ADR Installation for X-Calibur Panoramic X-Ray System

Overview for installing ADR

Install ADR sensor unit to the Cassette Holder

Route a LAN cable to the PC

Necessary Components

Item	Ref#.	Part No.	Qty
01. Digital Cable Assembly		308-03711	1
02. Positioning Drawing for Digital Pan		308-03712	1
03. Reference Drawing for Installation of Cassette Assembly	A01	308-03713	1
04. Bracket for Sensor	B03	308-03714	1
05. Light Blocking Plate	B10	308-03715	1
06. Cable Guide Assembly (w/Power Unit)	A02	308-03716	1
07. CNL1 Cable Assembly		308-03717	1
08. Template for Drilling (C)	B16	308-03724	1
09. Template for Drilling (D)	A04	308-03725	1
10. Spacer	B04	408-10745	2
11. Hook	B08	408-10746	2
12. ADR Plus System	B01	408-10459	1
13. Digital Board Assembly		408-10733	1
14. Template for Drilling (B)	B15	408-10779	1
15. CN Board C Assembly		408-05230-04	1
16. Weight		408-10889	3
17. STP LAN Cable		915-30052-01	5 Meter
		915-30052-03	10 M (default)
		915-30052-04	15 Meter
		915-30052-05	20 Meter
		915-30052-06	30 Meter
18. Felt	B07	916-00005-04	1
19. Urethane Roll Stock	B11	937-30018-15	4
20. Cable Holder	B13 / A08	972-83002-01	2
21. Spare Fuse (ST6 800mAN1)		972-05061-01	1
21. Adhesive backed Cable tie base (MB3A-L)A03		972-83007	2
22. STP Coupler(ADT-EX-STP)		988-50047	1

23. Template for Drilling (A)   208-02092   1

ADR Digital Upgrade Kit major components
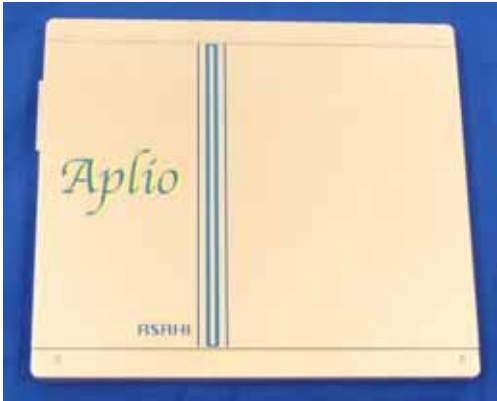
CCD Sensor Unit
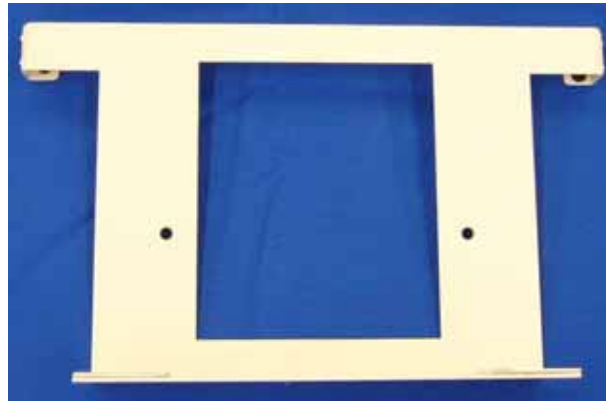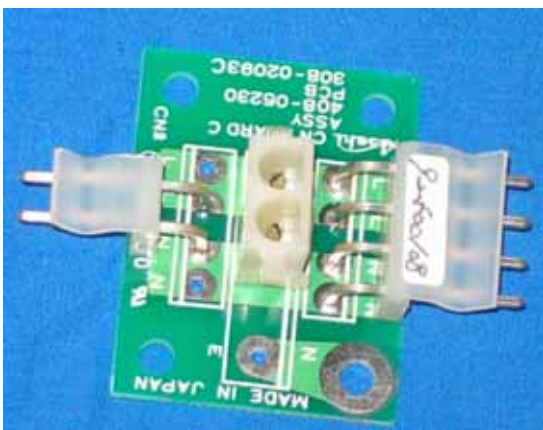

Sensor Bracket

Cable Guide

Power Unit

CN-Board C

Digital Board

CNL1 Cable Assembly

Digital Cable

LAN Cable

Light Blocking Plate

Following Parts become unnecessary

1. CN Board C Assembly	408-05230-03	1
2. Cassette Holding Plate	408-05526	1
3. Cassette Holding Rail	408-04801	1

Necessary tools for this installation

Philip head screw driver (Large)

Slotted head screw driver (Small)

Nut Driver 7/32" (5.5mm)

Sheet Metal Cutter

Long nose pliers

Cutter knife

Round file 25/64" (10mm)

Flat file 15/64" (6mm)

