

DEWALT®



Instruction Manual

DCD708

20V Max* 1/2" (13 mm) Brushless Cordless Drill Driver

DCD709

20V Max* 1/2" (13 mm) Brushless Cordless Hammerdrill

Definitions: Safety Alert Symbols and Words

This instruction manual uses the following safety alert symbols and words to alert you to hazardous situations and your risk of personal injury or property damage.





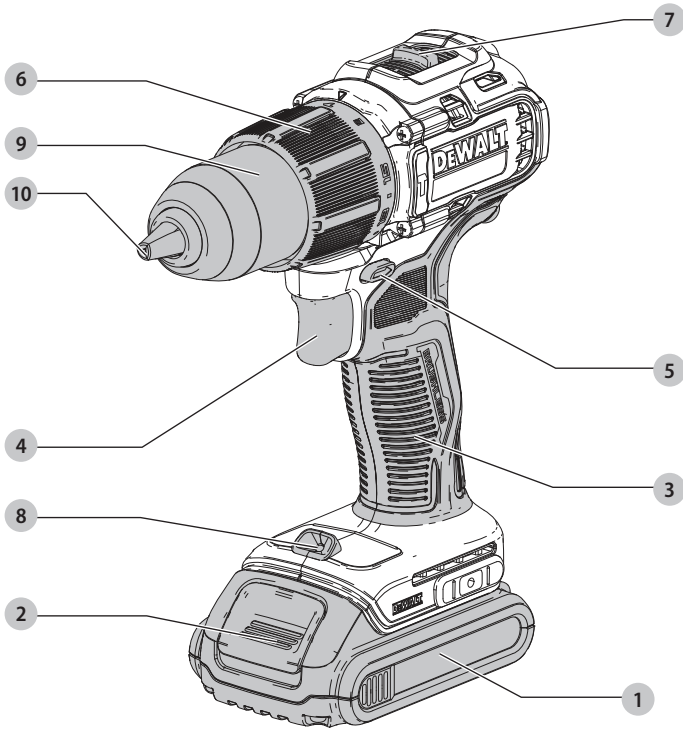


-  **DANGER:** Indicates an imminently hazardous situation which, if not avoided, **will** result in **death or serious injury**.
 -  **WARNING:** Indicates a potentially hazardous situation which, if not avoided, **could** result in **death or serious injury**.
 -  **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury**.
 -  (Used without word) Indicates a safety related message.
- NOTICE:** Indicates a practice **not related to personal injury** which, if not avoided, **may** result in **property damage**.

Fig. A



- 1 Battery pack
- 2 Battery pack release button
- 3 Main handle
- 4 Variable speed trigger switch
- 5 Forward/reverse control button
- 6 Mode selection collar
- 7 Speed selector
- 8 Worklight
- 9 Chuck sleeve
- 10 Keyless chuck

 **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.

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

GENERAL POWER TOOL SAFETY WARNINGS



WARNING: Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below 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.

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.
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

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 remove the battery, pack if detachable, 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 and accessories. 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.
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

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.
- e) **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- f) **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 265 °F (129 °C) may cause explosion.
- g) **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

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.
- b) **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

Additional Safety Rules for Drills/Drivers/Hammerdrills

- **Wear ear protectors with impact drills.** Exposure to noise can cause hearing loss.

- **Use auxiliary handle(s), if supplied with the tool.** Loss of control can cause personal injury.
- **Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring.** Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- **Hold tool firmly with two hands, one hand on the handle, and the other gripping the bottom around the battery area or the auxiliary handle if provided.** Loss of control can cause personal injury.
- **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 and drilling operations cause chips to fly.** Flying particles can cause permanent eye damage.
- **Do not operate this tool for long periods of time. Vibration caused by tool action may be harmful to your hands and arms.** Use gloves to provide extra cushion and limit exposure by taking frequent rest periods.
- **Accessories and tool may get hot during operation.** Wear gloves when handling them if performing heat producing applications such as hammerdrilling and drilling metals.

Additional Safety Information



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



WARNING: ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if 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.
-  **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.
- **Air vents often cover moving parts and should be avoided.** Loose clothes, jewelry or long hair can be caught in moving parts.

