INSTRUCTION MANUAL

DEWALT®

DW777-XE

216 mm (8.5") CROSS-CUT MITRE SAW

TABLE OF CONTENTS

DOUBLE INSULATION 1

SAFETY INSTRUCTIONS FOR ALL TOOLS 1

ADDITIONAL SAFETY RULES FOR MITRE SAWS 2

ELECTRICAL CONNECTION 3

ACCESSORIES 3

- OPTIONAL ACCESSORIES 3
- SAW BLADES 3

PACKAGE CONTENTS 3

SPECIFICATIONS 3

DESCRIPTION 3

ASSEMBLY 5

- UNPACKING 5
- CABLE CLAMP 5
- BENCH MOUNTING 5
- MOUNTING THE SAW BLADE 5

ADJUSTMENTS 5

- ADJUSTING THE TRAVERSE BARS FOR CONSTANT CUTTING DEPTH 5
- ADJUSTING THE FENCE 6
- CHECKING AND ADJUSTING THE BLADE TO THE FENCE 6
- CHECKING AND ADJUSTING THE BLADE TO THE TABLE 6
- CHECKING AND ADJUSTING THE BEVEL ANGLE 7

BRUSHES 7

OPERATION 7

- INSTRUCTIONS FOR USE 7
- SWITCHING ON AND OFF 7
- BODY AND HAND POSITION 7
- BASIC SAW CUTS 7
  - VERTICAL STRAIGHT CROSS CUT 7
  - VERTICAL MITRE CROSS-CUT 8
  - BEVEL CROSS-CUTS 8
- QUALITY OF CUT 8
- CLAMPING THE WORKPIECE 8
- COMPOUND MITRE 8
- SUPPORT FOR SHORT AND LONG PIECES 8
  - CUTTING SHORT MATERIAL 8
  - CUTTING LARGE MATERIAL 8

DUST EXTRACTION 8

TRANSPORTING 8

MAINTENANCE 8

- USING THE ROLLER TABLE 9

SERVICE INFORMATION 9

REPAIRS 9

TROUBLESHOOTING GUIDE 9

TABLE 1: COMPOUND MITRE CUT 10

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 AT: **1800 338 002** (Aust) or **0800 339 258** (NZ).

Technical Data

		DW777
Voltage	V	230
Power input	W	1800
Blade diameter	mm	216
Blade bore	mm	30
Max. blade speed	min^{-1}	6300
Mitre (max. positions)	left and right	50°
Bevel (max. positions)	left	48°
Compound mitre	bevel	45°
	mitre	45°
Capacities		
cross-cut 90°	mm	60 x 270
mitre 45°	mm	60 x 190
mitre 48°	mm	60 x 180
bevel 45°	mm	48 x 270
bevel 48°	mm	45 x 270
Overall dimensions	mm	460 x 560 x 430
Weight	kg	15.0
L_{PA} (sound pressure)	dB(A)	93
K_{PA} (sound pressure uncertainty)	dB(A)	3
L_{WA} (acoustic power)	dB(A)	104
K_{WA} (acoustic power uncertainty)	dB(A)	3.9

Vibration total values (triax vector sum) determined according to EN 61029:		
Vibration emission value a_h		
a_h =	m/s^2	2.1
Uncertainty K =	m/s^2	1.5

The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

⚠ **WARNING:** The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

Important Safety Instructions

WARNING: Read all instructions before operating product. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

READ ALL INSTRUCTIONS

Double Insulation

Double insulated tools are constructed throughout with two separate layers of electrical insulation or one double thickness of insulation between you and the tool's electrical system. Tools built with this insulation system are not intended to be grounded.

NOTE: Double insulation does not take the place of normal safety precautions when operating this tool. The insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool.

⚠**CAUTION:** WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS. Repair or replace damaged cords.

Safety Instructions For All Tools

This mitre saw accepts the DEWALT worklight and laser attachments.

⚠**WARNING: To reduce the risk of eye injury, ALWAYS use eye protection when operating the mitre saw.**

- **KEEP GUARD 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 spindle before turning tool on. Tools, scrap pieces, and other debris can be thrown at high speed, causing injury.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- **DO NOT USE THE MACHINE IN A DANGEROUS ENVIRONMENT.** The use of power tools in damp or wet locations or in rain can cause shock or electrocution. Keep your work area well-lit to avoid tripping or placing arms, hands, and fingers in danger.
- **KEEP CHILDREN AWAY.** All visitors should be kept at a safe distance from work area. Your shop is a potentially dangerous environment.
- **MAKE WORKSHOP CHILDPROOF** with padlocks, master switches, or by removing starter keys. The unauthorised start-up of a machine by a child or visitor may result in injury.
- **DON'T FORCE TOOL.** It will do the job better and be 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. Using the incorrect tool or attachment may result in personal injury.
- **WEAR PROPER APPAREL.** No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Air vents may cover moving parts and should also be avoided.
- **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
- **SECURE THE WORKPIECE.** Use clamps or a vise to hold the workpiece on the table and against the fence or when your hand will be dangerously close to the blade (within 6"). It is safer than using your hand and it frees both hands to operate tool.
- **DON'T OVERREACH.** Keep proper footing and balance at all times. Loss of balance may cause personal injury.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories. Poorly maintained tools and machines can further damage the tool or machine and/or cause injury.
- **TURN THE MACHINE "OFF", AND DISCONNECT THE MACHINE FROM THE POWER SOURCE** before installing or removing accessories, before adjusting or changing set-ups, when making repairs or changing locations. An accidental start-up can cause injury. Do not touch the plug's metal prongs when unplugging or plugging in the cord.
- **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure that the switch is in the "OFF" position before plugging in the power cord.
- **USE PROPER EXTENSION CORD**. Make sure your extension cord is in good condition. If your product is equipped with a cordset, use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the tool's plug. 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 gage. The smaller the gage number, the heavier the cord.

MINIMUM GAUGE FOR CORD SETS

For Cable length (m):	7.5	15	25	30	45	60
Use Cable with minimum rating (Amperes)						
Tool Amperes						
0 - 3.4	7.5	7.5	7.5	7.5	7.5	7.5
3.5 - 5.0	7.5	7.5	7.5	7.5	10	15
5.1 - 7.0	10	10	10	10	15	15
7.1 - 12.0	15	15	15	15	20	20
12.1 - 20.0	20	20	20	20	25	–

- **CHECK for 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. Do not use tool if switch does not turn it on and off.

- **USE RECOMMENDED ACCESSORIES.** Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may be hazardous when used on another tool. 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.
- **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop. Serious injury can result.
- **DO NOT OPERATE ELECTRIC TOOLS NEAR FLAMMABLE LIQUIDS OR IN GASEOUS OR EXPLOSIVE ATMOSPHERES.** Motors in these tools may spark and ignite fumes.
- **STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE. DO NOT USE THE MACHINE WHEN YOU ARE TIRED OR UNDER THE INFLUENCE OF DRUGS or ALCOHOL**. A moment of inattention while operating power tools may result in injury.

Additional Safety Rules For Mitre Saws

⚠**WARNING:** Do not allow familiarity (gained from frequent use of your saw) to replace safety rules. Always remember that a careless fraction of a second is sufficient to inflict severe injury.

