



94696  
Q027365

**BAR12E**  
**Angle Drill**  
**INSTRUCTION MANUAL**

**WARNING:**

**Please read the following instruction carefully before the tool used.**

## GENERAL SAFETY RULES

### PERSONAL SAFETY

1. **USE SAFETY GLASSES.** Use a face or dust mask if operation is dusty.
2. **DRESS PROPERLY.** Do not wear loose clothing or jewellery. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
3. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
4. **REMOVE ADJUSTING KEY & WRENCHES.** From habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
5. **CHECK DAMAGED PARTS.** Before further use of tool, a guard or other part that is damaged should be carefully checked to determine that it would operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by and authorised service centre unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorised service centre. Do not use tool if switch does not turn it on and off.
6. **DO NOT OVERREACH.** Keep proper footing and balance at all times.

### WORK AREA

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
2. **CONSIDER WORK AREA ENVIRONMENT.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit.
3. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces, for example, pipes, radiators, ranges, and refrigerator enclosures.
4. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Do not let visitors contact tool.
5. **DO NOT OPERATE** portable electric tools near flammable liquids or in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.
6. **USE EXTREME CAUTION.** When drilling or driving into wall, ceilings or other areas where electrical wire may be contacted, the metal portions of tools are not insulated from the driver spindle. Be careful not to touch any exposed electrical terminals with the tool.

### TOOL AND CHARGER USE

1. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
2. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of the heavy-duty tool. Don't use tool for purpose not intended; for example, don't use circular saw for cutting tree limbs or logs.
3. **SECURE WORK.** Use clamps or a vice to hold work. It's safer than using our hand and it frees both hands to operate tool.
4. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safe performance. Follow instructions for lubricating and changing accessories. Keep handles dry, clean, and free from oil and grease.
5. **DISCONNECT OR LOCK OFF TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
6. **AVOID UNINTENTIONAL STARTING.** Be careful not to activate the switch when charging accessories, or carrying the tool. To prevent damaged to charger, do not run the tool with the charger connected.

### TOOL AND CHARGER CARE

1. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, high or secured place - out of the reach of children.
2. **DON'T ABUSE CORD.** Never carry charger by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
3. **DO NOT ALTER OR MISUSE TOOL.** These tools are precision built. Any alteration or modification is misuse and may result in a dangerous condition.
4. **MAINTAIN TOOLS WITH CARE.** Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect charger cords periodically and if damaged, have repaired by authorised service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free from oil and grease.

## IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY CHARGER

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

**WARNING:** 120 volts or 230 volts present at charging terminal. Do not probe with conductive objects. Be danger of electric or electrocution.

**WARNING:** If battery pack case is cracked or damaged, do not inset into charger. Be danger of electric or electrocution.

1. The charger and battery pack is specially designed to work together. DO NOT attempt to charge the battery pack with any other chargers.
2. Do not expose charger to rain or snow.
3. The charger is not intended for any uses other than charging SPARKY rechargeable batteries. Any other uses may result in risk of fire, electric shock or electrocution.
4. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
5. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
6. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in risk of fire, electric shock, or electrocution.
7. An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety. When using more than one extension to make up the total length, make sure each individual extension contains at least the same wire size as the main extension.

Table 1: Recommended Wire Size for Extension Cords

Total Extension Cord Length (feet)

25	50	75	100	125	150	175
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Wire Gauge						
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18	18	16	16	14	14	12
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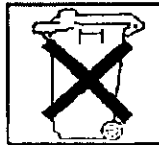
8. The charger is ventilated through slots in the top and the bottom of the housing. Do not place any object on top of charger or place the charger on a soft surface that might block the ventilation slots and result in excessive internal heat. Place the charger in a position away from any heat source.
9. Do not operate charger with damaged cord or plug - have them replace immediately.
10. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to an authorised service centre.

