

Cable No. 31 DKA-2P (2·P3) through SC BFR-L16L (6L·J501)

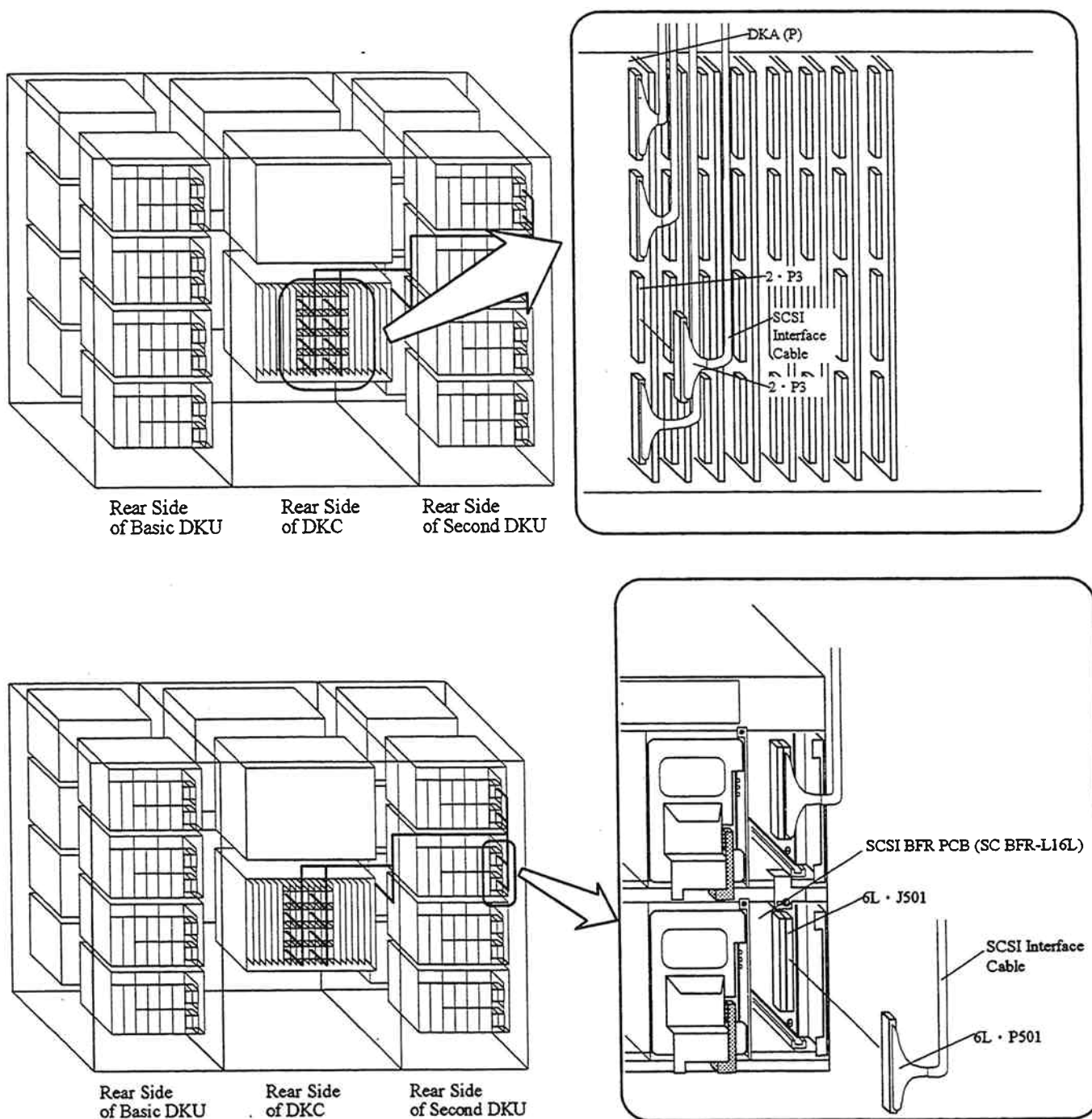


Fig. K-42 Replacement of SCSI Interface Cable

Cable No. 32 DKA-2P (2·P4) through SC BFR-L17L (7L·J501)

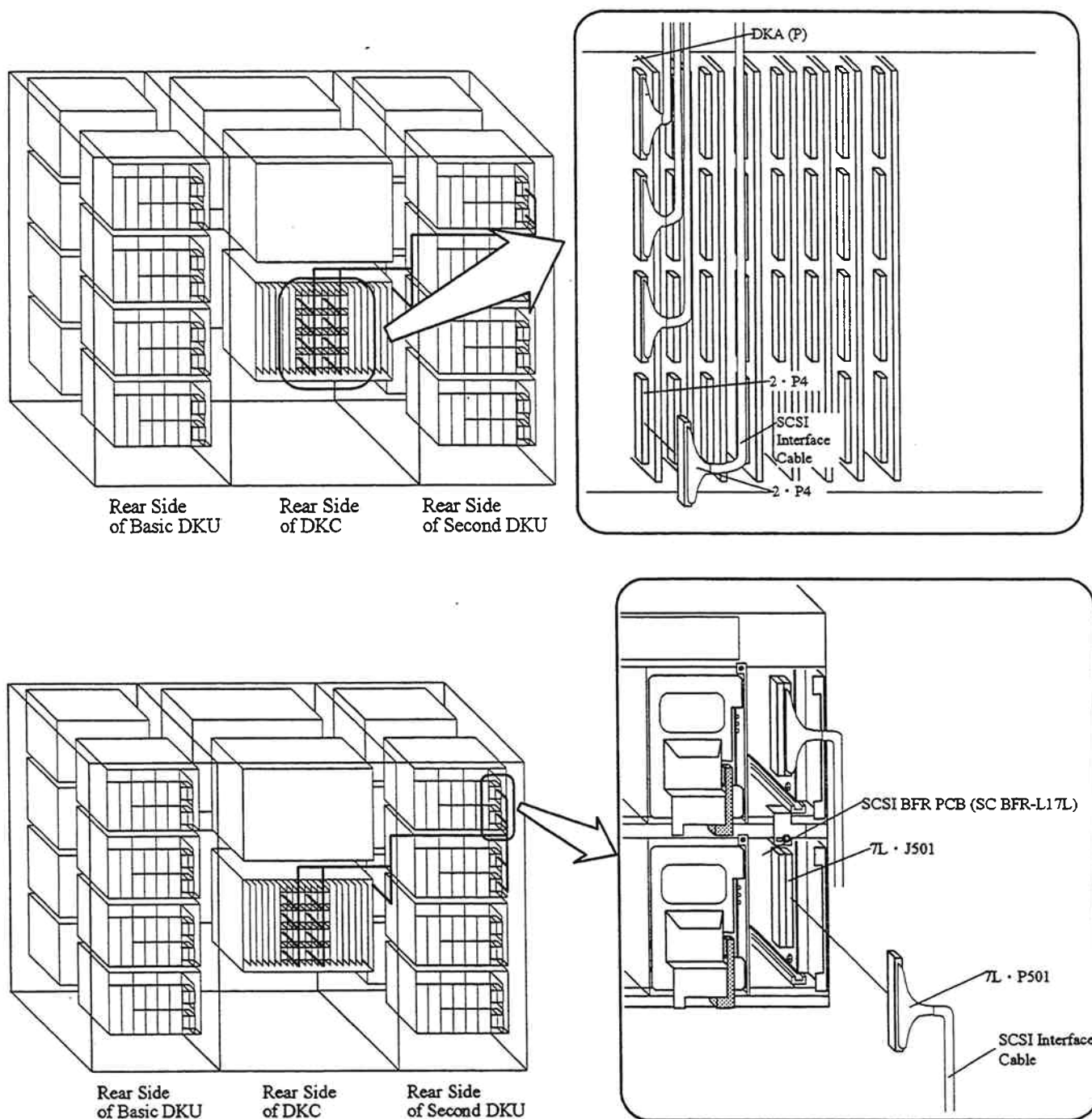


Fig. K-43 Replacement of SCSI Interface Cable

(4) Attach the Logic Box covers. Refer to SECTION 3.3.1 HOW TO OPEN / CLOSE THE DOOR [INST03-10].

(5) Fix the SCSI interface cables in the DKU chassis with the cable fixing wires and repeat binders.

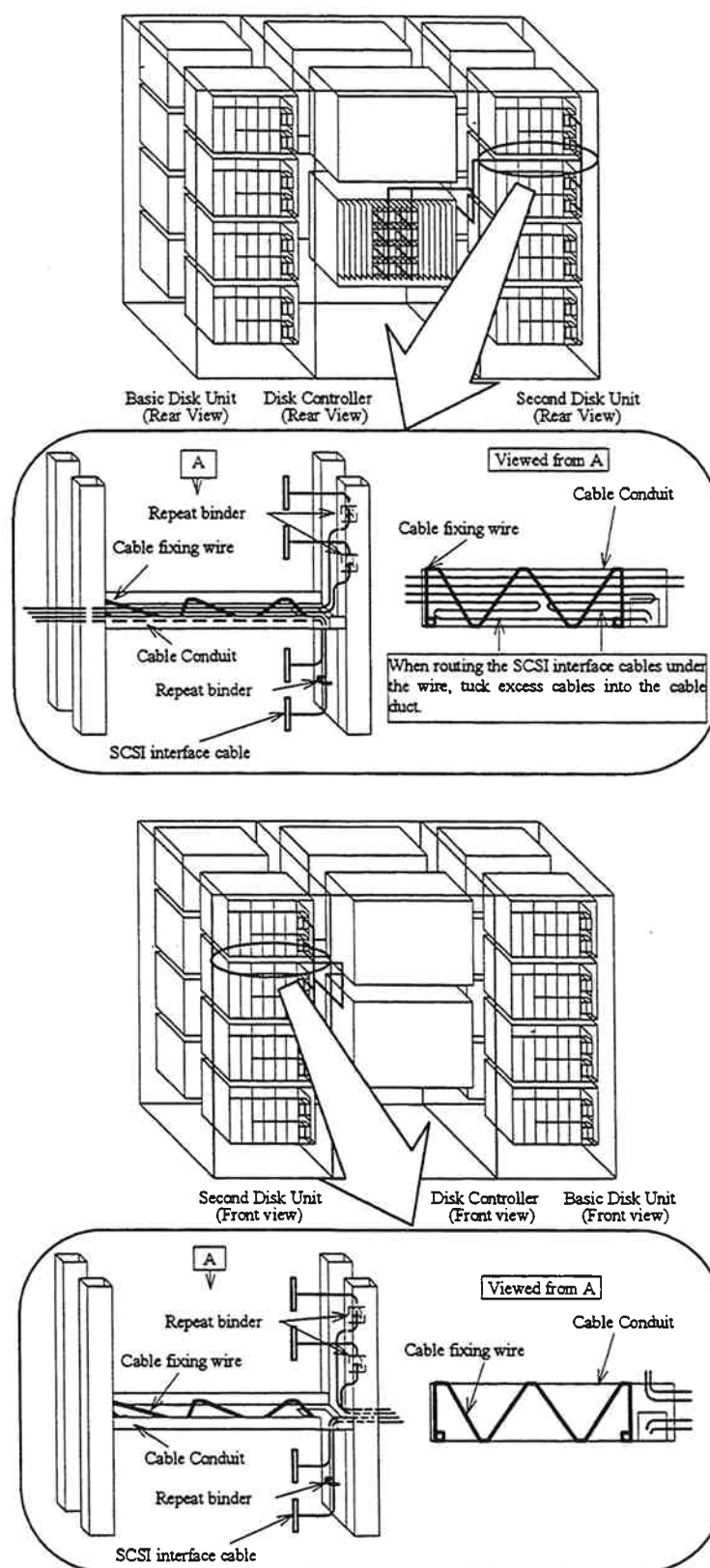


Fig. K-44 Fixation of the SCSI Interface Cables

(6) In case that there is 3rd/4th DKU, go to REP03-449A.

In case that there isn't 3rd/4th DKU, go to post-PROCEDURE h (REP04-190).

Cable No. 33-40 SC BFR-R10-R13U/L through SC BFR-R20-R23U/L

(1) Remove the cable fixing wires and repeat binders.

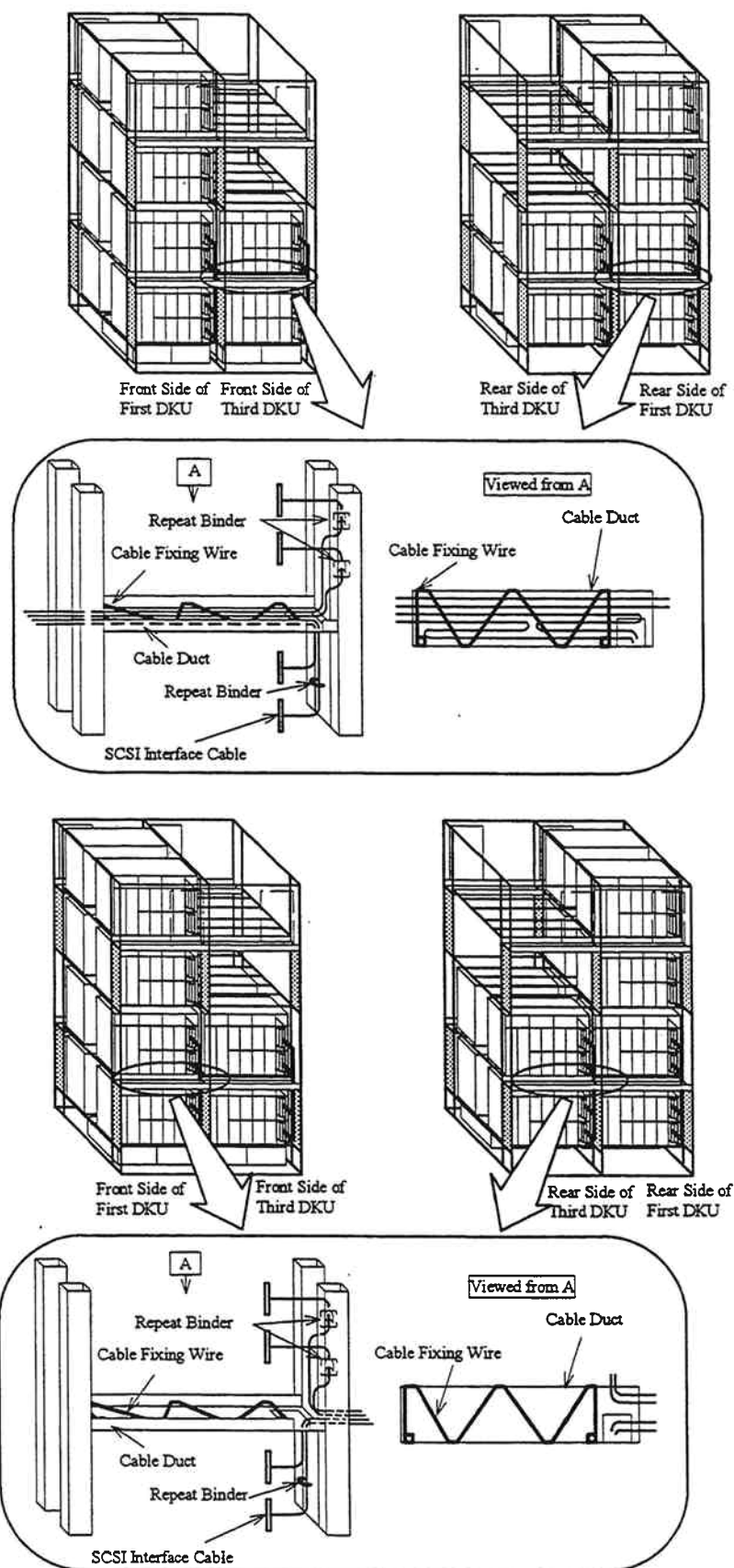


Fig. K-45 Removal of the cable fixing wires and repeat binders

(2) Replace the SCSI interface cable. The SCSI interface cable should be wired in the same way as the previous route.

Cable No. 33 SC BFR-R10U (0U-J502) through SC BFR-R20U (0U-J501)

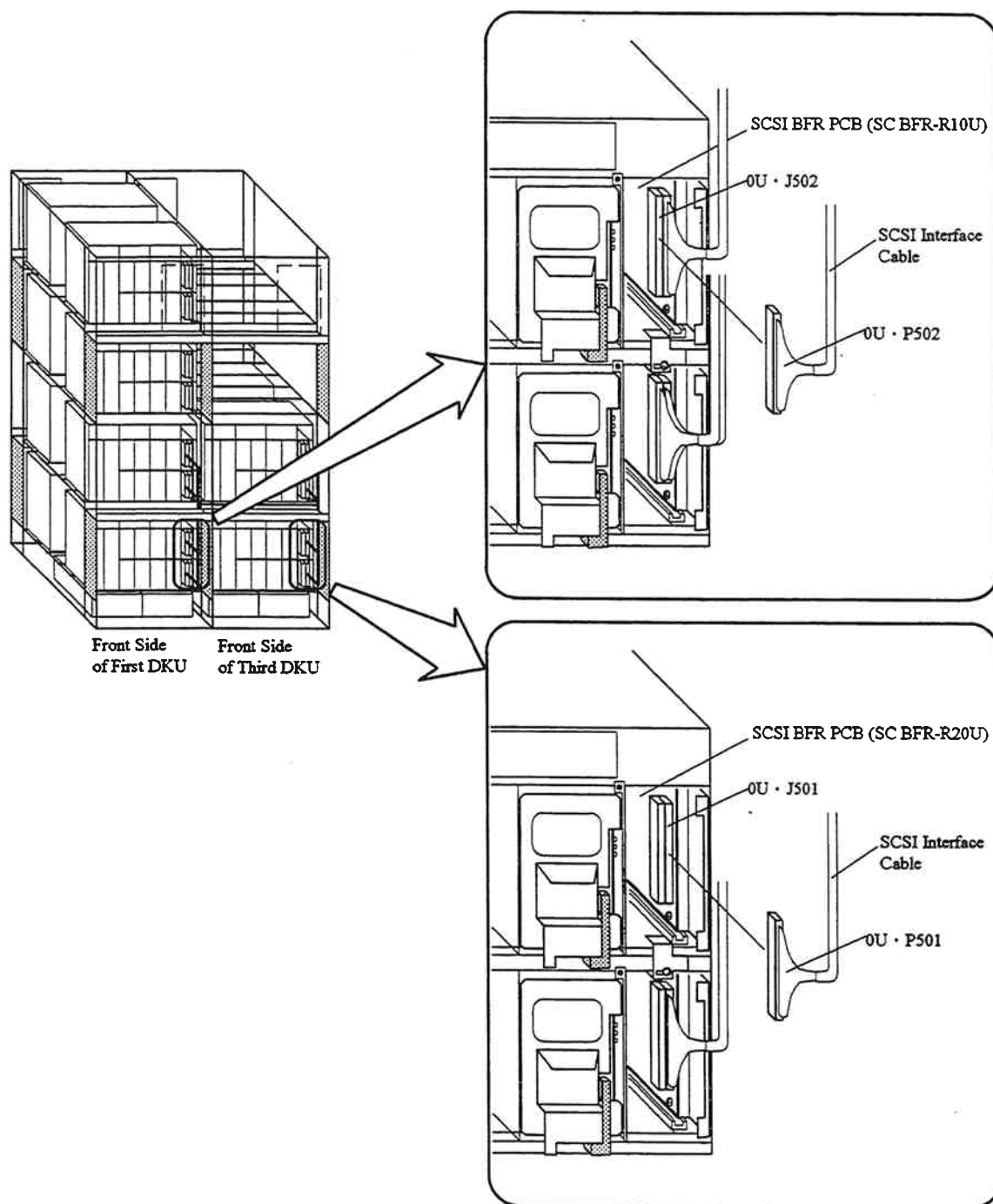


Fig. K-46 Replacement of SCSI Interface Cable

Cable No. 34 SC BFR-R11U (1U·J502) through SC BFR-R21U (1U·J501)

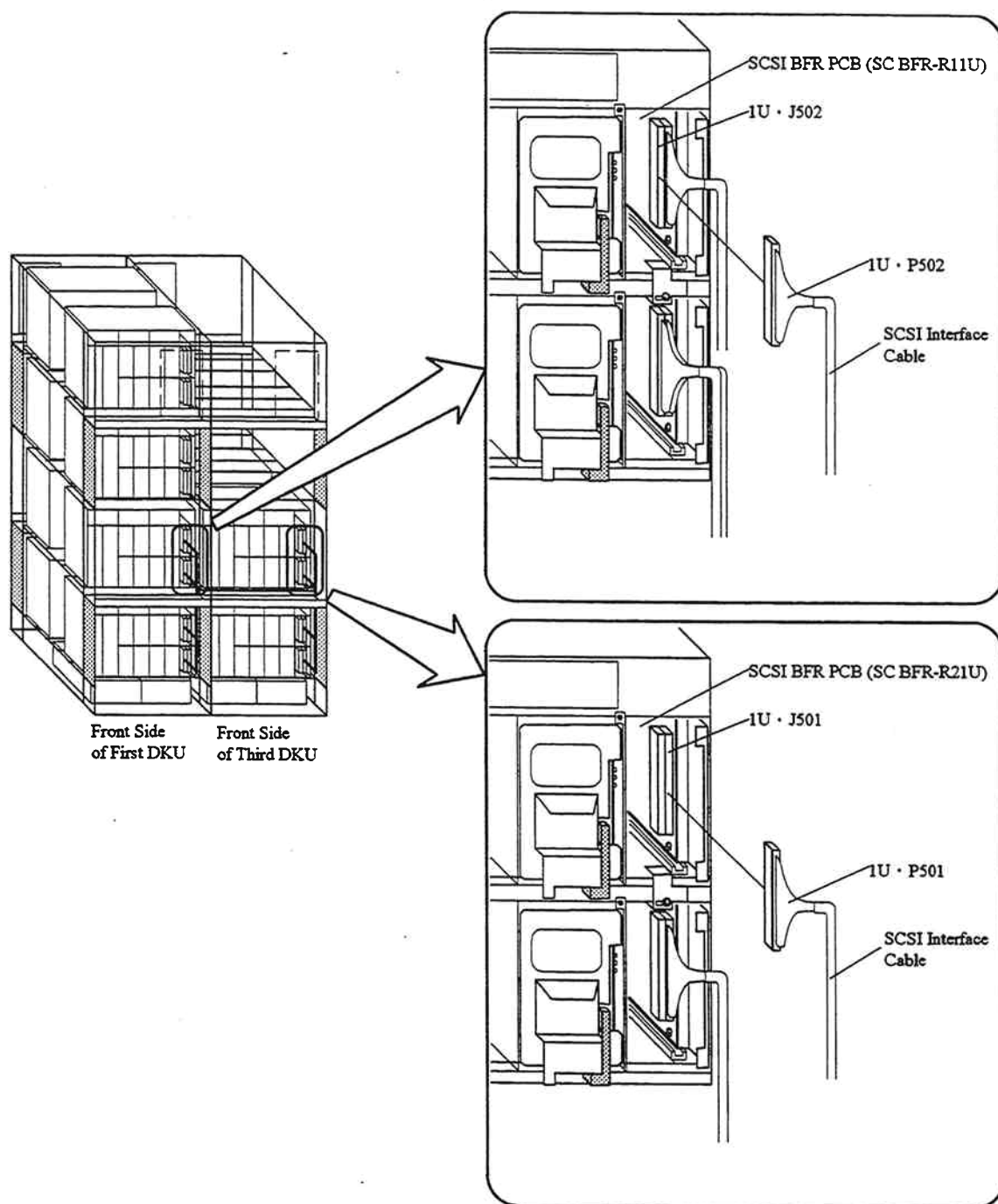


Fig. K-47 Replacement of SCSI Interface Cable

Cable No. 35 SC BFR-R12U (2U·J502) through SC BFR-R22U (2U·J501)

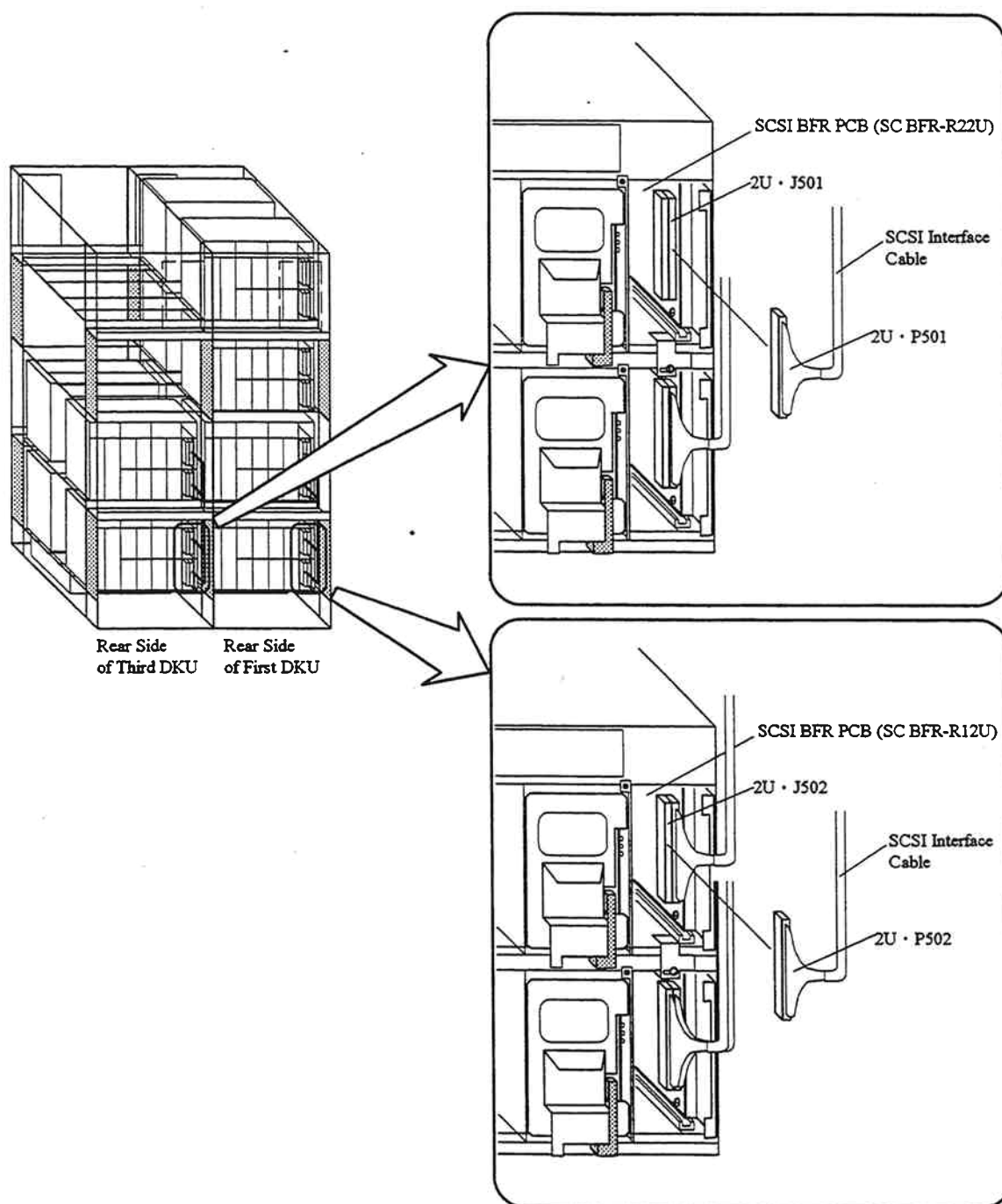


Fig. K-48 Replacement of SCSI Interface Cable

Cable No. 36 SC BFR-R13U (3U-J502) through SC BFR-R23U (3U-J501)

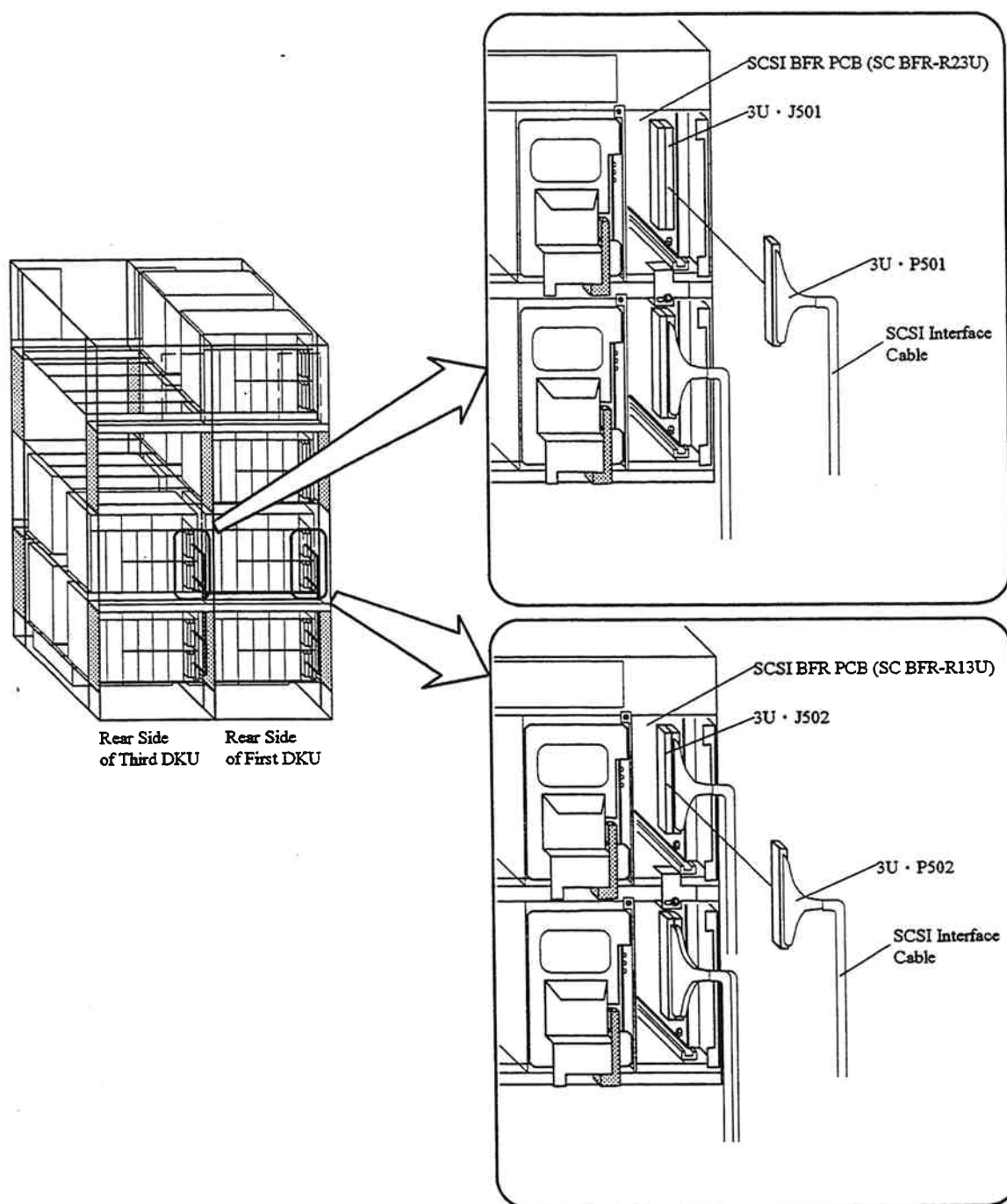


Fig. K-49 Replacement of SCSI Interface Cable

Cable No. 37 SC BFR-R10L (0L·J502) through SC BFR-R20L (0L·J501)

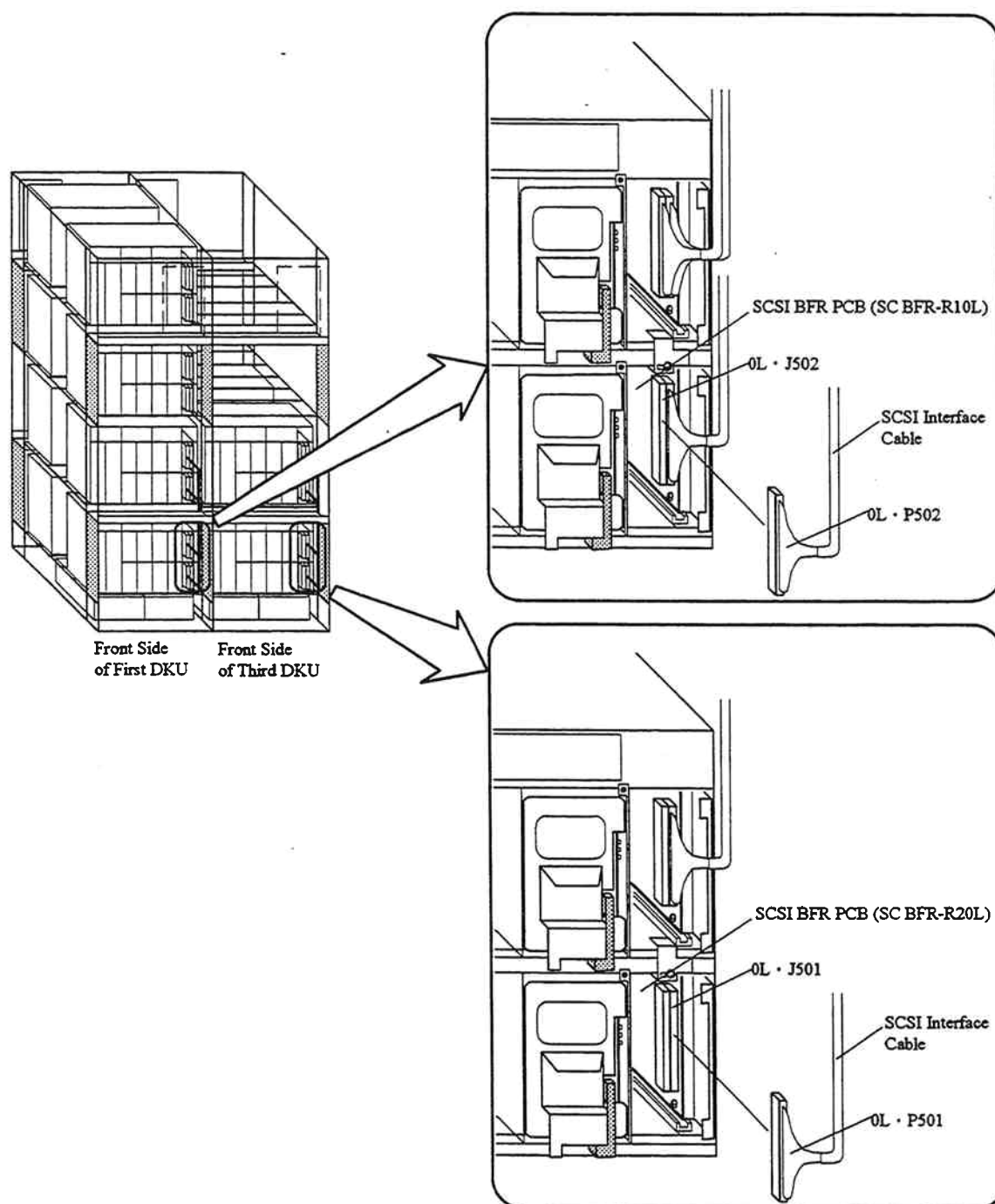


Fig. K-50 Replacement of SCSI Interface Cable

Cable No. 38 SC BFR-R11L (1L-J502) through SC BFR-R21L (1L-J501)

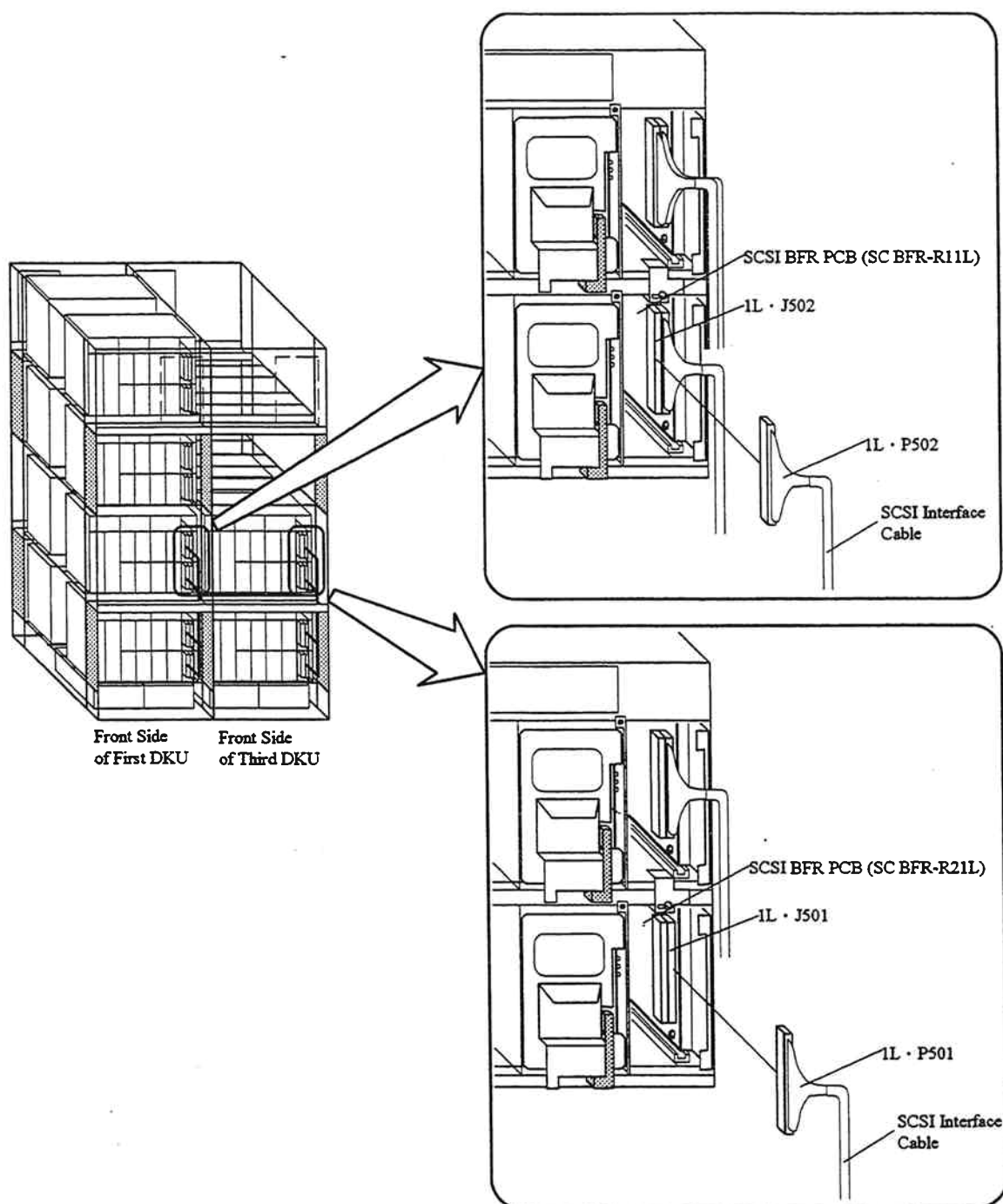


Fig. K-51 Replacement of SCSI Interface Cable

Cable No. 39 SC BFR-R12L (2L·J502) through SC BFR-R22L (2L·J501)

