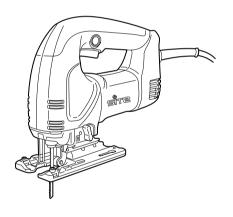
# **INSTRUCTION MANUAL**



# Jig Saw

**SMA400** 



008472

DOUBLE INSULATION

# **△WARNING:**

For your personal safety, READ and UNDERSTAND before using. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

# **ENGLISH SPECIFICATIONS**

Model		SMA400	
Length of stroke		26 mm	
Max. cutting capacities	Wood	135 mm	
	Steel	10 mm	
Strokes per minute (min <sup>-1</sup> )		800 - 2,800	
Overall length		236 mm	
Net weight		2.4 kg	
Safety class		□ /II	

END201 4

## **Symbols**

The following show the symbols used for the equipment. Be sure that you understand their meaning before use.



· Read instruction manual.



DOUBLE INSULATION



Only for EU countries

Do not dispose of electric equipment together with household waste material! In observance of European Directive 2002/96/EC on waste electric and electronic equipment and implementation in accordance with national law, electric equipment that have reached the end of their life must be collected separately and returned to environmentally compatible recycling facility. For further information visit www.recycle-more.co.uk

#### Intended use

The tool is intended for the sawing of wood, plastic and metal materials. As a result of the extensive accessory and saw blade program, the tool can be used for many purposes and is very well suited for curved or circular cuts.

#### Power supply

The tool should be connected only to a power supply of the same voltage as indicated on the nameplate, and can only be operated on single-phase AC supply. They are double-insulated in accordance with European Standard and can, therefore, also be used from sockets without earth wire

For European countries only Noise and Vibration

The typical A-weighted sound pressure level is 85 dB (A). Uncertainty is 3 dB(A). The noise level under working may exceed 85 dB (A).

## Wear ear protection.

The typical weighted root mean square acceleration value is 6 m/s<sup>2</sup>.

These values have been obtained according to EN60745

ENH501-1

#### **Declaration of Conformity**

Site UK Ltd **BA 22 8RT** 

Declare that the product Jig saw SMA400

Complies with the essential health and safety requirements of the following directives: 98/37 EC - Machinery Directive. 2004/108 EC

Standards and technical specifications referred to:

EN60745 EN55014 EN61000

**Authorised Signatory** 

2007

ENF002-1

ENG004-2

000245

Peter Harries Site UK Ltd Quality Manager GFA005-1

# General Power Tool Safety Warnings

MARNING Read all safety warnings and all 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.

### 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 a power tool in a damp location is unavoidable, use a residual current device (RCD). Use of an RCD reduces the risk of electric shock.

#### Personal safety

10. 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.
- 12. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. . Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- 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 jewellery. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- 16. 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

- 17. 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.
- 19. 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.
- 20. 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.
- 21. 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.
- 23. 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.
- Follow instruction for lubricating and changing accessories.
- Keep handles dry, clean and free from oil and grease.

GEB016-1

# **SPECIFIC SAFETY RULES**

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to jig saw safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

- 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.
- Always use safety glasses or goggles.
  Ordinary eye or sun glasses are NOT safety glasses.
- 4. Avoid cutting nails. Inspect workpiece for any nails and remove them before operation.
- 5. Do not cut oversize workpiece.
- Check for the proper clearance beyond the workpiece before cutting so that the blade will not strike the floor, workbench, etc.
- 7. Hold the tool firmly.
- 8. Make sure the blade is not contacting the workpiece before the switch is turned on.
- 9. Keep hands away from moving parts.
- Do not leave the tool running. Operate the tool only when hand-held.
- Always switch off and wait for the blade to come to a complete stop before removing the blade from the workpiece.
- 12. Do not touch the blade or the workpiece

- immediately after operation; they may be extremely hot and could burn your skin.
- Do not operate the tool at no-load unnecessarily.
- Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.
- Always use the correct dust mask/respirator for the material and application you are working with.

# SAVE THESE INSTRUCTIONS.

# **⚠ WARNING:**

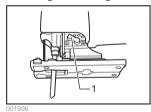
MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

# **FUNCTIONAL DESCRIPTION**

# **⚠** CAUTION:

 Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

### Selecting the cutting action



 Cutting action changing lever

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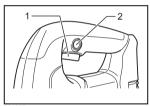
This tool can be operated with an orbital or a straight line (up and down) cutting action. The orbital cutting action thrusts the blade forward on the cutting stroke and greatly increases cutting speed.

