

DEWALT®

DC720

DC721

DC722

DC725

DC727

DC730

DC731

DC732

DC735

DC737

DC742

DC743

DC745

www.DEWALT.com

Figure 1

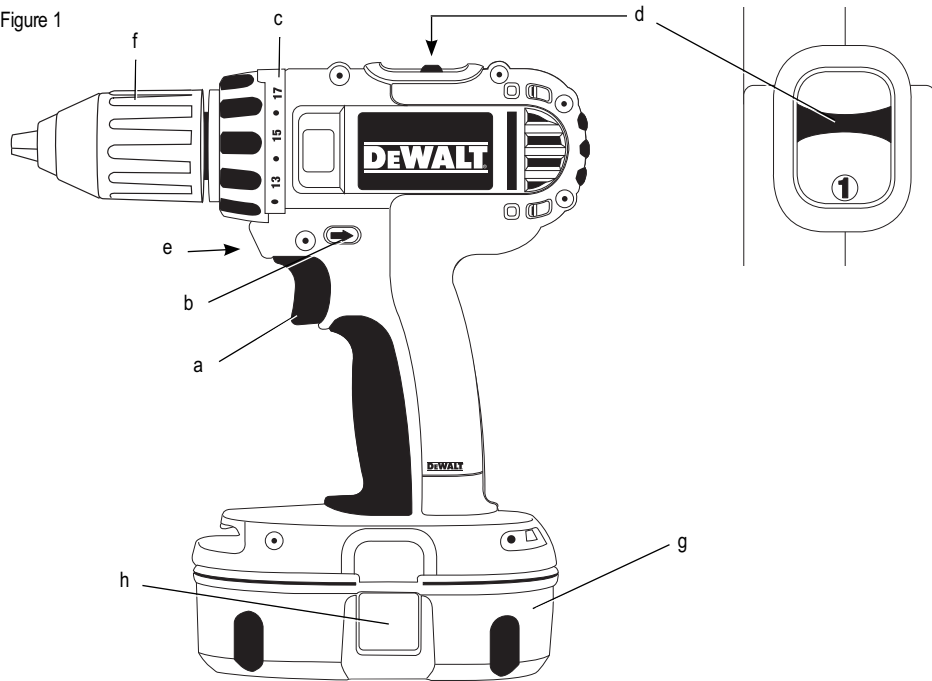


Figure 2

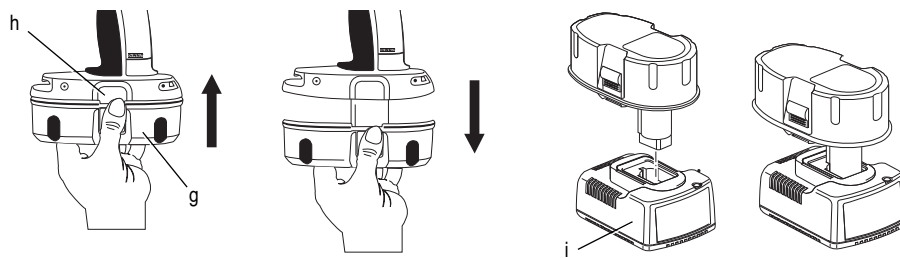


Figure 3

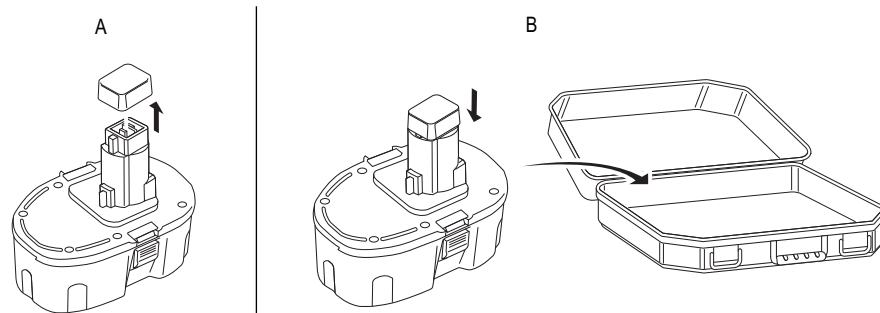


Figure 4

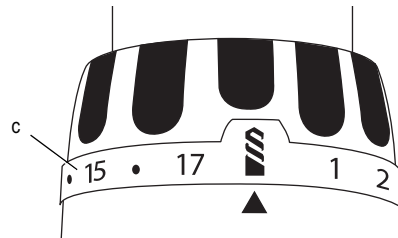
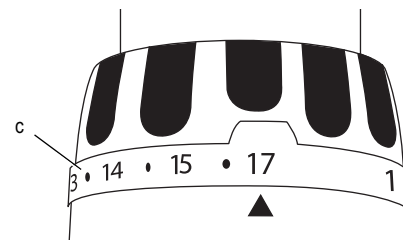


Figure 5



Figure 6



DC720, DC721, DC722, DC730, DC731, DC732, DC742, DC743

CORDLESS COMPACT DRILL/DRIVERS

DC725, DC727, DC735, DC737, DC745

CORDLESS COMPACT DRILL/DRIVER/HAMMERDRILL

Congratulations!

You have chosen a DEWALT tool. Years of experience, thorough product development and innovation make DEWALT one of the most reliable partners for professional power tool users.

Technical data

		DC720	DC721	DC722	DC725	DC727	DC730	DC731
Voltage	V _{DC}	18	18	18	18	18	14.4	14.4
Battery Type		NiCd/NiMH	NiCd/NiMH	Li-Ion	NiCd/NiMH	Li-Ion	NiCd/NiMH	NiCd/NiMH
Power output	W	400	400	375	400	375	295	295
No-load speed								
1st gear	min ⁻¹	0-500	0-500	0-500	0-500	0-500	0-400	0-400
2nd gear	min ⁻¹	0-1700	0-1700	0-1700	0-1700	0-1700	0-1450	0-1450
Impact rate								
1st gear	min ⁻¹	–	–	–	0-8500	0-8500	–	–
2nd gear	min ⁻¹	–	–	–	0-29000	0-29000	–	–
Max. torque	Nm	40	44	41	44	41	35	40
Chuck capacity	mm	10	13	13	13	13	10	13
Maximum drilling capacity								
Wood	mm	38	38	38	38	38	35	35
Metal	mm	10	13	13	13	13	10	13
Masonry	mm	–	–	–	13	13	–	–
Weight (without battery pack)	kg	1.35	1.36	1.36	1.46	1.46	1.34	1.35

		DC732	DC735	DC737	DC742	DC743	DC745
Voltage	V _{DC}	14.4	14.4	14.4	12	12	12
Battery Type		Li-Ion	NiCd/NiMH	Li-Ion	NiCd/NiMH	NiCd/NiMH	NiCd/NiMH
Power output	W	270	295	270	240	240	240
No-load speed							
1st gear	min ⁻¹	0-400	0-400	0-400	0-400	0-400	0-400
2nd gear	min ⁻¹	0-1450	0-1450	0-1450	0-1450	0-1450	0-1450
Impact rate							
1st gear	min ⁻¹	–	0-6800	0-6800	–	–	0-6800
2nd gear	min ⁻¹	–	0-25000	0-25000	–	–	0-25000
Max. torque	Nm	37	40	37	32	35	35
Chuck capacity	mm	13	13	13	10	13	13
Maximum drilling capacity							
Wood	mm	35	35	35	28	28	28
Metal	mm	13	13	13	10	13	13
Masonry	mm	–	13	13	–	–	13
Weight (without battery pack)	kg	1.35	1.45	1.45	1.33	1.34	1.44

ENGLISH

		DC720	DC721	DC722	DC725	DC727	DC730	DC731
L_{pA} (sound pressure)	dB(A)	76	76	76	83	83	76	76
K_{pA} (sound pressure uncertainty K)	dB(A)	3	3	3	3	3	3	3
L_{WA} (acoustic power)	dB(A)	87	87	87	94	94	87	87
K_{WA} (acoustic power uncertainty K)	dB(A)	3	3	3	3	3	3	3

Vibration total values (triax vector sum) determined according to EN60745:

Vibration emission value a_h								
Drilling into metal								
a_{hD}	m/s ²	1.15	1.15	1.15	1.40	1.40	1.15	1.15
Uncertainty K	m/s ²	1.70	1.70	1.70	1.58	1.58	1.70	1.70
Vibration emission value a_h								
Drilling into concrete								
a_{hD}	m/s ²	–	–	–	7.8	7.8	–	–
Uncertainty K	m/s ²	–	–	–	2.7	2.7	–	–

		DC732	DC735	DC737	DC742	DC743	DC745
L_{pA} (sound pressure)	dB(A)	76	83	83	76	76	83
K_{pA} (sound pressure uncertainty K)	dB(A)	3	3	3	3	3	3
L_{WA} (acoustic power)	dB(A)	87	94	94	87	87	94
K_{WA} (acoustic power uncertainty K)	dB(A)	3	3	3	3	3	3

Vibration total values (triax vector sum) determined according to EN60745:

Vibration emission value a_h							
Drilling into metal							
a_{hD}	m/s ²	1.15	1.40	1.40	1.15	1.15	1.40
Uncertainty K	m/s ²	1.70	1.58	1.58	1.70	1.70	1.58
Vibration emission value a_h							
Drilling into concrete							
a_{hD}	m/s ²	–	7.8	7.8	–	–	7.8
Uncertainty K	m/s ²	–	2.7	2.7	–	–	2.7

The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.



WARNING: The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

Battery pack	DE9180	DE9181	DE9503	DE9095	DE9098	DE9140	DE9141
Battery type	Li-Ion	Li-Ion	NiMH	NiCd	NiCd	Li-Ion	Li-Ion
Voltage	V _{DC}	18	18	18	18	14.4	14.4
Capacity	A _H	2.0	1.1	2.6	2.0	1.3	2.0
Weight	kg	0.68	0.42	1.0	1.0	0.87	0.58

Battery pack	DE9094	DE9091	DE9074	DE9501	DE9071
Battery type	NiCd	NiCd	NiCd	NiMH	NiCd
Voltage	V _{DC}	14.4	14.4	12	12
Capacity	A _H	1.3	2.0	1.3	2.6
Weight	kg	0.6	0.70	0.55	0.69

Charger	DE9130	DE9135	DE9116
Mains voltage	V _{AC}	230	230
Battery type	NiCd/NiMH	NiCd/NiMH/Li-Ion	NiCd/NiMH
Approx. charging time	min	30 (2.0 Ah battery packs)	40 (2.0 Ah battery packs)
Weight	kg	0.5	0.52

Fuses:		
Europe	230 V tools	10 Amperes, mains
U.K. & Ireland	230 V tools	13 Amperes, in plugs

Definitions: Safety Guidelines

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



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



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



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

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



Denotes risk of electric shock.



