

- This manual contains important information regarding the safe use of the BUM100S/150S/300S. Please read these instructions before installing and/or using the product.
- Please connect and install the battery unit only after having fully understood the relevant procedures for the Backup Power Supply, found in the Backup Power Supply Instruction Manual.

Safety precautions

This manual contains important information regarding the safe use of this product.

Please read these instructions before installation and/or use.

- The safety symbols used in this manual are explained below.

	Warning	Indicates an imminently hazardous situation which, if not handled properly, may result in death or serious injury.
	Caution	Indicates a potentially hazardous situation which, if not handled properly, may result in injury or property damage.

* Property damage means damage to houses/household effects, livestock, and pets.



: Indicates a prohibited action (something you must not do). For example, indicates that disassembly is prohibited.



: Indicates a necessary action (something you must do). For example, indicates that grounding is necessary.

Note that some items described as cautions may result in more serious damage under certain conditions. The information described here is very important and must be strictly observed.



Warning

Do not disassemble, repair, or modify the product.

- Doing so may cause an electric shock or a fire.



If liquid leaks from the product, do not touch it.

- Doing so may cause blindness or burns.
- If it touches your eyes or skin, wash it out with lots of clean water and consult your doctor.



Warning (product use)

Do not use this product in applications which require an extremely high degree of reliability and safety, such as those listed below.

(This product is designed and manufactured for use for OA equipment such as personal computers.)

- Medical equipment or system that may cause death directly
- Applications that directly affect the safety of people. (For example, the operation and control of cars and elevators.)
- Applications in which failure may significantly damage or impact the society and public. (For example, important computer systems or communication equipment.)
- Applications with the same level of importance as those described above.



Caution (installation)

Two or more people should work together to carry, unpack and install the BUM300S.

- Because the unit is heavy, you may injure yourself or drop the unit, or it may fall over.



Product weights are 20.5 kg (BUM100S), 21.5 kg (BUM150S), and 43.5kg (BUM300S). Carefully consider the weight when unpacking/transporting this product.

- Injury may result if the unit falls or is dropped.
- If you drop the unit, stop using it and have it inspected and repaired. For information about repairs, contact us at _____.



Keep plastic bags out of the reach of children.

- Children may suffocate if they put their heads into plastic bags.





Caution (installation)

Do not install the unit in any position other than those specified.

- Refer to "2-1 Installation" on page 4 for proper installation positions.
- Injury may result if the unit falls or is dropped.



Do not use the product where the maximum temperature exceeds 40°C.

- The battery weakens rapidly, and may cause a fire.
- Doing so may cause the unit to fail or malfunction.



Do not exceed the ranges specified for environmental conditions during use/storage.

Do not install or store the unit in the types of places listed below.

- Do not store the unit in places where the humidity is lower than 20% or higher than 90%.
- Do not use the unit in places where the humidity is lower than 25% or higher than 85%.
- Do not install/store the unit in closed places such as cabinets with no clearance, places where there is flammable or corrosive gas, or outdoors.
- Installing or storing the unit in such places may cause a fire.



Caution (use)

When the battery is dead, replace it immediately or stop using the unit.

- Continuing to use the unit may cause a fire.



Ambient temperature	Expected life
20°C	4 to 5 years
30°C	2 to 2.5 years

* The values in the table on the left reflect the expected life under standard use conditions and are not guaranteed values.

Do not place objects on the unit, and do not drop metal objects onto the unit.

- Doing so may cause distortion/damage to the case or a failure of the internal circuit, and may cause a fire.



Do not use the product in a closed place and/or do not cover the product.

- Doing so may cause abnormal heating or a fire.



Do not pour water on the unit and do not allow it to become wet.

- Doing so may cause an electric shock or a fire.
- If the unit becomes wet, immediately stop using it and have it inspected and repaired.
For information about repairs, contact us at _____.



Do not insert metal objects into the battery connectors.

- Doing so may cause an electric shock.



Caution (battery replacement)

Perform replacement on a stable and flat surface.

- Handle the battery carefully so that you do not drop it.
- Dropping the battery may result in injury or burns due to leakage (acid).



Use a specified battery for replacement.

- Using a battery other than that which is specified may cause a fire.
- Product models: BP100XS (Replacement battery pack for BUM100S)
BP150XS (BUM150S (2 required)/BUM300S (4 required))



Do not replace the battery in a place where there is flammable gas.

- A spark may occur when connecting the battery, which may cause an explosion or fire.



If fluid (dilute sulfuric acid) leaks from the battery, do not touch it.

- Doing so may cause blindness or burns.
- If it touches your eyes or skin, wash it out with lots of clean water and consult your doctor.



Do not try to disassemble or modify the product.

- Doing so may cause the battery to leak dilute sulfuric acid, which may cause blindness or burns.





Caution (battery replacement)

Do not drop the battery or expose it to strong impact.

- Doing so may cause the battery to leak dilute sulfuric acid.



Do not short the battery with metal objects.

- Doing so may cause an electric shock, fire or burn.
- Some electrical energy remains inside the spent battery.



Do not put the battery into fire, and do not break it.

- The battery may explode or leak dilute sulfuric acid.



Do not use a new battery and an old battery at the same time.

- Doing so may cause the battery to leak dilute sulfuric acid.



Notes

Charge the battery (for at least 24 hours) immediately after purchase.

- If you do not use the unit for a long time after purchase, the battery performance may deteriorate and it may become unusable.
- The battery can be charged once the AC input plug of the UPS is connected to a wall outlet (commercial power).

When storing the UPS, charge the battery for at least 24 hours and turn OFF the power switch.

