U1604A-02

S E R V I C E N O T E

Supersedes:
NONE

U1604A Handheld Oscilloscope

Serial Numbers:

- **U1604A-CFG001 – KR46001499 and below**
- **U1604A-CFG004 – KR46101530 and below**

Replacing the memory backup battery when the instrument shows hexadecimal characters on its date/time display

Parts Required:

P/N	Description	Qty.
NA	CR1220, 3V Button Cell	1

Note:
The Button Cell can be purchased from a local electronics store. More information on the CR1220 is available from the link below:
http://www.maxell.co.jp/e/products/industrial/battery/cr/pdf/CR1220_DataSheet_e.pdf

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION: **INFORMATION ONLY**	
AUTHOR: SW	PRODUCT LINE: WC
ADDITIONAL INFORMATION:	

January 21, 2009

Agilent Technologies

Situation:
If hexadecimal characters appear on the date/time display, this indicates that the memory backup battery is depleted and needs to be replaced.

Solution/Action:
Please follow the instructions below to replace the battery.

To remove stand

1 Remove the power cord and all connections from the instrument.
2 Push and lift up gently at either side of the stand as indicated in Figure 1.

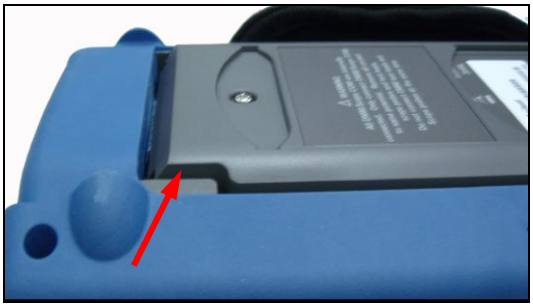

Figure 1 Push towards the arrow direction to remove the stand

3 Remove the stand from the rear panel of the instrument.

Figure 2 Disassemble the stand from the instrument

To remove battery pack

WARNING

To avoid electric shock, ensure you disconnect the power cord and all input to the instrument. Do not operate the instrument until the battery cover is covered securely.

1 Remove the two screws as shown in Figure 3.

Figure 3 Remove battery cover screws

2 Open up the battery cover and unplug the 3-wire connector from the PCBA board using a tweezer.

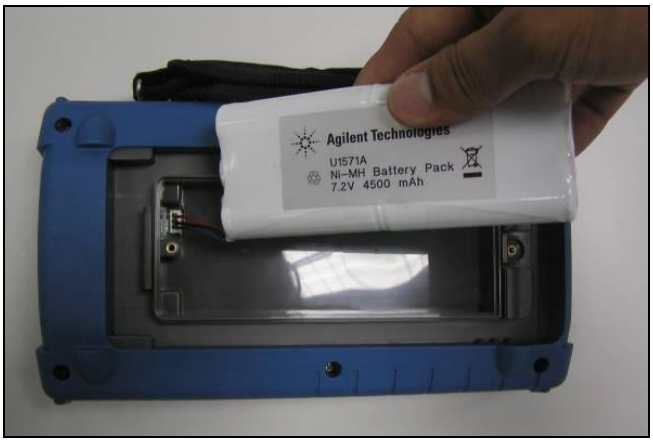

Figure 4 Unplug the 3-wire connector from the PCBA board using a tweezer.

3 Remover the 6 screws from the rear casing.

Figure 5 Remove the screws from the rear casing

4 Gently dismantle the front and rear casing from the instrument.

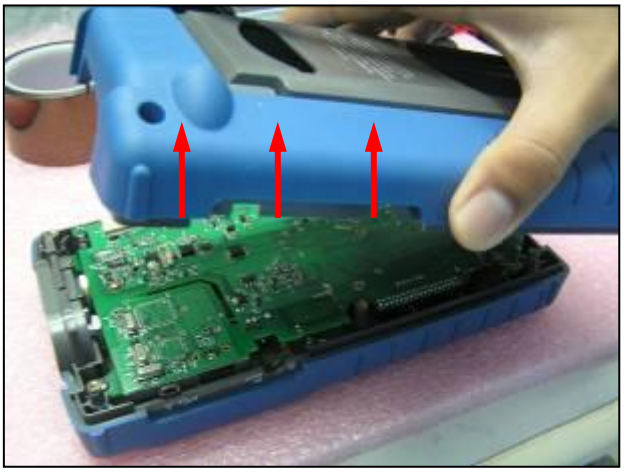

Figure 6 Remove the rear casing from the instrument

To remove the memory backup battery (button cell)

1 Locate the button cell at the left edge of the PCB.

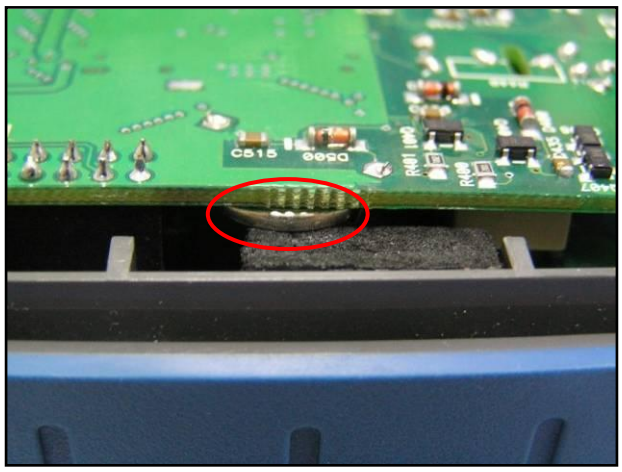

Figure 7 Button cell at the left edge of the PCB

2 Prepare a curve tweezer as shown in Figure 8.

Figure 8 Curve tweezer

3 Slide the tweezer under the PCB as show in Figure 9. Slowly move the tip of the tweezer to the battery holder, and carefully push the button cell out from the holder.

