

D28715 Heavy-Duty 14" (355 mm) Chop Saw with Quick-Change Clamp

The following are trademarks for one or more DEWALT power tools: the yellow and black color 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.

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

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

**ACAUTION**: 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.

### Important Safety Instructions

AWARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

## SAVE THESE INSTRUCTIONS

- KEEP GUARDS IN PLACE and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- KEEP WORK AREA CLEAN. Cluttered areas and benches invite injuries.
- DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
- KEEP CHILDREN AWAY. All visitors should be kept at a safe distance from work area.
- MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter kevs
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
- USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using and 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							
Ampere Rating		Volts	Total Length of Cord in Feet (meters)				
		120V	25 (7.6)	50 (15.2)	100 (30.5)	150 (45.7)	
		240V	50 (15.2)	100 (30.5)	200 (61.0)	300 (91.4)	
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 Reco	mmended	

- WEAR PROPER APPAREL. Do not wear loose clothing, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair. Air vents often cover moving parts and should also be avoided.
- ALWAYS USE SAFETY GLASSES which meet the ANSI Z87.1 requirements. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are not safety glasses.
- SECURE WORK. Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.

- DON'T OVERREACH. Keep proper footing and balance at all times.
- MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **DISCONNECT TOOLS** before servicing; when changing accessories, such as blades. bits, cutters, and the like.
- REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
- USE RECOMMENDED ACCESSORIES. Consult the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.
- **REPLACEMENT PARTS.** When servicing use only identical replacement parts.
- TO REDUCE THE RISK OF ELECTRIC SHOCK:
  - a. This equipment may have a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit, contact a qualified electrician to install the proper outlet.
  - b. The tool may be equipped with a 3-prong grounding type plug. This plug is to be used in a grounded outlet only. If the plug does not fit, contact a qualified electrician to install the proper outlet.
  - c. Do not alter the plug in any way.

### Additional Safety Rules for Chop Saw

- Always wear proper eye and respiratory protection.
- Before using, inspect the cutting wheel for cracks or flaws. If such a crack or flaw is evident, discard the wheel. The wheel should also be inspected whenever you think the tool may have been dropped. Flaws may cause wheel breakage.
- When starting the tool with a new or replacement wheel or if you are unsure of the condition of the wheel, hold the tool in a well protected area and let it run for one minute. If the wheel has an undetected crack or flaw, it should burst in less than one minute. Never start the tool with a person in line with the wheel. This includes the operator.
- In operation, avoid bouncing the wheel or giving it rough treatment. If this occurs, stop the tool and inspect the wheel for cracks or flaws.
- NEVER have any part of your body in line with the path of the saw blade. Personal injury will occur.
- Clean your chop saw periodically following the procedure in this manual.
- Do not remove wheel guards or base.
- ALWAYS USE THE VISE OR SPECIAL FIXTURE TO CLAMP WORK SECURELY. Other aids such as spring, bar, or C-clamps may be appropriate for certain sizes and shapes of workpiece. Use care in selecting and placing these clamps and make a dry run before making a cut.
- Use only 14" type 1 wheels rated at 4100 rpm or higher.
- Allow cut off parts to cool before handling.
- Do not attempt to cut wood or plastic with this tool.
- NEVER CUT MAGNESIUM WITH THIS TOOL. .
- Use chop saw in a well-ventilated area.
- Turn chop saw off before removing any pieces from the base.
- DO NOT CUT ELECTRICALLY LIVE MATERIAL.
- Do not use circular saw blades or any other toothed blades with this tool. Serious injury may result.
- DO NOT OPERATE THIS TOOL NEAR FLAMMABLE LIQUIDS, GASES OR DUST. Sparks or hot chips from cutting or arcing motor brushes may ignite combustible materials.
- Do not use the side of the abrasive wheel as a deburring grinder. This will substantially weaken the wheel creating an unsafe condition. The wheel may come apart.

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.

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.

**AWARNING: 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.

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

ACAUTION: Spark deflector will get hot. Avoid touching or adjusting while hot. Keep cordset and materials away from spark deflector.

