

# Durofix

## RK60132

### **CORDLESS JUMBO HAMMER DRILL**

#### *PRODUCT INFORMATION MANUAL*

*Manuel informations du produit*

*Manual información del producto*



THIS MANUAL CONTAINS IMPORTANT INFORMATION REGARDING SAFETY, OPERATION, MAINTENANCE AND STORAGE OF THIS PRODUCT.

CE MANUEL CONTIENT DES INFORMATIONS IMPORTANTES CONCERNANT LA SECURITE, L'OPERATION, LA MAINTENANCE ET LE STOCKAGE DE CE PRODUIT.

ESTE MANUAL CONTIENE INFORMACIÓN IMPORTANTE ACERCA DE LA SEGURIDAD, FUNCIONAMIENTO, MANTENIMIENTO Y ALMACENAMIENTO DE ESTE PRODUCTO.

**DO NOT** ATTEMPT TO OPERATE THE TOOL UNTIL YOU HAVE READ AND UNDERSTOOD ALL INSTRUCTIONS AND SAFETY RULES CONTAINED IN THIS MANUAL. FAILURE TO COMPLY MAY RESULT IN ACCIDENTS INVOLVING FIRE, ELECTRIC SHOCK, OR SERIOUS PERSONAL INJURY. SAVE THIS OWNER'S MANUAL FOR FUTURE REFERENCE AND REVIEW IT FREQUENTLY FOR SAFE OPERATION.

**NE PAS** TENTER D'OPERER L'OUTIL TANT QUE VOUS N'AVEZ PAS LU ET COMPRIS TOUTES LES INSTRUCTIONS ET REGLES DE SECURITE CONTENUES DANS CE MANUEL. SINON VOUS RISQUEZ DES ACCIDENTS TELS QU'UN INCENDIE, UNE ELECTROCUTION, OU DES BLESSURES CORPORELLES GRAVES. CONSERVEZ CE MODE D'EMPLOI EN CAS DE BESOIN ET RELISEZ-LE SOUVENT POUR UTILISER VOTRE OUTIL EN TOUTE SECURITE.

**NO** UTILICE ESTA HERRAMIENTA HASTA HABER LEÍDO Y COMPRENDIDO TODAS LAS INSTRUCCIONES Y NORMAS DE SEGURIDAD CONTENIDAS EN ESTE MANUAL. SI NO LO HACE PODRÍA PROVOCAR ACCIDENTES CON FUEGO, DESCARGA ELÉCTRICA O LESIONES PERSONALES SERIAS. GUARDE ESTE MANUAL DE INSTRUCCIONES PARA SU CONSULTA EN EL FUTURO Y REVÍSELO FRECUENTEMENTE PARA UN USO SEGURO.



**Original Instructions**

## THANKS FOR CHOOSING THIS PRODUCT

Durofix provides you with products at an affordable price, and we would like you to be fully satisfied with this product and our technical support. If any help or advice is needed, please kindly contact us.

## INTENDED USE

This tool is intended for personal use only.

This Drill is designed to drill and bore holes to the target.

## RECOGNIZE SAFETY SYMBOLS, WORDS AND LABELS

The safety instructions provided in this manual are not intended to cover all possible conditions and practices that may occur when operating, maintaining and cleaning power tools.

Always use common sense and pay particular attention to all the **DANGER**, **WARNING**, **CAUTION** and **NOTE** statements of this manual.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

**▲ DANGER**

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

**▲ WARNING**

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

**▲ CAUTION**

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

**NOTE**

**NOTE** provides additional information that is useful for proper use and maintenance of this tool. If a **NOTE** is indicated make sure it is fully understood.

## WARNING LABEL IDENTIFICATION



Read Manuals Before Operating Product.



Wear Eye Protection.



Wear Hearing Protection.



Wear Dust Mask.



Power tools can vibrate in use.



Keep body stance balanced and firm. Do not overreach when operating this tool.



Recycling



Do not drop the battery and charger into trashcan.

## IMPORTANT SAFETY RULES

### DANGER

**When using power tools, always prevent exposure and breathing of harmful dust and particles.**

**WARNING:** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products, and arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

**WARNING:** Handling the power cord on corded products may expose you to lead, a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. *Wash hands after handling.*

## GENERAL SAFETY RULES

### WARNING

**Read all safety warnings, instructions, illustrations and specifications provided with this power tool.** Failure to follow all instructions listed below 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.*

## WORK AREA

### WARNING

**Keep work area clean and well lit.** Cluttered and 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.

## ELECTRICAL SAFETY

### WARNING

- 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.