- **DO NOT OPERATE THIS MACHINE** until it is completely assembled and installed according to the instructions. A machine incorrectly assembled can cause serious injury.
- **OBTAIN ADVICE** from your supervisor, instructor, or another qualified person if you are not thoroughly familiar with the operation of this machine. Knowledge is safety.
- **STABILITY.** Make sure the mitre saw is placed on a secure supporting surface and does not slip or move during use. If the mobility kit is installed, raise the moveable caster(s) so saw is in its stationary position.
- **FOLLOW ALL WIRING CODES** and recommended electrical connections to prevent shock or electrocution. Protect electric supply line with at least a 15 ampere time-delay fuse or a circuit breaker."
- **MAKE CERTAIN** the blade rotates in the correct direction. The teeth on the blade should point in the direction of rotation as marked on the saw.
- **TIGHTEN ALL CLAMP HANDLES**, knobs and levers prior to operation. Loose clamps can cause parts or the workpiece to be thrown at high speeds.
- **BE SURE** all blade and blade clamps are clean, recessed sides of blade clamps are against blade and arbor screw is tightened securely. Loose or improper blade clamping may result in damage to the saw and possible personal injury.
- **ALWAYS USE A SHARP BLADE.** Check the blade to see if it runs true and is free from vibration. A dull or a vibrating blade can cause damage to the machine and/or serious injury.
- **DO NOT OPERATE ON ANYTHING OTHER THAN THE DESIGNATED VOLTAGE** for the saw. Overheating, damage to the tool and personal injury may occur.
- **DO NOT WEDGE ANYTHING AGAINST THE FAN** to hold the motor shaft. Damage to tool and possible personal injury may occur.
- **DO NOT** force cutting action. Stalling or partial stalling of motor can cause damage. To the machine or blade and/or serious injury.
- **ALLOW THE MOTOR TO COME TO FULL SPEED** prior to starting cut. Starting the cut too soon may cause damage to the machine or blade and/or serious injury.
- **NEVER CUT FERROUS METALS** (Those with any iron or steel content) or masonry. Either of these can cause the carbide tips to fly off the blade at high speeds causing serious injury.
- **DO NOT USE ABRASIVE WHEELS.** The excessive heat and abrasive particles generated by them may damage the saw and cause personal injury.
- **NEVER** have any part of your body in line with the path of the saw blade. Personal injury will occur.
- **NEVER** apply blade lubricant to a running blade. Applying lubricant could cause your hand to move into the blade resulting in serious injury.
- **DO NOT** place either hand in the blade area when the saw is connected to the power source. Inadvertent blade activation may result in serious injury.
- **DO NOT PERFORM FREE-HAND OPERATIONS** (workpiece not supported by table and fence). Hold the work firmly against the fence and table. Free-hand operations on a mitre saw could cause the workpiece to be thrown at high speeds, causing serious injury.
- **NEVER REACH AROUND** or behind the saw blade. A blade can cause serious injury.
- **DO NOT** reach underneath the saw unless it is unplugged and turned off. Contact with saw blade may cause personal injury.
- **SECURE THE MACHINE TO A STABLE SUPPORTING SURFACE.** Vibration can possibly cause the machine to slide, walk, or tip over, causing serious injury.
- **USE ONLY CROSSCUT SAW BLADES** recommended for mitre saws. For best results, use only zero-degree or negative hook angles when using carbide-tipped blades. Do not use blades with deep gullets. These can deflect and contact the guard, and can cause damage to the machine and/or serious injury.
- **USE ONLY BLADES OF THE CORRECT SIZE AND TYPE** specified for this tool to prevent damage to the machine and/or serious injury.
- **INSPECT BLADE FOR CRACKS** or other damage prior to operation. A cracked or damaged blade can come apart and pieces can be thrown at high speeds, causing serious injury. Replace cracked or damaged blades immediately.
- **CLEAN THE BLADE AND BLADE CLAMPS** prior to operation. Cleaning the blade and blade clamps allows you to check for any damage to the blade or blade clamps. A cracked or damaged blade or blade clamp can come apart and pieces can be thrown at high speeds, causing serious injury.
- **DO NOT** use lubricants or cleaners (particularly spray or aerosol) in the vicinity of the plastic guard. The polycarbonate material used in the guard is subject to attack by certain chemicals.
- **ALWAYS USE THE KERF PLATE AND REPLACE THIS PLATE WHEN DAMAGED.** Small chip accumulation under the saw may interfere with the saw blade or may cause instability of workpiece when cutting.
- **USE ONLY BLADE CLAMPS** specified for this tool to prevent damage to the machine and/or serious injury.
- **CLEAN THE MOTOR AIR SLOTS** of chips and sawdust. Clogged motor air slots can cause the machine to overheat, damaging the machine and possibly causing a short which could cause serious injury.
- **KEEP ARMS, HANDS, AND FINGERS** away from the blade to prevent severe cuts. Clamp all workpieces that would cause your hand to be within 6" of the saw blade.
- **NEVER LOCK THE SWITCH IN THE "ON"** position. Severe personal injury may result.
- **TURN OFF THE MACHINE** and allow the blade to come to a complete stop before raising the arm and prior to cleaning the blade area, removing debris in the path of the blade, before servicing or adjusting tool. A moving blade can cause serious injury.
- **PROPERLY SUPPORT LONG OR WIDE WORKPIECES**. Loss of control of the workpiece can cause injury.
- **NEVER** cross arms in front of blade while using tool. Always make a dry run (unpowered) before making a finish cut so that you can check the path of the blade or severe personal injury may result.
- **ADDITIONAL INFORMATION** regarding the safe and proper operation of power tools (i.e. a safety video) is available from the Power Tool Institute, 1300 Sumner Avenue, Cleveland, OH 44115-2851 (www.powertoolinstitute.com). Information is also available from the National Safety Council, 1121 Spring Lake Drive, Itasca, IL 60143-3201. Please refer to the American National Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor OSHA 1910.213 Regulations.

⚠**CAUTION:** Do not connect unit to electrical power source until complete instructions are read and understood.

⚠**WARNING:** NEVER MAKE ANY CUT UNLESS THE MATERIAL IS SECURED ON THE TABLE AND AGAINST THE FENCE.

⚠**WARNING:** Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use AS/NZS1716 approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

⚠**WARNING: ALWAYS wear approved protective safety equipment complying with the following standards:**

- Eye protection: AS/NZS1337 Eye Protectors for Industrial Applications;
- Hearing protection: AS/NZS1270 Acoustics – Hearing Protection;
- Respiratory protection: AS/NZS1716 Respiratory Protective Devices.

⚠**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.**

For your convenience and safety, the following warning labels are on your mitre saw.

ON MOTOR HOUSING:

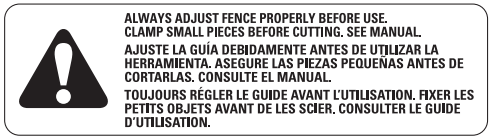
⚠WARNING: FOR YOUR OWN SAFETY, READ INSTRUCTION

MANUAL BEFORE OPERATING SAW.

WHEN SERVICING, USE ONLY IDENTICAL REPLACEMENT PARTS.

DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS.

ALWAYS WEAR EYE PROTECTION.



ON MOVING FENCES:

ALWAYS ADJUST FENCE PROPERLY BEFORE USE. Clamp small pieces before cutting. See manual.

ON GUARD: DANGER – KEEP AWAY FROM BLADE.

ON UPPER GUARD: PROPERLY SECURE BRACKET WITH BOTH SCREWS BEFORE USE.

ON TABLE: (2 PLACES)

ALWAYS TIGHTEN ADJUSTMENT KNOBS BEFORE USE.

KEEP HANDS 6" FROM PATH OF SAW BLADE.

NEVER PERFORM ANY OPERATION FREEHAND.

NEVER CROSS ARMS IN FRONT OF BLADE.

THINK! YOU CAN PREVENT ACCIDENTS.

DO NOT OPERATE SAW WITHOUT GUARDS IN PLACE.

TURN OFF TOOL, KEEP SAW HEAD DOWN AND WAIT FOR SAW TO STOP BEFORE MOVING HANDS, WORKPIECE OR CHANGING SETTINGS.

UNPLUG TOOL BEFORE CHANGING BLADE, MOVING OR SERVICING UNIT.

Electrical Connection

The electric motor has been designed for one voltage only. Always check that the power supply corresponds to the voltage on the rating plate. 230 V AC means your tool will operate on alternating current. As little as 10% lower voltage can cause loss of power and can result in overheating. All DEWALT tools are factory tested; if this tool does not operate, check the power supply. Your DEWALT tool is double insulated, therefore no earth wire is required.

