

# Installation Note

## HP/Agilent 8922U Option 101/103

HP/Agilent 8922H to 8922M Upgrade



**Agilent Part No. 08922-90197**  
**Printed in UK**  
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## **HP/Agilent 8922U Option 101/103 Installation Procedure**

This document details the installation of HP/Agilent 8922U Option 101 and Option 103.

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**NOTE**

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This upgrade provides the GSM functionality of the HP/Agilent 8922M, while retaining the RF Generator and RF Analyzer operating parameters of the HP/Agilent 8922H.

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## Introduction

During this procedure you will:

- a) Install new ROMs on the A32 GSM Controller Assembly.
- b) Download new HP/Agilent 8922M Host firmware to the A7 DCU Controller Assembly.

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### NOTE

The HP/Agilent 8922M Host firmware can only be installed over GPIB using an external controller running HP BASIC. Firmware files and the downloading utility are available electronically by contacting your local Agilent Technologies Customer Service Center.

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### Parts List

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### NOTE

Items shown in shaded area are not included in Option 103.

Description	Quantity
BOOT ROM, 08922-87168	1
GSM ROM SET (set of 4 ROMs), 08922-61896	1
Agilent 8922M/S GSM Test Set User's Guide	1
Agilent 8922M/S GSM Test Set Programming Reference Guide	1
Agilent 8922 Quick Start Guide	1
"8922U # 101" Label	1
"Agilent 8922H → M" Label	1
"Agilent 8922G → M" Label	1

### Tools Required

- T-10 Torx screw driver.
- T-15 Torx screw driver.
- 2-pt Posidriv screw driver.
- IC Extraction Tool (32 pin DIL).
- IC Extraction Tool (32 pin PLCC).

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## Procedure

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### CAUTION

Perform the following procedure only at a static safe work station. The printed circuit assemblies and ROMs in this instrument are very sensitive to **STATIC ELECTRICITY DAMAGE**. Wear an anti-static wrist strap that is connected to ground.

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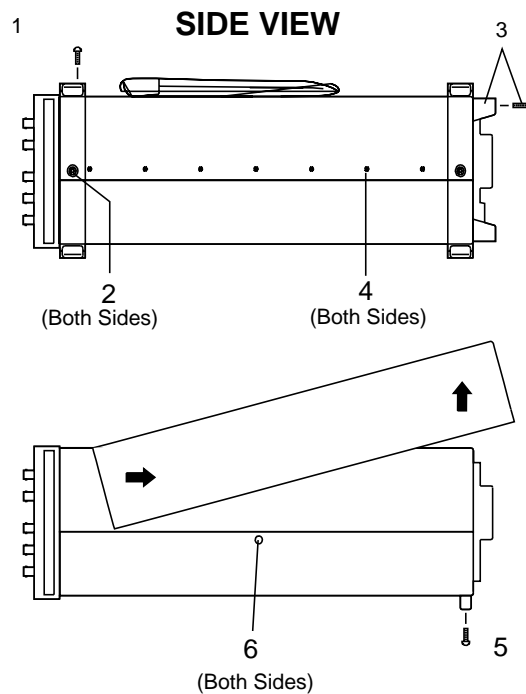
### NOTE

A RAM initialize must be carried out before removing any parts. To initialize RAM;

- Select CONFIG screen.
- Select SERVICE screen.
- Then select RAM Initialize and reply to prompts at top of display.

### Top Cover Removal

1. Remove four 2-pt. Pozidriv top bumper mounting screws.
2. Remove four 2-pt. Pozidriv side mounting screws and bumpers.
3. Remove two 2-pt. Pozidriv screws and standoffs.
4. Remove fourteen TX-10 screws and top cover.



### **Remove Internal Cover**

Remove internal cover using a TX-15 screw driver. Refer to Figure 1 “Internal Cover Removal” on page 6.

### **Replace GSM ROMs**

Refer to Figure 2 “Board Locations” on page 6, remove the A32 GSM Controller Assembly. Remove the four GSM ROMS U15,16,17,18. Install the GSM ROM set (08922-61896).