## PERSONAL SAFETY

### WARNING

- 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 these devices can reduce dust-related hazards.
- h. **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.

## TOOL USE AND CARE

### WARNING

- a. **Do not force the power tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
- b. **Do not use the power tool if switch does not turn it on or off.** A tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. **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 tool accidentally.
- d. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
- e. **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.
- 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.

- h. **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. **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.
- i. **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 sparks, burns, or a fire.
- j. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edge are less likely to bind and are easier to control.
- k. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
- l. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may create a risk of injury when used on another tool.

## BATTERY TOOL USE AND CARE

### **WARNING**

- 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.

- f. **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- g. **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C may cause explosion. NOTE The temperature „130 °C“ can be replaced by the temperature „265 °F“.
- h. **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

## 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.

**Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel may result in a risk of injury.

**When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual.** Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

## SPECIFIC SAFETY RULES AND SYMBOLS

### CAUTION

**Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring.** Contact with 'live' wire will also make exposed metal parts of the tool 'live' and shock the operator.

**Be aware that this tool is always in an operating condition, because it does not have to be plugged into an electrical outlet.** Always set the trigger switch to the locked OFF position when installing or removing the battery pack or bits.

**Do not use bits or sockets larger than those recommended.** Large bits or drills may overload the wrench/driver and damage the motor and gears.

**Do not use if chuck jaws or other parts are cracked or worn.**

**Never change direction of rotation until motor has completely stopped.**

**Never hold work in your hand, lap, or against other parts of your body when driving.**


**Do not use drill as a router or try to elongate or enlarge holes by twisting the drill bit.** Drill bits may break and cause injury.

**Keep hands away from rotating parts.**

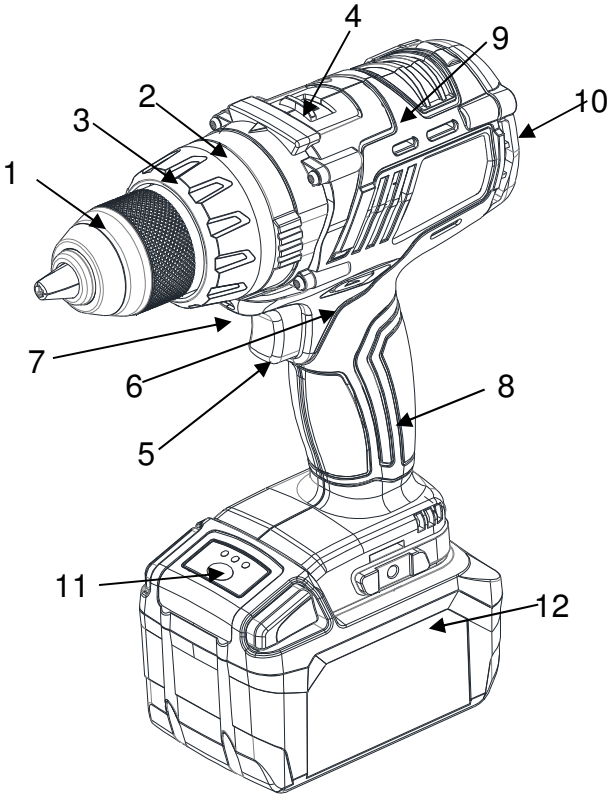
**Keep drill bit clear of yourself and all objects while installing and removing bit.**  
**Some wood contains preservatives which can be toxic.** Take extra care to prevent inhalation and skin contact when working with these materials. Request, and follow, all safety information available from your material supplier.  
**Do not stare at operation lamp.**

## SYMBOLS

The label on your tool may include the following symbols. The symbols and their definitions are as follows:

SYMBOL	NAME	EXPLANATION
V	Volts	Voltage (potential)
No	No Load Speed	No-load Rotational Speed
kg	Kilograms	Weight
 d.c.	Direct Current	Type of Current IEC60417.5031(2002.10)
.../min	Revolutions per Minute	Revolutions, Surface Speed, Strokes, etc. per Minute
rpm	Revolutions per Minute	Revolutions, Surface Speed, Strokes, etc. per Minute





