3.3.14 Check and Testing

NOTICE

Install all of the remaining optional parts.

3.3.14.1 Checking Input Voltage

⚠WARNING

Do not touch the internal parts of the AC power cable the AC Box or the Breaker Box.
Line voltage is present even if the circuit breaker is off.

1. Check the AC input voltage using a voltmeter at the customer's AC power source (at the distribution board or receptacle for R & S connectors).

3.3.14.2 Checking Input Power Cable and Voltage Select Jumper Cable

Check the input power cable and jumper cable (P104) at the AC BOX-R10 and AC BOX-R11 in the Basic Disk Unit. See Table 3.3.14.2-1 and figures 3.3.14.2-1 and 3.3.14.2-2 for check items.

Table 3.3.14.2-1 AC Input Cable Conductors and Jumper Cable (P104) Positions

Input Voltage	AC Input Cable Conductors	Jumper Cable (P104) Position	Remarks
200-240Vac	4 conductors (R,S,T,FG)	J104-1	DKU205IU-14 (J104-2 dummy connector)
380-415Vac	5 conductors (R,S,T,N,FG)	J104-2	DKU205IE-14 (J104-1 dummy connector)

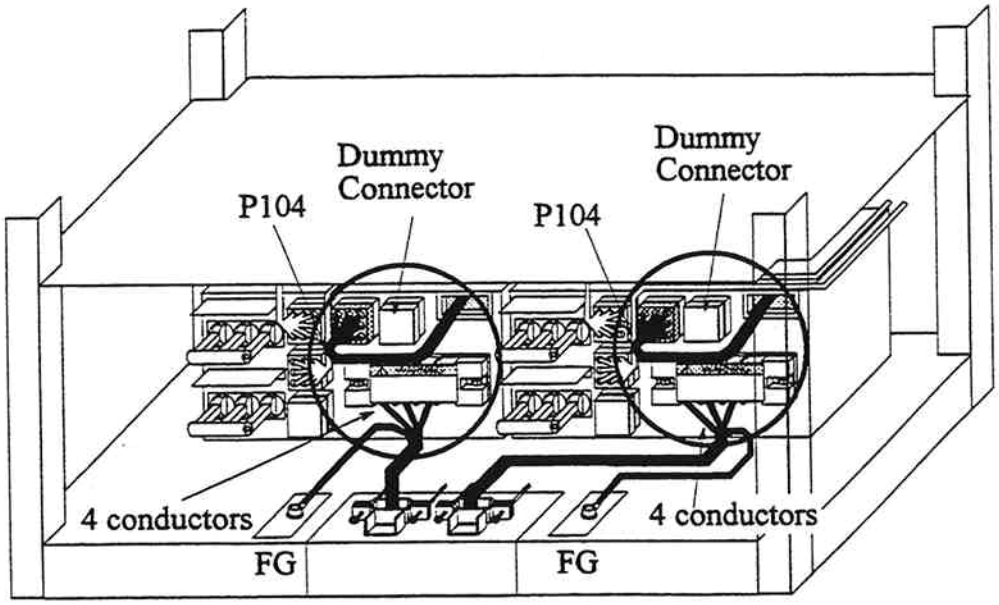


Fig. 3.3.14.2-1 AC Input Cable Conductors and Jumper Cable (P104) Positions 200-240Vac

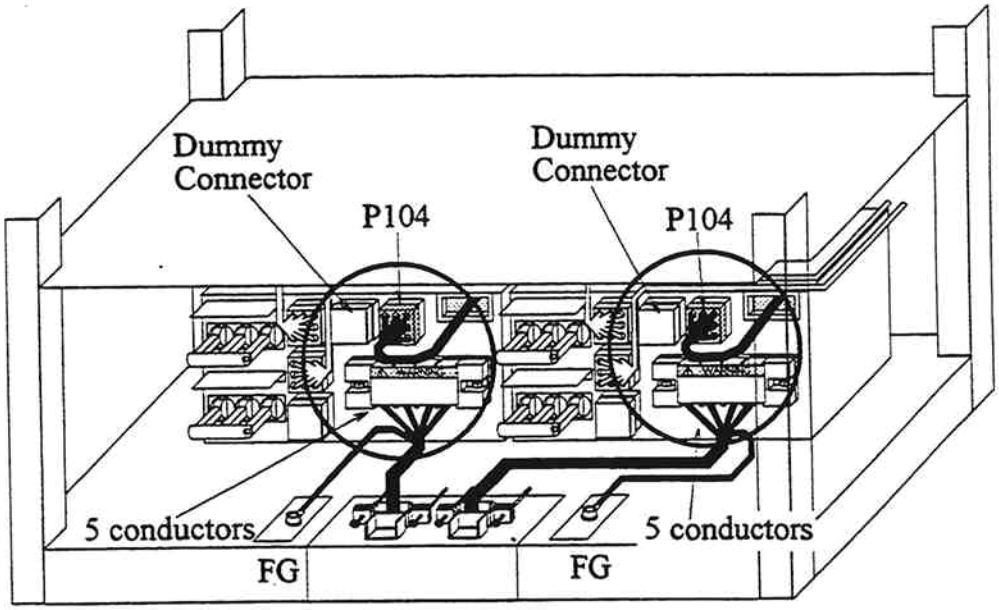


Fig. 3.3.14.2-2 AC Input Cable Conductors and Jumper Cable (P104) Positions 380-415Vac

3.3.14.3 Checking the Voltage Select Jumper Connector at the OUTLET BOX

Input voltage 200-240 Vac (DKC210IU / DKC210ID) ONLY

Check the P311 and P312 jumper connectors at the Outlet Box

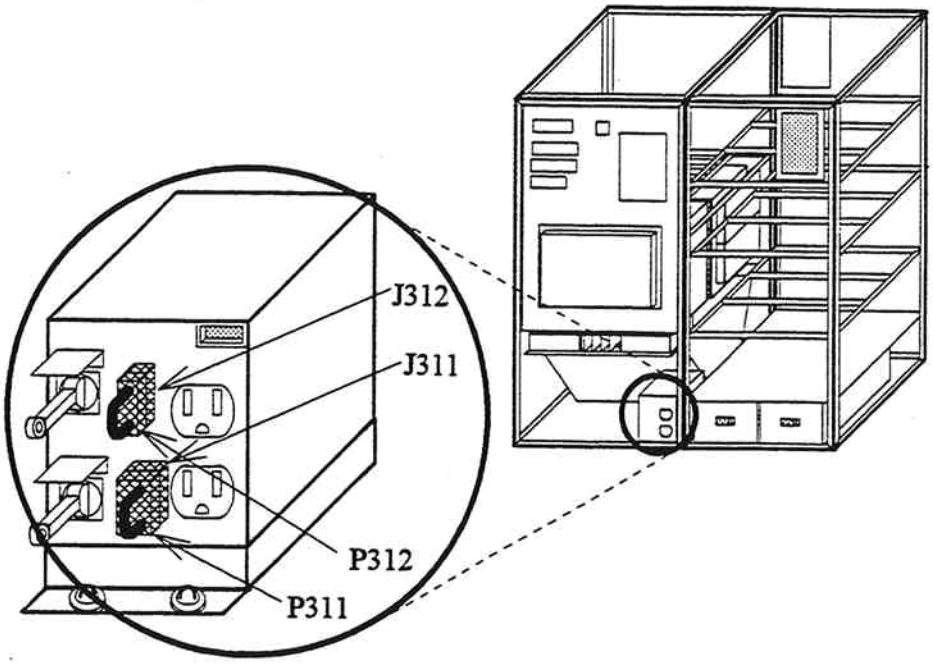


Fig. 3.3.14.3-1 Voltage Select Jumper Connectors

DKC210IU

Table 3.3.14.3-1 Voltage Select Jumper Connector Setting (DKC210IU)

Input		Jumper Connectors		
Input Voltage	Frequency	J311	J312	Output Voltage
208 Vac	60 Hz	P311 208 V	P312 115 V	115 Vac
230 Vac		P311 230 V	P312 115 V	

DKC210ID

Table 3.3.14.3-2 Voltage Select Jumper Connector Setting (DKC210ID)

Input		Jumper Connectors		
Input Voltage	Frequency	J311	J312	Output Voltage
200 Vac	50 / 60 Hz	P311 200 V	P312 100 V	100 Vac
208 Vac		P311 208 V		
220 Vac		P311 220 V		
230 Vac		P311 230 V		
240 Vac		P311 240 V		

3.3.14.4 Power On/Off Check

1. Install all of the remaining optional parts.

2. Turn on the disk controller according to the procedure shown in SECTION 3.3.15 POWER ON/OFF PROCEDURE. Refer to INST03-2300 through 2334.

3. Check the power supply output voltage to verify that it indicates the required level. Refer to PERIOD02-10 through 30.

4. Turn off the Disk Subsystem according to the procedure shown in SECTION 3.3.15 POWER ON/OFF PROCEDURE. Refer to INST03-2340 through 2355.

5. New Installation: Go to INST02-11 step (13).

3.3.15 Power ON/OFF Procedure

3.3.15.1 Power ON Procedure

3.3.15.1.1 Power ON Procedure of Disk Subsystem

1. Power on procedures are shown below. Refer to the details and start the operation.

   a. Turn on the main circuit breaker at the AC Box on the Disk Unit.

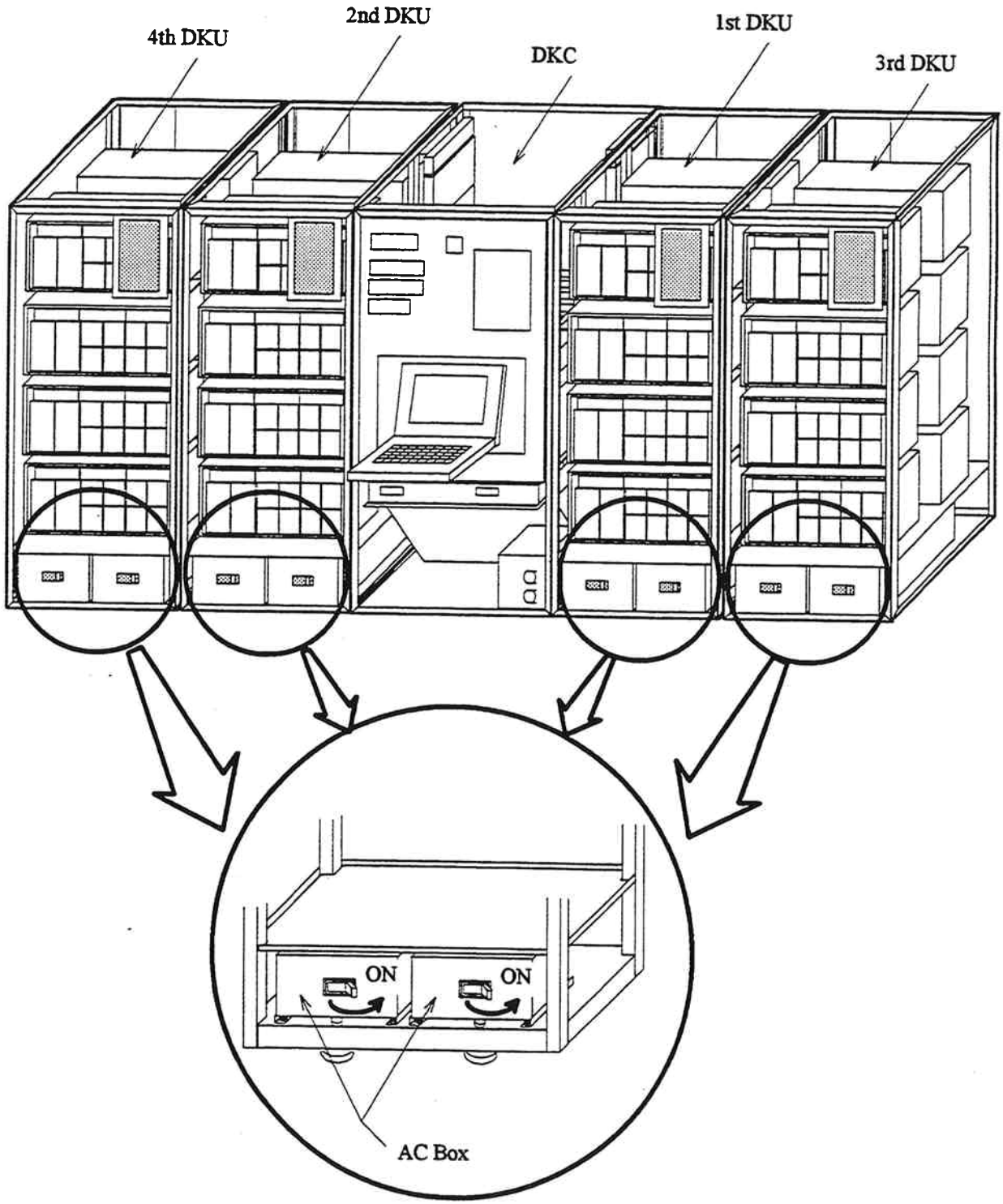


Fig. 3.3.15.1.1-1 Main Circuit Breaker on AC Box

b. Turn on the circuit breaker at the Breaker Box-1 and 2 and Outlet Box in the Disk Controller.

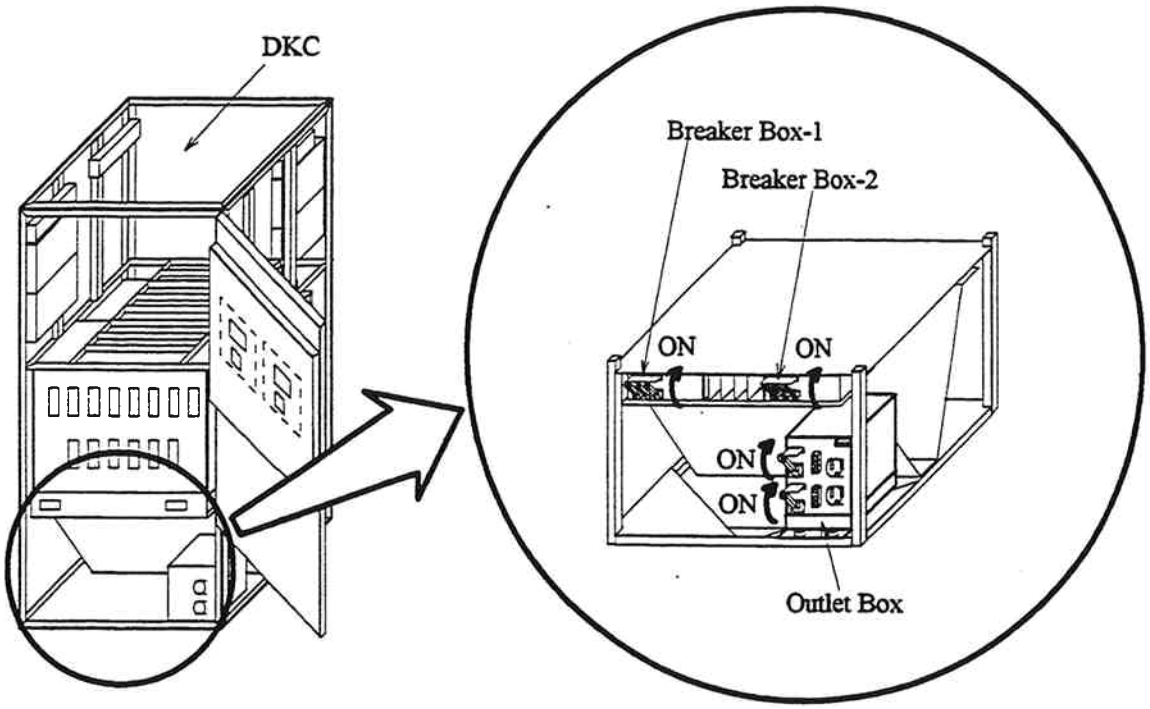


Fig. 3.3.15.1.1-2 Circuit Breaker in Breaker Box-1 and 2 and Outlet Box

c. Turn the "ENABLE/DISABLE" switch on the PWRCTR-1 and 2 PCBs to "ENABLE".

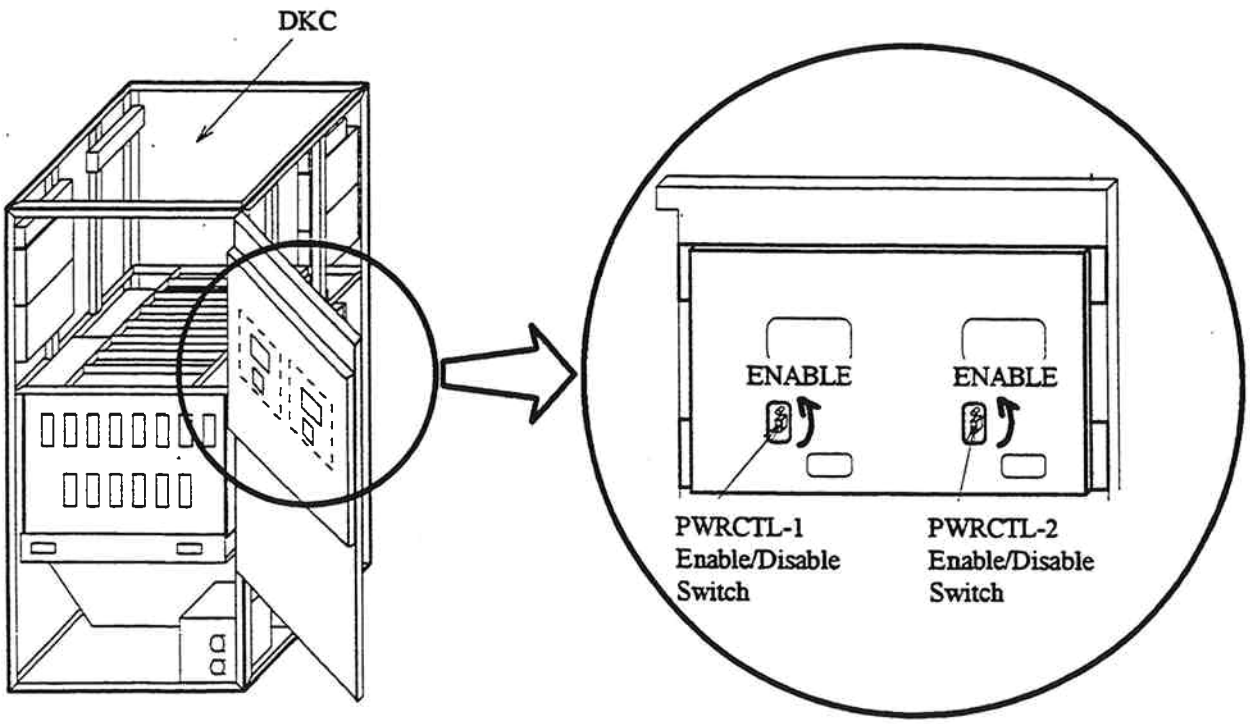


Fig. 3.3.15.1.1-3 ENABLE/DISABLE Switch on PWRCTR-1 and 2 PCBs

d. Turn the "ENABLE/DISABLE" switch on the SSVP / HUB PCB to "ENABLE".

