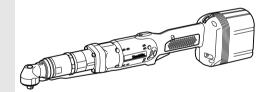


# Cordless Angle Nut Runner

MODEL BFL300F MODEL BFL400F



005735

## INSTRUCTION MANUAL

#### **WARNING:**

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

# SPECIFICATIONS

Model		BFL300F	BFL400F	
Fastening torque	Hard joint	16 - 30 N • m (142 - 266 in • lbs)	25 - 40 N • m (221 - 354 in • lbs)	
	Soft joint	16 - 30 N • m (142 - 266 in • lbs)	25 - 40 N • m (221 - 354 in • lbs)	
Square drive		9.5 mm (3/8")	9.5 mm (3/8")	
No load speed (RPM)		400 /min.	260 /min.	
Dimensions (With Battery Cartridge BH1427)		506 mm x 73 mm x 104 mm (19-15/16" x 2-7/8" x 4-1/8")	510 mm x 73 mm x 104 mm (20-1/16" x 2-7/8" x 4-1/8")	
Net weight (With Battery Cartridge BH1427)		2.3 kg (5.1 lbs.)	2.4 kg (5.3 lbs.)	
Standard battery cartridge		BH1427		

- Manufacturer reserves the right to change specifications without notice.
- · Specifications may differ from country to country.

# **GENERAL SAFETY RULES**

GEA002-1

### **∆ WARNING:**

**Read all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

# SAVE THESE INSTRUCTIONS

#### Work area safety

- 1. Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- 2. 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.

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

#### **Electrical safety**

- 4. 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.
- 6. 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.

#### **Personal safety**

- 9. 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.
- 10. Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- 11. Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.

- 12. 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.
- 13. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- 14. 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.
- 15. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dustrelated hazards.

#### Power tool use and care

- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired

**before use.** Many accidents are caused by poorly maintained power tools.

- **21. Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- 22. Use the power tool, accessories and tool bits etc. in accordance with these instructions and in the manner intended for the particular type of power tool, 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

- 23. Ensure the switch is in the off position before inserting battery pack. Inserting the battery pack into power tools that have the switch on invites accidents.
- 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.

- 25. 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

- 28. 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.
- WARNING- To reduce the risk of injury, user must read instruction manual.

# ADDITIONAL SAFETY RULES FOR POWER TOOL

GEB002-1

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

- 1. 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.
- 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 leave the tool running. Operate the tool only when hand-held.
- Do not touch the drill bit or the workpiece immediately after operation; they may be extremely hot and could burn your skin.
- Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.

# SAVE THESE INSTRUCTIONS

#### **∆** WARNING:

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

# SYMBOLS

The followings show the symbols used for tool.

V .....volts

n. .....no load speed

---- direct current

.../min......revolutions or reciprocation per minute

# IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY CARTRIDGE

ENC005-1

USD301-1

- 1. 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.
- 3. If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
- 4. 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 or rain.

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

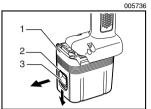
- Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50°C (122°F).
- 7. Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
- 8. Be careful not to drop or strike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

# 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.
- 2. Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
- 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.
- 4. Charge the Nickel Metal Hydride battery cartridge when you do not use it for more than six months.

# FUNCTIONAL DESCRIPTION



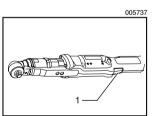
- 1. Battery cartridge
- 2. Red part
- 3. Button

#### $\triangle$ CAUTION:

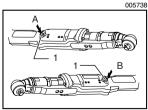
• Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

#### Installing or removing battery cartridge

- Always switch off the tool before insertion or removal of the battery cartridge.
- To remove the battery cartridge, withdraw it from the tool while sliding the button on the front of the cartridge.
- To insert 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 part on the upper side of the button, it is not locked completely. Insert it fully until the red part 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 inserting the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.







1. Reversing switch lever

#### Switch action

#### $\triangle$ 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**

#### **▲** 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.

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.

#### Lighting up the lamps

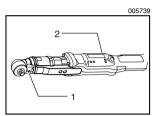
#### **△** CAUTION:

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

Pull the switch trigger to light up the lamp. The lamp keeps on lighting while the switch trigger is being pulled. The light automatically goes out 10 seconds after the switch trigger is released.

#### 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.



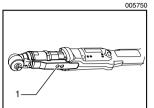
1. Lamp

2. LED indicator

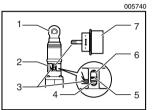
### LED indicator / Beeper

Led indicator / Beeper on the tool shows the following functions.

