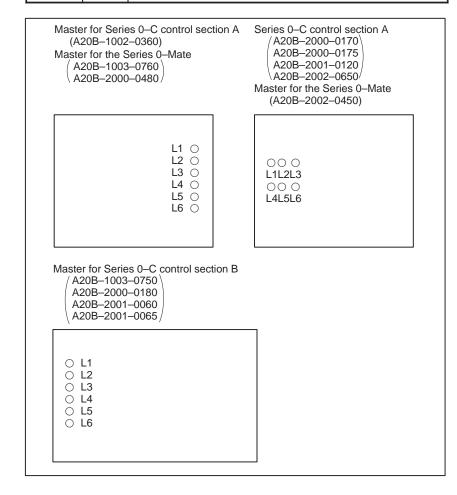
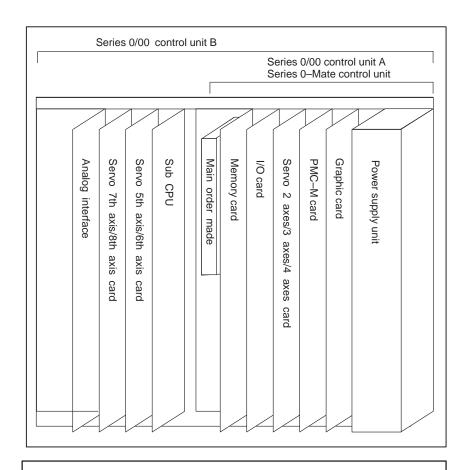
2.4 LEDS ON PRINTED-CIRCUIT BOARDS

LED		Description and Correction				
Number	Color	Description and Correction				
L1	Green	Blinks during automatic operation. Does not indicate an alarm.				
L2	Red	Lights when an alarm occurs. Appropriate corrective action should be applied according to the alarm number displayed on the CRT screen.				
L3	Red	No memory card has been installed.				
L4	Red	 (1) A watchdog timer alarm has occurred. The master printed–circuit board or memory card mabe defective. See alarm 920. (2) A servo alarm has occurred. (3) No axis card has been installed or, if one has been installed, it may be defective. 				
L5	Red	(1) A watchdog timer alarm has occurred in the sub–CP Replace the sub–CPU printed–circuit board.(2) A 5th/6th servo alarm has occurred.				
L6	Red	A system alarm has occurred (1) The analog interface card is defective. (2) The DNC1 card is defective. (3) The 7th/8th card is defective.				



2.5 PRINTED-CIRCUIT BOARD UNIT LIST

2.5.1 Structure



NOTE

The Series 00 is equipped with the following printed–circuit boards in place of the PMC–M and graphics cards.

If there is no PMC: A02B-0086-C051

PMC-M ROM board with electrical interface:

A02B-0086-C052

PMC-M RAM board with electrical interface:

A02B-0086-C053

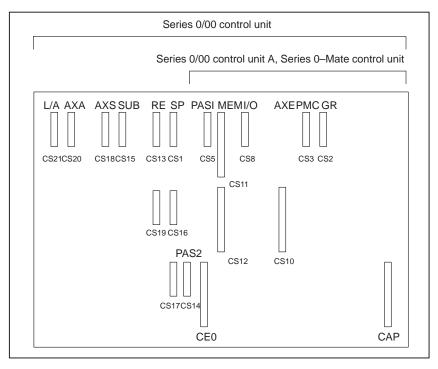
PMC–M ROM board with optical interface:

A02B-0086-C055

PMC–M RAM board with optical interface:

A02B-0086-C056

2.5.2 Construction



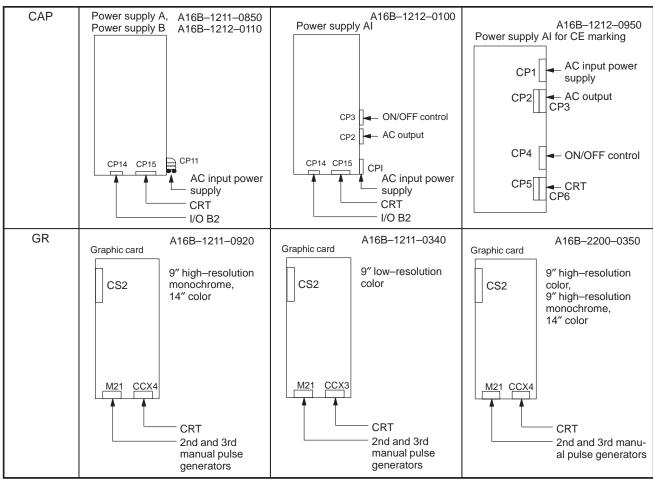


Fig.2.5.2 (a) Construction of Series 0/00

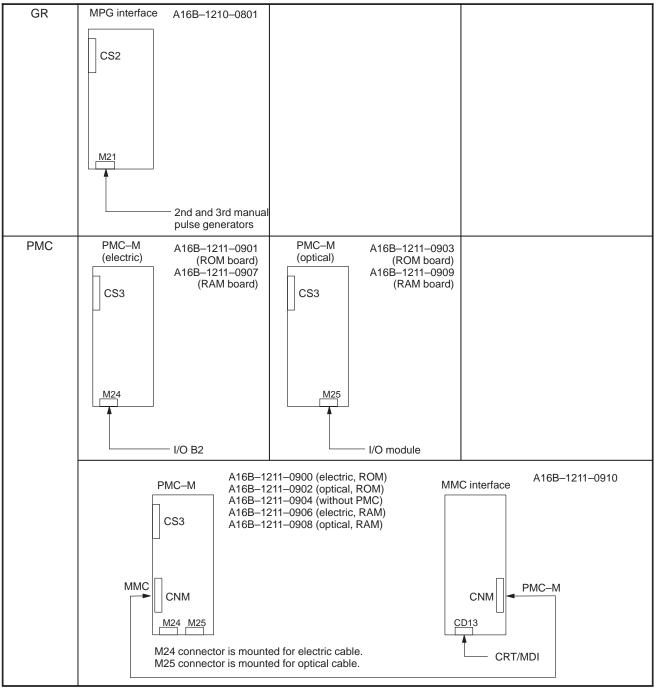


Fig.2.5.2 (b) Construction of Series 0/00

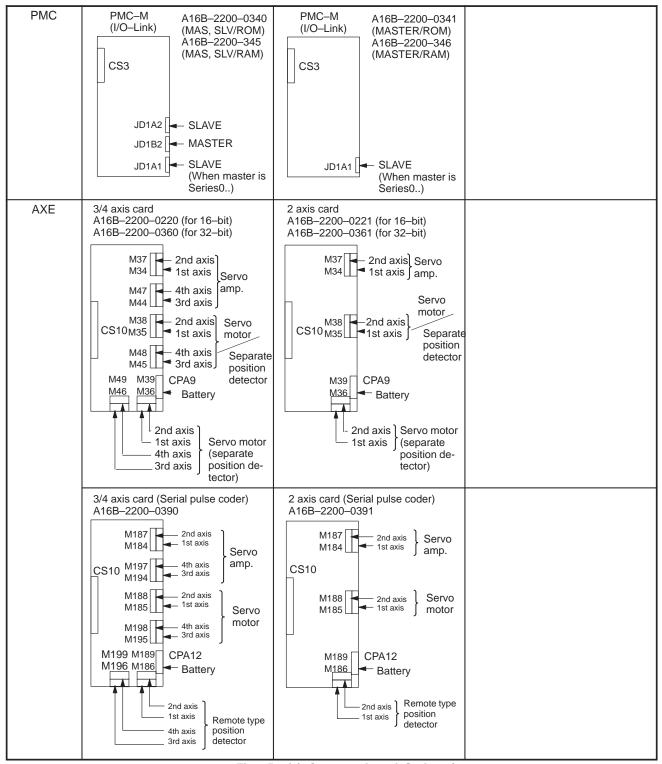


Fig.2.5.2 (c) Construction of Series 0/00

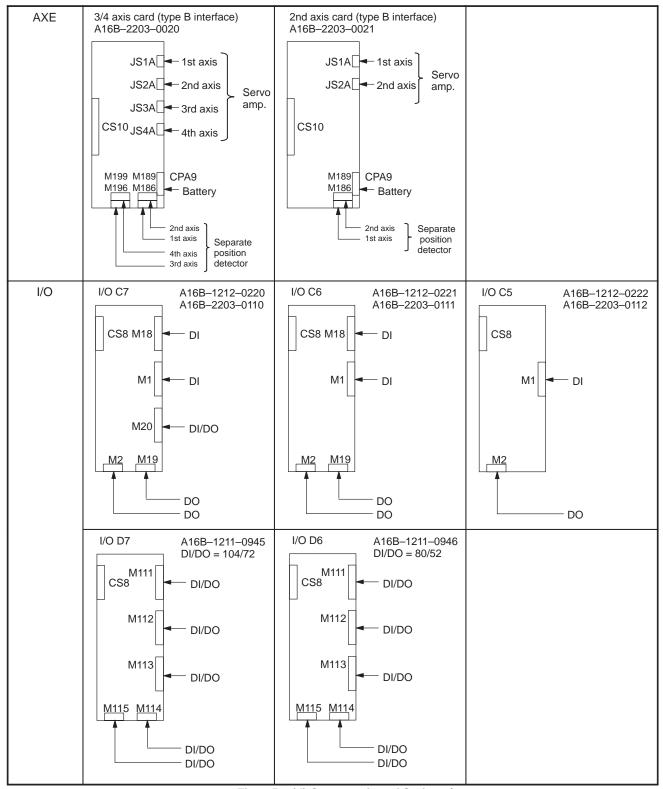


Fig. 2.5.2 (d) Construction of Series 0/00

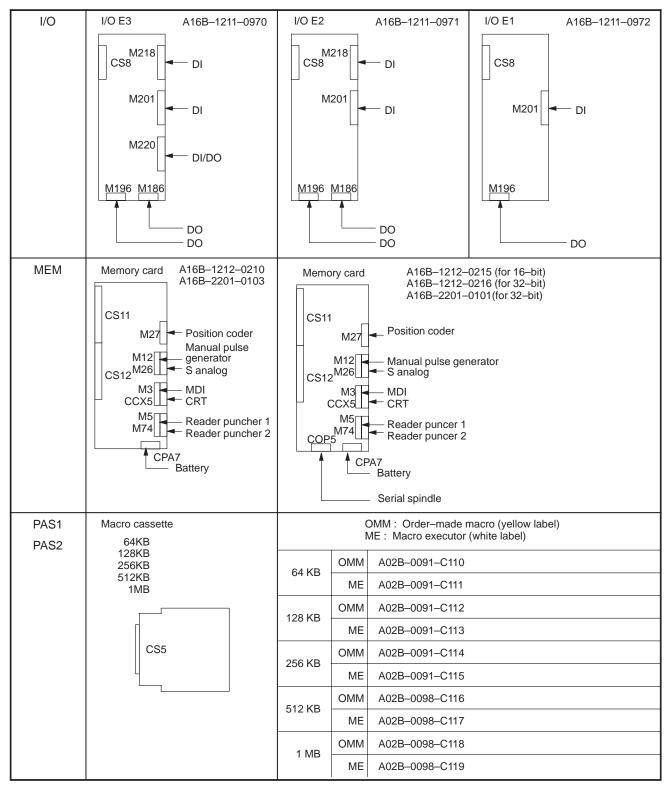


Fig. 2.5.2 (e) Construction of Series 0/00

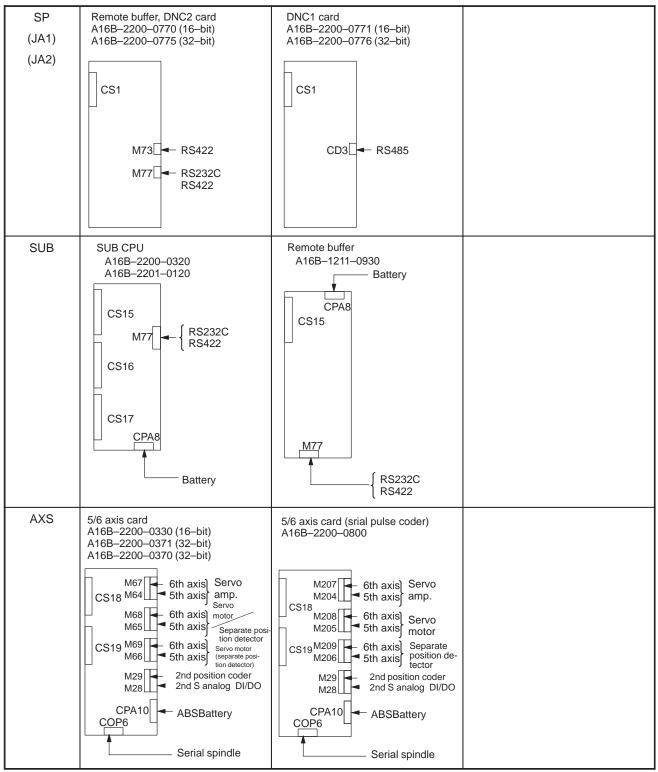


Fig. 2.5.2 (f) Construction of Series 0/00

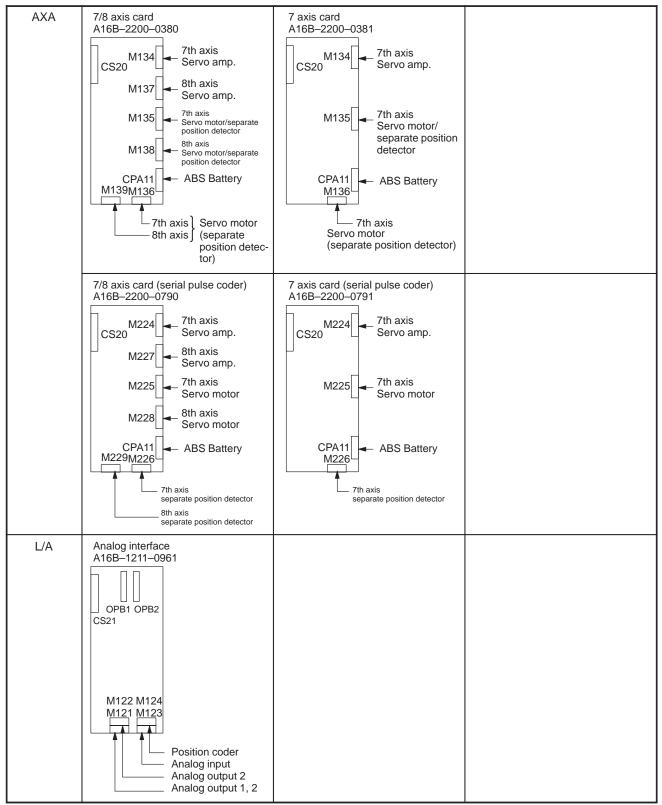


Fig. 2.5.2 (g) Construction of Series 0/00

2.7 DETAILS OF POWER SUPPLY

2.7.1 Details of Power Supply Unit A (A16B-1211-0850) (A16B-1210-0510)

It is easy to mount and dismount the CNC power supply unit, because it is designed to be mounted on, and connected directly to, the master printed–circuit board. All its AC inputs and DC outputs are linked via connectors.