11. Do not disassemble charger; take it to an authorised service centre when service or repair is required. Incorrect reassemble may result in a risk of electric shock, electrocution or fire.
12. To reduce risk of electric shock, unplug charger from outlet before attempting any cleaning. Removing the battery pack will not reduce this risk.
13. **NEVER** attempt to connect 2 chargers together.
14. **DO NOT** store or use the tool and battery pack in locations where the temperature may reach or exceed 105°F (such as outside sheds or metal buildings in summer).
15. The charger is designed to operate on standard household electrical power. Do not attempt to use it on any other voltage!

## IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY PACKS

1. The battery pack is not fully charged out of the carton! First read the safety instructions below. Then follow charging notes and procedures.
2. 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.
3. 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 and this leakage gets on your skin:
  - a. Wash quickly with soap and water.
  - b. Neutralise with a mild acid such as lemon juice or vinegar.After washing, flush the affected area with clean water for a minimum of 15 minutes and seek immediate medical attention. (medical note: The liquid is 25-35% solution of potassium hydroxide.)
4. Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, immediately discontinue use and do not recharge.
5. Do not carry extra battery packs in aprons, pockets, or toolboxes along with their metal objects. Battery pack could be short-circuited causing damage to the battery pack and possibly causing severe burns or fire.
6. Charge the battery packs only in SPARKY chargers.
7. **NOTE:** Review and observe all of the "Important Charging Notes" in the charger instruction section of this manual.
8. **NOTE:** The batteries in your battery pack are the nickel-cadmium types. Cadmium is considered to be a toxic material by the Environmental Protection Agency. Before disposing of damaged or worn out Nickel-

Cadmium battery packs, check with your state Environmental Protection Agency to find out about special restrictions on the disposal of these battery packs or return them to a SPARKY certified service centre for recycling.



## IMPORTANT

## CHARGING NOTES

1. Do not charge the tool in damp or wet environment.
2. Longest life and best performance can be obtained if the battery pack is charged when the air temperature is between 65°F and 75°F (18 -24°C). DO NOT charge the battery pack in an air temperature below +40°F(+4.5°C), or above +105°F(+40.5°C) . This is important and will prevent serious damage to the battery pack.
3. The charger and battery pack may become warm to touch while charging. This is a normal condition, and does not indicate a problem.
4. To prevent overheating, do not cover the charger and do not charge battery packs in direct sunlight or near heat sources.
5. If the battery pack does not charge properly
  - (1) Check current at receptacle by plugging in a lamp or other appliance.
  - (2) Check to see if receptacle is connected to a light switch, which turns power off when you turn out the lights.
  - (3) Move charger and battery pack to a location where the surrounding air temperature is approximately 65°F - 75°F (18 -24°C).
6. If the charger does not charge the tool, battery pack and charger to your local service centre.
7. The battery pack should be recharged when it fails to produce sufficient power on jobs, which were easily done previously. **DO NOT CONTINUE** to use under these conditions. Follow the charging procedure. You may also charge a partially used pack whenever you desire with no adverse affect on the battery pack.
7. 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, aluminium foil, or any build-up 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.

8. Do not freeze or immerse charger in water or any other liquid

**WARNING:** Don't allow any liquid to get inside charger. Electric shock may result. To facilitate the cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed, or an un-insulated trailer.

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

**IMPORTANT:** This product is not user serviceable. There are no user serviceable parts inside the charger. Servicing at an authorised service centre is required to avoid damage to static sensitive internal components.

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

Always use correct battery pack (pack supplied with tool or replacement pack exactly like it.) Never install any other battery pack. It will ruin your tool and may create a hazardous condition.

