

CHALLENGE

14.4V Cordless Drill/Driver

Original Instruction Manual

SS20CHAMD



challenge[®]

After Sales Support

UK/Ireland 0345 640 0800

Important - Please read these instructions fully before starting assembly

These instructions contain important information that will help you get the best from your drill, ensuring it remains safe to operate.

If you need help or have damaged or missing parts, call the Customer Helpline on 0345 640 0800

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Safety Information

Important - Please read these instructions fully before starting assembly

Warning Symbols

The following warning symbols appear throughout this assembly manual and indicate the appropriate safety measures you should take when assembling and operating the power tool.



To reduce the risk of injury, Please read the instruction manual



Warning



Wear ear protection



Wear eye protection



Wear dust mask



Double insulation



Indoor use only



Do not expose to rain or water



Do not burn



Li-Ion



Li-Ion

Li-ion battery. This product has been marked with a symbol relating to 'separate collection' for all battery packs and battery pack. It will then be recycled or dismantled in order to reduce the impact on the environment. Battery packs can be hazardous for the environment and for human health since they contain hazardous substances.



Avoid using tool in temperature of 45°C or more.



In accordance with essential requirements of the European directive(s)

Safety Information

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General Power Tool Safety Warnings



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

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a 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.

Safety Information

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General Power Tool Safety Warnings

- 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.

Safety Information

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General Power Tool Safety Warnings

- 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**
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.

Drill Safety Warnings

1. **Wear ear protectors when impact drilling.** Exposure to noise can cause hearing loss.
2. **Use auxiliary handle(s), if supplied with the tool.** Loss of control can cause personal injury.
3. **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring.** Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

Safety Warnings for battery pack

- a) **Do not dismantle, open or shred cells or battery pack.**
- b) **Do not short-circuit a battery pack. Do not store battery packs haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by conductive materials.** 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.
- c) **Do not expose battery pack to heat or fire. Avoid storage in direct sunlight.**
- d) **Do not subject battery pack to mechanical shock.**
- e) **In the event of battery leaking, do not allow the liquid to come into contact with the skin or eyes.** If contact has been made, wash the affected area with copious amounts of water and seek medical advice.
- f) **Seek medical advice immediately if a cell or battery pack has been swallowed.**
- g) **Keep battery pack clean and dry.**
- h) **Wipe the battery pack terminals with a clean dry cloth if they become dirty.**
- i) **Battery pack needs to be charged before use. Always refer to this instruction and use the correct charging procedure.**
- j) **Do not maintain battery pack on charge when not in use.**
- k) **After extended periods of storage, it may be necessary to charge and discharge the battery pack several times to obtain maximum performance.**
- l) **Battery pack gives its best performance when it is operated at normal room temperature (20 °C ± 5 °C).**
- m) **When disposing of battery packs, keep battery packs of different electrochemical systems separate from each other.**
- n) **Recharge only with the charger specified by manufacturer.** Do not use any charger other than that specifically provided for use with the equipment. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- o) **Do not use any battery pack which is not designed for use with the equipment.**

Safety Information

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Safety Warnings for battery pack

- p) **Keep battery pack out of the reach of children.**
- q) **Retain the original product literature for future reference.**
- r) **Remove the battery from the equipment when not in use.**
- s) **Dispose of properly.**

General 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.

This appliance can be used by adults and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Additional Safety Instructions For Your Battery Charger

1. Before charging, read the instructions.
2. After charging, disconnect the battery charger from the supply mains. Then remove the chassis connection and then the battery connection.
3. Do not charge a leaking battery.
4. Do not use chargers for works other than those for which they are designed.
5. Before charging, ensure your charger is matching the local AC supply.
6. For indoor use, or do not expose to rain.
7. The charging device must be protected from moisture.
8. Do not use the charging device in the open.
9. Do not short out the contacts of battery or charger.
10. Make sure the correct polarity (+/-) has been followed when charging.
11. Do not open the unit and keep out of the reach of children.
12. Do not charge the batteries of other manufactures or ill-suited models.
13. Ensure that the connection between the battery charger and battery is correctly positioned and is not obstructed by foreign bodies.
14. Keep battery charger's slots are free of foreign objects and protect against dirt and humidity. Store in a dry and frost-free place.
15. When charging batteries, ensure that the battery charger is in a well-ventilated area and away from inflammable materials. Batteries can get hot during charging. Do not overcharge any batteries. Ensure that batteries and chargers are not left unsupervised during charging.
16. Do not recharge non-rechargeable batteries, as they can overheat and break.
17. Longer life and better performance can be obtained if the battery pack is charged when the air temperature is between 18°C and 24°C. Do not charge the battery pack in air temperatures below 4°C, or above 40°C. This is important as it can prevent serious damage to the battery pack.
18. Charge only battery pack of the same model provided by manufacturer and of models recommended by manufacturer.

