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**INSTRUCTION MANUAL
GUIDE D'UTILISATION
MANUAL DE INSTRUCCIONES**

INSTRUCTIVO DE OPERACIÓN, CENTROS DE SERVICIO Y PÓLIZA
DE GARANTÍA. **ADVERTENCIA:** LEÁSE ESTE INSTRUCTIVO ANTES
DE USAR EL PRODUCTO.

DEWALT®

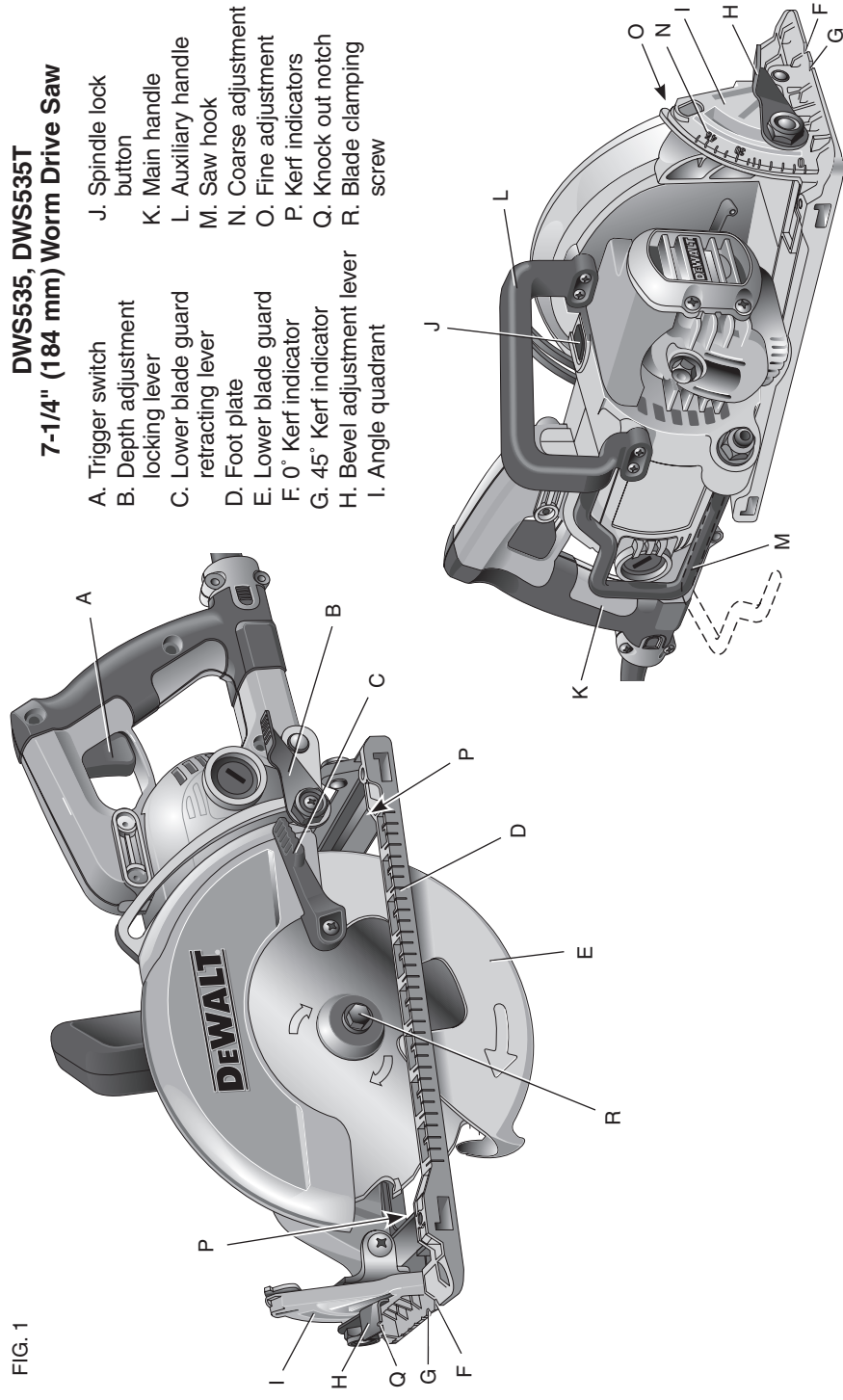
DWS535, DWS535T

Heavy-Duty 7-1/4" (184 mm) Worm Drive Circular Saw

Scie Circulaire Industrielle à Vis Sans Fin, 184 mm (7-1/4 po)

Sierra circular de 184 mm (7-1/4 pulg.) con impulsor sinfin para trabajo pesado

FIG. 1



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.