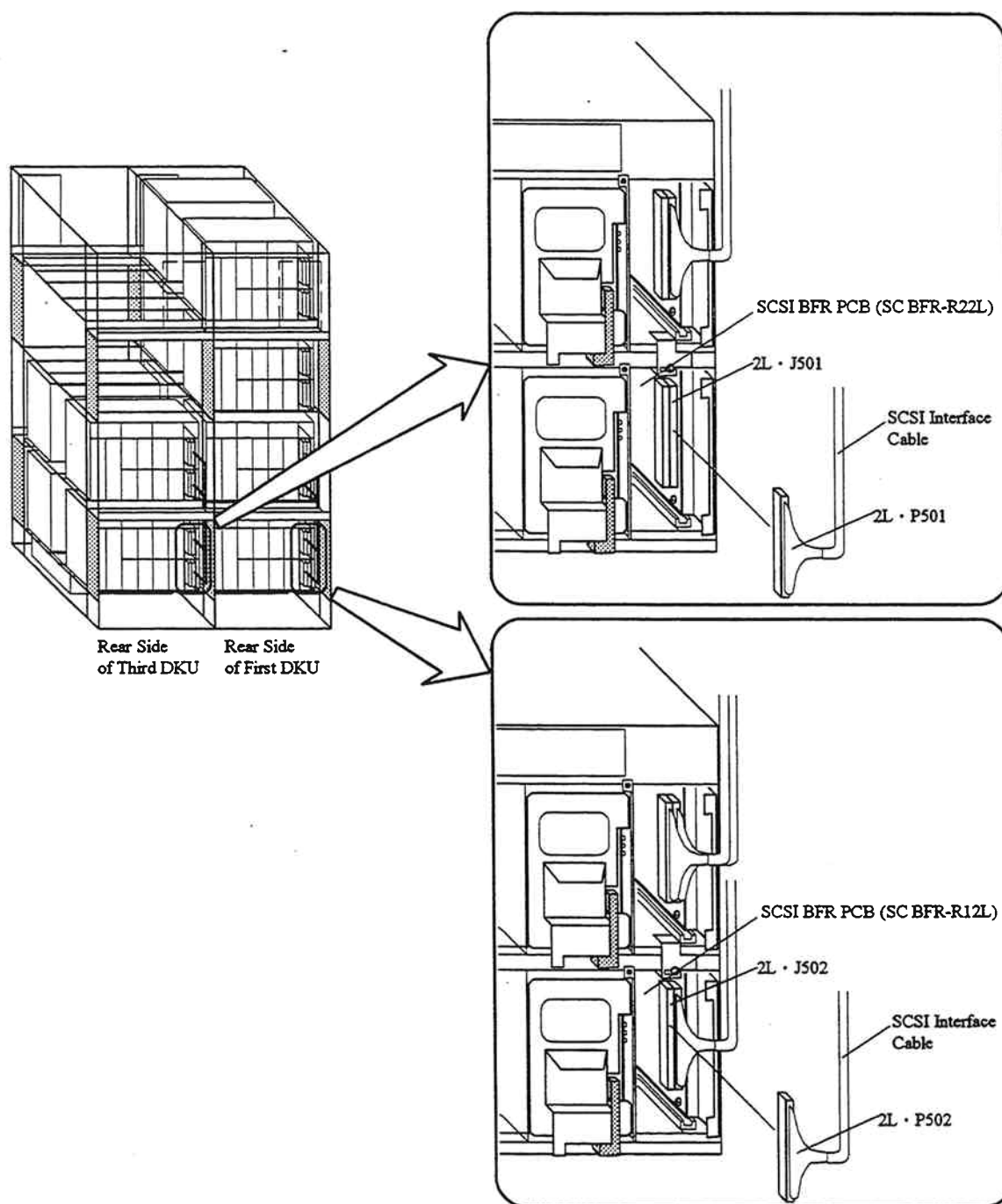


Fig. K-52 Replacement of SCSI Interface Cable

Cable No. 40 SC BFR-R13L (3L-J502) through SC BFR-R23L (3L-J501)

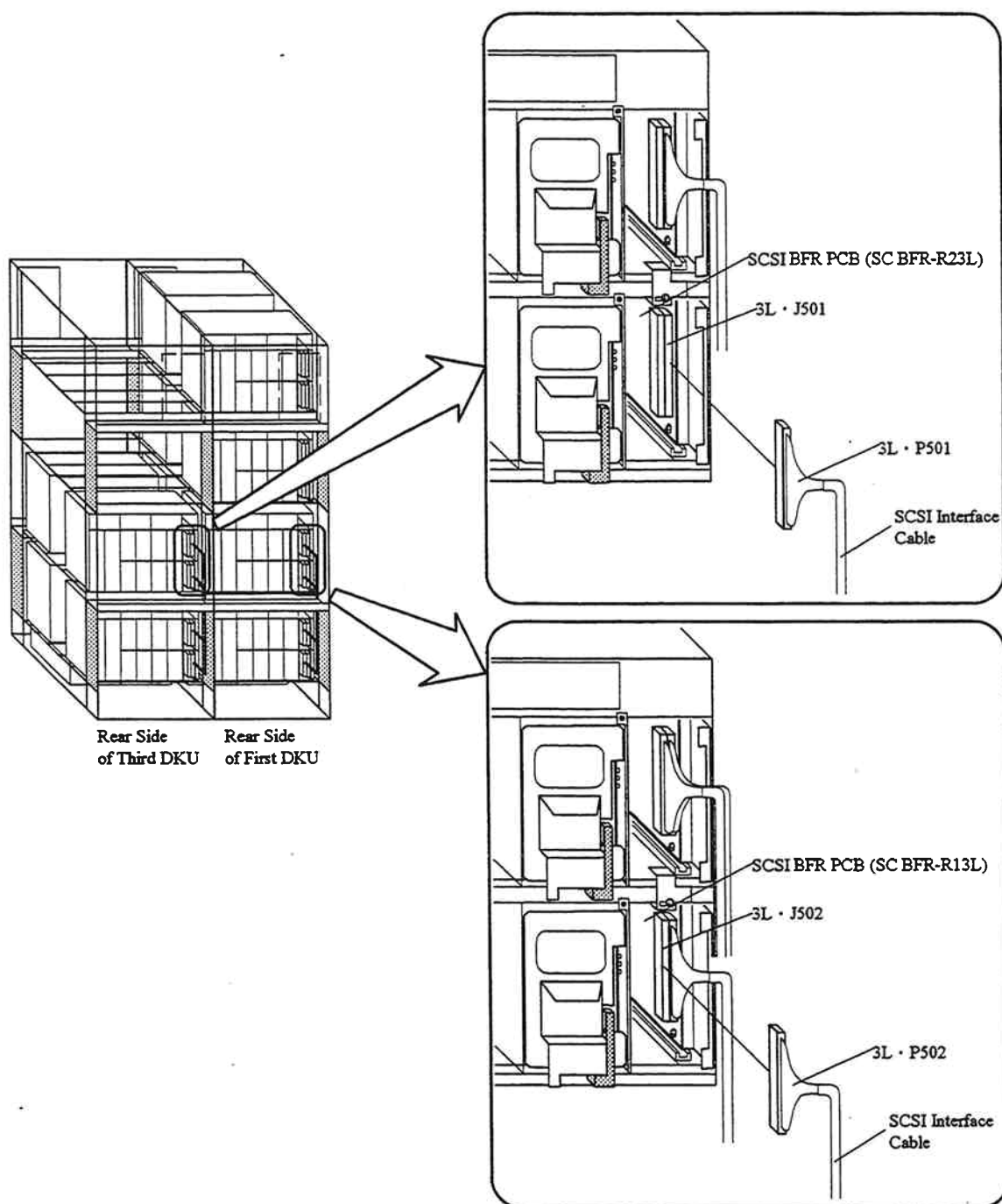


Fig K-53 Replacement of SCSI Interface Cable

(3) Fix the SCSI interface cables in the DKU chassis with the cable fixing wires and repeat binders.

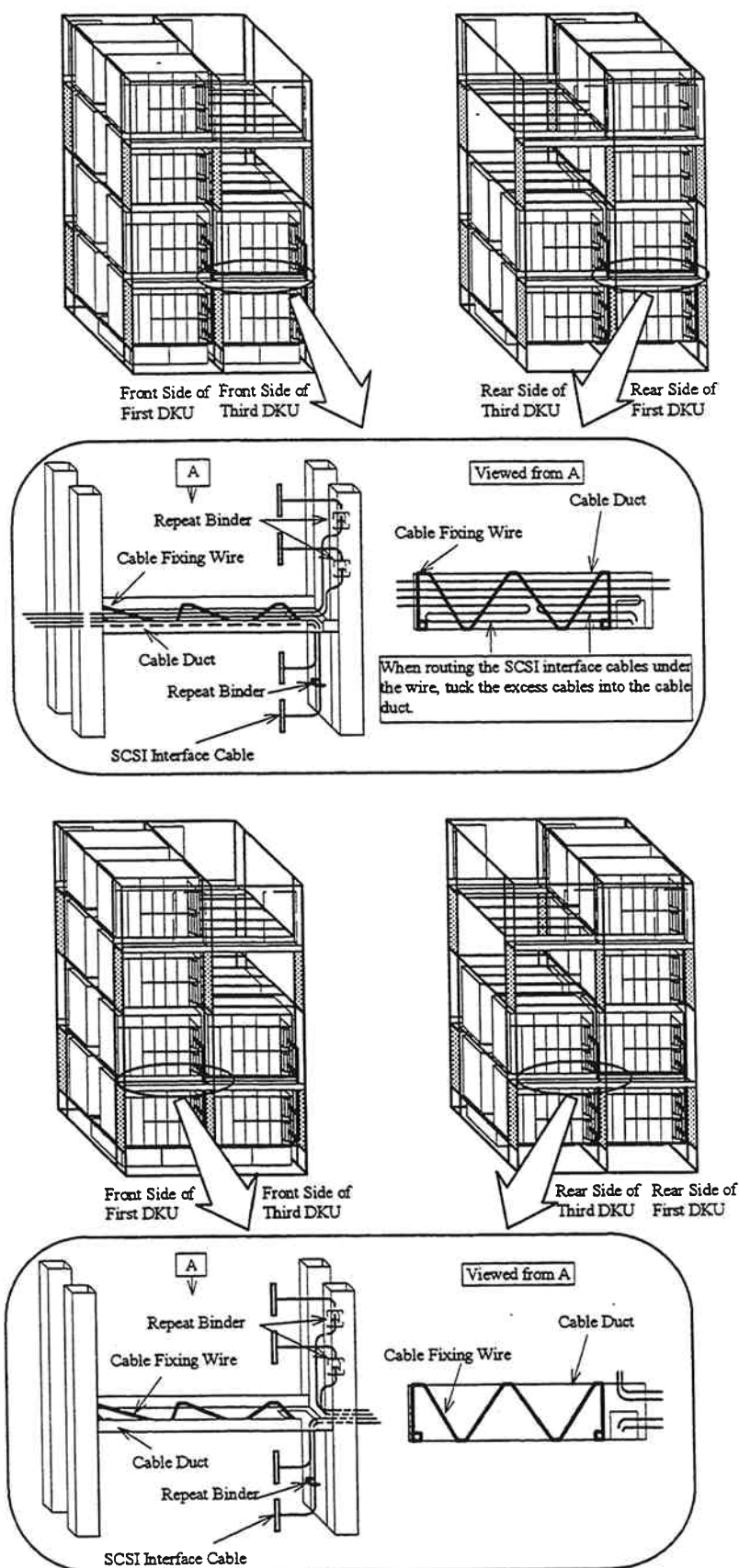


Fig. K-54 Fixation of the SCSI Interface Cables

(4) Go to post-PROCEDURE h (REP04-190).

Cable No. 41-48 SC BFR-R14-R17U/L through SC BFR-R24-R27U/L

(1) Remove the cable fixing wires and repeat binders.

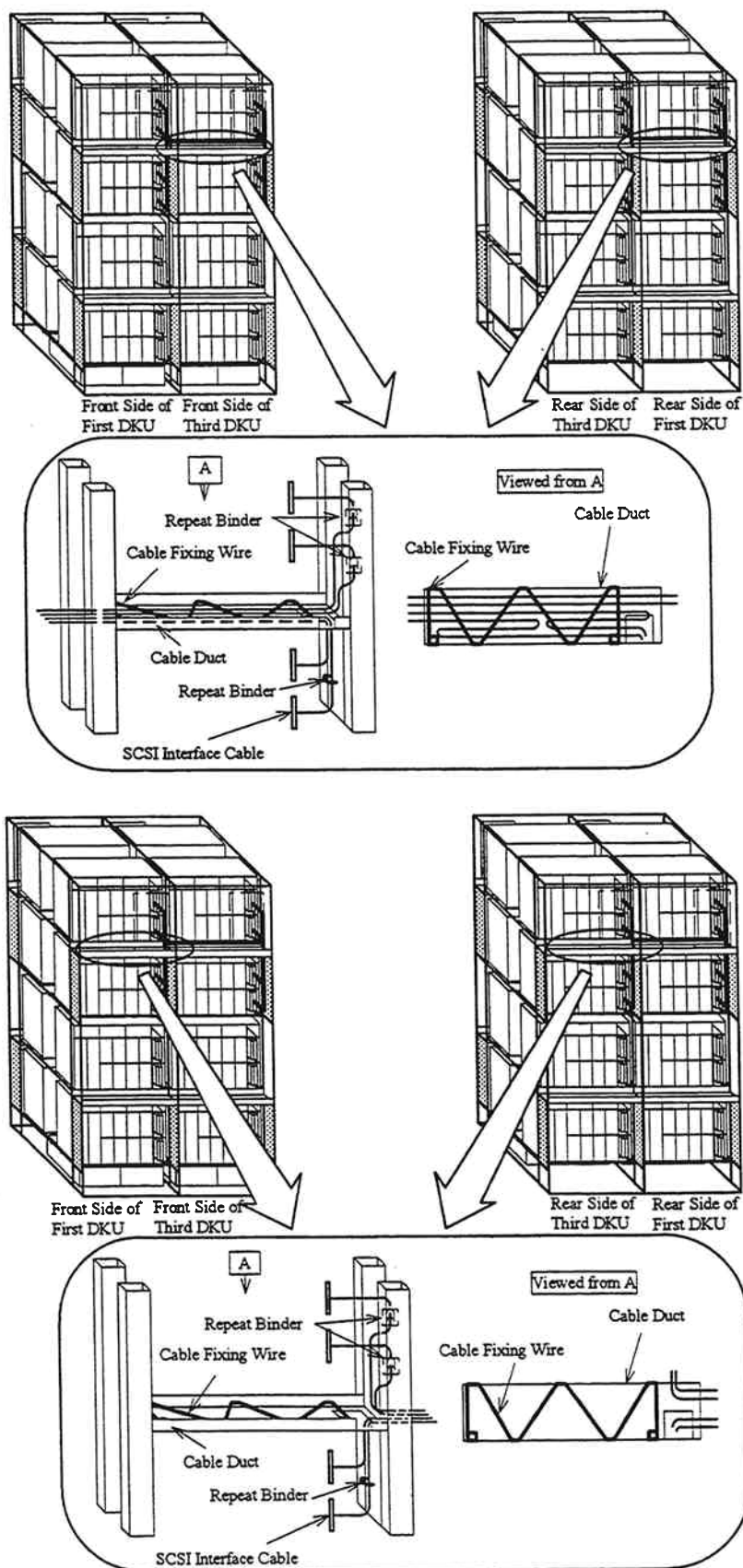


Fig. K-55 Removal of the cable fixing wires and repeat binders

(2) Replace the SCSI interface cable. The SCSI interface cable should be wired in the same way as the previous route.

Cable No. 41 SC BFR-R14U (4U·J502) through SC BFR-R24U (4U·J501)

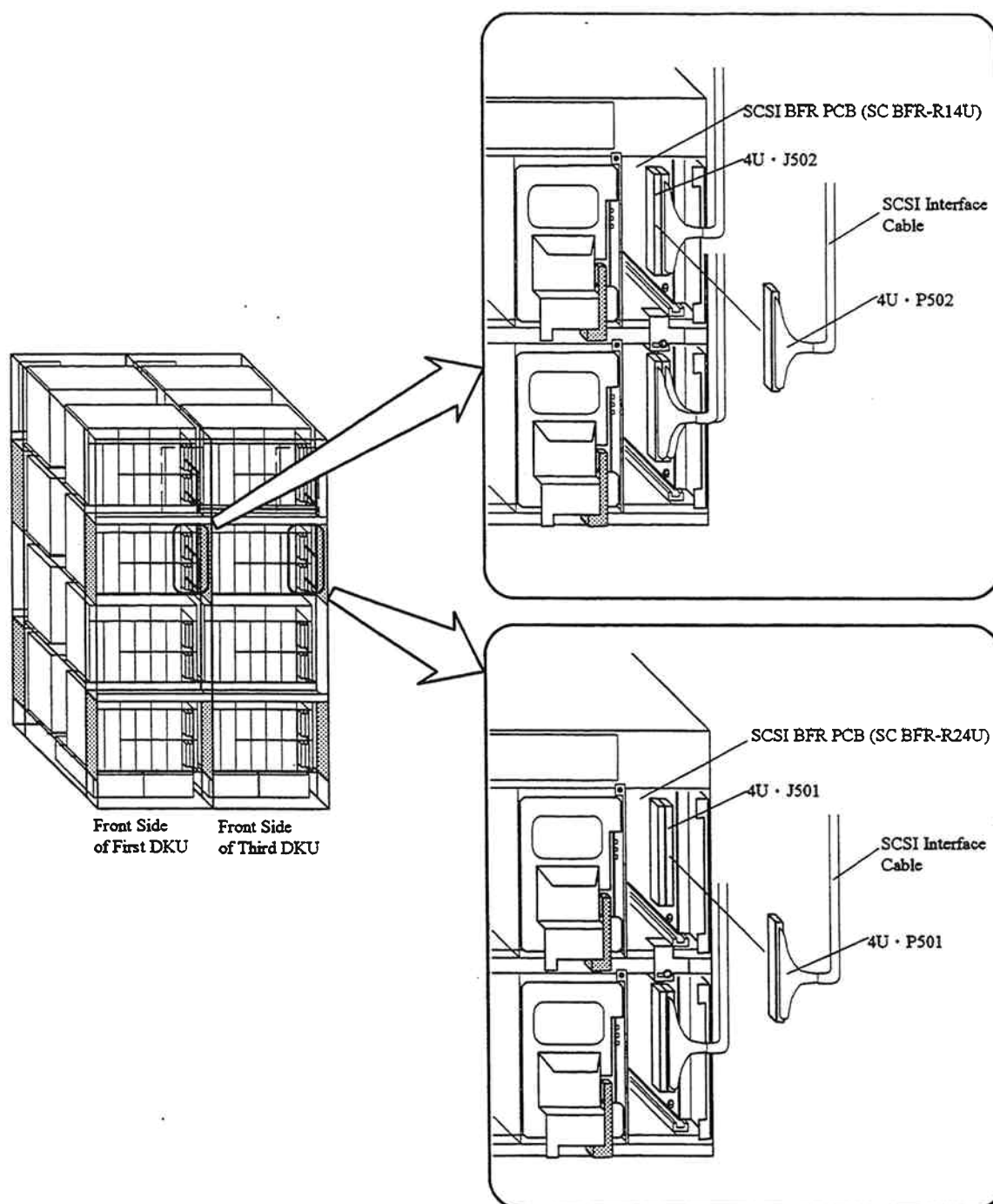


Fig. K-56 Replacement of SCSI Interface Cable

Cable No. 42 SC BFR-R15U (5U-J502) through SC BFR-R25U (5U-J501)

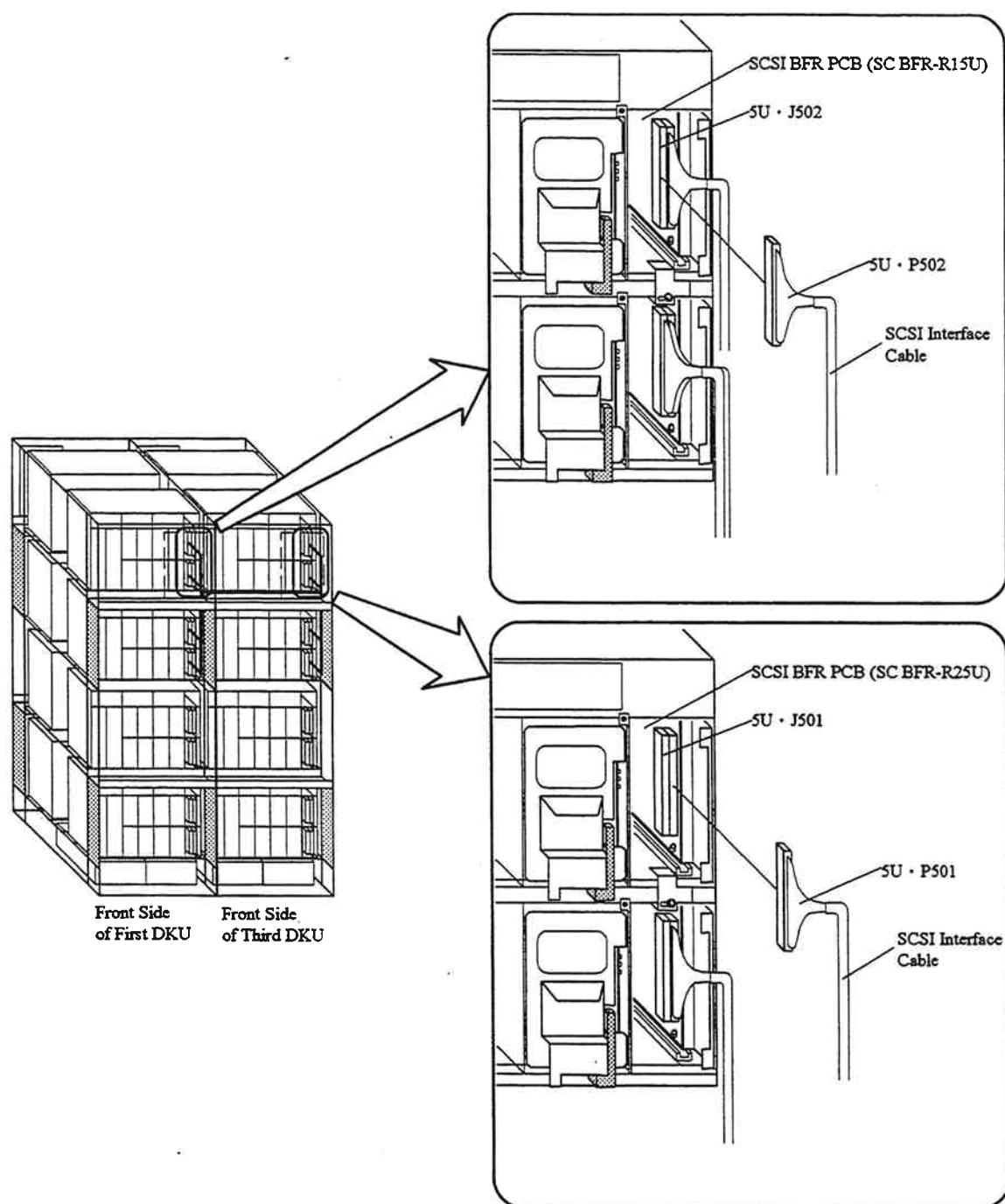


Fig. K-57 Replacement of SCSI Interface Cable

Cable No. 43 SC BFR-R16U (6U·J502) through SC BFR-R26U (6U·J501)

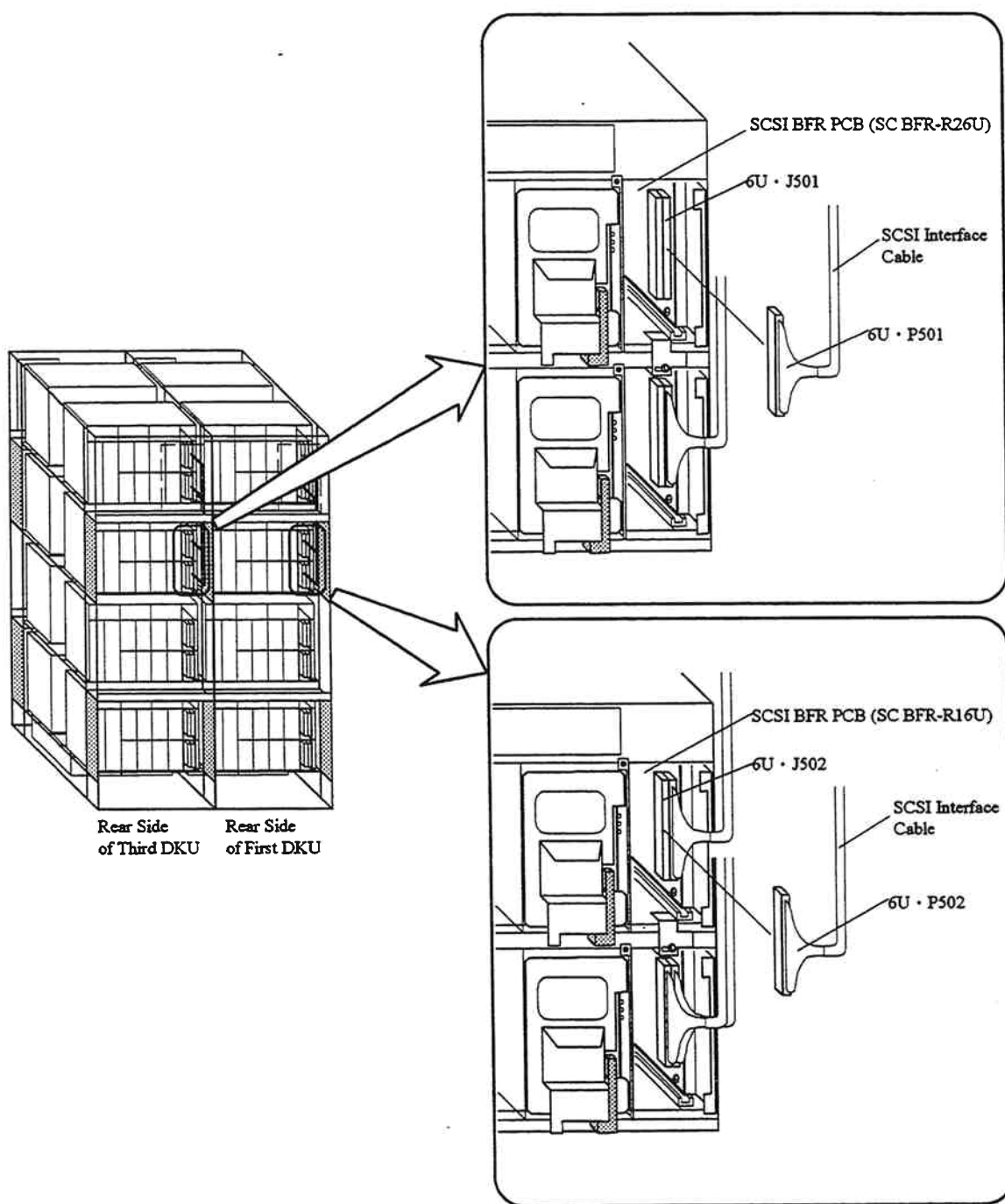


Fig. K-58 Replacement of SCSI Interface Cable

Cable No. 44 SC BFR-R17U (7U·J502) through SC BFR-R27U (7U·J501)

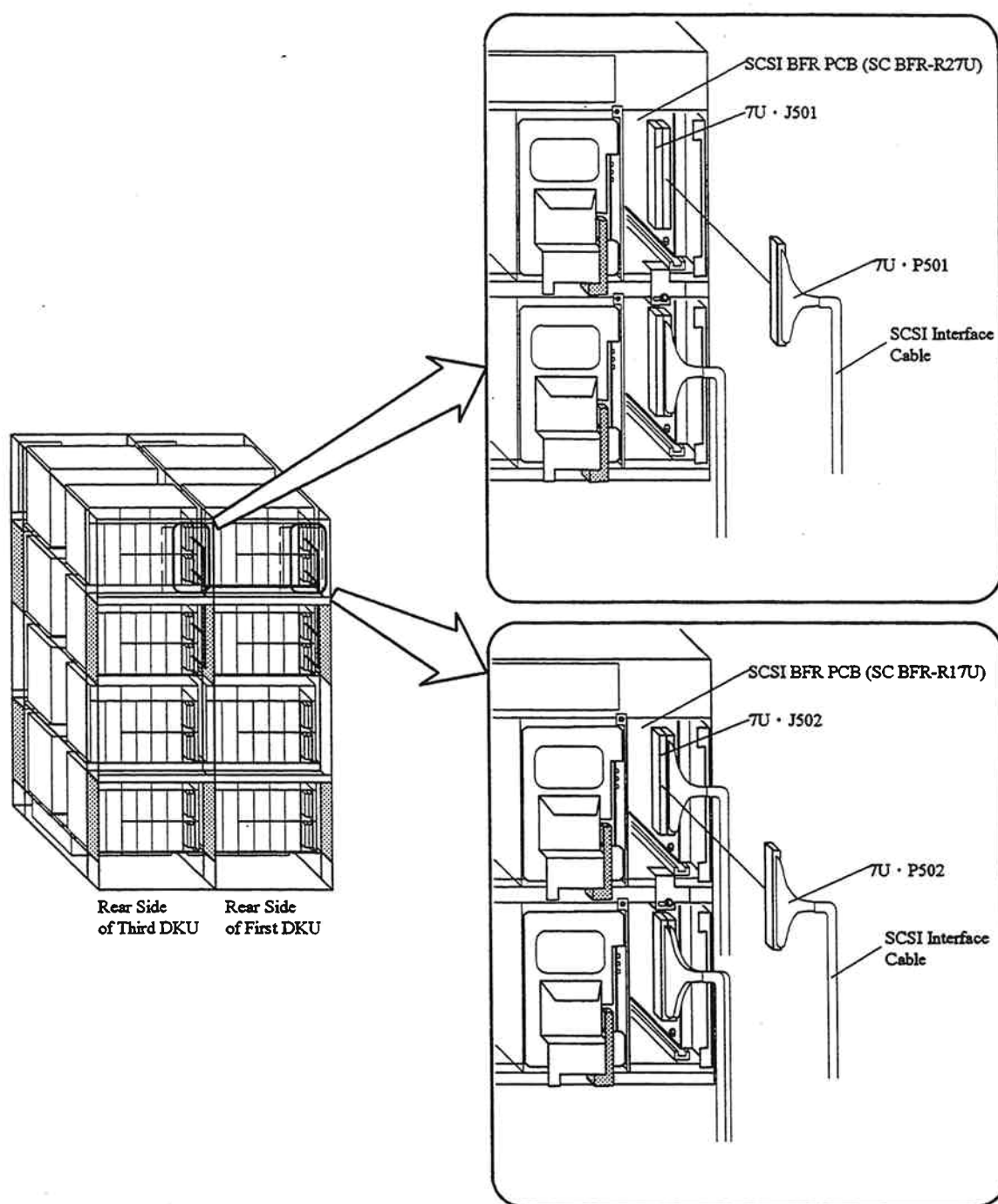


Fig. K-59 Replacement of SCSI Interface Cable

Cable No. 45 SC BFR-R14L (4L·J502) through SC BFR-R24L (4L·J501)

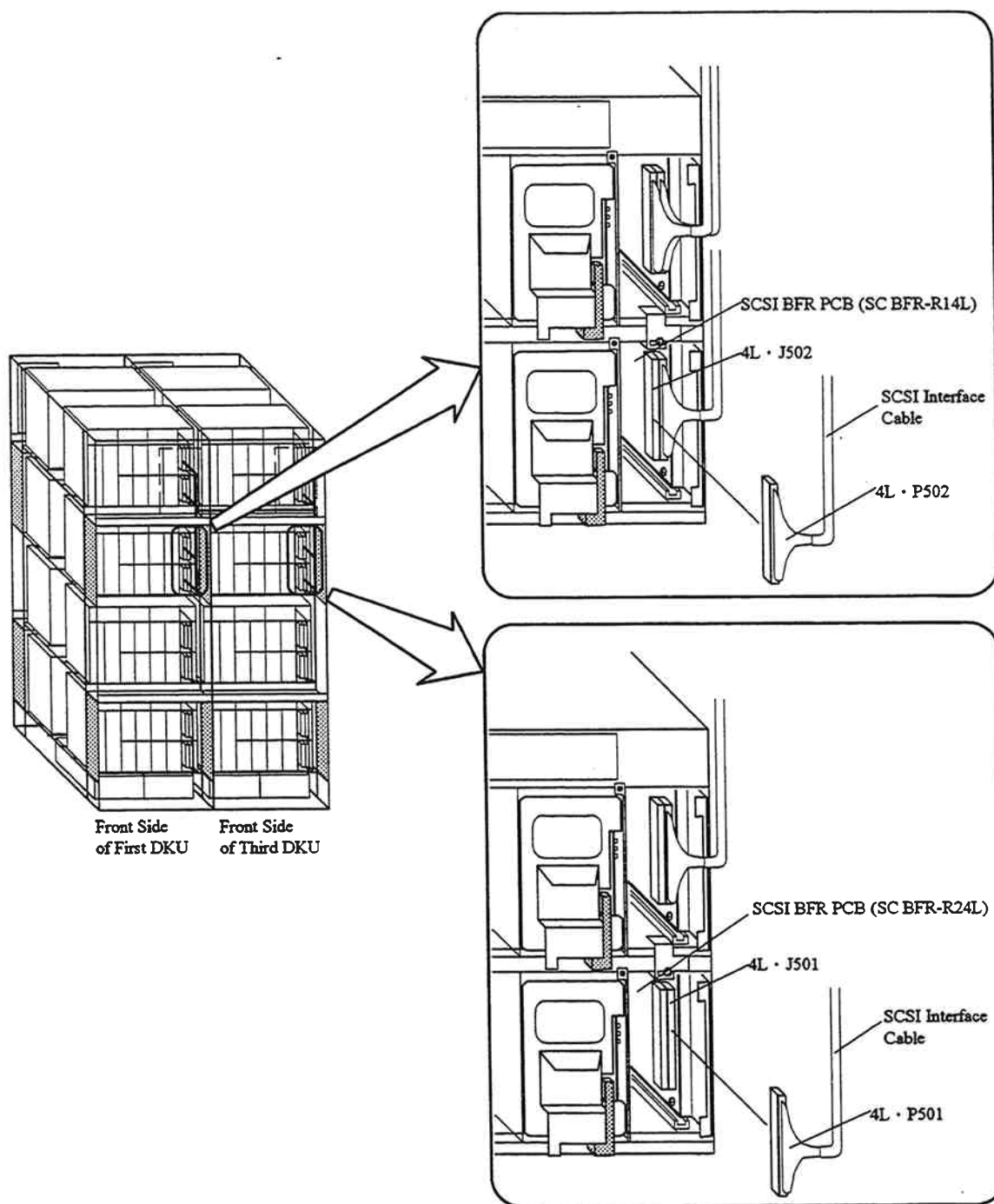


Fig. K-60 Replacement of SCSI Interface Cable

Cable No. 46 SC BFR-R15L (5L·J502) through SC BFR-R25L (5L·J501)

