

6.29 ALARMS 910 TO 916 (RAM PARITY ERRORS)

Point of detection



These alarms indicate RAM parity errors.

RAM is provided with a check bit (parity bit). When data is written to RAM, the check bit is also written to the RAM by either setting it to 1 or resetting it to 0 so that the total number of 1 bits in the data, including the check bit, is even or odd. When the data is read from RAM, the check bit is used to ensure that the read data is correct.

#7	#6	#5	#4	#3	#2	#1	#0	#P
1	0	1	1	0	1	1	1	0

(Parity bit)
(This example applies to even parity.)

Cause and corrective action

- (1) If any of these alarms occurs immediately after the power is switched on, switch the power off then back on while holding down the  and  keys so that the RAM is cleared to all 0s.

If a parity alarm still occurs after the RAM has been cleared to all 0s, it is likely that the printed-circuit board on which the RAM in which the alarm has occurred is defective. So, replace the printed-circuit board.

* Re-set all data according to Chapter 3 "Data input/output."

Number	Message	Contents
910	RAM PARITY	RAM parity error (low byte) in the tape memory RAM module. Replace the memory printed board.
911	RAM PARITY	RAM parity error (high byte) in the tape memory RAM module. Replace memory printed board.
912	SHARED RAM PARITY	There is a parity error of the RAM that is shared with the digital servo (low byte). Replace the axis control printed board.
913	SHARED RAM PARITY	There is a parity error of the RAM that is shared with the digital servo (high byte). Replace the axis control printed board.
914	SERVO RAM PARITY	There is parity error of the digital servo local RAM. Replace the axis control printed board.
915	LADDER PROGRAM EDITING CASSETTE RAM PARITY	RAM parity error (low-order bytes) of the ladder program editing cassette. Replace the ladder program editing cassette.
916	LADDER PROGRAM EDITING CASSETTE RAM PARITY	RAM parity error (high-order bytes) of the ladder program editing cassette. Replace the ladder program editing cassette.

- (2) Memory backup battery voltage drop

The rated voltage of the memory backup battery is 3.0 V. If it drops to or below 2.6 V, a battery alarm occurs.

If the memory backup battery voltage drops, the message "BAT" blinks on the screen.

If a battery alarm occurs, replace the batteries with new lithium batteries as soon as possible.

* See Section 2.6 for an explanation of how to replace the batteries.

- (3) Defective power supply unit

If an alarm is eliminated by clearing the memory to all 0s, a probable cause is a defective power supply unit.