



**Instruction Manual** 

# **DCW210**

20V Max\* 5" (127 mm) Random Orbit Palm Sander Ponceuse portative à orbite aléatoire 127 mm (5 po) 20 V max\* Lijadora de Palma de Órbita Aleatoria 20 V Máx\* de 127 mm (5")

# www.DeWALT.com

If you have questions or comments, contact us.

Pour toute question ou tout commentaire, nous contacter.

Si tiene dudas o comentarios, contáctenos.

1-800-4-DEWALT

## **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**.

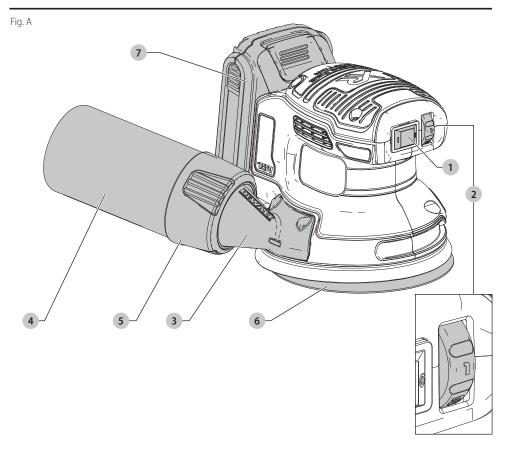


**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, **may** result in **minor or moderate injury**.



(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**.



- 1 On/Off switch
- 2 Speed control dial
- 3 Dust port
- 4 Dust bag
- 5 Dust bag collar
- 6 Sanding pad
- **7** Battery pack



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.

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).

## 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 mainsoperated (corded) power tool or battery-operated (cordless) power tool.

### 1) Work Area Safety

- 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.
- 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 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. 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.
- 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 130 °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.
- Never service damaged battery packs. Service of battery packs should only be performed by the manufacturer or authorized service providers.

# **Additional Safety Instructions for Sanders**

- Always wear eye protection and a respirator when sanding.
- Sanding of lead-based paint is not recommended.
   See Precautions to Take When Sanding Paint for additional information before sanding paint.
- Do not operate the unit without the dust collection bag or dust collection system.
- · Clean your tool out periodically.

- Empty dust bag frequently, especially when sanding resin coated surfaces such as polyurethane, varnish, shellac, etc. Dispose of coated dust particles according to the finish manufacturer's guidelines, or place in a metal can with a tight-fitting metal lid. Remove coated dust particles from the premises daily. The accumulation of fine sandina dust particles may self ignite and cause fire.
- Replace a worn or damaged belt when it causes high tool rpm. High tool rpm caused by a worn out belt may result in separation of sanding pad from the sander, possibly causing personal injury. For instructions on replacing the belt, see Replacing the Sanding Pad and the Belt under Maintenance.

## **Additional Safety Information**



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 EOUIPMENT:

- 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 chemicallytreated 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.

 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:

Vvolts	ightharpoonup or AC/DC alternating or
Hzhertz	direct current
minminutes	□Class II
——— or DC direct current  (1)	Construction (double insulated) n <sub>0</sub> no load speed
/min per minute	nrated speed
BPMbeats per minute	earthing terminal
IPMimpacts per minute	safety alert symbol
RPMrevolutions per	visible radiation
minute	ear respiratory
sfpmsurface feet per	protection
minute	ear eye
SPMstrokes per minute	protection
Aamperes	Owear hearing
Wwatts	protection
$oldsymbol{\sim}$ or ACalternating current	documentation

## **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. 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.

## **READ ALL INSTRUCTIONS**

# Important Safety Instructions for All Battery Packs



WARNING: Read all safety warnings and all instructions for the battery pack, charger and power tool. 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.
- 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 designated 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, immedicately 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.

## **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:** Lithium-ion batteries should not be put in checked baggage.

#### Shipping the DEWALT FLEXVOLT™ Battery

The DEWALT FLEXVOLT  $\!^{\mathbb{M}}$  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 FLEXVOL™ 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

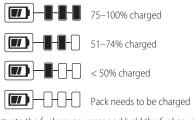
## USE: 120 Wh Shipping: 3 x 40 Wh

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).

