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scheme; the "D" shaped air intake grill; the array of pyramids on the handgrip; the kit box configuration; and the array of lozenge-shaped humps on the surface of the tool.

# **Definitions: Safety Guidelines**

The definitions below describe the level of severity for each signal word. Please read the manual and pay attention to these symbols.

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

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

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

**CAUTION:** Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **may** result in **property damage**.

IF YOU HAVE ANY QUESTIONS OR COMMENTS ABOUT THIS OR ANY DEWALT TOOL, CALL US TOLL FREE AT: **1-800-4-DEWALT (1-800-433-9258)** 

3) PERSONAL SAFETY

- 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 safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in 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. Air vents often cover moving parts and should also be avoided.
- 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 dustrelated hazards.
- 4) POWER TOOL USE AND CARE
  - a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
  - b) 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.
  - c) 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.
  - d) 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.
  - e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools 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 and in the manner intended for the particular type of power tool, 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.

### 5) SERVICE

de 26 mm (1") para trabajo pesado D25111, D25113, D25211, D25213, D25313, D25314 para trabajo pesado D25330

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Martillos ( Martillo ci a) 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.

## **Additional Safety Instructions for Rotary Hammers**

• Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool 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.

Be certain that the material being drilled does not conceal electric or gas service and that their locations have been verified with the utility companies.

- Wear ear protectors. Exposure to noise can cause hearing loss.
- Use auxiliary handles supplied with the tool.

Loss of control can cause personal injury.Keep a firm grip on the tool at all times. Do not attempt to operate this tool without holding it with both hands. Operating this tool with one hand will result in loss of control. Breaking through or encountering hard materials such as re-bar may be hazardous as well. Tighten the side handle securely before use.

- 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.
- Wear safety goggles or other eye protection. Hammering operations cause chips to fly. Flying particles can cause permanent eye damage. Wear a dust mask or respirator for applications that generate dust. Ear protection may be required for most applications.
- Keep a firm grip on the tool at all times. Do not attempt to operate this tool without holding it with both hands. It is recommended that the side handle be used at all times. Operating this tool with one hand will result in loss of control. Breaking through or encountering hard materials such as re-bar may be hazardous as well.
- Do not operate this tool for long periods of time. Vibration caused by hammer action may be harmful to your hands and arms. Use gloves to provide extra cushion and limit exposure by taking frequent rest periods.
- **Do not recondition bits yourself.** Chisel reconditioning should be done by an authorized specialist. Improperly reconditioned chisels could cause injury.
- Wear gloves when operating tool or changing bits. Accessible metal parts on the tool and bits may get extremely hot during operation. Small bits of broken material may damage bare hands.
- Never lay the tool down until the bit has come to a complete stop. Moving bits could cause injury.
- **Do not strike jammed bits with a hammer to dislodge them**. Fragments of metal or material chips could dislodge and cause injury.
- Slightly worn chisels can be resharpened by grinding.
- Keep the power cord away from the rotating bit. Do not wrap the cord around any part of your body. An electric cord wrapped around a spinning bit may cause personal injury and

### **General Safety Rules**

### WARNING! To reduce risk of injury, user must read instruction manual.

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

# SAVE THESE INSTRUCTIONS

#### 1) WORK AREA SAFETY

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

### 2) ELECTRICAL SAFETY

- 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. Have damaged cords repaired or replaced by an authorized service center. Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the tool's plug.
- 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. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Minimum Gauge for Cord Sets								
Volts				Total Length of Cord in Feet				
Ampere Rating		120V	25	50	100	150		
		240V	50	100	200	300		
More	Not More	AWG						
Than	Than							
0	6		18	16	16	14		
6	10		18	16	14	12		
10	12		16	16	14	12		
12	16		14	12	Not Recommended			

IOSS OT CONTROL

**NOTE:** Do not overheat the bit (discoloration) while grinding a new edge. Badly worn chisels require reforging. Do not reharden and temper the chisel.