Electric Drill with a drill bit 5/32" (4mm)

Drill bit 3/4" (20mm)

Center punch

Spade Bit

Needle Nose Plier

Metric Nut Driver

Wiring Connection Overview

Figure 1

Installation Procedures

1. Rotation Unit Section

Unplug the Power Cable

1. Remove the Rotation Unit Cover

2. Pull out CNA(12P) connector from POWER BOARD(PART CODE:EX-07-130), and connect DIGITAL BOARD to CNA

Digital Board

3. Connect the pulled out CNA connector to CNA on the DIGITAL BOARD (Figure 2)
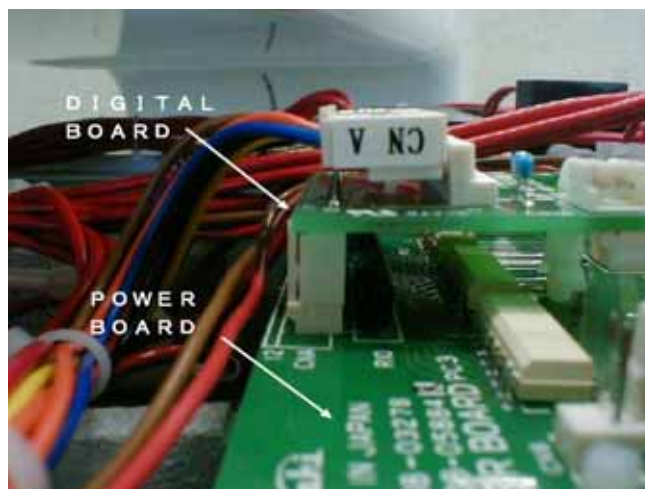
Figure 2

4. Connect CNXD Cable to CNXD connector on the DIGITAL BOARD (Figure 3)
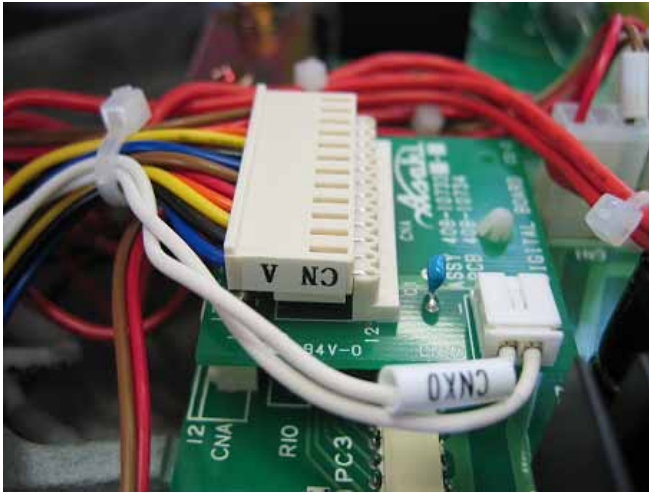
Figure 3

5. Attach the CNXD Cable to the CNA wire harness with a plastic tie (Figure 3)

2. Arm Section

(X-Ray Head Side)

Apply the supplied template **A** (figure 4). Drill a hole by using 3/4" spade bit. Drill a hole by using 5/32" drill bit. Attach a Cable Holder by a flat head screw. (Figure 7)

Template (A) Figure 4

Figure 5

Figure 6

Cable holder

Figure 7

Apply the supplied template **B** (figure 8). Drill a hole by using 3/4" spade bit. Then cut sides by using a sheet metal cutter.

Figure 8

Figure 9

Figure 10

3. Cassette Holder Section

Move the cassette holder to the right end.

Apply the template **C** on the metal cassette holder shield plate (Align to upper left).

Using a center punch, dimple that point for drilling. Then drill a hole by using xx drill bit.

Attach a Cable Holder (Figure 14).by using a sheet metal screw.
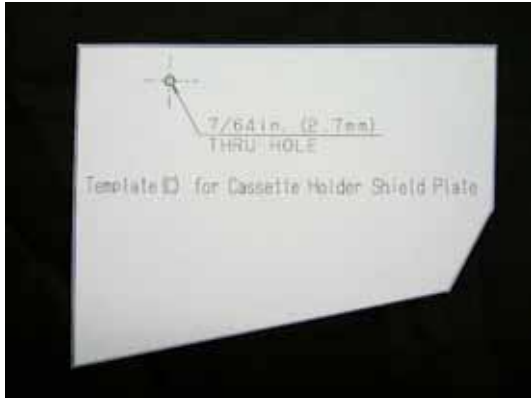
Figure 11
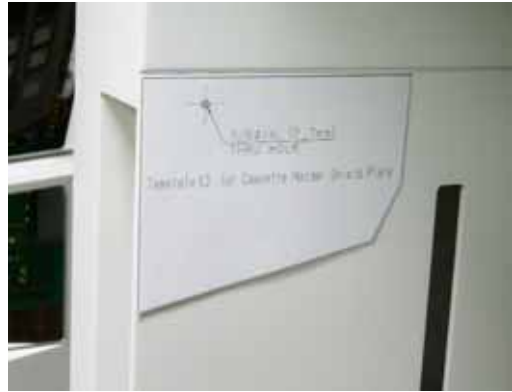
Figure 12