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

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

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

NOTICE: indicates a practice **not related to personal injury** 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).



WARNING: To reduce the risk of injury, read the instruction manual.

General Power Tool Safety Warnings

⚠WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

English

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.

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.

- e) *When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.*
- f) *If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.*

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 personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- c) *Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.*
- d) *Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
- e) *Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.*
- f) *Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.*

- g) *If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related 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 tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.*
- f) *Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g) *Use the power tool, accessories and tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.*

5) SERVICE

- 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.

Safety Instructions for All Saws

⚠ DANGER:

- a) **Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle or motor housing.** If both hands are holding the saw, they cannot be cut by the blade.
- b) **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- c) **Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.
- d) **Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform.** It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- e) **Hold power tool 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 also make exposed metal parts of the power tool "live" and shock the operator.
- f) **When ripping always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- g) **Always use blades with correct size and shape (diamond versus round) of arbour holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.

English

- h) **Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

CAUSES AND OPERATOR PREVENTION OF KICKBACK:

- *Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.*
- *When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.*
- *If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.*

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

- a) **Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.** *Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.*
- b) **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur.** *Investigate and take corrective actions to eliminate the cause of blade binding.*
- c) **When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged**

into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.

- d) **Support large panels to minimize the risk of blade pinching and kickback.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- e) **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- f) **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.
- g) **Use extra caution when making a "plunge cuts" into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

LOWER GUARD SAFETY INSTRUCTIONS

- a) **Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- b) **Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- c) **Lower guard should be retracted manually only for special cuts such as "plunge cuts" and "compound cuts."** Raise lower guard by retracting handle and as

soon as blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.

- d) **Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

Additional Safety Instructions

- **Use clamps or another practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- **Keep your body positioned to either side of the blade, but not in line with the saw blade. KICKBACK could cause the saw to jump backwards (see Causes and Operator Prevention of Kickback and KICKBACK).**
- **Avoid cutting nails. Inspect for and remove all nails from lumber before cutting.**
- **Always make sure nothing interferes with the movement of the lower blade guard.**
- **Accessories must be rated for at least the speed recommended on the tool warning label.** Wheels and other accessories running over rated speed can fly apart and cause injury. Accessory ratings must always be above tool speed as shown on tool nameplate.
- **Always make sure the saw is clean before using.**
- **Stop using this saw and have it properly serviced if any unusual noise or abnormal operation occurs.**

- *Always be sure all components are mounted properly and securely before using tool.*
- *Always handle the saw blade with care when mounting or removing it or when removing the diamond knockout.*
- *Always wait until the motor has reached full speed before starting a cut.*
- *Always keep handles dry, clean and free of oil and grease. Hold the tool firmly with both hands when in use.*
- *Always be alert at all times, especially during repetitive, monotonous operations. Always be sure of position of your hands relative to the blade.*
- *Stay clear of end pieces that may fall after cutting off. They may be hot, sharp and/or heavy. Serious personal injury may result.*
- *Replace or repair damaged cords. Make sure your extension cord is in good condition. Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the tool's plug.*
- **An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety.** The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size. 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.

English

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)
	240V	50 (15.2)	100 (30.5)	200 (61.0)
AWG				
More Than	Not More Than			
0	6	18	16	14
6	10	18	16	14
10	12	16	16	14
12	16	14	12	Not Recommended

⚠ CAUTION: Blades coast after turn off. Serious personal injury may result.

⚠ 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.

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

⚠ 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 respiratory protection.

⚠ WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known in the state of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,

- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber (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.

⚠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. Always operate tool in well-ventilated area and provide for proper dust removal. Use dust collection system wherever possible.

- 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	~ alternating current
⎓..... direct current	~ alternating or direct current
Ⓜ..... Class I Construction (grounded)	no no load speed
Ⓜ..... Class II Construction (double insulated)	⊕ earthing terminal
	⚡ safety alert symbol

BPM beats per minute .../min per minute
RPM revolutions per minute IPM impacts per minute

SAVE THESE INSTRUCTIONS FOR FUTURE USE

COMPONENTS (Fig. 1)

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

Refer to Figure 1 for saw components.

INTENDED USE

These heavy-duty circular saws are designed for professional wood cutting applications. **DO NOT** use water feed attachments with this saw. **DO NOT** use abrasive wheels or blades. **DO NOT** use under wet conditions or in presence of flammable liquids or gases.

These heavy-duty saws are professional power tools. **DO NOT** let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

Saw Hook (Fig. 2)

⚠WARNING: To reduce the risk of serious personal injury, Do not use the saw with the saw hook rotated below the foot plate.

