GE Medical Systems

Technical Publications

Direction 2303976
Revision 3

Signa® Ovation Mechanical Installation

Operating Documentation

DAMAGE IN TRANSPORTATION

All packages should be closely examined at time of delivery. If damage is apparent, have notation **"damage in shipment"** written on **all** copies of the freight or express bill **before** delivery is accepted or "signed for" by a General Electric representative or a hospital receiving agent. Whether noted or concealed, damage **MUST** be reported to the carrier **immediately** upon discovery, or in any event, within **14** days after receipt, and the contents and containers held for inspection by the carrier. A transportation company will not pay a claim for damage if an inspection is not requested within this **14** day period.

Immediately complete a "Damage Loss Claim Form", available via MS Exchange Mail, after the damage is found.

MS Exchange Path:

Outlook/Public Folder/All Public Folders/Medical Systems/!Global Initiatives/Information Management/Forms/Common Forms/DAMAGE LOSS CLAIM FORM.

Send the completed form to the email address listed in the form.

For more information about the Transportation Claim Procedure, access the GE Medical Systems Intranet and enter the following URL address (case sensitive):

ftp://3.87.40.2/globepro/qualsys/Docs/190016MF.PDF

Rev. 11/15/2000

Language Policy For Service Documentation (Dir. 2128126)

W A R N I N G

- **THIS SERVICE MANUAL IS AVAILABLE IN ENGLISH ONLY.**
- **IF A CUSTOMER'S SERVICE PROVIDER REQUIRES A LANGUAGE OTHER THAN ENGLISH, IT IS THE CUSTOMER'S RESPONSIBILITY TO PROVIDE TRANSLATION SERVICES.**
- **DO NOT ATTEMPT TO SERVICE THE EQUIPMENT UNLESS THIS SERVICE MANUAL HAS BEEN CONSULTED AND IS UNDERSTOOD.**
- **FAILURE TO HEED THIS WARNING MAY RESULT IN INJURY TO THE SERVICE PROVIDER, OPERATOR OR PATIENT FROM ELECTRIC SHOCK, MECHANICAL OR OTHER HAZARDS.**

AVERTISSEMENT

- **CE MANUEL DE MAINTENANCE N'EST DISPONIBLE QU'EN ANGLAIS.**
- **SI LE TECHNICIEN DU CLIENT A BESOIN DE CE MANUEL DANS UNE AUTRE LANGUE QUE L'ANGLAIS, C'EST AU CLIENT QU'IL INCOMBE DE LE FAIRE TRADUIRE.**
- **NE PAS TENTER D'INTERVENTION SUR LES ÉQUIPEMENTS TANT QUE LE MANUEL SERVICE N'A PAS ÉTÉ CONSULTÉ ET COMPRIS.**
- **LE NON–RESPECT DE CET AVERTISSEMENT PEUT ENTRAÎNER CHEZ LE TECHNICIEN, L'OPÉRATEUR OU LE PATIENT DES BLESSURES DUES À DES DANGERS ÉLECTRIQUES, MÉCANIQUES OU AUTRES.**

WARNUNG

- **DIESES KUNDENDIENST-HANDBUCH EXISTIERT NUR IN ENGLISCHER SPRACHE.**
- **FALLS EIN FREMDER KUNDENDIENST EINE ANDERE SPRACHE BENÖTIGT, IST ES AUFGABE DES KUNDEN FÜR EINE ENTSPRECHENDE ÜBERSETZUNG ZU SORGEN.**
- **VERSUCHEN SIE NICHT, DAS GERÄT ZU REPARIEREN, BEVOR DIESES KUNDENDIENST-HANDBUCH NICHT ZU RATE GEZOGEN UND VERSTANDEN WURDE.**
- **WIRD DIESE WARNUNG NICHT BEACHTET, SO KANN ES ZU VERLETZUNGEN DES KUNDENDIENSTTECHNIKERS, DES BEDIENERS ODER DES PATIENTEN DURCH ELEKTRISCHE SCHLÄGE, MECHANISCHE ODER SONSTIGE GEFAHREN KOMMEN.**

AVISO

- **ESTE MANUAL DE SERVICIO SÓLO EXISTE EN INGLÉS**
- **SI ALGÚN PROVEEDOR DE SERVICIOS AJENO A GEMS SOLICITA UN IDIOMA QUE NO SEA EL INGLÉS, ES RESPONSABILIDAD DEL CLIENTE OFRECER UN SERVICIO DE TRADUCCIÓN.**
- **NO SE DEBERÁ DAR SERVICIO TÉCNICO AL EQUIPO, SIN HABER CONSULTADO Y COMPRENDIDO ESTE MANUAL DE SERVICIO.**
- **LA NO OBSERVANCIA DEL PRESENTE AVISO PUEDE DAR LUGAR A QUE EL PROVEEDOR DE SERVICIOS, EL OPERADOR O EL PACIENTE SUFRAN LESIONES PROVOCADAS POR CAUSAS ELÉCTRICAS, MECÁNICAS O DE OTRA NATURALEZA.**

ATENÇAO

- **ESTE MANUAL DE ASSISTÊNCIA TÉCNICA SÓ SE ENCONTRA DISPONÍVEL EM INGLÊS.**
- **SE QUALQUER OUTRO SERVIÇO DE ASSISTÊNCIA TÉCNICA, QUE NÃO A GEMS, SOLICITAR ESTES MANUAIS NOUTRO IDIOMA, É DA RESPONSABILIDADE DO CLIENTE FORNECER OS SERVIÇOS DE TRADUÇÃO.**
- **NÃO TENTE REPARAR O EQUIPAMENTO SEM TER CONSULTADO E COMPREENDIDO ESTE MANUAL DE ASSISTÊNCIA TÉCNICA.**
- **O NÃO CUMPRIMENTO DESTE AVISO PODE POR EM PERIGO A SEGURANÇA DO TÉCNICO, OPERADOR OU PACIENTE DEVIDO A‘ CHOQUES ELÉTRICOS, MECÂNICOS OU OUTROS.**

AVVERTENZA

- **IL PRESENTE MANUALE DI MANUTENZIONE È DISPONIBILE SOLTANTO IN INGLESE.**
- **SE UN ADDETTO ALLA MANUTENZIONE ESTERNO ALLA GEMS RICHIEDE IL MANUALE IN UNA LINGUA DIVERSA, IL CLIENTE È TENUTO A PROVVEDERE DIRETTAMENTE ALLA TRADUZIONE.**
- **SI PROCEDA ALLA MANUTENZIONE DELL’APPARECCHIATURA SOLO DOPO AVER CONSULTATO IL PRESENTE MANUALE ED AVERNE COMPRESO IL CONTENUTO.**
- **NON TENERE CONTO DELLA PRESENTE AVVERTENZA POTREBBE FAR COMPIERE OPERAZIONI DA CUI DERIVINO LESIONI ALL’ADDETTO ALLA MANUTENZIONE, ALL’UTILIZZATORE ED AL PAZIENTE PER FOLGORAZIONE ELETTRICA, PER URTI MECCANICI OD ALTRI RISCHI.**

警告

・このサービスマニュアルは英語版しかありません。

・GEMS以外でサービスを担当される業者が英語以外の言語を要求される場合、翻訳作業はその業者の責任で行うものとさせていただきます。

・このサービスマニュアルを熟読し、理解せずに装置のサービスを行わないでください。

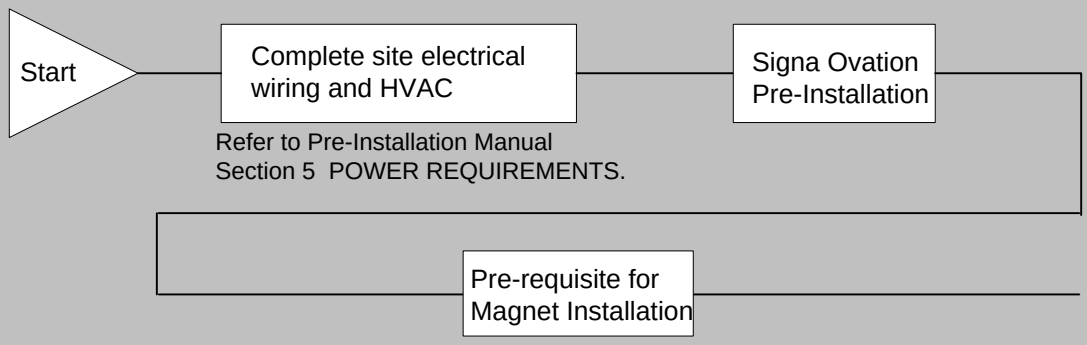
・この警告に従わない場合、サービスを担当される方、操作員あるいは患者さんが、感電や機械的又はその他の危険により負傷する可能性があります。

注意:

- 本维修手册仅存有英文本。
- 非 GEMS 公司的维修员要求非英文本的维修手册时，客户需自行负责翻译。
- 未详细阅读和完全了解本手册之前，不得进行维修。
- 忽略本注意事项会对维修员，操作员或病人造成触电，机械伤害或其他伤害。

Signa Ovation 3 Installation Flow Chart

Click here to understand the differential of MFO3 and MFO2 system.



Note1

It is necessary to cut the finished floor and make an anchor holes before Magnet Installation. If not performing this procedure before the Magnet installation, it will cause problem of whole installation process.

Signa Ovation 3 Installation Flow Chart

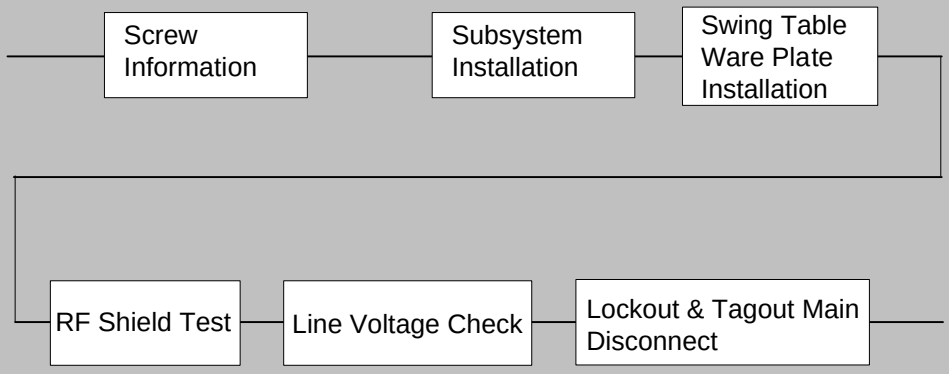
Magnet Delivery and Installation

Note

Magnet does not required to be anchored in a non-sesmic area.

2nd day

Signa Ovation 3 Installation Flow Chart

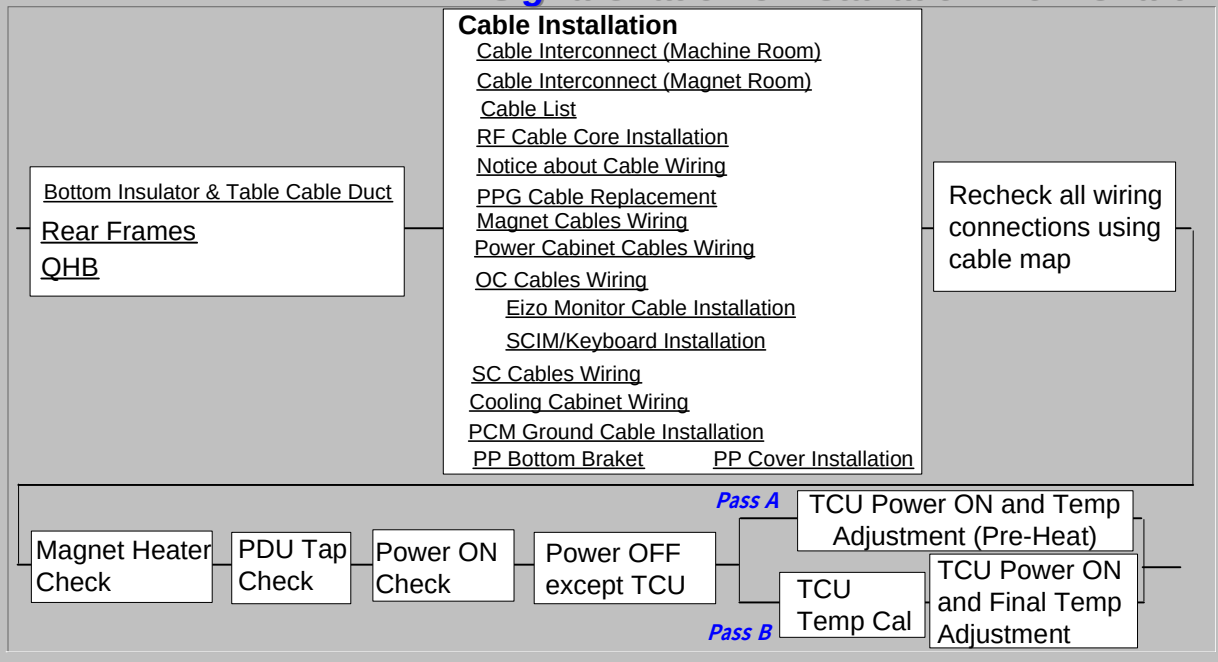


Go Back One

Pre-Install | 1 | 2 | 3 ~ 4 | 5 | 6 | 7 ~ 8 | 9 | 10 ~ 11

3rd day ~ 4th day

Signa Ovation 3 Installation Flow Chart



Go Back One

Pre-Install | 1 | 2 | 3 ~ 4 | 5 | 6 | 7 ~ 8 | 9 | 10 ~ 11

5th day

Signa Ovation 3 Installation Flow Chart

4.0 h

Magnet Front Frame

Check Mechanical Flowchart to insure all steps are complete using check list

If necessary resolve shipment shortage and omissions by mechanical supplier

Insure all rating plate are installed

Handoff review with mechanical Installation vendor

Environment Checks

Breaker ON (Except SSM & Cooling)

2.0 h

Software Installation

SSM OUTPUTS VERY HIGH VOLTAGE. BE SURE TO TURN THE SSM POWER OFF BEFORE CONNECTING DC BIAS CABLES. HANDLING DC BIAS CABLES WITHOUT TURNING SSM POWER OFF MAY CAUSE SERI-OUS INJURY OR DEATH DUE TO ELECTRIC SHOCK.

0.1 h

TCU File Update

0.1 h

Reboot the system

0.5 h

TCU Temp Cal

This procedure must be performed!!

Pass A

TCU Temp Final Adjustment

Pass B

TCU Temp Final Check

0.5 h

IPG_Stage Emulation

0.5 h

Reboot the system

0.1 h

Go Back One

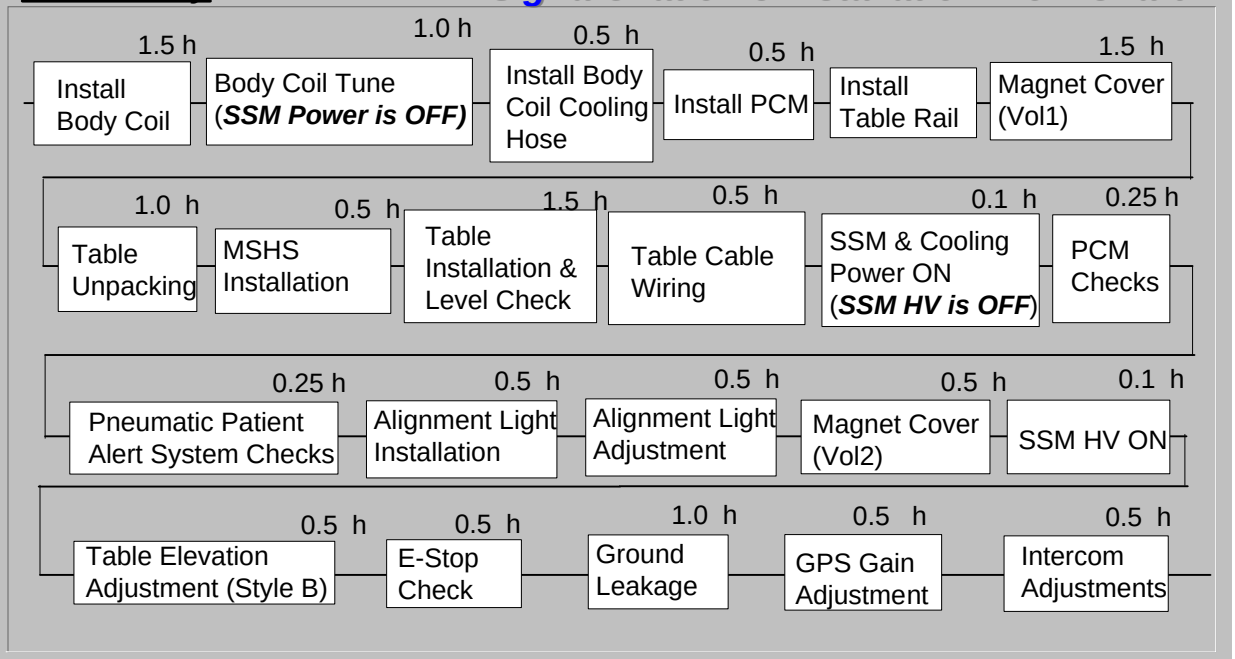
Pre-Install | 1 | 2 | 3 ~ 4 | 5 | 6 | 7 ~ 8 | 9 | 10 ~ 11

Signa Ovation 3 Installation Flow Chart

Point by Point Passive Shimming

7th~ 8th day

Signa Ovation 3 Installation Flow Chart

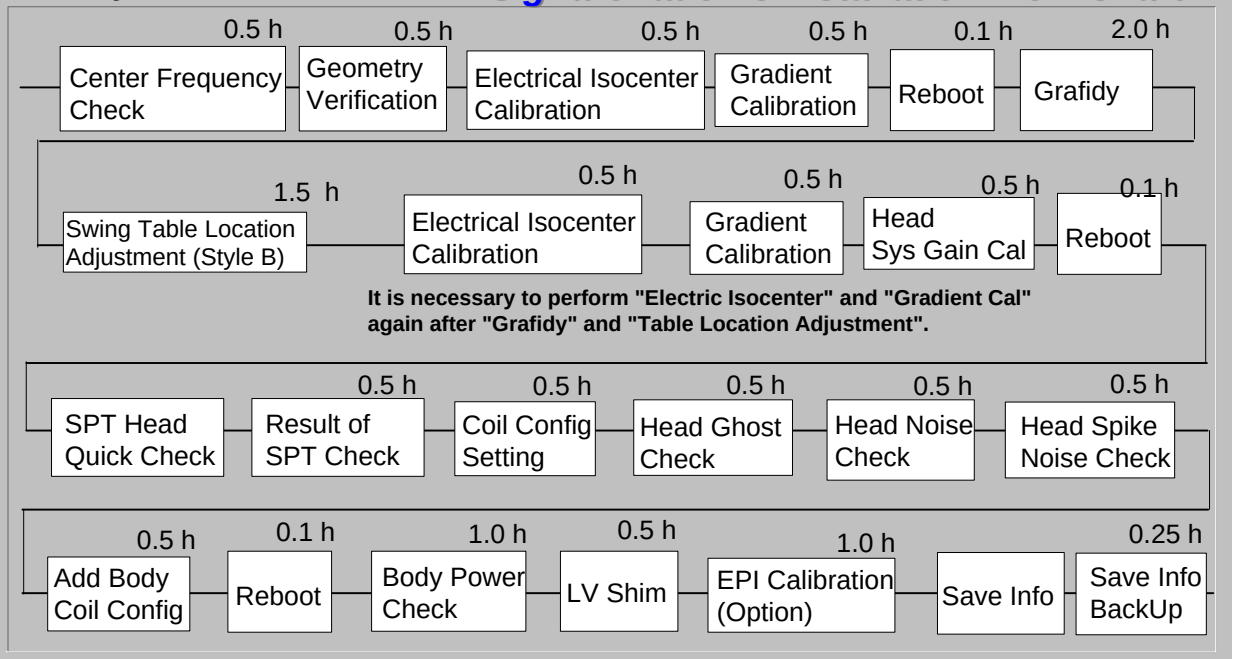


Go Back One

Pre-Install | 1 | 2 | 3 ~ 4 | 5 | 6 | 7 ~ 8 | 9 | 10 ~ 11

9th day

Signa Ovation 3 Installation Flow Chart

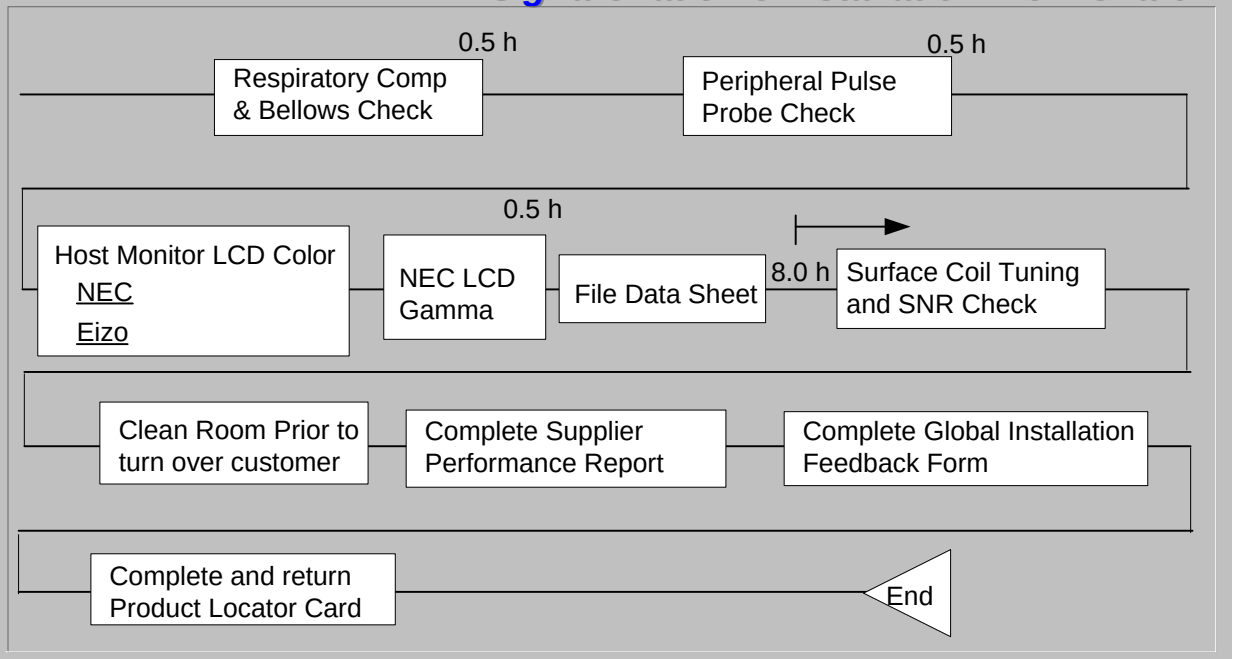


Go Back One

Pre-Install | 1 | 2 | 3 ~ 4 | 5 | 6 | 7 ~ 8 | 9 | 10 ~ 11

10th~11th day

Signa Ovation 3 Installation Flow Chart



Go Back One

Pre-Install | 1 | 2 | 3 ~ 4 | 5 | 6 | 7 ~ 8 | 9 | 10 ~ 11

SCREW INFORMATION

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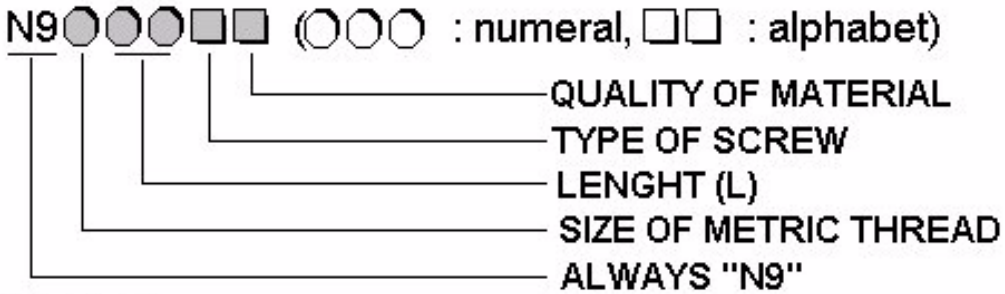
1. Screw Information

Most of screws used in GEYMS products have N9○○○□□ (○○○ :numeral, □□ : alphabet) format parts number. N○○○□□ means Metric thread screw and is used for common screws. We can determine the size of thread, length, shape, quality of screw from this parts number.

The following diagram shows the meaning of parts number's elements:

Place the cursor on □ to see the explanations:

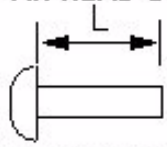


EXAMPLE

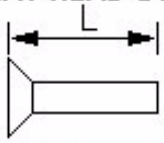
N9408JB : M4, 8mm lenght, Pan Head screw, Brass with Ni

TYPE OF SCREW

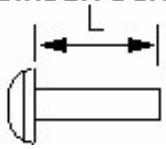
J : PAN HEAD SCREW



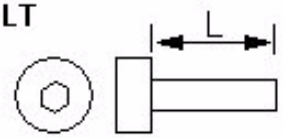
E : FLAT HEAD SCREW



L : BINDER SCREW



Z : HEXAGON SOCKET HEADED BOLT

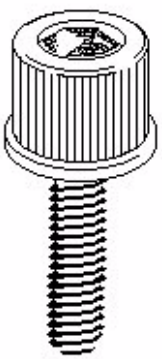


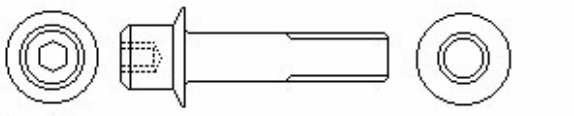
Quality of Material

- **B: Brass with Ni**
- **E: Brass with Zn**
- **S: Steel with Zn**
- **X: Steel with F**
- **U: Stainless**

FLANGE SOCKET

Illustration





1. Screw Information (Continued)

Screw:

Table 1:

Part Number	Screw Type	Name-Length (under “neck“)	section/Part
U0438AA	Flange Socket	M6-L12	
U0444AA	Flange Socket	M6-L20	
N9510JM	Pan Head Screw	M5-L10	
N9020YM	Cap Screw	M10-L20	
N9630YM	Cap Screw	M6-L30	
N9615YM	Cap Screw	M6-L15	
N9408ZM	Hexagon Socket Headed Bolt	M4-L8	PCM Installation
N9030YU	Cap Screw	M10-L30	Rail Installation (Rail Slide Adjuster)
N9420ZN	Hexagon Socket Headed Bolt	M6-L20	Cable Support of PAC Remote Interface
N9650UM	Cap Screw	M6-L50	Laser Light Alignment Jig
N9408JM	Pan Head Screw	M4-L8	Magnet Interface Unit and Plate
N9408LK	Binder Screw	M4-L8	Patient Communication Box
2109866-19	Hexagon Socket Headed Bolt	M10-L20	Rail Installation (Rail Anchor Bolt)
2109873-33	Hexagon Socket Headed Bolt	M6-L70	PAC Remote Interface

Nut:

Part Number	Type	Name	Section / Part
N9501BM	Nut	M5	Front Touch Sensor Fixing Nut
N9101BM	Nut	M10	Rail Slide Adjuster

Stud:

Part Number	Type	Name - Length	Section / Part
2145353	Stud (Male - Female)	M6-L38	Magnet Insulator
N9101BM	Stud (Male - Female)	M4-L35	Patient Communication Box

Revision History

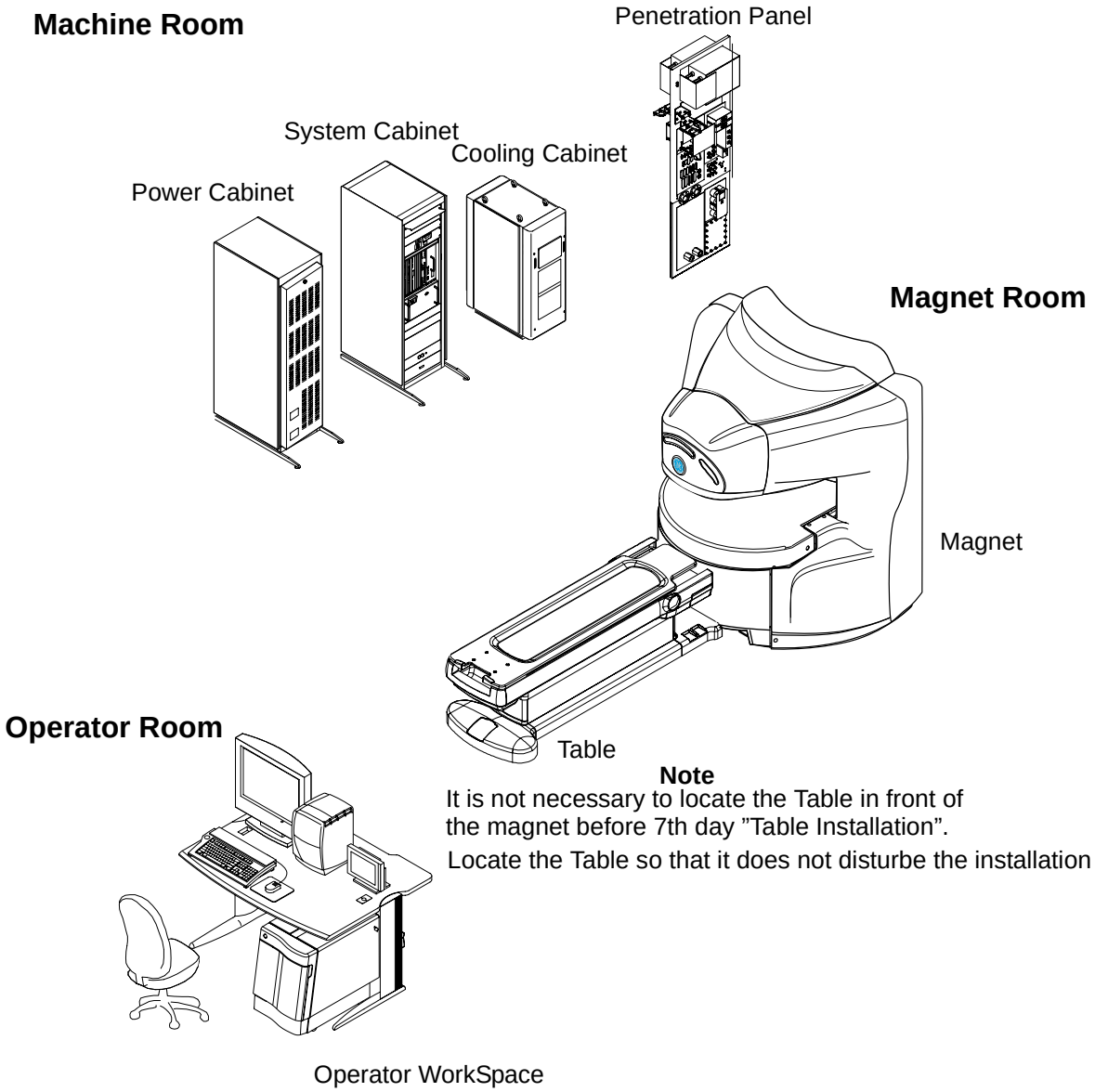
Rev	Date	Author	Primary Reasons For Change
0	Feb 15, 2002	K.Tsumagari	Initial Release

TABLE OF CONTENTS

1. Overview

This document describes how to set the following cabinets to the proper location.

- •Penetration Panel
- •Power Cabinet
- •System Cabinet
- •Operator WorkSpace
- •Cooling Cabinet

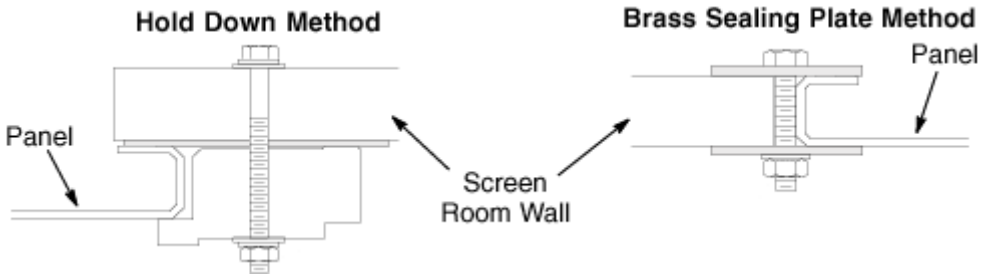


SUB SYSTEM SETTING OVERVIEW
ILLUSTRATION 1

2. Penetration Panel

2-1 Remove Blank Panel/ Prepare Screen Room Opening Surface

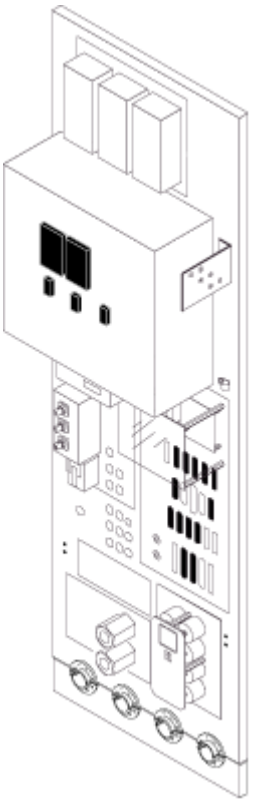
1. If still in place, remove vendor supplied blank panel. Save mounting hardware of either method shown below for installation of Penetration Panel.
2. Grade 8 bolts with black oxide coating should be used as mounting hardware. Tighten to torque of 20 lb– ft (1.5 to 2 turns after lock washer flattens).
3. To insure good conductivity, use a fine sandpaper or scouring pad to clean surface of screen room wall which will be in contact with Penetration Panel. **Do not sand surface of Penetration Panel as it is coated.**



REMOVE BRANK PANEL
ILLUSTRATION 2

2-2 Install Penetration Panel

1. Install Penetration Panel using same method and hardware for mounting of blank panel above.
2. Seal all joints with copper foil tape with a conductive adhesive (3M #1181) for RF– tight integrity.



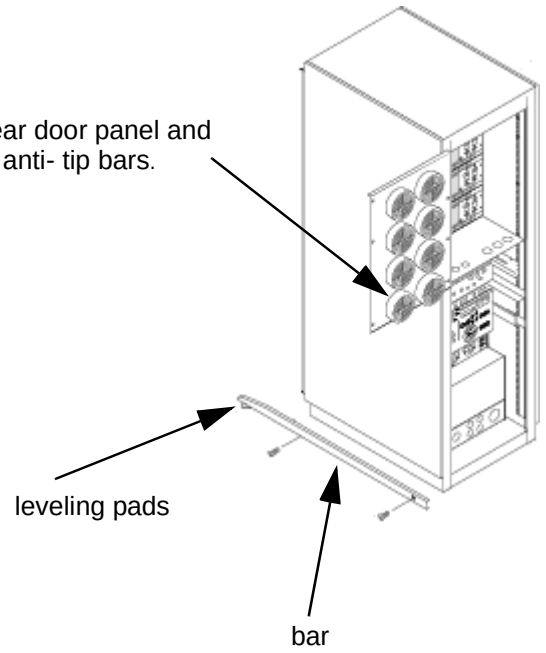
INSTALL PENETRATION PANEL
ILLUSTRATION 3

3. Power Cabinet

1. Move Power Cabinet to final position.
2. Open rear door panel.
3. Removeanti- tip bars from inside of cabinet.
4. Attach bars to cabinet.
5. Adjust leveling pads to level cabinet.

