If you have questions or comments, contact us. Pour toute question ou tout commentaire, nous contacter. Baitene dudas o comentaire, nous contacter. Bi tiene dudas o comentaire, nous contacter. <b>1-800-4-DEWALT • WWW.dewalt.com</b> <b>1-800-4-DEWALT •</b>		DC9310 7.2V-18V NiCd/NiMH/Li-Ion 1 Hour Charger DC9320 7.2V-18V NiCd/NiMH/Li-Ion Dual Port 1 Hour Charger Chargeur d'une heure DC9310 pour bloc-piles de 7,2 V à 18 V au NiCd/NiMH/Li-Ion Chargeur d'une heure DC9320 à double sortie pour bloc-piles de 7,2 V à 18 V au NiCd/NiMH/Li-Ion Cargador de 1 hora DC9310 de 7,2 V a 18 V con baterías de NiCd/NiMH/Li-Ion Cargador de 1 hora DC9310 de 7,2 V a 18 V con baterías de NiCd/NiMH/Li-Ion
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DEWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286 (JUL07) Form No. 655026-00 DC9310, DC9320

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

# **Definitions: Safety Guidelines**

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

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

 $\hat{A}$  WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

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

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

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



**WARNING! Read and understand all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

# SAVE THESE INSTRUCTIONS

# Important Safety Instructions for All Battery Chargers

**SAVE THESE INSTRUCTIONS:** This manual contains important safety and operating instructions for the DC9310 and DC9320 battery chargers.

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

Recommended Minimum Wire Size for Extension Cords

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

- Do not place any object on top of charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat. Place the charger in a position away from any heat source. The charger is ventilated through slots in the top and the bottom of the housing.
- Do not operate charger with damaged cord or plug.
- Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way. Take it to an authorized service center.
- Do not disassemble charger; take it to an authorized service center when service or repair is required. Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
- Disconnect the charger from the outlet before attempting any cleaning. This will reduce the risk of electric shock. Removing the battery pack will not reduce this risk.
- NEVER attempt to connect 2 chargers together.
- The charger is designed to operate on standard 120V household electrical power. Do not attempt to use it on any other voltage. This does not apply to the vehicular charger.

# SAVE THESE INSTRUCTIONS

# Introduction

The DC9310 and DC9320 battery chargers (Fig. 1) are designed to charge DEWALT battery packs with voltage from 7.2 up to 18 volts in about one hour. These chargers require no adjustment and are designed to be as easy as possible to operate. Simply place your battery pack into a receptacle of a plugged in charger and it will automatically charge the pack. Consult the chart at the end of this manual for compatibility of chargers and battery packs.

**A**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.

# Important Safety Instructions for All Battery Packs

When ordering replacement battery packs, be sure to include catalog number and voltage. Consult the chart at the end of this manual for compatibility of chargers and battery packs. The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below. Then follow charging procedures outlined.

# **READ ALL INSTRUCTIONS**

- Do not charge or use battery in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Inserting or removing the battery from the charger may ignite the dust or fumes.
- NEVER force battery pack into charger. DO NOT modify battery pack in any way to fit into a non-compatible charger as battery pack may rupture causing serious personal injury. Consult the chart at the end of this manual for compatibility of batteries and chargers.
- Charge the battery packs only in DEWALT chargers.
- DO NOT splash or immerse in water or other liquids.
- Do not store or use the tool and battery pack in locations where the temperature may reach or exceed 105°F (40°) (such as outside sheds or metal buildings in summer).

**ADANGER:** Electrocution hazard. Never attempt to open the battery pack for any reason. If battery pack case is cracked or damaged, do not insert into charger. Do not crush, drop or damage battery pack. Do not use a battery pack or charger that has received a sharp blow, been dropped, run over or damaged in any way (i.e., pierced with a nail, hit with a hammer, stepped on). Electric shock or electrocution may result. Damaged battery packs should be returned to service center for recycling.

**A**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.

**NOTE:** Battery storage and carrying caps are provided for use whenever the battery is out of the tool or charger. Remove cap before placing battery in charger or tool. **A** WARNING: Fire hazard. Do not store or carry battery so that metal objects can contact exposed battery terminals. For example, do not place battery in aprons, pockets, tool boxes, product kit boxes, drawers, etc., with loose nails, screws, keys, etc. without battery cap. Transporting batteries can possibly



cause fires if the battery terminals inadvertently come in contact with conductive materials such as keys, coins, hand tools and the like. The US Department of Transportation Hazardous Material Regulations (HMR) actually prohibit transporting batteries in commerce or on airplanes (i.e., packed in suitcases and carry-on luggage) UNLESS they are properly protected from short circuits. So when transporting individual batteries, make sure that the battery terminals are protected and well insulated from materials that could contact them and cause a short circuit.