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


V	volts		or AC/DC.....	alternating or direct current
Hz	hertz			
min	minutes		Class II Construction (double insulated)
	or DC.....			direct current
			Class I Construction (grounded)
.../min.....	per minute	n_0		no load speed
BPM.....	beats per minute	n		rated speed
IPM.....	impacts per minute			earthing terminal
RPM.....	revolutions per minute			safety alert symbol
sfpm	surface feet per minute			visible radiation
SPM.....	strokes per minute			avoid staring at light
OPM.....	oscillations per minute			wear respiratory protection
A	amperes			wear eye protection
W	watts			wear hearing protection
 or AC.....	alternating current			read all documentation
		IPXX		IP symbol


BATTERIES AND CHARGERS


The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below and then follow charging procedures outlined. When ordering replacement battery packs, be sure to include the catalog number and voltage.

READ ALL INSTRUCTIONS

Important Safety Instructions for All Battery Packs

-  **WARNING:** Read all safety warnings, instructions, and cautionary markings for the battery pack, charger and product. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.
- Do not charge or use the battery pack in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Inserting or removing the battery pack from the charger may ignite the dust or fumes.
- 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.
- NEVER force the battery pack into the charger. DO NOT modify the 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 104 °F (40 °C) (such as outside sheds or metal buildings in summer). For best life store battery packs in a cool, dry location.
- NOTE: Do not store the battery packs in a tool with the trigger switch locked on. Never tape the trigger switch in the ON position.
- 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.

 **WARNING:** Fire hazard. Never attempt to open the battery pack for any reason. If the battery pack case is cracked or damaged, do not insert into the charger. Do not crush, drop or damage the 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 (e.g., pierced with a nail, hit with a hammer, stepped on). Damaged battery packs should be returned to the 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.

Battery Pack Cleaning Instructions

Dirt and grease may be removed from the exterior of the battery using a cloth or soft non-metallic brush. Do not use water or any cleaning solutions.

The RBRC® Seal

The RBRC® (Rechargeable Battery Recycling Corporation) Seal on the nickel cadmium, nickel metal hydride or lithium-ion batteries (or battery packs) indicates 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 Call 2 Recycle® program provides an environmentally conscious alternative.

Call 2 Recycle, Inc., in cooperation with DeWALT and other battery users, has established the program 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 Call 2 Recycle, Inc.



Fuel Gauge Battery Packs (Fig. B)

Some DeWALT battery packs include a fuel gauge which consists of three green LED lights that indicate the level of charge remaining in the battery pack.

The fuel gauge is an indication of approximate levels of charge remaining in the battery pack according to the following indicators:

 75–100% charged

 51–74% charged

 < 50% charged

 Pack needs to be charged

To actuate the fuel gauge, press and hold the fuel gauge button. A combination of the three green LED lights will illuminate designating the level of charge left. When the level of charge in the battery is below the usable limit, the fuel gauge will not illuminate and the battery will need to be recharged.

Fig. B



NOTE: The fuel gauge is only an indication of the charge left on the battery pack. It does not indicate tool functionality and is subject to variation based on product components, temperature and end-user application.

Transportation



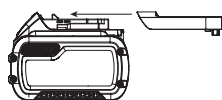
WARNING: Fire hazard. Do not store or carry the battery pack so that metal objects can contact exposed battery terminals. For example, do not place the battery pack in aprons, pockets, tool boxes, product kit boxes, drawers, etc., with loose nails, screws, keys, etc. **Transporting batteries can possibly 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 in carry-on baggage UNLESS they are properly protected from short circuits. So when transporting individual battery packs, make sure that the battery terminals are protected and well insulated from materials that could contact them and cause a short circuit. **NOTE:** Li-ion batteries should not be put in checked baggage.

Shipping the DeWALT FLEXVOLT™ Battery

The DeWALT FLEXVOLT™ battery has two modes: **Use** and **Shipping**.

