If you have questions or comments, contact us.
Pour toute question ou tout commentaire, nous contacter.
Si tiene dudas o comentarios, contáctenos.

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INSTRUCTION MANUAL
GUIDE D'UTILISATION
MANUAL DE INSTRUCCIONES

INSTRUCTIVO DE OPERACIÓN, CENTROS DE SERVICIO Y PÓLIZA DE GARANTÍA. **ADVERTENCIA:** LÉASE ESTE INSTRUCTIVO ANTES DE USAR EL PRODUCTO.

DEWALT®

DC212 Heavy-Duty 18V Cordless Rotary Hammer
DC222, DC223 Heavy-Duty 24V Cordless Rotary Hammers

Perceuse à percussion haute résistance sans fil 18V DC212
Perceuses à percussions haute résistance sans fil 24V DC222 et DC223

Rotomartillo inalámbrico DC212 de 18 V para trabajo pesado
Rotomartillos inalámbricos DC222 y DC223 del 24 V para trabajo pesado

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.

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

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

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

NOTICE: *Indicates a practice* ***not related to personal injury*** *which, if not avoided,* ***may*** *result in* ***property damage****.*

IF YOU HAVE ANY QUESTIONS OR COMMENTS ABOUT THIS OR ANY DEWALT TOOL, CALL US TOLL FREE AT: **1-800-4-DEWALT (1-800-433-9258)**.

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 ground fault circuit interrupter (GFCI) protected supply.*** *Use of a GFCI reduces the risk of electric shock.*

English

English

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 energizing 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 jewelry. Keep your hair, clothing and gloves away from moving parts.*** *Loose clothes, jewelry 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) BATTERY TOOL USE AND CARE

a) ***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.*

b) ***Use power tools only with specifically designated battery packs.*** *Use of any other battery packs may create a risk of injury and fire.*

c) ***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.*

d) ***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

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.*

Additional Safety Instructions for Rotary Hammers

- ***Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring.*** *Cutting accessory contacting a "live" wire may make exposed metal parts of the tool "live" and could give the operator an electric shock.*
- ***Wear ear protectors.*** *Exposure to noise can cause hearing loss.*
- ***Use auxiliary handles supplied with the tool.*** *Loss of control can cause personal injury.*
- ***Be certain that the material being drilled does not conceal electric or gas service and that their locations have been verified with the utility companies.***
- ***Use clamps or another practical way to secure and support the workpiece to a stable platform.*** *Holding the work by hand or against your body leaves it unstable and may lead to loss of control.*
- ***Wear safety goggles or other eye protection.*** *Hammering operations cause chips to fly. Flying particles can cause permanent eye damage. Wear a dust mask or respirator for applications that generate dust. Ear protection may be required for most applications.*
- ***Keep a firm grip on the tool at all times. Do not attempt to operate this tool without holding it with both hands.*** *It is recommended that the side handle be used at all times. Operating this tool with one hand will result in loss of control. Breaking through or encountering hard materials such as re-bar may be hazardous as well.*
- ***Do not operate this tool for long periods of time.*** *Vibration caused by hammer action may be harmful to your hands and arms. Use gloves to provide extra cushion and limit exposure by taking frequent rest periods.*
- ***Do not recondition bits yourself.*** *Chisel reconditioning should be done by an authorized specialist. Improperly reconditioned chisels could cause injury.*
- ***Wear gloves when operating tool or changing bits.*** *Accessible metal parts on the tool and bits may get extremely hot during operation. Small bits of broken material may damage bare hands.*
- ***Never lay the tool down until the bit has come to a complete stop.*** *Moving bits could cause injury.*
- ***Do not strike jammed bits with a hammer to dislodge them.*** *Fragments of metal or material chips could dislodge and cause injury.*
- ***Slightly worn chisels can be resharpened by grinding.***

- ***Keep the power cord away from the rotating bit. Do not wrap the cord around any part of your body.*** *An electric cord wrapped around a spinning bit may cause personal injury and loss of control.*

