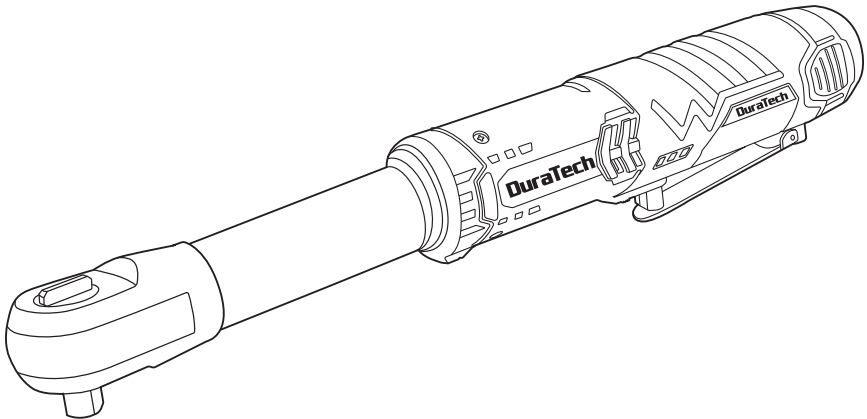


DuraTech

ORIGINAL OPERATING INSTRUCTIONS 3/8" EXTENDED CORDLESS RATCHET WRENCH



Thank you for buying a DuraTech 12V cordless ratchet wrench. Your new cordless ratchet wrench has been engineered and manufactured to DuraTech's high standard for dependability, ease of operation, and operator safety. Properly cared for, it will give you years of rugged, trouble-free performance.



WARNING: To reduce the risk of injury, the user must read and understand the operator's manual.

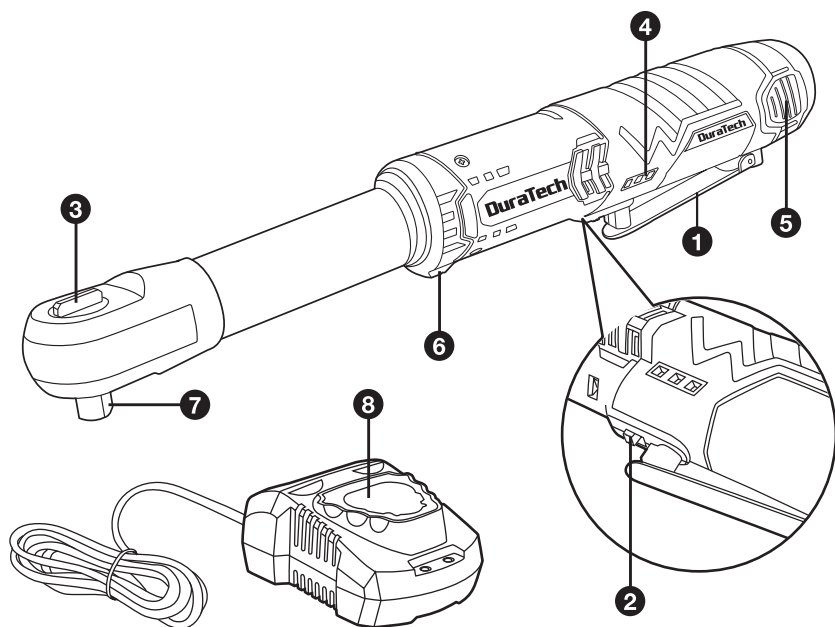
SAVE THIS MANUAL FOR FUTURE REFERENCE



Distributed by
Hangzhou GreatStar Industrial Co., Ltd.
No.35 Jiuquan Road, Jiubao Town,
Hangzhou 310019, China
www.greatstartools.com






Made in China

Fig. 1



SYMBOLS

	To reduce the risk of injury, user must read instruction manual
	Wear ear protection
	Wear eye protection
	Wear dust mask
	Do not expose to rain
	Wear protective gloves
	Wear protective footwear
	Do not burn

	Batteries may enter water cycle if disposed improperly, which can be hazardous for ecosystem. Do not dispose of waste batteries as unsorted municipal waste.
	Waste electrical products must not be disposed of with household waste. Please recycle where facilities exist. Check with your local authorities or retailer for recycling advice.
	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.
	Lock
	Unlock

Danger!