- The battery discharges even when it not being used, and it goes into over discharge state if it is left for a long period of time.
The backup time may become shorter or the battery may become unusable.
- We recommend keeping the temperature 25°C or less when storing the unit for long periods of time.
Connect the AC input plug of the UPS to a wall outlet (commercial power) for at least 24 hours at the following intervals:
 - Every 6 months when storage temperature is 25°C or less
 - Every 2 months when storage temperature is 40°C or less
- Turn OFF the power switch of the UPS during storage.

Do not install or store the unit in a place exposed to direct sunlight.


- A rise in temperature may cause the built-in battery to deteriorate rapidly and become unusable.

This unit uses a lead acid battery.

- Lead acid batteries are a valuable recyclable resource. Please recycle.
For information about recycling, please contact our peripheral device repair center.



1-1 Unpacking the product

**Caution**

Two or more people should work together to carry, unpack and install the BUM300S.




- Because the unit is heavy, you may injure yourself or drop the unit, or it may fall over.

Product weights are 20.5 kg (BUM100S), 21.5 kg (BUM150S), and 43.5kg (BUM300S). Carefully consider the weight when unpacking/transporting this product.

- Injury may result if the unit falls or is dropped.
- If you drop the unit, stop using it and have it inspected and repaired. For information about repairs, contact us at _____.

Do not install the unit on an unstable base.

- Injury may result if the unit falls or is dropped.

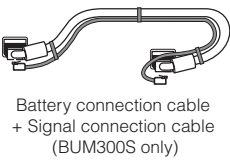
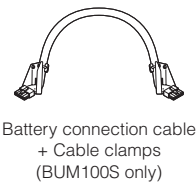
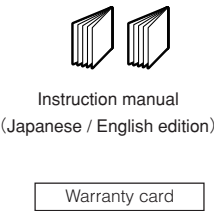


Open the package box and take out the Battery Unit and accessories.

1-2 Checking the accessories

Make sure that all accessories are included and that there is no external damage.
If you notice any defects, immediately contact the shop of purchase.

- 1. Instruction manual (Japanese/English edition).... 1
- 2. Battery connection cable + Cable clamps
(BUM100S only) 1 set
- 3. Battery connection cable + Signal connection cable
(BUM300S only) 1 set
- 4. Warranty card 1

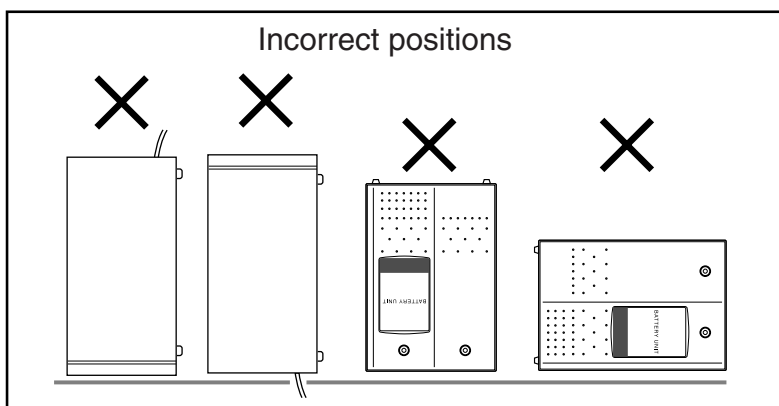
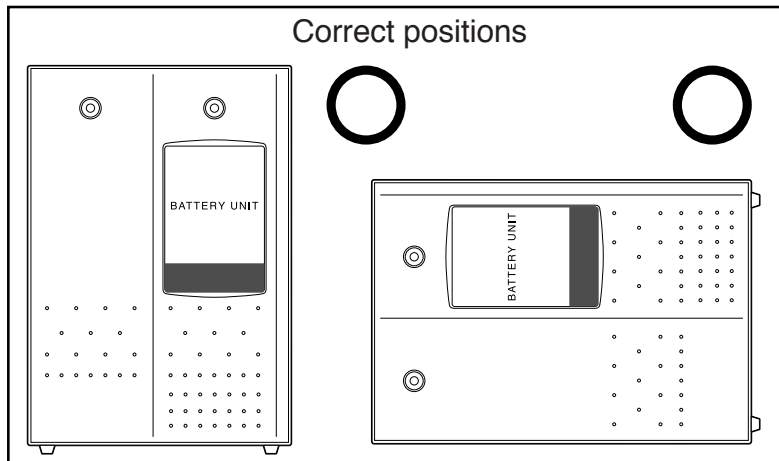


2-1 Installation

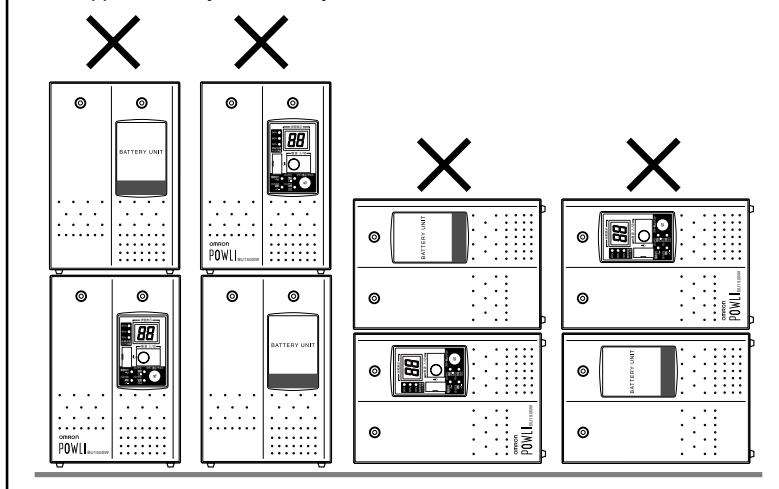
Install the additional battery unit.

