



makita PDC01 Portable power unit Instruction Manual

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makita PDC01 Portable power unit User Manual



PDC01

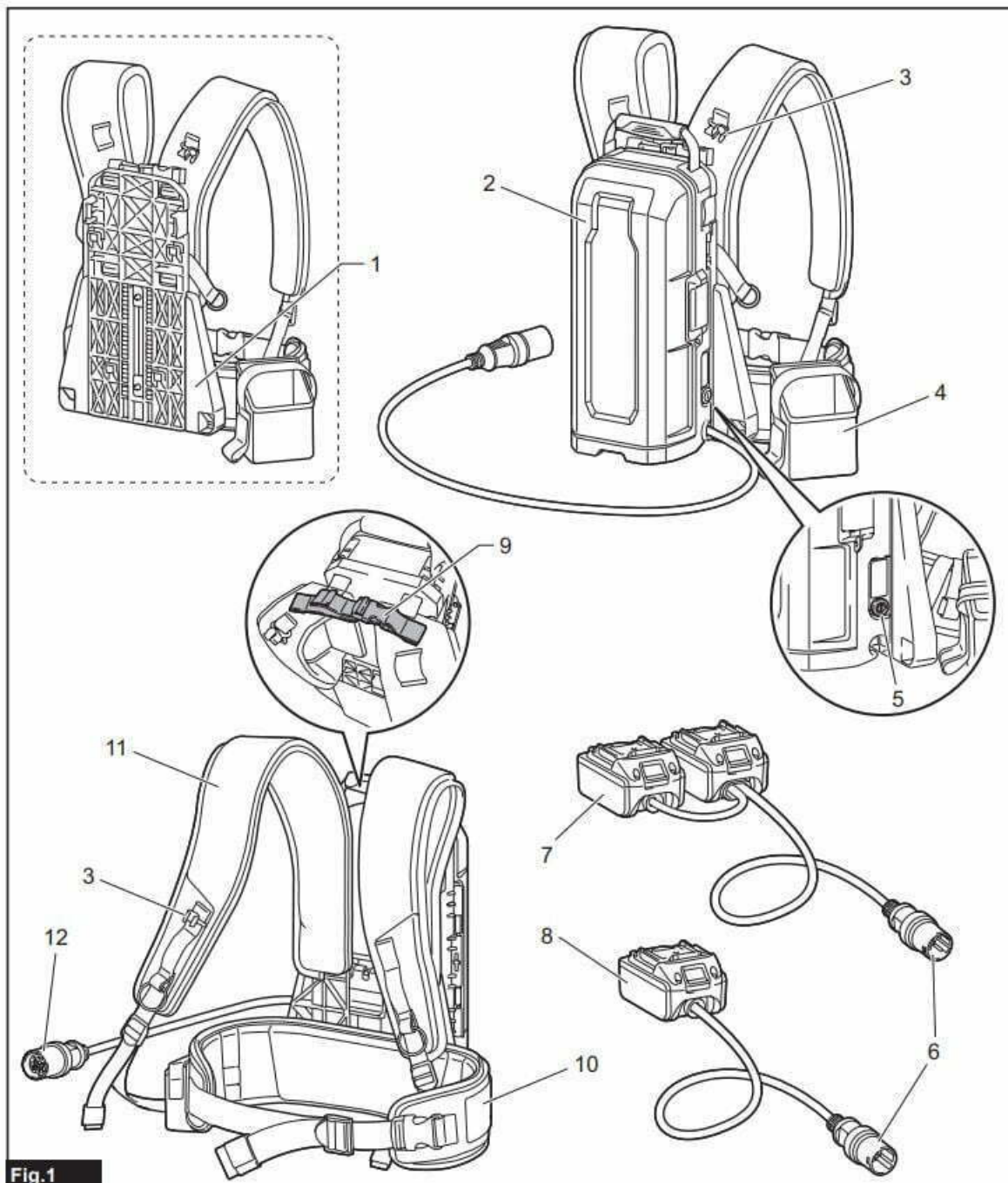
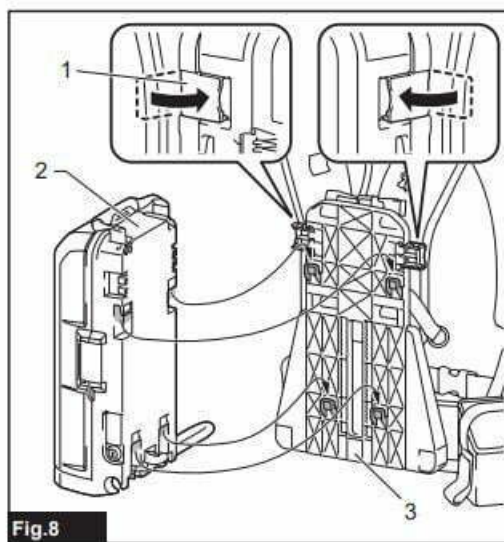
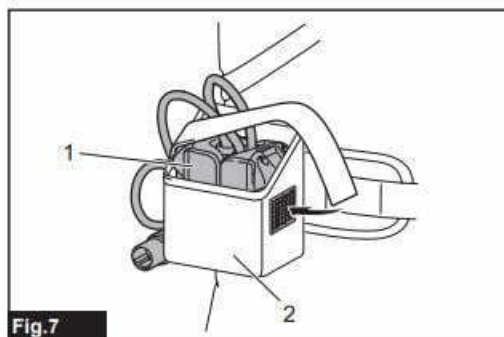
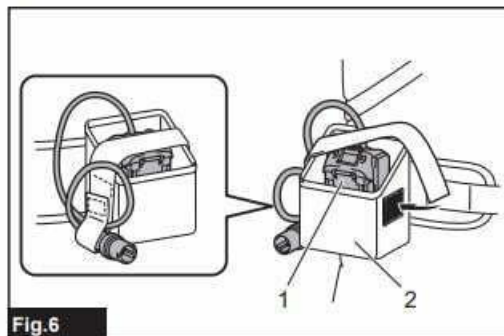
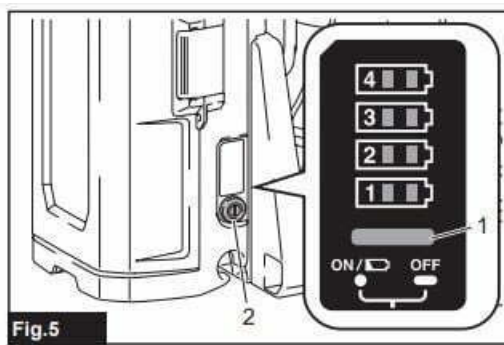
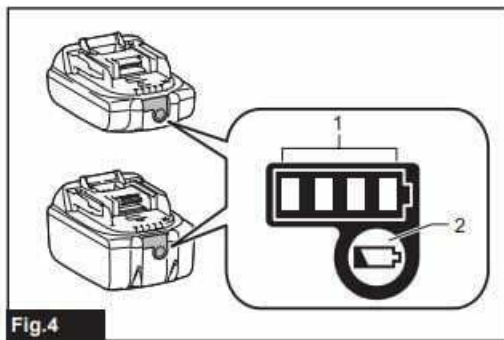
