

5. Installing the Battery

CAUTION A battery is already installed upon delivery.

Role of the Battery

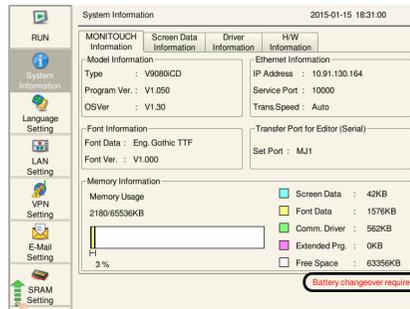
The battery provides backup power to the user memory area in SRAM (non-volatile device \$L and \$LD, sampling data) as well as the built-in clock.

Battery Replacement Period

The service life of the battery is about 5 years from the date of manufacture.

When the battery voltage drops, the message “Battery changeover required” appears at the lower right in the Local mode on the V9 series unit.

* For information on the Local mode, refer to the separate V9 Series Troubleshooting/Maintenance Manual.

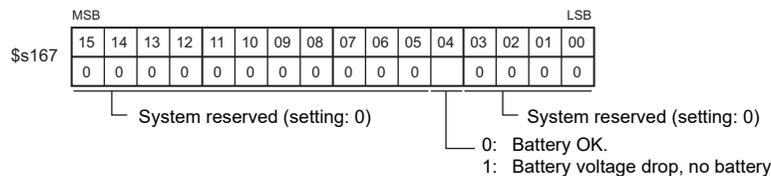


Battery Voltage Drop Detection

The battery status is output to the internal device memory address \$s167 of the V9 series unit.

When the battery voltage drops, the 4th bit of \$s167 turns ON.

If the battery voltage drops (4th bit turns ON) within the expiration date (five years), replace the battery immediately.



Battery Replacement

Replacement batteries are available from Hakko Electronics.

- V9150, V9120, V9100, V910xiW, V9080 series

Name	Model	Description
Battery for replacement	V9-BT	<ul style="list-style-type: none"> • Coin-type lithium primary cell 1 pce. • Caution sticker 1 pce.

* When using a commercially available battery, use “CR2450S/CR2450X”.

- V907xiW, V9060iT series

Name	Model	Description
Battery for replacement	V7-BT	<ul style="list-style-type: none"> • Coin-type lithium primary cell 1 pce. • Caution sticker 1 pce.

* Commercially available batteries cannot be used.

Safety Instructions on Handling Batteries

Lithium batteries contain combustible material such as lithium and organic solvents. Mishandling may cause heat, explosion, or ignition resulting in fire or injury. To prevent accidents, pay attention to the following cautions when handling lithium batteries.



CAUTION

- Only experts are authorized to perform battery replacement.
- Be sure to discharge static electricity from your body before performing battery replacement.
- Use the recommended battery for replacement.
- Rough handling of the battery may cause fire or chemical burns.
- Do not disassemble, incinerate, or heat the battery.
- Observe local and governmental regulations when disposing of waste batteries.
- Keep batteries out of reach of children. (If swallowed, immediately consult a doctor.)
- Never recharge the battery.
- If a battery leaks or smells, note that the leaking battery electrolyte is flammable. Keep away from heat or flame.

SRAM Area Backup Procedure

Replace the "V9-BT"/"V7-BT" battery within three minutes after the unit is turned off.

If it is not possible to replace the battery within three minutes, use the V-SFT-6 editor or a storage device to make a backup copy of the data in SRAM.

When Using the V-SFT-6 Editor

- 1) Connecting a cable
Connect the V9 series unit and the computer using the transfer cable ("V-CP", USB cable, or Ethernet cable).
 - 2) Starting the V-SFT-6 editor
Start the V-SFT-6 editor on the computer.
 - 3) Displaying the [Transfer] dialog
Click [Transfer] → [Upload]. The [Transfer] dialog is displayed.
 - 4) Selecting data to be transferred
Select [SRAM Data] for [Transfer Data].
 - 5) Starting SRAM data transfer
Click the [PC <-] button. Data transfer from the SRAM is started.
 - 6) Saving the SRAM data
When the SRAM data has been transferred, the [Save As] dialog is displayed on the computer. Save the data as a backup copy. The file extension is "*.RAM".
- * To transfer the "*.RAM" data, which was saved as a backup copy, back to the V9 series unit, click [Transfer] → [Download] in step 3, and click the [PC ->] button in step 5.

