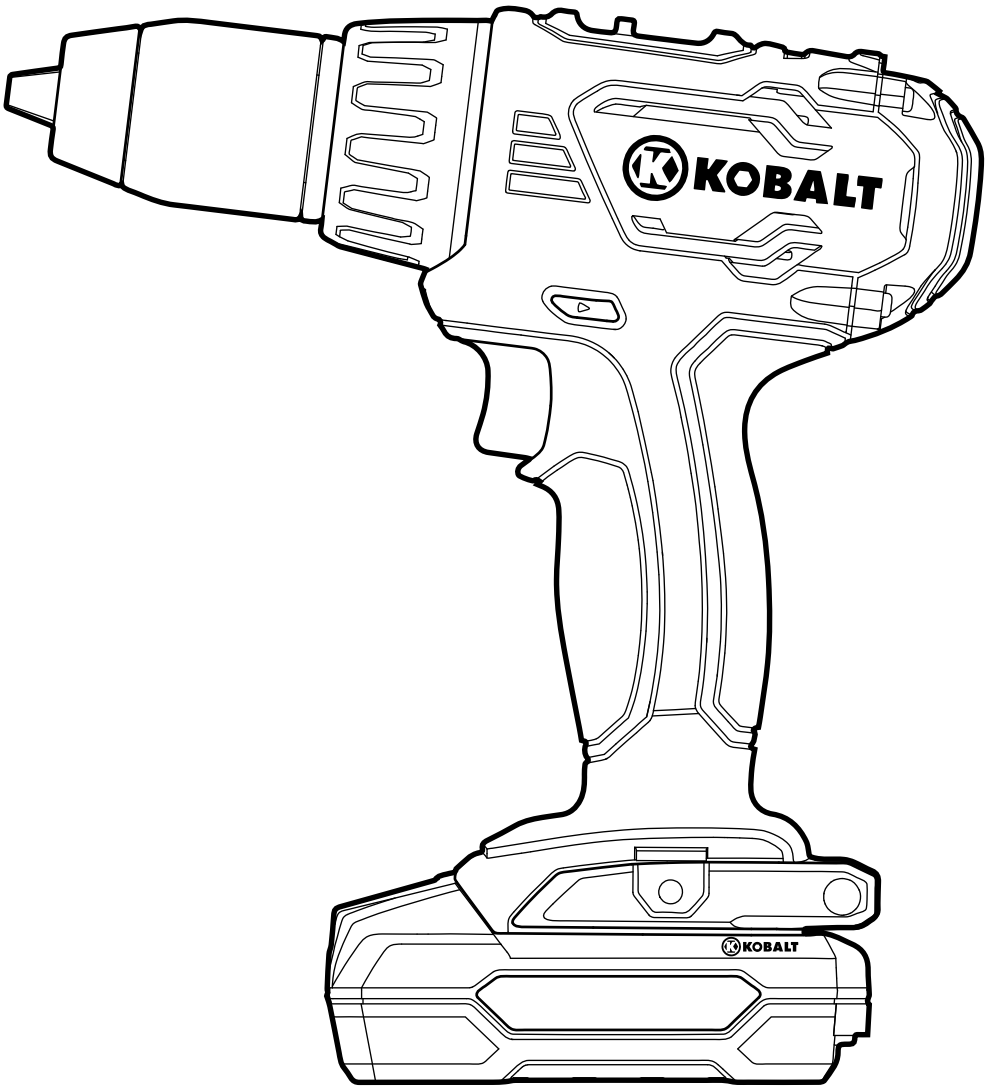
ITEM #0437506

20-VOLT CORDLESS COMPACT DRILL/DRIVER

MODEL #KT300A

Français p. 19

Español p. 37



c UL us LISTED

ATTACH YOUR RECEIPT HERE

Serial Number _____ **Purchase Date** _____

Questions, problems, missing parts? Before returning to your retailer, call our customer service department at 1-888-3KOBALT (1-800-356-2258), 8 a.m.-8 p.m., EST, Monday - Friday.

TABLE OF CONTENTS

PRODUCT SPECIFICATIONS

COMPONENT	SPECIFICATIONS
Motor	20 Volt DC
Switch	VSR (Variable Speed Reversible)
No-load speed	0-450/0-1,650 RPM
Clutch settings	23+1
Chuck capacity	1/2 in.
Maximum torque	485 in. lbs.

SAFETY INFORMATION

Know the Tool

to operate this tool, carefully read this manual and all labels affixed to the drill/driver before using it. Keep this manual available for future reference.

Important

This tool should only be serviced by a qualified service technician.

Read All Instructions Thoroughly

General Safety Rules For All Power Tools

WARNING: Read all safety warnings and all instructions. Failure to follow all 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.

Work Area Safety

- **Keep the 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

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adaptor plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce the 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 the 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 ground-fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

SAFETY INFORMATION

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 dust mask, non-skid safety shoes, hard hat, or hearing protection, used for appropriate conditions, will reduce personal injuries.
- **Prevent unintentional starting. Ensure that the switch is in the off-position before connecting to a power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing 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 jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothing, jewelry or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust-extraction and collection, ensure that these are connected and properly used.** Use of these devices can reduce dust-related hazards.

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 more safely 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 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.
- **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. 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, 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.

