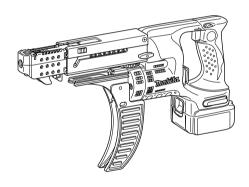
## **INSTRUCTION MANUAL**



## **Cordless Auto Feed Screwdriver**

BFR540 BFR550 BFR750



008261

#### **ENGLISH (Original instructions)**

## **SPECIFICATIONS**

Model	BFR540	BFR550	BFR750	
Screw strip	4 x 25 - 55 mm		4 x 45 - 75 mm	
No load speed (min <sup>-1</sup> )	4,000			
Overall length	424 mm		464 mm	
Net weight	2.0 kg	2.1 kg	2.1 kg	
Rated voltage	D.C. 14.4 V	D.C. 18 V	D.C. 18 V	
Standard battery cartridges	BL1430	BL1830		

- Due to our continuing programme of research and development, the specifications herein are subject to change without notice.
- · Specifications and battery cartridge may differ from country to country.
- · Weight, with battery cartridge, according to EPTA-Procedure 01/2003

END004-4

#### **Symbols**

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



Read instruction manual.

Cd · Only

Only for EU countries

Do not dispose of electric equipment or battery pack together with household waste material!

In observance of European Directive 2002/96/EC on waste electric and electronic equipment, 2006/66/EC on batteries and accumulators and waste batteries and accumulators and their implementation in accordance with national laws, electric equipment and battery pack that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

ENE033-1

#### Intended use

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

ENG905-1

#### Noise

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

#### Model BFR540

Sound pressure level ( $L_{pA}$ ) : 77 dB(A)

Uncertainty (K): 3 dB(A)

The noise level under working may exceed 80 dB (A).

#### Model BFR550

Sound pressure level (LpA): 78 dB(A)

Uncertainty (K): 3 dB(A)

The noise level under working may exceed 80 dB (A).

#### Model BFR750

Sound pressure level  $(L_{pA})$ : 76 dB(A)

Uncertainty (K): 3 dB(A)

The noise level under working may exceed 80 dB (A).

#### Wear ear protection

ENG900-1

#### Vibration

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

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

ENG901-

- 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.

#### **∆WARNING**:

- 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).

ENH101-15

#### For European countries only

#### **EC Declaration of Conformity**

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

Designation of Machine:

Cordless Auto Feed Screwdriver

Model No./ Type: BFR540, BFR550, BFR750

are of series production and

#### Conforms to the following European Directives:

2006/42/EC

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

EN60745

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

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

30.1.2009

000230

Tomoyasu Kato Director Makita Corporation 3-11-8, Sumiyoshi-cho, Anjo, Aichi, 446-8502, JAPAN

GEA006-2

# 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.

The term "power tool" in 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 a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply. Use of an GFCI 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.
- 14. 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

- 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.

#### Battery tool use and care

- 24. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- 26. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery

- terminals together may cause burns or a fire.
- 27. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

#### 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.

GER050-2

## CORDLESS SCREWDRIVER SAFETY WARNINGS

- Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring.
   Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Always be sure you have a firm footing.
   Be sure no one is below when using the tool in high locations.
- Hold the tool firmly.
- 4. Keep hands away from rotating parts.
- Do not touch the bit or the workpiece immediately after operation; they may be extremely hot and could burn your skin.

#### SAVE THESE INSTRUCTIONS.

#### **△WARNING:**

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

ENC007-7

## IMPORTANT SAFETY INSTRUCTIONS

## FOR BATTERY CARTRIDGE

 Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.

- 2. Do not disassemble battery cartridge.
- If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
- If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.
- 5. Do not short the battery cartridge:
  - (1) Do not touch the terminals with any conductive material.
  - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
  - (3) Do not expose battery cartridge to water

A battery short can cause a large current flow, overheating, possible burns and even a breakdown.

- Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
- Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
- 8. Be careful not to drop or strike battery.
- 9. Do not use a damaged battery.

## SAVE THESE INSTRUCTIONS.

#### Tips for maintaining maximum battery life

- Charge the battery cartridge before completely discharged.
  - Always stop tool operation and charge the battery cartridge when you notice less tool power.
- Never recharge a fully charged battery cartridge.
- Overcharging shortens the battery service life.