Do not use this unit in any position other than the correct positions indicated in the illustration below.

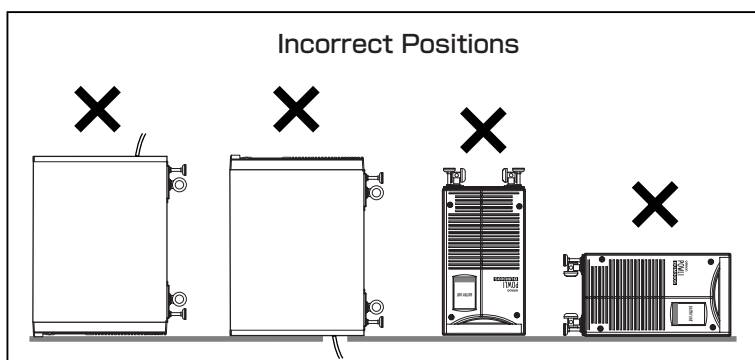
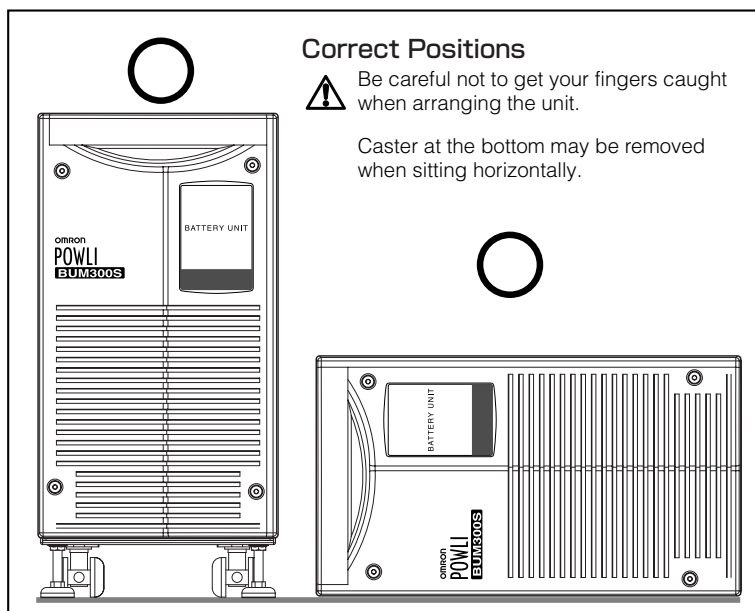
● For BUM100S/BUM150S



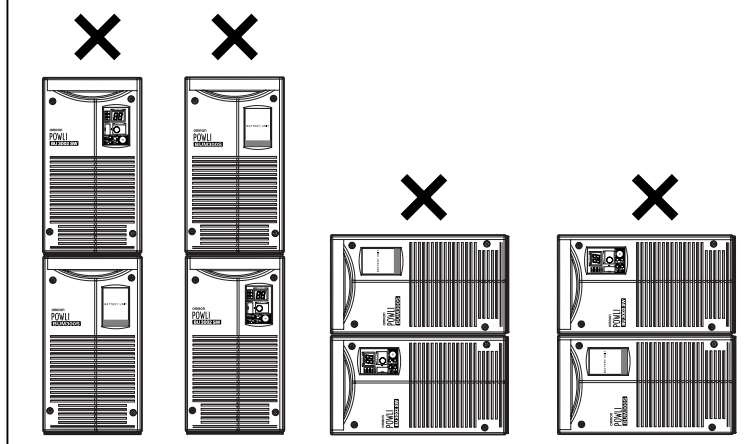
* Do not place the UPS or the additional battery unit on top of each other.
The upper unit may fall down by vibration etc.



● For BUM300S



* Do not place the UPS or the additional battery unit on top of each other. The upper unit may fall down by vibration etc.



Set BUM300S in the same way as setting main body BU3003SW.

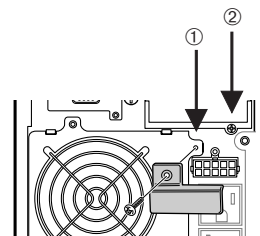
See also → BU1002SW/BU3002SW Instruction Manual p22.

2-2 Connecting the additional battery unit (BUM100S/150S/300S)

You can add only one additional battery unit.

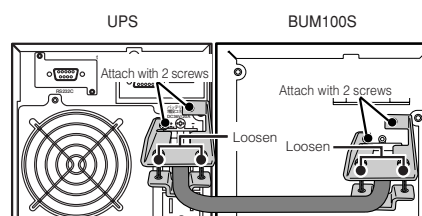
2-2-1 BUM100S connection procedure / Connectable UPS: BU100SW/BU1002SW

- (1) Remove the cover of the additional battery connector on the back of the UPS. _____ ①
Also remove the screws on the lower part of the signal card expansion slot cover. _____ ②

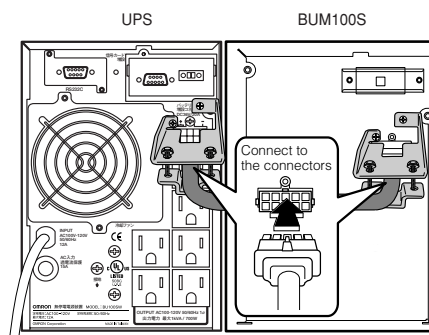


- (2) Attach the clamps to the rear of the UPS and the BUM100S using 2 screws each. For now, loosen the screw that fastens the cable clamp and holds the cable.

