

IMPORTANT:
Read Before Using

IMPORTANT :
Lire avant usage

IMPORTANTE:
Leer antes de usar



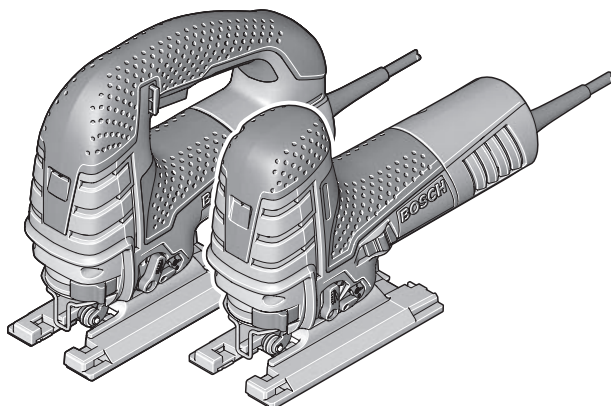
Operating/Safety Instructions

Consignes de fonctionnement/sécurité

Instrucciones de funcionamiento y seguridad

JS470E

JS470EB



BOSCH

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Version française
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General Power Tool Safety Warnings

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

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

The term “power tool” in all of the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

Keep work area clean and well lit. Cluttered or dark areas invite accidents.

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.

Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

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.

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.

Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

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.

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.

If operating the power tool in damp locations is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected supply. Use of an GFCI reduce the risk of electric shock.

Personal safety

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.

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.

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 energizing power tools that have the switch on invites accidents.

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.

Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.

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.

Power tool use and care

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.

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.

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.

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.

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.

Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

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.

Service

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 Rules for Jigsaws

Hold power tools by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.

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.

Do not drill, fasten or break into existing walls or other blind areas where electrical wiring may exist. If this situation is unavoidable, disconnect all fuses or circuit breakers feeding this worksite.

Never leave the trigger locked "ON". Before plugging the tool in, check that the trigger lock is "OFF". Accidental start-ups could cause injury.

Be aware of the location and setting of the switch "Lock-ON" button. If the switch is locked "ON" during the use, be ready for emergency situations to switch it "OFF", by first pulling the trigger then immediately releasing it without pressing the "Lock-ON" button.

Keep hands away from cutting area. Do not reach under the material being cut. The proximity of the blade to your hand is hidden from your sight.

Keep hands from between the gear housing and saw blade holder. The reciprocating blade holder can pinch your fingers.

Do not use dull or damaged blades. Bent blade can break easily or cause kickback.

Before starting to cut, turn tool "ON" and allow the blade to come to full speed. Tool can chatter or vibrate if blade speed is too slow at beginning of cut and possibly kickback.

Always wear safety goggles or eye protection when using this tool. Use a dust mask or respirator for applications which generate dust.

Secure material before cutting. Never hold it in your hand or across legs. Small or thin material may flex or vibrate with the blade, causing loss of control.

Make certain all adjusting screws and the blade holder are tight before making a cut. Loose adjusting screws and holders

can cause the tool or blade to slip and loss of control may result.

When removing the blade from the tool avoid contact with skin and use proper protective gloves when grasping the

blade or accessory. Accessories may be hot after prolonged use.

If your tool is equipped with a dust bag, empty it frequently and after completion of sawing. Spontaneous combustion, may in

Additional Safety Warnings

time, result from mixture of oil or water with dust particles. Be extremely careful of dust disposal, materials in fine particle form may be explosive. Do not throw contents on an open fire.


GFCI and personal protection devices like electrician's rubber gloves and footwear will further enhance your personal safety.

Do not use AC only rated tools with a DC power supply. While the tool may appear to work, the electrical components of the AC rated tool are likely to fail and create a hazard to the operator.

Keep handles dry, clean and free from oil and grease. Slippery hands cannot safely control the power tool.

Develop a periodic maintenance schedule for your tool. When cleaning a tool be careful not to disassemble any portion of the tool since internal wires may be misplaced or pinched or safety guard return springs may be improperly mounted. Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia, etc. may damage plastic parts.

Risk of injury to user. The power cord must only be serviced by a Bosch Factory Service Center or Authorized Bosch Service Station.