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

Vvolts	Aamperes
Hz hertz	Wwatts
min minutes	$\sim$ alternating current
direct current	n <sub>o</sub> no load speed
Class I Construction	🕀earthing terminal
(grounded)	Asafety alert symbol
Class II Construction (double insulated)	/min revolutions or reciprocation per minute
BPM beats per minute	

For your convenience and safety, the following warnings are on your Heavy-Duty 14" (355 mm) Chop Saw:

A FOR SAFE OPERATION READ THE INSTRUCTION MANUAL. DO NOT USE TOOTHED BLADES. USE ONLY REINFORCED WHEELS RATED 4100 RPM OR HIGHER. WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS. ALWAYS: WEAR EYE PROTECTION, USE GUARDS, CLAMP WORK IN VISE, USE PROPER RESPIRATORY PROTECTION. DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS.

## Features (Fig. 1, 7)

- A. Lock pin
- B. Spark deflector screw
- C. Spark deflector D. Base
- E. Fence
- F. Vise
- G. 8mm Allen wrench
- H. Crank
- I. Vise lever

## **Power Supply**

Be sure your power supply agrees with the nameplate marking. 120 volts, "60 Hz" means alternating current (normal 120 volt, 60 Hz house current).

A voltage decrease of more than 10% will cause a loss of power and overheating.

## **Cutting Capacity**

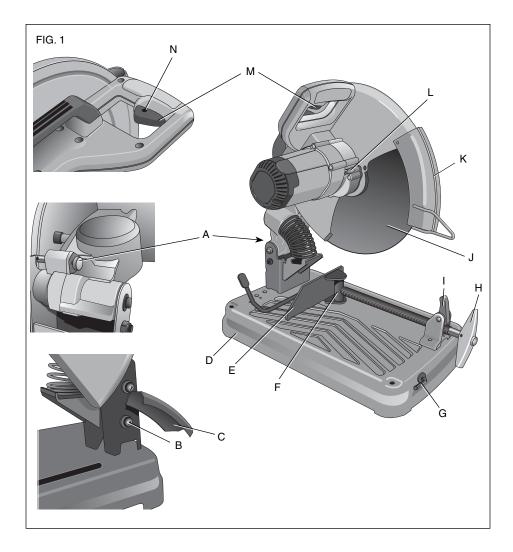
The wide vise opening and high pivot point provide cutting capacity for many large pieces. Use the cutting capacity chart to determine total maximum size of cuts that can be made with a new wheel.

- L. Wheel lock lever M. Trigger switch N. Padlock hole
- - P. Extra blade bolt washer
  - Q. Quick-Change blade clamp

- O. Extra blade bolt

J. Wheel

K. Spark guard

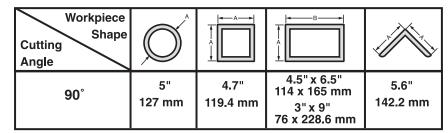


ACAUTION: CERTAIN LARGE, CIRCULAR OR IRREGULARLY SHAPED OBJECTS MAY REQUIRE ADDITIONAL HOLDING MEANS IF THEY CANNOT BE HELD SECURELY IN VISE.

**ACAUTION: DO NOT CUT MAGNESIUM WITH THIS TOOL.** Damage to the saw and personal injury may result.

#### MAXIMUM CUTTING CAPACITY

NOTE: Capacity shown on chart assumes no wheel wear and optimum fence position.



### Standard Equipment

- 1 14" (355 mm) metal cutting abrasive wheel
- 1 Allen wrench
- 1 Instruction manual

#### To Carry (Fig. 1)

Fold down unit to position where you can carry the saw. Push in lock pin (A) to lock arm down.

## Unlocking (Fig. 1)

To unlock tool and raise head, depress motor arm slightly and pull lock pin (A) out. Motor arm will then pivot upward.

### Material Clamping and Supporting

- Angles are best clamped and cut with both legs resting against base.
- A spacer block slightly narrower than the workpiece can be used to increase wheel utilization (Fig. 3).
- Long workpieces must be supported by a block so it will be level with top of base (Fig. 4). The cut-off end should be free to fall downward to avoid wheel binding.

## Spark Deflector Adjustment (Fig. 1)

To best deflect sparks away from surrounding persons and materials, loosen the screw (B), adjust the spark deflector (C) and then retighten screw.

**CAUTION:** Risk of property damage. Do not allow cordset to come into contact with deflector or sparks as damage to cordset may occur.