Denotes risk of fire.

EC-Declaration of conformity



DC720, DC721, DC722, DC725, DC727, DC730, DC731, DC732, DC735, DC737, DC742, DC743, DC745

DEWALT declares that these products described under "technical data" have been designed in compliance with:
98/37/EEC (until Dec. 28, 2009), 2006/42/EC (from Dec. 29, 2009), 2004/108/EC, 2006/95/EC, EN 55014-1, EN 55014-2, EN 60745-1, EN 60745-2-1, EN 60745-2-2.

For more information, please contact DEWALT at the following address or refer to the back of the manual.

ENGLISH

The undersigned is responsible for compilation of the technical file and makes this declaration on behalf of DeWALT.



Horst Grossmann
Vice President Engineering and Product
Development
DeWALT, Richard-Klinger-Strasse 11,
D-65510, Idstein, Germany
16/09/2007



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

General Power Tool Safety Warnings



WARNING! Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or batteryoperated (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 residual current device (RCD) protected supply.** Use of an RCD 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 energising 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 jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

4) POWER TOOL USE AND CARE

- a) **Do not force the power tool. Use the correct power tool for your application.**
The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**
Power tools are dangerous in the hands of untrained users.
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- f) **Keep cutting tools sharp and clean.**
Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) **Use the power tool, accessories and tool bits etc., in accordance with these instructions taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

5) BATTERY TOOL USE AND CARE

- a) **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b) **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- c) **When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws or other**

small metal objects that can make a connection from one terminal to another.
Shorting the battery terminals together may cause burns or a fire.

- d) **Under abusive conditions, liquid may be ejected from the battery, avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

6) SERVICE

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

ADDITIONAL SPECIFIC SAFETY RULES**Drill/Driver/Hammerdrill Safety Warnings**

- **Wear ear protectors with impact drills.**
Exposure to noise can cause hearing loss.
- **Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Cutting accessory contacting a "live" wire may make exposed metal parts of the tool "live" and shock the operator.
- **Use auxiliary handles supplied with the tool.**
Loss of control can cause personal injury.
- **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Wear ear protectors when hammering for extended periods of time.** Prolonged exposure to high intensity noise can cause hearing loss. Temporary hearing loss or serious ear drum damage may result from high sound levels generated by hammerdrilling.
- **Wear safety goggles or other eye protection.** Hammering and drilling operations cause chips to fly. Flying particles can cause permanent eye damage.
- **Hammer bits and tools get hot during operation.** Wear gloves when touching them.

Labels on tool

DATE CODE POSITION

Date Code, which includes the year of manufacture, is printed into the housing surface that forms the mounting joint between tool and battery!

Example:

2007 XX XX

Year of Manufacture

Important Safety Instructions for All Battery Chargers

SAVE THESE INSTRUCTIONS: This manual contains important safety and operating instructions for the DE9130, DE9135 and DE9116 battery chargers.

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



DANGER: Electrocutation hazard. 230 volts are present at charging terminals. Do not probe with conductive objects. Electric shock or electrocution may result.



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



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



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.
- **Do not place any object on top of charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat.** Place the charger in a position away from any heat source. The charger is ventilated through slots in the top and the bottom of the housing.
- **Do not operate charger with damaged cord or plug** — have them replaced immediately.
- **Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way.** Take it to an authorized service center.
- **Do not disassemble charger; take it to an authorized service center when service or repair is required.** Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
- **Disconnect the charger from the outlet before attempting any cleaning. This will reduce the risk of electric shock.** Removing the battery pack will not reduce this risk.
- **NEVER** attempt to connect 2 chargers together.
- **The charger is designed to operate on standard 230V household electrical power. Do not attempt to use it on any other voltage.** This does not apply to the vehicular charger.

SAVE THESE INSTRUCTIONS

Chargers

The DE9130 and DE9116 charger accepts 7.2 – 18 V NiCd and NiMH batteries.

The DE9135 charger accepts 7.2 – 18 V NiCd, NiMH or Li-Ion batteries.

These chargers require no adjustment and are designed to be as easy as possible to operate.

Charging Procedure



DANGER: *Electrocution hazard. 230 volts present at charging terminals. Do not probe with conductive objects. Danger of electric shock or electrocution.*

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

Charging process

Refer the table below for the state of charge of the battery pack.

State of charge	
charging	- - - - -
fully charged	=====
hot/cold pack delay	— - — - -
replace battery pack	••••••••••
problem	•• •• •• ••

Automatic refresh

The automatic refresh mode will equalise or balance the individual cells in the battery pack at its peak capacity. Battery packs should be refreshed weekly or whenever the pack no longer delivers the same amount of work.

To refresh your battery pack, place the battery in the charger as usual. Leave the battery pack for at least 8 hours in the charger.

Hot/Cold Pack Delay

When the charger detects a battery that is too hot or too cold, it automatically starts a Hot/Cold Pack Delay, suspending charging until the battery has reached an appropriate temperature. The charger

then automatically switches to the pack charging mode. This feature ensures maximum battery life.

DEEP DISCHARGE PROTECTION

The battery pack is protected against deep discharging when it is used in the tool.

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.
- 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 40° C (105° F) (such as outside sheds or metal buildings in summer).**



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



WARNING: *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). Damaged battery packs should be returned to service center for recycling.*



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.*

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

- **Do not incinerate the battery pack even if it is severely damaged or is completely worn out.** *The battery pack can explode in a fire.*
- **A small leakage of liquid from the battery pack cells may occur under extreme usage or temperature conditions.** *This does not indicate a failure.*

However, if the outer seal is broken:

- a. *and the battery liquid gets on your skin, immediately wash with soap and water for several minutes.*
- b. *and the battery liquid gets into your eyes, flush them with clean water for a minimum of 10 minutes and seek immediate medical attention. (Medical note: The liquid is 25-35% solution of potassium hydroxide.)*

SPECIFIC SAFETY INSTRUCTIONS FOR LITHIUM ION (LI-ION)

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



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

Battery Cap (fi g. 3)

A protective battery cap is supplied to cover the contacts of a detached battery pack. Without the protective cap in place, loose metal objects could short circuit the contacts, causing a fire hazard and damaging the battery pack.

1. Take off the protective battery cap before placing the battery pack in the charger or tool (Fig. 3A).
2. Place the protective cap over the contacts immediately after removing the battery pack from the charger or tool (Fig. 3B).



WARNING: *Make sure the protective battery cap is in place before storing or carrying a detached battery pack.*

Battery pack (fi g. 1)

BATTERY TYPE

The DC720, DC721, DC722, DC725 and DC727 operate on 18 volt battery packs.

The DC730, DC731, DC732, DC735 and DC737 operate on 14,4 volt battery packs.

The DC742, DC743 and DC745 operate on 12 volt battery packs.

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.

Labels on charger and battery pack

In addition to the pictographs used in this manual, the labels on the charger and the battery pack show the following pictographs:



Read instruction manual before use.



Battery charging



Battery charged



Battery defective




Hot/cold pack delay





Do not probe with conductive objects.





Do not charge damaged battery packs


 Use only with DEWALT battery packs, others may burst, causing personal injury and damage.


 Do not expose to water.


 Have defective cords replaced immediately.


 Charge only between 4 °C and 40 °C.

 Discard the battery pack with due care for the environment.

 Do not incinerate the battery pack NiMH, NiCd+ and Li-Ion.

 **NiMH** **NiCd** Charges NiMH and NiCd battery packs.

 **Li Ion** Charges Li-Ion battery packs.

 See technical data for charging time.

Package contents

The package contains:

- 1 Drill/Hammerdrill
- 2 Battery packs
- 1 Charger
- 1 Kitbox (K version only)
- 1 Instruction manual
- 1 Exploded drawing

NOTE: Battery packs and chargers are not included with N-models.

- *Check for damage to the tool, parts or accessories which may have occurred during transport.*
- *Take the time to thoroughly read and understand this manual prior to operation.*

Description (fi g. 1)



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

INTENDED USE

These drills/drivers/hammerdrills are designed for professional drilling and screwdriving applications.

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

These drills/drivers/hammerdrills are professional power tools. **DO NOT** let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

- a. Trigger switch
- b. Forward/reverse button
- c. Torque adjustment collar
- d. Gear selector
- e. Worklight
- f. Keyless chuck
- g. Battery pack
- h. Battery release buttons

Electrical safety

The electric motor has been designed for one voltage only. Always check that the battery pack voltage corresponds to the voltage on the rating plate. Also make sure that the voltage of your charger corresponds to that of your mains.



Your DEWALT charger is double insulated in accordance with EN 60335; therefore no earth wire is required.

If the supply cord is damaged, it must be replaced by a specially prepared cord available through the DEWALT service organization.

Mains plug replacement (U.K. & Ireland only)



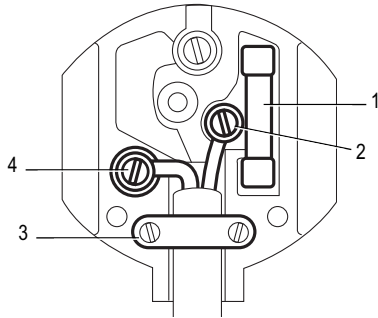
DANGER:


- Should your mains plug need replacing and you are competent to do this, proceed as instructed below. If you are in doubt, contact an authorized DEWALT repair agent or a qualified electrician.
- Disconnect the plug from the supply.
- Cut off the plug and dispose of it safely; a plug with bared copper conductors is dangerous if engaged in a live socket outlet.
- Only fit 13 Amperes BS1363A approved plugs fitted with the correctly rated fuse (1).
- The cable wire colours, or a letter, will be marked at the connection points of most good quality plugs. Attach the wires to their respective

ENGLISH

points in the plug (see below). Brown is for Live (L) (2) and Blue is for Neutral (N) (4).