● Use the screws removed in ① to attach the metal clamps.



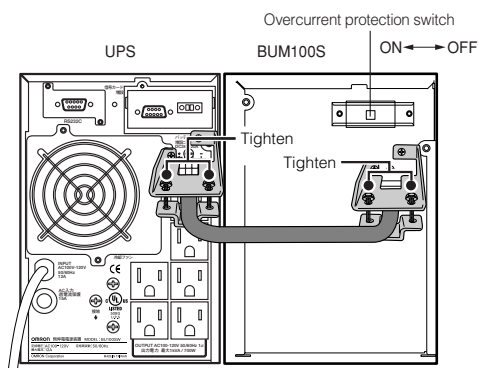
- (3) Connect the connection cable to the connectors on the backs of the UPS and BUM100S.



- (4) Insert the cable into the metal clamps attached in ②, and then tighten the screws (2 each).

When a 700W device is connected, the backup time is 30 minutes (initial battery value at an ambient temperature of 20°C).
When the battery is completely discharged, it takes 24 hours to charge.

- (5) Turn ON the overcurrent protection switch on the back of the additional battery unit.

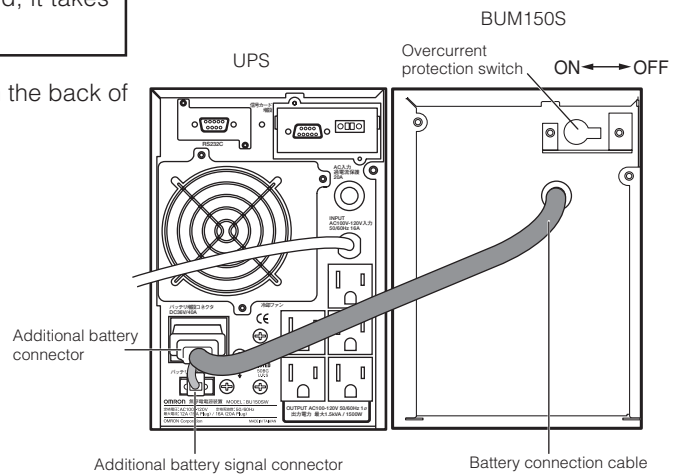


2-2-2 BUM150S connection procedure / Connectable UPS : BU150SW

- (1) Connect the end of the battery cable connected to the back of the BUM150S to the UPS additional battery connector and additional battery signal connector.

When a 1050W device is connected, the backup time is 20 minutes (initial battery value at an ambient temperature of 20°C).
When the battery is completely discharged, it takes 24 hours to charge.

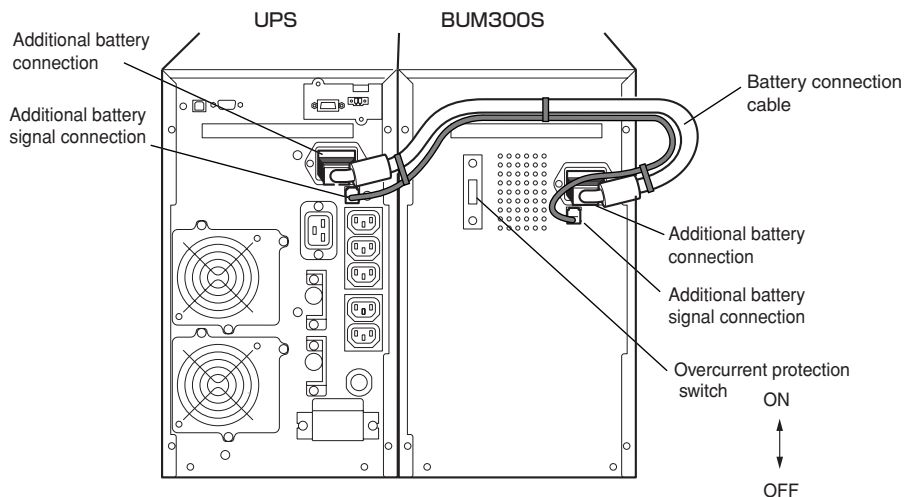
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- (2) Turn ON the overcurrent protection switch on the back of the additional battery unit.



2-2-3 BUM300S connection procedure / Connectable UPS : BU3002SW

- (1) Connect the battery connection cable to the battery connectors on the rear side of the unit and UPS. Connect the signal connection cable to the additional battery signal connector also.
- (2) Turn ON the overcurrent protection switch on the back of the battery unit. Connect the AC input plug of the unit to a wall outlet. The additional battery lamp on the unit's operation panel turns ON.

When a 2100W device is connected, the backup time is 24 minutes (initial battery value at an ambient temperature of 20°C).
When the battery is completely discharged, it takes 24 hours to charge.



3. Replacing the battery

The battery can be replaced while the UPS is stopped. (power supply output stopped)

Caution

When an additional battery unit (BUM100S/BUM150S/BUM300S) is connected to the UPS, replace the UPS battery when replacing the batteries of the additional battery unit. You cannot perform battery replacement of the additional battery unit only.