⚠WARNING: To reduce the risk of injury from the saw falling on operators or bystanders, make sure the saw is supported securely when using the hook to hang the saw from a rafter, joist or other elevated support.

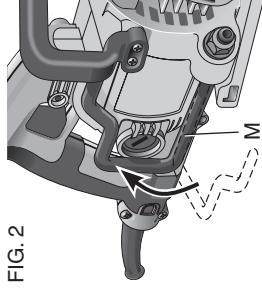


FIG. 2

Your saw has a convenient saw hook that allows the saw to hang from a joist, rafter, or other suitable, stable structure. The saw hook folds flat against the tool body when not in use.

To use the saw hook, push down on the hook to rotate it away from the handle until it latches into position.

To return the saw hook to its stored position, pull the hook up until it latches against the tool body.

Twist-lock Connector (DWS535T)

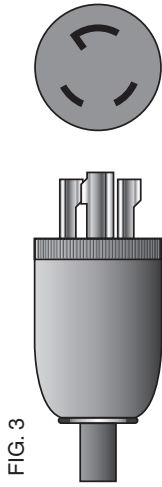


FIG. 3

The DWS535T is equipped with a twist-lock connector as shown in Figure 3. This prevents the cord from unplugging if the cord is inadvertently pulled. Only plug the twist-lock connector into a 3-wire extension cord with a female connector.

Cutting Depth Adjustment (Fig. 1, 4, 5)

1. Hold the saw firmly. Lift the depth adjustment locking lever (B) to move foot plate to obtain the desired depth of cut.
2. Lower the depth adjustment locking lever and tighten securely to lock the depth of cut before operating saw.

The length of cut markings on the side of the foot plate are accurate at full depth of cut only. Setting the saw at the proper cutting depth keeps blade friction to a minimum, removes sawdust from between the blade teeth, results in cooler, faster sawing and reduces the chance of kickback.

FIG. 4

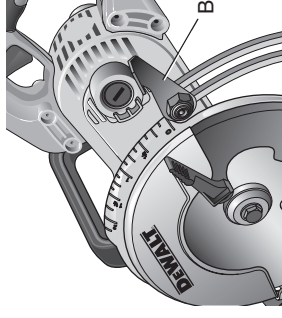
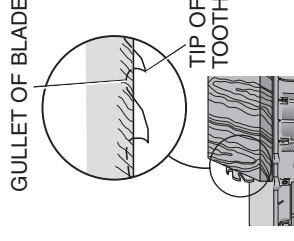


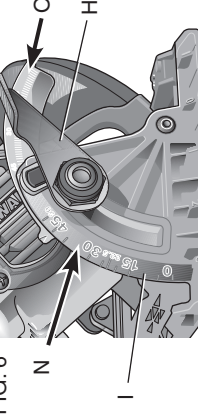
FIG. 5



For the most efficient cutting action, set the depth adjustment so that half of a blade tooth will project below the material to be cut. This distance is from the tip of the tooth to the bottom of the gullet in front of it (refer to inset of Figure 5). This keeps blade friction at a minimum, removes sawdust from the cut, results in cooler, faster sawing and reduces the chance of kickback. A method for checking for correct cutting depth is shown in Figure 5. Lay a piece of the material you plan to cut along the side of the blade, as shown, and observe how much tooth projects beyond the material.

Bevel Angle Adjustment (Fig. 1, 6)

FIG. 6



The full range of the bevel adjustment is from 0° to 53°. Defents are located at 22.5° and 45°. The angle quadrant is graduated in increments of 1°. On the front of the saw is a bevel angle adjustment mechanism

which consists of a calibrated angle quadrant (I) and a bevel adjustment lever (H). The angle quadrant allows for coarse adjustment (N) or fine adjustment (O) to achieve better accuracy in cutting.

TO SET THE SAW FOR A BEVEL CUT

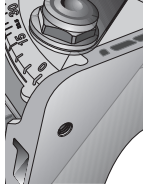
1. Lift the bevel adjustment lever (H) and tilt foot plate to the desired angle by aligning the pointer with the desired angle mark.
2. Push the bevel adjustment lever down and tighten securely to lock the angle.

Foot Plate Adjustment for 90° Cuts

IF ADDITIONAL ADJUSTMENT IS NEEDED

1. Adjust the saw to 0° bevel.
2. Retract blade guard. Place the saw on blade side.
3. Lift bevel adjustment lever. Place a square against the blade and foot plate to adjust the 90° setting.
4. Move the adjustment screw, located on the bottom of the foot plate (Fig. 7), so that the foot plate will stop at the proper angle.
5. Confirm the accuracy of the setting by checking the squareness of an actual cut on a scrap piece of material.

