

# INSTRUCTION MANUAL

# DEWALT®

DC980-XE, DC981-XE, DC983-XE, DC987-XE  
HEAVY DUTY XRP™ 1/2" (12.7MM) CORDLESS DRILL/DRIVER

DC984-XE, DC985-XE, DC988-XE, DC989-XE  
HEAVY DUTY XRP™ 1/2" (12.7MM) CORDLESS DRILL/DRIVER/HAMMERS

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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.

IF YOU HAVE ANY QUESTIONS OR COMMENTS ABOUT THIS OR ANY DEWALT TOOL, CALL US AT: 1800 654 155 (Aust) or 09 526 2556 (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.

### General Safety Rules

**▲ WARNING! Read all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

## SAVE THESE INSTRUCTIONS

### 1. WORK AREA

- Keep work area clean and well lit.** Cluttered and 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.

### 2. 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 or 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.

### 3. 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 safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Avoid accidental starting. Ensure the switch is in the off position before plugging in.** Carrying power tools with your finger on the switch or plugging in 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 these devices can reduce dust related hazards.

### 4. 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 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 tools 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 and in the manner intended for the particular type of power tool, 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. BATTERY TOOL USE AND CARE

- Ensure the switch is in the off position before inserting battery pack.** Inserting the battery pack into power tools that have the switch on invites accidents.
  - 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.
- 6. 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.

### 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. 240 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

**▲ CAUTION:** 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.

### Additional Safety Instructions

- Hold tool by insulated gripping surfaces when performing an operation where the tool may contact hidden wiring.** Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.
- Wear ear protectors when hammering for extended periods of time.** Prolonged exposure to high intensity noise can cause hearing loss. Temporary hearing loss or serious ear drum damage may result from high sound levels generated by hammer drilling.
- Wear safety goggles or other eye protection.** Hammering and drilling operations cause chips to fly. Flying particles can cause permanent eye damage.
- Always use the side handle supplied with the tool.** Keep a firm grip on the tool at all times. Do not attempt to operate this tool without holding it with both hands.
- Hammer bits and tools get hot during operation.** Wear gloves when touching them.

**▲ WARNING:** 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.

**▲ WARNING:** 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.

**▲ CAUTION: When not in use, place tool on its side on a stable surface where it will not cause a tripping or falling hazard.** Some tools with large battery packs will stand upright on the battery pack but may be easily knocked over.

**▲ CAUTION: Wear appropriate personal hearing protection during use.** Under some conditions and duration of use, noise from this product may contribute to hearing loss.

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

V .....	volts	A .....	amperes
Hz.....	hertz	W .....	watts
min.....	minutes	~ .....	alternating current
==== .....	direct current	n <sub>0</sub> .....	no load speed
☐ .....	Class II Construction	⊕ .....	earthing terminal
▲ .....	safety alert symbol	.../min.....	revolutions per minute

### Important Safety Instructions for Battery Packs

Your tool uses either a 12, 14.4 or 18 Volt DeWALT battery pack. When ordering replacement battery packs, be sure to include catalog number and voltage: Extended Run-Time battery packs deliver 25% more run-time than standard battery packs.

**NOTE:** Your tool will accept either standard or Extended Run Time battery packs. However, be sure to select proper voltage. Batteries slowly lose their charge when they are not on the charger, the best place to keep your battery is on the charger at all times.

The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below. Then follow charging procedures outlined.

## READ ALL INSTRUCTIONS

- Do not incinerate the battery pack even if it is severely damaged or is completely worn out.** The battery pack can explode in a fire.
- A small leakage of liquid from the battery pack cells may occur under extreme usage or temperature conditions.** This does not indicate a failure. However, if the outer seal is broken and this leakage gets on your skin:
  - Wash quickly with soap and water.
  - Neutralize with a mild acid such as lemon juice or vinegar.
  - If battery liquid gets into your eyes, flush them with clean water for a minimum of 10 minutes and seek immediate medical attention. **(Medical Note:** The liquid is 25–35% solution of potassium hydroxide.)
- Charge the battery packs only in DeWALT chargers.
- DO NOT** splash or immerse in water or other liquids.
- Do not store or use the tool and battery pack in locations where the temperature may reach or exceed 105°F (40°C) (such as outside sheds or metal buildings in summer).**

**▲ DANGER:** Never attempt to open the battery pack for any reason. If battery pack case is cracked or damaged, do not insert into charger. Electric shock or electrocution may result. Damaged battery packs should be returned to service center for recycling.