Use Mode: When the FLEXVOLT™ battery stands alone or is in a DeWALT 20V Max* product, it will operate as a 20V Max* battery. When the FLEXVOLT™ battery is in a 60V Max* or a 120V Max* (two 60V Max* batteries) product, it will operate as a 60V Max* battery.

Shipping Mode: When the cap is attached to the FLEXVOLT™ battery, the battery is in Shipping Mode. Strings of cells are



electrically disconnected within the pack resulting in three batteries with a lower Watt hour (Wh) rating as compared to one battery with a higher Watt hour rating. This increased quantity of three batteries with the lower Watt hour rating can exempt the pack from certain shipping regulations that are imposed upon the higher Watt hour batteries.

The battery label indicates two Watt hour ratings (see example). Depending on how the battery is shipped, the appropriate Watt hour rating must be used to determine the applicable shipping requirements. If utilizing the shipping cap, the pack will be considered 3 batteries at the Watt hour rating indicated for "Shipping". If shipping without the cap or in a tool, the pack will be considered one battery at the Watt hour rating indicated next to "Use".

Example of Use and Shipping Label Marking

USE: 120 Wh Shipping: 3 x 40 Wh

For example, Shipping Wh rating might indicate 3 x 40 Wh, meaning 3 batteries of 40 Watt hours each. The Use Wh rating might indicate 120 Wh (1 battery implied).

Important Safety Instructions for All Battery Chargers



WARNING: Read all safety warnings, instructions, and cautionary markings for the battery pack, charger and product. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

- **DO NOT attempt to charge the battery pack with any chargers other than a DeWALT charger.** DeWALT 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 the charger to rain or snow.**
- **Pull by the plug rather than the cord when disconnecting the charger.** This will reduce the risk of damage to the electric plug and cord.
- **Make sure that the 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 charger outdoors, always provide a dry location and 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 lower the gauge number, the heavier the cord.

Minimum Gauge for Cord Sets

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)		
Ampere Rating		American Wire Gauge				
More Than	Not More Than					
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 the 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 the charger with a damaged cord or plug—have them replaced immediately.**
- **Do not operate the 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 the 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 120V household electrical power. Do not attempt to use it on any other voltage.** This does not apply to the vehicular charger.



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



WARNING: Burn hazard. Do not submerge the battery pack in any liquid or allow any liquid to enter the battery pack. 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.



CAUTION: Burn hazard. To reduce the risk of injury, charge only DeWALT rechargeable battery packs. Other types of batteries may overheat and burst resulting in personal injury and property damage.



CAUTION: Under certain conditions, with the charger plugged into the power supply, 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 the charger cavities. Always unplug the charger from the power supply when there is no










battery pack in the cavity. Unplug the charger before attempting to clean.

Charging a Battery

NOTE: To ensure maximum performance and life of lithium-ion battery packs, charge the battery pack fully before first use.

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

NOTE: To remove the battery pack, some chargers require the battery pack release button to be pressed.

Indicators	
	Charging  
	Fully Charged  
	Hot/Cold Pack Delay*  

*DCB107, DCB112, DCB113, DCB115, DCB118, DCB132:

The red light will continue to blink, but a yellow indicator light will be illuminated during this operation. Once the battery pack has reached an appropriate temperature, the yellow light will turn off and the charger will resume the charging procedure.

A charger will not charge a faulty battery pack. The charger refusing to light could indicate a problem with the charger or a faulty battery pack.

NOTE: If the charger refuses to light, take the charger and battery pack to be tested at an authorized service center.

Hot/Cold Pack Delay

When the charger detects a battery pack that is too hot or too cold, it automatically starts a Hot/Cold Pack Delay, suspending charging until the battery pack has reached an appropriate temperature. The charger then automatically switches to the pack charging mode. This feature ensures maximum battery pack life.

A cold battery pack may charge at a slower rate than a warm battery pack.

The DCB118 charger is equipped with an internal fan designed to cool the battery pack. The fan will turn on automatically when the battery pack needs to be cooled.

Never operate the charger if the fan does not operate properly or if ventilation slots are blocked. Do not permit foreign objects to enter the interior of the charger.

Electronic Protection System

Li-Ion tools are designed with an Electronic Protection System that will protect the battery pack against overloading, overheating or deep discharge.