Note

Comply with UL requirements by either installing anti tip legs or securing the cabinet to the floor with local supplied brackets and floor anchors.If anchoring is required by local seismic code, secure to floor using floor anchors. Refer to local codes for seismic installation details.



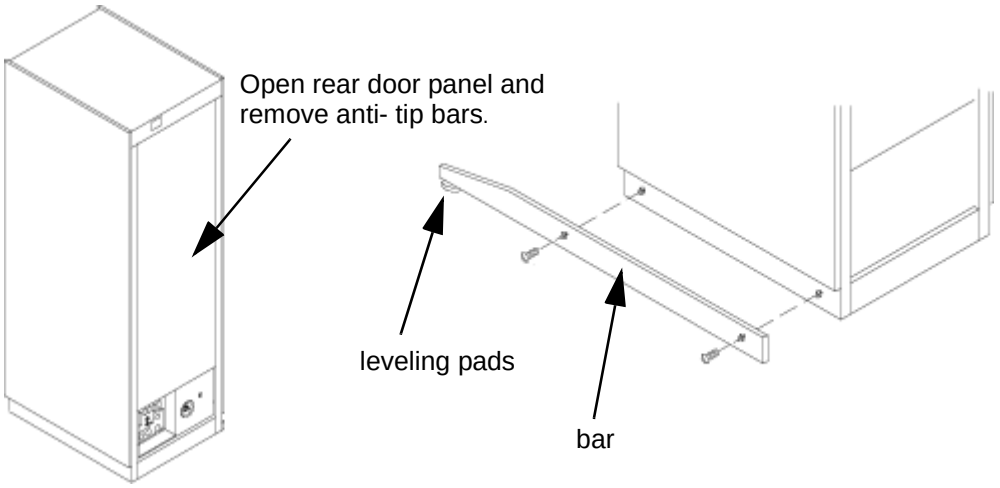
POWER CABINET SETTNG
ILLUSTRATION 4

4. System Cabinet

1. Move System Cabinet to final position.
2. Open rear door panel.
3. Remove anti- tip bars from inside of cabinet.
4. Attach bars to cabinet.
5. Adjust leveling pads to level cabinet.

Note

Comply with UL requirements by either installing anti tip legs or securing the cabinet to the floor with local supplied brackets and floor anchors.If anchoring is required by local seismic code, secure to floor using floor anchors. Refer to local codes for seismic installation details

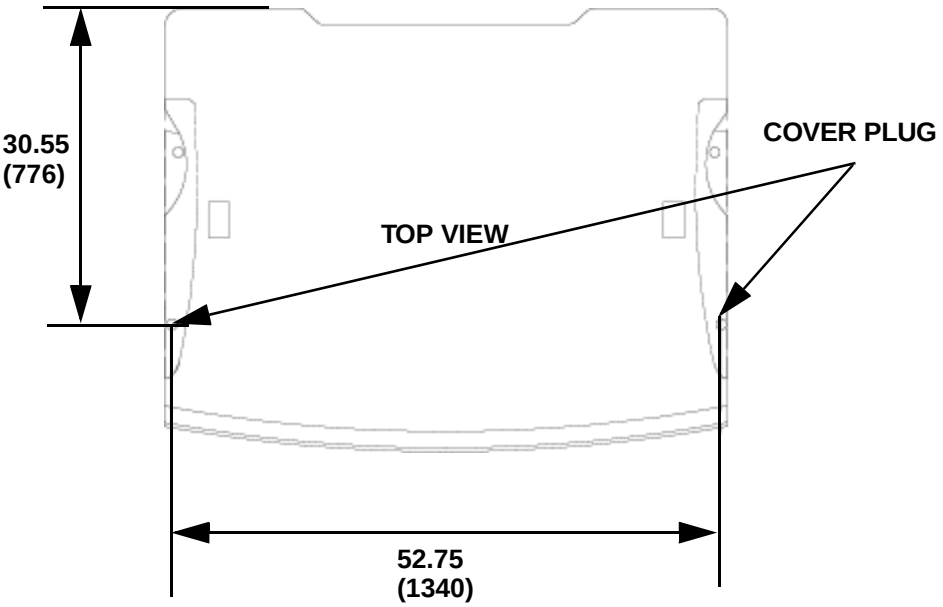


SYSTEM CABINET
ILLUSTRATION 5

5. Operator WorkSpace

5-1 Operator Workspace Table Anchor Installation

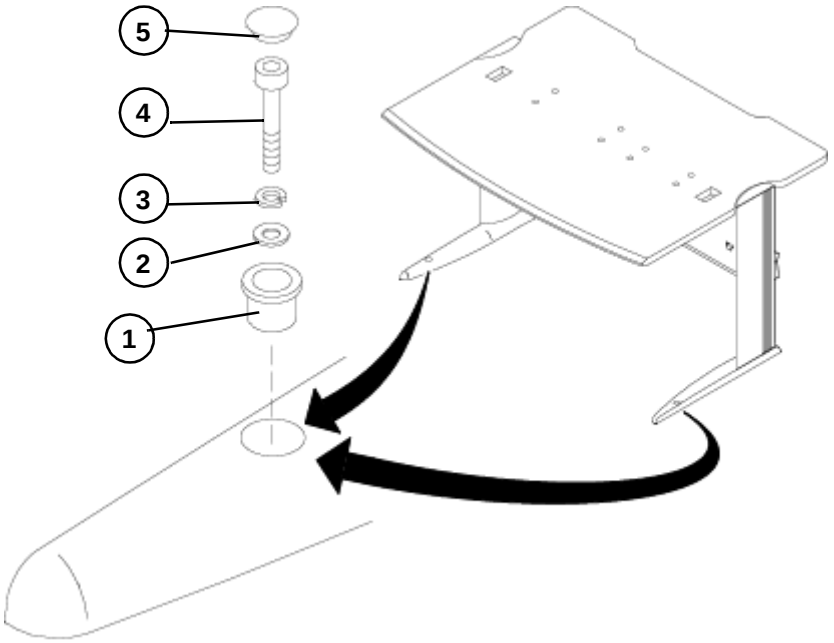
1. Refer to room layout plan and consult with Site customer for exact location of Operator Workspace Table (2135998- 2).
2. Remove and discard the two (2) cover plugs. Locate and mark on floor the two hole locations at the front of the table legs.
3. Move table to prepare for installing the floor anchors in Steps 4 and 5.
4. At each hole marked in Step 2, drill a .38 inch hole and insert 1/ 4- 20 x .375 diameter anchor (2168253).
5. Secure anchor in place with supplied SettingTool (2168781).



OW TABLE ANCHOR INSTALLATION
ILLUSTRATION 6

5-2 Securing Operator Workspace Table To Floor

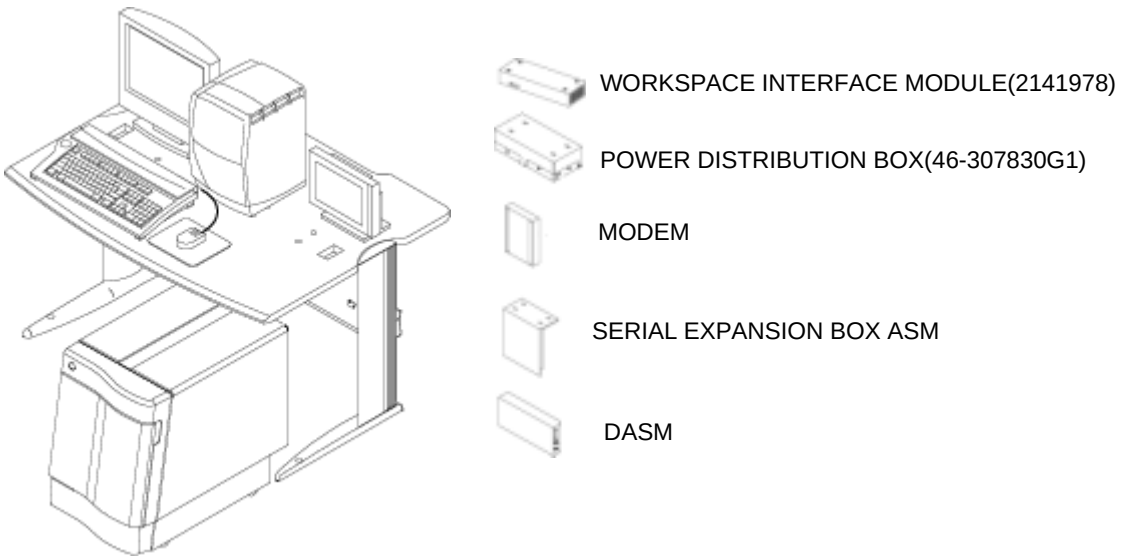
1. Insert Bushing (2151454) in table leg hole.
2. Insert as many Flat Washers (2168251) as required (3 provided for each leg) for securing table to floor.
3. Insert one Lock Washer (2168252) on top of Flat Washer(s).
4. Depending upon depth of previously installed anchor, install either the 1- 3/ 4 inch long or the 2 inch long 1/ 4 x 20 Hex Socket Cap Screw.
5. Install black nylon Plug (2168254).
6. Repeat anchoring process below for other leg.



SECURING OPERATOR WORKSPACE
ILLUSTRATION 7

5-3 Locating OW Components

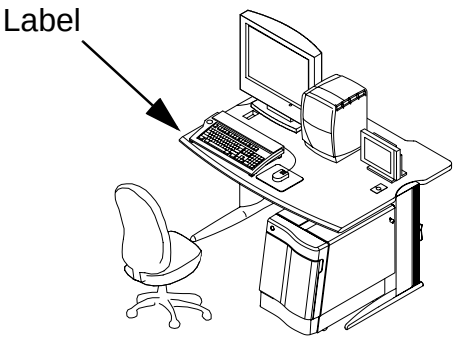
1. Locate the OW components.



LOCATING OW COMPONENTS
ILLUSTRATION 8

5-4 Warning Label Attachment

1. Select the label written in local language from caution label assy(2152854) and attach the label at the corner of OW.



LABEL
ILLUSTRATION 9

6. Cooling Cabinet

1. Locate the Cooling Cabinet to final position.

COOLING CABINET
ILLUSTRATION 10

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Feb 20, 2001	Y. Masumo	Initial Version

TABLE OF CONTENTS

1. Required Tools

•300ml tube construction adhesive or flooring adhesive equivalent (Liquid Nails, PL400)
•Denatured alcohol

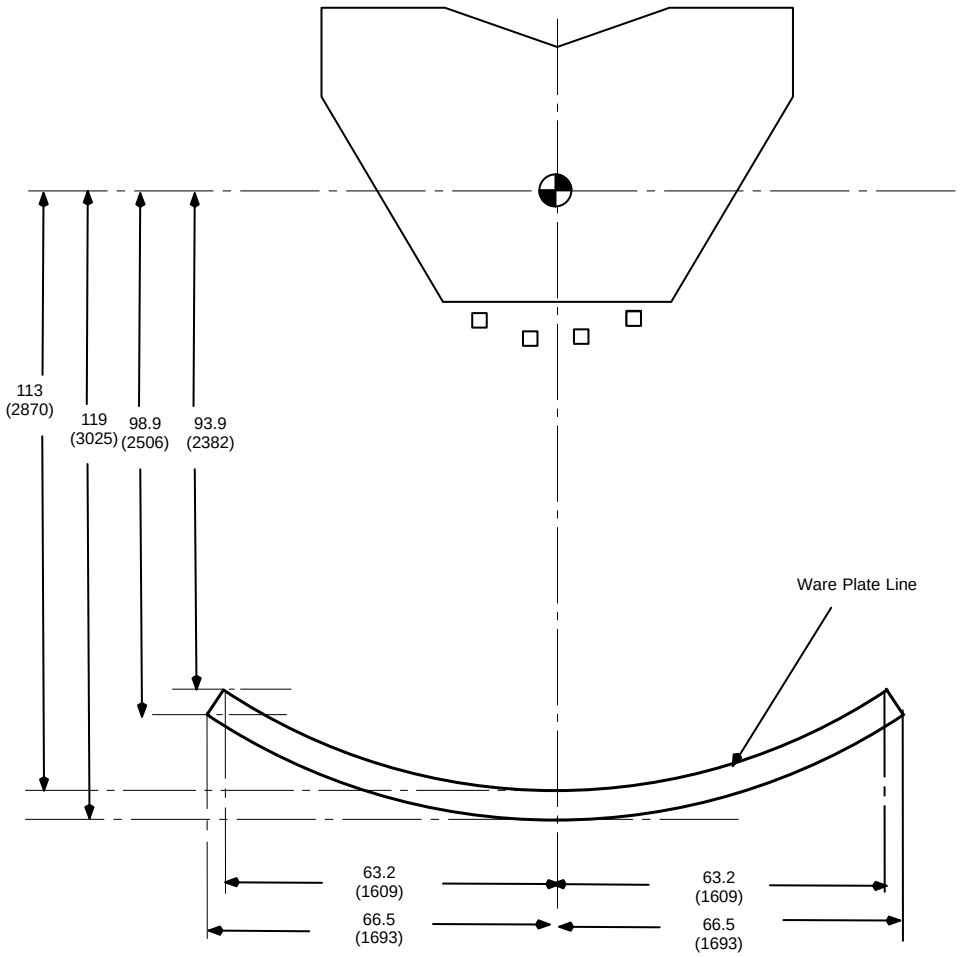
2. Prerequisit

- Table Ware Plate position is marked and the finished floor is cut off along the Ware Plate positioning line.
  There are two types of Ware Plate.
  - Style B is shipped from 3Q of 2001.
  - Style A is shipped before 3Q of 2001.

For Style B Table

Note
Style B Table is shipped from 3Q of 2001.

ALL DIMENSIONS ARE IN INCHES.
ALL BRACKETED ( ) DIMENSIONS ARE IN MILLIMETERS.



WAREPLATE (STYLE B) LOCATION
ILLUSTRATION 1

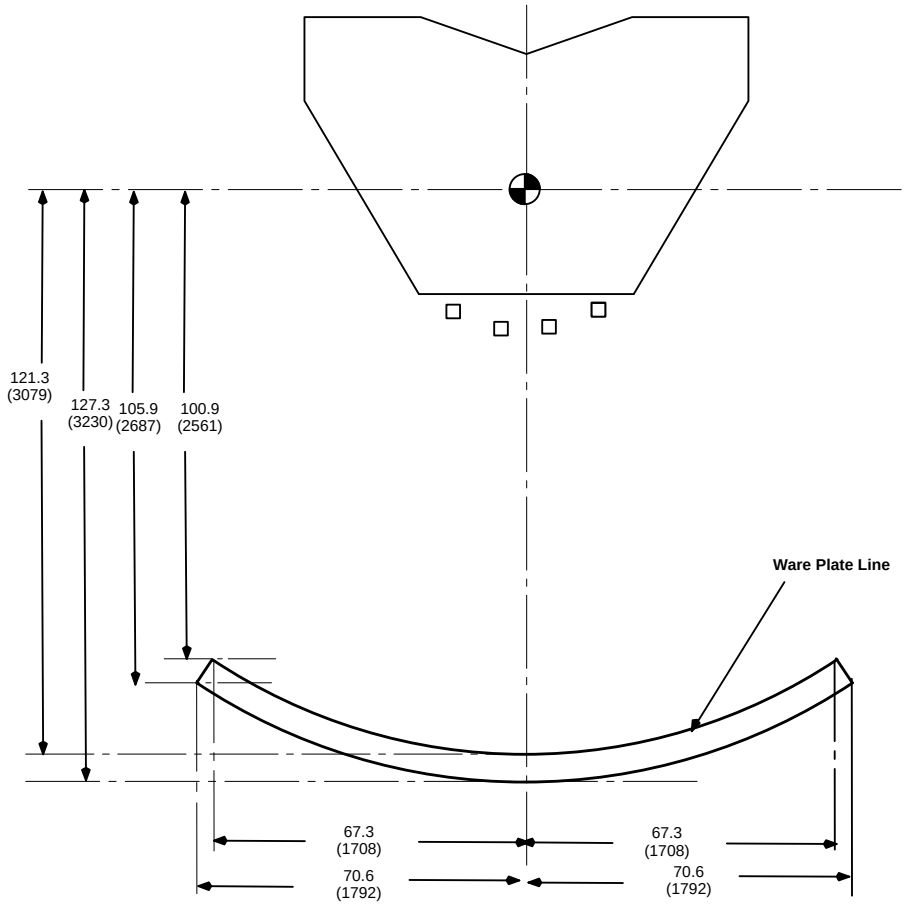
2. Prerequisit (continued)

For Style A Table

Note

Style A Table is shipped before 3Q of 2001.

ALL DIMENSIONS ARE IN INCHES.
ALL BRACKETED ( ) DIMENSIONS ARE IN MILLIMETERS.



WAREPLATE (STYLE A) LOCATION
ILLUSTRATION 2

3. Wear Plate/ Race Installation

3-1 Overview

The Swing table rides on the front rail and the Wear plate/Race at the rear. The location of the plate is critical. It is approximately 0.125 inches (3mm) thick.

3-2 Procedure

1. Verify that the finished floor is cut off along the edge of Ware Plate/Race.
2. Glue the Wear plate/Race into position. Apply enough glue to spread out a thin layer over the entire marked area. (See Illustration 2) Press the Wear plate/Race in position. Recommendation: Allow glue to set for at least 24 hours before placing the table on it.

GLUING THE WEAR PLATE/RACE TO THE FLOOR
ILLUSTRATION 3

WARNING!

ADHESIVE USED IN THIS PROCEDURE CONTAINS FLAMMABLE INGREDIENT AND TOXIC SUBSTANCE. READ THE FOLLOWING INSTRUCTION FIRST.

PHYSICAL/CHEMICAL CHARACTERISTICS
FLAMMABLE OBJECT AND TOXIC SUBSTANCE.
IN CASE OF INHALATION, IT MIGHT CAUSE DIZZINESS OR HEADACHE.

EMERGENCY/FIRST AID:
EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER. CALL A PHYSICIAN.
SKIN: WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, CALL A PHYSICIAN.
INHALATION: MOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, CALL A PHYSICIAN.
INGESTION: CLEAN THE MOUTH AND DO NOT INDUCE VOMITING. CALL A PHYSICIAN.

PRECAUTIONS-HANDLING/STORING:
STORE ADHESIVE IN CLOSED CONTAINERS. AVOID EXCESSIVE TEMPERATURES & HIGH HUMIDITY.

WASTE DISPOSAL METHOD:
DISPOSE THIS SUBSTANCE ACCORDING TO FEDERAL, STATE OR LOCAL REGULATIONS.

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Feb 7, 2001	Y. Masumo	Initial Version
1	May 15, 2001	Y. Masumo	Misc Correction
2	Oct 17, 2001	Y. Masumo	Added Style B information
3	Jan 30, 2002	Y. Masumo	Page 4: Added Warning for Adhesive.

TABLE OF CONTENTS

1. Table Cable Duct Bracket Installation

1. Install the front Table Cable Duct brackets

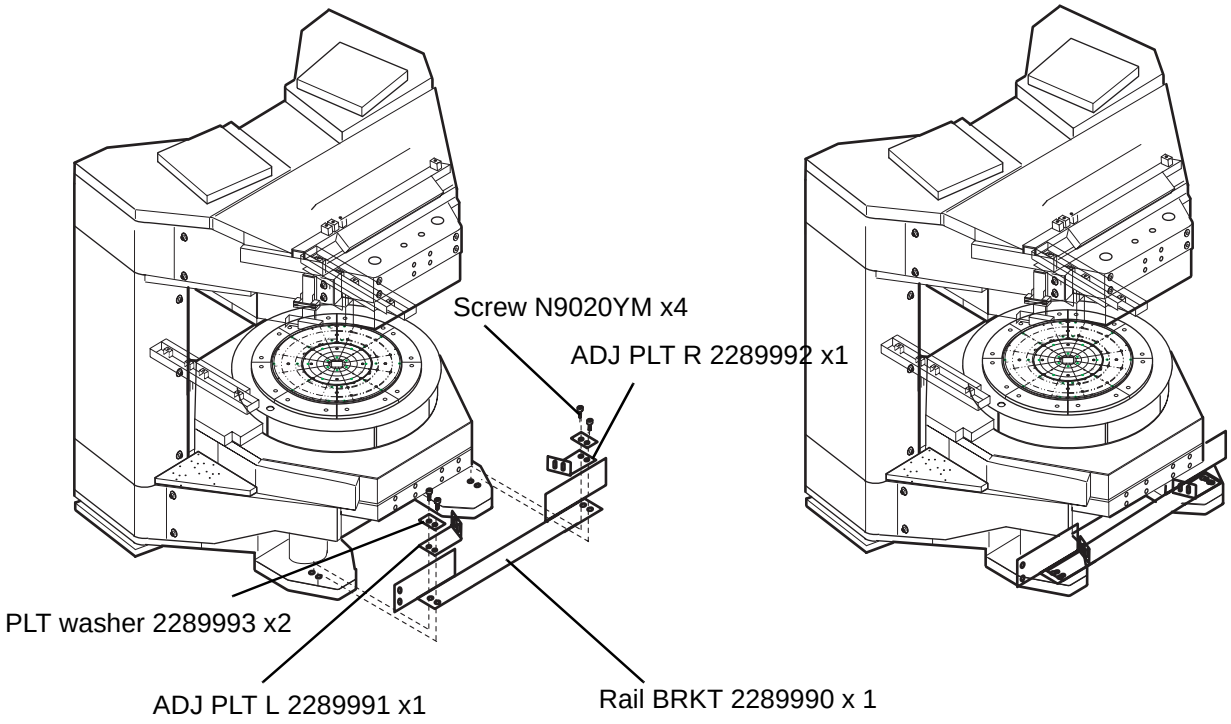
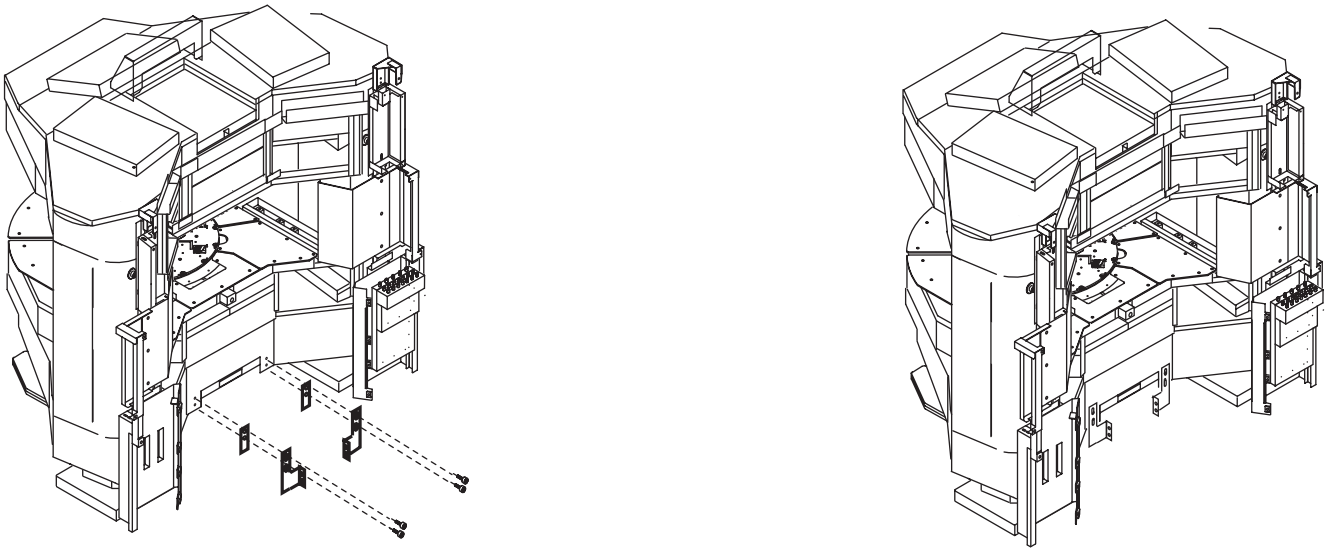


TABLE CABLE DUCT BRACKET (FRONT)
ILLUSTRATION 1

2. Install the rear Table Cable Duct brackets.



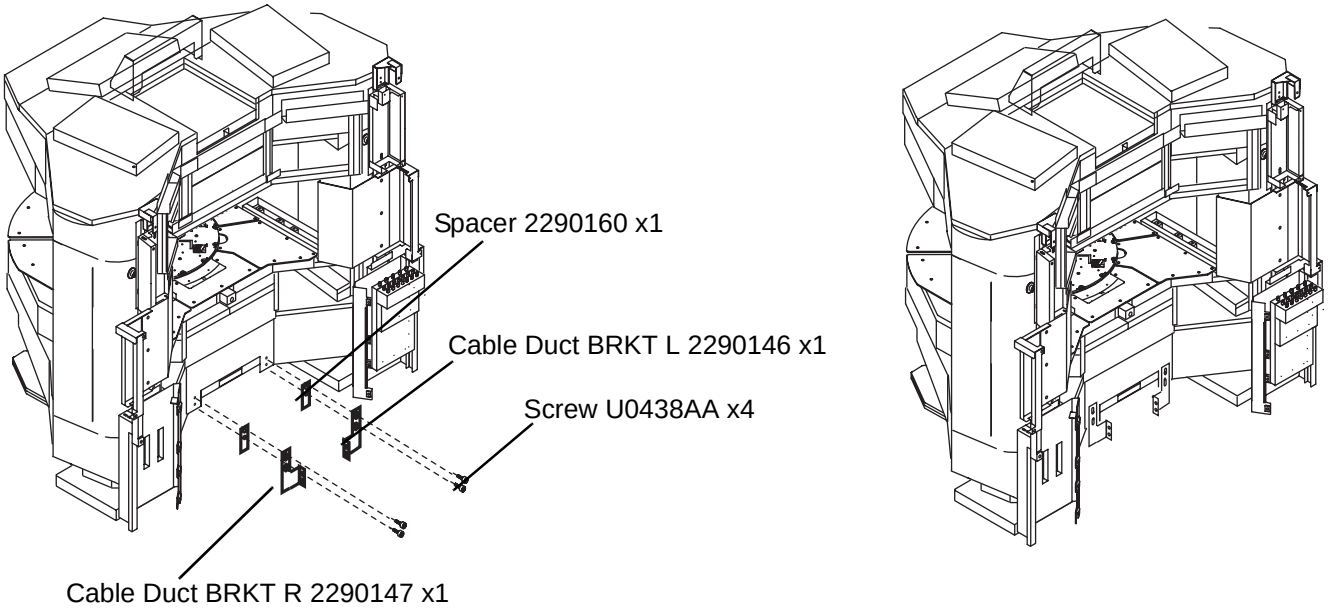
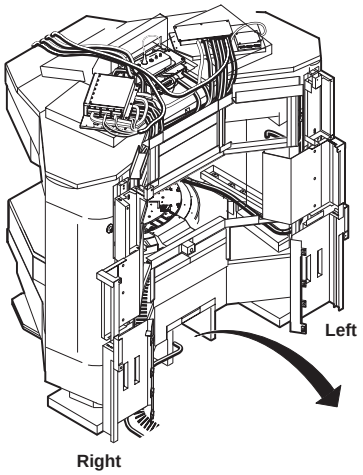
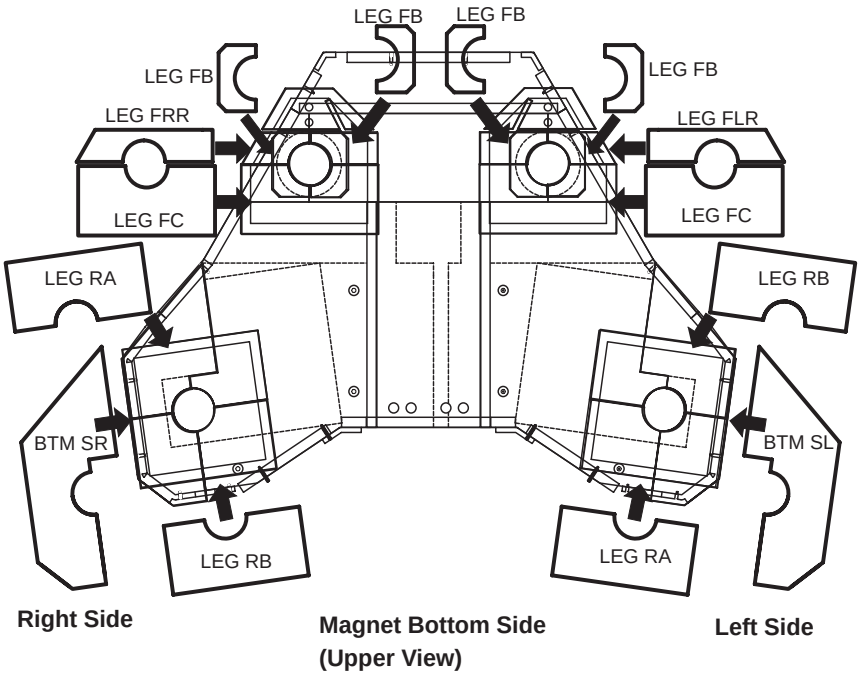


TABLE CABLE DUCT BRACKET (REAR)
ILLUSTRATION 2

2. Bottom Insurator Installation 1

1. Install bottom Insulators to the magnet as shown.





BOTTOM INSURATOR INSTALLATION 1
ILLUSTRATION 3

3. Table Cable Duct Installation

1. Install Table Cable Duct and fix it to the Front Bracket with four screws(U0438AA)

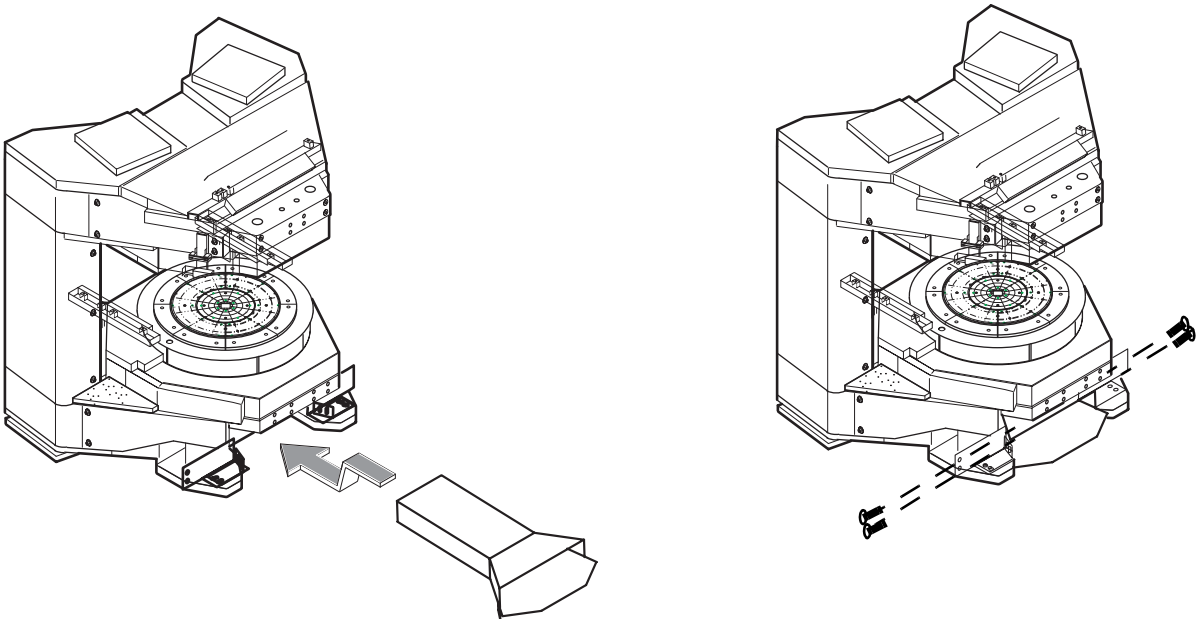


TABLE CABLE DUCT INSTALLATION
ILLUSTRATION 4

2. Fix Table Cable Duct to the Rear Bracket with four screws(U0438AA). .

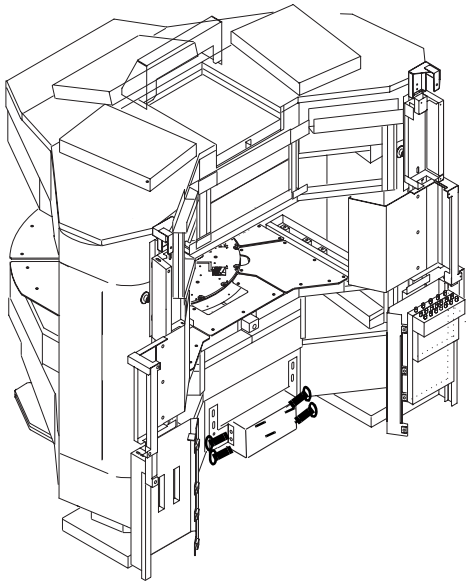
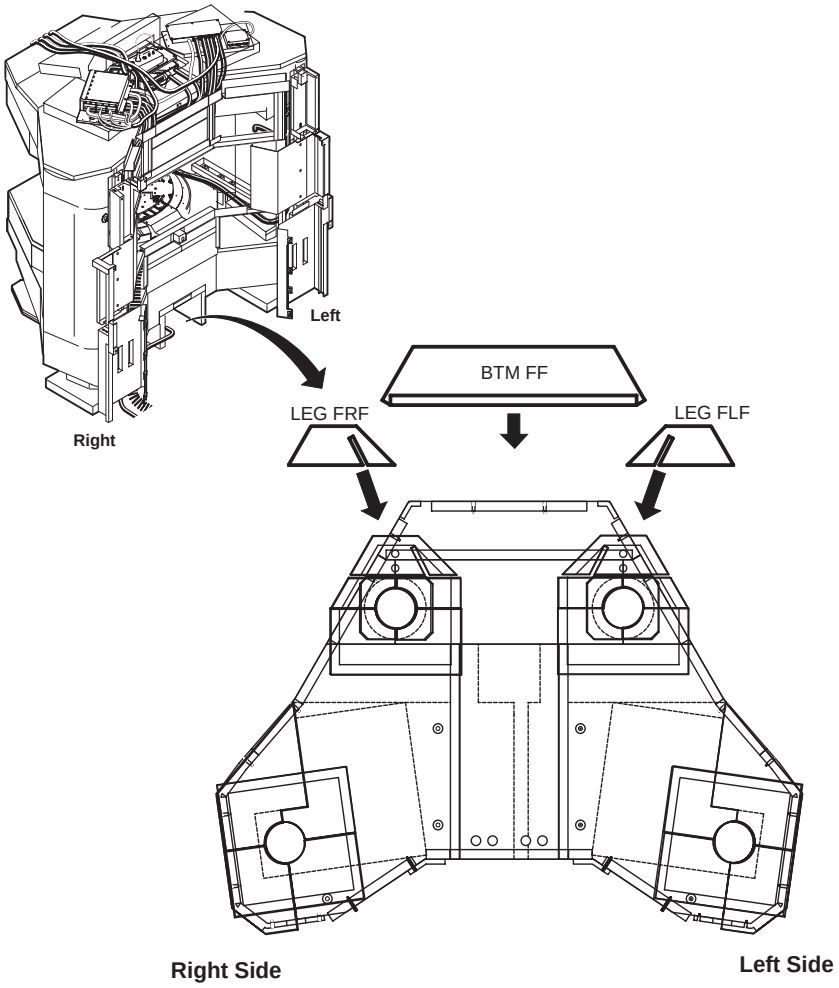


TABLE CABLE DUCT INSTALLATION
ILLUSTRATION 5

4. Bottom Insulator Installation 2

1. Install bottom Insulators to the magnet as shown.



BOTTOM INSULATOR INSTALLATION 2
ILLUSTRATION 6

Revision History

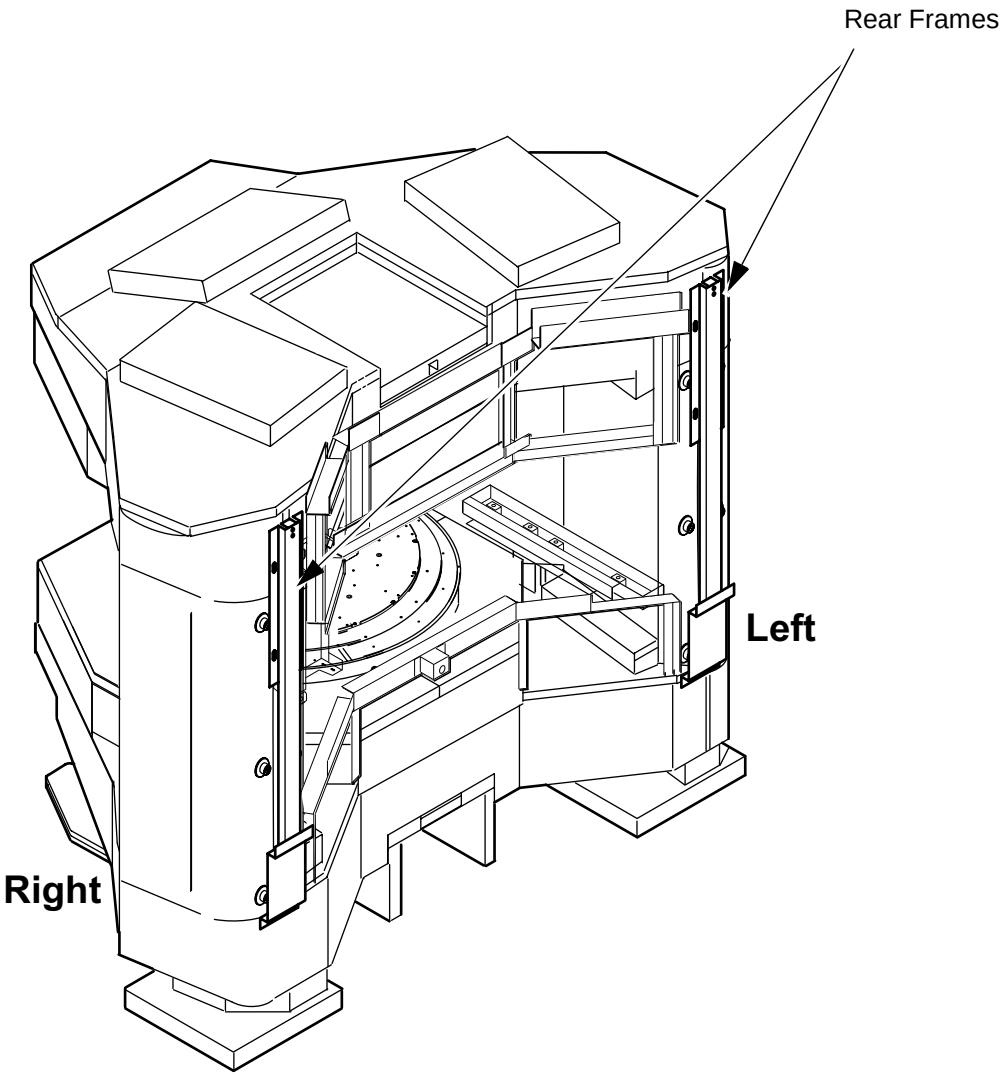
Rev	Date	Author	Primary Reasons For Change
0	Feb 12, 2000	Y. Masumo	Initial release
1	May 18, 2001	Y. Masumo	Added Bottom Insulator Installation
2	Sep 19, 2002	Y. Masumo	P2: Corrected illustration 1.