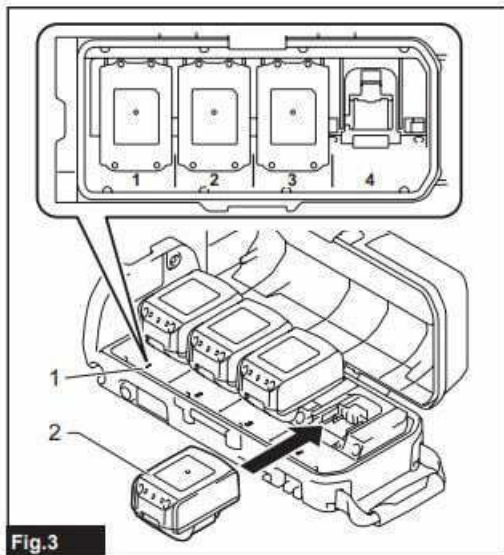
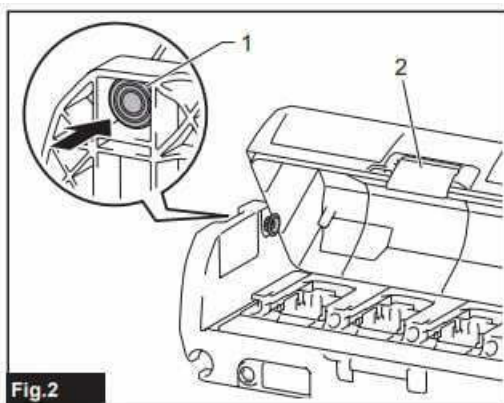
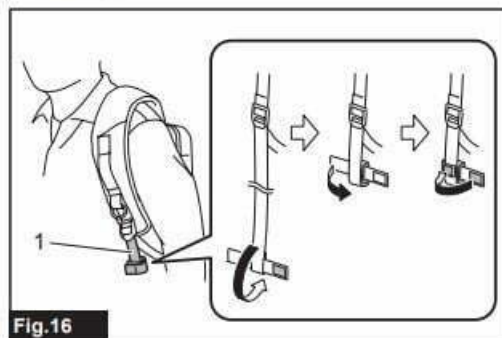
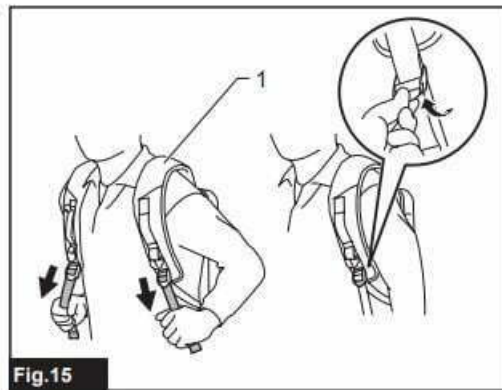
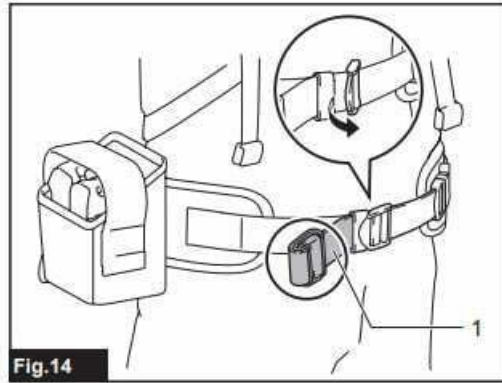
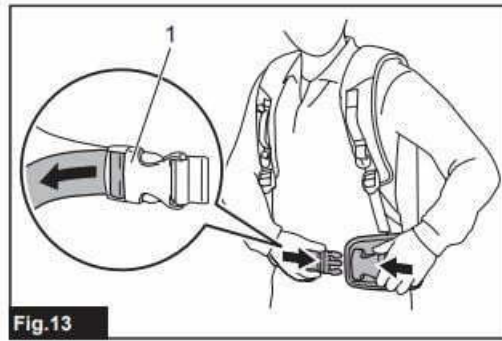
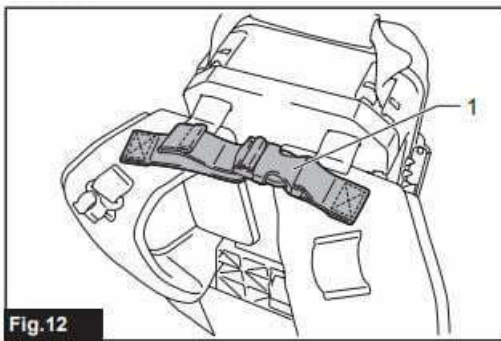
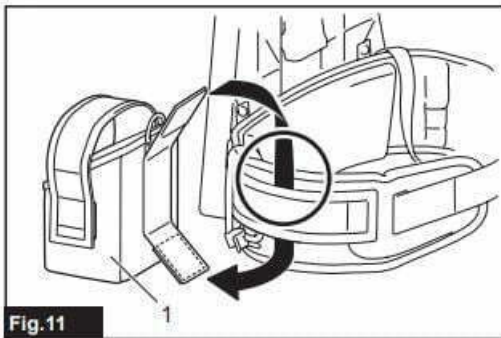
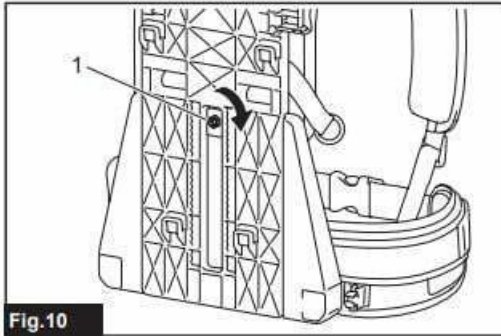
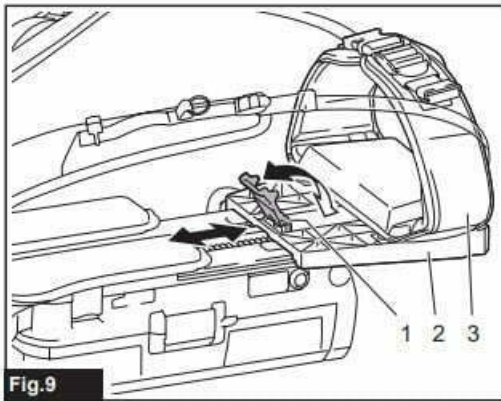