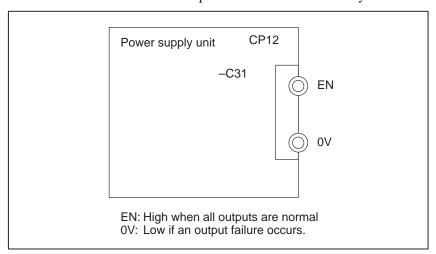
Fig.2.7.1(a) is an outline of this power supply unit, and Fig.2.7.1(b) is the block diagram.

(1) Input/output connectors

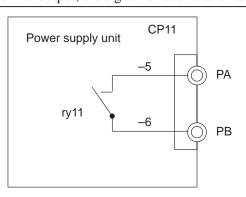
Connector name	Description		
CP11	200/220/230/240VAC		
	PA-PB signal output		
CP12	Supply of +5V, +15V, -15V, +24V, and +24E to the master printed-circuit board		
	EN signal output		
CP14	+24E supply for the additional I/O B2 printed circuit board (for Series 0) +24E supply for the I/O card connection unit (for Series 0) +24E supply for the connection unit (for Series 0)		
CP15	+24V supply for the 9" monochrome CRT/MDI unit (for Series 0) +24V supply for the 9" small CRT/MDI unit (for Series 10) +24V supply for the 9" small or standard CRT/MDI unit (for Series 15)		

(2) Descriptions of the input/output signals

1. ENABLE signal EN (output)
This TTL level signal indicates that all DC outputs are normal.
It becomes low if an output failure is detected in any circuit.



2. PA-PB signal (output) for keeping the power applied In a system with no input unit in use, the PA-PB signal is a contact signal used to keep the power applied. It is output from the power supply unit. In a system with an input unit in use, the PA-PB signal is used as an interface signal between the system and input unit. If the contact becomes open due to detection of an abnormal output, the signal functions as an alarm signal.



PA: The PA-PB contact is kept closed while the ENABLE signal is high. PB: The PA-PB contact is kept open while the ENABLE signal is low.

(3) Adjustments and settings

This power supply unit requires no adjustment or setting. Do not attempt to adjust the reference voltage (=10.00V) at A10 unless absolutely necessary, because the reference voltage has been adjusted during unit test; merely confirm the voltage across A10 and A0 of check connector CP16.

If the reference voltage at A10 falls outside the rated range, set it to 10.00V, using VR11, while measuring the voltage with a digital voltmeter. Rotating VR11 clockwise increases the voltage at A10. After the power supply unit is replaced, always to check the reference voltage at A10.

(4) Causes of blown fuses and required corrective actions

This power supply unit is provided with fuses F11 and F12 at its input, fuse F13 at the +24V output, and fuse F14 at the +24E output. Possible causes of these fuses blowing are listed below together with the corrective actions required to restore normal operation.

1. Fuses F11 and F12

(a) Short circuit in surge absorber VS11

VS11 is intended to suppress surge voltages on the input line. If an excessively large surge voltage or steady voltage is applied to VS11, it breaks down, short–circuiting and, causing F11 and F12 to blow. If VS11 has short–circuited, but you do not have a replacement part on hand, the machine can be used with VS11 removed. In such a case, however, you should obtain a replacement and install it as soon as possible, especially when the machine is being used in an installation prone to surge voltages. The specification number of VS11 is A50L–8001–0067#431U.

- (b) Short circuit in diode stack DS11
- (c) Short circuit between the collector and emitter of switching transistors Q14 and Q15

- (d) Short circuit in diodes D33 and D34
- (e) Short circuit between the collector and emitter of transistor Q1 in the auxiliary power supply circuit

If you suspect that any of short circuits (b) to (e) has occurred in the respective parts, replace the power supply unit with a spare. When replacing a fuse, use a replacement having the same rating. The specification number for fuses F11 and 12 is A60L-0001-0194#5.0.

2. Fuse F13

- (a) A short circuit may have occurred in the CRT/MDI unit or a +24 V power supply cord leading to it. Remove the cord from CP15, and check the unit and cord carefully.
- (b) A short circuit may have occurred in the +24 V circuit on the master printed–circuit board. Remove the cable from CP14 and CP15. Also, remove the power supply unit from the master printed–circuit board, then check the printed–circuit board carefully. When replacing a fuse, use a replacement having the same rating. The specification number for fuse F13 is A60L–0001–0075#3.2.

3. Fuse F14

- (a) Short circuit in +24E power supply cables for various printed–circuit board units
- (b) Ground fault of the +24E power supply line in the machine or false contact of the +24E power supply line with another power supply line

If either of (a) or (b) may have occurred, remove the cable from CP14, and check it carefully. When replacing a fuse, use a replacement part having the same rating. The specification number for fuse F14 is A60L–0001–0046#5.0.