MAGNET REAR FRAME INSTALLATION

TABLE OF CONTENTS

1. Preparation

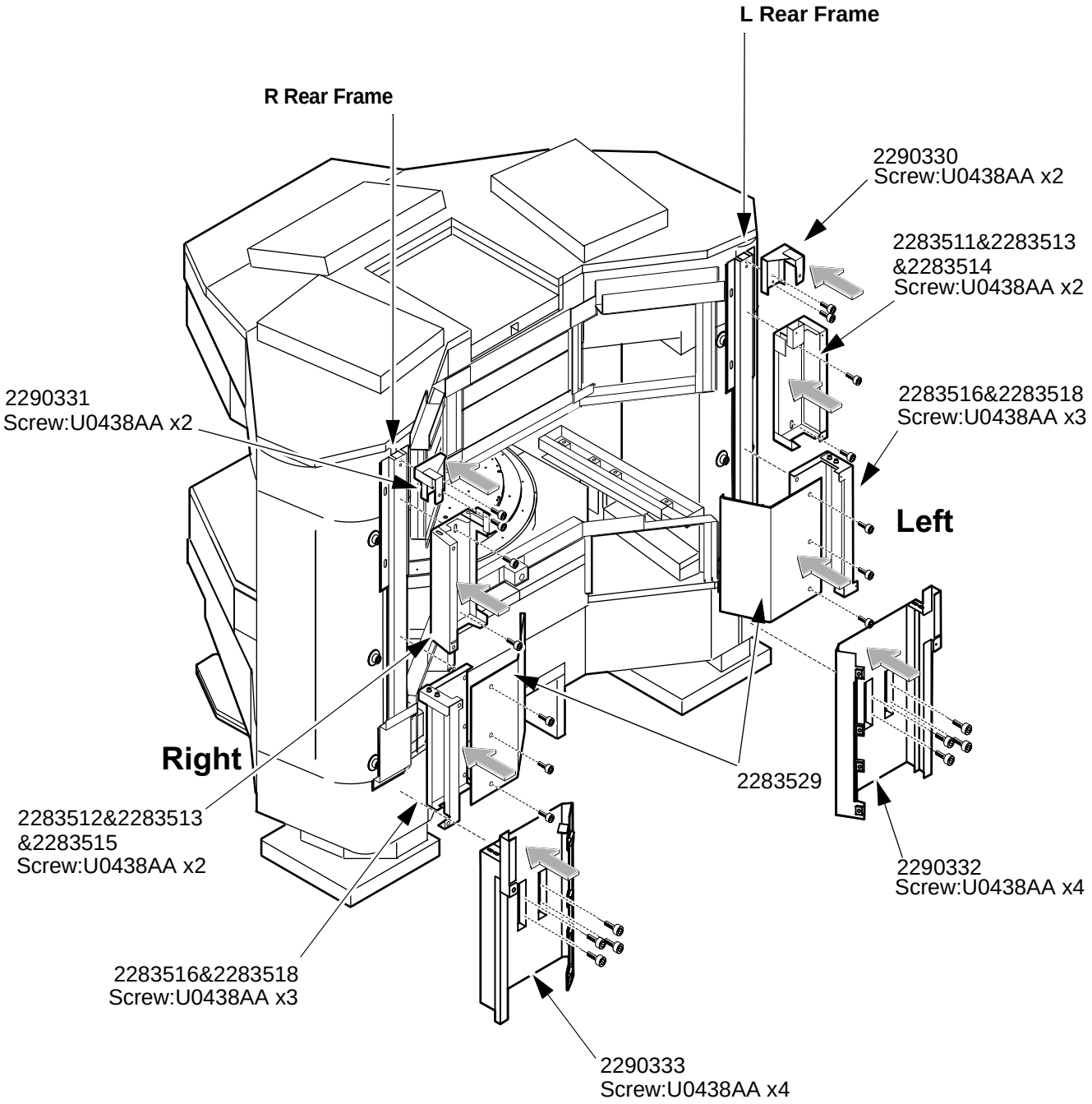
1. Verify that the following frames are already installed before starting the frame installation.



FRAMES BEFORE STARTING THE INSTALLATION
ILLUSTRATION 1-1

2. Rear Frame Installation

1. Install R and L Rear Frames to the magnet rear frame.



REAR FRAME INSTALLATION
Illustration 1-2

Revision History

Rev	Date	Auther	Primary Reasons For Change
0	Mar 05, 2001	K.Tsumagari	Initial Release
1	May 17, 2001	K.Tsumagari	Misc Change

QHB INSTALLATION

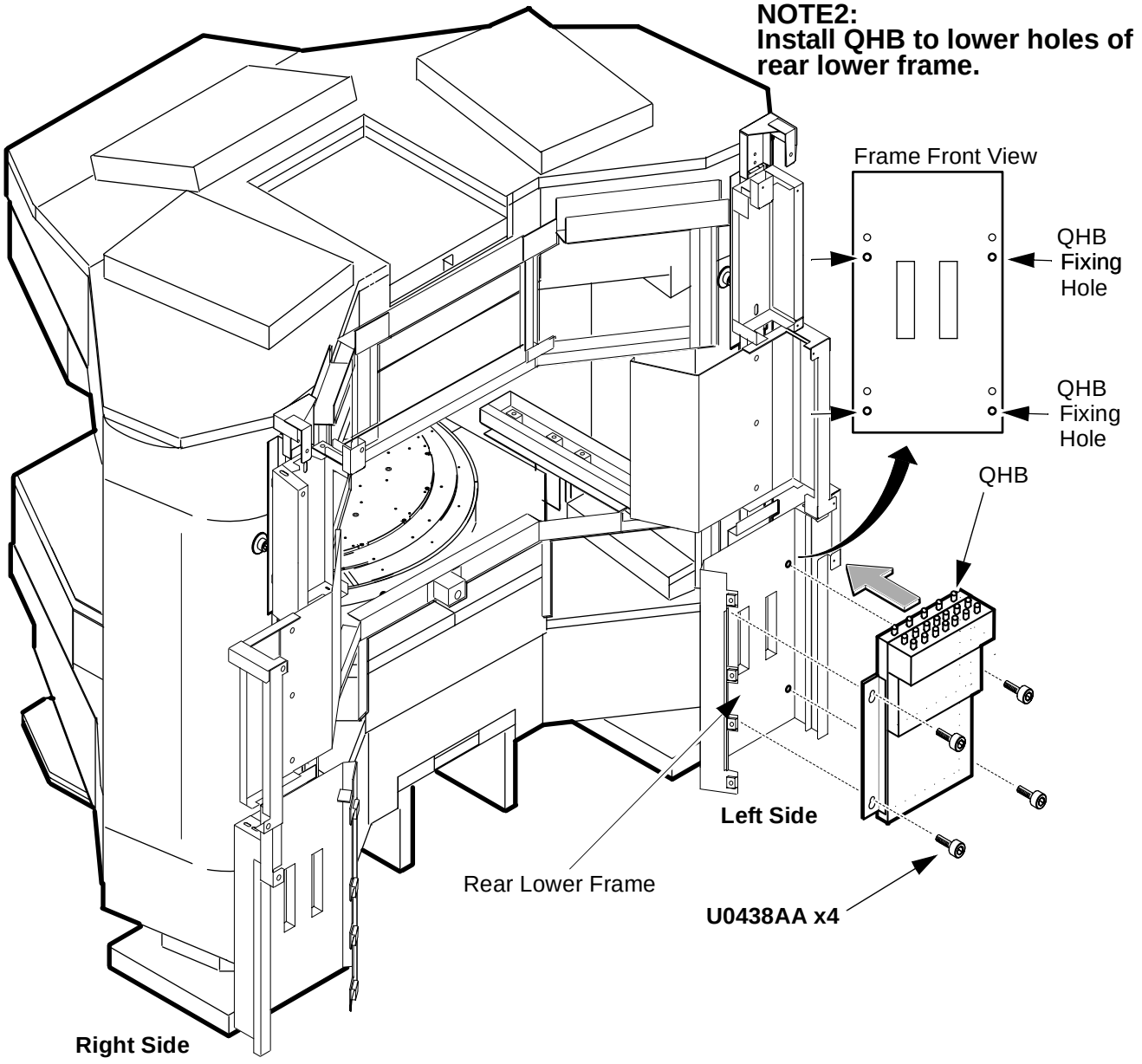
TABLE OF CONTENTS

1. QHB Installation

1. Install QHB to the rear lower frame of opposite side of wiring with 4 screws.

NOTE: The QHB must be installed to lower holes of rear lower frame.

NOTE1:
The illustration is right side wiring.
The left side wiring is symmetry.

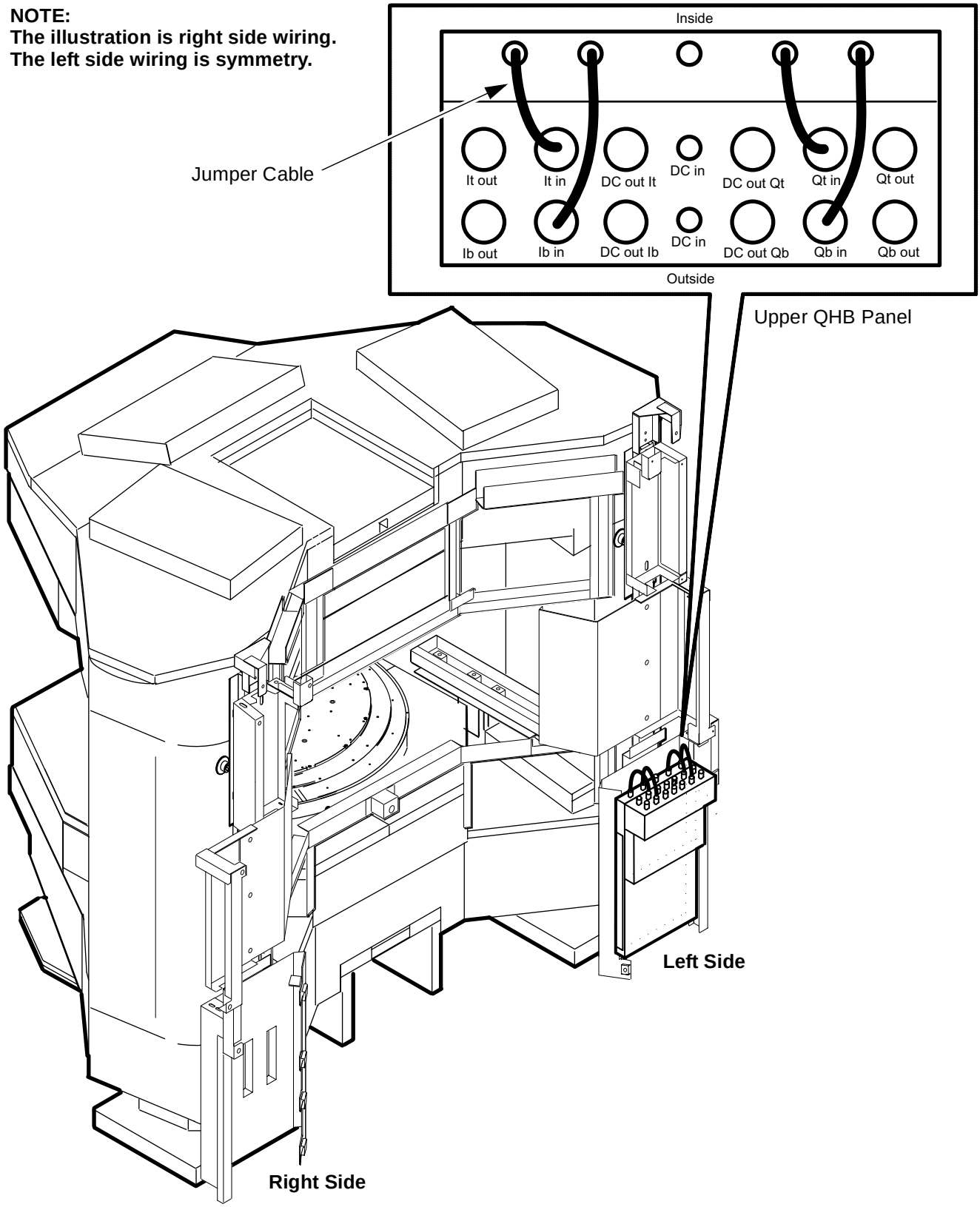


QHB INSTALLATION
ILLUSTRATION 1

1. QHB Installation(Continued)

2. Connect 4 jumper cables to upper panel of QHB.

NOTE:
The illustration is right side wiring.
The left side wiring is symmetry.



QHB INSTALLATION
ILLUSTRATION 2

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Feb 28, 2001	K.Tsumagari	Initial Release
1	Oct 22, 2001	K.Tsumagari	Misc. Change

Signa Ovation System Interconnect - 0.35T (FIXED SITE)

1. CUSTOMER FURNISHED TYPICAL CONNECTION FOR
2. NORMALLY CLOSED EMERGENCY OFF SWITCH
3. MDP, EO1/E02 and RUN #296/#297 are used only high voltage.(over 380V)
4. RUN #1009 is connected to MDP, if exist.
5. OPTIONAL: MAY NOT BE PRESENT ON ALL SYSTEMS
6. CUSTOMER SUPPLIED TELEPHONE LINE FOR INSITE MODEM

*** Denotes a newly assigned run number for HFO

**** Denotes a newly assigned run number for MFO

CONTINUED ON NEXT PAGE

FACILITY EMERGENCY POWER
FACILITY POWER
OW1 A2 CABINET (BROWN)
OW1 A2 A7 (SCSI EXPANSION)
OW1 A2 A4 (LAN HUB)
OW1 A2 A1 (PC)
OW1 A2 A11 (SEC KEY)
OW1 A2 A5 (AC POWER MODULE)
AC OUTLET
AC FAN
A12 (SERVICE LAPTOP)
TO SITE ETHERNET CONNECTION
OW1 A15 (PC HOST)
OW1 A3 (LCD DISPLAY)
OW1 A1 A4 (OPERATOR WORKSPACE INTERFACE MODULE)
STEREO RACK
MUSIC IN BORE
OW1 A8 (MOUSE)
OW1 A9 (RMT MIC)
OW1 A7 (KEYBRD)
OW1 A10 (SPKERS)
FOR CT TRACKBALL
OW1 A1 A1 (POWER MOD)
OW1 A4/A6 (HOST MONITOR)
R.B.G IN (COLOR)A6
DB-9 OW1 A13 (MODEM)
OW1 A5 (DASM)
OW1 A17 (SERIAL CONVERTER)
OW1 A1 TABLE (GREEN)
FEED THRU AIR LINES
MDP (MAIN DISCONNECT)
EO2 (EMERGENCY OFF)
SPLICE
GRFD CABIENT
PD1 (POWER DISTRIBUTION UNIT) (RED)
MR1 (RF AMP)
MR1 A24 (R/L SWITCH)
MR1 A23 (RFI)
MR3 (GRADIENT DRIVER)
MR1 A7 (SYSTEM SUPPORT MODULE) (BLUE/GREEN)
RF Door Switch
MR2 A12
MR2 A11 (SYSTEM CONTROL CABINET) (ORANGE)
MR1 A15 (PATIENT ALERT CONTROL BOX)
COOLING CABINET
PCC (PATIENT COMFORT COMPRESSOR) (BLUE/RED)
120VAC PATIENT COMFORT COMPRESSOR CNTL

Report updates for this diagram to T.Suzuki at Tel. +81-42-585-5951

	Signa Ovation			
	Interconnect Diagram, MFO			
APP. Y.Kato				
CH. S.Watanabe	SIZE A3	DATE 4 Sep 02	DWG NO 2353137SCH	REV 1
DR. T.Suzuki	SCALE NTS		SHEET 1 of 2	

Signa Ovation System Interconnect - 0.35T (FIXED SITE)

SEE NOTES ON PAGE 1

FACILITY FILTERS
EXAM ROOM LIGHTS
RF SHIELD ROOM COMMON GROUND
MS1 (MAGNET) (BLUE)
PP1 A11 (DYNAMIC DISABLE FILTER)
MG3 A3 (BODY QHB)
OUTPUT BIAS BOX
MG3 A5 (BODY PREAMP)
MG2 A12 A15 (TOP BODY COIL)
MG2 A12 A14 (BOT BODY COIL)
FL T
PP1 A18 (TCU)
9 HEATERS (UPPER)
9 HEATERS (LOWER)
TEMPERATURE SENSOR(UPPER)
TEMPERATURE SENSOR(LOWER)
THERMOSTAT (UPPER)
THERMOSTAT (LOWER)
SRI PLATE
MG2 A33 (SRI)
MG2 A39 (SRI SPLITTER)
MG2 A4 (OPERATOR DISPLAY)
MG2 A5R (RIGHT OPERATOR CONTROL)
MG2 A5L (LEFT OPERATOR CONTROL)
To Gradient Coil Temp. Sensor
PNEUMATIC TUBE FEED THRU
PP1 A17 A1 (F/O REPEATER BD)
PP1 A17 (REPEATER PANEL)
PATIENT CALL FEED THRU
RESPIRATION
PERIPHERAL GATING
MG2 A11 ECG (PAC II ASSEMBLY)
(PAC REMOTE INTERFACE)
SQZ BULB
RESPIRATION
PERIPHERAL GATING
ECG
PHOTO PLETHYSMOGRAPH
Filter Box 2
Filter Box 3
CN1
CN2
PT1 (PATIENT TABLE)
LATELAL DISPLAY REMORT
LATELAL DISPLAY MASTER
LONGITUDINAL ENCODER
LATELAL ENCODER
VERTICAL MOTOR
MG3 A4 (COIL I/F ELECTRONICS)
MG3 A5 (TABLE ELECTRONICS)
MG3 A7 (LONGITUDINAL MOTOR DRIVE)
PP1 A7 (GRADIENT FILTER)
MG2 A12 A1 (GRADIENT COIL)
PP1 A15 (MC SW FLTR)
PP1 A16 (MC BIAS FLTR)
TABLE PIVOT SENSORS
MG2 A40 (MAGNET I/F BOARD)
MAGNET I/F PLATE
MG3 A2 (PATIENT COMM BOX)
MG2 A40 A1 (L PINCH SW)
MG2 A40 A3 (F PINCH SW)
MG2 A40 A2 (R PINCH SW)
MG2 A37 (R PATIENT COMFORT MODULE)
MG2 A38 (L PATIENT COMFORT MODULE)
AIR VENT
MIC
+25– LASER DIODES
0– LASER DIODES
-25– LASER DIODES
PP1 (YELLOW)
EO1 (EMERGENCY OFF SWITCH)

*** Denotes a newly assigned run number for HFO

**** Denotes a newly assigned run number for MFO

Report updates for this diagram to T.Suzuki at Tel. +81-42-585-5951

	Signa Ovation			
	Interconnect Diagram, MFO			
APP. Y.Kato	SIZE A3	DATE 4 Sep 02	DWG NO 2353137SCH	REV 1
CH. S.Watanabe	SCALE NTS		SHEET 2 of 2	
DR. T.Suzuki				

Run	GE Part Number	Source Subsystem	Source Assembly	Source Connection	Destination Subsystem	Destination Assembly	Destination Connection
030M	46-271364G517	System Cabinet	Power Panel	J1	Power Cabinet	Power Distribution Unit	28,29,30,N
037T	46-255947G607	System Cabinet	Power Panel	GND	Power Cabinet	Power Distribution Unit	GRN/YEL BUS
040	2103427	Magnet	Magnet	GND			GND Stud
044	46-255947G9	Penetration Panel	Penetration Panel	GND	Power Cabinet	System Support Module	GND
047	46-307832P4	Operator Workspace	Power	J1	Power Cabinet	Power Distribution Unit	31,34,N
048	46-255947G11	Operator Workspace	Power	GND	Power Cabinet	Power Distribution Unit	GRN/YEL
049	46-307829P1	Operator Workspace	Power	J2	Operator Workspace	Power Module	PWR
229	46-301125G98	System Cabinet	System Control Cabinet	J1	Power Cabinet	System Support Module	J3
231	46-301125G100	System Cabinet	System Control Cabinet	J2	Penetration Panel	Penetration Panel	J8
296	46-271692G601	Penetration Panel	Penetration Panel	J18	Main Disconnect Panel	Main Disconnect Panel	
297	46-271693G1	Emergency Cutoff Switch	Emergency Cutoff Switch in		Penetration Panel	Penetration Panel	J18
414	46-317157G3			MIC	Magnet Enclosure	Patient Communication Box	J9
487	46-301125G764	Power Cabinet	System Support Module	J20	Penetration Panel	Multi-coil Switching Filter	J78
488	46-301125G765	System Cabinet	System Control Cabinet	J8	Penetration Panel	Penetration Panel	J80
489	46-301125G766	System Cabinet	System Control Cabinet	J9	Penetration Panel	Penetration Panel	J81
490	46-301125G767	System Cabinet	System Control Cabinet	J10	Penetration Panel	Penetration Panel	J82
701	46-301125G807	System Cabinet	System Control Cabinet	J15			RF Door Switch
702	46-258431G810	System Cabinet	System Control Cabinet	J18	Power Cabinet	System Support Module	J5
703	46-258431G809	System Cabinet	System Control Cabinet	J23	Power Cabinet	Power Distribution Unit	J2
706	46-258431G808	System Cabinet	System Control Cabinet	J14	Power Cabinet	Power Distribution Unit	J3
708	46-317076G602	System Cabinet	System Control Cabinet	J16	Power Cabinet	System Support Module	J27
710	46-317085G603	Power Cabinet	Gradient Driver	J2	System Cabinet	System Control Cabinet	J17
711	46-328079G9	Penetration Panel	F/O Repeater Panel	J91	Magnet Enclosure	Scan Room Interface (SRI)	J13
711	46-328079G9	Penetration Panel	F/O Repeater Panel	J91	Magnet Enclosure	Scan Room Interface (SRI)	J12
711	46-328079G9	Penetration Panel	F/O Repeater Panel	J91	Magnet Enclosure	Scan Room Interface (SRI)	J11
711M/712M	46-328079G9	Penetration Panel	F/O Repeater Board	J3	Penetration Panel	F/O Repeater Panel	J91
711M/712M	46-328079G9	Penetration Panel	F/O Repeater Board	J2	Penetration Panel	F/O Repeater Panel	J91
711M/712M	46-328079G9	Penetration Panel	F/O Repeater Board	J4	Penetration Panel	F/O Repeater Panel	J91
711M/712M	46-328079G9	Penetration Panel	F/O Repeater Board	J5	Penetration Panel	F/O Repeater Panel	J91
711M/712M	46-328079G9	Penetration Panel	F/O Repeater Board	J1	Penetration Panel	F/O Repeater Panel	J91
711V/712V	46-328078G5	System Cabinet	System Control Cabinet	J13	Penetration Panel	F/O Repeater Board	J9
711V/712V	46-328078G5	System Cabinet	System Control Cabinet	J13	Penetration Panel	F/O Repeater Board	J8
711V/712V	46-328078G5	System Cabinet	System Control Cabinet	J13	Penetration Panel	F/O Repeater Board	J7
711V/712V	46-328078G5	System Cabinet	System Control Cabinet	J13	Penetration Panel	F/O Repeater Board	J10
711V/712V	46-328078G5	System Cabinet	System Control Cabinet	J13	Penetration Panel	F/O Repeater Board	J11
712	46-328079G9	Penetration Panel	F/O Repeater Panel	J91	Magnet Enclosure	Physiological Acquisition C	J1
726	46-301125G831	Penetration Panel	Multi-coil Bias Filter (G2)	J77	Power Cabinet	System Support Module	J18
746	2352065	Penetration Panel	Penetration Panel	J44	Magnet Enclosure	Body Quadrature Hybrid As	J1
768TR	46-328000G902	Penetration Panel	Penetration Panel	J20	Power Cabinet	System Support Module	J31

Run	GE Part Number	Source Subsystem	Source Assembly	Source Connection	Destination Subsystem	Destination Assembly	Destination Connection
769	46-328000G903	Penetration Panel	Penetration Panel	J15	Power Cabinet	System Support Module	J34
770	46-328000G904	Penetration Panel	Penetration Panel	J11	Power Cabinet	System Support Module	J41
771	46-328000G905	Penetration Panel	Penetration Panel	J47	Power Cabinet	System Support Module	J36
772	46-328000G906	Penetration Panel	Penetration Panel	J14	Power Cabinet	System Support Module	J40
773	46-328000G907	Penetration Panel	F/O Repeater Panel	J1	Power Cabinet	System Support Module	J35
774M	46-258431G908	System Cabinet	System Control Cabinet	J25	Power Cabinet	System Support Module	J32
775	46-328000G915	Power Cabinet	System Support Module	J42	Penetration Panel	Dynamic Disable and Induc	J92
777	46-328000G913	Power Cabinet	System Support Module	J43	Penetration Panel	Dynamic Disable and Induc	J94
788	46-328000G937	Penetration Panel	Penetration Panel	J12	Operator Workspace	Workspace Interface Modul	J7
789	46-328000G938	System Cabinet	System Control Cabinet	J26	Operator Workspace	Workspace Interface Modul	J18
791	46-328000G939	System Cabinet	System Control Cabinet	J30	Operator Workspace	8P Serial Cable	Port 1
805	2114561-38	Operator Workspace	Workspace Interface Modul	J6	Operator Workspace	Keyboard Assembly	
810	2141980-2	Operator Workspace	Workspace Interface Modul	J8	Operator Workspace	PC Host Computer	KYBD, MS
811	2153396-3	Operator Workspace	Local Area Network HUB	PORT 2	Operator Workspace	PC Host Computer	ETHERNET
812	2188746	Operator Workspace	PC Host Computer	Serial Port 1 (RS232)	Operator Workspace	Modem	DB-9
813	2188747	Operator Workspace	Personal Computer	COM 2	Operator Workspace	PC Host Computer	Serial Port 2 (RS232)
814	2196990	Operator Workspace	Personal Computer	Keyboard, Mouse, CO	Operator Workspace	Workspace Interface Modul	J9
817	46-328000G958	Operator Workspace	Power	J3	Operator Workspace	Workspace Interface Modul	J17
818	2198993	System Cabinet	System Control Cabinet	J31	Operator Workspace	8P Serial Cable	Ports 6, 7, 8
819	2198995	Operator Workspace	SCSI Expansion Box	IN	Operator Workspace	PC Host Computer	SCSI
836	2241052	Operator Workspace	PC Host Computer	BIT3	System Cabinet	System Control Cabinet	J21
837	2263200	Operator Workspace	Serial Converter	J4	Penetration Panel	TCU	J2
838	2263200-2	Operator Workspace	Serial Converter	J3	Penetration Panel	Penetration Panel	J51
841	2263200-3	Penetration Panel	Penetration Panel	J51	Patient Table	Patient Table	J5
842	2263200-4	Penetration Panel	Penetration Panel	J15	Magnet Enclosure	SRI Splitter	J7
843	2260535	Penetration Panel	Penetration Panel	J20	Magnet Enclosure	Magnet Interface Board	J6
849	2263200-5	Magnet Enclosure	Scan Room Interface (SRI)	J4	Magnet Enclosure	SRI Splitter	J1
850	2263200-6	Magnet Enclosure	Scan Room Interface (SRI)	J7	Magnet Enclosure	SRI Splitter	J3
858	2263200-9	Magnet Enclosure	SRI Splitter	J4	Patient Table	Patient Table	J15
859	2263200-10	Magnet Enclosure	Scan Room Interface (SRI)	J3	Patient Table	Patient Table	J14
860	2263200-11	Magnet Enclosure	Scan Room Interface (SRI)	J2	Patient Table	Patient Table	J13
861	2221947	Magnet Enclosure	Operator Display	J4	Magnet Enclosure	SRI Splitter	J10
861	2221947	Magnet Enclosure	Operator Display	J4	Magnet Enclosure	Scan Room Interface (SRI)	J6
861	2221947	Magnet Enclosure	Operator Display	J4	Magnet Enclosure	Scan Room Interface (SRI)	J5
861	2221947	Magnet Enclosure	Operator Display	J4	Magnet Enclosure	SRI Splitter	J11
861	2221947	Magnet Enclosure	Operator Display	J4	Magnet Enclosure	Scan Room Interface (SRI)	J9
862	2221946	Magnet Enclosure	Operator Display	J1	Magnet Enclosure	Operator Control (Right)	J1
863	2221946	Magnet Enclosure	Operator Display	J2	Magnet Enclosure	Operator Control (Left)	J2
864	2261328	Magnet Enclosure	SRI Splitter	J6	Magnet Enclosure	Bore Light (Left)	

Run	GE Part Number	Source Subsystem	Source Assembly	Source Connection	Destination Subsystem	Destination Assembly	Destination Connection
865	2261328	Magnet Enclosure	SRI Splitter	J5	Magnet Enclosure	Bore Light (Right)	
866	2263200-12	Patient Table	Patient Table	J12	Magnet Enclosure	Magnet Interface Board	J3
869	46-317252G4 (ch	Magnet Enclosure	Patient Comfort Module Sp	N/A	Magnet Enclosure	Patient Communication Box	J8
870	46-317157G6	Magnet Enclosure	Patient Comfort Module Mic	N/A	Magnet Enclosure	Patient Communication Box	J7
871	2261329			Laser Diodes	Magnet Enclosure	Magnet Interface Board	J8
873	2263200-13	Magnet Enclosure	Patient Communication Box	J6	Magnet Enclosure	Magnet Interface Board	J1
875	46-317220P19	Patient Table	Patient Table	J1	Patient Table	Coil I/F Electronics	J6
876	46-317220P20	Patient Table	Patient Table	J2	Patient Table	Coil I/F Electronics	J7
877	46-317220P21	Patient Table	Patient Table	J3	Patient Table	Coil I/F Electronics	J8
878	46-317220P22	Patient Table	Patient Table	J4	Patient Table	Coil I/F Electronics	J5
879	2262695	Patient Table	Patient Table	J5	Patient Table	Coil I/F Electronics	J3
880	2262694-2	Patient Table	Patient Table	J9	Patient Table	Coil I/F Electronics	J9
881	2262696	Patient Table	Patient Table	J15	Patient Table	Coil I/F Electronics	J2
882		Patient Table	Patient Table	J14	Patient Table	Limit Switches and Encoder	J4
883		Patient Table	Patient Table	J13	Patient Table	Limit Switches and Encoder	J6
884		Patient Table	Patient Table	J11	Patient Table	Limit Switches and Encoder	J1
885		Patient Table	Patient Table	J12	Patient Table	Limit Switches and Encoder	J5
886		Patient Table	Patient Table	J8	Patient Table	Longitudal Motor Drive	N/A
887	2352606	Power Cabinet	Right/Left Switch	NC	Penetration Panel	Penetration Panel	J4
888	2350267	Power Cabinet	Right/Left Switch	NO	Penetration Panel	Penetration Panel	J83
889	2352606	Patient Table	Patient Table	J6	Penetration Panel	Penetration Panel	J4
890	2352607	Patient Table	Patient Table	J7	Penetration Panel	Penetration Panel	J83
891	46-320888G3	Patient Table	Patient Table	J6	Patient Table	Coil I/F Electronics	J1
892	46-320888G4	Patient Table	Patient Table	J7	Patient Table	Coil I/F Electronics	J10
893	46-282352G2	Magnet Enclosure	Body Quadrature Hybrid As	J2	Magnet Enclosure	Body Coil Preamplifier	IN
894	46-317758P18	Magnet Enclosure	Physiological Acquisition C	Respiration			Respiration
895	2219097	Magnet Enclosure	Physiological Acquisition C	Peripheral Gating			Peripheral Gating
896	2219096	Magnet Enclosure	Physiological Acquisition C	ECG			ECG
897	2221948	Magnet Enclosure	SRI Splitter	J9	Magnet Enclosure	Operator Display	J3
898	46-317903	Magnet Enclosure	Physiological Acquisition C	Photo Plethysmograph			Photo Plethysmograph
905	2262694	Patient Table	Patient Table	J10	Patient Table	Coil I/F Electronics	J4
906	2263200-14	Patient Table	Patient Table	J11	Penetration Panel	Penetration Panel	J47
910	2263200-15	Operator Workspace	8P Serial Cable	PORT 3	Operator Workspace	Serial Converter	J2
911	2263200-16	Operator Workspace	8P Serial Cable	PORT 5	Operator Workspace	Serial Converter	J1
920	2263200-17	Magnet Enclosure	Magnet Interface Board	J2	Penetration Panel	Penetration Panel	J12
921	2263200-18	Patient Table	Patient Table	J8	Penetration Panel	Penetration Panel	J11
926	2263200-23	Penetration Panel	Multi-coil Switching Filter	J78	Patient Table	Patient Table	J9
927	2263200-24	Penetration Panel	Multi-coil Bias Filter (G2)	J77	Patient Table	Patient Table	J10
929	2263200-26	System Cabinet	System Control Cabinet	J5	Penetration Panel	Penetration Panel	J7