- **Young children and the infirm.** This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with this appliance.
- **Replacement of the supply cord.** If the supply cord is damaged, it must be replaced by the manufacturer or an authorised DEWALT Service Centre in order to avoid a hazard.

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 Stanley Black & Decker, 82 Taryn Drive, Epping, VIC 3076 Australia or call 1800 338 002 or (NZ) 0800 339 258.

Optional Accessories

SAW BLADES: ALWAYS USE 216 mm (8.5") SAW BLADES WITH 30 mm (5/8") ARBOR HOLES. SPEED RATING MUST BE AT LEAST 6500 RPM. Never use a smaller diameter blade. It will not be guarded properly. Use crosscut blades only! Do not use blades designed for ripping, combination blades or blades with hook angles in excess of 5˚.

Type of blade	Blade dimensions (diameter x bore x no. of teeth)	Usage
DT4222 series 40	216 x 30 x 24	For general purpose, ripping and cross-cutting of wood and plastics
DT4320 series 60	216 x 30 x 48	ATB for fine cutting of manmade and natural wood
DT4350 series 60	216 x 30 x 60	TCG for extra fine cutting of manmade and natural wood

Package Contents

Check the contents of your mitre saw carton to make sure that you have received all parts. In addition to this instruction manual, the carton should contain:

1 Partly assembled machine
2 Hex key 4/6 mm
1 216 mm (8.5") TCT saw blade
1 Instruction manual
1 Exploded drawing

Specifications

CAPACITY OF CUT

50º mitre right and left
48º bevel left
Compound mitre 45º bevel

0º mitre	Max. Height 60 mm (2.36")	Result Width 270 mm (10.6")
45º mitre	Max. Height 60 mm (2.36")	Result Width 190 mm (7.5")
45º bevel - Left	Max. Height 48 mm (1.9")	Result Width 270 mm (10.6")

DRIVE

230 Volt Motor	Automatic Electric Brake
1800 Watts In	Cut Helical Gears
6000 RPM	Roller Bearings
Multi-V Belt	Carbide Blade

Description (Fig. 1-6, 9)

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

INTENDED USE

Your cross-cut mitre saw has been designed for professional cutting of wood, wood products and plastics. It will perform the sawing operations of cross-cutting, bevelling and mitring easily, accurately and safely.

DO NOT use under wet conditions or in presence of flammable liquids or gases.

This cross-cut mitre saw is a professional power tool. **DO NOT** let children come into contact with the tool. Supervision is required when inexperienced operators use this tool.

A. On/off switch
B. Guard lock up release lever
C. Carrying handle
D. Fixed upper guard
E. Outer flange
F. Blade bolt
G. Lower blade guard
H. Saw blade
I. Sliding fence lock knob
J. Fixed table
K. kerf plate
L. Mitre arm
M. Mitre latch
N. Rotating table/Mitre arm
O. Mitre scale
P. Sliding fence
Q. Dust extraction nozzle (optional accessory)
R. Traverse lock
S. Guard lock up hook
T. Bevel clamp handle

FIG. 1

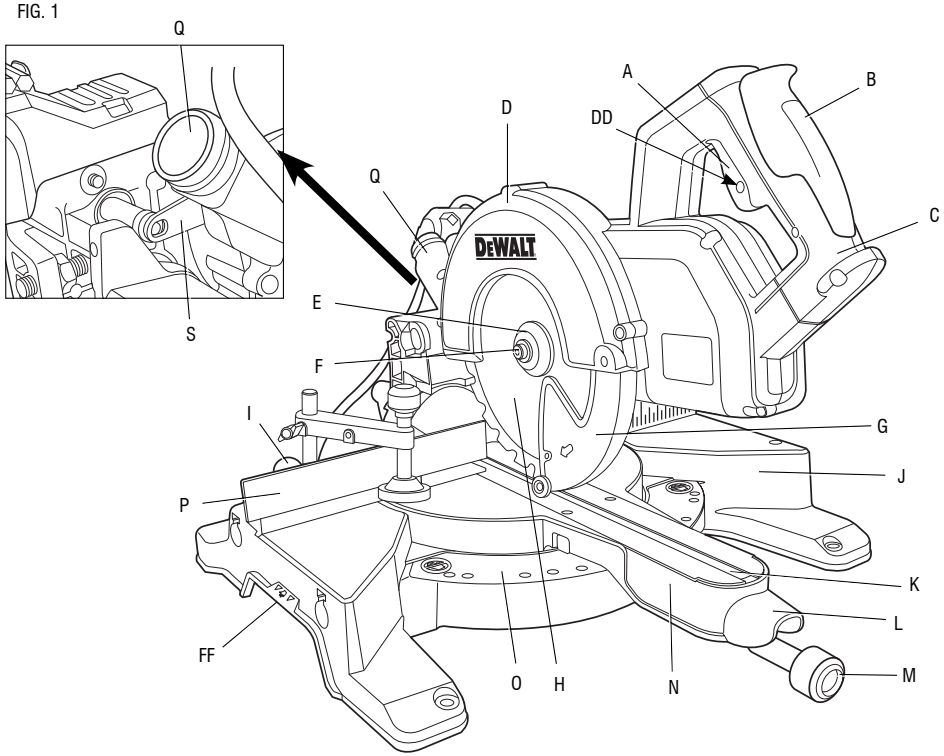
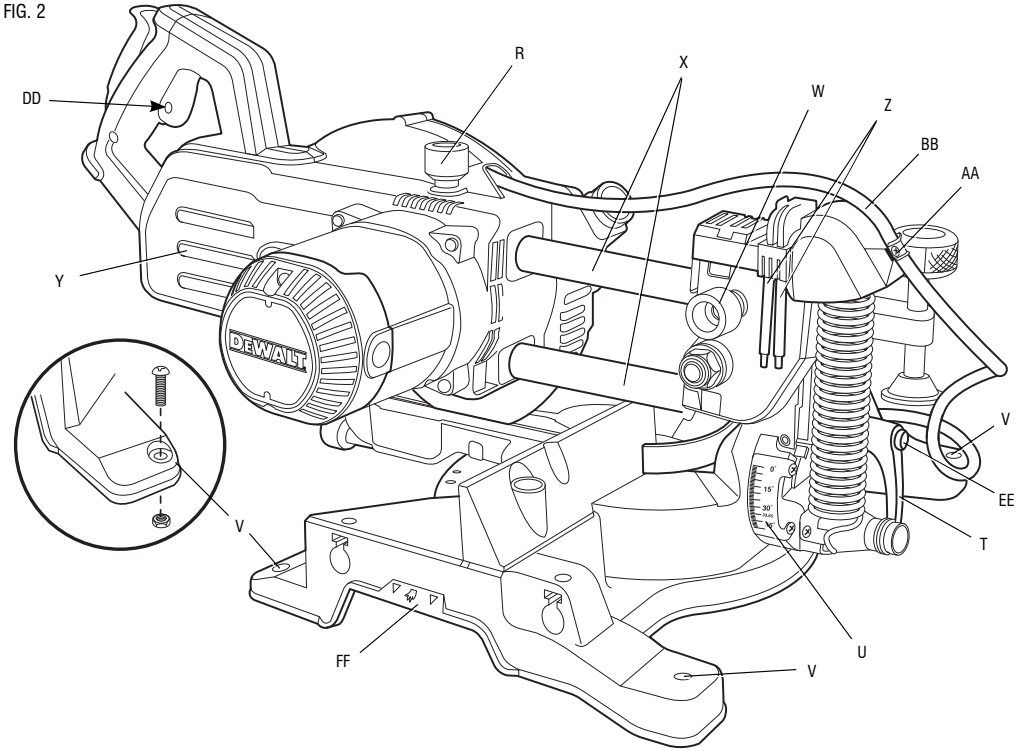


FIG. 2



U. Bevel scale
V. Bench mounting holes
W. Lock down button
X. Traverse bars
Y. Saw head
Z. Hex keys
AA. Cable clamp
BB. Cable
DD. Padlock hole
EE. Override button
FF. Carrying handle (left and right)
GG. Inner flange