### CONTROLS AND COMPONENTS:

- |                                     |                               |
|-------------------------------------|-------------------------------|
| 1. Keyless Chuck                    | 7. Built-in LED light         |
| 2. Mode Selector Collar             | 8. Soft Grip                  |
| 3. Torque Adjustment Collar         | 9. Plastic Decoration Housing |
| 4. Dual Range Gearing Shifter       | 10. Rear Cover                |
| 5. Variable Speed Switch            | 11. Battery Indicator         |
| 6. Forward / Reverse Control Button | 12. Battery Pack              |

## SPECIFICATIONS

<b>Model Number</b>	Unit	RK60132
<b>Voltage</b>	V d.c.	60
<b>Drive/Anvil</b>	in.	1/2”(13mm)
<b>Max. Tightening Torque</b>	in-lbs	1062
	Nm	120
<b>No Load Speed</b>	rpm	0-550/0-2,000
<b>Impacts per Minute</b>	ipm	30,000
<b>Tool Weight</b> (with battery 2.0Ah)	lbs	5.74
<b>Tool Weight</b> (with battery 2.0Ah)	kg	2.61

### ▲ **WARNING**

- that the vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and
- of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

<b>Charger Model Number</b>	DC60UN26-C10 / DC60UN26-C25
<b>Input</b>	100-240 V a.c., 50~60 Hz
<b>Output</b>	62 V d.c.
<b>Output Amps</b>	1.0A / 2.5A
<b>Input Power</b>	≤75W / ≤190W
<b>Battery Pack Model Number</b>	B6029LA
<b>Type</b>	Li-ion
<b>Voltage</b>	60V
<b>Capacity</b>	2.0Ah

### **VARIABLE SPEED SWITCH**

The variable speed switch provides safety feature to the user for screw driving.

To turn the tool on, squeeze the trigger switch. To turn the tool off, release the trigger switch (see Fig. 1A).

Your tool is equipped with a brake. The chuck will stop as soon as the trigger switch is fully released. The variable speed switch enables you to select the best speed for a

particular application. The farther you squeeze the trigger, the faster the tool will operate.

Use lower speeds for starting holes without a center punch, drilling metals or plastic, driving screws and drilling ceramics, or in any application requiring high torque. Higher speeds are better drilling in wood, wood compositions and for using abrasive and polishing accessories. For maximum tool life, use variable speed only for starting holes or fasteners.

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

## FORWARD / REVERSE CONTROL BUTTON

A forward/reverse control button determines the direction of the tool and also serves as a lock off button. To select forward rotation, RELEASE THE VARIABLE SPEED SWITCH, and depress the forward/reverse control button, towards the left hand side of the tool. To select reverse, depress the forward/reverse control button, towards the right hand 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, make sure the trigger is fully 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.

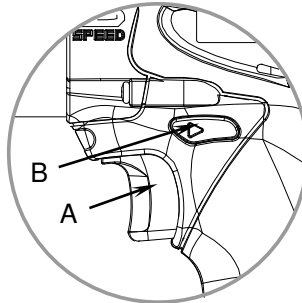


Fig. 1

## MODE SELECTOR COLLAR

The clutch feature of this collar is a mode change mechanism for screw-driving and hammer-drilling (see Fig. 2A).

### Symbols on Mode Selector Collar:



Hammer-drill

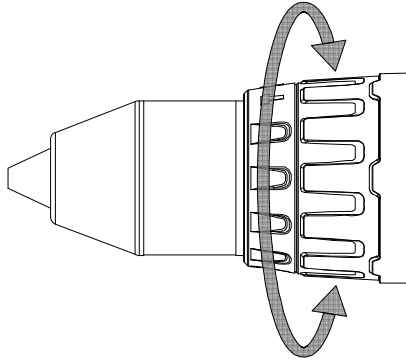
To select this mode with high speed provides for masonry or concrete drilling. The switch has to be released to stop the running motor when the chuck slipping or shaft locked.

Mode



Screwdriver Mode

To select this mode for screw-driving and drilling. The switch has not to be released to stop the running motor when the chuck slipping or shaft locked.



TORQUE ADJUSTMENT COLLAR

The clutch feature of this collar is an adjustable torque screwdriver mechanism for driving and removing a wide array of fastener shapes and sizes (see Fig. 2A). The clutch allows you to instantaneously regulate the torque, based on the force applied.