In The Box

Parts

- ① CHUCK
- ② TORQUE SETTING RING
- ③ TWO SPEED BUTTON
- ④ SIGHT LIGHT
- ⑤ ON/OFF SWITCH
- ⑥ FORWARD/REVERSE BUTTON
- ⑦ SOFT GRIP
- ⑧ BATTERY PACK RELEASE BUTTON
- ⑨ BATTERY PACK
- ⑩ DOUBLE END SCREWDRIVER BIT HOLDER



Accessories

DOUBLE END SCREWDRIVER BIT (SL5.5+PH2)
CHARGER

1
1

Operating Instructions



NOTE: Before using the tool, read the instruction book carefully.

Intended Use

This tool is intended for driving in and loosening screws as well as for drilling in wood, metal and plastic.

1. CHARGING PROCEDURE

A) BEFORE OPERATING, CHARGING THE BATTERY

NOTE:

- a) Do not use any charger other than that specifically provided for use with the equipment.
- b) If the battery pack is very hot you must remove your battery pack from the charger and allow time for the battery to cool down before recharging.
- c) The battery in your new tool is not charged when it leaves the plant. Therefore it must be fully charged before using for the first time.
- d) Please charge the battery to reach full or no less than half charge before storage. If the tool will not be used for long periods of time, charge the battery every 3-6 months. Plug the charger plug into a suitable power outlet.

Important:

When charging, the charger and battery may become warm to the touch, this is normal and does not indicate a problem.



WARNING: When battery charge runs out after continuous use or exposure to direct sunlight or heat, allow time for the tool to cool down before re-charging to achieve the full charge.

B) How to charge your battery pack (SEE FIG A)

Plug charger plug into a suitable power outlet and afterwards plug the DC plug into socket of your battery, the charging indicator (red) will illuminate at this time.

The charger indicator (red) will go out and the charging indicator (green) will illuminate when charging is complete, then unplug the charging plug from the wall socket and then remove the battery charger from the battery, the battery is ready to use.



Operating Instructions

2. INSTALLING AND REMOVING THE BATTERY PACK (SEE FIG B)

a) TO REMOVE THE BATTERY PACK

Press the Battery Pack Release Button (8) firmly first and then slide the Battery Pack out from your tool.

b) TO INSTALL THE BATTERY PACK

Slide the fully charged Battery Pack onto the tool with sufficient force until it clicks into position.

3. FORWARD/REVERSE SWITCH

For drilling and screw driving use forward rotation marked " <<" (Forward/Reverse switch (6) is moved to the left). Only use reverse rotation marked " >>" (Forward/Reverse switch (6) is moved to the right) to remove screws or release a jammed drill bit.



WARNING: Never change the direction of rotation when the chuck is rotating, wait until it has stopped!

4. SWITCH LOCK (SEE FIG C)

The switch trigger can be locked in the OFF position. This helps to reduce the possibility of accidental starting when not in use. To lock the switch trigger, place the rotation control (b) in the centre position.

5. ON / OFF SWITCH

Press the On/Off switch (a) to start and release it to stop your drill.