- Before replacing the top cover of the mains plug ensure that the cable restraint (3) is holding the outer sheath of the cable firmly and that the two leads are correctly fixed at the terminals crews.




 **WARNING:** NEVER use a light socket. NEVER connect the live (L) or neutral (N) wires to the earth pin marked E or \perp .


Using an extension cable

An extension cord should not be used unless absolutely necessary. Use an approved extension cable suitable for the power input of your charger (see technical data). The minimum conductor size is 1 mm²; the maximum length is 30 m.


When using a cable reel, always unwind the cable completely.

ASSEMBLY AND ADJUSTMENTS

 **WARNING:** Prior to assembly and adjustment, always remove the battery pack. Always switch off the tool before inserting or removing the battery pack.

 **WARNING:** Use only DEWALT battery packs and chargers.

Inserting and removing the battery pack from the tool (fi g. 2)

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

TO INSTALL THE BATTERY PACK INTO THE TOOL HANDLE


1. Align the base of the tool with the notch inside the tool's handle (fig. 2).
2. Slide the battery pack firmly into the handle until you hear the lock snap into place.

TO REMOVE THE BATTERY PACK FROM THE TOOL

1. Press the battery release buttons (h) and firmly pull the battery pack out of the tool handle.
2. Insert battery pack into the charger as described in the charger section of this manual.

OPERATION

Instructions for use

 **WARNING:** Always observe the safety instructions and applicable regulations.

Variable Speed Switch (fi g. 1)

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

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

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

Forward/Reverse Control Button (fi g. 1)

A forward/reverse control button (b) determines the 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.

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

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

Torque Adjustment Collar (fi g. 1)

Your tool has an adjustable torque screwdriver mechanism for driving and removing a wide array of fastener shapes and sizes and in some models, a hammer mechanism for drilling into masonry. Circling

the collar (c) are numbers, a drill bit symbol, and in some models, a hammer symbol. These numbers are used to set the clutch to deliver a torque range. The higher the number on the collar, the higher the torque and the larger the fastener which can be driven. To select any of the numbers, rotate until the desired number aligns with the arrow.

Dual Range Gearing (fi g. 1)

The dual range feature of your driver/drill allows you to shift gears for greater versatility.

To select the low speed, high torque setting, turn the tool off and permit to stop. Slide the gear selector (d) forward (towards the chuck) as shown in Figure 1.

To select the high speed, low torque setting, turn the tool off and permit to stop. Slide the gear selector back (away from chuck).

NOTE: Do not change gears when the tool is running. If you are having trouble changing gears, make sure that the dual range gear selector is either completely pushed forward or completely pushed back.

Worklight (fi g. 1)

There is a worklight (e) located just above the trigger switch (a). The worklight will be activated when the trigger switch is squeezed.

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

Keyless Single Sleeve Chuck (fi g. 1)

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

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

To release the accessory, repeat step 2 above.



WARNING: Do not attempt to tighten drill bits (or any other accessory) by gripping the front part of the chuck and turning the tool on. Damage to the chuck and personal injury may result. Always lock off trigger switch when changing accessories.

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

Drill Operation (fi g. 4)



WARNING: To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/installing attachments or accessories.



WARNING: To reduce the risk of personal injury, ALWAYS ensure workpiece is anchored or clamped firmly. If drilling thin material, use a wood "back-up" block to prevent damage to the material.

1. Use sharp drill bits only. For WOOD, use the low speed setting and twist drill bits, spade bits, power auger bits, or hole saws. For METAL, use the low speed setting and steel twist drill bits or hole saws. For MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits rated for percussion drilling. Use low speed for bits greater than 10 mm.
2. Always apply pressure in a straight line with the bit. Use enough pressure to keep drill biting, but do not push hard enough to stall the motor or deflect the bit.
3. Hold tool firmly with both hands to control the twisting action of the drill. If model is not equipped with side handle, grip drill with one hand on the handle and one hand on the battery pack.



CAUTION: Drill may stall if overloaded causing a sudden twist. Always expect the stall. Grip the drill firmly to control the twisting action and avoid injury.

4. **IF DRILL STALLS**, it is usually because it is being overloaded or improperly used. **RELEASE TRIGGER IMMEDIATELY**, remove drill bit from work, and determine cause of stalling. **DO NOT CLICK TRIGGER ON AND OFF IN AN ATTEMPT TO START A STALLED DRILL — THIS CAN DAMAGE THE DRILL.**

5. To minimize stalling or breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
6. Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.
7. With variable speed drills there is no need to center punch the point to be drilled. Use a slow speed to start the hole and accelerate by squeezing the trigger harder when the hole is deep enough to drill without the bit skipping out.

Hammerdrill Operation (fi g. 5)

1. Turn the collar (c) to the hammerdrill symbol.
2. Select the high speed setting by sliding the selector back (away from the chuck).
IMPORTANT: Use carbide-tipped or masonry bits only.
3. Drill with just enough force on the hammer to keep it from bouncing excessively or “rising” off the bit. Too much force will cause slower drilling speeds, overheating and lower drilling rate.
4. 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.
5. When drilling deep holes, if the hammer speed starts to drop off, pull the bit partially out of the hole with tool stil running to help clear debris from the hole.

NOTE: A smooth, even flow of dust from the hole indicates proper drilling rate.

Screwdriver Operation (fi g. 6)

1. Select the desired speed/torque range using the dual range gear selector to match the speed and torque of the planned operation.
2. Turn the torque adjustment collar to the desired position. Lower numbers indicate lower torque settings; higher numbers indicate higher torque settings.
3. Insert the desired fastener accessory into the chuck as you would any drill bit.
4. Make some practice runs in scrap or on unseen areas to determine the proper position of the clutch collar.
5. Always start with lower torque settings, then advance to higher torque settings to avoid damage to the workpiece or fastener.

MAINTENANCE

Your DEWALT power tool has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper tool care and regular cleaning.



WARNING: To reduce the risk of injury, turn unit off and disconnect tool from power source before installing and removing accessories, before making any adjustments or removing/installing attachments or accessories.



Lubrication

Your power tool requires no additional lubrication.



Cleaning



WARNING: Blow dirt and dust out of the main housing with dry air as often as dirt is seen collecting in and around the air vents. Wear approved eye protection and approved dust mask 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 materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

CHARGER CLEANING INSTRUCTIONS



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

Optional 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.

Consult your dealer for further information on the appropriate accessories.

Protecting the environment



Separate collection. This product must not be disposed of with normal household waste.



Should you find one day that your DeWALT product needs replacement, or if it is of no further use to you, do not dispose of it with household waste. Make this product available for separate collection.



Separate collection of used products and packaging allows materials to be recycled and used again. Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product.

DeWALT provides a facility for the collection and recycling of DeWALT products once they have reached the end of their working life. To take advantage of this service please return your product to any authorised repair agent who will collect them on our behalf.

You can check the location of your nearest authorised repair agent by contacting your local DeWALT office at the address indicated in this manual. Alternatively, a list of authorised DeWALT repair agents and full details of our after-sales service and contacts are available on the Internet at: www.2helpU.com



Rechargeable Battery Pack

This long life battery pack must be recharged when it fails to produce sufficient power on jobs which were easily done before. At the end of its technical life, discard it with due care for our environment:

- Run the battery pack down completely, then remove it from the tool.

- Li-Ion, NiCd and NiMH cells are recyclable. Take them to your dealer or a local recycling station. The collected battery packs will be recycled or disposed of properly.

GUARANTEE

• 30 DAY NO RISK SATISFACTION GUARANTEE •

If you are not completely satisfied with the performance of your DeWALT tool, simply return it within 30 days, complete as purchased, to the point of purchase, for a full refund or exchange. Proof of purchase must be produced.

• ONE YEAR FREE SERVICE CONTRACT •

If you need maintenance or service for your DeWALT tool, in the 12 months following purchase, it will be undertaken free of charge at an authorized DeWALT repair agent. Proof of purchase must be produced. Includes labour and spare parts for Power Tools. Excludes accessories.

• ONE YEAR FULL WARRANTY •

If your DeWALT product becomes defective due to faulty materials or workmanship within 12 months from the date of purchase, we guarantee to replace all defective parts free of charge or, at our discretion, replace the unit free of charge provided that:

- The product has not been misused.
- Repairs have not been attempted by unauthorized persons.
- Proof of purchase date is produced. This guarantee is offered as an extra benefit and is additional to consumers statutory rights.

For the location of your nearest authorized DeWALT repair agent, please use the appropriate telephone number on the back of this manual. Alternatively, a list of authorized DeWALT repair agents and full details on our after-sales service are available on the Internet at www.2helpU.com.