Caution

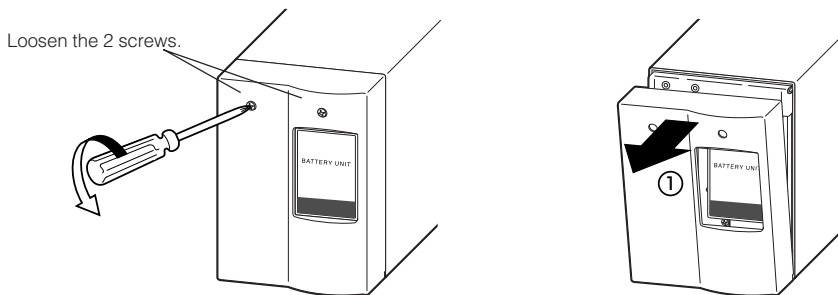
When the UPS is used in compliance with UL, CE standards, do not replace the battery while in operation (while power is being output). Replacing the battery while in operation does not comply with UL, CE standards. Replace the battery while UPS operation is stopped.

- * To replace the battery while the UPS is stopped, stop the connected devices, turn OFF the power switch of the UPS, and disconnect the AC input plug from the wall outlet.
- * If an input power supply error such as a power failure occurs when replacing the battery while in operation, backup cannot be performed and output stops.
- * Do not replace the battery during backup operation. Output will stop.

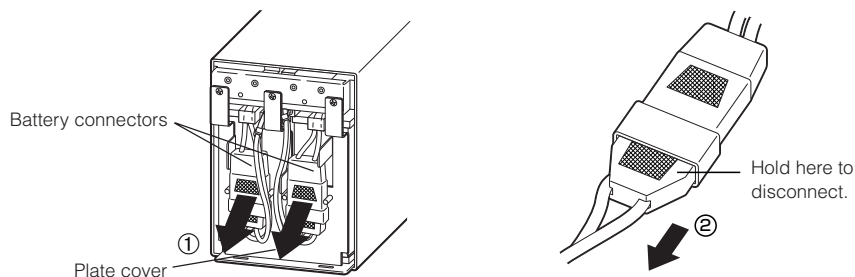
■ Additional battery unit (BUM100S/BUM150S) replacement procedure

For information on UPS battery replacement procedure, refer to the UPS instruction manual.

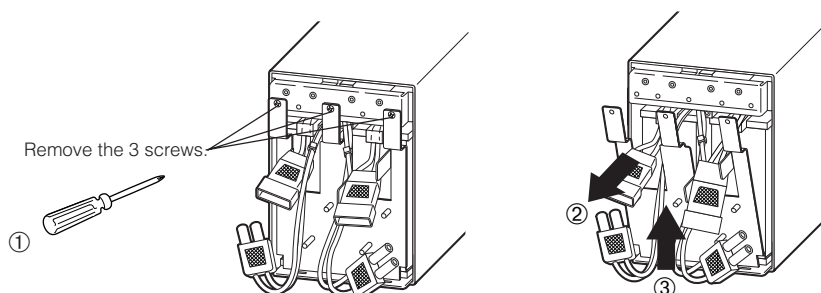
1. Use a screwdriver to loosen (anti-clockwise rotation) the 2 screws at the top of the front panel of the additional battery unit until they turn freely. (The screws cannot be removed from the front panel.) Pull the front panel towards you to remove it. ①



2. Remove the 2 battery connectors from the plate cover ① and disconnect the connectors. ②



3. Remove (anti-clockwise rotation) the 2 screws that hold the plate cover in place. ①
Pull the plate cover towards you ②, and lift it up to remove it. ③

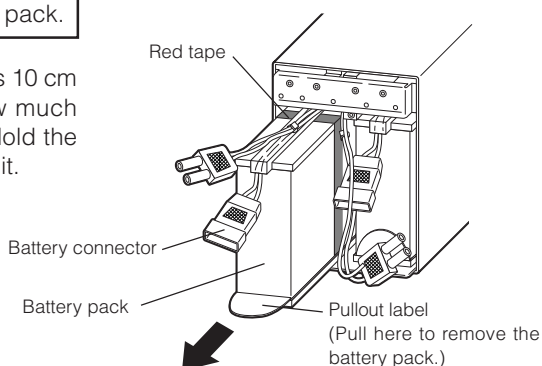


4. Remove both battery packs by pulling on the pullout label at the bottom of each battery pack.

Caution

Do not hold the connector of cable of the battery pack.

Use the red tape on top of the battery pack, which is 10 cm from the inner edge of the battery, to gauge how much further you need to pull the battery to remove it. Hold the battery securely with both hands so as not to drop it.



5. Insert 2 new battery packs into the additional battery unit as far as they will go. ①

● **Replacement battery pack**

For BUM100S : Model number BP100XS (2 required)

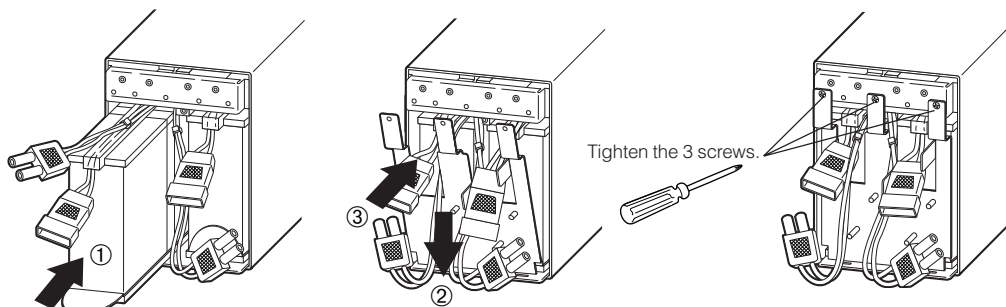
For BUM150S : Model number BP150XS (2 required)

Attach the plate cover.

Insert the tab at the bottom of the cover into the hole in the main body ②, and push the plate cover towards the main body. ③

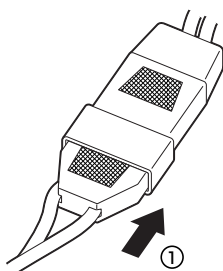
Use a screwdriver to securely tighten (clockwise) the 3 removed screws.

