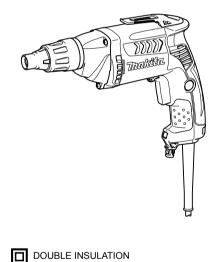
**INSTRUCTION MANUAL** 

# Thakita<sup>®</sup>

### Screwdriver

FS2500



010106

**AWARNING**:

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

#### ENGLISH (Original instructions) SPECIFICATIONS

Model		F\$2500
Capacities	Self drilling screw	6 mm
	Drywall screw	5 mm
No load speed (min <sup>-1</sup> )		0 - 2,500
Overall length		280 mm
Net weight		1.5 kg
Safety class		□ /

• Due to our continuing programme of research and development, the specifications herein are subject to change without notice.

· Note: Specifications may differ from country to country.

• Weight according to EPTA-Procedure 01/2003

#### 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 ite implementation in accordance with national law, electric equipment that have reached the end of their life must be collected separately and returned to environmentally an compatible recycling facility. ENE033-1

#### Intended use

The tool is intended for screw driving in wood, metal and plastic.

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

The typical A-weighted noise level determined according to EN60745:

Sound pressure level  $(L_{pA})$ : 83 dB(A) Sound power level  $(L_{WA})$ : 94 dB(A) Uncertainty (K): 3 dB(A) Wear ear protection

#### Vibration

ENG204-2

The vibration total value (tri-axial vector sum) determined according to EN60745:

Work mode: screwdriving without impact Vibration emission  $(a_h) : 2.5 \text{ m/s}^2$  or less Uncertainty (K) : 1.5 m/s<sup>2</sup>

ENG901-1

- The declared vibration emission value has been measured in accordance with the standard test method and may be used for comparing one tool with another.
- The declared vibration emission value may also be used in a preliminary assessment of exposure.

#### AWARNING:

- The vibration emission during actual use of the power tool can differ from the declared emission value depending on the ways in which the tool is used.
- Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

ENH101-12

#### EC Declaration of Conformity

We Makita Corporation as the responsible manufacturer declare that the following Makita machine(s):

Designation of Machine: Screwdriver

Model No./ Type: FS2500

are of series production and

#### Conforms to the following European Directives:

98/37/EC until 28th December 2009 and then with 2006/42/EC from 29th December 2009

And are manufactured in accordance with the following standards or standardised documents:

must

#### ∐ ≰

#### EN60745

The technical documentation is kept by our authorised representative in Europe who is:

Makita International Europe Ltd, Michigan, Drive, Tongwell, Milton Keynes, MK15 8JD, England

#### 30th January 2009

000230

Tomoyasu Kato Director Makita Corporation 3-11-8, Sumiyoshi-cho, Anjo, Aichi, JAPAN

GEA005-3

#### General Power Tool Safety Warnings

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

## Save all warnings and instructions for future reference.

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

#### Work area safety

- 1. 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) protected supply. Use of an RCD reduces the risk of electric shock.
- 10. Use of power supply via a RCD with a rated residual current of 30mA or less is always recommended.

#### Personal safety

- 11. 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.
- 12. 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.
- 13. 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.
- 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

18. 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.
- 20. 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.
- 22. 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.
- 24. 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

- 25. 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.
- 26. Follow instruction for lubricating and changing accessories.
- 27. Keep handles dry, clean and free from oil and grease.

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#### SPECIFIC SAFETY RULES

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

 Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring or its own cord. Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

- 2. Always be sure you have a firm footing. Be sure no one is below when using the tool in high locations.
- 3. Hold the tool firmly.
- 4. Keep hands away from rotating parts.
- 5. Do not touch the bit or the workpiece immediately after operation; they may be extremely hot and could burn your skin.

#### SAVE THESE INSTRUCTIONS.

#### **AWARNING**:

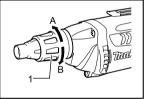
MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

#### FUNCTIONAL DESCRIPTION

#### ACAUTION:

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

#### Depth adjustment

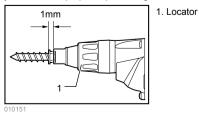


1. Locking ring

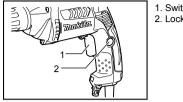
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The depth can be adjusted by turning the lock ring. Turn it in "B" direction for less depth and in "A" direction for more depth. One full turn of the lock ring equals 1.5 mm change in depth.

Adjust the lock ring so that the distance between the tip of the locator and the screw head is approximately 1 mm as shown in the figures. Drive a trial screw into your material or a piece of duplicate material. If the depth is still not suitable for the screw, continue adjusting until you obtain the proper depth setting.



#### Switch action



2. Lock button



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#### ACAUTION:

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. Tool speed is increased by increasing pressure on the switch trigger. Release the switch trigger to stop.

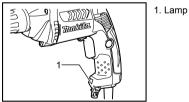
For continuous operation, pull the switch trigger and then push in the lock button.

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

#### NOTE:

Even with the switch on and motor running, the bit will not rotate until you fit the point of the bit in the screw head and apply forward pressure to engage the clutch.

#### Lighting up the lamps



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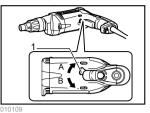
Do not look in the light or see the source of light directly.

To turn on the lamp, pull the trigger. Release the trigger to turn it off.

#### NOTE

Use a dry cloth to wipe the dirt off the lens of lamp. Be careful not to scratch the lens of lamp, or it may lower the illumination.

#### **Reversing switch action**



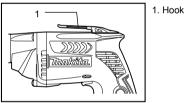
1. Reversina switch lever

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- Always check the direction of rotation before operation.
- Use the reversing switch only after the tool comes to a complete stop. Changing the direction of rotation before the tool stops may damage the tool.

This tool has a reversing switch to change the direction of rotation. Move the reversing switch lever to the <- position (A side) for clockwise rotation or the ⇒position (B side) for counterclockwise rotation.

#### Hook



The hook is convenient for temporarily hanging the tool.

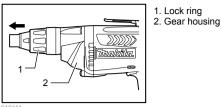
#### ASSEMBLY

#### ACAUTION:

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

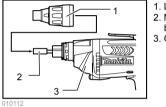
#### Installing or removing the bit

To remove the bit, first remove the locator by pulling the lock ring away from the gear housing. Then pull the magnetic socket bit.



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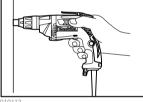
To install the magnetic socket bit, insert it into the tool as far as it will go. Then install the locator by pushing it firmly back onto the gear housing.



1. Lock ring 2. Magnetic socket bit

3. Gear housing

#### **OPERATION**



Fit the screw on the point of the bit and place the point of the screw on the surface of the workpiece to be fastened. Apply pressure to the tool and start it. Withdraw the tool as soon as the clutch cuts in. Then release the switch trigger.

#### ACAUTION:

- When fitting the screw onto the point of the bit, be careful not to push in on the screw. If the screw is pushed in, the clutch will engage and the screw will rotate suddenly. This could damage a workpiece or cause an injury.
- Make sure that the bit is inserted straight in the screw head, or the screw and/or bit may be damaged.
- Hold the tool only by the handle when performing an operation. Do not touch the metal part.

#### MAINTENANCE

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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 be performed by Makita Authorized Service Centers, always using Makita replacement parts.

### ACCESSORIES

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These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- Phillips Insert bits
- Socket bits
- Magnetic bit holder
- Locator


### Makita Corporation Anjo, Aichi, Japan