



makita DTM50 Cordless Multi Tool Instruction Manual

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17 EC Declaration of Conformity

17.1 For European countries only

17.2 4. Always use safety glasses or goggles. Ordinary eye or sun glasses are NOT safety glasses.

17.3 6. Hold the tool firmly.

17.4 8. Keep hands away from moving parts.

17.5 10. Always switch off and wait for the blade to come to a complete stop before removing the blade from the workpiece.

17.6 12. Do not operate the tool at no-load unnecessarily.

17.7 14. Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.

17.8 16. Ventilate your work area adequately when you perform sanding operations.

17.9 18. Be sure that there are no cracks or breakage on the pad before use. Cracks or breakage may cause a personal injury.

17.10 24. Do not operate the power tool near flammable

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

18 Important safety instructions for battery cartridge

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

18.2 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.

18.3 5. Do not short the battery cartridge:

18.4 (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.

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

18.6 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.

18.7 9. Do not use a damaged battery.

18.8 11. Follow your local regulations relating to disposal of battery.

19 Tips for maintaining maximum battery life

19.1 1. Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.

19.2 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.

20 Installing or removing battery cartridge

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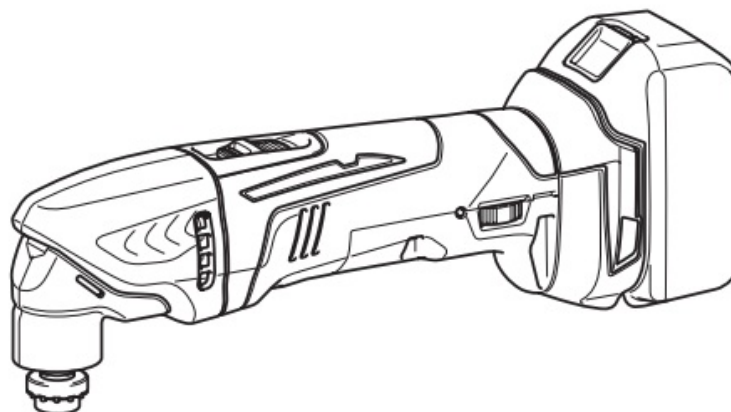
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SPECIFICATIONS

Model	DTM40	DTM50
Oscillation per minute	6,000 – 20,000 (min ⁻¹)	
Oscillation angle, left/right	1.6 ° (3.2 ° total)	
Overall length	307 – 324 mm	
Net weight	1.7 – 2.0 kg	1.8 – 2.2 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

Battery cartridge	D.C.14.4 V Model	BL1415N / BL1430 / BL1430B / BL1440 / BL1450 / BL1460B
	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.



WARNING: 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

The tool is intended for sawing and cutting wood, plastic, gypsum, non-ferrous metals, and fastening elements (e.g. unhardened nails and staples). It is also intended for working soft wall tiles, as well as dry sanding and scraping of small surfaces. It is especially for working close to edge and flush cutting.

Noise

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

Work mode: Sanding Sound pressure level (L_{pA}) : 78 dB (A) Uncertainty (K) : 3 dB (A)

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

Work mode: Cutting with plunge cut saw blade

Model DTM40

Sound pressure level (L_{pA}) : 82 dB (A) Sound power level (L_{WA}) : 93 dB (A) Uncertainty (K) : 3 dB (A)

Model DTM50

Sound pressure level (L_{pA}) : 84 dB (A) Sound power level (L_{WA}) : 95 dB (A) Uncertainty (K) : 3 dB (A)

Work mode: Cutting with segmental saw blade Sound pressure level (L_{pA}) : 81 dB (A) Sound power level (L_{WA}) : 92 dB (A) Uncertainty (K) : 3 dB (A)

Work mode: Scraping

Model DTM40

Sound pressure level (L_{pA}) : 81 dB (A) Sound power level (L_{WA}) : 92 dB (A) Uncertainty (K) : 3 dB (A)

Model DTM50

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

NOTE: 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.