DC720, DC721, DC722, DC730, DC731, DC732, DC742, DC743
 轻便型无绳电钻/螺丝起子
 DC725, DC727, DC735, DC737, DC745
 型无绳冲击钻/螺丝起子/锤钻

祝贺您！

您已选择了得伟工具。凭借多年的经验和全面的产品开发与创新，得伟已经成为专业电动工具用户的最可靠伙伴之一。

技术参数

		DC720	DC721	DC722	DC725	DC727	DC730	DC731
电压	伏(直流)	18	18	18	18	18	14.4	14.4
电池类型		NiCd/NiMH	NiCd/NiMH	Li-Ion	NiCd/NiMH	Li-Ion	NiCd/NiMH	NiCd/NiMH
输出功率	瓦特	400	400	375	400	375	295	295
空载速度								
1档	/分钟	0-500	0-500	0-500	0-500	0-500	0-400	0-400
2档	/分钟	0-1700	0-1700	0-1700	0-1700	0-1700	0-1450	0-1450
冲击速度								
1档	/分钟	-	-	-	0-8500	0-8500	-	-
2档	/分钟	-	-	-	0-29000	0-29000	-	-
最大扭矩	牛*米	40	44	41	44	41	35	40
夹头尺寸	毫米	10	13	13	13	13	10	13
最大钻进性能								
木材	毫米	38	38	38	38	38	35	35
金属	毫米	10	13	13	13	13	10	13
砖石	毫米	-	-	-	13	13	-	-
重量(不含电池)	千克	1.35	1.36	1.36	1.46	1.46	1.34	1.35

		DC732	DC735	DC737	DC742	DC743	DC745
电压	伏(直流)	14.4	14.4	14.4	12	12	12
电池类型		Li-Ion	NiCd/NiMH	Li-Ion	NiCd/NiMH	NiCd/NiMH	NiCd/NiMH
输出功率	瓦特	270	295	270	240	240	240
空载速度							
1档	/分钟	0-400	0-400	0-400	0-400	0-400	0-400
2档	/分钟	0-1450	0-1450	0-1450	0-1450	0-1450	0-1450
冲击速度							
1档	/分钟	-	0-6800	0-6800	-	-	0-6800
2档	/分钟	-	0-25000	0-25000	-	-	0-25000
最大扭矩	牛*米	37	40	37	32	35	35
夹头尺寸	毫米	13	13	13	10	13	13
最大钻进性能							
木材	毫米	35	35	35	28	28	28
金属	毫米	13	13	13	10	13	13
砖石	毫米	-	13	13	-	-	13
重量(不含电池)	千克	1.35	1.45	1.45	1.33	1.34	1.44

		DC720	DC721	DC722	DC725	DC727	DC730	DC731
L _{pA} (声压)	分贝	76	76	76	83	83	76	76
K _{pA} (声压不确定性K)	分贝	3	3	3	3	3	3	3
L _{WA} (声功率)	分贝	87	87	87	94	94	87	87
K _{WA} (声功率不确定性K)	分贝	3	3	3	3	3	3	3

依据EN60745确定的振动总值(三轴矢量和):

振动释放值ah

钻进金属

anD=	米/秒 ²	1.15	1.15	1.15	1.40	1.40	1.15	1.15
不确定性K=	米/秒 ²	1.70	1.70	1.70	1.58	1.58	1.70	1.70

振动释放值ah

钻进混凝土

anD=	米/秒 ²	-	-	-	7.8	7.8	-	-
不确定性K=	米/秒 ²	-	-	-	2.7	2.7	-	-

		DC732	DC735	DC737	DC742	DC743	DC745
L _{pA} (声压)	分贝	76	83	83	76	76	83
K _{pA} (声压不确定性K)	分贝	3	3	3	3	3	3
L _{WA} (声功率)	分贝	87	94	94	87	87	94
K _{WA} (声功率不确定性K)	分贝	3	3	3	3	3	3

依据EN60745确定的振动总值(三轴矢量和):

振动释放值ah

钻进金属

anD=	米/秒 ²	1.15	1.40	1.40	1.15	1.15	1.40
不确定性K=	米/秒 ²	1.70	1.58	1.58	1.70	1.70	1.58

振动释放值ah

钻进混凝土

anD=	米/秒 ²	-	7.8	7.8	-	-	7.8
不确定性K=	米/秒 ²	-	2.7	2.7	-	-	2.7

本数据表中的振动释放水平依据EN60745规定的标准试验确定,可在工具之间进行比较,也可用于振动影响的初步评估。



警告: 所示振动释放水平适用于工具的主要用途。如用于其它目的、使用其它配件或维护不良,工具的振动水平会有所不同;工作总周期内所受的振动影响也会大大升高。

评估振动影响程度时,还须考虑工具关闭或空转的时间。这可能大大降低整个工作时间内振动影响水平。

采取其它安全措施,保护使用人员免受振动伤害,例如:维护工具和配件、给双手保暖、合理安排工作形式。

中文

电池组	DE9180	DE9181	DE9503	DE9095	DE9098	DE9140	DE9141
电池类型	Li-Ion	Li-Ion	NiMH	NiCd	NiCd	Li-Ion	Li-Ion
电压	伏特(直流)	18	18	18	18	14.4	14.4
容量	安时	2.0	1.1	2.6	2.0	1.3	2.0
重量	千克	0.68	0.42	1.0	1.0	0.87	0.37

电池组	DE9094	DE9091	DE9074	DE9501	DE9071
电池类型	NiCd	NiCd	NiCd	NiMH	NiCd
电压	伏特(直流)	14.4	14.4	12	12
容量	安时	1.3	2.0	1.3	2.6
重量	千克	0.6	0.70	0.55	0.69

充电器	DE9130	DE9116	
主电网电压	伏特(直流)	230	230
电池类型	NiCd/NiMH	NiCd/NiMH	
近似充电时间	分钟	30	60
		(2.0安时电池组)	(2.0安时电池组)
重量	千克	0.5	0.4

保险丝:

欧洲	230伏工具	主电网10安培
英国及爱尔兰	230伏工具	插头13安培

定义：安全准则

下列定义解释了各标志术语的严重程度。请仔细阅读本手册并注意这些标志。



危险：表示紧急的危险情形，如不加以阻止，将导致死亡或严重伤害。



警告：表示潜在的危险情形，如不加以阻止，可能导致死亡或严重伤害。



注意：表示潜在的危险情形，如不加以阻止，可能导致轻度或中度伤害。

注意：(不带安全警示标志)：表示潜在的危险情形，如不加以阻止，可能导致财产损失。



表示有触电危险。



表示火灾危险

符合欧洲委员会标准声明



DC720, DC721, DC722, DC725, DC727, DC730, DC731, DC732, DC735, DC737, DC742, DC743, DC745

得伟声明上述“技术参数”中产品的设计符合以下标准：

98/37/EEC (有效期至2009年12月28日)、
2006/42/EC (自2009年12月29日起)、
2004/108/EC、2006/95/EC、EN55014-1、
EN55014-2、EN60745-1/、EN60745-2-1、
EN60745-2-2。

如欲获取更多信息，请通过以下方式联系得伟或参考本手册背面资料。

如下签字人负责编写技术文件并代表得伟作上述声明。



Horst Grossmann
 工程设计与产品开发副总裁
 Development
 DEWALT, Richard-Klinger-Strasse 11,
 D-65510, Idstein, 德国
 2007年9月16日



警告：为降低伤害风险，请仔细阅读手册内容。

电动工具一般安全警示



警告！请阅读所有安全警告与准则。如未遵守本手册中的警告与规定，可能导致触电、火灾和/或严重伤害。

请保存好所有警示和规定，以备将来查阅。

警示中的术语“电动工具”是指主电网电源驱动(有线)电动工具，或者电池驱动(无线)电动工具。

1) 工作场地安全

- 保持工作区域清洁、明亮。混乱或昏暗的场地会引发事故。
- 存在易燃液体、气体或粉尘等的易爆环境中，禁止使用电动工具。电动工具产生的火花会点燃粉尘或气体。
- 让儿童和旁观者远离后，再操纵电动工具。分心会使你放松控制。

2) 电气安全

- 电动工具的插头必须与插座相配。切勿以任何方式改装插头。需接地的电动工具不能使用任何转换插头。未经改装的插头和匹配的插座将降低触电危险。
- 避免人体接触接地表面，如管道、散热片、炉灶和冰箱等。身体接地会增加触电危险。
- 不得将电动工具暴露在雨中或潮湿环境中。水进入电动工具将增加触电风险。
- 不得滥用电源线。绝不能使用电源线搬运、拉动电动工具或拔出其插头。让电源线远离热、油、锐边或运动部件。受损或缠绕的电线会增加触电危险。
- 当在户外使用电动工具时，使用适合户外使用的外接电线。适合户外使用的电线将减少触电危险。
- 如果不得不在潮湿场合使用电动工具，请使用漏电保护器(RCD)。使用RCD可降低触电风险。

3) 人身安全

- 保持警觉。当操作电动工具时，关注所从事的操作并保持清醒。请勿在疲倦、药物、酒精或治疗反应的情况下操作电动工具。在操作电动工具时，一旦精力分散，就可能导致严重的人身伤害。
- 使用个人防护装置。始终佩戴护目镜。安全装置，诸如适当条件下的防尘面具、防滑安全鞋、安全帽、或听力防护等装置能减少人身伤害。
- 避免意外启动。连接电源和/或电池组、拿起或搬动电动工具之前，请确保开关处于off(关断)位置。手指放在开关上搬运工具，或开关处于接通状态时插入插头均可引发危险。
- 在电动工具接通之前，取下所有调整键或扳手。遗留在电动工具旋转零件上的扳手或键会造成人身伤害。
- 手不要伸的太远。时刻注意立足点和身体平衡。这样在意外情况下才能更好地控制电动工具。
- 着装适当。不要穿宽松衣服或佩戴饰品。让你的头发、衣服和手套远离运动部件。宽松衣服、佩饰或长发可能会卷入运动部件。
- 如果提供了与排屑装置、除尘设备连接用的装置，请确保它们连接完好且使用得当。使用这些装置可减少粉尘引起的危害。

4) 电动工具使用以及注意事项

- 不要勉强使用电动工具。根据用途选用适当的电动工具。合适的电动工具能够在设计功率下，更为出色、安全地运行。
- 工具开关不能接通或关断电源时，请勿使用该工具。开关失控的电动工具是危险的，必须修理。
- 在进行任何调节、更换附件或存放工具之前，必须从电源上拔掉插头和/或取下电池组。这种预防性措施将降低电动工具意外启动的风险。
- 将闲置的电动工具存放在儿童所及范围之外，并且不要让不熟悉电动工具或对这些使用须知不了解的人操作电动工具。电动工具在未经培训的用户手中会发生危险。
- 保养电动工具。检查运动部件是否对正或卡住，检查零件破损情况以及是否存在影响电动工具运行的其它情况。如有损坏，必须在使用前修理电动工具。许多事故都是由工具维护不良所造成的。
- 保持刀具锋利和清洁。保养良好、切削锋利的刀具不易卡住而且更易于控制。
- 电动工具、配件和钻头等的使用应符合使用说明书以及具体工具型号所要求的方式、作业条件和性质。电动工具用于设计之外的目的时，可能发生危险。