Fig.1





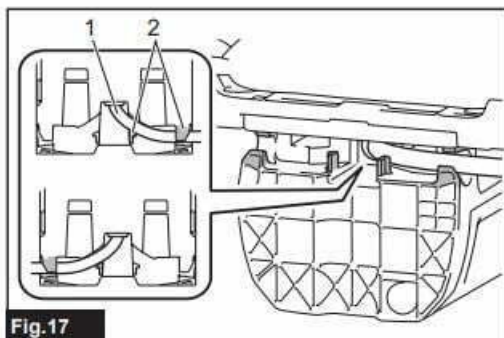


Fig.17

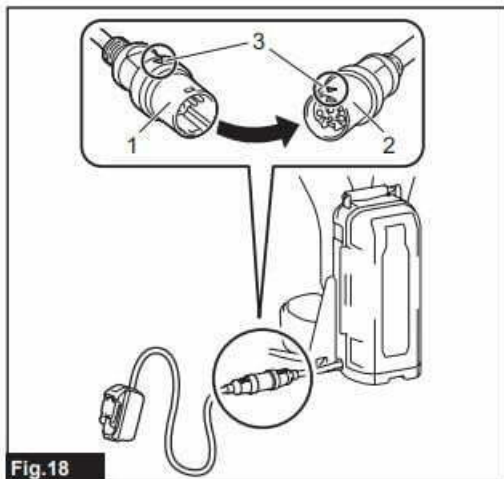


Fig.18

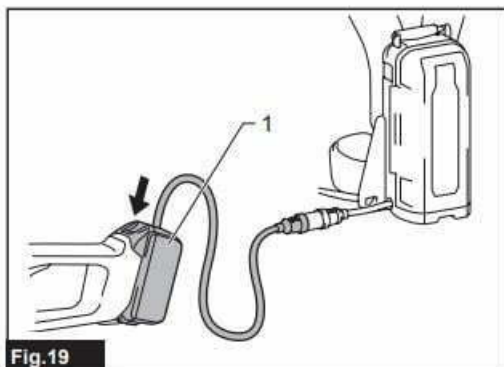


Fig.19

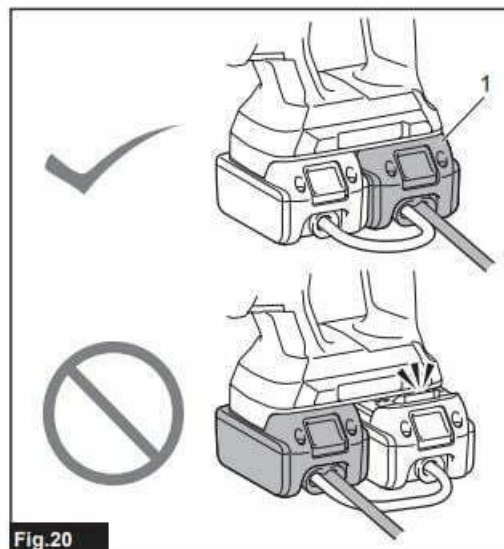


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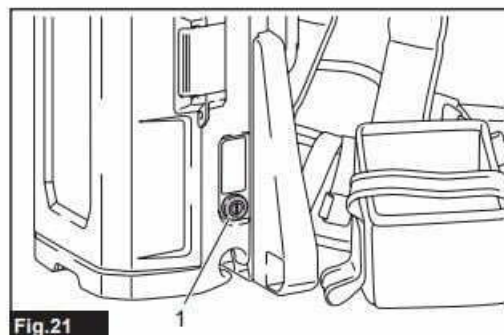


Fig.21

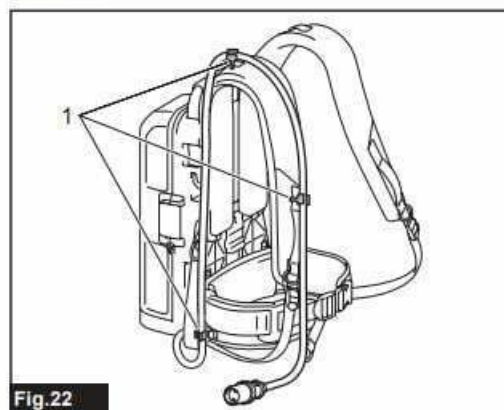