NOTE: The declared noise emission value(s) may also be used in a preliminary assessment of exposure.



WARNING: Wear ear protection.



WARNING: 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.



WARNING: 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

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

Work mode: Sanding Vibration emission (a_h) : 2.5 m/s² or less

Uncertainty (K) : 1.5 m/s² Work mode: Cutting with plunge cut saw blade

Model DTM40

Vibration emission (a_h) : 9.5 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM50

Vibration emission (a_h) : 10.0 m/s² Uncertainty (K) : 1.5 m/s²

Work mode: Cutting with segmental saw blade

Model DTM40

Vibration emission (a_h) : 5.0 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM50

Vibration emission (a_h) : 5.5 m/s² Uncertainty (K) : 1.5 m/s²

Work mode: Scraping

Model DTM40

Vibration emission (a_h) : 7.5 m/s² Uncertainty (K) : 1.5 m/s²

Model DTM50

Vibration emission (a_h) : 9.5 m/s² Uncertainty (K) : 1.5 m/s²

NOTE: 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.

NOTE: The declared vibration total value(s) may also be used in a preliminary assessment of exposure.

EC Declaration of Conformity

For European countries only

The EC declaration of conformity is included as Annex A to this instruction manual.

General power tool safety warnings

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.

1. **This power tool is intended to function for sawing, cutting, grinding and sanding. 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
2. **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring.** Cutting accessory contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric
3. **Use clamps or another practical way to secure and support the workpiece to a stable** Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
4. **Always use safety glasses or goggles. Ordinary eye or sun glasses are NOT safety glasses.**
5. **Avoid cutting nails. Inspect workpiece for any nails and remove them before**
6. **Hold the tool firmly.**
7. **Make sure the application tool is not contacting the workpiece before the switch is turned**
8. **Keep hands away from moving parts.**
9. **Do not leave the tool running. Operate the tool only when hand-held.**
10. **Always switch off and wait for the blade to come to a complete stop before removing the blade from the workpiece.**
11. **Do not touch the application tool or the workpiece immediately after operation; they may be extremely hot and could burn your**
12. **Do not operate the tool at no-load unnecessarily.**
13. **Always use the correct dust mask/respirator for the material and application you are working**
14. **Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.**
15. **This tool has not been waterproofed, so do not use water on the workpiece**
16. **Ventilate your work area adequately when you perform sanding operations.**
17. **Use of this tool to sand some products, paints and wood could expose user to dust containing hazardous substances. Use appropriate respiratory**
18. **Be sure that there are no cracks or breakage on the pad before use. Cracks or breakage may cause a personal injury.**

19. **Do not use accessories which are not specifically designed and recommended by the tool manufacturer.** Just because the accessory can be attached to your power tool, it does not assure safe operation.
20. **Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments.** The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing
21. **Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment.** Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of
22. **Never lay the power tool down until the accessory has come to a complete stop.** The spinning accessory may grab the surface and pull the power tool out of your
23. **Do not run the power tool while carrying it at your side.** Accidental contact with the accessory could snag your clothing, pulling the accessory into your
24. **Do not operate the power tool near flammable materials.** Sparks could ignite these materials.
25. **Do not use accessories that require liquid** Using water or other liquid coolants may result in electrocution or shock.
26. **Always be sure that the tool is switched off and unplugged or that the battery cartridge is removed before carrying out any work on the tool.**

Always be sure you have a firm footing. Be sure no one is below when using the tool in high locations.

