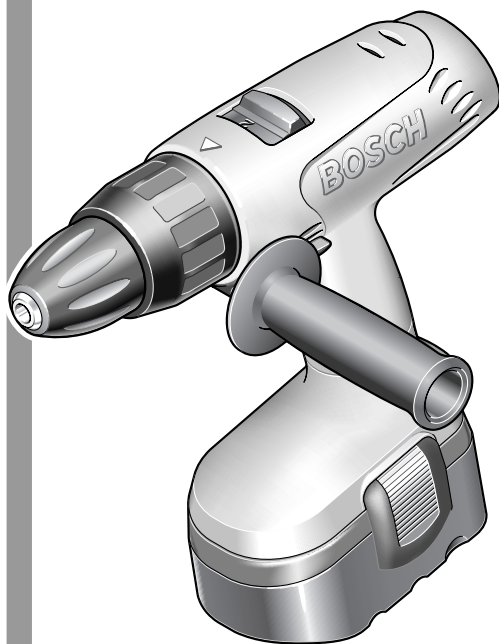


Bedienungsanleitung
Operating instructions
Instructions d'emploi
Instrucciones de servicio
Manual de instruções
Istruzioni d'uso
Gebruiksaanwijzing
Betjeningsvejledning
Bruksanvisning
Brukerveiledningen
Käyttöohje
Οδηγία χειρισμού
Kullanım kılavuzu

BOSCH
Ideas that work.

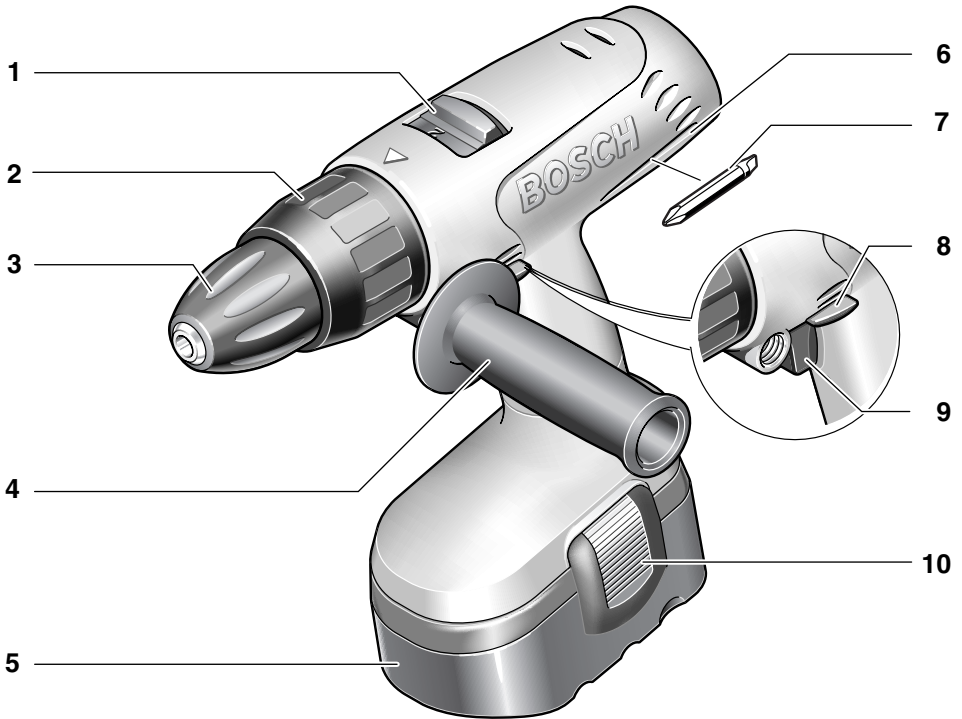
* Des idées en action.