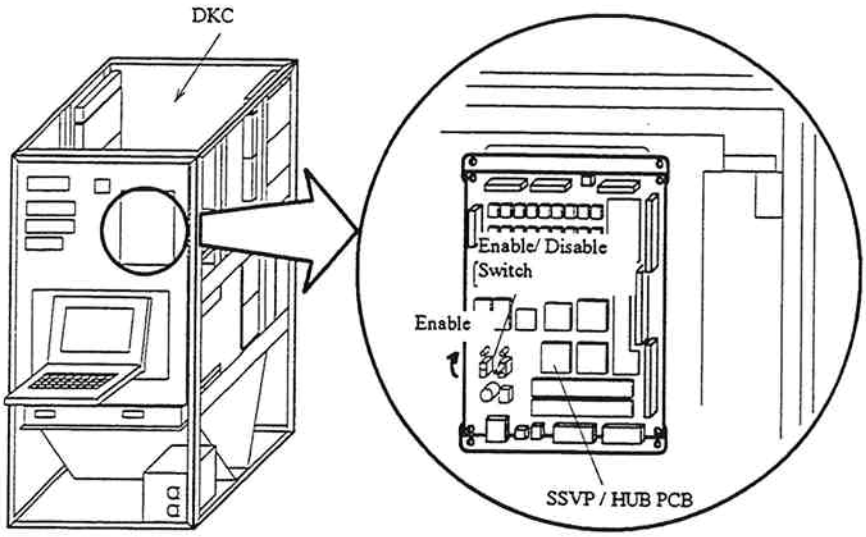


Fig. 3.3.15.1.1-4 ENABLE/DISABLE Switch on SSVP PCB

e. Turn the "ENABLE/DISABLE" switch on the DKUMN PCB's to "ENABLE".

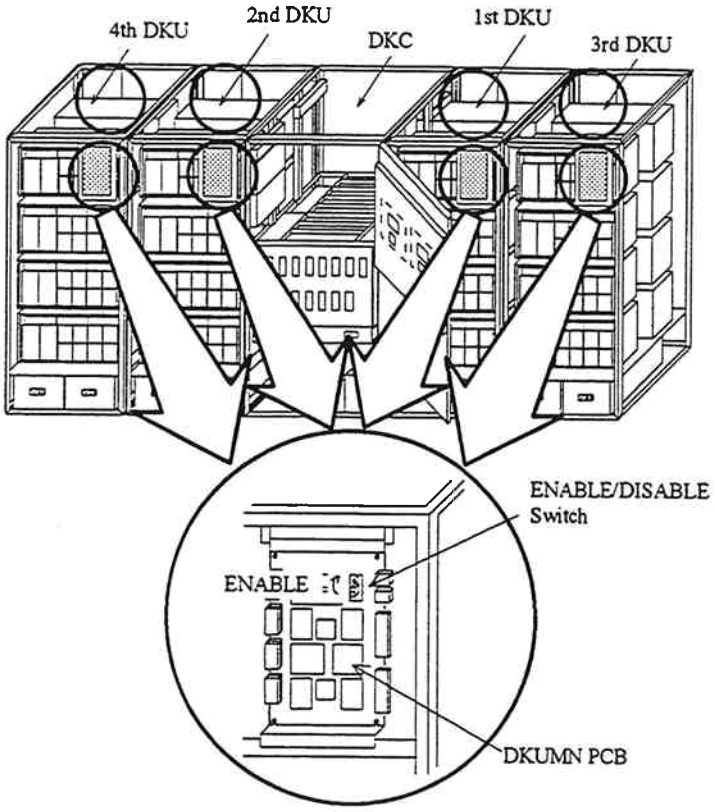


Fig. 3.3.15.1.1-5 ENABLE/DISABLE Switch on DKUMN PCBs

f. Return to General Flow.

New Installation: Go to INST02-11 Step (15).

Disruptive Installation: Go to INST03-2330 Step "g".

Disruptive De-installation: Go to INST03-2330 Step "g".

g. Turn "ENABLE/DISABLE" switch on the CE panel PCB to "ENABLE".

h. [Case as custom engineer operates]

Turn the "REMOTE/LOCAL" switch on the CE panel PCB to "LOCAL".

Turn the "POWER ON/OFF" switch on the CE panel PCB to "ON".

[Case as that operate from CPU]

Turn the "REMOTE/LOCAL" switch on the CE panel PCB to " REMOTE ".

Turn on the power supply from CPU.

Note : CE Panel has three types in difference of appearance.

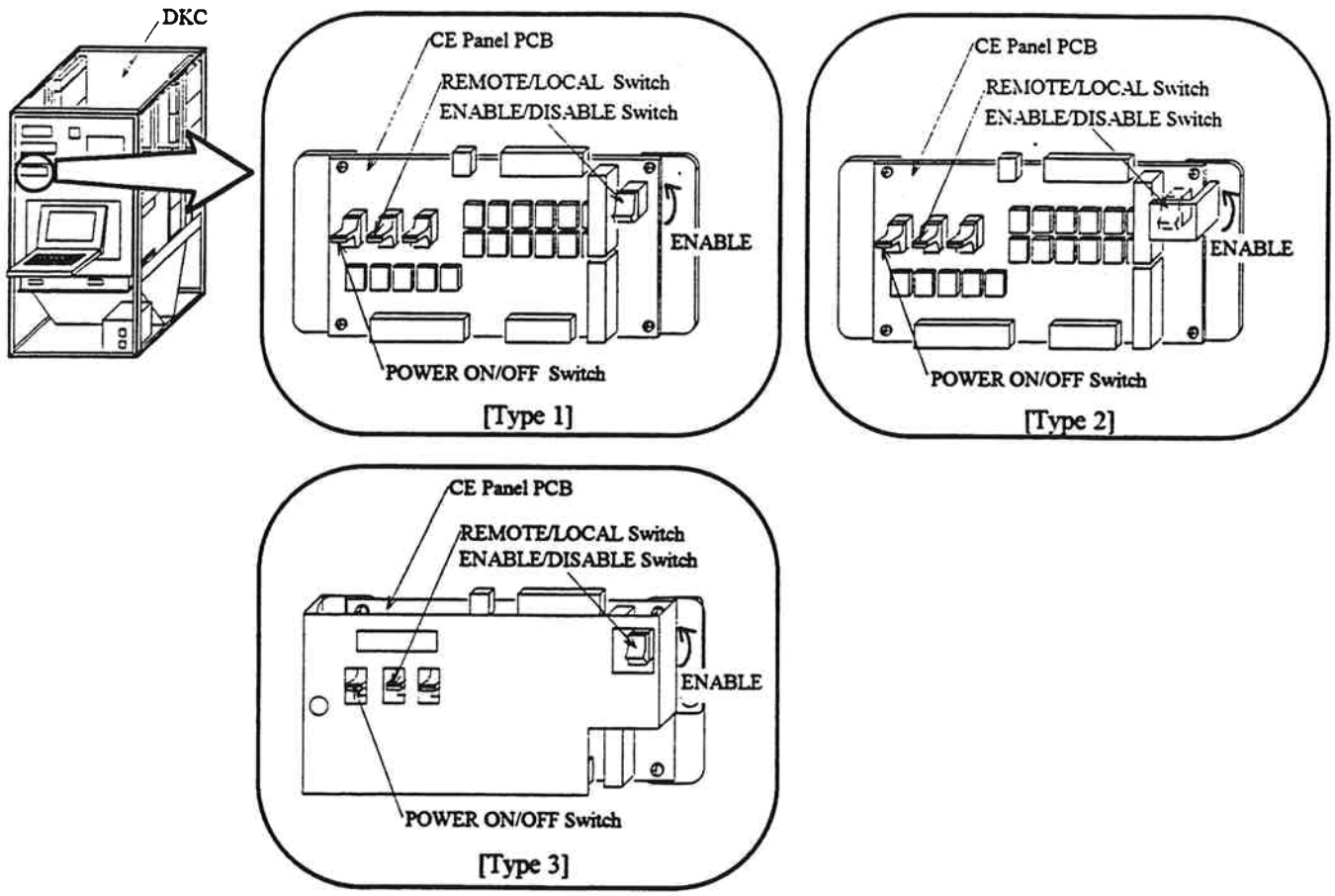


Fig. 3.3.15.1.1-6 CE Panel PCB

i. Return to General Flow.

New Installation: Go to INST02-11 Step (17).

Disruptive Installation: Go to INST02-41 Step (12).

Disruptive De-installation: Go to INST02-51A Step (17).

3.3.15.1.2 Power ON Procedure of Additional Disk Unit

Before turning the power of AC BOX on, make sure that the Enable/Disable switch on the DKU Monitor is in "Disable" position. If the switch is in "Enable" position, turn the switch to "Disable" position.

1. Power on procedures are shown below. Refer to the details and start the operation.
   a. Turn on the main circuit breaker at the AC Box on the Disk Unit.

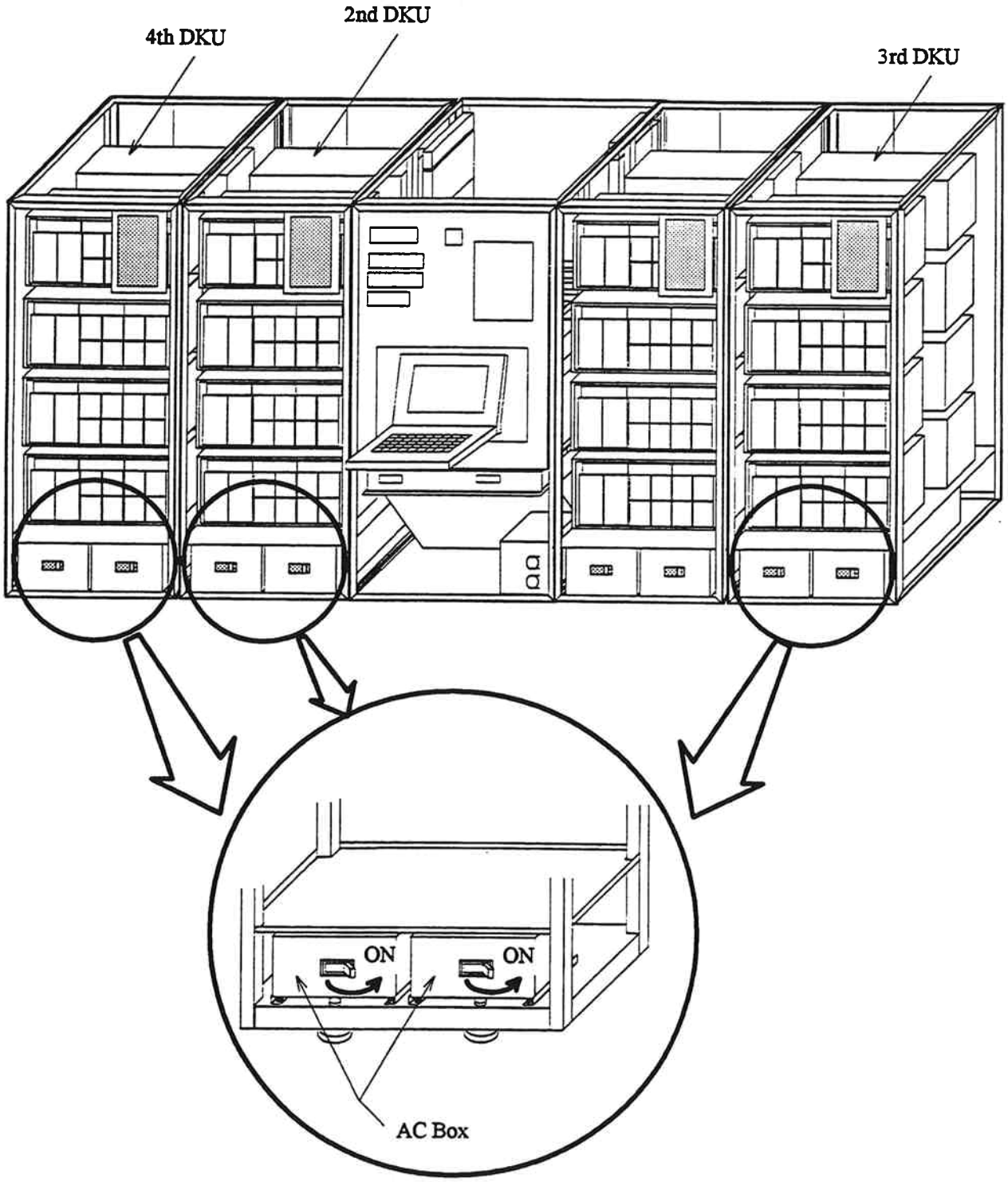


Fig. 3.3.15.1.2-1 Main Circuit Breaker on AC Box

b. Turn the "ENABLE/DISABLE" switch on the DKUMN PCB's to "ENABLE".

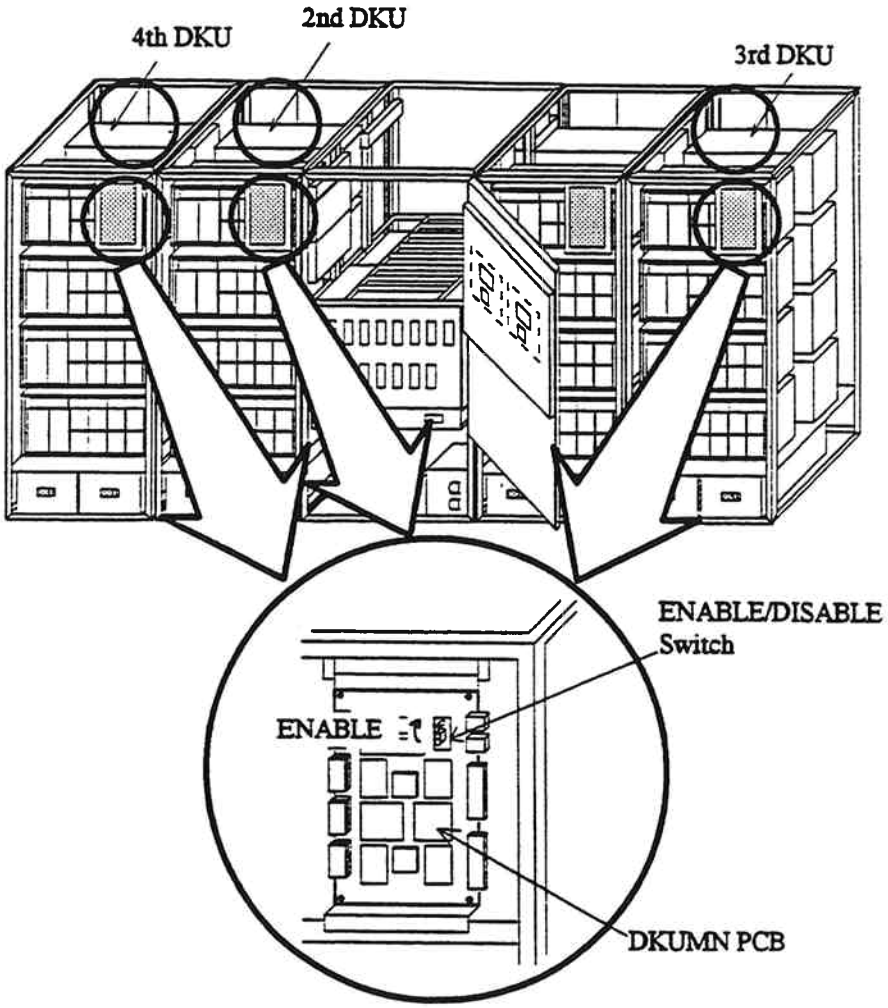


Fig. 3.3.15.1.1.2-2 ENABLE/DISABLE Switch on DKUMN PCBs

c. Return to General Flow.

Non-Disruptive Installation: Go to INST02-21 Step (9)-4.

3.3.15.2 Power OFF Procedure

3.3.15.2.1 Power OFF Procedure of Disk Subsystem

1. Power off procedures are shown below. Refer to the details and start the operation.

a. [Case as custom engineer operates]

Turn the "REMOTE/LOCAL" switch on the CE panel PCB to "LOCAL".

Turn the "POWER ON/OFF" switch on the CE panel PCB to "OFF".

[Case as that operate from CPU]

Turn the "REMOTE/LOCAL" switch on the CE panel PCB to " REMOTE ".

Turn off the power supply from CPU.

Note : CE Panel has three types in difference of appearance.

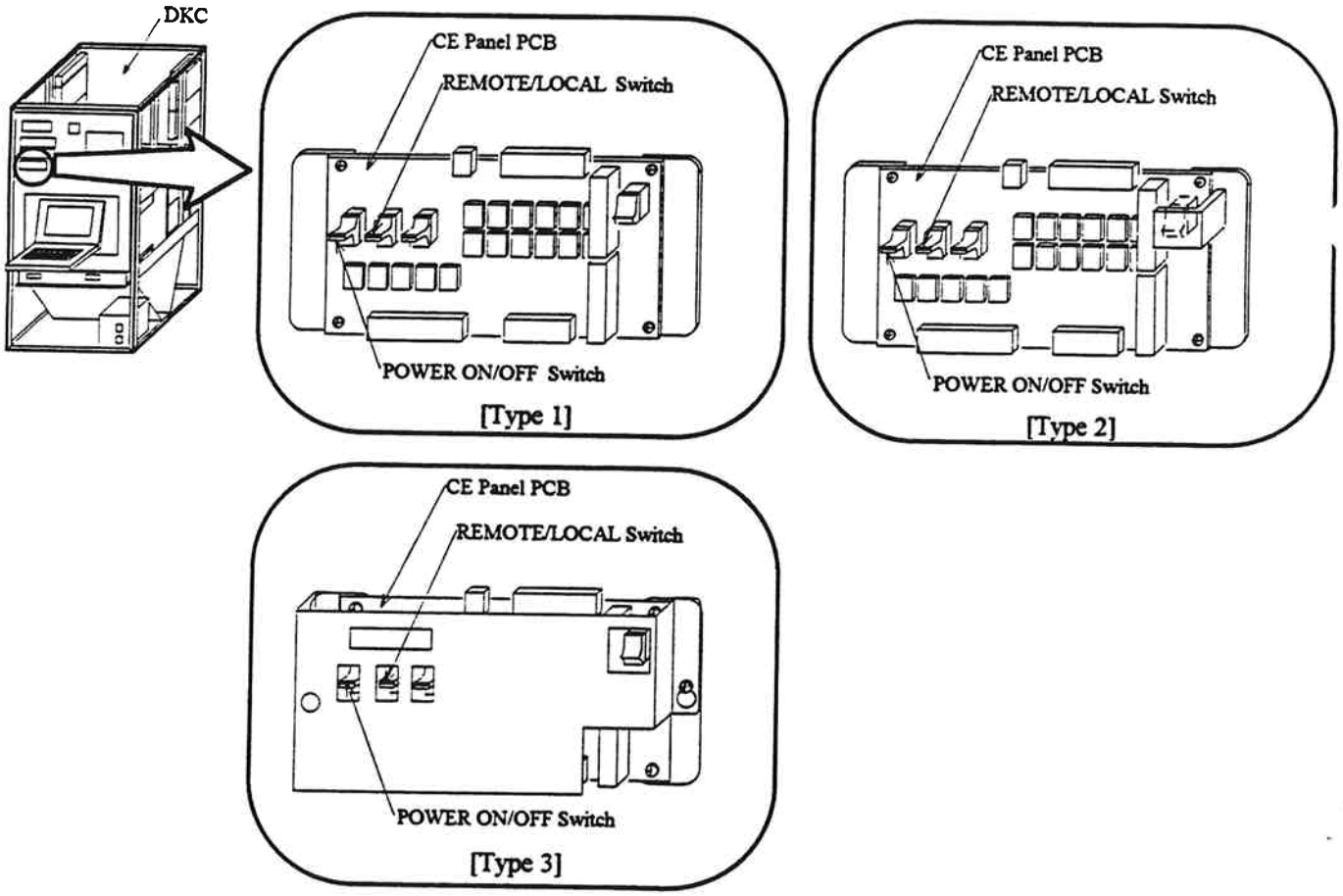


Fig. 3.3.15.2-1 CE Panel PCB

b. Turn off the main circuit breaker at the AC Box on the Disk Unit.

NOTICE: Stop the SVP before turning off the circuit breaker in the location of AC BOX-R10.