**A WARNING: ALWAYS** use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:

- ANSI Z87.1 eye protection (CAN/CSA Z94.3),
- ANSI S12.6 (S3.19) hearing protection,
- NIOSH/OSHA/MSHA respiratory protection.

**A** WARNING: 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.

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.

**A** WARNING: 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.

**A WARNING: Always use eye protection.** All users and bystanders must wear eye protection that conforms to ANSI Z87.1.

A WARNING: Always wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

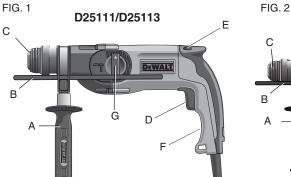
• The label on your tool may include the following symbols. The symbols and their definitions are as follows:

V	volts	A amperes	
Hz	hertz	W watts	
min	minutes	$\sim$ alternating current	
	direct current	n <sub>o</sub> no load speed	
	Class I Construction	😑earthing terminal	
	(grounded)	🛦 safety alert symbol	
□	Class II Construction	/min revolutions or reciprocation	n
	(double insulated)	per minute	
RDM	boate por minuto		

BPM ..... beats per minute

## Motor

Your DEWALT tool is powered by a DEWALT-built motor. Be sure your power supply agrees with the nameplate markings. Voltage decrease of more than 10% will cause loss of power and overheating. All DEWALT tools are factory tested.



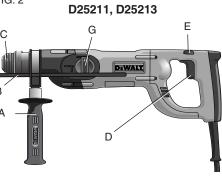


FIG. 3 D25313, D25314



D25314 ONLY

D25314

SEULEMENT

D25314

SOLAMENTE

FIG. 6

FIG. 5 DRILL-ONLY MODE

MODE PERÇAGE SEULEMENT MODO SÓLÓ TALADRO

HAMMER/DRILL MODE MODE PERFORATION-PERÇAGE MODO TALADRO/PERCUTOR

CHISEL ROTATION — ROTATION DU BURIN ROTACIÓN DE CINCELES

HAMMER-ONLY MODE \_\_\_\_\_ MODE PERFORATION SEULEMENT MODO SÓLO MARTILLO

# Components (Fig. 1–4)

**A** WARNING: Never modify the power tool or any part of it. Damage or personal injury could result.

G. Mode selector

H. Chisel rotation

J. Sleeve

K. Collar

I. Mode selector button

- A. Side handle
- B. Depth rod
- C. SDS chuck
- D. Trigger switch/Variable speed trigger
- E. Forward/reverse control button
- F. Lock-on button (D25111, D25113, D25330 only)

### INTENDED USE

These heavy-duty rotary hammers have been designed for professional drilling and hammerdrilling, screwdriving and light chipping at various work sites (i.e., construction sites). **DO NOT** use under wet conditions or in presence of flammable liquids or gases.

These heavy-duty rotary hammers are professional power tools. **DO NOT** let children come into contact with the tool. Supervision is required for those under 16 years of age.

## **Side Handle**

**A CAUTION:** Always operate the tool with the side handle properly assembled. Hold tool with both hands to maximize control.

A side handle (A) is supplied with this rotary hammer. It clamps to the front of the gear case without depth red (B) as shown in Figure 1 and can be rotated  $260^{\circ}$  to permit right or left hand

# Mode Selector - D25113, D25213, D25313, D25314 (Fig. 5)

**CAUTION:** Tool must come to a complete stop before activating the mode actuator button or damage to the tool may result.

## DRILL-ONLY MODE

To use drill-only mode, depress button (I) and turn the mode selector (G) so the yellow arrow points to the corresponding symbol as shown. Use drill-only mode for wood, metal, and plastics.

### HAMMER/DRILL MODE To use hammer/drill mode, depress the button and turn the mode selector so the yellow arrow

points to the corresponding symbol as shown. Use this mode for masonry drilling.

## CHISEL ROTATION

To manually rotate the chisel, depress the button and turn the mode selector so the yellow arrow points to the corresponding symbol as shown.

## HAMMER-ONLY MODE

For light chiseling, depress the button and turn the mode selector so the yellow arrow points to the corresponding symbol as shown.

