INSTRUCTION MANUAL

DEWALL

DWD024S-XE

VARIABLE SPEED REVERSIBLE PERCUSSION DRILL

Definitions: Safety Guidelines

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.

ADANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

AWARNING: Indicates a potentially hazardous situation which, if not avoided, **could** result in **death or serious injury**.

ACAUTION: Indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury**.

NOTICE: Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **may** result in **property**

IF YOU HAVE ANY QUESTIONS OR COMMENTS ABOUT THIS OR ANY DEWALT TOOL, CALL US AT: 1800 654 155 (Aust) or 0800 339258 (NZ).

SAFETY INSTRUCTIONS FOR POWER TOOLS

When using power tools, always observe the safety regulations applicable in your country to reduce the risk of fire, electric shock and personal injury. Read the following safety instructions before attempting to operate this product. Keep these instructions in a safe place.



WARNING: To reduce the risk of injury, read the instruction manual.

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.

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 earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) 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.
- 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.

Electrical Safety

The electric motor has been designed for one voltage only. Always check that the power supply corresponds to the voltage on the rating plate. 230 V AC means your tool will operate on alternating current. As little as 10% lower voltage can cause loss of power and can result in overheating. All DEWALT tools are factory tested; if this tool does not operate, check the power supply. Your DEWALT tool is double insulated, therefore no earth wire is required.

- Young children and the infirm. This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with this appliance.
- Replacement of the supply cord. If the supply cord is damaged, it must be replaced by the manufacturer or an authorised DEWALT Service Centre in order to avoid a hazard.

Extension Cords

ACAUTION: Use only extension cords that are approved by the country's Electrical Authority. Before using extension cords, inspect them for loose or exposed wires, damaged insulation and defective fittings. Replace the cord if necessary.

| MINIMUM GAUGE FOR CORD SETS | | | | | | | | |
|---|----------------|-----|-----|-----|-----|-----|--|--|
| For Cable length (| m): 7.5 | 15 | 25 | 30 | 45 | 60 | | |
| Use Cable with minimum rating (Amperes) Tool Amperes | | | | | | | | |
| 0 - 3.4 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | | |
| 3.5 - 5.0 | 7.5 | 7.5 | 7.5 | 7.5 | 10 | 15 | | |
| 5.1 - 7.0 | 10 | 10 | 10 | 10 | 15 | 15 | | |
| 7.1 - 12.0 | 15 | 15 | 15 | 15 | 20 | 20 | | |
| 12.1 - 20.0 | 20 | 20 | 20 | 20 | 25 | _ | | |

Additional Safety Instructions for Drills

- Wear ear protectors. Exposure to noise can cause hearing loss.
- Use auxiliary handles supplied with the tool. Loss of control can cause personal injury.
- Hold power tool by insulated gripping surfaces only, 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 shock the operator.
- Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- Wear safety goggles or other eye protection. Drilling operations cause chips to fly. Flying particles can cause permanent eye damage.
- · Bits and tools get hot during operation. Wear gloves when touching them.
- Keep handles dry, clean, free from oil and grease. it is recommended to use rubber gloves. This will enable better control of the tool.

AWARNING: ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:

- ANSI Z87.1 eye protection (CAN/CSA Z94.3),
- ANSI S12.6 (S3.19) hearing protection.
- NIOSH/OSHA/MSHA respiratory protection.

AWARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- · lead from lead-based paints,
- · crystalline silica from bricks and cement and other masonry products, and
- · arsenic and chromium from chemically-treated lumber (CCA).

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

 Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

AWARNING: Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

A WARNING: ALWAYS wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

AWARNING: We recommend the use of a residual current device with a residual current rating of 30mA or less.