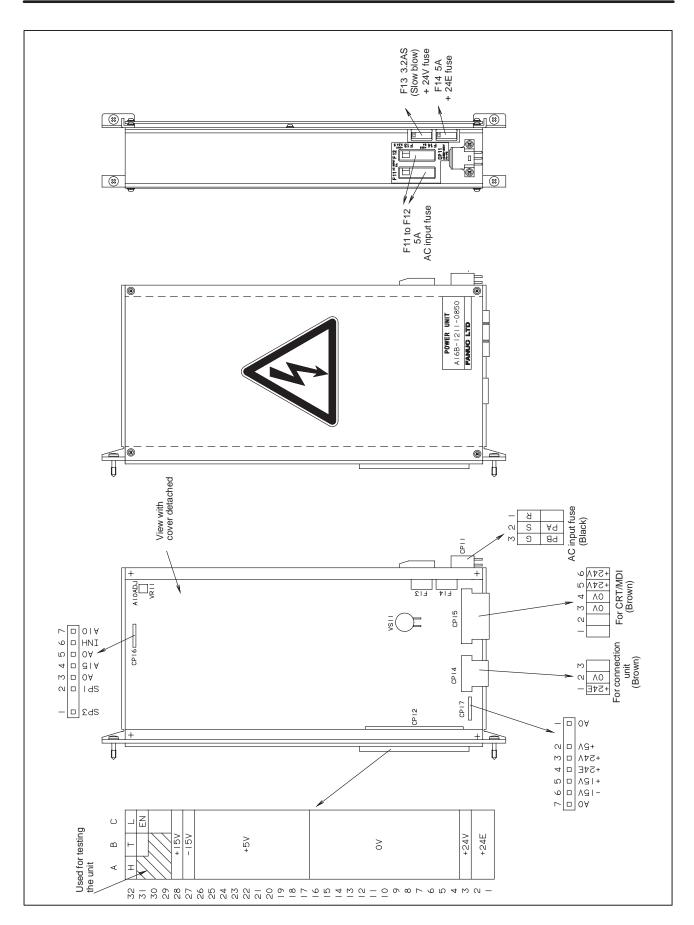


Fig.2.7.1(a) Power supply unit A external diagram

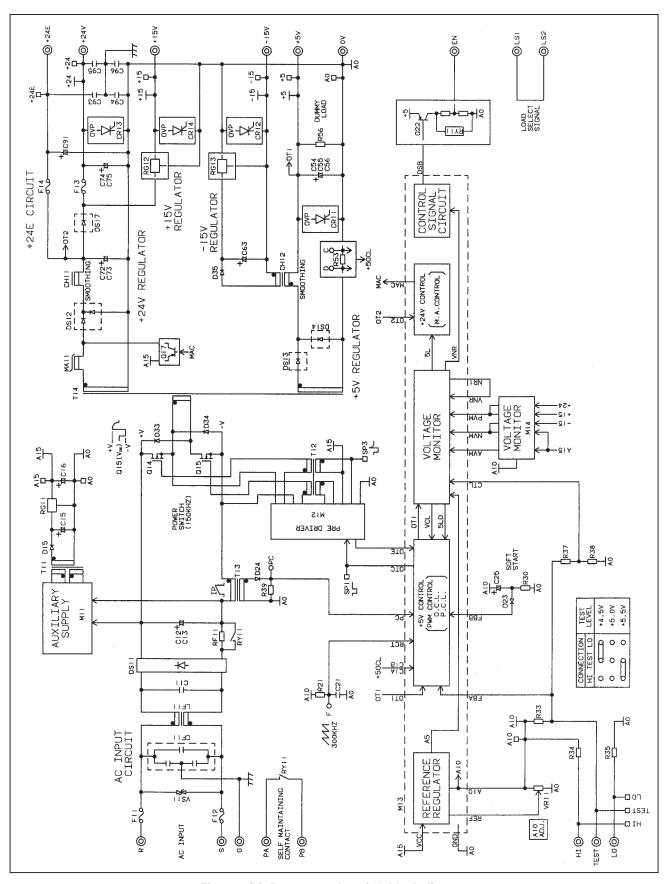


Fig.2.7.1(b) Power supply unit A block diagram

2.7.2 Details of Power Supply Unit B2 (A16B-1212-0110)

It is easy to mount and dismount the CNC power supply unit, because it is designed to be mounted on, and connected directly to, the master printed–circuit board. All its AC inputs and DC outputs are linked via connectors.

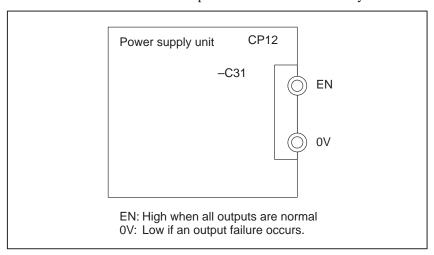
Fig.2.7.2(a) is an outline of this power supply unit, and Fig.2.7.2(b) is the block diagram.

(1) Input/output connectors

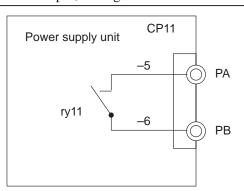
Connector name	Description		
CP11	200/220/230/240VAC		
	PA-PB signal output		
CP12	Supply of +5V, +15V, -15V, +24V, and +24E to the master printed-circuit board		
	EN signal output		
CP14	+24E supply for the additional I/O B2 printed circuit board (for Series 0) +24E supply for the I/O card connection unit (for Series 0) +24E supply for the connection unit (for Series 0)		
CP15	+24V supply for the 9" monochrome CRT/MDI unit (for Series 0) +24V supply for the 9" small or standard CRT/MDI unit (for Series 15)		

(2) Descriptions of the input/output signals

1. ENABLE signal EN (output)
This TTL level signal indicates that all DC outputs are normal.
It becomes low if an output failure is detected in any circuit.



2. PA-PB signal (output) for keeping the power applied In a system with no input unit in use, the PA-PB signal is a contact signal used to keep the power applied. It is output from the power supply unit. In a system with an input unit in use, the PA-PB signal is used as an interface signal between the system and input unit. If the contact becomes open due to detection of an abnormal output, the signal functions as an alarm signal.



PA: The PA-PB contact is kept closed while the ENABLE signal is high. PB: The PA-PB contact is kept open while the ENABLE signal is low.

(3) Adjustments and settings

This power supply unit requires no adjustment or setting. Do not attempt to adjust the reference voltage (=10.00V) at A10 unless absolutely necessary, because the reference voltage has been adjusted during unit test; merely confirm the voltage across A10 and A0 of check connector CP16.

If the reference voltage at A10 falls outside the rated range, set it to 10.00V, using VR11, while measuring the voltage with a digital voltmeter. Rotating VR11 clockwise increases the voltage at A10. After the power supply unit is replaced, always to check the reference voltage at A10.

(4) Causes of blown fuses and required corrective actions

This power supply unit is provided with fuses F11 and F12 at its input, fuse F13 at the +24 V output, and fuse F14 at the +24E output. Possible causes of these fuses blowing are listed below together with the corrective actions required to restore normal operation.

1. Fuses F11 and F12

(a) Short circuit in surge absorber VS11

VS11 is intended to suppress surge voltages on the input line. If an excessively large surge voltage or steady voltage is applied to VS11, it breaks down, short–circuiting and, causing F11 and F12 to blow. If VS11 has short–circuited, but you do not have a replacement part on hand, the machine can be used with VS11 removed. In such a case, however, you should obtain a replacement and install it as soon as possible, especially when the machine is being used in an installation prone to surge voltages. The specification number of VS11 is A50L–8001–0067#431U.

- (b) Short circuit in diode stack DS11
- (c) Short circuit between the collector and emitter of switching transistors Q14 and Q15

- (d) Short circuit in diodes D33 and D34
- (e) Short circuit between the collector and emitter of transistor Q11 in the auxiliary power supply circuit

If you suspect that any of short circuits (b) to (e) has occurred in the respective parts, replace the power supply unit with a spare. When replacing a fuse, use a replacement having the same rating. The specification number for fuses F11 and 12 is A60L–0001–0194#5.0.

2. Fuse F13

- (a) A short circuit may have occurred in the CRT/MDI unit or a +24 V power supply cord leading to it. Remove the cord from CP15, and check the unit and cord carefully.
- (b) A short circuit may have occurred in the +24 V circuit on the master printed-circuit board. Remove the cable from CP14 and CP15. Also, remove the power supply unit from the master printed-circuit board, then check the printed-circuit board carefully. When replacing a fuse, use a replacement having the same rating. The specification number for fuse F13 is A60L-0001-0075#3.2.

3. Fuse F14

- (a) Short circuit in +24E power supply cables for various printed–circuit board units
- (b) Ground fault of the +24E power supply line in the machine or false contact of the +24E power supply line with another power supply line

If either of (a) or (b) may have occurred, remove the cable from CP14, and check it carefully. When replacing a fuse, use a replacement part having the same rating. The specification number for fuse F14 is A60L–0001–0046#7.5.