When using the equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating instructions and safety regulations with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, hand over these operating instructions and safety regulations as well. We cannot accept any liability for damage or accidents which arise due to a failure to follow these instructions and the safety instructions.

1. GENERAL POWER TOOL SAFETY WARNING

WARNING!

Read and understand 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

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **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.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical safety

- **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.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **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.
- **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.

- **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

- **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.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- **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.
- **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.
- **Do not overreach.** Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- **Dress properly.** Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- **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.
- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

4) Power tool use and care

- **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.
- **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.
- **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.

- **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.
- **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation.** If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **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.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

5) 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.

6) Battery tool use and care

- a. Ensure the switch is in the off position before inserting battery pack. Inserting the battery pack into power tools that have the switch on invites accidents.
- b. 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.
- c. Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- d. 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.
- e. 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.

ADDITIONAL SAFETY INSTRUCTIONS FOR THE CHARGER


Your Duratech tool with Lithium Ion batteries may only be charged with the specific designed Duratech Lithium Ion battery charger purchased with the tool.

IT IS DANGEROUS TO USE ANY OTHER BATTERY CHARGER TO CHARGE YOUR TOOL. Do not attempt to charge the battery pack with any other charger than the one supplied.

Before using the charger, read all the instructions, labels and cautionary markings on the charger and battery pack as well as the instructions on using the battery pack.

Do not use the charger if it has been subjected to a heavy knock, dropped or otherwise damaged in anyway. Take the charger to an authorised service centre for a check or repair.

Do not disassemble the charger. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when you use the tool or charger again. Take the charger to a power tool repair centre when service or repair is required.

 **DANGER.** If the battery pack is cracked or damaged in any other way, do not insert it in the charger.


Do not plug anything other than your Duratech tool into the charger, as other objects may touch dangerous voltage points or short out parts, which could result in fire or electric shock.

Do not place the tool or charger on an uneven surface, as a fall may cause serious damage.

Never place the tool or charger near or over a heat source such as a radiator or heater.

Do not operate the charger in a cabinet or other enclosure unless proper ventilation is provided.

Use the battery charger indoors only.

 **WARNING.** Do not allow any liquid to come into contact with the charger. There is a danger of electric shock. Do not position the tool or battery charger near water; for example, near a sink, wash bowl or toilet. Do not spill liquid of any kind on the tool or charger. Doing so may short out parts, causing damage to the product and creating the risk of fire or electric shock.

To reduce the risk of an electric shock, unplug the charger from the power supply before attempting to clean it. To clean tool or charger, wipe with a damp cloth. Use of any other cleaners is not recommended.

Do not place any object on to, or allow anything to rest on the charger.

Make sure that the charger cable is positioned where it will not be stepped on, tripped over or otherwise subjected to damage or stress. Keep the lead away from operating machinery.

Do not pull on the lead of the charger to disconnect it from the mains power socket.

Do not use an extension cord unless it is absolutely necessary. The use of an improper extension cord could cause the risk of fire, electric shock or electrocution.

Never attempt to connect two chargers together.

Do not charge batteries or use the tool and battery pack in locations where the temperature may be below 40°F(4°C) or exceed 104°F(40°C) such as alongside sheds or metal structures.

If you wish to charge a second battery pack, unplug the charger from the mains supply and leave it for at least 15 minutes. After this time you can charge a second battery pack.

ADDITIONAL SAFETY INSTRUCTIONS RELATED TO THE BATTERY PACK AND BATTERY SAFETY

Use only the Duratech batteries supplied with the Duratech Tool or Duratech-approved replacements.

Do not use the battery to power any device other than the Duratech tool it was sold with.

Charge the battery only with the Duratech charger supplied with the tool or Duratech-approved replacements and according to the instructions in the Duratech Instruction Manual.

Do not charge the battery in a place where static electricity is generated nor let the battery touch something that is statically charged.

The battery can be stored at temperatures between 40°F(4°C) and 104°F(40°C).