 **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.

Symbols

IMPORTANT: Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

Symbol	Name	Designation/Explanation
V	Volts	Voltage (potential)
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
kg	Kilograms	Weight
min	Minutes	Time
s	Seconds	Time
Ø	Diameter	Size of drill bits, grinding wheels, etc.
n_0	No load speed	Rotational speed, at no load
n	Rated speed	Manufacturers rated speed
.../min	Revolutions or reciprocation per minute	Revolutions, strokes, surface speed, orbits etc. per minute
0	Off position	Zero speed, zero torque...
1, 2, 3, ... I, II, III,	Selector settings	Speed, torque or position settings. Higher number means greater speed
	Infinitely variable selector with off	Speed is increasing from 0 setting
	Arrow	Action in the direction of arrow
	Alternating current	Type or a characteristic of current
	Direct current	Type or a characteristic of current
	Alternating or direct current	Type or a characteristic of current
	Class II construction	Designates Double Insulated Construction tools.
	Earthing terminal	Grounding terminal
	Warning symbol	Alerts user to warning messages
	Li-ion RBRC seal	Designates Li-ion battery recycling program
	Ni-Cad RBRC seal	Designates Ni-Cad battery recycling program
	Read manual symbol	Alerts user to read manual
	Wear eye protection symbol	Alerts user to wear eye protection

Symbols (continued)

IMPORTANT: Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.



This symbol designates that this tool is listed by Underwriters Laboratories.



This symbol designates that this tool is listed by Underwriters Laboratories, to United States and Canadian Standards.



This symbol designates that this tool is listed by the Canadian Standards Association.



This symbol designates that this tool is listed by the Canadian Standards Association, to United States and Canadian Standards.



This symbol designates that this tool is listed by the Intertek Testing Services, to United States and Canadian Standards.



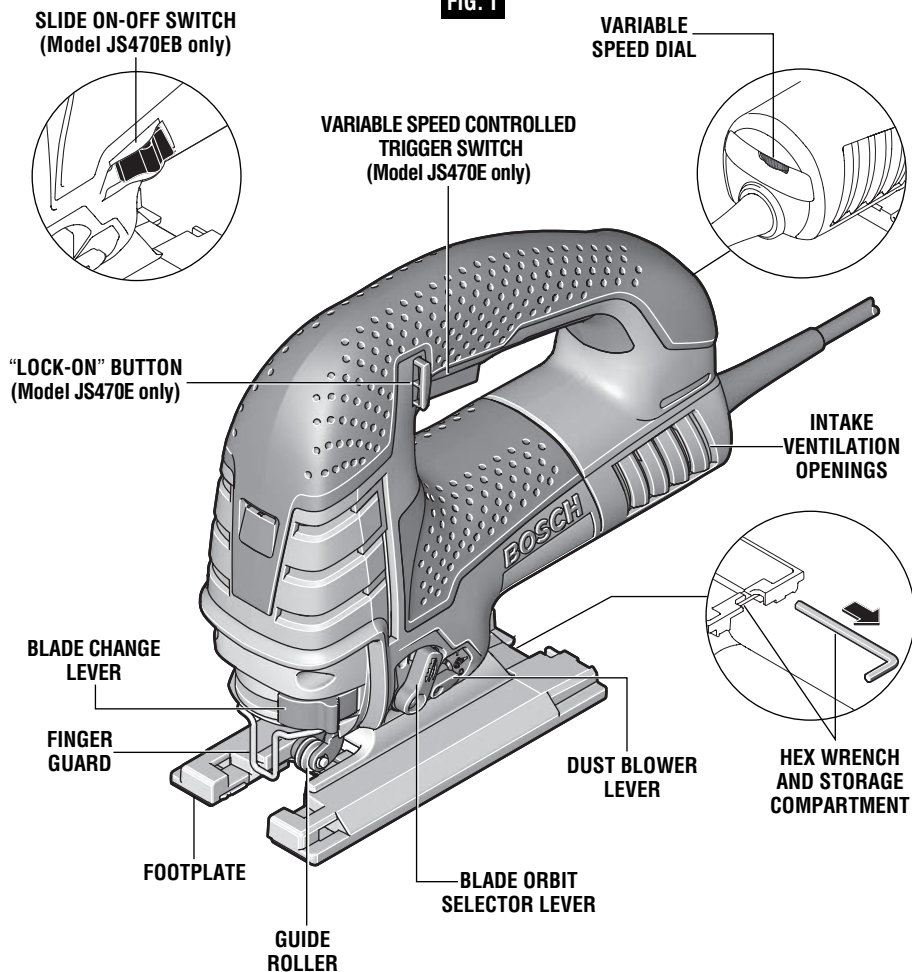
This symbol designates that this tool complies to NOM Mexican Standards.