Do not pinch the cable with the plate cover.

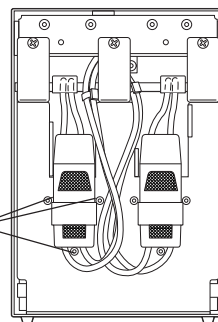


6. Securely connect the connectors. ①
Secure the connectors to the plate cover. ②

You may hear a “pop” sound when you connect the battery if it is replaced after the unit’s operation is stopped, but this sound is not abnormal.

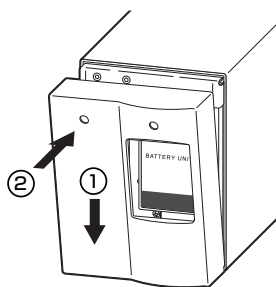


②
Use the 3 supports on the plate cover to secure the connectors.

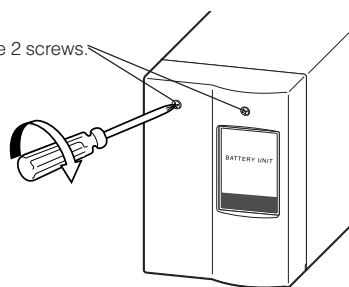


**If you cannot secure a connector to the plate cover, the connector is not completely connected.
Connect the connector again.**

7. Attach the front panel.
Insert the tab at the bottom of the front panel into the hole in the main body ①, and push the plate cover towards the main body. ②
Use a screwdriver to securely tighten (clockwise) the 2 screws at the top of the front panel.



Tighten the 2 screws.

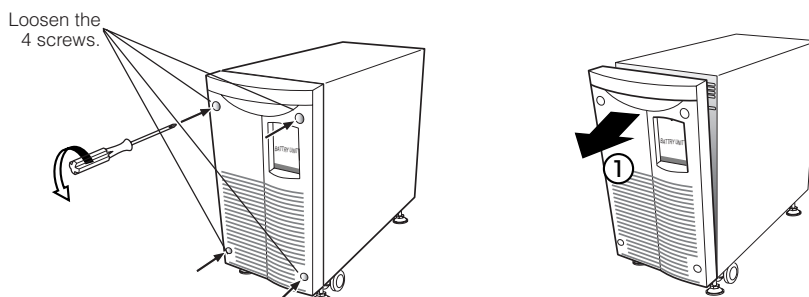


Battery replacement is complete.

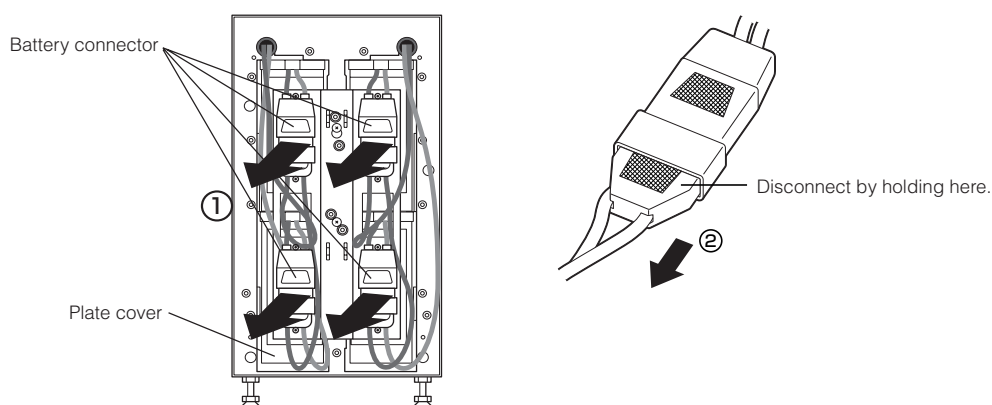
■ Additional battery unit (BUM300S) replacement procedure

For information on UPS battery replacement procedure, refer to the UPS instruction manual.

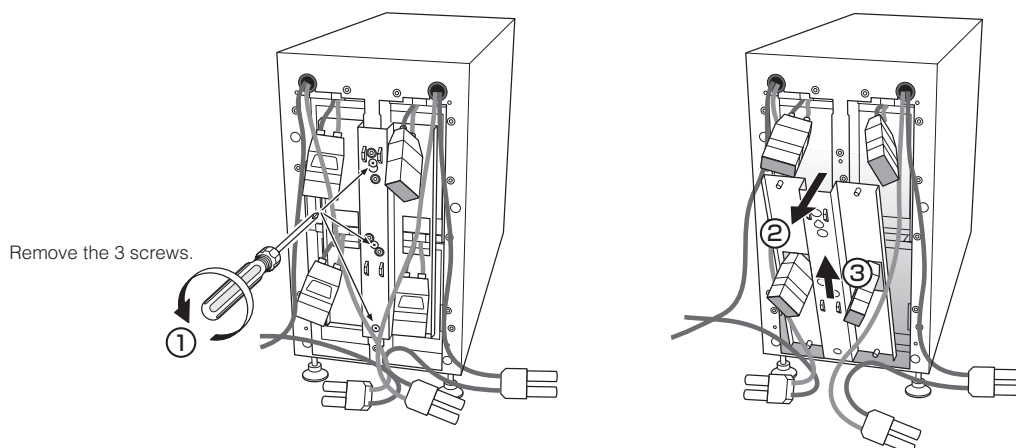
1. Use a screwdriver to loosen (anti-clockwise rotation) the 4 screws on the front panel of the additional battery unit until they turn freely.



