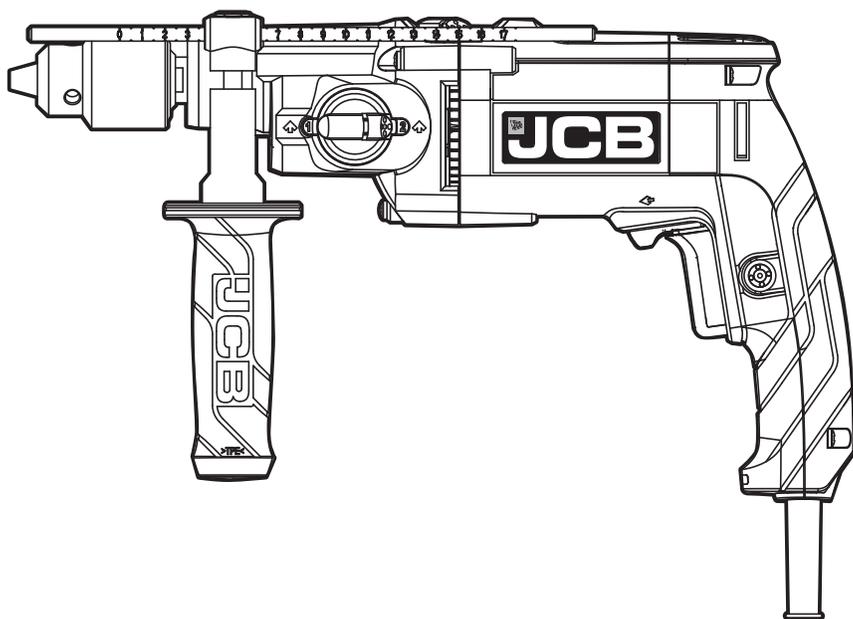


**JCB**

Safety and operating manual

# Hammer Drill JCB-HD900-2





# ORIGINAL INSTRUCTIONS

## GENERAL POWER TOOL SAFETY WARNINGS



**WARNING!** Read all safety warnings and all instructions.

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

**Save all warnings and instructions for future reference.**

The term "power tool" in the warnings refers to your electric (corded) power tool or battery-operated (cordless) power tool.

### 1. Work area safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **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.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

### 2. Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.

b) **Avoid body contact with grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.

c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool.** Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

e) **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.

f) **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.

### 3. Personal safety

- a) **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.

**b) 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.

**c) 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.

**d) 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.

**e) Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

**f) 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.

**g) 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.

#### **4. Power tool use and care**

**a) 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.

**b) 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.

**c) 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.

**d) 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.

**e) 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.

f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) **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.

## **5. Service**

a) **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.

b) **If the replacement of the supply cord is necessary, this has to be done by the manufacturer or its agent in order to avoid a safety hazard.**

## **HAND DRILL SAFETY INSTRUCTIONS**

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

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

3. **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

# SYMBOLS



To reduce the risk of injury, user must read instruction manual



Double insulation



Wear ear protection



Wear eye protection

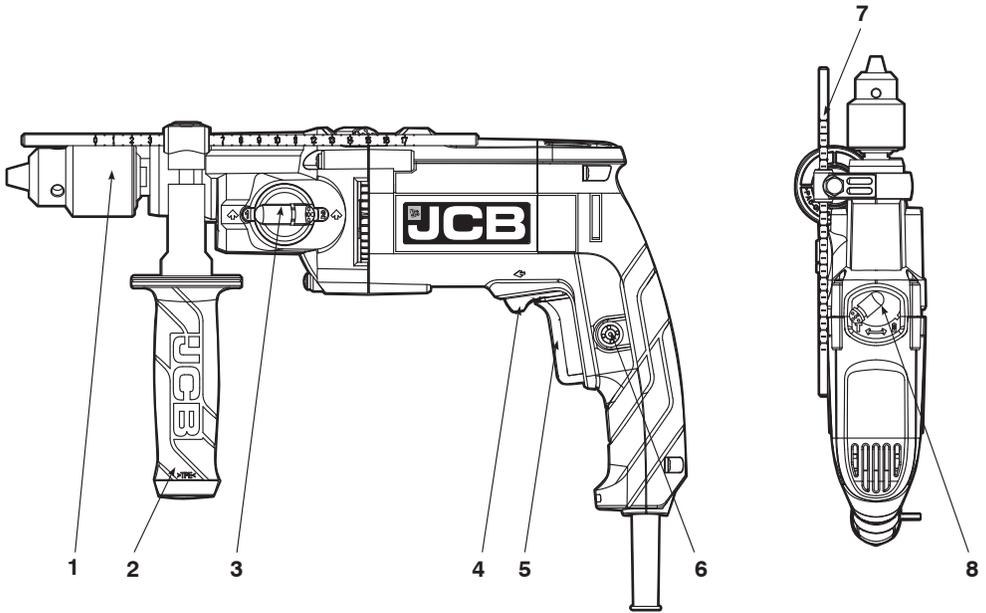


Wear dust mask



This product has been marked with a symbol relating to removing electric and electronic waste. This means that this product shall not be discarded with household waste but that it shall be returned to a collection system which conforms to the European Directive 2002/96/CE. It will then be recycled or dismantled in order to reduce the impact on the environment. Electric and electronic equipment can be hazardous for the environment and for human health since they contain hazardous substances.