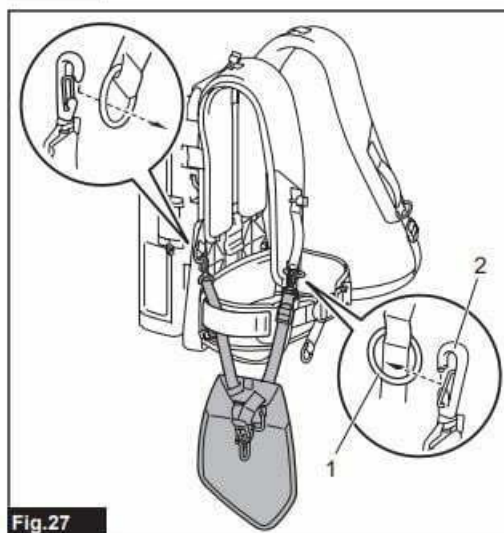
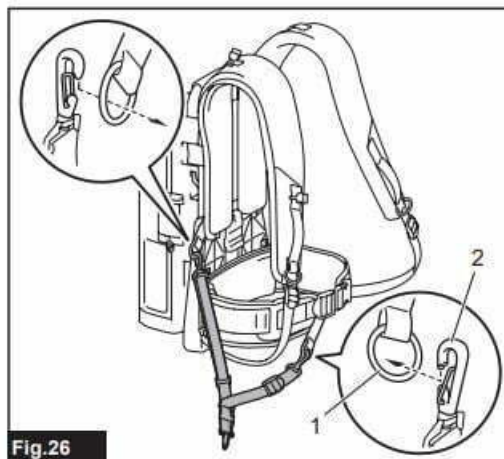
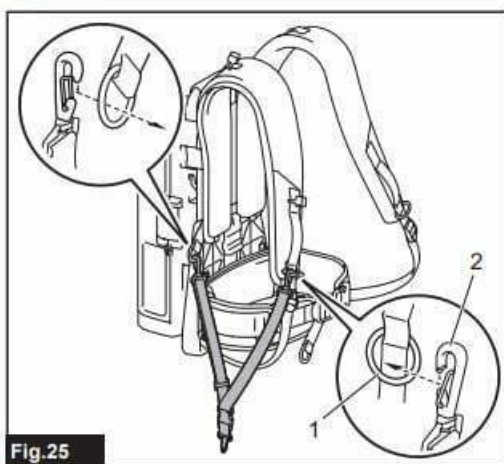
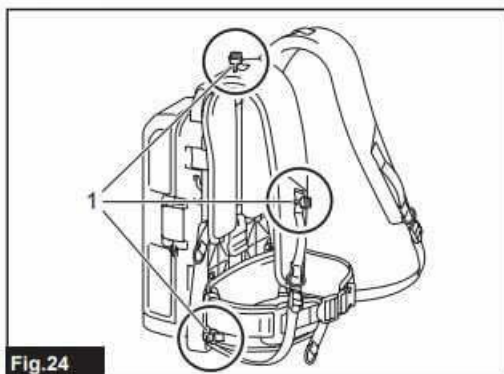
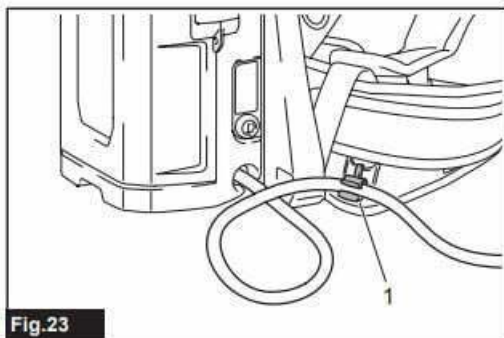
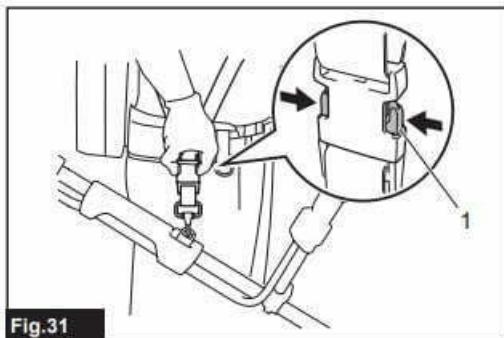
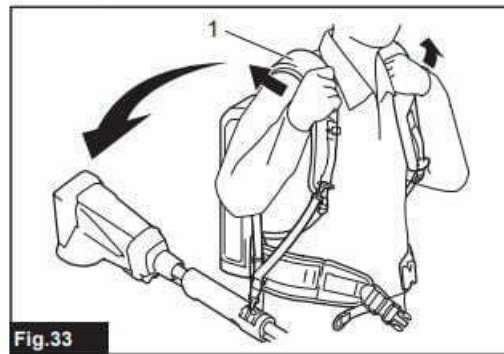
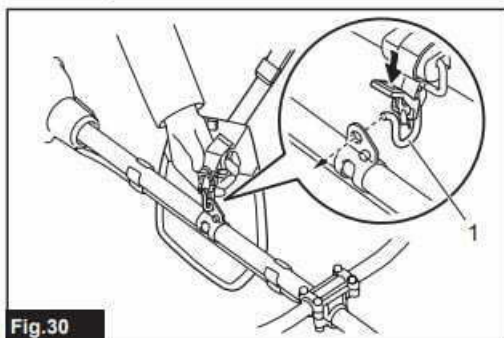
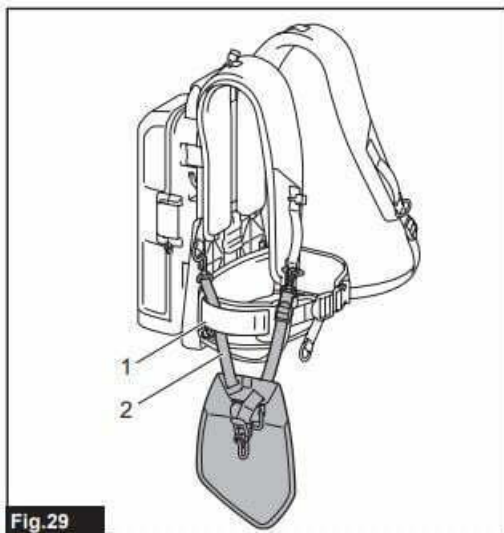