## 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:



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.



**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.

For more information regarding fuel gauge battery packs, please call 1-800-4-DEWALT (1-800-433-9258) or visit our website www.dewalt.com.

## The RBRC® Seal

The RBRC® (Rechargeable Battery Recycling Corporation) Seal on the nickel cadmium, nickel metal hydride or lithiumion 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.

# Important Safety Instructions for All Battery Chargers



WARNING: Read all safety warnings and all instructions for the battery pack, charger and power tool. 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 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 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 qauge number, the heavier the cord.

## **Minimum Gauge for Cord Sets**

Vo	lts	Total Length of Cord in Feet (meters)					
12	0 V	25 (7.6) 50 (15.2) 100 (30.5) 150 (45.7)			150 (45.7)		
240 V		50 (15.2) 100 (30.5) 200 (61.0) 300 (91.		300 (91.4)			
Ampere	Rating Not	A					
Than	More Than	American Wire Gauge					
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.
- 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.

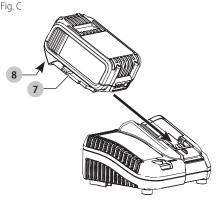


**CAUTION:** Burn hazard. To reduce the risk of injury, charge only DEWALT rechargeable battery packs. Other types of batteries may overheat and burst resulting in personal injury and property damage. **NOTICE:** Under certain conditions, with the charger plugged into the power supply, the charger can

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 (Fig. C)

1. Plug the charger into an appropriate outlet before inserting battery pack.



- Insert the battery pack ₱ into the charger, making sure the battery pack is fully seated in 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 battery pack is fully charged and may be used at this time or left in the charger. To remove the battery pack from the charger, push the battery release button 8 on the battery pack.

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

## **Charger Operation**

Refer to the indicators below for the charge status of the battery pack.



#### \*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.

The compatible charger(s) will not charge a faulty battery pack. The charger will indicate faulty battery pack by refusing to light.

**NOTE:** This could also mean a problem with a charger. If the charger indicates a problem, 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 will charge at a slower rate than a warm battery pack. The battery pack will charge at that slower rate throughout the entire charging cycle and will not return to maximum charge rate even if the battery pack warms.

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-lon 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 lithiumion battery pack on the charger until it is fully charged.

## 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.

## 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.

# 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 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
  - c. Move the 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 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.

## 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. A)



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

Refer to Figure A at the beginning of this manual for a complete list of components.

#### Intended Use

This random orbit sander has been designed for sanding wood, metal, plastics and painted surfaces.

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

This sander is a professional power tool.

**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.

## Attaching Sanding Discs (Fig. D)

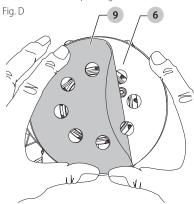
Your sander is designed to use 5" (127 mm) sanding discs 9 with an 8-hole dust extraction pattern. Sanding discs for the DCW210 attach with hook and loop.

The recommended DWE64233 sanding discs are available at extra cost from your local dealer or authorized DEWALT service center.

# To Attach Sanding Disc to the Sanding Pad (Fig. D)

- 1. Turn the sander over so that the sanding pad **6** is facing upward.
- 2. Clean the dust from the sanding pad 6 face.
- 3. Hold the pad with one hand to keep it from rotating.
- 4. With the other hand, align the holes and place the disc **9** directly on top of the pad.

**NOTE:** These sanders are not to be used in drywall applications. Using a sanding screen (e.g., screen used for sanding drywall) directly on the hook and loop pad will not hold and will damage the hooks on the pad. The hooks on the pad will wear very rapidly if left in contact with the work surface while the tool is operating.



# Switch (Fig. A)

To turn the unit on, depress the side of the dust-protected switch  $\P$  that corresponds to the symbol "I". To turn the tool off, depress the side of the switch that corresponds to the symbol "O".