NOTE: *Do not overheat the bit (discoloration) while grinding a new edge. Badly worn chisels require reforging. Do not reharden and temper the chisel.*

- ***Air vents often cover moving parts and should be avoided.*** *Loose clothes, jewelry or long hair can be caught in moving parts.*

⚠***WARNING: 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.*

⚠***WARNING:*** *Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California 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.*

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 disperse 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.*

may or may not need this warning, depends on tool:

⚠***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.*

⚠***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.*

- *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*	∿ *or AC*	*alternating current*
⎓ *or DC*	*direct current*	⎓ *or AC/DC*	*alternating or direct current*
⏚	*Class I Construction (grounded)*	n_o	*no load speed*
⧈	*Class II Construction (double insulated)*	*n*	*rated speed*
.../min	*per minute*		
BPM	*beats per minute*		
IPM	*impacts per minute*		

RPM ..... revolutions per minute
sfpm ..... surface feet per minute
SPM ..... strokes per minute
⏚ ..... earthing terminal
⚠ ..... safety alert symbol

Important Safety Instructions for All Battery Packs

When ordering replacement battery packs, be sure to include catalog number and voltage. Consult the chart at the end of this manual for compatibility of chargers and battery packs.

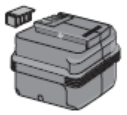
The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below. Then follow charging procedures outlined.

READ ALL INSTRUCTIONS

- ***Do not charge or use battery in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.*** *Inserting or removing the battery from the charger may ignite the dust or fumes.*
- ***NEVER force battery pack into charger. DO NOT modify battery pack in any way to fit into a non-compatible charger as battery pack may rupture causing serious personal injury.*** *Consult the chart at the end of this manual for compatibility of batteries and chargers.*
- *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:*** *Electrocution hazard. Never attempt to open the battery pack for any reason. If battery pack case is cracked or damaged, do not insert into charger. Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has received a sharp blow, been dropped, run over or damaged in any way (i.e., pierced with a nail, hit with a hammer, stepped on). 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:*** *Fire hazard. 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.*

SPECIFIC SAFETY INSTRUCTIONS FOR NICKEL CADMIUM (NiCd) OR NICKEL METAL HYDRIDE (NiMH)

- ***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:

  a. *and the battery liquid gets on your skin, immediately wash with soap and water for several minutes.*

  b. *and the 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.)*

SPECIFIC SAFETY INSTRUCTIONS FOR LITHIUM ION (Li-Ion)

- ***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. Toxic fumes and materials are created when lithium ion battery packs are burned.*
- ***If battery contents come into contact with the skin, immediately wash area with mild soap and water.*** *If battery liquid gets into the eye, rinse water over the open eye for 15 minutes or until irritation ceases. If medical attention is needed, the battery electrolyte is composed of a mixture of liquid organic carbonates and lithium salts.*
- ***Contents of opened battery cells may cause respiratory irritation.*** *Provide fresh air. If symptoms persist, seek medical attention.*

⚠ ***WARNING:*** *Burn hazard. Battery liquid may be flammable if exposed to spark or flame.*

The RBRC™ Seal

The RBRC™ (Rechargeable Battery Recycling Corporation) Seal on the nickel cadmium, nickel metal hydride or lithium ion batteries (or battery packs) indicate that the costs to recycle these batteries (or battery packs) at the end of their useful life have already been paid by DEWALT. In some areas, it is illegal to place spent nickel cadmium, nickel metal hydride or lithium ion 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 and Canada to facilitate the collection of spent nickel cadmium, nickel metal hydride or lithium ion batteries. Help protect our environment and conserve natural resources by returning the spent nickel cadmium, nickel metal hydride or lithium ion batteries 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 All Battery Chargers

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

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

⚠ ***DANGER:*** *Electrocution hazard. 120 volts are present at charging terminals. Do not probe with conductive objects. Electric shock or electrocution may result.*

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

⚠ ***CAUTION:*** *Burn hazard. To reduce the risk of injury, charge only DEWALT rechargeable batteries. Other types of batteries may burst causing personal injury and damage.*

