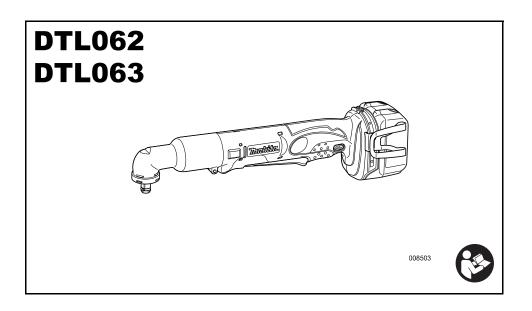
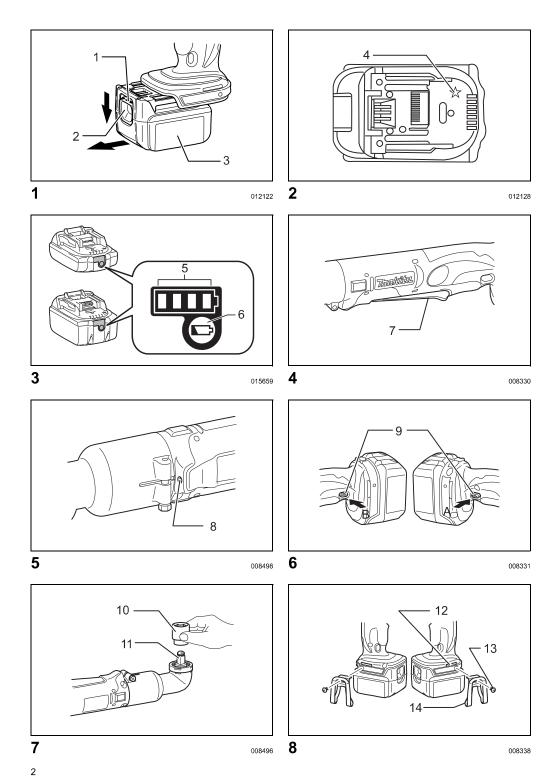
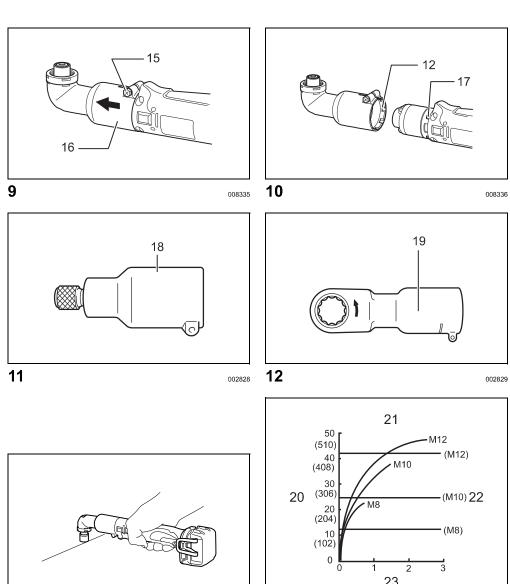
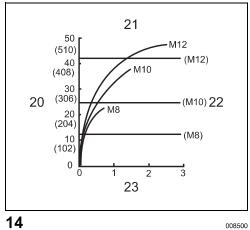


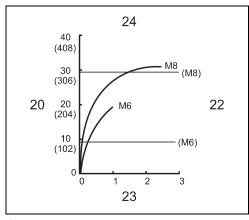
GB	Cordless Angle Impact Wrench	Instruction manual
F	Outil d'entraînement à impact angulaire sans fil	Manuel d'instructions
D	Akku-Winkelschlagschrauber	Betriebsanleitung
	Avvitatrice angolare ad impulsi a batteria	Istruzioni per l'uso
NL	Haakse accuslagdopsleutel	Gebruiksaanwijzing
E	Llave de impacto angular sin cables	Manual de instrucciones
Р	Chave de percussão para cantos sem fios	Manual de instruções
DK	Ledningsfri vinkelslagskruenøgle	Brugsanvisning
GR	Γωνιακό παλμικό κλειδί μπαταρίας	Οδηγίες χρήσης











008499

ENGLISH (Original instructions)

Explanation of general view

1.	Red indicator	9.	Reversing switch lever	17.	Tooth
2.	Button	10.	Socket	18.	Straight head
3.	Battery cartridge	11.	Anvil	19.	Ratchet head
4.	Star marking	12.	Groove	20.	Standard bolt
5.	Indicator lamps	13.	Screw	21.	Fastening torque
6.	Check button	14.	Hook	22.	Proper fastening torque
7.	Switch lever	15.	Hex bolt	23.	Fastening time (S)
8.	Lamp	16.	Angle head	24.	High tensile bolt