Battery Tool Use and Care

- **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.

- **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- **When a battery pack is not in use, keep it away from other metal objects, such as 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.
- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, seek medical help.** Liquid ejected from the battery may cause irritation or burns.

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.

Specific Safety Rules For Cordless Drill/Driver

- **Hold a power tool by the insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- **Secure the workpiece.** Clamping devices or a vise will hold the workpiece in place better and more safely than holding it by hand.
- **Always wait until the machine has come to a complete stop before placing it down.** The tool insert can jam and lead to loss of control over the power tool.
- **Before performing any kind of work on the machine (e.g., maintenance, tool change, etc.), as well as when transporting and storing it, always set the rotational direction switch to the center position.** Unintentional activation of the On/Off switch may result in personal injury.
- **Do not open the battery.** There is risk of a short circuit.
- **Protect the battery from heat and fire.** There is risk of explosion.
- **When working with the power tool, always hold it firmly with both hands and provide a secure stance.** The power tool is guided more securely with both hands.

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, cement, and other masonry products.

— Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending upon how often you do this type of work.

To reduce your exposure to these chemicals:

— Work in a well-ventilated area.

— Work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

— Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water.

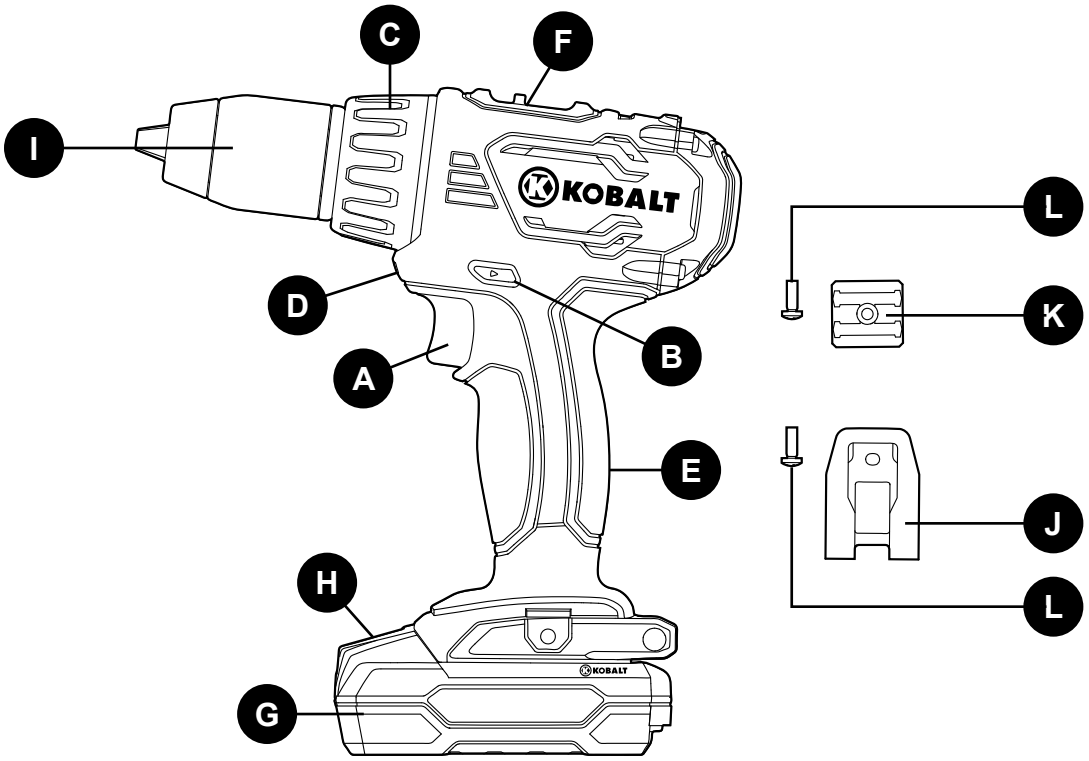
Allowing dust to get into your mouth or eyes or to lie on the skin may promote absorption of harmful chemicals.

PREPARATION

Know Your Cordless Drill/Driver

Before attempting to use the drill/driver, familiarize yourself with all of its operating features and safety requirements.

PACKAGE CONTENTS



PART	DESCRIPTION
A	Variable-speed trigger switch
B	Direction-of-rotation selector (forward/center lock/reverse)
C	Torque-adjustment ring
D	LED work light
E	Handle
F	Gear selector
G	Battery pack
H	Battery-release button
I	Keyless chuck
J	Belt clip (1)
K	Bit holder (1)
L	Screws (2)

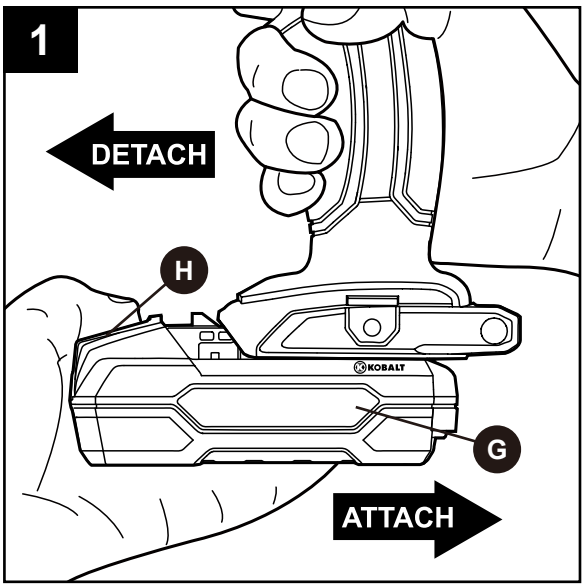
WARNING: Do not allow familiarity with the drill/driver to cause carelessness. Remember that one careless moment is enough to cause severe injury. Before attempting to use any tool, be sure to become familiar with all of the operating features and safety instructions.