To change the cutting action, just turn the cutting action changing lever to the desired cutting action position. Refer to the table to select the appropriate cutting action.

Position	Cutting action	Applications
0	Straight line cutting action	For cutting mild steel, stainless steel and plastics.
		For clean cuts in wood and plywood.
I	Small orbit cutting action	For cutting mild steel, aluminium and hard wood.
п	Medium orbit cutting action	For cutting wood and plywood.
		For fast cutting in aluminium and mild steel.
Ш	Large orbit cutting action	For fast cutting in wood and plywood.

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#### Switch action



Switch trigger
 Lock button

⚠ CAUTION:

 Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

To start the tool, simply pull the switch trigger. Release the switch trigger to stop.

For continuous operation, pull the switch trigger and then push in the lock button.

To stop the tool from the locked position, pull the switch trigger fully, then release it.

## Speed adjusting dial



Speed adjusting dial

The tool speed can be infinitely adjusted between 800 and 2,800 strokes per minute by turning the adjusting dial. Higher speed is obtained when the dial is turned in

the direction of number 5; lower speed is obtained when it is turned in the direction of number 1.

Refer to the table to select the proper speed for the workpiece to be cut. However, the appropriate speed may differ with the type or thickness of the workpiece. In general, higher speeds will allow you to cut workpieces faster but the service life of the blade will be reduced.

Workpiece to be cut	Number on adjusting dial	
Wood	4 - 5	
Mild steel	3 - 5	
Stainless steel	3 - 4	
aluminium	3 - 5	
Plastics	1 - 4	

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# **⚠** CAUTION:

 The speed adjusting dial can be turned only as far as 5 and back to 1. Do not force it past 5 or 1, or the speed adjusting function may no longer work.

The tools equipped with electronic function are easy to operate because of the following features.

## Constant speed control

Electronic speed control for obtaining constant speed. Possible to get fine finish, because the rotating speed is kept constant even under load condition.

#### Soft start feature

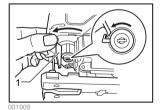
Safety and soft start because of suppressed starting shock

# **ASSEMBLY**

# **⚠** CAUTION:

 Always be sure that the tool is switched off and unplugged before carrying out any work on the tool

## Installing or removing saw blade



1. Tool opener

# **⚠** CAUTION:

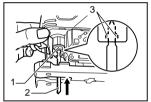
- Always clean out all chips or foreign matter adhering to the blade and/or blade holder. Failure to do so may cause insufficient tightening of the blade, resulting in a serious personal injury.
- · Do not touch the blade or the workpiece

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- immediately after operation; they may be extremely hot and could burn your skin.
- Tighten the saw blade securely. Failure to do so may cause a serious injury.
- When you remove the saw blade, be careful not to hurt your fingers with the top of the blade or the tips of workpiece.

To install the blade, open the tool opener to the position shown in the figure.

Keeping that situation, insert the saw blade into the blade clamp as far as the two protrusions of the blade can not be seen.



- 1. Blade clamp
- 2. Jig saw blade
- 3. Protrusions

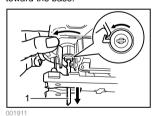
Return the tool opener to its original position.

After installing, always make sure that the blade is securely held in place by trying to pull it out.

## 

 Do not open the tool opener excessively, or it may cause tool damage.

To remove the blade, open the tool opener to the position shown in the figure. Pull the saw blade out toward the base.

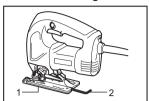


1. Jig saw blade

#### NOTE:

· Occasionally lubricate the roller.

# Hex wrench storage



- 1. Base
- 2. Hex wrench

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When not in use, the hex wrench can be conveniently stored.

# **OPERATION**



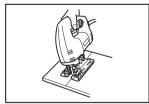
- 1. Cutting line
- 2. Base

A CAUTION:

- Always hold the tool base flush with the workpiece.
  Failure to do so may cause blade breakage, resulting in a serious injury.
- Do not use the tool with no load.

Turn the tool on and wait until the blade attains full speed. Then rest the tool base flat on the workpiece and gently move the tool forward along the previously marked cutting line. When cutting curves, advance the tool very slowly.

## **Bevel cutting**



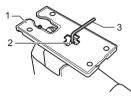
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# **⚠** CAUTION:

 Always be sure that the tool is switched off and unplugged before tilting the base.