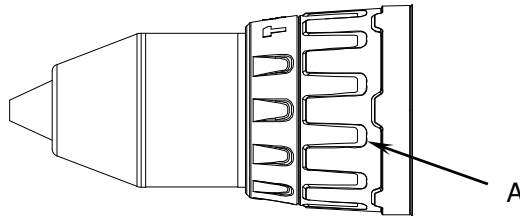


Fig. 2

Symbols on the Collar:

1 • • • 21

Torque Range Number

Circling the collar are numbers ranging from 1 to 20. These numbers are used to set the clutch to deliver a torque range. The higher number on the collars, the higher torque and larger the fastener which can be driven.



Drill

Select this mode for high speed drilling (Wood, Aluminum, and Steel) and the clutch will be locked. Release the trigger to stop the motor running when the chuck is slipping or the shaft is locked.

## DUAL RANGE GEARING

The dual range feature of your Driver/Drill allows you to shift gears for greater versatility. To select the low speed, high torque setting (position L), turn the tool off and allow it to stop. Push the dual range gear shifter forward towards the chuck. To select the high speed, low torque setting (position H), turn the tool off and permit to stop. Slide the dual range gear shifter back (away from chuck) (see Fig. 3A).

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

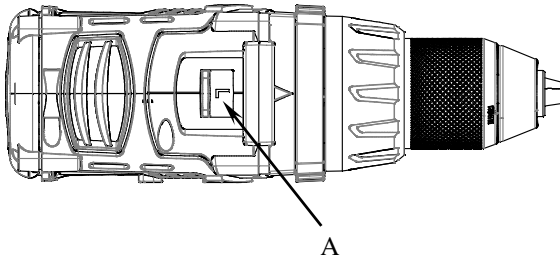


Fig. 3

## BUILT-IN LED AREA LIGHT

Your tool has a built-in LED light to illuminate the work area and improve vision when drilling/driving in areas with insufficient light.

## EXTERNAL RECHARGEABLE CARBON BRUSH

Your tool has a rechargeable carbon brush for easy replacement and prolonging the motor life.

## ELECTRIC BRAKE

**The variable speed switch is equipped with a circuit designed electric brake function. The tool will promptly stop rotating after the switch is fully released – This is the normal function of an electric brake.**

## ASSEMBLY

### INSTALLING OR REMOVING BATTERY PACK

## English

**TO REMOVE BATTERY PACK:** Depress the battery release button (see Fig. 4C), and pull battery pack out of tool.

**TO INSTALL BATTERY PACK:** Align rails (see Fig 4B), on the tool with the four tabs on the battery pack, and push battery pack onto tool until it locks in place.

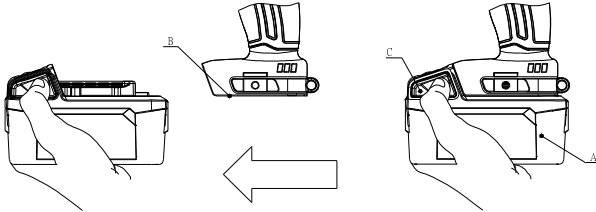


Fig. 4

### INSERTING AND REMOVING DRILL AND SCREWDRIVER BITS

**CAUTION:** Always set the reversing button to the center (locked “OFF”) position when installing and removing bits.

1. The three-jaw chuck is designed for self-centering of the bit. Open jaws large enough by turning the sleeve (see Fig. 5A) counterclockwise, when viewing the chuck from the bit end, so that the bit shank can be inserted easily.
2. Clean and insert the smooth end of the bit as far as it will go into the chuck, or up to the flutes for small bits.
3. While holding the bit with one hand, turn the sleeve clockwise until the bit is gripped in the chuck.
4. Tighten the chuck by turning the sleeve clockwise. Tighten securely.

**WARNING:** Do not operate the drill motor while installing or removing bits. This action may cause the bit to be thrown from the chuck, causing personal injury.

5. To remove the bit, reverse the above procedure.

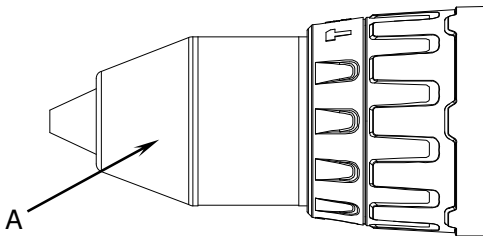


Fig. 5

### BATTERY POWER INDICATOR

Trigger the tool and Battery Indicator to show the battery pack's remaining capacity