1. To Attach Battery Pack

a. Place the direction-of-rotation selector (B) in the center (locked) position.

b. Align the raised portion on the battery pack (G) with the grooves on the bottom of the drill/driver, and then slide the battery pack onto the drill/driver as shown.

c. Make sure that the latch on the battery pack snaps into place and the battery pack is secured to the drill/driver before beginning operation.



NOTICE: When placing the battery pack on the tool, be sure that the raised rib on battery pack aligns with the groove on the drill/driver and the latches snap into place properly. Improper assembly of the battery pack can cause damage to internal components.

To Detach Battery Pack (Fig. 1)

d. Make sure that the trigger switch (A) is in the “OFF” position.

e. Press the battery-release button (H) to release the battery pack.

f. Pull forward on the battery pack to remove it from the drill/driver.

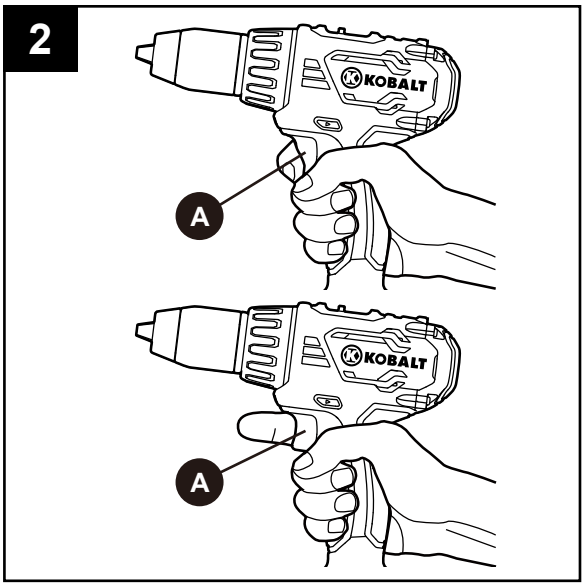
⚠ **WARNING:** Battery tools are always in operating condition. Therefore, the direction-of-rotation selector should always be locked (center) when the tool is not in use or when carrying the tool at your side.

2. Trigger Switch

a. To turn the drill/driver ON, depress the trigger switch (A). To turn it OFF, release the trigger switch.

Variable Speed

b. The variable-speed trigger switch delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.



3. Two-Speed Gear Box

a. The drill/driver has a two-speed gear box designed for drilling or driving at two different variable-speed ranges. A gear selector (F) is located on the top of the drill/driver to select either 1 (Low) or 2 (High) speed.

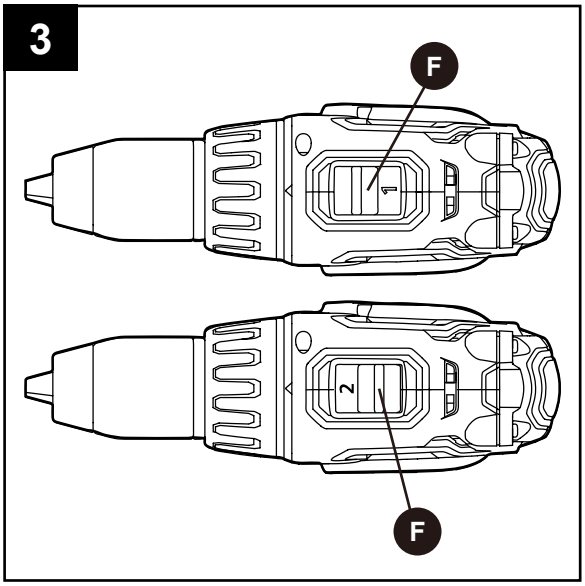
b. When set to 1, the drill/driver will deliver lower speeds and increased power and torque.

c. When set to 2, the drill/driver will deliver higher speeds and reduced power and torque.

d. Use 1 for high power and high torque applications and 2 for fast drilling or driving applications.

e. Use **1** for starting holes without a center punch, drilling metals, plastics or ceramics, or in applications that require a higher torque.

f. **2** is better for drilling wood and wood composites and for using abrasive and polishing accessories.



NOTICE: Never change gears while the tool is running. Failure to obey this caution could result in serious damage to the drill/driver.

NOTICE: Avoid running the drill/driver at 1 speed for extended periods of time. Running at 1 speed under constant use may cause the drill/driver to become overheated. If this occurs, cool the drill/driver by running it without a load at 2 speed.