 The label on your tool may include the following symbols. The symbols and their definitions are as follows:

| V | volts | Α | .amperes |
|-------------|-----------------------|----------|--------------------------------|
| Hz | hertz | W | .watts |
| min | minutes | ∼ | alternating current. |
| | | ≂ | alternating or direct current. |
| Ū | Class I Construction | n_0 | .no load speed |
| | (grounded) | ⊕ | earthing terminal. |
| □ | Class II Construction | A | .safety alert symbol |
| | (double insulated) | BPM | beats per minute. |
| /min | per minute | RPM | revolutions per minute. |

Residual Risks

The following risks are inherent to the use of drills:

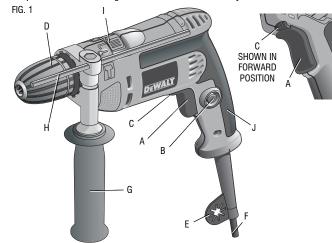
- Injuries caused by touching the rotating parts or hot parts of the tool.
 In spite of the application of the relevant safety regulations and the implementation of safety devices, certain residual risks cannot be avoided. These are:
- Impairment of hearing.
- Risk of squeezing fingers when changing accessories.
- Health hazards caused by breathing dust developed when working in wood.

- Risk of personal injury due to flying particles.
- Risk of personal injury due to prolonged use.

SAVE THESE INSTRUCTIONS FOR FUTURE USE

Motor

Your DEWALT tool is powered by a DEWALT-built motor. Be sure your power supply agrees with the nameplate markings. Voltage decrease of more than 10% will cause loss of power and overheating. All DEWALT tools are factory tested.



COMPONENTS (Fig. 1)

A WARNING: Never modify the power tool or any part of it. Damage or personal injury could result.

- A. Variable speed trigger switch
- B. Lock-on button

- G. Side handle
- H. Depth adjustment rod

- C. Forward/reverse lever
- D. Chuck

- I. Mode selector
 J. Main handle
- E. Cord protector with key holder
- F. Cord set

INTENDED USE

These heavy-duty variable speed percssion drills are designed for professional drilling. **DO NOT** use under wet conditions or in presence of flammable liquids or gases. These heavy-duty percussion drills are professional power tools.

DO NOT let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

ASSEMBLY AND ADJUSTMENTS

WARNING: To reduce the risk of injury, turn unit off and disconnect tool from power source before installing and removing accessories, before adjusting or changing set-ups or when making repairs. Be sure the trigger switch is in the OFF position. An accidental start-up can cause injury.

Side Handle (fig. 1)

AWARNING: To reduce the risk of personal injury, **ALWAYS** operate the tool with the side handle properly installed. Failure to do so may result in the side handle slipping during tool operation and subsequent loss of control. Hold tool with both hands to maximize control.

A side handle comes assembled with the DWD024S-XE. The side handle (G) can be adjusted to suit both right-hand and left-hand users.

TO ADJUST THE SIDE HANDLE

- 1. Loosen the side handle (G) by turning it counterclockwise.
- 2. Rotate the side handle to the desired position.
- 3. Tighten the side handle by turning it clockwise.

TO CHANGE SIDES

For right-hand users: slide the side handle clamp over the chuck, handle at the left. For left-hand users: slide the side handle clamp over the chuck, handle at the right.

Forward/Reverse Lever (fig. 1)

The forward/reverse lever (C), located above the trigger switch (A), is used for withdrawing bits from tight holes and removing screws.

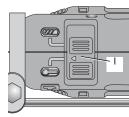
To reverse the motor, release the trigger switch FIRST and then push the lever to the right (viewed when holding the drill in the operating position).

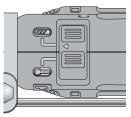
After any reversing operations, return lever to forward position.

Mode Selector (fig. 2)

NOTICE: Tool must come to a complete stop before activating the mode selector button or damage to the tool may result.

FIG. 2





Select the required operating mode by sliding the mode selector (I) to the corresponding symbol.



DRILL-ONLY MODE

Use drill-only mode for wood, metal, and plastics.



HAMMER-ONLY MODE

Use hammer-only mode for simultaneous rotating and impacting for masonry, brick and concrete.

Setting the Drilling Depth (fig. 3)

- 1. Insert the required drill bit into the chuck.
- 2. Loosen the side handle (G).
- 3. Fit the depth adjustment rod (H) through the hole in the side handle clamp.

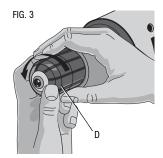
- 4. Adjust the drilling depth as shown in figure 3.
- 5. Tighten the side handle.