OPTIONAL ACCESSORIES (FIG. 3–6)

HH. Table end plate
II. Support guide rails
JJ. Material support plate
KK. Material clamp
LL. Swivelling stop
MM. Adjustable stand 760 mm (max. height)
NN. Legstand
OO. Length stop for short workpieces (to be used with guide rails [II])
PP. Roller table
QQ. Dust extraction tubes
RR. Three-way connector

FIG. 3

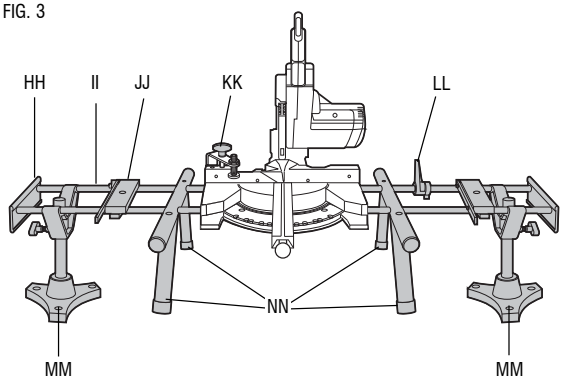


FIG. 4

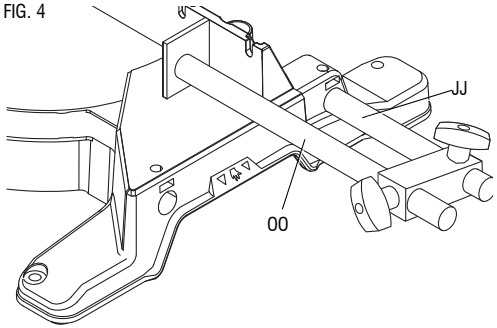
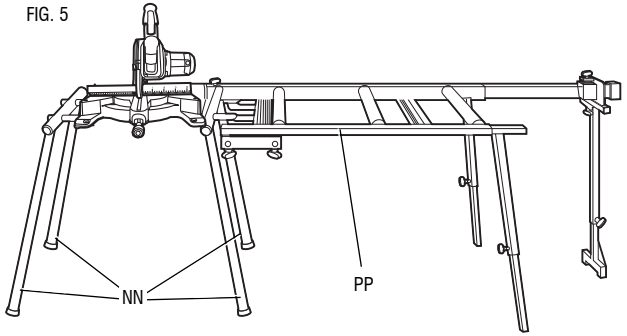


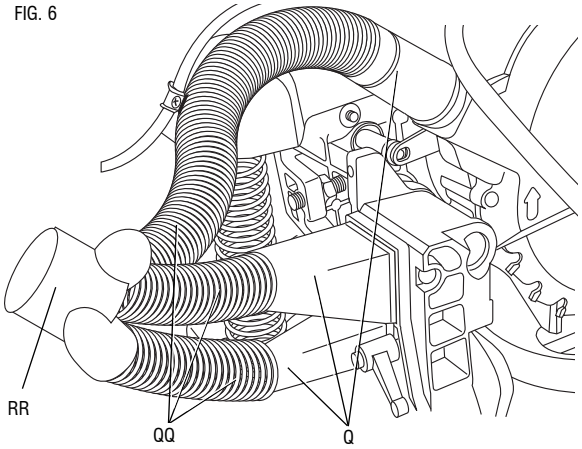
FIG. 5



ASSEMBLY

⚠WARNING: 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.

FIG. 6



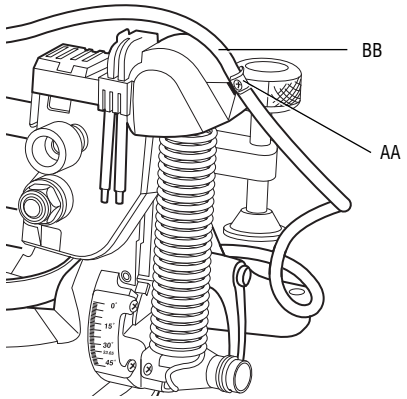
Unpacking

The motor and guards are already assembled onto the base.

Cable Clamp (Fig. 7)

Insert the cable (BB) into the cable clamp (AA). Allow enough cable for the saw head to travel, then tighten the clamp by means of the screw.

FIG. 7



Bench Mounting (Fig. 2)

1. Holes (V) are provided in all four feet to facilitate bench mounting. The holes are provided to accommodate different sizes of bolts. Use either hole; it is not necessary to use both. Always mount your saw firmly to prevent movement.

   To enhance the portability, the tool can be mounted to a piece of 12.5 mm or thicker plywood which can then be clamped to your work support or moved to other job sites and reclamped.
2. When mounting your saw to a piece of plywood, make sure that the mounting screws do not protrude from the bottom of the wood. The plywood must sit flush on the work support. When clamping the saw to any work surface, clamp only on the clamping bosses where the mounting screw holes are located. Clamping at any other point will interfere with the proper operation of the saw.
3. To prevent binding and inaccuracy, be sure the mounting surface is not warped or otherwise uneven. If the saw rocks on the surface, place a thin piece of material under one saw foot until the saw is firm on the mounting surface.

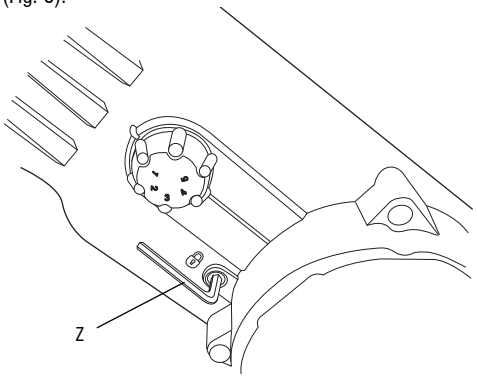
Mounting the Saw Blade (Fig. 8–10)

⚠WARNING: 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.

⚠WARNING: The teeth of a new blade are very sharp and can be dangerous.

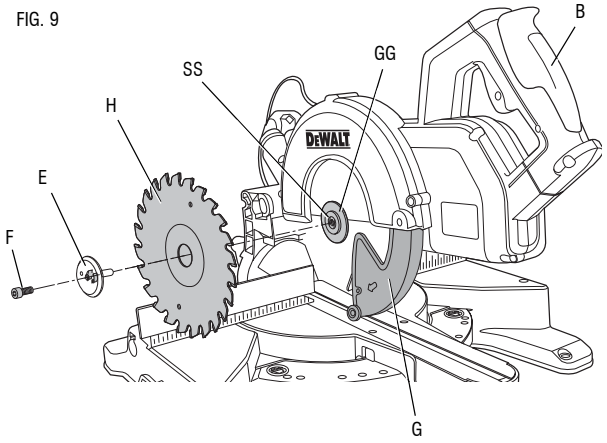
1. Insert the 6 mm hex key (Z) into the opposite location of the blade shaft and hold it (Fig. 8).

FIG. 8



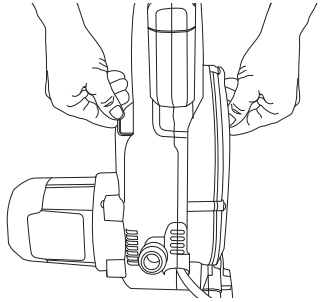
2. Loosen the blade bolt (F) by turning clockwise. Remove the blade bolt (F) and the outer flange (E).

FIG. 9



3. Press the lower guard lock up release lever (B) to raise the lower blade guard (G) and remove the saw blade (H).
4. Install the new saw blade onto the shoulder provided on the inner flange (GG) making sure that the teeth at the bottom edge of the blade are pointing towards the fence (away from the operator).
5. Replace the outer flange (E), making sure that the location lugs (SS) are engaged correctly, one on each side of the motor shaft.
6. Tighten the blade bolt (F) by turning anti-clockwise while holding the 6 mm hex key (Z) engaged with your other hand (Fig. 10).