2. Remove the battery connector from the plate cover ① and disconnect the connector. ②



3. Remove (anti-clockwise rotation) the 2 screws that hold the plate cover in place. ① While pulling the plate cover toward you ②, lift it up and remove the 2 lower battery connectors from the eyehole. ③



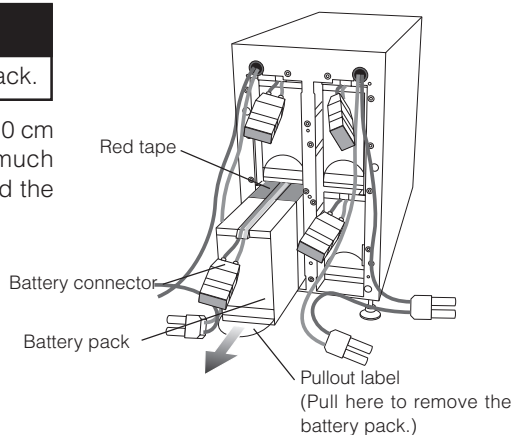
4. Remove the 4 battery packs by pulling on the pullout label at the bottom of each battery pack.



Caution

Do not hold the connector of cable of the battery pack.

Use the red tape on top of the battery pack, which is 10 cm from the inner edge of the battery, to gauge how much further you need to pull the battery to remove it. Hold the battery securely with both hands so as not to drop it.



5. Insert 4 new battery packs into the additional battery unit as far as they will go. ①

● Replacement battery pack

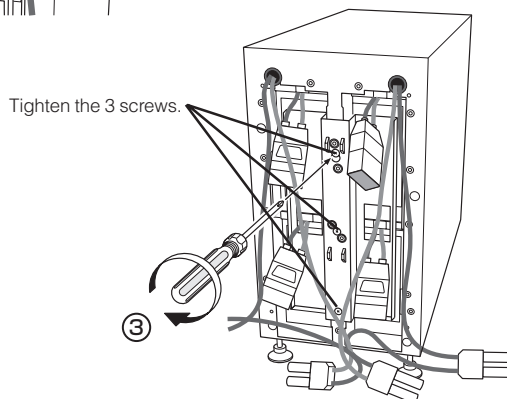
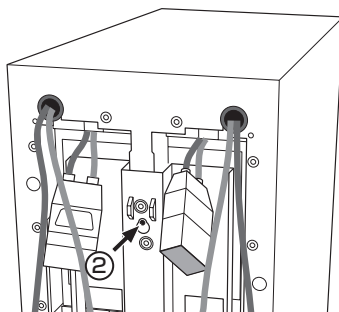
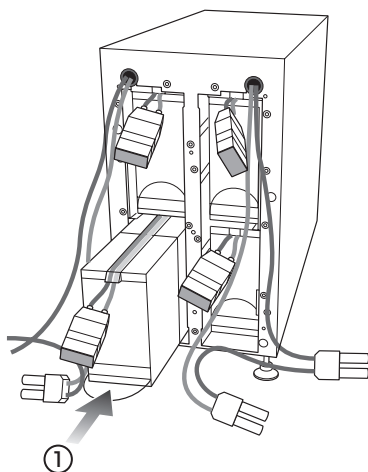
For BUM300S : Model number BP150XS (4 required)

Attach the plate cover.

Align the teardrop-shaped screw hole at the top of the plate cover with the additional battery unit's top screw hole. ②

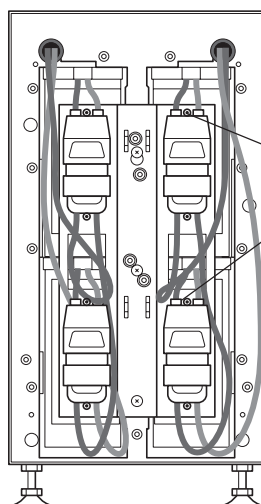
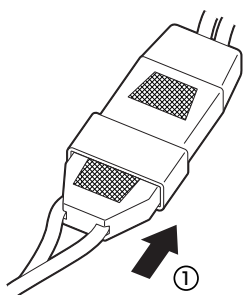
Use a screwdriver to securely tighten (turn clockwise) the 3 removed screws. ③

Do not pinch the cable with the plate cover.



6. Securely connect the connectors. ①
Secure the connectors to the plate cover. ②

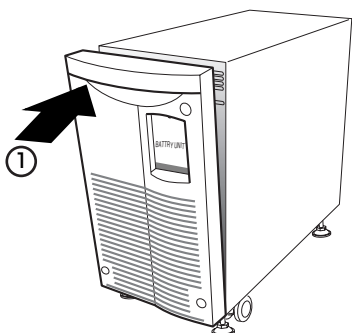
You may hear a “pop” sound when you connect the battery if it is replaced after the unit’s operation is stopped, but this sound is not abnormal.



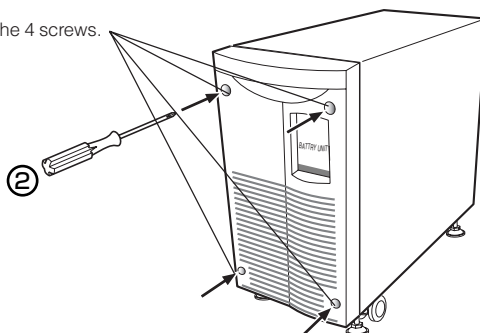
Use the 2 supports at the top and bottom of the plate cover to secure the connectors.

