

**Robert Bosch GmbH**  
Power Tools Division  
70745 Leinfelden-Echterdingen  
Germany

[www.bosch-pt.com](http://www.bosch-pt.com)

**1 609 92A 0C0** (2013.09) 0 / 158 **EURO**



1 609 92A 0C0

## GSR | GSB Professional

14,4 VE-2-LI | 18 VE-2-LI

 **BOSCH**

**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

**pl** Instrukcja oryginalna  
**cs** Původní návod k používání  
**sk** Pôvodný návod na použitie  
**hu** Eredeti használati utasítás  
**ru** Оригинальное руководство по эксплуатации  
**uk** Оригінальна інструкція з експлуатації  
**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  
**lt** Originali instrukcija  
**ar** تعليمات التشغيل الأصلية  
**fa** دفترچه راهنمای اصلی



## English

### 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 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

- ▶ **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 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.

- ▶ **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 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 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 Warnings for Drills and Screwdriver

### GSB 14,4 VE-2-LI / GSB 18 VE-2-LI

- ▶ **Wear ear protectors when impact drilling.** Exposure to noise can cause hearing loss.

### GSR 18 VE-2-LI / GSB 18 VE-2-LI

- ▶ **Use auxiliary handle(s), if supplied with the tool.** Loss of control can cause personal injury.
- ▶ **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.

### GSR 14,4 VE-2-LI / GSR 18 VE-2-LI / GSB 14,4 VE-2-LI / GSB 18 VE-2-LI

- ▶ **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory or fastener may contact hidden wiring.** Cutting accessory and fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- ▶ **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.
- ▶ **Switch off the power tool immediately when the tool insert jams. Be prepared for high reaction torque that can cause kickback.** The tool insert jams when:
  - the power tool is subject to overload or
  - it becomes wedged in the workpiece.
- ▶ **Hold the machine with a firm grip.** High reaction torque can briefly occur while driving in and loosening screws.
- ▶ **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.

- ▶ **Keep your workplace clean.** Blends of materials are particularly dangerous. Dust from light alloys can burn or explode.

- ▶ **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.
- ▶ **Use the battery only in conjunction with your Bosch product.** This measure alone protects the battery against dangerous overload.
- ▶ **Use only original Bosch batteries with the voltage listed on the nameplate of your product.** When using other batteries, e. g. imitations, reconditioned batteries or other brands, there is danger of injury as well as property damage through exploding batteries.

## Additional Safety and Working Instructions


- ▶ **Dusts from materials such as lead-containing coatings, some wood types, minerals and metal can be harmful to one's health and cause allergic reactions, lead to respiratory infections and/or cancer.** 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.
- ▶ **Before any work on the machine (e. g., maintenance, tool change, etc.) as well as during transport and storage, set the rotational direction switch to the centre position.** Unintentional actuation of the On/Off switch can lead to injuries.
- ▶ **The battery is supplied partially charged. To ensure full battery capacity, completely charge the battery in the battery charger before using for the first time.**
- ▶ **The battery is equipped with a NTC temperature control which allows charging only within a temperature range of between 0 °C and 45 °C. A long battery service life is achieved in this manner.**
- ▶ **Read the operating instructions of the battery charger.**
- ▶ **Apply the power tool to the screw only when it is switched off.** Rotating tool inserts can slip off.
- ▶ **Adjust the gear switch only when the machine is at a complete stop.**
- ▶ **Always push the gear selector and turn the operating mode selector switch through to the stop.** Otherwise, the machine can become damaged.












10 | English

- ▶ **In case of excessive loading, e. g., prolonged blocking of the application tool, the electronics switch off the power tool. After switching on again, the power tool can be used again as intended for. In case of continued overload, the power tool will switch off again in order to prevent damage to the motor.**
- ▶ To save energy, only switch the power tool on when using it.

### Symbols

The following symbols are important for reading and understanding the operating instructions. Please take note of the symbols and their meaning. The correct interpretation of the symbols will help you to use the machine in a better and safer manner.

Symbol	Meaning
	GSR 14,4 VE-2-LI/ GSR 18 VE-2-LI/ GSB 14,4 VE-2-LI/ GSB 18 VE-2-LI: Cordless screwdriver/ Combination cordless drill Grey-marked area: Handle (insulated gripping surface)
	Article number
	Read all safety warnings and all instructions
	Before any work on the machine itself, remove the battery
	Always wear ear protection.
	Movement direction
	Reaction direction
	Drilling and screwdriving
	Impact drilling
	Low speed
	High speed

Symbol	Meaning
	Switching On
	Switching Off
	Prohibited action
	Right/left rotation
	Battery Capacity
U	Rated voltage
$n_s$	Impact rate
$n_0 1$	No-load speed (1. gear)
$n_0 2$	No-load speed (2. gear)
M	Maximum torque according to ISO 5393
	Metal
	Brickwork
	Wood
$\emptyset$	Drilling diameter, max.
	Max. screw dia.
	Chuck clamping range
	Weight according to EPTA-Procedure 01/2003
*	Value dependent of the battery pack being used
$L_{pA}$	Sound pressure level
$L_{wA}$	Sound power level
K	Uncertainty
$a_h$	Vibration total value

### Delivery Scope

Cordless screwdriver / Combination cordless drill.  
Battery, application tools and other accessories shown or described are not part of the standard delivery scope.  
A complete overview of accessories can be found in our accessories program.

### Intended Use

The machine is intended for driving in and loosening screws as well as for drilling in wood, metal, ceramics and plastic. GSB machines are additionally intended for impact drilling in bricks, brickwork and masonry.

The light of this power tool is intended to illuminate the power tool's direct area of working operation and is not suitable for household room illumination.

## Technical Data

The technical data of the machine are listed in the table on page 151.


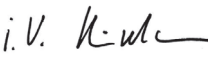
Please observe the article number on the type plate of your machine. The trade names of the individual machines may vary.

## Declaration of Conformity

We declare under our sole responsibility that the product described under "Technical Data" is in conformity with the following standards or standardisation documents: EN 60745 according to the provisions of the directives 2009/125/EC (Regulation 1194/2012), 2011/65/EU, 2004/108/EC, 2006/42/EC.

Technical file (2006/42/EC) at:  
Robert Bosch GmbH, PT/ETM9,  
D-70745 Leinfelden-Echterdingen

Henk Becker	Helmut Heinzlmann
Executive Vice President	Head of Product Certification
Engineering	PT/ETM9

*PPA*  
 *i.V.* 

Robert Bosch GmbH, Power Tools Division  
D-70745 Leinfelden-Echterdingen  
18.04.2013

## Noise/Vibration Information

The measured values of the machine are listed in the table on page 151.

Noise and vibrational values (vector sum of three directions) determined according to EN 60745.

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.

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.

## Mounting and Operation

Action	Figure	Page
Removing the battery	<b>1</b>	152
Inserting the battery	<b>2</b>	152
Checking the battery charge condition	<b>3</b>	152
Changing the position of the auxiliary handle	<b>4</b>	153
Mounting application tools	<b>5</b>	153
Reversing the rotational direction	<b>6</b>	154
Setting the torque	<b>7</b>	154
Selecting the drilling position	<b>8</b>	155
Setting the operating mode	<b>9</b>	155
Gear selection, mechanical	<b>10</b>	155
Switching On and Off	<b>11</b>	156
Selecting Accessories	-	157

## Maintenance and Cleaning

► **For safe and proper working, always keep the machine and ventilation slots clean.**

Clean the application tool, the tool holder, the power tool's ventilations slots, and the battery's ventilation slots each time after using.