NOTICE: *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, grinding dust, metal chips, 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.*
- ***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.*
- ***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. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.*

Minimum Gauge for Cord Sets

Ampere Rating		Volts	Total Length of Cord in Feet (meters)			
		120 V	25 (7.6)	50 (15.2)	100 (30.5)	150 (45.7)
		240 V	50 (15.2)	100 (30.5)	200 (61.0)	300 (91.4)
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

- ***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.***

- ***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 two chargers together.*
- ***The charger is designed to operate on standard 120 volt household electrical power. 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. If 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 Automatic Tune-Up™ mode.
4. Once the Automatic Tune-Up™ mode is complete, the charger will begin a maintenance charge; the red indicator will remain lit.

Chargers

Your tool uses a DEWALT charger. Be sure to read all safety instructions before using your charger. Consult the chart at the end of this manual for compatibility of chargers and battery packs.

Fan Cooling (24 Volt Only)

The 24V charger is equipped with an internal fan that provides rapid cooling of DEWALT 24V battery packs. The fan operation is automatic and will turn on when required during battery charging. This procedure is of great benefit for a pack that has finished a useable cycle. Place the battery pack into the charger immediately after use so that the fan can cool the cells and prolong the life of the battery pack.

⚠***WARNING:*** *To minimize the risk of eye injury, always use eye protection. Fan may blow debris from vent area at any time. Keep face and eyes away from area above vents.*

Charging Procedure (Fig. 3)

⚠***DANGER:*** *Electrocution hazard. 120 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 before inserting battery pack.
2. Insert the battery pack (I) into the charger, as shown in Figure 3, making sure the pack is fully seated in 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

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, re-insert 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 pack. Such batteries are still usable but should not be expected to perform as much work. The charger will indicate to replace battery pack.

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:

English

a. Check operation of 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, grinding dust, metal chips, 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:*** *Shock hazard. Don't allow any liquid to get inside charger. Electric shock may result.*

⚠ ***WARNING:*** *Burn hazard. 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.*

Storage Recommendations

1. The best storage place is one that is cool and dry away from direct sunlight and excess heat or cold.
2. For long storage, it is recommended to store a fully charged battery pack in a cool dry place out of the charger for optimal results.

NOTE: Battery packs should not be stored completely depleted of charge. The battery pack will need to be recharged before use.

SAVE THESE INSTRUCTIONS FOR FUTURE USE

COMPONENTS (Fig. 1)

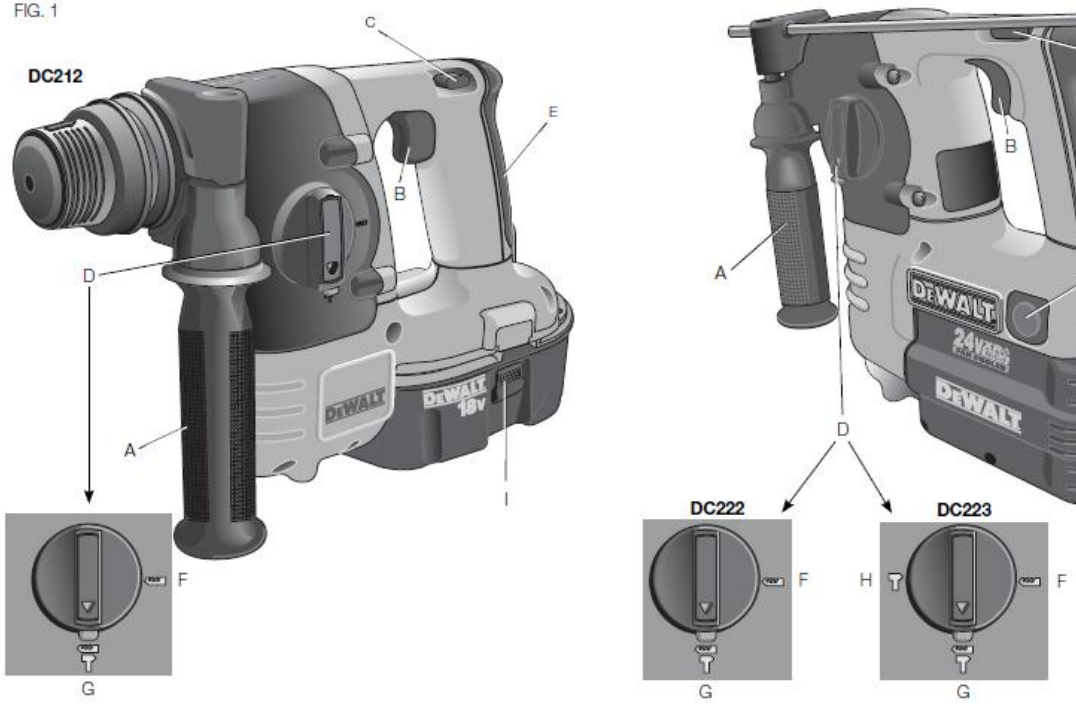
A. Side handle
B. Trigger switch
C. Forward/reverse control button (Lock-off button)
D. Mode selector
E. Main handle