The tool will automatically turn off if the Electronic Protection System engages. If this occurs, place the lithium-ion battery pack on the charger until it is fully charged.

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 – 75 °F (18 °C – 24 °C). DO NOT charge when the battery pack is below +40 °F (+4.5 °C), or above +104 °F (+40 °C). This is important and will prevent serious damage to the battery pack.
2. The charger and battery pack may become warm to the 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 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 the charger and battery pack to a location where the surrounding air temperature is approximately 65 °F – 75 °F (18 °C – 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 effect on the battery pack.
5. 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 the charger before attempting to clean.
6. Do not freeze or immerse the charger in water or any other 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.

Wall Mounting

DCB107, DCB112, DCB113, DCB115, DCB118, DCB132

These chargers are designed to be wall mountable or to sit upright on a table or work surface. If wall mounting, locate the charger within reach of an electrical outlet, and away from a corner or other obstructions which may impede air flow. Use the back of the charger as a template for the location of the mounting screws on the wall. Mount

the charger securely using drywall screws (purchased separately) at least 1" (25.4 mm) long, with a screw head diameter of 0.28–0.35" (7–9 mm), screwed into wood to an optimal depth leaving approximately 7/32" (5.5 mm) of the screw exposed. Align the slots on the back of the charger with the exposed screws and fully engage them in the slots.

Intended Use

This tool is a professional power tool designed for drilling and screwdriving.

DO NOT use under wet conditions or in presence of flammable liquids or gases.

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 serious personal injury, turn unit off and remove the battery pack before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

Belt Hook and Bit Clip (Optional Accessory) (Fig. C)

WARNING: To reduce the risk of serious personal injury, ONLY use the tool's belt hook to hang the tool from a work belt. DO NOT use the belt hook for tethering or securing the tool to a person or object during use. DO NOT suspend tool overhead or suspend objects from the belt hook.

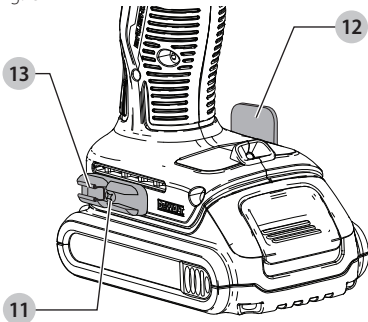
WARNING: To reduce the risk of serious personal injury, ensure the screw holding the belt hook is secure.

IMPORTANT: When attaching or replacing the belt hook or bit clip, use only the screw **11** that is provided. Be sure to securely tighten the screw.

The belt hook **12** and bit clip **13** can be attached to either side of the tool using only the screw **11** provided, to accommodate left- or right-handed users. If the belt hook or bit clip is not desired at all, they can be removed from the tool.

To move the belt hook or bit clip, remove the screw that holds it in place then reassemble on the opposite side. Be sure to securely tighten the screw.

Fig. C



Installing a Bit or Accessory into a Keyless Chuck (Fig. D)

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 and disconnect tool from power source when changing accessories.

WARNING: Always ensure the bit is secure before starting the tool. A loose bit may eject from tool causing possible personal injury.

To install a drill bit or other accessory:

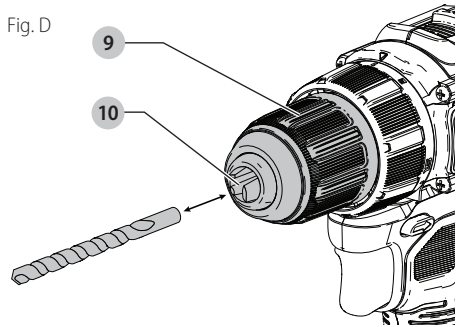
1. Rotate the chuck sleeve **9** to open the teeth of the keyless chuck **10** far enough to accept the desired accessory.
2. Insert the accessory about 3/4" (19 mm) into the keyless chuck and tighten securely by rotating the chuck sleeve.

NOTE: For maximum tightness, tighten the keyless chuck with one hand on the chuck sleeve and one hand holding the tool.