SPECIFICATIONS

Mo	odel	DTL062	DTL063	
Canacitica	Standard bolt	M4 - M12		
Capacities	High tensile bolt	M4 - M8		
Square drive		9.5 mm		
No load speed (min ⁻¹)		0 - 2,000		
Impacts per minute		0 - 3,000		
Max. fastening torque		60 N•m		
Overall length		387 mm		
Net weight		1.4 - 1.8 kg	1.4 - 2.0 kg	
Rated voltage		D.C. 14.4 V	D.C. 18 V	

- · Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications may differ from country to country.
- The weight may differ depending on the attachment(s), including the battery cartridge. The lightest and heaviest combination, according to EPTA-Procedure 01/2014, are shown in the table.

Applicable battery cartridge and charger

	D.C.14.4 V Model	BL1415N/BL1430/BL1430B/BL1440/BL1450/BL1460B
Battery cartridge	D.C.18 V Model	BL1815N/BL1820/BL1820B/BL1830/BL1830B/BL1840/ BL1840B/BL1850/BL1850B/BL1860B
Charger		DC18RC/DC18RD/DC18RE/DC18SD/DC18SE/DC18SF

Some of the battery cartridges and chargers listed above may not be available depending on your region of residence.

Only use the battery cartridges and chargers listed above. Use of any other battery cartridges and chargers may cause injury and/or fire.

Intended use

ENE033-1 The tool is intended for screw driving in wood, metal and

General power tool safety warnings

GEA010-2

⚠ WARNING: Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below 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.

CORDLESS IMPACT WRENCH SAFETY WARNINGS

Hold the 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.
- 2. Wear ear protectors.
- 3. Check the impact socket carefully for wear, cracks or damage before installation.
- 4. Hold the tool firmly.
- 5 Keep hands away from rotating parts.
- Always be sure you have a firm footing.
 Be sure no one is below when using the tool in high locations.
- The proper fastening torque may differ depending upon the kind or size of the bolt. Check the torque with a torque wrench.

SAVE THESE INSTRUCTIONS.

MARNING: 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.

IMPORTANT SAFETY INSTRUCTIONS FOR BATTERY CARTRIDGE ENCOR

- 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:
 - 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

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.
- 10. The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements. For commercial transports e.g. by third parties, forwarding agents, special requirement on packaging and labeling must be observed.

For preparation of the item being shipped, consulting an expert for hazardous material is required. Please also observe possibly more detailed national regulations.

Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging.

- 11. Follow your local regulations relating to disposal of battery.
- 12. Use the batteries only with the products specified by Makita. Installing the batteries to non-compliant products may result in a fire, excessive heat, explosion, or leak of electrolyte.

SAVE THESE INSTRUCTIONS.

CAUTION: Only use genuine Makita batteries.
Use of non-genuine Makita batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the Makita warranty for the Makita tool and charger.

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.
- 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 if you do not use it for a long period (more than six months).

FUNCTIONAL DESCRIPTION

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 (Fig. 1)

- Always switch off the tool before installing or removing of the battery cartridge.
- To remove the battery cartridge, slide it from the tool while sliding the button on the front of the 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) (Fig. 2)

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.

Indicating the remaining battery capacity

Only for battery cartridges with the indicator (Fig. 3)
Press the check button on the battery cartridge to indicate
the remaining battery capacity. The indicator lamps light
up for a few seconds.

Indicator lamps			
Lighted	Off	Blinking	Remaining capacity
			75% to 100%
			50% to 75%
			25% to 50%
			0% to 25%
			Charge the battery.
	1]	The battery may have malfunctioned.

NOTE:

 Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

Switch action

CAUTION:

 Before inserting the battery cartridge into the tool, always check to see that the switch lever actuates properly and returns to the "OFF" position when released. (Fig. 4)

To start the tool, simply pull the switch lever. Tool speed is increased by increasing pressure on the switch lever. Release the switch lever to stop.

Lighting up the front lamp

CAUTION

 Do not look in the light or see the source of light directly. (Fig. 5)

Pull the switch lever to light up the lamp. The lamp keeps on lighting while the switch lever is being pulled. The light automatically goes out 10 - 15 seconds after the switch lever 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

Reversing switch action (Fig. 6)

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 lever 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.