# COMPONENT LIST



<b>1. KEYED CHUCK</b>
<b>2. AUXILIARY HANDLE</b>
<b>3. GEARBOX SWITCH</b>
<b>4. FORWARD AND REVERSE ROTATION CONTROL</b>
<b>5. ON/OFF SWITCH</b>
<b>6. SWITCH LOCK-ON BUTTON</b>
<b>7. DEPTH STOP</b>
<b>8. HAMMER DRILL OR DRILL SELECTOR</b>
<b>9. CHUCK KEY (See E2)</b>

# TECHNICAL DATA

Voltage		220-240V~50Hz
Rated power		900W
Rated no load speed	Gear 1	0-1,400/min
	Gear 2	0-2,700/min
Rated impact rate	Gear 1	0-22400bpm
	Gear 2	0-43200bpm
Protection class		□ /II
Chuck capacity max.		13mm
Drilling capacity max	Steel	13mm
	Masonry	20mm
	Wood	40mm
Machine weight		3.1Kg

## NOISE INFORMATION

A weighted sound pressure  $L_{pA}$ : 97.5 dB(A)

A weighted sound power  $L_{wA}$ : 108.5dB(A)

$K_{pA}$  &  $K_{wA}$ =3.0dB(A)

Wear ear protection when sound pressure is over: 80dB(A) 

## VIBRATION INFORMATION

Vibration total values (triax vector sum) determined according to EN 60745:

Impact drilling into concrete	Vibration emission value $a_h = 5.7 \text{ m/s}^2$
	Uncertainty $K = 1.5\text{m/s}^2$

Drilling into metal	Vibration emission value $a_h = 12.4\text{m/s}^2$
	Uncertainty $K = 1.5\text{m/s}^2$



**WARNING:** The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is

used dependant on the following examples and other variations on how the tool is used:  
How the tool is used and the materials being cut or drilled.  
The tool being in good condition and well maintained.  
To use the correct accessory for the tool and ensure it is sharp and in good condition.  
The tightness of the grip on the handles and if any anti vibration accessories are used.  
And the tool is being used as intended by its design and these instructions.

**This tool may cause hand-arm vibration syndrome if its use is not adequately managed.**



**WARNING:** To be accurate, an estimation of exposure level in the actual conditions of use should also take account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Helping to minimize your vibration exposure risk.

ALWAYS use sharp chisels, drills and blades.

Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate).

If the tool is to be used regularly then invest in anti vibration accessories.

Avoid using tools in temperatures of 10°C or less.

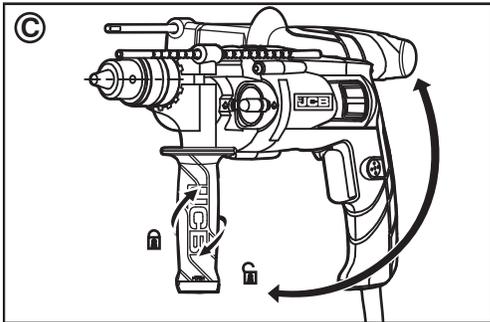
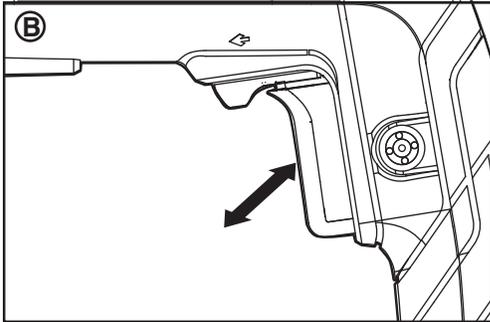
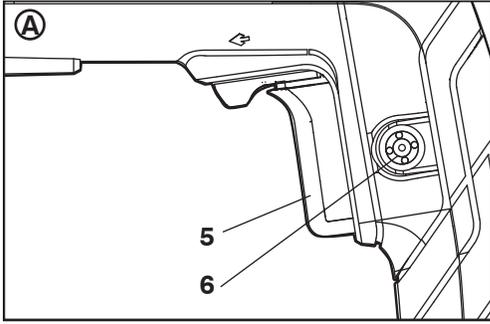
Plan your work schedule to spread any high vibration tool use across a number of days.