Figure 13

4 hole
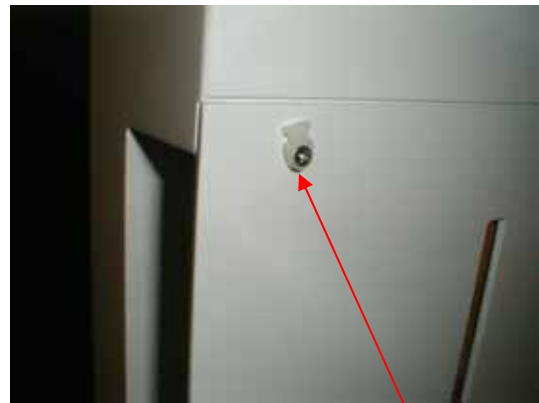
Figure 14

Cable Holder

Remove a Cassette Holding Plate
(PART CODE:EX-06-167 Fig.15   by
unscrewing two screws on both ends.

Cassette Holding Plate

Figure 15

Remove a cassette Holding Rail
(PART CODE:EX-06-280 Fig.16) by
unscrewing four screws (two screws on both ends).

Cassette Holding Rail

Figure 16

Remove a Leaf Spring (Fig.17). Fix a Holder by flat head screws and nuts (By using a small screw driver and a nut driver)   Fig.18

Leaf Spring   Figure 17

Figure 18

Attach a light blocking plate   Fig.19
Use two M3× 10 screws for both ends

Figure 19   Light Blocking Plate

Attach Sensor Unit to the bracket (See Fig.20 & 21)
        Use two M4× 6 screws

Sensor Bracket   Sensor
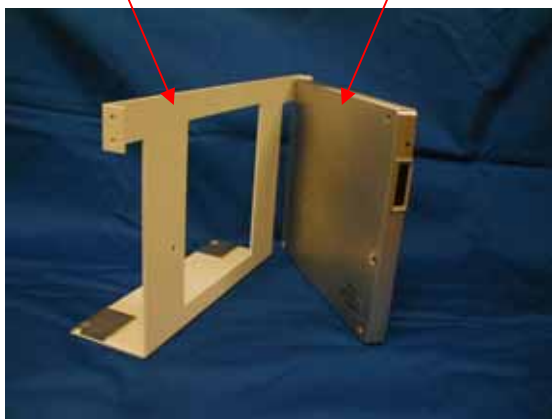
Figure 20

Figure 21

Loosen two hooks on both ends　Fig.22 & 23
　　　(Use binding head screws　M3× 5　　temporarily tighten them　Fig.24
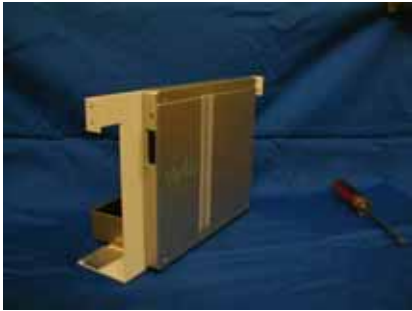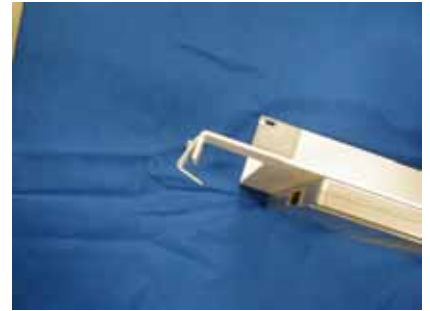
Figure 22　　　　　　　　Figure 23　　　　　　　　Figure 24

Remove two screws that hold a cover.
　Fig.25

Figure 25

Insert a censor unit from the bottom.　Fig.26

Figure 26

Temporarily tighten a sensor unit　Fig.27
Use two binding head screws M3× 12
and washers)

Figure 27

Align two blue stripes to the center
of the slit.(Fig.28
　　Slit
　　Alignment stripes
　　(N/G)　　　　　　　　　(Good)
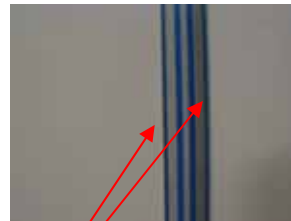
Figure 28

(Blue line is not aligned to the center)