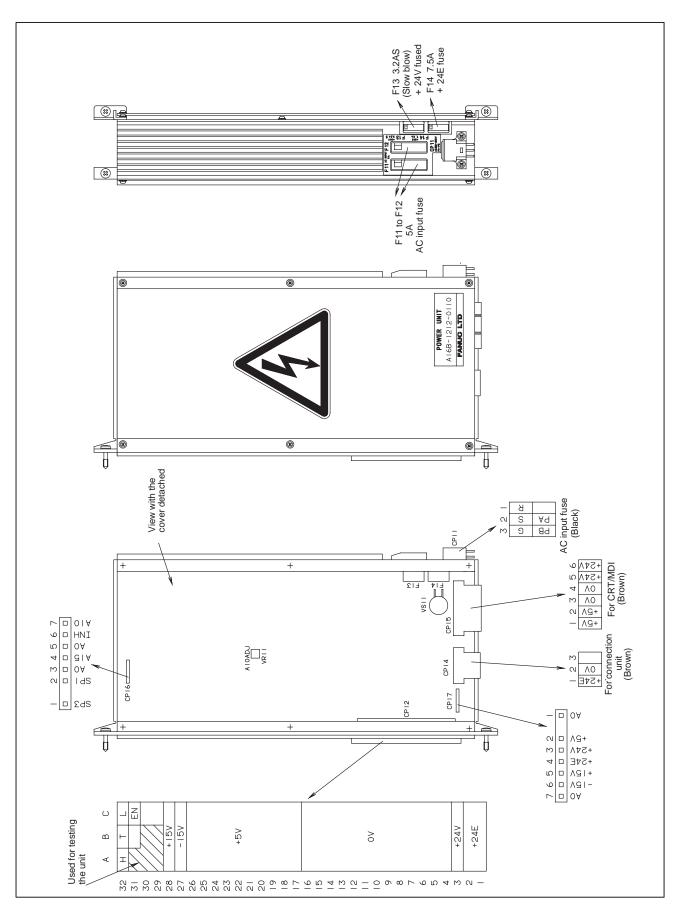


Fig.2.7.2(a) Power supply unit B2 external diagram

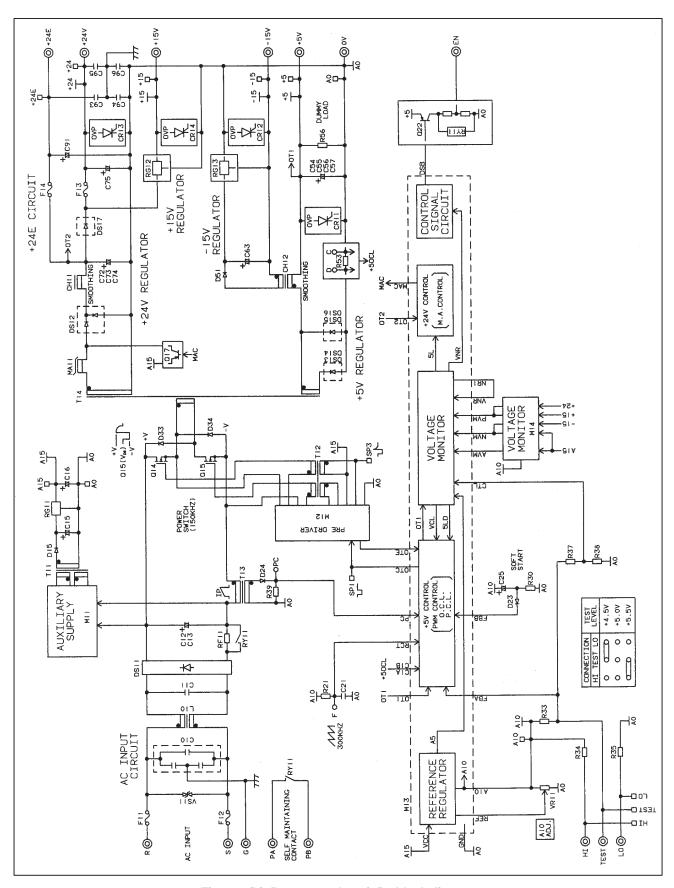


Fig.2.7.2(b) Power supply unit B2 block diagram

2.7.3 Details of Power Supply Unit AI (A16B–1212–0100)

It is easy to mount and dismount the CNC power supply unit, because it is designed to be mounted on, and connected directly to, the master printed–circuit board. All its AC inputs and DC outputs are linked via connectors.

Because this power supply unit has a built—in input unit function, it is not necessary to prepare a separate relay or input unit for switching the AC input on and off. The AC input can be connected directly to the power supply unit. The unit has an AC service outlet, which is switched on and off simultaneously with the power supply unit. This AC service outlet can be used to supply power to a unit such as a fan motor.

Fig.2.7.3(a) is an outline of this power supply unit, and Fig.2.7.3(b) is the block diagram.

(1) Input/output connectors

Connector name	Description				
CP1	200/220/230/240 VAC input				
CP2	200/220/230/240 VAC output (switched on and off simultaneously with the power supply unit)				
CP3	Power on/off switch contact signal input				
	External alarm signal input				
	Alarm signal input				
CP12	Supply of +5 V, +15 V, -15 V, +24 V, and +24E to the master printed-circuit board				
	EN signal output				
CP14	+24E supply for the additional I/O B2 printed circuit board (for Series 0) +24E supply for the connection unit (for Series 15)				
CP15	+24V supply for the 9" monochrome CRT/MDI unit (for Series 0)				

(2) Descriptions of the input/output signals and display LEDs

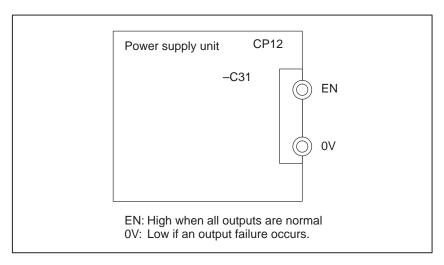
1. AC power supply display LED (green)
When an AC power source is connected to the power supply unit, the LED lights regardless of whether the unit is on or off.

2. Alarm display LED (red)

If the power supply unit is switched off because of an alarm condition due to a failure such as an output error, the alarm display LED lights and remains on until the alarm condition is cleared by pressing the OFF switch or shutting down the AC power supply.

3. ENABLE signal EN (output)

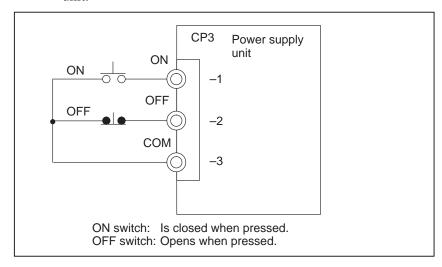
This TTL level signal indicates that all DC outputs are normal. It becomes low if an output failure is detected in any circuit.



4. Power supply on/off control signal ON-OFF-COM (input) If two switches are connected to this circuit as shown below, pressing the ON switch turns on the power supply unit, while pressing the OFF switch turns the unit off.

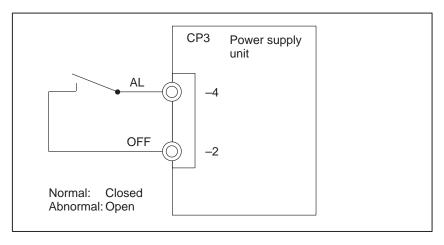
If an alarm occurs in the power supply unit, and the alarm display LED lights in red, however, pressing the ON switch will not turn on the power supply unit. In this case, it is necessary to remove the cause of the alarm and press the OFF switch.