FIG. 7

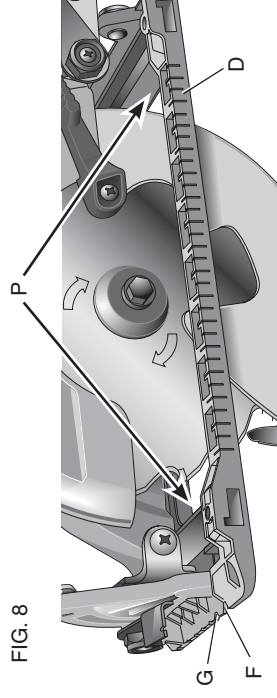


Kerf Indicator (Fig. 8)

The front of the saw foot plate (D) has a 0° kerf indicator (F) and a 45° kerf indicator (G) for vertical and bevel cutting. The kerf indicators enable you to guide the saw along the cutting lines penciled on the workpiece.

The indicator aligns with the left (outer) side of the saw blade. The moving blade making the slot or "kerf" cut falls to the right of the indicator. Position the saw along the penciled cutting line so that the kerf falls into the waste or surplus material. Marking indicators on the front of the foot plate are at 1/2" (13 mm) intervals for additional cutting guides.

FIG. 8



Kerf indicators (P) are also located on the inside of the foot plate to keep the saw square when cutting.

OPERATION

⚠ WARNING: 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.

IMPORTANT: Always make sure the depth adjustment locking lever is in the down position before operating saw.

Trigger Switch (Fig. 1)

⚠ WARNING: To reduce the risk of serious personal injury, hold saw with both hands when starting the saw to avoid kickback.

Press the trigger switch (A) to turn the tool on. Release the trigger switch to turn the tool off.

NOTE: This tool has no provision to lock the trigger in the on position and should never be locked on by any other means.

Changing Blades (Fig. 1, 9-12)

IMPORTANT: Most replacement blades come with a round arbor center opening which must be knocked out so a diamond-shaped

arbor center is exposed. Only blades with a diamond-shaped arbor center can be used on this saw.

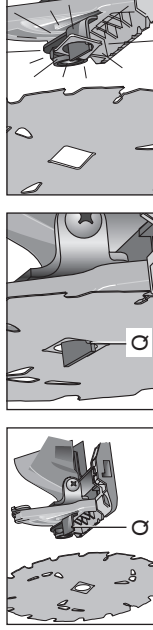
NOTICE: Never install a blade without removing the knockout. Lack of blade engagement will cause the blade to come into contact with other parts of the saw causing tool damage.

TO REMOVE KNOCKOUT

⚠ WARNING: ALWAYS use eye protection. All users and bystanders must wear eye protection that conforms to ANSI Z87.1.

⚠ WARNING: Make sure that bevel adjusting locking lever is tight and secure after using it to remove knockout. If blade adjustment shifts while cutting it may cause binding and kickback.

FIG. 9



Place the round center hole of the blade into the notch (Q) on the top of the bevel adjustment lever (H). Grasping the saw and blade firmly, pull until the knockout pops out. The diamond-shaped arbor center is now exposed.

TO INSTALL THE BLADE (FIG. 1, 10, 11)

1. Loosen and remove the blade clamping screw (R) with the wrench provided, by turning it clockwise as indicated by the arrow on the outer clamp washer (S).
2. Remove outer clamp washer (S).
3. Using the lower blade guard retracting lever (C), retract the lower blade guard (E).

IMPORTANT: When retracting the lower blade guard to install the blade, check the condition and operation of the lower blade guard to assure that it is working properly. Make sure it moves

freely and does not touch the blade, foot plate or any other part, in all angles and depths of cut.

4. Place blade (T) on saw spindle (U) against the inner clamp washer (V), making sure that the blade will rotate in the proper direction (the direction of the rotation arrow on the saw blade and the teeth must point in the same direction as the direction of rotation arrow on the lower blade guard).

IMPORTANT: Always ensure the diamond-shaped arbor center of the blade aligns with the raised diamond-shaped arbor center on the outer clamp washer.