## ACCESSORIES

Auxiliary handle	1
Metal depth gauge	1
Chuck key	1

We recommend that you purchase your accessories from the same store that sold you the tool. Use good quality accessories marked with a well-known brand name. Choose the type according to the work you intend to undertake. Refer to the accessory packaging for further details. Store personnel can assist you and offer advice.

# OPERATING INSTRUCTIONS



**NOTE:** Before using the tool, read the safety and operating manual carefully.

## INTENDED USE

The machine is intended for impact drilling in brick, concrete and stone as well as for drilling in wood, metal and plastic.

### 1. ON/OFF SWITCH

Depress to start and release to stop your tool.

### 2. SWITCH LOCK-ON BUTTON

Depress on/off switch (5) then lock on button (6) (See A), release on/off switch first and lock-on button second. Your switch is now locked on for continuous use. To switch off your tool just depress and release the on/off switch.

### 3. FORWARD AND REVERSE ROTATION CONTROL

For drilling and screwdriving use forward rotation marked “←” (lever is moved to the left). Only use reverse rotation marked “→” (lever is moved to the right) to remove screws or release a jammed drill bit (See B).

**Never change the direction of rotation when the tool is rotating, wait until it has stopped.**

#### 4. AUXILIARY HANDLE

Slide the handle onto the drill and rotate to the desired working position. To clamp the auxiliary handle rotate the handgrip clockwise. To loosen the auxiliary handle, rotate the hand grip anti-clockwise. Always use the auxiliary handle (See C).

#### 5. DEPTH STOP

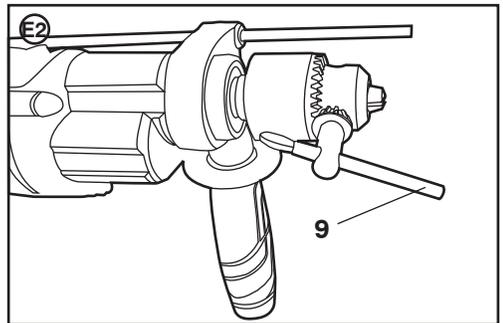
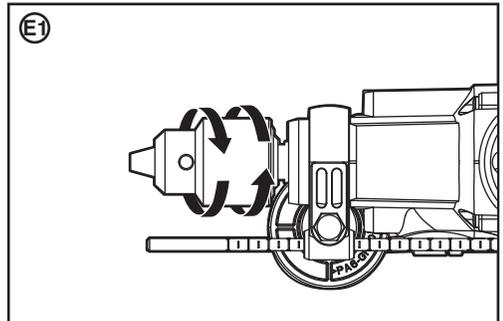
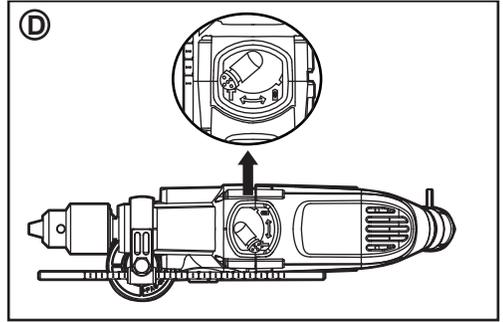
Fit the drill bit or driver bit into the chuck. Loosen the depth stop by rotating the handle grip anti-clockwise. Slide the depth stop until the distance between the depth stop end and the drill/driver bit end is equal to the depth of hole/screw you wish to make. Then clamp the depth stop by rotating the handle clockwise.

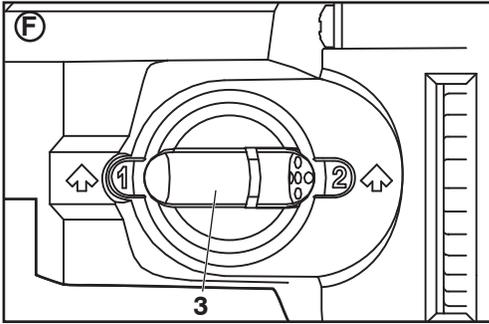
#### 6. HAMMER OR DRILLING CONTROL

When drilling masonry and concrete choose the Hammer position.  When drilling wood, metal, plastic and screwdriving choose the Drill position.  (See D)

#### 7. INSERTING TOOLS KEYED CHUCK

Insert tool and tighten equally in all 3 bores with chuck key (9). Rotate chuck key (9) clockwise to tighten the chuck, and rotate it anti-clockwise to loosen the chuck. (See E1, E2)





## 8. GEARBOX SWITCH

Choose position 1 for high torque/ low speed range for large diameter drill bits and screw driving. Choose position 2 for low torque/ High-speed range for small diameter drill bits. If the gears do not engage easily then rotate the chuck by hand to align the gears. Never change the gears when the tool is rotating, wait until it has stopped. (See F)

## WORKING HINTS FOR YOUR HAMMER DRILL

If your power tool becomes too hot, set the speed to maximum and run no load for 2-3 minutes to cool the motor. Tungsten carbide drill bits should always be used for concrete and masonry. When drilling in metal, only use HSS drill bits in good condition. Always use a magnetic bit holder when using short screwdriver bits.