With the base tilted, you can make bevel cuts at any angle between 0° and 45° (left or right).

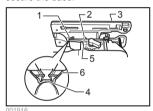
Loosen the bolt on the back of the base with the hex wrench. Move the base so that the bolt is positioned in the centre of the bevel slot in the base.



- 1. Base
- 2. Bolt
- 3. Hex wrench

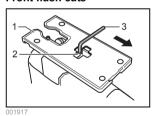
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Tilt the base until the desired bevel angle is obtained. The V-notch of the gear housing indicates the bevel angle by graduations. Then tighten the bolt firmly to secure the base.



- 1. Graduations
- 2. Bevel slot
- 3. Base
- 4. V-notch
- Bolt
- 6. Gear housing

Front flush cuts



- 1. Base
- 2. Bolt
- 3. Hex wrench

Loosen the bolt on the back of the base with the hex wrench and slide the base all the way back. Then tighten the bolt to secure the base.

# Cutouts

Cutouts can be made with either of two methods A or B. A) Boring a starting hole:

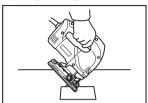


1. Starting hole

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For internal cutouts without a lead-in cut from an edge, pre-drill a starting hole 12 mm or more in diameter. Insert the blade into this hole to start your cut

## B) Plunge cutting:

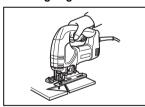


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You need not bore a starting hole or make a lead-in cut if you carefully do as follows.

- (1) Tilt the tool up on the front edge of the base with the blade point positioned just above the workpiece surface.
- (2) Apply pressure to the tool so that the front edge of the base will not move when you switch on the tool and gently lower the back end of the tool slowly.
- (3) As the blade pierces the workpiece, slowly lower the base of the tool down onto the workpiece surface.
- (4) Complete the cut in the normal manner.

# Finishing edges



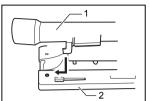
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To trim edges or make dimensional adjustments, run the blade lightly along the cut edges.

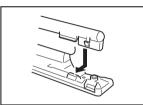
#### Metal cutting

Always use a suitable coolant (cutting oil) when cutting metal. Failure to do so will cause significant blade wear. The underside of the workpiece can be greased instead of using a coolant.

#### **Dust extraction**



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The dust nozzle (accessory) is recommended to perform clean cutting operations.

To attach the dust nozzle on the tool, insert the hook of dust nozzle into the hole in the base.

The dust nozzle can be installed on either left or right side of the base.

Then connect a vacuum cleaner to the dust nozzle.



Dust nozzle
 Hose for
 vacuum cleaner

⚠ CAUTION:

 If you try to remove the dust nozzle forcibly, the hook of the dust nozzle can be diminished and removed unintentionally during operation.

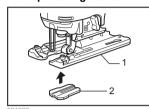
## Cover plate



Cover plate
 Base

Dust nozzle
 Use the cover plate when cutting decorative veneers,
 plastics, etc. It protects sensitive or delicate surfaces from damage. Fit it on the back of the tool base.

# Anti-splintering device



- 1. Base
- 2. Anti-splintering device

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For splinter-free cuts, the anti-splintering device can be used. To install the anti-splintering device, move the tool base all the way forward and fit it from the back of tool base. When you use the cover plate, install the anti-splintering device onto the cover plate.

# **⚠** CAUTION:

 The anti-splintering device cannot be used when making bevel cuts.

# **MAINTENANCE**

# **⚠** CAUTION:

 Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

To maintain product SAFETY and RELIABILITY, repairs, carbon brush inspection and replacement, any other maintenance or adjustment should only be performed by authorised Service Centres.

Congratulations on your purchase of a SITE power tool.

We want you to continue getting the best performance from it so this handbook includes information on safety, handling and care. Please retain this handbook in case you need to refer to any of the information in the future

#### GUARANTEE

This SITE product carries a guarantee of 12 months. If your product develops a fault within this period, you should, in the first instance contact your retailer.

This guarantee specifically excludes losses caused due to:

- Fair wear and tear
- Misuse or abuse
- Lack of routine maintenance
- Failure of consumable items (such as batteries)
- Accidental damage
- Cosmetic damage
- Failure to follow manufacturer's guidelines
- Loss of use of the goods
- Unauthorised repairs

This guarantee does not affect your statutory rights. This guarantee is only valid in the UK

For further technical advice, spare parts or repair service (outside of guarantee) please contact the customer help line number on 01908 214004.

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