

## 8.5 OTHERS

Those special housing type controls, with which all the power sequence control circuits are converted to the NC area, are sometimes provided with MCBs which can be turned on and off externally.

Generally, when these MCBs are turned off, the power supply to the NC is stopped. For details, refer to the manual of the machine tool builders.

## 8.6 TROUBLE CAUSES AND REMEDIES

### 8.6.1 ON-LINE DIAGNOSTICS

On-line diagnostics are implemented to locate a trouble quickly and protect the machine against malfunctions. Shown below are the displaying functions executed by the control being on-line and machining.

- Display of three-digit alarm code including a code showing an axis in error.
- Display of four-digit status code including a function code showing M, S, T, V, DWL.
- Input/output signal display

These displays can be made at any time, while the machine is in automatic operation, or at stand-by.

### 8.6.2 ALARM CODES AND REMEDIES

Where "ALM" or "A/B" on CRT screen is blinking and the machine stops, depress the ALM key. Then alarm code and message will be displayed on CRT screen. Alarm codes "800," "810," "820," "830" and "840" are displayed as soon as the corresponding error occurs.

For the remedies for trouble causes represented by alarm codes, see APPENDIX 5 LIST OF ALARM CODES on the last part of this manual.

### 8.6.3 INPUT/OUTPUT SIGNALS

To clear up the causes indicated by alarm codes, check the input/output signals on the CRT screen.

Input/output signals are divided into standard and custom-built ones, and displayed by specifying the corresponding diagnostic number with keys on the operator's station.

Standard signals are included in every type of YASNAC MX1. Custom-built signals are provided for optional machine interface equipped with some type of YASNAC controls.

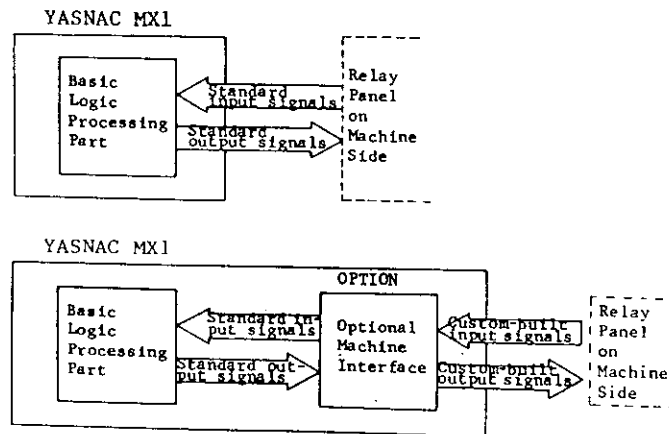


Fig. 8.8