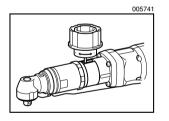
				003814	
Function	Status	Status of the LED	indicator/beeper	Action to be taken	
1 unction	Status	LED indicator	Beeper	Action to be taken	
Auto-stop fastening	This function works when the tool has reached the preset fastening torque and normal tightening has been completed. This helps overtightening to be avoided.	Lights up in green for approximately one second.	_	-	
Delayed re-start	For approximately one second after auto-stop fastening, the tool does not start even if the switch trigger is pulled.				
Warning against insufficient fastening	Insufficient fastening has been performed when the switch trigger has released before reaching the preset fastening torque.	Lights up in red.	A long beep	Retighten the screw	
Warning for battery cartridge capacity	This indicates the appropriate time to replace the battery cartridge when the battery power becomes low.	Flickers in red slowly.	A series of long beeps	Replace the battery with fully charged one	
Checking the		Lighta un in rad	Alanghaan	Deplose the bettery	
Checking the remaining battery capacity, Autostop	This function works when the battery power is almost used up. At this time, tool stops immediately.	Lights up in red.	A long beep	Replace the battery with fully charged one	
Check the LED indicator, light and beeper operation	This function works to check the proper operation of the LED indicator, light and beeper when a battery cartridge has been inserted into the tool.	Lights up first in green, next red. (And then the light comes on.)	A series of very short beeps	-	
Anti-reset of controller	This function works when an abnormal drop of the battery voltage occurs for some reason, and the tool stops.	Flickers in red and green alternatively.	A series of short beeps	Replace the battery with fully charged one	
Overheat	This function works if the temperature of the controller or motor increases to a high level and the tool stops.	Flickers in red quickly.	A series of short beeps	Remove the battery cartridge immediately and cool the tool down.	
Operation error of the switch trigger	This function works to avoid the tool's immediate start upon insertion of battery cartridge into the tool with the switch trigger being pulled.	Flickers in red and green alternatively.	A series of short beeps	Release the switch trigger.	
Motor malfunction	This indicates the abnormal condition of the motor. The tool does not operate.	Flickers in red and green alternatively.	A series of short beeps	Ask Makita service centers.	



1. Screw



- 1. Angle head
- 2. Ring
- 3. Scale
- 4. Compression spring
- 5. Yellow line
- 6. Hole for adjusting grip
- 7. Adjusting grip



#### Adjusting the fastening torque

When you wish to drive machine screws, wood screws, hex bolts, etc. with the predetermined torque, adjusting the fastening torque as follows.

- 1. First remove the battery cartridge from the tool.
- 2. Loosen and remove the screw that secures ring.
- 3. Rotate the ring in the front of the tool by hand so that a hole can be seen below the ring.

- 4. Place the battery cartridge in place and pull the switch trigger. Release it so that the adjusting ring rotates and becomes visible in the hole. And then remove the battery cartridge.
- 5. Use an optional adjusting grip to adjust the fastening torque. Insert the pin of the adjusting grip into the hole in the front of the tool. And then, turn the adjusting grip clockwise to set a greater fastening torque, and counter-clockwise to set a smaller fastening torque.
- 6. Align the edge of the adjusting ring with your desired number on the fastening torque scale.
- 7. Insert the battery cartridge and be sure that a fastening torque has been set up by using a fastening torque tester.
- 8. Rotate the ring so that the hole for adjusting grip is covered, hold and then secure the ring with screw.

#### NOTE:

• Numbers on the fastening torque scale is a guideline to set up your desired fastening torque.

## ASSEMBLY

#### **△** CAUTION:

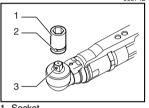
 Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

#### Selecting correct socket

There are different types of sockets for some models depending on applications. Choose and install a correct socket for your application.

#### Installing or removing socket

To install the socket, push it onto the square drive of the tool with one hand by depressing a pin on the square drive with another hand until it locks into place. To remove the socket, simply pull it off depressing the pin on the square drive.



005742

#### 1. Socket

- 2. Hole
- 3. Pin

## **OPERATION**

Hold the tool firmly and place the socket over the bolt or nut. Then switch the tool on. When the clutch cuts in, the motor will stop automatically. Then release the switch trigger.

#### NOTE:

- Hold the tool with its square drive pointed straight at the bolt or nut, or the bolt or nut will be damaged.
- Use of a low temperature conditioned battery cartridge may sometimes give warning for battery cartridge capacity by warning lamp and beeper which makes the tool stop immediately. In this case, the range of fastening capacity may be inferior to those shown in the above even if a charged battery cartridge is used.