Pressing the OFF switch clears the alarm condition. Subsequently pressing the ON switch turns on the power supply unit.



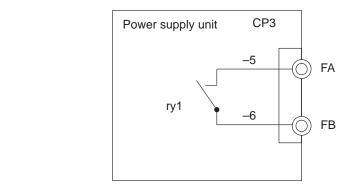
5. External alarm signal AL (input)

When a contact signal from another unit or external power supply becomes "closed," the ENABLE signal of this power supply unit becomes low, thus immediately turning off the power supply unit.



6. Alarm signal FA–FB (output)

This contact signal indicates the state of all DC outputs. The contact is open when all the DC outputs are normal. It is closed if an output failure is detected in any DC output circuit. If an external alarm signal (item 5) is connected, the FA–FB contact opens, when all DC outputs are normal and the external alarm signal is "open." The contact closes when the external alarm signal becomes "closed."



FA: The FA-FB contact opens, when all DC outputs are normal and the external alarm contact signal is "open."

FB: The FA–FB contact is closed if any DC output is normal, or if the external alarm contact signal is "closed."

(3) Adjustments and settings

This power supply unit requires no adjustment or setting. Do not attempt to adjust the reference voltage (=10.00V) at A10 unless absolutely necessary, because the reference voltage has been adjusted during unit test; merely confirm the voltage across A10 and A0 of check connector CP16.

If the reference voltage at A10 falls outside the rated range, set it to 10.00V, using VR11, while measuring the voltage with a digital voltmeter. Rotating VR11 clockwise increases the voltage at A10. After the power supply unit is replaced, always to check the reference voltage at A10.

(4) Causes of blown fuses and required corrective actions

This power supply unit is provided with fuses F11 and F12 at its input, fuse F13 at the +24V output, and fuse F14 at the +24E output. Possible causes of these fuses blowing are listed below together with the corrective actions required to restore normal operation.

1. Fuses F11 and F12

- (a) Short circuit in surge absorber VS11
 VS11 is intended to suppress surge voltages on the input line. If an excessively large surge voltage or steady voltage is applied to VS11, it breaks down, short–circuiting and, causing F11 and F12 to blow. If VS11 has short–circuited, but you do not have a replacement part on hand, the machine can be used with VS11 removed. In such a case, however, you should obtain a replacement and install it as soon as possible, especially when the machine is being used in an installation prone to surge voltages. The specification
- (b) Short circuit in diode stack DS11
- (c) Short circuit between the collector and emitter of switching transistors Q14 and Q15

number of VS11 is A50L-8001-0067#431U.

- (d) Short circuit in diodes D33 and D34
- (e) Short circuit between the collector and emitter of transistor Q1 in the auxiliary power supply circuit

If you suspect that any of short circuits (b) to (e) has occurred in the respective parts, replace the power supply unit with a spare. When replacing a fuse, use a replacement having the same rating. The specification number for fuses F11 and 12 is A60L-0001-0245#GP75.

2. Fuse F13

- (a) A short circuit may have occurred in the CRT/MDI unit or a +24 V power supply cord leading to it. Remove the cord from CP15, and check the unit and cord carefully.
- (b) A short circuit may have occurred in the +24 V circuit on the master printed–circuit board. Remove the cable from CP14 and CP15. Also, remove the power supply unit from the master printed–circuit board, then check the printed–circuit board carefully. When replacing a fuse, use a replacement having the same rating. The specification number for fuse F13 is A60L–0001–0075#3.2.

3. Fuse F14

- (a) Short circuit in +24E power supply cables for various printed–circuit board units
- (b) Ground fault of the +24E power supply line in the machine or false contact of the +24E power supply line with another power supply line

If either of (a) or (b) may have occurred, remove the cable from CP14, and check it carefully. When replacing a fuse, use a replacement part having the same rating. The specification number for fuse F14 is A60L–0001–0046#5.0.

4. Fuse F1

Fuse F1 and surge absorber VS1 are wired so that, if a high current flows through VS1, it may cause F1 to blow. This is intended to protect the circuits in the power supply unit from an abnormal voltage that may occur due to a failure in the auxiliary power supply circuit of the power supply unit and an abnormal voltage that may originate in the power supply ON/OFF switch contact signal line or external alarm signal line. If F1 blows, probable causes are:

- (1) Failure in the auxiliary power supply circuit (M1, Q1, T1, D1, Q2, or ZD1)
- (2) False contact between the power supply ON/OFF switch contact signal line or external alarm signal line and the AC power line

If cause (1) is more likely, replace the power supply unit. If cause (2) is more likely, replace the power supply unit, because the power supply unit may have failed. After the power supply ON/OFF switch contact signal line and external alarm signal line have been checked, and all abnormal conditions (if any) have been cleared, if replacing F1 restores normal operation, there is no need to replace the power supply unit. The specification number of fuse F1 is A60L–0001–0172#DM03. When replacing the fuse, use a replacement having the same rating.