To remove a drill bit or other accessory:

- Rotate the sleeve far enough to open the teeth to release the accessory.

Fig. D



Speed Selection (Fig. A)

The tool features two speed settings for greater versatility.

NOTE: Do not change speeds when the tool is running. Always allow the tool to come to a complete stop before changing speed.

1. To select speed 1 (higher torque setting), slide the speed selector **7** back (away from the chuck).
2. To select speed 2 (lower torque setting), slide the speed selector forward (towards the chuck).



If the tool does not change speeds, confirm that the speed selection switch is completely engaged in the forward or back position.

Mode Selection (Fig. A)

The mode selection collar **6** can be used to select the correct operating mode depending upon the planned application.

To select, rotate the collar until the desired symbol aligns with the arrow.

! WARNING: When the torque adjustment collar is in the drill or hammerdrill position, the drill will not clutch. The drill may stall if overloaded, causing a sudden twist.

Symbol	Mode
	Drilling
1–15	Screwdriving (higher number = greater torque)
	Hammerdrilling (DCD709 only)

OPERATION

! WARNING: To reduce the risk of serious personal injury, turn unit off and remove the battery pack before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

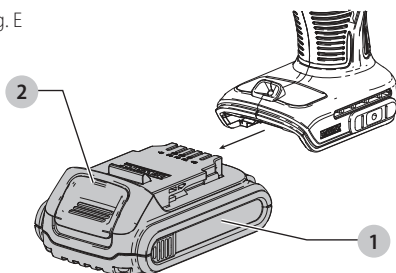
Installing and Removing the Battery Pack (Fig. E)

NOTE: For best results, make sure your battery pack is fully charged.

To install the battery pack **1** into the tool handle, align the battery pack with the rails inside the tool's handle and slide it into the handle until the battery pack is firmly seated in the tool and ensure that it does not disengage.

To remove the battery pack from the tool, press the release button **2** and firmly pull the battery pack out of the tool handle. Insert it into the charger as described in the charger section of this manual.

Fig. E



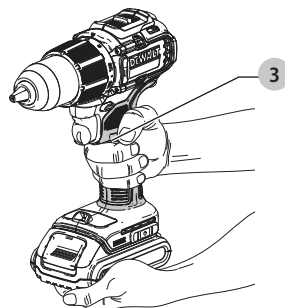
Proper Hand Position (Fig. F)

! WARNING: To reduce the risk of serious personal injury, ALWAYS use proper hand position as shown.

! WARNING: 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 **3** and one hand on the battery pack. Hold tool firmly with both hands to control the twisting action of the drill.

Fig. F



Variable Speed Trigger Switch and Forward/Reverse Control Button (Fig. G)

The drill is turned ON and OFF by pulling and releasing the trigger switch **4**. The farther the trigger is depressed, the higher the speed of the drill.

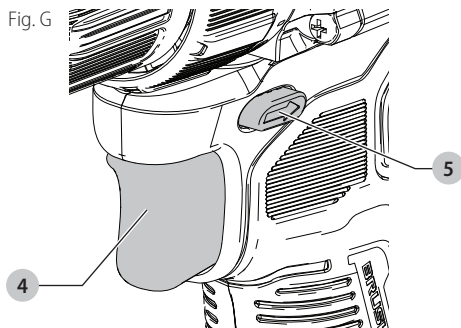
A forward/reverse control button **5** determines the rotational direction of the tool and also serves as a lock-off button.

- 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.

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

Fig. G




LED Work Light (Fig. A)


! CAUTION: Do not stare into worklight. Serious eye injury could result.

The worklight **8** is activated when the trigger switch **4** is depressed, and will automatically turn off approximately 20 seconds after the trigger switch is released.


NOTE: The work light is for lighting the immediate work surface and is not intended to be used as a flashlight.


Performing an Application (Fig. A)

 **WARNING:** To reduce the risk of personal injury, ALWAYS ensure workpiece is anchored or clamped firmly.

 **WARNING:** Always wait until the motor has come to a complete standstill before changing the direction of rotation.


Prior to performing work:


- Set the speed selector . Refer to **Speed Selection**.
- Install the appropriate bit or accessory into the chuck. Refer to **Installing a Bit or Accessory into a Keyless Chuck**.