Side Handle (Fig. 1)

⚠ ***WARNING:*** *To reduce the risk of personal injury,* ***ALWAYS*** *operate the tool with the side handle (A) 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.*

The side handle clamps to the front barrel (collar) and may be rotated 360° to permit right- or left-hand use. The side handle can be tightened by rotating the black plastic portion of the side handle clockwise. The side handle must be tightened sufficiently to resist the twisting action of the tool if the accessory binds or stalls. Be sure to grip the side handle at the far end to control the tool during a stall. To loosen side handle, rotate counterclockwise.

FIG. 1



English

Switch (Fig. 1)

To turn the tool on, squeeze the trigger switch (B). 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.

VARIABLE SPEED SWITCH

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. 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.

Mode Selector (Fig. 1)

⚠ ***CAUTION:*** *Never change the mode while the unit is running.*

For straight drilling, rotate the mode selector (D) until the arrow points to the drill bit symbol (F). For rotary hammer, align the arrow with the hammer symbol (G). For chipping mode (DC223 only) align arrow with the chipping symbol (H).

NOTE: The mode selector (D) must be in drill, hammer or chipping (DC223 only) mode at all times. There are no operable positions in between.

Forward/Reverse Control Button (Fig. 2)

A forward/reverse control button (C) determines the direction and also serves as a lock-off button.

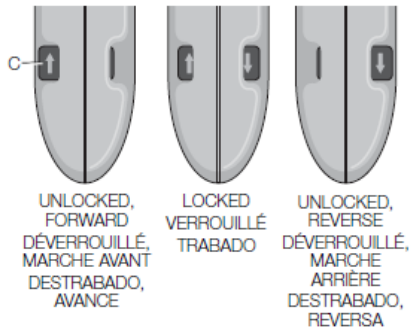
To select forward rotation, release the trigger switch (B) and depress the forward/reverse control button on the right side of the tool.

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.

FIG. 2



OPERATION

⚠ ***WARNING: To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs.*** *An accidental start-up can cause injury.*

Installing and Removing the Battery Pack (Fig. 3)

NOTE: Make sure your battery pack is fully charged.

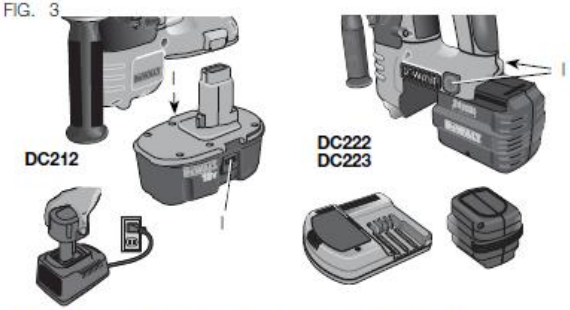
⚠ ***WARNING: Make certain the switch lock-off button (C) is engaged to prevent switch actuation before removing or installing battery.***

To install the battery pack into the tool handle, align the notch (or rails) inside the tool's handle with the battery pack 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 (I) and firmly pull (or slide) the battery pack out of the tool handle. Insert it into the charger as described in the charger section of this manual.