**NOTE:** Battery storage and carrying caps are provided for use whenever the battery is out of the tool or charger. Remove cap before placing battery in charger or tool.

**▲ WARNING: Do not store or carry battery so that metal objects can contact exposed battery terminals.** For example, do not place battery in aprons, pockets, tool boxes, product kit boxes, drawers, etc., with loose nails, screws, keys, etc. without battery cap. **Transporting batteries can possibly cause fires if the battery terminals inadvertently come in contact with conductive materials such as keys, coins, hand tools and the like.** The US Department of Transportation Hazardous Material Regulations (HMR) actually prohibit transporting batteries in commerce or on airplanes (i.e., packed in suitcases and carry-on luggage) UNLESS they are properly protected from short circuits. So when transporting individual batteries, make sure that the battery terminals are protected and well insulated from materials that could contact them and cause a short circuit.

**▲ CAUTION:** Battery pack must be securely attached to tool. If battery pack is detached, personal injury may result.

### The RBRC™ Seal

The RBRC™ (Rechargeable Battery Recycling Corporation) Seal on the nickel-cadmium battery (or battery pack) indicates that the costs to recycle the battery (or battery pack) at the end of its useful life have already been paid by DeWALT. In some areas, it is illegal to place spent nickel-cadmium batteries in the trash or municipal solid waste stream and the RBRC program provides an environmentally conscious alternative.

RBRC™ in cooperation with DeWALT and other battery users, has established programs in the United States to facilitate the collection of spent nickel-cadmium batteries. Help protect our environment and conserve natural resources by returning the spent nickel-cadmium battery to an authorized DeWALT service center or to your local retailer for recycling. You may also contact your local recycling center for information on where to drop off the spent battery.

RBRC™ is a registered trademark of the *Rechargeable Battery Recycling Corporation*.



## Important Safety Instructions for Battery Chargers

**SAVE THESE INSTRUCTIONS:** This manual contains important safety instructions for battery chargers.

- Before using charger, read all instructions and cautionary markings on charger, battery pack, and product using battery pack.

**▲ DANGER:** 240 Volts are present at charging terminals. Do not probe with conductive objects. Electric shock or electrocution may result.

**▲ WARNING:** Do not allow any liquid to get inside charger. Electric shock may result.

**▲ CAUTION:** To reduce the risk of injury, charge only DeWALT nickel cadmium rechargeable batteries. Other types of batteries may burst causing personal injury and damage.

**▲ CAUTION:** Under certain conditions, with the charger plugged in to the power supply, the exposed charging contacts inside the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.

- **DO NOT attempt to charge the battery pack with any chargers other than the ones in this manual.** The charger and battery pack are specifically designed to work together.
- **These chargers are not intended for any uses other than charging DeWALT rechargeable batteries.** Any other uses may result in risk of fire, electric shock or electrocution.
- **Do not expose charger to rain or snow.**
- **Pull by plug rather than cord when disconnecting charger.** This will reduce risk of damage to electric plug and cord.
- **Make sure that cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.**
- **Do not use an extension cord unless it is absolutely necessary.** Use of improper extension cord could result in risk of fire, electric shock, or electrocution.
- **An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety.** The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size.

Recommended Minimum Wire Size for Extension Cords

Total Length of Cord	25 ft.	50 ft.	75 ft.	100 ft.	125 ft.	150 ft.	175 ft.
	7.6 m	15.2 m	22.9 m	30.5 m	38.1 m	45.7 m	53.3 m
Wire Size AWG	18	18	16	16	14	14	12

- **Do not place any object on top of charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat.** Place the charger in a position away from any heat source. The charger is ventilated through slots in the top and the bottom of the housing.
- **Do not operate charger with damaged cord or plug** — have them replaced immediately.
- **Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way.** Take it to an authorized service center.
- **Do not disassemble charger; take it to an authorized service center when service or repair is required.** Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
- **Disconnect the charger from the outlet before attempting any cleaning.** This will reduce the risk of electric shock. Removing the battery pack will not reduce this risk.
- **NEVER attempt to connect 2 chargers together.**
- **The charger is designed to operate on standard household electrical power (240 Volts). Do not attempt to use it on any other voltage.** This does not apply to the vehicular charger.