A　　　　　　　　B

Tighten screws that were temporarily
　loosened in the figure 26.
　　　Fig. 29

Figure 29

Tighten screws that were temporarily
　loosened in the figure 24.
　　　(Fig. 30)

Figure 30

4. Digital Cable

Route a digital cable as shown in fig. 31

Connector
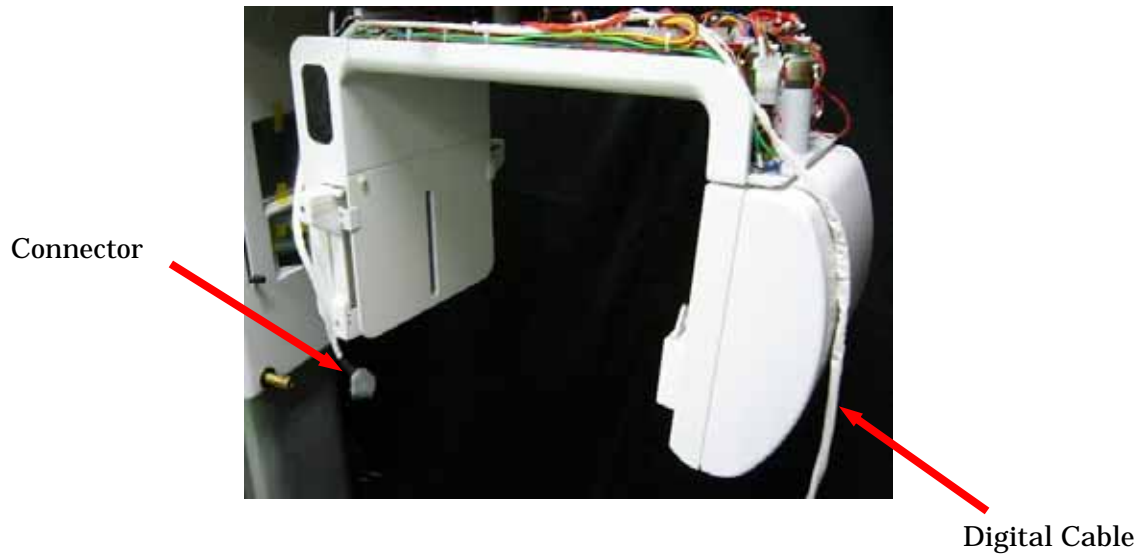
Digital Cable

Figure 31

Connect digital cable to censor unit

Fix a digital cable to a cable holder (refer Fig 14. on page 9) (Fig. 32)
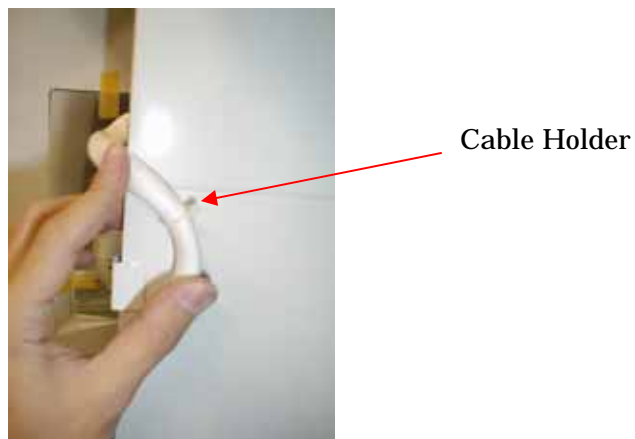
Cable Holder

Figure 32

Put the Arm Cover and the Cassette Holder Cover

Run the digital cable through the hole (Fig. 33)
Put a grommet to the hole.
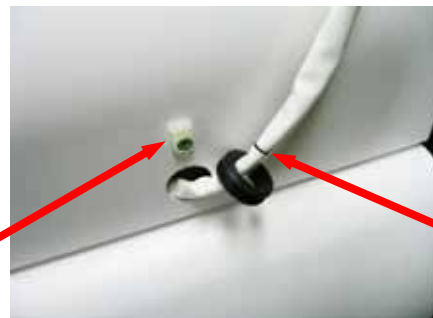Fix the cable with the cable holder at the alignment mark.

Hole

Grommet

Figure 33

Cable Holder

Alignment Mark

Fix the cable by a cable holder

5. Rotation Unit

Remove a Driving Unit Cover

Remove an old CNB Cable Assembly by disconnecting CNB on both sides, CNB1 & CNB2 connector(Fig. 35) From CNB Port (Fig. 34) on the CN Board B (Part Code: EX-04-150) by disconnecting two CNB, CNb1 & CNb2.