Fig.22





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SPECIFICATIONS

Intended use

The portable power pack enables the batteries and the tool or machine to be separated, making it suitable for a long time work by switching the installed batteries.

This unit can be used with the following tools or machines.

- 18 V battery-powered tool or machine
- 36 V (18 V x 2) battery-powered tool or machine
- Battery-powered tool or machine (direct connection to portable power pack)

About this instruction manual

The term “unit” in this instruction manual refers to portable power pack.

Compatible tool or machine category

- Cordless Chain Saw, Cordless Pole Saw, Cordless Blower, Cordless Grass Trimmer, Cordless String Trimmer, Cordless Multi Function Power Head, Cordless Hedge Trimmer, Cordless Grass Shear, Cordless Pole Hedge Trimmer, Cordless Angle Grinder, Cordless Rotary Hammer* * Except for DHR280 / DHR281 / DHR282 /

The compatible category of tool or machine is subject to change without notice. Refer to the latest instruction manual for the information on the compatible category of tool or machine.



WARNING: Never use this unit with tools or machines categorized below. Using this unit with non-compatible tools or machines may cause personal injury or malfunction. Cordless Garden Sprayer, Battery Powered Pruning Shears, Battery Powered Wheelbarrow, Motor-Assisted Bicycle, Cordless Backpack Vacuum Cleaner, Robotic Cleaner, Cordless Fan Jacket, Cordless Heated Jacket

Applicable battery cartridge and charger

Battery cartridge	BL1815N / BL1820 / BL1820B / BL1830 / BL1830B / BL1840 / BL1840B / BL1850 / BL1850B / BL1860B
Charger	DC18RC / DC18RD / DC18RE / DC18SD / DC18SE / DC18SF / DC18SH



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

Symbols



Read instruction manual.