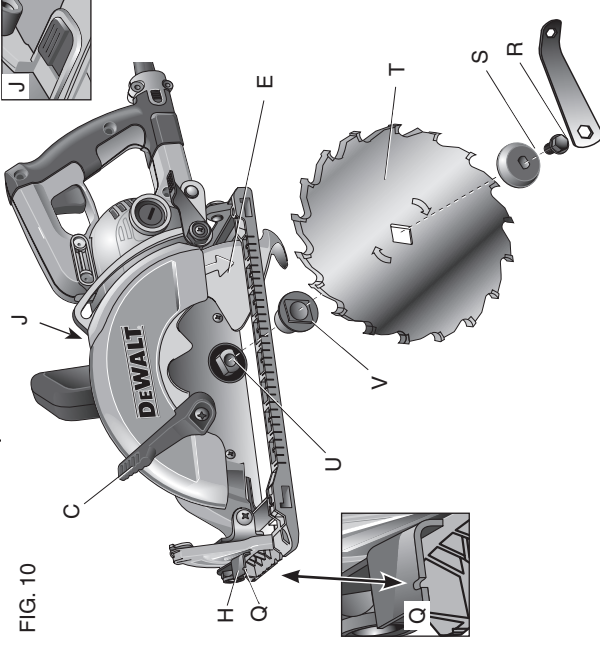


FIG. 10

NOTE: Do not assume that the printing on the saw blade will always be facing you when properly installed.

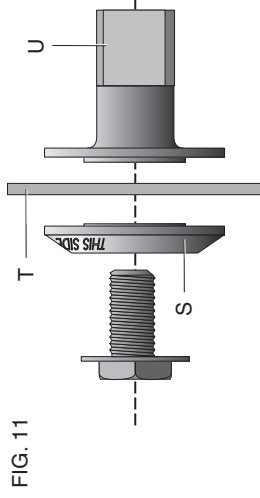
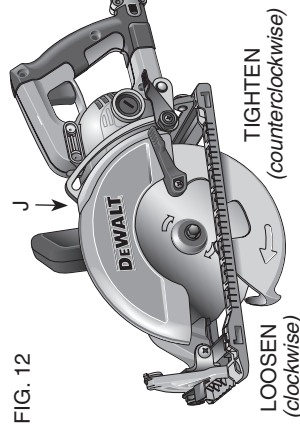


FIG. 12



5. Place outer clamp washer (S) on saw spindle (U) with the large flat surface against the blade and the wording on the outer clamp washer facing you as shown in Figure 11.
6. Thread the blade clamping screw (R) into saw spindle by hand (screw has left-hand threads and must be turned counterclockwise to tighten).
7. Slowly release the lower blade guard retracting lever (C).
8. Depress the spindle lock button (J) while turning the saw spindle with the blade wrench provided until the blade lock engages and the blade stops rotating. Using the blade wrench, firmly tighten blade clamping screw.

NOTICE: *Never engage the blade lock while saw is running, or engage in an effort to stop the tool. Never turn the saw on while the blade lock is engaged. Serious damage to your saw will result.*

TO REPLACE THE BLADE (FIG. 10-12)

1. Depress the spindle lock button (J) while turning the saw spindle with the blade wrench provided until the blade lock engages and the blade stops rotating.

2. With the blade wrench provided, loosen the blade clamping screw (R) by turning it clockwise as indicated by the arrow on the outer clamp washer (S).
3. Remove the outer clamp washer (S).
4. Using the lower blade guard retracting lever (C), retract the lower blade guard. Remove used blade and properly discard.
5. Install new blade as previously described.
6. Clean any sawdust that may have accumulated in the guard or clamp washer area. Check the condition and operation of the lower blade guard as previously outlined. Do not lubricate this area.
7. Select the proper blade for the application (refer to **Blades**). Always use blades that are the correct size (diameter) with the proper size and shape center hole for mounting on the saw spindle. Always assure that the maximum recommended speed (rpm) on the saw blade meets or exceeds the speed (rpm) of the saw.

LOWER BLADE GUARD

⚠WARNING: The lower blade guard is a safety feature which reduces the risk of serious personal injury. Never use the saw if the lower guard is missing, damaged, misassembled or not working properly. Do not rely on the lower blade guard to protect you under all circumstances. Your safety depends on following all warnings and precautions as well as proper operation of the saw. Check lower guard for proper closing before each use as outlined in Safety Instructions for All Saws. If the lower blade guard is missing or not working properly, have the saw serviced before using. To assure product safety and reliability, repair, maintenance and adjustment should be performed by an authorized service center or other qualified service organization, always using identical replacement parts.

Blades

⚠WARNING: To minimize the risk of eye injury, always use eye protection. Carbide is a hard but brittle material. Foreign objects in the work piece such as wire or nails can cause tips to crack or break. Only operate saw when proper saw blade guard is in place. Mount blade securely in proper rotation before using, and always use a clean, sharp blade.

⚠CAUTION: Do not cut ferrous metals (steel), masonry, glass, masonry-type planking, cement board or tile with this saw.

Do not use abrasive wheels or blades. A dull blade will cause slow, inefficient cutting resulting in overload to the saw motor, excessive splintering and could increase the possibility of kickback. Please refer to the following table to determine the correct size replacement blade for your model saw.