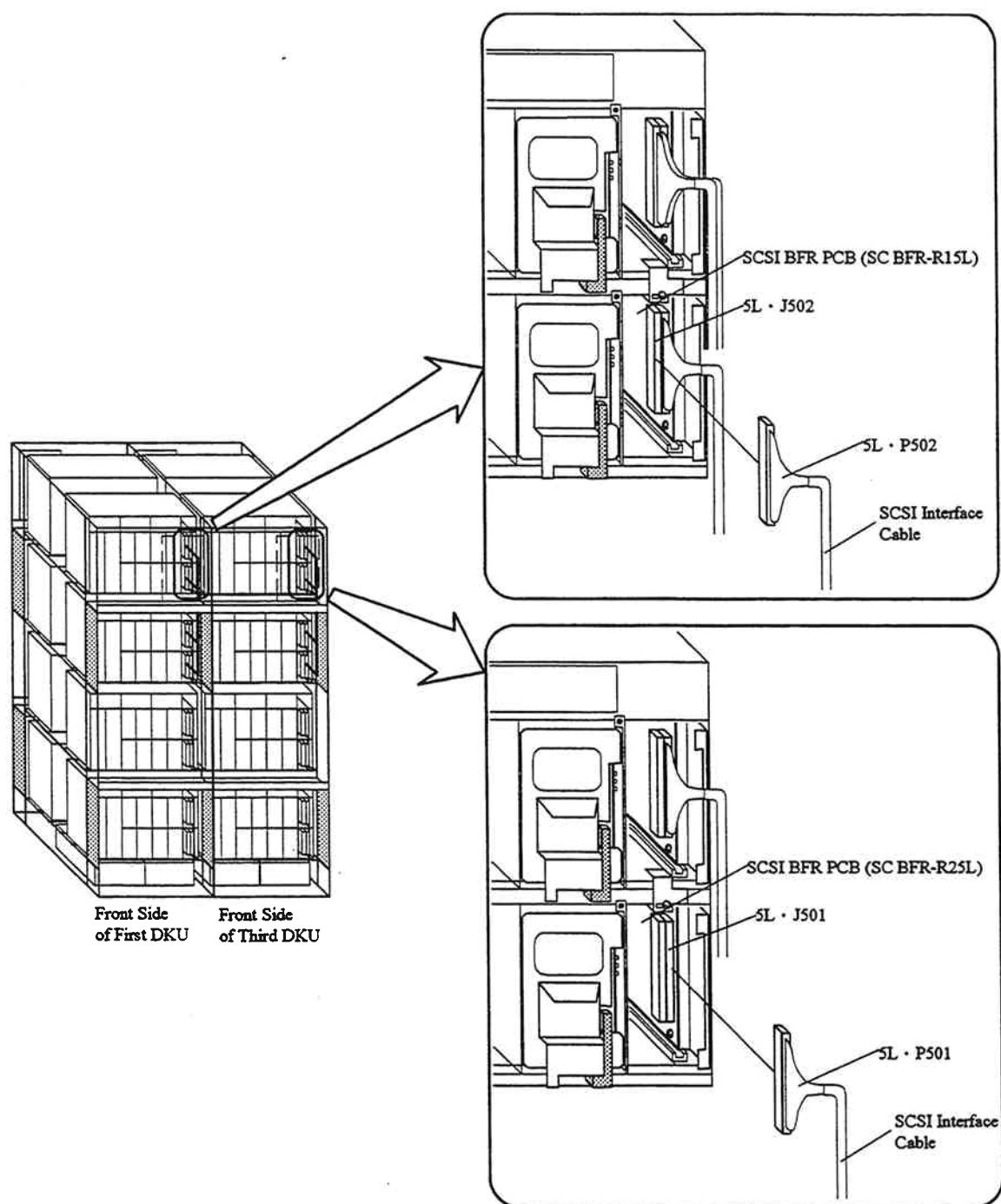


Fig. K-61 Replacement of SCSI Interface Cable

Cable No. 47 SC BFR-R16L (6L-J502) through SC BFR-R26L (6L-J501)

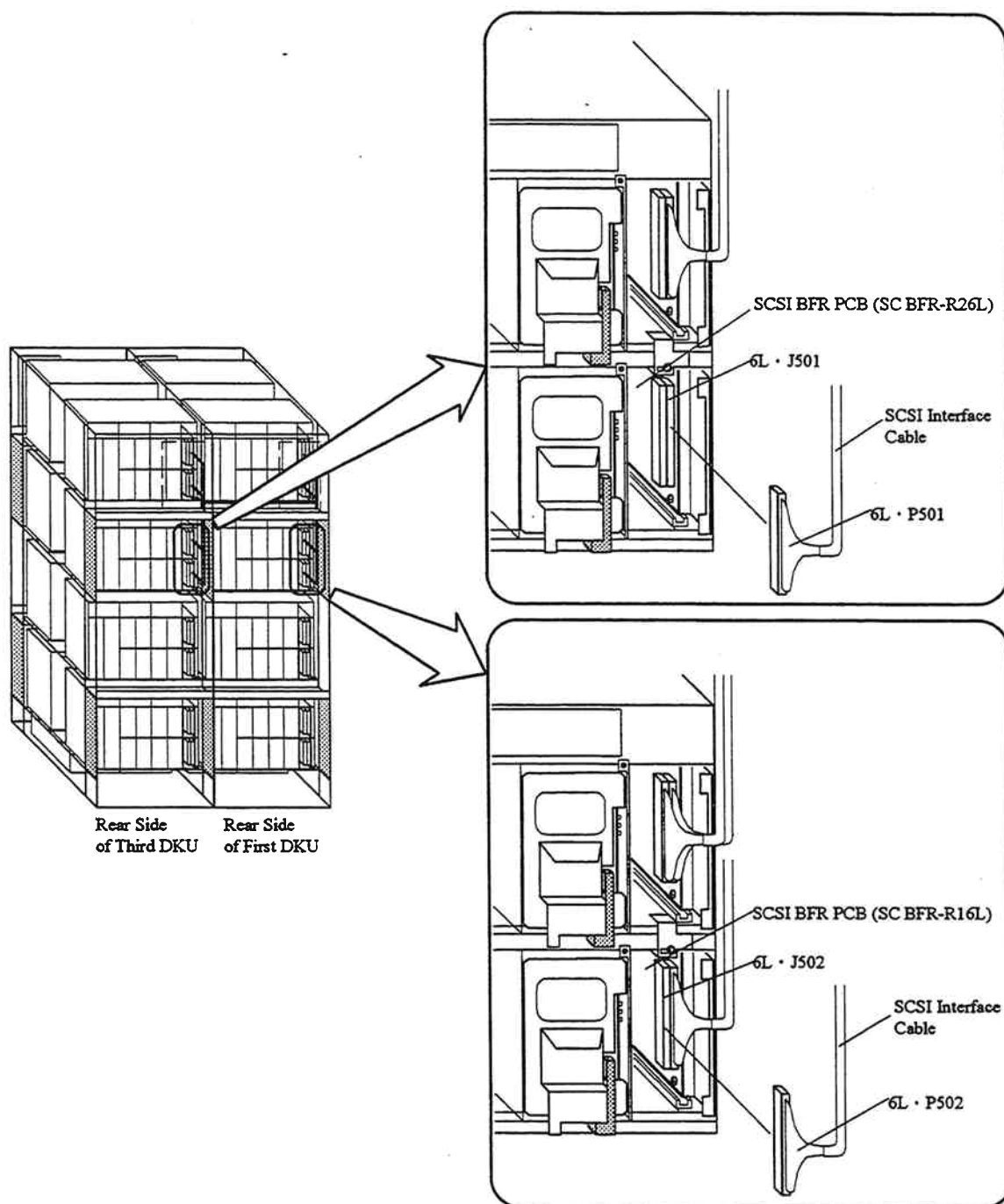


Fig. K-62 Replacement of SCSI Interface Cable

Cable No. 48 SC BFR-R17L (7L-J502) through SC BFR-R27L (7L-J501)

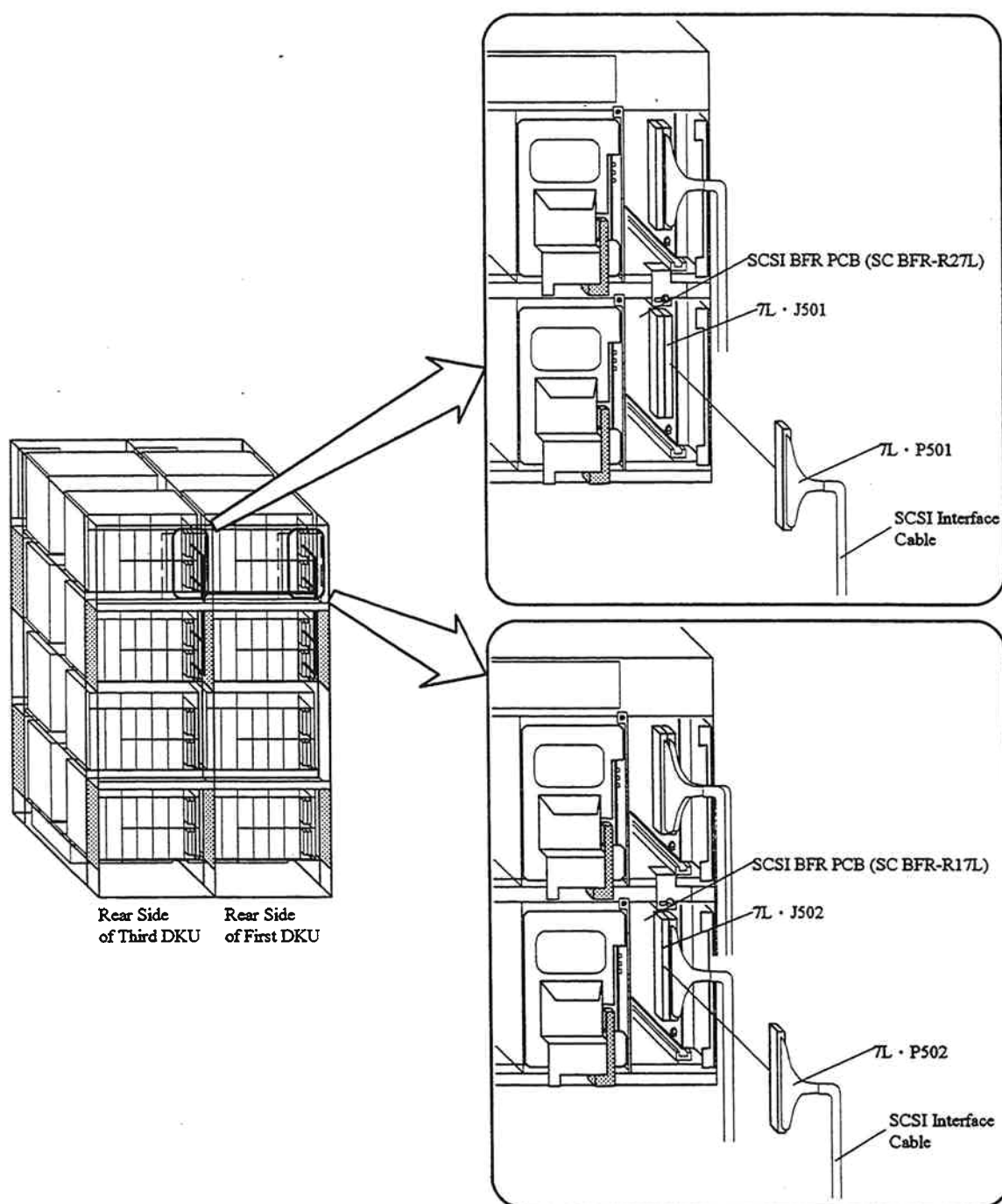


Fig. K-63 Replacement of SCSI Interface Cable

(3) Fix the SCSI interface cables in the DKU chassis with the cable fixing wires and repeat binders.

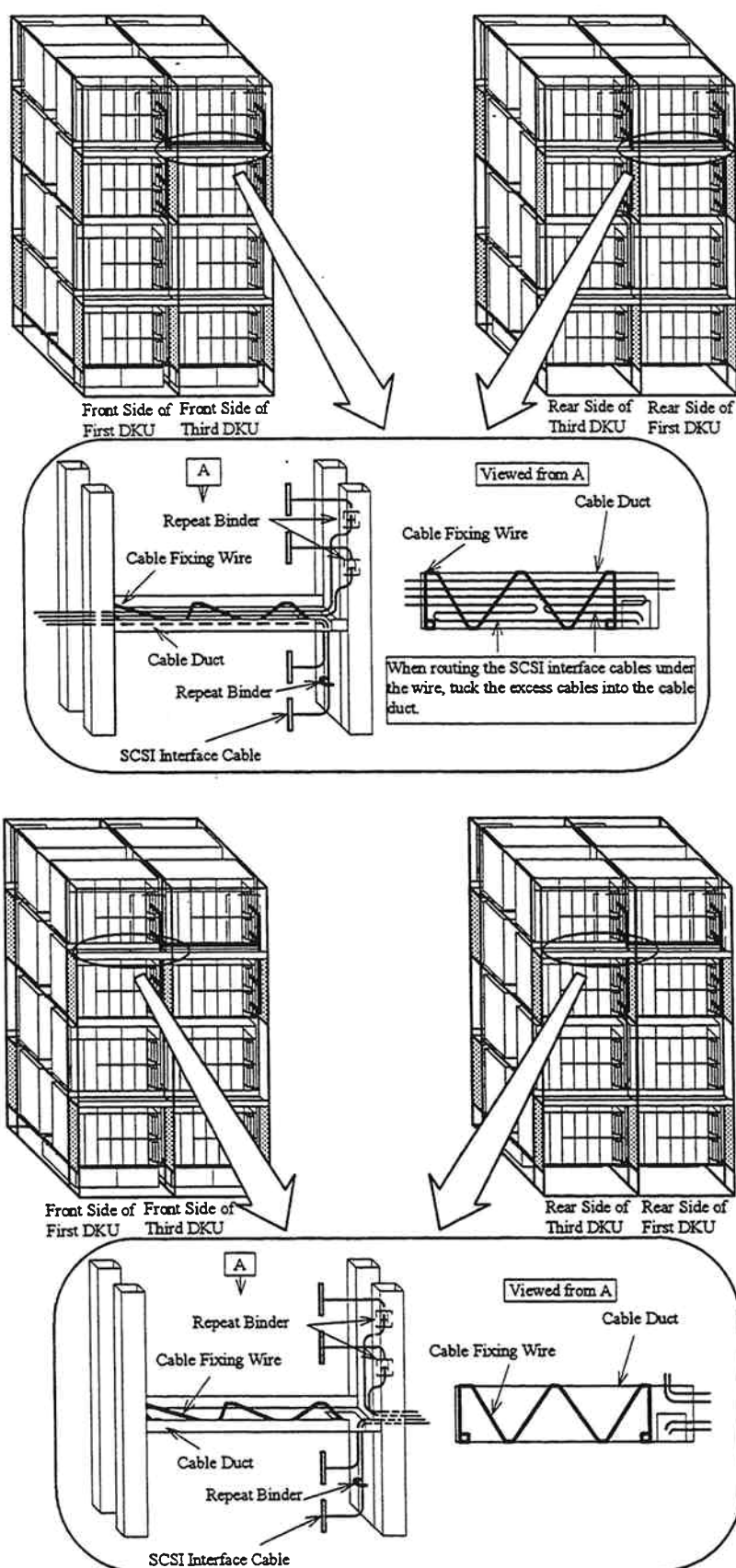


Fig. K-64 Fixation of the SCSI Interface Cables

(4) Go to post-PROCEDURE h (REP04-190).

Cable No. 49-56 SC BFR-L10-L13U/L through SC BFR-L20-L23U/L

(1) Remove the cable fixing wires and repeat binders.

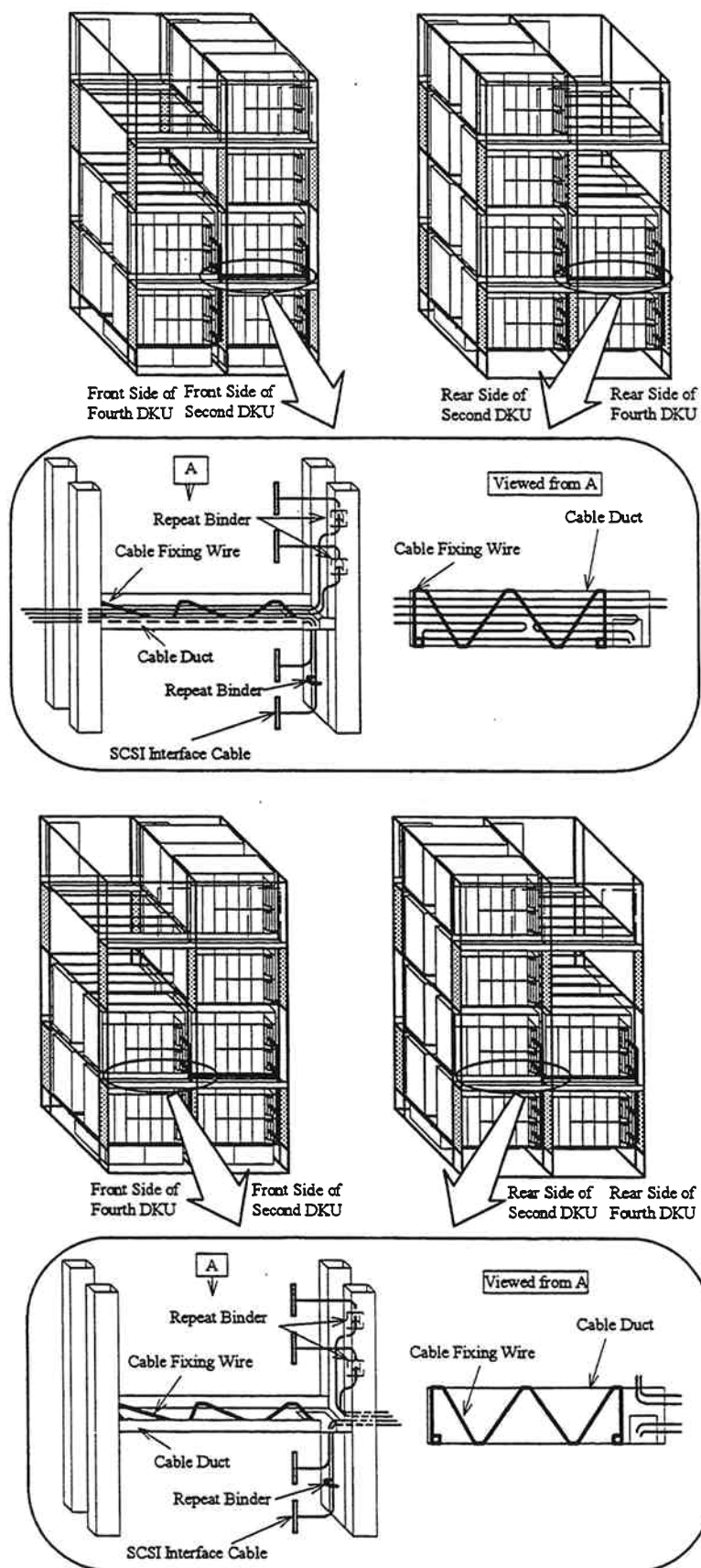


Fig. K-65 Removal of the cable fixing wires and repeat binders

(2) Replace the SCSI interface cable. The SCSI interface cable should be wired in the same way as the previous route.

Cable No. 49 SC BFR-L10U (0U·J502) through SC BFR-L20U (0U·J501)

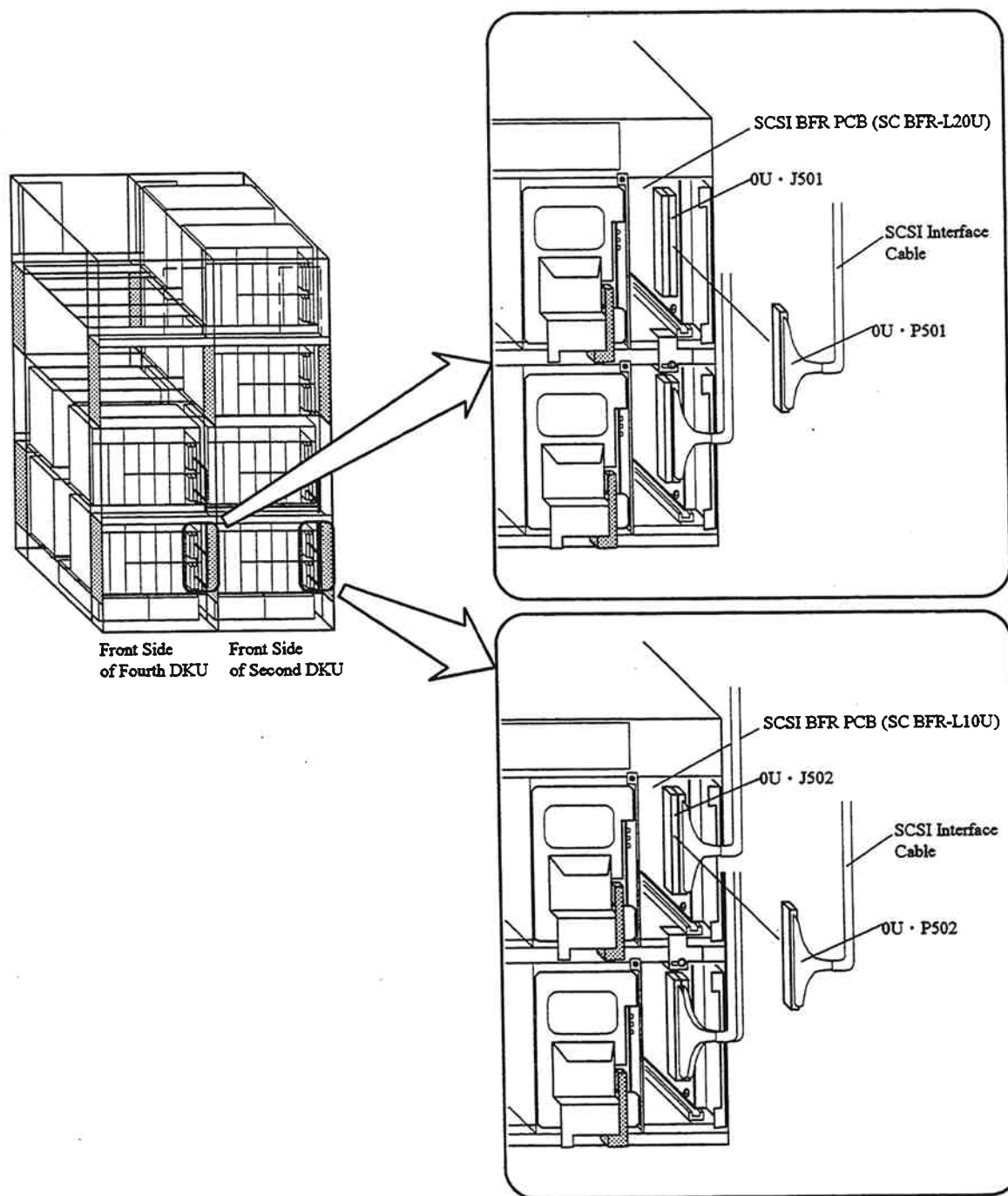


Fig. K-66 Replacement of SCSI Interface Cable

Cable No. 50 SC BFR-L11U (1U·J502) through SC BFR-L21U (1U·J501)

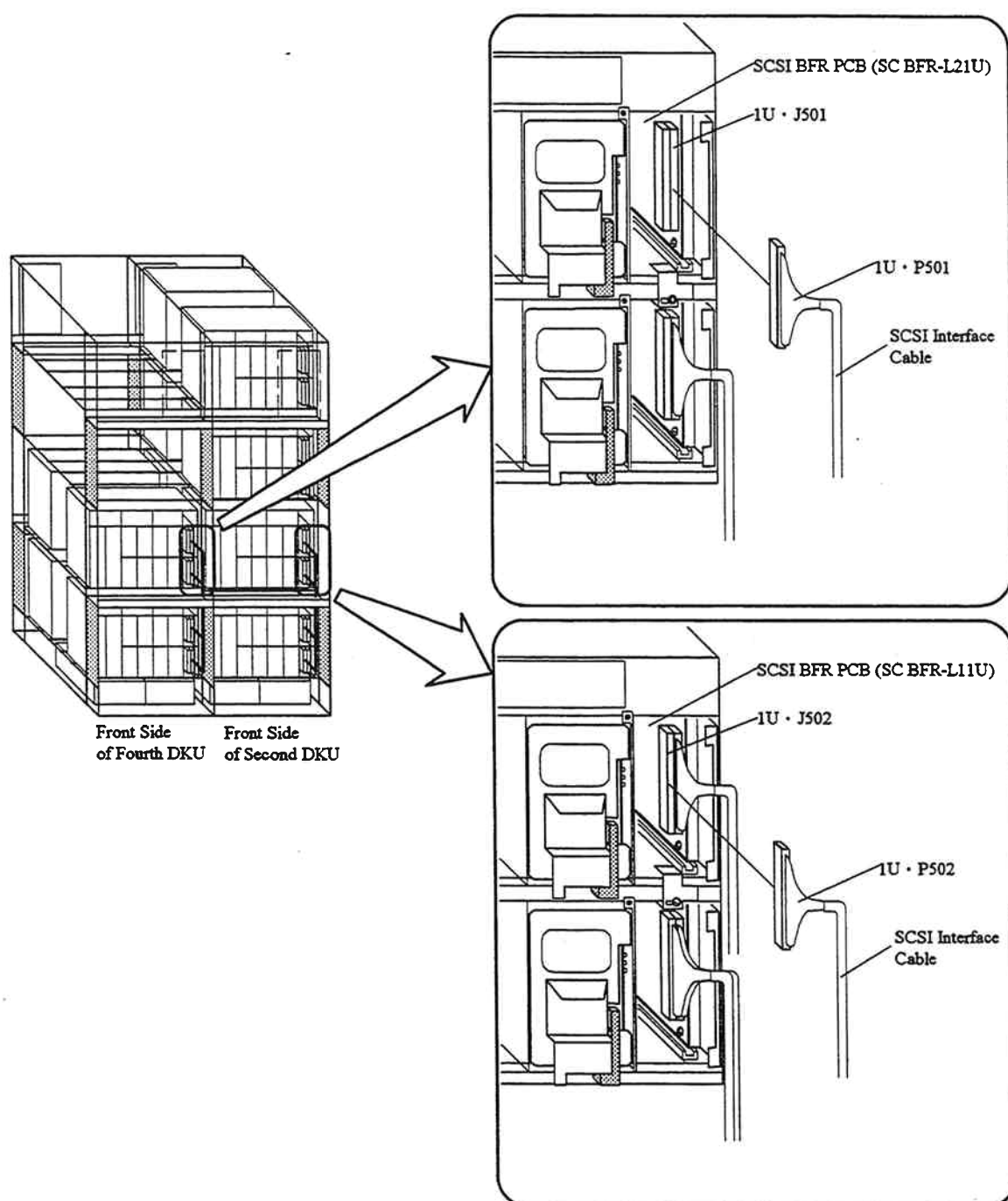


Fig. K-67 Replacement of SCSI Interface Cable

Cable No. 51 SC BFR-L12U (2U·J502) through SC BFR-L22U (2U·J501)

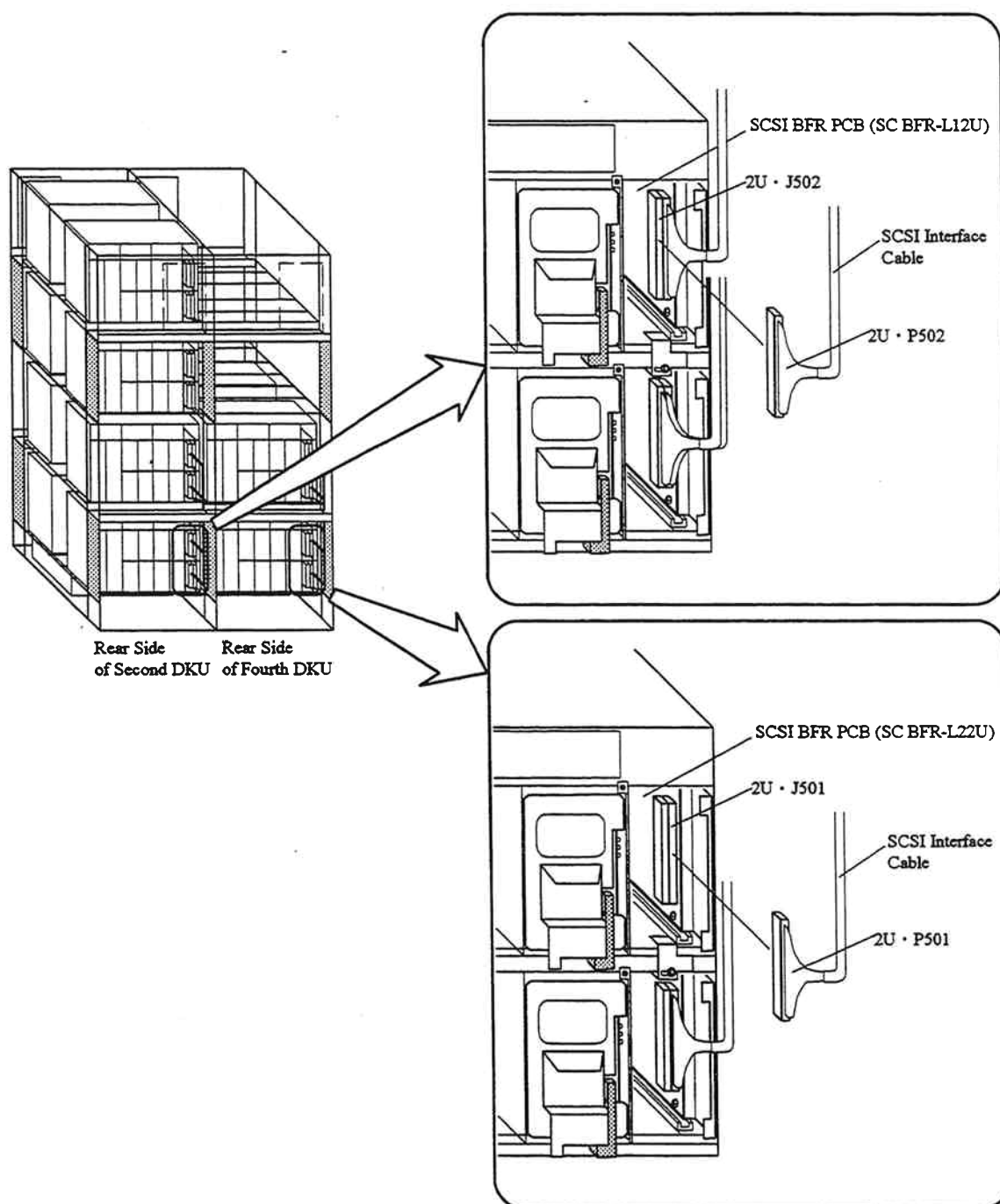


Fig. K-68 Replacement of SCSI Interface Cable

Cable No. 52 SC BFR-L13U (3U-J502) through SC BFR-L23U (3U-J501)

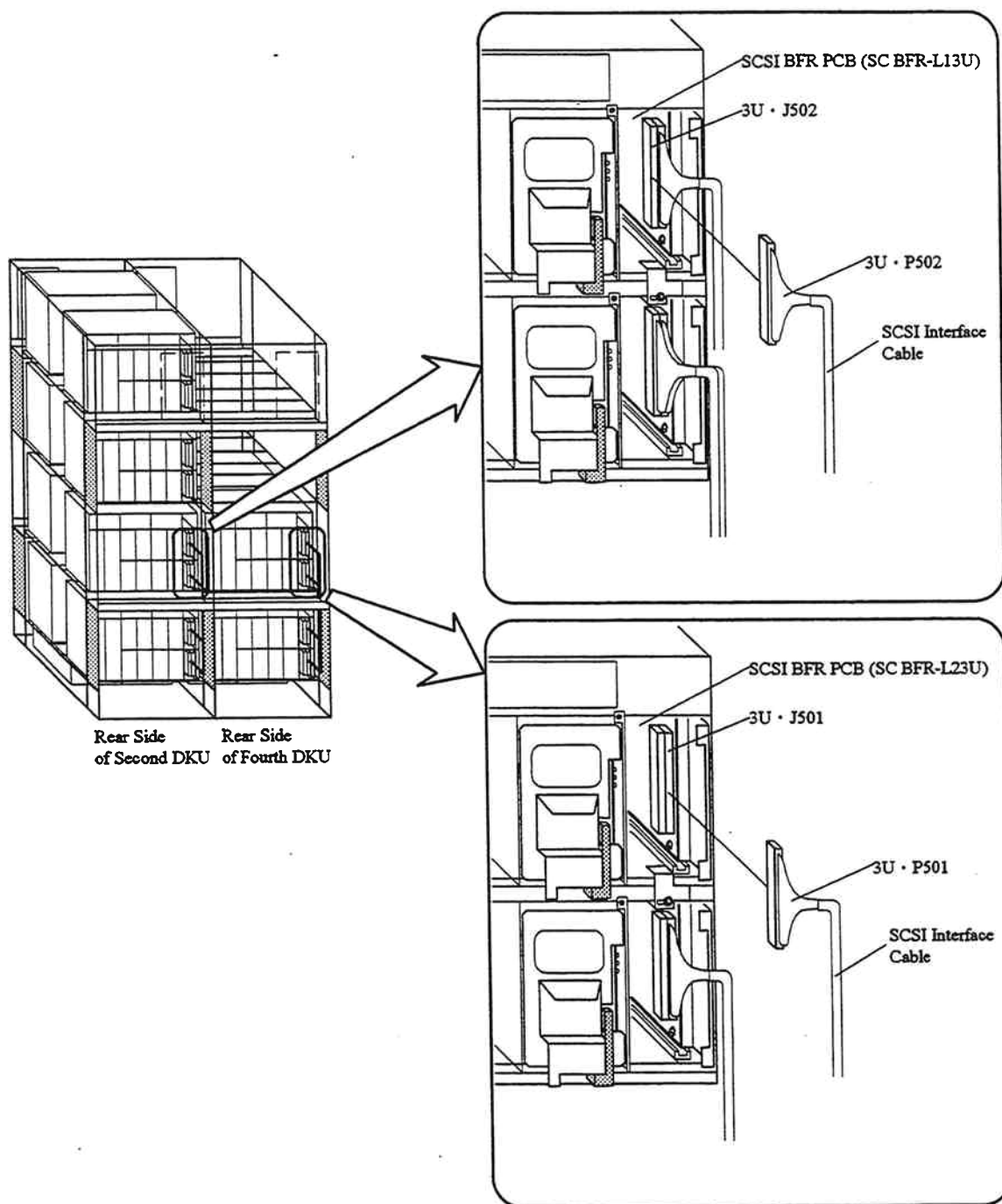


Fig. K-69 Replacement of SCSI Interface Cable

Cable No. 53 SC BFR-L10L (0L-J502) through SC BFR-L20L (0L-J501)

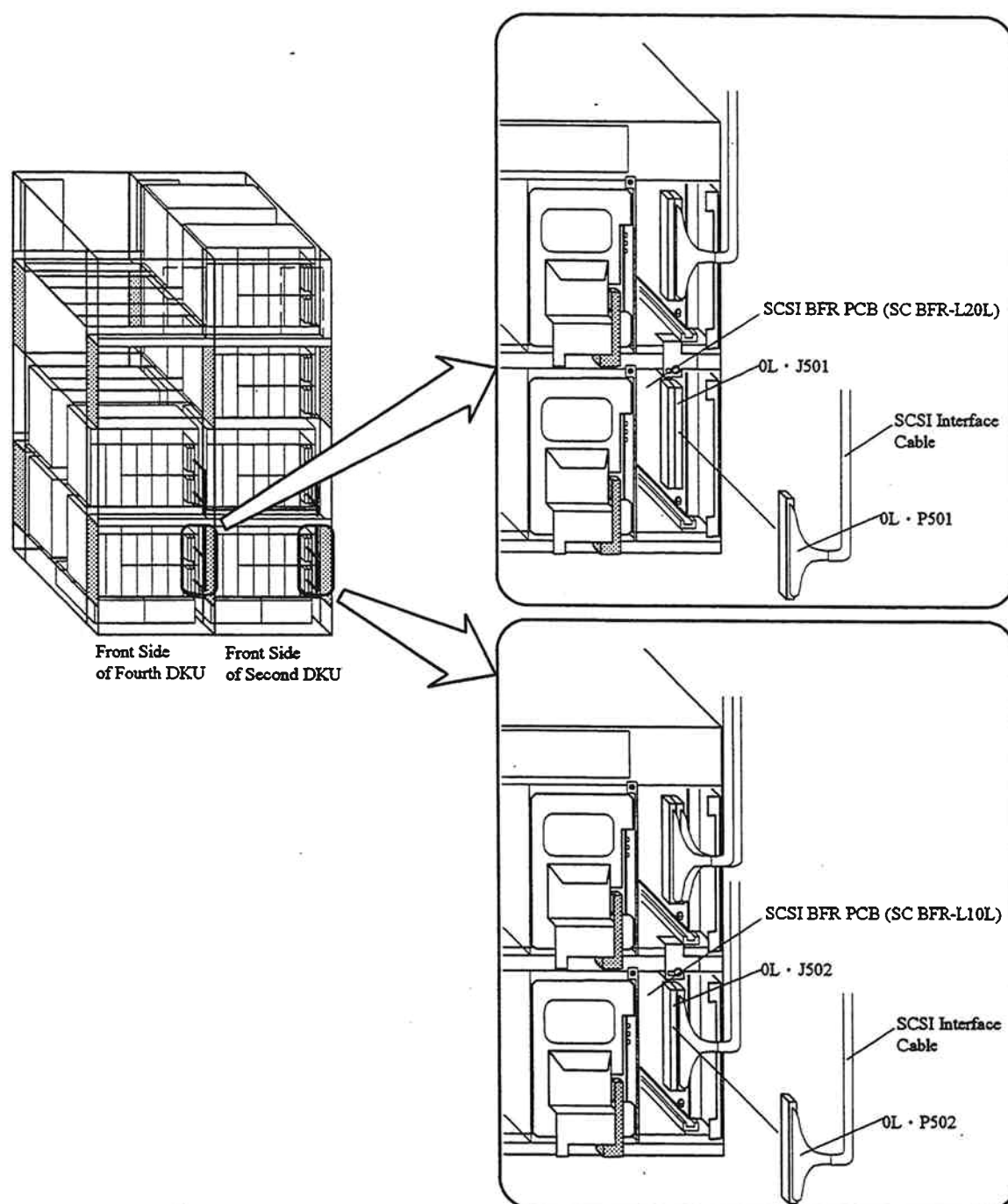


Fig. K-70 Replacement of SCSI Interface Cable

Cable No. 54 SC BFR-L11L (1L-J502) through SC BFR-L21L (1L-J501)