Important safety instructions for battery cartridge

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**
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**
5. **Do not short the battery cartridge:**
 - **Do not touch the terminals with any conductive**
- (2) **Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.**
 - **Do not expose battery cartridge to water or**

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

6. **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**

9. **Do not use a damaged battery.**

10. **The contained lithium-ion batteries are subject to the Dangerous Goods Legislation require-**

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

Tips for maintaining maximum battery life

1. **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.**

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.**

4. **Charge the battery cartridge if you do not use it for a long period (more than six months).**

Installing or removing battery cartridge

- **1: 1. Button 2. Red indicator 3. Battery cartridge**

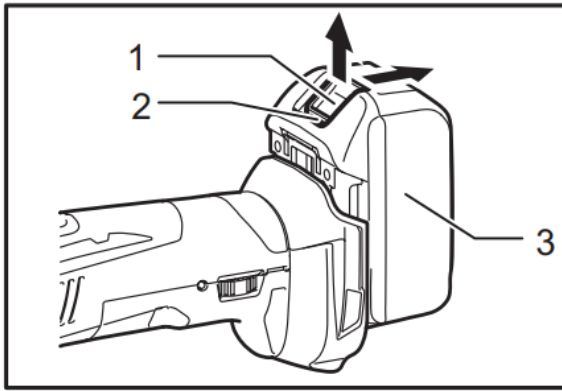


Fig.1

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. 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

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

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

- 2: 1. Star marking

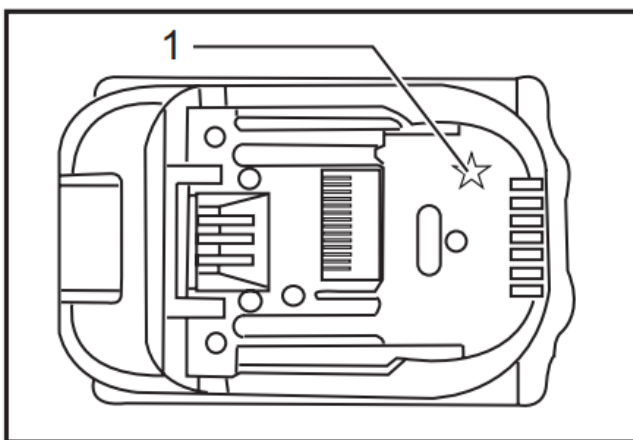


Fig.2

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, slide the slide switch on the tool toward the “O (OFF)” position and stop the application that caused the tool to become overloaded. Then slide the slide switch toward the “I (ON)” position again to restart. If the tool does not start, the battery is overheated. In this situation, let the battery cool before sliding the slide switch toward the “I (ON)” position again.

- Low battery voltage:









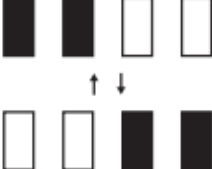
The remaining battery capacity is too low and the tool will not operate. In this situation, remove and recharge the battery.

Indicating the remaining battery capacity

Only for battery cartridges with the indicator

- 3: 1. Indicator lamps 2. Check button

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			Remaining capacity
 Lighted	 Off	 Blinking	
			75% to 100%
			50% to 75%
			25% to 50%
			0% to 25%
			Charge the battery.
			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

- 4: 1. Slide switch

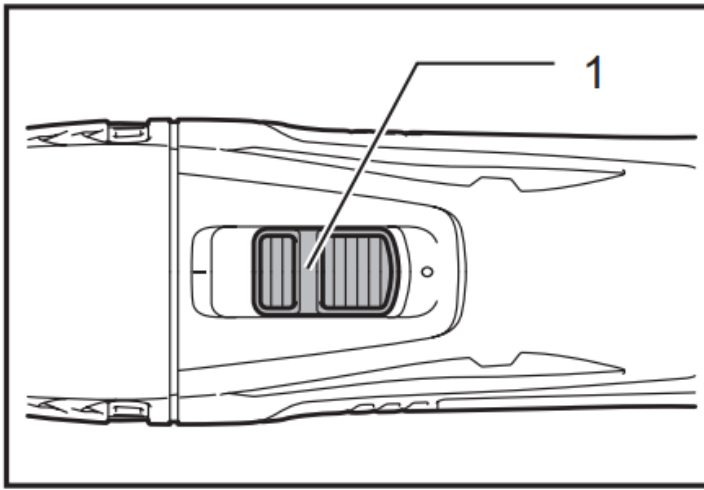


Fig.4

CAUTION:

Before installing the battery cartridge into the tool, always check to see that the tool is switched off

To start the tool, slide the slide switch toward the “I (ON)” position.