PSB 12 VE-2 PSB 14,4 VE-2 PSB 18 VE-2 PSB 24 VE-2

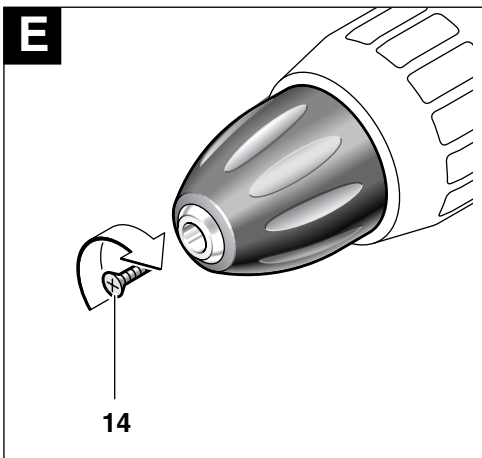
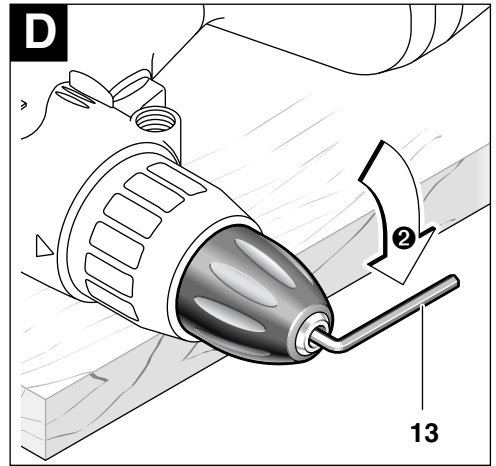
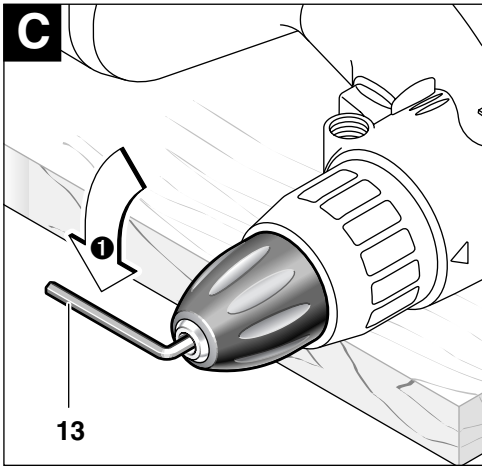
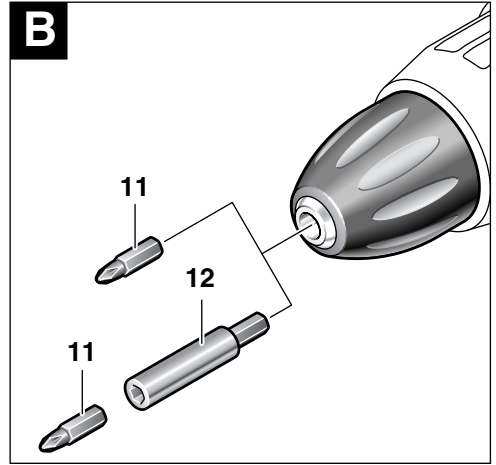
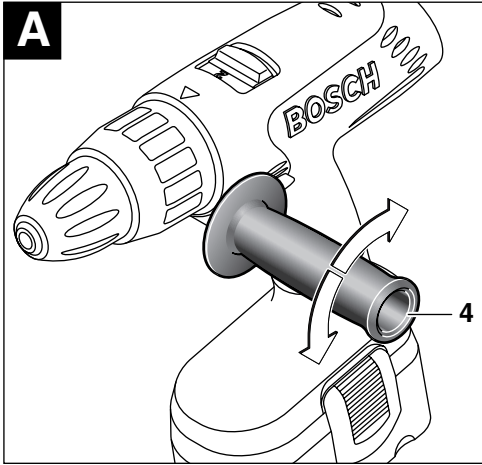


Deutsch
English
Français
Español
Português
Italiano
Nederlands
Dansk
Svenska
Norsk
Suomi
Ελληνικά
Türkçe