## 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 order, please always include the 10-digit article number given on the type plate of the machine.

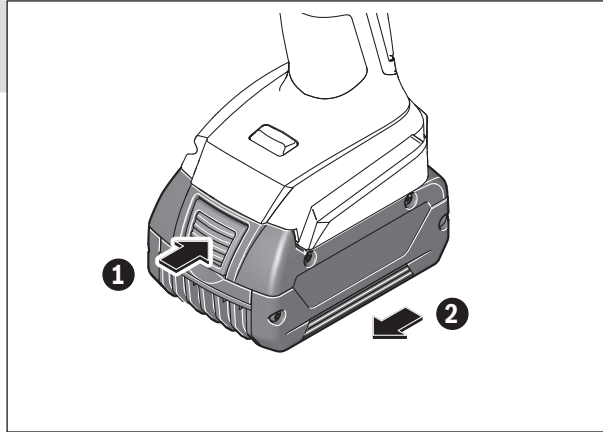
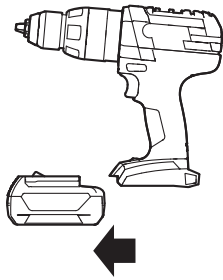
### Great Britain

Robert Bosch Ltd. (B.S.C.)  
P.O. Box 98  
Broadwater Park  
North Orbital Road  
Denham  
Uxbridge  
UB 9 5HJ  
Tel. Service: (0844) 7360109  
Fax: (0844) 7360146  
E-Mail: boschservicecentre@bosch.com

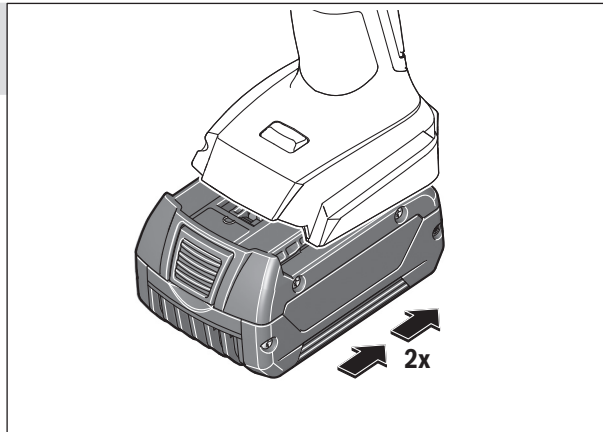
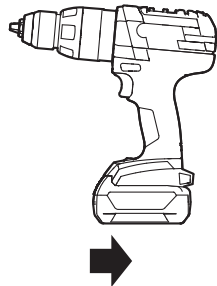
		GSR 14,4 VE-2-LI	GSR 18 VE-2-LI	GSB 14,4 VE-2-LI	GSB 18 VE-2-LI
		3 601 H65 4..	3 601 H65 3..	3 601 H62 4..	3 601 H62 3..
U	V=	14,4	18	14,4	18
$n_0 1$	$\text{min}^{-1}$	0 - 380	0 - 380	0 - 420	0 - 420
$n_0 2$	$\text{min}^{-1}$	0 - 1600	0 - 1600	0 - 1800	0 - 1800
$n_s$	$\text{min}^{-1}$	-	-	0 - 27000	0 - 27000
M	Nm	75	80	80	85
M	Nm	40*	47*	37*	42*
$\emptyset$	mm	-	-	14	16
$\emptyset$	mm	13	13	13	13
$\emptyset$	mm	45	50	40	45
$\emptyset$	mm	10	12	10	10
	mm	1,5 - 13	1,5 - 13	1,5 - 13	1,5 - 13
	kg	1,8/2,0*	1,9/2,1*	1,9/2,1*	2,0/2,2*
$L_{WA}$	dB(A)	-	-	102	102
$L_{pA}$	dB(A)	75	75	91	91
K	dB	3	3	3	3
$a_h$	$\text{m/s}^2$	-	-	16	16
$a_h$	$\text{m/s}^2$	<2,5	<2,5	<2,5	<2,5
$a_h$	$\text{m/s}^2$	<2,5	<2,5	<2,5	<2,5
K	$\text{m/s}^2$	1,5	1,5	1,5	1,5

152 |

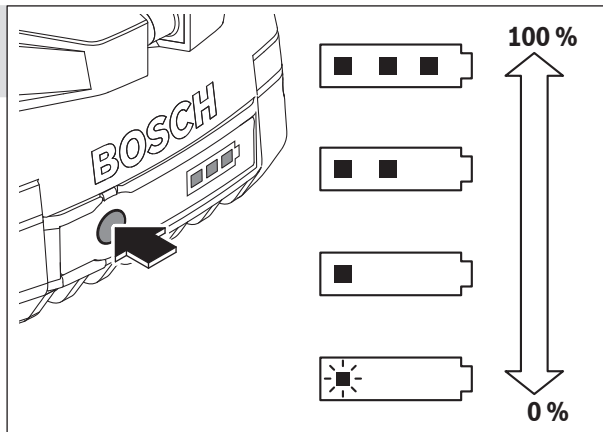
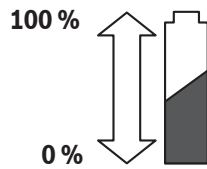
1



2



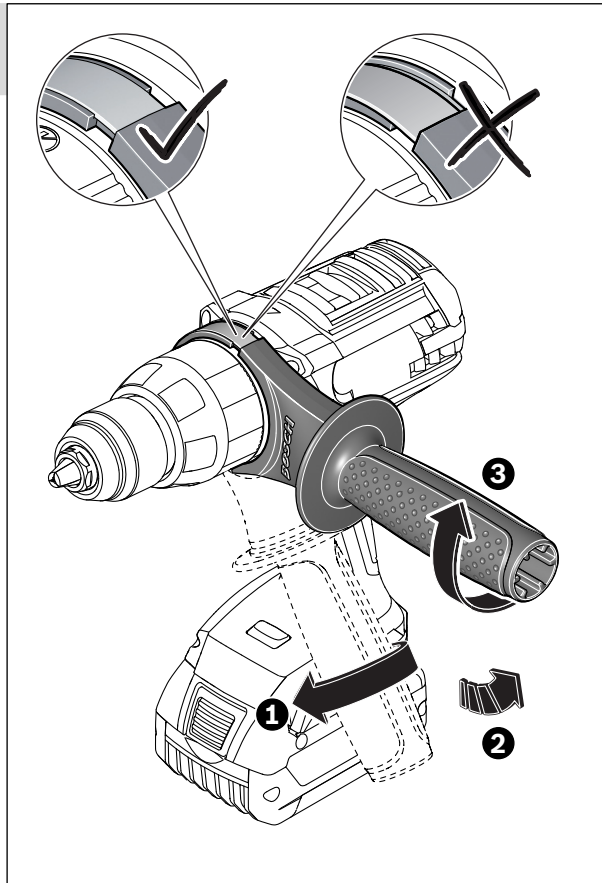
3



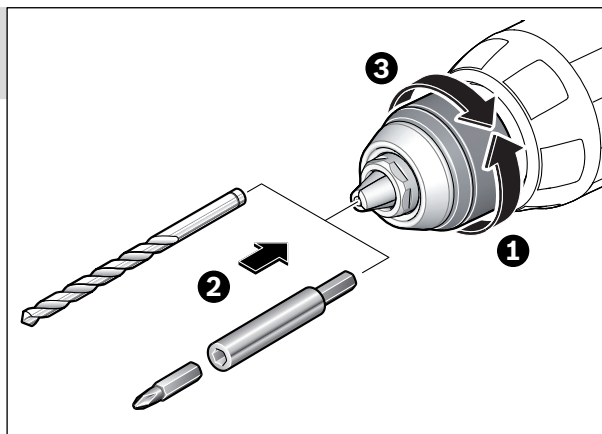
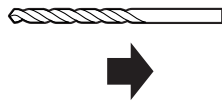
4