Never store or leave your lithium ion battery in temperatures over that recommended otherwise fire may occur.

DO NOT store the Lithium Ion battery anywhere that the temperature can easily reach higher temperatures than recommended -this includes garden type sheds, and vehicles where the inside temperature can climb to dangerous levels in the direct sunlight and on high temperature days. **THINK BEFORE LEAVING YOUR LITHIUM ION BATTERY PACK IN STORAGE.**

The battery can be charged or operated at temperatures between 40°F(4°C) and 104°F(40°C). **NEVER CHARGE YOU LITHIUM ION BATTERY BELOW OR ABOVE TEMPERATURES RECOMMENDED OTHERWISE FIRE OR SERIOUS DAMAGE TO THE BATTERY PACK MAY OCCUR.**

The most suitable temperatures to charge the battery pack are between 68°F(20°C) -77°F(25°C).

Always allow the battery pack to cool down after charging, do not place it in a hot environment such as a metal shed or open trailer left in the sun.

Take care where the tool is stored. Do not store in areas of corrosive fumes, or salt air or similar conditions. Try and store the tool in the packaging supplied with the tool.

Do not dispose of the battery in a fire or put the battery into a microwave oven, conventional oven, dryer, or high-pressure container. Under these conditions, the battery may explode.

Never attempt to open the battery pack, puncture the battery or subject the battery to strong physical shock.

If the plastic housing of the battery pack breaks open or cracks, immediately discontinue its use and do not recharge it. Ensure the battery pack clip is in good condition and will not allow the pack to fall free from the tool. If the clip is damaged or for any reason is not locking the pack in place, Do Not continue to use.

Stop using the battery if it exhibits abnormal heat, odour, colour, deformation, or is in an abnormal condition.

If you detect leakage or a foul odour, it is especially important to keep the battery away from fire. If battery liquid leaks onto your skin or clothes, wash well with clean water immediately. If liquid leaking from the battery gets into your eyes, do not rub your eyes. Rinse your eyes well (for at least 10 minutes) with clean water, and consult a doctor immediately.

Do not use a leaking battery.

Handle batteries with care to avoid shorting the battery with conducting materials, such as nails, screws, metal watch bands, rings, bracelets, and keys. The battery may overheat and could burn you.

After the battery has reached the end of its useful life, we recommend recycling the materials at your local municipal council recycling centre. DO NOT attempt to replace the battery cells in the battery pack, repair or modify any part of the battery pack assembly.

When recycling, make it nonconductive by applying insulating tape to the terminals located on the battery.

WHEN TO CHARGE THE BATTERY

New batteries are shipped in a low charged condition and should be fully charged before Use. The battery pack can be recharged at any time during use, provided the pack is not overheated.

If the battery pack starts to cut out due to low voltage, or previous tasks undertaken can no longer be performed, it is suggested to stop using the tool and recharge the battery.

For storage, it is suggested to recharge the battery between 50% and 75% charge. Charge the device at least once in 3-6 months to preserve battery life span.

7) Cordless ratchet wrench safety warnings

- Hold the power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring. Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Hold the tool firmly.

- Always be sure you have a firm footing.
Be sure no one is below when using the tool in high locations.
- Wear ear protectors.
- Check the impact socket carefully for wear, cracks or damage before installation.
- Keep hands away from rotating parts.
- Do not touch the ratchet head, impact socket, bolt, nut or the workpiece immediately after long time operation. They may be extremely hot and could burn your skin.

2. LAYOUT AND UNPACKING

2.1 Layout (Fig. 1)

1. Paddle switch
2. Lock switch
3. R/F toggle(R:reverse F:forward)
4. Battery indicator light
5. Battery pack x 2
6. LED
7. Drive anvil
8. Charger

2.2 Items supplied

Please check that the article is complete as specified in the scope of delivery. If parts are missing, please contact our online service center.

- Open the packaging and take out the equipment with care.
- Remove the packaging material and any packaging and/or transportation braces (if available).
- Check to see if all items are supplied.
- Inspect the equipment and accessories for transport damage.
- If possible, please keep the packaging until the end of the guarantee period

Danger!