5) 电池驱动工具的使用和注意事项

- a) 仅使用厂家规定的充电器充电。如利用某种电池的充电器给其它电池组充电，则可能会引发火灾。
- b) 仅使用电动工具专门指定的电池组。使用其它电池组可能引发伤害与火灾。
- c) 不用时，把电池组保存在远离其它金属物体的地方，如回形针、硬币、钥匙、钉子、螺钉或其它能够连接两个接线端子的细小金属物体。电池端子短路可能引起燃烧或火灾。
- d) 在滥用的情况下，电池可能喷出液体；应避免接触液体。如不小心接触液体，请立即用水冲洗。如果液体进入眼睛，还要进行治疗。电池喷出的液体可能引起疼痛或灼伤。

6) 维修

- a) 本电动工具必须由合格的维护人员维修，并采用相同的备件。这将确保电动工具的安全性。

特别安全附则

电钻/起子/锤钻安全警示
警告

- 请佩戴听力保护器。噪音会损伤听力。
- 钻具可能接触隐藏的电线或工具本身的电源线时，请仅仅握住绝缘手柄表面。钻具如果接触到“带电”导线，工具金属部件表面就会“带电”并使操作人员触电。
- 请使用随钻提供的辅助手柄。工具失控会导致人身伤害。
- 使用夹具或采取其它可行的办法，将工件固定、支撑到稳定的平台上。手持或用身体顶住工件都是不稳定的，会导致操作失控。
- 长时间锤击作业时，请佩戴听力保护装置。长时间暴露在高强度噪声环境中会损伤听力。来自冲击钻的高声级噪音会导致临时性听力丧失或耳鼓的严重损伤。
- 请佩戴安全护目镜或其它护目装备。锤击和钻孔作业时，会产生大量飞散的碎片。飞扬的颗粒会造成眼睛永久性伤害。
- 钻头和工具会在使用过程中发热。接触时请佩戴手套。

工具上的标识

日期码的位置

日期码也包含制造年份。它被印刷在工具外壳上电池安装接口的表面内。

例如：

2007 XX XX

制造年份

所有电池充电器的重要安全说明

请保存这些说明：本手册包含DE9130、DE9135、和DE9116充电器的重要安全与使用说明。

- 使用充电器前，请仔细阅读所有说明内容及充电器、电池和相关工具上的警示标志。



危险：电击风险。充电端子存在230伏特电压。切勿插入导电体。否则，可能导致电击或死亡。



警告：触电风险。充电器内不得进入任何液体。否则，可能造成触电事故。



注意：烧伤风险。为降低人身伤害的风险，请仅使用得伟可充电电池。其它类型的电池可能爆炸，从而导致人身伤害与损坏。



注意：特定条件下，充电器连接电源后，充电器内暴露的充电触头会被异物短路。导电性异物，包括但不限于钢绒、铝箔或聚集的金属颗粒，应远离充电器腔室。当腔室内没有电池组时，切记拔下充电器插头。清理充电器前，亦应拔下其插头。

- 切勿采用本手册之外的充电器给电池充电。充电器与电池组的工作配合是经过专门设计的。
- 这些充电器的唯一设计目的是给得伟可充电电池充电。若用于任何其它目的，则会发生火灾、触电或电击。
- 充电器不得暴露在雨中或雪中。
- 断开充电器电源时，请拔插头，而非拉电源线。这将降低插头和电源线损坏的风险。
- 电源线的位置应避免被踩踏、引起绊倒，或以其它方式损坏、受力。
- 除非绝对必要，请勿使用延长线。延长线的不当使用会引发火灾、触电或电击。
- 安全起见，延长线必须具备足够的导线尺寸（AWG或美国线规）。导线的线号越小，其容量越大。即16号比18号的容量大。使用一条以上的延长线来达到总导线长度时，应确保每条延长线至少具备最低线号要求。
- 请勿在充电器上放置任何其它物品，也不得把充电器放置在柔软表面上，这会堵塞通风槽，从而导致内部过热。充电器的放置地点应远离任何热源。充电器通过其外壳顶部和底部的槽来通风。
- 充电器电源线或插头损坏时，切勿使用—应立即维修。
- 充电器被重击、跌落或发生其它损坏后，切勿使用。请到授权维修中心修理。
- 切勿拆卸充电器。需要维护或修理时，请委托授权维修中心进行。一旦重新组装不正确，会形成触电、电击或火灾隐患。

- 清理充电器前，去从插座上断开其电源。这会降低电击风险。取下电池组并不能降低该风险。
- 绝不可试图将两个充电器连接在一起。
- 充电器的运行设计为230伏标准家用电源。切勿试图用于其它电压。车载充电器不适用本规定。

请保存这些说明

充电器

DE9130和DE9116充电器用于7.2-18伏NiCd和NiMH电池。

DE9135充电器用于7.2-18伏NiCd、NiMH或Lilon电池。

这些充电器无须调节，其设计尽可能便于使用。

充电程序



危险：电击风险。充电端子存在230伏特电压。切勿插入导体。否则，可能导致电击或死亡。

1. 插入电池组之前，将充电器（i）插入合适的插座内。
2. 将电池组（g）插入充电器。红（充电）灯将连续闪烁，表示充电过程启动。
3. 当红灯持续保持发光时，表示充电完成。电池已充满，可以使用，也可留在充电器中。

充电过程

电池组的充电状态见下表。

充电状态	
正在充电	-----
充满	_____
热/冷态电池组延迟	— — — — —
更换电池组
故障

自动刷新

自动刷新模式能够补偿或平衡电池组中电池的峰值容量。应每周刷新，或当电池组不再输出相同数量的功时进行。

要刷新电池组，将电池照常放入充电器。将电池组留在充电器中至少8小时。

热/冷态电池组延迟

当电池组检测到电池过热或过冷时，会自动启动热/冷态电池组延迟：在电池达到合适温度之前，暂停充电。然后，充电器会自动转换到充电模式。这一特性确保电池寿命最大化。

深度放电保护

在工具中使用的电池组会被深度放电保护。

所有电池组的重要安全说明

订购备用电池组时，切记提供目录编号和电压。有关充电器与电池组的兼容性，可参考本手册末尾的表格。

电池组出厂前并未充满。使用电池组和充电器之前，请阅读以下安全准则。然后，依据列出的充电程序操作。

仔细阅读所有准则内容

- 不得在爆炸性环境中充电或使用电池组，例如存在易燃液体、气体或粉尘等的地方。从充电器中插拔电池组会点燃粉尘或气体。
- 仅使用得伟充电器给电池组充电。
- 不得喷溅水或其它液体，也不得浸入其中。
- 在工具和电池组的存放或使用地点，温度不得达到或超过40°C (105°F) (例如在夏天，工棚或金属建筑的外部)。



危险：电击风险。禁止以任何理由打开电池组。如果电池组壳体破裂或损坏，切勿将其放入充电器中。否则，可能导致触电或电击。损坏的电池组应交给维修中心回收。



警告：禁止以任何理由打开电池组。如果电池组壳体破裂或损坏，切勿将其放入充电器中。不得挤压、损坏电池组或使其跌落。如果电池组曾被重击、跌落、碾压或发生其它方式的损坏（例如针刺、锤击、踩踏等），则不得使用。损坏的电池组应交给维修中心回收。



注意：不用时，将工具侧放于稳固表面上，以防止跌绊或跌落风险。一些工具的电池组较大，可以直立在电池组上，但很容易翻倒。

镍镉（NiCd）或镍氢（NiMH）专用安全准则

- 即使电池组被严重损坏或彻底磨穿，也不得焚烧。电池组遇火会发生爆炸。
- 在极端使用条件或温度条件下，电池组中电池会泄露少量液体。这并不表示故障。

但是，如果外部密封破裂：

- a. 并且电池液接触您的皮肤，请立即用肥皂和水清洗数分钟。
- b. 并且电池液进入您的眼睛，请立即用洁净水冲洗至少10分钟，并且立即就医（医学说明：该液体为25-35%的氢氧化钾溶液）。

锂离子（LI-ION）专用安全准则

- 即使电池组被严重损坏或彻底磨穿，也不得焚烧。电池组遇火会发生爆炸。锂离子电池燃烧时，会产生有毒烟气与材料。
- 如果皮肤接触电池内含物，请立即使用中性和水清洗。如果电池液进入眼睛，请睁眼用水冲洗15分钟或直至刺激感消失。如需

就医，电池电解液为液体有机碳酸盐和锂盐的混合物。

- 电池打开后，其内含物可能刺激呼吸系统。提供新鲜空气。如果症状持续，请就医。



警告：灼烧风险。电池液遇到火花或明火时，会起火燃烧。

电池帽 (图3)

分体式电池组配有保护帽来覆盖电极。若无保护帽，松散的金属物体会使电极短路，而引起火灾并损坏电池组。

1. 将电池组放入充电器或工具之前，请取下保护帽 (图3A)。
2. 从充电器或工具上取下电池组后，请立即将保护帽盖到电极上 (图3B)。



警告：存放或携带分体式电池组之前，请确保保护帽就位。

电池组 (图1)

电池类型

DC720、DC721、DC722、DC725和DC727使用18伏电池组。

DC730、DC731、DC732、DC735和DC737使用14.4伏电池组。

DC742、DC743和DC745使用12伏电池组。

存放建议

1. 最佳存放地点应凉爽、干燥，避免阳光直射、过热或过冷。
2. 长期存放不会损害电池组或充电器。适当条件下，可以存放5年甚至更长。

充电器和电池组上的标志

除了本手册中使用的象形图外，充电器和电池组上还有以下象形图标识：

使用前，请阅读使用说明。



使用前，请阅读使用说明。



电池充电中



电池已充电



电池损坏



热\冷态电池组延迟



切勿插入导体。



损坏的电池组不得充电



仅可使用得伟电池组。
其它电池组可能爆炸，从而引起人身伤害及损坏。



不得暴露在水中。



请立即更换损坏的电源线。



仅可在4至40°C之间充电。



以环保的方式、谨慎地处理报废的电池组。



不得焚烧NiMH、NiCd+以及Li-Ion电池组。



可为NiMH、NiCd电池组充电。



可为Li-Ion电池组充电。



充电时间见技术参数。

套装内容

本套装包括：

电钻/锤钻	1台
电池组	2块
充电器	1个
工具箱	1个 (仅限于K版)
说明手册	1本
分解图	1份

注意：N型号不包括电池组和充电器。

- 检查工具、部件或配件是否在运输过程中损坏。
- 使用前，请抽空彻底阅读并掌握本手册内容。

说明 (图1)