(See the SVP section)

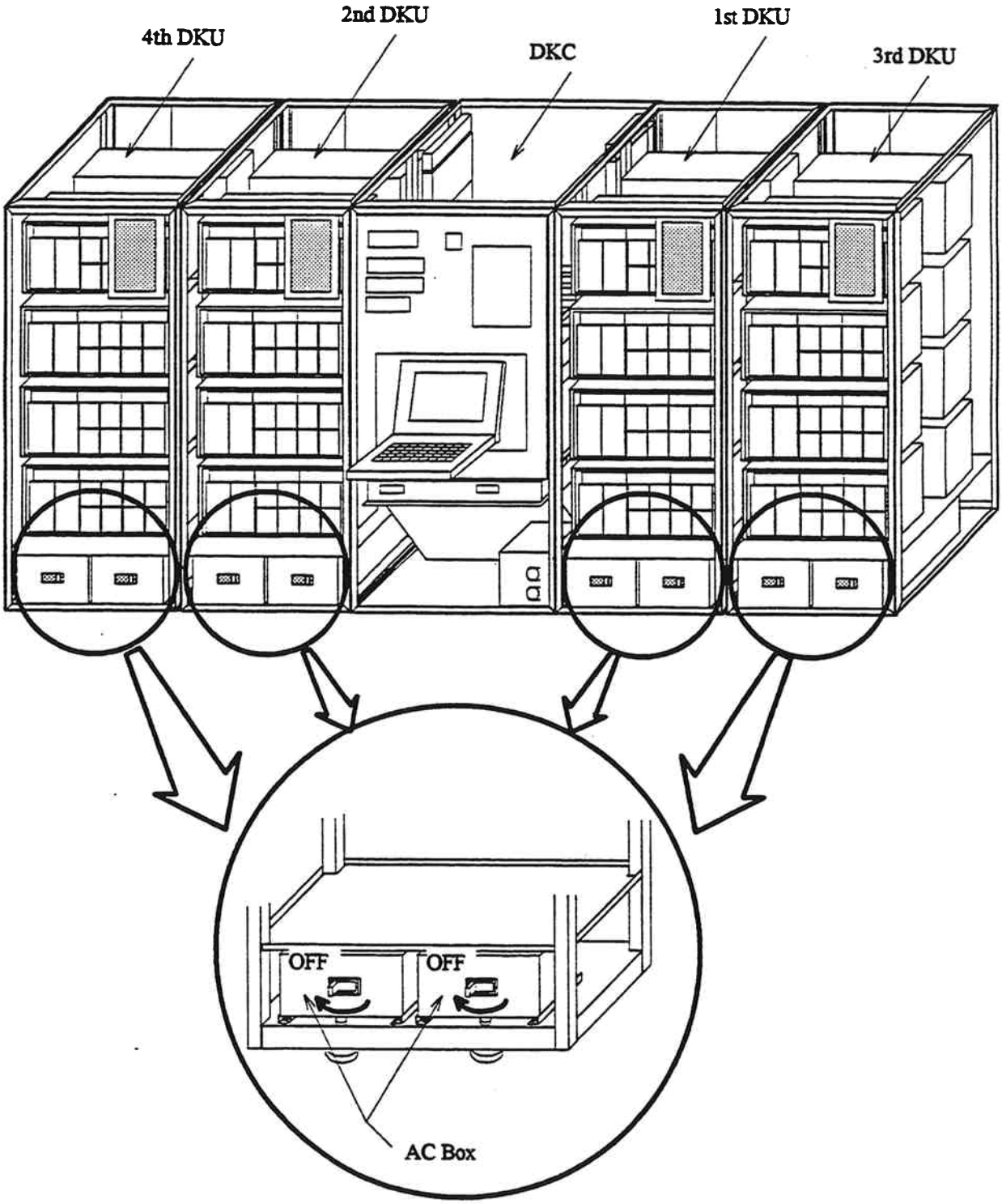


Fig. 3.3.15.2-2 Main Circuit Breaker on AC Box

c. Return to General Flow.

Disruptive Installation: Go to INST02-40 Step (3).

Disruptive De-installation: Go to INST02-51 Step (9).

3.3.15.1.2.2 Power OFF Procedure of Additional Disk Unit

1. Power off procedures are shown below. Refer to the details and start the operation.

   a. Turn off the main circuit breaker at the AC Box on the Disk Unit.

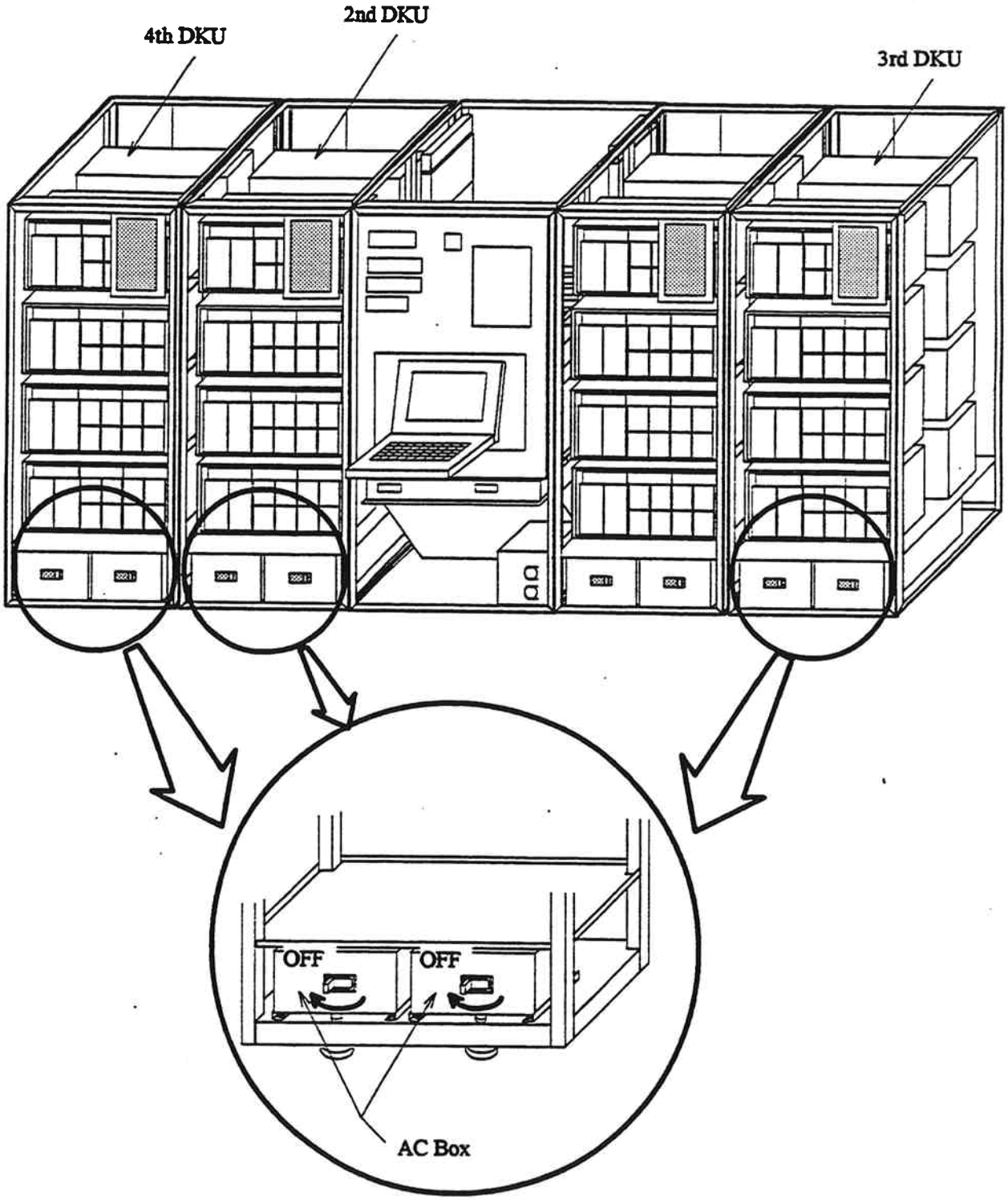


Fig. 3.3.15.2.2-1 Main Circuit Breaker on AC Box

3.3.16 Changing of Channel Switch

This section describes the procedure for changing the channel switch from parallel to serial or serial to parallel.

3.3.16.1 Flowchart

3.3.16.1.1 Parallel Channel Switch to Serial Channel Port.....[INST03-2380]

(1) Confirm the Shut Down LED.
↓
(2) Change the PCBs.
↓
(3) Change the I/F connector panel.
↓
(4) Connect the optical fiber cables.
↓
(5) Attach the labels.
↓
(6) Change the nameplate.

3.3.16.1.2 Serial Channel Port to Parallel Channel Switch.....[INST03-2450]

(1) Confirm the Shut Down LED.
↓
(2) Change the PCBs.
↓
(3) Change the I/F connector panel.
↓
(4) Connect the CH cables.
↓
(5) Attach the labels.
↓
(6) Change the nameplate.

3.3.16.1.3 Serial Channel 4 or 8 Port to Serial Channel 8 or 4 Port.....[INST03-2540]

(1) Confirm the Shut Down LED.

↓

(2) Change the PCBs.

↓

(3) Connect the optical fiber cables.

↓

(4) Attach the labels.

↓

(5) Change the nameplate.

3.3.16.2 Parallel Channel Switch to Serial Channel Port

3.3.16.2.1 Parts List

Table 3.3.16.2.1-1 Parts List

No.	Model Number			Part Name	Part No.	Quantity	Remarks
	Current	→	New				
1	DKC-F210I-8P	→	DKC-F210I-4S	Channel Adapter PCB	3240246-B	2	
				I/F Connector Panel	3228996-A	2	
				Screw	SB408	20	
				Label	5480349-1	2	Serial
				Screw	SB306	4	
				Bracket	5471998-1	2	
				Holder	2084816-1	4	
				Nameplate	3243053-1	1	
2	DKC-F210I-8P	→	DKC-F210I-8S	Channel Adapter PCB	3240246-B	2	
				I/F Connector Panel	3228996-B	2	
				Screw	SB408	20	
				Label	5480349-1	4	Serial
				Screw	SB306	4	
				Bracket	5471998-1	2	
				Holder	2084816-1	8	
				Nameplate	3243054-1	1	

3.3.16.2.2 Procedure of Changing from Parallel Channel Switch to Serial Channel Port

Basic Location

1. Confirmation of the Shut Down LED(Only Non-Disruptive Procedure)
   a. Confirm that the Shut Down LED lights.(Fig. 3.3.16.2.2-1) If the LED does not light, see Connection of Shut Down Jumper(INST03-2600).

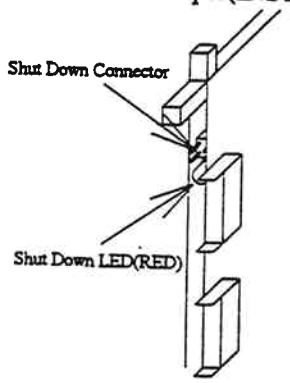


Fig. 3.3.16.2.2-1 Shut Down LED

2. Change of the PCBs

Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will insure that the IC and LSI on the PCB are protected from static electricity.

   a. Disconnect the CH cables from the sub-edge connectors on PCB(Slot No. : E, Q).
   b. Change the PCBs. Refer to Table 3.3.16.2.2-1 and Fig. 3.3.16.2.2-2.

Table 3.3.16.2.2-1 PCB Location

No.	Parts name	Parts No.		Slot No.	Location No.	Remarks
		Current	New			
1	Channel Adapter PCB	3236921-A	3240246-B	E and Q	CHA-1E and CHA-2Q	DKC-F210I-8P→4S
2	Channel Adapter PCB	3236921-A	3240246-A	E and Q	CHA-1E and CHA-2Q	DKC-F210I-8P→8S

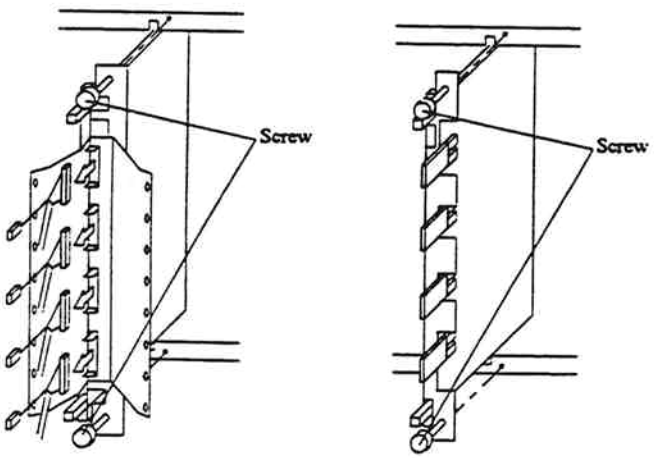


Fig. 3.3.16.2.2-2 Change of PCB

3. Change of the I/F Connector Panel

   a. Remove the I/F connector panel. Refer to Fig. 3.3.16.2.2-3.

   b. Install the I/F connector panel. Refer to Fig. 3.3.16.2.2-4.

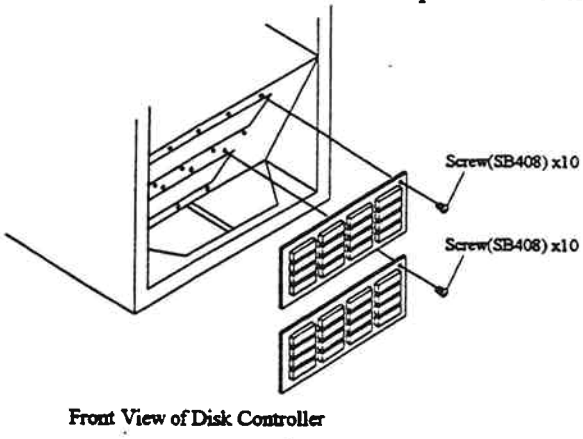


Fig. 3.3.16.2.2-3 Removal of I/F Connector Panel

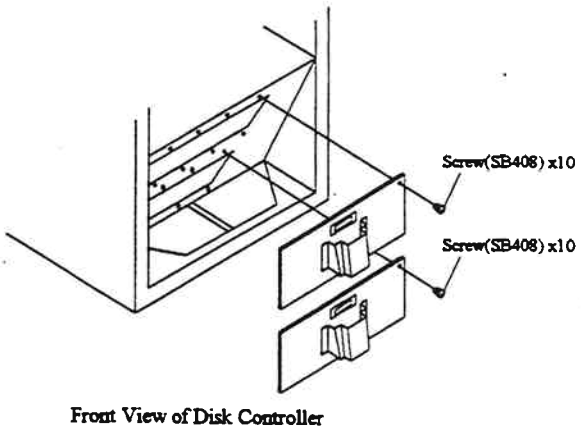


Fig. 3.3.16.2.2-4 Installation of I/F Connector Panel

4. Connection of the optical fiber cable

   a. Pull the optical fiber cable into the DKC through the I/F connector panel.

   b. Connect the optical fiber cable to the PCB referring to Serial Channel Interface[LOCATION05-40] in LOCATION SECTION.

   c. Fix the cable with Holder①. Refer to Fig. 3.3.16.2.2-5.

   d. Fix the cable to Lower Strain Relief② and attach Upper Strain Relief③ and Bracket④. Refer to Fig. 3.3.16.2.2-6. In case of DKC-F210I-4S installation, turn Bracket④ upside down.

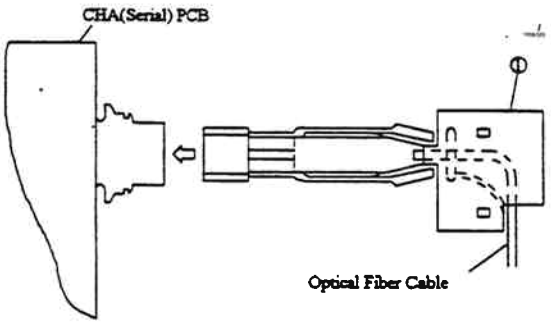


Fig. 3.3.16.2.2-5 Connection of Optical Fiber Cable

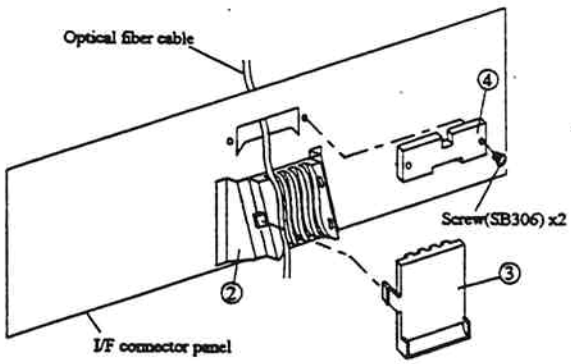


Fig. 3.3.16.2.2-6 Installation of Optical Fiber Cable

5. Labeling

a. Remove the labels "PARALLEL PORT". Refer to Fig. 3.3.16.2.2-7 and Table 3.3.16.2.2-2.

b. Attach the labels "SERIAL PORT". Refer to Fig. 3.3.16.2.2-7 and Table 3.3.16.2.2-3.

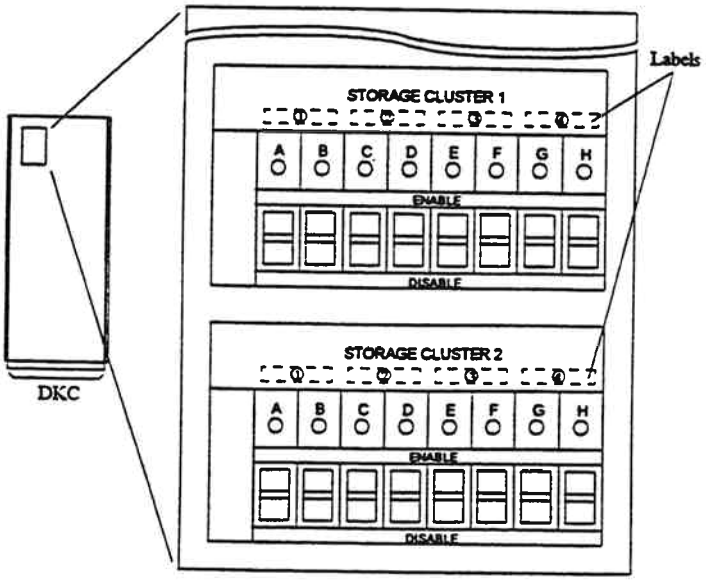


Fig. 3.3.16.2.2-5 Attachment of Labels

Table 3.3.16.2.2-2 Removal Location

No.	Model Number	Label Location
1	DKC-F210I-8P → 4S	① and ②
2	DKC-F210I-8P → 8S	① and ②

Table 3.3.16.2.2-3 Attachment Location

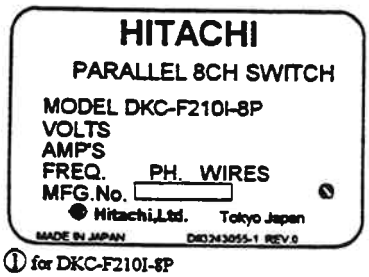
No.	Model Number	Label Location
1	DKC-F210I-8P → 4S	①
2	DKC-F210I-8P → 8S	① and ②

6. Change of the nameplate

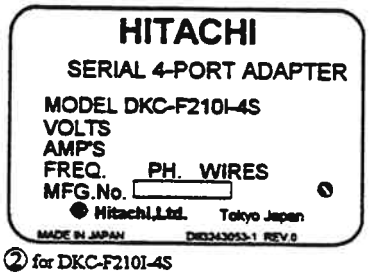
a. Change the nameplate. Refer to Table 3.3.16.2.2-4 and Fig. 3.3.16.2.2-8.