Functional Description and Specifications

⚠ WARNING Disconnect the plug from the power source before making any assembly, adjustments or changing accessories. Such preventive safety measures reduce the risk of starting the tool accidentally.

Jigsaws

FIG. 1



Model number

JS470E & JS470EB

NOTE: For tool specifications refer to the nameplate on your tool.

Assembly

BLADE INSTALLATION AND REMOVAL

This jigsaw is equipped with a Bosch tool-less blade changing system for fast and easy changes of T-shank blades. (Note: This jigsaw does not accept U-shank blades.)

⚠ WARNING If blade is not properly installed, then the blade may unexpectedly dislodge from jigsaw when tool is energized.

1. To remove a previously-used blade, pull blade change lever until blade ejects.

⚠ WARNING Blade ejects forcefully when released. Direct away from yourself or bystanders.

2. Pull the blade change lever to the point that the slots on the blade clamp's ring line up with the slot in the center of the clamp (Fig. 2).

3. Insert the saw blade (teeth in cutting direction) until it the "T" part of the blade shank is completely inserted in to the blade clamp. (When inserting the saw blade, the back of the blade must rest in the groove of the guide roller) (Fig. 2a.)

4. When blade change lever is released, it will spring back to its closed position.

5. Verify that the blade clamp has also returned to its closed position (which is the

point where slots were previously).

Note: If the saw blade cannot be inserted into the plunger, the slots of the blade holder are not in the correct position.

DUST EXTRACTION

(Not included, available as accessory)

The JS1007 Dust Extraction Kit includes a dust shroud and an extraction tube for connecting the jigsaw to a vacuum hose or vacuum hose adapter.

Note: The dust shroud must be used when the extraction tube is connected to a vacuum cleaner system.

To use this feature, attach extraction tube to footplate. When inserting the extraction tube into the footplate be sure that the plastic post of the extraction tube engages into the corresponding hole on the housing (Fig. 3).

For vacuuming, a Bosch Air Sweep vacuum hose or hose adapter (optional accessory) can be directly connected to the extraction tube (Fig. 3).

For maximum vacuum dust pick up, dust shroud must be attached.

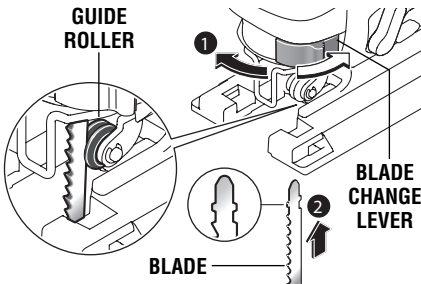
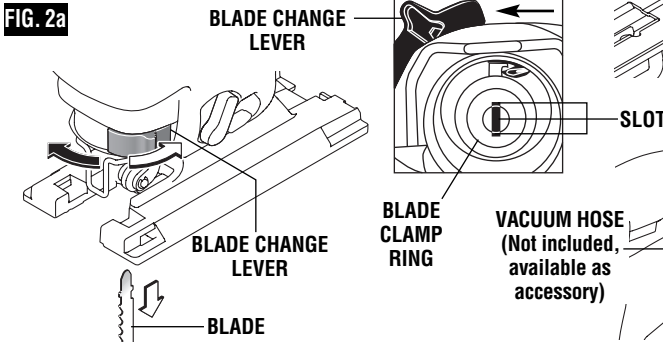


FIG. 2a

FIG. 2



DUST SHROUD
(Not included,
available as
accessory)

EXTRACTION TUBE
(Not included, available
as accessory)

FIG. 3

SLOT

PLASTIC
POST

VACUUM HOSE
(Not included,
available as
accessory)

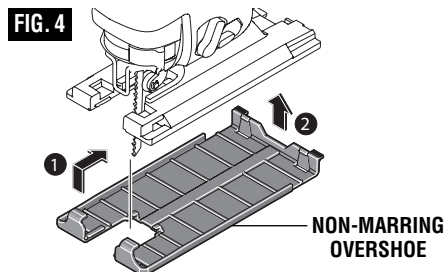
ATTACHING NON-MARRING OVERSHOE

Your tool is equipped with a protective plastic overshoe that protects finer surfaces.

To attach, hook overshoe over front of metal footplate and snap into place at rear of footplate (Fig. 4).