# Speed Control Dial (Fig. A)

The speed control dial 2, shown in Figure A, allows you to increase or decrease speed from 8000–12000 Orbits Per Minute. The optimal speed setting for each application is

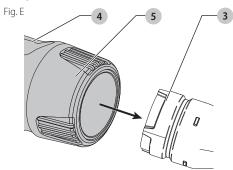
very much dependent on personal preference. Generally, you will want to use a higher setting on harder materials and a lower setting on softer materials. Material removal rate increases as speed increases.

## Dust Extraction (Fig. E, H)

Your sander has two dust extraction methods: a built-in dust port 3 which allows either the supplied dust bag 4 or a shop vacuum system to be connected; and a dust skirt (11, Fig. H). The built-in dust port utilizes the DEWALT AirLock connection making it compatible with the DEWALT dust extractors.

## To Attach the Dust Bag (Fig. E)

- 1. While holding the sander, fit the dust bag collar **5** to the dust port **3** as shown in Figure E.
- 2. Turn the collar **5** clockwise to lock the dust bag **4** in place.



## To Empty the Dust Bag (Fig. E)

- 1. While holding the sander, turn the collar **5** counterclockwise to unlock the dust bag **4**.
- 2. Remove dust bag from the sander and gently shake or tap the dust bag to empty.
- 3. Reattach the dust bag back onto the dust port and lock into place by turning the dust bag collar clockwise.

You may notice that all the dust will not come free from the bag. This will not affect sanding performance but will reduce the sander's dust collection efficiency. To restore your sander's dust collection efficiency, depress the spring inside the dust bag when you are emptying it and tap it on the side of the trash can or dust receptacle.



**CAUTION: Never operate this sander unless a dust collector is in place.** Sanding dust exhaust may create a breathing hazard.

#### **OPERATION**



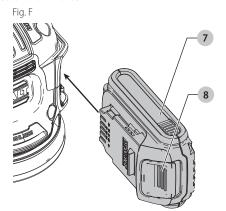
WARNING: To reduce the risk of serious personal injury, turn unit off and remove the battery pack before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

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

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

To install the battery pack  $\mathfrak{D}$  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 **8** 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.



# Proper Hand Position (Fig. G)

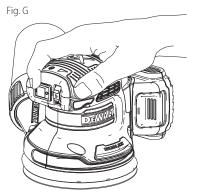


**WARNING:** To reduce the risk of serious personal injury, **ALWAYS** use proper hand position as shown.



**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 grip as shown.



# Operating the Sander (Fig. G)

**NOTICE:** These sanders are not to be used in drywall applications.

**NOTICE:** Avoid overloading your sander. Overloading will result in a considerable reduction in speed and finish quality of your work. The unit may also become hot. In this event, run sander at a no load condition for a minute or two.

To operate your sander, grasp it as shown in Figure G and turn it on. Move the sander in long, sweeping strokes along the surface being sanded, letting the sander do the work. Pushing down on the tool while sanding actually slows the removal rate and produces an inferior quality surface. Be sure to check your work often, this sander is capable of removing material rapidly, especially with coarse paper.

The random orbital action of your sander allows you to sand with the grain or at any angle across it for most sanding jobs. To produce the best finish possible, start with coarse grit sandpaper and change gradually to finer and finer paper. Vacuum and wipe surface with a tack cloth between grit steps. Your sander is designed to sand into small or confined areas. Its small size and light weight make it ideal for overhead work.

The rate at which the dust collection bag fills up will vary with the type of material being sanded and the coarseness of the sandpaper. For best results, empty the bag frequently. When sanding painted surfaces, (see the following for additional precautions when sanding paint) you may find that the sandpaper loads up and clogs with paint. A heat gun will work much better to remove paint before sanding. FOLLOW ALL SAFETY INSTRUCTIONS IN HEAT GUN INSTRUCTION MANUAL.

## **Precautions to Take When Sanding Paint**

Sanding of lead based paint is NOT RECOMMENDED due to the difficulty of controlling the contaminated dust. The greatest danger of lead poisoning is to children and pregnant women.