## OPERATION

### Installing or removing battery pack (See Fig.1)

**TO REMOVE BATTERY PACK:** Depress the battery release button and pull battery pack out of tool.

**TO INSTALL BATTERY PACK:** Push battery pack onto tool until it locks in place.

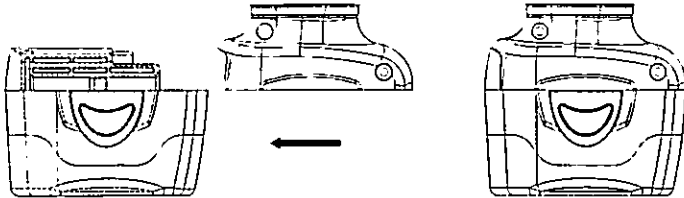


Fig.1

### To tightening and loosening screws

Install the bit that matches the screw, line up the bit in the grooves of the head of the screw then tighten it.

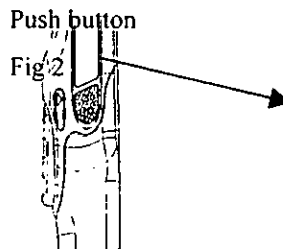
Push the impact driver just enough to keep the bit fitting the head of the screw.

### ⚠ CAUTION

1. Applying the impact driver for too long tightens the screw too much and can break it.
2. Tightening a screw with the impact driver at an angle to that screw can damage the head of the screw and the proper force will not be transmitted to the screw.

### To check the rotational direction

By pushing the R-side of the push button. The L-side of the push button is pushed to turn the chuck counter-clockwise. (See Fig 2)



### ⚠ CAUTION

The push button can't be switched while the drill is turning. To switch the push button, stop the impact driver then set the push button.

### Switch operation (See Fig 3)

1. When the trigger switch is depressed, the tool rotates. When the trigger is released, the tool stops.
2. The rotational speed can be controlled by varying the amount that the trigger switch is pulled. Speed is low when the trigger switch is pulled slightly and increases as the trigger switch is pulled more.

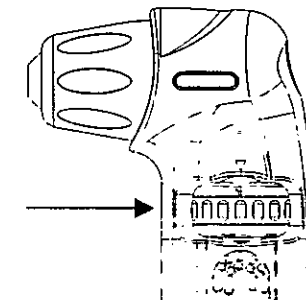


Fig 3

### Torque Adjustment (See Fig 4)

By rotating the torque adjustment selection collar behind the chuck, it is possible to adjust the torque to each of 12 setting.

The range of 12 torque setting allows better control when using the drill as screw driver to prevent over-tightening of the screws.



Torque setting  
12 modes  
Fig 4

## OPERATION AS A CHARGER

### CHARGING THE BATTERY PACK GENERAL

Before using your Cordless Impact driver for the first time, the battery pack should be fully charged. If the battery pack is installed in the Driver, remove it by following instruction under INSTALLING OR REMOVEING BATTERY PACK.

As a battery pack approaches the discharged state, you will notice a sharp drop in tool performance. When the tool is unable to perform the task at hand, it is time to recharge will reduce the total work life of the pack. Discharging the pack beyond this point can damage the pack.

**NOTE:** Battery temperature will increase during and shortly after use. Batteries may not accept a full charge if they are charged immediately after use. Allow the battery pack to room temperature before charging for best results.

After continue to charge 2 empty batteries, the Charger must rest 1 hour.

**CAUTION** The battery charger must rest on the four pads provided on the bottom of the case. Vent slots in top and bottom of charger must not be obstructed. Do not charge battery when temperature of battery is BELOW 40°F (4.4°C) or ABOVE 104°F (40°C)

If the supply cord is damaged, it must be replaced by the manufacturer or its Service agent or a similarly qualified person in order to avoid a hazard.

For charging Ni-Cd batteries with battery pack model B1222,

It is not allowed to use non-chargeable batteries.

The batteries must be removed from the appliance before it is scrapped and that they are disposed of safely.

The appliance must be disconnected from the supply before remove the batteries.

## NORMAL CHARGING

Make sure power circuit voltage is the same as that shown on the charger specification plate. Connect charger to power source. The orange light (A) Fig. 6, should light up. This indicates the charger is ready to begin charging.