Where possible use a pilot hole before drilling a large diameter hole.

## MAINTENANCE

**Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.**

Your power tool requires no additional lubrication or maintenance.

There are no user serviceable parts in your power tool. Never use water or chemical cleaners to clean your power tool. Wipe clean with a dry cloth. Always store your power tool in a dry place. Keep the motor ventilation slots clean. Keep all working controls free of dust. Occasionally you may see sparks through the ventilation slots. This is normal and will not damage your power tool. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

## ENVIRONMENTAL PROTECTION



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authorities or retailer for recycling advice.

# PLUG REPLACEMENT (UK & IRELAND ONLY)

If you need to replace the fitted plug then follow the instructions below.

## IMPORTANT

The wires in the mains lead are colored in accordance with the following code:

**Blue – Neutral**

**Brown – Live**

As the colors of the wires in the mains lead of this appliance may not correspond with the colored markings identifying the terminals in your plug, proceed as follows. The wire which is colored blue must be connected to the terminal which is marked with N. The wire which is colored brown must be connected to the terminal which is marked with L.

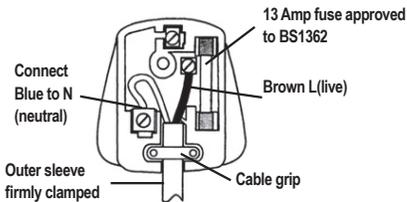


### Warning:

Never connect live or neutral wires to the earth terminal of the plug. Only fit an approved BS1363/A plug and the correct rated fuse.

Note: If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket.

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# WARRANTY STATEMENT

## A product of hard work

In every corner of the world you'll find a JCB machine. Since our beginnings in 1945, we have always invested heavily in research and development, keeping JCB at the cutting edge of innovation. Today, JCB has some of the finest engineering facilities across the globe, producing a range of over 300 machines and maintains a reputation for unrivaled customer service. The same innovation to always get the job done better, the same quality to never let you down, the same engineering heritage and expertise that you can trust, can be found in JCB Power Tools. JCB power tools are guaranteed against manufacturing defects for a period of 3 years from the date of purchase.

If your JCB power tool becomes defective within this warranty period, we guarantee to:

- Replace or repair all defective parts, free of charge, or
- Repair products free of charge, or
- Replace the unit with a new or re-conditioned unit, free of charge.

## Conditions

Your 3 year guarantee does not cover defects caused by or resulting from:

- overload, misuse, or neglect
- normal wear and tear, including accessory wear
- hire use
- repairs attempted by anyone other than an authorised agent
- damage caused by foreign objects, substances or accidents

Your 3 year guarantee does not cover:

- battery packs as they are guaranteed for a 12 month period
- accessories supplied with the power tool.

## Warranty claims

For guarantee claims, please contact JCB Customer Services. You will be required to submit proof of purchase.

## JCB CUSTOMER HELPLINE 0333 0143092

### Terms

This guarantee does not affect your statutory rights. JCB SO53 3LE (Registered in England under No. 973387).

# EC DECLARATION OF CONFORMITY

We,  
**Positec Power Tools (Europe) Ltd**  
PO Box 6242, Newbury, RG14 9LT, UK

Declare that the product  
Description

**JCB Hammer Drill**

Type

**(JCB-HD900-2)**

Function

**Boring holes in various materials**

Complies with the following Directives,

EC Machinery Directive

**2006/42/EC**

EC Low Voltage Directive

**2014/35/EU**

EC Electromagnetic Compatibility Directive

**2014/30/EU**

RoHS directive

**2011/65/EU**

Standards conform to

**EN 55014-1**

**EN 55014-2**

**EN 60745-1**

**EN 60745-2-1**

**EN 61000-3-3**

**EN 61000-3-2**

The person authorised to compile the technical file,

**Name: Russell Nicholson**

**Address: Positec Power Tools (Europe) Ltd**

**PO Box 6242, Newbury, RG14 9LT, UK**



**Suzhou 2016/01/11**

**Allen Ding**

**Deputy Chief Engineer, Testing & Certification**