DWS535, DWS535T

Blade	Diameter	Teeth	Application
DW3592B10	7-1/4"	18	General Purpose
DW3578B10	(184 mm)	24	Wood Cutting
DW3576B10	7-1/4"	36	Plywood Cutting
DW3526	(184 mm)	140	
DW3578B10	7-1/4"	24	Laminated or engineered lumber
	(184 mm)		

If you need assistance regarding blades, please call 1-800-4-DEWALT (1-800-433-9258).

Kickback

Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator. When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator. If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator. Kickback is more likely to occur when any of the following conditions exist.

1. IMPROPER WORKPIECE SUPPORT

- A. Sagging or improper lifting of the cut off piece can cause pinching of the blade and lead to kickback (Fig. 14).
- B. Cutting through material supported at the outer ends only can cause kickback. As the material weakens it sags, closing down the kerf and pinching the blade.

C. Cutting off a cantilevered or overhanging piece of material from the bottom up in a vertical direction can cause kickback. The falling cut off piece can pinch the blade.

D. Cutting off long narrow strips (as in ripping) can cause kickback. The cut off strip can sag or twist closing the kerf and pinching the blade.

E. Snagging the lower guard on a surface below the material being cut momentarily reduces operator control. The saw can lift partially out of the cut increasing the chance of blade twist.

2. IMPROPER DEPTH OF CUT SETTING ON SAW

To make the most efficient cut, the blade should protrude only far enough to expose half of a tooth as shown in Figure 5. This allows the foot plate to support the blade and minimizes twisting and pinching in the material. See the section titled **Cutting Depth Adjustment**.

3. BLADE TWISTING (MISALIGNMENT IN CUT)

A. Pushing harder to cut through a knot, a nail, or a hard grain area can cause the blade to twist.

B. Trying to turn the saw in the cut (trying to get back on the marked line) can cause blade twist

C. Over-reaching or operating the saw with poor body control (out of balance), can result in twisting the blade.

D. Changing hand grip or body position while cutting can result in blade twist.

E. Backing up the saw to clear blade can lead to twist.

4. MATERIALS THAT REQUIRE EXTRA ATTENTION

A. Wet lumber

B. Green lumber (material freshly cut or not kiln dried)

C. Pressure treated lumber (material treated with preservatives or anti-rot chemicals)

5. USE OF DULL OR DIRTY BLADES

Dull blades cause increased loading of the saw. To compensate, an operator will usually push harder which further loads the unit and promotes twisting of the blade in the kerf. Worn blades may also have insufficient body clearance which increases the chance of binding and increased loading.

6. LIFTING THE SAW WHEN MAKING BEVEL CUT

Bevel cuts require special operator attention to proper cutting techniques - especially guidance of the saw. Both blade angle to the foot plate and greater blade surface in the material increase the chance for binding and misalignment (twist) to occur.

7. RESTARTING A CUT WITH THE BLADE TEETH JAMMED AGAINST THE MATERIAL

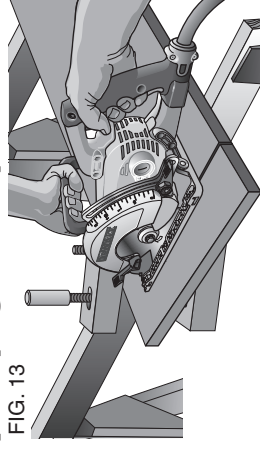
The saw should be brought up to full operating speed before starting a cut or restarting a cut after the unit has been stopped with the blade in the kerf. Failure to do so can cause stalling and kickback.

Any other conditions which could result in pinching, binding, twisting, or misalignment of the blade could cause kickback. Refer to the sections on adjustments and operation for procedures and techniques that will minimize the occurrence of kickback.

Workpiece Support (Fig. 13-15)

⚠ WARNING: It is FIG. 13

important to support the work properly and to hold the saw firmly to prevent loss of control which could cause personal injury. Figure 13 illustrates proper hand support of the saw. Maintain a



firm grip with both hands on the saw and position your body and arm to allow you to resist kickback if it occurs.

Figure 13 shows proper sawing position. Note that hands are kept away from cutting area. **To avoid kickback**, DO support board or panel NEAR the cut (Fig. 14). DON'T support board or panel away from the cut (Fig. 15).

FIG. 14

DO support board or panel NEAR the cut.