Connect the new CNL1 Cable(Fig.36) to CNB port.
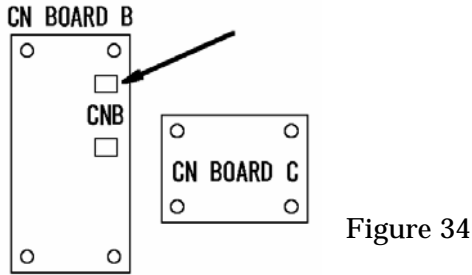
Figure 34
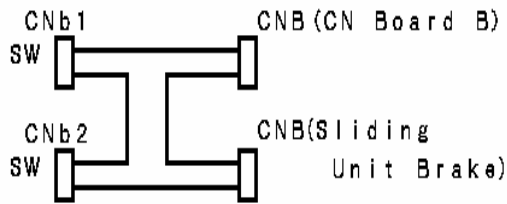
Figure 35   Old CNB CABLE ASSY
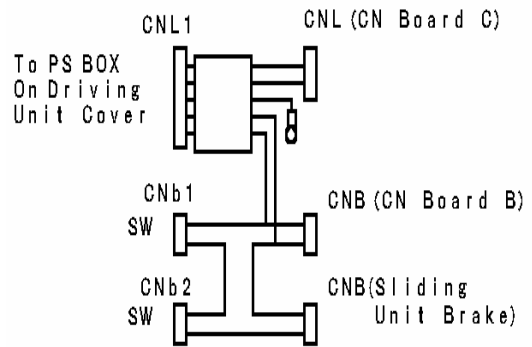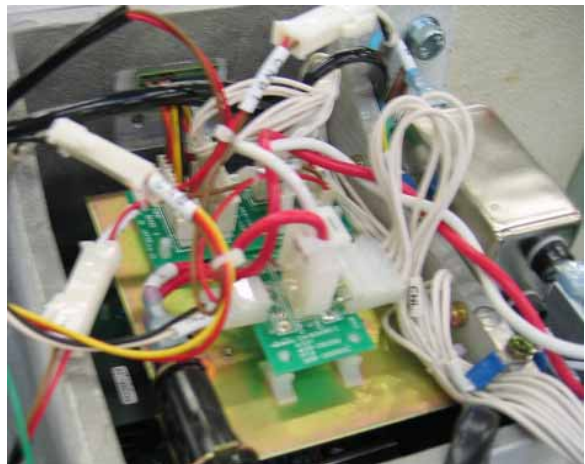
Figure 36   CNL1 CABLE ASSY

Actual Connection

Figure 35 Actual View

Connect CNl1 Cable Assembly to CLN(2p) port on new CN Board C.

Remove Board C (Part Code: EX-04-160) and replace with new CN Board c
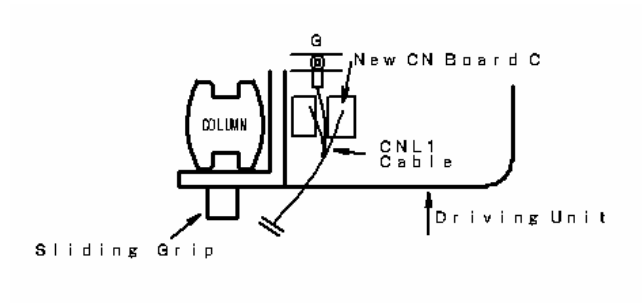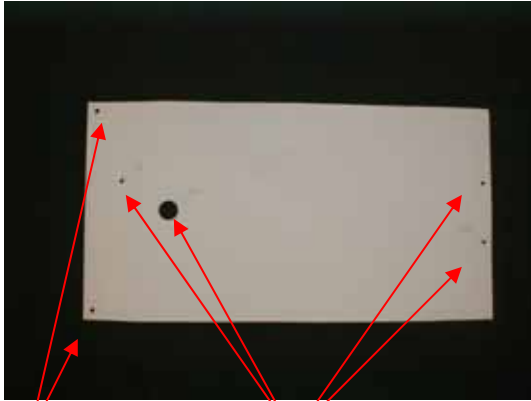
Connect CNL1 Cable" G" to Driving Unit　See Fig.37

Figure 37

6. Route Digital Cable

Remove the Driving Unit Cover.