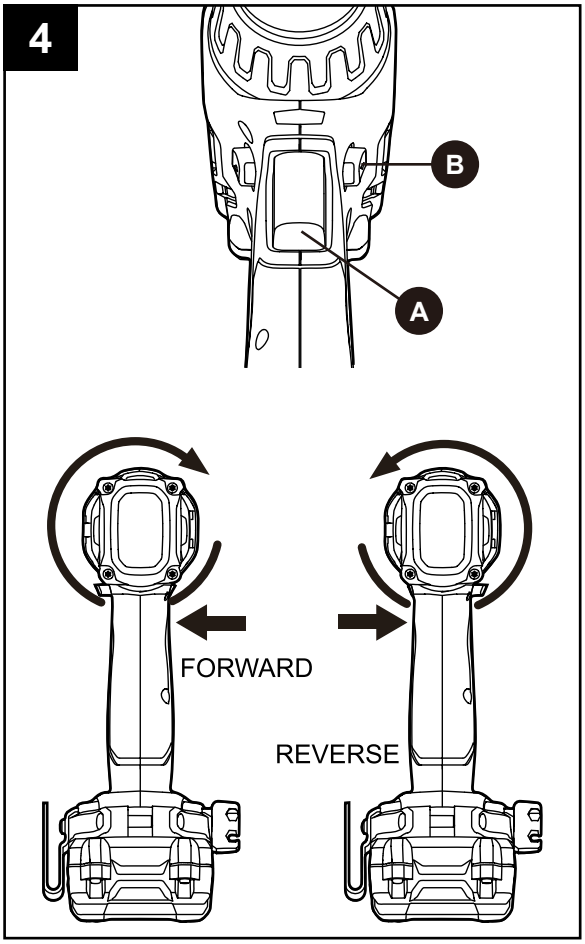
4. Direction-of-Rotation Selector (Forward/Center Lock/Reverse)

The direction of bit rotation is reversible and is controlled by a selector located above the trigger switch (A). With the drill/driver held in the normal operating position, pointing away from you:

a. Position the direction-of-rotation selector (B) to the left of the tool for forward rotation.

b. Position the direction-of-rotation selector to the right of the tool for reverse rotation.

c. Setting the switch in the OFF (center lock) position helps reduce the possibility of accidental starting when not in use.



NOTICE: To prevent gear damage, always allow the drill/driver to come to a complete stop before changing the direction of rotation.

NOTICE: The drill/driver will not run unless the direction-of-rotation selector is engaged fully to the left or right

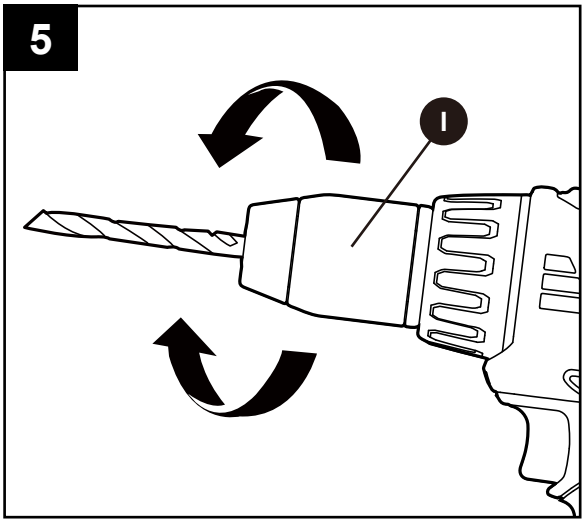
Electric Brake

d. To stop the drill/driver, release the trigger switch and allow the tool to come to a complete stop. The electric brake quickly stops the rotation. This feature engages automatically when you release the trigger switch.

NOTICE: This drill/driver is equipped with an electric brake. When the brake is functioning properly, sparks may be visible through the vent slots in the housing. This is normal and is the action of the brake.

5. Keyless Chuck

a. The drill/driver has a keyless chuck (I) to tighten or release drill bits in the chuck jaws. The arrows on the chuck indicate the direction in which to rotate the chuck body in order to GRIP (tighten). Rotate the chuck in the opposite direction to OPEN (release).



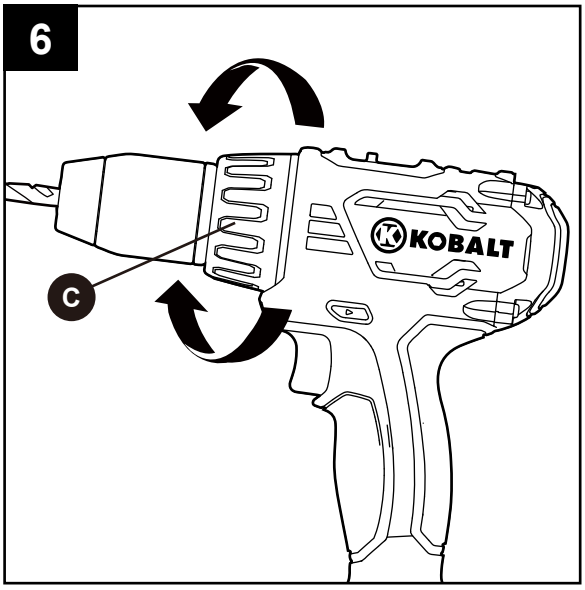
WARNING: Do not hold the chuck body with one hand and use the power of the drill/driver to tighten the chuck jaws on the drill bit. The chuck body could slip in your hand, or your hand could slip and come in contact with the rotating bit. This could cause an accident resulting in serious personal injury.