1. One light ON: 30% remaining capacity.

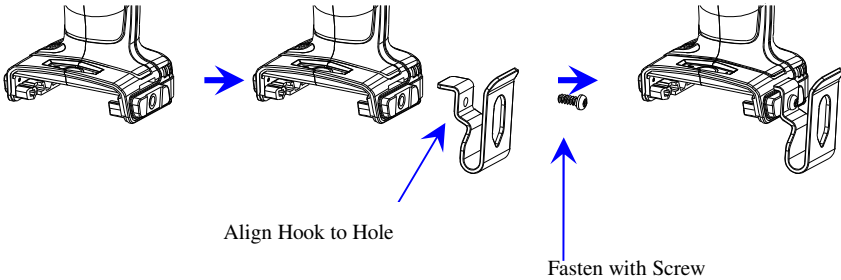


2. Two lights ON: 60% remaining capacity.
3. All lights ON: 100% remaining capacity.

## INSTALL THE METAL HOOK

Before install the metal hook, follow the procedure as shown below.

1. Align the holes of metal hook to the tool housing.
2. Use screws to fasten the metal hook to the tool housing.



## CHUCK REMOVAL

### ALWAYS WEAR EYE PROTECTION

Turn the adjustment collar to the “drill” position and low speed gear shifter. Tighten the chuck around the shorter end of a hex key (not supplied) of 1/4” or greater size. Using a wooden mallet or similar object, strike the longer end in the clockwise direction. This will loosen the screw inside the chuck.

1. Open chuck jaws fully.
2. Insert a screwdriver into front of chuck between jaws to engage screw head. Remove screw by turning clockwise.
3. Place a hex key in chuck and tighten. Using a wooden mallet or similar object, strike key sharply in the counterclockwise direction. This will loosen the chuck so that it can be unscrewed by hand.

## CHUCK INSTALLATION

1. Screw the chuck on by hand as far as it will go and insert screw (LH thread).
2. Tighten screw securely.
3. Tighten the chuck around the shorter end of a 1/4”a or large hex key (not supplied) strike the longer end in the clockwise direction with a wooden mallet.

## INSTALLING OR REMOVING BATTERY PACK

**TO REMOVE BATTERY PACK:** Depress the battery pack release button (7) and pull the battery pack (8) out of tool.

**TO INSTALL BATTERY PACK:** Push the battery pack (8) onto tool until it locks in place.

## INSERTING AND REMOVING A DRILL BIT

Your tool features a keyless chuck for greater convenience. To insert a drill bit or other accessory, follow the following steps listed below.

1. Lock the trigger switch in the off position.
2. Grasp the rear half of the chuck with one hand and use your other hand to rotate the front half counterclockwise. Rotate far enough so that the chuck opens sufficiently to accept the desired accessory.
3. Insert the bit or other accessory into the chuck and tighten securely by holding the rear half of the chuck and rotating the front portion in the clockwise direction.

To release the accessory, repeat step 2 listed above.

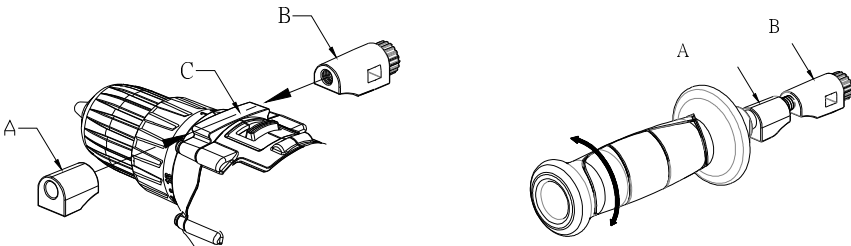
### **CAUTION**

1. 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.
2. Be sure to tighten chuck with two hands on both the rear sleeve and the forward sleeve for maximum tightness.

## INSTALLING OR REMOVING THE SIDE HANDLE

When installing the side handle, follow the sequence of operation below, and pass the side handle through the part A (no thread) and the part B (threaded) and rotate it clockwise to clamp it to the side handle base (C part) until it is firm, Reverse operation when removing the side handle.

When assembling, the side handles can be assembled to the left or right for assembly, so that they can be held during operation.