Run	GE Part Number	Source Subsystem	Source Assembly	Source Connection	Destination Subsystem	Destination Assembly	Destination Connection
930	2259428	Power Cabinet	System Support Module	J37	Patient Comfort Compresso	Patient Comfort Compresso	
931	2259428-2	Power Cabinet	System Support Module	J47	Patient Comfort Compresso	Patient Comfort Compresso	
934	2263200-27	Penetration Panel	Penetration Panel	J8	Magnet Enclosure	Body Coil Preamplifier	Output
935	2352605	Power Cabinet	Radio Frequency Interface	J4	Penetration Panel	Penetration Panel	J44
943	2275301			Table Pivot Sensor			Run 944
944	2263200-34	Magnet Enclosure	Magnet Interface Board	J4			Run 943
1001	2283335	Power Cabinet	Gradient Driver	X-GCA	Penetration Panel	Gradient Filter Box	1,2,GND
1002	2283336	Power Cabinet	Gradient Driver	Y-GCA	Penetration Panel	Gradient Filter Box	3,4,GND
1003	2283337	Power Cabinet	Gradient Driver	Z-GCA	Penetration Panel	Gradient Filter Box	5,6,GND
1004	2283338	Penetration Panel	Gradient Filter Box	1,2,GND	Magnet Enclosure	Gradient Coil	1,3
1005	2283339	Penetration Panel	Gradient Filter Box	3,4,GND	Magnet Enclosure	Gradient Coil	5,7
1006	2283340	Penetration Panel	Gradient Filter Box	5,6,GND	Magnet Enclosure	Gradient Coil	9,11
1007	2279862	Power Cabinet	Power Distribution Unit	RF Coil Cooling PLUG	Cooling Cabinet	Cooling Cabinet	TM1 (1,2)
1008	2279864	Power Cabinet	Power Distribution Unit	GND	Cooling Cabinet	Cooling Cabinet	GND
1009	2280055	Power Cabinet	Power Distribution Unit	33,36,GND	Penetration Panel	TCU	J1
1010	2280056	Magnet	Magnet	GND	Magnet Enclosure	Scan Room Interface (SRI)	GND
1011	2282839	Penetration Panel	TCU	J3	Magnet	Magnet	J13
1012	2282838	Penetration Panel	TCU	J4	Magnet	Magnet	J14
1013	2282840	Penetration Panel	TCU	J5	Magnet	Magnet	J15
1014	2284671	Penetration Panel	Dynamic Disable and Induc	J72	Magnet Enclosure	Output Bias Box	DC in 1
1015	2284672	Penetration Panel	Dynamic Disable and Induc	J75	Magnet Enclosure	Output Bias Box	DC in 2
1016	2279863	Penetration Panel	Penetration Panel	J14	Magnet Enclosure	Scan Room Interface (SRI)	J1
1017	2280058	Magnet Enclosure	SRI Splitter	J8	Magnet Enclosure	Magnet Interface Board	J7
1018	2280057	Magnet Enclosure	Magnet Interface Board	J5	Magnet Enclosure	Pinch Switch	A1, A2, A3
1019	2284412	Patient Table	Patient Table	J4	Penetration Panel	MA Module	J1
1020	2284413	Patient Table	Patient Table	J1	Penetration Panel	MA Module	J2
1021	2284414	Patient Table	Patient Table	J2	Penetration Panel	MA Module	J3
1022	2284415	Patient Table	Patient Table	J3	Penetration Panel	MA Module	J4
1023	2288234	Magnet Enclosure	Scan Room Interface (SRI)	J8	Magnet Enclosure	SRI Splitter	J2
1024	2288584	Power Cabinet	System Support Module	GND	Patient Comfort Compresso	Patient Comfort Compresso	GND
1025	2294342	Magnet Enclosure	FILTER BOX 2	J1	Penetration Panel	Penetration Panel	J89
1026	2294343	Magnet Enclosure	FILTER BOX 3	J2	Magnet Enclosure	Operator Display	J5
1027	2284838	Magnet Enclosure	Scan Room Interface (SRI)	GND	Magnet Enclosure	Magnet Interface Board	GND

RF CABLE CORE INSTALLATION

TABLE OF CONTENTS

1. Effectivity

Signa Ovation3 systems and later

2. Overview

RF Cableit is necessary to install cores for the following RF cables.

RF Cables

Item	Part Number	Part Name
1	2352606	RF Cable (RUN#887)
2	2352607	RF Cable (RUN#888)
3	2352605	RF Cable (RUN#935)

Note

The cables above are included in RF Line Cable Assy(2284768-2).

Core and Clamp

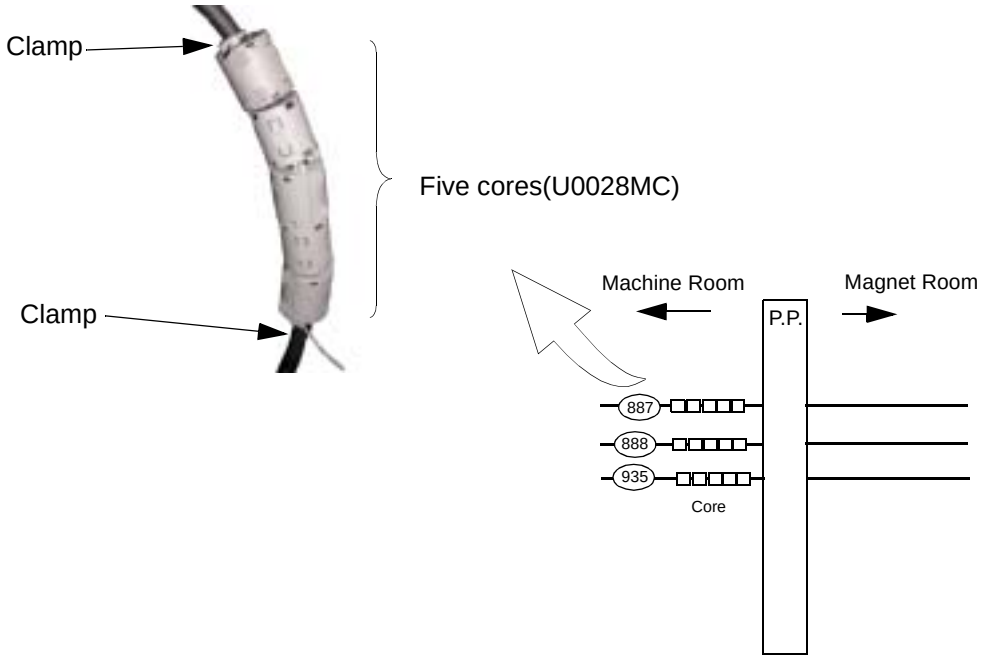
Item	Part Number	Part Name	Qty
1	U0028MC	Core	15
2		Clamp (Attached with core)	6

Note

The parts above are included in 0.35 Site Collector (2354165).

3. Procedure

1. Install five cores to the RF Cables (Penetration Panel Connection side).
2. Fix core with clamps.



CORE INSTALLATION
ILLUSTRATION 1

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Sep 20, 2002	Y. Masumo	Initial Release

TABLE OF CONTENTS

1. Gradient Cable Connection

1. Connect the Gradient Cable to the Gradient filter as following illustration. (Machine Room Side)

GRADIENT CABLE CONNECTION (MACHINE ROOM SIDE)
ILLUSTRATION 1

2. Connect the Gradient Cable to P.P as following illustration.(Scan Room Side)

GRADIENT CABLE CONNECTION (SCAN ROOM SIDE)
ILLUSTRATION 2

2. Duct Cable Routing

Run the gradient cables, signal cables, receiver cables, and Tx cables separately in the duct. Otherwise, cables may cause the noise problem.

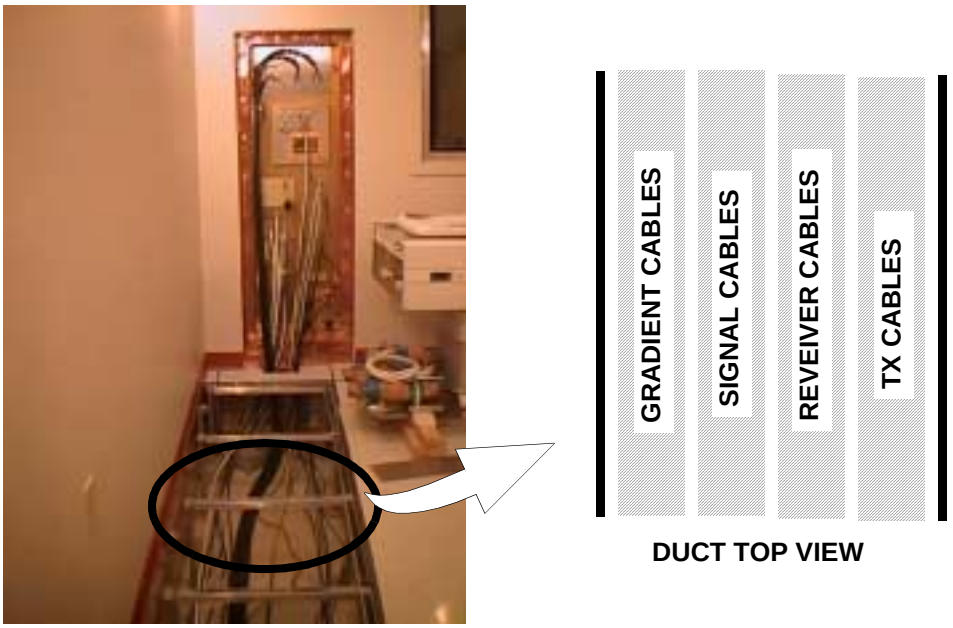


ILLUSTRATION 3

3. Optical Cable

CAUTION

Fiber optic cables are easily damaged! Handle fiber optic cables very carefully. Failure to do so may cause intermittent problems difficult to isolate. Do not bend fiber optic cables to radius smaller than two inches.

4. Dynamic Disable Cable

Run number 775 & 777 cables(Dynamic Disable Cable, PP-GRFD) may cause the noise problem. To avoid this problem, separate these cables from the other cables as far as possible.

5. Notice for RF Cable

If it is necessary to cut off the RF cable, follow the instruction for cutting cable and installing connector which is provided with each cable kit.

6. Notice for Gradient Cable

Never cut off GPS cables(X,Y, Z) from Power Cabinet to SRU terminal(machine room side), and from SRU terminal (scan room side) to magnet rear terminal.

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Feb 9, 2001	Y. Masumo	Initial Version
1	Oct 17, 2001	Y. Masumo	Added Notice of RF Cable and Gradient Cable

TABLE OF CONTENTS

1. Overview

This document describes replacement of the PAC PPG Cable to long from short.

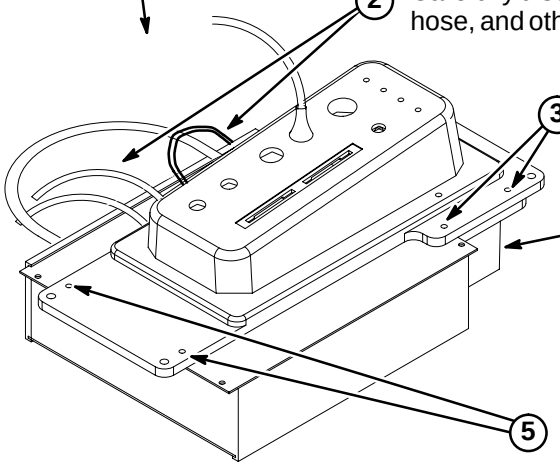
2. Preparation

Required Tool:

Items	Qty	Type/Parts Number	Part
Metric Allen Wrench Set	1	Non ferrous	

3. Procedure

1. Separate PAC front panel from module box.

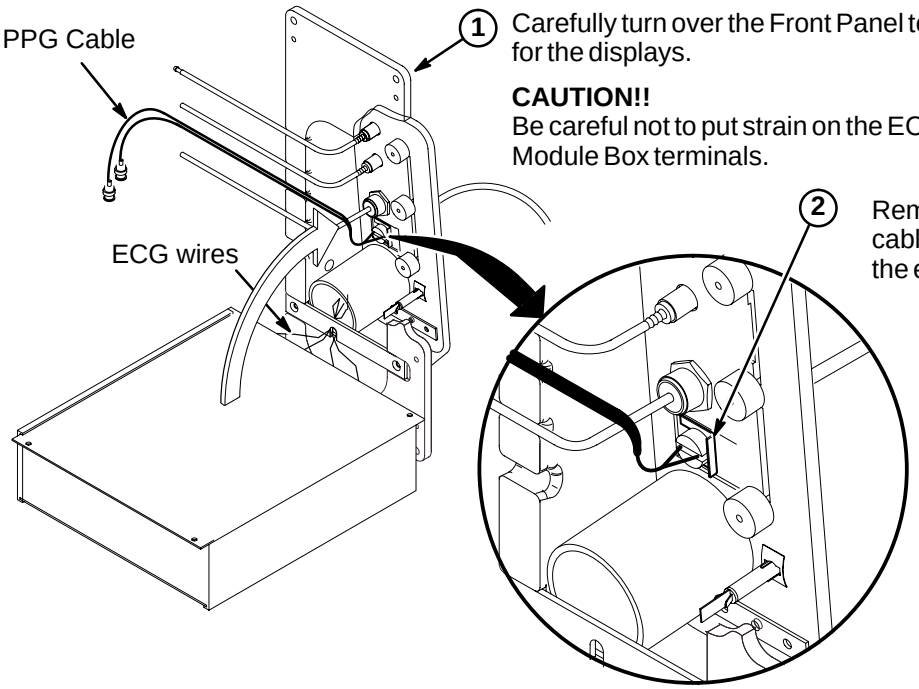


1. Verify all cables connected to the PAC Module Box are labeled. If not, label wires and connectors to help indentify location for reconnection or if a wire should break.
2. Carefully disconnect the two fiber optic cables from J5 and J6, air hose, and other connectors from the side of the PAC Module Box.
3. Remove the four screws, two on each side, holding the fiberglass Front Panel to the Cover Guard on the PAC Module Box.
4. Remove fiberglass Cover Guard.

   CAUTION!!
   ECG wires are located behind this guard and are soldered to terminals on the PAC Module Box. Be careful not to break these wires and make sure wires are labeled.
5. Remove two screws securing the white fiberglass Front Panel to the PAC Module Box.

PAC PPG CABLE REPLACEMENT TO LONG FROM SHORT
ILLUSTRATION 3-1

2. Replace PPG Cable to long from short.

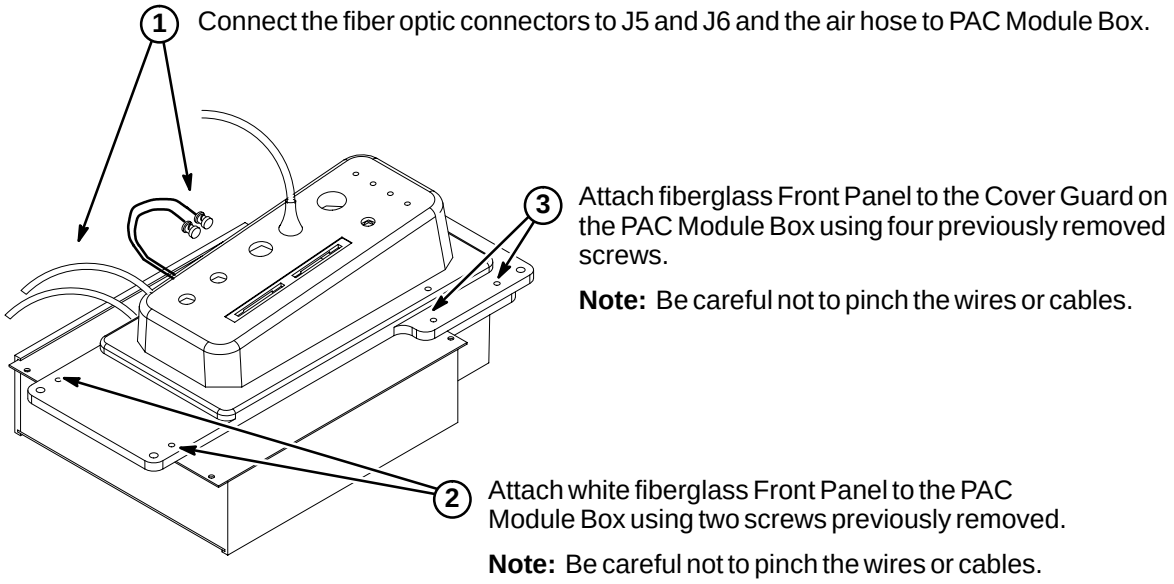


1. Carefully turn over the Front Panel to access the cable connections for the displays.

   CAUTION!!
   Be careful not to put strain on the ECG wires soldered to the PAC Module Box terminals.
2. Remove retainer clip securing PPG cable to the front panel and remove the existing cable.
3. Unpack new Long PPG cable . Remove protective covers from the fiber optic connectors.
4. Install new Long PPG cable into front panel and secure with new retaining clip provided with the cable.

PAC PPG CABLE REPLACEMENT TO LONG FROM SHORT
ILLUSTRATION 3-2

3. Restore PAC Front Panel to module box.



PAC PPG CABLE REPLACEMENT TO LONG FROM SHORT
ILLUSTRATION 3-3

Revision History

Rev	Date	Author	Primary Reasons For Change
0	May 22, 2001	K.Tsumagari	Initial Version

MAGNET CABLE WIRING INSTALLATION

TABLE OF CONTENTS

WARNING!

FERROUS MATERIAL HAZARD! THE CRIMP TOOL, AND OTHER TOOLS AND PARTS REQUIRED FOR THIS INSTALLATION CONTAIN FERROUS MATERIAL AND WILL BE STRONGLY ATTRACTED TO MAGNET AND MAY BECOME DANGEROUS PROJECTILES. IF MAGNET IS AT FULL FIELD – KEEP ALL FERROUS TOOLS AT LEAST 10 FEET AWAY FROM THE MAG-NET.

NOTE:
The Magnet heater and sensor cables must be routed around the outside of the magnet Insulator. Do not bury the magnet heater and sensor cables into the insulator.

1. Preparation

1. Verify that the following parts are shipped before starting the cable wiring.

Ground Cable Wiring (Page 8)

Run No.	Parts No.	From	To	Check
40	2103427	Magnet	Penetration Panel	
1010	2280056	SRI or Magnet I/F Unit	Magnet	
1027	2284838	SRI	Magnet I/F Unit	

Gradient Cable Wiring (Page 9 and 10)

Parts No.	Parts Name	Qty	Check
2286960	Gradient Cable Clamp Plate (Fixing Screw: U0438AA x4)	2	
2145791	Terminal (Fixing Screw: N9510 x2)	1	
2179100,2179101,2179102	Loop Cable	3	

Run No.	Parts No.	From	To	Check
1004	2283338	PP(Gradient Filter Box) 1/2	Gradient Coil Terminal 1/3	
1005	2283339	PP(Gradient Filter Box) 3/4	Gradient Coil Terminal 5/7	
1006	2283340	PP(Gradient Filter Box) 5/6	Gradient Coil Terminal 9/11	

Magnet I/F Unit Cable Wiring (Page 11)

Run No.	Parts No.	From	To	Check
414	-	PatientCommunicationBox J9	MIC(P-Light Cover)	
843	2260535	Magnet Interface Board J6	Penetration Panel J20	
866	2263200-12	Magnet Interface Board J3	Patient Table J12	
869	46-317252G4	PatientCommunicationBox J9	PCM Speaker	
870	46-317157G6	PatientCommunicationBox J7	PCM Microphone	
871	2261329	Magnet Interface Board J8	Laser Diodes	
873	2263200-13	Magnet Interface Board J1	PatientCommunicationBox J6	
920	2263200-17	Magnet Interface Board J2	Penetration Panel J12	
943	2275301	Pivot Sensor(with table rail)	Run 944	
944	2263200-34	Magnet Interface Board J4	Run 943	
1017	2280058	Magnet Interface Board J7	SRI Splitter J8	
1018	2280057	Magnet Interface Board J5	Pinch Switches A1,A2 and A3 A1:L Pinch Switch A2:R Pinch Switch A3:Front Pinch Switch	

Continued

PAC Cable Wiring (Page 12)

Run No.	Parts No.	From	To	Check
-	2284775	PAC J2	Filter Box 2	
-	2284776	PAC J4	Filter Box 3	
716	46-317359G931	Filter Box 2	Penetration Panel J89	
848	2221945	Filter Box 3	Operator Display J5	

Parts No.	Parts Name	Qty	Check
2225039	Filter Box 2	1	
2228335	Filter Box 3	1	

SRI / SRI Splitter Cable Wiring (Page 13)

Run No.	Parts No.	From	To	Check
842	2263200-4	SRI Splitter J7	Penetration Panel J15	
849	2263200-5	SRI J4	SRI Splitter J1	
850	2263200-6	SRI J7	SRI Splitter J3	
858	2263200-9	SRI Splitter J4	Patient Table J15	
859	2263200-10	SRI J3	Patient Table J14	
860	2263200-11	SRI J2	Patient Table J13	
861	2221947	SRI J5,J6&J9 SRI Splitter J10&J11	Operator Display J4	
864	2261328	SRI Splitter J6	PCM Bore Light (Left)	
865	2261328	SRI Splitter J5	PCM Bore Light (Right)	
897	2221948	SRI Splitter J9	Operator Display J3	
1016	2279863	SRI J1	Penetration Panel J14	
1023	2288234	SRI J8	SRI Splitter J2 Gradient Coil Temp Sensor 3P	

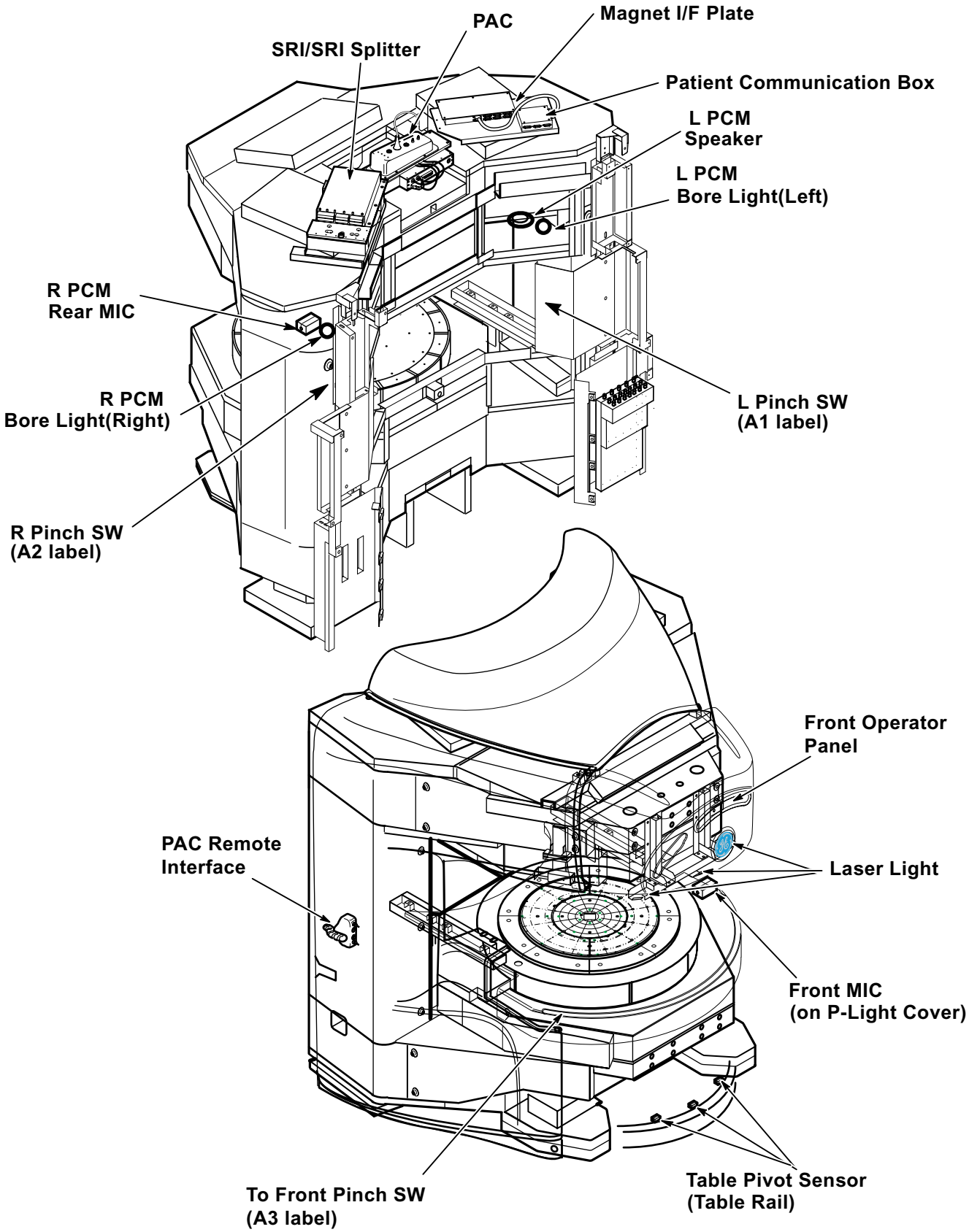
Heater/Temperature Sensor/Thermostat Cable Wiring (Page 14)

Run No.	Parts No.	From	To	Check
1011	2282839	Magnet J13	Penetration Panel TCU J3	
1012	2282838	Magnet J14	Penetration Panel TCU J4	
1013	2282840	Magnet J15	Penetration Panel TCU J5	

Optical Cable Wiring (Page 15)

Run No.	Parts No.	From	To	Check
711/712	46-328079G9	SRI J11,J12&J13 PAC J1	Penetration Panel F/O Repeater Panel J91	

2. Electrical Component Location

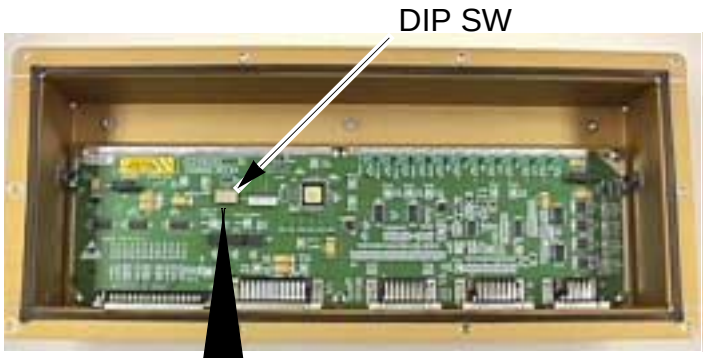


ELECTRICAL COMPONENT LOCATION
ILLUSTRATION 1

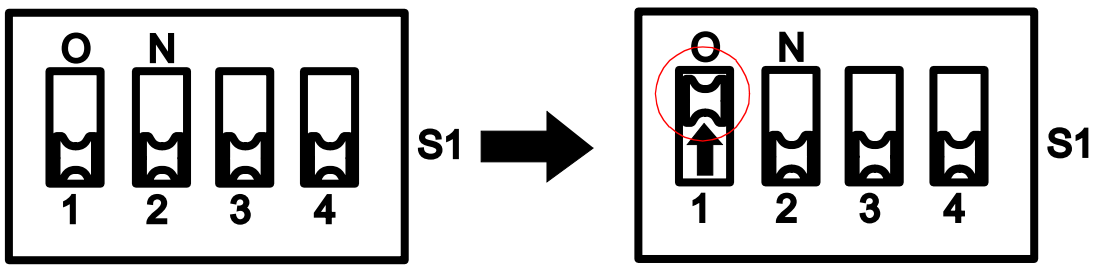
3. Magnet Unit Installation

NOTE:
For new magnet interface unit (2254366-2), provide a bank of 4 dip switches including a function to select logic of OpenSpeed and Ovation, and this unit is keeping compatibility of OpenSpeed and Ovation by dip switch setting. Differential of logic is a signal condition for collision only.

1. Before installing the magnet I/F unit, open the top cover of the Magnet I/F unit by removing 10 screws.
2. Inspect DIP Switch position.If all SW is OFF position, slide the switch 1 to ON position. The switch 2, 3 and 4 are OFF position.
3. Restore top cover of the magnet I/F unit with 10 screws.



Magnet Interface Unit (Removed top cover)



Factory (Default) Setting

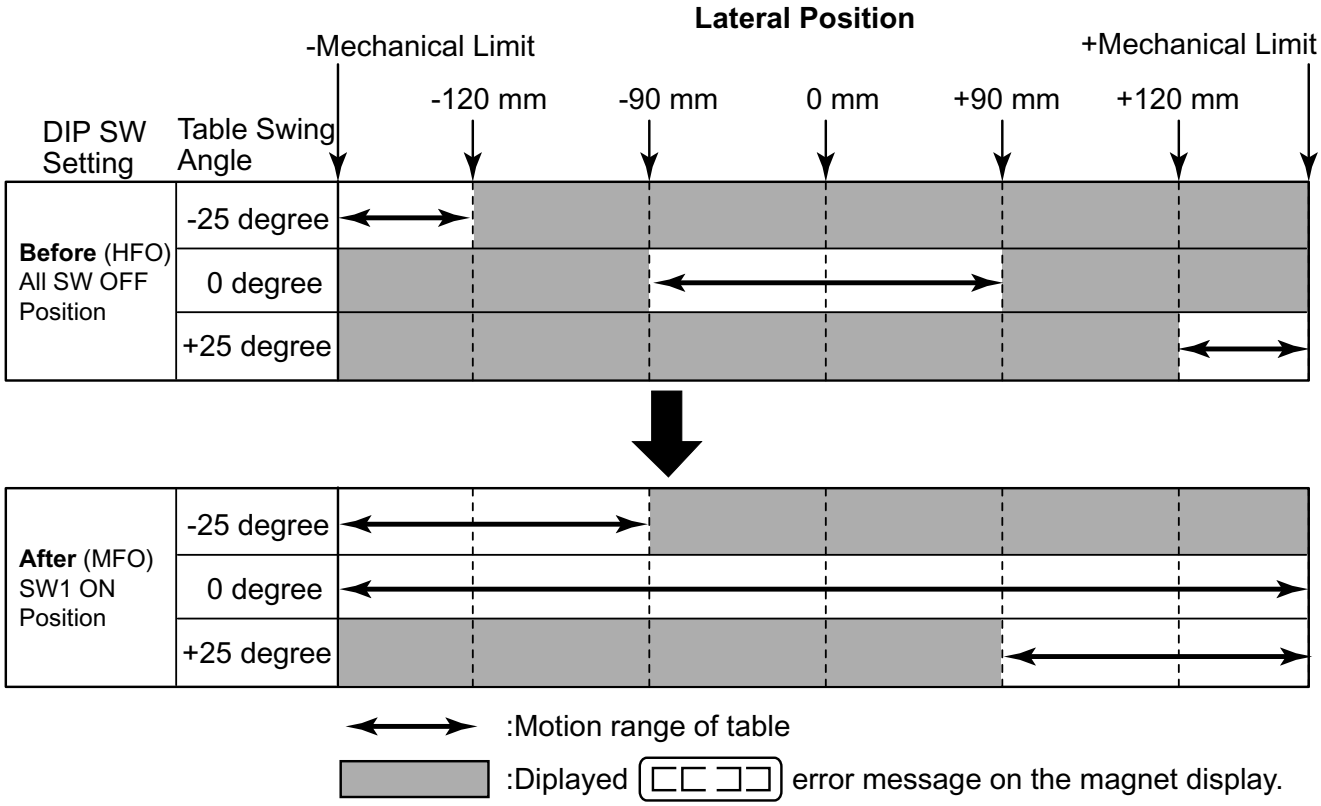
Switch 1 should be in the ON position, 2,3,4 are in the OFF position.