6. Adjustable Torque Clutch

a. The torque clutch can be adjusted to 23 driving settings and 1 drilling setting. The higher the torque setting, the more force the drill/driver produces to turn an object.

b. When using the drill/driver for different driving applications, it is necessary to increase or decrease the torque to help prevent the possibility of damaging screw heads, threads, workpiece, etc.

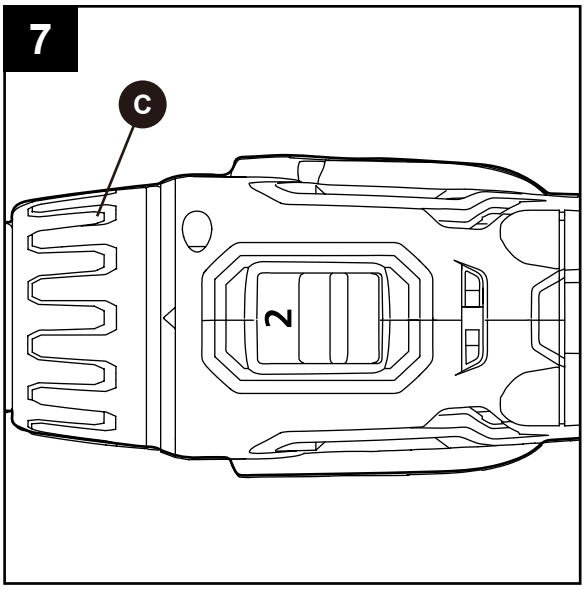
c. Adjust the torque by rotating the torque-adjustment ring (C). The proper setting depends on the job and the type of bit, fastener, and material you will be using. In general, use greater torque for larger screws. If the torque is too high, the screws may be damaged or broken. For delicate operations, such as removing a partially stripped screw, use a low torque setting. For operations such as driving into hardwood, use a higher torque setting.



CAUTION: Do not change the torque setting when the tool is running.

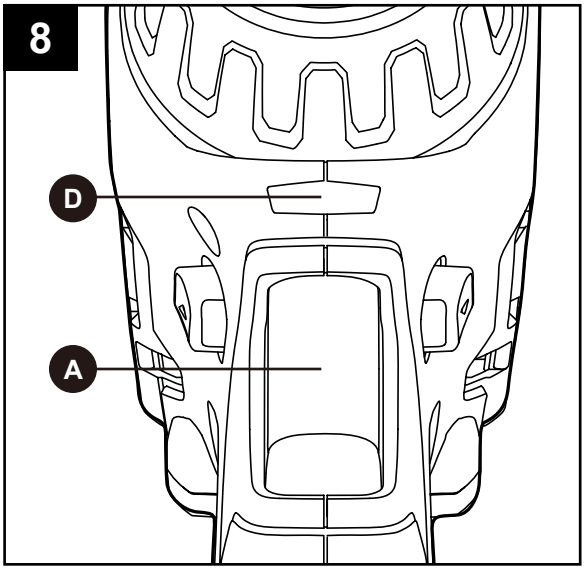
7. Drill Mode

Select the drill mode for drilling and other heavy-duty applications. To select the drill mode, rotate the torque- adjustment ring (C) until the drill icon aligns with the torque indicator and clicks into position.



8. LED Work Light

a. The LED work light (D), located above the trigger switch (A), will illuminate when the trigger switch is depressed. This provides additional light on the surface of the workpiece for operation in lower-light areas. The LED work light will turn off when the trigger switch is released.



9. Installing the Belt Clip

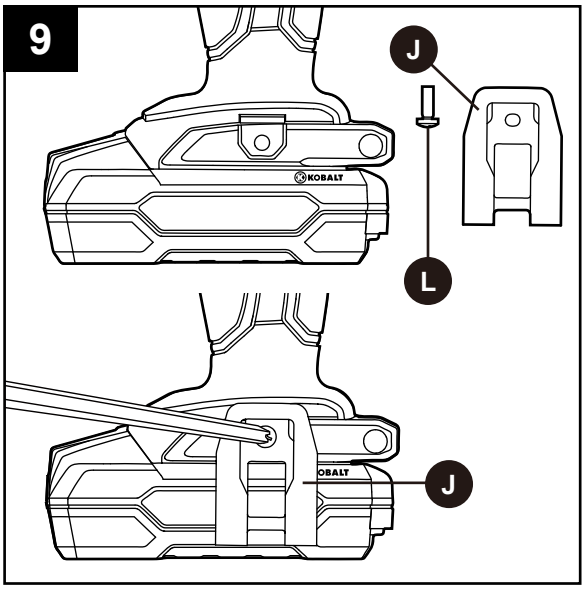
a. Align the rib of the belt clip (J) with the hole on the base of the drill.

b. Insert the screw (L) and tighten the screw securely with a Phillips screwdriver (not included).

Removing the Belt Clip

c. Use a screwdriver to loosen the screw (L) that attaches the belt clip (J) to the drill.

d. Remove the screw and the belt clip.



10. Installing the Bit Holder

The bit holder (K) at the base of the tool can store 2 bits.

