work with low and uniform application pressure, otherwise, the working performance will decline and the application tool can become blocked.



While working, move the machine back and forth, so that the application tool does not heat up excessively and become blocked.























#### Sawing

- ▶ Use only undamaged saw blades that are in perfect condition. Bent or dull saw blades can break, negatively influence the cut, or lead to kickback.
- ▶ When sawing light building materials, observe the statutory provisions and the recommendations of the material suppliers.
- ▶ Plunge cuts may only be applied to soft materials, such as wood, gypsum plaster boards, etc.!

Before sawing with HCS saw blades in wood, particle board, building materials, etc., check these for foreign objects such as nails, screws, or similar. If required, remove foreign objects or use BIM saw blades.

### Separating

**Note:** When separating wall tiles take into consideration that the application tools/accessories wear heavily when used for longer periods of time.

### Sanding

The removal rate and the sanding pattern are primarily determined by the choice of sanding sheet, the preset oscillation rate and the applied pressure.

Only flawless sanding sheets achieve good sanding capacity and extend the service life of the machine.

Pay attention to apply uniform sanding pressure; this increases the working life of the sanding sheets.

Intensifiying the sanding pressure does not lead to an increase of the sanding capacity, but to increased wear of the machine and the sanding sheet.

For precise on-the-spot sanding of edges, corners and hard to reach areas, it is also possible to work only with the tip or an edge of the sanding plate.

When selectively sanding on the spot, the sanding sheet can heat up considerably. Reduce the orbital stroke rate and the sanding pressure, and allow the sanding sheet to cool down regularly.

A sanding sheet that has been used for metal should not be used for other materials.

Use only original Bosch sanding accessories.

For sanding, always connect the dust extraction.

For scraping, select a high oscillation rate.

Work on a soft surface (e.g. wood) at a flat ange, and apply only light pressure. Otherwise the scraper can cut into the surface.

### **Temperature Dependent Overload Protection**

In normal conditions of use, the power tool cannot be overloaded. If the power tool is overloaded or not kept within the permitted battery temperature range, the speed is reduced or the power tool switches off. At reduced speed, the power tool will run again at full speed once the permitted battery temperature is reached or the load is reduced. During automatic shut-down, switch off the power tool, allow the battery to cool down, then switch the power tool back on.

### **Recommendations for Optimal Handling of the Battery**

Protect the battery against moisture and water.

Store the battery only within a temperature range between - 20 °C and 50 °C. As an example, do not leave the battery in the car in summer.

A significantly reduced working period after charging indicates that the battery is used and must be replaced. Observe the notes for disposal.

### Maintenance and Service

### Maintenance and Cleaning

- ▶ Before any work on the machine itself (e.g. maintenance, tool change, etc.) as well as during transport and storage, remove the battery from the power tool. There is danger of injury when unintentionally actuating the On/Off switch.
- ► For safe and proper working, always keep the machine and ventilation slots clean.

Clean Riff application tools (accessory) regularly with a wire

### 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. Exploded views and information on spare parts can also be found under:

### www.bosch-pt.com

Bosch's application service team will gladly answer questions concerning 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.

### **Great Britain**

Robert Bosch Ltd. (B.S.C.)

P.O. Box 98

**Broadwater Park** 

North Orbital Road

Denham

Uxbridge

UB 9 5HJ

At www.bosch-pt.co.uk you can order spare parts or arrange the collection of a product in need of servicing or repair.

Tel. Service: (0344) 7360109

E-Mail: boschservicecentre@bosch.com

### Ireland

Origo Ltd.

Unit 23 Magna Drive Magna Business Park

City West

Dublin 24

Tel. Service: (01) 4666700

Fax: (01) 4666888

























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#### 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.com.au

### **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

### **Transport**

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

When being transported by third parties (e.g.: 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 batteries 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 possibly more detailed national regulations.

### Disposal



The machine, rechargeable batteries, accessories and packaging should be sorted for environmentalfriendly recycling.

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

### Only for EC countries:



According to the European Guideline 2012/19/EU, power tools that are no longer usable, and according to the European Guideline 2006/66/EC, defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

Batteries no longer suitable for use can be directly returned at:

#### **Great Britain**

Robert Bosch Ltd. (B.S.C.) P.O. Box 98 Broadwater Park North Orbital Road Denham

Uxbridge UB 9 5HJ

At www.bosch-pt.co.uk you can order spare parts or arrange the collection of a product in need of servicing or repair.

Tel. Service: (0344) 7360109

E-Mail: boschservicecentre@bosch.com

### **Battery packs/batteries:**



Please observe the instructions in section "Transport", page 20.

Subject to change without notice.

## **Français**

### Avertissements de sécurité

### Avertissements de sécurité généraux pour l'outil

**A** AVERTISSEMENT Lire tous les avertissements de sécurité et toutes les ins-

tructions. 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).











160992A117 (7.4.15) Bosch Power Tools