# Vise Operation (Fig. 5)

The vise has a quick travel feature. To release the vise (F) when it is clamped tightly, turn the crank (H) counterclockwise one or two times to remove clamping pressure. Lift the vise lever (I) up. Pull crank assembly out as far as desired. The vise may be shoved into work without cranking. Lower vise lever then tighten vise on work by using crank.

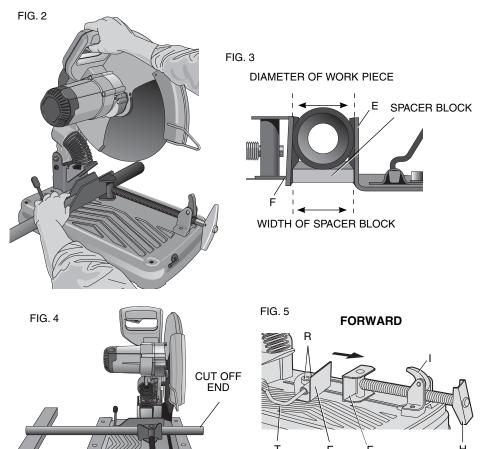
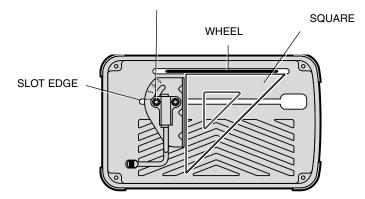
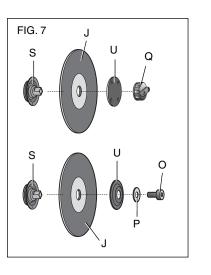


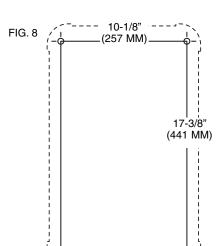
FIG. 6

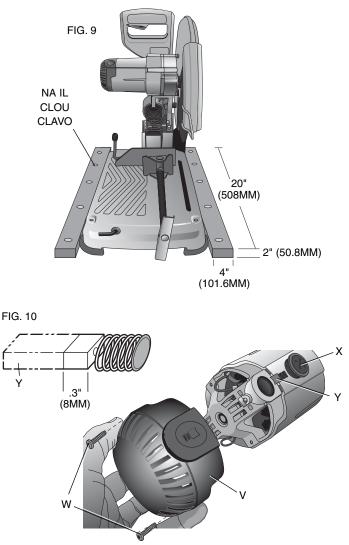
BLOCK

ANGLE ADJUSTMENT INDICATOR









# Fence Operation (Fig. 5)

**AWARNING:** To reduce the risk of injury, turn unit off and disconnect machine from power source before installing and removing accessories, before adjusting or changing set-ups or when making repairs. Be sure the trigger switch is in the OFF position. An accidental start-up can cause injury.

The fence (E) requires no tools to adjust. The quick-release clamp lever (T) unlocks and locks the fence. When the lever is rotated fully forward, the fence is unlocked. The fence can then be freely moved forward, backward or rotated to allow for the best cutting position for a new wheel and as the wheel wears.

Rotating the lever fully to the rear locks the fence in position selected. If the bottom leg of the lever is not horizontal (parallel to the base), the fence is not locked. Lever will only lock fence when there is strong resistance to moving it to rear. If resistance is light, adjust clamping force by tightening slightly the two bolts (R) holding the fence to the base. Test by reclamping and attempt to move fence.

# Fence Angle Adjustment (Fig. 6)

**AWARNING:** To reduce the risk of injury, turn unit off and disconnect machine from power source before installing and removing accessories, before adjusting or changing set-ups or when making repairs. Be sure the trigger switch is in the OFF position. An accidental start-up can cause injury.

The angle adjustment indicator is part of fence clamping system. Align the desired angle indicator line with the edge of the slot in base.

### FOR A MORE ACCURATE SQUARE CUT

- 1. Unlock the fence.
- 2. Push the arm down until the wheel extends into the base.
- 3. Place a square against the wheel and adjust the fence against the square.
- 4. Lock the fence into position.

# Usage (Fig. 1, 2)

Refer to Figure 2 for proper body positioning during use.

To start the tool, depress the trigger switch (M). To turn the tool off, release the trigger switch. Keep hands and material from wheel until it has coasted to a stop.