## MAINTENANCE

#### **△** CAUTION:

• Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

# 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.

- Protector (Yellow,Blue,Red,Clear)
- · Various type of Makita genuine batteries and chargers
- Automatic refreshing adapter
- Adjust grip
- · Switch lever set
- Spindle complete 12.7



Out

Fold

Makita Canada Inc. 1950 Forbes Street, Whitby, Ontario L1N 7B7 Stamp Timbre

## Your answers to the following questions are appreciated.

Construction trade Home maintenance Makita Br Makita Br Makita Br Power Size Other ( Price Any comments?  Certificate of Warranty Mail to Makita Date Purchased Month Day Year 20 Serial No. Initial Last Name Male Female Single Street Address	
Use of the product is intended for?       4. Most favored points are?         Construction trade       Home maintenance       Design       Makita Br         Industrial maintenance       Other ()       Features       Power         Size       Other ()       Features       Other ()         Price       Price         Any comments?	
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City Province Postal Code	
Postal Code	
AGE: Under 19 20-29 30-39 40-49 Over	
	50
Occupation:	
Dealer's Name & Address:	

# **Factory Service Centres**

Head Office:	1950 Forbes St., Whitby, Ontari	o, L1N 7B7 (905) 571 - 2200	1-800-263-3734
Regional Office:	11771 Hammersmith Way, Rich B.C. V7A 5H6	mond (604) 272 - 3104	1-800-663-0909
Regional Office: (Montreal)	6389 boul. Couture, St. Leonard H1P 3J5	l, Quebec (514) 323 - 1223	1-800-361-7049
Dartmouth:	202 Brownlow Avenue Dartmouth, N.S., B3B 1T5	(902) 468 - 7064	1-888-625-4821
Ville St. Laurent: (Montreal)	1140 Rue Bégin, Ville St. Laure H4R 1X1	nt, Quebec (514) 745 - 5025	1-888-745-5025
Les Saules: (Quebec)	1200 St. Jean Baptiste, Unit 106 Quebec, G2E 5E8	6, Les Saules, (418) 871 - 5720	1-800-663-5757
<b>Nepean:</b> (Ottawa)	210 Colonnade Road, Unit 11, N Ontario, K2E 7M1	Nepean, (613) 224 - 5022	1-888-560-2214
Whitby:	1950 Forbes St., Whitby, Ontari	o, L1N 7B7 (905) 571 - 2200	1-800-263-3734
London:	317 Adelaide St. S., Unit 117, L Ontario, N5Z 3L3	ondon, (519) 686 - 3115	1-800-571-0899
Mississauga:	6350 Tomken Rd., Unit 8, Missis Ontario, L5T 1Y3	ssauga, (905) 670 - 7255	1-888-221-9811
Calgary:	#8-6115 Fourth St. S.E., Calgar Alberta, T2H 2H9	y (403) 243 - 3995	1-800-267-0445
Edmonton:	11614-149 Street, Edmonton, A T5M 3R3	lberta, (780) 455 - 6644	1-888-455-6644
Richmond:	11771 Hammersmith Way, Rich V7A 5H6	mond, B.C., (604) 272 - 3104	1-800-663-0909
Winnipeg:	1670 St. James Street, Winnipe R3H 0L3	g, Manitoba, (204) 694 - 0402	1-800-550-5073
Saskatoon:	206A-2750 Faithful Avenue Sas Saskatchewan, S7K 6M6	katoon, (306) 931 - 0111	1-888-931-0111

For the authorized service centre nearest you please refer to the local yellow pages directory under "tools" or contact our customer service department (Tel) 1-800-263-3734

#### When you need service...

- Explain the problem in a letter
- Enclose the letter with the tool
- Package carefully and send prepaid to the nearest Makita factory or authorized service centre

#### CUSTOMER RECORD

DATE

PURCHASED: \_

DEALER'S NAME

& ADDRESS: \_\_\_\_

MODEL NO .:

SERIAL NO.: \_

## MAKITA LIMITED ONE YEAR WARRANTY

#### Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centres. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply:

- where normal maintenance is required,
- repairs have been made or attempted by others,
- the tool has been abused, misused or improperly maintained,
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

"The Makita Warranty is the only and the entire written warranty given by Makita for the Makita tools. No dealer or his agent or employee is authorized to extend or enlarge upon this warranty by any verbal or written statement or advertisement."

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE YEAR TERM OF THIS WARRANTY.

"This Warranty gives you specific rights. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any warranties set forth in any provincial legislation. To the extent required by law, the provisions in any provincial or federal legislation with respect to warranties take precedence over the provisions in this warranty."

## Makita Corporation

3-11-8, Sumiyoshi-cho, Anjo, Aichi 446-8502 Japan