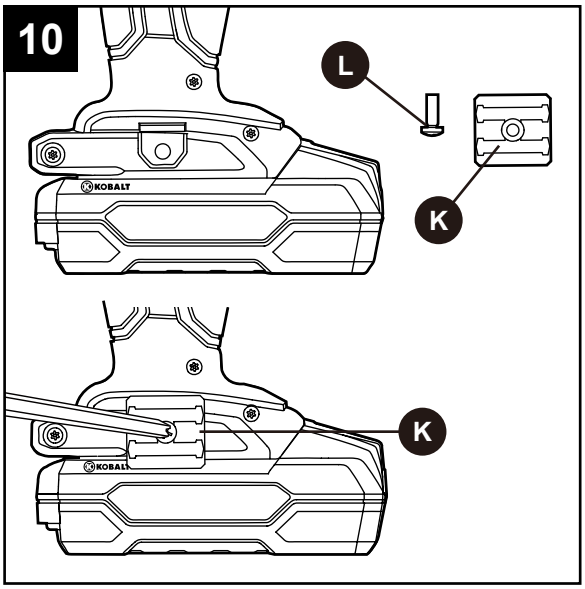
a. Align the rib of bit holder with the hole on the base of the drill.

b. Insert the screw (L) and tighten the screw securely with a Phillips screwdriver (not included).

Removing the Bit Holder (Fig. 10)

a. Use a screwdriver to loosen the screw (L) that attaches the bit holder (K) to the drill.

b. Remove the screw and the bit holder.



11. Installing Bits

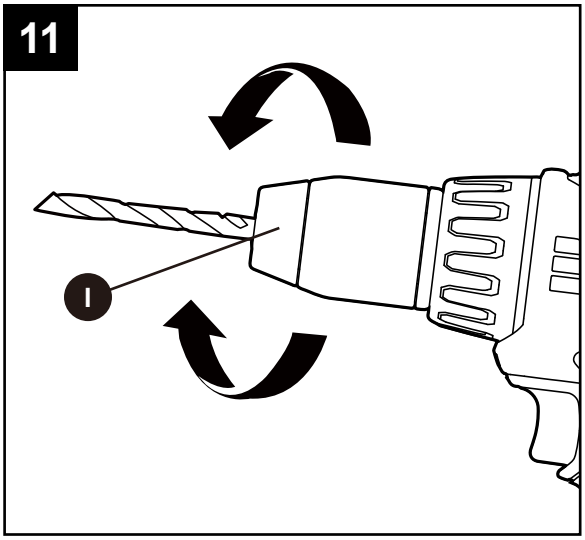
a. Lock the trigger switch by placing the direction-of-rotation selector (B) in the OFF (center) position.

b. Open or close the chuck jaws to a point where the opening is slightly larger than the shank of the bit you intend to use.

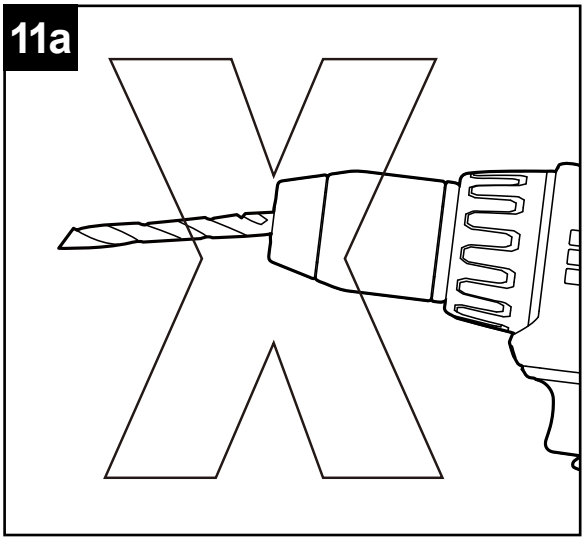
c. Insert the bit.

d. Tighten the chuck jaws securely on the bit.

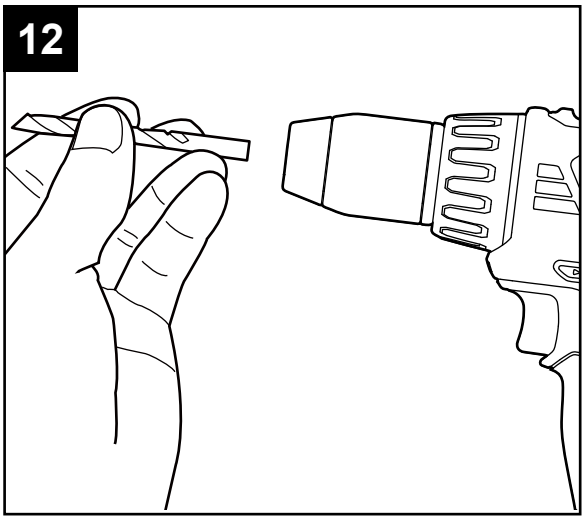
NOTICE: Rotate the chuck body in the direction of the arrow marked GRIP to close the chuck jaws. Do not use a wrench to tighten or loosen the chuck jaws.



WARNING: Make sure to insert the drill bit straight into the chuck jaws. Do not insert the drill bit into the chuck jaws at an angle and then tighten the chuck as shown in **Fig. 11a**. This could cause the drill bit to be thrown from the drill/driver, resulting in possibly serious personal injury or damage to the chuck.