The equipment and packaging material are not toys. Do not let children play with plastic bags, foils or small parts. There is a danger of swallowing or suffocating!

3. PROPER USE

The tool is intended for fastening bolts and nuts.

4. Technical Data

Charger	Input:120V~, 60Hz 50W, Output:12VDC,2.4A
Battery capacity	2000mAh/pack
Battery voltage	Maximum 12V/Nominal 10.8V
Charging time	Approx 1 hour
No load speed	0 - 180 rpm
Drive anvil	9.5mm(3/8inch)
Weight	1.3kg(2.9lb)
Maximum torque	60N.m(531in-lbs)

Caution!

- Keep the noise emissions and vibrations to a minimum.
- Only use appliances which are in perfect working order.
- Service and clean the appliance regularly.
- Adapt your working style to suit the appliance.
- Do not overload the appliance.
- Have the appliance serviced whenever necessary.
- Switch the appliance off when it is not in use.
- Wear protective gloves.

Caution!

Residual risks

Even if you use this electric power tool in accordance with instructions, certain residual risks cannot be ruled out. The following hazards may arise in connection with the equipment's construction and layout:

- Lung damage if no suitable protective dust mask is used.
- Damage to hearing if no suitable ear protection is used.
- Health damage caused by hand-arm vibrations if the equipment is used over a prolonged period or is not properly guided and maintained.

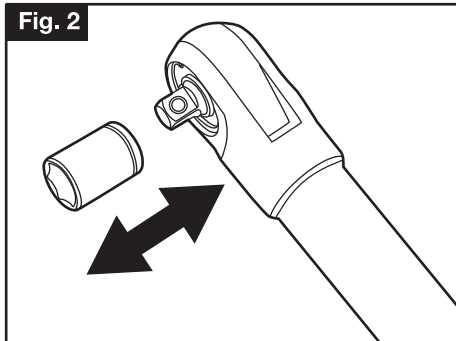
5. ASSEMBLY

Warning!

WARNING: Always remove battery pack before changing or removing accessories. Only use accessories specifically recommended for this tool. Others may be hazardous.

5.1 Installing and removing accessories (Fig. 2)

Fig. 2



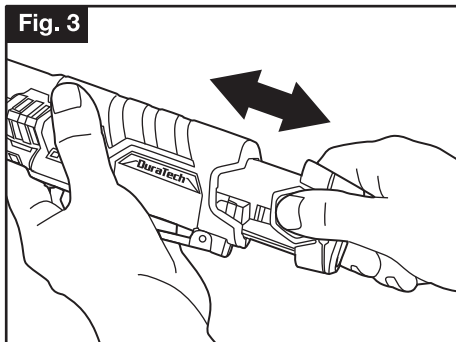
⚠ Warning!

Check that the accessories are correctly attached. Incorrect or insecurely fastened accessories can come loose during operation and cause a hazard.

- To attach a socket or other accessory, align the accessory with the drive anvil and push it firmly onto the tool.
- To remove the accessory, pull the accessory off the drive anvil.

5.2 Inserting/Removing the Battery (Fig.3)

Fig. 3



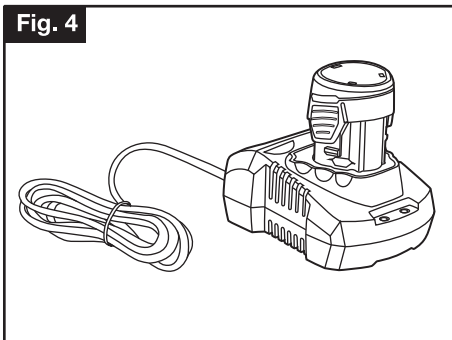
- To remove the battery, push in the release buttons and pull the battery pack away from the tool.
- To insert the battery, slide the pack into the body of the tool. Make sure it latches securely in place.

6. OPERATION

6.1 Charging (Fig.4)

- Assume that the charger you use are applicable to the battery pack.
- Insert the charger into power supply.
- Insert the battery into the slot of charger. Make sure the contact with the charger is correct

Fig. 4



The charging status is displayed by the control lights. Power indicator will turn on.