To stop the tool, slide the slide switch toward the “O (OFF)” position.

Adjusting the orbital stroke rate

- **5: 1. Dial**

The orbital stroke rate is adjustable. To change the orbital stroke rate, turn the dial between 1 and 6. The higher the number is, the higher the orbital stroke rate is. Preset the dial to the number suitable for your workpiece.

NOTE:

- The dial cannot be turned directly from 1 to 6 or from 6 to 1. Forcing the dial may damage the When changing the dial direction, always turn the dial moving it through each intermediate number.

Lighting up the front lamp

- **6: 1. Front lamp**

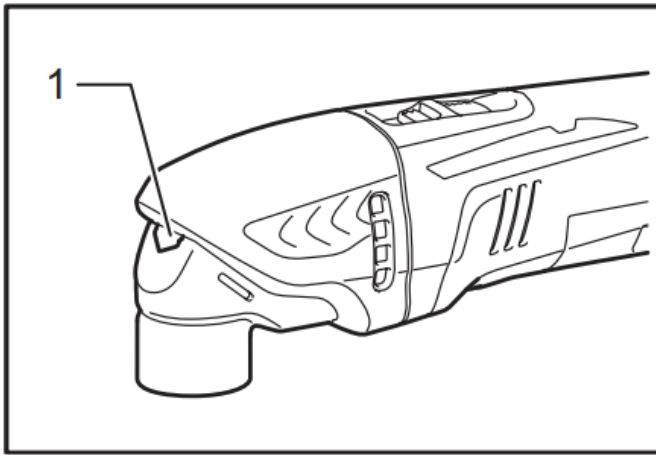


Fig.6

Slide the slide switch toward the “I (ON)” position to light up the front lamp. The lamp keeps on lighting while the switch is the “I (ON)” position. The light automatically goes out after pressing the rear of the slide switch, and then sliding the slide switch toward the “O (OFF)” position.

Overload protection

When the tool is overloaded and the tool temperature reaches a certain level, the front lamp blinks and the tool automatically stops. Remove a cause of overload to restart.

Indication lamp

- 7: 1. Indication lamp

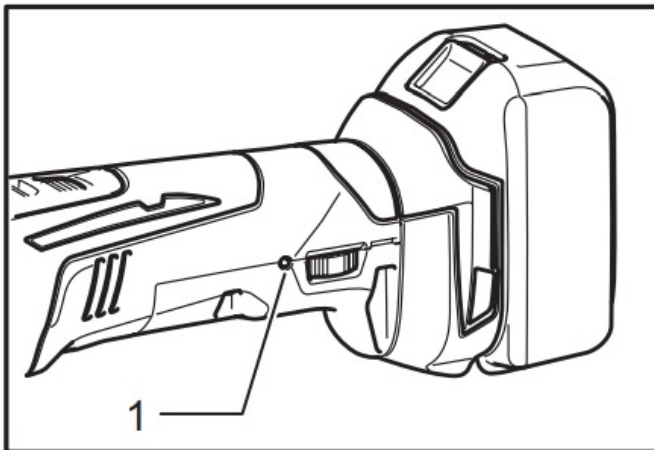


Fig.7

- When the remaining battery capacity gets low, the indication lamp
- When the remaining battery capacity gets much lower, the tool stops during operation and the indication lamp lights up about 10

At this time, remove the battery cartridge from the tool and charge it.

