IMPORTANT: Read Before Using

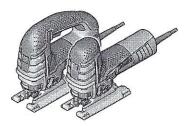
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# Operating/Safety Instructions Consignes de fonctionnement/sécurité Instrucciones de funcionamiento y seguridad

JS470E JS470EB





BOSCH

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For English Version See page 2

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Versión en español Ver la página 24

BM 2610008439 06-11:BM 2610008439 06-11 6/17/11 10:46 AM Page 3

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.

starting the power tools actioentally.

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.

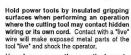
Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

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

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.

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



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 lirst 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

#### **General Power Tool Safety Warnings**

A 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

Keep children and bystanders away white 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

anock.

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 location is unavoidable, use a Ground Fault Circu Interrupter (GFCI) protected supply. Use an GFCI reduce the risk of electric shock.

## Personal safety

alert, watch what you are doing and 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 7 or battery pack, picking up or carrying the tool. Carrying power tools with your linger on the switch or energizing power tools that have the

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 narts. 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.

BM 2610008439 06-11:BM 2610008439 06-11 6/17/11 10:46 AM Page 4

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

blade or accessory. Accessories may be not after prolonged use.

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

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 n'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 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 damped plastic pate. 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.

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

- Lead from lead-based paints,
- · Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemicallytreated 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 the and learn their meaning. Proper interpretation of these symbols will allow you to operate t tool better and safer.

Symbol	Name	Designation/Explanation
٧	Volts	Voltage (potential)
Α	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, et
n <sub>o</sub>	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
, 2, 3, I, II, III,	Selector settings	Speed, torque or position settings. Higher number means greater spee
0_	Infinitely variable selector with off	Speed is increasing from 0 setting
<b>→</b>	Arrow	Action in the direction of arrow
$\sim$	Alternating current	Type or a characteristic of current
	Direct current	Type or a characteristic of current
$\overline{}$	Alternating or direct current	Type or a characteristic of current
	Class II construction	Designates Double Insulated Construction tools.
<b>⊕</b>	Earthing terminal	Grounding terminal
$\triangle$	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

BM 2610008439 06-11:BM 2610008439 06-11 6/17/11 10:46 AM Page 8

## 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.)

A WARNING
If blade is not properly
unexpectedly dislodge from jigsaw when tool is
energized.

In temporary

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

 WARNING Blade ejects forcefully when released. Direct away from yourself or hystanders. 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 (leeth 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) (Fig. 2a.)

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

FIG.

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).

point where slots were previously).

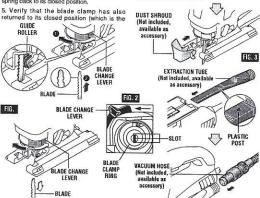
Note: If the saw blade cannot be inserted into the plunger, the slots of the blade holder are not in the correct position.

DUST EXTRACTION (Not included, available as accessory)
The JA1007 Dust Extraction Kit includes a dust shroud and an extraction tube to

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.

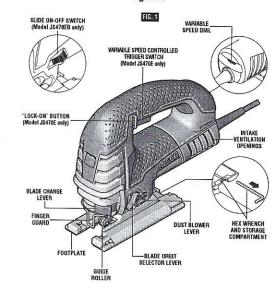
For maximum vacuum dust pick up, dust shroud must be attached.



### **Functional Description and Specifications**

<u>A WARNING</u> Disconnect the plug from the power source before making any measures reduce the risk of starting the tool accidentally.

## **Jigsaws**

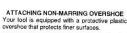


Model number

JS470E & JS470EB

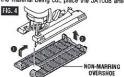
NOTE: For tool specifications refer to the nameplate on your tool.

BM 2610008439 06-11:BM 2610008439 06-11 6/17/11 10:46 AM Page 9



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

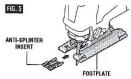
ANTI-SPLINTER INSERT
To minimize splintering of the top surface of the material being cut, place the JA1008 anti-



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.

pretered by the operator.

The best speed for a particular application is largely determined by experience though as a general rule, slower speeds are for deases 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 motion temperature will rise due to slower speeds of the internal cooling fan. In successing, it is necessary to occasionally run the tool at full speed for a few minutes to keep the motor running at high efficiency.

VARIABLE SERED DIAI

# 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

SPM rating (strokes per minute		
JS470E	JS470EB	
500 Max.	500	
800 Max.	800	
1400 Max.	1400	
1900 Max.	1900	
2400 Max.	2400	
3100 Max.	3100	
	JS470E 500 Max. 800 Max. 1400 Max. 1900 Max. 2400 Max.	

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.

button backward.

VARIABLE SPEED CONTROLLED

TRIGGER SWITCH

(Model US470E orly)

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

Recardless of the pressure applied on the

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

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.

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

# CONSTANT RESPONSE CIRCUITRY

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 with cleaner cutting or delicate scrolling work is performed.

# Setting II



Medium density materials such as harder woods or particle

# 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.

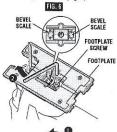
## FOOTPLATE ANGLE ADJUSTMENT The footplate may be tilted to allow angle cuts up to 45° in either direction (Fig. 6).

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

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).







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.

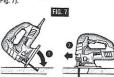
To begin a cut, clearly mark the cutting line, and rest the front of the footplate on the work. Engage the switch, and move the blade into the work using only enough forward pressure to keep the blade cutting steadily. Do not force, as this will not make the saw cut faster; let the blade do the work.

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, till 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 yery gradually lower the blade. and then very gradually lower the blade (Fig. 7).



When it touches, continue pressing down on 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.

cut into hard materials such as steel.

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

This (JA1010) 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. 8).

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