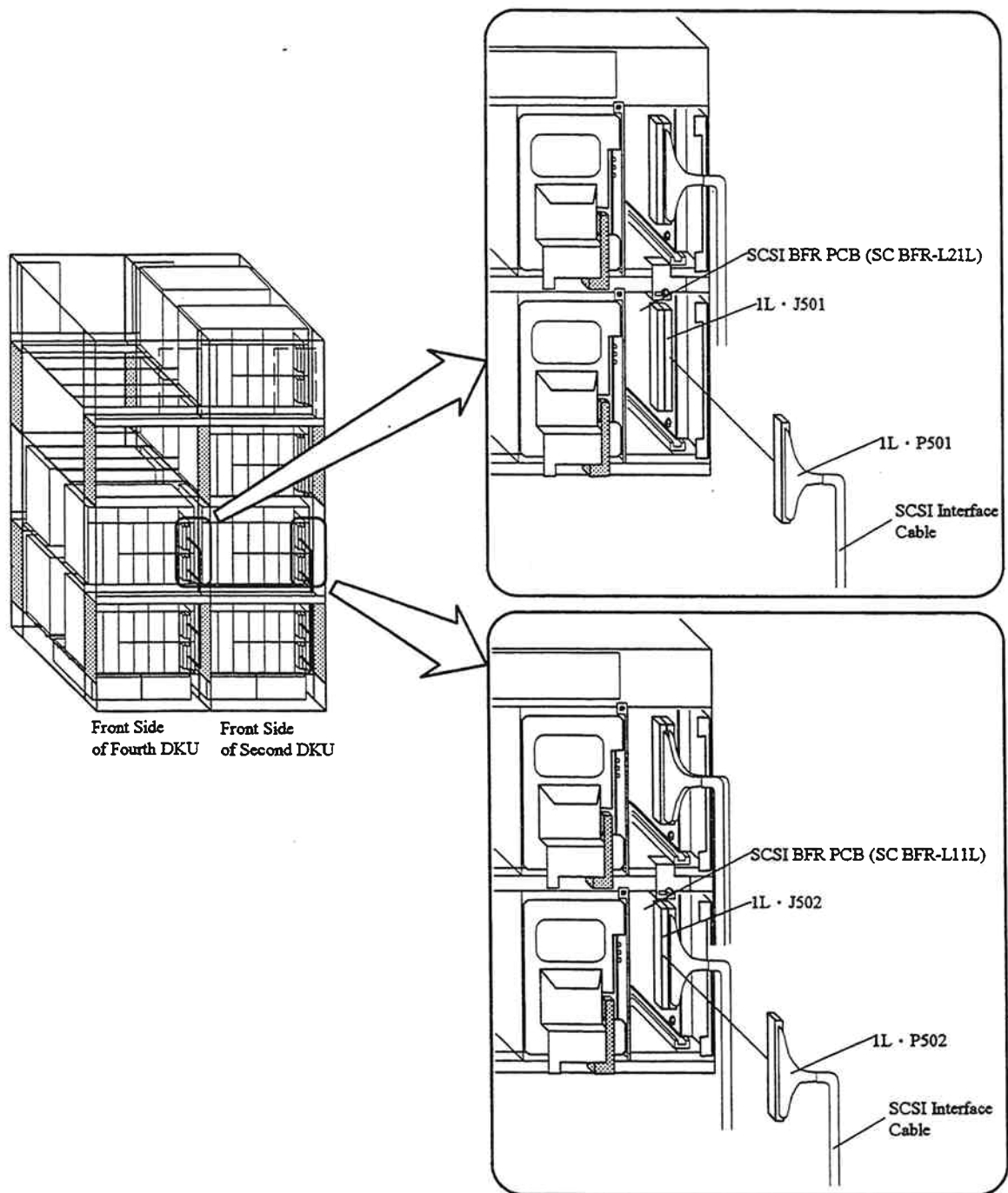


Fig. K-71 Replacement of SCSI Interface Cable

Cable No. 55 SC BFR-L12L (2L-J502) through SC BFR-L22L (2L-J501)

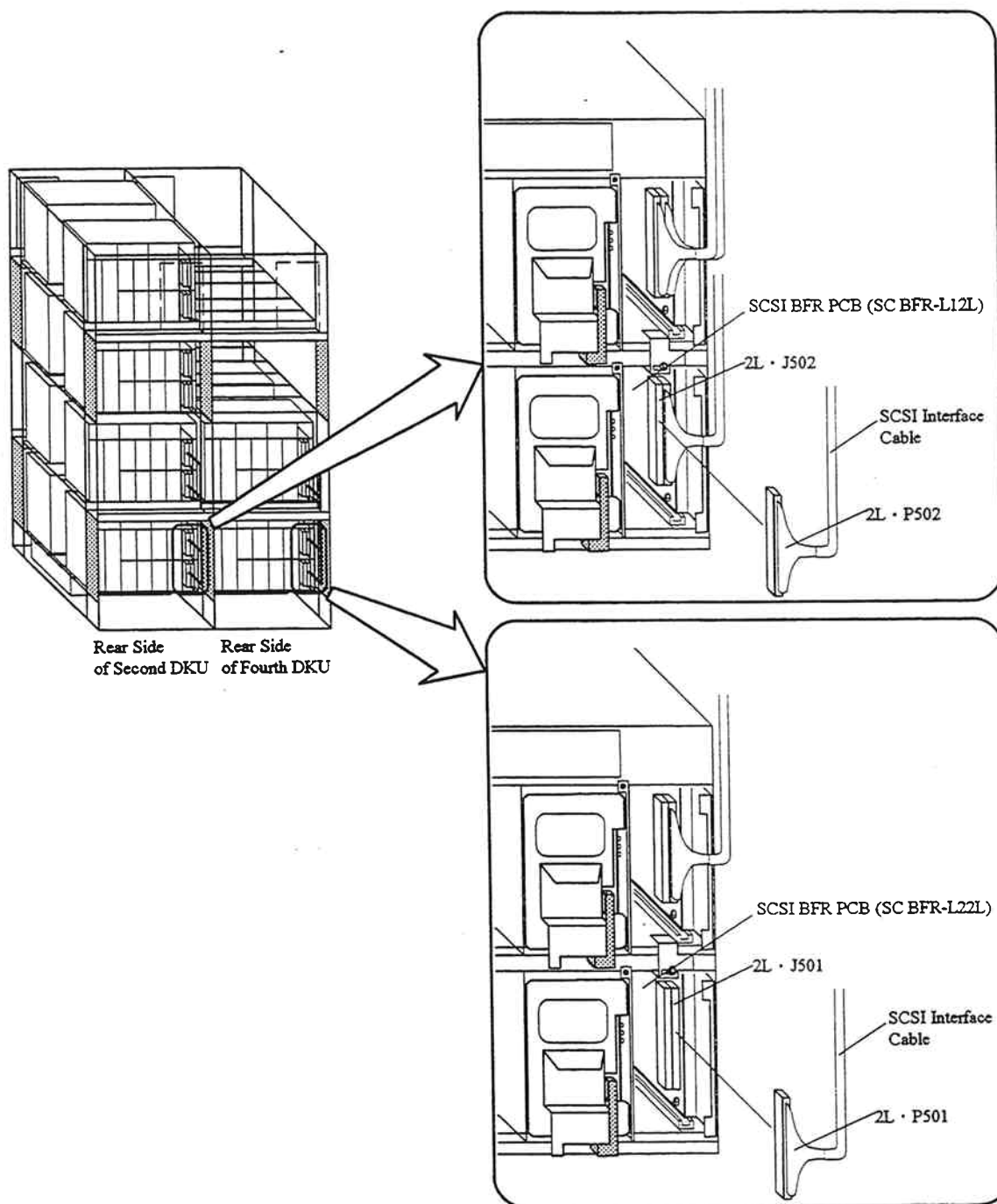


Fig. K-72 Replacement of SCSI Interface Cable

Cable No. 56 SC BFR-L13L (3L-J502) through SC BFR-L23L (3L-J501)

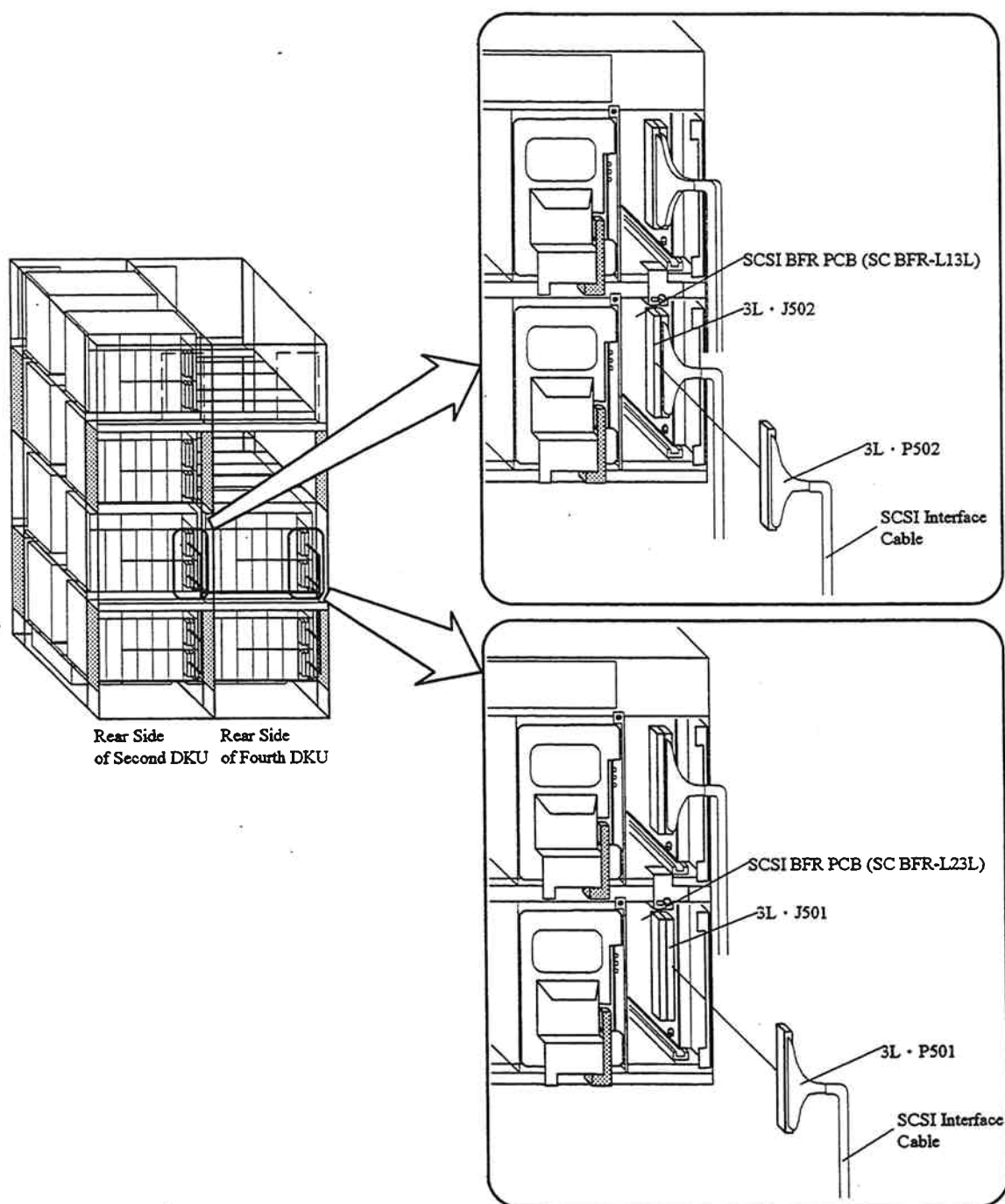


Fig. K-73 Replacement of SCSI Interface Cable

(3) Fix the SCSI interface cables in the DKU chassis with the cable fixing wires and repeat binders.

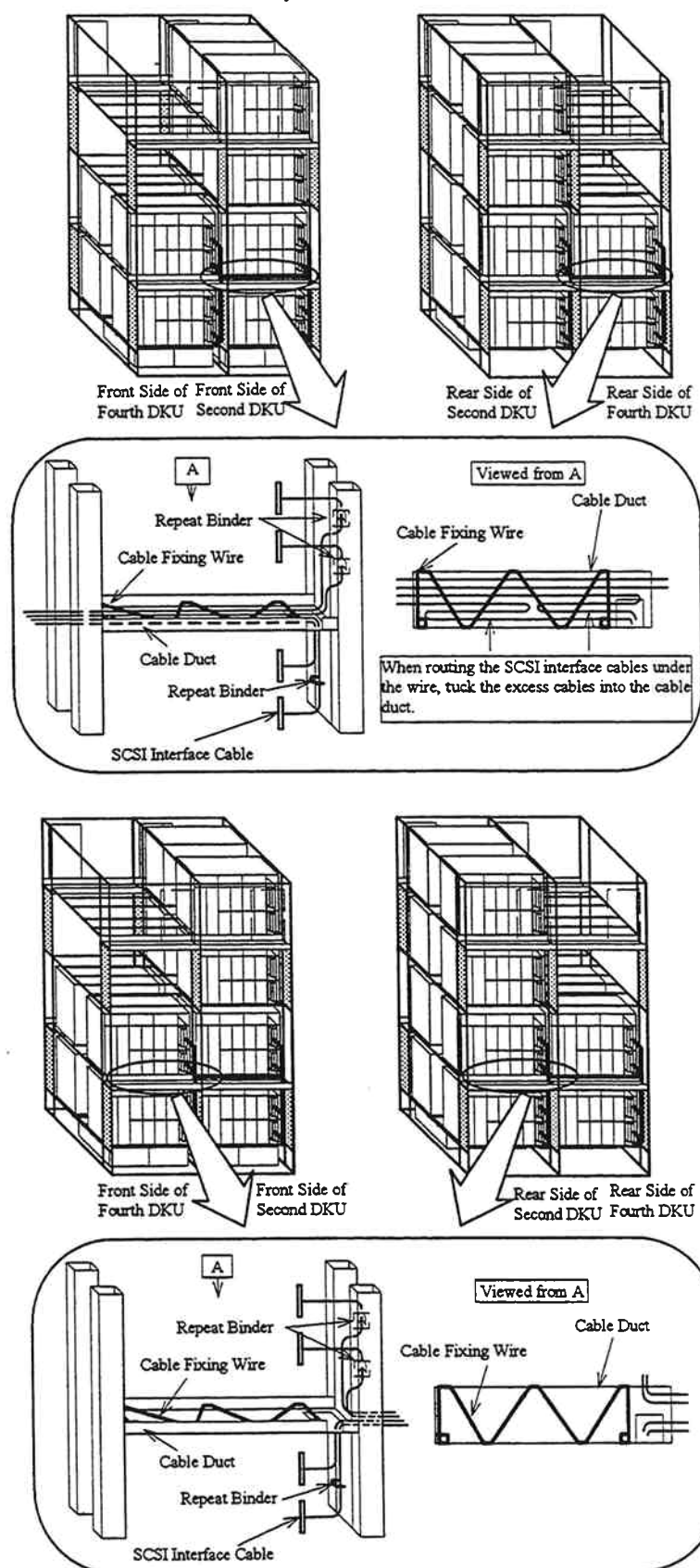


Fig. K-74 Fixation of the SCSI Interface Cables

(4) Go to post-PROCEDURE h (REP04-190).

Cable No. 57-64 SC BFR-L14-L17U/L through SC BFR-L24-L27U/L

(1) Remove the cable fixing wires and repeat binders.

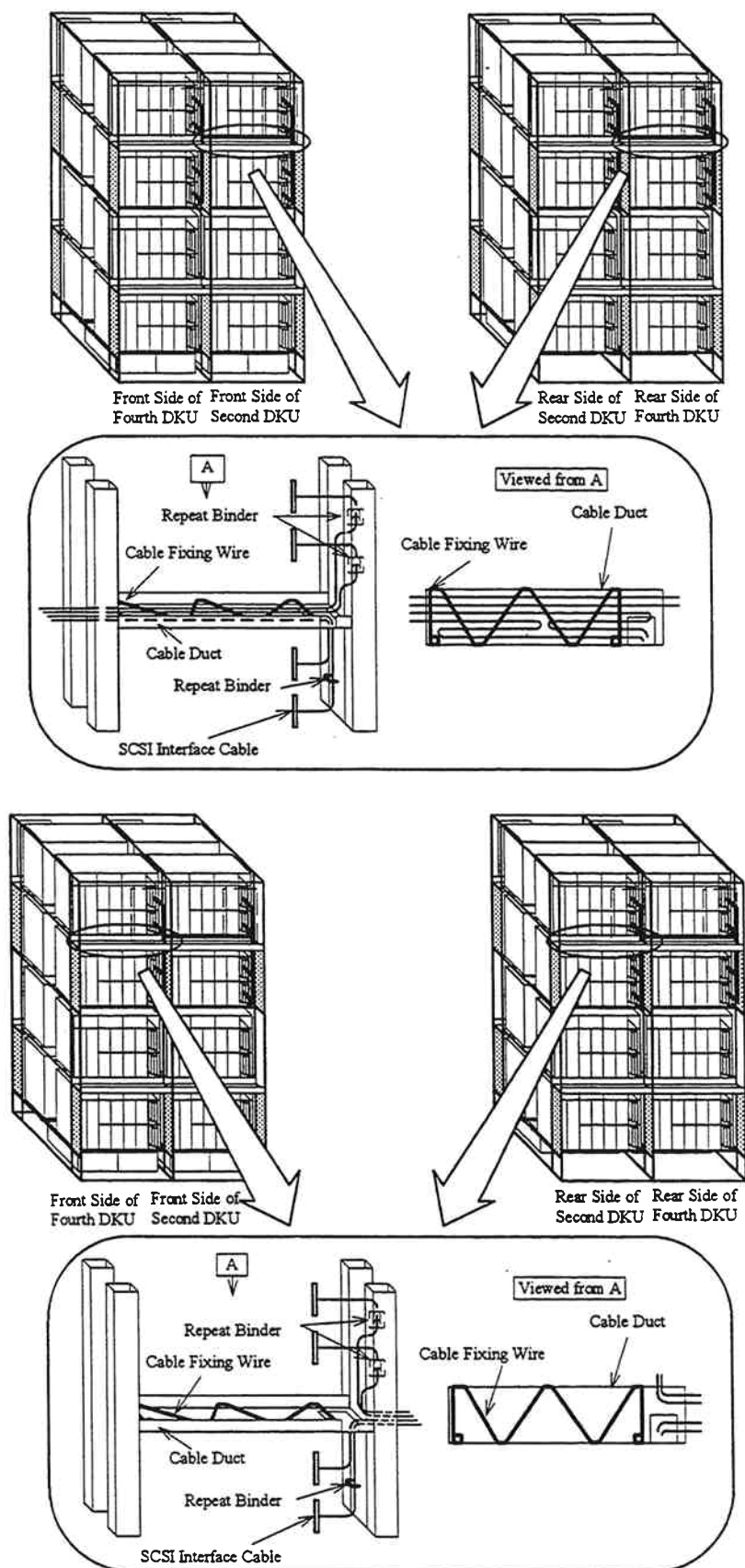


Fig. K-75 Removal of the cable fixing wires and repeat binders

(2) Replace the SCSI interface cable. The SCSI interface cable should be wired in the same way as the previous route.

Cable No. 57 SC BFR-L14U (4U-J502) through SC BFR-L24U (4U-J501)

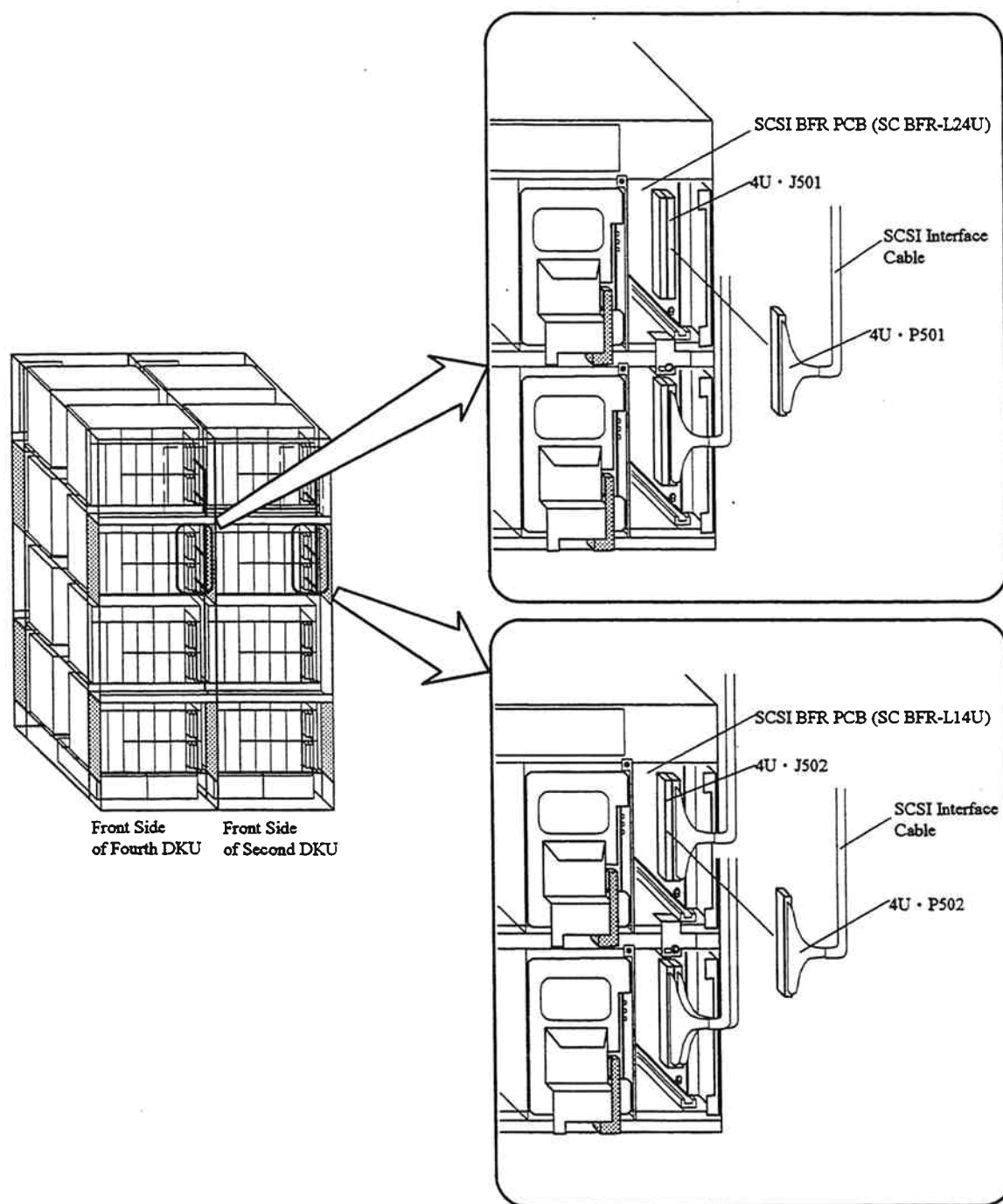


Fig. K-76 Replacement of SCSI Interface Cable

Cable No. 58 SC BFR-L15U (5U-J502) through SC BFR-L25U (5U-J501)

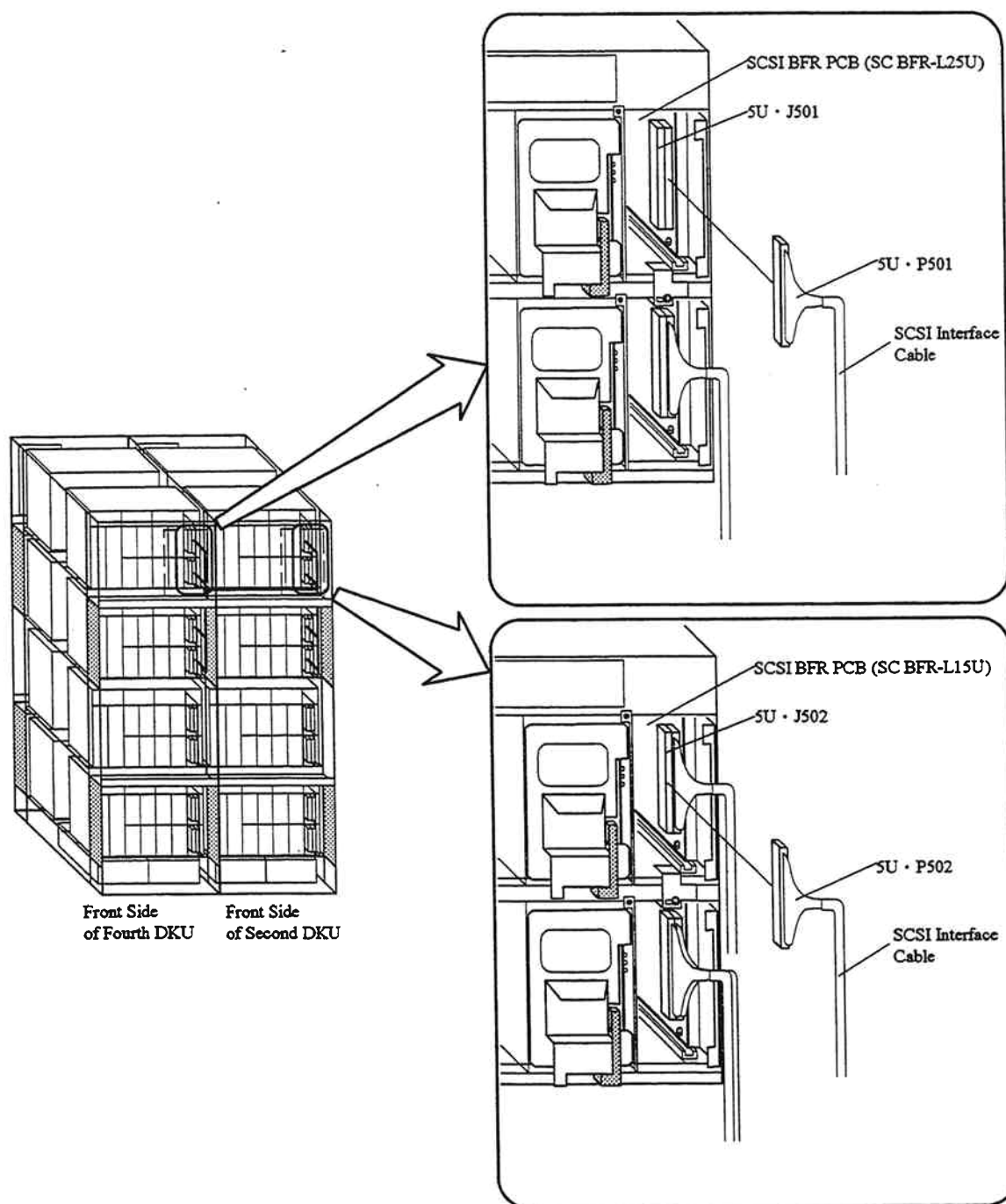


Fig. K-77 Replacement of SCSI Interface Cable

Cable No. 59 SC BFR-L16U (6U-J502) through SC BFR-L26U (6U-J501)

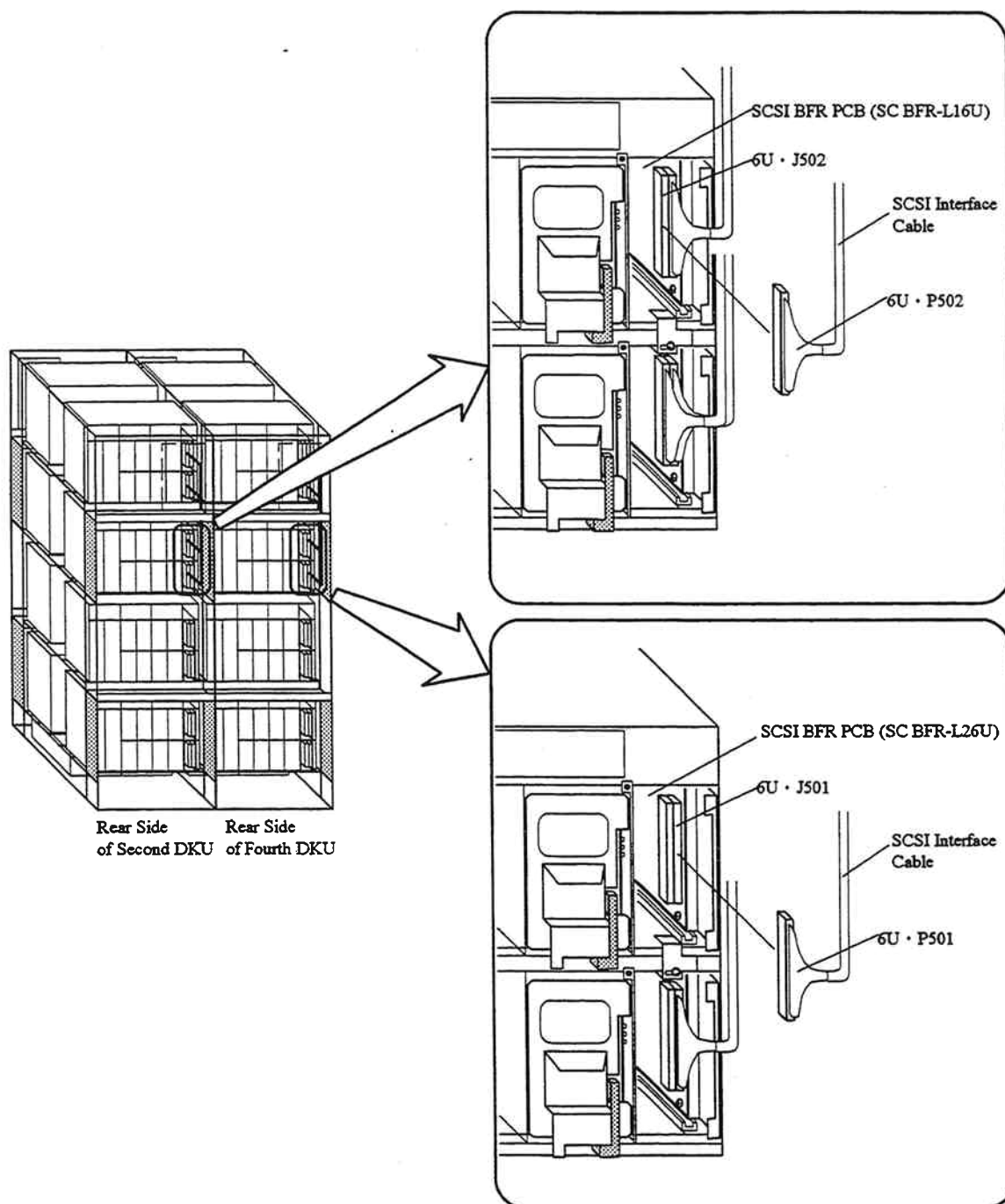


Fig. K-78 Replacement of SCSI Interface Cable

Cable No. 60 SC BFR-L17U (7U·J502) through SC BFR-L27U (7U·J501)

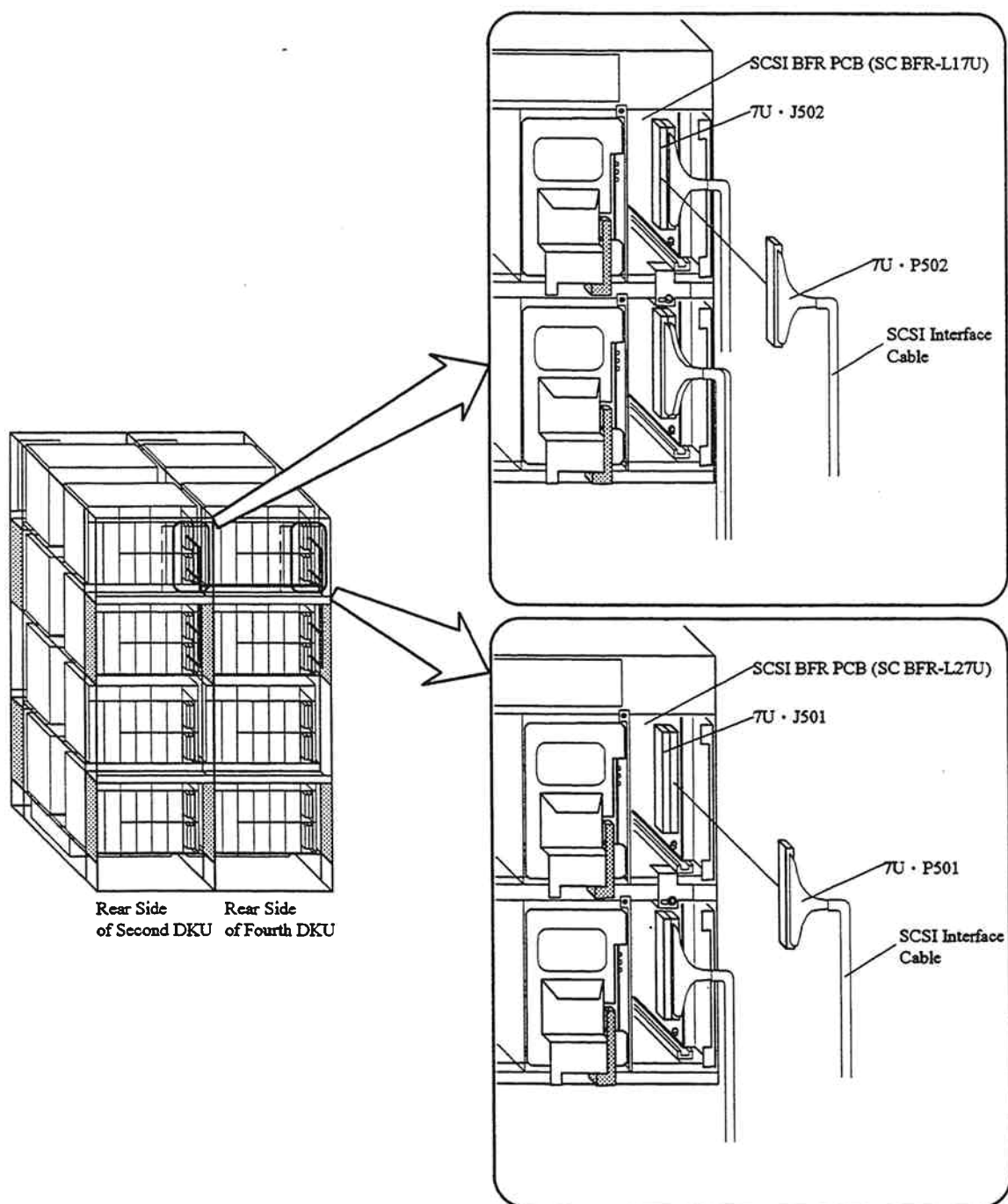


Fig. K-79 Replacement of SCSI Interface Cable

Cable No. 61 SC BFR-L14L (4L-J502) through SC BFR-L24L (4L-J501)

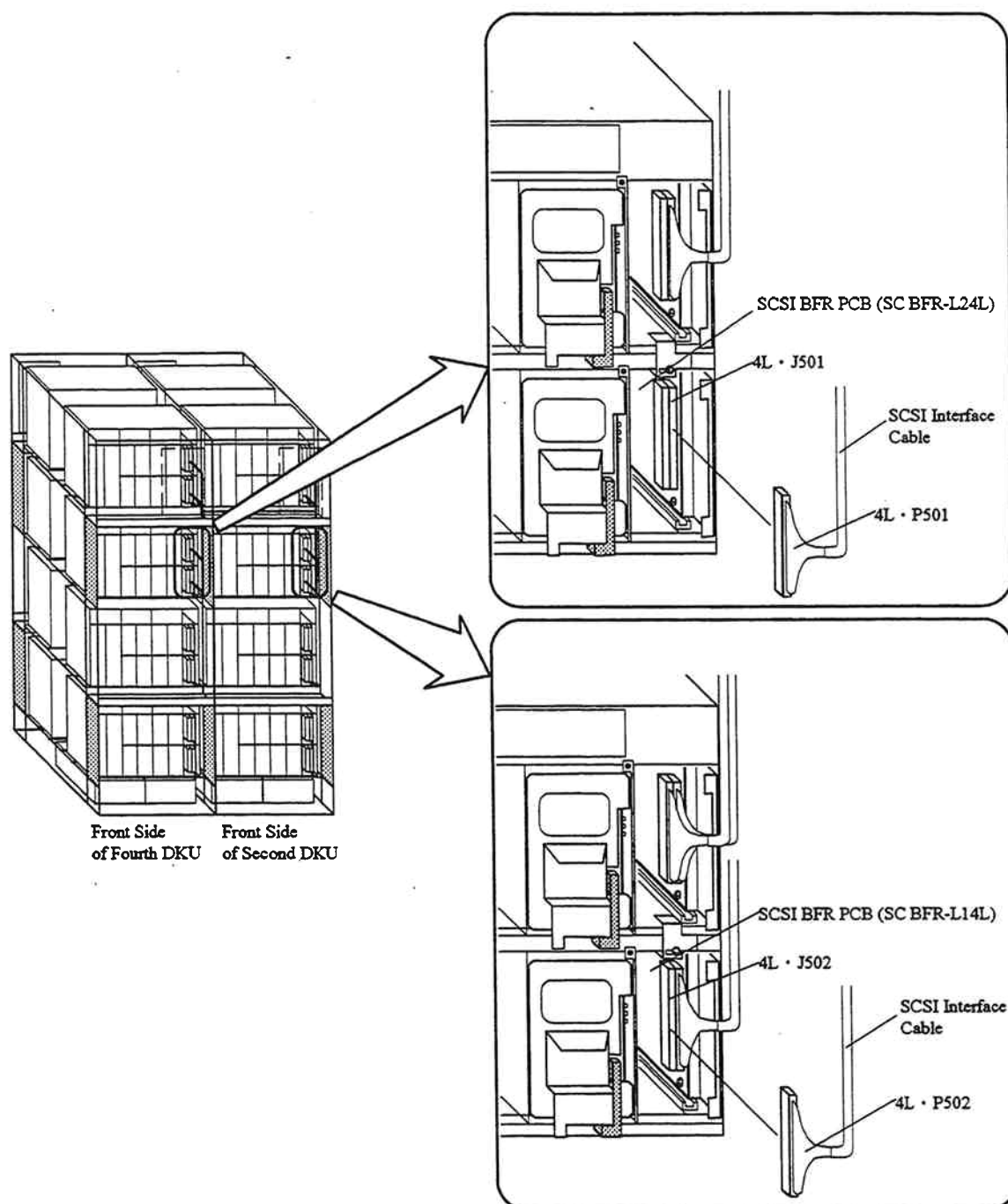


Fig. K-80 Replacement of SCSI Interface Cable

Cable No. 62 SC BFR-L15L (5L-J502) through SC BFR-L25L (5L-J501)