## Using Automatic Tune-Up™ Mode

The Automatic Tune-Up™ Mode equalizes or balances the individual cells in the battery pack allowing it to function at peak capacity. Battery packs should be tuned up weekly or after 10 charge/discharge cycles or whenever the pack no longer delivers the same amount of work. To use the Automatic Tune-Up™, place the battery pack in the charger and leave it for at least 8 hours. The charger will cycle through the following modes.

1. The red light will blink continuously indicating that the 1-hour charge cycle has started.
2. When the 1-hour charge cycle is complete, the light will stay on continuously and will no longer blink. This indicates that the pack is fully charged and can be used at this time.
3. Whenever the pack is left in the charger after the initial 1-hour charge, the charger will begin the Automatic Tune-Up™ Mode. This mode continues up to 8 hours or until the individual cells in the battery pack are equalized. The battery pack is ready for use and can be removed at any time during the Tune-Up™ Mode.
4. Once the Automatic Tune-Up™ Mode is complete the charger will transition to a maintenance charge; the indicator light shuts off when the automatic Tune-Up™ Mode is complete.

## SAVE THESE INSTRUCTIONS FOR FUTURE USE

### Chargers

Your tool uses a 12.0, 14.4, or 18.0 Volt DeWALT Charger. Your battery can be charged in DeWALT 1 Hour Chargers, 15 Minute Chargers or Vehicular 12 Volt charger. Be sure to read all safety instructions before using your charger. Consult the chart on the back cover of this manual for compatibility of chargers and battery packs.

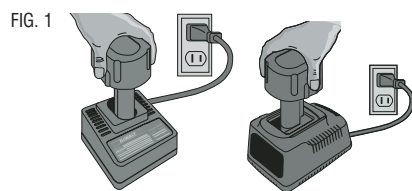


FIG. 1

### Charging Procedure (Fig. 1)

**▲ DANGER:** 240 Volts are present at charging terminals. Do not probe with conductive objects. Electric shock or electrocution may result.

1. Plug the charger into an appropriate outlet.
2. Insert the battery pack into the charger. The red (charging) light will blink continuously indicating that the charging process has started.
3. The completion of charge will be indicated by the red light remaining ON continuously. The pack is fully charged and may be used at this time or left in the charger.

### Indicator Light Operation

PACK CHARGING.....

FULLY CHARGED.....

HOT/COLD PACK DELAY.....

REPLACE PACK.....

PROBLEM POWER LINE.....

### Charge Indicators

Some chargers are designed to detect certain problems that can arise with battery packs. Problems are indicated by the red light flashing at a fast rate. If this occurs, reinsert battery pack into the charger. If the problem persists, try a different battery pack to determine if the charger is OK. If the new pack charges correctly, then the original pack is defective and should be returned to a service center or other collection site for recycling. If the new battery pack elicits the same trouble indication as the original, have the charger tested at an authorized service center.

### HOT/COLD PACK DELAY

Some chargers have a Hot/Cold Pack Delay feature: when the charger detects a battery that is hot, it automatically starts a Hot Pack Delay, suspending charging until the battery has cooled. After the battery has cooled, the charger automatically switches to the Pack Charging mode. This feature ensures maximum battery life. The red light flashes long, then short while in the Hot Pack Delay mode.

### PROBLEM POWER LINE

Some chargers have a Problem Power Line indicator. When the charger is used with some portable power sources such as generators or sources that convert DC to AC, the charger may temporarily suspend operation, flashing the red light with two fast blinks followed by a pause. This indicates the power source is out of limits.

### LEAVING THE BATTERY PACK IN THE CHARGER

The charger and battery pack can be left connected with the red light glowing indefinitely. The charger will keep the battery pack fresh and fully charged.

**NOTE:** A battery pack will slowly lose its charge when kept out of the charger. If the battery pack has not been kept on maintenance charge, it may need to be recharged before use. A battery pack may also slowly lose its charge if left in a charger that is not plugged into an appropriate AC source.

**WEAK BATTERY PACKS:** Chargers can also detect a weak battery. Such batteries are still usable but should not be expected to perform as much work. In such cases, about 10 seconds after battery insertion, the charger will beep rapidly 8 times to indicate a weak battery condition. The charger will then go on to charge the battery to the highest capacity possible.