Table 3.3.16.2.2-4 Change of Nameplate

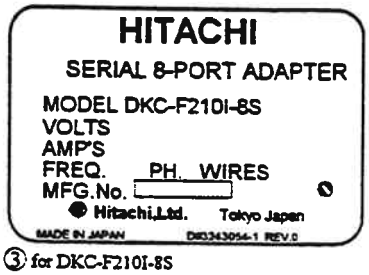
No.	Model Number			Nameplate		
	Current		New	Current		New
1	DKC-F210I-8P	→	DKC-F210I-4S	①	→	②
2	DKC-F210I-8P	→	DKC-F210I-8S	①	→	③



① for DKC-F210I-8P



② for DKC-F210I-4S



③ for DKC-F210I-8S

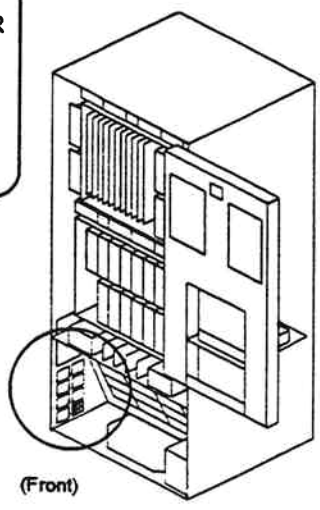


Fig. 3.3.16.2.2-8 Nameplate

Additional Location

1. Confirmation of the Shut Down LED(Only Non-Disruptive Procedure)

   a. Confirm that the Shut Down LED lights.(Fig. 3.3.16.2.2-9) If the LED does not light, see Connection of Shut Down Jumper(INST03-2600).

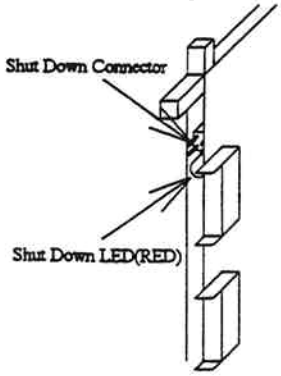


Fig. 3.3.16.2.2-9 Shut Down LED

2. Change of the PCBs

Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will insure that the IC and LSI on the PCB are protected from static electricity.

   a. Disconnect the CH cables from the sub-edge connectors on PCB(Slot No. : F, R).

   b. Change the PCBs. Refer to Table 3.3.16.2.2-5 and Fig. 3.3.16.2.2-10.

Table 3.3.16.2.2-5 PCB Location

No.	Part name	Part No.		Slot No.	Location No.	Remarks
		Current	New			
1	Channel Adapter PCB	3236921-A	3240246-B	F and R	CHA-1F and CHA-2R	DKC-F210I-8P→4S
2	Channel Adapter PCB	3236921-A	3240246-A	F and R	CHA-1F and CHA-2R	DKC-F210I-8P→8S

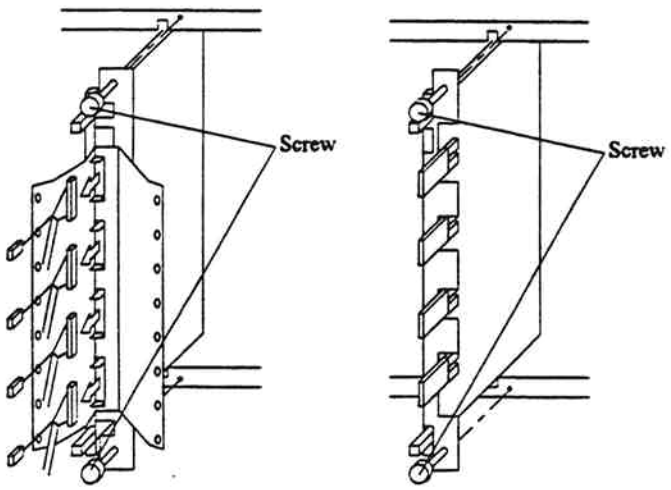


Fig. 3.3.16.2.2-10 Change of PCB

3. Change of the I/F Connector Panel

   a. Remove the I/F connector panel. Refer to Fig. 3.3.16.2.2-10.

   b. Install the I/F connector panel. Refer to Fig. 3.3.16.2.2-11.

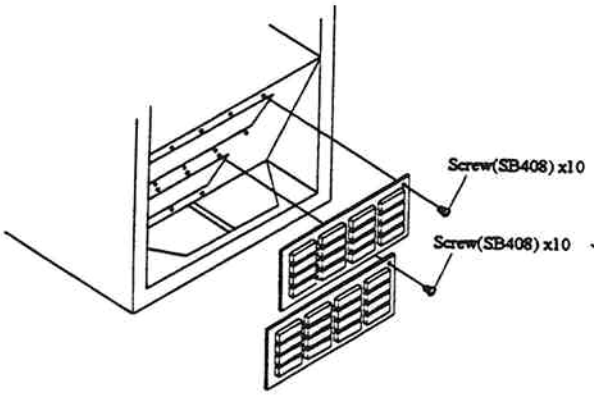


Fig. 3.3.16.2.2-10 Removal of I/F Connector Panel

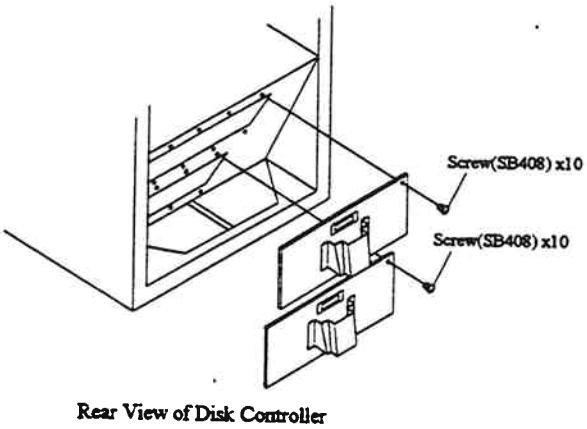


Fig. 3.3.16.2.2-11 Installation of I/F Connector Panel

4. Connection of the optical fiber cable

   a. Pull the optical fiber cable into the DKC through the I/F connector panel.

   b. Connect the optical fiber cable to the PCB referring to Serial Channel Interface[LOCATION05-40] in LOCATION SECTION.

   c. Fix the cable with Holder①. Refer to Fig. 3.3.16.2.2-12.

   d. Fix the cable to Lower Strain Relief② and attach Upper Strain Relief③ and Bracket④. Refer to Fig. 3.3.16.2.2-13. In case of DKC-F210I-4S installation, turn Bracket④ upside down.

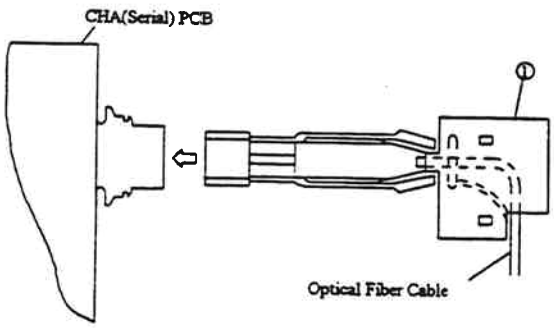


Fig. 3.3.16.2.2-12 Connection of Optical Fiber Cable

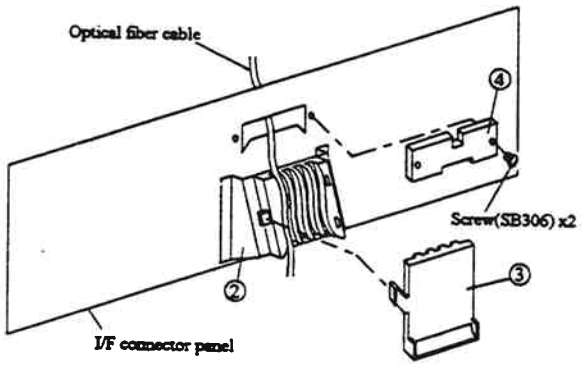


Fig. 3.3.16.2.2-13 Installation of Optical Fiber Cable

5. Labeling

a. Remove the labels "PARALLEL PORT". Refer to Fig. 3.3.16.2.2-14 and Table 3.3.16.2.2-6.

b. Attach the labels "SERIAL PORT". Refer to Fig. 3.3.16.2.2-14 and Table 3.3.16.2.2-7.

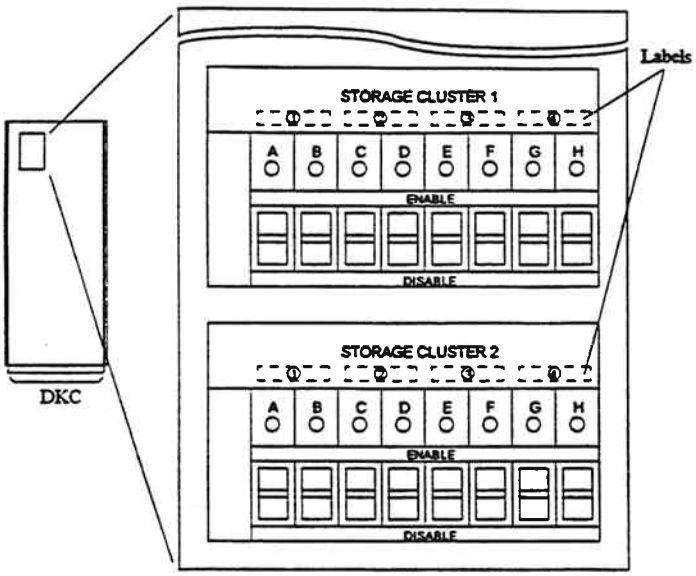


Fig. 3.3.16.2.2-14 Attachment of Labels

Table 3.3.16.2.2-6 Removal Location

No.	Model Number	Label Location
1	DKC-F210I-8P → 4S	③ and ④
2	DKC-F210I-8P → 8S	③ and ④

Table 3.3.16.2.2-7 Attachment Location

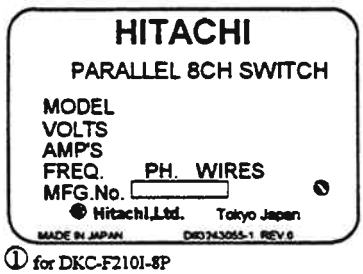
No.	Model Number	Label Location
1	DKC-F210I-8P → 4S	③
2	DKC-F210I-8P → 8S	③ and ④

6. Change of the nameplate

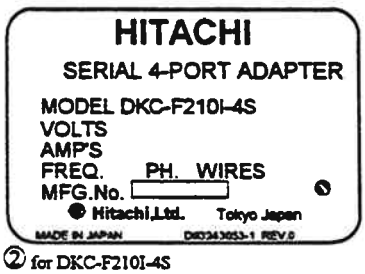
a. Change the nameplate. Refer to Table 3.3.16.2.2-8 and Fig. 3.3.16.2.2-15.

Table 3.3.16.2.2-8 Change of Nameplate

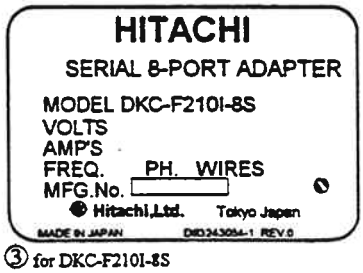
No.	Model Number			Nameplate		
	Current		New	Current		New
1	DKC-F210I-8P	→	DKC-F210I-4S	①	→	②
2	DKC-F210I-8P	→	DKC-F210I-8S	①	→	③



① for DKC-F210I-8P



② for DKC-F210I-4S



③ for DKC-F210I-8S

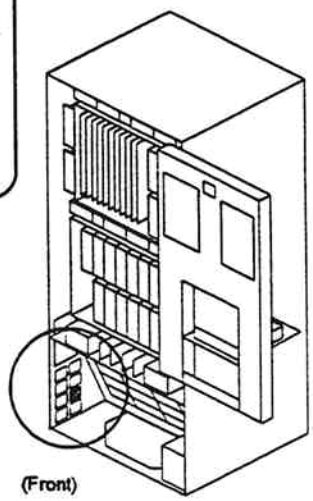


Fig. 3.3.16.2.2-15 Nameplate

3.3.16.3 Serial Channel Port to Parallel Channel Switch

3.3.16.3.1 Parts List

Table 3.3.16.3.1-1 Parts List

No.	Model Number			Part Name	Part No.	Quantity	Remarks
	Current	→	New				
1	DKC-F210I-4S	→	DKC-F210I-8P	Channel Adapter PCB	3236921-A	2	
				I/F Connector Panel	2099257-A	1	Cluster 1 side
				I/F Connector Panel	2099257-B	1	Cluster 2 side
				Screw	SB408	20	
				Clip(1)	5480323-1	2	
				Clip(4)	5480326-1	4	
				Label	5480349-2	4	Parallel
				Nameplate	3243055-1	1	
				Bypass Connector	5430027-8	8	For removal of CHA
2	DKC-F210I-8S	→	DKC-F210I 8P	Channel Adapter PCB	3236921-A	2	
				I/F Connector Panel	2099257-A	1	Cluster 1 side
				I/F Connector Panel	2099257-B	1	Cluster 2 side
				Screw	SB408	20	
				Clip(1)	5480323-1	2	
				Clip(4)	5480326-1	4	
				Label	5480349-2	4	Parallel
				Nameplate	3243055-1	1	
				Bypass Connector	5430027-8	8	For removal of CHA

3.3.16.3.2 Procedure of Changing from Serial Channel Port to Parallel Channel Switch

Basic Location

1. Confirmation of the Shut Down LED(Only Non-Disruptive Procedure)
   a. Confirm that the Shut Down LED lights.(Fig. 3.3.16.3.2-1) If the LED does not light, see Connection of Shut Down Jumper(INST03-2600).

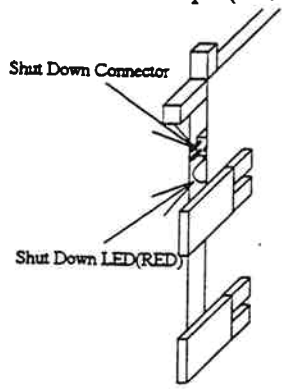


Fig. 3.3.16.3.2-1 Shut Down LED

2. Change of the PCBs

Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will insure that the IC and LSI on the PCB are protected from static electricity.

   a. Set the jumper plugs(JP1-JP4). Refer to Fig. 3.3.16.3.2-2.
   b. Disconnect the optical fiber cables from the sub-edge connectors on PCB(Slot No. : E, Q).
   c. Change the PCBs. Refer to Table 3.3.16.3.2-1 and Fig. 3.3.16.3.2-2.

Table 3.3.16.3.2-1 PCB Location

No.	Part name	Part No.		Slot No.	Location No.	Remarks
		Current	New			
1	Channel Adapter PCB	3240246-B	3236921-A	E and Q	CHA-1E and CHA-2Q	DKC-F210I-4S→8P
2	Channel Adapter PCB	3240246-A	3236921-A	E and Q	CHA-1E and CHA-2Q	DKC-F210I-8S→8P

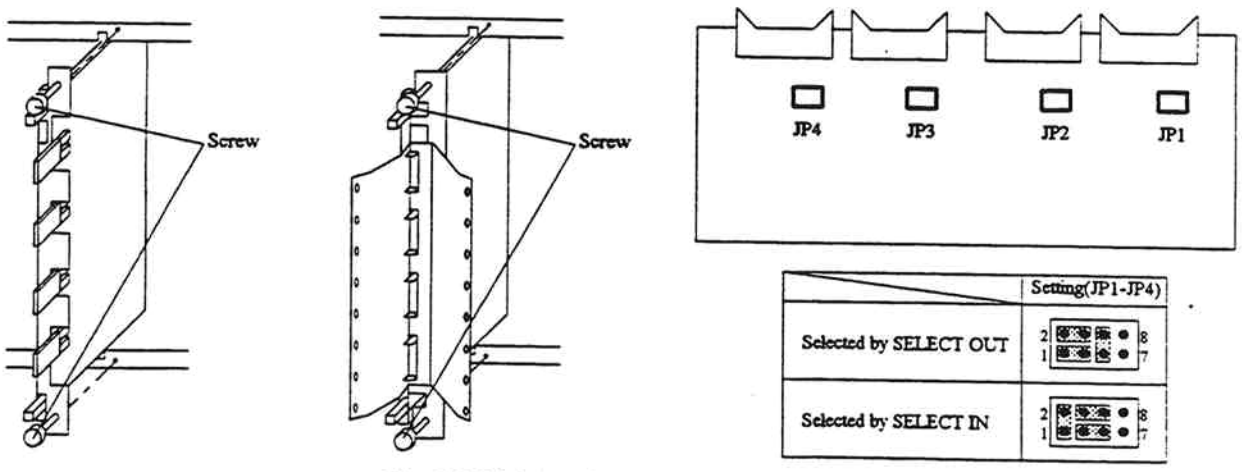


Fig. 3.3.16.3.2-2 Change of PCB

3. Change of the I/F Connector Panel

a. Remove the I/F connector panel. Refer to Fig. 3.3.16.3.2-3.

b. Install the I/F connector panel. Refer to Fig. 3.3.16.3.2-4.

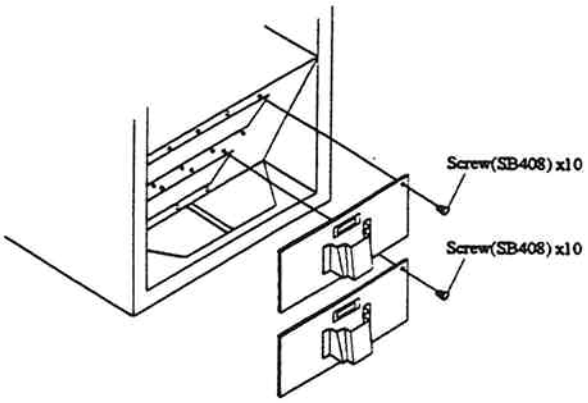


Fig. 3.3.16.3.2-3 Removal of I/F Connector Panel

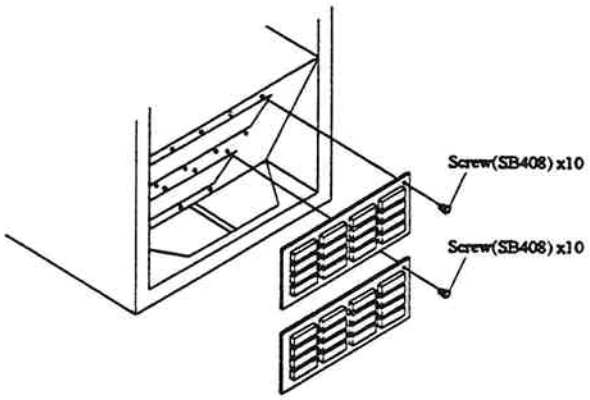


Fig. 3.3.16.3.2-4 Installation of I/F Connector Panel

4. Cabling

a. Pass the CH cables through the cable guide. Refer to Fig. 3.3.16.3.2-5.