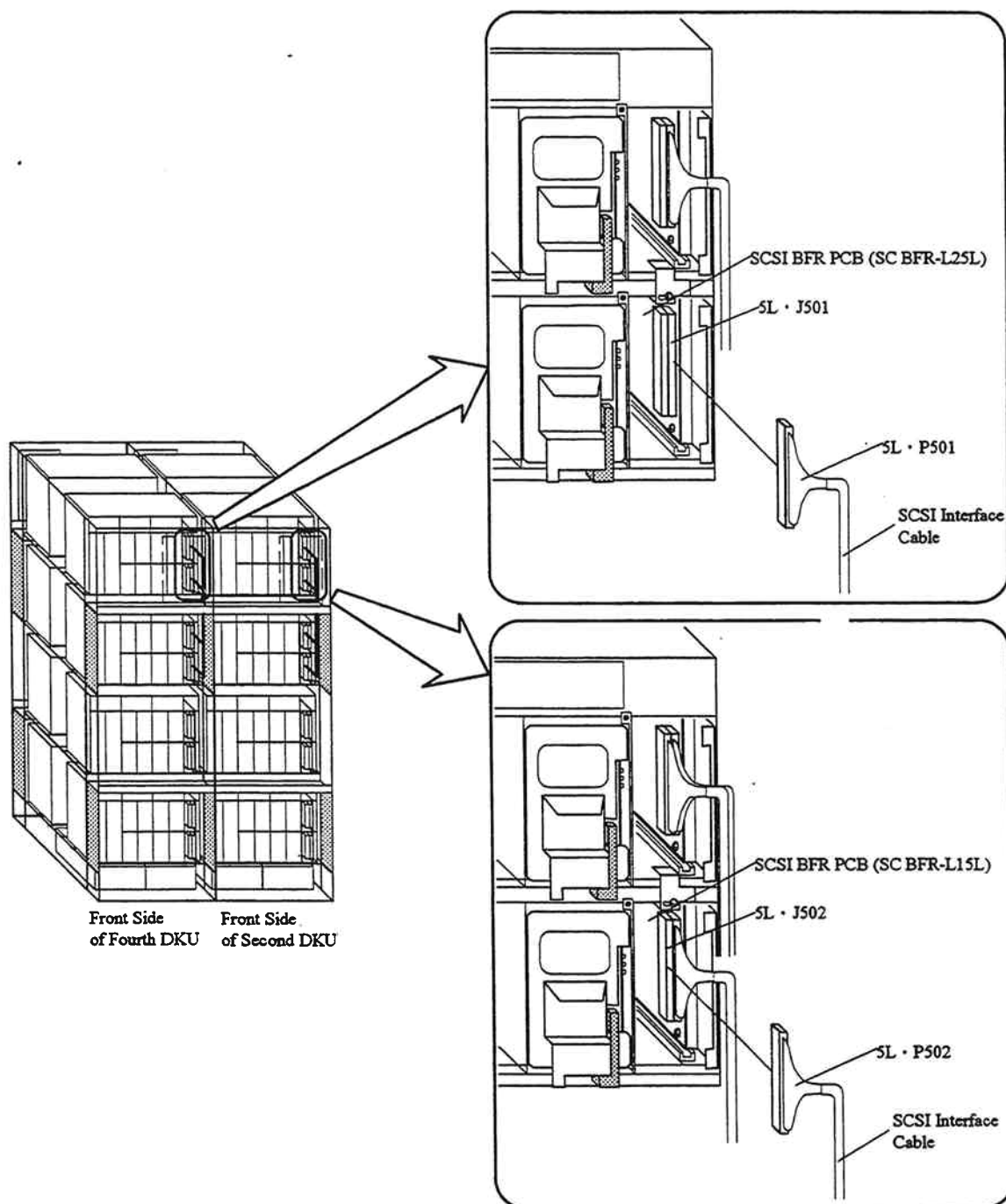


Fig. K-81 Replacement of SCSI Interface Cable

Cable No. 63 SC BFR-L16L (6L-J502) through SC BFR-L26L (6L-J501)

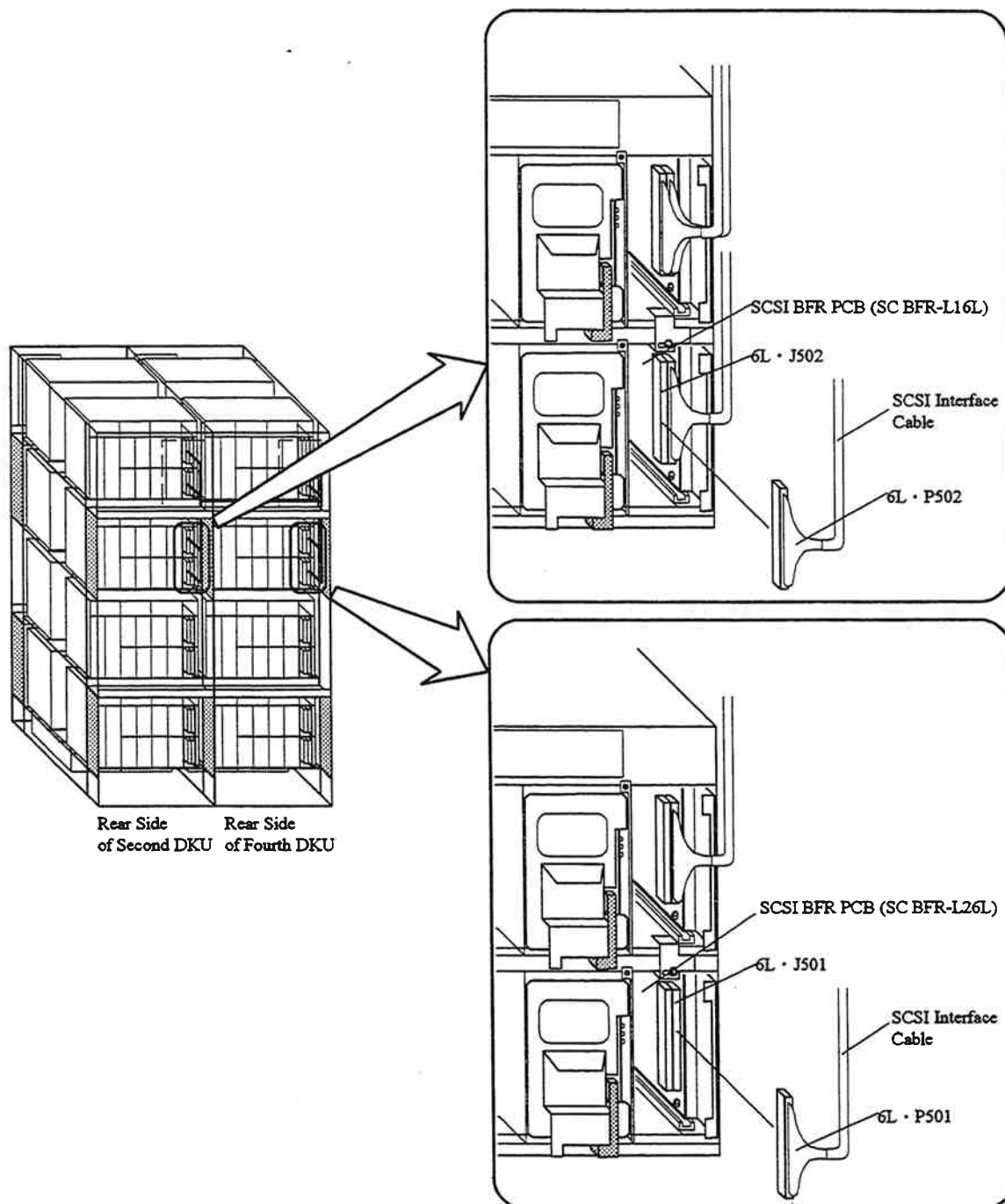


Fig. K-82 Replacement of SCSI Interface Cable

Cable No. 64 SC BFR-L17L (7L-J502) through SC BFR-L27L (7L-J501)

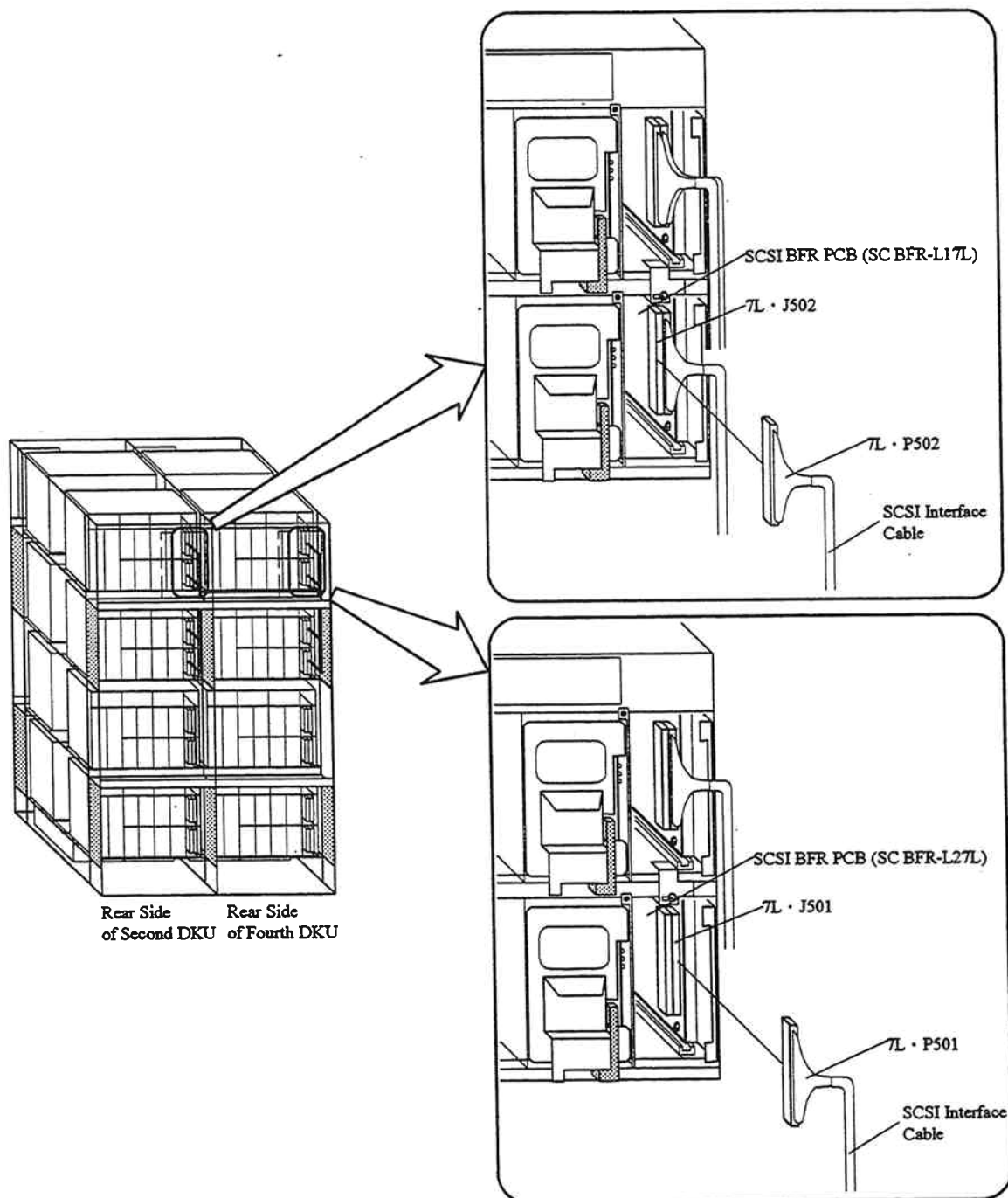


Fig. K-83 Replacement of SCSI Interface Cable

(3) Fix the SCSI interface cables in the DKU chassis with the cable fixing wires and repeat binders.

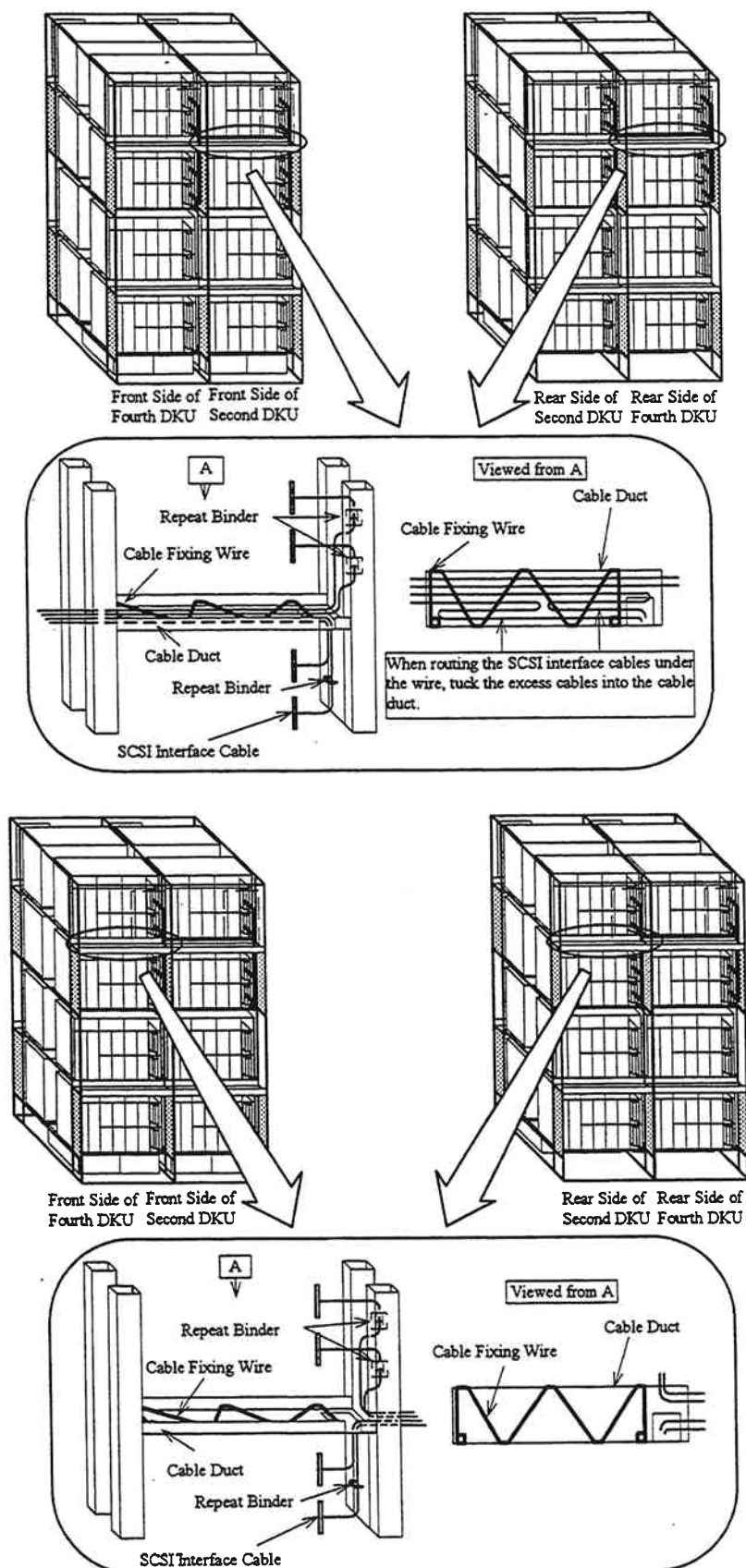


Fig. K-84 Fixation of the SCSI Interface Cables

(4) Go to post-PROCEDURE h (REP04-190).

Blank sheet

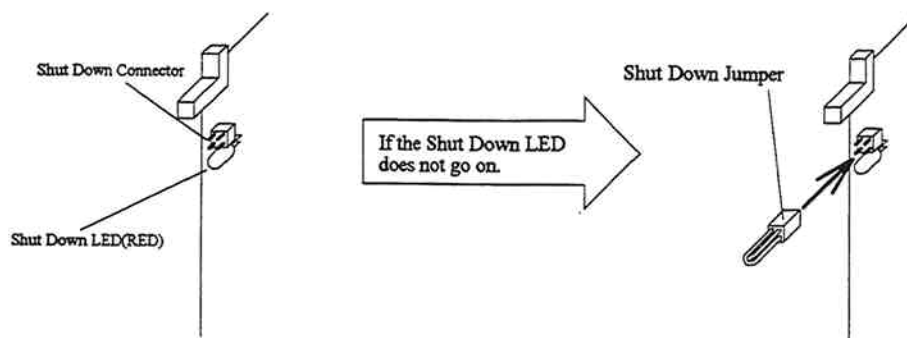
[HARDWARE L]

◆ LTM

[Related Procedure]

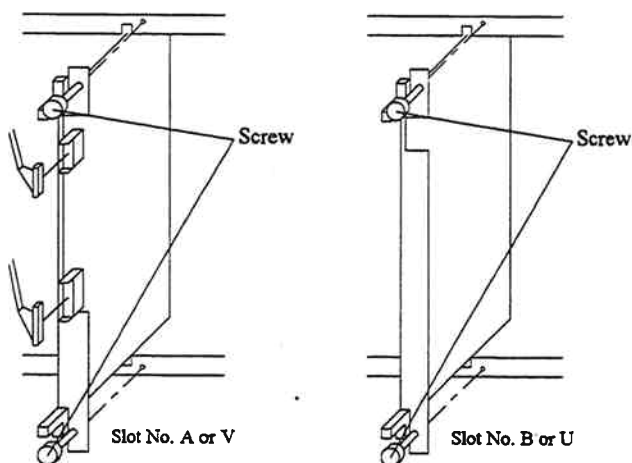
SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-140.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-140.

1. Check that the Shut Down LED is on. If not, connect the Shut Down Jumper to the Shut Down Connector.
(only hot replace)



2. Remove the LTM PCB.

- a. If the "Slot No." of the failed LTM PCB is A or V, disconnect the two cables from the sub-edge of the failed PCB.
- b. Remove the two screws and remove the failed LTM PCB.
- c. If the Shut Down Jumper is used, remove it.



3. Insert the spare PCB to the correct location and fasten the screws.

(When you plug in new PCB, the Shut Down LED is lit on again.)

4. Connect the cables to the sub-edge of the spare PCB.

5. Go to SVP post procedure t1 [REP04-210].

[HARDWARE T1]

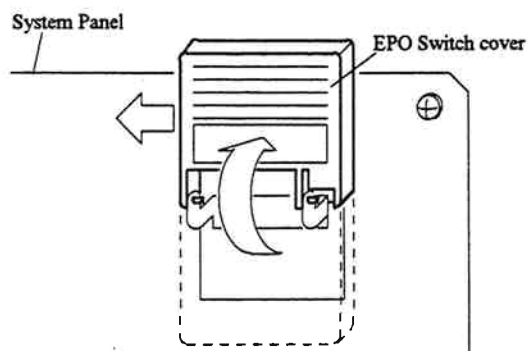
◆ System PNL

[Related Procedure]

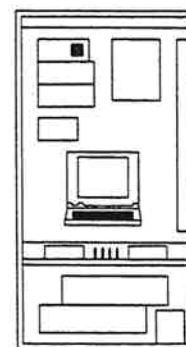
SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-150.

1. Set the switches of the spare PCB to the same positions as those of the failed PCB.

2. Remove the EPO Switch cover referring to the following figure.

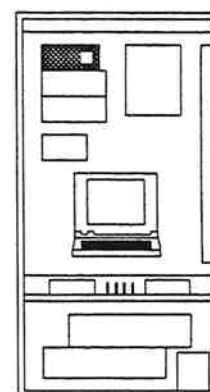
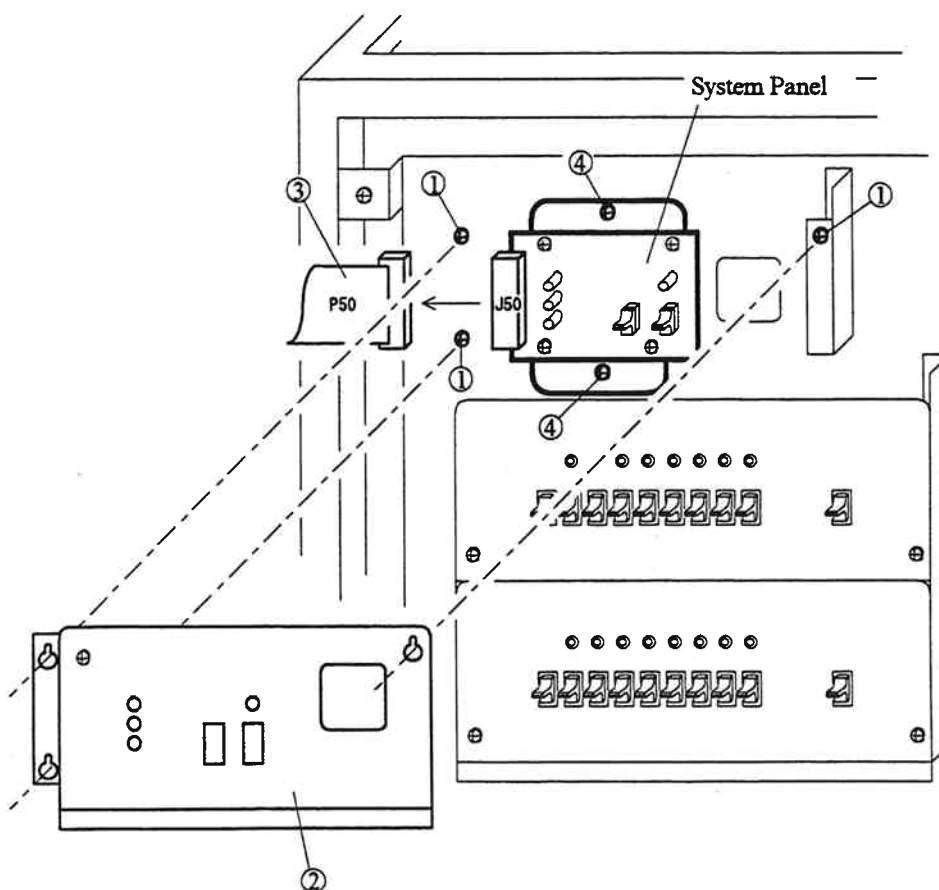


Front view of Movable rack

Front View of Disk Controller
(Movable Rack is closed.)

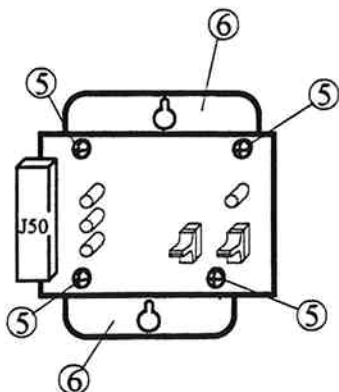
3. Remove the PCB.

- a. Loosen the three screws① and remove the plate②.
- b. Disconnect the cable③.
- c. Loosen the two screws④ and remove the System Panel.

Front View of Disk Controller
(Movable Rack is closed.)

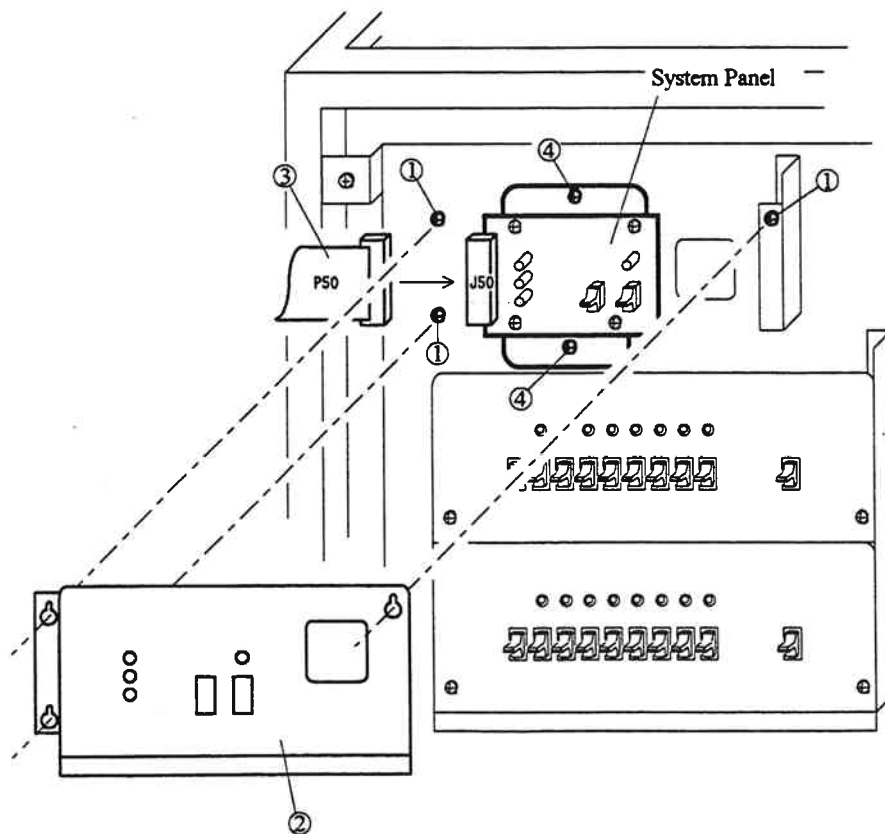
4. Remove the plates from the failed PCB, and then attach them to the spare PCB.

- a. Remove the four screws⑤ and the plates⑥ from the failed PCB.
- b. Attach the plates⑥ to the spare PCB and fasten the four screws⑤.



5. Attach the PCB.

- a. Attach the spare PCB.
- b. Fasten the two screws④ and connect the cable③.
- c. Attach the plate② and fasten the three screws①.
- d. Attach the EPO Switch cover.



6. Go to SVP post procedure t1 [REP04-210].

[HARDWARE T2]

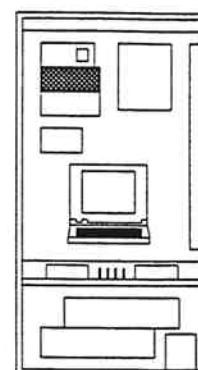
◆ OP PNL

[Related Procedure]

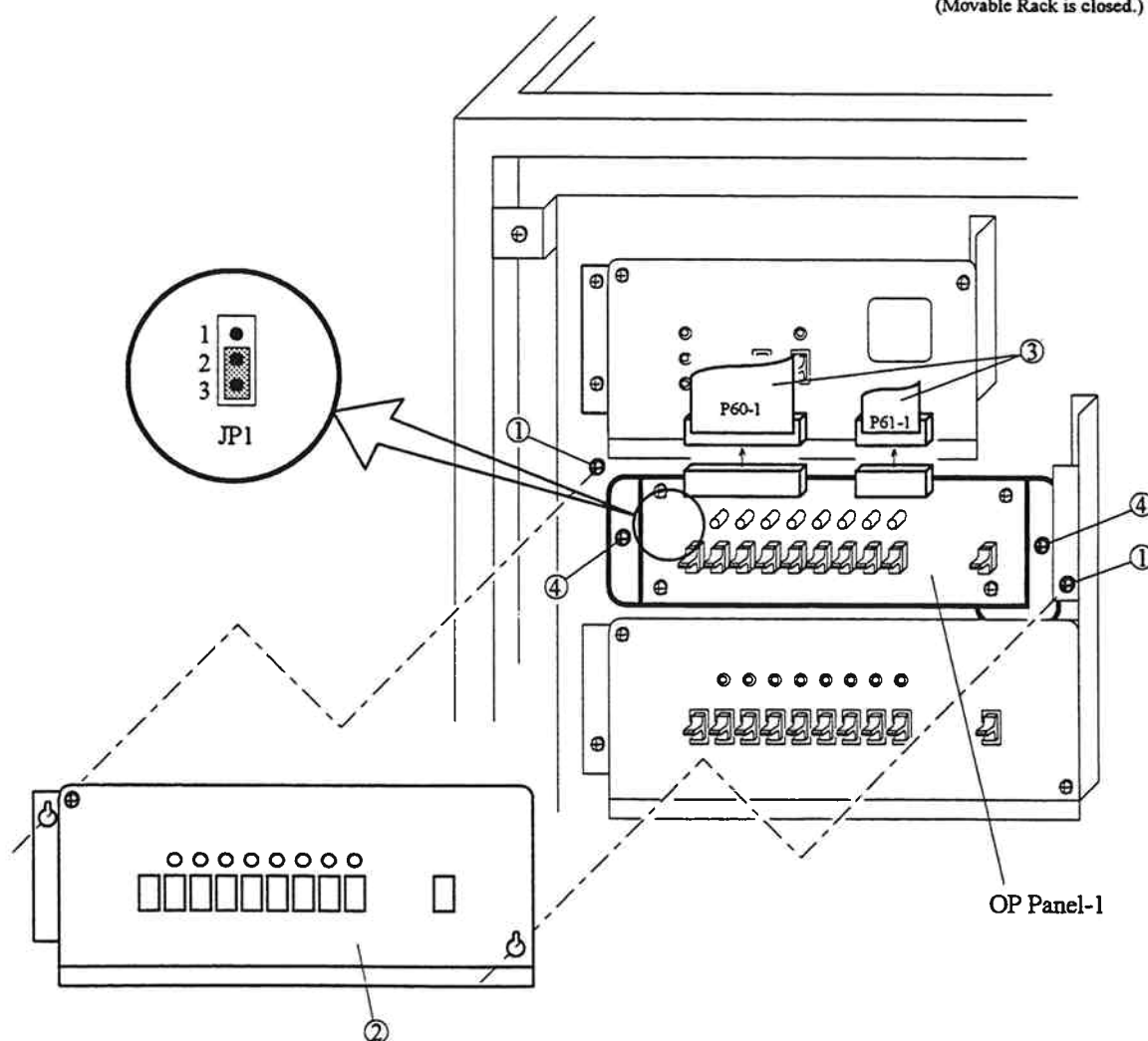
SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-150.

OP Panel-1

1. Memorize the current setting of Enable/Remote/Disable Switches on the OP Panel-1.
2. Set the switches of the spare PCB to the proper position.
 - a. If Enable/Disable LED is on, set the Enable/Remote/Disable Switch to Enable position.
 - b. If Enable/Disable LED is off, set the Enable/Remote/Disable Switch to Disable position.
3. Remove the PCB.
 - a. Loosen the two screws① and remove the plate②.
 - b. Set the jumper socket(JP1) of the failed PCB referring to following figure.
 - c. Disconnect the cables③.
 - d. Loosen the two screws④ and remove the OP Panel-1.

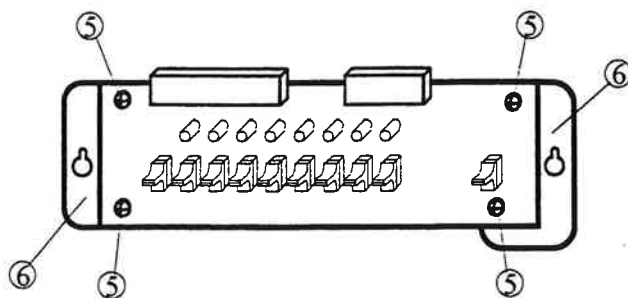


Front View of Disk Controller
(Movable Rack is closed.)



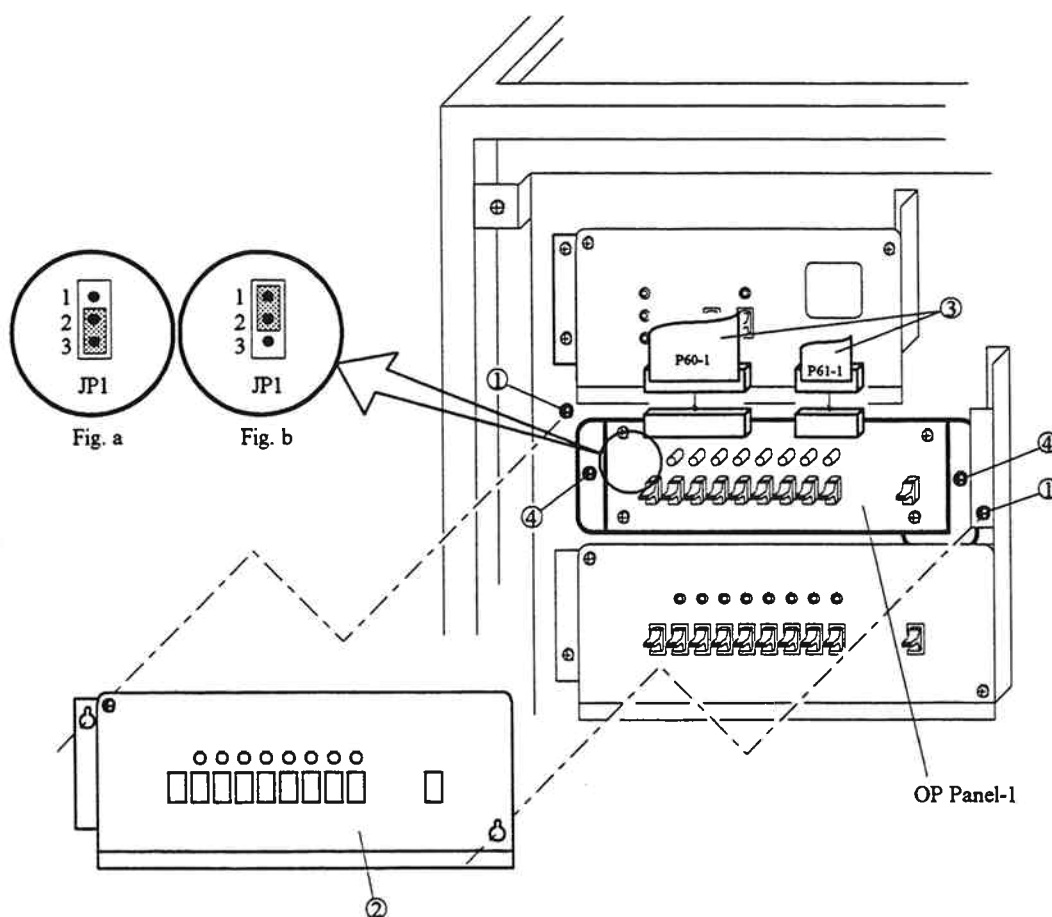
4. Remove the plates from the failed PCB, and then attach them to the spare PCB.

- a. Remove the four screws⑤ and the plates⑥ from the failed PCB.
- b. Attach the plates⑥ to the spare PCB and fasten the four screws⑤.



5. Attach the PCB.

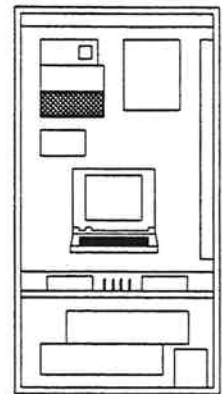
- a. Attach the spare PCB and fasten the two screws④.
- b. Set the jumper socket(JP1) referring to Fig. a.
- c. Connect the cables③.
- d. Set the jumper socket(JP1) referring to Fig. b.
- e. Attach the plate② and fasten the two screws①.



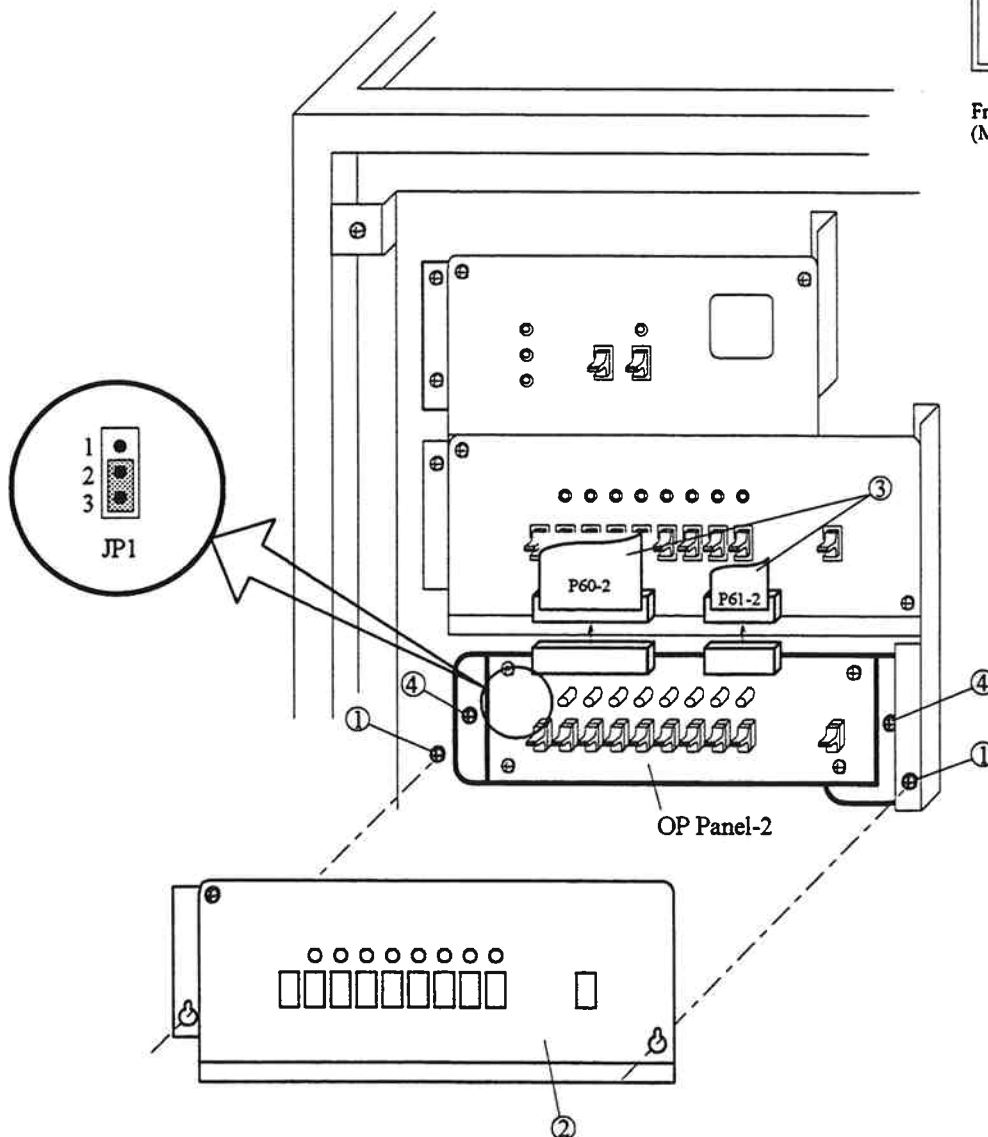
6. Go to SVP post procedure t1 [REP04-210].