DIP SW SETTING OF NEW MAGNET INTERFACE UNIT
ILLUSTRATION 2

3. Magnet Unit Installation(Continued)

4. After setting DIP SW, table motion range of lateral direction is changed to following specifications.

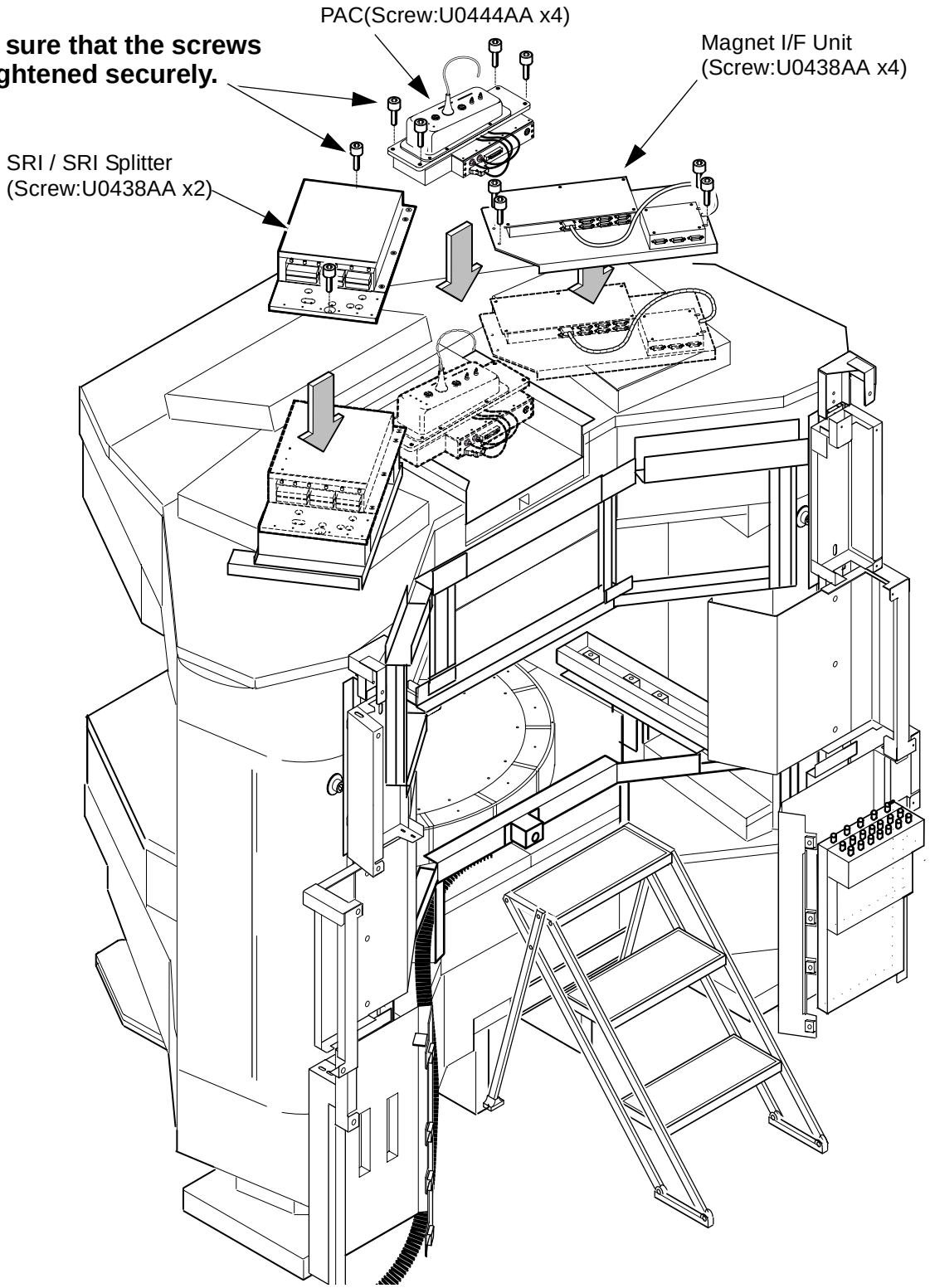
Table Motion Range of Lateral Direction



3. Magnet Unit Installation(Continued)

5. Install PAC onto the magnet with 4 screws.Make sure that screws are tightened securely.
6. Install Magnet I/F Unit Assy onto the magnet with 4 screws.
7. Install SRI/SRI Splitter onto the magnet with 2 screws.Make sure that screws are tightened securely.

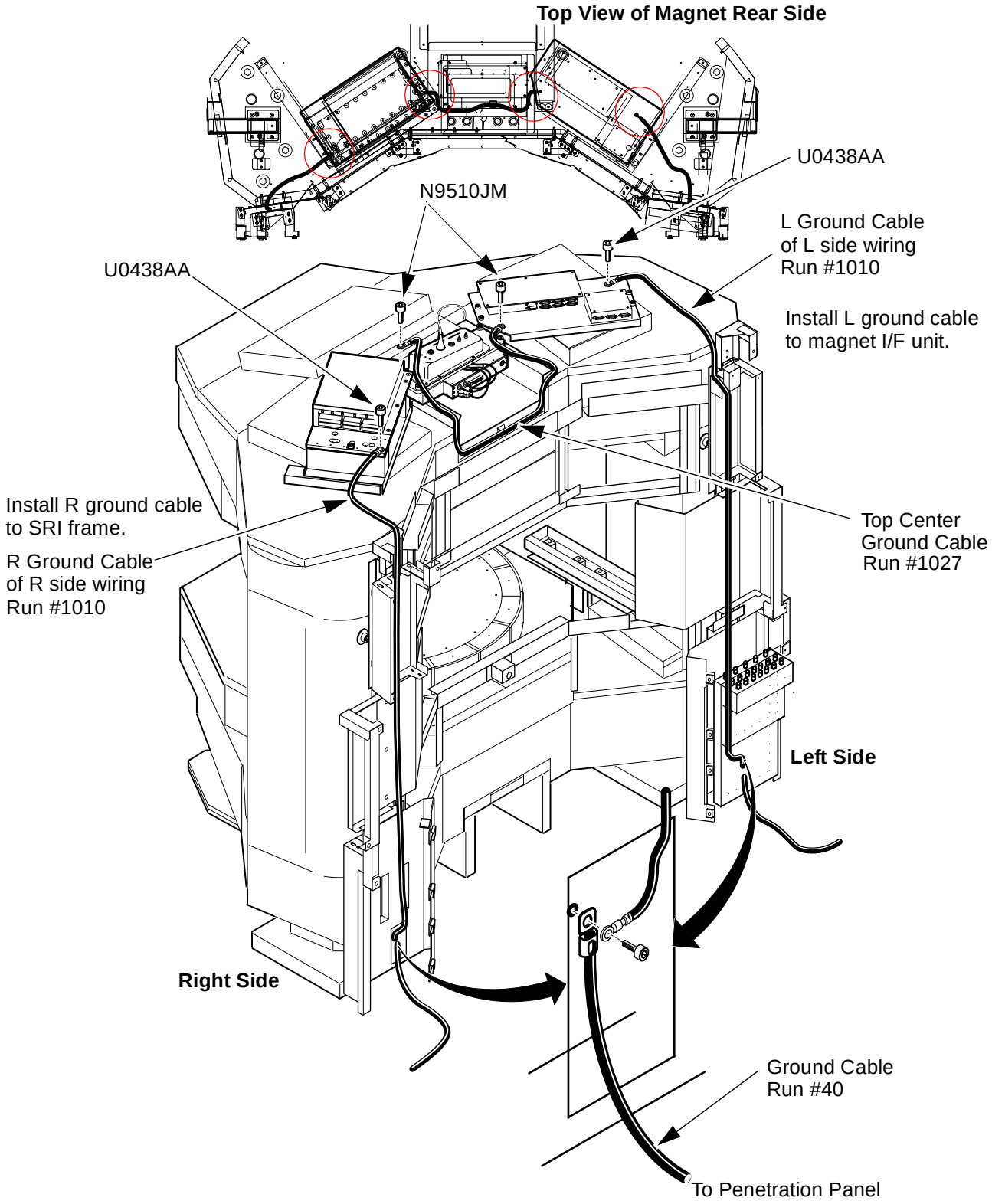
NOTE:
Make sure that the screws are tightened securely.



MAGNET UNIT INSTALLATION
ILLUSTRATION 3

4. Ground Cable Wiring

1. Install R or L Ground Cable according to site layout.
2. Install top center ground cable between Magnet I/F Unit and SRI frame.
3. Install ground cable and R or L ground cable to magnet R or L bottom side with screw.

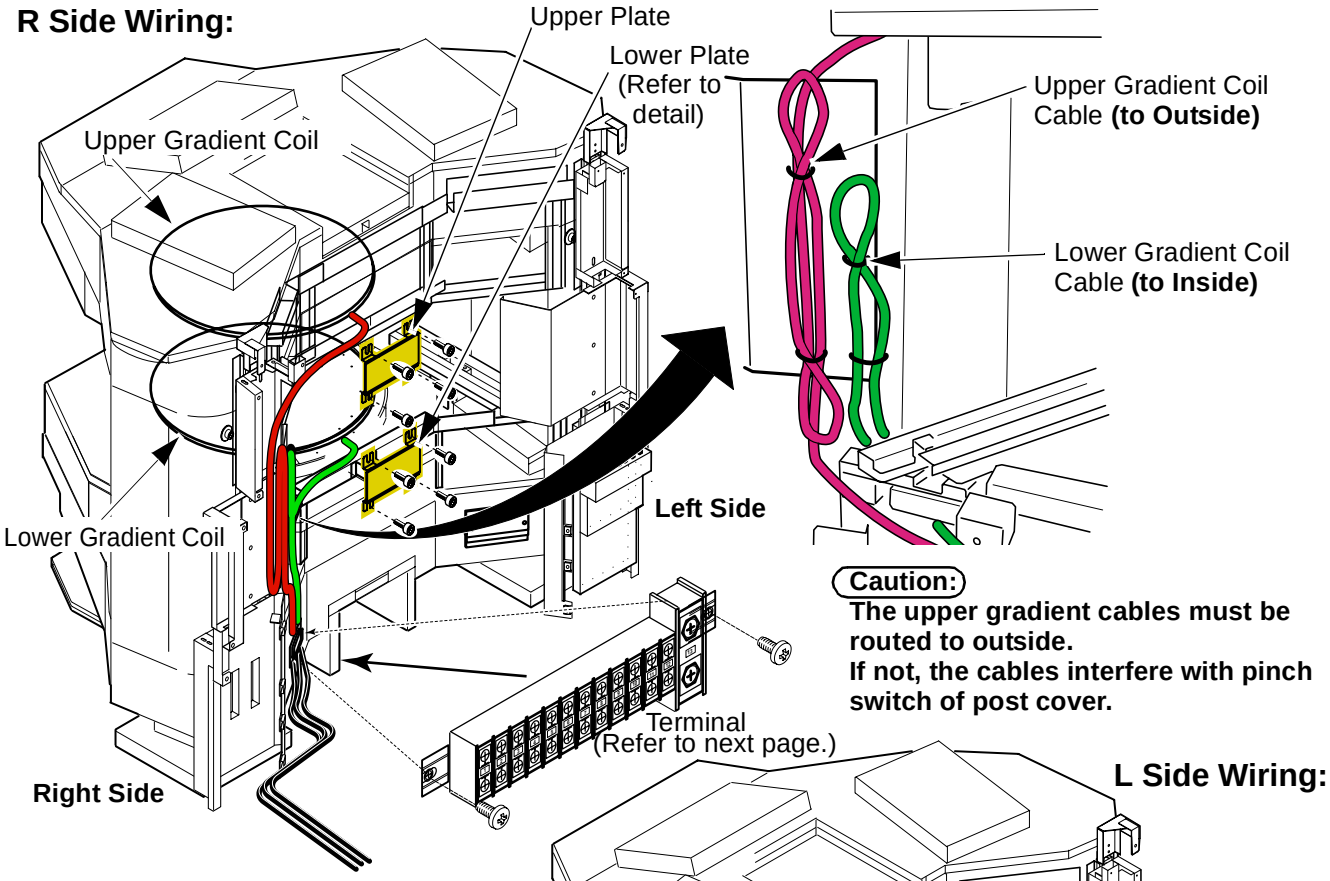


GROUND CABLE WIRING
ILLUSTRATION 4

5. Gradient Cable Wiring (Cables)

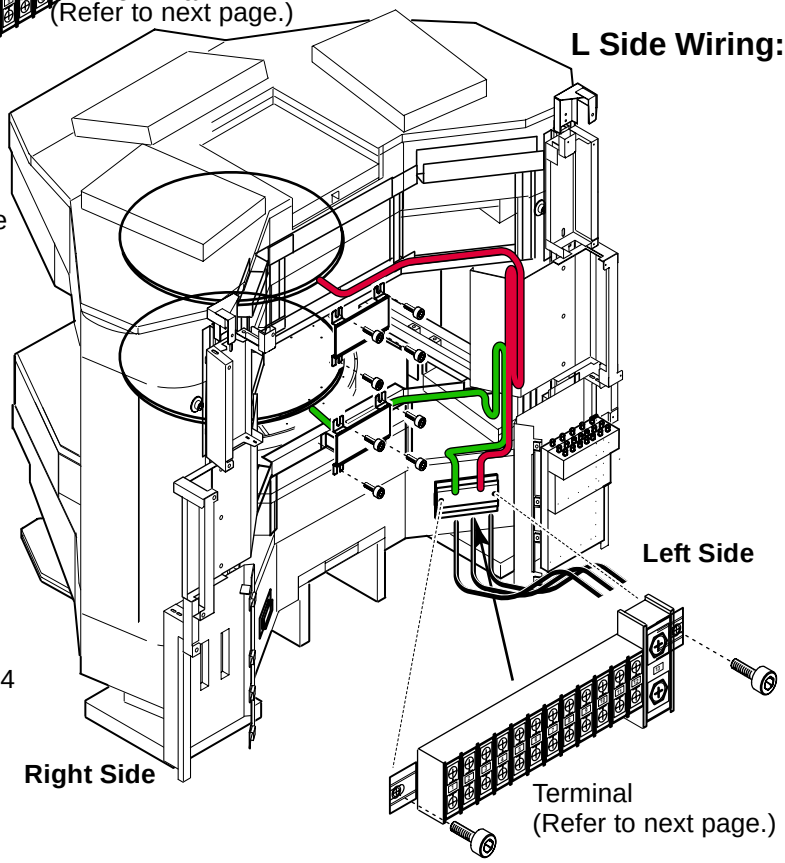
1. Install upper and lower plates to cable outlet of pole piece with U0438AA x4 for each side.
2. Install the terminal with 2 screws to R or L side according to site layout.
3. Route the upper and lower gradient cables to R or L side according to site layout.

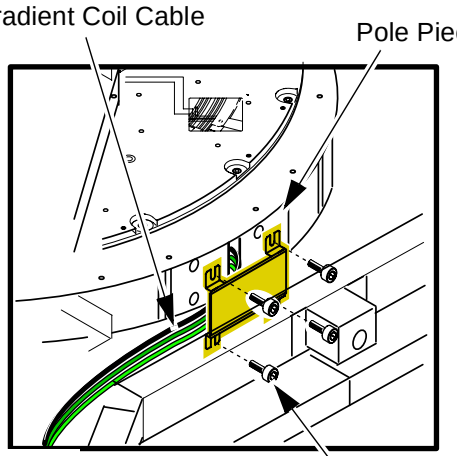
R Side Wiring:



Caution:
The upper gradient cables must be routed to outside.
If not, the cables interfere with pinch switch of post cover.

L Side Wiring:





Detail of Lower Plate (R Side Wiring)

If site is L side wiring, route gradient cable to L side.
Upper plate is similar.

GRADIENT CABLE WIRING (CABLES)
ILLUSTRATION 5

6. Gradient Cable Wiring (Terminals)

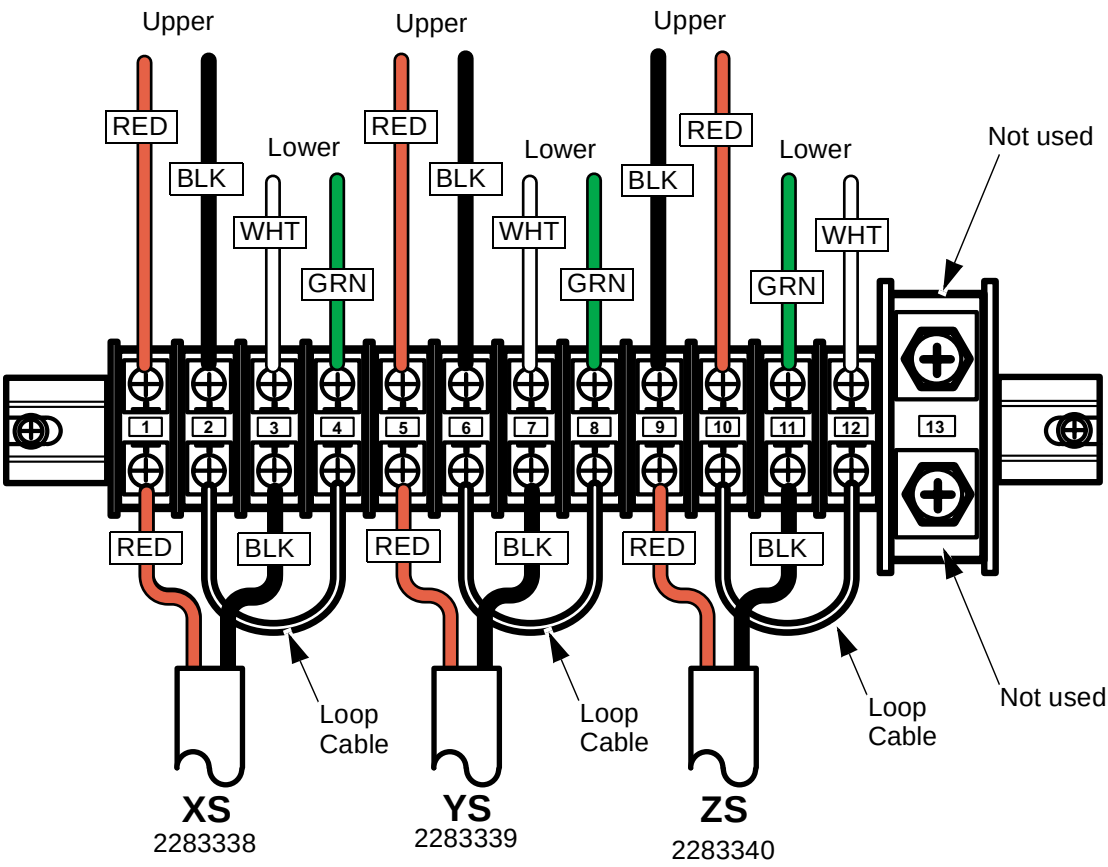
DANGER!!

BE CAREFUL TO ELECTRICAL SHOCK HAZARD.WHEN CONNECTING THE TERMINAL,CHECK THAT THE SYSTEM POWER OFF.

1. Connect 6 upper / 6 lower gradient cables,3 loop cables and XS/YS/ZS cables to terminal.

R/L Terminal Setting:

1,2,5,6,9 and 10 Terminals : Upper Gradient Cables
3,4,7,8,11 and 12 Terminals : Lower Gradient Cables



GRADIENT CABLE WIRING (TERMINALS)
ILLUSTRATION 6

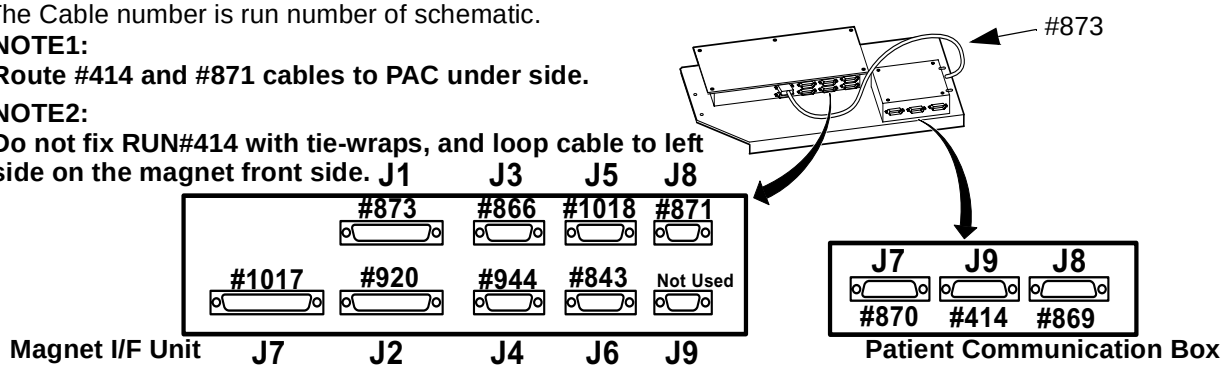
7. Magnet I/F Unit Cable Wiring

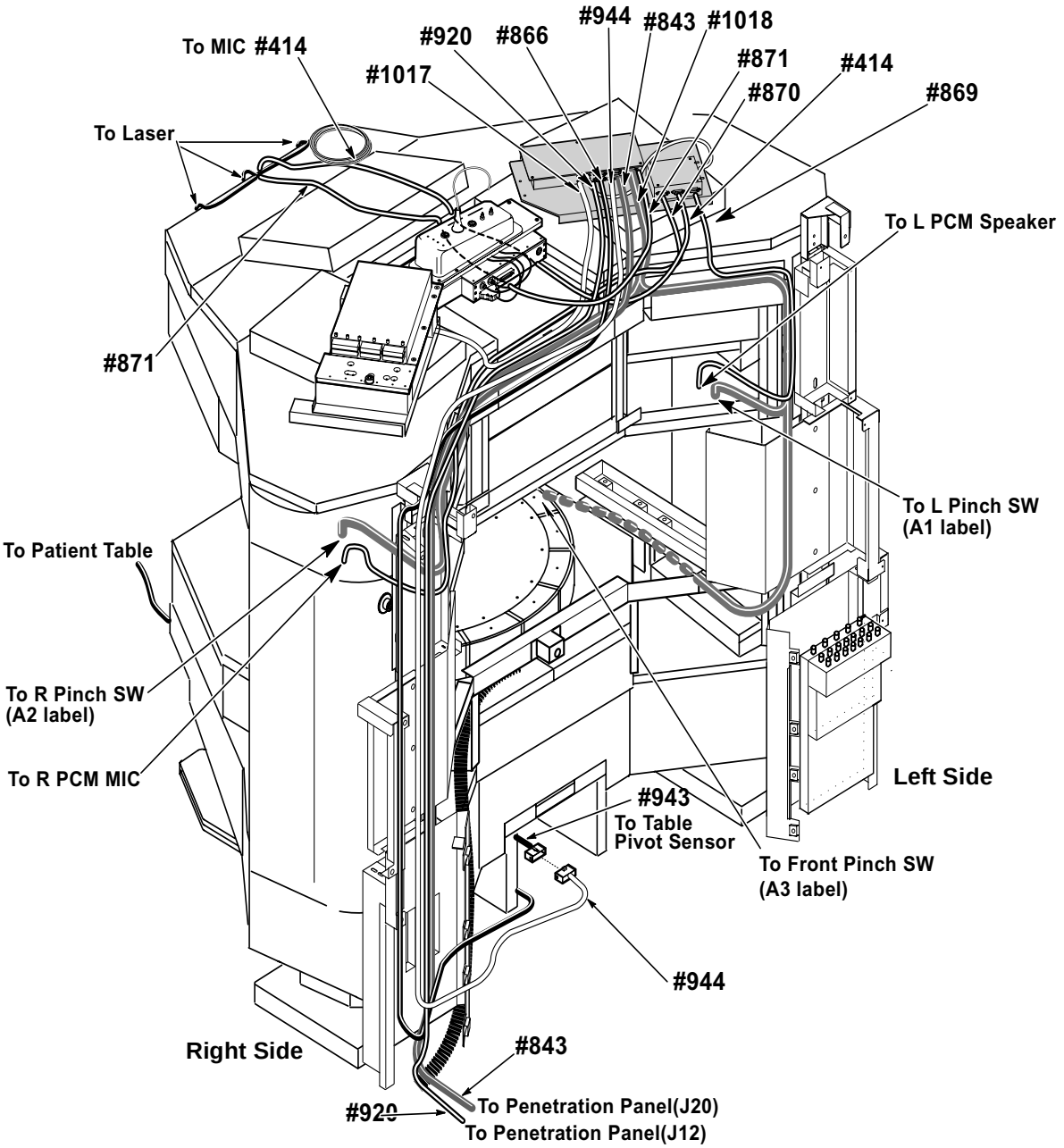
1. The run number 869,870,871,1017 and 1018 cables are common to R or L side wiring.

The Cable number is run number of schematic.

NOTE1:
Route #414 and #871 cables to PAC under side.

NOTE2:
Do not fix RUN#414 with tie-wraps, and loop cable to left side on the magnet front side.

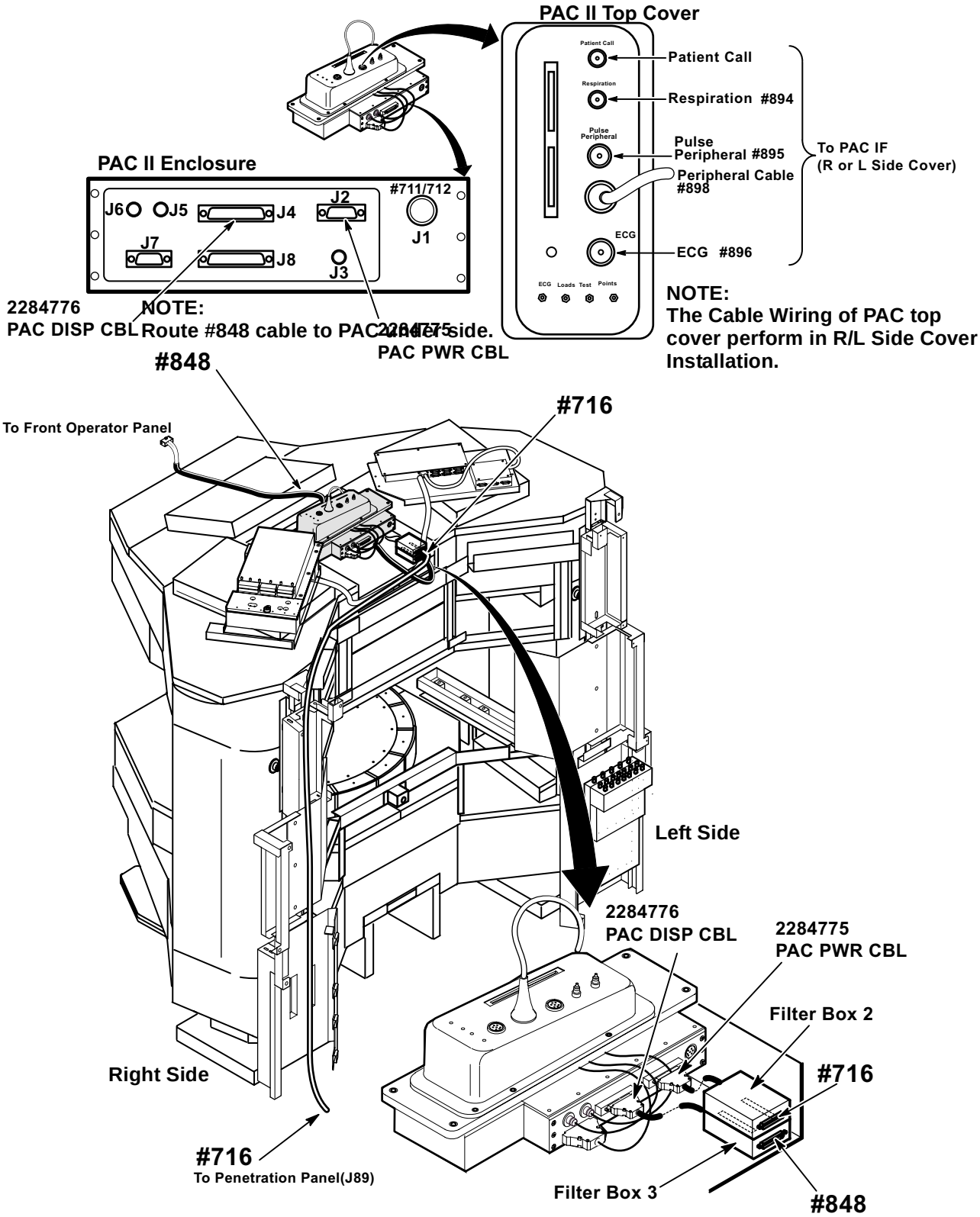




MAGNET I/F UNIT CABLE WIRING
ILLUSTRATION 7

8. PAC Cable Wiring

1. The Illustration is R side wiring.The L side wiring is symmetry for illustraiton.

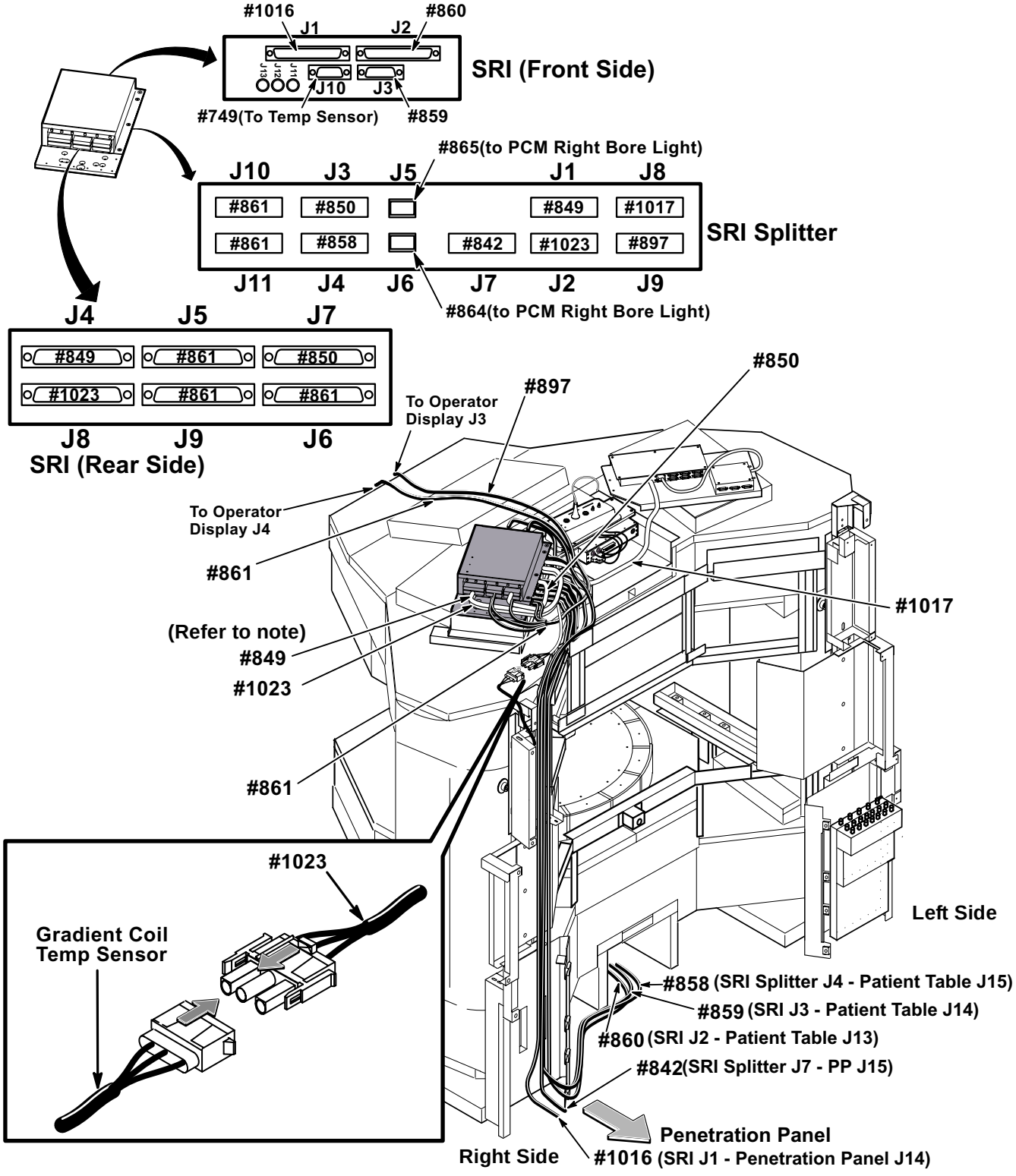


PAC CABLE WIRING
ILLUSTRATION 8

9. SRI / SRI Splitter Cable Wiring

1. The Illustration is R side wiring.The L side wiring is symmetry for illustraiton.

NOTE: #861 cable causes noise in the images. Do not loop this cable.
If there is noise in the images, change routing of #861 cable.

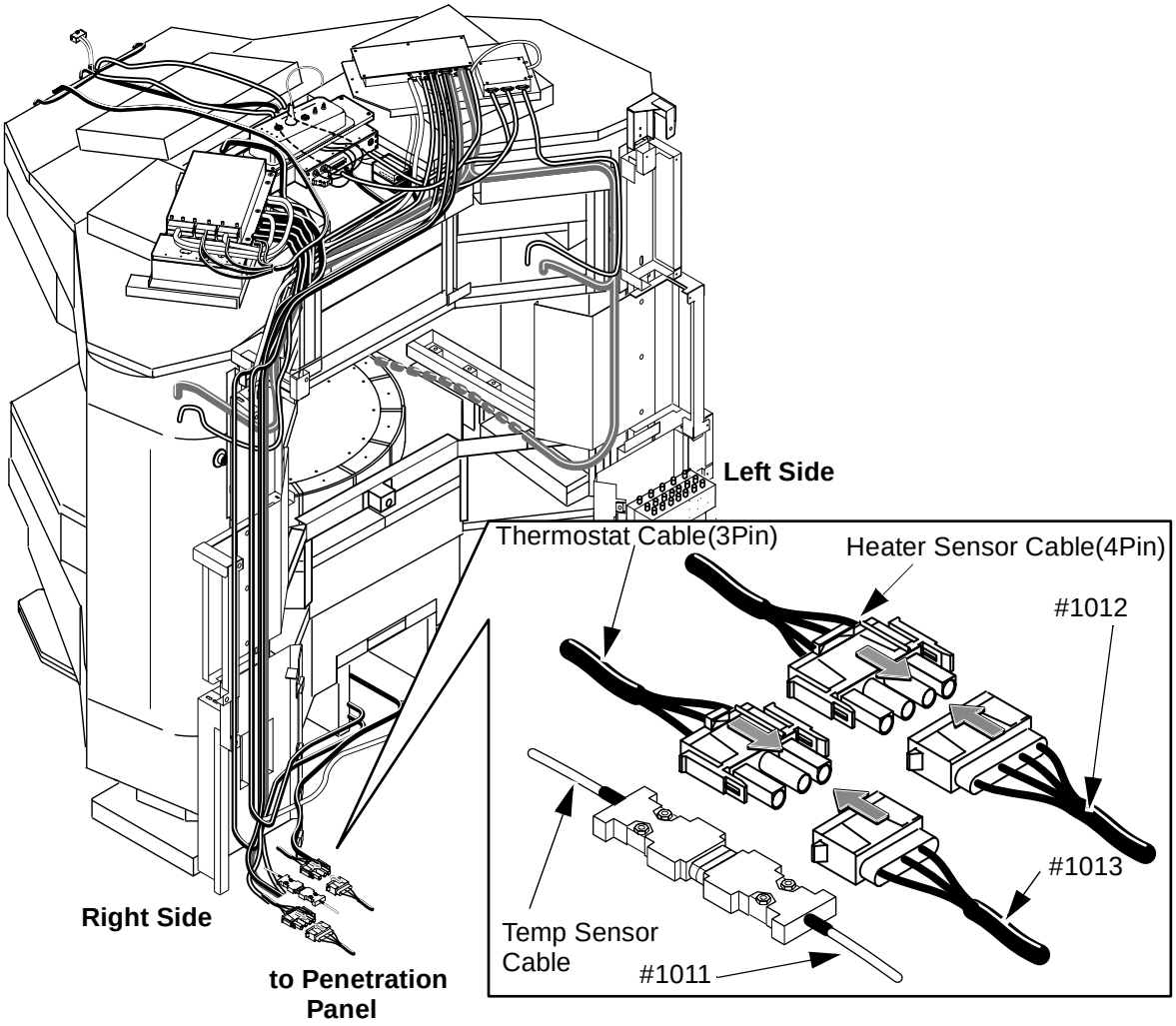


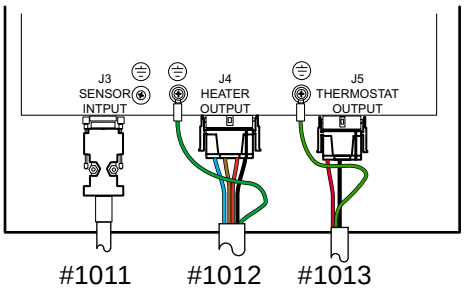
SRI / SRI SPLITTER CABLE WIRING
ILLUSTRATION 9

10.Heater/Temperature Sensor/Thermostat Cable Wiring

1. The Illustration is R side wiring.The L side wiring is symmetry for illustraiton.

NOTE:
The Magnet heater and sensor cables must be routed around the outside of the magnet Insulator. Do not bury the magnet heater and sensor cables into the insulator.