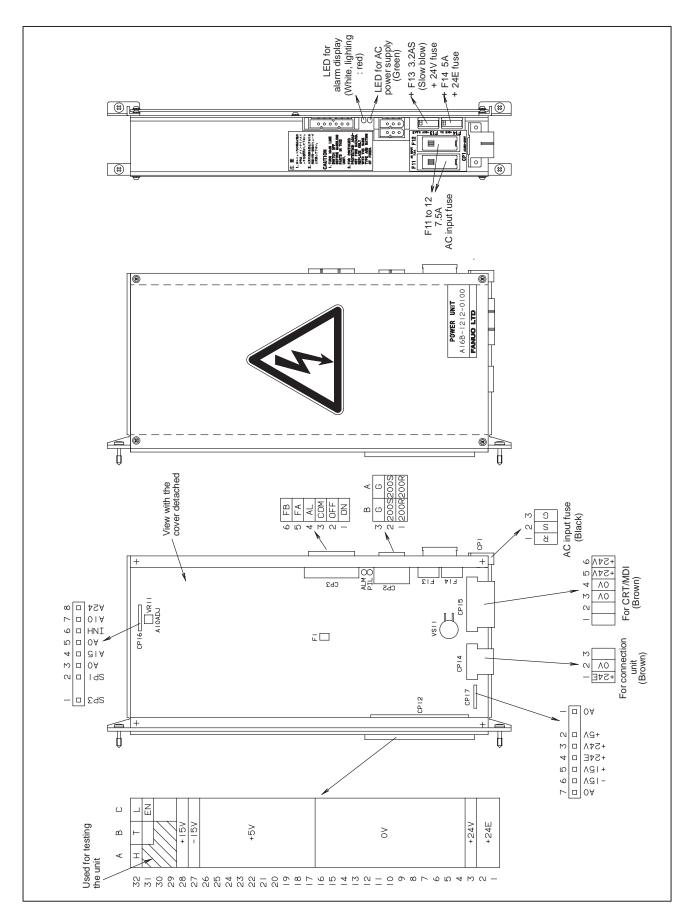


Fig.2.7.3(a) Power supply unit AI external diagram

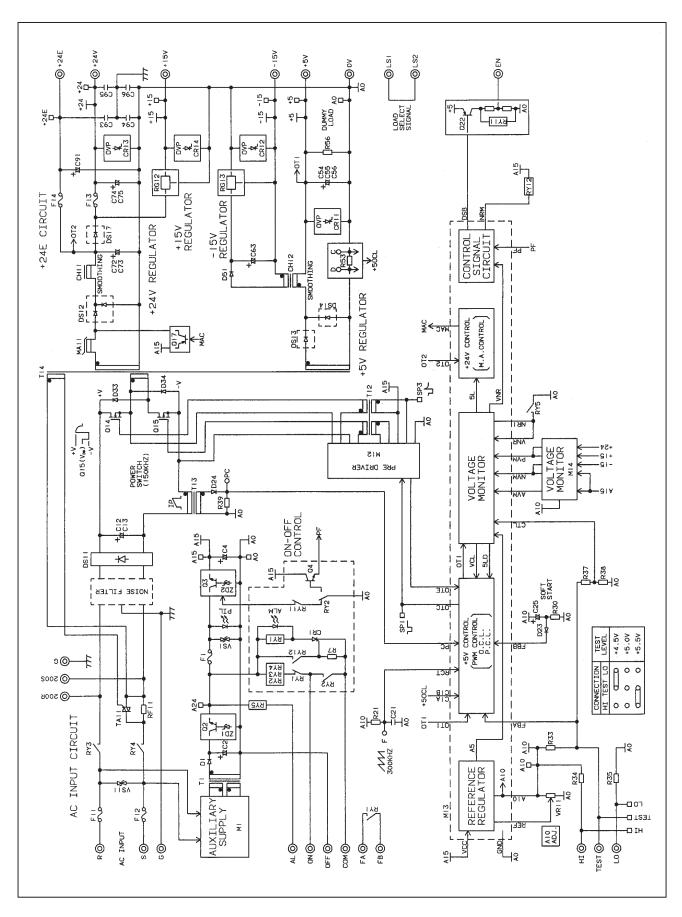


Fig.2.7.3(b) Power supply unit Al block diagram

2.7.4 CE Marking Correspond Details of Power Supply Unit AI (A16B–1212–0950)

It is easy to mount and dismount the CNC power supply unit, because it is designed to be mounted on, and connected directly to, the master printed–circuit board. All its AC inputs and DC outputs are linked via connectors.

Because this power supply unit has a built—in input unit function, it is not necessary to prepare a separate relay or input unit for switching the AC input on and off. The AC input can be connected directly to the power supply unit. The unit has an AC service outlet, which is switched on and off simultaneously with the power supply unit. This AC service outlet can be used to supply power to a unit such as a fan motor.

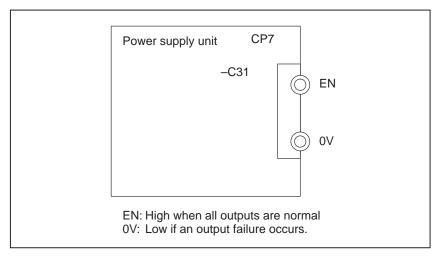
(1) Input/output connectors

Connector name	Description			
CP1	200/220/230/240 VAC input			
CP2 or CP3	200/220/230/240 VAC output (switched on and off simultaneously with the power supply un			
CP4	Power on/off switch contact signal input			
	External alarm signal input			
	Alarm signal (FA–FB) output			
CP7	Supply of +5 V, +15 V, -15 V, +24 V, and +24E to the master printed–circuit board			
	EN signal output			
CP6	Reserved for future use			
CP5	CP5 +24V supply for the 9" monochrome CRT/MDI unit (for Series			

(2) Descriptions of the input/output signals and display LEDs

- 1. AC power supply display LED (green)
 When an AC power source is connected to the power supply unit, the LED lights regardless of whether the unit is on or off.
- 2. Alarm display LED (red)

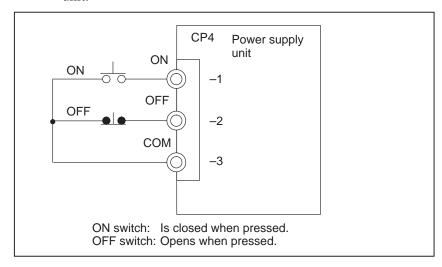
 If the power supply unit is switched off because of an alarm condition due to a failure such as an output error, the alarm display LED lights and remains on until the alarm condition is cleared by pressing the OFF switch or shutting down the AC power supply.
- 3. ENABLE signal EN (output)
 This TTL level signal indicates that all DC outputs are normal.
 It becomes low if an output failure is detected in any circuit.



4. Power supply on/off control signal ON-OFF-COM (input) If two switches are connected to this circuit as shown below, pressing the ON switch turns on the power supply unit, while pressing the OFF switch turns the unit off.

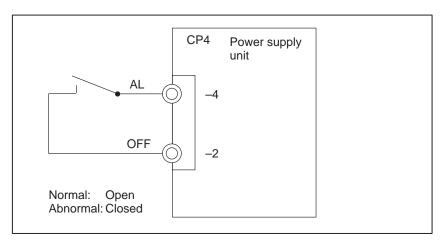
If an alarm occurs in the power supply unit, and the alarm display LED lights in red, however, pressing the ON switch will not turn on the power supply unit. In this case, it is necessary to remove the cause of the alarm and press the OFF switch.

Pressing the OFF switch clears the alarm condition. Subsequently pressing the ON switch turns on the power supply unit.



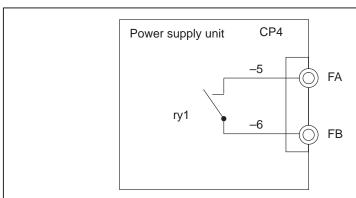
5. External alarm signal AL (input)

When a contact signal from another unit or external power supply becomes "closed," the ENABLE signal of this power supply unit becomes low, thus immediately turning off the power supply unit.



6. Alarm signal FA–FB (output)

This contact signal indicates the state of all DC outputs. The contact is open when all the DC outputs are normal. It is closed if an output failure is detected in any DC output circuit. If an external alarm signal (item 5) is connected, the FA–FB contact opens, when all DC outputs are normal and the external alarm signal is "open." The contact closes when the external alarm signal becomes "closed."



FA: The FA-FB contact opens, when all DC outputs are normal and the external alarm contact signal is "open."

FB: The FA-FB contact is closed if any DC output is normal, or if the external alarm contact signal is "closed."

(3) Adjustments and settings

This power supply unit requires no adjustment or setting.

(4) Causes of blown fuses and required corrective actions

This power supply unit is provided with fuses F1 at its input, fuse F3 at the +24V output, and fuse F4 at the +24E output. Possible causes of these fuses blowing are listed below together with the corrective actions required to restore normal operation.

1. Fuses F1

- (a) Short circuit in surge absorber VS11 VS11 is intended to suppress surge voltages on the input line. If an excessively large surge voltage or steady voltage is applied to VS11, it breaks down, short–circuiting and, causing F1 to blow. If VS11 has short–circuited, but you do not have a replacement part on hand, the machine can be used with VS11 removed. In such a case, however, you should obtain a replacement and install it as soon as possible, especially when the machine is being used in an installation prone to surge voltages. The specification number of VS11 is A50L–2001–0122#G431K.
- (b) Short circuit in diode stack DB11
- (c) Short circuit between the collector and emitter of switching transistors Q21 and Q22, Q11
- (d) Short circuit in diodes D12, D31, D32
- (e) Failure auxiliary power supply circuit IC (H1)
- (f) Failure in power–factor improvement IC (H3)
- (g) Failure in a unit connected to AC OUT (CP2 and CP3) or short circuit in the wiring

If you suspect that any of short circuits (b) to (e) has occurred in the respective parts, replace the power supply unit with a spare. When replacing a fuse, use a replacement having the same rating. The specification number for fuses F1 is A60L–0001–0245#GP75.