**NOTE:** The yellow arrow on the mode selector **MUST** be aligned with the one of the symbols at all times. There are no operable positions between the positions.

## SDS Chuck (Fig. 6)

A WARNING: Shock Hazard. To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/ installing attachments or accessories.

**A WARNING:** Burn Hazard. ALWAYS wear gloves when changing bits. Accessible metal parts on the tool and bits may get extremely hot during operation. Small bits of broken material may damage bare hands.

**CAUTION:** Do not use chipping bits in this tool. Using chipping bits may cause the tool to bindup and damage to the tool may occur.

To insert bit, insert shank of bit about 3/4" (19 mm) into chuck. Push and rotate bit until it locks in place. The bit will be securely held.

To release bit, pull the sleeve (J) back and remove the bit.

# **OPERATION**

## **Overload Clutch**

If the drill bit becomes jammed or caught, the drive to the drill spindle is interrupted. Because of the forces that occur as a result, always hold the machine securely with both hands and take a firm stance.

## **Drilling Tools**

The machine is intended for hammerdrilling in concrete, brick and stone. It is also suitable for drilling without impact in wood, metal, ceramic and plastic. Machines with electronic control and right/left rotation are also suitable for screw driving and thread cutting.

## **Chipping Tools**

The machine is intended for chipping in concrete, brick and stone.

## Drilling

A WARNING: Shock Hazard. To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/installing attachments or accessories.

**A** WARNING: To reduce the risk of personal injury, ALWAYS ensure workpiece is anchored or clamped firmly. If drilling thin material, use a wood "back-up" block to prevent damage to the material.

- 1. Always unplug the drill when attaching or changing bits or accessories.
- 2. Use sharp drill bits only. For WOOD, use twist drill bits, spade bits, power auger bits, or hole saws. For METAL, use steel twist drill bits or hole saws. For MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits rated for percussion drilling. 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.
- 3. Always apply pressure in a straight line with the bit. Use enough pressure to keep drill biting, but do not push hard enough to stall the motor or deflect the bit.
- 4. Hold tool firmly to control the twisting action of the drill.
- 5. IF DRILL STALLS, it is usually because it is being overloaded or improperly used. RELEASE TRIGGER IMMEDIATELY, remove drill bit from work, and determine cause of stalling. DO NOT CLICK TRIGGER ON AND OFF IN AN ATTEMPT TO START A STALLED DRILL — THIS CAN DAMAGE THE DRILL.
- 6. To minimize stalling or breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
- 7. Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.
- 8. 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.

# **Removable SDS Chuck & Three Jaw Keyless Chuck** (D25314)

The D25314 is equipped with a removable quick change SDS chuck as well as a removable three jaw keyless chuck. The hammer mechanism does not function when the three jaw keyless chuck is used.

Both the SDS and three jaw keyless chuck can be easily removed by turning the collar (K) into the unlocked position (L) to release the chuck (Fig. 6).

The SDS and three jaw keyless chuck can be easily attached by inserting the chuck into the spindle of the tool and turning the collar to the locked position (M). The chuck will click when properly installed.

## DRILLING IN METAL

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use. The side handle can be tightened by rotating the black plastic portion of the side handle clockwise and loosened by rotating it counterclockwise.

## Switch

To start the rotary hammer, depress the trigger switch (D). To stop rotary hammer, release the switch.

## VARIABLE SPEED TRIGGER

The **variable speed trigger switch** (D) permits speed control. The farther the trigger switch is depressed, the higher the speed of the drill.

**NOTE:** Use lower speeds for starting holes without a centerpunch, drilling in metal, plastics or ceramics, or driving screws. Higher speeds are better for drilling in masonry for maximum efficiency.

# **Lock-on Button**

**A WARNING:** Be sure to release the locking mechanism before disconnecting the plug from the power supply. Failure to do so will cause the hammerdrill to start immediately the next time it is plugged in. Damage or personal injury could result.

The lock-on button is for use only when the rotary hammer is stationary, mounted in a drill press stand or for chipping applications.