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

- Do not incinerate the battery pack even if it is severely damaged or is completely worn out. The battery pack can explode in a fire.
- A small leakage of liquid from the battery pack cells may occur under extreme usage or temperature conditions. This does not indicate a failure.
  However, if the outer seal is broken:
  - a. and the battery liquid gets on your skin, immediately wash with soap and water for several minutes.
  - b. and the battery liquid gets into your eyes, flush them with clean water for a minimum of 10 minutes and seek immediate medical attention. (**Medical note:** The liquid is 25-35% solution of potassium hydroxide.)

and product using battery pack.

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

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

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

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

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

#### SPECIFIC SAFETY INSTRUCTIONS FOR LITHIUM ION (LI-ION)

- Do not incinerate the battery pack even if it is severely damaged or is completely worn out. The battery pack can explode in a fire. Toxic fumes and materials are created when lithium ion battery packs are burned.
- If battery contents come into contact with the skin, immediately wash area with mild soap and water. If battery liquid gets into the eye, rinse water over the open eye for 15 minutes or until irritation ceases. If medical attention is needed, the battery electrolyte is composed of a mixture of liquid organic carbonates and lithium salts.
- **Contents of opened battery cells may cause respiratory irritation.** Provide fresh air. If symptoms persists, seek medical attention.

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

## The RBRC<sup>™</sup> Seal

The RBRC<sup>™</sup> (Rechargeable Battery Recycling Corporation) Seal on the nickel cadmium, nickel metal hydride or lithium ion batteries (or battery packs) indicate that the costs to recycle these batteries (or battery packs) at the end of their useful life have already been paid by DEWALT. In some areas, it is illegal to place spent nickel cadmium, nickel metal hydride or lithium ion batteries in the



trash or municipal solid waste stream and the RBRC program provides an environmentally conscious alternative.

RBRC<sup>™</sup> in cooperation with DEWALT and other battery users, has established programs in the United States and Canada to facilitate the collection of spent nickel cadmium, nickel metal hydride or lithium ion batteries. Help protect our environment and conserve natural resources by returning the spent nickel cadmium and 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<sup>™</sup> is a registered trademark of the *Rechargeable Battery Recycling Corporation*.

## Using Automatic Tune-Up<sup>™</sup> Mode

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

1. The red light will blink continuously indicating that the 1-hour charge cycle has started.

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

## **Chargers**

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.

## **Charging Procedure**

**ADANGER:** Electrocution hazard. 120 volts present at charging terminals. Do not probe with conductive objects. Danger of electric shock or electrocution.

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

**NOTE**: The DC9320 Dual Port Charger can simultaneously charge two battery packs in about one hour.

## **Indicator Light Operation**



## **Charge Indicators**

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

## HOT/COLD PACK DELAY

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

#### **PROBLEM POWER LINE**

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

## LEAVING THE BATTERY PACK IN THE CHARGER

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

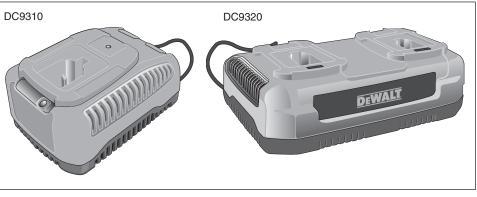
**NOTE:** A battery pack will slowly lose its charge when kept out of the charger. If the battery pack has not been kept on maintenance charge, it may need to be recharged before use. A battery pack may also slowly lose its charge if left in a charger that is not plugged into an appropriate AC source.

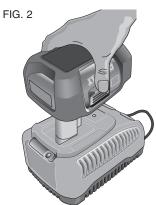
**WEAK BATTERY PACKS:** Chargers can also detect a weak battery pack. Such batteries are still usable but should not be expected to perform as much work. The charger will indicate to replace battery pack.