FIG. 10



ADJUSTMENTS

⚠WARNING: 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.

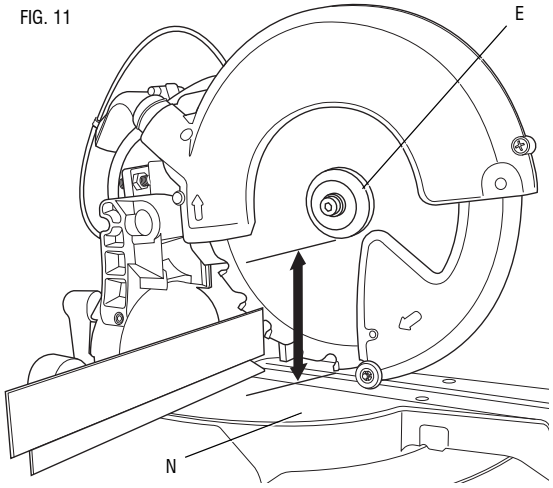
Your mitre saw was accurately adjusted at the factory. If readjustment due to shipping and handling or any other reason is required, follow the steps below to adjust your saw. Once made, these adjustments should remain accurate.

Adjusting the Traverse Bars for Constant Cutting Depth (Fig. 1, 2, 11, 12)

The blade must run at a constant cutting depth along the full length of the table and must not touch the fixed table at the rear of the slot or at the front of the rotating arm. To achieve this, the traverse arms must be perfectly parallel to the table when the saw head is fully depressed.

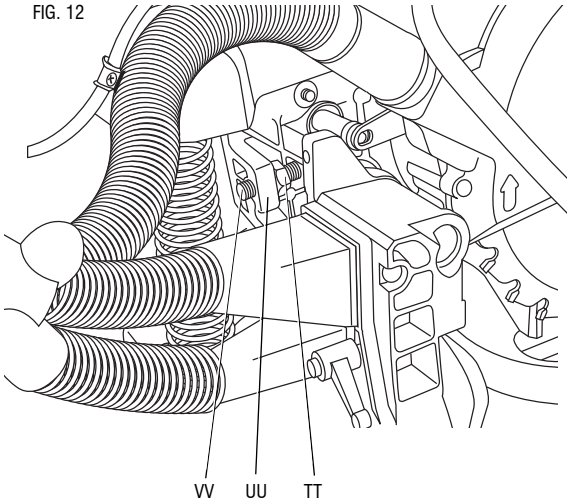
1. Press the lower guard lock up release lever (B) (Fig. 1).
2. Press the saw head fully to the rear position and measure the height from the rotating table (N) to the bottom of the outer flange (E) (Fig. 11).

FIG. 11



3. Turn the saw head traverse lock (R) (Fig. 2).
4. Keeping the saw head fully depressed, pull the head to the end of its travel.
5. Measure the height indicated in Figure 11 again. Both values should be identical.
6. If adjustment is required, proceed as follows (Fig.12):

FIG. 12



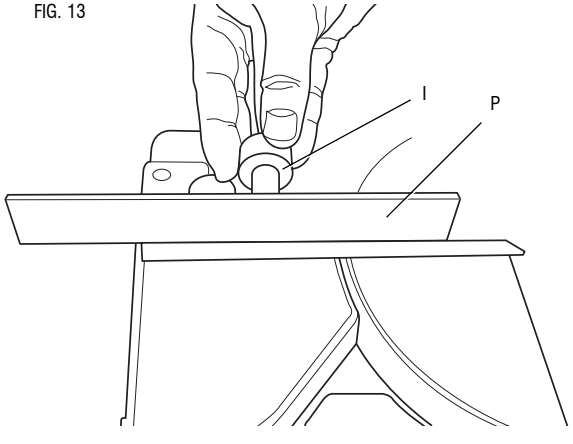
a. Loosen the locknut (TT) in the bracket (UU) under the upper dust extraction nozzle (QQ) and adjust the screw (VV) as required, proceeding in small steps.
b. Tighten the locknut (TT).

⚠**WARNING:** Always check that the blade does not touch the table at the rear of the slot or at the front of the rotating arm at 90° vertical and 45° bevel positions. Do not switch on before having checked this!

Adjusting the Fence (Fig. 13)

Turn the sliding fence lock knob (I) anti-clockwise to loosen. Move the sliding fence (P) to a position that avoids the blade cuts it,then tighten the fence lock knob by turning clockwise.

FIG. 13



Checking and Adjusting the Blade to the Fence (Fig. 2, 14, 15)

1. Slacken the mitre latch (M).
2. Place your thumb on the mitre arm (L) and squeeze the mitre latch (M) to release the rotating table/mitre arm (N).
3. Swing the mitre arm until the latch locates it at the 0° mitre position.
4. Pull down the head and lock it in this position using the lock down button (W).
5. Check that the two 0° markings (WW) on the mitre scale (O) are just visible.
6. Place a square (XX) against the left side of the fence (P) and blade (H).

⚠**WARNING:** Do not touch the tips of the blade teeth with the square.

7. If adjustment is required, proceed as follows:
   a. Loosen the screws (YY) and move the scale/mitre arm assembly left or right until the blade is at 90° to the fence as measured with the square (Fig. 14).
   b. Retighten the screws (YY).

FIG. 14

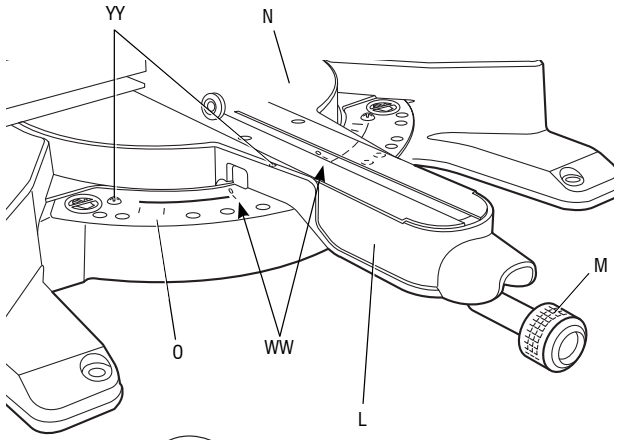
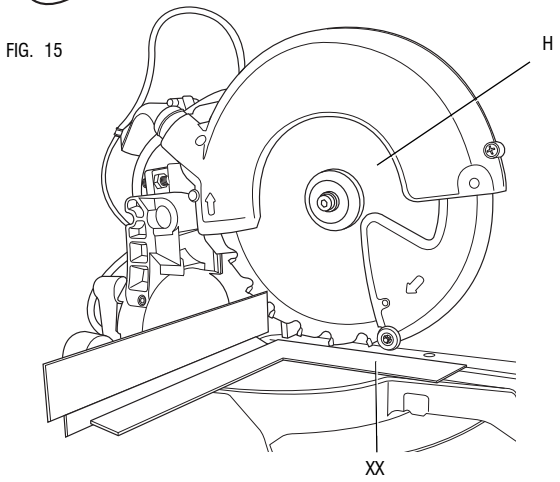


FIG. 15



Checking and Adjusting the Blade to the Table (Fig. 16–19)

1. Loosen the bevel clamp handle (T) (Fig. 16).
2. Press the saw head to the right to ensure it is fully vertical and tighten the bevel clamp handle.
3. Place a set square (XX) on the table and up against the blade (H) (Fig. 17).

⚠**WARNING:** Do not touch the tips of the blade teeth with the square.

4. If adjustment is required, proceed as follows:
   a. Loosen the bevel clamp handle (T) and turn the vertical position adjustment stop screw (ZZ) in or out until the blade is at 90° to the table as measured with the square.
   b. If the bevel pointer (A1) does not indicate zero on the bevel scale (U), loosen the screws (A2) that secure the scale and move the scale as necessary.