Before using the tool each time, be sure that the lock-on button release mechanism is working freely.

## D25111, D25113 ONLY (FIG. 1)

To lock the trigger switch in the ON position for continuous operation, depress the trigger switch and slide the lock-off button (F) up. The tool will continue to run.

To turn the tool OFF from a locked ON condition, squeeze the trigger once then release it.

## D25330 ONLY (FIG. 4)

To lock the trigger switch in the ON position for continuous operation, depress the trigger switch and push the lock-on button (F) in. The tool will continue to run.

To turn the tool OFF from a locked ON condition, squeeze the trigger once then release it.

# Reversing Lever (D25111, D25113, D25211, D25213, D25313, D25314)

The reversing lever is used to reverse the rotary hammer for backing out screws or jammed bits. It is located above the trigger, shown in Figure 2.

**A CAUTION:** When reversing to clear jammed bits, be ready for strong reactive torque.

## D25111, D25113

To reverse the rotary hammer, turn it OFF and align the reversing lever (E) with the yellow arrow pointing backward (viewed when holding drill in operating position).

To position the lever for forward operation, turn the rotary hammer OFF and align the reversing lever with the yellow arrow pointing forward (viewed when holding drill in operating position).

### D25211, D25213, D25313, D25314

To reverse the rotary hammer, turn it OFF and push the reversing lever (E) in so the yellow arrow pointing backwards shows.

To position the lever for forward operation, turn the rotary hammer OFF and push the reversing lever in so the yellow arrow pointing forward shows.

## (D25113, D25213, D25313, D25314)

An SDS to round shank adaptor chuck is required. Ensure that tool is in drill-only mode. (D25111, D25211 has no drill-only mode). Start drilling with slow speed and increase to full power while applying firm pressure on the tool. A smooth even flow of metal chips indicates the proper drilling rate. 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 sulphurized cutting oil or lard oil; bacon-grease will also serve the purpose.

**NOTE:** Large [(5/16" to 1/2") (7.9 mm to 12.7 mm)] holes in steel can be made easier if a pilot hole [(5/32" to 3/16") (4 mm to 4.8 mm)] is drilled first.

### **DRILLING IN WOOD**

### (D25113, D25213, D25313, D25314)

An SDS to round shank adaptor chuck is required. Ensure that tool is in drill-only mode. D25111, D25211 have no drill-only mode). Start drilling with slow speed and increase to full power while applying firm pressure on the tool. 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 spade bits, power auger bits, or hole saws. Work that is apt to splinter should be backed up with a block of wood.

#### DRILLING IN MASONRY (D25113, D25213, D25313, D25314)

When drilling in masonry, use SDS carbide tipped bits rated for percussion drilling and be certain that the bit is sharp. Use a constant and firm force on the tool to drill most effectively. A smooth, even flow of dust indicates the proper drilling rate.

# **Depth Rod**

### TO ADJUST THE DEPTH ROD

- 1. Push in and hold the button on the side handle.
- 2. Move the depth rod (B) so the distance between the end of the rod and the end of the bit equals the desired drilling depth.
- 3. Release the button to lock rod into position. When drilling with the depth rod, stop when end of rod reaches surface of material.

# MAINTENANCE

A WARNING: Shock Hazard. To reduce the risk of serious personal injury, turn tool off and disconnect tool from power source before making any adjustments or removing/ installing attachments or accessories.

# Cleaning

**À CAUTION**: Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals may weaken the plastic materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

# Lubrication

Your tool was properly lubricated before leaving the factory. In from two to six months, depending upon use, take or send your tool to an authorized service center for a complete cleaning, inspection and lubrication. Tools used constantly on production jobs will need relubrication more often. Also, tools "out of service" for long periods should be relubricated before being put back to work.

# Accessories

**A**WARNING: Since accessories, other than those offered by DEWALT, have not been tested with this product, use of such accessories with this tool could be hazardous. To reduce the risk of injury, only DEWALT, recommended accessories should be used with this product.