ASSEMBLY

CAUTION:

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

on the

- **8:** 1. Application tool installation bolt 2. Holes in the application tool 3. Protrusions of the tool flange

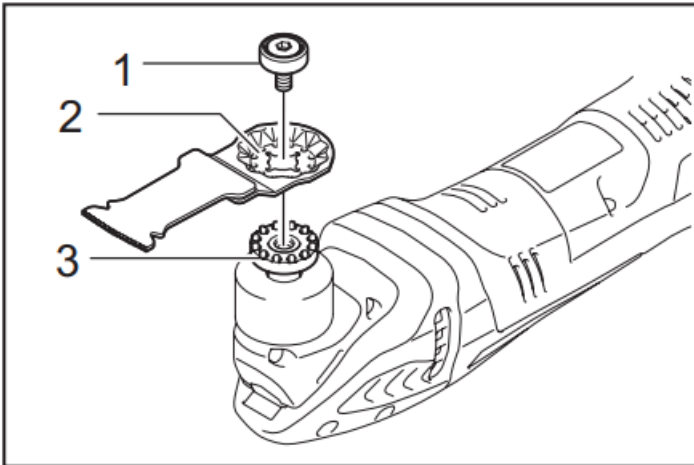


Fig.8

- **9:** 1. Application tool installation bolt 2. Hex

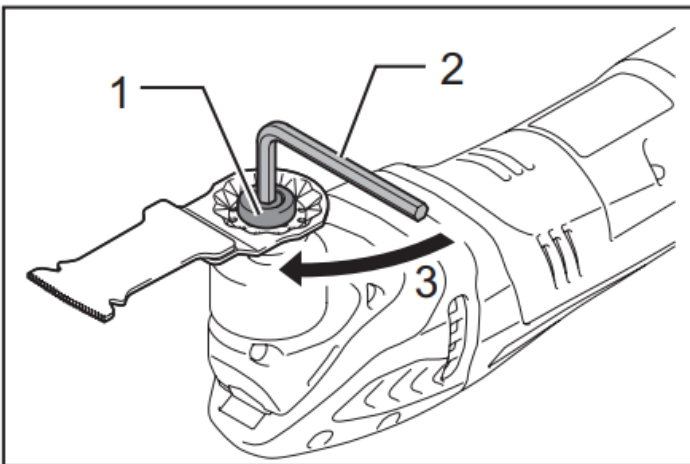


Fig.9

wrench 3. Tighten

Put an application tool (optional accessory) on the tool flange so that the protrusions of the tool flange fit in the holes in the application tool and secure the application tool by tightening the bolt firmly with the hex wrench. When using sanding application tool, mount the application tool on the sanding pad so that it matches the sanding pad direction.

The sanding pad has a hook and loop type fitting system which allows easy and rapid fitting of a sanding paper. As sanding papers have holes for dust extraction, mount a sanding paper so that the holes in a sanding paper match those in the sanding pad.

To remove a sanding paper, raise its end and peel it off. Loosen and remove the application tool installation bolt using a hex wrench and then take off the application tool.

- **10:** 1. Application tool installation bolt 2. Holes in the application tool 3. Adapter (required for some application tools) 4. Protrusions of the tool flange

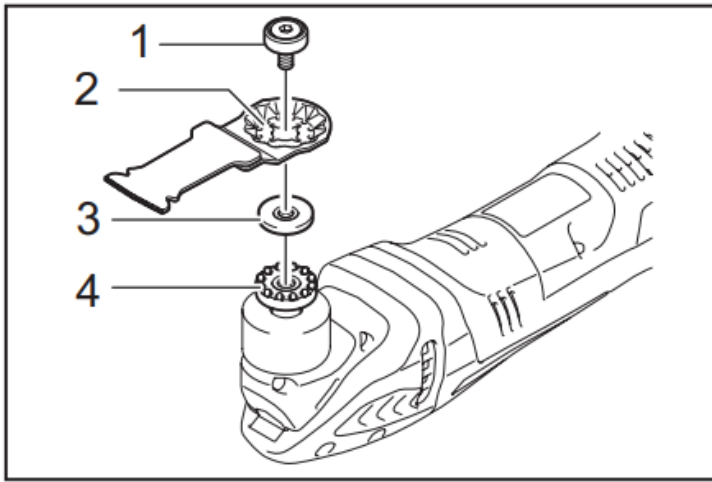


Fig.10

When using application tools with a different type of installation section, use a correct adapter (optional accessory).