PSB 18 VE-2
PSB 24 VE-2



Tool Specifications

Cordless impact drill and screwdriver

		PSB 12 VE-2	PSB 14,4 VE-2	PSB 18 VE-2	PSB 24 VE-2
Order number		0 603 941 5..	0 603 941 4..	0 603 941 3..	0 603 941 2..
No-load speed					
1st gear	[rpm]	0–400	0–400	0–450	0–500
2nd gear	[rpm]	0–1 500	0–1 500	0–1 600	0–1 800
max. torque, soft screwdriving application according to ISO 5393					
	[Nm]	18	20	23	30
Maximum drilling Ø					
Steel	[mm]	12	12	13	13
Wood	[mm]	20	25	28	30
Brickwork	[mm]	10	10	14	15
Screw diameter, max.	[mm]	6	8	8	8
Chuck clamping range	[mm]	1–10	1–10	1–10	1–13
Drill spindle thread		1/2 "	1/2 "	1/2 "	1/2 "
Weight with battery, approx.	[kg]	2.1	2.2	2.3	2.7

Battery

		NiCd	NiCd	NiCd	NiCd
Temperature control		NTC	NTC	NTC	NTC
Rated voltage	[V=]	12	14.4	18	24
Capacity	[Ah]	1.5	1.5	1.5	1.5
Weight, approx.	[kg]	0.6	0.7	0.8	1.1

Please observe the order number of your machine. The trade names of the individual machines may vary.

Machine Elements

The numbering of the device elements refers to the illustration of the machine on the graphics page.

- 1 Gear selector
- 2 Torque setting ring
- 3 Keyless chuck
- 4 Auxiliary handle (PSB 18 VE-2/PSB 24 VE-2)
- 5 Battery
- 6 Screwdriver bit magazine
- 7 Screwdriver bit*
- 8 Rotational direction switch
- 9 On/Off switch
- 10 Battery unlocking button
- 11 Screwdriver attachment (bit)*
- 12 Universal bit holder*
- 13 Allen key*
- 14 Locking screw

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

Noise/Vibration Information

Measured values determined according to EN 60 745.

Typically the A-weighted sound pressure level of the product is less than 70 dB (A).

The noise level when working can exceed 85 dB (A).

Wear hearing protection!

The typical hand/arm vibration is below 2.5 m/s².

Intended Use

The machine is intended for screwing in and loosening screws, for drilling in wood, metal, ceramic and plastic and for impact drilling in brick, concrete and stone.



For Your Safety

Working safely with this machine is possible only when the operating and safety information are read completely and the instructions contained therein are strictly followed. In addition, the general safety notes in the enclosed booklet must be observed.

- Wear safety goggles.
- For long hair, wear hair protection. Work only with closely fitting clothes.
- Before each use, check the machine and battery. If damage is detected, do not use the machine. Have repairs performed only by a qualified technician. Never open the machine yourself.
- **Before any work on the machine itself (e. g. maintenance, tool change, etc.) as well as when transporting and storing, always set the rotational direction switch to the centre position.** Otherwise danger of injury is given when unintentionally actuating the On/Off switch.
- Convince yourself before using that the battery is securely seated in the machine.
- Do not strain the machine so heavily that it comes to a standstill.
- **PSB 18 VE-2/PSB 24 VE-2:** Operate the machine only with the auxiliary handle 4. When working with the machine, always hold it firmly with both hands and provide for a secure stance.
- **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.
- Hold the power tool securely: When tightening or releasing screws, high reaction torque can briefly occur.
- **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- Never allow children to use the machine.
- Bosch is only able to ensure perfect operation of the machine if the original accessories intended for it are used.

Battery and Battery Charger

- **The enclosed operating instructions for the battery charger must be read carefully!**
- Do not open the battery, and protect it from impact. Store in a dry and frost-free place.
- Allow a heated battery to cool before charging.
- Protect the battery from heat and fire: Danger of explosion!
- Do not dispose of the battery in household waste or discard into fire or water.