### Important Charging Notes

1. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65°F and 75°F (18° - 24°C). DO NOT charge the battery pack in an air temperature below +40°F (+4.5°C), or above +105°F (+40.5°C). This is important and will prevent serious damage to the battery pack.
2. The charger and battery pack may become warm to touch while charging. This is a normal condition, and does not indicate a problem. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed, or an uninsulated trailer.

3. If the battery pack does not charge properly:
  - a. Check current at receptacle by plugging in a lamp or other appliance
  - b. Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights.
  - c. Move charger and battery pack to a location where the surrounding air temperature is approximately 65°F - 75°F (18° - 24°C).
  - d. If charging problems persist, take the tool, battery pack and charger to your local service center.
4. The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse affect on the battery pack.
5. Under certain conditions, with the charger plugged into the power supply, the exposed charging contacts inside the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.
6. Do not freeze or immerse charger in water or any other liquid.

**▲ WARNING:** Don't allow any liquid to get inside charger. Electric shock may result.

**▲ CAUTION:** Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, return to a service center for recycling.

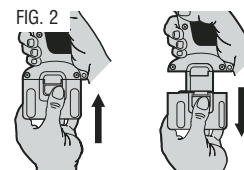
## OPERATION

### Installing and Removing the Battery Pack (Fig. 2)

**NOTE:** Make sure your battery pack is fully charged.

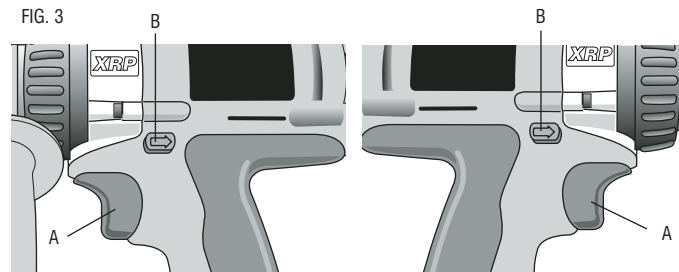
**To install the battery pack into the tool handle,** align the base of the tool with the notch inside the tool's handle and slide the battery pack firmly into the handle until you hear the lock snap into place.

**To remove the battery pack from the tool,** press the release buttons and firmly pull the battery pack out of the tool handle. Insert it into the charger as described in the charger manual.



### Variable Speed Switch (Fig. 3)

To turn the tool on, squeeze the trigger switch (A). To turn the tool off, release the trigger switch. Your tool is equipped with a brake. The chuck will stop as soon as the trigger switch is fully released.



The variable speed switch enables you to select the best speed for a particular application. The farther you squeeze the trigger, the faster the tool will operate. Use lower speeds for starting holes without a centerpunch, drilling in metals or plastics, driving screws and drilling ceramics, or in any application requiring high torque. Higher speeds are better for drilling in wood, wood compositions and for using abrasive and polishing accessories. For maximum tool life, use variable speed only for starting holes or fasteners.

**NOTE:** Continuous use in variable speed range is not recommended. It may damage the switch and should be avoided.

### Forward/Reverse Control Button (Fig. 3)

A forward/reverse control button (B) determines the direction the tool will spin and also serves as a lock off button.

**To select forward rotation,** release the trigger switch and depress the forward/reverse control button on the right side of the tool.

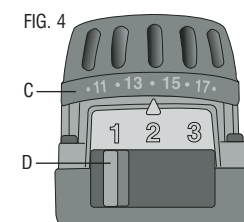
**To select reverse,** depress the forward/reverse control button on the left side of the tool.

The center position of the control button locks the tool in the off position. When changing the position of the control button, be sure the trigger is released.

**NOTE:** The first time the tool is run after changing the direction of rotation, you may hear a click on start up. This is normal and does not indicate a problem.

### Torque Adjustment Collar (Fig. 4)

Your tool has an adjustable torque screwdriver mechanism for driving and removing a wide array of fastener shapes and sizes and in some models, a hammer mechanism for drilling into masonry. Circling the collar (C) are numbers, a drill bit symbol, and in some models, and a hammer symbol. These numbers are used to set the clutch to deliver a torque range. The higher the number on the collar, the higher the torque and the larger the fastener which can be driven. To select any of the numbers, rotate until the desired number aligns with the arrow.



### Three Speed Gearing (Fig. 4)

The three speed feature of your tool allows you to shift gears for greater versatility. To select speed 1 (highest torque setting), turn the tool off and permit it to stop. Slide the gear shifter (D) all the way to the left. Speed 2 (middle torque and speed setting) is in the middle position. Speed 3 (highest speed setting) is to the right.