FIG. 16

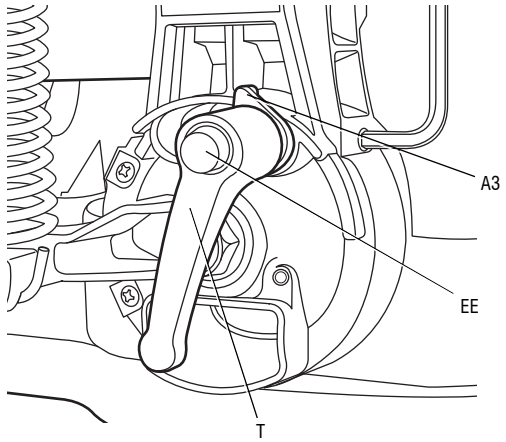
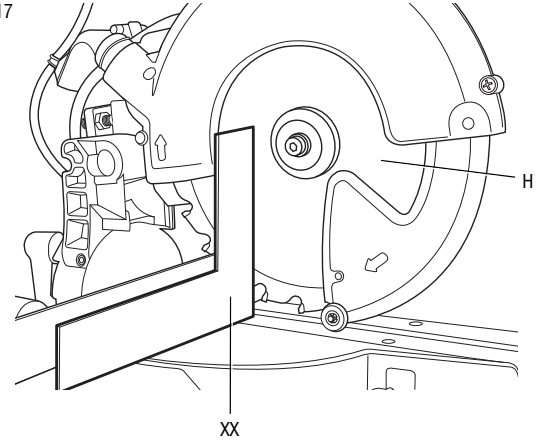


FIG. 17



Checking and Adjusting the Bevel Angle (Fig. 1, 18, 19)

The bevel override allows the max. bevel angle to be set at 45° or 48° as required.

Left = 45°

Right = 48°

1. Make sure the override knob (A3) is located in the left position.
2. Loosen the bevel clamp handle (T) and move the saw head to the left.
3. This is the 45° bevel position.
4. If adjustment is required, turn the stopscrew (A4) in or out as necessary until the pointer (A1) indicates 45°.

⚠**WARNING:** The guide grooves can become clogged with sawdust. Use a stick or some low pressure air to clear the guide grooves.

FIG. 18

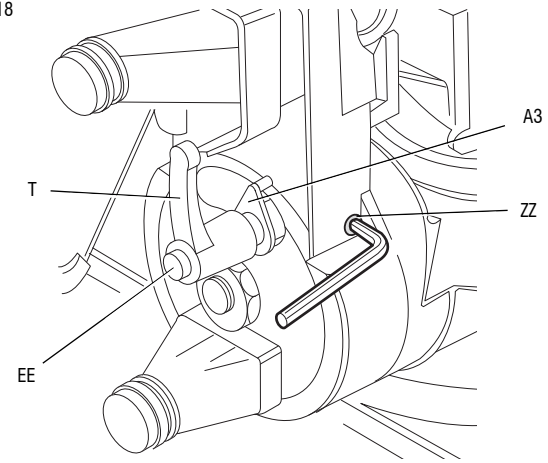
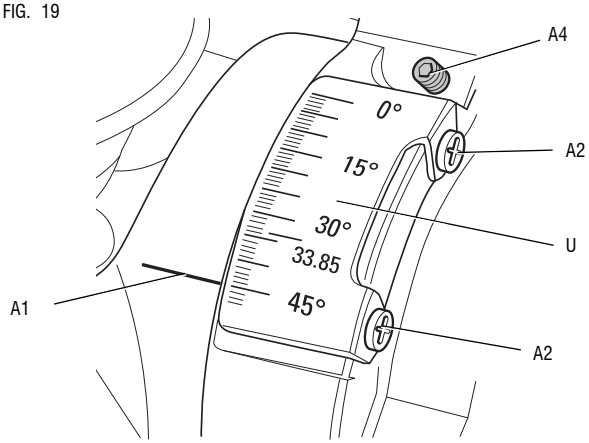


FIG. 19



Brushes

⚠**WARNING:** To reduce the risk of serious personal injury, turn off the tool and disconnect it from the power source before attempting to move it, change accessories or make any adjustments accept as written in laser adjustment instructions.

Inspect carbon brushes regularly by unplugging tool, removing the motor end cap, lift the brush spring and withdraw 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 its removal. Carbon brushes have varying symbols stamped into their sides, and if the brush is worn down to approximately 12.7 mm (1/2"), the spring will no longer exert pressure and they must be replaced. Use only identical DEWalt brushes. Use of the correct grade of brush is essential for proper operation of electric brake. New brush assemblies are available at DEWALT service centers. The tool should be allowed to "run in" (run at no load) for 10 minutes before use to seat new brushes. The electric brake may be erratic in operation until the brushes are properly seated (worn in). Always replace the brush inspection cap after inspection or servicing the brushes.

While "running in" DO NOT TIE, TAPE, OR OTHERWISE LOCK THE TRIGGER SWITCH ON. HOLD BY HAND ONLY.

OPERATION

⚠**WARNING: 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.

Instructions for Use

⚠**WARNING:** Always observe the safety instructions and applicable regulations.

We recommend the use of a residual current device with a residual current rating of 30mA or less.

⚠**WARNING:**

- Install the appropriate saw blade. Do not use excessively worn blades. The maximum rotation speed of the tool must not exceed that of thesaw blade.
- Do not attempt to cut excessively small pieces.
- Allow the blade to cut freely. Do not force.
- Allow the motor to reach full speed before cutting.
- Make sure all locking knobs and clamp handles are tight.
- Secure the workpiece.
- Although this saw will cut wood and plastic materials,these operating instructions refer to the cutting of wood only. The sameguide-lines apply to the other materials. Do not cut ferrous (iron and steel) materials or masonry with this saw! Do not use any abrasive discs!
- Make sure to use the kerf plate. Do not operate the machine if the kerf slot is wider than 10 mm.
- Placing the workpiece on a piece of wood will increase the capacities to 300 mm.

Switching On and Off (Fig. 1)

A hole (DD) is provided in the on/off switch (A) for insertion of a padlock to lock the tool.

1. To run the tool, press the on/off switch (A).
2. To stop the tool, release the switch.

Body and Hand Position

Proper positioning of your body and hands when operating the mitre saw will make cutting easier, more accurate and safer.

⚠**WARNING:**

- Never place your hands near the cutting area.
- Place your hands no closer than 150 mm (6") from the blade.
- Hold the workpiece tightly to the table and the fence when cutting. Keep your hands in position until the switch has been released and the blade has completely stopped.
- Always make dry runs (without power) before finish cuts so that you can check the path of the blade.
- Do not cross your hands.
- Keep both feet firmly on the floor and maintain proper balance.
- As you move the saw arm left and right, follow it and stand slightly to the side of the saw blade.

Basic Saw Cuts

VERTICAL STRAIGHT CROSS CUT (FIG. 1, 20)

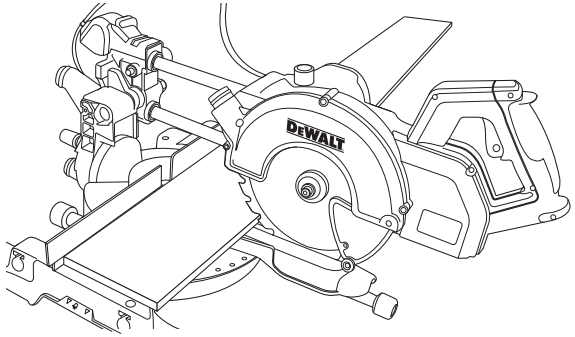
NOTE: Use 216 mm (8.5") saw blades with 30 mm arbor holes to obtain the desired cutting capacities.

1. Slacken the mitre latch (M) and subsequently lift it up.
2. Engage the mitre latch (M) at the 0° position and fasten the mitre latch.
3. Place the wood to be cut against the fence (P).
4. Take hold of the carrying handle (C) and press the guard lock up release lever (B) to release the guard. Press the trigger switch (A) to start the motor. It is recommended to start the cut near the fence.
5. Depress the head to allow the blade to cut through the timber and enter the plastic kerf plate (K).
6. When the head is fully depressed, slowly pull it across to complete the cut.
7. After completing the cut, release the switch and wait for the saw blade to come to a complete standstill before returning the head to its upper rest position.