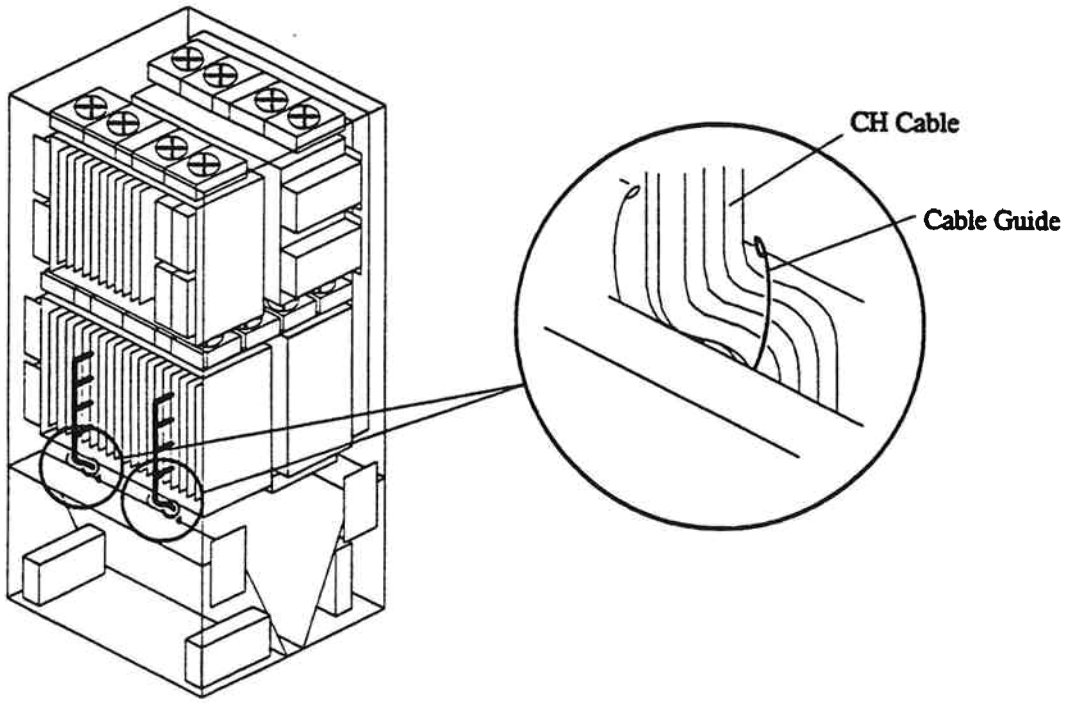


Fig. 3.3.16.3.2-5 Cabling

5. Connection of the CH cable

a. Connect the CH cables. Refer to Fig. 3.3.16.3.2-6 and Table 3.3.16.3.2-2.

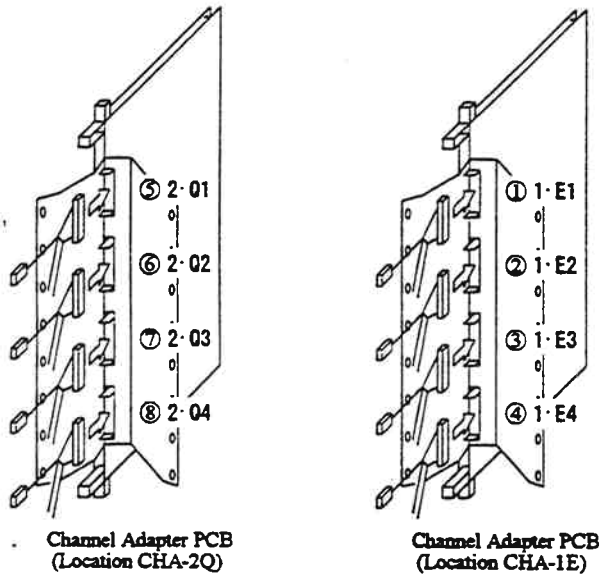


Fig. 3.3.16.3.2-6 Connection of CH Cables

Table 3.3.16.3.2-2 CH Cable Connection

No.	CH cable	Sub-edge connector on PCB
1	1·E1/1·F1	1·E1
2	1·E2/1·F2	1·E2
3	1·E3/1·F3	1·E3
4	1·E4/1·F4	1·E4
5	2·Q1/2·R1	2·Q1
6	2·Q2/2·R2	2·Q2
7	2·Q3/2·R3	2·Q3
8	2·Q4/2·R4	2·Q4

6. Binding of CH cables

a. Bind the CH cables. Refer to Fig. 3.3.16.3.2-7.

b. Button up the cable cover. Refer to Fig. 3.3.16.3.2-8.

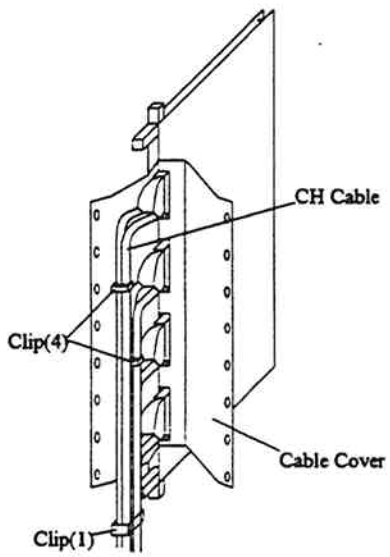


Fig. 3.3.16.3.2-7 Binding

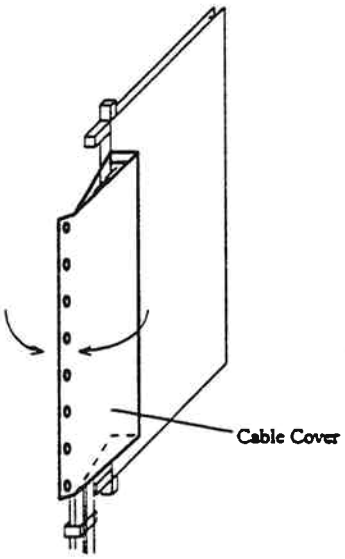


Fig. 3.3.16.3.2-8 Cable Cover

7. Labeling

a. Remove the labels "SERIAL PORT". Refer to Fig. 3.3.16.3.2-9 and Table 3.3.16.3.2-3.

b. Attach the labels "PARALLEL PORT". Refer to Fig. 3.3.16.3.2-9 and Table 3.3.16.3.2-4.

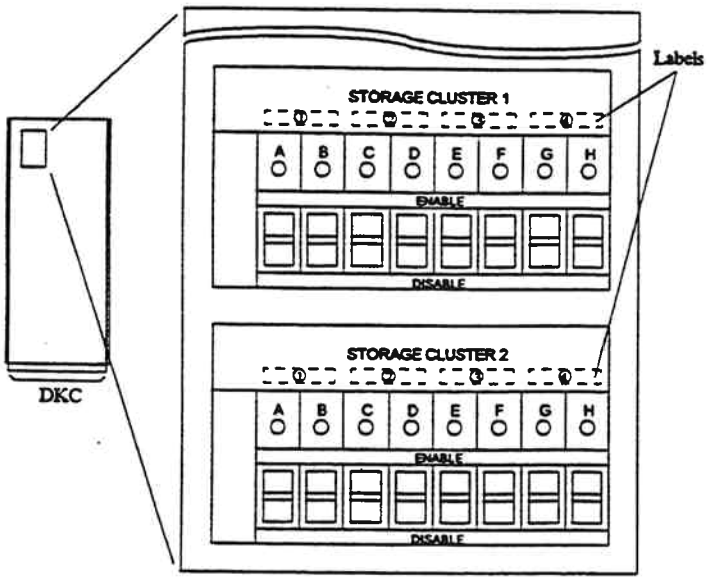


Fig. 3.3.16.3.2-9 Attachment of Labels

Table 3.3.16.3.2-3 Removal Location

No.	Model Number	Label Location
1	DKC-F210I-4S → 8P	①
2	DKC-F210I-8S → 8P	① and ②

Table 3.3.16.3.2-4 Attachment Location

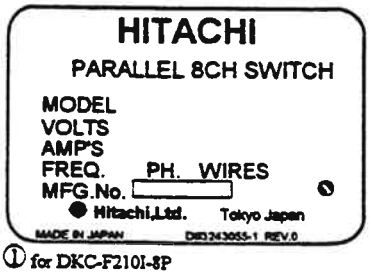
No.	Model Number	Label Location
1	DKC-F210I-4S → 8P	① and ②
2	DKC-F210I-8S → 8P	① and ②

8. Change of the nameplate

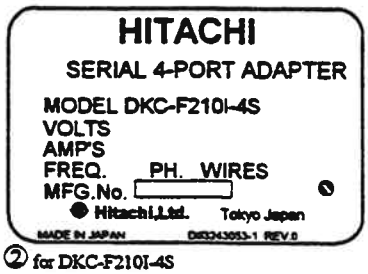
a. Change the nameplate. Refer to Table 3.3.16.3.2-5 and Fig. 3.3.16.3.2-10.

Table 3.3.16.3.2-5 Change of Nameplate

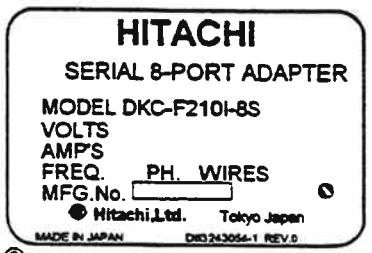
No.	Model Number			Nameplate		
	Current		New	Current		New
1	DKC-F210I-4S	→	DKC-F210I-8P	②	→	①
2	DKC-F210I-8S	→	DKC-F210I-8P	③	→	①



① for DKC-F210I-8P



② for DKC-F210I-4S



③ for DKC-F210I-8S

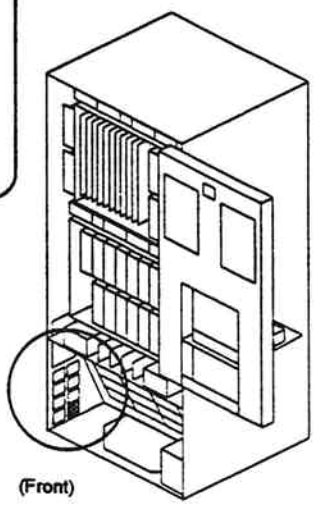


Fig. 3.3.16.3.2-10 Nameplate

Additional Location

1. Confirmation of the Shut Down LED(Only Non-Disruptive Procedure)
   a. Confirm that the Shut Down LED lights.(Fig. 3.3.16.3.2-11) If the LED does not light, see Connection of Shut Down Jumper(INST03-2600).

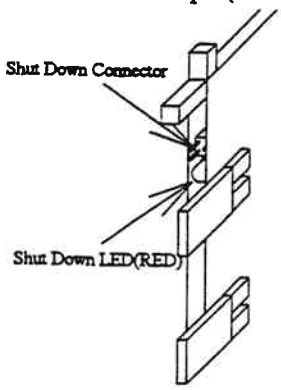


Fig. 3.3.16.3.2-11 Shut Down LED

2. Change of the PCBs

Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will insure that the IC and LSI on the PCB are protected from static electricity.

   a. Set the jumper plugs(JP1-JP4). Refer to Fig. 3.3.16.3.2-12.
   b. Disconnect the optical fiber cables from the sub-edge connectors on PCB(Slot No. : F, R).
   c. Change the PCBs. Refer to Table 3.3.16.3.2-6 and Fig. 3.3.16.3.2-12.

Table 3.3.16.3.2-6 PCB Location

No.	Part name	Part No.		Slot No.	Location No.	Remarks
		Current	New			
1	Channel Adapter PCB	3240246-B	3236921-A	F and R	CHA-1F and CHA-2R	DKC-F210I-4S→8P
2	Channel Adapter PCB	3240246-A	3236921-A	F and R	CHA-1F and CHA-2R	DKC-F210I-8S→8P

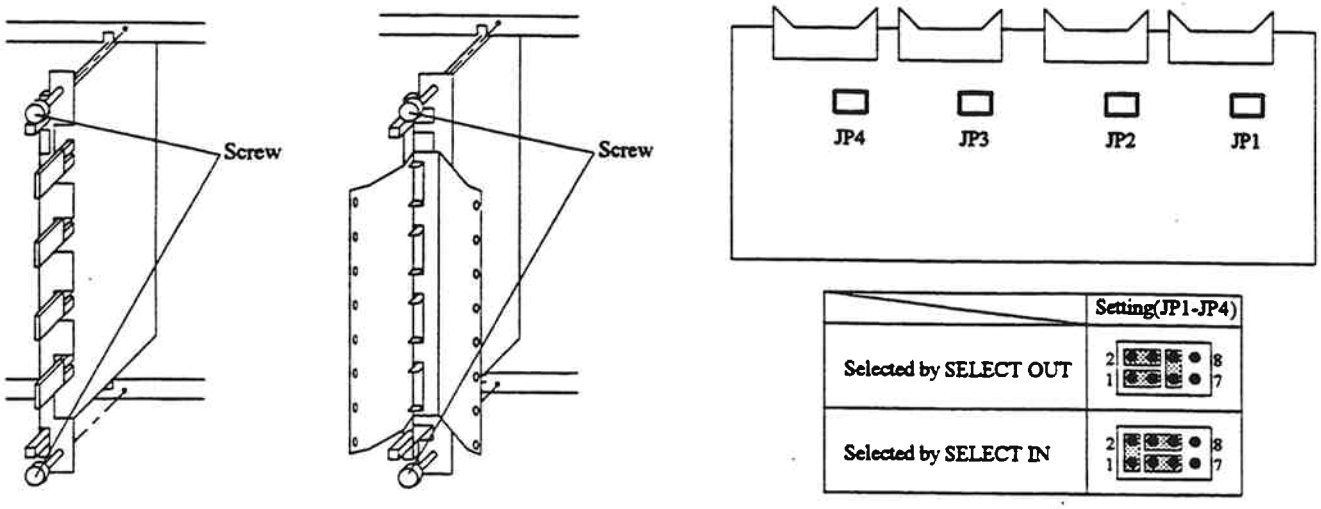


Fig. 3.3.16.3.2-12 Change of PCB

3. Change of the I/F Connector Panel

   a. Remove the I/F connector panel. Refer to Fig. 3.3.16.3.2-13.

   b. Install the I/F connector panel. Refer to Fig. 3.3.16.3.2-14.

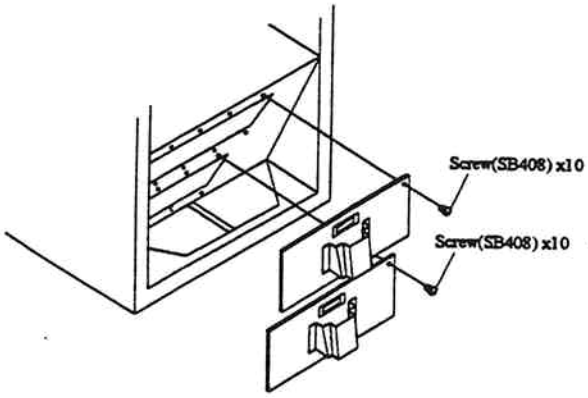


Fig. 3.3.16.3.2-13 Removal of I/F Connector Panel

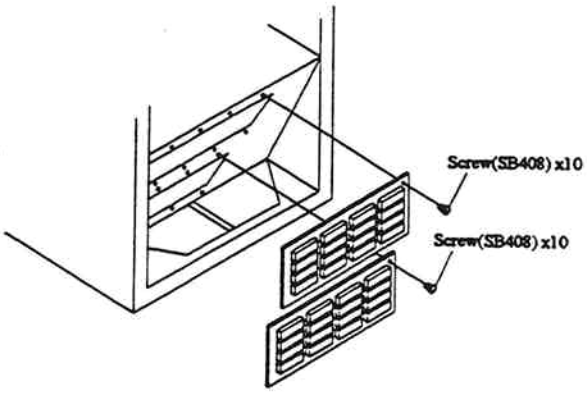


Fig. 3.3.16.3.2-14 Installation of I/F Connector Panel

4. Cabling

   a. Pass the CH cables through the cable guide. Refer to Fig. 3.3.16.3.2-15.

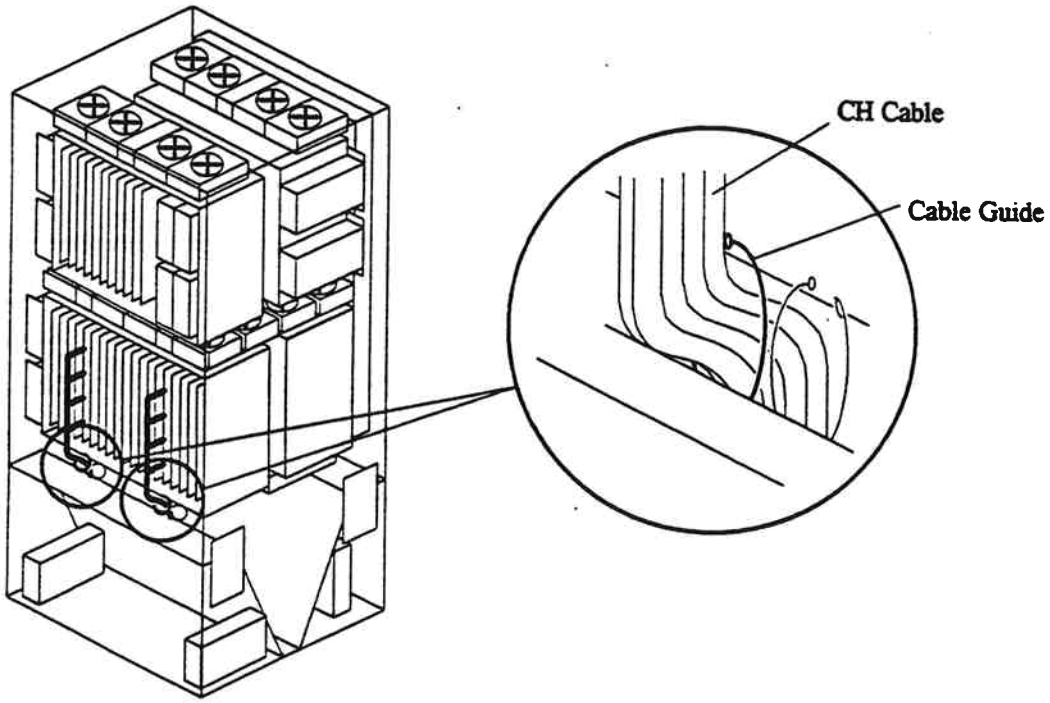


Fig. 3.3.16.3.2-15 Cabling

5. Connection of the CH cable

a. Connect the CH cables. Refer to Fig. 3.3.16.3.2-16 and Table 3.3.16.3.2-7.

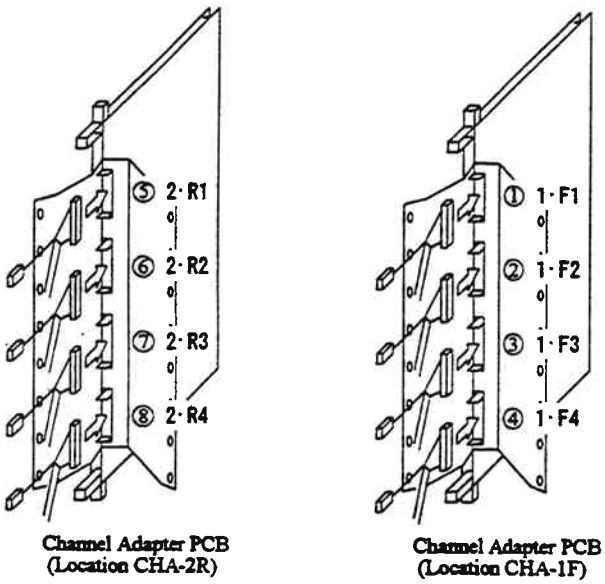


Fig. 3.3.16.3.2-16 Connection of CH Cables

Table 3.3.16.3.2-7 CH Cable Connection

No.	CH cable	Sub-edge connector on PCB
1	1·E1/1·F1	1·F1
2	1·E2/1·F2	1·F2
3	1·E3/1·F3	1·F3
4	1·E4/1·F4	1·F4
5	2·Q1/2·R1	2·R1
6	2·Q2/2·R2	2·R2
7	2·Q3/2·R3	2·R3
8	2·Q4/2·R4	2·R4

6. Binding of CH cables

a. Bind the CH cables. Refer to Fig. 3.3.16.3.2-17.

b. Button up the cable cover. Refer to Fig. 3.3.16.3.2-18.