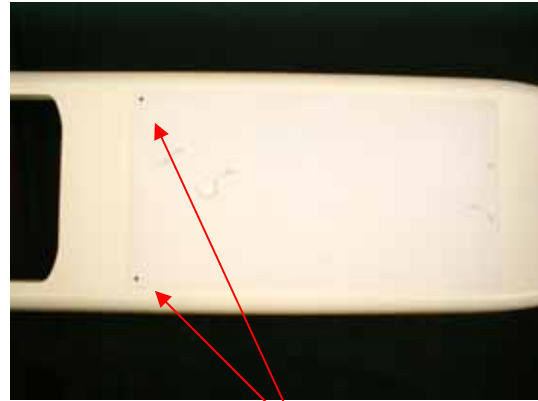Place Template **D** (Fig. 38) on the Driving Unit Cover and align holes (A).
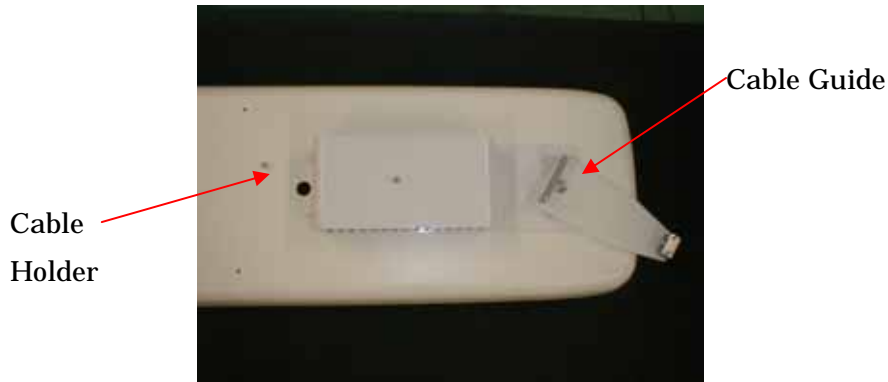
Then Drill holes (B).

Align those two holes

Figure 38   Figure 39

Attach Cable Guide Assembly and Cable Holder (Fig. 40) on the cover by using nut. (Screw from the bottom)
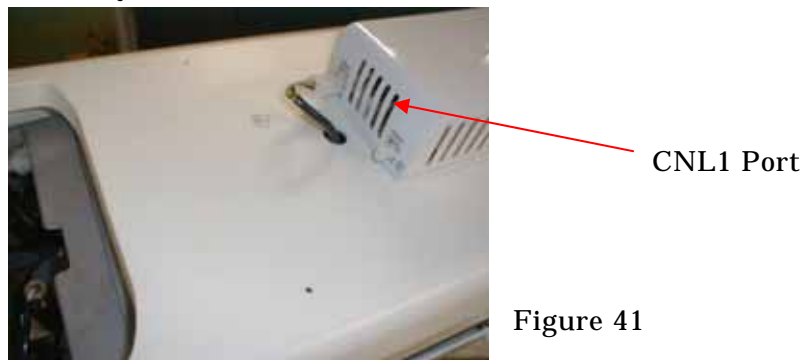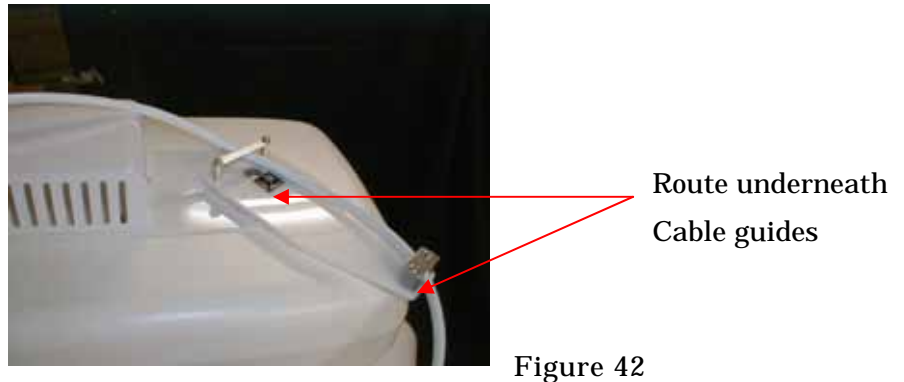

Cable Guide

Cable
Holder

Figure 40

Route CNL1 Cable from the bottom through the hole. Connect to CNL1 port on the back of Cable Guide Assembly.
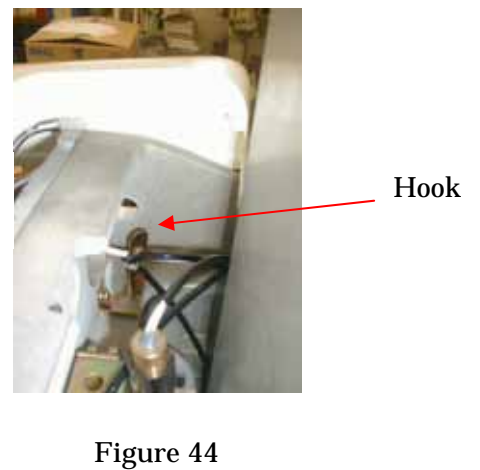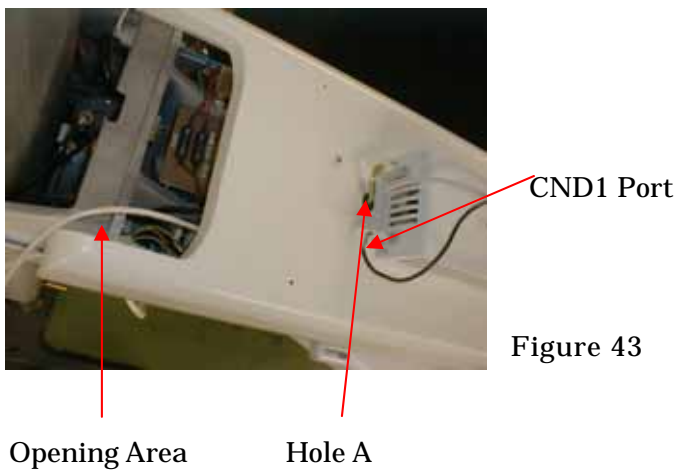