⚠**WARNING:**

- For some types of plastic profiles, it is advisable to follow the sequence in reverse order.
- The lower blade guard is designed to close quickly when the lever (B) is released. If it does not close within 1 second, have the saw serviced by an authorised DEWALT repair agent.

FIG. 20



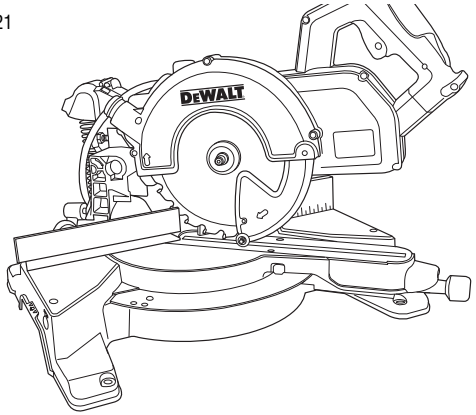
VERTICAL MITRE CROSS-CUT (FIG. 21)

1. Squeeze the mitre latch (M). Move the arm left or right to the required angle.
2. The mitre latch will automatically locate at 0°, 15°, 22.5°, 31.62°, 45° and 50° both left and right. If any intermediate angle is required hold the head firmly and lock by fastening the mitre latch.
3. Always ensure that the mitre lock lever is locked tightly before cutting.
4. Proceed as for a vertical straight cross-cut.

⚠**WARNING:** When mitring the end of a piece of wood with a small off-cut, position the wood to ensure that the off-cut is to the side of the blade with the greater angle to the fence, i.e.:

left mitre, off-cut to the right
right mitre, off-cut to the left

FIG. 21

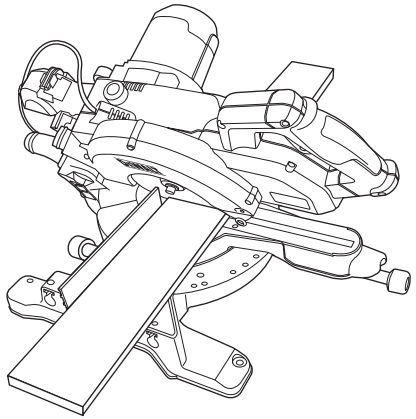


BEVEL CROSS-CUTS (FIG. 18, 22)

Bevel angles can be set from 0° to 48° to the left. Bevels up to 45° can be cut with the mitre arm set between zero and a maximum of 45° mitre position right or left.

1. Loosen the bevel clamp handle (T) and set the bevel as desired.
2. Set the override button (EE) if required.
3. Hold the head firmly and do not allow it to fall.
4. Tighten the bevel clamp handle (T) firmly.
5. Proceed as for a vertical straight cross-cut.

FIG. 22



Quality of Cut

The smoothness of any cut depends on a number of variables, i.e. the material being cut. When smoothest cuts are desired for moulding andother precision work, a sharp (60-tooth carbide) blade and a slower, even cutting rate will produce the desired results.

⚠**WARNING:** Ensure that the material does not creep while cutting; clamp it securely in place. Always let the blade come to a full stop before raising the arm. If small fibres of wood still split out at the rear of the workpiece, stick a piece of masking tape on the wood where the cut will be made. Saw through the tape and carefully remove tape when finished.

Clamping the Workpiece (Fig. 3)

1. Whenever possible, clamp the wood to the saw.
2. For best results use the material clamp (KK) made for use with your saw. Clamp the workpiece to the fence whenever possible. You can clamp to either side of the saw blade; remember to position your clamp against a solid, flat surface of fence.

⚠**WARNING:** Always use a material clamp when cutting small pieces.

Compound Mitre (Fig. 23, 24)

This cut is a combination of a mitre and a bevel cut. This is the type of cut used to make frames or boxes with slanting sides like the one shown in Figure 23.

FIG. 23

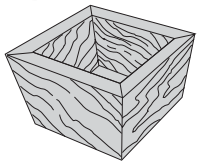
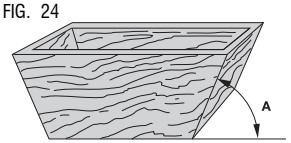


FIG. 24



⚠**WARNING:** If the cutting angle varies from cut to cut, check that the bevel clamp handle and the mitre clamping knob are securely tightened. These must be tightened after making any changes in bevel or mitre.

- The chart on page 11 will assist you in selecting the proper bevel and mitre settings for common compound mitre cuts.
- To use the chart, select the desired angle "A" (Fig. 24) of your project and locate that angle on the appropriate arc in the chart. From that point follow the chart straight down to find the correct bevel angle and straight across to find the correct mitre angle.

1. Set your saw to the prescribed angles and make a few trial cuts.
2. Practice fitting the cut pieces together.

   Example: To make a four-sided box with 25° exterior angles (angle "A") (Fig. 24), use the upper right arc. Find 25° on the arc scale. Follow the horizontal intersecting line to either side to get the mitre angle setting on the saw (23°). Likewise follow the vertical intersecting line to the top or bottom to get the bevel angle setting on the saw (40°). Always try cuts on a few scrap pieces of wood to verify the settings on the saw.

⚠**WARNING:** Never exceed the compound mitre limits of 45° bevel with 45° left or right mitre.

Support for Short and Long Pieces (Fig. 3)

CUTTING SHORT MATERIAL

It is advisable to use the length stop (OO) for short workpieces both for batch sawing and for short individual workpieces of different lengths. The length stop can only be used in conjunction with a pair of optional guide rails (II).

CUTTING LARGE MATERIAL

⚠**WARNING: To reduce the risk of injury,** always support long workpieces. Figure 3 shows the ideal configuration for sawing long workpieces when the saw is used free-standing (all items available as an option).

These items (except the legstand and the material clamp) are required both on the infeed and the outfeed side:

- –Legstand (NN) (supplied with mounting instructions).
- –Guide rails (500 or 1,000 mm) (II).
- –Stands (MM) to support the guide rails. Do not use the stands to support the machine! The height of the stands is adjustable.
- –Material support plates (JJ).
- –Table end plate (HH) for supporting the rails (also when working on an existing bench).
- –Material clamp (KK).
- –Swivelling stop (LL).

1. Place your saw on the legstand and fit the guide rails.
2. Firmly screw the material support plates (JJ) to the guide rails (II).
3. The material clamp (KK) now functions as a length stop.
4. Install the table end plates (HH).
5. Install the swivelling stop (LL) to the rear rail.
6. Use the swivelling stop (LL) to adjust the length of medium and long workpieces. It can be adjusted sideways or swung out of the way when not in use.

Dust Extraction (Fig. 1, 6)

⚠**WARNING:** Whenever possible, connect a dust extraction device designed in accordance with the relevant regulations regarding dust emission.

Connect a dust collection device designed in accordance with the relevant regulations. The air velocity of externally connected systems shall be 20m/s +/- 2 m/s. Velocity to be measured in the connection tube at the point of connection, with the tool connected but not running.

A separate dust kit is available as an option (DE7777).

1. Fit the dust extraction tubes (QQ) to the nozzles (Q); the longer hose to upper nozzle.
2. Connect the hoses to the three-way connector (RR).

Transporting (Fig. 1)

⚠**WARNING:** In order to conveniently carry the mitre saw, the base is provided with two hand indentations (FF).

1. To transport the saw, set the bevel and mitre positions to 0°.
2. Press the lower guard lock up release lever (B) (Fig.1).
3. Press the head down and press the lock down button (W) (Fig. 2).
4. Bring the saw blade to rest position and press the traverse lock (R).

MAINTENANCE

⚠**WARNING: 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.