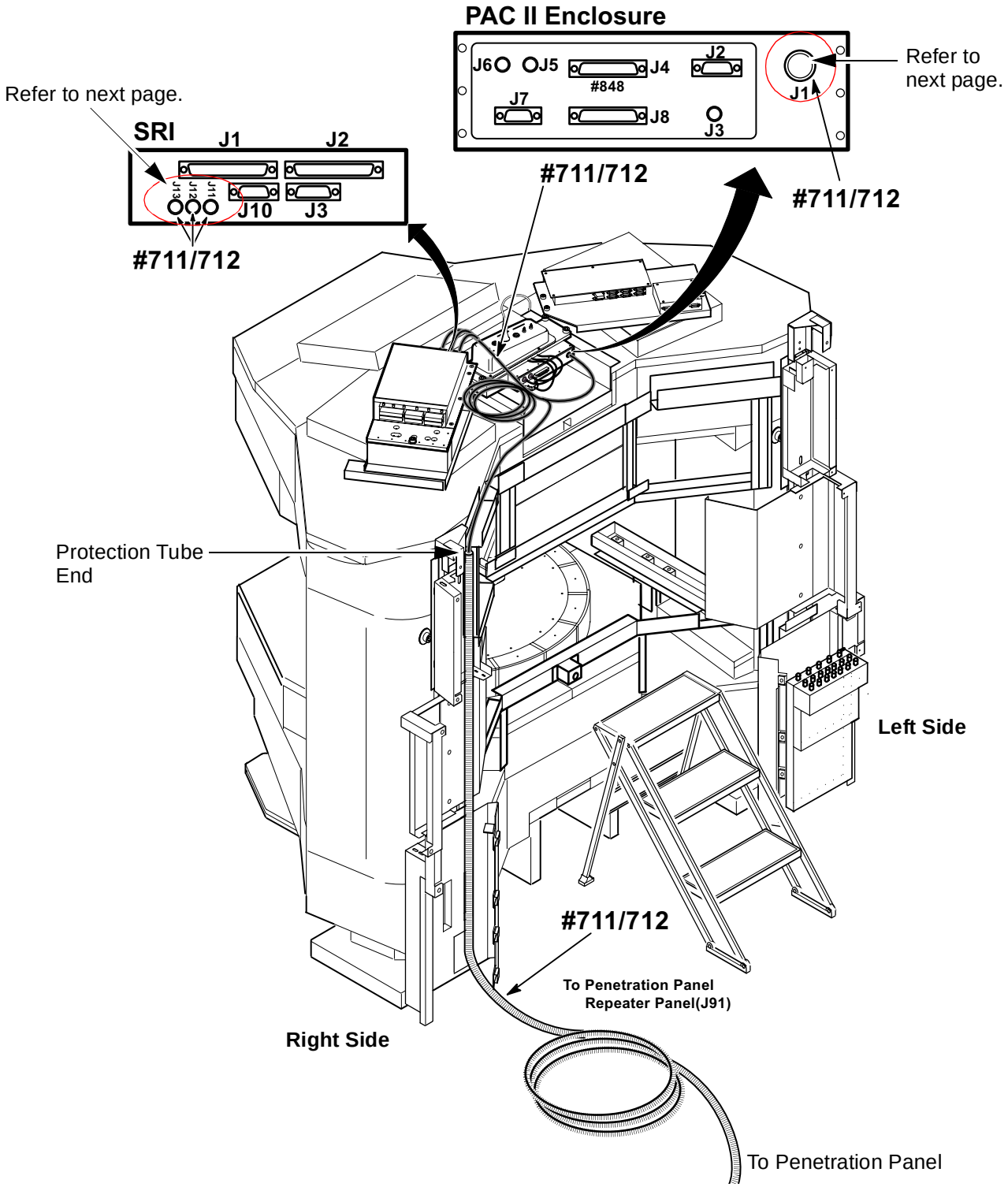
Penetration Panel TCU

HEATER/TEMPERATURE SENSOR/THERMOSTAT CABLE WIRING
ILLUSTRATION 10

11.OPT Cable(Run#711/712) Wiring

CAUTION

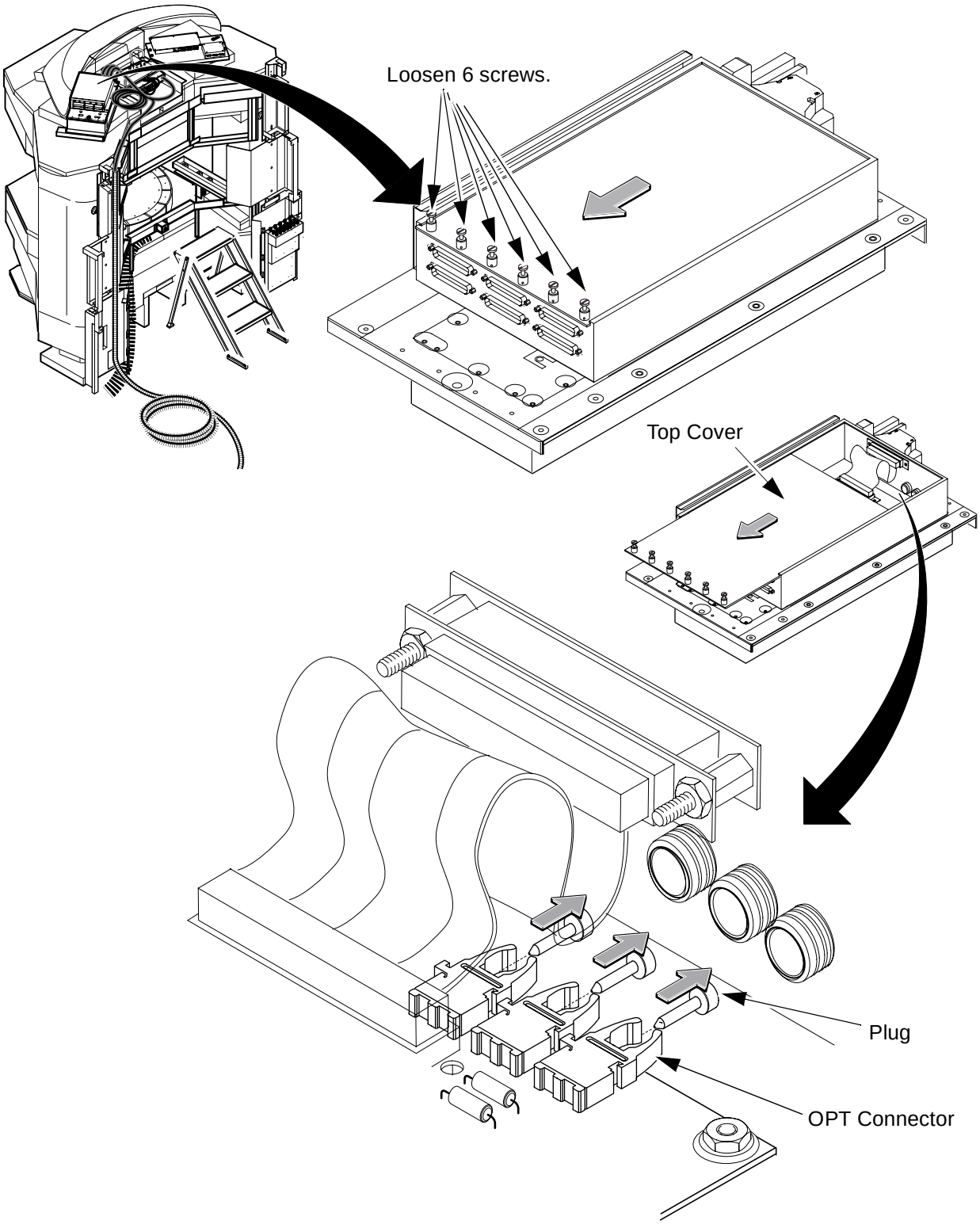
Fiber optic cables are easily damaged. Handle fiber optic cables very carefully.Failure to do so may cause intermittent problems difficult to isolate.Do not bend fiber optic cables to radius smaller than two inches.



OPT CABLE(RUN#711/712) WIRING
ILLUSTRATION 11

11.OPT Cable(Run#711/712) Wiring(Continued)

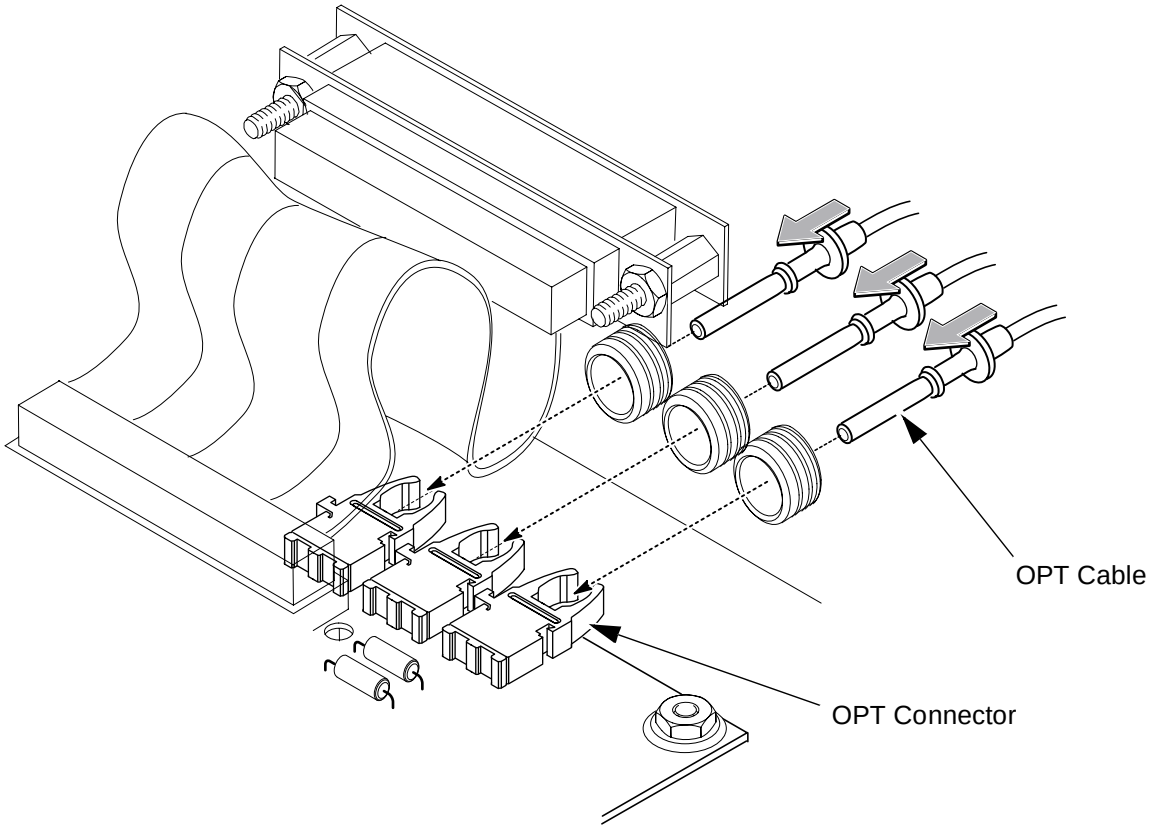
1. Loosen 6 screws on SRI top cover.
2. Slide and open SRI top cover.
3. Remove 3 plugs from OPT connector on the board.



OPT CABLE(RUN#711/712) WIRING(CONTINUED)
ILLUSTRATION 12

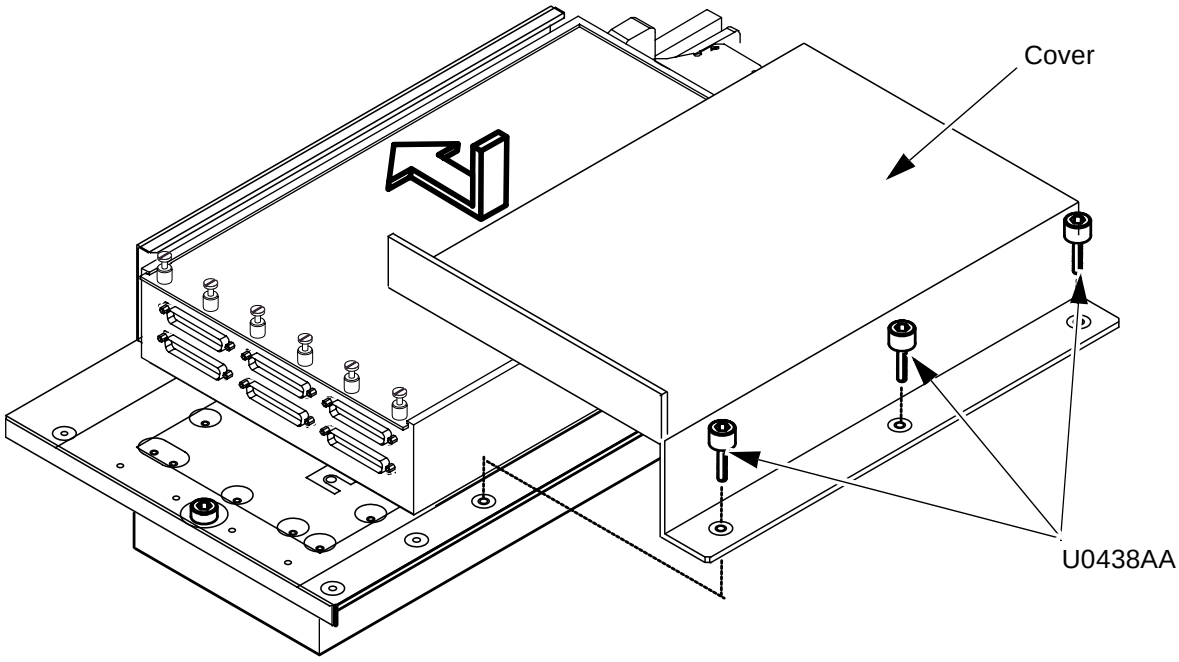
11.OPT Cable(Run#711/712) Wiring(Continued)

4. Connect 3 OPT cables to OPT connector securely.



OPT CABLE(RUN#711/712) WIRING(CONTINUED)
ILLUSTRATION 13

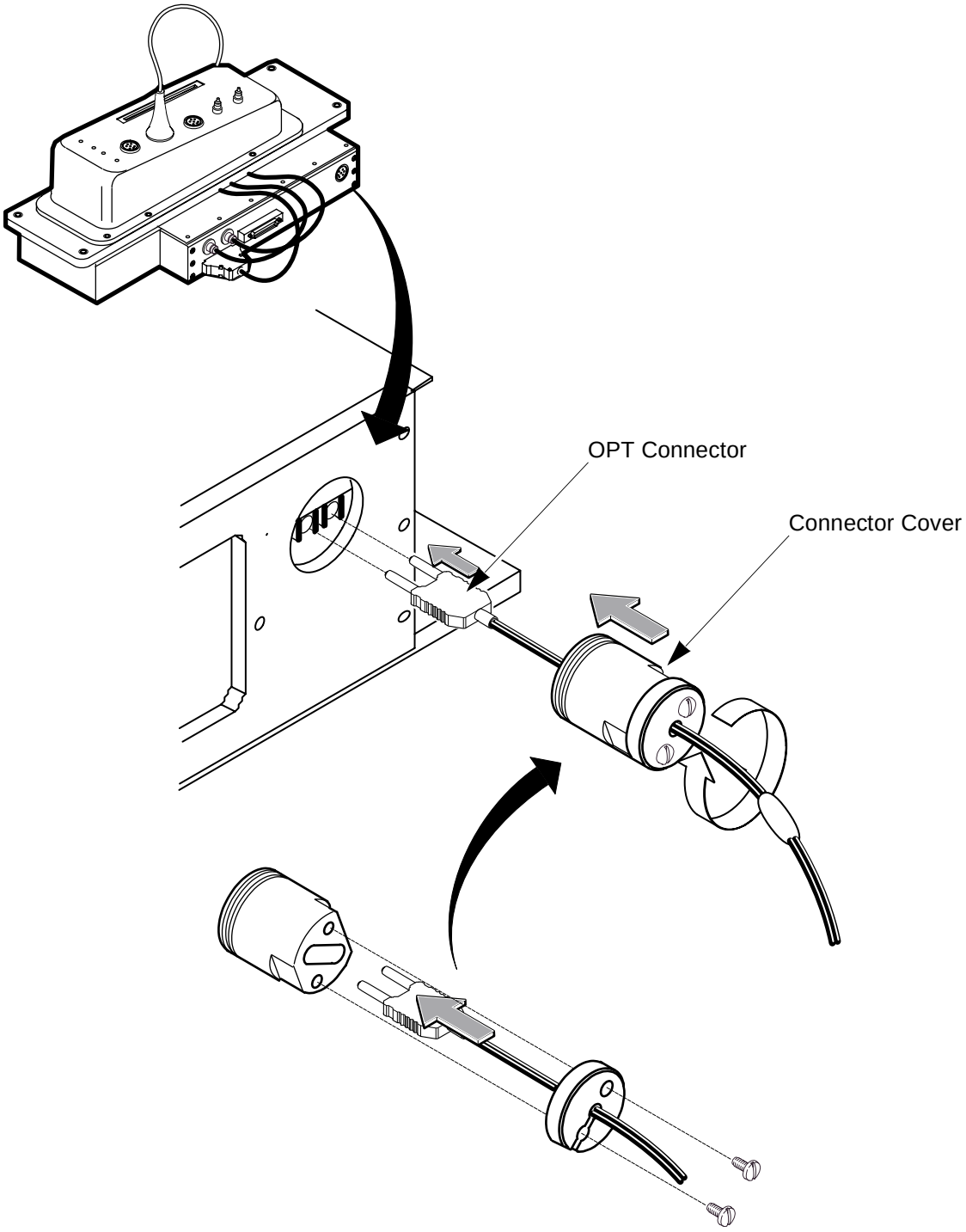
5. Install SRI cover with 3 screws(U0438AA) securely.



OPT CABLE(RUN#711/712) WIRING(CONTINUED)
ILLUSTRATION 14

11.OPT Cable(Run#711/712) Wiring(Continued)

6. Connect OPT connector to PAC.
7. Install connector cover to PAC.



OPT CABLE(RUN#711/712) WIRING(CONTINUED)
ILLUSTRATION 15

12.OPT Cable Repair

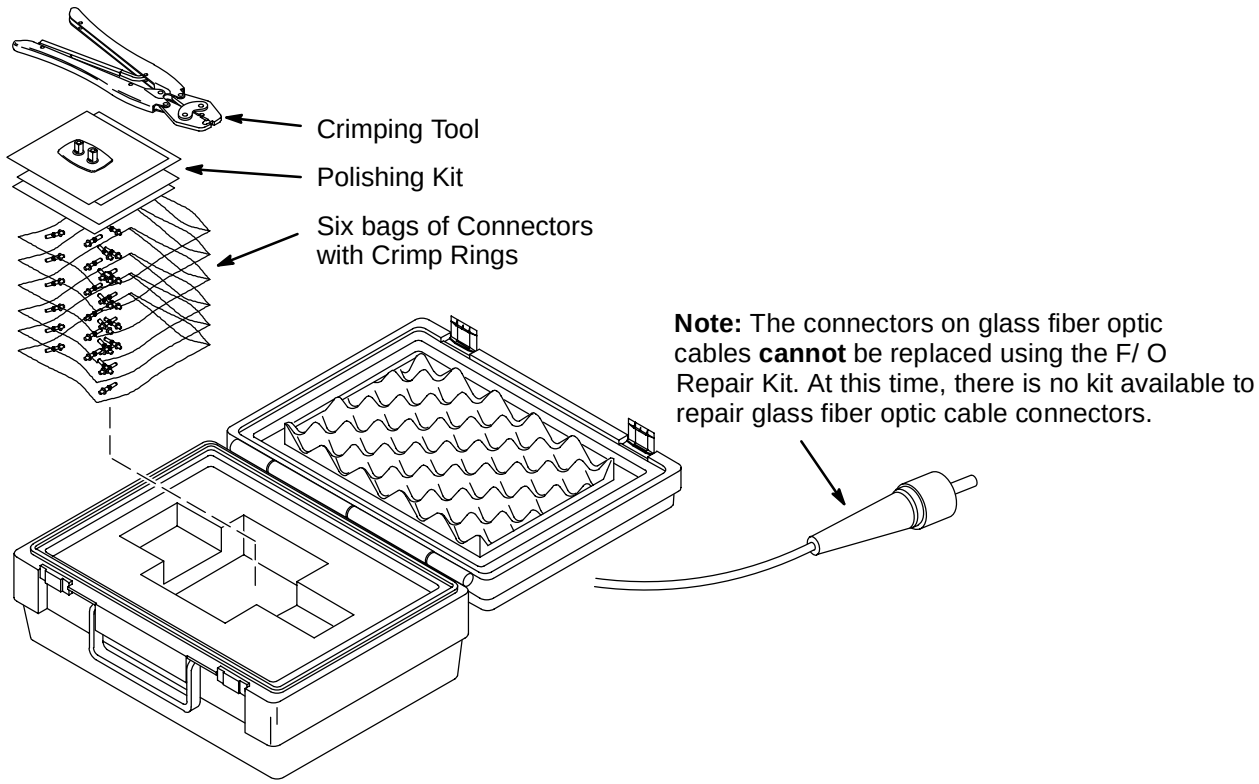
WARNING!

FERROUS MATERIAL HAZARD! CRIMP TOOL AND OTHER TOOLS REQUIRED FOR THIS PROCEDURE CONTAIN FERROUS MATERIAL AND WILL BE STRONGLY ATTRACTED TO MAGNET AND MAY BECOME DANGEROUS PROJECTILES. KEEP ALL FERROUS TOOLS AT LEAST 10 FEET AWAY FROM THE MAGNET.

12-1 Fiber Optic Cable Termination Kit

NOTE:The connectors on plastic fiber optic cables can be replaced if damaged or cut off to shorten.

1. The Fiber Optic Repair Kit, 46– 301450G1, contains all the necessary materials to replace a damaged connector.
2. The “Spares Kit”, delivered with the Shipping Collector, contains a 46– 320119P1 Termination Kit for Fiber Optic Cables. This kit consists of consumables such as terminals and polishing sheets used to terminate cables during installation.
3. Remove the end of fiber optic cable to be re– terminated from magnet room if possible.
4. If it is not possible to remove the end to be repaired from the magnet room, the cable must be at least 10 feet away from the magnet before it can be worked on.
5. Cut cable to desired length.

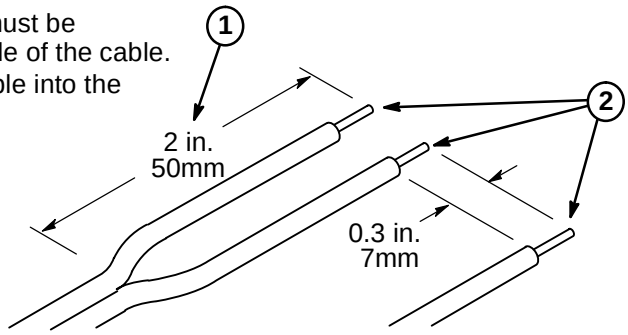


OPT CABLE REPAIR
ILLUSTRATION 16

12-2 Stripping Fiber Optic Outer Jacket

1. For Duplex Cables, seperate the two fibers approximately 2 in. (50mm) back from the ends.
2. Strip off approximately 0.3 in. (7 mm) of the outer jacket with the 16 gauge wire strippers.Excess webbing on duplex cable may have to be trimmed to allow the connector to slide over the cable.

Note: The separated duplex cable must be stripped to equal lengths on each side of the cable. This allows proper seating of the cable into the connector.

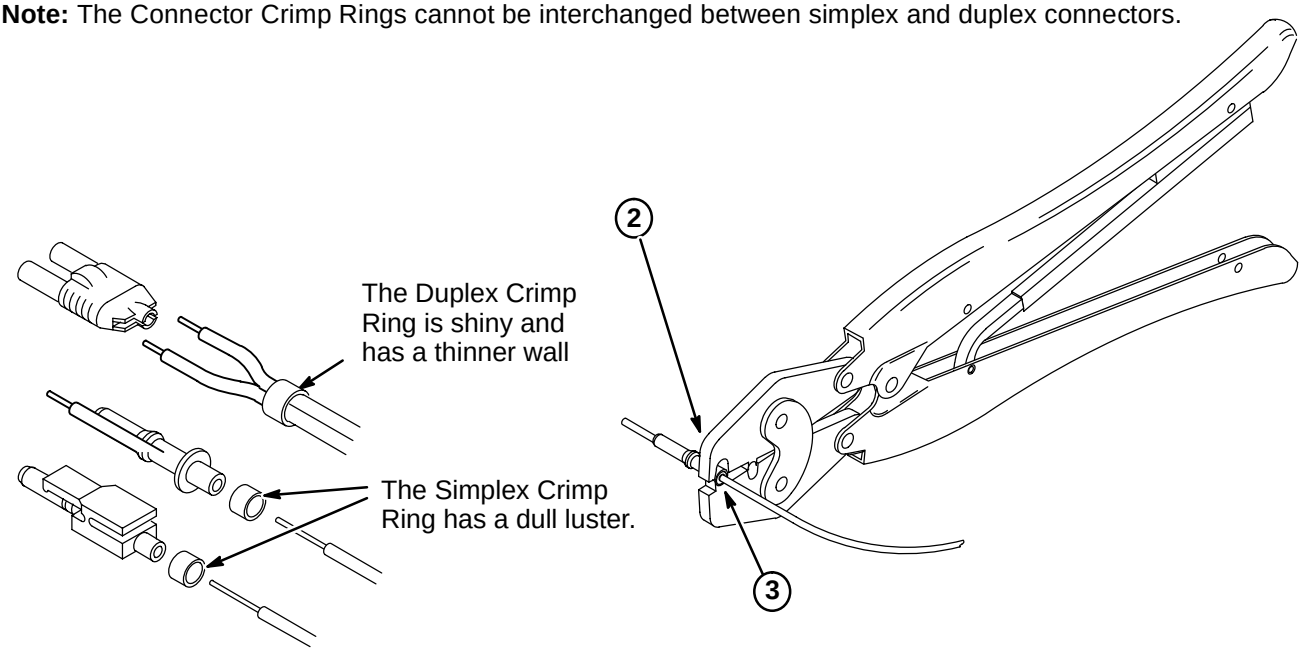


STRIPPING FIBER OPTIC OUTER JACKET
ILLUSTRATION 17

12-3 Crimping Connector To Fiber Optic Cable

1. Place the Crimp Ring and Connector over the end of the cable.
2. The fiber should extend approximately 0.12 in. (3mm) through the end of the connector.
3. Carefully position the ring so that it is entirely on the connector and then crimp the ring in place with the crimping tool.

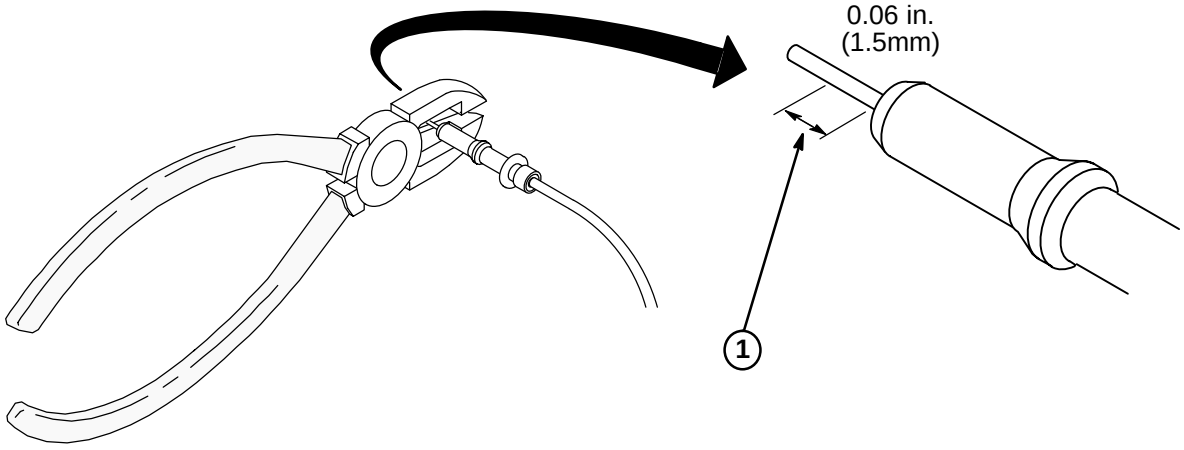
Note: The Connector Crimp Rings cannot be interchanged between simplex and duplex connectors.



CRIMPING CONNECTOR TO FIBER OPTIC CABLE
ILLUSTRATION 18

12-4 Trimming Excess Fiber From Connector

1. Cut off excess fiber protruding from the connector. The trimmed fiber should extend approximately 0.06 in. (1– 1/ 2mm).

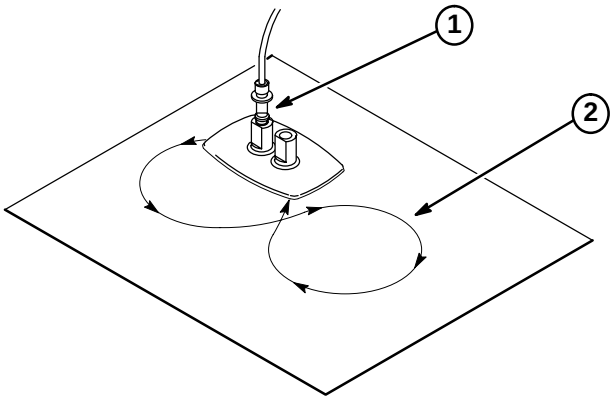


TRIMMING EXCESS FIBER FROM CONNECTOR
ILLUSTRATION 19

12-5 Polishing Fiber Optic End

1. Insert the connector fully into the polishing fixture with the trimmed fiber end protruding from the bottom of the fixture.
2. Place the 600 grit abrasive paper on a flat smooth surface. Pressing down on the indicator, polish the fiber and the connector using a figure eight motion until the connector is flush with the end of the polishing fixture.
3. Wipe the connector and fixture with a clean cloth or tissue.
4. Place the flush connector and polishing fixture on the dull side of the 3 micron pink lapping film and continue to polish the fiber and connector for approximately 25 strokes.
5. The fiber end should be flat, smooth and clean. The cable end can now be connected.

Note: The four dots on the bottom of the polishing fixture are wear indicators. Replace the polishing fixture when any dot is no longer visible.



POLISHING FIBER OPTIC END
ILLUSTRATION 20

Revision History

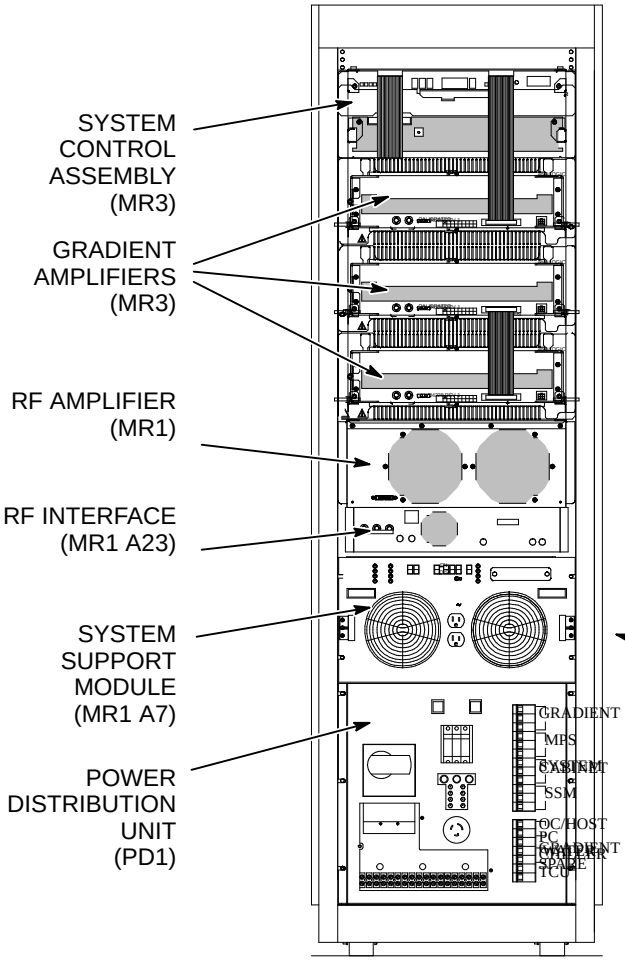
Rev	Date	Auther	Primary Reasons For Change
0	Mar 07, 2001	K.Tsumagari	Initial Release
1	Feb 01, 2002	K.Tsumagari	Page 5 and 6: Added DIP SW setting of the magnet I/F unit. Page 9: Added detail of upper and lower plates installation. Page 13: Added note of #861 cable wiring. Page 1 and 14: Added note of heater and sensor cables.

POWER CABINET INSTALLATION

TABLE OF CONTENTS

REV blank

- FRONT VIEW WITH MODULE DESIGNATORS



DANGER!!

LETHAL VOLTAGES ARE PRESENT WITHIN THE PDU. MAKE SURE THAT POWER AT THE MAIN DISCONNECT IS OFF, LOCKED, AND TAGGED BEFORE PROCEEDING.

- INPUT VOLTAGE AND CIRCUIT BREAKER DIP SWITCH SETTINGS

Refer to Direction 2266541, *Phoenix PDU Module in 0.7T Power Cabinet,* Section 3, Installation and Operation, for instructions on Input Voltage Selection and Circuit Breaker Dip Switch Settings.

A copy of the manual should be shipped with the cabinet. It can also be found on the MR Service Methods CD- ROM shipped with the system or the MR Service Engineering Web Site.