To reduce the risk of injury, keep the cord away from obstacles.



Close the cover securely for protection against ingress of water or rain.



Li-ion

Only for EU countries
Do not dispose of electric equipment or battery pack together with household waste material! In observance of the European Directives, on Waste Electric and Electronic Equipment and Batteries and Accumulators and Waste Batteries and Accumulators and their implementation in accordance with national laws, electric equipment and batteries and battery pack(s) that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

SAFETY WARNINGS

Portable power pack safety warnings

1. Be sure to read the instruction manual of the tool or machine before use.
2. Do not pick up or carry this unit by holding only the cord. Do not pull the cord while you are wearing or using this unit.
3. Before wearing the unit, remove the adapters from the tool or machine.
4. When you leave the tool or machine, be sure to remove the adapters from the tool or machine, or remove the unit from your body.
5. Be careful not to trip over the cord during operation.
6. Do not use this unit on an unstable surface, or unstable high places.
7. Do not use multiple units by connecting one unit to another unit.
8. During operation, keep the cord away from obstacles. The cord caught by obstacles may cause serious injury.
9. Do not insert the adapters into the charger.
10. Do not install the adapters to the battery ports of this unit.
11. This unit is designed exclusively for use with 18 V batteries. Do not use the batteries other than 18 V batteries.
12. Inspect the unit, cords, and harness before use. If they are damaged, ask your local Makita Authorized Service Center for repair.
13. When attaching the cord to the cord holder, be sure to attach it slowly and securely.

14. Always make sure that the tool or machine is switched off and the adapters are removed before attempting to perform inspection or maintenance of the tool or machine.
15. When using this unit with a tool equipped with a blade, be sure to keep the cord away from the blade.
16. Do not use this unit when you are using a safety harness.
17. Do not use this unit while you are climbing up in a tree.
18. Do not use this unit when you are wearing cordless fan jacket or cordless heated jacket.
19. Do not expose this unit to sparks.
20. When using this unit without wearing it, be sure to lay down the unit.
21. Do not let water enter into the cover.
22. Do not disassemble, repair, or modify the unit.
23. Be careful not to entangle the harness or belt by the tool or machine.
24. When using the unit, be careful not to cut the cords with the tool or machine.

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 or tamper the battery cartridge. It may result in a fire, excessive heat, or explosion.
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 breakdown.
6. Do not store and use 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. Do not nail, cut, crush, throw, drop the battery cartridge, or hit against a hard object to the battery cartridge. Such conduct may result in a fire, excessive heat, or explosion.
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. When disposing the battery cartridge, remove it from the tool and dispose of it in a safe place. 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.
13. If the tool is not used for a long period of time, the battery must be removed from the tool.

14. During and after use, the battery cartridge may take on heat which can cause burns or low temperature burns. Pay attention to the handling of hot battery cartridges.
15. Do not touch the terminal of the tool immediately after use as it may get hot enough to cause burns.
16. Do not allow chips, dust, or soil stuck into the terminals, holes, and grooves of the battery cartridge. It may result in poor performance or breakdown of the tool or battery cartridge.
17. Unless the tool supports the use near high-voltage electrical power lines, do not use the battery cartridge near a high-voltage electrical power lines. It may result in a malfunction or breakdown of the tool or battery cartridge.
18. Keep the battery away from children.

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

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. When not using the battery cartridge, remove it from the tool or the charger.
5. Charge the battery cartridge if you do not use it for a long period (more than six months).

PARTS DESCRIPTION

Fig.1

1. Base plate
2. Battery box
3. Cord holder
4. Adapter pocket
5. Power button
6. Plug
7. Adapters for 36 V (18 V x 2) (optional accessory)
8. Adapter for 18 V (optional accessory)
9. Width adjustment belt
10. Waist belt
11. Shoulder harness
12. Socket

FUNCTIONAL DESCRIPTION



CAUTION: Always be sure that the unit is switched off and the battery cartridge is removed before adjusting

or checking function on the unit.

Installing or removing battery cartridge



CAUTION: Always switch off the unit before installing or removing of the battery cartridge.



CAUTION: Hold the unit and the battery cartridge firmly when installing or removing battery cartridge. Failure to hold the unit and the battery cartridge firmly may cause them to slip off your hands and result in damage to the unit and battery cartridge and a personal injury.



CAUTION: When installing or removing the battery cartridge, place the unit on a flat and stable surface. Otherwise, the battery cartridge may fall accidentally and cause an injury.

1. Pull up the lever and open the cover of the battery box.
2. Push the lock button, and then lock the cover with the lock button. Fig.2: 1. Lock button 2. Lever



CAUTION: Make sure that the cover is locked with the lock button securely. Otherwise, the cover may close accidentally, and cause an injury.

3. Install the battery cartridges.
4. Raise the cover to release the lock button, and then close the cover and lock the cover with the lever.



CAUTION: Make sure that the cover is closed securely and locked. Otherwise, water or rain may enter inside the battery box and cause an electric shock or malfunction.

NOTICE: When using this unit with 36 V (18 V x 2) battery-powered tool or machine, install at least one battery to battery port 1 or 2, and at least one battery to battery port 3 or 4.