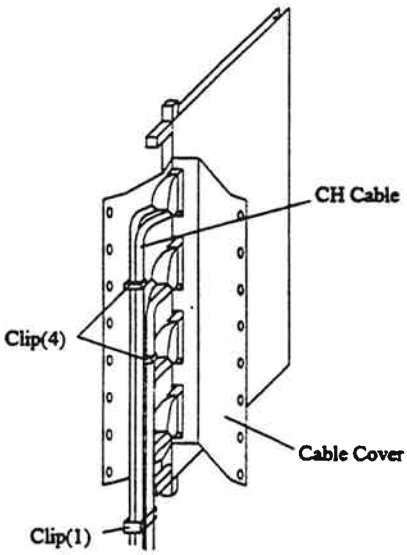


Fig. 3.3.16.3.2-17 Binding

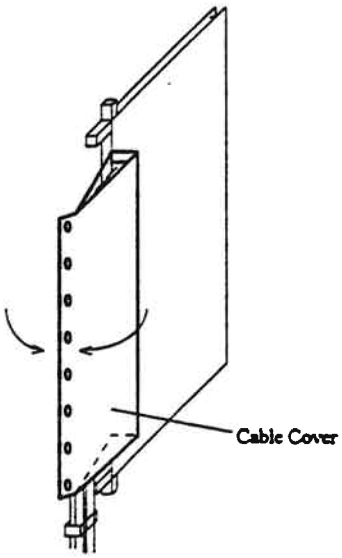


Fig. 3.3.16.3.2-18 Cable Cover

7. Labeling

a. Remove the labels "SERIAL PORT". Refer to Fig. 3.3.16.3.2-19 and Table 3.3.16.3.2-8.

b. Attach the labels "PARALLEL PORT". Refer to Fig. 3.3.16.3.2-19 and Table 3.3.16.3.2-9.

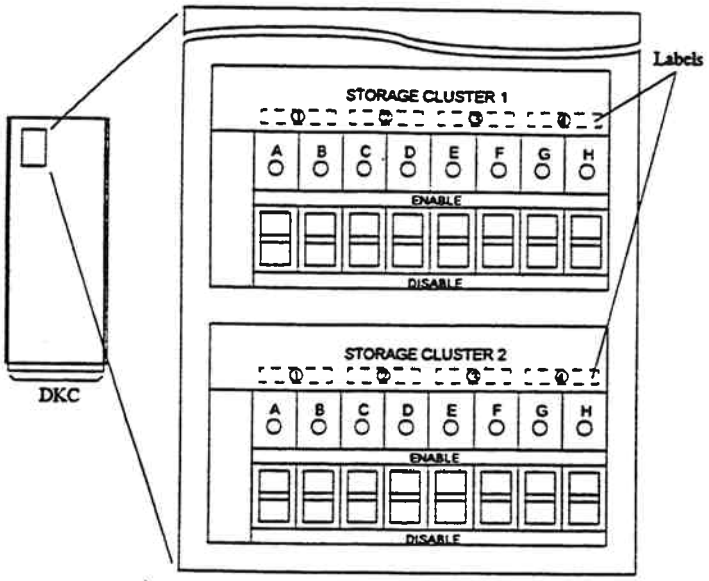


Fig. 3.3.16.3.2-19 Attachment of labels

Table 3.3.16.3.2-8 Removal Location

No.	Model Number	Label Location
1	DKC-F210I-4S → 8P	③
2	DKC-F210I-8S → 8P	③ and ④

Table 3.3.16.3.2-9 Attachment Location

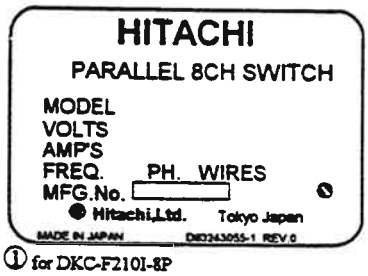
No.	Model Number	Label Location
1	DKC-F210I-4S → 8P	③ and ④
2	DKC-F210I-8S → 8P	③ and ④

8. Change of the nameplate

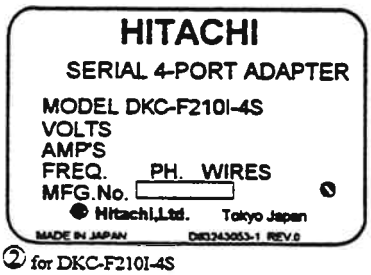
a. Change the nameplate. Refer to Table 3.3.16.3.2-10 and Fig. 3.3.16.3.2-20.

Table 3.3.16.3.2-10 Change of Nameplate

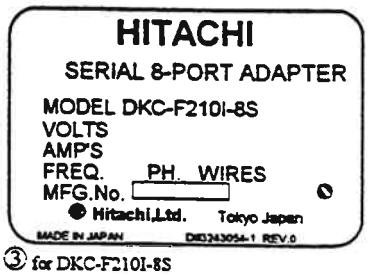
No.	Model Number			Nameplate		
	Current		New	Current		New
1	DKC-F210I-4S	→	DKC-F210I-8P	②	→	①
2	DKC-F210I-8S	→	DKC-F210I-8P	③	→	①



① for DKC-F210I-8P



② for DKC-F210I-4S



③ for DKC-F210I-8S

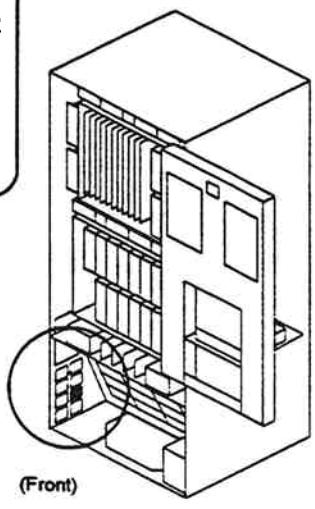


Fig. 3.3.16.3.2-20 Nameplate

3.3.16.4 Serial Channel 4 or 8 port to Serial Channel 8 or 4 port

3.3.16.4.1 Parts List

Table 3.3.16.4.1-1 Parts List

No.	Model Number			Part Name	Part No.	Quantity	Remarks
	Current	→	New				
1	DKC-F210I-4S	→	DKC-F210I-8S	Channel Adapter PCB	3240246-A	2	
				I/F Connector Panel	3228996-B	2	
				Screw	SB408	20	
				Label	5480349-1	4	Serial
				Screw	SB306	4	
				Bracket	5471998-1	2	
				Holder	2084816-1	8	
				Nameplate	3243054-1	1	
2	DKC-F210I-8S	→	DKC-F210I 4S	Channel Adapter PCB	3240246-B	2	
				I/F Connector Panel	322899-A	2	
				Bracket	5471998-1	2	
				Label	5480349-1	2	Serial
				Screw	SB408	20	
				Screw	SB306	4	
				Holder	2084816-1	4	
				Nameplate	3243053-1	1	

3.3.16.4.2 Procedure of Changing from Serial Channel 4 or 8 port to Serial 8 or 4 port

Basic Location

1. Confirmation of the Shut Down LED(Only Non-Disruptive Procedure)
   a. Confirm that the Shut Down LED lights.(Fig. 3.3.16.4.2-1) If the LED does not light, see Connection of Shut Down Jumper(INST03-2600).

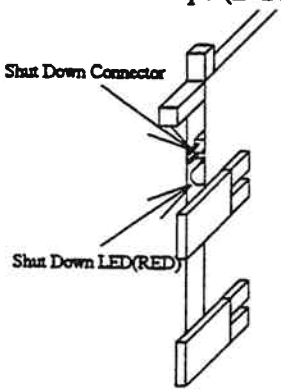


Fig. 3.3.16.4.2-1 Shut Down LED

2. Change of the PCBs

Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will insure that the IC and LSI on the PCB are protected from static electricity.

   a. Disconnect the optical fiber cables from the sub-edge connectors on PCB(Slot No. : E, Q).
   b. Change the PCBs. Refer to Table 3.3.16.4.2-1 Fig 3.3.16.4.2-2.

Table 3.3.16.4.2-1 PCB Location

No.	Part name	Part No.		Slot No.	Location No.	Remarks
		Current	New			
1	Channel Adapter PCB	3240246-B	3240246-A	E and Q	CHA-1E and CHA-2Q	DKC-F210I-4S→8S
2	Channel Adapter PCB	3240246-A	3240246-B	E and Q	CHA-1E and CHA-2Q	DKC-F210I-8S→4S

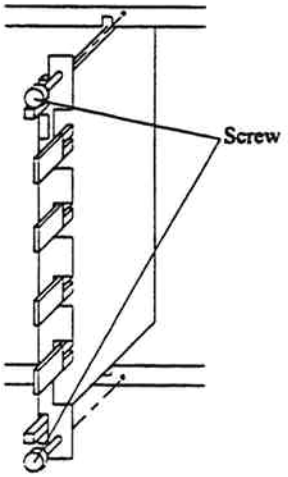


Fig. 3.3.16.4.2-2 Change of PCB

3. Connection of optical fiber cable

   a. Pull the optical fiber cable into the DKC210 through the I/F connector panel.

   b. Connect the optical fiber cable to the PCB referring to Serial Channel Interface[LOCATION05-40] in LOCATION SECTION.

   c. Fix the cable with Holder①. Refer to Fig. 3.3.16.4.2-3.

   d. Fix the cable to Lower Strain Relief② and attach Upper Strain Relief③ and Bracket④. Refer to Fig. 3.3.16.4.2-4. In case of DKC-F210I-4S installation, turn Bracket④ upside down.

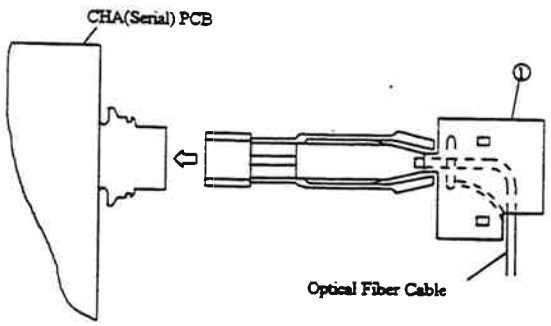


Fig. 3.3.16.4.2-3 Connection of Optical Fiber Cable

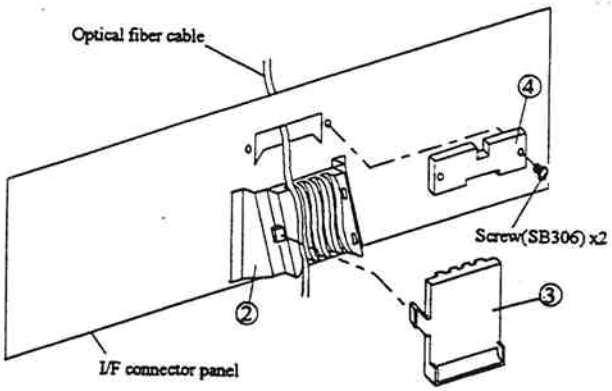


Fig. 3.3.16.4.2-4 Installation of Optical Fiber Cable

4. Labeling

   a. Remove the labels "SERIAL PORT". Refer to Fig. 3.3.16.4.2-5 and Table 3.3.16.4.2-2.

   b. Attach the labels "SERIAL PORT". Refer to Fig. 3.3.16.4.2-5 and Table 3.3.16.4.2-3.

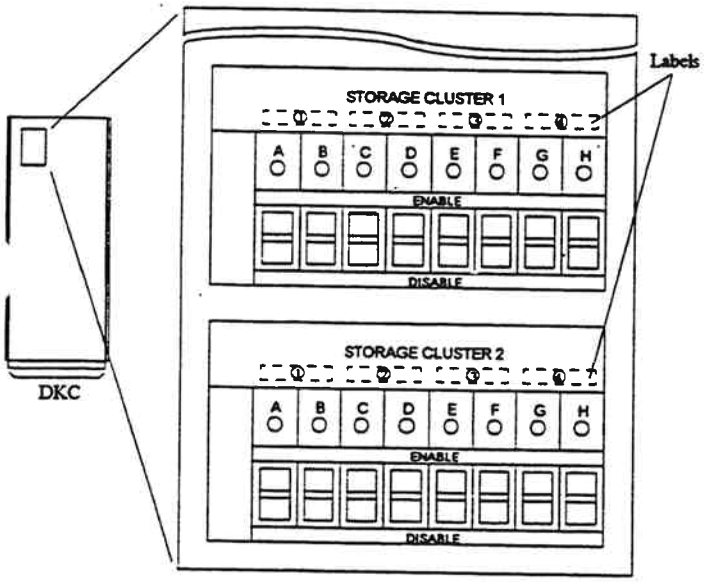


Fig. 3.3.16.4.2-5 Attachment of Labels

Table 3.3.16.4.2-2 Removal Location

No.	Model Number	Label Location
1	DKC-F210I-4S → 8S	-
2	DKC-F210I-8S → 4S	②

Table 3.3.16.4.2-3 Attachment Location

No.	Model Number	Label Location
1	DKC-F210I-4S → 8S	②
2	DKC-F210I-8S → 4S	-

5. Change of the nameplate

   a. Change the nameplate. Refer to Table 3.3.16.4.2-4 and Fig. 3.3.16.4.2-6.

Table 3.3.16.4.2-4 Change of Nameplate

No.	Model Number			Nameplate		
	Current		New	Current		New
1	DKC-F210I-4S	→	DKC-F210I-8S	①	→	②
2	DKC-F210I-8S	→	DKC-F210I-4S	②	→	①

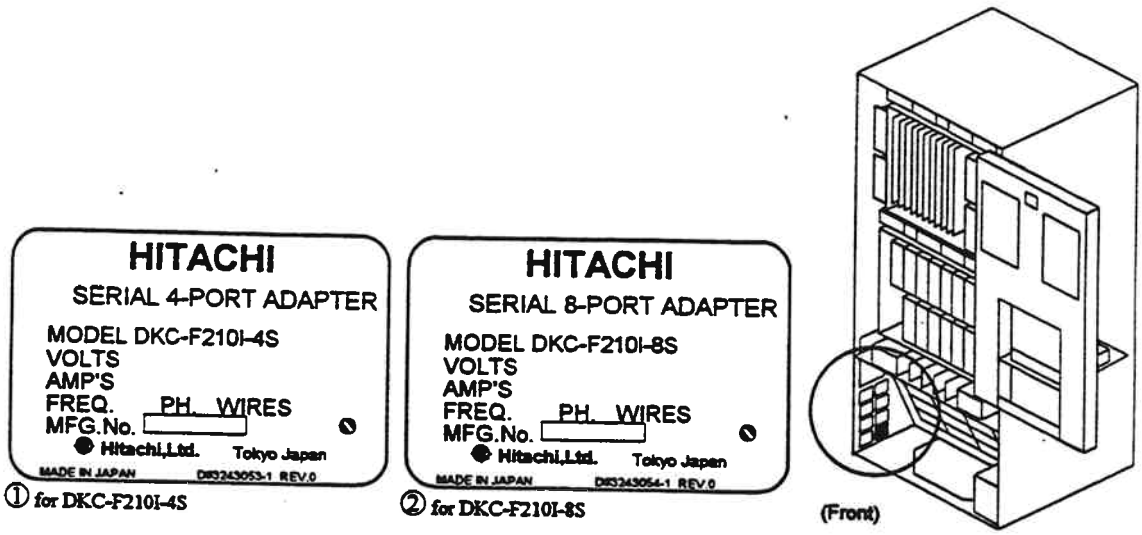


Fig. 3.3.16.4.2-6 Nameplate

Additional Location

1. Confirmation of the Shut Down LED(Only Non-Disruptive Procedure)

   a. Confirm that the Shut Down LED lights.(Fig. 3.3.16.3.2-11) If the LED does not light, see Connection of Shut Down Jumper(INST03-2600).

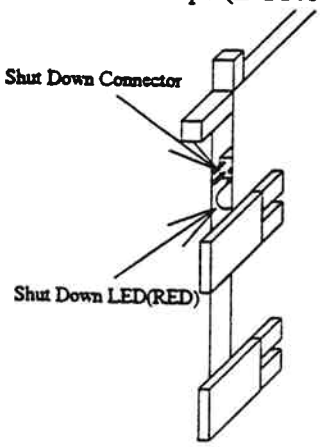


Fig. 3.3.16.4.2-7 Shut Down LED

2. Change of the PCBs

Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will insure that the IC and LSI on the PCB are protected from static electricity.

a. Disconnect the optical fiber cables from the sub-edge connectors on PCB(Slot No. : F, R).

b. Change the PCBs. Refer to Table 3.3.16.4.2-5 and Fig. 3.3.16.4.2-8.

Table 3.3.16.4.2-5 PCB Location

No.	Part name	Part No.		Slot No.	Location No.	Remarks
		Current	New			
1	Channel Adapter PCB	3240246-B	3240246-A	F and R	CHA-1F and CHA-2R	DKC-F210I-4S→8S
2	Channel Adapter PCB	3240246-A	3240246-B	F and R	CHA-1F and CHA-2R	DKC-F210I-8S→4S

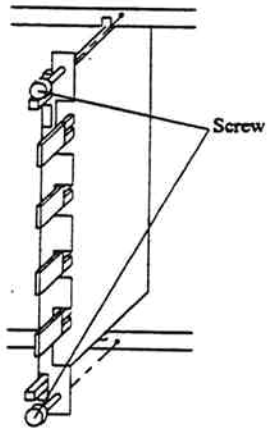


Fig. 3.3.16.4.2-8 Change of PCB

3. Connection of optical fiber cable

a. Pull the optical fiber cable into the DKC210 through the I/F connector panel.

b. Connect the optical fiber cable to the PCB referring to Serial Channel Interface[LOCATION05-40] in LOCATION SECTION.

c. Fix the cable with Holder①. Refer to Fig. 3.3.16.4.2-9.

d. Fix the cable to Lower Strain Relief② and attach Upper Strain Relief③ and Bracket④. Refer to Fig. 3.3.16.4.2-10. In case of DKC-F210I-4S installation, turn Bracket④ upside down.

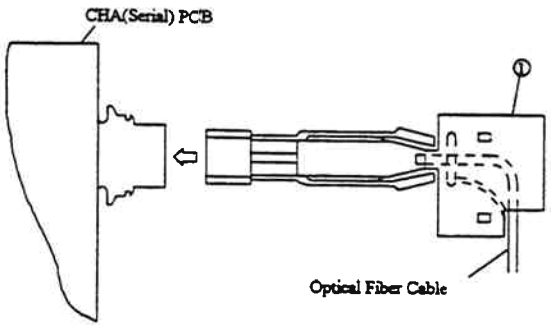


Fig. 3.3.16.4.2-9 Connection of Optical Fiber Cable

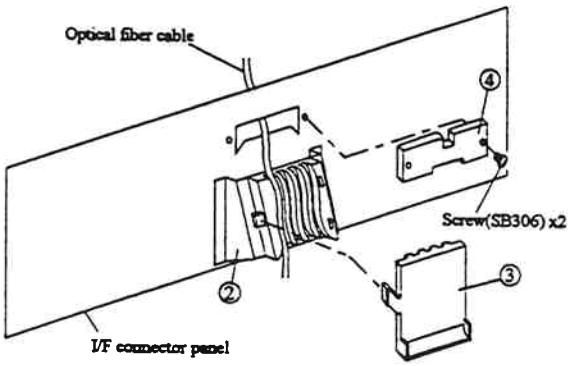


Fig. 3.3.16.4.2-10 Installation of Optical Fiber Cable

4. Labeling

a. Remove the labels. Refer to Fig. 3.3.16.4.2-11 and Table 3.3.16.4.2-6.

b. Attach the labels. Refer to Fig. 3.3.16.4.2-11 and Table 3.3.16.4.2-7.