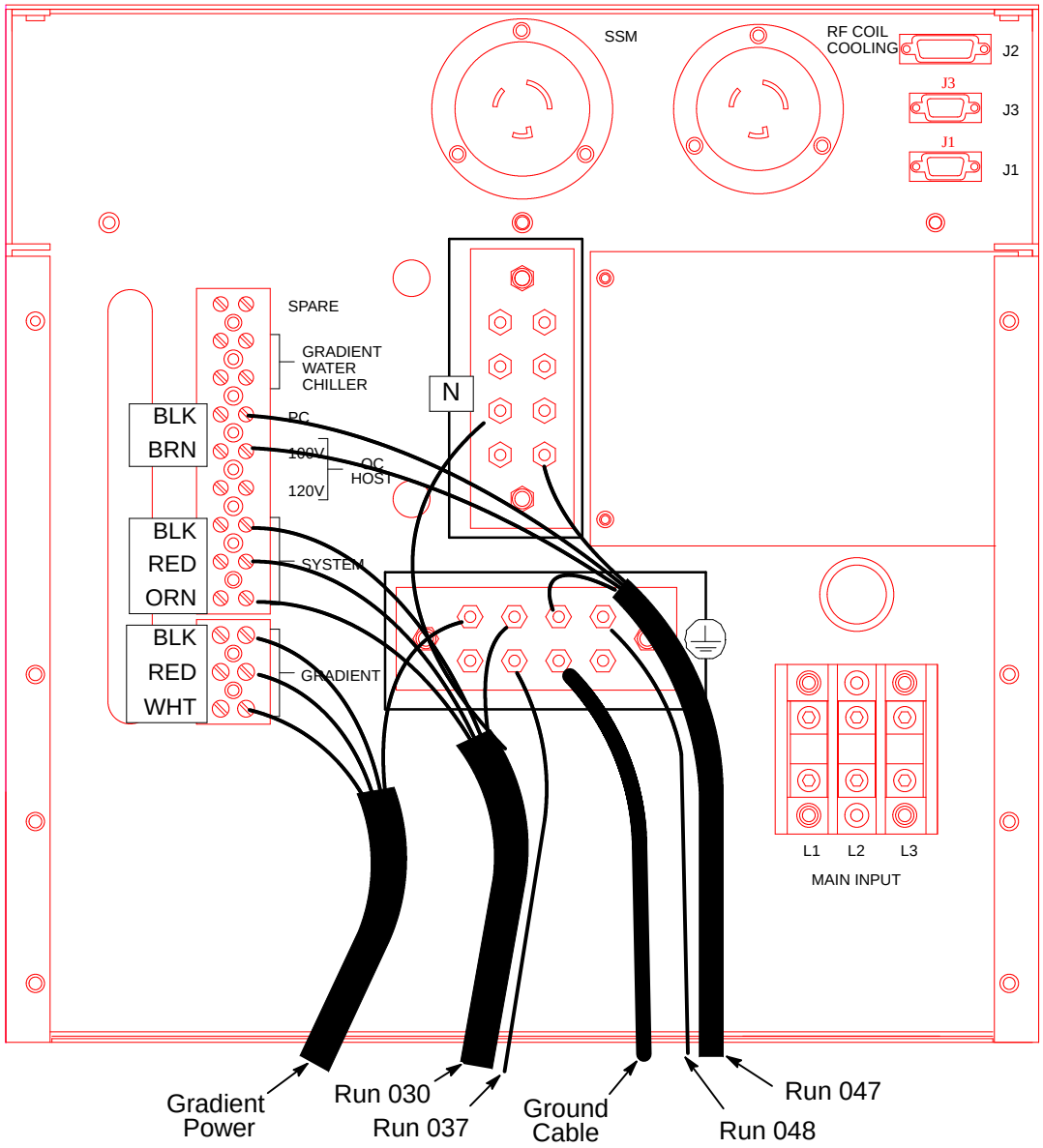
- CONNECT POWER CABLES TO PDU MODULE

1. Route/connect power cables to pressure connectors on back of PDU module as shown in Table.

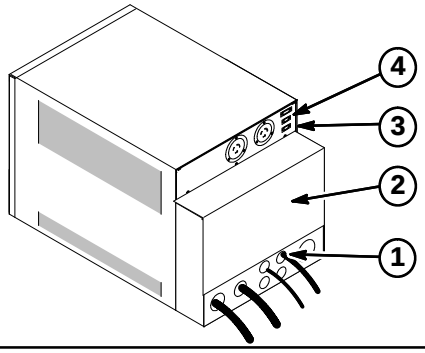
2. Trim and connect ground wire cables (Runs 037 and 048) to ground bus connectors.

CONNECT TO	RUN	PHASE	DESTINATION
1,2,3		f A, B, C	Gradient Amplifier 3f , Neutral, Ground
16,17,18	030	f A, B, C	System Cabient 3f , Neutral, Ground
25,31	047	f C,A	Operator Workspace Single f , Neutral, Ground
GROUND	037		System Cabinet Ground Wire
GROUND	048		Operator Workspace Ground Wire
GROUND			Customer Supplied1/0 Ground Cable

COLOR CODE: for remainder of cables:
3f = Black, Red, Orange Neutral = Light blue Gnd = Grn/Yel
Single f = Brown, Black
Other 3- phase cable Phase Coding: Black = Phase A; Red = Phase B; Orn= Phase C



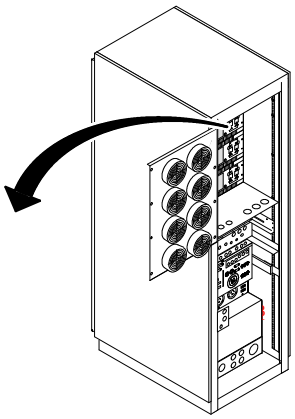
- ROUTE/CONNECT RUNS 703 AND 706 TO PDU MODULE



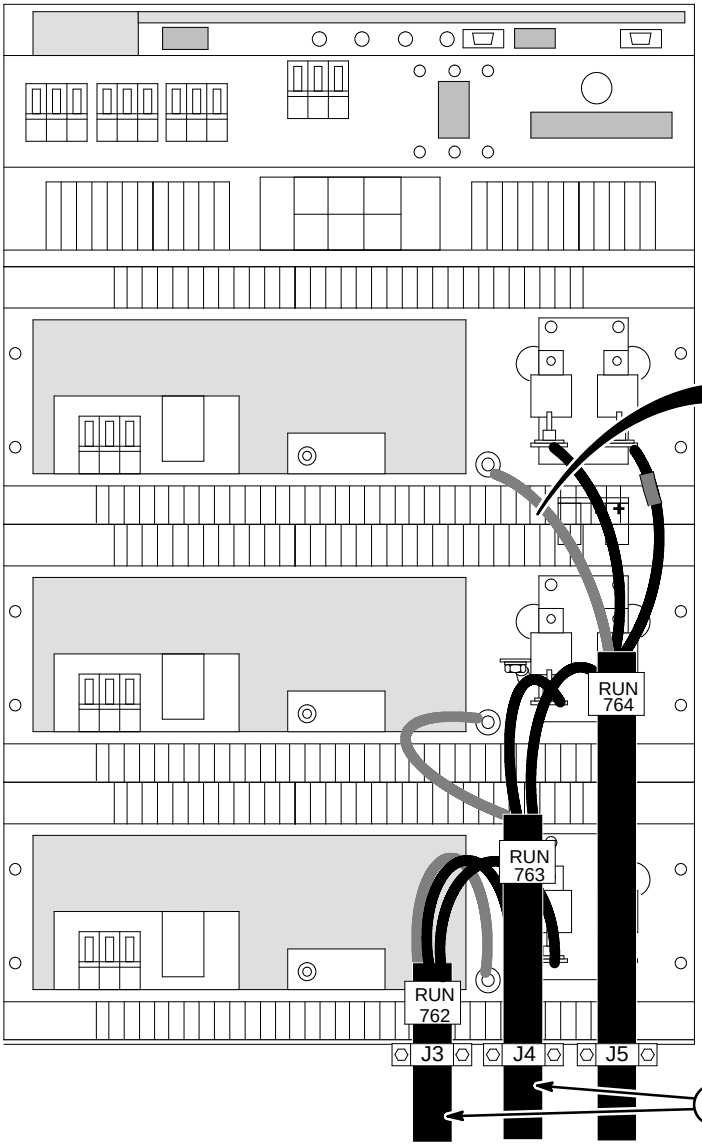
4. Connect Run 703 to J2.
3. Connect Run 706 to J3.
2. Attach rear PDU module cover.
1. Tighten clamps of interface panel to secure cables in place.

- CONNECT RUNS 762, 763, & 764 OUTPUT CRADIENT CABLES

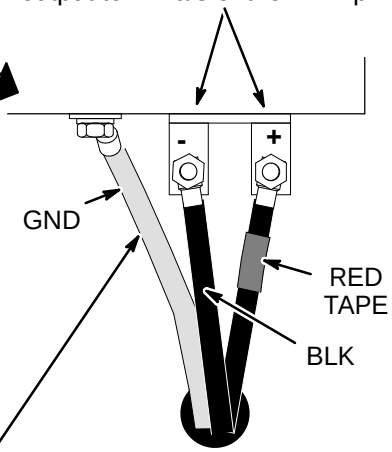
NOTE: Output cables (Runs 762, 763, and 764) were previously routed, cut to length, and terminated.



1. Loosen screws on J5 clamp on bottom of shelf below. Insert ends of Run 764 gradient output cable into Cabinet Interface J5. (Runs 762 will insert into J3, and Run 763 into J4)



2. Connect gradient output cables with red- taped (+) #1 wires to + output terminals and black (-) #2 wires to - output terminals of the Z Amplifier.



3. Connect the GND leads of each run to the Ground stud located on the back of amplifier.

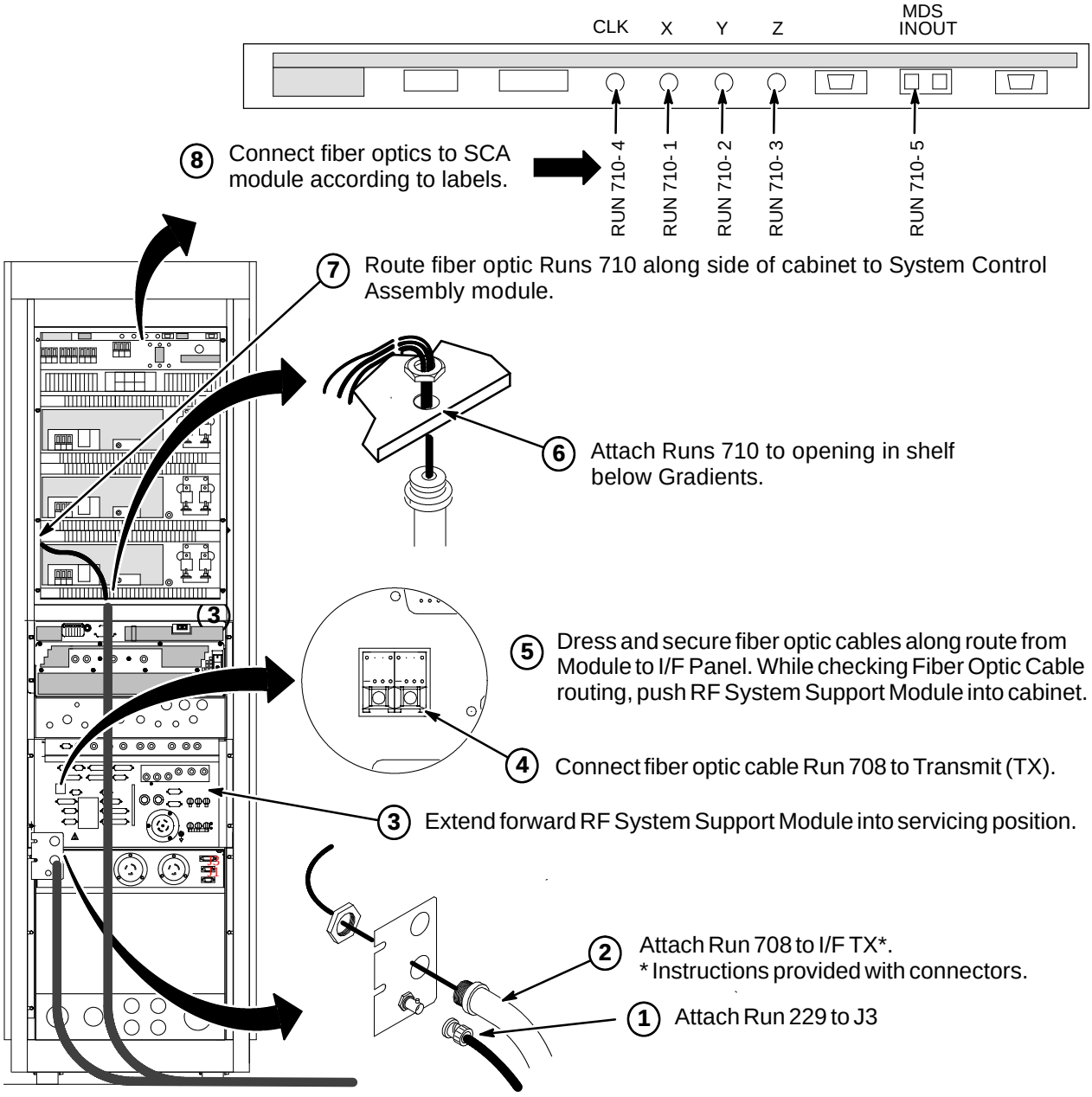
4. Tighten clamp block to secure output power cable to I/F panel.

5. Repeat steps 1, 2, 3, and 4 for connection of Runs 762 and 763 to X and Y Amplifiers.

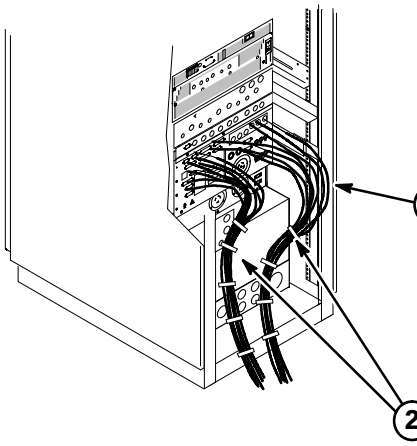
- ROUTE/CONNECT FIBER OPTICS AND RUN 229

CAUTION

Handle fiber optic cables carefully. Do not bend fiber optic cables to radius smaller than two inches. Avoid scratching connector ends. Keep connectors protected until ready to connect. Routing of fiber optic cables must be done with care to prevent damage to optical fibers.



- SYSTEM SUPPORT MODULE CABLE CONNECTIONS



CAUTION

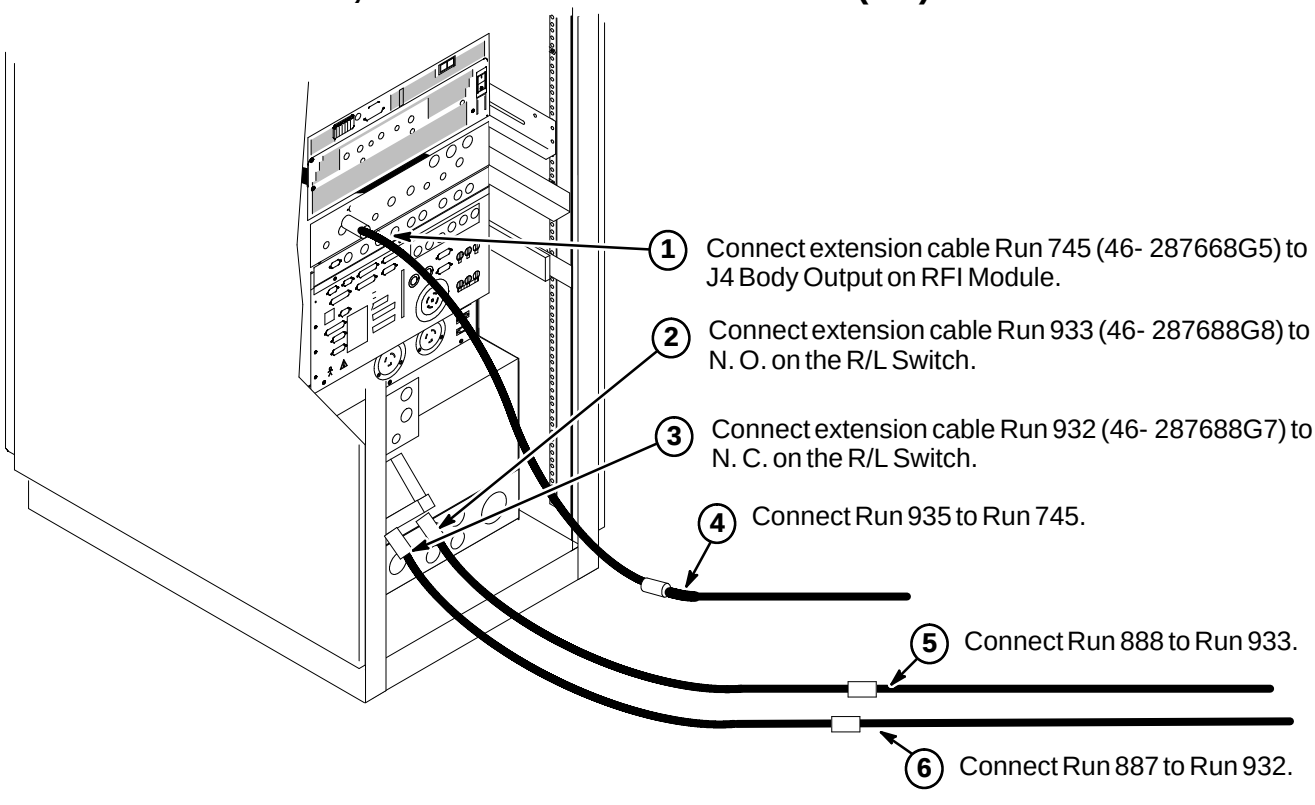
All cables connected to System Support Module Interface Panel must have a service loop of approximately 2 feet (610mm) to allow enough slack for serviceability when Module is moved completely forward.

1. Connect cables to System Support Module.

Note:
If needed, refer to Overview: Section 2 - System Cables, for Run descriptions and designator information located at end of each cable.

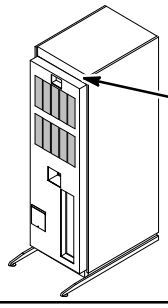
2. Dress and secure cables connected to System Support Module. Verify sufficient slack by moving Module completely forward and back again. Adjust as necessary.

- CONNECT RUNS 887, 888 and 935 TO RF INTERFACE (RFI) MODULE



1. Connect extension cable Run 745 (46- 287668G5) to J4 Body Output on RFI Module.
2. Connect extension cable Run 933 (46- 287688G8) to N. O. on the R/L Switch.
3. Connect extension cable Run 932 (46- 287688G7) to N. C. on the R/L Switch.
4. Connect Run 935 to Run 745.
5. Connect Run 888 to Run 933.
6. Connect Run 887 to Run 932.

- ATTACH INSITE CABINET MAGNET



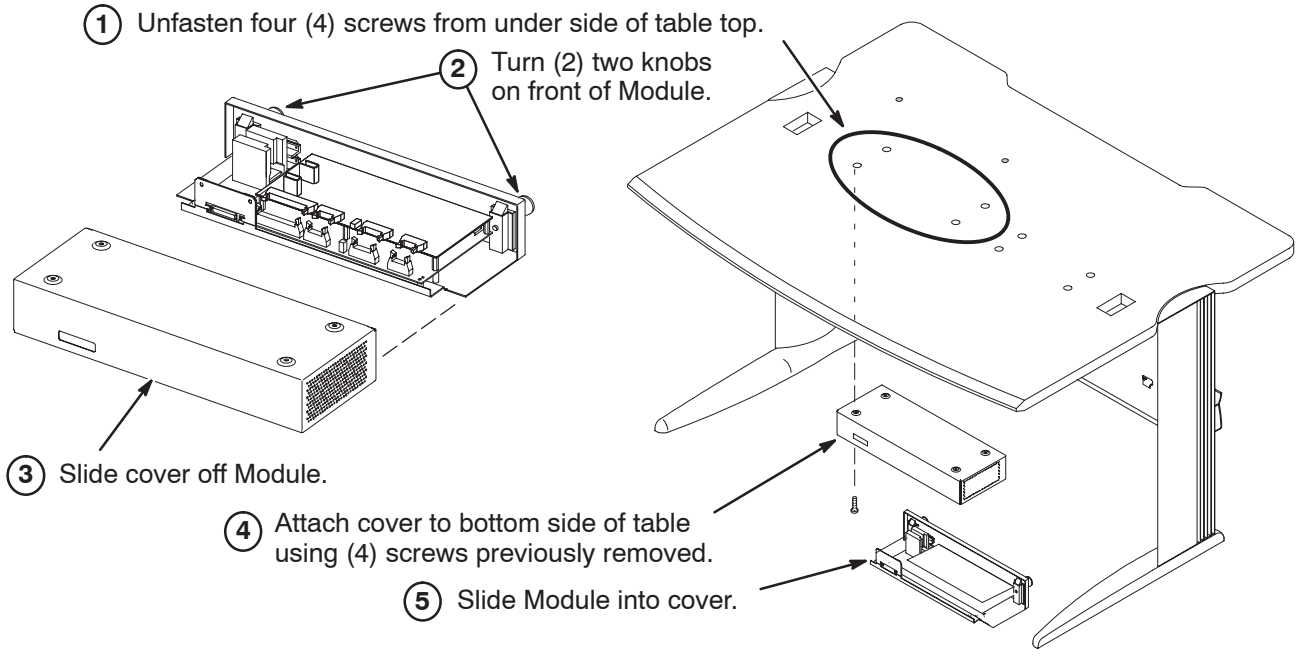
1. Attach all front and rear covers.
2. From the OpenSpeed InSite Kit (46- 301708G5), locate the “Power (GRFD)” cabinet magnet (46- 320095P15). Attach to front of cabinet as shown.

OW INSTALLATION

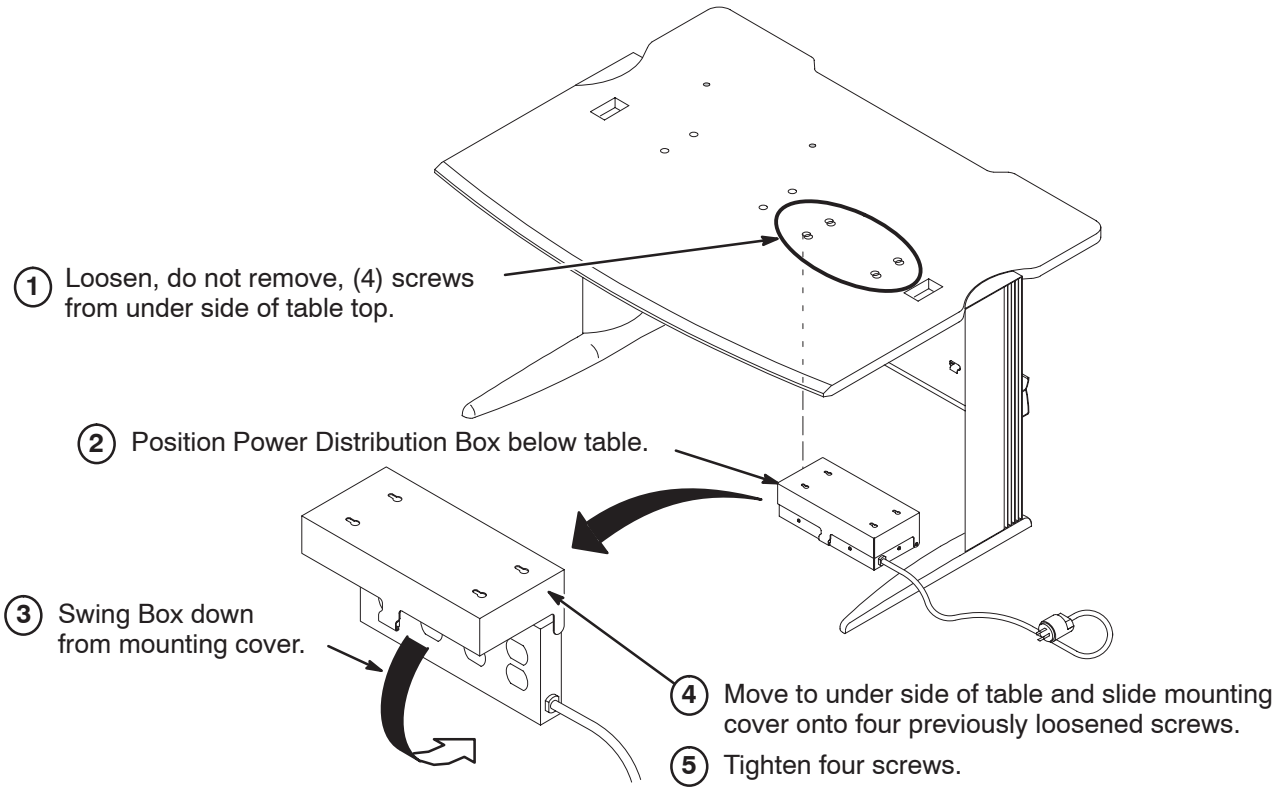
TABLE OF CONTENTS

TABLE OF CONTENTS (continued))

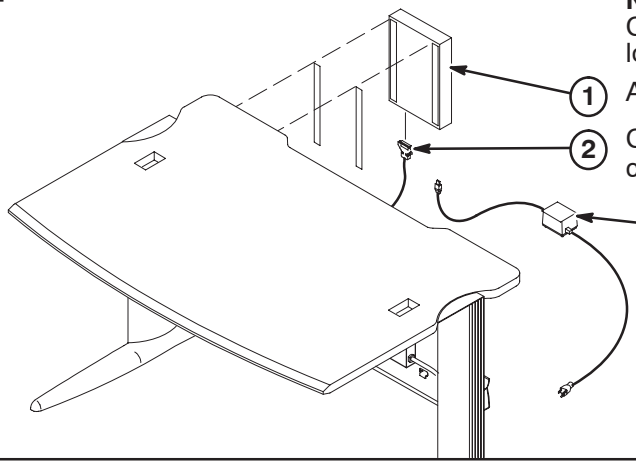
❑ ATTACH WORKSPACE INTERFACE MODULE (2141978 series) TO TABLE



❑ ATTACH POWER DISTRIBUTION BOX (46–307830G1) TO TABLE



❑ ATTACH MODEM TO TABLE



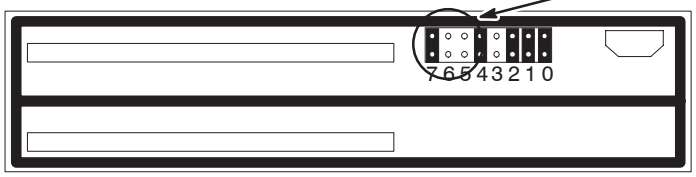
Note: Modem is to be supplied by District office. Consult with Site customer for preference of Modem location on back plate of table.

1. Attach to back plate of table.
2. Connect Run 812 (2188746) to Modem. Other end to be connected to Operator Workspace Cabinet SER 1 later.
3. Modem Power Adapter to be supplied by District office and connected to Power Distribution Box J7.

❑ ATTACH DASM TO TABLE

Note: The Analog and Digital DASMs are shipped with the jumper set to SCSI ID=0. This is the correct ID for an AW, but incorrect for Signa Horizon LX (SCSI ID=3).

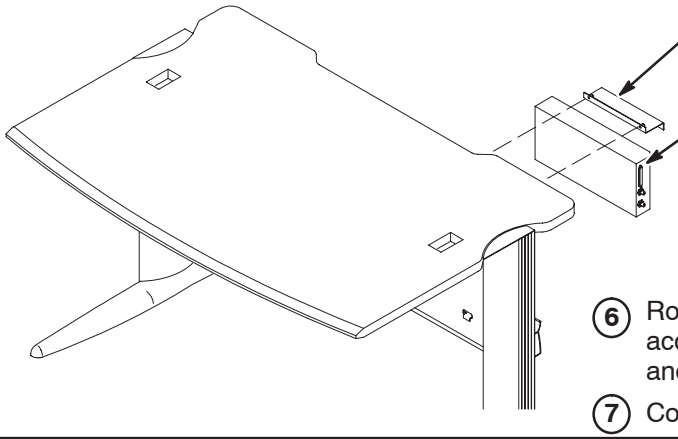
1. Unfasten DASM cover screw and remove cover.



2. For SCSI ID = 3, set Configuration Jumper J2 as follows:
   5=OFF, 6=OFF, 7=ON
   Note: A jumper in the OFF position enables the SCSI ID bit.
3.

Note: Consult with Site customer for preference of DASM location. This procedure installs DASM in the cable trough. Customer may prefer DASM on top of table.

CAUTION: Longer SCSI cables cannot be substituted.



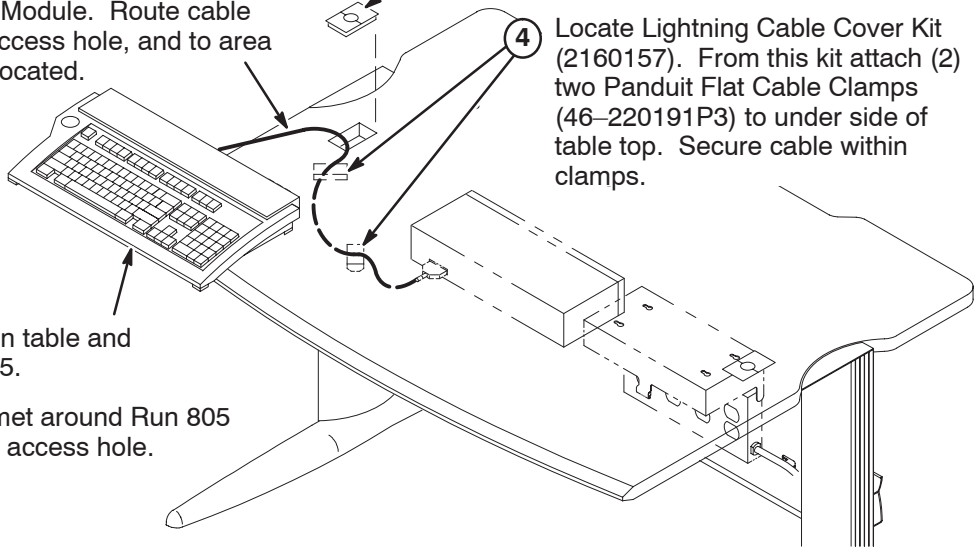
4. Unfasten DASM Bracket from back plate. Use only for 46–269566P3 or 2143388–2. Not used for 2251040 or 2251043.
5. Install DASM (Analog, 46–269566P3, or Digital, 2143388–2) in cable trough and fasten in place with DASM Bracket.

   OR

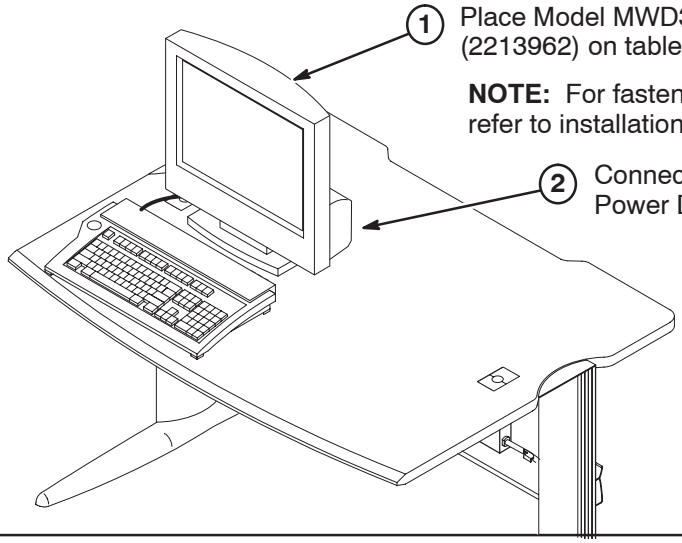
   Install DASM (Analog, 2251040, or Digital, 2251043) in cable trough. Refer to installation instructions that are shipped with DASM.
6. Route and connect DASM cables and accessories according to instructions provided with DASM Module and Cable Map in Overview Tab of this manual.
7. Connect power cable to Power Distribution Box J2.

❑ INSTALL KEYBOARD ON TABLE

1. Consult with Site customer for exact location of Keyboard and Color Monitor on Operator Workspace (OW) Table.
2. Remove cable grommet from side of table where Monitor and Keyboard are to be located.
3. Connect Run 805 to I/F Module. Route cable under table, thru cable access hole, and to area where Keyboard will be located.
4. Locate Lightning Cable Cover Kit (2160157). From this kit attach (2) two Panduit Flat Cable Clamps (46–220191P3) to under side of table top. Secure cable within clamps.
5. Place Keyboard on table and connect to Run 805.
6. Place cable grommet around Run 805 and insert in cable access hole.



❑ INSTALL MODEL LCD2000 COLOR MONITOR (2213962) ON TABLE

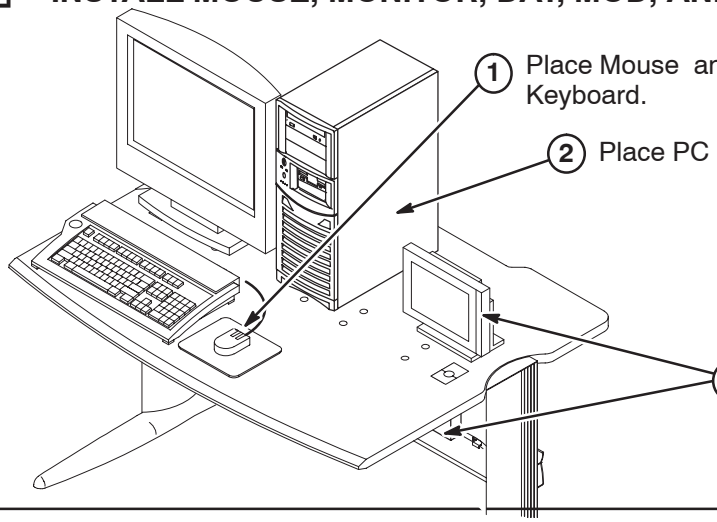


1. Place Model MWD321 Color Monitor (2213962) on table in back of keyboard.

   NOTE: For fastening monitor to surface, refer to installation drawing 2204493DDW.

2. Connect power cable to Power Distribution Box J1.

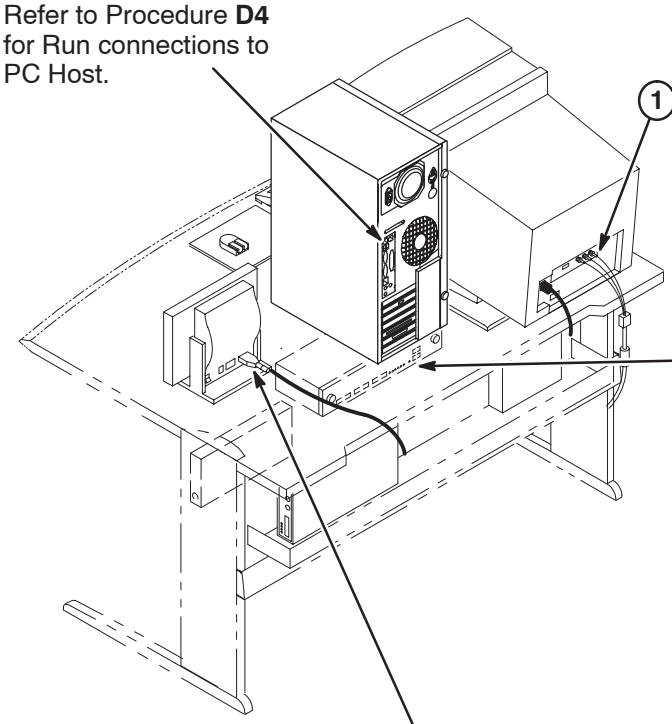
❑ INSTALL MOUSE, MONITOR, DAT, MOD, AND LCD DISPLAY ON TABLE



1. Place Mouse and Mouse Pad on table and connect to Keyboard.
2. Place PC Host Computer (2351335) on table.
3. Place LCD Display (2138599) on table. Connect power cable to Power Distribution Box J5.