⚠**WARNING:** If the saw blade is worn replace it with a new sharp blade.

DO NOT use lubricants or cleaners (particularly spray or aerosol) in the vicinity of the plastic guard. The polycarbonate material used in the guard is subject to attack by certain chemicals.

1. All bearings are sealed. They are lubricated for life and need no further maintenance.

2. Periodically clean all dust and wood chips from around AND UNDER the base and the rotary table. Even though slots are provided to allow debris to pass through, some dust will accumulate.
3. The brushes are designed to give you several years of use. If they ever need replacement follow the instructions on page 7 or return the tool to the nearest service center for repair. Service center locations are packed with your tool.

USING THE ROLLER TABLE (FIG. 3–5)

The roller table (PP) makes the handling of large and long pieces of wood very easy (Fig. 5). It can be connected either to the left or to the right of the machine. The roller table requires the use of the optional legstand (Fig. 3).

⚠**WARNING:** Assemble the roller table following the instructions supplied with the legstand.

- Replace the short support bars provided with the legstand with the irregular rails from the table on the side the table is to be used.
- Follow all instructions provided with the roller table.

Service Information

Please have the following information available for all service calls:

Model Number _____ Serial Number _____

Date and Place of Purchase _____

Repairs

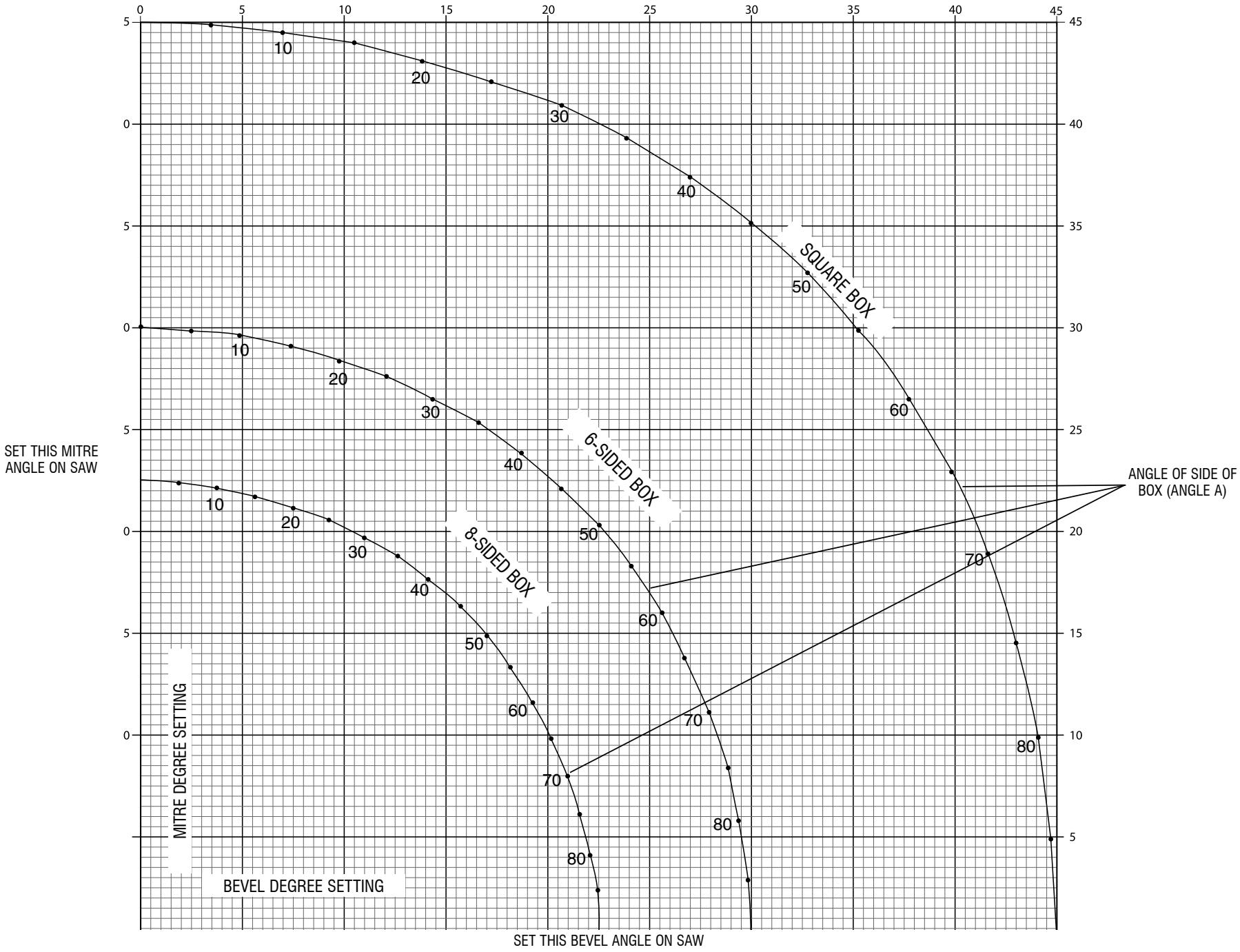
To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustments should be performed by a DEWALT factory service center, a DEWALT authorised service center or other qualified service personnel. Always use identical replacement parts.

TROUBLESHOOTING GUIDE

⚠**WARNING: TO REDUCE THE RISK OF INJURY, BE SURE TO FOLLOW SAFETY RULES AND INSTRUCTIONS**

TROUBLE!	*WHAT'S WRONG?*	*WHAT TO DO*
SAW WILL NOT START	1. Saw not plugged in	1. Plug in saw.
	2. Fuse blown or circuit breaker tripped	2. Replace fuse or reset circuit breaker.
	3. Cord damaged	3. Have cord replaced by authorised service center.
	4. Brushes worn out	4. Have brushes replaced by authorised service center or replace them yourself as instructed in ***Brushes*** paragraph under **Adjustments**.
SAW MAKES UNSATISFACTORY CUTS	1. Dull blade	1. Replace blade, refer to ***Mounting the Saw Blade*** paragraph under **Assembly.**
	2. Blade mounted backwards	2. Turn blade around, refer to ***Mounting the Saw Blade*** paragraph under **Assembly.**
	3. Gum or pitch on blade	3. Remove blade and clean with turpentine and coarse steel wool or household oven cleaner.
	4. Incorrect blade for work being done	4. Change the blade type, refer to ***Saw Blades*** under **Optional Accessories.**
BLADE DOES NOT COME UP TO SPEED	1. Extension cord too light or too long	1. Replace with adequate size cord, refer to ***Use Proper Extension Cord*** under **Safety Instructions For All Tools.**
	2. Low house voltage	2. Contact your electric company.
MACHINE VIBRATES EXCESSIVELY	1. Saw not mounted securely to stand or work bench	1. Tighten all mounting hardware, refer to ***Bench Mounting*** paragraph under **Assembly.**
	2. Stand or bench on uneven floor	2. Reposition on flat level surface, refer to ***Bench Mounting*** paragraph under **Assembly**.
	3. Damaged saw blade	3. Replace blade, refer to ***Mounting the Saw Blade*** paragraph under **Assembly.**
DOES NOT MAKE ACCURATE MITRE CUTS	1. Mitre scale not adjusted correctly	1. Check and adjust, refer to ***Checking and Adjusting the Blade to the Fence*** paragraph under **Adjustments**.
	2. Blade is not square to fence	2. Check and adjust, refer to ***Checking and Adjusting the Blade to the Fence*** paragraph under **Adjustments**.
	3. Blade is not perpendicular to table	3. Check and adjust fence, refer to ***Checking and Adjusting the Blade to the Table*** paragraph under **Adjustments**..
	4. Workpiece moving	4. Clamp workpiece securely to fence or glue 120 grit sandpaper to fence with rubber cement.

TABLE 1: COMPOUND MITRE CUT (POSITION WOOD WITH BROAD FLAT SIDE ON THE TABLE AND THE NARROW EDGE AGAINST THE FENCE)



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