**NOTE:** Do not change gears when the tool is running. Always allow the drill to come to a complete stop before changing gears. If you have trouble changing gears, make sure that the gear shifter is engaged in one of the three speed settings.

### Keyless Single Sleeve Chuck (Fig. 5)

Your tool features a keyless chuck with one rotating sleeve for one-handed operation of the chuck. To insert a drill bit or other accessory, follow these steps.

1. Lock the trigger in the OFF position as previously described.
2. Grasp the black sleeve of the chuck with one hand and use the other hand to secure the tool as shown in Figure 4. Rotate the sleeve counterclockwise far enough to accept the desired accessory.
3. Insert the accessory about 19mm (3/4") into the chuck and tighten securely by rotating the chuck sleeve clockwise with one hand while holding the tool with the other. Your tool is equipped with an automatic spindle lock mechanism. This allows you to open and close the chuck with one hand.

To release the accessory, repeat step 2 above.

**▲ WARNING:** 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. Always lock off trigger switch when changing accessories.

Be sure to tighten chuck with one hand on the chuck sleeve and one hand holding the tool for maximum tightness.

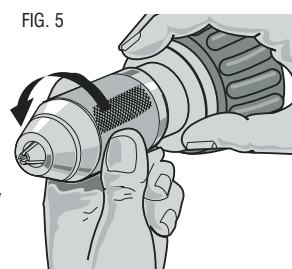


FIG. 5

### Side Handle (Fig. 6)

**▲ CAUTION:** Always hold drill with both hands and use side handle if so equipped. Side handle clamps to the front of the gear case as shown and can be rotated 360° to permit right- or left-hand use. Be sure side handle is installed tightly. If model is not equipped with side handle, grip drill with one hand on the handle and one hand on the battery pack.

**NOTE:** Side handle comes equipped on models DC987, DC988, DC989.

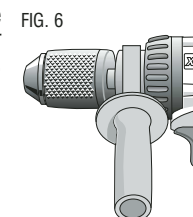


FIG. 6

### Operation as a Drill

Turn the collar to the drill bit symbol. Install and tighten the desired drill bit in the chuck. Select the desired speed/torque range using the gear shifter to match the speed and torque to the planned operation. Follow these instructions for best results when drilling.

### DRILLING

1. Use sharp drill bits only. For WOOD, use twist drill bits, spade bits, power auger bits, or hole saws. For METAL, use high speed steel twist drill bits or hole saws. For MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits.
2. Be sure the material to be drilled is anchored or clamped firmly. If drilling thin material, use a "back-up" block to prevent damage to the material.
3. Always apply pressure in a straight line with the bit. Use enough pressure to keep the drill bit biting, but do not push hard enough to stall the motor or deflect the bit.
4. Hold tool firmly to control the twisting action of the drill.
5. IF DRILL STALLS, it is usually because it is being overloaded. RELEASE TRIGGER IMMEDIATELY, remove drill bit from work, and determine cause of stalling. DO NOT CLICK TRIGGER OFF AND ON IN AN ATTEMPT TO START A STALLED DRILL - THIS CAN DAMAGE THE DRILL.
6. To minimize stalling as you are breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
7. Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.
8. 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. Operate at full on after starting the bit.

### Drilling in Wood

Start drilling with slow speed and increase to full power while applying firm pressure to 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. For larger holes, use low speed wood bits. Work that is likely to splinter should be backed up with a block of wood.

### 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 (7.94mm to 12.7mm; 5/16" to 1/2") holes in steel can be made easier if a pilot hole (3.97mm to 4.76mm; 5/32" to 3/16") is drilled first.

### Drilling in Masonry

#### (TOOLS WITHOUT A HAMMER FEATURE)

Use carbide tipped bits rated for percussion drilling and be certain that the bit is 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.

### Operation as a Hammerdrill

Some models have the Hammerdrill feature. To utilize the hammer feature of your tool, rotate the collar to align the hammer symbol with the arrow shown in Figure 3. The hammering position is for hammer drilling in soft concrete and masonry such as brick, mortar and soft ceramics.