When Using a Storage Device:

For details on the method for making backups using a storage device such as an SD card or USB flash drive, refer to the separate V9 Series Troubleshooting/Maintenance Manual.

Battery Replacement Procedure

V9150, V9120, V9100, V910xiW, V9080

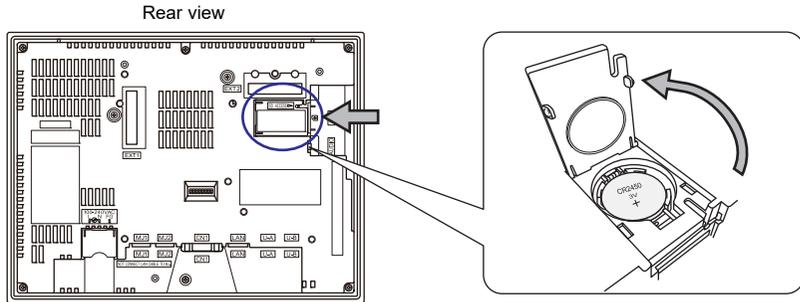


There is a risk of electrical shock.

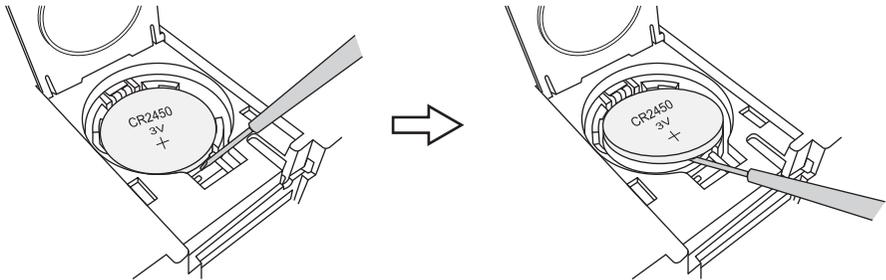
Turn OFF power to the V9 series unit before performing steps 2. through 7. below.

1. Turn OFF power the V9 series unit.
2. Slide the battery holder cover in the direction of the arrow to open it.

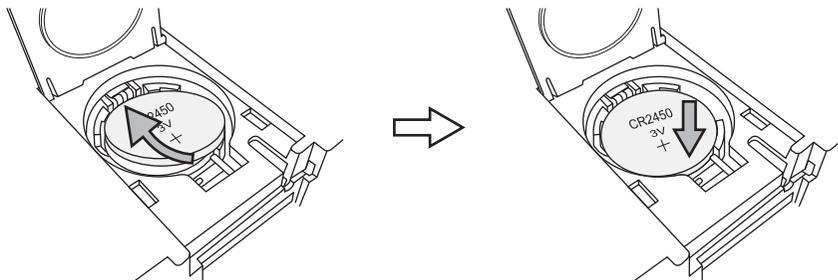
Example: V9100



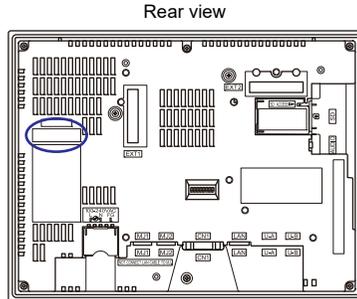
3. Insert a precision screwdriver into the gap on the right side of the battery and lift the battery out.



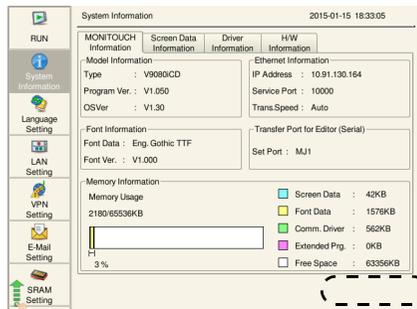
4. Remove the battery.
5. Slide a new battery left into the battery holder with the "+" side facing upward and then press the right side of the battery until it clicks.



6. Close the battery holder cover.
7. Remove the caution sticker on the rear face of the V9 series unit (circled below). Write a date five years from the present date for battery replacement on the new caution sticker and attach the sticker.