GSR 18 VE-2-LI  
GSB 18 VE-2-LI



5



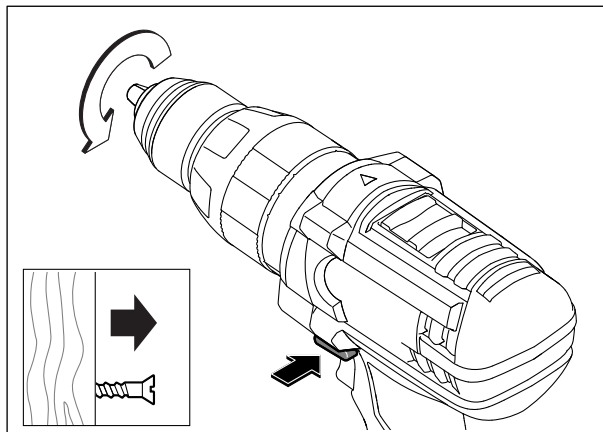
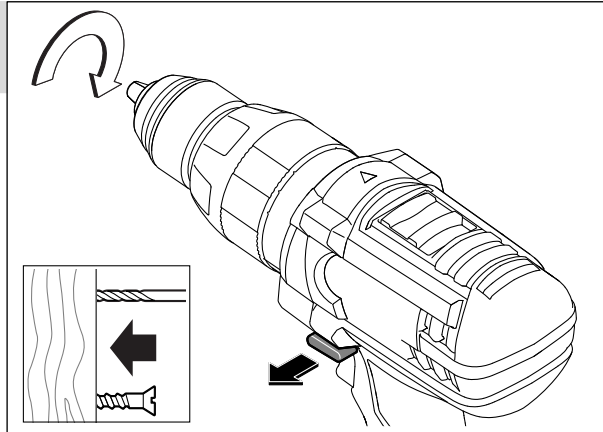
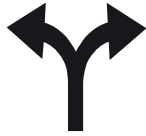




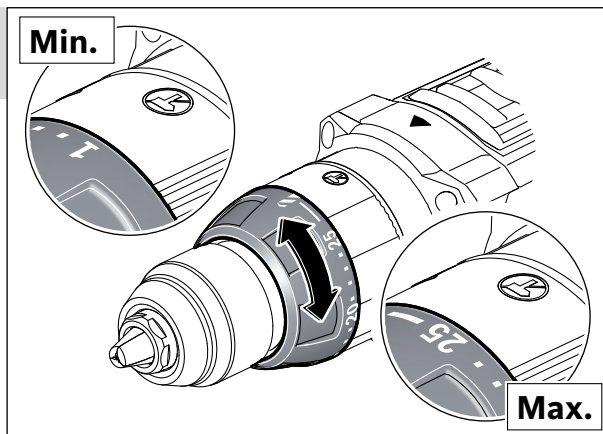
154 |



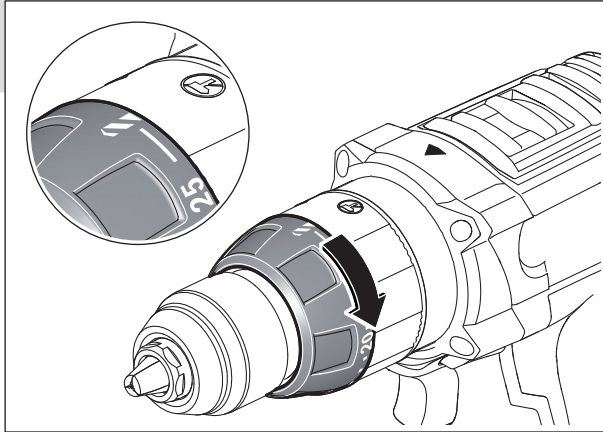
6



7

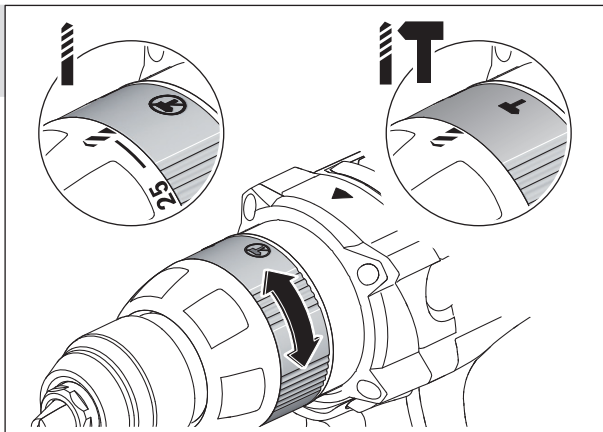


8

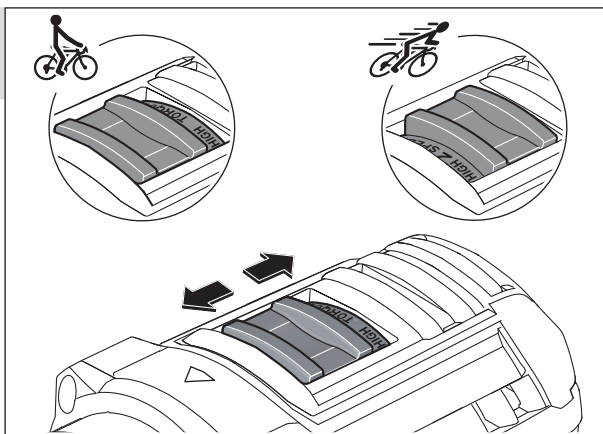
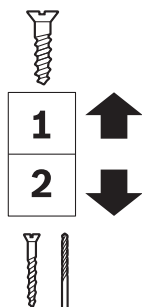


9

GSB 14,4 VE-2-LI  
GSB 18 VE-2-LI



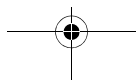
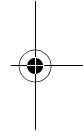
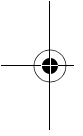
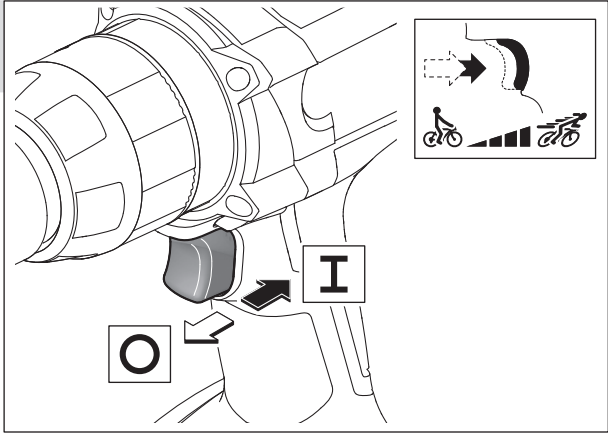
10