## **Important Charging Notes**

- 1. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65°F and 75°F (18°- 24°C). DO NOT charge the battery pack in an air temperature below +40°F (+4.5°C), or above +105°F (+40.5°C). This is important and will prevent serious damage to the battery pack.
- 2. The charger and battery pack may become warm to touch while charging. This is a normal condition, and does not indicate a problem. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed, or an uninsulated trailer.
- 3. If the battery pack does not charge properly:
- a. Check current at receptacle by plugging in a lamp or other appliance
- b. Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights.
- c. Move charger and battery pack to a location where the surrounding air temperature is approximately 65°F 75°F (18°- 24°C).
- d. If charging problems persist, take the tool, battery pack and charger to your local service

FIG. 1





## **Three Year Limited Warranty**

DEWALT will repair, without charge, any defects due to faulty materials or workmanship for three years from the date of purchase. This warranty does not cover part failure due to normal wear or tool abuse. For further detail of warranty coverage and warranty repair information, visit www.dewalt.com or call 1-800-4-DEWALT (1-800-433-9258). This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

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

#### 1 YEAR FREE SERVICE

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

## 2 YEARS FREE SERVICE ON BATTERY PACKS

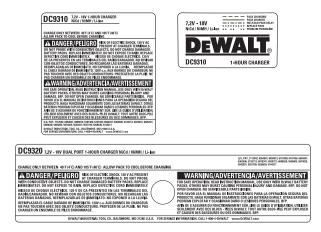
DC9071, DC9091, DC9096, DC9280, DC9360 and DC9180

## 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 either 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 for a free replacement.



## **Patent Notification**

Manufactured under one of more of the following U.S. patents:									
7112942	6133713	5557190	D460413						
6954051	6075341	5268630	6362596						
6859013	6020721	5144217	6326101						
6791300	6008628	6747436	6133713						
6747436	5945803	6504341	6075341						
6504341	5874825	6500581	6008628						
6362596	5642031	D466863	6324339						

- center.
- 4. The battery pack should be recharged when it fails to produce sufficient power on jobs which were easily done previously. DO NOT CONTINUE to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse affect on the battery pack.
- 5. Under certain conditions, with the charger plugged into the power supply, the exposed charging contacts inside the charger can be shorted by foreign material. Foreign materials of a conductive nature such as, but not limited to, steel wool, aluminum foil, or any buildup of metallic particles should be kept away from charger cavities. Always unplug the charger from the power supply when there is no battery pack in the cavity. Unplug charger before attempting to clean.
- 6. Do not freeze or immerse charger in water or any other liquid.

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

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

## **Storage Recommendations**

- 1. The best storage place is one that is cool and dry away from direct sunlight and excess heat or cold.
- 2. Long storage will not harm the battery pack or charger. Under proper conditions, they can be stored for 5 years or more.

# Repairs

This product is not serviceable. There are no serviceable parts inside the charger.

READ ALL OF THE INSTRUCTIONS IN THE BATTERY CHARGER SECTION OF THIS MANUAL BEFORE ATTEMPTING TO CHARGE THE BATTERY PACK FOR YOUR TOOL.

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

Other patents may be pending.

## Définitions : lignes directrices en matière de sécurité

Les définitions ci-dessous décrivent le niveau de danger pour chaque mot-indicateur employé. Veuillez lire le mode d'emploi et porter une attention particulière à ces symboles.

**ADANGER :** indique une situation dangereuse imminente qui, si elle n'est pas évitée, causera la mort ou des blessures graves.

**ÀAVERTISSEMENT :** indique une situation potentiellement dangereuse qui, si elle n'est pas évitée, **pourrait** se solder par un **décès ou des blessures graves**.

**AMISE EN GARDE :** indique une situation potentiellement dangereuse

qui, si elle n'est pas évitée **pourrait** se solder par **des blessures mineures ou modérées.** 

**MISE EN GARDE :** utilisé sans le symbole d'alerte à la sécurité, indique une situation potentiellement dangereuse qui, si elle n'est pas évitée **pourrait** se solder par **des dommages à la propriété**.

EN CAS DE QUESTIONS OU DE COMMENTAIRES SUR CET OUTIL OU SUR TOUT AUTRE OUTIL DEWALT, APPELEZ-NOUS SANS FRAIS AU NUMÉRO SUIVANT : 1-800-4 DEWALT (1-800-433-9258)



**AVERTISSEMENT ! Lire et comprendre toutes les directives.** À défaut de suivre les directives sous-mentionnées, un choc électrique, un incendie et des blessures corporelles graves pourraient survenir.