  3. Charge the battery cartridge with room
- temperature at 10 ° C 40 ° C (50 ° F 104 ° F).

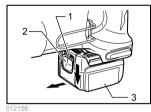
  Let a hot battery cartridge cool down before charging it.
- Charge the battery cartridge once in every six months if you do not use it for a long period of time.

## **FUNCTIONAL DESCRIPTION**

#### ACAUTION:

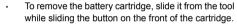
 Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

#### Installing or removing battery cartridge



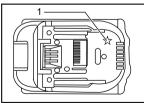
- Red indicator
- 2. Button
- 3. Battery cartridge

 Always switch off the tool before installing or removing of the battery cartridge.



- To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Always insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely. Install it fully until the red indicator cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.
- Do not use force when installing the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.

## Battery protection system (Lithium-ion battery with star marking)



1. Star marking

012128

Lithium-ion batteries with a star marking are equipped with a protection system. This system automatically cuts off power to the tool to extend battery life.

The tool will automatically stop during operation if the tool and/or battery are placed under one of the following conditions:

#### Overloaded:

The tool is operated in a manner that causes it to draw an abnormally high current.

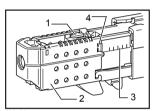
In this situation, release the trigger switch on the tool and stop the application that caused the tool to become overloaded. Then pull the trigger switch again to restart.

If the tool does not start, the battery is overheated. In this situation, let the battery cool before pulling the trigger switch again.

#### Low battery voltage:

The remaining battery capacity is too low and the tool will not operate. In this situation, remove and recharge the battery.

### Setting for desired screw length



- 1. Lever
- 2. Stopper base 3. Label on feeder
- hox
- 4. Fenestella

There are 7 positive-lock screw length settings. To obtain the desired setting, pull out the stopper base while depressing the lever until you see the number of the desired screw length (indicated on the label on feeder box) appear to rest in the fenestella of stopper base. See the table below for the relation between the number indicated on the label on feeder box and the respective screw length.

### For Models BFR540, BFR550

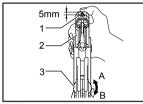
Number indicated on the label	Screw length	
25	25 mm	
30	30 mm	
35	35 mm	
40	40 mm	
45	45 mm	
50	50 mm	
55	55 mm	

008238

#### For Model BFR750

Number indicated on the label	Screw length	
45	45 mm	
50	50 mm	
55	55 mm	
60	60 mm	
65	65 mm	
70	70 mm	
75 75 mn		
000044		

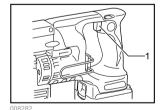
#### Adjusting the driving depth



- 1. Stopper base
- 2. Casing
- 3. Adjusting knob

Depress the stopper base as far as it will go. While keeping it in this position, turn the adjusting knob until the bit tip projects approx. 5 mm from the stopper base. Drive a trial screw. If the screw head projects above the surface of the workpiece, turn the adjusting knob in the "A" direction: if the screw head is counter-sunk, turn the adjusting knob in the "B" direction.

#### Switch action



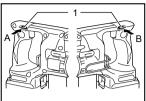
1. Switch trigger

## **∆CAUTION:**

Before inserting the battery cartridge into 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.

#### Reversing switch action



1. Reversing switch lever

008383

This tool has a reversing switch to change the direction of rotation. Depress the reversing switch lever from the A side for clockwise rotation or from the B side for counterclockwise rotation.

When the reversing switch lever is in the neutral position, the switch trigger cannot be pulled.

#### **∆CAUTION**:

- 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.
- When not operating the tool, always set the reversing switch lever to the neutral position.

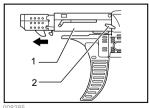
## **ASSEMBLY**

#### **∆CAUTION**:

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

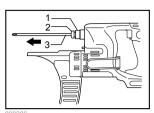
#### Installing or removing the bit

Loosen the thumb screws which secure the casing. Pull out the casing in the direction of the arrow.



Casing
 Thumb screw

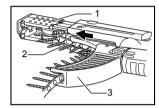
Press the dust cover toward the plane bearing and pull out the bit. If the dust cover cannot be moved as far as the plane bearing, try it again after turning the bit slightly. To install the bit, insert it into the socket while turning it slightly. After installing, always make sure that the bit is securely held in place by trying to pull it out.