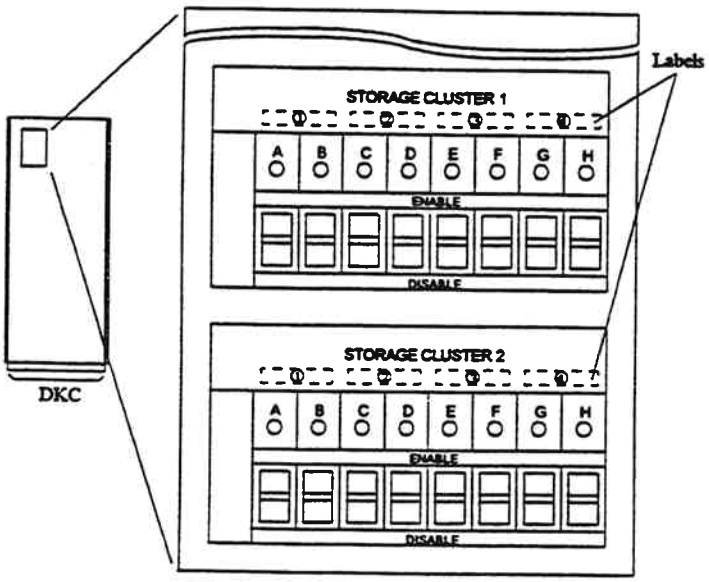


Fig. 3.3.16.4.2-11 Attachment of Labels

Table 3.3.16.4.2-6 Removal Location

No.	Model Number	Label Location
1	DKC-F210I-4S → 8S	-
2	DKC-F210I-8S → 4S	④

Table 3.3.16.4.2-7 Attachment Location

No.	Model Number	Label Location
1	DKC-F210I-4S → 8S	④
2	DKC-F210I-8S → 4S	-

5. Change of the nameplate

a. Change the nameplate. Refer to Table 3.3.16.4.2-8 and Fig. 3.3.16.4.2-12.

Table 3.3.16.4.2-8 Change of Nameplate

No.	Model Number			Nameplate		
	Current		New	Current		New
1	DKC-F210I-4S	→	DKC-F210I-8S	①	→	②
2	DKC-F210I-8S	→	DKC-F210I-4S	②	→	①

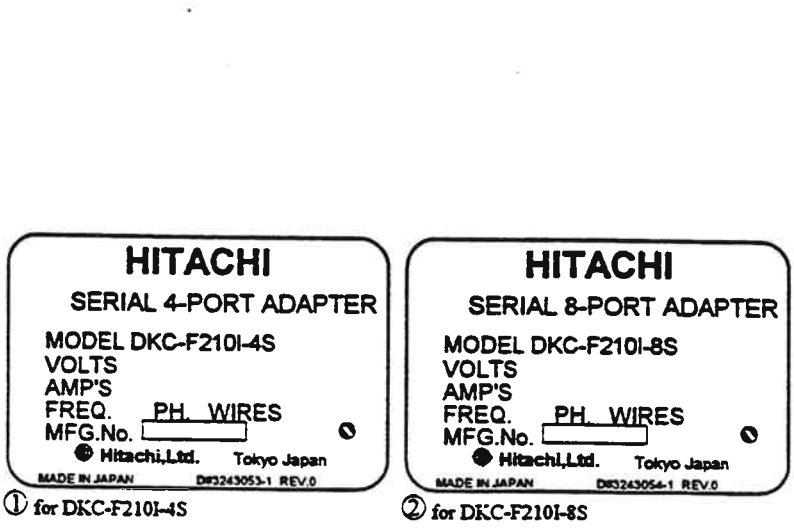
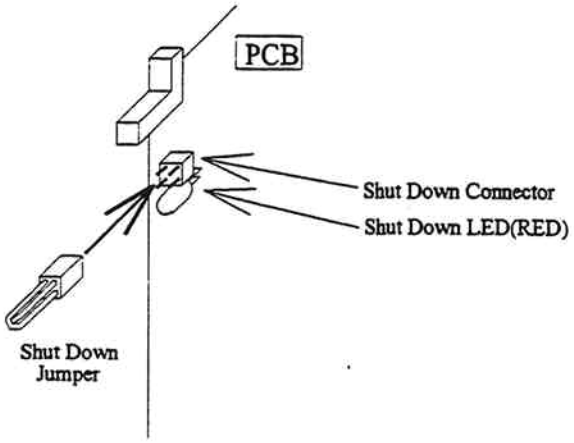


Fig. 3.3.16.4.2-12 Nameplate

3.3.17 Connection of Shut Down Jumper

1. Insert the Shut Down Jumper to the Shut Down Connector.



3.3.18 Attaching the Wrist Strap

(1) To protect the IC and LSI on the PCB from static electricity damage, put on the wrist straps and connect them into the ground wires on the DKC/DKU before starting work (see Fig. 3.3.18-1 and 3.3.18-2).

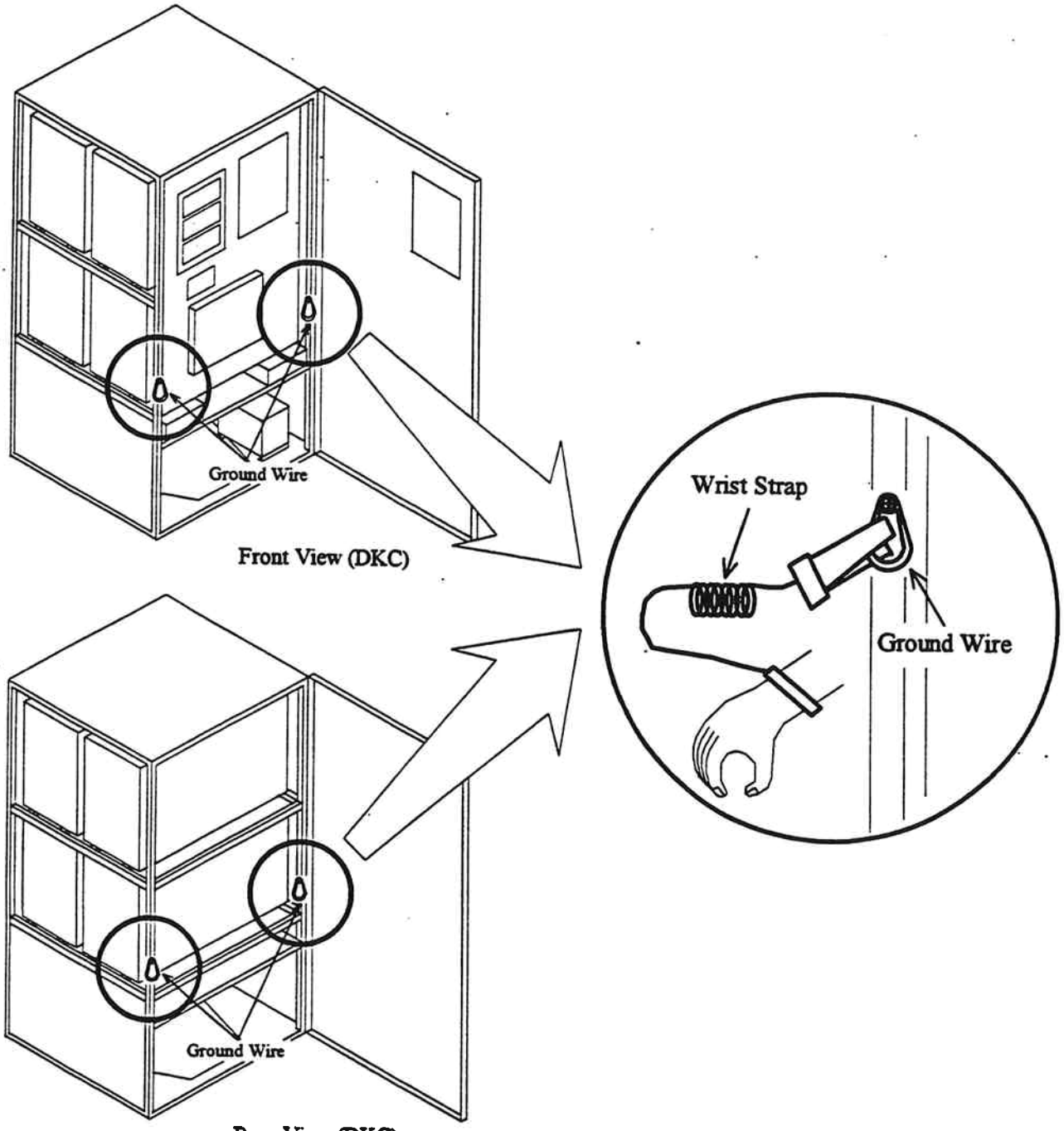


Fig. 3.3.18-1 Location of Ground Wire on the DKC

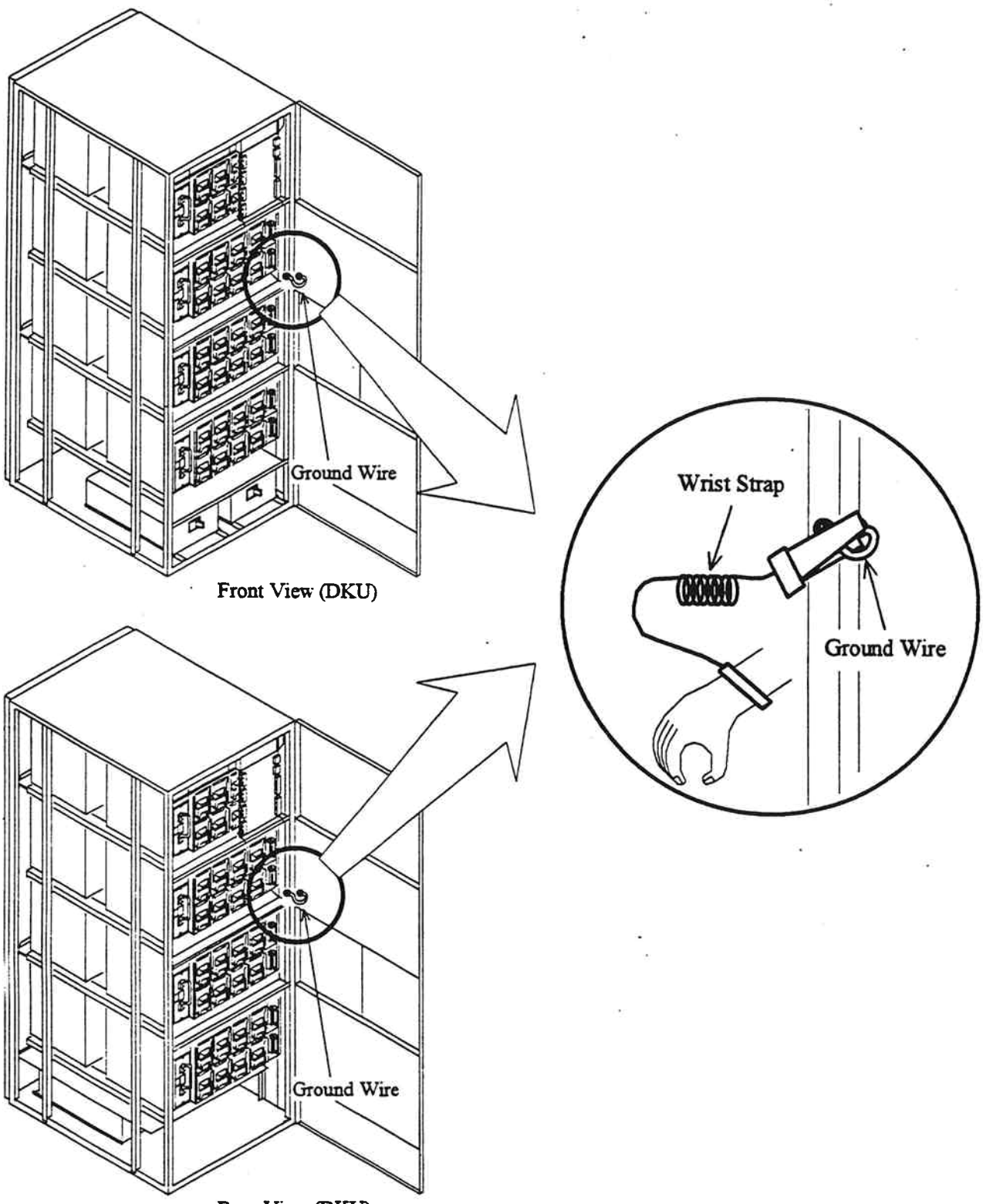


Fig. 3.3.18-2 Location of Ground Wire on the DKU

3.3.19 Installation of Front Door Conversion Kit(DKC-F210I-DR)

3.3.19.1 Flowchart

(1) Replace the Front Door.

(2) Attach the Plate.

(3) Attach the Nameplate.

3.3.19.2 Parts List

Table 3.3.19.2-1 Parts List

No.	Model Number	Parts Name	Parts No.	Quantity	Remarks
1	DKC-F210I-DR	Front Door ASSY(CE)	3250811-A	1	
		Panel ASSY(CE)	5497341-A	1	Plate(CE)
		Plate (PK 5)	5480314-2	1	Plate(Type 1)
		Nameplate	3250663-1	1	

3.3.19.3 Installation Procedure of Front Door Conversion Kit

1. Replace the front door.
   a. Open the front door.
   b. Loosen the screw and remove the wire rope from the front door.

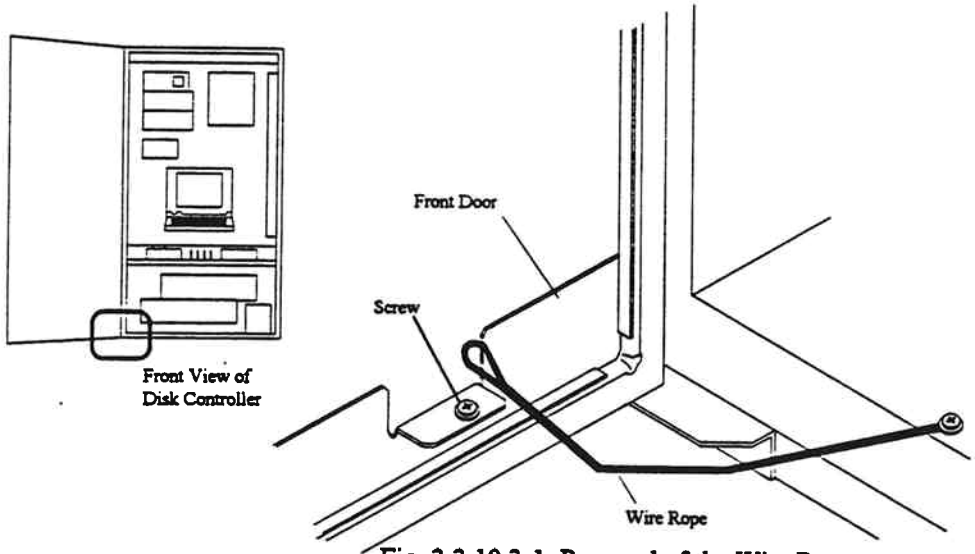


Fig. 3.3.19.3-1 Removal of the Wire Rope

c. Open the movable rack. Remove the screw and remove the frame ground cable from the frame.

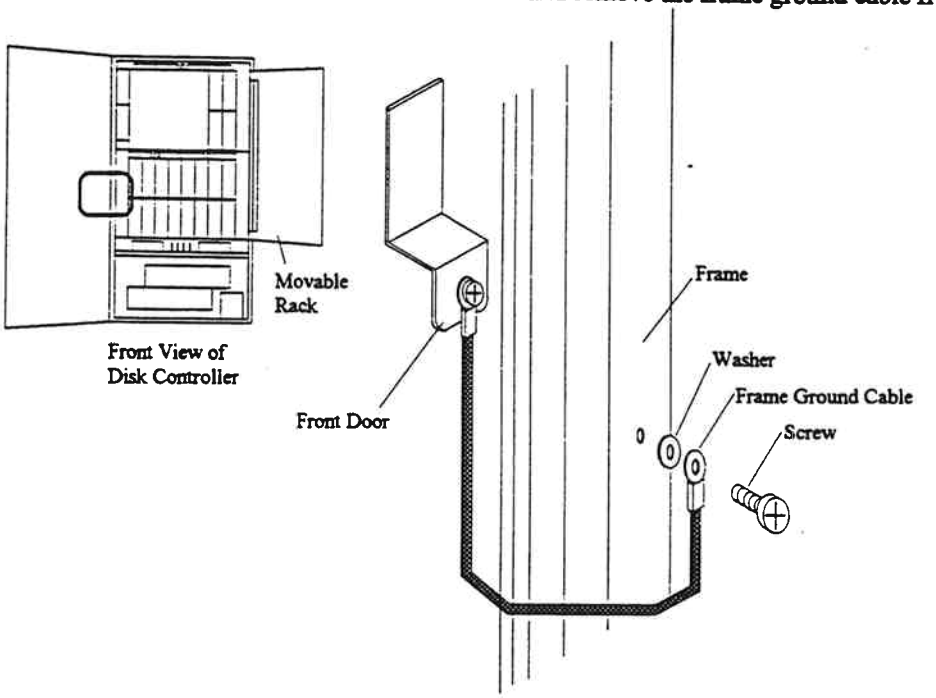


Fig. 3.3.19.3-2 Removal of the Frame Ground Cable

d. Loosen the two screws and remove the door hinge from the front door. Remove the front door from the frame.

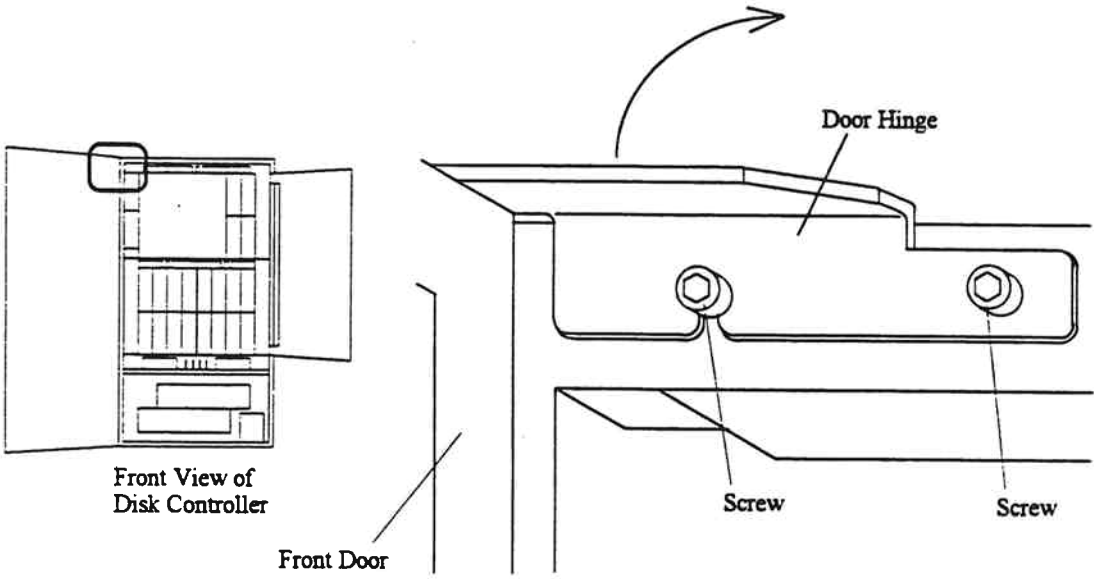


Fig. 3.3.19.3-3 Removal of the Front Door

e. Attach the new front door and fix it with the door hinge. Tighten the two screws.

f. Attach the Frame Ground cable with the screw. Close the Movable Rack.

g. Loosen the screw and attach the wire rope. Tighten the screw.

2. Attach the Plate.

CE PNL has two types in difference of appearance.

If the CE PNL is Type 1, go to step 2A.

If the CE PNL is Type 2, go to step 2B[INST03-2660].