OP Panel-2

1. Memorize the current setting of Enable/Remote/Disable Switches on the OP Panel-2.
2. Set the switches of the spare PCB to the proper position.
 - a. If Enable/Disable LED is on, set the Enable/Remote/Disable Switch to Enable position.
 - b. If Enable/Disable LED is off, set the Enable/Remote/Disable Switch to Disable position.
3. Remove the PCB.
 - a. Loosen the two screws① and remove the plate②.
 - b. Set the jumper socket(JP1) of the failed PCB referring to following figure.
 - c. Disconnect the cables③.
 - d. Loosen the two screws④ and remove the OP Panel-2.

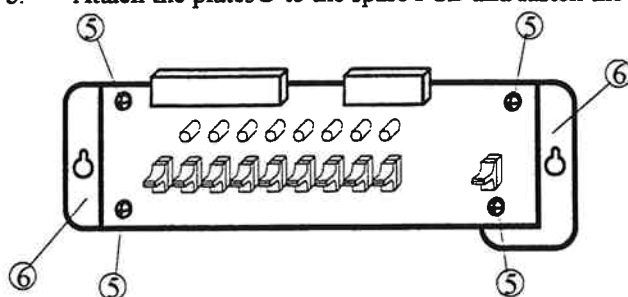


Front View of Disk Controller
(Movable Rack is closed.)



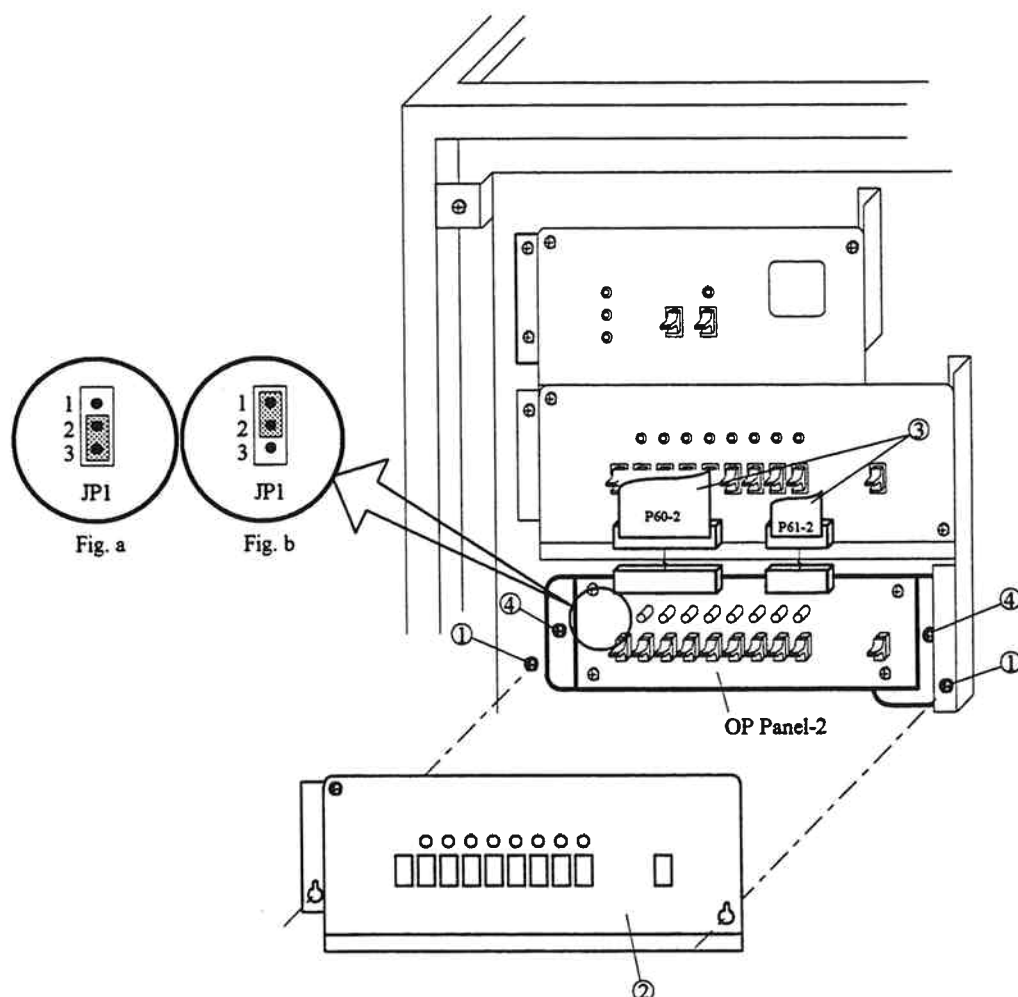
4. Remove the plates from the failed PCB, and then attach them to the spare PCB.

- Remove the four screws⑤ and the plates⑥ from the failed PCB.
- Attach the plates⑥ to the spare PCB and fasten the four screws⑤.



5. Attach the PCB.

- Attach the spare PCB and fasten the two screws④
- Set the jumper socket(JP1) referring to Fig. a.
- Connect the cables③.
- Set the jumper socket(JP1) referring to Fig. b.
- Attach the plate② and fasten the two screws①.



6. Go to SVP post procedure t1 [REP04-210].

[HARDWARE T3]

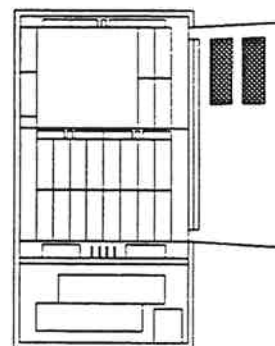
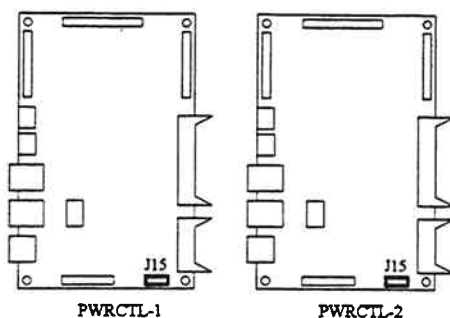
◆ CE PNL

[Related Procedure]

SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-150.

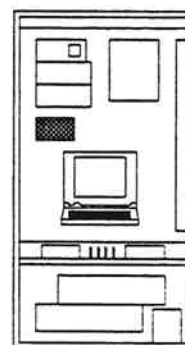
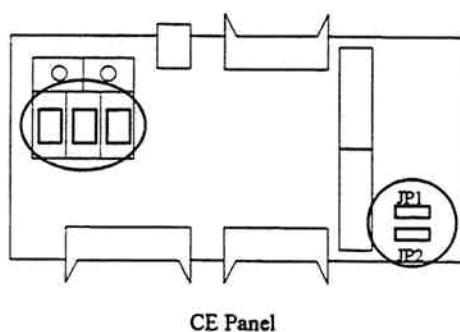
Note: The COMP signal of PCI is turned off, if the CE Panel is removed.

1. Connect the "CE Panel INH" jumper plugs(P15) to the sockets(J15) on the PWRCTL-1 and PWRCTL-2.



Front View of Disk Controller
(Movable Rack is opened.)

2. Set the three switches and the two jumper plugs of the spare PCB to the same positions as those of the failed PCB.

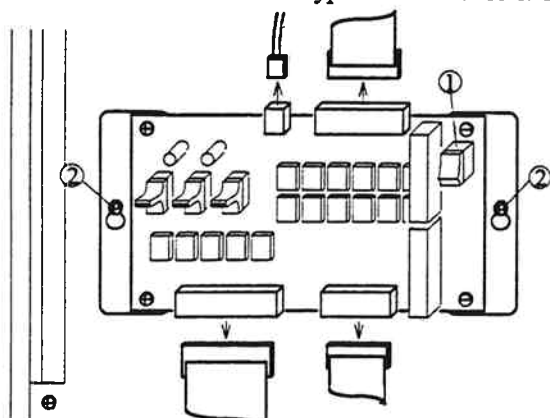


Front View of Disk Controller
(Movable Rack is closed.)

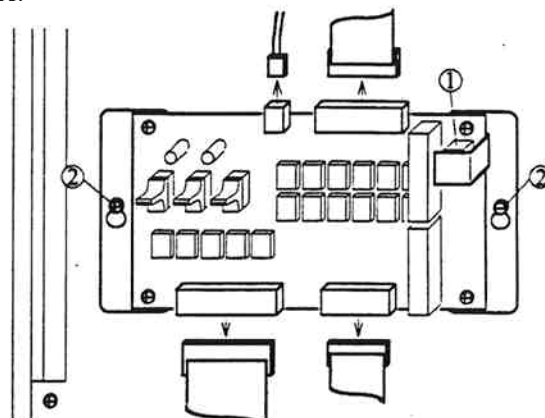
3. Remove the PCB.

- a. Set Enable/Disable Switch ① to Disable on the CE Panel.
- b. Loosen the two screws ②
- c. Remove the plate ③ only type 3.
- d. Disconnect all cables from the CE Panel.
- c. Remove the CE Panel.

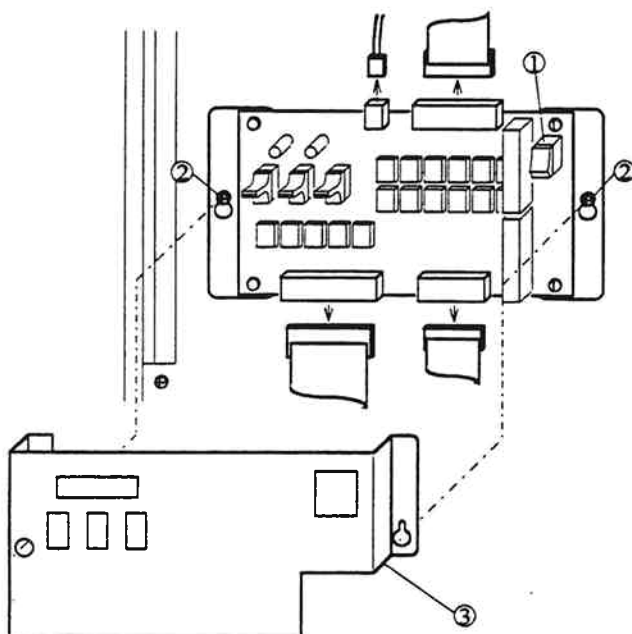
Note: CE PNL has three types in difference of appearance.



Type 1



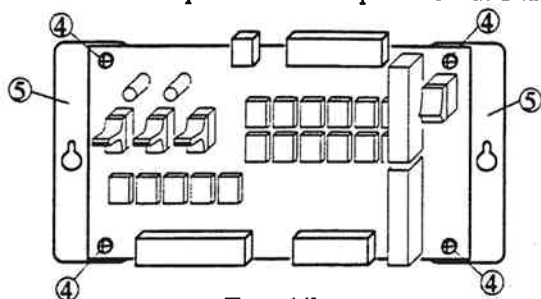
Type 2



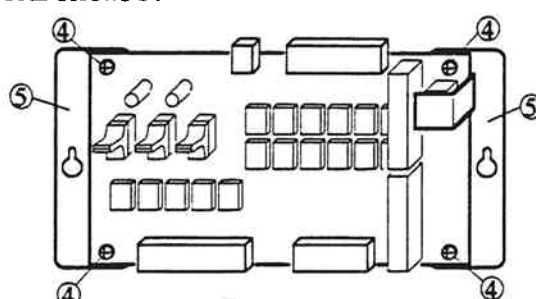
Type 3

4. Remove the plates from the failed PCB, and then attach them to spare PCB.

- a. Remove the four screws ④ and the plates ⑤ from the failed PCB.
- b. Attach the plates ⑤ to the spare PCB and fasten the four screws ④.



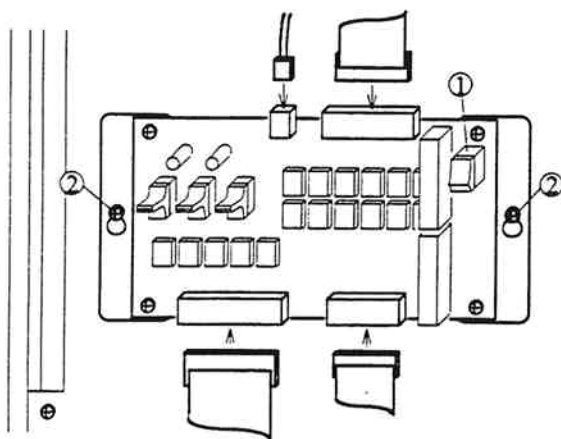
Type 1/3



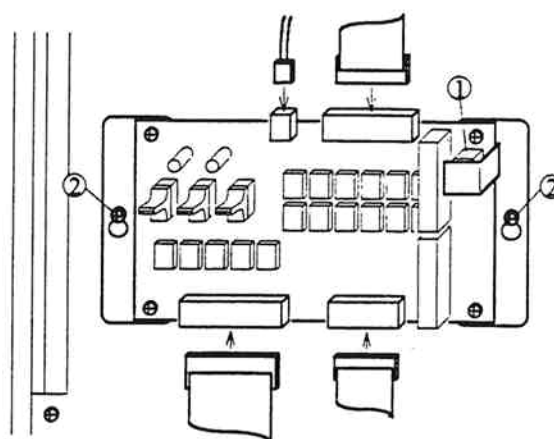
Type 2

5. Attach the PCB.

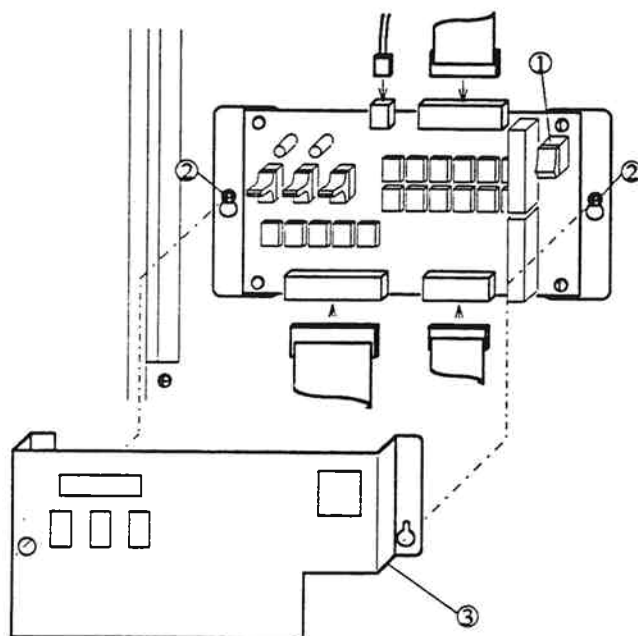
- Set Enable/Disable Switch① to Disable on the spare PCB.
- Attach the spare PCB.
- Connect the cables.
- Attach the plate③ only type 3.
- Fasten the two screws②.
- Set Enable/Disable Switch① to Enable.



Type 1



Type 2



Type 3

6. Go to SVP post procedure t1 [REP04-210].

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.

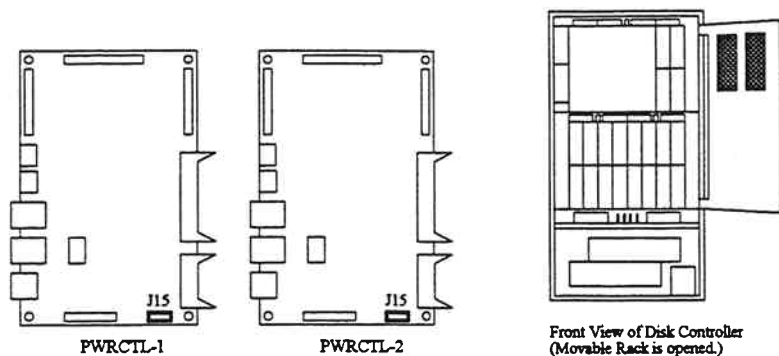
[HARDWARE T4]

◆ EPO SW

[Related Procedure]

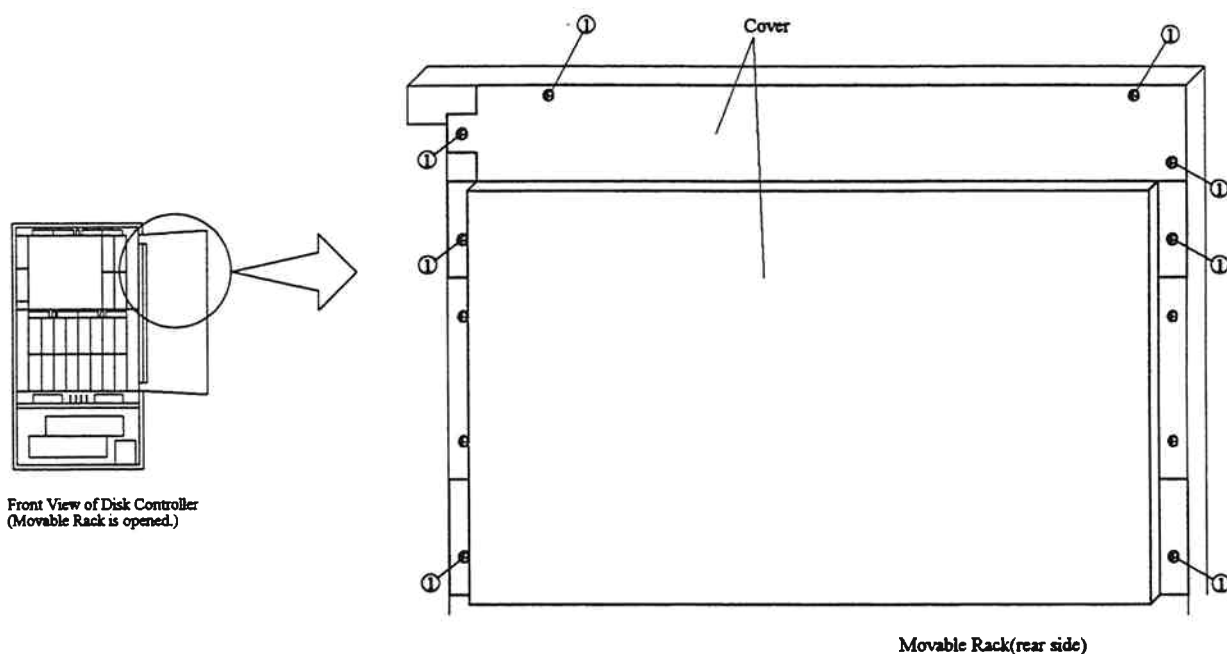
SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-150.

1. Connect the "CE Panel INH" jumper plugs(P15) to the sockets(J15) on the PWRCTL-1 and PWRCTL-2.



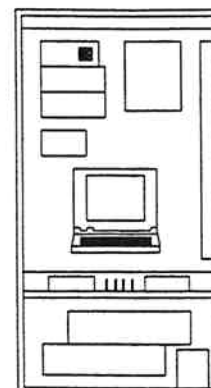
2. Remove the covers

- a. Open the Movable Rack, loosen the eight screws① and remove the two covers.

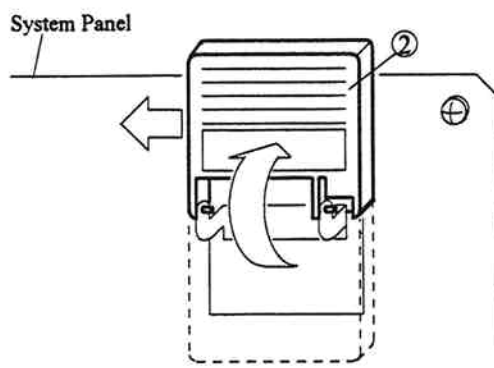


3. The following figures show the correct way to replace the EPO SW.

- a. Remove EPO SW Cover②.
- b. Disconnect the connector③.
- c. Loosen the two screws④ and remove the EPO SW.
- d. Fasten the two screws④ and attach the EPO SW Cover②.
- e. Confirm that the EPO SW isn't pulled, and then connect the cables③.
- f. Attach the covers in the reverse order of removal.(Refer to REP03-540)

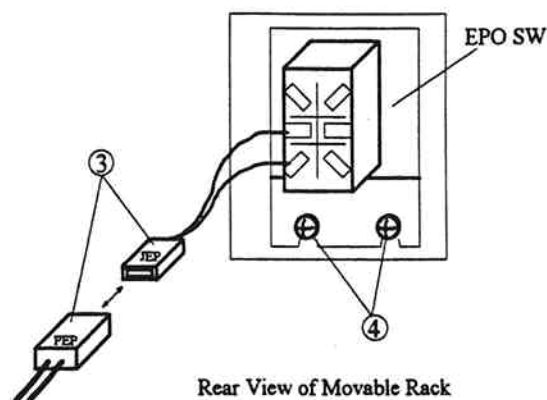


Front View of Disk Controller
(Movable Rack is closed.)



Front View of Movable Rack

Fig. T4-1 Removal of EPO SW Cover



Rear View of Movable Rack

Fig. T4-2 Removal of EPO SW

4. Go to SVP post procedure t1 [REP04-210].

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.

[HARDWARE T5]

◆ PWR CTL

[Related Procedure]

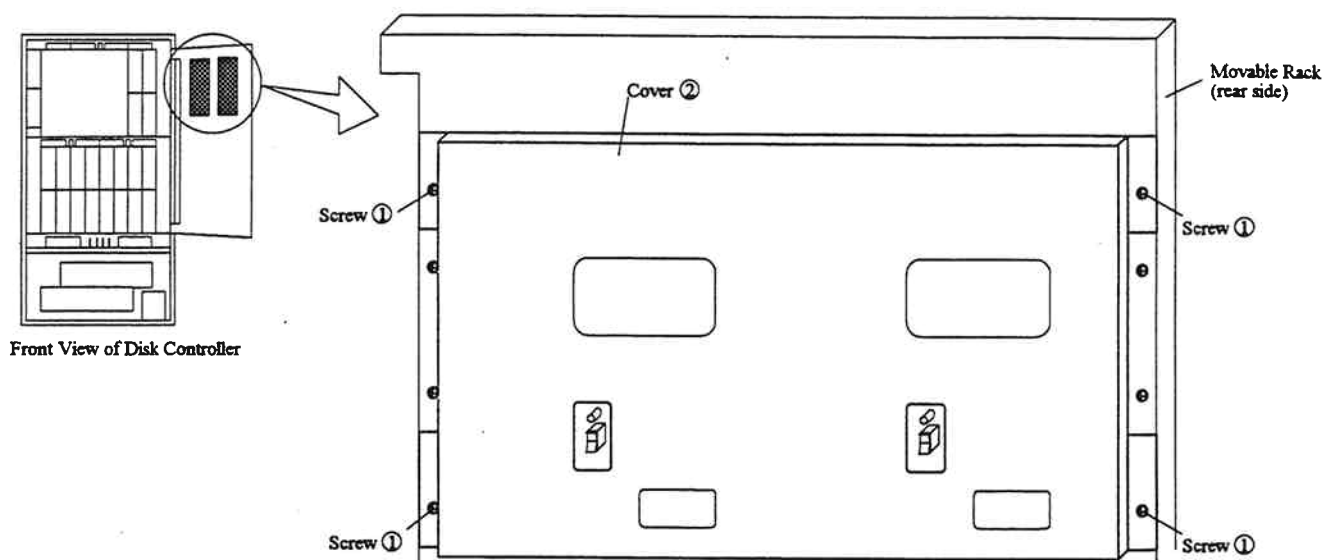
SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-150.

PWRCTL-1

Note: Do not replace PWRCTL-1 PCB and PWRCTL-2 PCB at the same time.

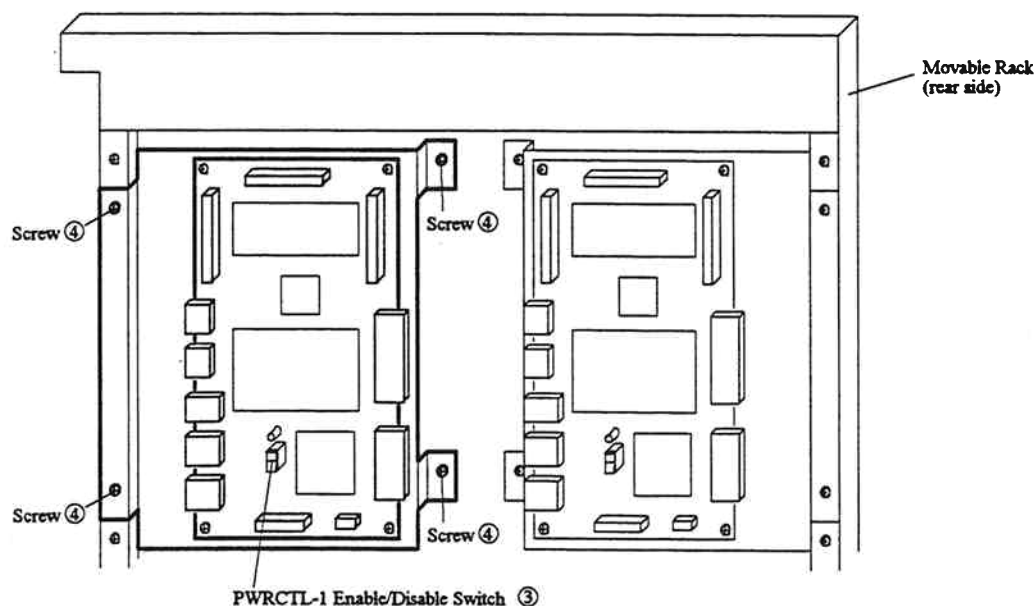
If you want to replace the both PCB, first complete the replacement of one PCB and then start the replacement of the other.

1. Loosen the four screws① and remove the cover②.

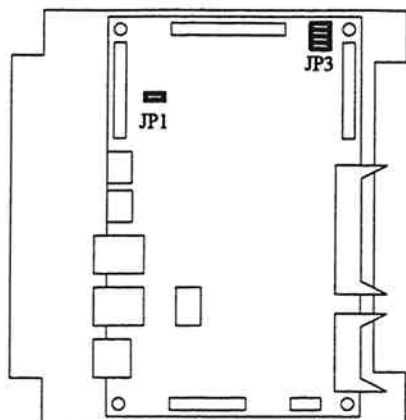


2. Remove the PCB.

- a. Set Enable/Disable Switch③ to Disable on the PWRCTL-1.
- b. Remove all cables attached to the PWRCTL-1.
- c. Loosen the four screws④ and remove the PWRCTL-1.

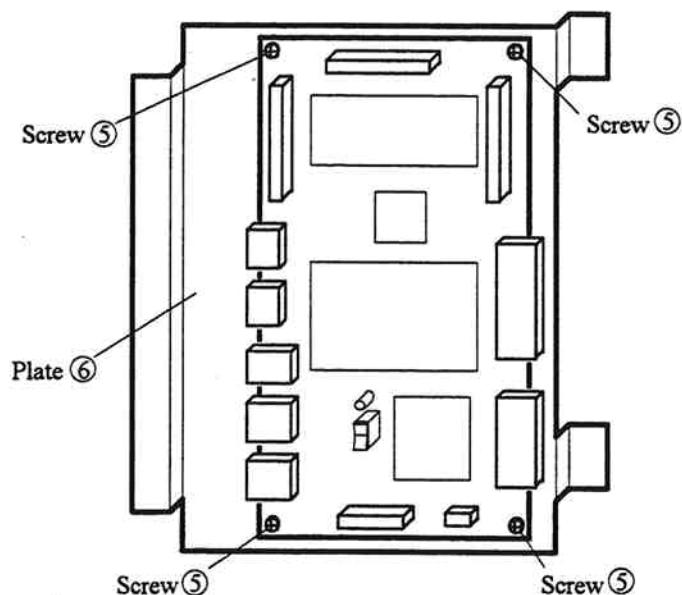


3. Set the jumper sockets(JP1 and JP3) of the spare PCB to the same positions as those of the failed PCB.



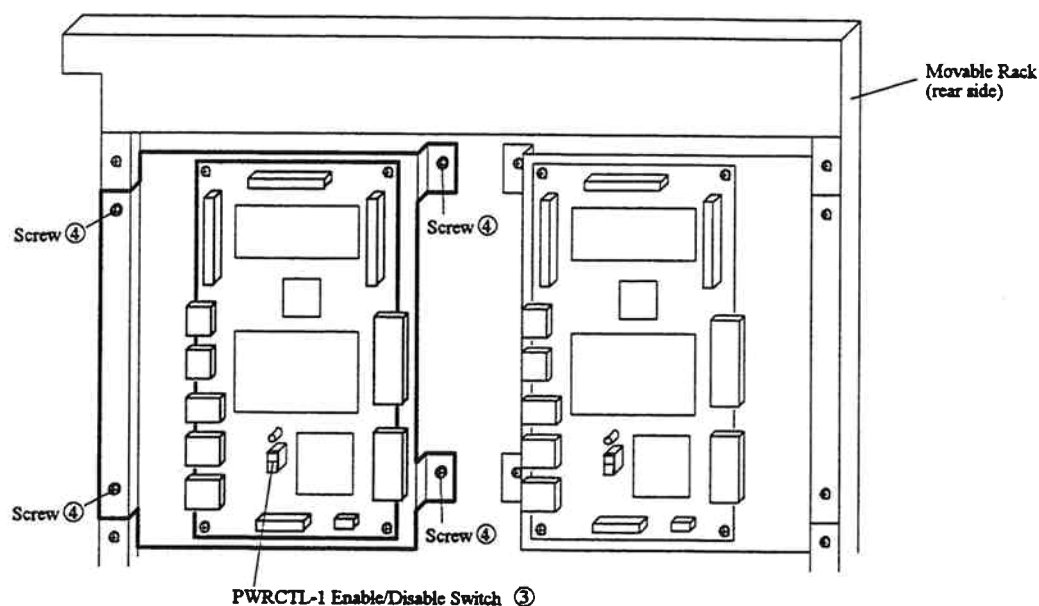
4. Remove the plates from the failed PCB, and then attach them to the spare PCB.

- a. Remove the four screws⑤ and remove the plate⑥ from the failed PCB.
- b. Attach the plate⑥ to the spare PCB and fasten the four screws⑤.



5. Attach the PCB.

- a. Set Enable/Disable Switch③ to Disable on the spare PCB.
- b. Attach the spare PCB and fasten the four screws④.
- c. Connect all cables removed in step 2.
- d. Set Enable/Disable Switch③ to Enable.
- e. Attach the cover② removed in step 1 and fasten the four screws①.



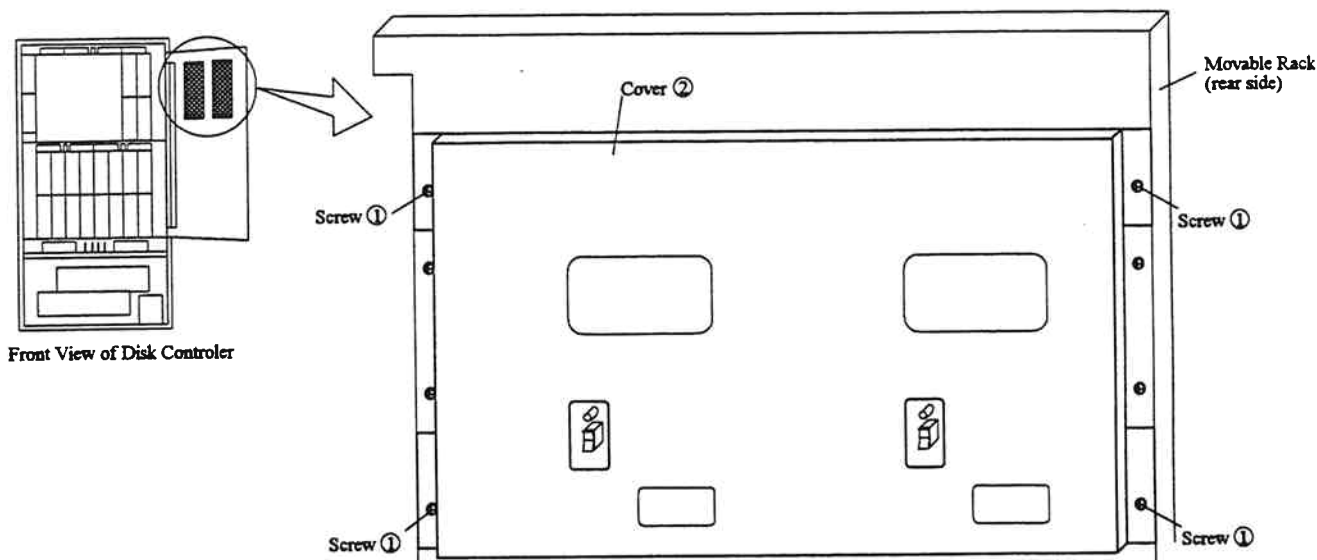
6. Go to SVP post procedure t1 [REP04-210].

PWRCTL-2

Note: Do not replace PWRCTL-1 PCB and PWRCTL-2 PCB at the same time.

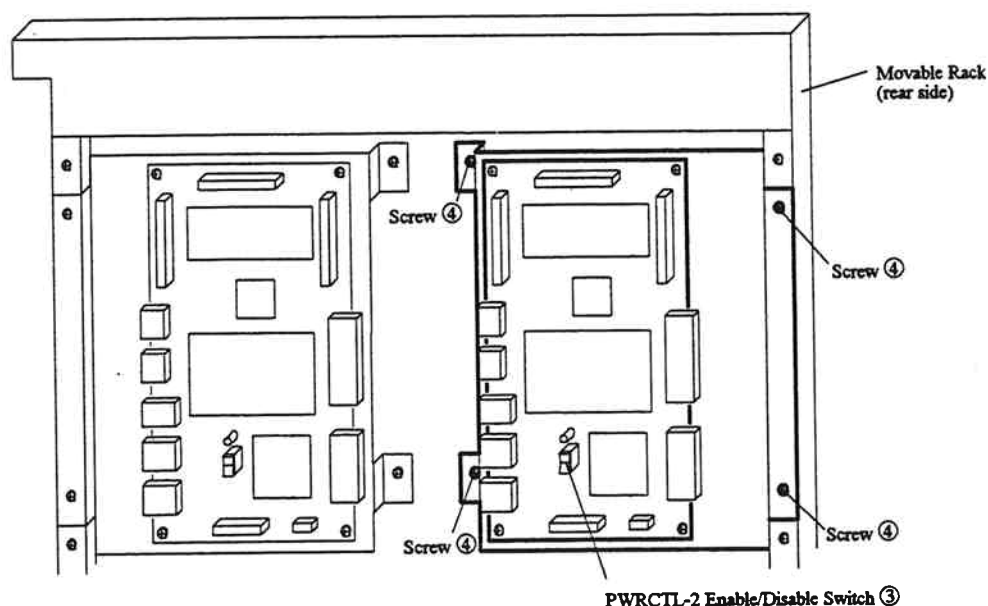
If you want to replace the both PCB, first complete the replacement of one PCB and then start the replacement of the other.

1. Loosen the four screws① and remove the cover②.

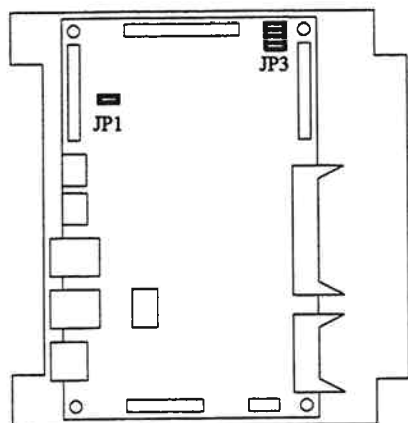


2. Remove the PCB.

- a. Set Enable/Disable Switch③ to Disable on the PWRCTL-2.
- b. Remove all cables attached to the PWRCTL-2.
- c. Loosen the four screws④ and remove the PWRCTL-2.