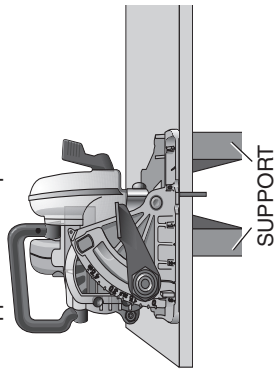
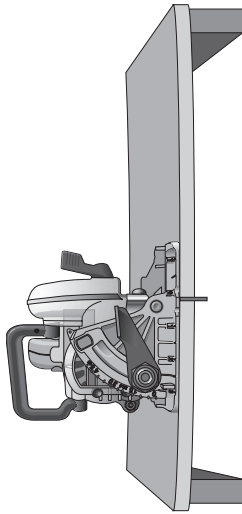


FIG. 15

DON'T support board or panel AWAY from the cut.



Place the work with its “good” side – the one on which appearance is most important – down. The saw cuts upward, so any splintering will be on the work face that is up when you cut it.

Cutting

▲ WARNING: *Never attempt to use this tool by resting it upside down on a work surface and bringing the material to the tool. Always securely clamp the workpiece and bring the tool to the workpiece, securely holding the tool with two hands as shown in Figure 13.*

Place the wider portion of the saw foot plate on that part of the work piece which is solidly supported, not on the section that will fall off when the cut is made. As examples, Figure 13 illustrates the RIGHT way to cut off the end of a board. Always clamp work. Don't try to hold short pieces by hand! Remember to support cantilevered and overhanging material. Use caution when sawing material from below.

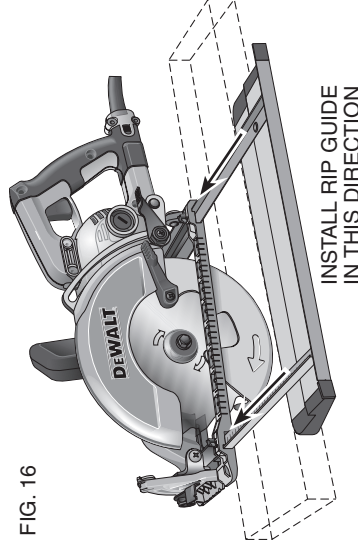
Be sure saw is up to full speed before blade contacts material to be cut. Starting saw with blade against material to be cut or pushed forward into kerf can result in kickback. Push the saw forward at a speed which allows the blade to cut without laboring. Hardness and toughness can vary even in the same piece of material, and knotty or damp sections can put a heavy load on the saw. When this happens, push the saw more slowly, but hard enough to keep working without much decrease in speed. Forcing the saw can cause rough cuts, inaccuracy, kickback, and over-heating of the motor. Should your cut begin to go off the line, don't try to force it back on. Release the switch and allow blade to come to a complete stop. Then you can withdraw the saw, sight anew, and start a new cut slightly inside the wrong one. In any event, withdraw the saw if you must shift the cut. Forcing a correction inside the cut can stall the saw and lead to kickback.

IF SAW STALLS, RELEASE THE TRIGGER AND BACK THE SAW UNTIL IT IS LOOSE. BE SURE BLADE IS STRAIGHT IN THE CUT AND CLEAR OF THE CUTTING EDGE BEFORE RESTARTING.

As you finish a cut, release the trigger and allow the blade to stop before lifting the saw from the work. As you lift the saw, the spring-tensioned telescoping guard will automatically close under the blade. Remember the blade is exposed until this occurs. Never reach under the work for any reason. When you have to retract the telescoping guard manually (as is necessary for starting pocket cuts) always use the retracting lever.

NOTE: When cutting thin strips, be careful to ensure that small cutoff pieces don't hang up on inside of lower guard.

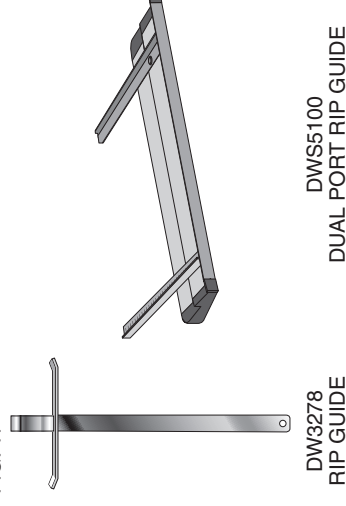
FIG. 16



RIPPING (FIG. 16)

Ripping is the process of cutting wider boards into narrower strips – cutting grain lengthwise. Hand guiding is more difficult for this type of sawing and the use of either DEWALT DW3278 rip guide or DWS5100 dual port rip guide is recommended (Fig. 17).