Positioning battery pack on charger, align rails (see Fig. 6D), on battery charger with four tabs (see Fig. 7E) on battery pack. Slide battery forward onto charger until it stops.

The red light (see Fig. 6B) should begin to glow continuously, indicating that the battery pack is receiving a "Fast Charge". After approximately one hour, the "Fast Charge" indicator light (red) should go out indicating that the battery pack is fully charged and that the charger is now in a "Trickle Charge" mode (green light). The battery pack can be left on "Trickle Charge" until you are ready to use it.

### CAUTION

When insert battery pack onto charger, if the orange light (see Fig. 6A) starts to blink, and the green light (see Fig. 6C) begins to glow, indicating maybe battery temperature is too high or the battery voltage is too low, please leave battery pack on charger, it will be charged automatically when battery temperature is between 32°F(0°C) and 100°F(37.7°C) or battery voltage becomes to normal. Then the red light (see Fig. 6B) should begin to glow continuously, and the green light will turn off.

Depending on room temperature, line voltage, and existing charge level, initial battery charging may take longer than one hour.

Disconnect charger from power source when not in use.

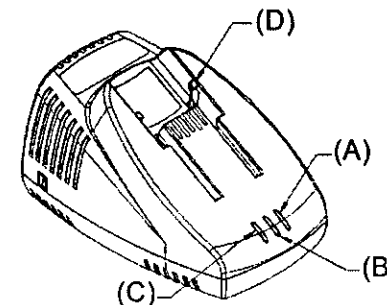


Fig. 6

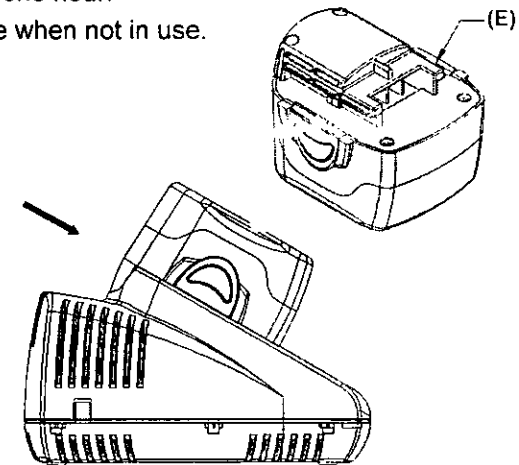


Fig. 7

## **IMPORTANT INFORMATION FOR RECHARGING HOT BATTERIES**

When using your cordless impact wrench / driver continuously, the batteries in your battery pack will become hot. You should let a hot battery pack cool down for approximately 30 minutes before attempting to recharge. When the battery pack becomes discharged and is hot, the red light on the charger will flash. When the battery pack cools down, the red light will glow continuously to indicate fast charging mode, 1-hour charge time.

**NOTE:** This will occur when continuous use of your tool causes the battery pack to become hot. It does not occur under normal conditions.

## **INSTALLING OR REMOVING BATTERY PACK**

**TO REMOVE BATTERY PACK:** Depress the battery release button and pull battery pack out of tool.

**TO INSTALL BATTERY PACK:** Align rails on the tool with the four tabs on the battery pack, and push battery pack onto tool until it locks in place.

## **Maintenance**

**CLEANING:** With the motor running, blow dirt and dust out of all air vents with dry air at least once a week. Wear safety glasses when performing this. Exterior plastic parts may be cleaned a damp cloth and mild detergent. Although these parts are highly solvent resistant, NEVER use solvent.

### **Charger Cleaning Instructions:**

Dirt and grease may be removed from the exterior of the charger using a cloth or soft non-metallic brush. Do not use water or any cleaning solutions.

**IMPORTANT!** To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement) should be performed by certified service centres or other qualified service organisations, always using identical replacement parts.

**WARNING:** Disconnect the charger from the AC outlet before cleaning solutions.

## **Accessories**

Recommended accessories for use with your tool are available at extra cost from your local service centre.