CNL1 Port

Figure 41

Route Digital Cable (White LAN Cable) through Cable guides. (Fig. 42

Route underneath
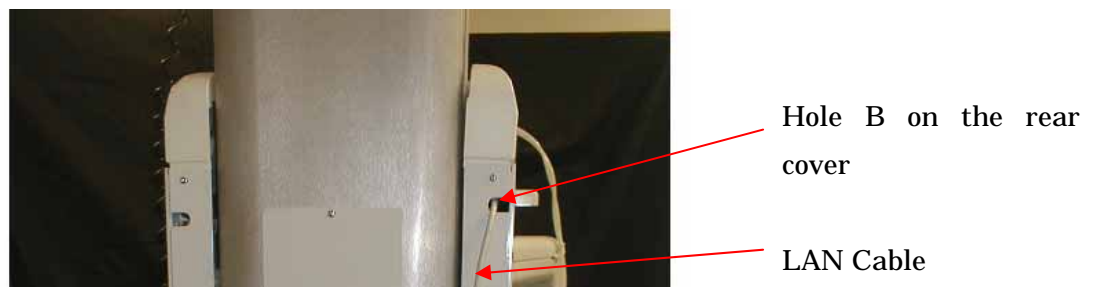Cable guides

Figure 42

Connect CND1 Cable to CND1 port on the back of Cable Guide Assembly.
Route White LAN Cable through Hole A to the opening area. (Fig. 43)
Route White LAN cable on the hook. (Fig. 44)

CND1 Port

Figure 43

Opening Area   Hole A

Hook

Figure 44

Route White LAN Cable through Hole B on the rear cover. (Fig. 45)

Hole B on the rear
cover

LAN Cable

Figure 45

Put Rotation Unit Cover on. Leave some slack in the cable and fix the LAN Cable by Cable Holders (with adhesive backed tie bases). (Fig. 46, 47 & 48)

Figure 46   Fix those points

Figure 47

Make sure the cable is not strained

Figure 48

Route LAN Cable to the bottom of the base. Fix LAN Cable by two Cable Holders (with double coated tape). (Fig. 49)

Fix   cable   by cable holders

Figure 49

Connect Digital Cable 1 and LAN Cable by using coupler. (Fig.50

Fix a coupler to the wall not to be stepped on.

Figure 50

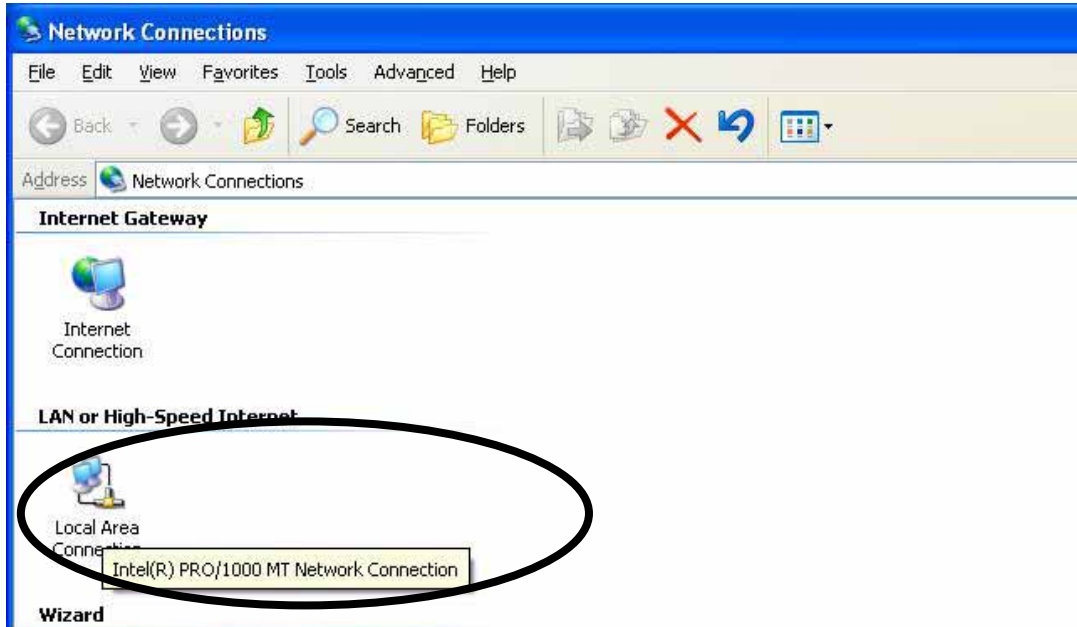Connect LAN cable to PC.