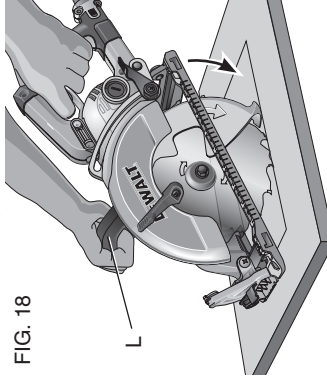
FIG. 17



POCKET CUTTING (FIG. 18)

⚠ WARNING: Never tie the blade guard in a raised position. Never move the saw backwards when pocket cutting. This may cause the unit to raise up off the work surface which could cause injury. A pocket cut is one that is made in a floor, wall, or other flat surface.

1. Adjust the saw foot plate so the blade cuts at desired depth.
2. Tilt the saw forward and rest front of the foot plate on material to be cut.
3. Using the retracting lever, retract lower blade guard to an upward position. Lower rear of foot plate until blade teeth almost touch cutting line.



4. Release the blade guard (its contact with the work will keep it in position to open freely as you start the cut). Remove hand from guard lever and firmly grip auxiliary handle (L), as shown in Figure 18. Position your body and arm to allow you to resist kickback if it occurs.
5. Make sure blade is not in contact with cutting surface before starting saw.
6. Start the motor and gradually lower the saw until its foot plate rests flat on the material to be cut. Advance saw along the cutting line until cut is completed.
7. Release trigger and allow blade to stop completely before withdrawing the blade from the material.
8. When starting each new cut, repeat as above.

MAINTENANCE

⚠ WARNING: *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

⚠ WARNING: *Blow dirt and dust out of all air vents with clean, dry air at least once a week. To minimize the risk of eye injury, always wear ANSI Z87.1 approved eye protection when performing this.*

⚠ WARNING: *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

Self lubricating ball and roller bearings are used in the tool and relubrication is not required. However, it is recommended that, once a year, you take or send the tool to a certified service center for a thorough cleaning, inspection and lubrication of the gear case.

TO CHECK OIL

⚠ WARNING: *Hot surfaces. Risk of burn. Motor and surrounding parts are very hot. Do not touch. Allow motor to cool prior to servicing.*

⚠ WARNING: *Be careful, gear oil may be hot! Contact with hot oil may result in personal injury.*

NOTICE: *Ensure there is gear oil in the saw before operating the saw or tool damage may occur.*

NOTE: Gear oil contains substances that are regulated and must be disposed of in accordance with local, state, provincial and federal laws and regulations.

1. Place saw on a stable, level surface so the table of the saw sits flush against the surface.
 2. With the wrench provided, turn the oil plug counterclockwise to remove.
 3. Due to settling, even though the correct amount of oil may be present in the crankcase it may not be visible looking into the oil fill hole.
 - a. With the tool turned off and disconnected from the power source, rotate blade and look into oil fill hole.
 - b. If no oil is visible as the gears turn, it needs to be added.
 4. To add oil, slowly add 85W-140 gear oil or equivalent until it reaches the lowest plug hole thread. 85W-140 gear oil or equivalent is available from your local DEWALT service center.
- NOTE:** When adding oil, allow the oil to flow very slowly. Overflow may occur if the oil is added too quickly.

English

5. Replace the oil plug and tighten securely.

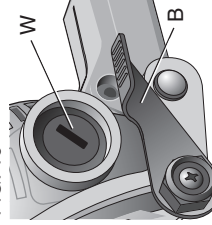
6. Dispose of oil according to local, state and federal laws and regulations.

Brushes (Fig. 19)

Inspect carbon brushes regularly by unplugging the saw, removing the end cap (W) located above the depth adjustment lever (B) and withdrawing the brush assembly. Keep brushes clean and sliding freely in their guides. Always replace a used brush in the same orientation in the holder as it was prior to removal.

Carbon brushes have varying symbols stamped into their sides, and if either brush is worn down to the line closest to the spring, the brushes must be replaced. Use only identical DEWALT brushes. New brush assemblies are available at your local service center. Always replace the end cap after inspecting or servicing brushes. The tool should be allowed to "run in" (run at no load without a blade) for 5 minutes before use to seat new brushes. While "running in" **DO NOT TIE, TAPE, OR OTHERWISE LOCK THE TRIGGER SWITCH ON. HOLD BY HAND ONLY.**

FIG. 19



Accessories

⚠ 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.

Recommended accessories for use with your tool are available at extra cost from your local service center. If you need any assistance in

locating any accessory, please contact DEWALT Industrial Tool Co., 701 East Joppa Road, Baltimore, MD 21286, call 1-800-4-DEWALT (1-800-433-9258) or visit our website www.dewalt.com.

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.

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, DEWALT 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.

English

DWS535 7-1/4" (184mm) WORM DRIVE CIRCULAR SAW