Replacing Control Units

6102, 6101, RBS 6131

Operating Instructions

11/1543-LZA 701 6001/1 Uen B

Contents

1 Introduction

This instruction describes how to replace a Support Control Unit (SCU) in a cabinet.

The reasons for replacing an SCU are as follows:

- To replace a faulty SCU
- To upgrade the cabinet with a later version of a unit

Note: It is recommended to perform replacement procedures during off-peak hours to minimize traffic disturbances.

1.1 Prerequisites

This section contains information on the documents, tools, and conditions that apply to the procedure.

1.1.1 Documents

Before starting this procedure, ensure that the following documents have been read and understood:

- *Personal Health and Safety Information*
- *System Safety Information*

See Section 4 on page 8 for needed documents.

1.1.2 Tools

Make sure that the tools listed in Table 1 are available.

Table 1 Tools Required

Product Name	Product Number	Included in
Torx screwdriver, T20	LSA 901 43/3	Maintenance tool set (LTT 601 137/1)
Electrostatic Discharge (ESD) wrist strap	LTT 601 136/1	
Box socket set with Torx bit, T20	LTT 601 138/1	
Torque set, 0.5 – 4.0 Nm	LTT 601 145/1	–

1.1.3 Conditions

Before going to site, make sure that the following conditions are met:

- The operating instruction referring to these instructions must be available, if applicable.
- A new unit is available and checked.
- All keys are available and site access is granted.
- If it concerns a multistandard cabinet, inform all concerned Operation and Maintenance Centers (OMCs) that work is about to start.

2 Replacing an SCU

This section describes how to remove and install an SCU in the cabinet.

The cabinet is cooled by fans and the SCU is used to power and control the fans. Replacements must therefore take place as quickly as possible to prevent the temperature rising and avoid triggering alarms or even shutting down the cabinet.

2.1 Removing an SCU

Do!

This product contains components sensitive to ESD. Use an approved ESD wrist strap, connected to the product grounding point, to avoid damaging these components.

Steps

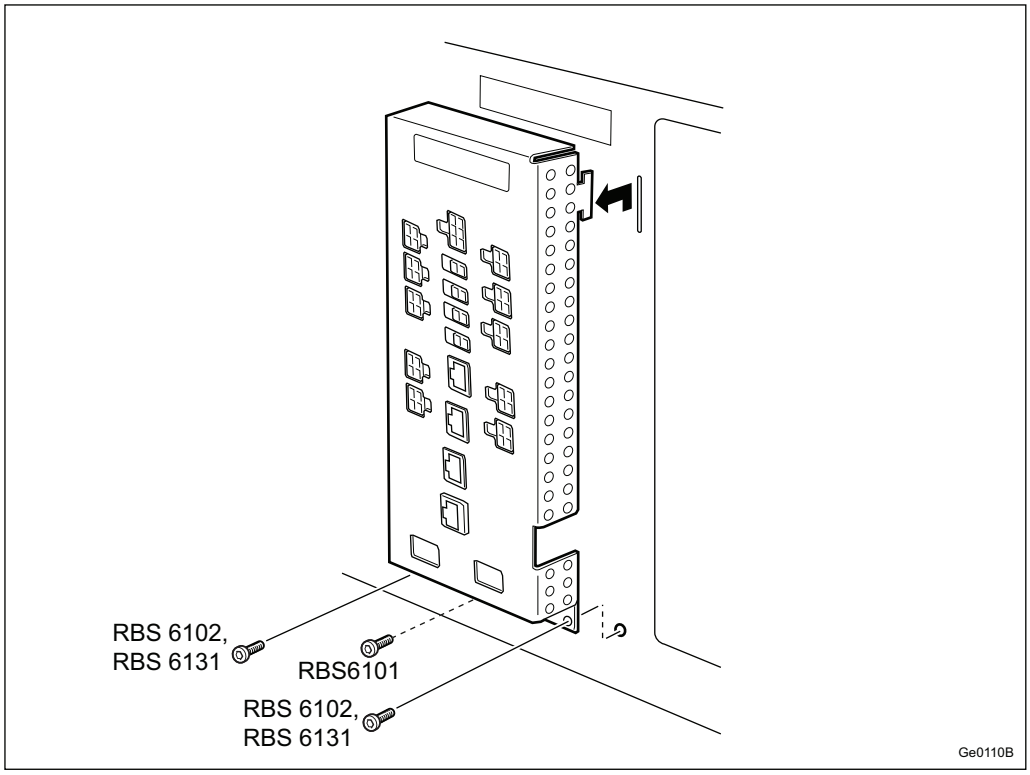
To remove an SCU, perform the following procedure:

1. Inform the OMC that work is to start at the site. The OMC can then decide what measures are necessary to minimize service disruptions.

   Note: If it concerns a cabinet with multistandard configurations, inform all OMCs concerned that work is about to start..

2. Open the cabinet door.
3. Put on the ESD wrist strap and connect the cable to the ESD grounding point on the cabinet.
4. Unpack the new SCU and check that it is undamaged.
5. Write down the positions of the cables connected to the SCU.
6. Switch off each Power Distribution Unit (PDU) output by pressing the buttons. The outputs are off when the indicator is off.
7. Disconnect the cables from the SCU.
8. Loosen the screw(s), using a T20 Torx screwdriver.

Note: The figure below shows the SCU in cabinet 6102 and RBS 6131. In 6101 the SCU is fastened with one screw.



9. Push the SCU upwards and pull it towards the front of the cabinet to remove the SCU as shown in step 8 on page 3.

2.2 Installing an SCU

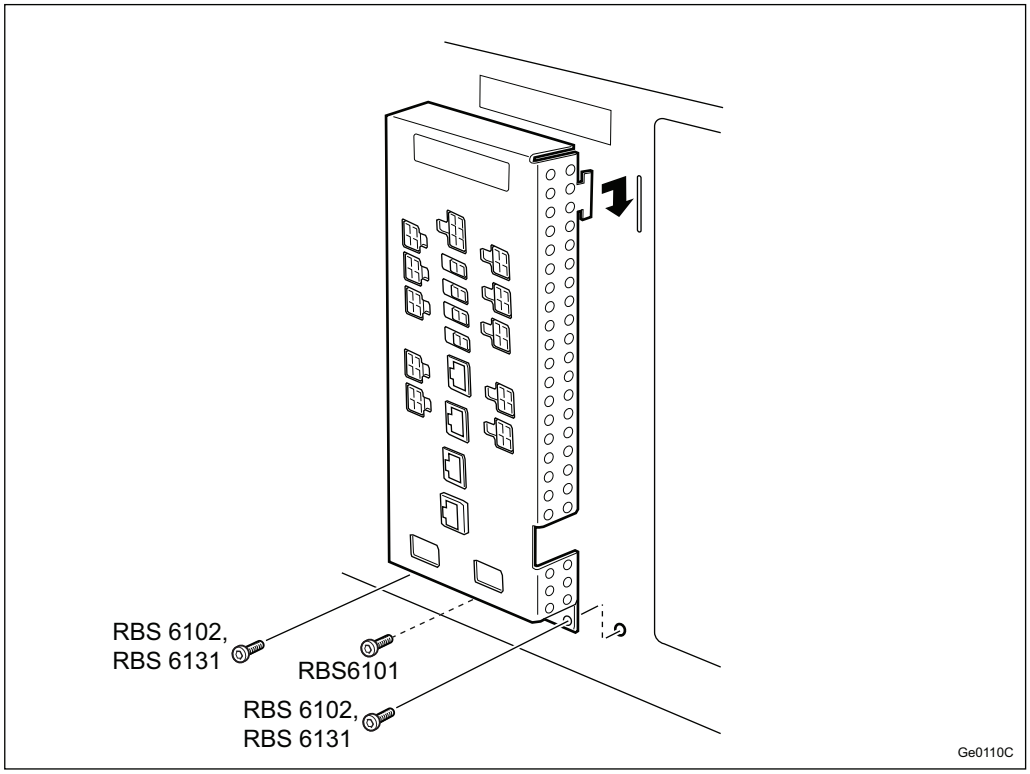
Do!