Keyless Chuck (fig. 1, 3-5)

The DWD024S-XE features a keyless chuck (D) for greater convenience.

TO INSERT A DRILL BIT OR OTHER ACCESSORY

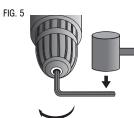
 Grasp the rear half of the chuck with one hand and use your other hand to rotate the front half counterclockwise, as shown in Figure 5. Rotate far enough so that the chuck opens sufficiently to accept the desired accessory.



- 2. Insert the bit or other accessory about 19 mm (3/4") into the chuck and tighten securely by holding the rear half of the chuck and rotating the front portion in the clockwise direction. When the chuck is nearly tightened, you will hear a clicking sound. After 4–6 clicks, the chuck is securely tightened around the accessory.
- 3. To release the accessory, repeat step 1 listed above.

AWARNING: Do not attempt to tighten drill bits (or any other accessory) by gripping the front part of the chuck and turning the tool on. Damage to the chuck and personal injury may result.





KEYLESS CHUCK REMOVAL (FIG. 3)

Tighten the chuck around the shorter end of a hex key (not supplied). Using a soft hammer or piece of wood, strike the longer end in the counterclockwise direction. This will loosen the chuck so that it can be unscrewed by hand.

KEYLESS CHUCK INSTALLATION (FIG. 4)

Screw the chuck on by hand as far as it will go. Tighten the chuck around the shorter end of a hex key (not supplied) and strike the longer end in the clockwise direction with a soft hammer.

OPERATION

A WARNING: To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/installing attachments or accessories.

Instructions for Use

AWARNING: Always observe the safety instructions and applicable regulations.

Trigger Switch (fig. 1)

To start the drill, depress the trigger switch; to stop the drill, release the trigger switch.

NOTE: Use lower speeds for starting holes without a center punch, drilling in metal or plastics, driving screws or drilling ceramics. Higher speeds are better for drilling wood and composition boards and using abrasive and polishing accessories.

VARIABLE SPEED

A variable speed trigger switch (A) permits speed control—the farther the trigger is depressed, the higher the speed of the drill.

For continuous operation, press and hold the variable speed switch, move the lock-on button (B) up, then release the switch.

To stop continuous operation, press the switch briefly and release it. Always switch the tool off when work is finished and before unplugging.

Proper Hand Position (fig. 6)

AWARNING: To reduce the risk of serious personal injury, **ALWAYS** use proper hand position as shown in figure 6.

AWARNING: To reduce the risk of serious personal injury, **ALWAYS** hold securely in anticipation of a sudden reaction.

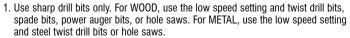
Proper hand position requires one hand on the main handle (J), with the other hand on the side handle (G).

Drilling

AWARNING: To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/installing attachments or accessories.

AWARNING: To reduce the risk of personal injury, ALWAYS ensure workpiece is anchored or clamped

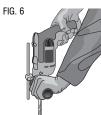
firmly. If drilling thin material, use a wood "back-up" block to prevent damage to the material.



- Always apply pressure in a straight line with the bit. Use enough pressure to keep drill biting, but do not push hard enough to stall the motor or deflect the bit.
- Hold tool firmly with both hands to control the twisting action of the drill. If model is not equipped with side handle, grip drill with one hand on the handle and one hand on the body.

ACAUTION: Drill may stall if overloaded causing a sudden twist. Always expect the stall. Grip the drill firmly to control the twisting action and avoid injury.

- 4. IF DRILL STALLS, it is usually because it is being overloaded or improperly used. RELEASE TRIGGER IMMEDIATELY, remove drill bit from work, and determine cause of stalling. DO NOT CLICK TRIGGER ON AND OFF IN AN ATTEMPT TO START A STALLED DRILL — THIS CAN DAMAGE THE DRILL.
- To minimize stalling or breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
- Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.



7. With variable speed drills there is no need to center punch the point to be drilled. Use a slow speed to start the hole and accelerate by squeezing the trigger harder when the hole is deep enough to drill without the bit skipping out.