To prevent unauthorized use of tool, install a standard padlock (not included) into the padlock hole (N) located in the trigger.

# Removal and Installation of Wheels (Fig. 7)

**AWARNING:** To reduce the risk of injury, turn unit off and disconnect machine from power source before installing and removing accessories, before adjusting or changing set-ups or when making repairs. Be sure the trigger switch is in the OFF position. An accidental start-up can cause injury.

The Quick-Change blade clamp requires no tools to change the blade.

- 1. Push in wheel lock lever (L) and rotate wheel (J) by hand until wheel lock lever engages slot in inside flange (S) to lock wheel. Loosen the Quick-Change blade clamp (Q) counterclockwise. Clamp has right-hand thread.
- 2. Remove the Quick-Change blade clamp (Q), blade clamp washer (U) and old wheel (J) by hand.
- 3. Make sure flange surfaces are clean and flat. Install the new abrasive wheel by reversing the above steps.
- 4. Tighten the Quick-Change blade clamp clockwise until the knob clicks as least three times to ensure the knob is tight. The Quick-Change blade clamp cannot be overtightened.

**NOTE:** A keyed blade clamp system which includes a blade bolt and blade bolt washer, (Fig. 7 O, P) is available at extra cost from your local dealer or authorized service center. When using the keyed blade clamp system, do not overtighten bolt.

**AWARNING:** Risk of personal injury. Check the work surface that the chop saw rests on when replacing with a new abrasive wheel. It is possible that the wheel may contact ANY ITEMS OR STRUCTURE THAT EXTENDS ABOVE work surface (under the base) when the arm is fully lowered.

## Mounting (Fig. 8, 9)

**ACAUTION:** Tool must be supported on stable, level, non-skid surface to prevent unexpected movement when operating.

#### PROCEDURE FOR PERMANENT MOUNTING

- 1. Drill four holes 5/16" (8 mm) through the work surface (Fig. 8).
- 2. Insert 1/4-20 screws down through the holes in the base and through holes in mounting surface. The approximate length of the screws should be the thickness of the mounting surface plus 4" (102 mm).

#### CRADLE MOUNTING

- 1. Cut two boards approximately 20" long x 2" high x 4" wide (508 x 50.8 x 101.6 mm).
- 2. Place chop saw at desired work location.
- 3. Place boards tightly along side, and nail to work surface (Fig. 9).
- **Operation Tips for More Accurate Cuts**
- Allow the wheel to do the cutting. Excessive force will cause the wheel to glaze reducing cutting efficiency and/or to deflect causing inaccurate cuts.
- Properly adjust fence angle.
- Make sure material is laying flat across base.
- Properly clamp material to avoid movement and vibration.

### MAINTENANCE

**AWARNING:** To reduce the risk of injury, turn unit off and disconnect machine from power source before installing and removing accessories, before adjusting or changing set-ups or when making repairs. Be sure the trigger switch is in the OFF position. An accidental start-up can cause injury.

### MOTOR BRUSH INSPECTION AND REPLACEMENT (FIG. 10)

Brushes should be regularly inspected for wear. To inspect brushes, unscrew the two end cap screws (W) and remove end cap (V). Remove brush cap (X). Brushes (Y) should slide freely in brush box. If brushes are worn down to .3" (8 mm) as shown in Figure 10 they should be replaced. To reinstall, push new brush back into brush box. If replacing existing brush, maintain same orientation as when removed. Replace the brush cap (do not overtighten). Replace end cap and two screws. Tighten securely.

### Cleaning

**AWARNING:** Blow dirt and dust out of the main housing with dry air as often as dirt is seen collecting in and around the air vents. Wear ANSI Z87.1 (CAN/CSA Z94.3) approved eye protection when performing this procedure.

**AWARNING:** 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.

#### Repairs

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustments (including brush inspection and replacement) should be performed by a DEWALT factory service center, a DEWALT authorized service center or other qualified service personnel. Always use identical replacement parts.

**NOTE:** Unit may be converted to a three-wire twist lock cord set at an authorized service center.

### Lubrication

Closed-type, grease-sealed ball bearings are used throughout. These bearings have sufficient lubrication packed in them at the factory to last the life of the chop saw.

Learn more about power saws we have.