PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense
 when operating a power tool. Do not use tool while tired or
 under the influence of drugs, alcohol, or medication. A
 moment of inattention while operating power tools may result in
 serious personal injury.
- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothing, jewelry, or long hair can be caught in moving parts. Air vents often cover moving parts and should also be avoided.
- Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- Remove adjusting keys or switches before turning the tool on.
 A wrench or key that is left attached to a rotating part of the tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE

- 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.
- Do not force 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.
- Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.

- Such preventative safety measures reduce the risk of starting the tool accidentally.
- Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- Maintain tools with care. Keep cutting tools sharp and clean.
 Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
- Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- 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.

SERVICE

- Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could 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 electric shock or injury.

Additional Safety Rules

- Hold tool by insulated gripping surfaces when performing an operation where the cutting tools may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- Keep handles dry, clean, free from oil and grease. It is recommended to use rubber gloves. This will enable better control
- DO NOT TOUCH ANY METAL PARTS OF THE TOOL when drilling or driving into walls, floors or wherever live electrical wires may be encountered. Hold the tool only by insulated grasping surfaces to prevent electric shock if you drill or drive into a live wire.

ACAUTION: Wear appropriate hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

AWARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known 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 (CCA).

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 those dust masks that are specially designed to filter out microscopic particles.

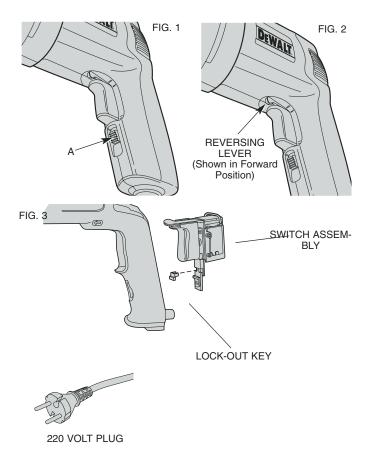
Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

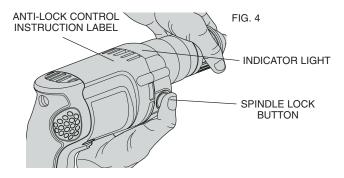
AWARNING: Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

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

V.....volts Aamperes
Hz....hertz W....watts

 \sim alternating current \sim no load speed





- ☐Class II Construction .../min ..revolutions or
 ☐earthing terminals reciprocation per minute
- ▲safety alert symbol

Anti-Lock Control (DW239, DW249)

Your DEWALT drill may come with an electronic feature called Anti-Lock Control. It is designed to help you control the drill during a stall and keep it from pulling out of your hands. This may be encountered when drilling in steel or using large bits in wood.

As a stall situation presents itself, the motor cycles on and off for a set period of time. This takes up the reaction of the stall and allows you to keep the drill under control. The speed control senses your release of the trigger and resets the motor to run again.

Figure 4 shows the instruction label mounted behind it. There are three alert signals.

 Check Level: One flash each time the trigger is depressed. Everything is functioning satisfactorily. If there is no flash, the tool should be returned to a DEWALT authorized service center for repair.

- Engaged Level: Should a stall condition still exist, the electronics will shut down the tool and the light will be steady on. When the unit is running in normal mode, there will be no light.
- 3. Alert Mode: A series of continual flashes as the trigger is pulled indicates that the electronics are no longer functioning. The tool may still be able to function without the benefit of AntiLock Control but should be serviced as soon as possible.

Motor Brushes

 D_EWALT uses an advanced brush system which automatically stops the drill when the brushes wear out. This prevents serious damage to the motor.

Switch

To start drill, depress trigger switch; to stop the drill, release trigger. To lock trigger in the on position for continuous operation, depress trigger and push up locking button "A" shown in figure 1, then gently release the trigger. To release the locking mechanism, depress the trigger fully, then release it. Before using the tool each time, be sure that the locking button release mechanism is working freely.

Do not lock the switch on when drilling by hand so that you can instantly release the trigger switch if the bit binds in the hole.

The locking button is for use only when the drill is mounted in a drill press stand or otherwise held stationary.

Be sure to release the locking button before disconnecting the plug from the power supply. Failure to do so will cause the tool to start immediately the next time it is plugged in. Damage or injury could result.

THE VARIABLE SPEED TRIGGER SWITCH

This switch permits speed control: the farther the trigger is depressed, the higher the speed of the drill.

NOTE: Use lower speeds for starting holes without a center punch, drilling in metal or plastics, driving screws or drilling ceramics. Higher speeds are better for drilling wood and composition boards, and for using abrasive and polishing accessories.

THE REVERSING LEVER

The reversing lever changes the direction of rotation of the drill and is used when backing out screws and jammed drill bits. To operate the tool in reverse, release the trigger switch and push the lever to the left (when viewed from the chuck end) as shown in Figure 2. To operate the drill in forward for drilling holes or driving screws (as well as when using other accessories) release the trigger switch and push the lever to the right (when viewed from the chuck end).