Before Putting into Operation

Battery Charging

A battery that is new or has not been used for a longer period does not develop its full capacity until after approximately 5 charging/discharging cycles.

To remove the battery 5, press the unlocking buttons 10 and pull out the battery to the rear. Do not exert any force.

The battery is equipped with an 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.

A significantly reduced working period after charging indicates that the batteries are used and must be replaced.

- Observe the notes on environmental protection.

Auxiliary Handle (see figure A) (PSB 18 VE-2/PSB 24 VE-2)

- Operate the machine only with the auxiliary handle 4.

Screw the auxiliary handle 4 on the right or left of the machine head depending on the working method.

Changing the Tool

Open the drill chuck **3** by turning until the tool can be inserted. Insert the tool.

Firmly tighten the sleeve of the keyless chuck **3** by hand until the locking action ("click") is no longer heard. This automatically locks the chuck.

Rotate the sleeve in the reverse direction to remove the tool.

Screwdriving (see figure **B**)

Directly clamp the screwdriver bit **7** into the drill chuck or use the additional universal bit holder **12** when operating with hex shank bits **11**.

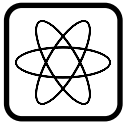
Starting Operation

Inserting the Battery

Set the rotational direction switch **8** to the centre position = lock-off and allow the charged battery **5** to engage into the handle.

Switching On and Off

To **start** the machine, press the On/Off switch **9** and keep it depressed.



The machine runs with variable speed between 0 and maximum, depending on the pressure applied to the On/Off switch **9**. Light pressure results in a low rotational speed thus allowing smooth, controlled starts. Do not strain the machine so heavily that it comes to a standstill.

To **switch off** the machine, release the On/Off switch **9**.

Electric Brake

When releasing the On/Off switch **9** the speed of the drill chuck is reduced to a stop, thus preventing the run-on of the tool.

For screwdriving applications, wait until the screw is flush with the material and then release the On/Off switch **9**. The screw head does not penetrate into the material then.

Gear Selection, Mechanical

Two speed ranges can be preselected with the gear selector **1**:

1st gear: Low rotational speed, high power.

2nd gear: High rotational speed, less power.

The speed settings may only be changed when the machine is motionless. If the speed setting has not quite notched in properly, briefly press the On/Off switch **9**.


Fully Automatic Spindle Locking (Auto-Lock)

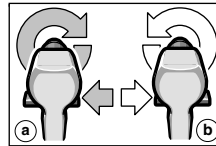
The drill spindle is locked when the On/Off switch **9** is not pressed.

This makes quick and easy changing of the tool in the drill chuck possible.

The locked drill chuck enables retightening of projecting screws by using the switched-off machine as a screwdriver.

Reversing the Rotational Direction

 **Operate the rotational direction switch **8** only at a standstill.**



The rotational direction switch **8** is used to reverse the rotational direction of the machine. However, this is not possible with the On/Off switch **9** actuated.

Right Rotation (**a**)

Turn the rotational direction switch through to the left stop (normal operation: drilling, screwdriving, etc.).

Left Rotation (**b**)

Press the rotational direction switch through to the right stop (for loosening and unscrewing screws and nuts).

Setting the Torque

Carry out a practical test to determine with which of the 5 settings of the torque setting ring **2** the screws are driven flush into the material.

1 Low setting, e. g., small screws, soft materials.

5 High setting, e. g., large screws, hard materials.

With the correct setting, the clutch disengages as soon as the screw is driven flush into the material or the set torque is reached. Select a higher setting when driving out screws, or set to the “Drilling” symbol.

Drilling and Impact Drilling



Drilling

Set the torque setting ring **2** to the “Drilling” symbol.



Impact Drilling

Set the torque setting ring **2** to the “Hammer Drilling” symbol.

Replacing the Drill Chuck

■ **Before any work on the machine itself, remove the battery.**

The locking screw **14** secures the drill chuck against loosening from the drill spindle. Fully open the drill chuck and completely unscrew the locking screw **14** by turning in clockwise direction (see figure **E**).