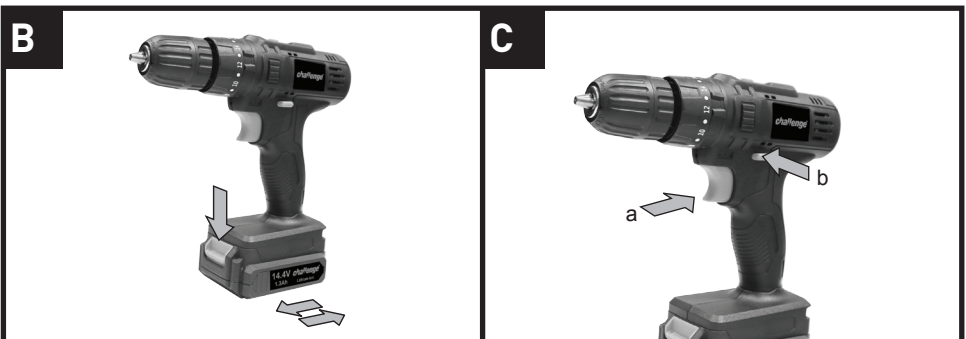
The on/off switch (a) is fitted with a brake function which stops your chuck immediately when you quickly release the switch.



WARNING: Do not operate for long periods at low speed because excess heat will be produced internally.

6. USING THE SIGHTLIGHT

To turn on the light simply press the on/off switch. When you release the on/off switch, the light will be off.



Operating Instructions


7. CHUCK ADJUSTMENT (SEE FIG. D)


To open the chuck jaws rotate the front section of the chuck. Insert the drill bit between the chuck jaws and rotate the front section in the opposite direction. Ensure the drill bit is in the centre of the chuck jaws. Finally, firmly rotate the front chuck section in the opposite directions. Your drill bit is now clamped in the chuck.

8. TORQUE ADJUSTMENT (SEE FIG. E)







(Screw driving force of your drill driver)

The torque is adjusted by rotating the torque adjustment ring. The torque is greater when the torque adjustment ring is set on a higher setting. The torque is less when the torque adjustment ring is set on a lower setting.

When drilling in masonry and concrete choose the hammer position .

When drilling in wood, metal, plastic and screwdriver choose the drill position .

Make the setting as follows:

-  1 - 4 for driving small screws
-  5 - 9 for driving screws into soft material
-  10 - 14 for driving screwdriver in soft and hard wood
-  15 - 18 for driving screws into hard wood
-  for heavy drilling
-  for drilling in masonry

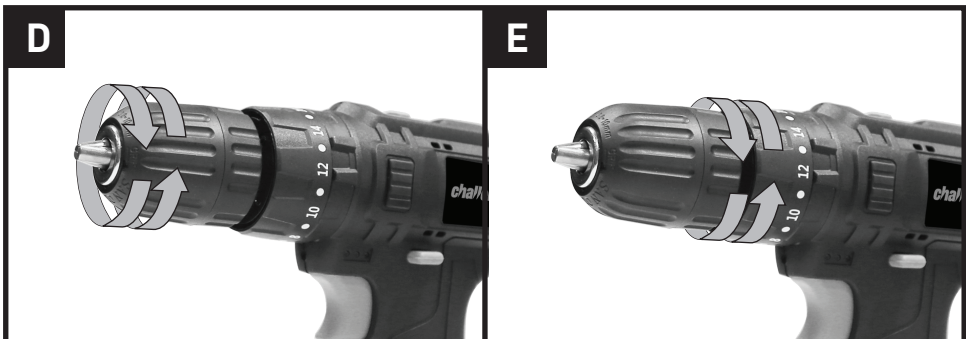
9. DRILLING

When drilling into a hard smooth surface, use a centre punch to mark the desired hole location. This will prevent the drill bit from slipping off centre as the hole is started. Hold the tool firmly and place the tip of the bit at the point to be drilled. Depress the switch trigger to start the tool. Move the drill bit into the work piece, applying only enough pressure to keep the bit cutting. Do not force or apply side pressure to elongate a hole.

If you want to activate the drill function (For drilling metal wood or plastic), turn the torque adjustment ring on the drill position.



When drilling in metal, only use HSS drill bits in good condition. Always use a magnetic bit holder (not included) when using short screwdriver bits. When screw driving, apply a small quantity of liquid soap or similar to the screw threads to ease insertion.



Operating Instructions

10. OVERLOAD PROTECTION

When overloaded, the motor comes to a stop. Relieve the load on the tool immediately and release the on/off switch. Restart the tool as normal.

11. TEMPERATURE DEPENDENT OVERLOAD PROTECTION

When using as intended for the power tool cannot be subject to overload. When the load is too high or the allowable battery temperature is too hot, the electronic control switches off the power tool until the temperature is in the optimum temperature range again.