2. Fuse F3

- (a) A short circuit may have occurred in the CRT/MDI unit or a +24 V power supply cord leading to it. Remove the cord from CP5, and check the unit and cord carefully.
- (b) A short circuit may have occurred in the +24 V circuit on the master printed-circuit board. Remove the cable from CP5 and CP6. Also, remove the power supply unit from the master printed-circuit board, then check the printed-circuit board carefully. When replacing a fuse, use a replacement having the same rating. The specification number for fuse F3 is A60L-0001-0075#5.0.

3. Fuse F4

- (a) Short circuit in +24E power supply cables for various printed–circuit board units
- (b) Ground fault of the +24E power supply line in the machine or false contact of the +24E power supply line with another power supply line

If either of (a) or (b) may have occurred, remove the cable from CP6, and check it carefully. When replacing a fuse, use a replacement part having the same rating. The specification number for fuse F4 is A60L-0001-0046#5.0.

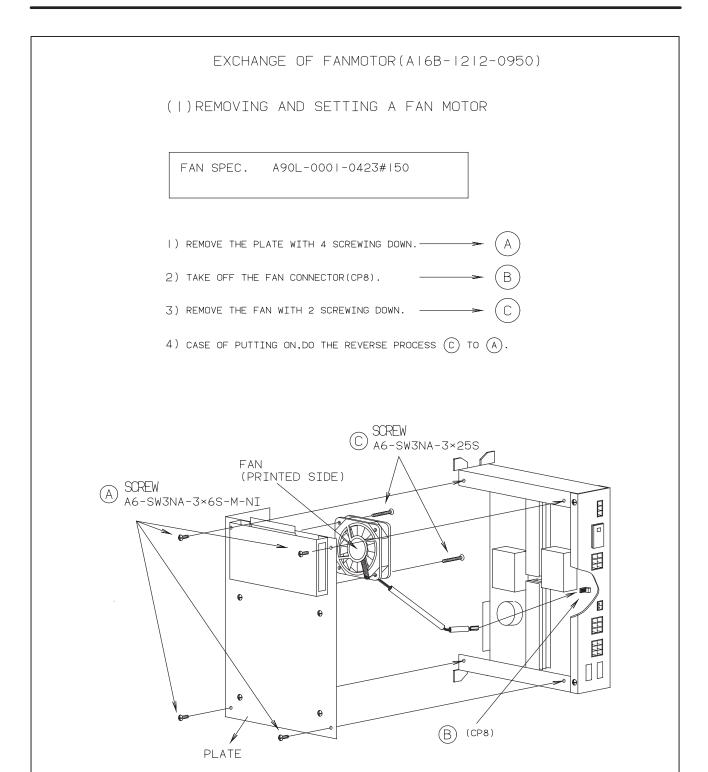


Fig.2.7.4(a) Exchange of fanmotor (A16B-1212-0950)

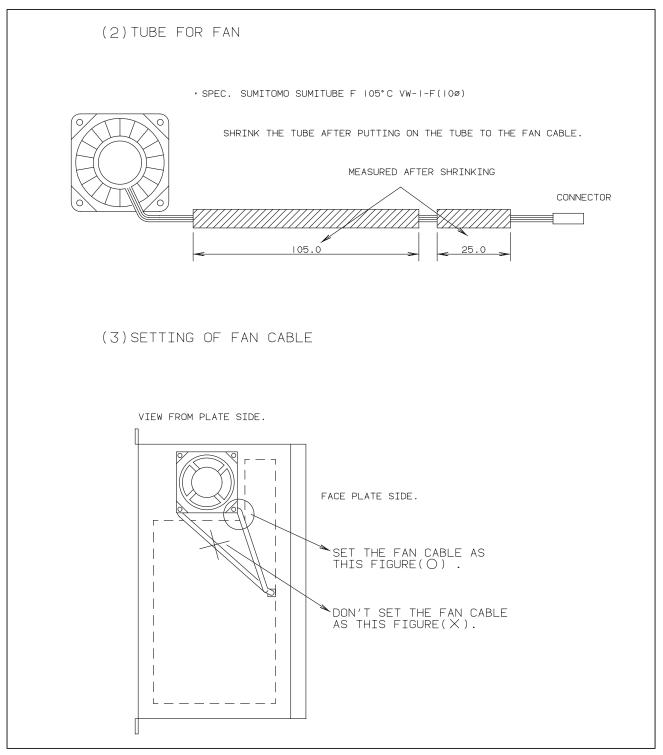
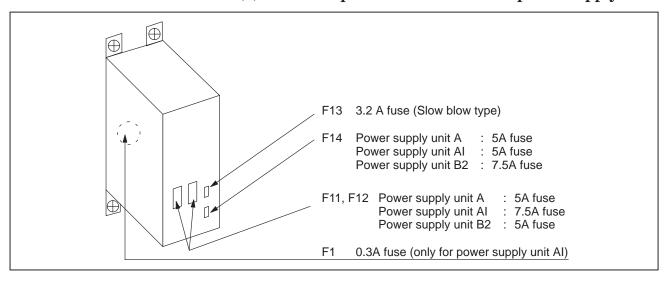


Fig.2.7.4(b) Exchange of fanmotor (A16B-1212-0950)

2.7.5 **Fuses**

Unit name		Part number	Rating	Specification	Use
Power supply unit	А	F11, F12	5A	A60L-0001-0194#5.0	For 200VAC input
		F13	3.2A	A60L-0001-0075#3.2	+24V for CRT/MDI master or option printed cisuit board
		F14	5A	A60L-0001-0046#5.0	Protection of +24E line in the machine from external failures
	Al	F11, F12	7.5A	A60L-0001-0245#GP75	For 200VAC input
		F13	3.2A	A60L-0001-0075#3.2	+24V for CRT/MDI master or option printed cisuit board
		F14	5A	A60L-0001-0046#5.0	Protection of +24E line in the machine from external failures
		F1	5A	A60L-0001-0172#DM03	For sections inside the power suppy unit
	B2	F11, F12	5A	A60L-0001-0194#5.0	For 200VAC input
		F13	3.2A	A60L-0001-0075#3.2	+24V for CRT/MDI master or option printed cisuit board
		F14	7.5A	A60L-0001-0046#7.5	Protection of +24E line in the machine from external failures
	AI (CE Marking)	F1	7.5A	A60L-0001-0245#GP75	For 200VAC input
		F3	5A	A60L-0001-0075#5.0	+24V for CRT/MDI master or option printed cisuit board
		F4	5A	A60L-0001-0046#5.0	Protection of +24E line in the machine from external failures
P.C.B. for input unit		F1, F2	10A	A60L-0001-0901#P4100H	For 200VAC input
		F3	0.3A	A60L-0001-0172#DM03	For power ON/OFF control circuit

(1) Mounted position of the fuse for power supply unit



(2) Mounted position of the fuses for input unit