NOTE: This unit automatically switches the batteries to be used among the installed batteries. The unit selects the appropriate battery every time the tool or machine is turned on.

NOTE: When using this unit with 18 V battery-powered tool or machine, install at least one battery cartridge to one of the battery ports.

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.

Fig.3: 1. Battery port 2. Battery cartridge

To remove the battery cartridge, slide it from the unit while sliding the button on the front of the cartridge.



CAUTION: Always install the battery cartridge fully until the red indicator cannot be seen. If not, it may accidentally fall out of the unit, causing injury to you or someone around you.










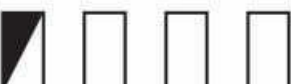



CAUTION: Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

Indicating the remaining battery capacity

Only for battery cartridges with the indicator

Fig.4: 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.

Tool / battery protection system

The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions:

Overload protection

When the tool or battery is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops without any indication. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

Overheat protection

When the tool or battery is overheated, the tool stops automatically. In this case, let the tool and battery cool before turning the tool on again.

Over discharge protection

When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

Power button and battery indicator

CAUTION: Make sure that the tool or machine is turned off before turning on the unit. Otherwise, the tool or machine may start suddenly and cause an injury.







Fig.5: 1. Main power lamp 2. Power button

To turn the power on, press the power button. The main power lamp lights up in green. To turn the power off, press the power button for a few seconds.

NOTE: If the unit and connected tool or machine are left unattended for 8 hours, the unit automatically turns off.

If the main power lamp blinks in green, the adapter is not connected to the unit, or the batteries are empty. In this case, connect the adapter to the unit, or charge the batteries. If the lamp keeps blinking in green, refer to the troubleshooting. If the main power lamp blinks in red and green alternately, turn the power off, and then turn the power on. If the main power lamp keeps blinking in red and green alternately after turning the power on, ask your local Makita Authorized Service Center for repair.

Press the power button to indicate the remaining battery capacity. The indicator lamp that corresponds to each battery port lights up for approximately 5 seconds.

Indicator lamps			Remaining capacity
 Lighted	 Off	 Blinking	
			50% to 100%
			0% to 50%
			Charge the battery.

NOTE: The indicator lamps for remaining battery capacity is just for a reference. The actual battery capacity may differ depending on the usage conditions.

NOTE: If the tool or machine has indicator lamps for remaining battery capacity, do not refer to the indicator lamps of the tool or machine but to the indicator lamps of this unit.

Using the adapter pocket

CAUTION: Do not use this unit with the cord fixed using the hook and loop fastener of the adapter pocket. You can put the adapters into the adapter pocket as shown in the figure. Fig.6: 1. Adapter 2. Adapter pocket
Fig.7: 1. Adapter 2. Adapter pocket

ASSEMBLY

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

Assembling the unit

1. Attach the battery box to the base plate as shown in the figure. Be sure to lock the levers on both sides of the

base plate after attaching the battery box.

Fig.8: 1. Lever 2. Battery box 3. Base plate

CAUTION: Make sure that the battery box is securely fixed to the base plate, and locked with levers.

Otherwise, the battery box may fall when you wear the unit or use the unit, and cause an injury.

2. Adjust the position of the waist belt. Pull up the height adjustment lever, then adjust the position of the waist belt by sliding the base plate, and then return the lever.

Fig.9: 1. Height adjustment lever 2. Base plate 3. Waist belt

NOTICE: If the height adjustment lever is loose, tighten the nut of the height adjustment lever. When tightening the nut, do not tighten it excessively. Otherwise, the height adjustment lever will not move. Fig.10: 1. Nut

3. Attach the adapter pocket to the waist belt with the hook and loop fastener as shown in the figure. Fig.11: 1. Adapter pocket

NOTE: The adapter pocket can be attached on either left or right side of the waist belt.

4. Adjust the width of the shoulder harness using the width adjustment belt. Fig.12: 1. Width adjustment belt
5. Wear the unit, then lock the buckle of the waist belt, and then adjust the length of the waist belt. Fig.13: 1. Buckle

NOTE: You can fold and fix the belt with the hook and loop fastener as shown in the figure. Fig.14: 1. Belt

6. Adjust the length of the shoulder harness. Fig.15: 1. Shoulder harness

NOTE: You can fold and fix the belt with the hook and loop fastener as shown in the figure. Fig.16: 1. Belt

OPERATION



CAUTION: When wearing the unit, be sure to put shoulder harness on your both shoulders. Otherwise, the unit may fall when you wear the unit or use the unit, and cause an injury.



CAUTION: When wearing the unit, be sure to wear the unit on your back. Otherwise, the unit may fall during operation and cause an injury.



CAUTION: Always switch off the tool or machine before turning on the unit, or connecting the plug of the adapter or power tool/machine to the socket of the battery box. Otherwise, the tool or machine may start suddenly and cause an injury.

Connecting the unit to the tool or machine

1. Pull out the cord from either left or right side of the battery box. When pulling out the cord, be sure to set the cord in the holders as shown in the figure. Fig.17: 1. Cord 2. Holder
2. Wear the unit.

3. Insert the plug of the adapter or power tool/ machine into the socket of the battery box all the way so that the arrow mark on the plug is aligned with that on the socket. Fig.18: 1. Plug 2. Socket 3. Arrow mark

NOTICE: When disconnecting the plug and socket, do not hold the cords but hold the plug and socket.

