Chapter 8: Maintenance

Replacing DecisioNet Hardware

Except for the ESL battery replacement described in this chapter, the DecisioNet System hardware does not require any preventive maintenance. If there is a problem, trained NCR Customer Service personnel or other trained personnel can use the information in Chapter 7, "Testing and Troubleshooting," to analyze and isolate the problem.

DecisioNet hardware is not field repairable. If it is determined that a CBS, antenna, power supply, or ESL is defective, use the procedures described in this chapter to replace the unit with a new one. If appropriate, contact your NCR representative for information on where to send the defective unit for repair.

Important Information: After removing or replacing the CBS or a transmit antenna, it is recommended that you re-certify RF communications. It is also recommended that the change in the site configuration be noted for support purposes. For more information, contact your NCR representative and reference the following:

- DecisioNet Implementation Guide (B005-0000-1250)
- Certification/Re-Certification Site Survey Policy (497-0410343)

Replacing a CBS

Use this procedure to replace a suspected malfunctioning CBS with another one.

- Stop CBS communication using the **DNCBSMTEST** > 2. CBS Test
 Disable Communications option.
- 2. Power off all the CBSs in the system by powering off the power supplies.
- 3. After noting its switch positions, disconnect and remove the malfunctioning CBS.
- 4. Set the switches in the new CBS to match the switches in the CBS you are replacing.
- 5. Install the new CBS and reconnect the cables where they were connected before.
- 6. Power up all CBSs in the system.
- 7. Re-start CBS communication using the **DNCBSMTEST DNCBSMTEST** > **2. CBS Test** > 3. **Enable Normal Mode Communications** option.
- 8. Confirm that errors related to the replaced CBS are no longer being logged.

Replacing Antennas

Replacing a Receive Antenna

Use this procedure to replace a suspected malfunctioning receive antenna.

- 1. Disconnect and remove the malfunctioning receive antenna.
- 2. Install and re-connect the new receive antenna.
- 3. Confirm that errors related to the replaced antenna are no longer being logged.

Replacing a Transmit Antenna

Use this procedure to replace a suspected malfunctioning transmit antenna. You MUST remove power from the CBSs during this procedure. Removing a transmit antenna from a powered CBS can damage the CBS transmitter circuitry.

- Stop CBS communication using he **DNCBSMTEST** > 2. **CBS Test** > 6. **Disable Communications** option.
- 2. Power off all the CBSs in the system by powering off the power supplies.
- 3. Disconnect and remove the malfunctioning transmit antenna.
- 4. Install the new transmit antenna.
- 5. Power up all CBSs in the system.
- 6. Re-start CBS communication using the **DNCBSMTEST DNCBSMTEST** > 2. **CBS Test** > 3. **Enable Normal Mode Communications** option.

Replacing a Power Supply

Use this procedure to replace a suspected malfunctioning power supply.

- Stop CBS communication using the **DNCBSMTEST** > 2. CBS Test
 Disable Communications option.
- 2. Power off all the CBSs in the system by powering off the power supplies.
- 3. Disconnect and remove the malfunctioning power supply.
- 4. Install a new power supply.
- 5. Power up all power supplies in the system.
- 6. Re-start CBS communication using the **DNCBSMTEST DNCBSMTEST** > 2. **CBS Test** > 3. **Enable Normal Mode Communications** option.
- 7. Confirm that errors related to the replaced power supply are no longer being logged.

Battery Replacement

When an ESL's battery becomes weak, the battery symbol in the display lights indicating that its lithium battery must be replaced. After removing the ESL from the shelf, follow these steps to replace the batteries:

1. Open the battery cover by inserting a coin in the slot and turning counter-clockwise to its detented position as shown in the following illustration.





2. Attach the Power Saver Tool.

Note: This tool is planned for GCA . It serves as a temporary power source while replacing ESL batteries.

3. Remove the battery cover.



- 4. Remove the battery.
- 5. Place a new battery in the battery cavity, remove the *Power Saver Tool*, and replace the battery cover.

Caution: Danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type as recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Updating a CBS's Firmware Images

Periodically updates may be required to add enhancements or correct problems in the CBS firmware. Firmware updates are distributed on diskette as a self-extracting executable file that automatically updates all CBS firmware images. Instructions for performing the update are included with the diskette.