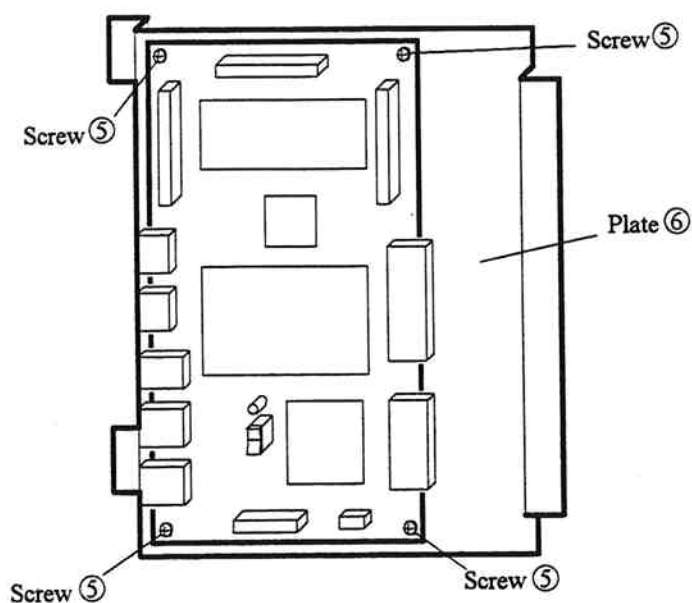


3. Set the jumper sockets(JP1 and JP3) of the spare PCB to the same positions as those of the failed PCB.



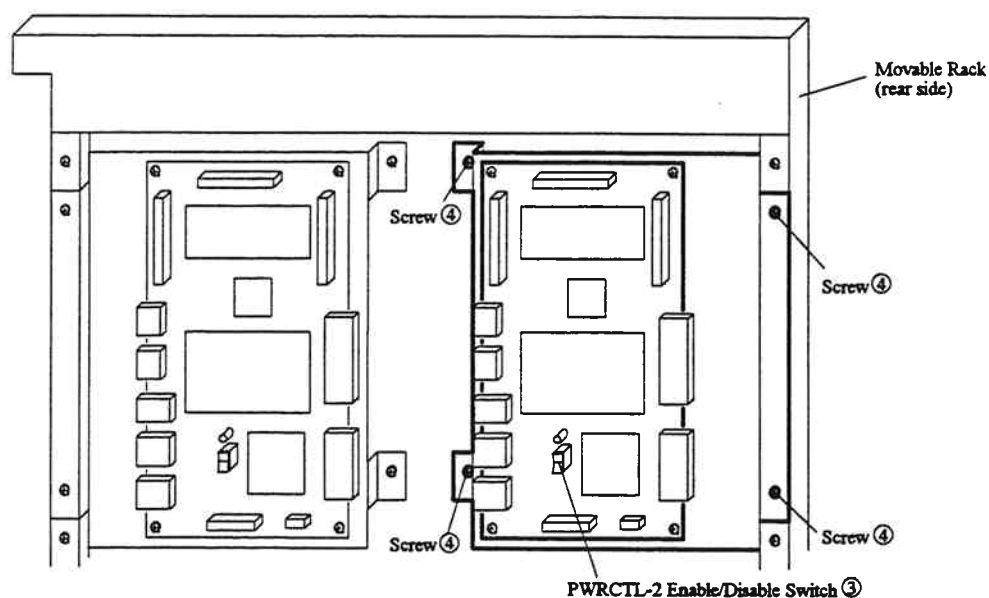
4. Remove the plates from the failed PCB, and then attach them to the spare PCB.

- a. Remove the four screws⑤ and remove the plate⑥ from the failed PCB.
- b. Attach the plate⑥ to the spare PCB and fasten the four screws⑤.



5. Attach the PCB.

- a. Set Enable/Disable Switch③ to Disable on the spare PCB.
- b. Attach the spare PCB and fasten the four screws④.
- c. Connect all cables removed in step 2.
- d. Set Enable/Disable Switch③ to Enable.
- e. Attach the cover② removed in step 1 and fasten the four screws①.



6. Go to SVP post procedure t1 [REP04-210].

[HARDWARE T6]

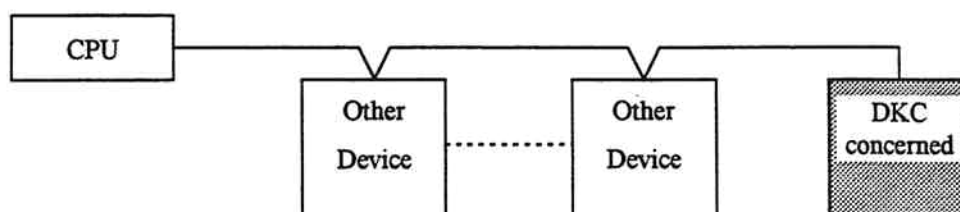
◆ PCI CONN

[Related Procedure]

SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-150.

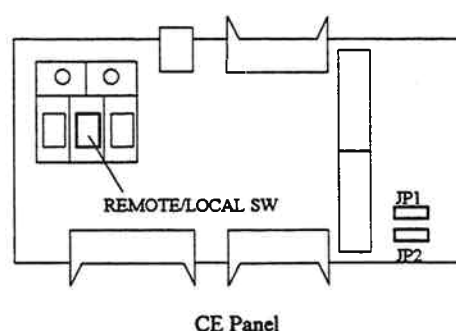
Note 1: Replacement of PCI CONN Panel causes other devices running on the same PCI connection line to be powered off except a) and b) shown below (because giving the EPO instruction is assumed). Therefore, stop the other device before performing replacement.

- a) If PCI cable is not connected to the replacing DKC.
- b) If the replacing DKC (DKC concerned) is connected to the end of the PCI cable as shown below.



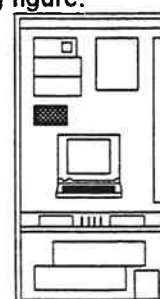
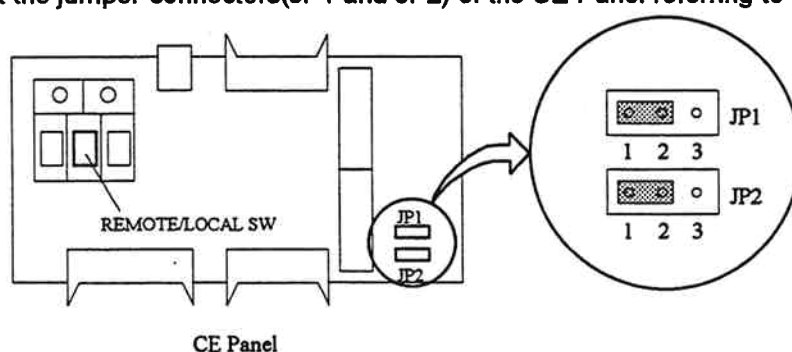
Note 2: The COMP signal of PCI is turned off, if the PCI cable is disconnected.

1. Confirm that the REMOTE/LOCAL Switch of CE Panel is set to LOCAL. If not, set the REMOTE/LOCAL Switch to LOCAL.



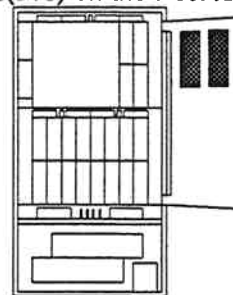
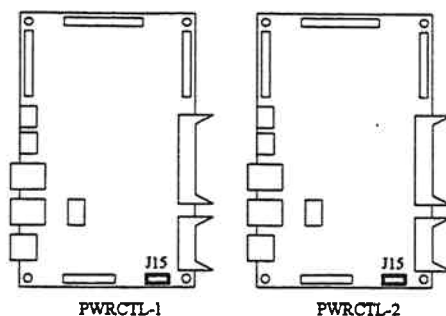
Front View of Disk Controller
(Movable Rack is closed.)

2. Set the jumper connectors(JP1 and JP2) of the CE Panel referring to following figure.



Front View of Disk Controller
(Movable Rack is closed.)

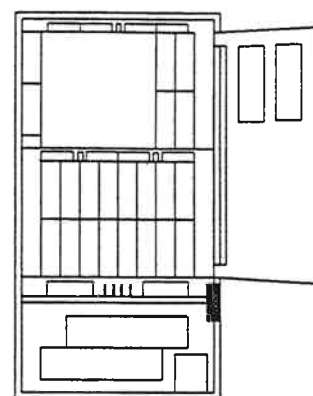
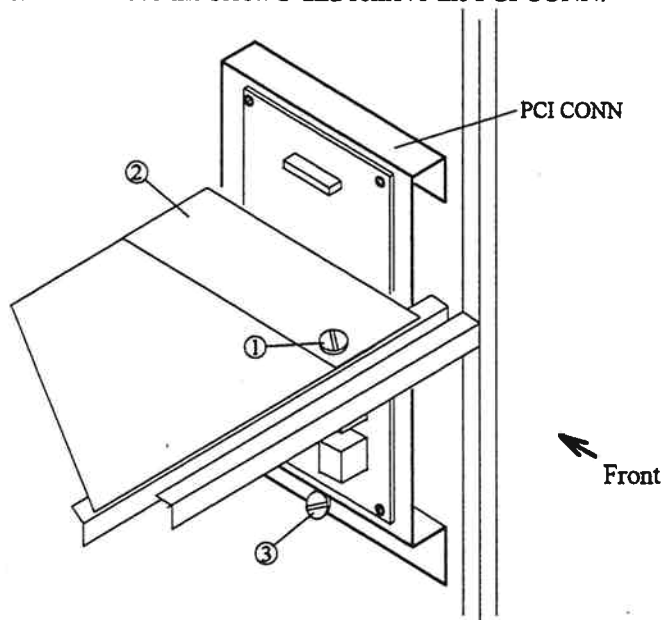
3. Connect the "CE Panel INH" jumper plugs(P15) to the sockets(J15) on the PWRCTL-1 and PWRCTL-2.



Front View of Disk Controller
(Movable Rack is opened.)

4. Remove the PCI CONN.

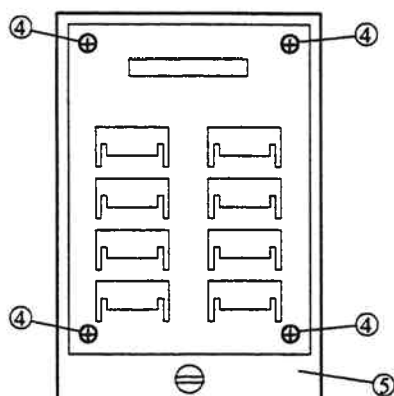
- a. Disconnect all cables from PCI CONN.
- b. Loosen the screw① and remove the plate②.
- c. Remove the screw③ and remove the PCI CONN.



Front View of Disk Controller
(Movable Rack is opened.)

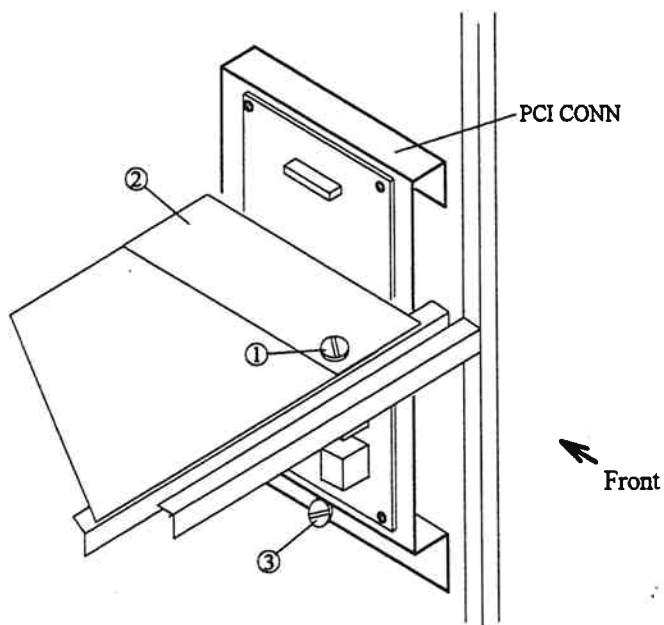
5. Remove the plate from the failed PCB, and then attach them to the spare PCB.

- a. Remove the four screws④ and the plate⑤ from the failed PCB.
- b. Attach the plate⑤ to the spare PCB and fasten the four screws④.

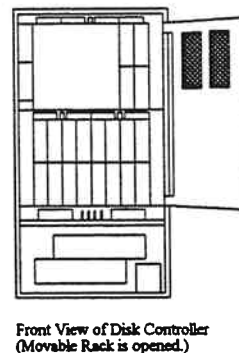
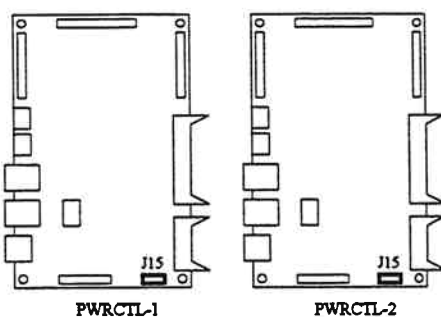


6. Attach the PCI CONN.

- Attach the PCI CONN and fasten the screw③.
- Attach the plate② and fasten the screw①.
- Connect the cables.

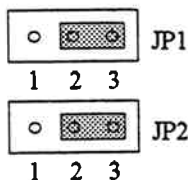


7. Disconnect the "CE Panel INH" jumper plugs(P15) from the sockets(J15) on the PWRCTL-1 and PWRCTL-2.

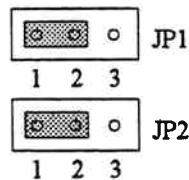


8. Restore the REMOTE/LOCAL switch and jumper (JP1 and JP2) on the CE panel set in step 1 and 2 to its previous setting. The relation between the REMOTE/LOCAL switch and the jumper setting is shown below.

- When is REMOTE/LOCAL switch is in the REMOTE position.



- When is REMOTE/LOCAL switch is in the LOCAL position.



9. Go to SVP post procedure t1 [REP04-210].

[HARDWARE T7]

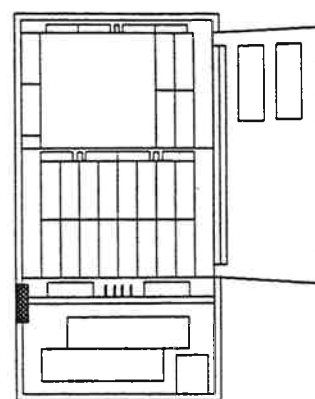
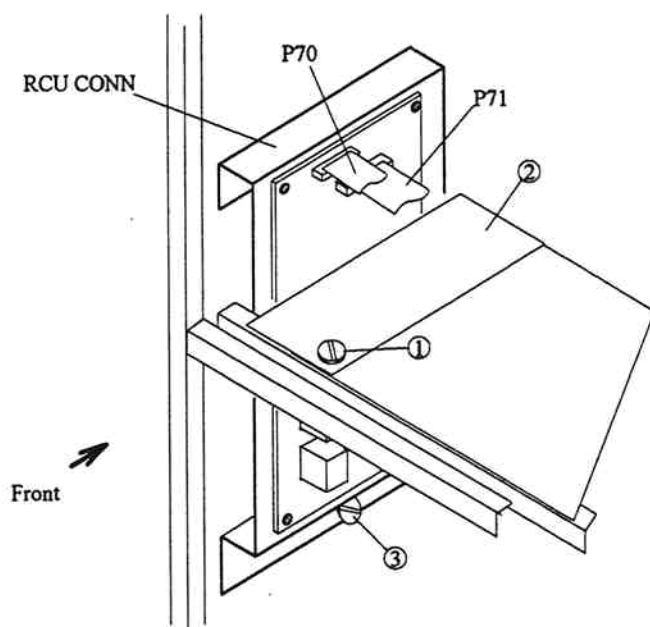
◆ RCU CONN

[Related Procedure]

SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-150.

1. Remove the RCU CONN.

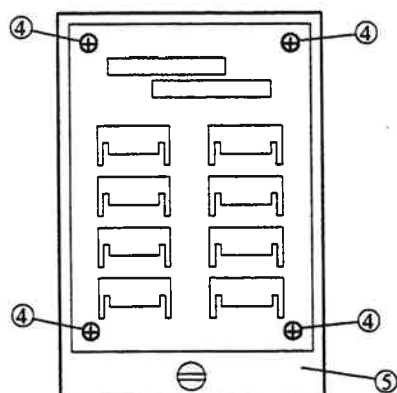
- a. Disconnect all cables from the RCU CONN.
- b. Loosen the screw① and remove the plate②.
- c. Remove the screws③ and remove the RCU CONN.



Front View of Disk Controller
(Movable Rack is opened.)

2. Remove the plate from the failed PCB, and then attach them to spare PCB.

- a. Remove the four screws④ and the plate⑤ from the failed PCB.
- b. Attach the plate⑤ to the spare PCB and fasten the four screws④.



3. Attach the PCB.

- a. Attach the RCU CONN and fasten the screw③.
- b. Attach the plate② and fasten the screw①.
- c. Connect the cables(P70, 71).

4. Go to SVP post procedure t1 [REP04-210].

[HARDWARE T8]

◆ Fan(Logic Fan Assembly, Cache Fan Assembly)

[Related Procedure]

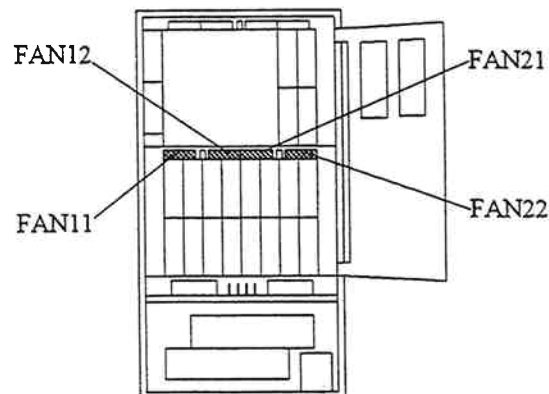
SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T3REP02-550	
SVP post-procedure	Post-procedure t3REP04-360	Refer to REP01-150.

Logic Fan Assembly

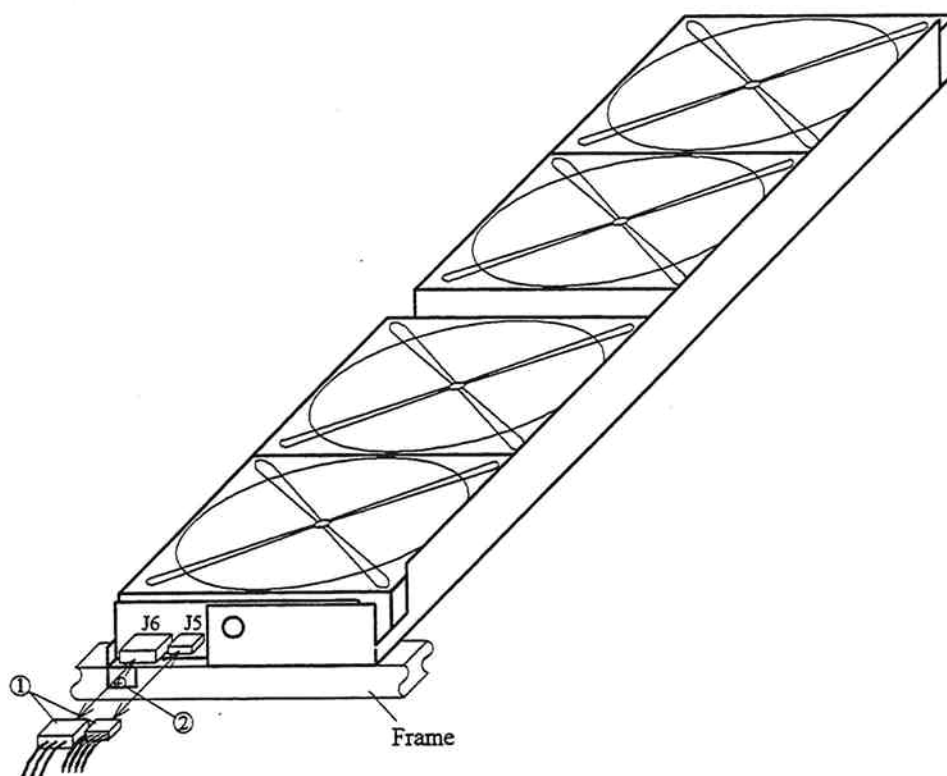
Hazardous rotating mechanism: Can cause injury if touched. Stay clear of it when machine is running.

1. The following figure shows the correct way to replace the Logic Fan Assembly.

- a. Disconnect the cables①.
- b. Loosen the screw②.
- c. Replace the Logic Fan Assembly.
- d. Fasten the screw② and connect the cables①.



Front View of Disk Controller
(Movable Rack is opened.)



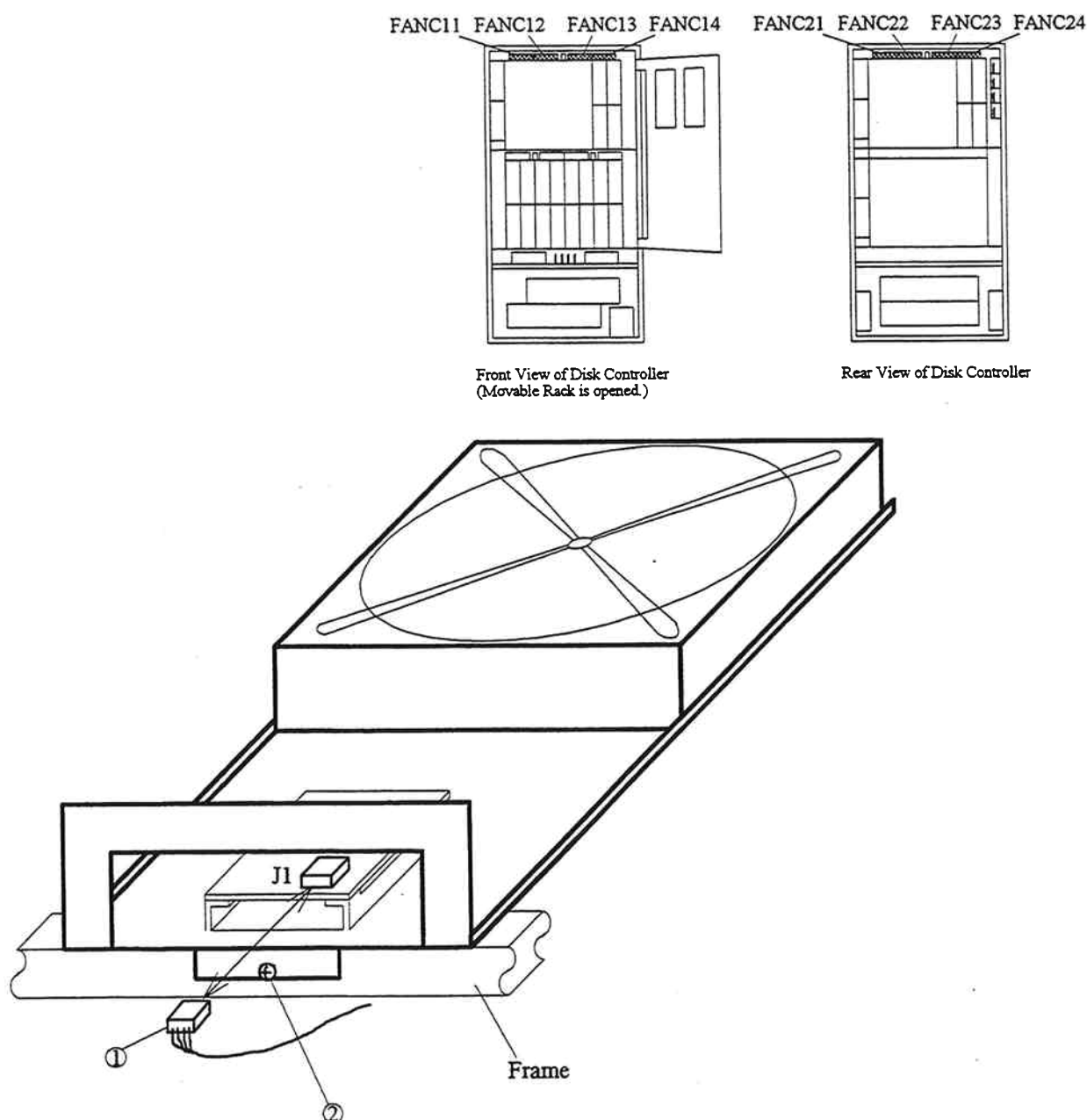
2. Go to SVP post procedure t3 [REP04-360].

Cache Fan Assembly

Hazardous rotating mechanism: Can cause injury if touched. Stay clear of it when machine is running.

1. The following figure shows the correct way to replace the Cache Fan Assembly.

- a. Disconnect the cable① from connector J1.
- b. Loosen the screw②.
- c. Replace the Cache Fan Assembly.
- d. Fasten the screw② and connect the cable①.



2. Go to SVP post procedure t3 [REP04-360].

[HARDWARE T9]

◆ Thermostat Assembly

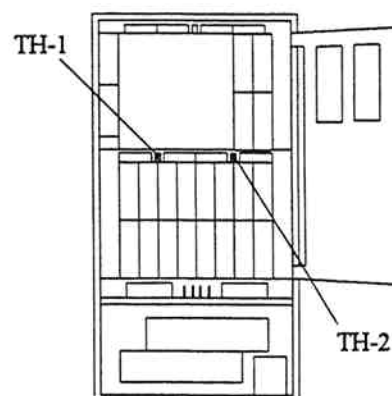
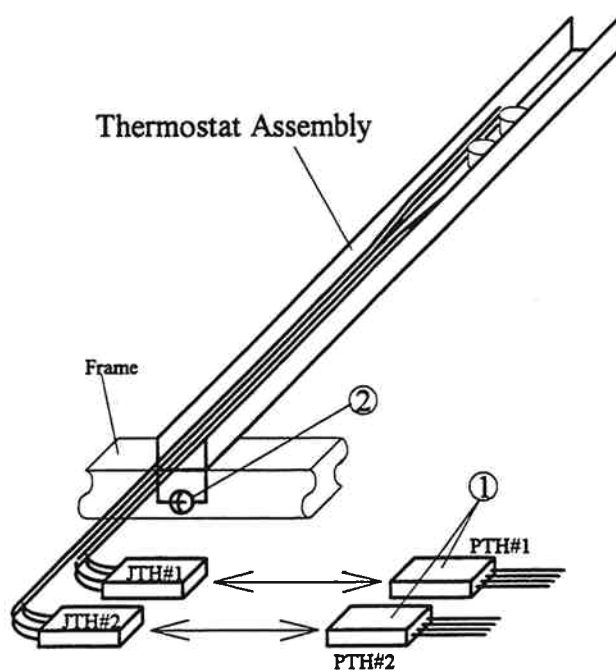
[Related Procedure]

SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T3REP02-550	
SVP post-procedure	Post-procedure t3REP04-360	Refer to REP01-150.

Logic Box Thermostat Assembly

1. The following figure shows the correct way to replace the Thermostat Assembly on Logic Box.

- a. Disconnect the cables① and loosen the screw②.
- b. Replace the Thermostat Assembly.
- c. Fasten the screw② and connect the cables①.



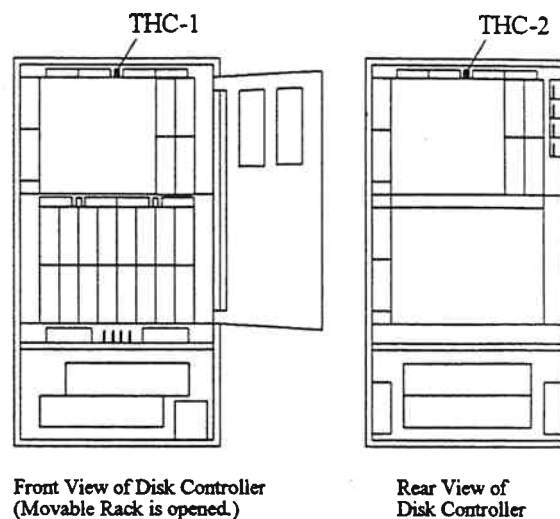
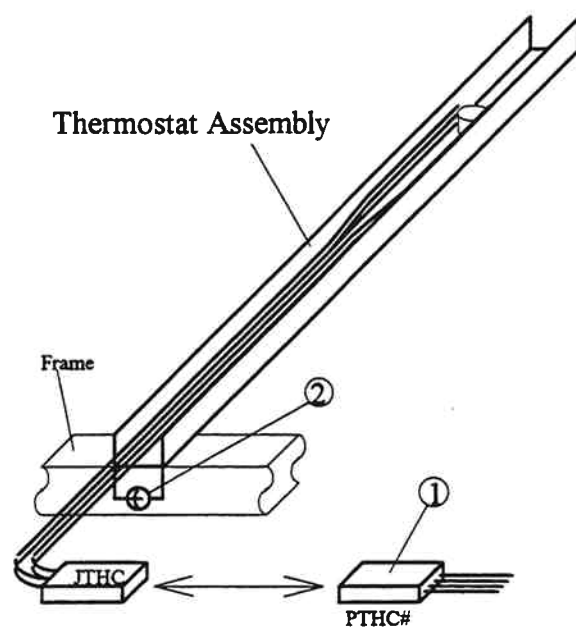
Front View of Disk Controller
(Movable Rack is opened.)

2. Go to SVP post procedure t3 [REP04-360].

Cache Box Thermostat Assembly

1. The following figure shows the correct way to replace the Thermostat Assembly on Cache Box.

- a. Disconnect the cable① and loosen the screw②.
- b. Replace the Thermostat Assembly.
- c. Fasten the screw② and connect the cables①.



2. Go to SVP post procedure t3 [REP04-360].

[HARDWARE T10]

◆ SVP

[Related Procedure]

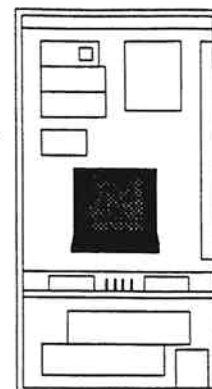
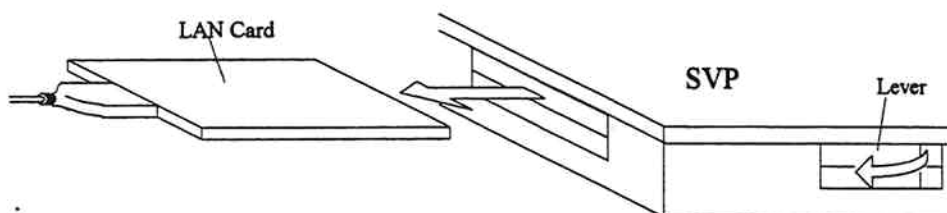
SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-150.

1. Turn off the SVP.

- a. Press the [Ctrl]+[Alt] keys+the power button.

2. Remove the LAN Card.

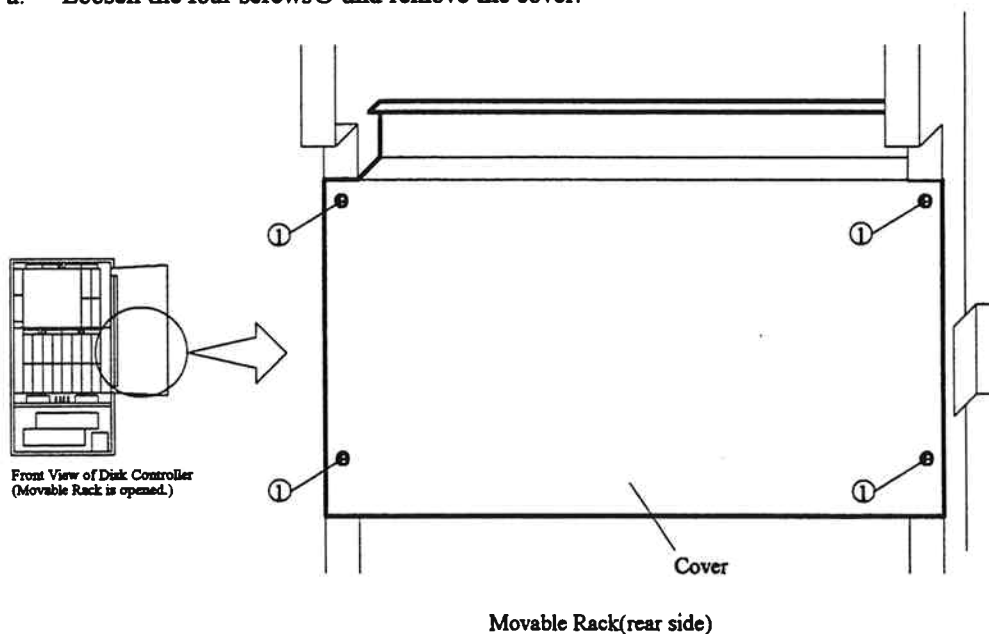
- a. Move the lever located on the front left side of the SVP to left to release the LAN Card.



Front View of Disk Controller
(Movable Rack is closed.)

3. Remove the cover

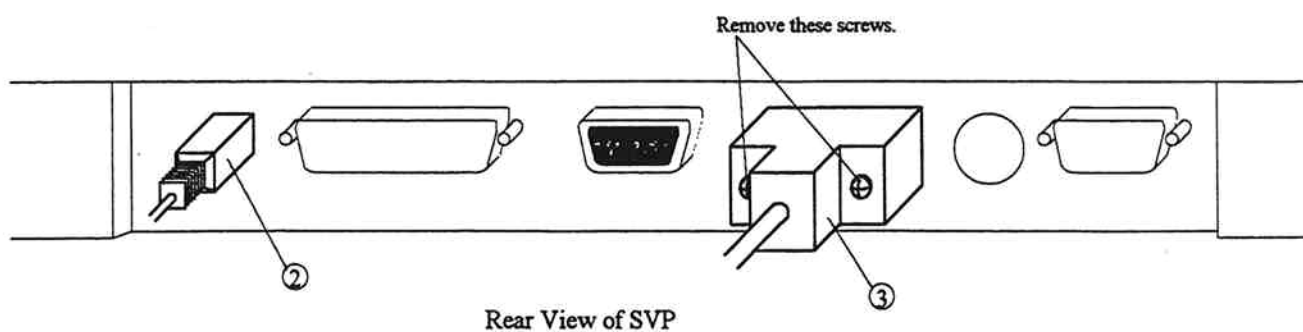
- a. Loosen the four screws① and remove the cover.



Front View of Disk Controller
(Movable Rack is opened.)

4. Disconnect the cables

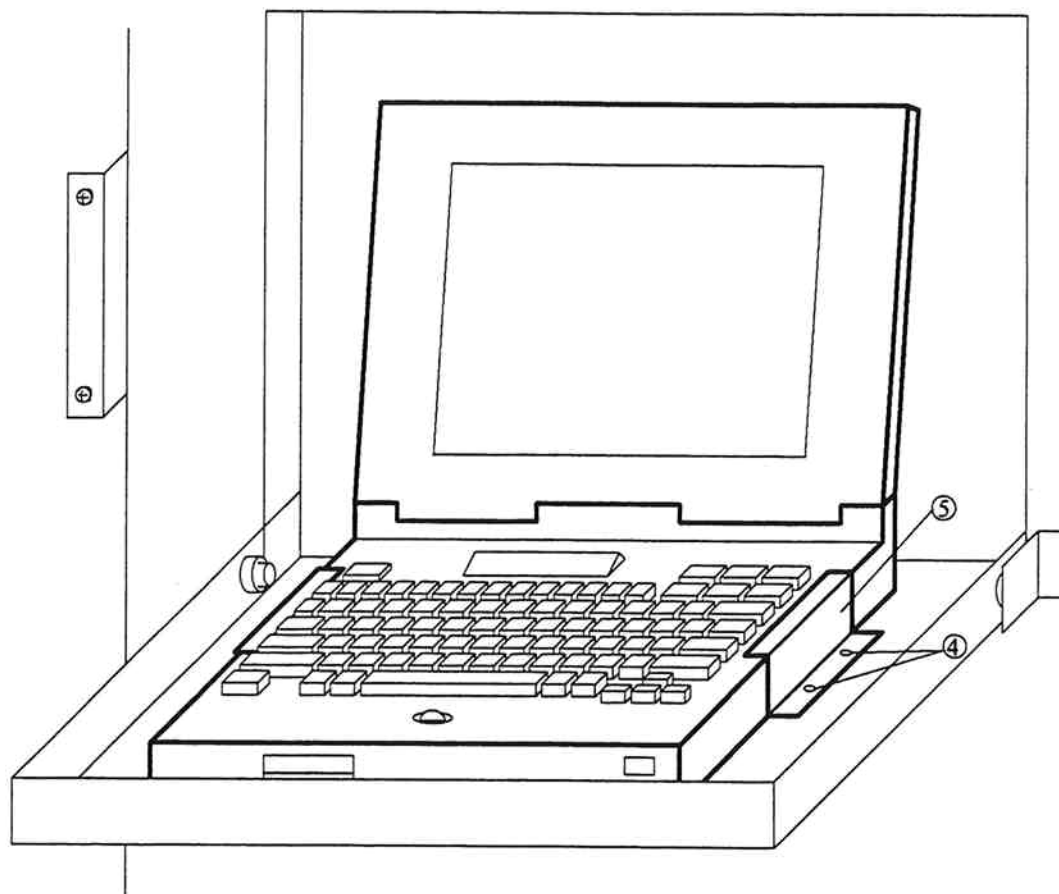
- a. Disconnect the cables② and ③ from the SVP.



Rear View of SVP

The following figure shows the correct way to replace the SVP.

- a. Loosen the two screws④ with a torque driver, and slide the plate⑤ which fixes the side of SVP.
- b. Replace the SVP and attach the plate⑤, LAN Card, cables and cover.