DRILLING IN METAL

Start drilling with slow speed and increase to full power while applying firm pressure on the tool. A smooth even flow of metal chips indicates the proper drilling rate. Use a cutting lubricant when drilling metals. The exceptions are cast iron and brass which should be drilled dry.

NOTE: Large [8 mm (5/16") to 13 mm (1/2")] holes in steel can be made easier if a pilot hole [4 mm (5/32") to 5 mm (3/16")] is drilled first.

DRILLING IN WOOD

Start drilling with slow speed and increase to full power while applying firm pressure on the tool. Holes in wood can be made with the same twist drills used for metal. These bits may overheat unless pulled out frequently to clear chips from the flutes. Work that is apt to splinter should be backed up with a block of wood.

DRILLING IN MASONRY

When drilling in masonry, use carbide-tipped bits rated for percussion drilling and be certain that the bits are sharp. Use a constant and firm force on the tool to drill most effectively. A smooth, even flow of dust indicates the proper drilling rate.

MAINTENANCE

A WARNING: Shock Hazard. To reduce the risk of serious personal injury, turn tool off and disconnect from power source before making any adjustments or removing/installing attachments or accessories.

Motor Brushes

DEWALT uses an advanced brush system which automatically stops the drill when the brushes wear out. This prevents serious damage to the motor. New brush assemblies are available at authorized DEWALT service centers. Always use identical replacement parts.

Lubrication

Your power tool requires no additional lubrication.

Cleaning

AWARNING: Blow dirt and dust out of all air vents with clean, dry air at least once a week. To minimize the risk of eye injury, always wear ANSI Z87.1 approved eye protection when performing this.

AWARNING: Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals may weaken the plastic materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement) should be performed by certified service centers or other qualified service organizations, always using identical replacement parts.

ACCESSORIES

▲ WARNING: Since accessories, other than those offered by DEWALT, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only DEWALT, recommended accessories should be used with this product.

Recommended accessories for use with your tool are available at extra cost from your local service center. If you need any assistance in locating any accessory, please contact DEWALT Industrial Tool Co., 20 Fletcher Road, Mooroolbark, VIC 3138 Australia or call 1800 654 155 or (NZ) 0800 339258.

Guarantee

Applicable to hand held Power Tools, Lasers and Nailers.

Three Year Limited Warranty

DEWALT will repair, without charge, any defects due to faulty materials or workmanship for three years from the date of purchase. Please return the complete unit, transportation prepaid, to any DEWALT Service Centre, or any authorised service station.

For warranty repair information, call (AUS) 1800 654 155 or (NZ) 0800 339258. This warranty does not apply to

- Accessories
- · Damage caused where repairs have been made or attempted by others.
- · Damage due to misuse, neglect, wear and tear, alteration or modification.

This warranty gives you specific legal rights and you may have other rights under the provisions of the Consumer Guarantee Act 1993 (New Zealand only), Trade Practices Act 1974 and State Legislation (Australia only).

In addition to the warranty, DEWALT tools are covered by our:

FREE ONE YEAR SERVICE CONTRACT

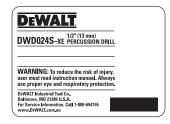
DEWALT will also maintain the tool for free at any time during the first year of purchase. This includes labour, parts and lubrication required to restore the product to sound mechanical and/or electrical condition. Normal wear parts are not covered in this service. Carbon brushes worn more then 50% will be replaced.

NOTE: Three Year Warranty is not applicable to items deemed as consumables. Radial arm saws are covered by a one (1) year warranty only. DEWALT Reserves the right to review its warranty policy prior to launch of any new business development products.

30 DAY NO SATISFACTION GUARANTEE

If you are dissatisfied with any DEWALT power tool, laser or nailer, for any reason, simply return it to the point of purchase with your sales receipt within 30 days for a replacement unit or a full refund.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call (AUS) 1800 654 155 or (NZ) 0800 339258 for a free replacement.



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The following are trademarks for one or more DEWALT power tools: the yellow and black color scheme; the "D" shaped air intake grill; the array of pyramids on the handgrip; the kit box configuration; and the array of lozenge-shaped humps on the surface of the tool.