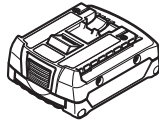
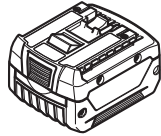




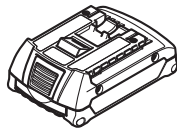
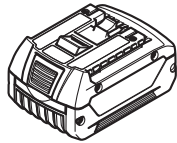
**11** 

I / O

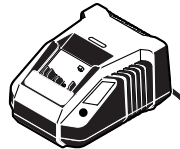




**14,4 V (Li-Ion)**



**18 V (Li-Ion)**



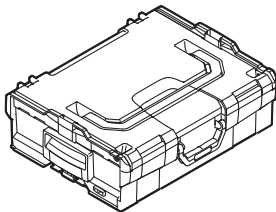
**AL 1820 CV  
(14,4 / 18 V)**  
2 607 225 424 (EU)



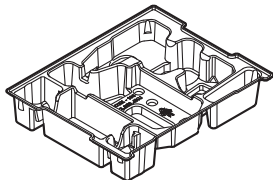
**AL 1860 CV  
(14,4 / 18 V)**  
2 607 225 322 (EU)  
2 607 225 324 (UK)



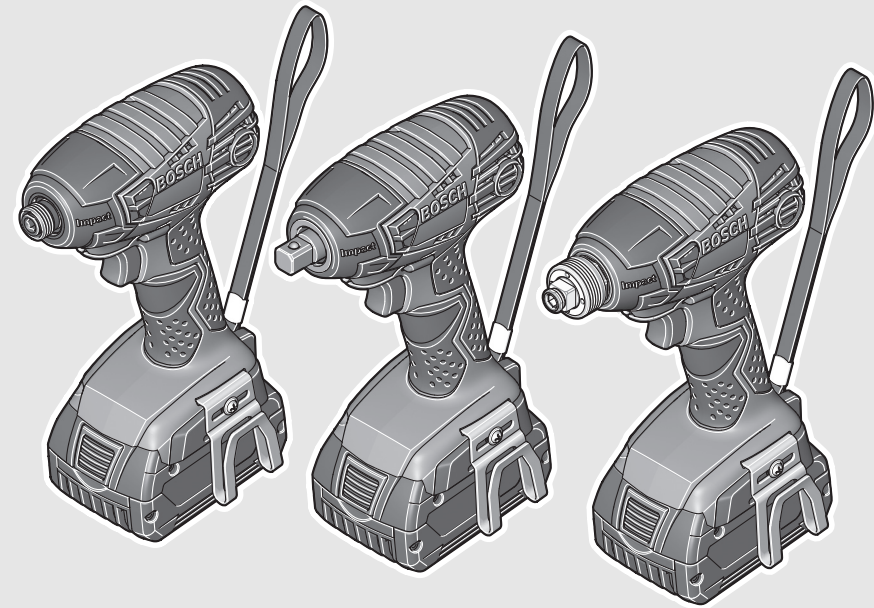
2 602 025 169



2 608 438 692  
(L-BOXX 136)



2 608 438 029



**Robert Bosch GmbH**  
Power Tools Division  
70745 Leinfelden-Echterdingen  
Germany

[www.bosch-pt.com](http://www.bosch-pt.com)

1 609 92A 0C4 (2013.09) 0 / 207 EURO



1 609 92A 0C4

## GDR | GDS | GDX Professional

14,4 V-Li | 18 V-Li

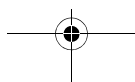
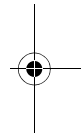
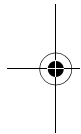
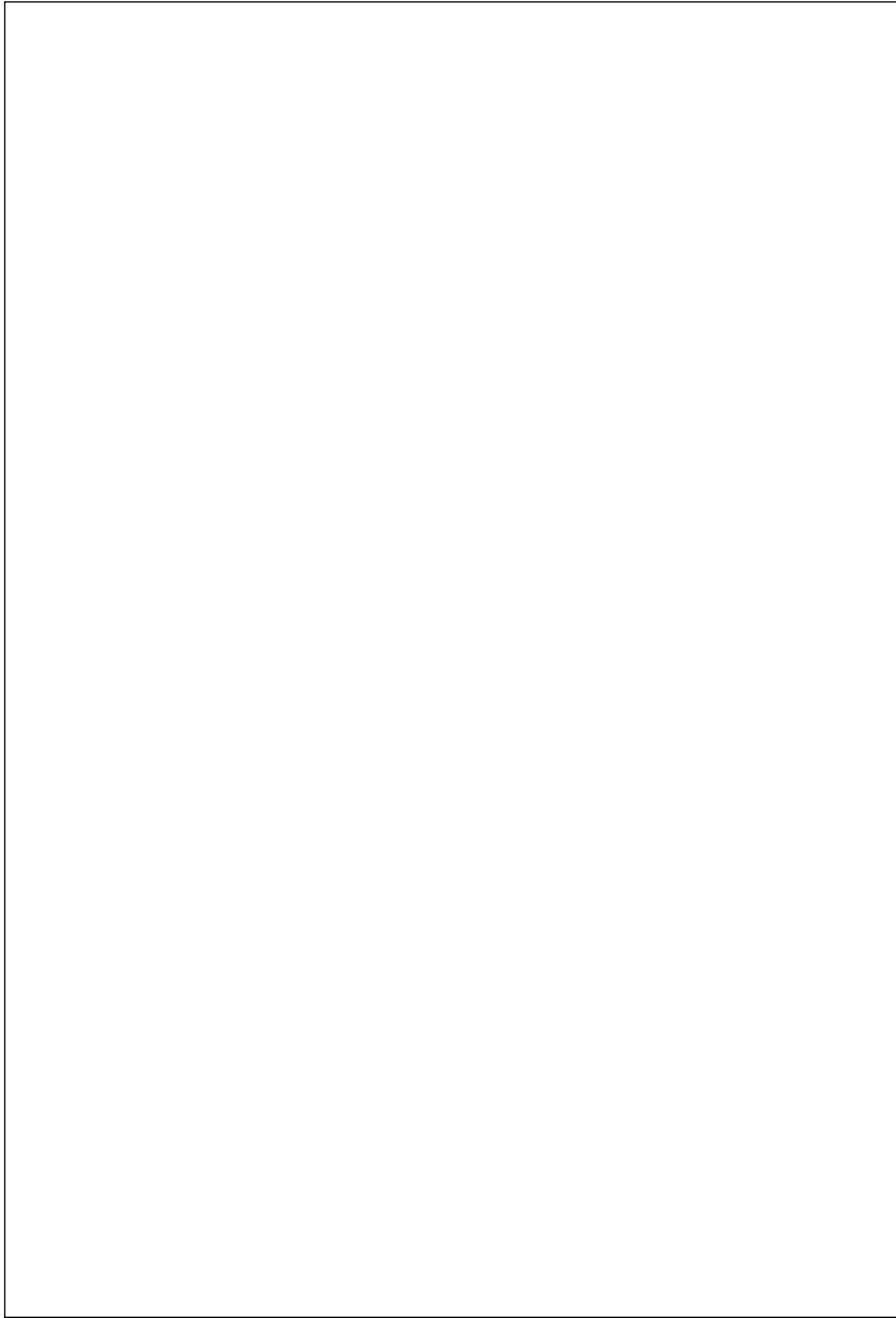
 **BOSCH**