Otherwise, the cords may be damaged and cause a malfunction of the unit.

NOTE: The plug and socket are disconnected if a certain load is applied.

4. Install the adapters to the tool or machine in the same way as the battery cartridge. Fig.19: 1. Adapter

NOTICE: For 18 V battery-powered tool or machine, use the adapter for 18 V. For 36 V (18 V x 2) battery-powered tool or machine, use the adapters for 36 V (18 V x 2).

For direct connection type tool or machine, no adapter is required.

NOTICE: If you cannot install the adapters to the tool or machine when installing two adapters, swap one

adapter with the other adapter and install them. Fig.20: 1. Adapter

NOTE: The direction of the cord of the adapter can be changed in the range of approximately 180 degrees.

5. Press the power button to turn the power on. To turn the power off, press the power button for a few seconds.

Fig.21: 1. Power button

Using the cord holders



CAUTION: Attach only the cord of the battery box to the cord holders. Do not attach the cord of the adapters to the cord holders. Attaching the cord of the adapters may invite accident and cause an injury. You can attach the cord of the battery box to the cord holders as shown in the figure.

Fig.22: 1. Cord holder

You can also attach the cord using only the cord holder of the waist belt as shown in the figure.

Fig.23: 1. Cord holder

The cord holders can be attached on either left or right side of the shoulder harness and waist belt.

Fig.24: 1. Cord holder

Using the hanging band

Optional accessory

You can use the hanging band for cordless grass trimmer or cordless string trimmer with this unit.

Attaching the hanging band

1. Attach the hooks of the hanging band to the rings of the shoulder harness or waist belt as shown in the figure.

Select the type of band and the connecting method appropriate for your usage.

Fig.25: 1. Ring 2. Hook

Fig.26: 1. Ring 2. Hook

Fig.27: 1. Ring 2. Hook

Fig.28: 1. Ring 2. Hook

NOTE: If the tool is bike handle type, attach the band so that the band passes through inside of the waist belt as shown in the figure. Fig.29: 1. Waist belt 2. Band

2. Attach the hook to the tool. Fig.30: 1. Hook

Detaching the tool

Push the levers on the buckle to unlock the buckle.

Fig.31: 1. Lever

NOTE: The buckle is not equipped depending on the type of band.

Emergency detachment

1. Push the levers on the buckle of the waist belt to unlock the buckle. Fig.32: 1. Buckle 2. Lever
2. Take off the shoulder harness to release the tool and the unit.

Fig.33: 1. Shoulder harness

MAINTENANCE



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

NOTICE: Never use gasoline, benzene, 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 or Factory Service Centers, always using Makita replacement parts.

TROUBLESHOOTING

Before asking for repairs, conduct your own inspection first. If you find a problem that is not explained in the manual, do not attempt to dismantle the tool, machine, or unit. Instead, ask Makita Authorized Service Centers, always using Makita replacement parts for repairs.

State of abnormality	Main power lamp	Cause	Remedy
The tool or machine does not start.	The lamp lights up in green.	The adapters are not installed to the tool or machine.	Install the adapters to the tool or machine. Check that the adapters are installed securely.
		The tool or machine, or the cords of the adapters are overheated.	Cool down the tool or machine, and the unit.
		The tool or machine, or the unit is broken.	Ask Makita Authorized Service Centers for repair.
	The lamp blinks in green.	The plug of the adapter or power tool/machine and the socket of the battery box are not connected.	Connect the plug and the socket. Check that the plug and socket are connected securely.
		The remaining battery capacity is not enough.	Charge the batteries, or replace the batteries with charged ones.
		Two batteries are not installed to the unit when using the unit with the battery-powered tool or machine with higher voltage than 18V. The remaining battery capacity of two batteries is not enough.	Install at least one battery to battery port 1 or 2, and at least one battery to battery port 3 or 4. Charge the batteries, or replace the batteries with charged ones.
		The unit needs to switch the battery.	Switch off the tool or machine, and then back on. Press the power button of the unit.
		The cord of the unit is overheated.	Cool down the unit.
	The lamp blinks in red and green alternately.	The unit has detected an abnormality.	Turn off the unit, and then back on.
		The tool or machine, or the unit is broken.	Ask Makita Authorized Service Centers for repair.
	The lamp does not light up.	The unit is not turned on.	Turn on the unit.
		The batteries are not installed to the unit.	Install the batteries to the unit.
		The remaining battery capacity is not enough.	Charge the batteries, or replace the batteries with charged ones.
		The unit is broken.	Ask Makita Authorized Service Centers for repair.

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.

- Makita genuine battery and charger
- Adapters for 36 V (18 V x 2)
- Adapter for 18 V


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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 Jan-Baptist Vinkstraat 2,
 3070 Kortenberg, Belgium

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 Anjo, Aichi 446-8502 Japan

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Documents / Resources

	<div> <div>makita PDC01 Portable power unit [pdf] Instruction Manual</div> <div>PDC01, Portable power unit, power unit</div> </div>
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References

- [MAKITA Industrial Power Tools - The Leader In Cordless with 18V LXT Lithium-Ion](#)