Note: Operating temperature of this tool is 19° to 104°F (-7° to +40°C). Using the tool outside of this temperature range will decrease the life of the tool.

FIG. 3



Shocks – Active Vibration Control

For best vibration control, hold the tool with one hand on the main handle (E) and the other hand on the side handle (A). Apply just enough pressure so the hammer is approximately mid-stroke. The hammer only needs enough pressure to engage the internal active vibration control. Applying too much pressure will not make the tool drill faster and active vibration control will not engage.

SDS Chuck (Fig. 4)

CAUTION: *Do not use chipping bits in this tool. Using chipping bits may cause the tool to bind-up and damage to the tool may occur.*

To insert bit, insert shank of bit about 3/4" (19 mm) into chuck (J). Push and rotate bit until it locks in place. The bit will be securely held.

To release bit, pull the sleeve (K) back and remove the bit.

FIG. 4

Drilling

⚠***WARNING:*** ***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.*

⚠***WARNING:*** *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.*

1. Use sharp drill bits only. For MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits rated for percussion drilling.
2. 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.
3. 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 battery pack.

English

⚠***CAUTION:*** *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.**
5. To minimize stalling or breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
6. 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 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

⚠***WARNING: To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs.*** *An accidental start-up can cause injury.*

Cleaning

⚠***WARNING:*** *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.*

⚠***WARNING:*** *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.*

CHARGER CLEANING INSTRUCTIONS

⚠***WARNING:*** *Shock hazard. 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.*

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., 701 East Joppa Road, Baltimore, MD 21286, call 1-800-4-DEWALT (1-800-433-9258) or visit our website www.dewalt.com.

MAXIMUM RECOMMENDED CAPACITIES
DC212, DC222, DC223

Spindle speed	0-1,110 min^{-1}
Hammering speed	0-4,100 min^{-1}
Bits, Masonry Drilling	7/8" (.875 mm)

Repairs

The charger and battery pack are not serviceable.

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustments (including brush inspection and replacement) should be performed by a DEWALT factory service center, a DEWALT authorized service center or other qualified service personnel. Always use identical replacement parts.

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. This warranty does not cover part failure due to normal wear or tool abuse. For further detail of warranty coverage and warranty repair information, visit www.dewalt.com or call 1-800-4-DEWALT (1-800-433-9258). This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

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

1 YEAR FREE SERVICE

DEWALT will maintain the tool and replace worn parts caused by normal use, for free, any time during the first year after purchase.

2 YEARS FREE SERVICE ON DEWALT BATTERY PACKS

DC9071, DC9091, DC9096, DC9280, DC9360, DC9180, DCB120, DCB201 and DCB203

3 YEARS FREE SERVICE ON DEWALT BATTERY PACKS

DCB200, DCB204

DEWALT BATTERY PACKS

Product warranty voided if the battery pack is tampered with in any way. DEWALT is not responsible for any injury caused by tampering and may prosecute warranty fraud to the fullest extent permitted by law.

90 DAY MONEY BACK GUARANTEE

If you are not completely satisfied with the performance of your DEWALT Power Tool, Laser, or Nailer for any reason, you can return it within 90 days from the date of purchase with a receipt for a full refund – no questions asked.

LATIN AMERICA: This warranty does not apply to products sold in Latin America. For products sold in Latin America, see country specific warranty information contained in the packaging, call the local company or see website for warranty information.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call 1-800-4-DEWALT (1-800-433-9258) for a free replacement.