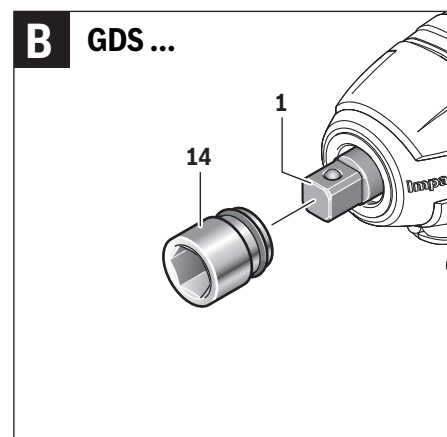
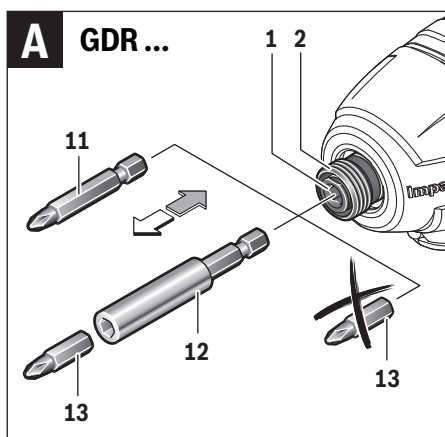
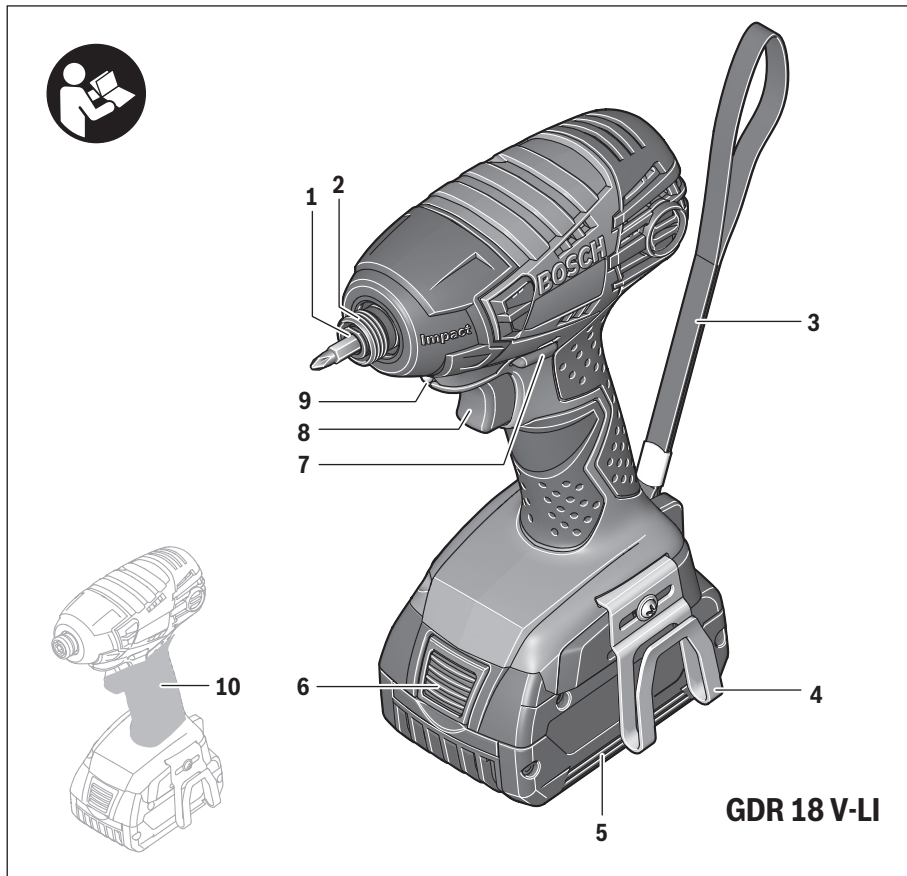
**de** Originalbetriebsanleitung  
**en** Original instructions  
**fr** Notice originale  
**es** Manual original  
**pt** Manual original  
**it** Istruzioni originali  
**nl** Oorspronkelijke  
gebruiksaanwijzing  
**da** Original brugsanvisning  
**sv** Bruksanvisning i original  
**no** Original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

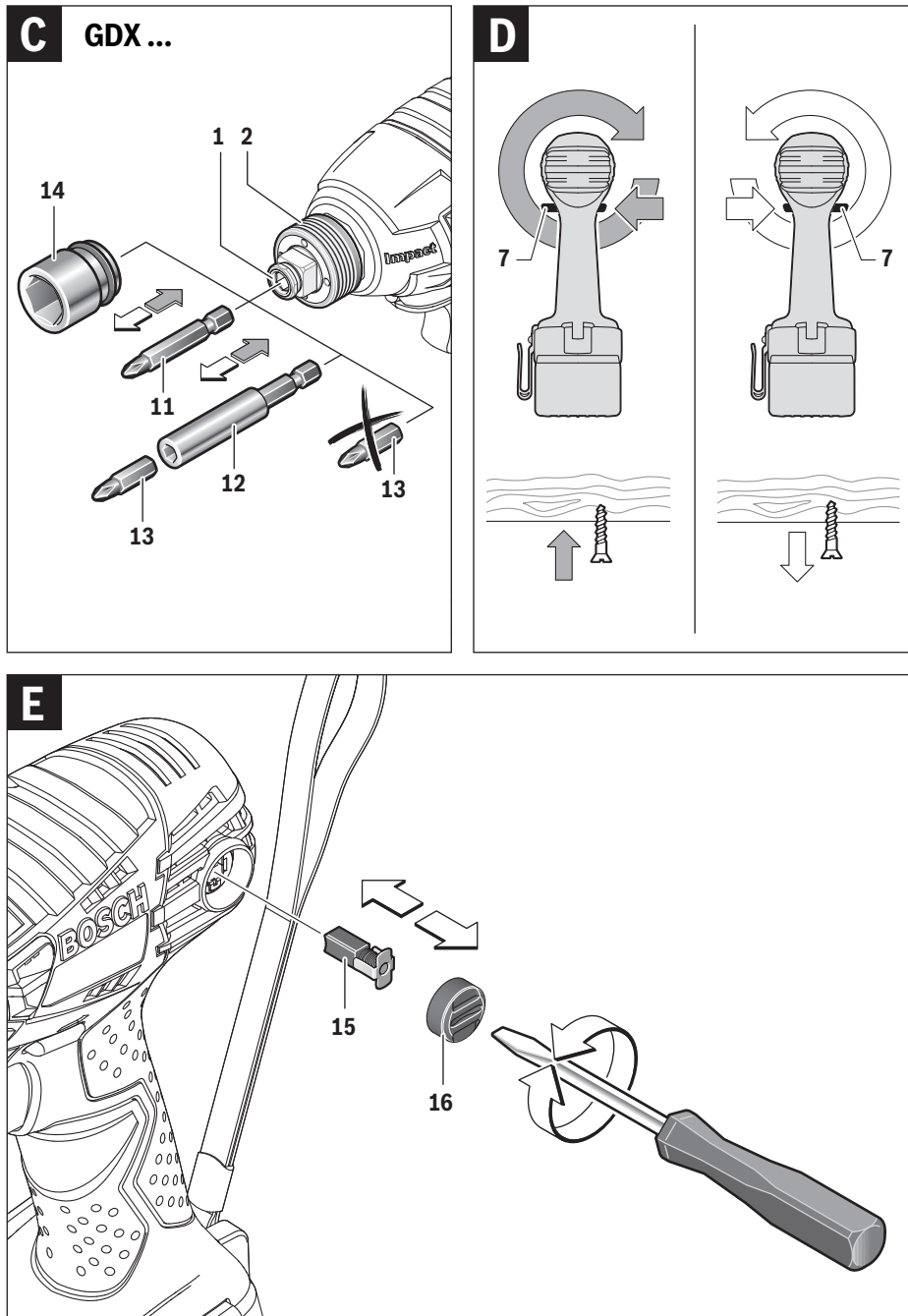
**pl** Instrukcja oryginalna  
**cs** Původní návod k používání  
**sk** Pôvodný návod na použitie  
**hu** Eredeti használati utasítás  
**ru** Оригинальное руководство  
по эксплуатации  
**uk** Оригінальна інструкція з  
експлуатації  
**kk** Пайдалану нұсқаулығының  
түпнұсқасы  
**ro** Instrucțiuni originale  
**bg** Оригинална инструкция  
**mk** Оригинално упатство за работа  
**sr** Originalno uputstvo za rad