Selecting correct socket

Always use the correct size socket for bolts and nuts. An incorrect size socket will result in inaccurate and inconsistent fastening torque and/or damage to the bolt or nut

Installing or removing socket (Fig. 7)

To install the socket, push it onto the anvil of the tool until it locks into place.

To remove the socket, simply pull it off.

Hook (Accessory)

CAUTION:

 When installing the hook, tighten the screw firmly.
 Failure to do so may cause the breakage of the tool or personal injury. (Fig. 8)

The hook is convenient for temporarily hanging the tool. This can be installed on either side of the tool. To install the hook, insert it into a groove in the tool housing on either side and then secure it with a screw. To remove, loosen the screw and then take it out.

Adjusting the angle head

The angle head can be adjusted 360° (8 positions in 45-degree increments). To adjust it, loosen the hex bolt and remove the angle head.

Adjust the angle head to the desired position and reinstall it so that the teeth on the housing will match up with the grooves in the angle head. Then tighten the hex bolt to secure the angle head. (Fig. 9 & 10)

Straight head and ratchet head (Accessory)

Straight heads and ratchet heads are available as optional accessories for various applications on the job. (Fig. 11 & 12)

OPERATION

CAUTION:

 Always insert the battery cartridge all the way until it locks in place. 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.

Hold the tool firmly and place the socket over the bolt or nut. Turn the tool on and fasten for the proper fastening time. (Fig. 13)

The proper fastening torque may differ depending upon the kind or size of the bolt, the material of the workpiece to be fastened, etc. The relation between fastening torque and fastening time is shown in the figures. (Fig. 14 & 15)

NOTE:

- · Hold the tool pointed straight at the bolt or nut.
- Excessive fastening torque may damage the bolt/nut or socket. Before starting your job, always perform a test operation to determine the proper fastening time for your bolt or nut.
- If the tool is operated continuously until the battery cartridge has discharged, allow the tool to rest for 15 minutes before proceeding with a fresh battery.

The fastening torque is affected by a wide variety of factors including the following. After fastening, always check the torque with a torque wrench.

- When the battery cartridge is discharged almost completely, voltage will drop and the fastening torque will be reduced.
- 2. Driver bit or socket bit
 - Failure to use the correct size driver bit or socket bit will cause a reduction in the fastening torque.
 - A worn socket (wear on the hex end or square end) will cause a reduction in the fastening torque.

3. Bolt

- Even though the torque coefficient and the class of bolt are the same, the proper fastening torque will differ according to the diameter of bolt.
- Even though the diameters of bolts are the same, the proper fastening torque will differ according to the torque coefficient, the class of bolt and the bolt length.
- The use of the universal joint or the extension bar somewhat reduces the fastening force of the impact wrench. Compensate by fastening for a longer period of time.
- 5. The manner of holding the tool or the material of driving position to be fastened will affect the torque.
- Operating the tool at low speed will cause a reduction in the fastening torque.

MAINTENANCE

CAUTION:

- 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.
 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.

- Sockets
- · Extension bar
- · Universal joint
- · Bit adapter
- · Various type of Makita genuine batteries and chargers

NOTE

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

Noise

ENG905-1

The typical A-weighted noise level determined according to EN62841:

Sound pressure level (L_{pA}): 88 dB (A) Sound power level (L_{WA}): 99 dB (A) Uncertainty (K): 3 dB (A)

ENG907-1

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

⚠ WARNING:

- Wear ear protection.
- The noise emission during actual use of the power tool can differ from the declared value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.
- 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).

Vibration

ENG900-1

The vibration total value (tri-axial vector sum) determined according to EN62841:

Model DTL062

Work mode: impact tightening of fasteners of the maximum capacity of the tool Vibration emission (a_h): 14.5 m/s² Uncertainty (K): 2.0 m/s²

Model DTL063

Work mode: impact tightening of fasteners of the maximum capacity of the tool Vibration emission (a_h): 16.5 m/s² Uncertainty (K): 2.0 m/s²

ENG901-2

- The declared vibration total value(s) has been measured in accordance with a standard test method and may be used for comparing one tool with another.
- The declared vibration total value(s) 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 value(s) depending on the ways in which the tool is used especially what kind of workpiece is processed.
- 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).

EC Declaration of Conformity

For European countries only
The EC declaration of conformity is included as Annex A to this instruction manual.