SPECIFICATIONS

DC212	18 volts DC (⎓)	0-1 100 min^{-1} (rpm) / 0-4 100 min^{-1} (bpm)
DC222	24 volts DC (⎓)	0-1 100 min^{-1} (rpm) / 0-4 100 min^{-1} (bpm)
DC223	24 volts DC (⎓)	0-1 100 min^{-1} (rpm) / 0-4 100 min^{-1} (bpm)

DEWALT Battery and Charger Systems

Battery	Output	Chargers/Charge Time (Minutes) – Chargeurs/Durée de charge (Minutes) – Cargadores de baterías/Tiempo de carga (Minutos)																				
		120 Volts																	12 Volts			
Cat #	Voltage	DW9106	DW9116	DW9107	DW9108	DW9116	DW9216	DW9117	DW911	DC911	DC922	DC9000	DC9310	DC9320	DCB100	DCB101	DCB103	DW9245	DCB119	DW9249	DW9109	DC9319
DC9360	36	X	X	X	X	X	X	X	X	X	X	60	X	X	X	X	X	X	X	X	X	X
DC9280	28	X	X	X	X	X	X	X	X	X	X	60	X	X	X	X	X	X	X	X	X	X
DW0242	24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60	X	60	X	X
DC9096	18	X	X	X	60	60	60	20	60	60	60	X	60	60	X	X	60	X	X	X	60	60
DC9099	18	X	X	X	45	45	45	15	45	45	45	X	45	45	X	X	45	X	X	X	45	45
DC9180	18	X	X	X	X	X	X	X	X	X	X	X	60	60	X	X	60	X	X	X	X	60
DC9181	18	X	X	X	X	X	X	X	X	X	X	X	30	30	X	X	30	X	X	X	X	30
DCB200	20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	60	60	X	90	X	X	X
DCB201	20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	30	30	X	45	X	X	X
DCB205	20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	40	40	X	60	X	X	X
DCB204	20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	80	80	X	120	X	X	X
DW9096	18	X	X	X	60	60	60	20	60	60	60	X	60	60	X	X	60	X	X	X	60	60
DW9098	18	X	X	X	30	30	30	12	30	30	30	X	30	30	X	X	30	X	X	X	30	30
DW9099	18	X	X	X	45	45	45	15	45	45	45	X	45	45	X	X	45	X	X	X	45	45
DC9091	14.4	90	115	60	60	60	60	20	60	60	60	X	60	60	X	X	60	X	X	X	60	60
DC9094	14.4	60	90	45	45	45	45	15	45	45	45	X	45	45	X	X	45	X	X	X	45	45
DW9091	14.4	60	90	45	45	45	45	15	45	45	45	X	45	45	X	X	45	X	X	X	45	45
DW9094	14.4	45	60	30	30	30	30	12	30	30	30	X	30	30	X	X	30	X	X	X	30	30
DCB120	12	X	X	X	X	X	X	X	X	X	X	X	X	X	40	30	30	X	40	X	X	X
DC9071	12	90	115	60	60	60	60	20	60	60	60	X	60	60	X	X	60	X	X	X	60	60
DW9060	12	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DW9071	12	60	90	45	45	45	45	15	45	45	45	X	45	45	X	X	45	X	X	X	45	45
DW9072	12	45	60	30	30	30	30	12	30	30	30	X	30	30	X	X	30	X	X	X	30	30
DW9048	9.6	40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DW9061	9.6	60	90	45	45	45	45	15	45	45	45	X	45	45	X	X	45	X	X	X	45	45
DW9062	9.6	45	60	30	30	30	30	12	30	30	30	X	30	30	X	X	30	X	X	X	30	30
DW9067	7.2	45	60	30	30	30	30	12	30	30	30	X	30	30	X	X	30	X	X	X	30	30

"X" Indicates that the battery pack is not compatible with that specific charger.
"X" indique que le bloc-piles n'est pas compatible avec ce chargeur.
Una "X" indica que el paquete de baterías no es compatible con ese determinado cargador.

All charge times are approximate. Actual charge time may vary. Read the instruction manual for more specific information.
Les durées de charge sont approximatives; la durée de charge réelle peut varier. Lire le manuel d'utilisation pour obtenir des renseignements plus précis.
El tiempo de duración de carga es aproximado; la duración de carga real puede variar. Lea el manual de instrucciones para obtener información más precisa.

DEWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286
(NOV12) Part No. N242239 DC212, DC222, DC223