**sl** Izvirna navodila  
**hr** Originalne upute za rad  
**et** Algpärane kasutusjuhend  
**lv** Instrukcijas oriģinālvalodā  
**lt** Originali instrukcija  
**ar** تعليمات التشغيل الأصلية  
**fa** دفترچه راهنمای اصلی











## 12 | English

**Deutschland**

Robert Bosch GmbH  
Servicezentrum Elektrowerkzeuge  
Zur Luhne 2  
37589 Kalefeld – Willershausen  
Unter [www.bosch-pt.com](http://www.bosch-pt.com) können Sie online Ersatzteile bestellen oder Reparaturen anmelden.  
Kundendienst: Tel.: (0711) 40040480  
Fax: (0711) 40040481  
E-Mail: [Servicezentrum.Elektrowerkzeuge@de.bosch.com](mailto:Servicezentrum.Elektrowerkzeuge@de.bosch.com)  
Anwendungsberatung: Tel.: (0711) 40040480  
Fax: (0711) 40040482  
E-Mail: [Anwendungsberatung.pt@de.bosch.com](mailto:Anwendungsberatung.pt@de.bosch.com)

**Österreich**

Tel.: (01) 797222010  
Fax: (01) 797222011  
E-Mail: [service.elektrowerkzeuge@at.bosch.com](mailto:service.elektrowerkzeuge@at.bosch.com)

**Schweiz**

Tel.: (044) 8471511  
Fax: (044) 8471551  
E-Mail: [AfterSales.Service@de.bosch.com](mailto:AfterSales.Service@de.bosch.com)

**Luxemburg**

Tel.: +32 2 588 0589  
Fax: +32 2 588 0595  
E-Mail: [outillage.gereedschap@be.bosch.com](mailto:outillage.gereedschap@be.bosch.com)

**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 Wiederverwertung 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:****Li-Ion:**

Bitte beachten Sie die Hinweise im Abschnitt „Transport“, Seite 12.

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 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**

- ▶ **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 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.
- ▶ **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 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 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 Warnings for Impact Wrenches

- ▶ **Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring.** Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- ▶ **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- ▶ **Always wait until the machine has come to a complete stop before placing it down.** The tool insert can jam and lead to loss of control over the power tool.
- ▶ **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.

## 14 | English

- ▶ **Use the battery only in conjunction with your Bosch power tool.** This measure alone protects the battery against dangerous overload.
- ▶ **Use only original Bosch batteries with the voltage listed on the nameplate of your power tool.** When using other batteries, e.g. imitations, reconditioned batteries or other brands, there is danger of injury as well as property damage through exploding batteries.
- ▶ **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.

## Product Description and Specifications



**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 driving in and loosening screws and bolts as well as for tightening and loosening nuts within the respective range of dimension.

The light of this power tool is intended to illuminate the power tool's direct area of working operation and is not suitable for household room illumination.

### Product Features

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

- 1 Tool holder
- 2 Locking sleeve
- 3 Carrying strap
- 4 Belt clip\*
- 5 Battery pack\*
- 6 Battery unlocking button\*
- 7 Rotational direction switch
- 8 On/Off switch
- 9 "PowerLight"
- 10 Handle (insulated gripping surface)
- 11 Screwdriver bit with ball catch\*
- 12 Universal bit holder\*
- 13 Screwdriver bit\*
- 14 Application tool (e. g. an impact socket)\*
- 15 Carbon brushes
- 16 Cover lid

\*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 Impact Screwdriver		GDR 14,4 V-LI	GDR 18 V-LI
Article number		3 601 JA1 4..	3 601 JA1 3..
Rated voltage	V=	14.4	18
No-load speed	min <sup>-1</sup>	0 – 2800	0 – 2800
Impact rate	min <sup>-1</sup>	0 – 3200	0 – 3200
Maximum torque, hard screwdriving application according to ISO 5393	Nm	150*	160*
Bolt size	mm	M6 – M14	M6 – M14
Tool holder		¼" hexagon socket	¼" hexagon socket
Weight according to EPTA-Procedure 01/2003	kg	1.5/1.7*	1.6/1.8*

Cordless Impact Screwdriver		GDS 14,4 V-LI	GDS 18 V-LI
Article number		3 601 JA1 T..	3 601 JA1 S..
Rated voltage	V=	14.4	18
No-load speed	min <sup>-1</sup>	0 – 2800	0 – 2800
Impact rate	min <sup>-1</sup>	0 – 3200	0 – 3200
Maximum torque, hard screwdriving application according to ISO 5393	Nm	170*	180*
Bolt size	mm	M6 – M16	M6 – M16
Tool holder		■ ½"	■ ½"
Weight according to EPTA-Procedure 01/2003	kg	1.5/1.7*	1.6/1.8*

English | 15

Cordless Impact Screwdriver		GDX 14,4 V-LI	GDX 18 V-LI
Article number		3 601 JB8 0..	3 601 JB8 1..
Rated voltage	V=	14.4	18
No-load speed	min <sup>-1</sup>	0 – 2800	0 – 2800
Impact rate	min <sup>-1</sup>	0 – 3200	0 – 3200
Maximum torque, hard screwdriving application according to ISO 5393			
– ¼" hexagon socket	Nm	150*	160*
– ½" socket	Nm	170	180
Bolt size	mm	M6 – M16	M6 – M16
Tool holder		¼" hexagon socket / ½"	¼" hexagon socket / ½"
Weight according to EPTA-Procedure 01/2003	kg	1.5/1.7*	1.6/1.8*

\*dependent of the battery pack being used

### Noise/Vibration Information

Measured sound values determined according to EN 60745.

Typically the A-weighted noise levels of the product are:  
Sound pressure level 96 dB(A); Sound power level 107 dB(A). Uncertainty K = 3 dB.