**If you cannot secure a connector to the plate cover, the connector is not completely connected.
Connect the connector again.**

7. Attach the front panel. ①
Push the front panel toward the main body. ①
Use a screwdriver to securely tighten (clockwise) the 4 screws at the top of the front panel. ②



Tighten the 4 screws.



Battery replacement is now complete.

<After replacing the battery during operation...>

Press the beep stop/test button for 5 to 10 seconds, to perform a self-diagnostic test. Normal operation resumes after the test for about 10 second. If the beeping sounds, the beeping stops at the first press of the button and starts test in the second press of the button.

If the battery replacement indicator is ON and beep sounds before replacing the battery, the indicator is OFF and beep stops after test completion, and normal operation resumes.

<After replacing the battery with operation stopped...>

Connect the AC input plug to a wall outlet (commercial power), and turn ON the power switch of the UPS. When operation starts, the self-diagnostic test is automatically performed. Normal operation resumes after the 10-second test.



Write the usage start date on the label on the top side. Also, if using the UPS monitoring software included with the UPS, keep a record of the software usage start date.

Notes**This unit uses a lead acid battery.**

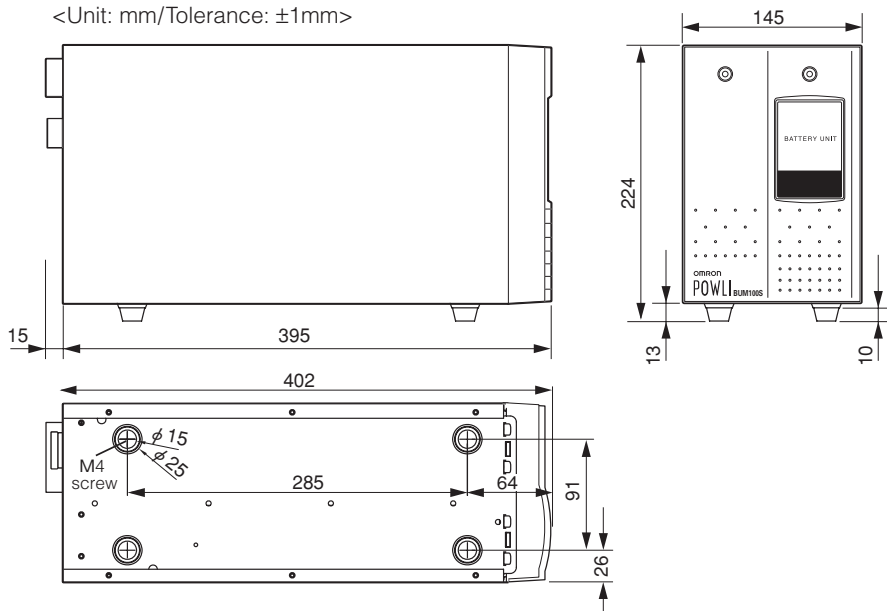
- Lead acid batteries are a valuable recyclable resource. Please recycle.
- For information about recycling, please contact our peripheral device repair center.



Dimensions

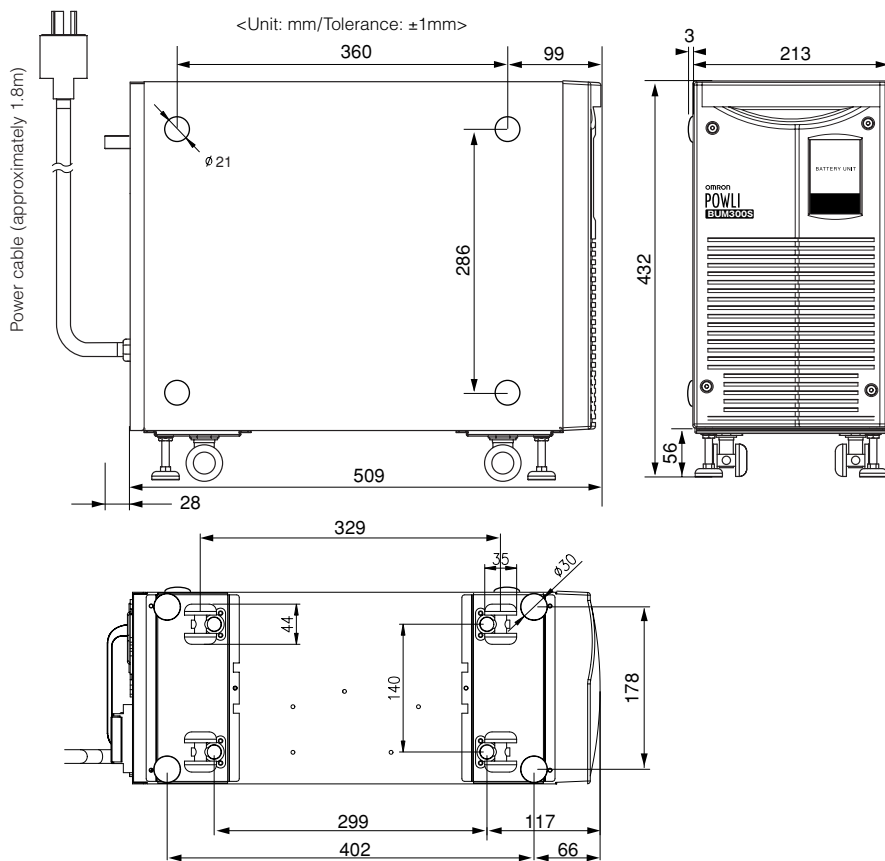
● BUM100S/BUM150S

<Unit: mm/Tolerance: ± 1 mm>



● BUM300S

<Unit: mm/Tolerance: ± 1 mm>



K1L-D-05096C