Return the reversing lever to the forward position after all operations in reverse are completed.

SWITCH LOCK-ON

Your drill is equipped with a switch lock-on feature. If you wish to disable this feature, take your tool to any authorized service center. The service center can provide a lock-out key to prevent the unit from being locked in the on position (Figure 3).

Operation

DRILLING

- Always unplug the drill when attaching or changing bits or accessories.
- 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. For MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits.
- Be sure the material to be drilled is anchored or clamped firmly. If drilling thin material, use a wood "back-up" block to prevent damage to the material.
- 4. Always apply pressure in a straight line with the bit. Use enough pressure to keep the drill biting, but do not push hard enough to stall the motor or deflect the bit.
- 5. Hold the tool firmly to control the twisting action of the drill.
- IF THE DRILL STALLS, it is usually because it is being overloaded or improperly used. RELEASE THE TRIGGER IMMEDIATELY, remove the drill bit from work, and determine cause of stalling. DO

NOT CLICK 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
- 8. Keep the motor running when pulling the bit out of a drilled hole. This will help prevent jamming.
- 9. With Variable Speed Drills there is no need to center punch the point to be drilled. Use a slow speed to start the hole and accelerate by squeezing the trigger harder when the hole is deep enough to drill without the bit skipping out.

Keyed Chucks

Open chuck jaws by turning collar with fingers and insert shank of bit about 3/4" into chuck. Tighten chuck collar by hand. Place chuck key in each of the three holes, and tighten in CLOCKWISE direction. It's important to tighten chuck with all three holes to prevent slippage. To release bit, turn chuck key COUNTERCLOCKWISE in just one hole, then loosen the chuck by hand. Any authorized DEWALT service center can install a keyless chuck in place of a keyed chuck.

Keyless Chucks

Open chuck jaws by turning plastic collar with fingers and insert shank of bit about 3/4" into chuck. Tighten plastic collar CLOCKWISE while depressing spindle lock button on the right side of the tool housing (Fig. 4). To release bit, turn plastic collar COUNTERCLOCKWISE while depressing the spindle lock button (Fig. 4).

NOTE: DO NOT DEPRESS LOCK BUTTON WHILE OPERATING DRILL or while the chuck is moving.

Drilling in Metal

Use a cutting lubricant when drilling metals. The exceptions are cast iron and brass which should be drilled dry. The cutting lubricants that work best are sulfurized cutting oil or lard oil; bacon-grease will also serve the purpose.

Drilling in Wood

Holes in wood can be made with the same twist drills used for metal. These bits may overheat unless pulled out frequently to clear chips from the flutes. For larger holes, use power drill wood bits. Work that is apt to splinter should be backed up with a block of wood.

Drilling in Masonry

Use carbide tipped masonry bits at low speeds. Keep an even force on the drill but not so much that you crack the brittle materials. A smooth, even flow of dust indicates the proper drilling rate.

Side Handle

A side handle may be supplied with your drill. Side handles are included with these drills: DW231, DW235G, DW235-220, DW236, DW238, DW239, DW245, DW246, DW248, DW249. The side handle clamps to the front of the gear case and can be rotated 360 degrees to permit right or left hand use.

A CAUTION: If a side handle is included with your drill, always use it and hold the drill with both hands.

Maintenance

Use only mild soap and damp cloth to clean the tool. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid. Self-lubricating bearings are used in the tool and periodic relubrication is not required. In the unlikely event that service is ever needed, take your tool to an authorized service location.

Accessories

Recommended accessories for use with your tool are available at extra cost from your distributor or local service center. ACCESSORY MUST BE RATED FOR USE AT SPEED EQUAL TO OR HIGHER THAN NAMEPLATE R.P.M. OF TOOL WITH WHICH IT IS BEING USED.

If you need assistance in locating any accessory, please contact DEWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286 or call 1-800-4- DEWALT (1-800-732-4441).

A CAUTION: The use of any non-recommended accessory may be hazardous.

Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection and replacement) should be performed by authorized service centers or other qualified service organizations, always using identical replacement parts.

Three Year Limited Warranty

DEWALT will repair, without charge, any defects due to faulty materials or workmanship for three years from the date of purchase. This warranty does not cover part failure due to normal wear or tool abuse. For further detail of warranty coverage and warranty repair information, visit www.dewalt.com or call 1-800-4-DEWALT (1-800-433-9258). This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may have other rights which vary in certain states or provinces.

In addition to the warranty, D∈WALT tools are covered by our:

1 YEAR FREE SERVICE

DeWALT will maintain the tool and replace worn parts caused by normal use, for free, any time during the first year after purchase.

90 DAY MONEY BACK GUARANTEE

If you are not completely satisfied with the performance of your DEWALT Power Tool, Laser, or Nailer for any reason, you can return it within 90 days from the date of purchase with a receipt for a full refund – no questions asked.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call 1-800-4-DEWALT for a free replacement.