12. Removing Bits



a. Lock the trigger switch by placing the direction-of-rotation selector (B) in the OFF (center) position.

b. Open the chuck jaws.

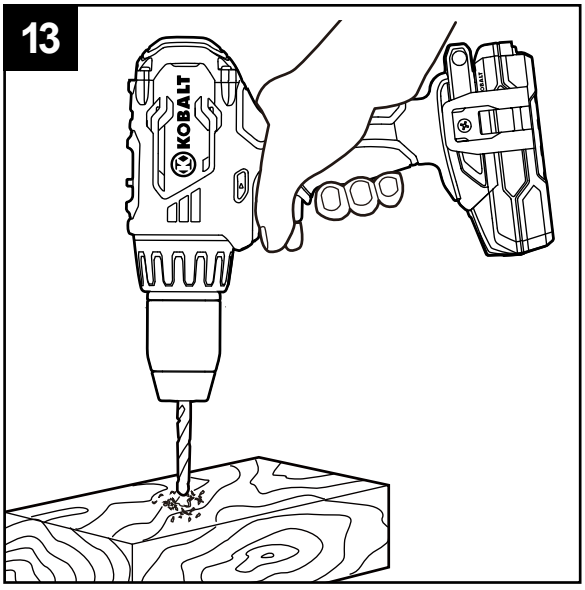
NOTICE: Rotate the chuck body in the reverse direction to loosen the chuck jaws. Do not use a wrench to tighten or loosen the chuck jaws.

c. Remove the drill bit.

WARNING: Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

WARNING: Battery tools are always in operating condition. Therefore, the direction-of-rotation selector should always be locked (center) when not in use or carrying the drill at your side.

13. Drilling



a. Check the direction-of-rotation selector for the correct setting (forward or reverse).

b. Secure the material to be drilled in a vise or with clamps to keep it from turning as the drill bit rotates.

c. Hold the drill/driver firmly and place the bit at the point to be drilled.

d. Depress the trigger switch to start the drill/driver.

e. Move the drill bit into the workpiece, applying only enough pressure to keep the bit cutting. Do not force the drill/driver or apply side pressure to elongate a hole. Let the tool do the work.

f. When drilling hard, smooth surfaces, use a center punch to mark the desired location of the hole. This will prevent the drill bit from slipping off center as the hole is started.

g. If the bit jams in the workpiece or if the drill/driver stalls, stop the tool immediately. Remove the bit from the workpiece and determine the reason for jamming.

h. To stop the drill/driver, release the trigger switch and allow the tool to come to a complete stop. The electric brake quickly stops the rotation. This feature engages automatically when you release the trigger switch.

OPERATING INSTRUCTIONS

NOTICE: This drill/driver is equipped with an electric brake. When the brake is functioning properly, sparks may be visible through the vent slots in the housing. This is normal and is the action of the brake.

Wood Drilling

a. For maximum performance, use high-speed steel or brad-point bits for drilling wood.
b. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
c. Increase speed as the drill bit bites into the material.
d. When drilling “through” holes, place a block of wood behind the workpiece to prevent ragged or splintered edges on the back side of the hole.

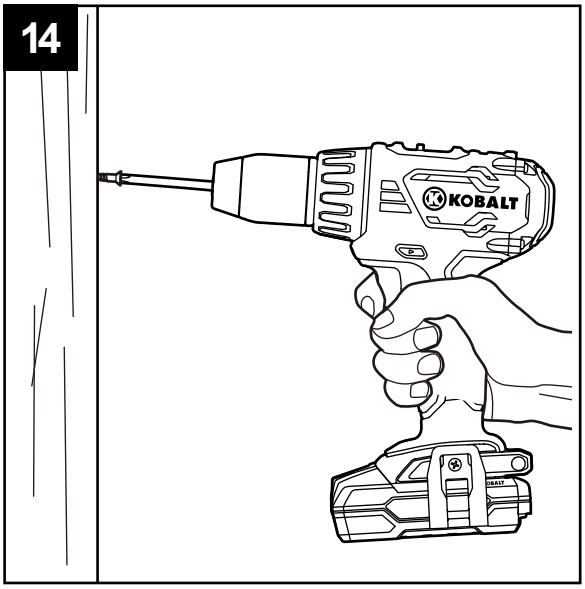
Metal Drilling

a. For maximum performance, use high-speed steel bits for drilling metal or steel.
b. When drilling metals, use light oil on the drill bit to keep it from overheating. The oil will prolong the life of the bit and increase the drilling action.
c. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.
d. Maintain a speed and pressure which will allow cutting without overheating the bit. Applying too much pressure will:
   — Overheat the drill/driver.
   — Wear the bearings.
   — Bend or burn bits.
   — Produce off-center or irregular-shaped holes.

Masonry Drilling

a. For maximum performance, use carbide-tipped masonry bits when drilling holes in brick, tile, concrete, etc.
b. Maintain a speed and pressure which will allow cutting without overheating the bit or drill/driver Applying too much pressure will:
   — Overheat the drill/driver.
   — Wear the bearings.
   — Bend or burn bits.
   — Produce off-center or irregular-shaped holes.
c. Apply light pressure and medium speed for best results in brick.
d. Apply additional pressure for hard materials, such as concrete.
e. When drilling holes in tile, practice on a scrap piece to determine the best speed and pressure.
f. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.