Hex wrench storage

- 11: 1. Hex wrench

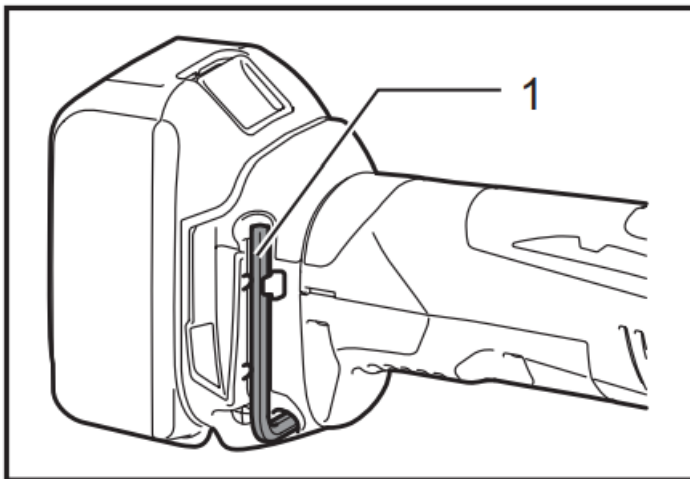


Fig.11

When not in use, store the hex wrench as shown in the figure to keep it from being lost

► Fig.12

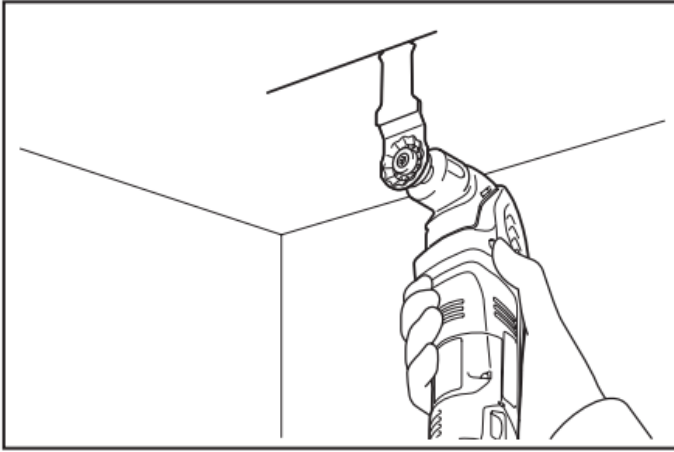


Fig.12

Put the application tool on the workpiece.

And then move the tool forward so that the application tool movement does not slow down.

► **Fig.13**

Apply a sanding paper on the workpiece.

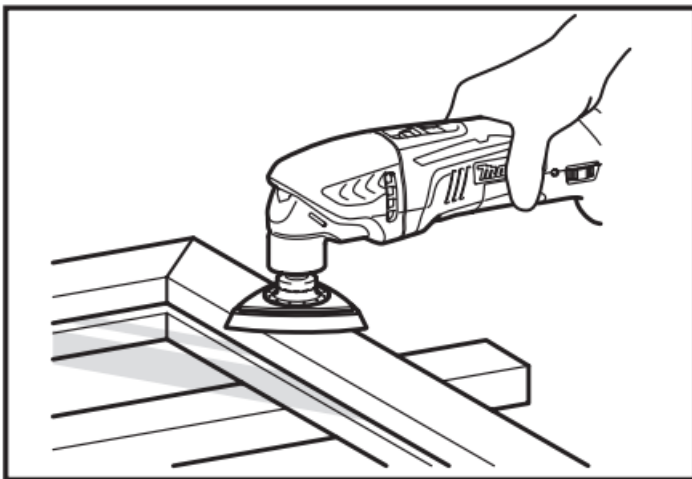


Fig.13

NOTE:

- Using a test material sample to try is recommendable to determine a correct orbital stroke rate suitable for your
- Use a sanding paper with the same grit until sanding the whole workpiece is completed. Replacing a sanding paper with different grit sanding paper may not get a fine
- **14:** 1. Nozzle band 2. Dust nozzle 3. Dust nozzle 4. Dust attachment 5. Felt ring (ø 37 mm) 6. Pad (with OIS marking)

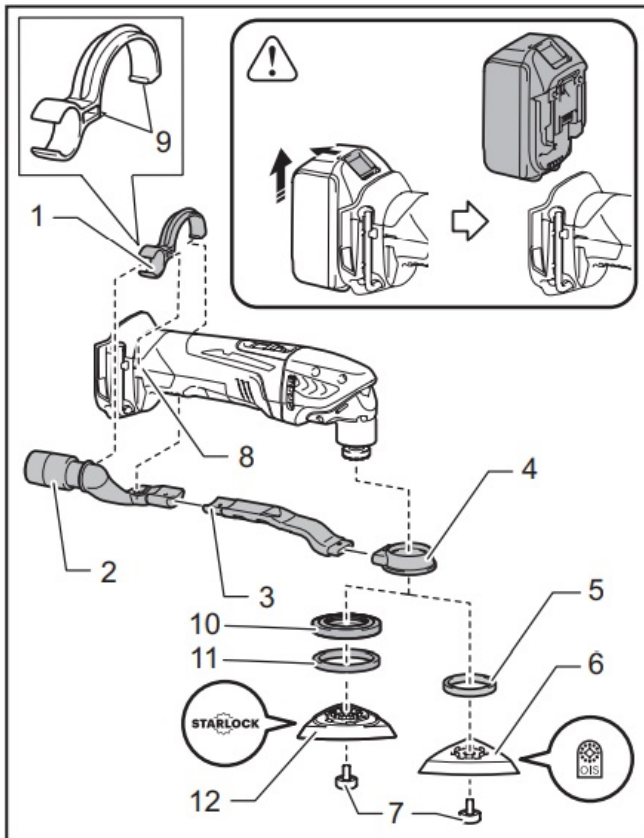


Fig.14

7. Application tool installation bolt 8. Holes in the tool 9. Protrusions on the nozzle band

8. Spacer 11. Felt ring (ø 47 mm) 12. Pad (with STARLOCK marking)

- Install dust nozzles and dust
- Install the nozzle band on the tool so that its protrusions fit in the holes in the tool to secure
- Put the felt ring and the sanding pad on the dust attachment and then secure them with the application tool installation

► **Fig.15**

When you wish to perform cleaner operation, connect a vacuum cleaner to your tool. Connect a hose of vacuum cleaner to the dust extraction attachment (optional accessory).

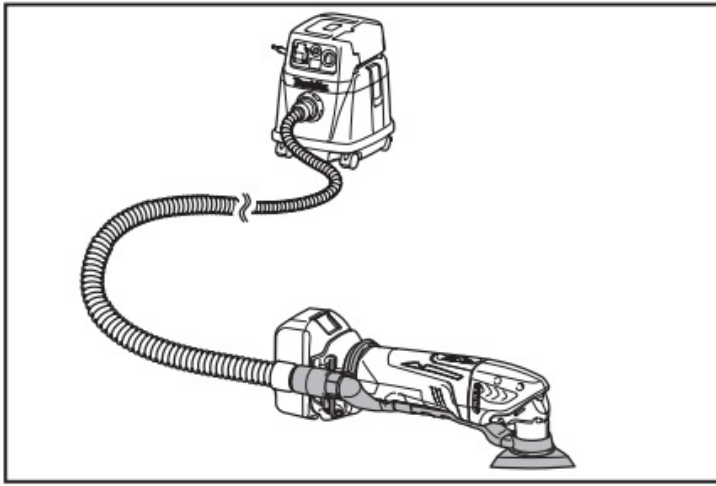


Fig.15

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.