#### Wear hearing protection!

Vibration total values  $a_h$  (triax vector sum) and uncertainty K determined according to EN 60745:

Impact tightening of fasteners of the maximum capacity of the tool:  $a_h = 12 \text{ m/s}^2$ ,  $K = 1.5 \text{ m/s}^2$ .

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.

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 the following standards or standardisation documents: EN 60745 according to the provisions of the directives 2009/125/EC (Regulation 1194/2012), 2011/65/EU, 2004/108/EC, 2006/42/EC.

Technical file (2006/42/EC) at:  
Robert Bosch GmbH, PT/ETM9,  
D-70745 Leinfelden-Echterdingen

Henk Becker  
Executive Vice President  
Engineering

Helmut Heinzelmann  
Head of Product Certification  
PT/ETM9

*Henk Becker* *Helmut Heinzelmann*  
i.v.

Robert Bosch GmbH, Power Tools Division  
D-70745 Leinfelden-Echterdingen  
15.05.2013

## Assembly

### Battery Charging

► **Use only the battery chargers listed on the accessories page.** Only these battery chargers are matched to the lithium ion battery of your power tool.

**Note:** The battery is supplied 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.

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.

► **Do not continue to press the On/Off switch after the machine has been automatically switched off.** The battery can be damaged.

The battery is equipped with a NTC temperature control which allows charging only within a temperature range of between 0 °C and 45 °C. A long battery service life is achieved in this manner.

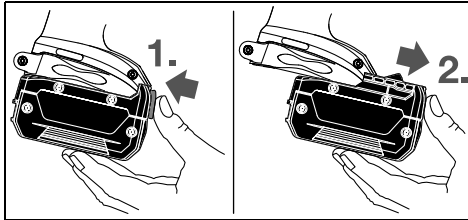
Observe the notes for disposal.

### 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 **6** unintentionally. As long as the battery is

## 16 | English

inserted in the power tool, it is held in position by means of a spring.



To remove the battery **5**, press the unlocking button **6** and pull out the battery toward the front. **Do not exert any force.**

### Changing the Tool (see figure A – C)

- ▶ **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.
- ▶ **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.

### GDR 14,4 V-LI/GDR 18 V-LI/GDX 14,4 V-LI/GDX 18 V-LI: Inserting

Pull the locking sleeve **2** forward, push the insert tool to the stop into the tool holder **1** and release the locking sleeve **2** to lock the insert tool.

Use only screwdriver bits with ball catch **11** (DIN 3126-E6.3). Other screwdriver bits **13** can be used with a universal bit holder with ball catch **12**.

### Removing

Pull the locking sleeve **2** forward and remove the insert tool.

### GDS 14,4 V-LI/GDS 18 V-LI/GDX 14,4 V-LI/GDX 18 V-LI:

- ▶ **When working with an application tool, pay attention that the application tool is connected securely on the tool holder.** When the application tool is not securely connected with the tool holder, it can come off during application.

Slide the application tool **14** onto the square drive of the tool holder **1**.

However based on the system, if the application tool **14** appears wobbly after connecting securely on the tool holder **1**; this has no influence on the function/safety.

## Operation

### Method of Operation

The tool holder **1** with the tool is driven by an electric motor via a gear and impact mechanism.

The working procedure is divided into two phases:

**Screwing in and tightening** (impact mechanism in action).

The impact mechanism is activated as soon as the screwed connection runs tight and thus load is put on the motor. In this

instance, the impact mechanism converts the power of the motor to steady rotary impacts. When loosening screws or nuts, the process is reversed.

## 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.

Set the rotational direction switch **7** to the centre position to protect the power tool against accidental starting.

Insert the charged battery **5** from the front into the base of the power tool until the battery is securely locked.

### Reversing the rotational direction (see figure D)

The rotational direction switch **7** is used to reverse the rotational direction of the machine. However, this is not possible with the On/Off switch **8** actuated.

**Right rotation:** For driving in screws and tightening nuts, press the rotational direction switch **7** through to the left stop.

**Left Rotation:** For loosening and unscrewing screws and nuts, press the rotational direction switch **7** through to the right stop.

### Switching On and Off

To **start** the machine, press the On/Off switch **8** and keep it pressed.

The power light **9** lights up when the On/Off switch **8** is slightly or completely pressed, and allows the work area to be illuminated when lighting conditions are insufficient.

To **switch off** the machine, release the On/Off switch **8**.

To save energy, only switch the power tool on when using it.

### Adjusting the Speed

The speed of the switched on power tool can be variably adjusted, depending on how far the On/Off switch **8** is pressed.

Light pressure on the On/Off switch **8** results in a low rotational speed. Further pressure on the switch results in an increase in speed.

### Working Advice

- ▶ **Apply the power tool to the screw/nut only when it is switched off.** Rotating tool inserts can slip off.

The torque depends on the impact duration. The maximum achieved torque results from the sum of all individual torques achieved through impact. The maximum torque is achieved after an impact duration of 6 – 10 seconds. After this duration, the tightening torque is increased only minimally.

The impact duration is to be determined for each required tightening torque. The actually achieved tightening torque is always to be checked with a torque wrench.

### Screw Applications with Hard, Spring-loaded or Soft Seat

When in a test, the achieved torques in an impact series are measured and transferred into a diagram, resulting in the curve of a torque characteristic. The height of the curve corresponds with the maximum reachable torque, and the steepness indicates the duration in which this is achieved.

A torque gradient depends on the following factors:

- Strength properties of the screws/nuts
- Type of backing (washer, disc spring, seal)
- Strength properties of the material being screwed/bolted together
- Lubrication conditions at the screw/bolt connection

The following application cases result accordingly:

- A **hard seat** is given for metal-to-metal screw applications with the use of washers. After a relatively short impact duration, the maximum torque is reached (steep characteristic curve). Unnecessary long impact duration only causes damage to the machine.

- A **spring-loaded seat** is given for metal-to-metal screw applications, however with the use of spring washers, disc springs, studs or screws/nuts with conical seat as well as when using extensions.
- A **soft seat** is given for screw applications, e. g., metal on wood or when using lead washers or fibre washers as backing.

For a spring-loaded seat as well as for a soft seat, the maximum tightening torque is lower than for a hard seat. Also, a clearly longer impact duration is required.

### Reference Values for Maximum Screw/Bolt Tightening Torques

Calculated from the tensional cross-section; utilization of the yield point 90 % (with friction coefficient  $\mu_{\text{total}} = 0.12$ ). As a control measure, always check the tightening torque with a torque wrench.

Property Classes according to DIN 267	Standard Screws/Bolts								High-strength Bolts			
	3.6	4.6	5.6	4.8	6.6	5.8	6.8	6.9	8.8	10.9	12.9	
M 6	2.71	3.61	4.52	4.8	5.42	6.02	7.22	8.13	9.7	13.6	16.2	
M 8	6.57	8.7	11	11.6	13.1	14.6	17.5	19.7	23	33	39	
M 10	13	17.5	22	23	26	29	35	39	47	65	78	
M 12	22.6	30	37.6	40	45	50	60	67	80	113	135	
M 14	36	48	60	65	72	79	95	107	130	180	215	
M 16	55	73	92	98	110	122	147	165	196	275	330	

### Tips

Before screwing larger, longer screws into hard materials, it is advisable to predrill a pilot hole with the core diameter of the thread to approx.  $\frac{2}{3}$  of the screw length.