ANTI-SPLINTER INSERT

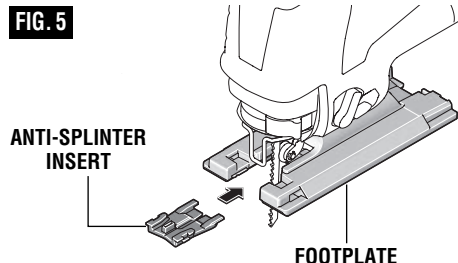
To minimize splintering of the top surface of the material being cut, place the JA1008 anti-



splinter insert in the blade opening of the footplate (Fig. 5).

Note: This insert will only work with blades that have ground sides such as T301CD, T101B, T101D, and T101DP.

Note: When the insert is used with the non-marring overshoe, the anti-splinter insert has to be placed in overshoe.



Operating Instructions

PLUNGER SPEED

The jigsaw cutting speed or stroke rate required depends on the material being cut, the type of blade being used, and the feed rate preferred by the operator.

The best speed for a particular application is largely determined by experience though as a general rule, slower speeds are for denser materials and faster speeds for softer materials.

Note that when the jigsaw is used at low speed settings for an extended length of time, the motor temperature will rise due to slower speeds of the internal cooling fan. In such cases, it is necessary to occasionally run the tool at full speed for a few minutes to keep the motor running at high efficiency.

VARIABLE SPEED DIAL

Your Jigsaw is equipped with a variable speed dial. The blade stroke rate may be adjusted during cutting operation by presetting the dial on or between any one of the six numbers (Fig. 5).

Setting	SPM rating (strokes per minute)	
	JS470E	JS470EB
1	500 Max.	500
2	800 Max.	800
3	1400 Max.	1400
4	1900 Max.	1900
5	2400 Max.	2400
6	3100 Max.	3100

SLIDE ON-OFF SWITCH

(Model JS470EB only)

The tool is switched "ON" by the switch button located at the side of the motor housing. The switch locks in the "ON" position, a convenience for continuous operation (Fig. 1).

TO TURN THE TOOL "ON" slide the switch button forward.

TO UNLOCK THE SWITCH, slide the switch button backward.

VARIABLE SPEED CONTROLLED

TRIGGER SWITCH

(Model JS470E only)

Your tool is equipped with a variable speed trigger switch. The tool can be turned "ON" or "OFF" by squeezing or releasing the trigger. The speed can be adjusted from the minimum to maximum SPM as set on the variable speed dial by the pressure you apply to the trigger. Apply more pressure to increase the speed and release pressure to decrease speed.

Regardless of the pressure applied on the trigger, the tool will not operate any faster than maximum speed setting selected on the variable speed dial.

"LOCK-ON" BUTTON (Model JS470E only)

The "Lock-ON" button, located in the handle of your tool allows for continuous operation at maximum preset SPM without holding the trigger (Fig. 1).

TO LOCK TRIGGER "ON": squeeze trigger, depress button and release trigger.

TO UNLOCK THE TRIGGER: squeeze trigger and release it without depressing the "Lock-ON" button.

⚠ WARNING If the "Lock-ON" button is continuously being depressed, the trigger can not be released.

CONSTANT RESPONSE CIRCUITRY


The internal electronic feedback system provides a "soft start", which will reduce the stresses that occur from a high torque start. The system also maintains the selected speed under load for maximum efficiency.

BLADE ORBIT SELECTOR LEVER

Maximum cutting efficiency can be obtained by adjusting the blade orbit selector lever to suit the material being cut.

The following chart will help you determine which setting to use for your application. This chart is intended as a guideline only, and test cuts in scrap material should be performed first to determine the best setting.

Setting O

 Hard materials such as metals or thin sheet metals. This setting can be used with knife blades, grit edge blades, rasp work and down cutting blades.


Setting I

 Soft materials where cleaner cutting or delicate scrolling work is performed.

Setting II

 Medium density materials such as harder woods or particle board.

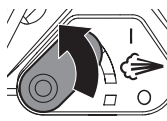
Setting III

 Soft materials such as wood, plastics, etc. and when fast cutting is more important than a clean cut.

CHIP BLOWER

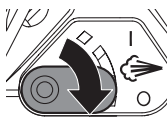
Your jigsaw is equipped with a two position chip blower to help keep the cutting line clear of chips.

By adjusting the chip blower lever the force of the discharge air may be altered as follows;



BLOWER SWITCHED ON

For working with wood, plastic and similar materials that produce large amounts of sawdust.



BLOWER SWITCHED OFF

For working with metals and when cooling agents are used, or with dust collection accessory.