Red light=charging.

Green light=Ready for charging or charging completed.

Charger will automatically stop when charging is completed.

- Unplug the charger and disconnect it from the battery pack when finished.
- Allow the battery pack to cool completely before using it.
- Store the charger and battery pack indoors, out of reach of children.

Battery capacity indicator

There are battery capacity indicators on the tool, you can check the capacity status of the battery if you press the paddle switch. Those 3 LED show the status of the capacity level of the battery.

All 3 LEDs(RED/YELLOW/GREEN) are lit:

The battery is fully charged.

2 LEDs (RED/YELLOW) are lit:

The battery has an adequate remaining charge.

1 LED(RED) is lit:

The battery is in low power, please recharge the battery.

6.2 Switching on/off

Lock Switch

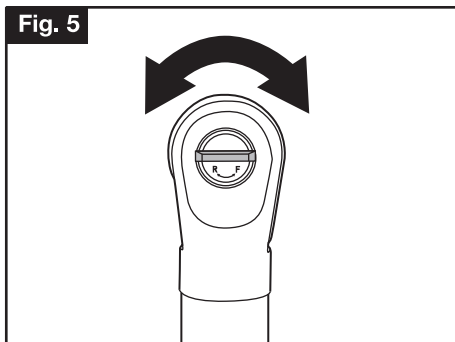
To lock the paddle switch, slide the lock switch to the locked position. To unlock the paddle switch, slide the lock switch to the unlocked position. The paddle switch will not work when the lock switch is in the locked position. Always lock the paddle switch or remove the battery pack before performing maintenance, changing accessories, storing the tool and any time the tool is not in use.

Starting, Stopping and Controlling Speed

These tools may be operated at any speed from 0 to full speed.

- To start the tool, press the paddle switch. NOTE: An LED light is turned on when the switch is pressed.
- To vary the driving speed, increase or decrease pressure on the switch. The further the switch is pressed, the greater the speed.
- To stop the tool, release the switch.

Using the Forward/Reverse Toggle (Fig.5)



For forward (clockwise) rotation, rotate the forward/reverse toggle counterclockwise. Check the direction of rotation before use.

For reverse (counterclockwise) rotation, rotate the forward/reverse toggle clockwise. Check the direction of rotation before use.

7. CLEANING, MAINTENANCE

Danger!

Always remove the battery pack before making adjustments to the equipment.

7.1 Cleaning

- Keep all safety devices, air vents and the motor housing free of dirt and dust as far as possible. Wipe the equipment with a clean cloth or blow it with compressed air at low pressure.
- We recommend that you clean the device immediately each time you have finished using it.
- Clean the equipment regularly with a moist cloth and some soft soap. Do not use cleaning agents or solvents; these could attack the plastic parts of the equipment. Ensure that no water can seep into the device. The ingress of water into an electric tool increases the risk of an electric shock.

7.2 Maintenance

There are no parts inside the equipment which require additional maintenance.

8. STORAGE

Store the equipment and accessories in a dark and dry place at above freezing temperature. The ideal storage temperature is between 5°C (41°F) and 30°C (86°F). Store the electric tool in its original packaging.

9. DISPOSAL AND RECYCLING

The equipment is supplied in packaging to prevent it from being damaged in transit. The raw materials in this packaging can be reused or recycled. The equipment and its accessories are made of various types of material, such as metal and plastic. Never place defective equipment in your household refuse. The equipment should be taken to a suitable collection center for proper disposal. If you do not know the whereabouts of such a collection point, you should ask in your local council offices.



Environmental protection

This product has been marked with a symbol relating to removing electric and electronic waste. This means that this product shall not be discarded with household waste but that it shall be returned to a collection system. It will then be recycled or dismantled in order to reduce the impact on the environment. Electric and electronic equipment can be hazardous for the environment and for human health since they contain hazardous substances.



Disposal of an exhausted battery pack

To preserve natural resources, please recycle or dispose of the battery pack properly. This battery pack contains Li-ion batteries. Consult your local waste authority for information regarding available recycling and/or disposal options. Discharge your battery pack by operating your tool, then remove the battery pack from the tool 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.