Since it is difficult to identify whether or not a paint contains lead without a chemical analysis, we recommend the following precautions when sanding any paint:

#### 1. PERSONAL SAFETY

- No children or pregnant women should enter the work area where the paint sanding is being done until all clean up is completed.
- A dust mask or respirator should be worn by all persons entering the work area. The filter should be replaced daily or whenever the wearer has difficulty breathing. See your local hardware store for the proper NIOSH-approved dust mask.
- NO EATING, DRINKING or SMOKING should be done
  in the work area to prevent ingesting contaminated
  paint particles. Workers should wash and clean up
  BEFORE eating, drinking or smoking. Articles of food,
  drink, or smoking should not be left in the work area
  where dust would settle on them.

### 2. ENVIRONMENTAL SAFETY

- Paint should be removed in such a manner as to minimize the amount of dust generated.
- Areas where paint removal is occurring should be sealed with plastic sheeting of 4 mils thickness.

- Sanding should be done in a manner to reduce tracking of paint dust outside the work area.

#### 3. CLEANING AND DISPOSAL

- All surfaces in the work area should be vacuumed and thoroughly cleaned daily for the duration of the sanding project. Vacuum filter bags should be changed frequently.
- Plastic drop cloths should be gathered up and disposed of along with any dust chips or other removal debris. They should be placed in sealed refuse receptacles and disposed of through regular trash pick-up procedures. During clean up, children and pregnant women should be kept away from the immediate work area.
- All toys, washable furniture and utensils used by children should be washed thoroughly before being used again.

## **MAINTENANCE**

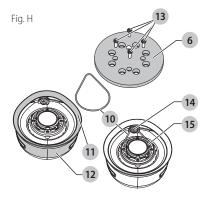


WARNING: To reduce the risk of serious personal injury, turn unit off and remove the battery pack before making any adjustments or removing/installing attachments or accessories. An accidental start-up can cause injury.

# Replacing the Sanding Pad and the Belt (Fig. H)

Your sander is equipped with a replaceable belt **10** which is located between the pad **6** and the sander body **12**. It is designed to control the pad speed while the unit is off the work surface. The belt and the sanding pad **6** are designed to be consumable parts and will occasionally need to be replaced. The sanding pad needs replacement when signs of wear become evident. Replacement of the belt is necessary when the pad speed increases very dramatically when the unit is lifted from the work surface. These parts are available at extra cost from your local dealer or authorized DEWALT service center.

- 1. Holding the platen firmly, remove the four screws **13** from the bottom of the pad.
- 2. Remove the pad 6.
- Replace worn or damaged belt 10 by wrapping it around the shoulder screw 14 and bearing retainer 15 as shown in Figure H.
- Reinstall pad (replace with new pad if necessary).
   Replace the four screws (13). Be careful not to overtighten screws.



## 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.

## **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. If you need assistance in locating any accessory, please contact DEWALT Industrial Tool Co., 701 East Joppa Road, Towson, MD 21286, call 1-800-4-DEWALT (1-800-433-9258) or visit our website: www.dewalt.com.

## Repairs

The charger and battery pack are not serviceable.



**WARNING:** To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement, when applicable) should be performed by a DEWALT factory service center or a DEWALT authorized service center. Always use identical replacement parts.

# **Register Online**

Thank you for your purchase. Register your product now for:

- WARRANTY SERVICE: Registering your product will help you obtain more efficient warranty service in case there is a problem with your product.
- CONFIRMATION OF OWNERSHIP: In case of an insurance loss, such as fire, flood or theft, your

- registration of ownership will serve as your proof of purchase.
- FOR YOUR SAFETY: Registering your product will allow us to contact you in the unlikely event a safety notification is required under the Federal Consumer Safety Act.

Register online at www.dewalt.com/register.

## **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 LIMITED WARRANTY IS GIVEN IN LIEU OF ALL OTHERS, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND EXCLUDES ALL INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so these limitations may not apply to you. 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, DC9182, DC9280, DC9360, DCB120, DCB127, DCB201, DCB203BT, DCB207, DCB361

#### 3 YEARS FREE SERVICE ON DEWALT BATTERY PACKS

DCB200, DCB204, DCB204BT, DCB203, DCB205, DCB205BT, DCB206, DCB230, DCB606, DCB609

**NOTE:** Battery 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.