- 1. Plane bearing
- 2. Dust cover
- 3 Bit

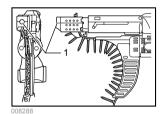
#### Installing screw strip

Insert the screw strip through the screw guide. Then insert it through the feeder box until the first screw reaches the position next to the driving position.



- 1. Feeder box
- 2 Screw strip
- 3. Screw guide

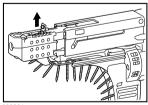
#### 008290



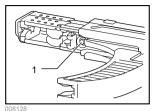
1. Driving position

#### Removing screw strip

To remove the screw strip, just pull it out in the direction of the arrow. If you depress the reverse button, you can pull out the screw strip in the reverse direction of the arrow.

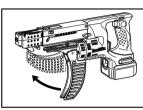


00828



1 Reverse hutton

#### Folding screw guide



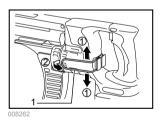
008280

Screw guide is foldable. Folding the screw guide allows space used for storage to be minimal.

### Carry hook

The carry hook is convenient for temporarily hooking the tool. It can be installed on either side of the tool.

When removing the carry hook, widen it by pressing its right ends ON BOTH SIDES in the directions of arrow (1) and raise it in the direction of the arrow (2).



1. Hook

## **OPERATION**

#### Driving operation

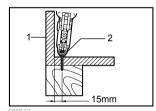


Switch on the tool by pulling the switch trigger. Hold the tool squarely and firmly up against the driving surface. A screw will be automatically carried to the driving position and fastened.

#### **ACAUTION**

- Always check the bit carefully for wear before driving operations. Replace a worn bit or poor fastening may result.
- Always hold the tool squarely against the driving surface. Holding it at an angle may damage the screw heads and cause wear on the bit. This may also lead to poor fastening.
- Always keep the tool firmly against the driving surface until the driving is over. Failure to do so may cause insufficient fastening of screws.
- Be careful not to drive a screw onto another screw already fastened.
- Do not operate the tool without screws. It will damage the driving surface.
- Do not apply oil or grease on the sliding surface of the feeder box.

#### **Driving in corner**



- 1 Wall
- 2. Stopper base

This tool can be used to drive at a position 15 mm away from the wall as shown in the figure.

#### **∆CAUTION:**

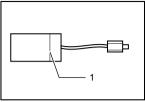
Driving at a position closer than 15 mm to the wall or driving with the stopper base in contact with the wall may damage the screw heads and cause wear on the bit. This may also lead to poor fastening of screws and malfunction of the tool.

### MAINTENANCE

#### ACAUTION:

- Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.
- Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result

#### Replacing carbon brushes

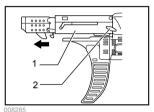


1. Limit mark

006258

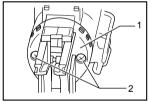
Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

Loosen the thumb screws which secure the casing. Pull out the casing in the direction of the arrow.



Casing
 Thumb screw

Use a screwdriver to remove two screws then remove the front cover

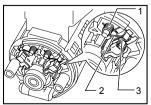


1. Front cover

2. Screws

008287

Raise the arm part of the spring and then place it in the recessed part of the housing with a slotted bit screwdriver of slender shaft or the like.

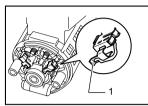


1. Spring

2. Arm

Recessed part

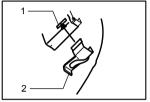
Use pliers to remove the carbon brush caps of the carbon brushes. Take out the worn carbon brushes, insert the new ones and replace the carbon brush caps in reverse.



1. Carbon brush cap

006817

Make sure that the carbon brush caps have fit into the holes in brush holders securely.



- 1. Hole
- 2. Carbon brush cap

06304

Reinstall the front cover and tighten two screws securely. To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized Service Centers, always using Makita replacement parts.

## **OPTIONAL ACCESSORIES**

#### **∆CAUTION**:

 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.

- Drywall screw strip
- Phillips bit
- Various type of Makita genuine batteries and chargers
- · Plastic carrying case

#### NOTE:

 Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.


Makita Corporation Anjo, Aichi, Japan

www.makita.com