Re-install the A32 GSM Control Assembly.

### **Install 08920-87168 Boot ROM**

On the A7 DCU Control Assembly (Refer to Figure 2 “Board Locations” on page 6 for location of A7 Control Assembly) install Boot ROM 08922-87168 at U65 (Refer to Figure 3 “DIP Switch Location” on page 7 for location of U65).

### **Reposition the A7 DCU Control Assembly DIP switches**

Refer to Figure 3 “DIP Switch Location” on page 7 for DIP switch settings.

Re-install the A7 DCU Control Assembly.

### **Download new Host firmware**

The HP/Agilent 8922M Host firmware is downloaded to the instrument over the GPIB interface. This is achieved using an external controller with GPIB interface and the HP BASIC programming language. Agilent Technologies Customer Services Centre engineering staff have access to these files.

### Verify firmware revisions using the SERVICE screen

The SERVICE screen is used to verify the correct installation of the Host and GSM firmware by checking the datecodes. Datecode are shown in the format YYYYMMDD.

- Power ON the HP/Agilent 8922H.
- The display will show HP 8922M at power ON.
- Using the Cursor Control knob select the **CONFIG** screen.
- Using the Cursor Control knob select the **SERVICE** screen.
- Select RAM Initialize field and reply to the prompts at the top of the display.
- From the **Latch** field select the **host\_revision** choice.
- Ensure the datecode, shown in the **Value** field is **19960131** or greater.
- From the **Latch** field select the **g\_boot\_revision** choice.
- Ensure the datecode, shown in the **Value** field is **19960112** or greater.
- From the **Latch** field select the **gsm\_fw\_revision** choice.
- Ensure the datecode, shown in the **Value** field is **19960117** or greater.

### Replace Internal Cover

### Replace External Covers

### Verify Operation

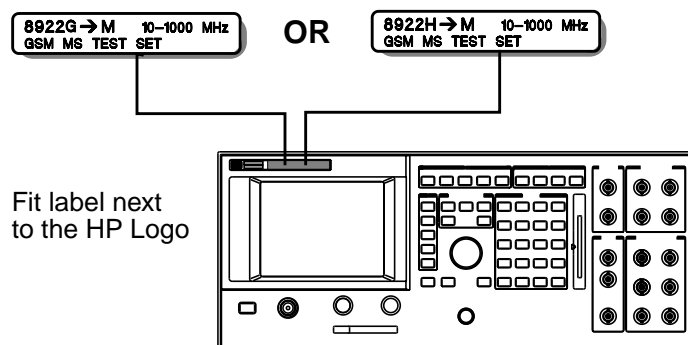
This is not essential, however a simple and effective verification procedure is to make a call using a GSM mobile.

### Option label Installation

Remove the backing from the 8922U #101 label and apply neatly to the rear panel of the HP/Agilent 8922H in a position where it can be seen.

### Add Model Identification Label

Attach the correct model identification label to the front panel label as shown below.