This product contains components sensitive to ESD. Use an approved ESD wrist strap, connected to the product grounding point, to avoid damaging these components.

To install an SCU, perform the following procedure:

Steps

1. Insert the SCU in the slots and press the SCU down.



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2. Make sure that the SCU is in the correct position.
3. Tighten the screw(s) to a torque of 2.3 Nm using a torque screwdriver and a T20 Torx bit as shown in the figure in step 1 on page 4.

   Note: The SCU in 6101 is fastened with one screw while the SCU in 6102 is fastened with two screws.
4. Reconnect the cables in accordance with the notations made in step 5 on page 3.

   Detailed information can be found in *Non-RF Connections*.
5. Switch on each PDU output where a cable is connected by pressing the buttons.
6. Check that the green optical indicators for the buttons pushed on the PDU are lit.
7. Ensure that the SCU is working correctly.

   Note: The green optical indicator on the SCU is on, and the red and the yellow optical indicators are off.
8. If the SCU is working correctly, proceed to step 10 on page 6.

If the alarm `EnclosureProductDataMismatch` (WCDMA, LTE) or `Cabinet Product Data Mismatch` (GSM) is issued, proceed to step 9 on page 6.

9. The alarm is issued if a mismatch occurs between the cabinet Product Information Data (PID) stored in the SCU and the cabinet PID. To cease the alarm, perform the following activities either on-site or remotely.

   Activities to be Performed On-site Only

   a. Locate the cabinet enclosure label containing the cabinet PID situated on the bottom shelf of the cabinet. Below is an example of the cabinet PID values on the label:

      ***/BFM901292

      R-state

      RBS6102

      YYYYMMDD

      Serial number

   b. For WCDMA, LTE: Enter the values printed on the cabinet PID to the Managed Object (MO) `Cabinet`, attribute `ProductData`

      For GSM: Enter the values printed on the cabinet PID to the IDB description.

      Note: This procedure must be performed even if the label PID and the MO (IDB) PID match in order to update the cabinet PID in the SCU memory.

   Activities to be Performed Remotely

   a. Read and make a written note (print if possible) of the values of the current cabinet PID listed in the Managed Object (MO) `Cabinet`, attribute `ProductData` (LTE, WCDMA) or IDB (GSM).

   b. Overwrite the same PID values into the Managed Object (MO) `Cabinet`, attribute `ProductData` (LTE, WCDMA) or IDB (GSM). These newly written values will be written into the SCU memory and the cabinet PID on the label will now be stored as the cabinet PID in the SCU.

10. Perform the procedure in Section 3 on page 7.

3 Performing Concluding Routines

Follow the instructions in the operating instruction that refers to this document.

Steps

Before leaving the site, perform the following procedure:

1. Ensure that the cabinet is operational and that no alarm is active (detailed information about optical indicators can be found in *Indicators, Buttons, and Switches*).

   Note: Reaching final indicator status can take up to 30 minutes.

2. Disconnect the ESD wrist strap.
3. Collect all tools.
4. Inform the OMC that the work is finished at the site.
5. Close and lock the cabinet, if applicable.
6. Follow the procedures for the return and disposal of replacement parts and the disposal of packing. Information about how to handle faulty equipment is described in *Handling Faulty Equipment*.
7. Lock all doors and gates to the site.

4 References

Safety

- Personal Health and Safety Information

  124 46-2885
- System Safety Information

  124 46-2886

Generic

- Handling Faulty Equipment

  2/1541-LZA 701 6001
- Indicators, Buttons, and Switches

  19/1551-LZA 701 6001
- Non-RF Connections (RBS 6101)

  47/1551-LZA 701 6001
- Non-RF Connections (RBS 6102)

  16/1551-LZA 701 6001
- Non-RF Connections (RBS 6131)

  123/1551-LZA 701 6001
- Non-RF Connections (TMR 6101)

  4/1551-LZA 701 6007
- Non-RF Connections (TMR 6102)

  5/1551-LZA 701 6007