14. Screw Driving



Try to use modern screws for easy driving and improved grip.

a. Install the correct driver bit.

b. Ensure that the torque-setting ring is set to the most suitable setting. If in doubt, start with a low setting and gradually increase the setting until the most suitable position is found. Do not change the torque setting when the tool is running.

c. Use the correct speed for the job and apply minimal pressure to the trigger initially. Increase the speed only when full control can be maintained.

d. It is advisable to drill a pilot hole first: slightly longer than the screw to be driven and just smaller than the shank diameter of the screw. The pilot hole will act as a guide for the screw and will also make tightening the screw less difficult. When screws are positioned close to an edge of the material, a pilot hole will also help to prevent splitting of the wood.

e. Use a countersinking bit (available separately) to accommodate the screw head, so that it does not protrude from the surface.

f. If the screw becomes difficult to drive home, remove the screw and try a slightly larger or longer pilot hole, but remember that there must be enough remaining material for the screw to grip! If restarting a screw in a hole, make the first few turns by hand. If the screw is still difficult to drive (as when using very hard woods) try using a lubricant such as soap; liquid soap is usually best.

g. Keep sufficient pressure on the drill to prevent the bit turning out of the screw head. The screw head can easily become damaged, making it difficult to drive it home or remove it.

h. To stop the drill/driver, release the trigger switch and allow the tool to come to a complete stop. The electric brake quickly stops the rotation. This feature engages automatically when you release the trigger switch.

NOTICE: This drill/driver is equipped with an electric brake. When the brake is functioning properly, sparks may be visible through the vent slots in the housing. This is normal and is the action of the brake.

CARE AND MAINTENANCE

General Maintenance

All repairs should be carried out only by an authorized service organization.

Before cleaning or performing any maintenance, remove the battery pack from the tool. For safe and proper operation, always keep the tool and its ventilation slots clean. Always use only a soft, dry cloth to clean your drill/driver; never use detergent or alcohol.

15. Chuck Removal

The chuck can be removed and replaced.

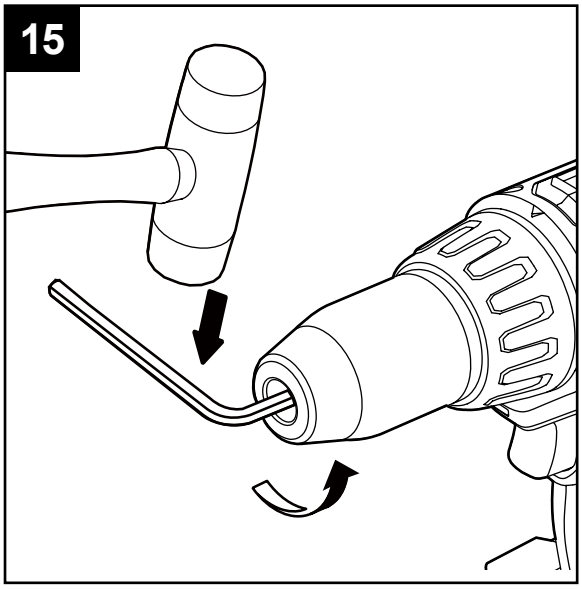
a. Lock the trigger switch by placing the direction-of-rotation selector in the center position.

b. Open the chuck jaws.

c. Use a screwdriver to remove the chuck screw by turning it in a clockwise direction.

d. Insert a 5/16-in. or larger hex key into the chuck of the drill/driver and securely tighten the chuck jaws around the hex key.

e. Tap the hex key sharply with a mallet in a counter-clockwise direction. This will loosen the chuck for easy removal.



NOTICE: The chuck screw has left handed threads. Attach a new chuck to the spindle and tighten the chuck screw.

TROUBLESHOOTING

WARNING: Turn the switch to the “OFF” position and remove the battery pack from the tool before performing troubleshooting procedures.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
The drill/driver does not work.	Battery is depleted.	Charge the battery.
Bit cannot be installed.	1. Sleeve is not released. 2. Bit does not fit the sleeve.	1. Release the sleeve. 2. Use the appropriate bit.
Motor overheating.	1. Cooling vents are obstructed.	1. Clean, clear vents. Do not cover vents with hand during operation.

5-YEAR HASSLE-FREE WARRANTY

This drill/driver is warranted to the original purchaser from the original purchase date for five (5) years subject to the warranty coverage described herein.

This drill/driver is warranted for the original user to be free from defects in material and workmanship.

If you believe that the drill/driver is defective at any time during the specified warranty period, simply return the drill/driver along with proof of purchase to the place of purchase for a free replacement or refund, or call 1-888-3KOBALT (1-888-356-2258) for warranty service.

This warranty is void if: defects in materials or workmanship or damages result from repairs or alterations which have been made or attempted by others or the unauthorized use of nonconforming parts; the damage is due to normal wear, damage is due to abuse (including overloading of the tool beyond capacity), improper maintenance, neglect or accident; or the damage is due to the use of the tool after partial failure or use with improper accessories or unauthorized repair or alteration.

This warranty excludes blades, bits, bulbs and accessories.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

Printed in China

kobalttools.com KOBALT