FOOTPLATE ANGLE ADJUSTMENT

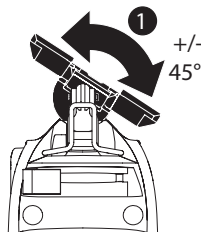
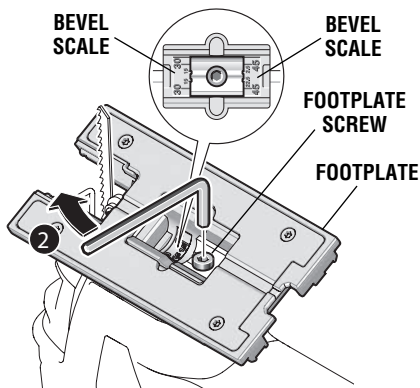
The footplate may be tilted to allow angle cuts up to 45° in either direction (Fig. 6).

To adjust footplate, remove dust shroud if used, loosen the footplate screw and slide the footplate slightly forward towards the back of tool, then rotate to desired angle (Fig. 6).

The detent slots will hold the footplate firmly at 0°, and there are additional position marks for 15°, 22.5° 30° and 45° angles. Intermediate angles may be set with a protractor (Fig. 6).

After positioning the footplate, securely tighten the footplate screw (Fig. 6).

FIG. 6



TOOL TIPS

Always be certain that smaller workpieces are securely fastened to a bench or other support. Larger panels may be held in place by clamps on a bench or sawhorses.

To begin a cut, clearly mark the cutting line, and rest the front of the footplate on the work. Engage the switch, and move the blade into the work using only enough forward pressure to keep the blade cutting steadily. Do not force, as this will not make the saw cut faster; let the blade do the work.

Choose blades carefully, as the ability of the jigsaw to follow curves, provide smoother finishes, or faster cutting is directly related to the type of blade used (See your Bosch Dealer).

For tight curves it is best to use a narrow or scroll blade.

When sawing metal or similar materials, shut off chip blower and apply coolant/lubricant alongside the cutting line.

PLUNGE CUTTING

Plunge cutting is useful and time-saving in making rough openings in softer materials. It is not necessary to drill a hole for an inside or pocket cut. Draw lines for the opening, hold the saw firmly, tilt it forward so that the toe of the saw foot rests on the work, but with the blade well clear of the work. Start the motor, and then very gradually lower the blade. When it touches, continue pressing down on the toe of the saw foot slowly pivoting the saw like a hinge until the blade cuts through and the foot rests flat on the work. Then saw ahead on the cutting line. We do not recommend plunge cutting with a scroll blade.

To make sharp corners, cut up to the corner, then back up slightly before rounding the corner. After the opening is complete, go back to each corner and cut it from the opposite direction to square it off. Do not try to plunge cut into hard materials such as steel.

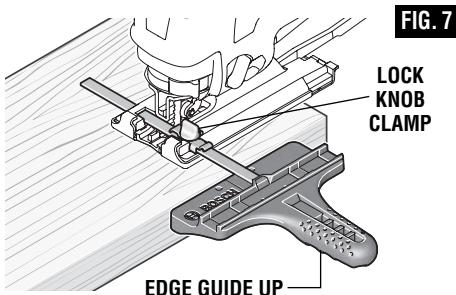
CIRCLE AND PARALLEL CUTTING GUIDE (Not included, available as accessory)

This (JS1006) accessory is available at an extra cost. It is used for fast and accurate straight and circle cutting (Fig. 9).

PARALLEL CUTTING

1. Insert bar of guide through lock knob clamp, then through the slots provided in foot, from either side of foot with the edge guide facing UP (Fig. 7).

2. Hook lock knob clamp onto edge of footplate, adjust fence to desired width, and securely tighten lock knob clamp (Fig. 7).

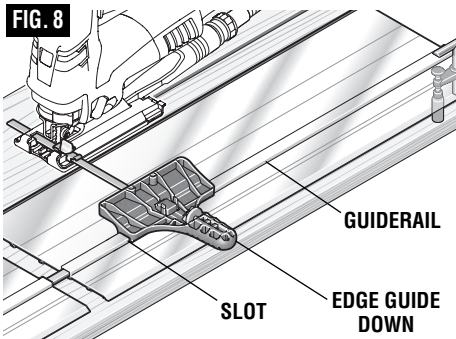


PARALLEL CUTTING WITH OPTIONAL GUIDE RAIL SYSTEM

1. Insert bar of guide through lock knob clamp, then through the slots provided in foot, from either side of foot with the edge guide facing DOWN (Fig. 8).