**Note:** Pay attention that no metal particles enter the power tool.

### Belt Clip

With the belt clip **4**, the machine can be hung onto a belt. The user has both hands free and the machine is always at hand.

### Recommendations for Optimal Handling of the Battery

Protect the battery against moisture and water.

Store the battery only within a temperature range between 0 °C and 50 °C. As an example, do not leave the battery in the car in summer.

Occasionally clean the venting slots of the battery using a soft, clean and dry brush.

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.**

### Replacing the Carbon Brushes (see figure E)

Check the length of the carbon brushes approx. every 2 – 3 months and replace the carbon brushes if required.

Never replace only a single carbon brush!

**Note:** Use only carbon brushes supplied by Bosch and intended specifically for your product.

- Unscrew the caps **16** using a suitable screwdriver.
- Replace the spring-loaded carbon brushes **15** and screw the caps back on again.

### 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 order, please always include the 10-digit article number given on the type plate of the machine.

## 18 | English

**Great Britain**

Robert Bosch Ltd. (B.S.C.)  
 P.O. Box 98  
 Broadwater Park  
 North Orbital Road  
 Denham  
 Uxbridge  
 UB 9 5HJ  
 Tel. Service: (0844) 7360109  
 Fax: (0844) 7360146  
 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

**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 environmental-friendly 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:

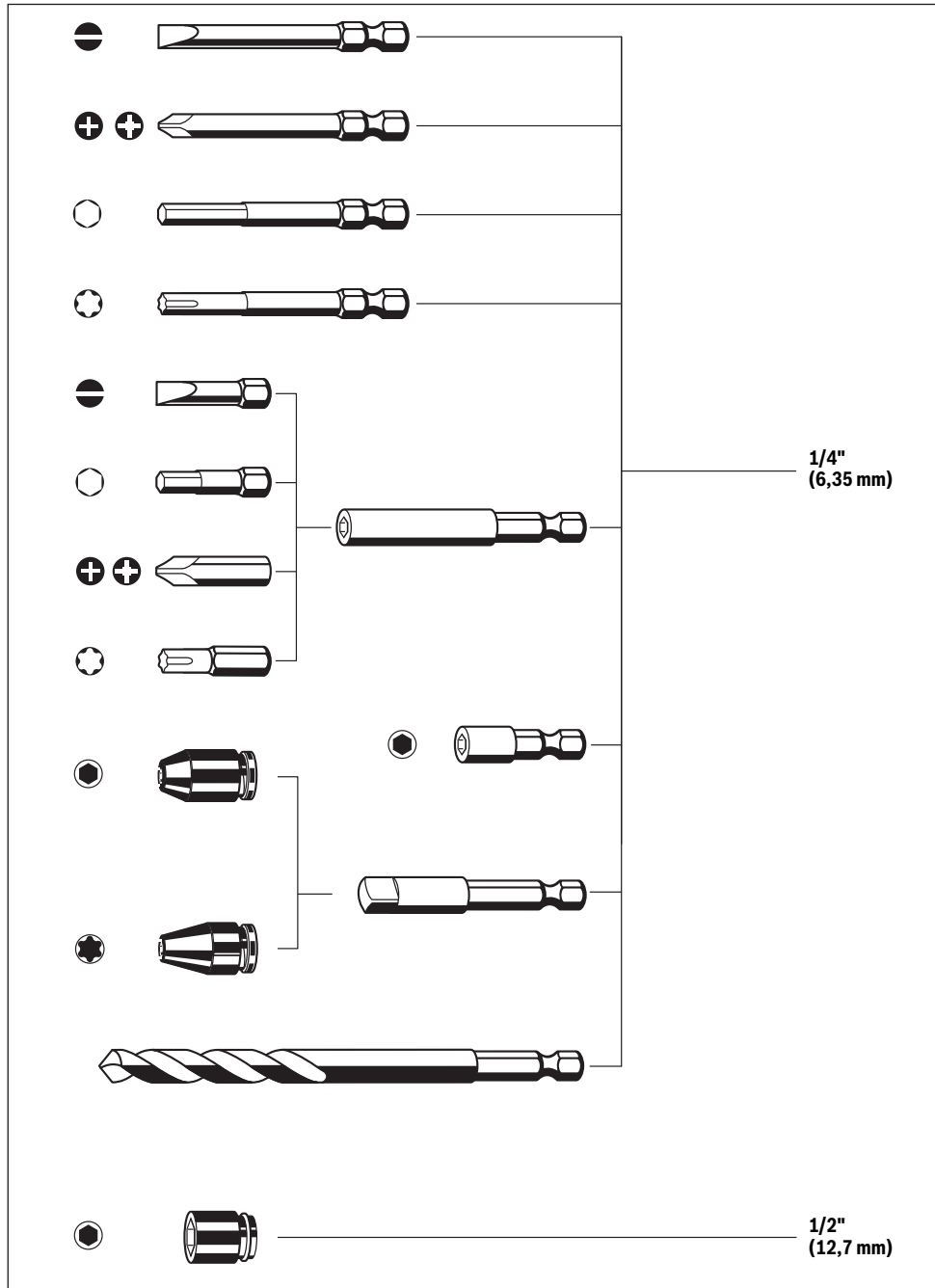
**Great Britain**

Robert Bosch Ltd. (B.S.C.)  
 P.O. Box 98  
 Broadwater Park  
 North Orbital Road  
 Denham  
 Uxbridge  
 UB 9 5HJ  
 Tel. Service: (0844) 7360109  
 Fax: (0844) 7360146  
 E-Mail: boschservicecentre@bosch.com

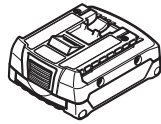
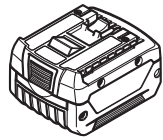
**Battery packs/batteries:****Li-ion:**

Please observe the instructions in section "Transport", page 18.

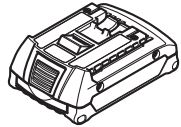
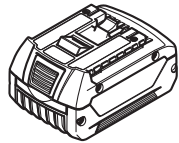
**Subject to change without notice.**



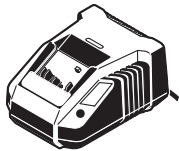




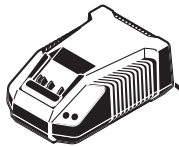
**14,4 V (Li-Ion)**



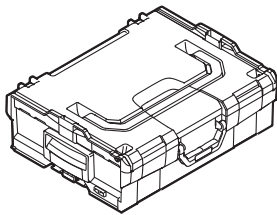
**18 V (Li-Ion)**



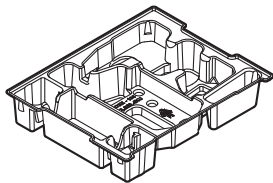
**AL 1820 CV  
(14,4 / 18 V)**  
2 607 225 424 (EU)  
2 607 225 426 (UK)



**AL 1860 CV  
(14,4 / 18 V)**  
2 607 225 322 (EU)  
2 607 225 324 (UK)



**L-BOXX 136**  
2 608 438 692



**GDR 14,4 V-LI/GDR 18 V-LI/  
GDS 14,4 V-LI/GDS 18 V-LI:**  
2 608 438 007