警告：切勿修改本工具或其任何部件。否则，可能造成人身伤害或工具损坏。

预期用途

这些电钻/起子/锤钻是为专业钻孔和拧螺丝设计的。

禁止在潮湿或存在易燃液体、气体的环境中使用本工具。

这些电钻/起子/锤钻是专业型电动工具。禁止儿童接触工具。无使用经验的人必须在监督下使用。

- a. 触发开关
- b. 正/反转按钮
- c. 扭矩调节环
- d. 换档开关
- e. 工作灯
- f. 无键夹头
- g. 电池组
- h. 电池释放按钮

电器安全

电动马达仅设计为一种电压。请务必检查电池组电压是否与铭牌一致。此外，还须确保充电器电压与主电网一致。



您的得伟电动工具依据EN60335进行双重绝缘。因此，不需要接地线。

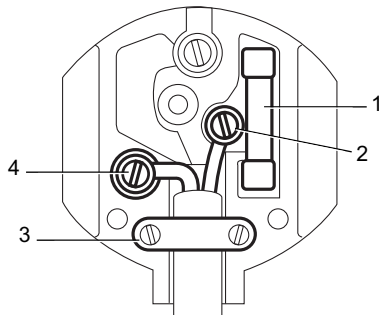
如果电源线损坏，必须采用得伟维修机构提供的专用线。

更换主电网电源插头 (仅限英国及爱尔兰)



危险：

- 如果您的主电网插头需要更换，而您又能够胜任，则请按照以下规定进行。如果您有疑问，请联系授权的得伟维修代理或合格电工。
- 从电源上断开插头。
- 切下插头并安全处理。带裸铜导体的插头如果插入带电插座，是极其危险的。
- 仅使用经核准的13安BS1363A插头，并且配上正确的额定保险丝（1）。
- 大多数高质量插头会给连接点的导线标上颜色或字母。将导线连接到相应的插头连接点（如下图所示）。棕色代表火线（L）（2），蓝色是零线（N）（4）。
- 重新安装主电网插头顶盖之前，应确保导线限制器（3）牢牢固定导线的外护套，并且两个接线正确地紧固在端子螺丝上。



警告：禁止使用照明插座。
严禁将火线(L)或零线(N)接到地线极E或⊥。

延长线的使用

除非绝对必要，否则请勿使用延长线。请使用与输入功率（见技术参数）匹配的、经过认证的延长线；最小导体尺寸为1mm²，最大长度为30米。使用电缆卷筒时，请始终保持电缆完全展开。

组装与调整



警告：组装及调整之前，切记取下电池组。插入或取下电池组前，请务必关闭工具。



警告：仅可使用得伟电池组和充电器。

从工具上拆、装电池组（图2）



警告：为了降低严重人身伤害的风险，请在调整、取下/安装附件或配件之前，关闭工具并断开电池组。意外启动会造成伤害。

将电池组装入工具手柄中

1. 使工具底座与工具手柄内的缺口对正。
2. 将电池组紧紧滑入手柄，直至听到锁定咬合的声音。

从工具上取下电池组

1. 按下电池释放按钮（h），将电池组紧紧拉出工具手柄。
2. 将电池组插入充电器，如本手册“充电器”章节所述。

操作

使用说明



警告：请始终遵守安全守则以及适用法规的要求。

变速开关（图1）

要启动工具，挤压触发开关（a）即可；

要使工具停止，松开开关即可。本工具配有制动器。一旦完全松开触发开关，夹头即停。

注意：不建议在变速范围内连续使用工具。这会损坏开关，应予避免。

正/反转控制按钮（图1）

正/反转控制按钮（b）确定工具的方向，同时还具有锁定按钮的功能。

要选择正转，释放触发开关，并且按下工具右侧的

正/反转控制按钮。

要选择反转，按下工具左侧的正/反转控制按钮。

控制按钮处于中心位置时，工具将被锁定在off（断开）状态。当改变控制按钮的位置时，请确保触发开关已释放。

注意：改变旋转方向后首次运行工具时，你会在启动时听到咔嚓声。这是正常现象，不表示故障。

扭矩调节环（图1）

您的工具配有扭矩调节机构，用于紧固或拆卸各种形状与尺寸的紧固件；一些工具型号还配有锤击机构，用于砖石钻孔。调节环（c）的周边是一些数字以及钻头标志，某些型号上为锤子标志。这些数字用于设定离合器，以输出一定范围的力矩。环上的数字越大，扭矩就越大，可以驱动的紧固件就越大。要选择任一数字，将该数字旋转至对准箭头即可。

双程调速（图1）

您的起子/电钻的双程调速特性使您能够调档，从而获得更多的功能性。

要选择低转速、高扭矩设定，关闭工具使其停止。把换挡开关（d）向前滑动（朝向夹头），如图1所示。

要选择高转速、低扭矩设定，关闭工具使其停止。把换挡开关（d）向后滑动（远离夹头）。

注意：工具运行过程中，不得换档。如果换档时出现问题，请确保双程换挡开关要么完全推到前部，要么完全推到后部。

工作灯（图1）

靠近触发开关（a）的上方有一工作灯（e）。挤压触发开关时，工作灯即被激活。

注意：工作灯用于照亮紧邻的工作表面，并不设计为手电筒。

无键套筒夹头（图1）

您的工具配有无键夹头（f）。它带一旋转套筒，用于夹头的单手操作。要插入钻头或其它附件，请按如下步骤操作。

1. 按照前述内容，将触发开关锁定在OFF位置。
2. 一只手握住夹头的黑色套筒，另一只手固定工具。逆时针旋转套筒，使其足以容纳所需配件。
3. 把配件插入夹头约19毫米，然后一只手把持工具，另一只手顺时针旋转夹头套筒，使其紧固。您的工具配有心轴自动锁定机构。这使您能够用一只手打开或关闭夹头。

要释放配件，重复上述第2步。



警告：禁止通过握住夹头前部并启动工具来紧固钻头（或任何其它配件）。这会损坏夹头并导致人身伤害。更换配件时，切记锁定触发开关。

请使用一只手握住夹头套筒，一只手握住工具，紧固到最大限度。

钻孔（图4）



警告：为了降低严重人身伤害的风险，在调整或安装/拆卸附件或配件之前，请关闭工具并断开电源。



警告：为了降低人身伤害的风险，请务必确保工件锚固或夹持牢固。如果在较薄材料上钻孔，请使用木材“衬垫”来防止材料损坏。

1. 切记使用锋利的钻头。钻木材时，应使用麻花钻头、扁钻头、机械螺旋钻头或孔锯。钻金属时，使用钢麻花钻头或孔锯。钻砖石时，例如砖块、水泥、煤渣砌块等，使用标称为冲击钻的硬质合金钻头。超过10毫米的钻头应采用低速档。
2. 用力方向始终与钻头成一直线。请施加足够的压力，保证钻进所需，但不要大到马达失速或钻头倾斜。
3. 双手紧握工具，控制钻进时的扭转效应。如果该型号未配侧手柄，请一只手握住工具手柄，另一只手电池组。



注意：工具过载时会停转，并导致突然扭转。请始终预判停转的可能性。握紧工具，控制扭转效应并避免受伤。

4. 如果电钻失速，常常是由于过载或使用不当。请立即松开触发开关，从工件上退出钻头，查找失速的原因。切勿通过点动触发开关来启动已停转的钻头，这会损坏工具。
5. 为尽量减少失速故障，避免钻头在材料中折断，请降低对电钻的压力，使钻头从孔的最后部分中缓和下来。
6. 从成孔中拉出钻头时，请保持马达运转。这有助于防止卡死。
7. 使用变速电钻时，无须中心冲定位。启动时采用较低速度，当钻深足以防止跳钻时，加力挤压触发开关，使电钻加速。

锤钻（图5）

1. 把轴环（c）旋转到锤钻标志处。
 2. 向后（远离夹头）滑动选择开关，选择高速档。
- 重要提示：仅可使用硬质合金钻头或巧工钻头。

3. 钻进时，对工具用力的大小应刚好防止过度回弹或“跳离”。用力过度会导致转速慢、过热和钻进速度低。
4. 直线钻进，使钻头与工件成直角。钻进时，不得对钻头施加侧向力，这会导致出屑槽堵塞、钻进速度慢。
5. 钻深孔时，如果锤钻速度变慢，请把钻头从孔中拉出一部分，同时保持工具运行。这有助于清除钻屑。

注意：如果钻屑平滑、均匀地从孔中流出，则表明钻孔速度适当。

螺丝起子（图6）

1. 使用双程选档开关选择所需速度/扭矩范围，使之与计划操作的速度与力矩相匹配。
2. 把扭矩调节环旋转到需要的位置。小数字代表低扭矩；大数字代表高扭矩。
3. 把需要的紧固配件插入夹头，与安装钻头时的操作一样。
4. 在废料上或不可见区域中做一些练习，确定离合器环的适当位置。
5. 启动时，始终采用低扭矩档，然后升高至大扭矩档，以免损坏工件或紧固件。

维护

您的得伟电动工具设计精良，可以长期使用，仅需极少维护。要连续获得令人满意的工作效果，需要您做合适的保养和定期的清洁。



警告：为降低人身伤害的风险，在拆、装配件或附件，调整、修理工具之前，请关闭工具并拔下工具插头。



润滑

本电动工具无须另行润滑。



清洁



警告：一旦通风口及其周围积聚可见的粉尘，请即用干燥的压缩空气吹走主机外壳内的粉尘和灰尘。进行这一步骤时，请佩戴经认可的护目装备和认可的面罩。



警告：切勿使用溶剂或其它刺激性化学品来清洁工具的非金属部件。这些化学品可能削弱零件中使用的材料。只能使用抹布蘸中性肥皂水进行清洁。勿使任何液体进入工具；勿使工具的任何部分浸入液体中。