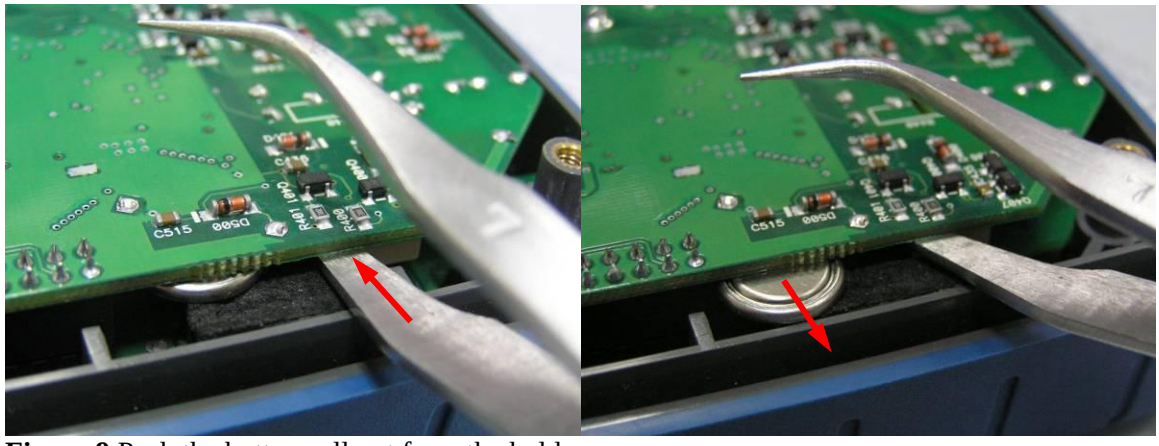

Figure 9 Push the button cell out from the holder

4 Remove the button cell from the holder.

To install a new button cell

1 Turn the new button cell over so that the bottom faces upwards as shown in Figure 10.

2 Move the button cell to the opening of the battery holder. Slide the button cell in slowly. Make sure the button cell is properly intact in the battery holder.

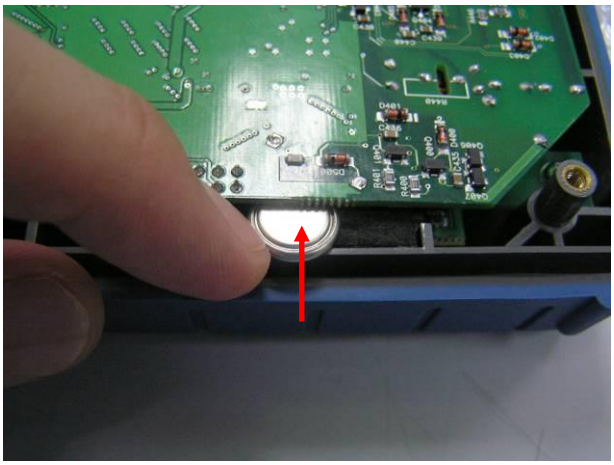

Figure 10 Push the button cell into the holder

Re-assemble the unit

1 Put the rear housing back onto the instrument.

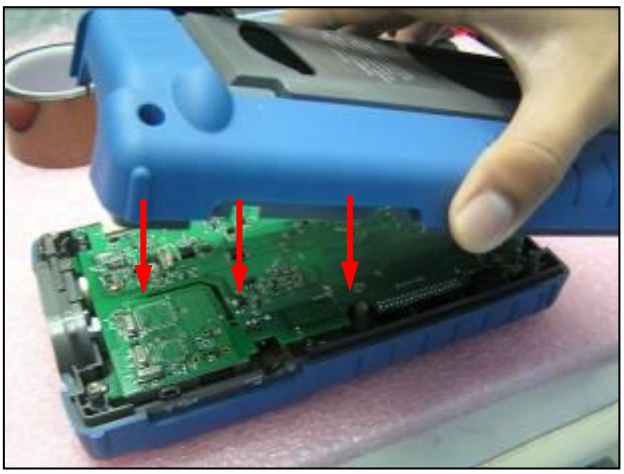

Figure 11 Put the rear housing back

2 Fasten the 6 screws at the rear cover.

Figure 12 Fasten the screws

2 Reconnect the battery to the unit.

Figure 13 Reconnect the battery

3 Install the battery cover and tighten the 2 screws.

Figure 14 Tighten the 2 screws

3 Put the rear stand on top of the battery cover. Press the rear stand in the direction shown in Figure 15 until it fits into the catch.

Figure 15 Press the rear stand in the direction of the arrow

After you have completed the steps above, perform self-calibration according to the instructions found in the Agilent U1602A/U1604A User's and Service Guide, Chapter 7: Performance Test - Self-Calibration.