12. PROTECTION AGAINST DEEP DISCHARGING

The LITHIUM-ION battery is protected against deep discharging by the "Discharging Protection System". When the battery is empty, the tool is switched off by means of a protective circuit: The drill will no longer rotate. Remove the battery and recharge.

Trouble Shooting

Problem	Possible cause	Solution
Unit will not work	1. Battery not installed properly 2. Battery not charged	1. Check battery installation 2. Check battery charging requirements
Battery will not charge	1. Battery not installed into charge 2. Charger not plugged into a working outlet. 3. Surrounding air temperature is too hot or too cold	1. Insert battery into charger until red light appears 2. Plug charger into a working outlet. Check current by plugging in a lamp. 3. Move charger to an appropriate place which temperature is suitable for the charger.
Switch cannot be pressed	Forward/Reverse switch at middle position	Make sure switch is on Forward or Reverse rotation according to project need.

Maintenance

Your tool requires no additional lubrication or maintenance.

There are no user serviceable parts in your power tool. Never use water or chemical cleaners to clean your power tool. Wipe clean with a dry cloth. Always store your power tool in a dry place. Keep the motor ventilation slots clean. Keep all working controls free of dust. Occasionally you may see sparks through the ventilation slots. This is normal and will not damage your power tool.

Technical Data


Technical Data Table

Voltage	14.4 V DC
No load speed	0-350/0-1350 /min
Number of clutch positions	18+1+1
Max torque	15N.m
Chuck capacity	∅ 10 mm
Charger protection class	□ / II
Charging time	3-5hrs
Charger input	100-240V, 50/60Hz, 0.3A
Charger Output	18V dc, 0.4A
Max. drilling capacity	
	Steel 8 mm
	Wood 18mm
	Masonry 8mm
Battery capacity	1.3Ah Lithium-ion battery pack (18.72Wh)
Machine weight (battery pack included)	1190g

Noise Information

A weighted sound pressure
A weighted sound power

Wear ear protection when sound pressure is over:


L_{pA} : 83.9dB(A)
 L_{wA} : 94.9dB(A)
 K_{pA} & K_{wA} = 5.0dB(A)
80dB(A) 

Technical Data


Vibration Information

Vibration total values (triax vector sum) determined according to EN 62841	
Drilling into metal	Vibration emission value $a_{h,d} = 6.125\text{m/s}^2$
	Uncertainty $K = 1.5\text{m/s}^2$

The declared vibration total value may be used for comparing one tool with another, and may also be used in a preliminary assessment of exposure.

 **WARNING:** The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used, dependant on the following examples and other variations on how the tool is used: How the tool is used and the materials being inflating. The tool being in good condition and well maintained. The use the correct accessory for the tool and ensuring it is sharp and in good condition. The tightness of the grip on the handles and if any anti vibration accessories are used. The tool being used as intended by its design and through these instructions.

This tool may cause hand-arm vibration syndrome if its use is not adequately managed.

 **WARNING:** To be accurate, an estimation of exposure level in the actual conditions of use should also take account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle but not actually doing the job. This may significantly reduce the exposure level over the total working period. Helping to minimize your vibration exposure risk. Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate). If the tool is to be used regularly then invest in anti vibration accessories. Avoid using tools in temperatures of 45°C or more. Plan your work schedule to spread any high vibration tool use across a number of days.

Environmental Protection



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

DISPOSAL OF AN EXHAUSTED BATTERY PACK



To preserve natural resources, please recycle or dispose of the battery pack properly. This battery pack contains Lithium batteries. Consult your local waste authority for information regarding available recycling and/or disposal options. Discharge your battery pack by operating your drill, then remove the battery pack from the drill housing and cover the battery pack connections with heavy-duty adhesive tape to prevent short circuit and energy discharge. Do not attempt to open or remove any of the components.

Guarantee

This product is selected for DOMESTIC USE ONLY and not for business use. This product is guaranteed against manufacturing defects for a period of 24 months. This does not cover the product where the fault is due to misuse, abuse, use in contravention of the instructions, or where the product has been the subject of unauthorized modifications or alterations, or has been the subject of commercial use. In the event of a problem with the product within the guarantee period please return it to your nearest store. If the item is shown to have an inherent defect present at the time of sale, the store will provide you with a replacement. Your statutory rights remain unaffected.