Loosening the Drill Chuck (see figure **C**)

Place the machine on a stable surface (e. g. workbench). Hold the machine firmly and loosen the chuck by turning to the left, as when unscrewing a screw (**1**). Loosen a tight chuck by giving the long end of the Allen key **13** a sharp blow.

Tightening the Drill Chuck (see figure **D**)

The drill chuck is mounted in reverse order (**2**).

Tips

- Use only screwdriver bits that fit properly in the head of the screw.
- When driving in larger and/or longer screws in hard material, it is advisable to drill a pilot hole first.
- For drilling in metal, use only perfectly sharpened HSS drills. The appropriate quality is guaranteed by the Bosch accessories program.

Maintenance and Cleaning

- **Before any work on the machine itself, remove the battery.**
- ✎ For safe and proper working, always keep the machine and the ventilation slots clean.

If the machine should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an after-sales service centre for Bosch power tools.

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

Environmental Protection

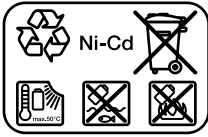


Recycle raw materials instead of disposing as waste

The machine, accessories and packaging should be sorted for environmental-friendly recycling.

These instructions are printed on recycled paper manufactured without chlorine.

The plastic components are labelled for categorized recycling.



Nickel-cadmium-battery: If your product is equipped with a nickel-cadmium-battery, the battery must be collected, recycled or disposed of in an environmentally-friendly way.

Defective or worn out batteries must be recycled according to the guidelines 91/157/EEC.

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
 Middlesex UB 9 5HJ

☎ Service +44 (0) 18 95 / 83 87 82
 ☎ Advice line +44 (0) 18 95 / 83 87 91
 Fax +44 (0) 18 95 / 83 87 89

Service and Customer Assistance

Exploded views and information on spare parts can be found under:
www.bosch-pt.com

Great Britain

Robert Bosch Ltd. (B.S.C.)
 P.O. Box 98
 Broadwater Park
 North Orbital Road
 Denham-Uxbridge
 Middlesex UB 9 5HJ

☎ Service +44 (0) 18 95 / 83 87 82
 ☎ Advice line +44 (0) 18 95 / 83 87 91
 Fax +44 (0) 18 95 / 83 87 89

Ireland

Beaver Distribution Ltd.
 Greenhills Road
 Tallaght-Dublin 24

☎ Service +353 (0)1 / 414 9400
 Fax +353 (0)1 / 459 8030

Australia

Robert Bosch Australia Ltd.
 RBAU/SPT2
 1555 Centre Road
 P.O. Box 66 Clayton
 3168 Clayton/Victoria

☎ +61 (0)1 / 800 804 777
 Fax..... +61 (0)1 / 800 819 520
www.bosch.com.au
 E-Mail: CustomerSupportSPT@au.bosch.com

New Zealand

Robert Bosch Limited
 14-16 Constellation Drive
 Mairangi Bay
 Auckland
 New Zealand

☎ +64 (0)9 / 47 86 158
 Fax..... +64 (0)9 / 47 82 914

CE Declaration of Conformity

We declare under our sole responsibility that this product is in conformity with the following standards or standardization documents. EN 60 745 (Battery powered products) and EN 60 335 (Battery charger) according to the provisions of the directives 73/23/EEC, 89/336/EEC, 98/37/EC.

CE 04

Dr. Egbert Schneider
 Senior Vice President
 Engineering

Dr. Eckerhard Strötgen
 Head of Product
 Certification

Robert Bosch GmbH, Geschäftsbereich Elektrowerkzeuge

Subject to change without notice

BOSCH
Ideas that work.

* Des idées en action.



Robert Bosch GmbH
Geschäftsbereich Elektrowerkzeuge
70745 Leinfelden-Echterdingen
www.bosch-pt.com

2 609 932 336 (04.02) O / 72
Printed in Switzerland - Imprimé en Suisse