1. When drilling, use just enough force on the hammer to keep it from bouncing excessively or "rising" off the bit. Too much force will cause slower drilling speeds, overheating, and a lower drilling rate.
2. Drill straight, keeping the bit at a right angle to the work. Do not exert side pressure on the bit when drilling as this will cause clogging of the bit flutes and a slower drilling speed.
3. When drilling deep holes, if the hammer speed starts to drop off, pull the bit partially out of the hole with the tool still running to help clear debris from the hole.
4. Do not pour water into the hole to settle dust. Water causes clogging of bit flutes which will tend to make the bit bind in the hole.

### Operation as a Screwdriver

Select the desired speed/torque range using the 3 speed gear shift lever on the top of tool to match the speed and torque to the planned operation. Insert the desired fastener accessory into the chuck as you would any drill bit. Set the torque adjustment collar (Fig. 3). Make a few practice runs in scrap or unseen areas to determine the proper position of the clutch collar.

## MAINTENANCE

### Cleaning

**CAUTION:** With the motor running, blow dirt and dust out of all air vents with dry air at least once a week. Wear safety glasses when performing this. Exterior plastic parts may be cleaned with a damp cloth and mild detergent. Although these parts are highly solvent resistant, NEVER use solvents.

### CHARGER CLEANING INSTRUCTIONS

**WARNING:** Disconnect the charger from the AC outlet before cleaning. Dirt and grease may be removed from the exterior of the charger using a cloth or soft non-metallic brush. Do not use water or any cleaning solutions.

### 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

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.

**CAUTION:** The use of any non-recommended accessory may be hazardous.

#### MAXIMUM RECOMMENDED CAPACITIES

	Speed 1	Speed 2	Speed 3
BITS, METAL DRILLING	12.7mm (1/2")	6.35mm (1/4")	6.35mm (1/4")
WOOD, FLAT BORING	38mm (1-1/2")	15.88mm (5/8")	15.88mm (5/8")
BITS, MASONRY DRILLING	-	6.35mm (1/4")	6.35mm (1/4")

### 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 1800 654 155.

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 than 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 1800-654-155 for a free replacement.



Battery	Output Nominal		Chargers/Charge Time																	
			240 Volts								12 Volts									
	Cat. Number	Voltage	Amp Hour	97014	98014	DW9106	DW9107	DW9108	DW9115	DW9116	DW9117	DW9118	DE9116	DE9118	DW911	DC011	DW0245	DE2046	DW9109	
DW10242	24	2.0	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60	60	X
DE0240-XJ	24	2.0	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60	60	X
DW0240	24	1.7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60	60	60
DW9096	18	2.4	X	X	X	X	X	X	X	60	20	X	X	60	X	60	X	X	X	60
DE9095-XJ	18	2.0	X	X	X	X	X	60	X	60	20	X	60	X	60	60	X	X	X	60
DE9091-XJ	14.4	2.0	45	45	45	45	45	45	15	45	15	90	45	90	45	45	X	X	X	45
DW9074-XJ	14.4	1.7	45	45	45	45	45	45	15	45	15	90	45	90	45	45	X	X	X	45
DW9072	12	1.25	45	45	45	45	45	45	15	30	12	60	30	60	30	30	X	X	X	30
DE9071-XJ	12	2.0	45	45	45	45	45	45	15	45	15	90	45	90	45	45	X	X	X	45
DW9071	12	1.7	60	60	60	60	60	60	15	45	15	90	45	90	45	45	X	X	X	45
DW9050	12	1.3	40	40	40	40	40	40	15	45	15	90	45	90	45	45	X	X	X	45
DW9063	9.6	1.25	45	45	45	45	45	45	15	30	12	60	30	60	30	30	X	X	X	30
DW9062	9.6	1.3	45	45	45	45	45	45	15	30	12	60	30	60	30	30	X	X	X	30
DW9061	9.6	1.7	60	60	60	60	60	60	15	45	15	X	X	45	90	45	X	X	X	45
DW9048	9.6	1.3	40	40	40	40	40	40	15	45	15	X	X	X	X	X	X	X	X	45
DW9057	7.2	1.25	45	45	45	45	45	45	15	30	12	60	30	60	30	30	X	X	X	30
DW9046	7.2	1.3	40	40	40	40	40	40	15	30	12	60	30	60	30	30	X	X	X	30

X Indicates that the battery pack is not compatible with that specific charger.

All charge times are approximate. Actual charge time may vary.

Read the instruction manual for more specific information.

The battery voltage is nominal, it can measure above or below depending on the state of charge.