

## 2. MEMORY BACKUP BATTERY REPLACEMENT

A long-lasting lithium battery is used to back up the memory at power shut-off. Normally, it operates satisfactorily for about 5 years, although the replacement time may be shortened under difficult working conditions (high temperature and high humidity, for instance). When the battery voltage is dropped, immediately replace the battery because low voltage can ruin the memory.

### 2-1. Battery voltage drop detection

When the battery voltage drops, the BATT LED indicators provided on both the CPU panel and the programmer are lit, turning ON the internal relay 177 to signal that the battery should be replaced.

### 2-2. Battery replacement procedure

After the battery voltage drop is detected, replace the battery within 10 days.

#### ● Battery type: RB-5

Replacement batteries are fitted with a lead wire and a connector at the KOYO plant and are available from KOYO.

#### ● Replacement procedure

- (1) Remove the CPU module from the standard base after about one minute when the AC power source is turned off.
- (2) Withdraw a midget plug connecting battery and CPU board.
- (3) Move the battery holder by picking up the hook of the holder enough to have an opening so that the old battery can be removed.
- (4) Install a new battery and fix it with the battery holder.
- (5) Insert a plug on the top of the battery lead wire into the connector on the board.
- (6) Reinstall the CPU module on the standard base when the replacement work is completed.
- (7) Confirm if the BATT LED is OFF after applying the AC power.

Note: For CPUs made before with lot numbers 8906 for SA-21 and 8908 for SA-22, internal relay 177 must be forcibly turned off by the programmer. Depress keys as shown below.

RST SHF 1 7 7 ENT

The power source for RAM while the battery is being replaced is maintained by the large size of capacitor. Battery replacement should be done immediately after cutting OFF the AC power.

Make sure the voltage of the (new) replacement battery is more than 3 V before installation.