LAN Board Installation and PC setup

Turn the power of personal computer off, and keep the power outlet off.
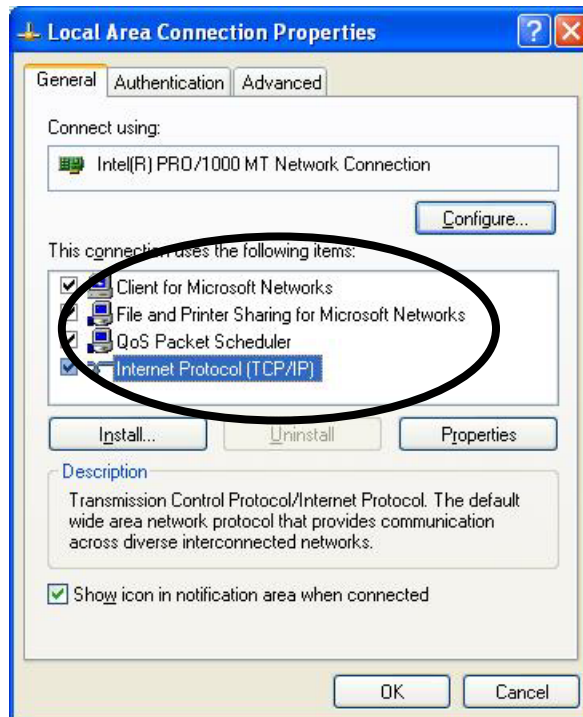
Insert an expanded LAN Board.

Start the personal computer, open Start Menu, right click "My Network" then select
"Property"

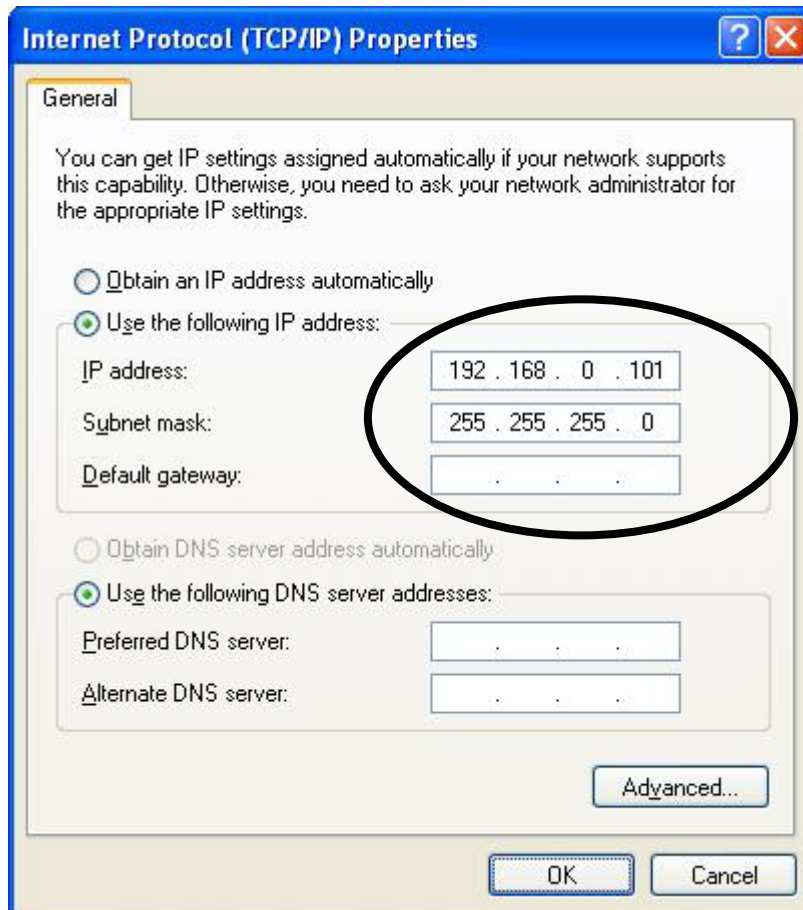Select "Property" from right clicked menu of Local Area Connection on the expanded LAN Board.

Select "Internet Protocol (TCP/IP)" from General Tab, and push "Property" button.

23

Select "Use following IP Address", and set IP Address and Subnet Mask.

IP Address

Subnet Mask

7. Click "OK", the Local Area properties box reappears

8. Click "OK" and you are set up