充电器清洁说明



警告：触电风险。清洁前，请把充电器从交流电插座上断开。可使用布或非金属软刷来清除充电器外表面上的灰尘和油脂。不得使用水或任何其它清洗液。

配件的选择



警告：由于非得伟配件未经本产品匹配测试，本工具若使用此类配件，将存在隐患。为降低人身伤害风险，本产品仅可使用得伟推荐的配件。

请向零售商咨询合适配件的更多信息。

保护环境



分类回收。此类产品不得和普通生活垃圾一起处理。

当您需要更换或不再使用得伟产品时，请不要把它和生活垃圾一起处理。请把它单独分类回收。



旧产品和旧包装的分类回收使材料能够得以再循环和再利用。再循环材料的重新利用有助于防止环境污染和减少原料需求。

在市政垃圾场或您购买新产品的零售商处，地方法规可能要求电器产品与生活垃圾分开回收。

得伟提供设施来收集、回收使用寿命到期的得伟产品。要利用本服务，请将产品送往任何授权维修中心，他们代表得伟回收产品。

您可与本手册中的当地得伟地址联系，查找距离最近的授权维修中心的位置。此外，也可以登录互联网：www.2helpU.com，查看得伟授权维修代理的办公室清单，以及我们售后服务的详细资料与联系方式。



可充电电池组

如果本长寿命电池组不能提供顺利完成工作所需电力，则必须进行充电。在技术寿命终结时，要小心处理，注意保护环境：

- 把电池组电力完全耗尽，然后从工具上取下。
- Li-Ion、NiCd和NiMH电池是可以回收的。把它们送往经销商或者当地的回收站。回收的电池组将被适当地回收或处理。

한국어

기술자료

		DC722	DC725	DC732	DC735	DC737
전압 V	DC	18	18	14.4	14.4	14.4
배터리타입		Li-Ion	NiCd	Li-Ion	NiCd/NiMH	Li-Ion
출력	W	375	400	270	295	270
무부하회전수						
1단 기어	min-1	0-500	0-500	0-400	0-400	0-400
2단 기어	min-1	0-1700	0-1700	0-1450	0-1450	0-1450
타격						
1단 기어	min-1	-	0-8500	-	0-6800	0-6800
2단 기어	min-1	-	0-29000	-	0-25000	0-25000
최대토크	Nm	41	44	37	40	37
척	mm	13	13	13	13	13
최대작업능력						
목재	mm	38	38	35	35	35
철재	mm	13	13	13	13	13
석재	mm	-	13	-	13	13

배터리 유형		DE9180	DE9181	DE9503	DE9095	DE9098	DE9140	DE9141	DE9094	DE9091
배터리 유형		Li-Ion	Li-Ion	NiMH	NiCd	NiCd	Li-Ion	Li-Ion	NiCd	NiCd
전압	V _{DC}	18	18	18	18	18	14.4	14.4	14.4	14.4
용량	A _h	2.0	1.1	2.6	2.0	1.3	2.0	1.1	1.3	2.0
중량	kg	0.68	0.42	1.0	1.0	0.87	0.58	0.37	0.6	0.7

충전기 유형: 모든 모델에서 사용할 수 있는 DE9135-KR

주의사항: 디월트는 제품사양을 향상시키기 위하여 별도 공지 없이 상기 공구의 내용을 변경할 수 있습니다.

일반 전동공구 안전 수칙



경고! 모든 안전수칙과 지침을 읽으십시오. 이를 따르지 않는다면 감전이나 화재, 심각한 상해를 입을 수 있습니다.

항후 참고할 수 있도록 모든 안전수칙과 지침을 보관하십시오.

1) 전기 안전

- a) 전동공구의 플러그는 콘센트와 맞아야 합니다. 어떤 방법으로든 플러그를 절대 변형시키지 마십시오. 접지된 전동공구에 어댑터 플러그를 사용하지 마십시오. 플러그를 변형하지 않고 알맞은 콘센트에 사용하면 감전의 위험이 줄어들게 됩니다.
- b) 파이프나 라디에이터, 전차레인지나 냉장고 등의 접지된 표면에 신체를 접촉하지 마십시오. 신체가 접지되면 감전의 위험이 커집니다.
- c) 전동공구를 비가 내리거나 젖은 곳에 두지 마십시오. 전동공구에 물이 들어가면 감전의 위험이 커지게 됩니다.

2) 개인 안전

- a) 개인 보호장비를 사용하십시오. 항상 보안경을 착용하십시오. 방진 마스크나 미끄럼 방지 신발, 안전모, 청력 보호구 등 보호장비를 적절하게 사용하면 상해의 위험이 줄어들 것입니다.

충전기		DE9130	DE9116
주 전압	V _{AC}	230	230
배터리 유형		NiCd/NiMH	NiCd/NiMH
대략적 충전 시간 분		30 (2.0 A _n 배터리 팩)	60 (2.0 A _n 배터리 팩)
중량	kg	0.5	0.4

- b) 무리하게 사용하지 마십시오. 항상 적절하게 발을 두고 균형을 유지하십시오.

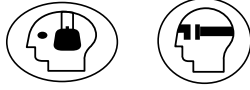
3) 전동공구의 사용 및 관리

- a) 전동공구에 힘을 가하지 마십시오. 사용 목적에 알맞은 전동공구를 사용하십시오. 다른 전동공구를 설계된 속도대로 사용하면 작업을 수월하고 안전하게 할 수 있을 것입니다.
- b) 전원 스위치가 작동하지 않는다면 전동공구를 사용하지 마십시오. 스위치로 제어할 수 없는 전동공구는 위험하며 이는 반드시 수리해야 합니다.
- c) 조정하거나 부속품을 교환하거나 전동공구를 보관하기 전에 전원 공급장치나 배터리 팩에서 플러그를 빼십시오. 이러한 예방 안전 수칙은 전동공구가 우발적으로 작동하게 되는 위험을 줄여줍니다.
- d) 작업 상태와 행해야 할 작업을 고려한 본 지침에 따라 전동공구 및 부속품, 부품을 사용하십시오. 다른 용도로 전동공구를 사용하면 위험한 상황이 야기될 수 있습니다.




4) 배터리 관련 도구의 사용 및 관리

- a) 제조업체가 정한 충전기로만 충전하십시오.
- b) 전동공구에 맞게 특별히 고안된 배터리 팩만을 사용하십시오.
- c) 무리한 상황에서, 배터리에서 액체가 나올 수 있으며 이를 만지지 않도록 하십시오. 우연히 만지게 된다면, 물로 닦아내십시오. 액체가 눈에 닿았다면, 특별히 진료를 받으십시오. 배터리에서 흘러나온 액체는 염증이나 화상을 야기할 수도 있습니다.
- d) 배터리 팩을 사용하지 않을 때에는 클립이나 동전, 열쇠, 못, 나사, 한 단자에서 다른 단자로

연결할 수 있는 기타 작은 금속 물질 등을 가까이 두지 마십시오. 배터리 단자가 짧으면 화상이나 화재가 일어날 수 있습니다.



모든 배터리 충전기에 대한 중요한 안전수칙

-  **경고:** 감전 위험. 충전기 내부에 액체가 들어가지 않도록 하십시오. 감전될 수 있습니다.
-  **주의:** 화상 위험. 상해 위험을 줄이기 위해, 디월트 충전용 배터리만을 충전하십시오. 다른 회사의 배터리를 충전하는 경우 상해나 손상을 야기하는 폭발이 있을 수 있습니다.
-  **주의:** 전원 공급 장치에 충전기가 꽂혀 있는 특수한 상태에서, 충전기 내부에 충전상태가 지속되면 외부물질에 의해 수명이 단축될 수 있습니다.
 - 본 사용설명서에 있는 충전기 외에 다른 충전기로 본 배터리 팩을 충전하지 마십시오. 본 충전기와 배터리 팩은 함께 사용하도록 특별히 고안되었습니다.
 - 본 충전기는 디월트 충전용 배터리를 충전하는 이외의 용도로는 사용하지 마십시오. 다른 용도로 사용하면 화재나 감전, 감전사 등을 야기할 수 있습니다.
 - 충전기가 비나 눈을 맞지 않도록 하십시오.
 - 충전기를 뺄 때, 코드로 플러그를 뽑으십시오.
 - 정말 필요할 때 이외에는 연장 코드를 사용하지 마십시오.
 - 충전기 위에 어떤 물건이든 두지 마십시오. 환기 슬롯을 막아서 과도한 내부열을 발생시킬 수 있는 부드러운 표면 위에 놓지 마십시오.
 - 코드나 플러그가 손상된 충전기를 작동시키지 마십시오.
 - 강한 충격을 받거나, 떨어뜨리거나, 그 외 어떤 방법으로든 손상이 된 경우, 충전기를 작동시키지 마십시오.
 - 충전기를 해체하지 마십시오. 수리가 필요할 때에는 서비스 센터에 문의하십시오.
 - 세척하시려면 그 전에 충전기를 콘센트에서 빼십시오. 감전 위험이 줄어듭니다. 배터리 팩을 빼면 감전 위험이 줄어듭니다.
 - 절대로 충전기 두 개를 함께 연결하지 마십시오.

충전 절차

1. 배터리 팩을 넣기 전에 충전기(j)를 적절한 콘센트에 꽂습니다.
2. 배터리 팩(h)을 충전기에 넣습니다. 붉은 빛(충전 중)이 계속 깜빡 거리며 충전이 시작되었음이 표시됩니다.
3. 충전이 완료되면 붉은 빛이 계속 켜져 있습니다. 배터리 팩이 다 충전되면 사용하거나 충전기에서 뺄 수 있습니다.

충전 과정

배터리 팩의 충전 상태는 아래 표를 참고하십시오.

충전 상태	
충전 중	-----
충전 완료	-----
냉/온 팩 지연	-----
배터리 팩 교체
문제 발생

자동 튜업모드

자동 튜업모드는 각각의 전지가 최대 충전이 되도록 똑같이 균형을 맞춰줍니다. 배터리 팩은 매주 혹은 전과 같이 작업을 수행하지 못할 때에 충전해야 합니다. 배터리 팩을 충전하려면, 보통 배터리를 충전기에 꽂습니다. 배터리 팩을 최소한 8시간 동안 충전하십시오.