 **WARNING:**

- Do not use this tool to mix or pump easily combustible or explosive fluids (benzine, alcohol, etc.).
- Do not mix or stir flammable liquids labeled accordingly.

Screwdriving (1–15)


Your tool has a clutch with adjustable torque for driving and removing a wide array of fastener shapes and sizes. The numbers 1–15 on the mode selection collar  are used to set a torque range for screwdriving. The higher the number on the collar, the higher the torque and the larger the fastener which can be driven.


1. Turn the mode selection collar  to the desired position. Refer to **Mode Selection**.
2. Pull the trigger switch applying pressure in a straight line with the bit until the fastener is seated at the desired depth in the workpiece.

Recommendations for Screwdriving

- Start with lower torque settings, then advance to higher torque settings to avoid damage to the workpiece or fastener.
- Make some practice runs in scrap or on unseen areas of the workpiece to determine the proper position of the mode selection collar.

Drilling

1. Turn the mode selection collar  to the drill symbol. Refer to **Mode Selection**.
2. Place drill bit in contact with the workpiece.
NOTE: Use sharp drill bit only.
3. Pull the trigger switch applying pressure in a straight line with the bit until it reaches the desired depth.

 **WARNING:** 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. Keep the motor running when pulling the bit back out of a drilled hole to prevent jamming.

Recommendations for Drilling

- When drilling, always apply pressure in a straight line with the bit, but do not push hard enough to stall the motor or deflect the bit.



IF THE DRILL STALLS:

- **RELEASE TRIGGER SWITCH IMMEDIATELY**, remove drill bit from work, and determine cause of stalling.
- **DO NOT DEPRESS TRIGGER SWITCH 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.
- Large holes (5/16" to 1/2" [7.9 mm to 12.7 mm]) in steel can be made easier if a pilot hole (5/32" to 3/16" [4 mm to 4.8 mm]) is drilled first.
- If drilling thin material or material that is prone to splinter, use a wood "back-up" block to prevent damage to the work piece.

Hammerdrilling

DCD709 Only


IMPORTANT: Use carbide-tipped or masonry bits rated for percussion drilling only.

1. Select the desired speed/torque range using the speed selector  to match the speed and torque to the planned operation. Turn the mode selection collar  to the hammerdrill symbol.
2. Pull the trigger, applying just enough pressure on the hammer to keep it from bouncing excessively or "rising" off the bit.


Recommendations for Hammerdrilling


- Too much force will cause slower drilling speeds, overheating, and a lower drilling rate.
- A smooth even flow of material indicates the proper drilling rate.
- 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.
- When drilling deep holes, if the hammer speed starts to drop off, pull the bit partially out of the hole with tool still running to help clear debris from the hole.

MAINTENANCE

 **WARNING:** To reduce the risk of serious personal injury, turn unit off and remove the battery pack before making any adjustments or removing/installing attachments or accessories. 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 procedure.

 **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.

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 dealer or authorized service center.

Compatible battery packs and chargers

20V Max* Li-Ion	Battery Packs Blocs-piles Baterías	DCB200, DCB201, DCB203, DCB204, DCB204BT**, DCB205, DCB205BT**, DCB206, DCB208, DCB230, DCB240
	Chargers Chargeurs Cargadores	DCB103, DCB104, DCB107, DCB112, DCB113, DCB115, DCB118, DCB132, DCB1106, DCB1112
60V Max* Li-Ion	Battery Packs Blocs-piles Baterías	DCB606, DCB609, DCB612
	Chargers Chargeurs Cargadores	DCB103, DCB104, DCB107, DCB112, DCB113, DCB115, DCB118, DCB132, DCB1106, DCB1112

* Maximum initial battery voltage (measured without a workload) is 20, 60 or 120 volts. Nominal voltage is 18, 54 or 108. (120V Max* is based on using 2 DEWALT 60V Max* lithium-ion batteries combined.)

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WARNING: Use of any other battery packs may create a risk of injury and fire.

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.