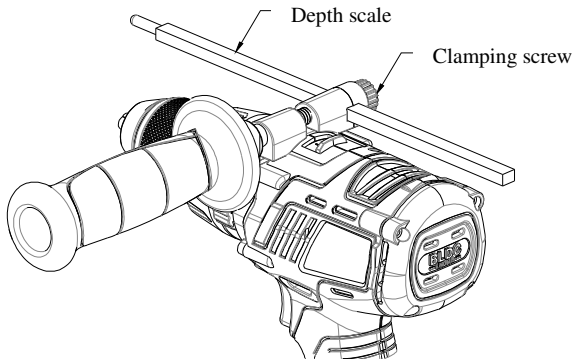


## INSTALLING OR REMOVING THE DEPTH SCALE



## Adjustable depth scale

Use an adjustable depth scale to make the drilling depth uniform, loosen the clamping screw, set the depth scale to the desired position, and tighten.



## OPERATION

### NOTE

**Always check the direction of the rotation before use.**

### AUTOMATIC SHUT-OFF FEATURE

The automatic shut-off feature will shut off power to the motor, after the motor has been stalled while the tool is unable to drill or drive.

When automatic shut-off occurs, the variable speed switch must be fully released first, and then operate the tool once again. If at the same time the tool has overheating situation, which is caused by motor's being severely loaded and stalled, operate the tool once again after leaving it to take a rest of over five minutes.

### OPERATION AS A DRILL

Rotate the Torque Adjustment Collar (see Fig. 2A) to the Drill Position. Install and tighten the desired drill bit in the chuck. Select the desired speed/torque range using the dual range gear shifter to match the speed and torque to the planned operation. Follow these instructions for best results when drilling.

#### Drilling:

Use sharp drill bits only. For WOOD, use twist drill bits, spade bits, power auger bits, or hole saws. For METAL, use high-speed steel twist drill bits, or hole saws. Be sure that the material to be drilled is anchored or clamped firmly. If drilling thin material, use a "back-up" block to limit damage to the material. Always apply pressure in a straight line with the bit. Always use enough pressure to keep the drill biting, but do not push too hard or you could stall the motor or break the bit.

## English

Hold the tool firmly to control the twisting of the drill.

IF DRILL STALLS, it is usually because it is being overloaded - RELEASE TRIGGER IMMEDIATELY, remove the drill from the workpiece, and determine cause of stalling. DO NOT CLICK THE TRIGGER OFF AND ON IN AN ATTEMPT TO START A STALLED DRILL - THIS CAN DAMAGE THE DRILL.

To minimize stalling or breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.

Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.

With variable speed drills there is no need to center punch the point to be drilled. Use a slow speed to start the hole until it is deep enough to drill without the bit skipping out, then use a higher speed to complete the drilling. .

### **Drilling in Wood and Plastic:**

Holes in wood and plastic can be made with the same twist drills used for drilling metal. These bits may overheat unless pulled out frequently to clear chips from the flutes. For large hole, use low speed wood bits. Work that is likely to splinter should be backed up with a block of wood.

### **Drilling into Metals:**

Use a cutting lubricant when drilling into metals. The exceptions are cast iron and brass, which should be drilled dry. The cutting lubricants that work best are sulphurized cutting oil.

## **OPERATION AS A HAMMER DRILL**

Turn Mode Selector Collar to Hammer-drill Mode, and then rotate Torque Adjustment Collar to Drill Position. Install and tighten the desired drill bit in the chuck. Select the desired speed/torque range using the dual range gear shifter to match the speed and torque to the planned operation. Follow these instructions for best results when drilling.

## **OPERATION AS A SCREWDRIVER**

Rotate Torque Adjustment Collar (see Fig. 2A) to Torque Range Number. Select the desired speed/torque range using the dual range gear shifter on the top of tool to match the speed and torque to the planned operation. Insert the desired fastener accessory into the chuck as you would any drill bit. It is advisable to perform few practice runs in scrap materials to determine the best position of the clutch collar for each application.

### **NOTE**

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

## English

### NOTE

When change the position of the control button, making sure the variable speed switch 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.

## MAINTENANCE



### WARNING

Remove the battery pack from this tool before cleaning solutions.

### NOTE

This tool is lubricated before it leaves the factory. This lubrication should last for the life of the tool. No further lubrication is required.

## 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 with a damp cloth and mild detergent. Although these parts are highly are 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.

**WARNING!!!:** Disconnect the charger from the AC outlet before performing any cleaning of the charger.

## ACCESSORIES

**Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

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

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

## PROTECTING THE ENVIRONMENT

## English

Before disposing of damaged, check with your state Environmental Protection Agency to find out about special restrictions on the disposal of tool or return them to a certified service center for recycling.



# Durofix



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