6. Go to SVP post procedure t1 [REP04-210].

[HARDWARE T11]

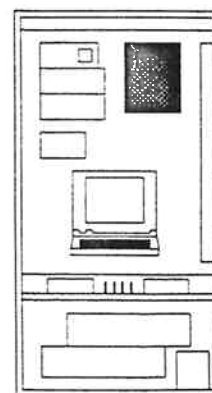
◆ SSVP

[Related Procedure]

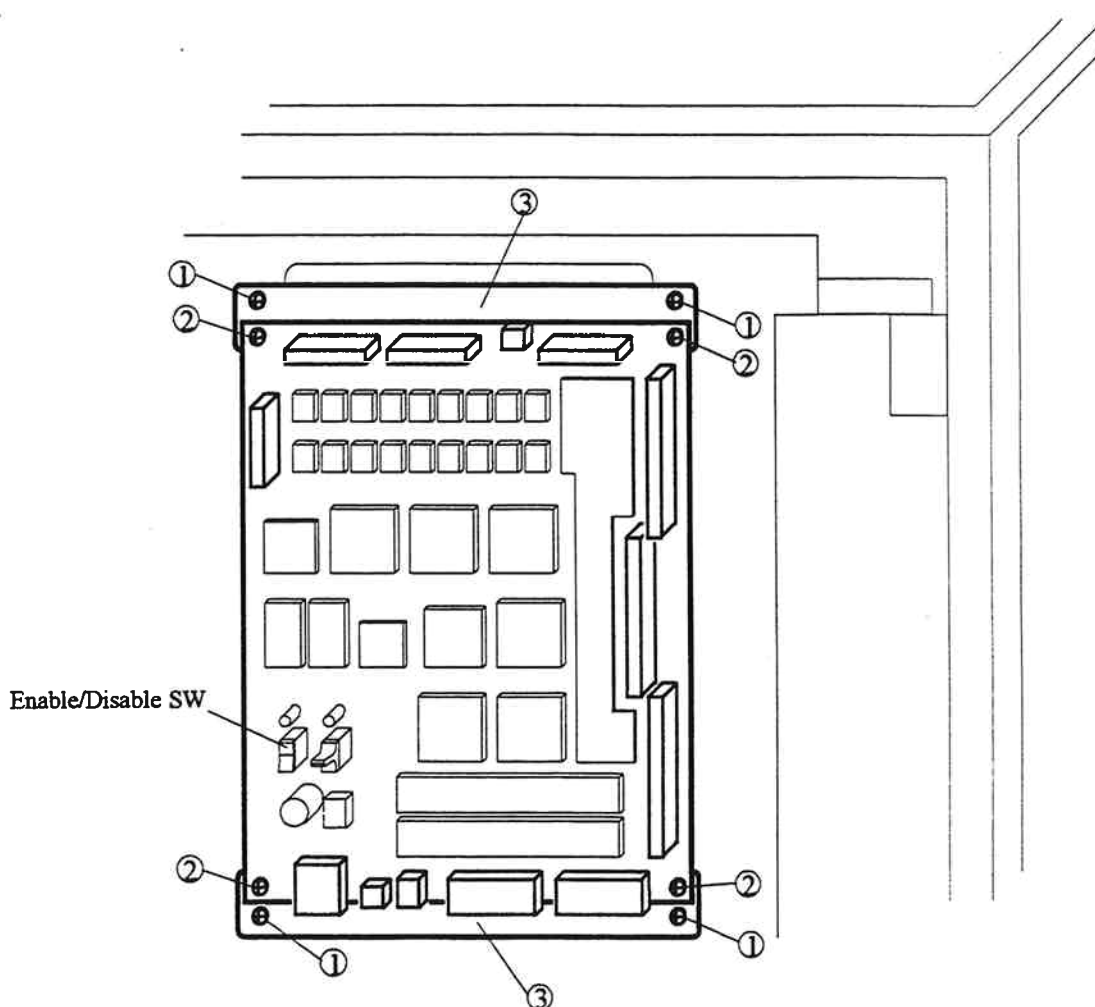
SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T1REP02-390	
SVP post-procedure	Post-procedure t1REP04-210	Refer to REP01-150.

1. The following figure shows the correct way to replace the SSVP PCB.

- a. Set Enable/Disable Switch to Disable on the SSVP PCB.
- b. Disconnect all cables that connect with the SSVP PCB.
- c. Loosen the four screws① and remove the SSVP PCB.
- d. Remove the four screws② and the plates③ from the failed PCB.
- e. Attach the plates④ to the spare PCB and fasten the four screws②.
- f. Confirm that Enable/Disable Switch of the spare PCB is set to **Disable**.
- g. Attach the SSVP PCB.
- h. Fasten the screws① and connect the cables.



Front View of Disk Controller
(Movable Rack is closed.)



2. Go to SVP post procedure t1 [REP04-210].

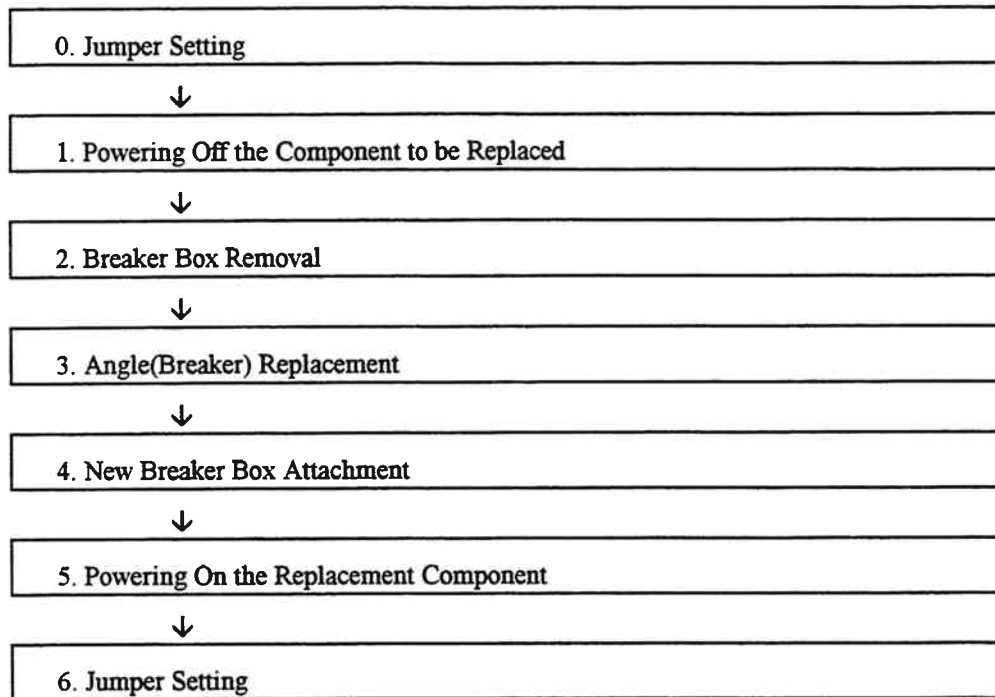
[HARDWARE T12]

◆ BREAKER BOX-1

[Related Procedure]

SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10 Pre-procedure T3REP02-550	Refer to REP01-150.
SVP post-procedure	Post-procedure t3REP04-360	Refer to REP01-150.

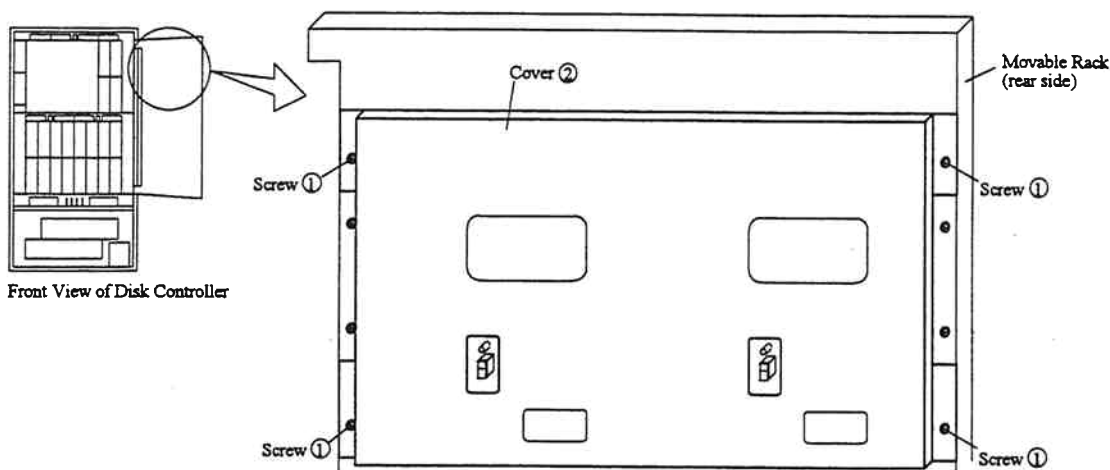
Flowchart



0. Jumper Setting

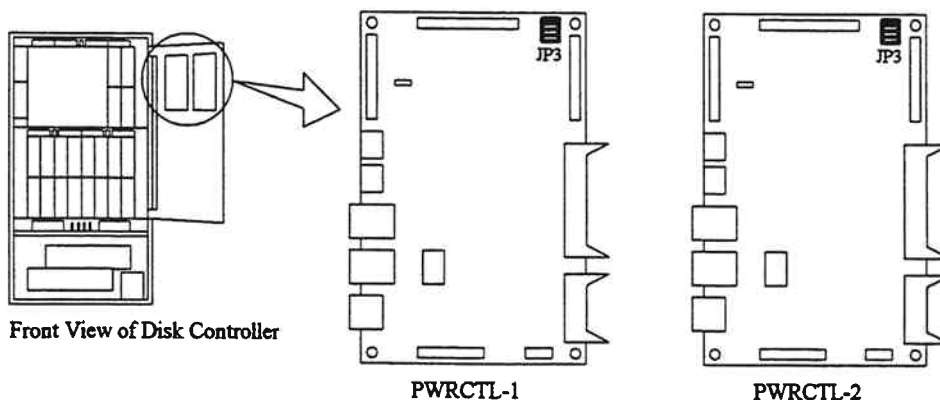
Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will insure that the IC and LSI on the PCB are protected from static electricity.

- a. Loosen the four screws① and remove the cover②.



- b. Set the jumper plugs on PWRCTL-1 and PWRCTL-2 referring to the following table and figure.

Location No.	No Cache Box installed	Cache Box installed
PWRCTL-1	JP3	JP3
PWRCTL-2	JP3	JP3



1. Power Off the Component to be Replaced

**WARNING****Be Careful with Electric Shock**

- The power of the device is still on after turning off the breakers shown below.
- The device may be powered off when turning off the breakers not shown below.
- The circuit has residual voltage for one minute after turning off the breakers. So be sure to disconnect all the connectors after this period.

**CAUTION****Mind Your Head**

- Be sure to mind your head during operation, or you might hit your head against the movable rack, which causes injury.

Table 1 Circuit Breakers to be Turned Off When Replacing Breaker Box-1

No.	Unit	Location No.	Breaker No.	Remarks
1	Disk Controller	Breaker Box-1	CB201	
2	Disk Controller	Breaker Box-1	CB202	
3	Disk Controller	Breaker Box-1	CB203	
4	Disk Controller	Outlet Box	CB301	
5	Disk Controller	Outlet Box	CB302	DKC210IU Only
6	Basic Disk Unit	AC BOX-R10	CB101	Failure to turn off may result in an electric shock.
7	Basic Disk Unit	AC BOX-R10	CB102	
8	Basic Disk Unit	AC BOX-R10	CB103	

- a. Turn off the circuit breakers in the Disk Controller. Refer to Table 1 and Fig. 1.

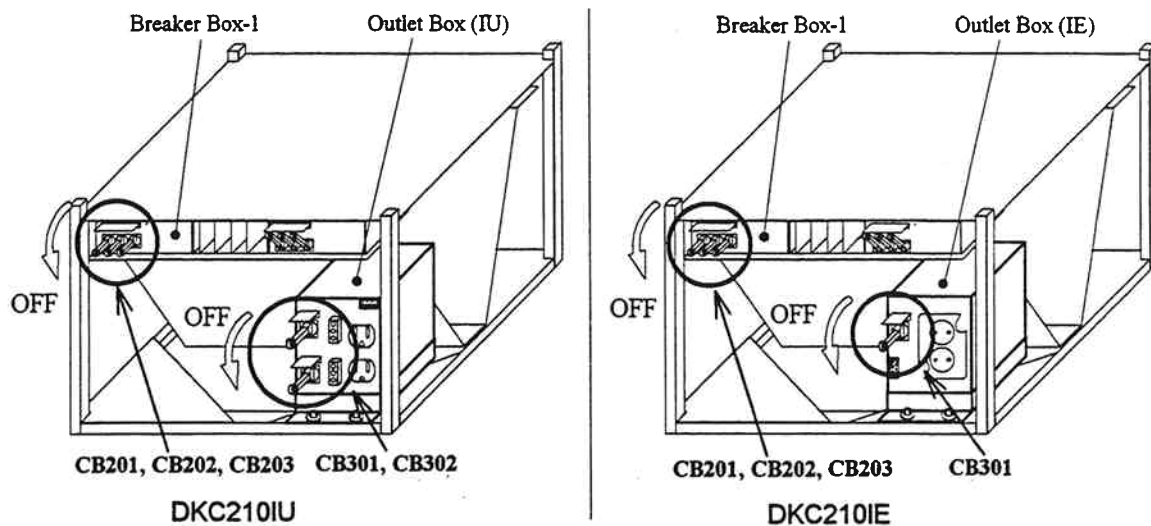


Fig. 1 Circuit Breakers to be Turned Off When Replacing Breaker Box-1

- b. Turn off the circuit breakers(CB101, CB102, CB103) on AC BOX-R10 in the Basic Disk Unit.
Failure to turn off may result in an electric shock.

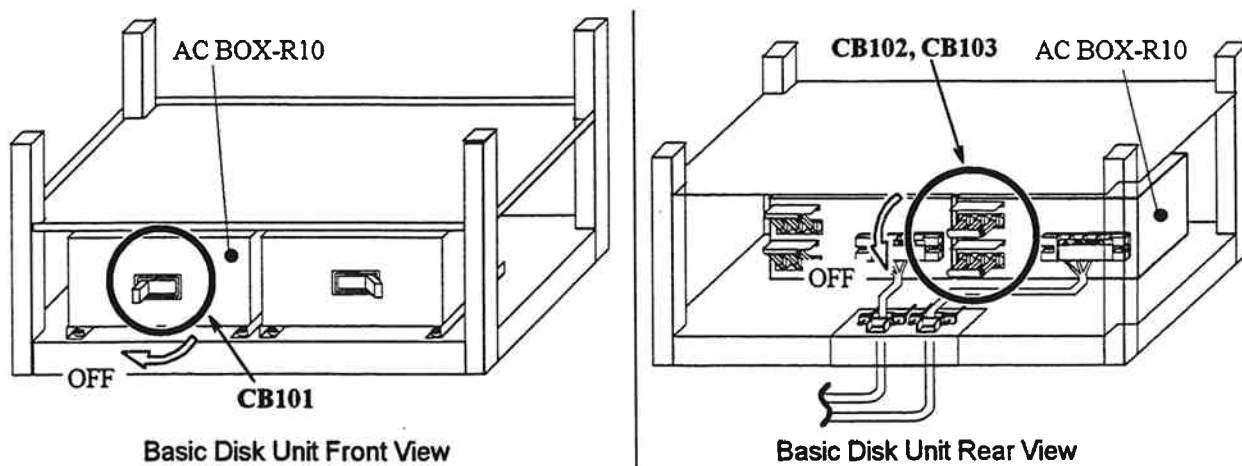


Fig. 2 Circuit Breakers to be Turned Off When Replacing Breaker Box-1

2. Breaker Box Removal

a. Logic PS Box Cover 2 removal

Remove Logic PS Cover 2. Refer to SECTION 3.3.1.8 LOGIC PS BOX COVER 2 [INST03-90]



WARNING

Be Careful with Electric Shock

- Be sure to turn off the circuit breaker of AC BOX-R10 before operation.

b. Disconnect the connectors from Breaker Box-1.

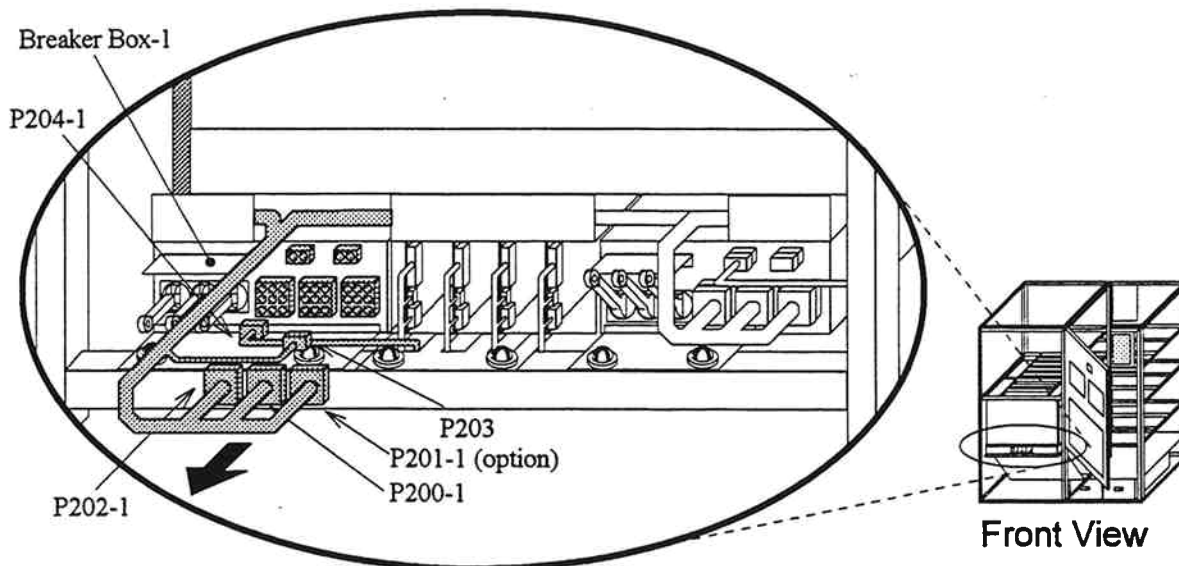


Fig. 3 Disconnection of Cable Connectors from Breaker Box-1

c. Loosen the two screws. Remove Breaker Box-1.

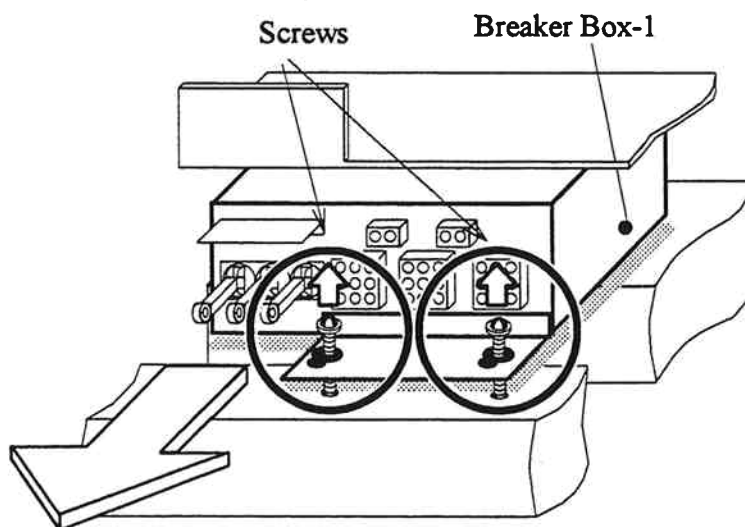


Fig. 4 Removal of Breaker Box-1

3. Angle(Breaker) Replacement

Loosen the two screws. Remove the Angle(Breaker) from the failed Breaker Box.

Secure the Angle(Breaker) to a new Breaker Box with the two screws

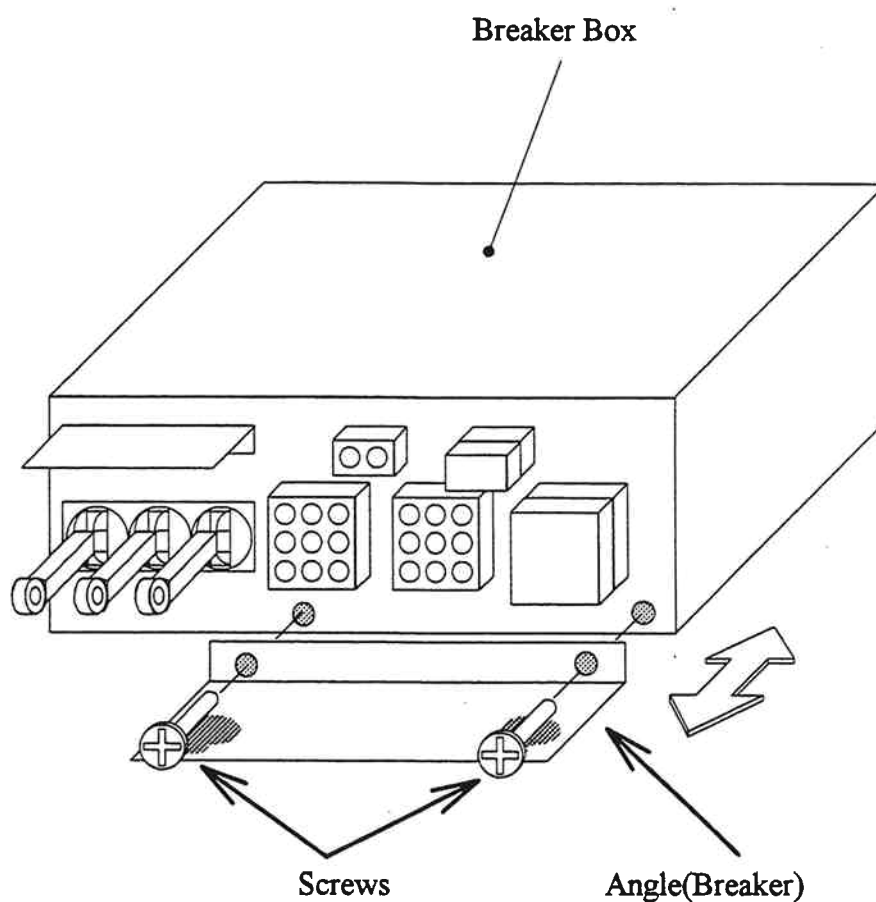


Fig. 5 Replacement of Angle(Breaker)

4. New Breaker Box Attachment

a. Turn off the circuit breakers (CB201, CB202, CB203) on a new Breaker Box.

b. Attach a new Breaker Box. Secure the Breaker Box with the screws.

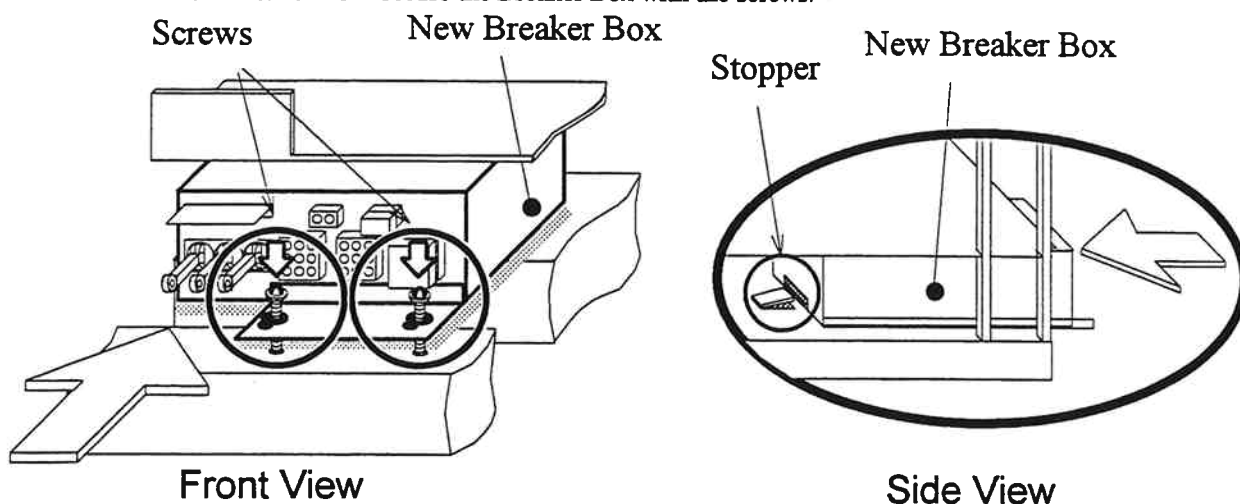


Fig. 6 Attachment of Breaker Box-1

c. Connect the connectors. Refer to Table 2 and Fig. 7.

Table 2 Breaker Box-1 Connectors

No.	Connector No.	Cable No.		Remarks
1	J200	P200-1	AC BOX-R10	
2	J201	P201-1	Dummy connector or Cache Box-1 and 2	option
3	J202	P202-1	Logic Power Supplies	
4	J203	P203-1	Outlet Box	
5	J204	P204-1	PWRCTL-2	

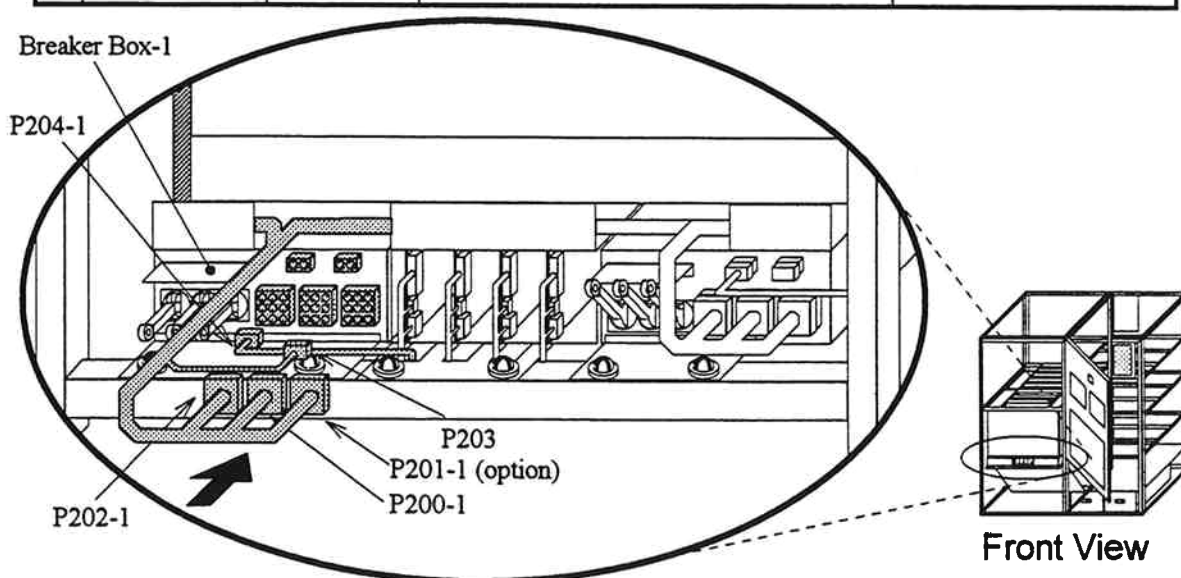


Fig. 7 Cable Connection of Breaker Box-1

d. Logic PS Box Cover 2 attachment

Attach Logic PS Cover 2. Refer to SECTION 3.3.1.8 LOGIC PS BOX COVER 2 [INST03-90]

5. Powering On the Replacement Component

- a. Turn on all the circuit breakers in the reverse order of powering off. Refer to Table 1 [REP03-740]
-
- b. Turn "IND TEST / CHK RST" switch in CE panel to "CHK RST".

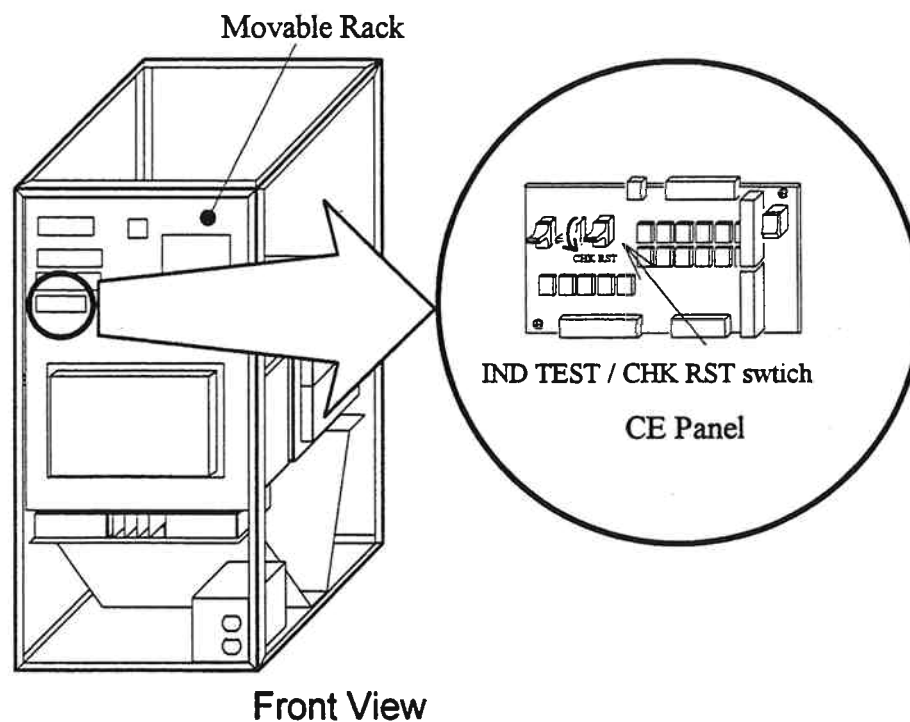


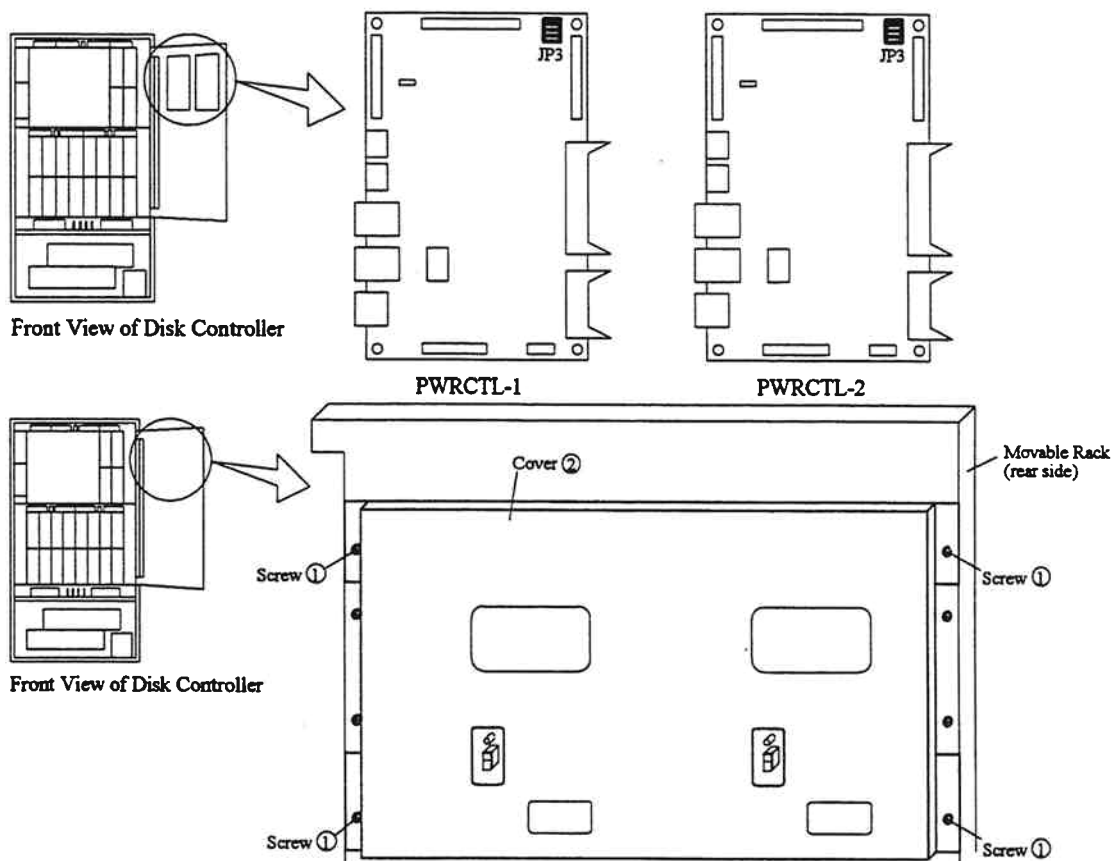
Fig. 8 Setting of IND TEST / CHK RST Switch

6. Jumper Setting

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 on PWRCTL-1 and PWRCTL-2 as indicated in the table below.
- b. Attach the cover② and fasten the four screws①.

Location No.	No Cache Box installed	Cache Box installed
PWRCTL-1	JP3	JP3
PWRCTL-2	JP3	JP3



7. Go to SVP post-procedure t3 [REP04-360].

Blank Sheet

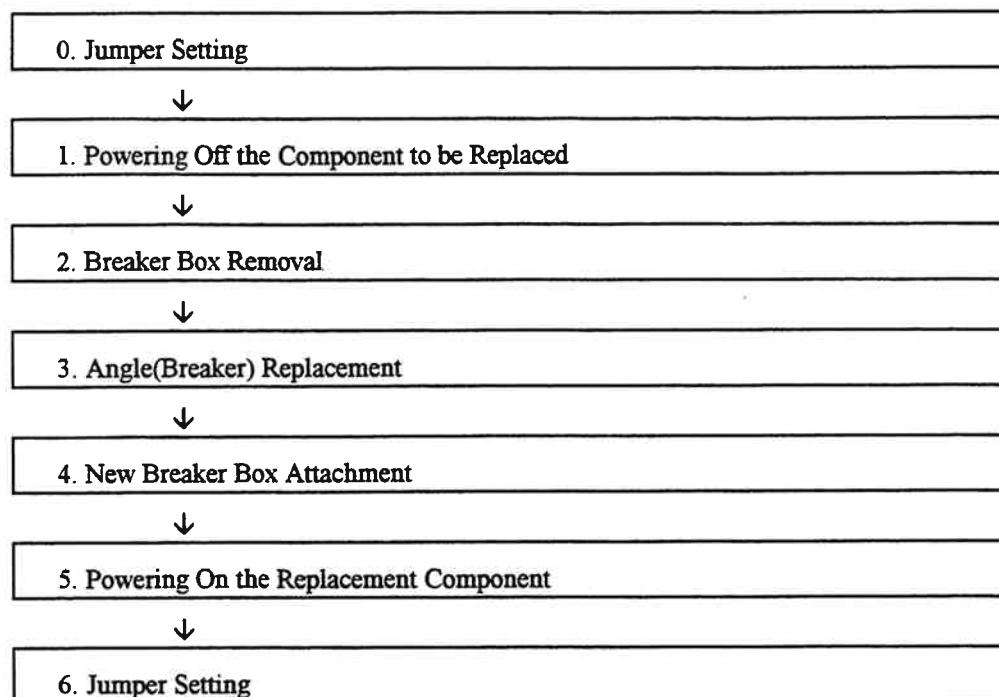
[HARDWARE T13]

◆ BREAKER BOX-2

[Related Procedure]

SVP procedure	Title & Sheet No.	Remarks
SVP pre-procedure	Pre-procedure AREP02-10	Refer to REP01-150.
	Pre-procedure T3REP02-550	
SVP post-procedure	Post-procedure t3REP04-360	Refer to REP01-150.

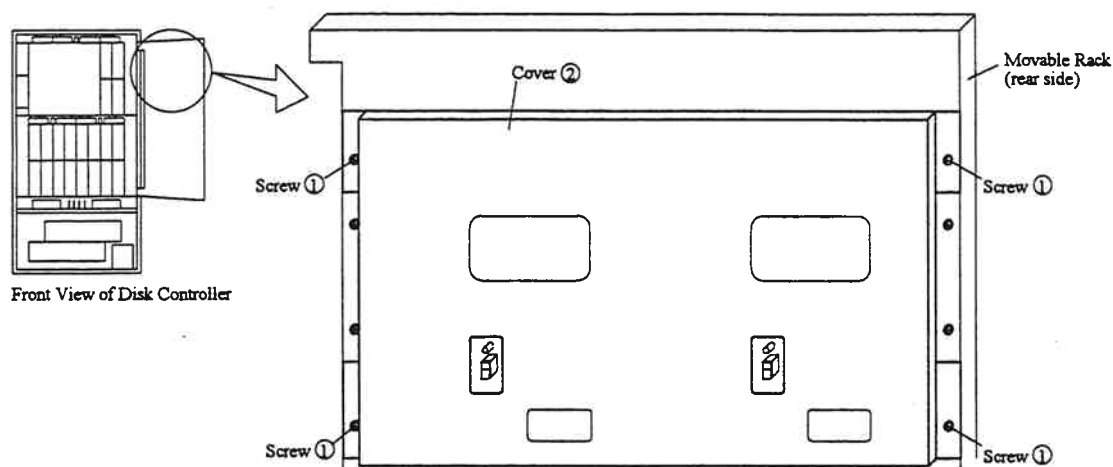
Flowchart



0. Jumper Setting

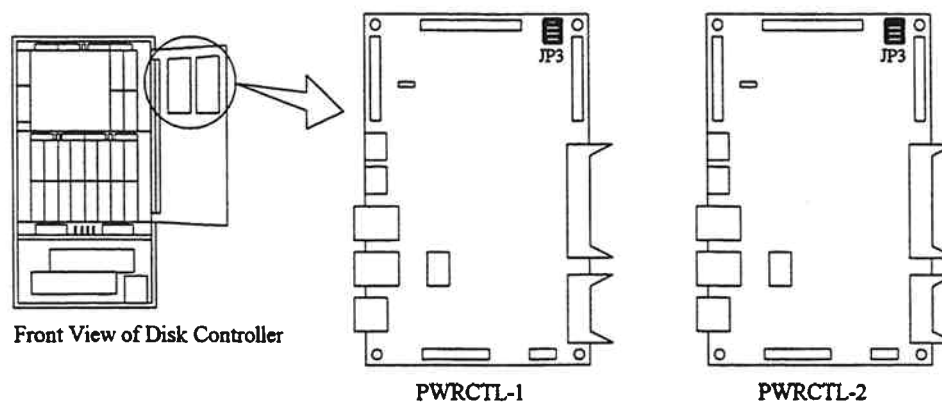
Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will insure that the IC and LSI on the PCB are protected from static electricity.

- a. Loosen the four screws① and remove the cover②.



- b. Set the jumper plugs on PWRCTL-1 and PWRCTL-2 referring to the following table and figure.

Location No.	No Cache Box installed	Cache Box installed
PWRCTL-1	JP3	JP3
PWRCTL-2	JP3	JP3



1. Powering Off the Component to be Replaced

 WARNING
Be Careful with Electric Shock

- The power of the device is still on after turning off the breakers shown below.
- The device may be powered off when turning off the breakers not shown below.
- The circuit has residual voltage for one minute after turning off the breakers. So be sure to disconnect all the connectors after this period.

 CAUTION
Mind Your Head

- Be sure to mind your head during operation, or you might hit your head against the movable rack, which causes injury.

Table 1 Circuit Breakers to be Turned Off When Replacing Breaker Box-2

No.	Unit	Location No.	Breaker No.	Remarks
1	Disk Controller	Breaker Box-2	CB201	
2	Disk Controller	Breaker Box-2	CB202	
3	Disk Controller	Breaker Box-2	CB203	
4	Basic Disk Unit	AC BOX-R11	CB101	Failure to turn off may result in an electric shock.
5	Basic Disk Unit	AC BOX-R11	CB102	
6	Basic Disk Unit	AC BOX-R11	CB103	