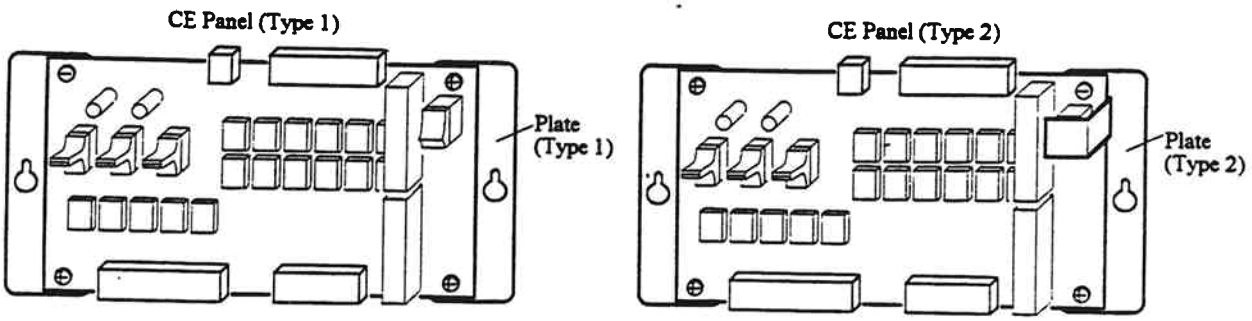


Fig. 3.3.19.3-4 CE Panel

2A In case of CE PNL Type 1

a. Loosen the two screws. Attach the plate and tighten the two screws.

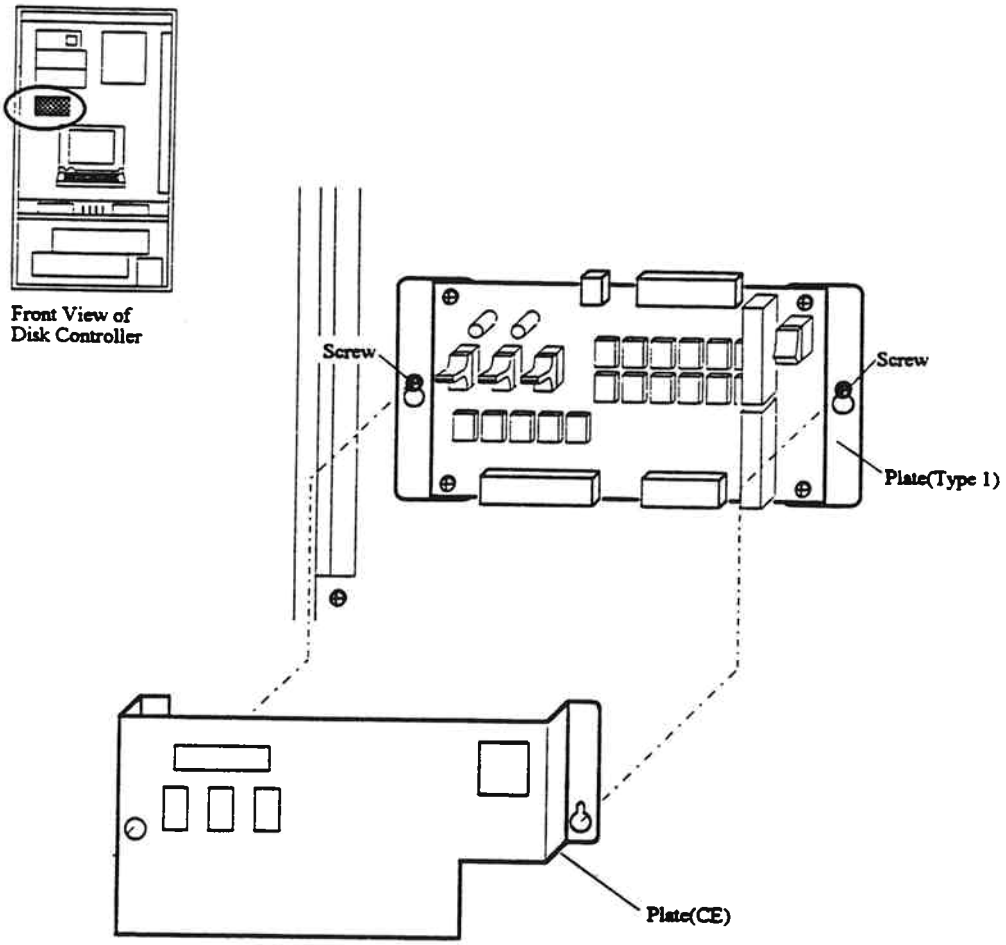


Fig. 3.3.19.3-5 Attachment of the Plate

b. Go to step 3[INST03-2690].

2B In case of CE PNL Type 2

Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will insure that the IC and LSI on the PCB are protected from static electricity.

a. When the sub-system is power on status, initiate blockade of CE Panel through SVP (REPLACE SECTION PRE-PROCEDURE A[REP02-10] and T1[REP02-390]).
When the sub-system is power off status, go to step 2B-c.

b. Connect the CE Panel INH jumper plugs(P15) on the PWRCTL-1 and PWRCTL-2.

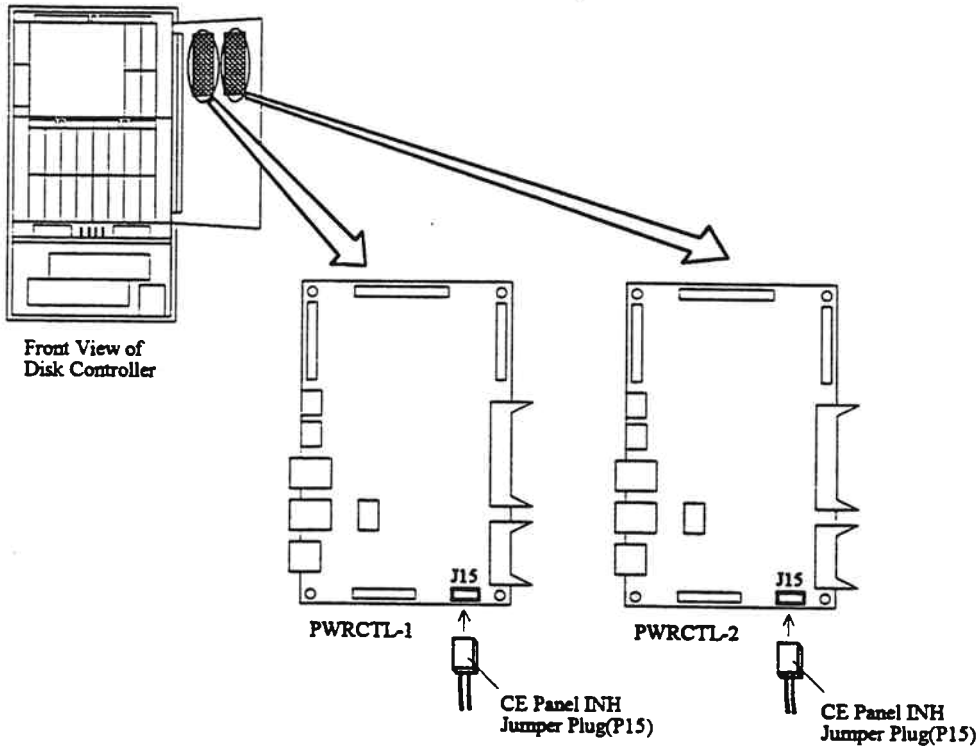


Fig. 3.3.19.3-6 Connection of the Jumper Plug

c. Memorize the current setting of switches on the CE PNL.

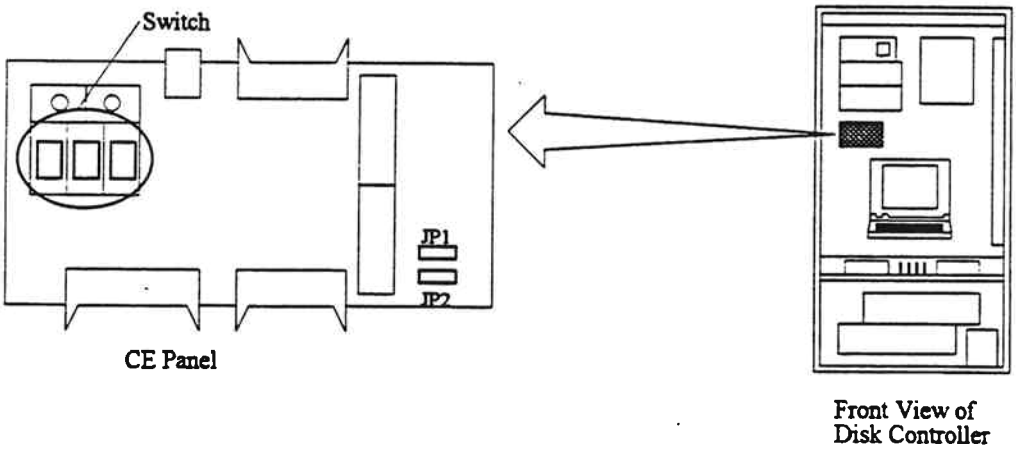


Fig. 3.3.19.3-7 Position of the Switches

d. Set Enable/Disable switch to Disable on the CE PNL.
e. Disconnect all cables from the CE PNL.
g. Loosen the two screws and remove the CE PNL.

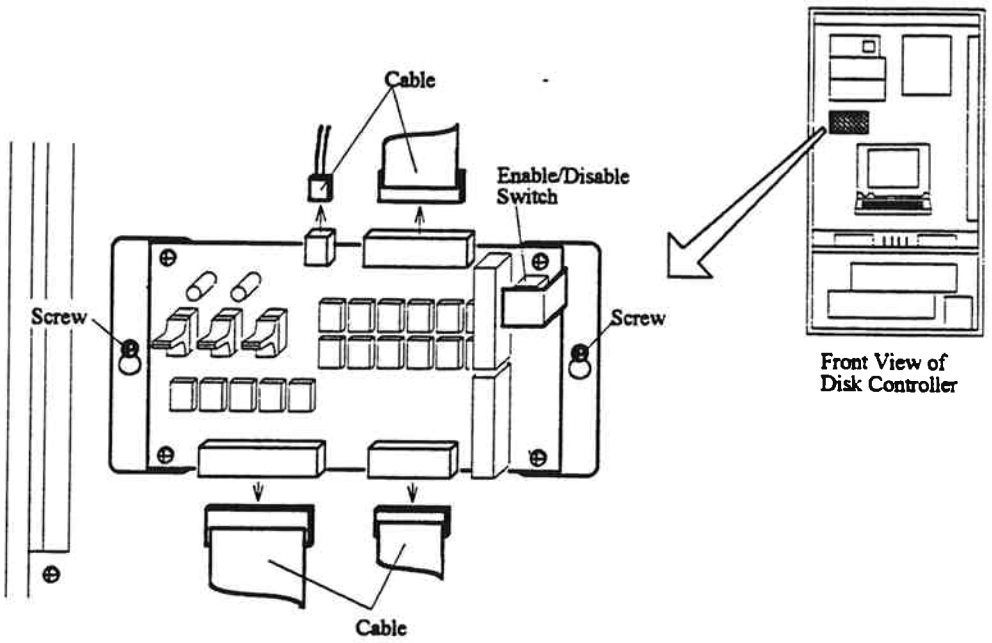


Fig. 3.3.19.3-8 Removal of the CE Panel

h. Remove the two screws and the plate(type 2).
i. Attach the plate(type 1) and tighten two screws.

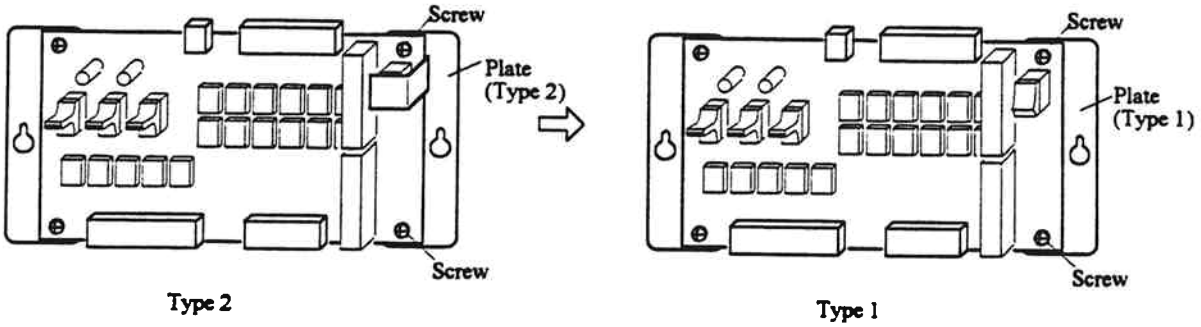


Fig. 3.3.19.3-9 Replacement of the Plate

j. Set Enable/Disable Switch① to Disable on the CE Panel.

k. Attach the CE Panel and connect all cables.

m. Attach the plate and tighten the two screws.

n. Set the switches② on the CE Panel to the same positions as those before removal.

p. Set Enable/Disable Switch① to Enable on the CE Panel.

Note: Disconnect the "CE Panel INH" jumper plugs(P15) from the sockets(J15) on the PWRCTL-1 and PWRCTL-2 according to the guidance of SVP.

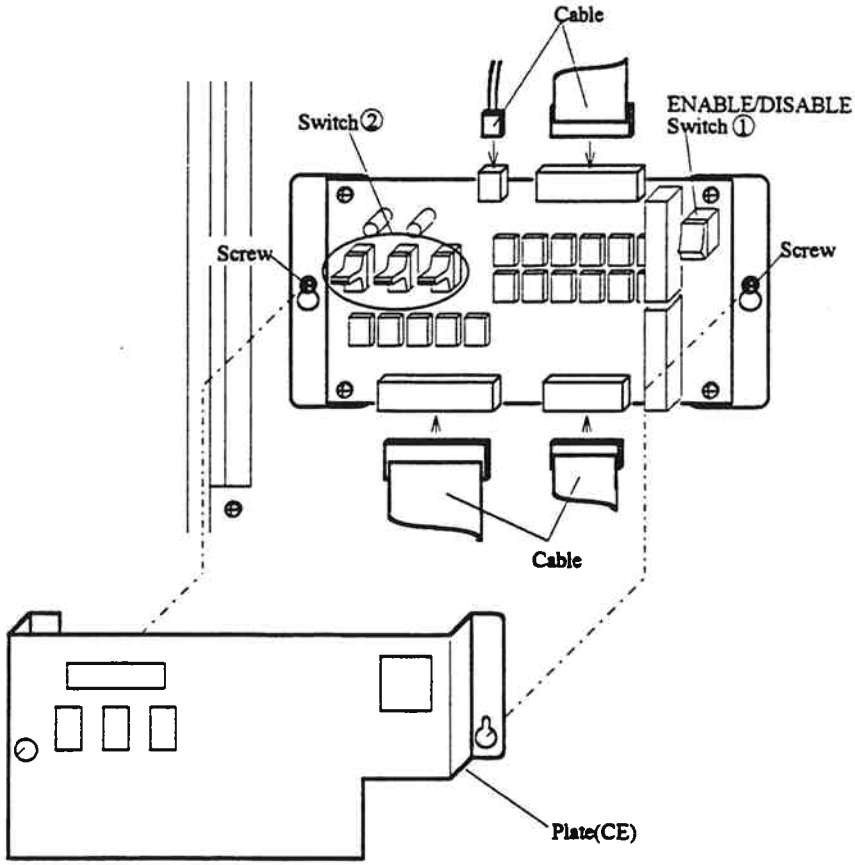


Fig. 3.3.19.3-10 Attachment of the CE Panel

q. When the sub-system is power on status, initiate recovery of CE Panel through SVP (REPLACE SECTION POST-PROCEDURE t1[REP04-210]).
When the sub-system is power off status, go to step 3[INST03-2690].

3. Attach the Nameplate.

a. Attach the nameplate of DKC-F210I-DR and wipe off the number ① of it.

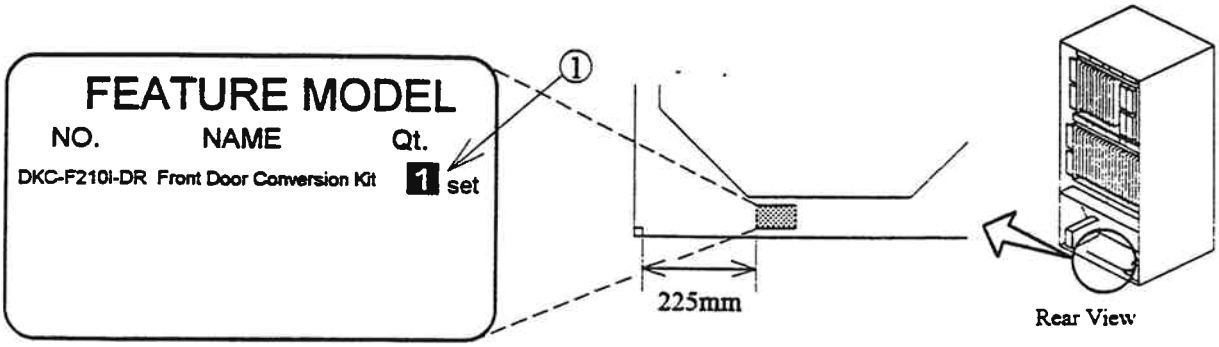


Fig. 3.3.19.3-11 Location of the Nameplate

4. Return to General Flow.

New Installtion : Go to INST02-11 Step(12).

Non-Disruptive Installation : Go to INST02-23 Step(14)-2.

Disruptive Installation : Go to INST02-40 Step(8).

3.3.20 Installation of Backup/Restore Function for Multi-Platform (DKC-F210I-M80)

3.3.20.1 Parts List

Table 3.3.20.1-1 Parts List

No.	Model Number	Parts Name	Parts No.	Quantity	Remarks
1	DKC-F210I-M80	Nameplate	3247493-1	1	

3.3.20.2 Installation Procedure of Backup/Restore Function for Multi-Platform

1. Attach the Nameplate.
   a. Attach the nameplate of DKC-F210I-M80 and wipe off the number ① of it.

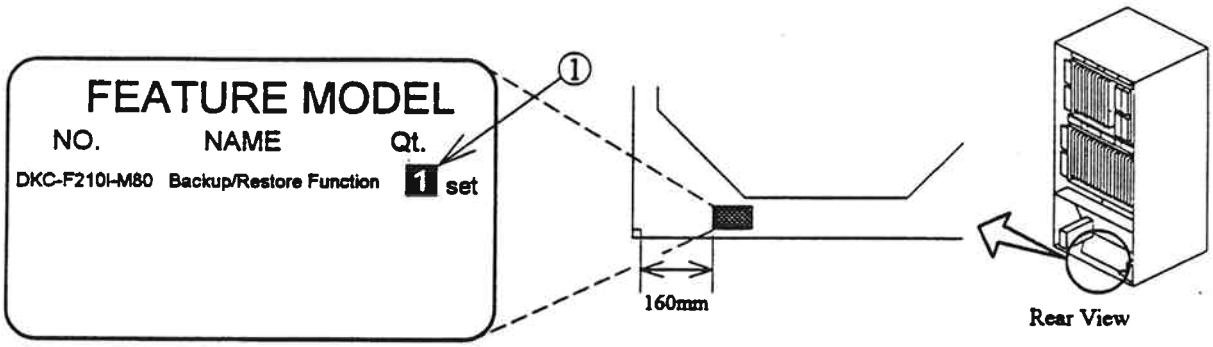


Fig. 3.3.20.2-1 Location of the Nameplate

2. Return to General Flow.
   New Installation : Go to INST02-12 END.
   Non-Disruptive Installation : Go to INST02-23 Step(15)-3.
   Disruptive Installation : Go to INST02-42 Step(20)-3.