냉/온 팩 지연

너무 뜨겁거나 너무 차가운 배터리를 충전기에 넣었을 때, '냉/온 팩 지연'이 자동으로 작동하여 배터리가 적당한 온도가 될 때까지 충전하지 않습니다.

모든 배터리 팩을 위한 중요 안전수칙

- 디월트 충전기뿐만 본 배터리 팩을 충전하십시오.
 - 물이나 기타 액체가 튀거나 들어가지 않도록 하십시오.
 - 전동공구와 배터리팩을 40° C (105° F) 가 넘는 곳에 보관하거나 사용하지 마십시오.
- 위험:** 감전사 위험. 어떤 이유로든 배터리팩을 절대 열려고 하지 마십시오.
경고: 어떤 이유로든 배터리팩을 절대 열려고 하지 마십시오. 배터리 팩 케이스가 깨지거나 손상되었다면, 충전기에 넣지 마십시오. 배터리 팩을 뭉개거나 떨어뜨리거나 손상시키지 마십시오. 날카로운 물건이 닿거나 떨어뜨리거나, 어떤 방법으로든 손상된 (못이 박히거나 망치로 치거나, 밟는 등) 배터리 팩이나 충전기를 사용하지 마십시오.

- 배터리 팩이 심각하게 손상이 되거나 완전히 낡았다 하더라도 절대 소각하지 마십시오. 배터리 팩이 폭발할 수 있습니다.
- 과도한 사용이나 특정 온도 하에서 배터리 팩 전지로부터 소량의 액체가 누출될 수 있습니다. 그러나, 외부가 깨진다면 다음과 같이 행하십시오.
 - a. 배터리 액체가 피부에 닿으면 즉시 비누와 물로 몇 분 동안 닦아내십시오.
 - b. 배터리 액체가 눈에 닿으면, 깨끗한 물로 최대 10분 동안 행구고 병원에 가십시오. (참고: 이 액체는 수산화 칼륨 25-35%용액입니다.)



손상된 배터리 팩을 충전하지 마십시오.



디월트 배터리 팩만을 사용하십시오. 그 외에는 폭발하여 상해나 배터리 팩의 손상이 야기될 수 있습니다.



물에 노출시키지 마십시오.



결함이 있는 코드는 즉시 교체하십시오.



4 °C ~ 40 °C의 온도에서 충전하십시오.



배터리 팩은 환경을 고려하여 분리수거하십시오.



NiMH, NiCd+, Li-Ion 배터리 팩을 소각하지 마십시오.



NiMH NiMH와 NiCd 배터리 팩 충전

배터리 캡 (그림. 3)

보호용 배터리 캡은 분리된 배터리 팩을 보호하도록 제공하고 있습니다. 보호용 캡이 없으면, 금속 물체가 닿았을 때 서킷이 줄어들어 화재나 배터리 팩이 손상될 수 있습니다.

1. 배터리 팩을 충전기나 전동공구에 넣기 전에 보호용 배터리 팩을 제거하십시오. (그림 3A)
2. 배터리 팩을 충전기나 전동공구에서 뺀 후에는 바로 보호용 캡을 접촉 부위에 씌우십시오. (그림 3B)



경고: 분리된 배터리 팩을 보관하거나 이동시키기 전에 보호용 배터리 캡이 제대로 씌워져 있는지 확인하십시오.

배터리 팩 (그림. 1)

배터리 유형
본 설명서에 기재된 각 공구는 디월트 배터리 시스템내에서 다른 배터리 기준을 적용하고 있습니다. 현재 12V, 14.4V, 18V 배터리의 유저들은 본 설명서에 있는 관련된 공구에 해당 팩을 사용할 수 있습니다. 성능과 사용시간은 사용에 따라 약간의 차이가 있을 수 있습니다.

충전기와 배터리 팩의 표시



배터리 충전 중



배터리 충전 완료



배터리 이상



냉/온 팩 지연



도체 물질로 시험하지 마십시오.

포장 내용

본 포장에는 다음을 포함하고 있습니다:

- 드릴/해머드릴 1
- 배터리 팩 2
- 충전기 2
- 보관함 (K 버전만) 1
- 사용설명서 1
- 분해도면 1

주: 배터리 팩과 충전기는 N-모델에는 포함되어 있지 않습니다.

- 배송 시 있을 수 있는 전동공구나 부품이나 부속품의 손상을 확인하십시오.
- 작동 전에 본 설명서를 확실히 읽고 숙지하십시오.

설명 (그림. 1)

용도

본 드릴/드라이버/해머드릴은 전문 드릴링이나 스크류드라이빙 작업을 위해 설계되었습니다.

- a. 방아쇠 스위치
- b. 전진/후진 버튼
- c. 토크 조정 칼라
- d. 기어 선택기
- e. 작업등
- f. 키리스 척
- g. 배터리 팩
- h. 배터리 배출 버튼

배터리 팩을 전동공구에 장착하고 분리하기 (그림. 2)



경고: 심각한 상해 위험을 줄이기 위해, 조정을 하거나, 부속품을 제거 및 설치하기 전에 전동공구의 전원을 끄고 배터리 팩을 빼십시오. 우발적인 가동은 상해를 야기할 수 있습니다.

- 전동공구 손잡이에 배터리 팩을 장착할 때
1. 전동공구 손잡이에 내부에 있는 표시자극에 전동공구의 베이스를 중심에 맞춥니다. (그림 2)
 2. 잠기는 소리가 들릴 때까지 배터리 팩을 손잡이에 확실히 밀어 넣습니다.
- 전동공구에서 배터리 팩을 분리할 때
1. 배터리 배출 버튼(h)을 눌러 전동공구 손잡이에서 배터리 팩을 확실히 밀어줍니다.
 2. 본 설명서의 충전기 부분에서 설명한 대로 배터리 팩을 충전기에 넣습니다.

가변속도 스위치 (그림. 1)

전동공구를 켜려면, 방아쇠 스위치(a)를 누릅니다.

전동공구를 끄려면 방아쇠 스위치를 놓습니다. 본 전동공구에는 브레이크가 장착되어 있습니다. 방아쇠 스위치를 완전히 놓자마자 척이 멈출 것입니다.

주: 가변 속도 범위에서 계속 사용하지 마십시오. 스위치가 손상될 수 있으니 이를 피하시기 바랍니다.

전진/후진 제어 버튼(그림. 1)

전진/후진 제어 버튼(b)은 전동공구의 방향을 결정해주며, 잠금 버튼으로도 사용됩니다.

전진 회전을 선택하려면, 전동공구의 오른쪽에 있는 전진/후진 제어 버튼을 눌러줍니다.

후진을 선택하려면, 전동공구의 왼쪽에 있는 전진/후진 제어 버튼을 눌러줍니다.

주: 회전 방향을 바꾼 뒤 전동공구를 처음으로 작동할 때, 가동 소리가 날 수 있습니다. 이는 정상이며, 제품에 문제가 있는 것은 아닙니다.

토크 조정 칼라 (그림. 1)

본 전동공구에는 조정할 수 있는 토크 스크류드라이버 메커니즘이 있어, 다양한 조임 모양이나 크기에서 나사를 조이거나 제거할 수 있으며, 일부 모델에는 해머 기능이 있어 석재를 뚫을 수 있습니다. 칼라(c)를 돌려 드릴 표시, 일부 모델에서는 해머 표시에 맞춥니다. 칼라의 숫자가 클수록 토크가 크며, 조일 수 있는 조임이 커지게 됩니다.

숫자를 선택하려면, 화살표시가 원하는 숫자에 올 때 까지 돌려줍니다.

이중 범위 기어링 (그림. 1)

저속, 큰 토크를 선택하려면, 전동공구의 전원을

끄고 멈추십시오. 기어 선택기(d)를 그림 1과 같이 앞으로 미십시오 (척을 향해).

고속, 작은 토크를 선택하려면, 전동공구의 전원을 끄고 멈추십시오. 기어선택기를 뒤로 미십시오 (척에서 멀리)

작업등 (그림. 1)

방아쇠 스위치(a) 위에는 작업등(e)이 있습니다. 방아쇠 스위치를 누를 때 작업등이 켜집니다.

키리스 단일 슬리브 척 (그림. 1)

1. 방아쇠를 앞서 설명한 대로 OFF에 둡니다.
2. 한 손으로 척의 검은 슬리브를 잡고, 다른 손으로 전동공구를 잡습니다. 원하는 부속품을 넣기에 충분한 만큼 슬리브를 반시계방향으로 돌려줍니다.
3. 19mm 정도의 부속품을 척에 넣고, 한 손으로 전동공구를 잡고 다른 한 손으로 척 슬리브를 돌려 확실히 조여줍니다. 이 전동공구에는 자동 스프링 잠금 장치가 있습니다. 그러므로 한 손으로 척을 열고 달을 수 있습니다. 부속품을 해체하려면 방법 2를 반복하십시오.

해머드릴 작동 (그림. 5)

1. 칼라(c) 를 해머드릴 표시로 맞춥니다.
2. 선택기를 뒤로 밀어 고속을 선택합니다. (척에서 멀리)
중요: 카바이드-팁이나 석재용 비트만을 사용하십시오.

드라이버 작동 (그림. 6)

1. 이중 범위 기어 선택기로 원하는 속도/토크 범위를 선택하십시오.
2. 토크 조정 칼라를 원하는 위치로 돌리십시오. 숫자가 작을수록 낮은 토크를, 숫자가 클수록 큰 토크를 말합니다.

관리

충전기 세척 방법

경고: 감전 위험. 세척하기 전에 충전기를 AC 단자에서 뽑으십시오. 형광이나 부드러운 비금속 소재의 브러시로 충전기 외부의 때나 기름을 제거할 수 있습니다. 물이나 세척제를 사용하지 마십시오.

분리 수거. 이 제품은 일반 가정 쓰레기로 버려서는 안됩니다.

충전용 배터리 팩

이 장수명 배터리 팩은 이전에는 수월하게 하던 작업에서 충분한 힘이 공급되지 않는 경우에 재충전을 해야 합니다. 수명이 다 되면, 환경을 고려하여 버리십시오.