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### Part Location Diagrams

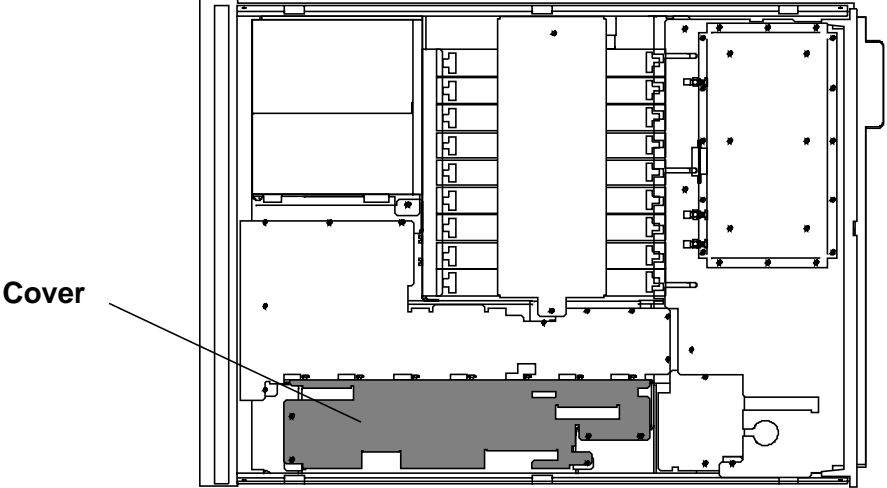


Figure 1

Internal Cover Removal

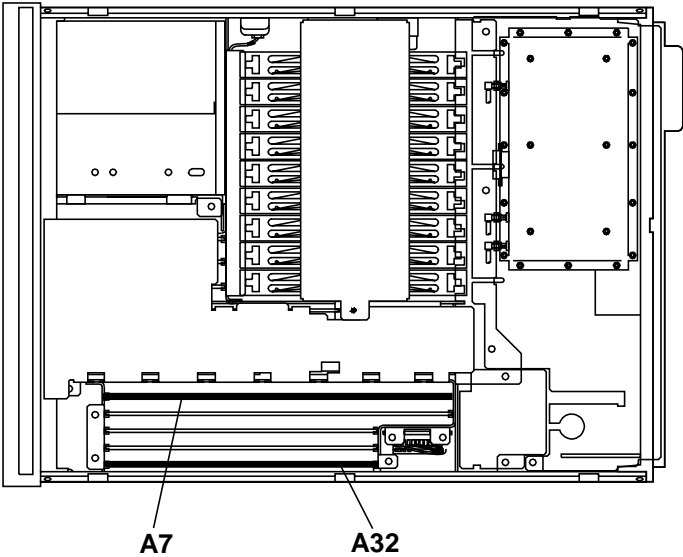
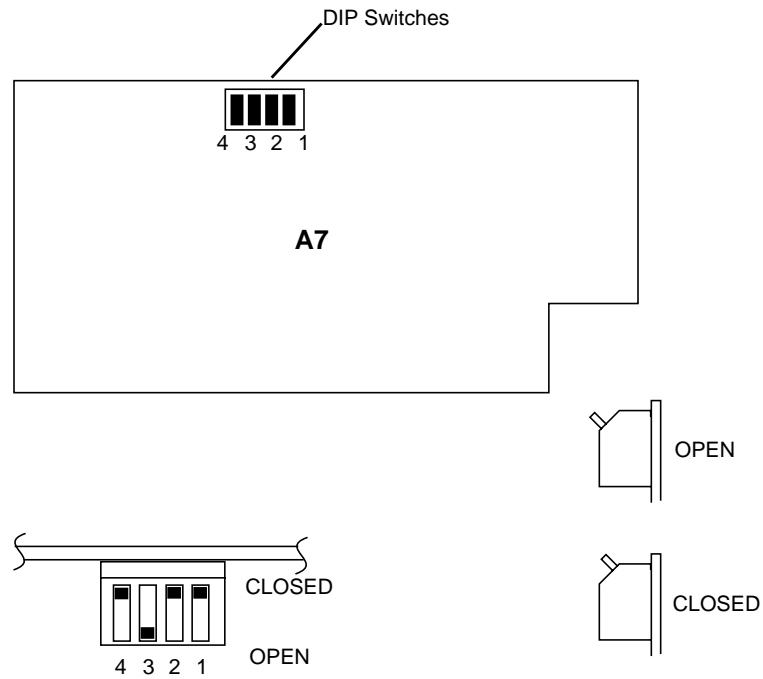


Figure 2

Board Locations





**Figure 3**

**DIP Switch Location**

Switch	Function	Closed	Open	Position
SW 1	CAL EPROM WRITE	Enable	Disable	CLOSED
SW 2	Smart Card Type	EPSON	PCMCIA	CLOSED
SW 3	HOST Memory Location	A8 OTP	A7 Flash	OPEN
SW 4	Not Used			Not Applicable



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Manufacturing Part Number

**08922-90197**