8. Turn power ON to the V9 series unit and check that the message “Battery changeover required” is cleared from the lower right of the screen in the Local mode.



9. If a “*.RAM” backup file was saved, transfer it back to the V9 series unit.

V907xiW, V9060iT

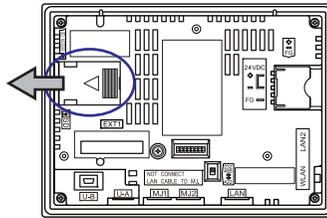


There is a risk of electrical shock.
Turn OFF power to the V9 series unit before performing steps 2. through 6. below.

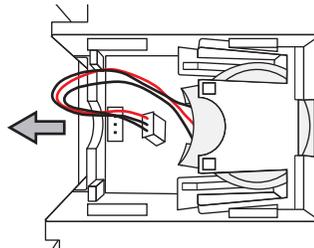
1. Turn OFF power to the V9 series unit.
2. Slide the battery holder cover in the direction of the arrow to remove it. The battery set in the socket is visible.

Example: V907xiW

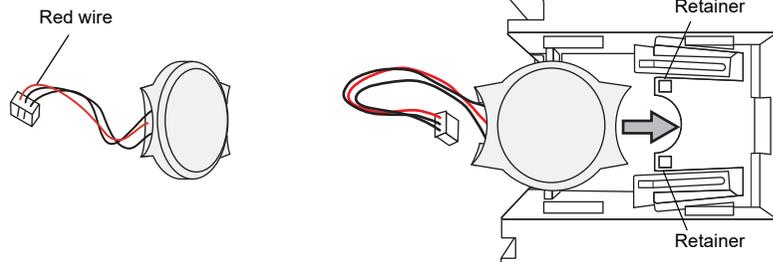
Rear view



3. Disconnect the battery connector, and pull the battery toward the left to remove it from the socket.



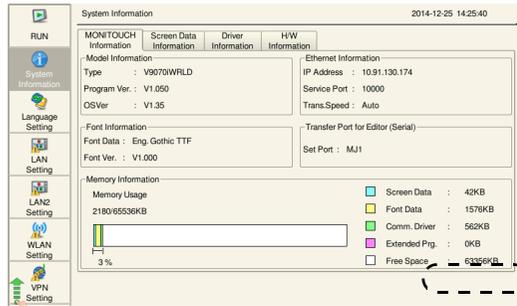
4. Insert the new battery into the socket with the side with the red wire facing down. Make sure that the battery is held in place by the retainers.



5. Attach the battery connector and close the battery holder cover.
6. Write a date five years from the present date for battery replacement on the new caution sticker and attach the sticker to an open area on the V9 series unit.

* Do not attach the sticker on air holes of the V9 series unit or optional units.

7. Turn power ON to the V9 series unit and check that the message “Battery changeover required” is cleared from the lower right of the screen in Local mode.



8. If a “*.RAM” backup file was saved, transfer it back to the V9 series unit.

Notes on the Battery: EU Directive 2006/66/EC

According to the EU directive 2006/66/EC effective in EU countries, well as the package box of the V9 series and the packaging of the replacement battery have the marking shown below:



CAUTION

- The marking shown above is effective only in EU countries.
- The details on the marking are designated in Article 20 “Information for end-users” and ANNEX II in EU directive 2006/66/EC.
- The marking indicates that the battery should be disposed of separately from general household waste.
- If element symbols are indicated below the marking, it means that the battery contains the specified heavy metal at a concentration exceeding the control value. The concentration control values are given below.
Hg: mercury (0.0005 %), Cd: cadmium (0.002 %), Pb: lead (0.004 %)
- The EU has determined the separating program for used batteries.
Dispose of used batteries properly at your local waste-disposal/recycling center.

“Perchlorate Best Management Practices” Regulations of California State Law, USA

The V9 series is a product subject to the “Perchlorate Best Management Practices” regulations of California state law in the USA. The packaging of the V9 series unit indicates the statement shown below.

Perchlorate Material - special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate/.

If exporting a product with an embedded V9 series unit that contains a lithium primary battery to the State of California, the above statement must be indicated on the product’s packaging.

Notes on Transport

Transportation of batteries containing lithium must observe the relevant transport regulations.