2. Place slot in guide onto guiderail.

3. Hook lock knob clamp onto edge of footplate, adjust fence to desired width, and securely tighten lock knob clamp (Fig. 8).

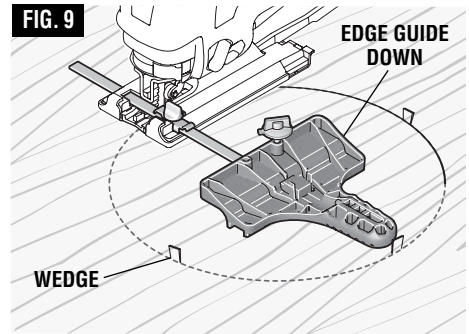


CIRCLE CUTTING

1. Before attaching the guide, draw a circle and predrill a 3/16" (5 mm) center hole in workpiece.
2. Drill or plunge cut near the circle's edge, turn saw off and disconnect the plug from power source.
3. Attach guide to saw with edge guide facing down as shown (Fig. 9).
4. Remove guide pin from end of guide, push pin through hole provided in guide, then into center hole of workpiece.
5. Measure the distance from the selected hole to the blade to be equal to the circle radius.
6. Hook lock knob clamp onto edge of footplate, adjust fence to desired width, and securely tighten lock knob clamp (Fig. 9).
7. Insert plug into power source, hold the saw firmly, squeeze trigger and slowly push the

saw forward. To make a hole, cut from inside the circle; To make wheels or discs, cut from the outside.

Cutting Tip: Cut slowly so the blade will stay straight in the cut. Place small wedges in the cut as shown in Fig. 9, to keep the inner circle from spreading when near the end of the cut.



Maintenance

Service

⚠ WARNING Preventive maintenance performed by unauthorized personnel may result in misplacing of internal wires and components which could cause serious hazard. We recommend that all tool service be performed by a Bosch Factory Service Center or Authorized Bosch Service Station.

TOOL LUBRICATION

Your Bosch tool has been properly lubricated and is ready to use. It is recommended that tools with gears be regreased with a special gear lubricant at every brush change.

CARBON BRUSHES

The brushes and commutator in your tool have been engineered for many hours of dependable service. To maintain peak efficiency of the motor, we recommend every two to six months the brushes be examined. Only genuine Bosch replacement brushes specially designed for your tool should be used.

BEARINGS

After about 300-400 hours of operation, or at every second brush change, the bearings

should be replaced at Bosch Factory Service Center or Authorized Bosch Service Station. Bearings which become noisy (due to heavy load or very abrasive material cutting) should be replaced at once to avoid overheating or motor failure.

Cleaning

⚠ WARNING To avoid accidents always disconnect the tool from the power supply before cleaning or performing any maintenance. The tool may be cleaned most effectively with compressed dry air. Always wear safety goggles when cleaning tools with compressed air.

Ventilation openings and switch levers must be kept clean and free of foreign matter. Do not attempt to clean by inserting pointed objects through openings.

⚠ CAUTION Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

Extension Cords

⚠ WARNING If an extension cord is necessary, a cord with adequate size conductors that is capable of carrying the current necessary for your tool must be used. This will prevent excessive voltage drop, loss of power or overheating. Grounded tools must use 3-wire extension cords that have 3-prong plugs and receptacles.

NOTE: The smaller the gauge number, the heavier the cord.

RECOMMENDED SIZES OF EXTENSION CORDS 120 VOLT ALTERNATING CURRENT TOOLS

Tool's Ampere Rating	Cord Size in A.W.G.				Wire Sizes in mm ²			
	Cord Length in Feet				Cord Length in Meters			
	25	50	100	150	15	30	60	120
3-6	18	16	16	14	0.75	0.75	1.5	2.5
6-8	18	16	14	12	0.75	1.0	2.5	4.0
8-10	18	16	14	12	0.75	1.0	2.5	4.0
10-12	16	16	14	12	1.0	2.5	4.0	—
12-16	14	12	—	—	—	—	—	—

Accessories

- * Non-marring overshoe
- * Anti splinter insert
- * T-shank jigsaw blade
- ** Dust extraction kit, includes dust shroud, extraction tube, and vacuum hose adapter.
- ** Vacuum hoses
- ** Circle and parallel cutting guide
- ** Jigsaw guiderail system
- ** Carrying case
- ** Other T-shank jigsaw blades

(* = standard equipment)

(** = optional accessories)