OPTIONAL ACCESSORIES

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


- Segment saw blade
- Round saw blade
- Plunge cut saw blade
- Scraper (rigid)
- Scraper (flexible)
- Serrated seg blade
- General joint cutter
- HM remover
- HM seg saw blade
- HM sanding plate
- Diamond seg sawblade
- Sanding pad
- Adapter
- Abrasive paper delta (red / white / black)
- Fleece delta (medium / coarse / without grit)
- Polishing felt delta
- Hex wrench
- Dust extraction attachment
- Makita genuine battery and charger

NOTE:

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

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6	DTM50	DTM50	F
7	DTM50	DTM50	G
8	DTM50	DTM50	H
9	DTM50	DTM50	I
10	DTM50	DTM50	J
11	DTM50	DTM50	K
12	DTM50	DTM50	L
13	DTM50	DTM50	M
14	DTM50	DTM50	N
15	DTM50	DTM50	O
16	DTM50	DTM50	P
17	DTM50	DTM50	Q
18	DTM50	DTM50	R
19	DTM50	DTM50	S
20	DTM50	DTM50	T
21	DTM50	DTM50	U
22	DTM50	DTM50	V
23	DTM50	DTM50	W
24	DTM50	DTM50	X
25	DTM50	DTM50	Y
26	DTM50	DTM50	Z
27	DTM50	DTM50	AA
28	DTM50	DTM50	AB
29	DTM50	DTM50	AC
30	DTM50	DTM50	AD
31	DTM50	DTM50	AE
32	DTM50	DTM50	AF
33	DTM50	DTM50	AG
34	DTM50	DTM50	AH
35	DTM50	DTM50	AI
36	DTM50	DTM50	AJ
37	DTM50	DTM50	AK
38	DTM50	DTM50	AL
39	DTM50	DTM50	AM
40	DTM50	DTM50	AN
41	DTM50	DTM50	AO
42	DTM50	DTM50	AP
43	DTM50	DTM50	AQ
44	DTM50	DTM50	AR
45	DTM50	DTM50	AS
46	DTM50	DTM50	AT
47	DTM50	DTM50	AU
48	DTM50	DTM50	AV
49	DTM50	DTM50	AW
50	DTM50	DTM50	AX
51	DTM50	DTM50	AY
52	DTM50	DTM50	AZ
53	DTM50	DTM50	BA
54	DTM50	DTM50	BB
55	DTM50	DTM50	BC
56	DTM50	DTM50	BD
57	DTM50	DTM50	BE
58	DTM50	DTM50	BF
59	DTM50	DTM50	BG
60	DTM50	DTM50	BH
61	DTM50	DTM50	BI
62	DTM50	DTM50	BJ
63	DTM50	DTM50	BK
64	DTM50	DTM50	BL
65	DTM50	DTM50	BM
66	DTM50	DTM50	BN
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68	DTM50	DTM50	BP
69	DTM50	DTM50	BQ
70	DTM50	DTM50	BR
71	DTM50	DTM50	BS
72	DTM50	DTM50	BT
73	DTM50	DTM50	BU
74	DTM50	DTM50	BV
75	DTM50	DTM50	BW
76	DTM50	DTM50	BX
77	DTM50	DTM50	BY
78	DTM50	DTM50	BZ
79	DTM50	DTM50	CA
80	DTM50	DTM50	CB
81	DTM50	DTM50	CC
82	DTM50	DTM50	CD
83	DTM50	DTM50	CE
84	DTM50	DTM50	CF
85	DTM50	DTM50	CG
86	DTM50	DTM50	CH
87	DTM50	DTM50	CI
88	DTM50	DTM50	CJ
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215	DTM50	DTM50	HG
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229	DTM50	DTM50	HU
230	DTM50	DTM50	HV
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