❑ CONNECT TABLE COMPONENT CABLES

Refer to Procedure **D4** for Run connections to PC Host.



(1) **For Color Monitor:** Connect Run 798 (2150533–2) to R IN, B IN, G IN on Monitor and route/connect to MONITOR on the PC Host module.

For Black & White Monitor: Connect Run 799 (2150533) to VIDEO on Monitor and route/connect to DISPLAY on the PC Host module.

(2) Connect the following cables from the OW I/F Module (OW A1 A4) for later connection to Operator Workspace Cabinet:

RUN #	CONNECTION	PART #
805	J6	2114561–38
810	J8	2141980–2
814	J9	2196990
817	J17	46–328000G958

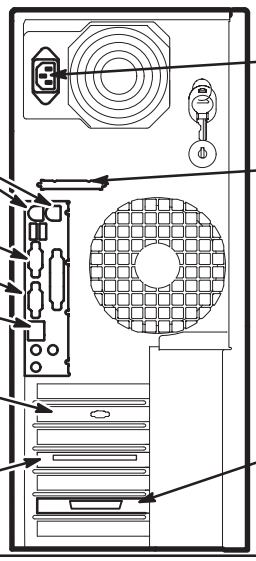
Connect the following cables to OW I/F Module. These cables will be routed to the System Cabinet and Penetration Panel:

RUN #	CONNECTION	PART #
789	J18	46–317068G938
788	J7	46–328000G937

(4) Connect Run 797 (2138599–2) to LCD Display. Other end is connected later to PC in the Operator Workspace Cabinet.

❑ PC Host CABLES CONNECTIONS

(1) Connect the following cables to the PC Host.



Connect power cable to Power distribution Box J4.

Run 819

Run 810 (2141980–2)

Run 812 (2188746)

Run 813 (2188747)

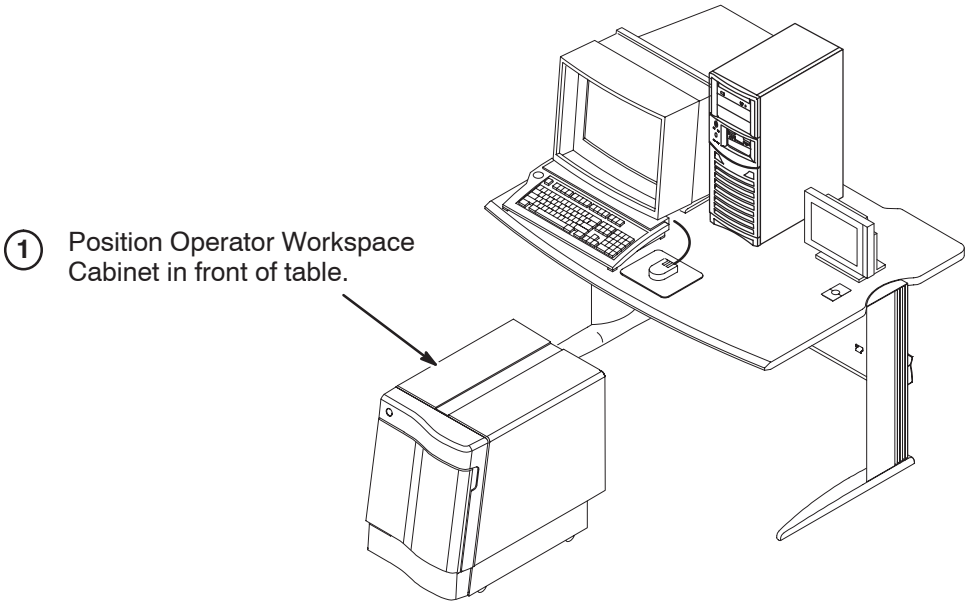
Run 811 (2153396–3)

RUN836(2351334).

8 Port Serial Cable, then to Run 910, 911, 791, 818.

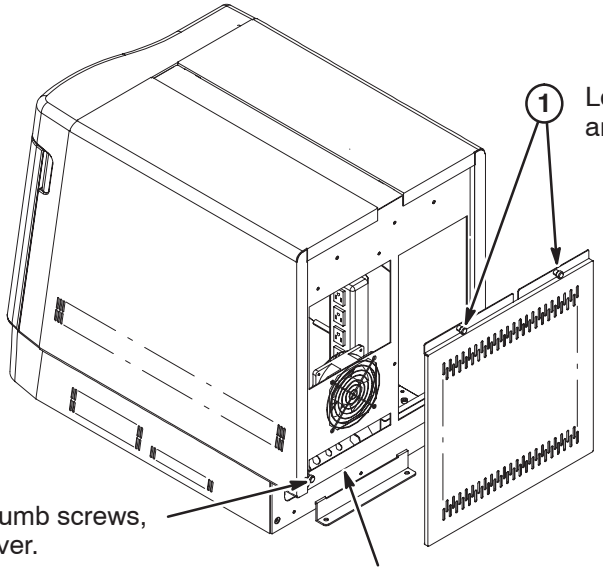
Option from DASM RUN807 (2355386) (for sites with DASM, SCSI Combo Card 2354516 is required)

❑ LOCATE OPERATOR WORKSPACE CABINET IN FRONT OF TABLE



① Position Operator Workspace Cabinet in front of table.

❑ REMOVE OPERATOR WORKSPACE CABINET REAR COVER

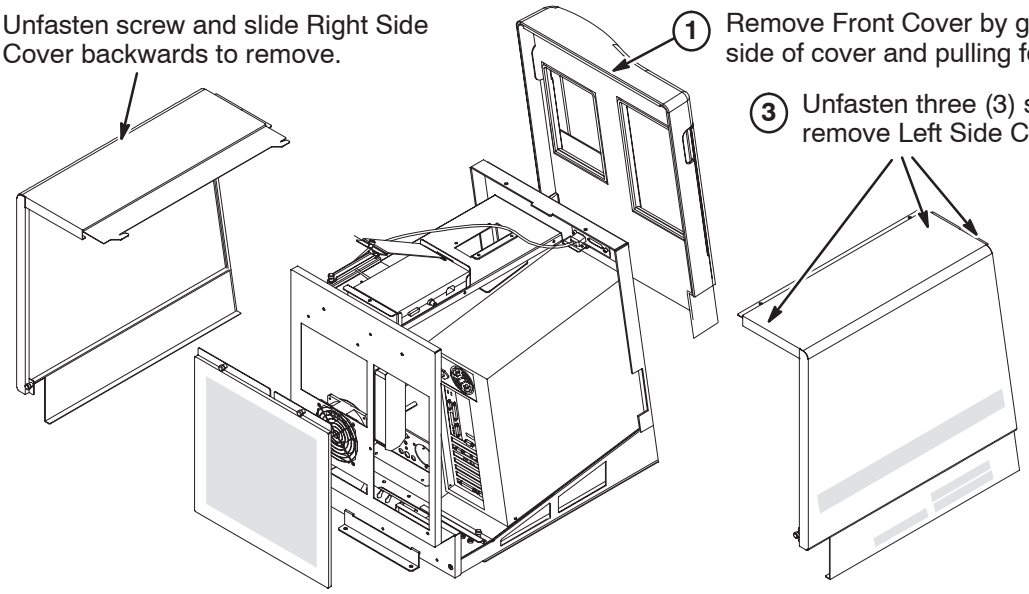


① Loosen (2) two thumb screws and remove Rear Cover.

② Loosen the (2) two thumb screws, one on each Side Cover.

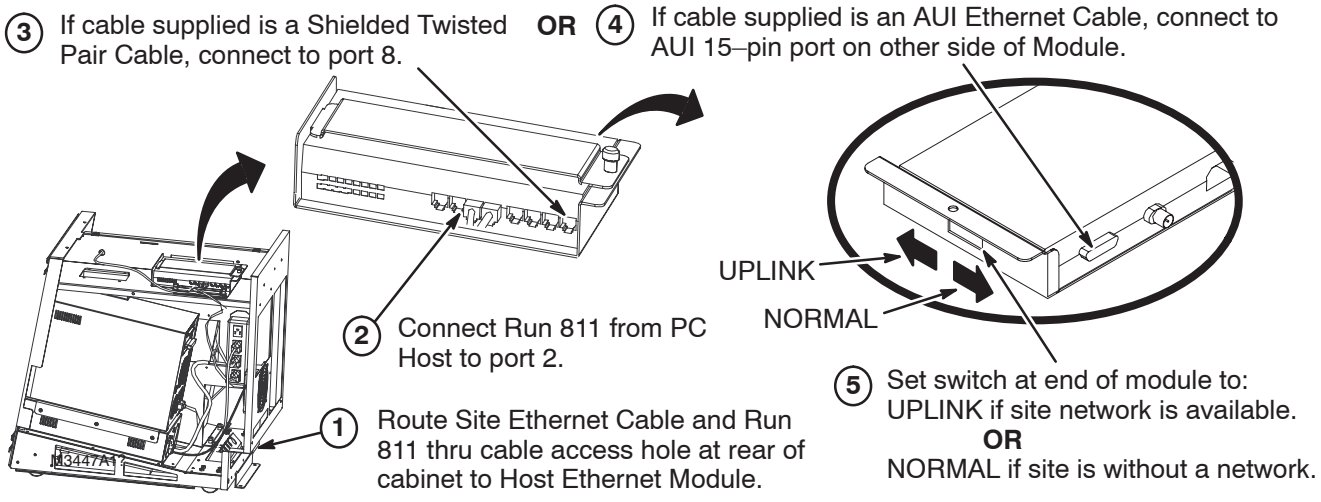
Cable Access Hole

❑ REMOVE OPERATOR WORKSPACE CABINET FRONT AND SIDE COVERS



❑ CONNECT ETHERNET CABLES

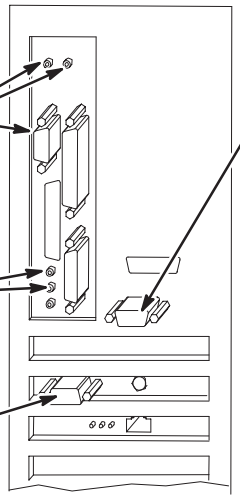
Note: Site Ethernet cable is supplied by customer.



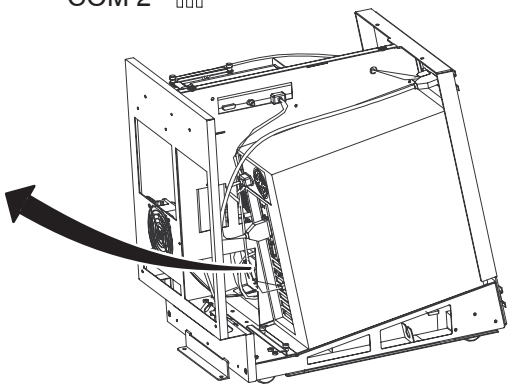
❑ ROUTE/CONNECT RUNS 792, 797, 813, AND 814 TO PC MODULE

Note: Route cables thru access hole at rear of cabinet.

1. Route Run 814 and connect as marked to:
   KEYBOARD
   MOUSE
   COM1
2. Route Run 792 and connect as marked to:
   MIC
   AUDIO
3. Route Run 797 and connect as marked to:
   VIDEO

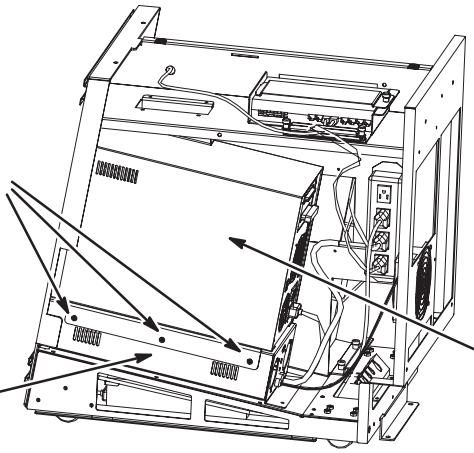


4. Route Run 813 and connect as marked to:
   COM 2

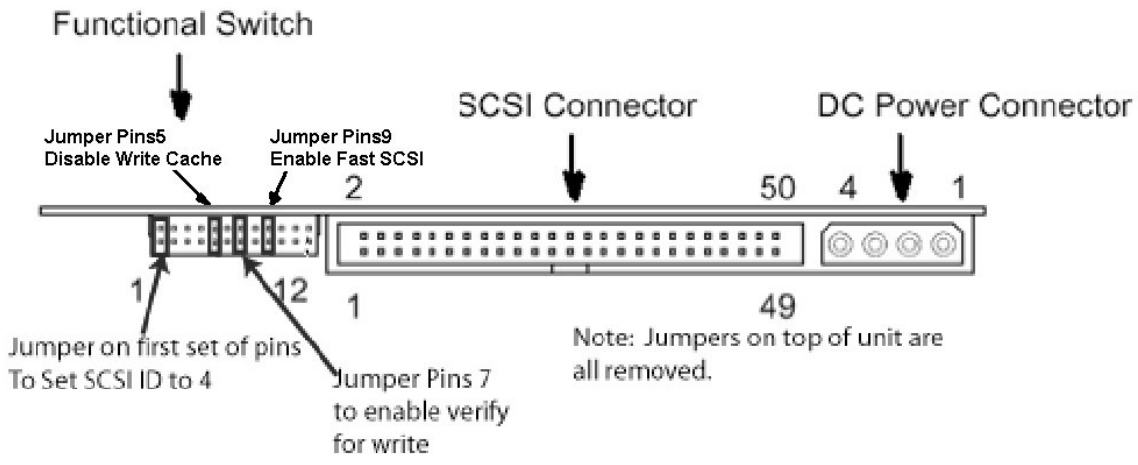


❑ INSTALL MOD DRIVE (LEGACY MEDIA) IN SCSI EXPANSION BOX

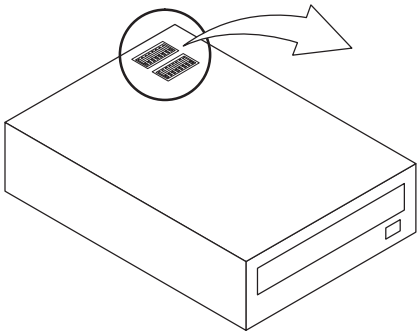
1. Unfasten three (3) screws from SCSI Expansion Box mounting bracket and remove Box and bracket from power module.
2. Unfasten six (6) screws that hold bracket to bottom of SCSI Expansion Box and remove bracket.
3. Remove SCSI Expansion Box cover.



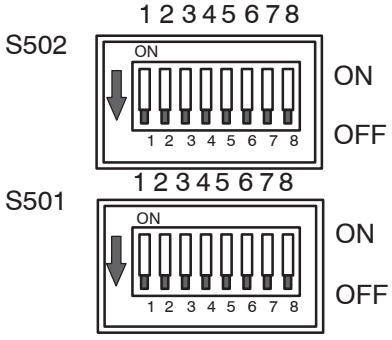
❑ MOD DRIVE SETTINGS



❑ MOD DRIVE DIP SWITCH SETTINGS

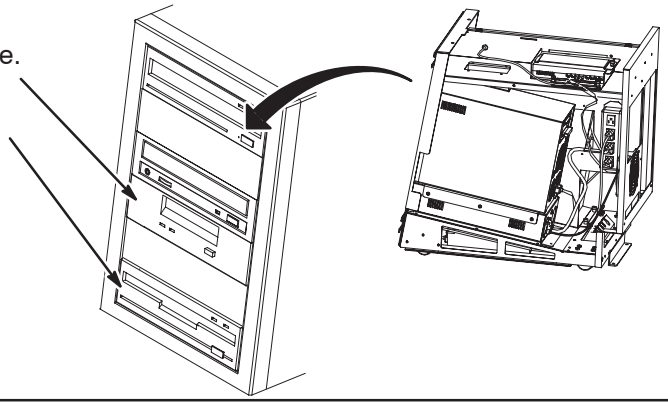


(These dip switches are located on the upper part of the drive.)



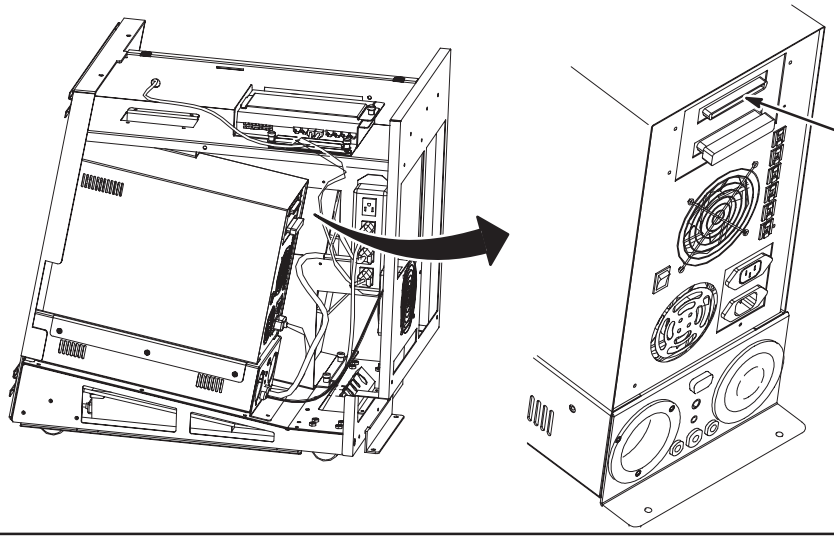
❑ INSTALL MOD DRIVE (LEGACY MEDIA) IN SCSI EXPANSION BOX

1. Install MOD Drive in slot 6 with existing hardware.
2. Connect power cords to MOD Drive.
3. Connect ribbon cable to MOD Drive.
4. Install SCSI Expansion Box cover. Reattach bracket to bottom of Box. Reattach bracket and Box assembly to power module.

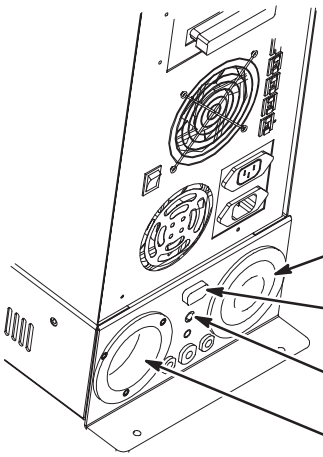


❑ ROUTE/CONNECT RUN 819 TO SCSI EXPANSION BOX

Note: Route all cables from PC Host thru cable access hole at rear of cabinet.



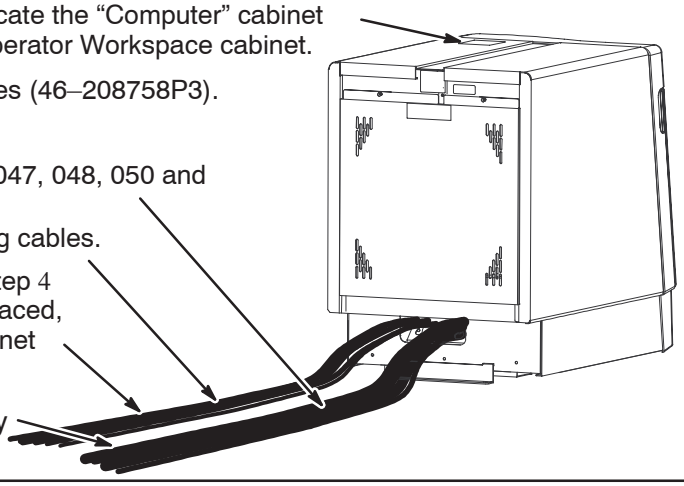
❑ ROUTE/CONNECT RUNS 047, 048, 049, AND 817 TO POWER MODULE



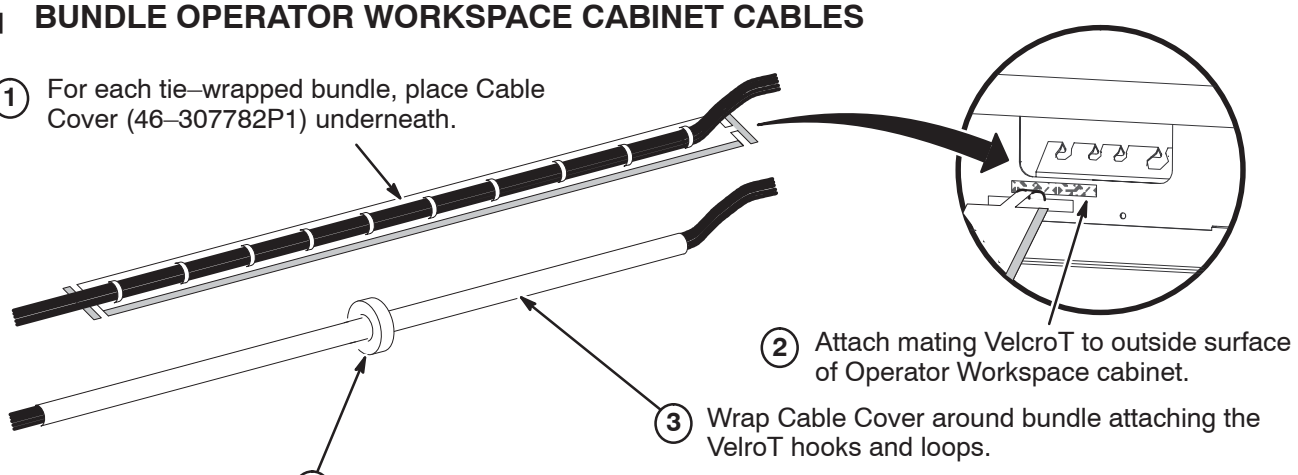
1. Route/Connect Run 049 Power Cable from Operator Workspace I/F to J2.
2. Route/Connect Run 817 Power Cable from Operator Workspace Power Module to J3.
3. Route/Connect Run 048 Ground Cable from PDU to ground screw.
4. Route/Connect Run 047 Power Cable from PDU to J1.

❑ ALIGN OPERATOR WORKSPACE CABINET CABLES & INSITE MAGNET

1. Install Operator Workspace Cabinet right and left Side covers, Front cover and Rear cover.
2. From the 8.0 LX InSite Kit (46–301708G14), locate the “Computer” cabinet magnet (46–320095P1) and attach to top of Operator Workspace cabinet.
3. Locate the twenty (20) seven inch long cable ties (46–208758P3).
4. Seperate cables into two bundles;
   The first bundle will include power cable Runs 047, 048, 050 and fiber optic cable Run 790.
   The second bundle will include all the remaining cables.
5. Align the cables of the first bundle created in Step 4 and attach ten (10) of the cable ties, equally spaced, around the cable bundle between the OW Cabinet and the OW Table.
6. Attach the remaining ten (10) cable ties, equally spaced, around the second cable bundle.



❑ BUNDLE OPERATOR WORKSPACE CABINET CABLES



1. For each tie–wrapped bundle, place Cable Cover (46–307782P1) underneath.
2. Attach mating VelcroT to outside surface of Operator Workspace cabinet.
3. Wrap Cable Cover around bundle attaching the VelroT hooks and loops.
4. Attach cable bundle Clamp (46–307873P1) to center of Cable Cover.
5. Carefully roll OW Cabinet into final position. Make sure cable bundles are unobstructed and slide easily. Attach to mating Velcro on cabinet.
6. Repeat Step 4 as often as necessary.

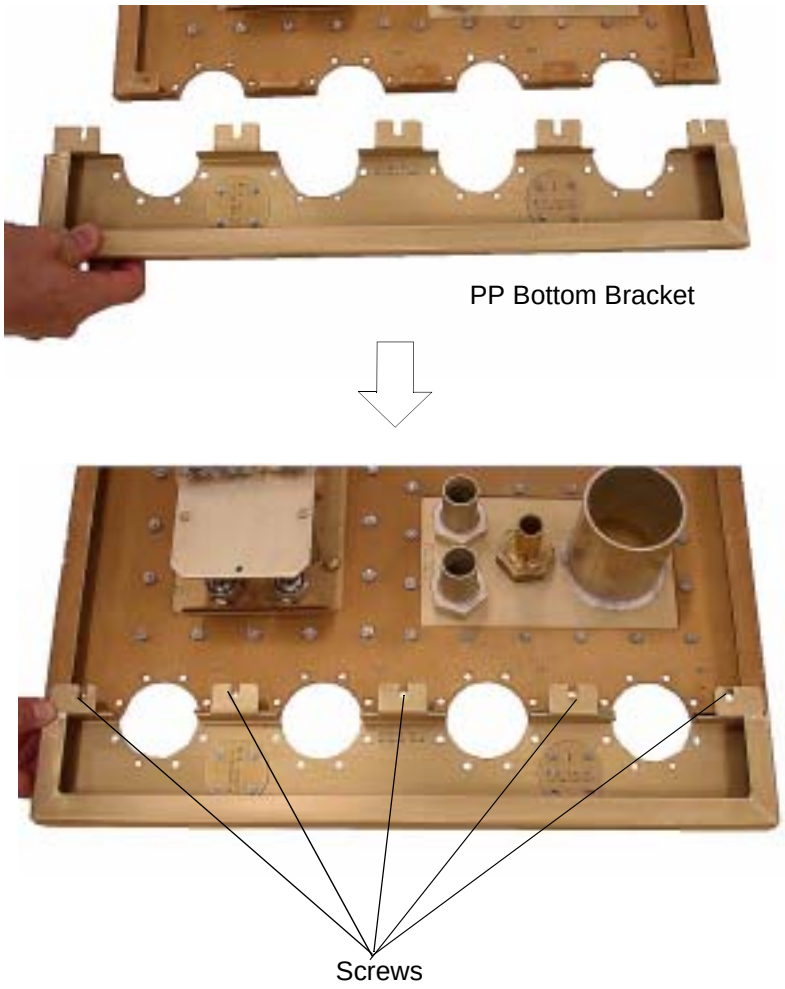
PP Bottom Bracket and Hose Panel Installation

Overview:

One blower cooling cabinet is introduced from Oct, 2002.
Since the one blower cabinet only uses one hole, it is necessary to close other three unused hole with blind plate.
Perform this procedure befofore installing Penetration Panel(2nd day of Installation Flowchart.).

Procedure:

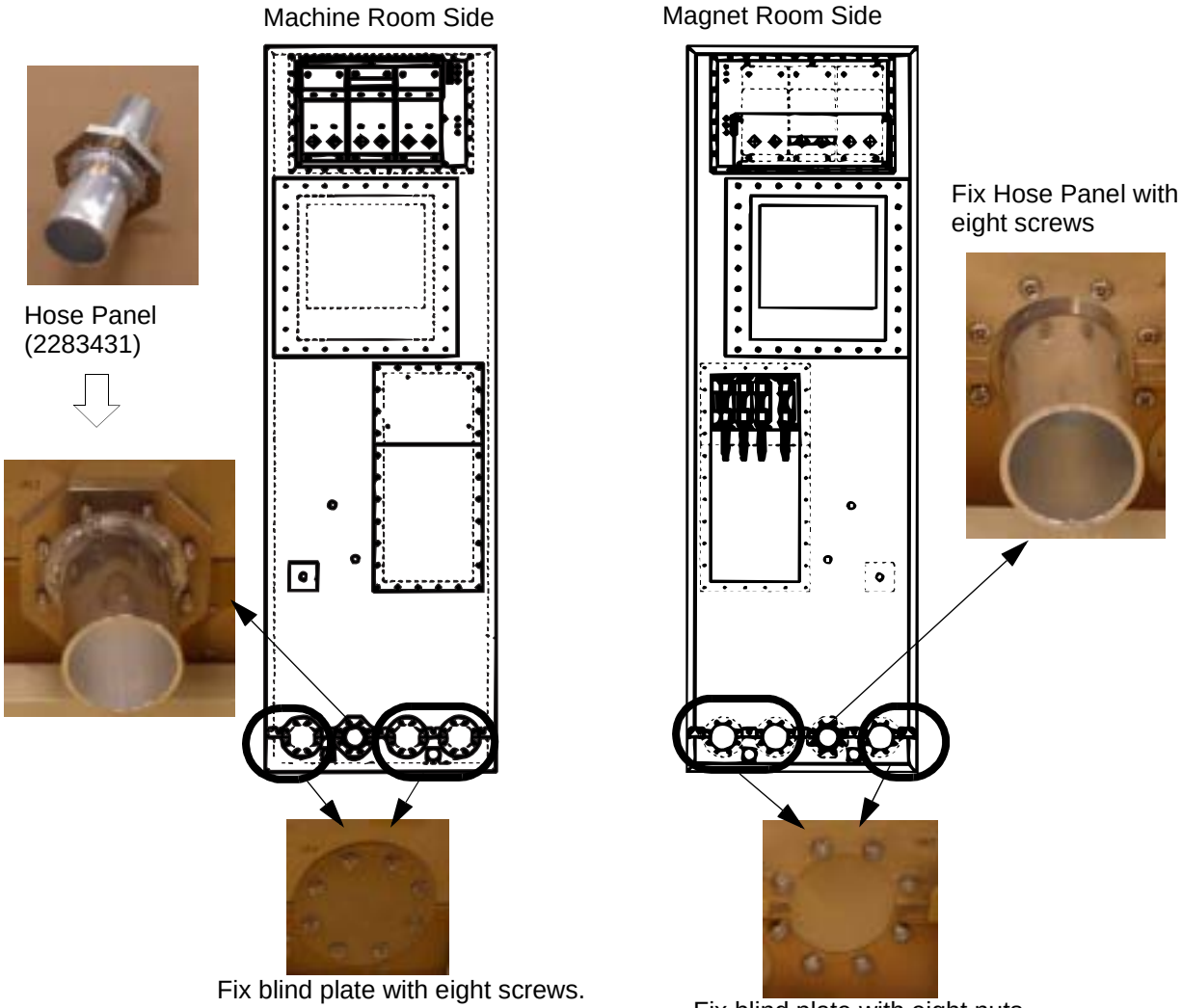
1. Install the PP Bottom bracket to Penetration Panel with five screws which are included in PEN WALL Assy.



PP BOTTOM BRACKET
Illustration 1

Procedure (continued):

2. Install blind plate and Hose Panel according to following the illustration.



(Blind plate, screws, and nuts are included in Pen Wall Assy.)

HOSE PANEL AND BLIND PLATE INSTALLATION
Illustration 2

Yutaka Masumo
GEYMS TP Gr. -MR

Penetration Panel INSTALLATION

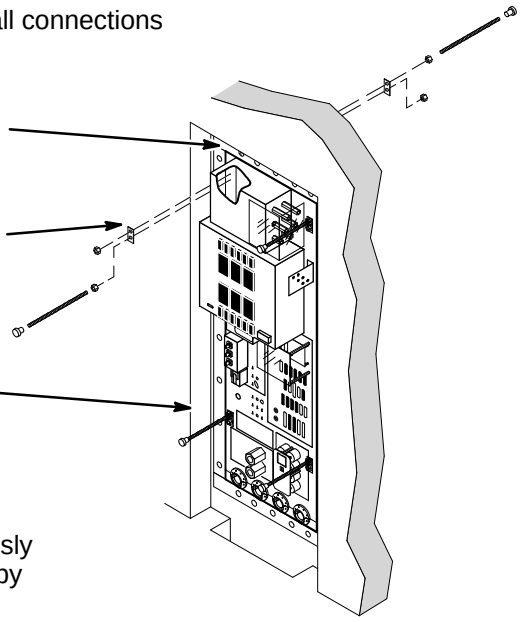
TABLE OF CONTENTS

REV blank

- INSTALL PENETRATION PANEL STAND- OFF HARDWARE

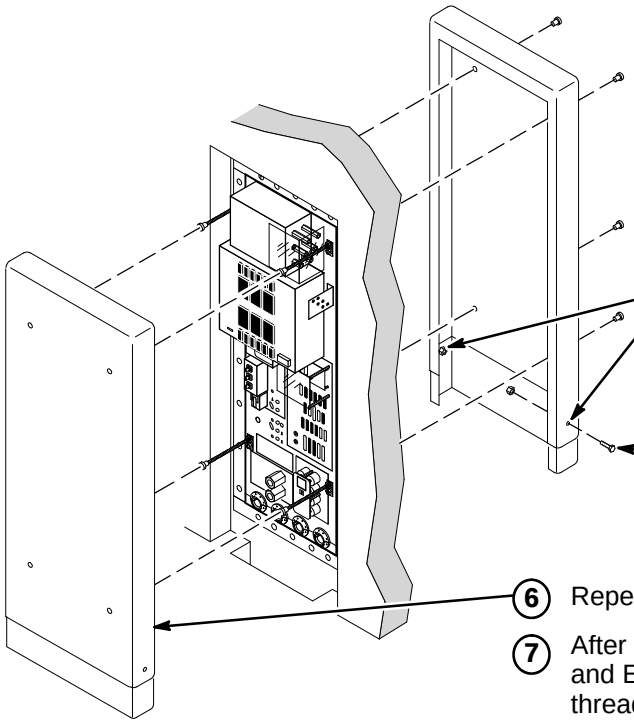
Note: The Penetration Panel Floor plate that is supplied with the cover kit is to be installed prior to routing and connecting cables to Penetration Panel. Refer to Installation Drawing furnished with the Covert Kit.

Note: The Penetration Panel Cover can be installed only after all connections and System installation has been completed.



1. Verify that cover will enclose finished wall opening. The distance from the top of Penetration Panel to wall opening must be less than 4- 1/2 inches (114mm). If not, new mounting stud holes in Penetration Panel may be required.
2. Place (8) Reinforcing Plates (46- 301211P1) over each hole pair on both sides of Penetration Panel and attach using:
   (16) 5/16- 18 x 9/16 Brass Nut (46- 208935P9)
   (8) 5/16- 18 x 18 inch Threaded Rod (46- 301213P2)
   (8) 5/16- 18 x 1 inch Barrel Nut (46- 301212P1)
3. Measure distance from face of Pen Panel to equipment room wall surface. Add six inches (152mm) to obtain length threaded rod should extend from panel.
4. Repeat step 3 procedure for exam room cover.
5. Adjust threaded rods with attached barrel nuts to the previously calculated dimensions from steps 3 and 4. Secure to panel by tightening brass nuts on both sides of Penetration Panel.

- INSTALL PENETRATION PANEL COVERS



1. Remove all barrel nuts.
2. In the Magnet room, temporarily install Top (46- 306936P1) and Bottom (46- 306964P1) Cover assembly on threaded rods and secure with four barrel nuts.
3. Adjust position of bottom cover section and mark two lower fastener holes.
4. Remove covers and drill hole in lower cover at each mark.
5. Attach top and bottom covers with furnished 10- 32 nuts and screws.
6. Repeat procedure for Equipment room cover.
7. After all installation procedures are completed in Magnet and Equipment rooms, install assembled covers on threaded rods and secure with four barrel nuts.

SC INSTALLATION

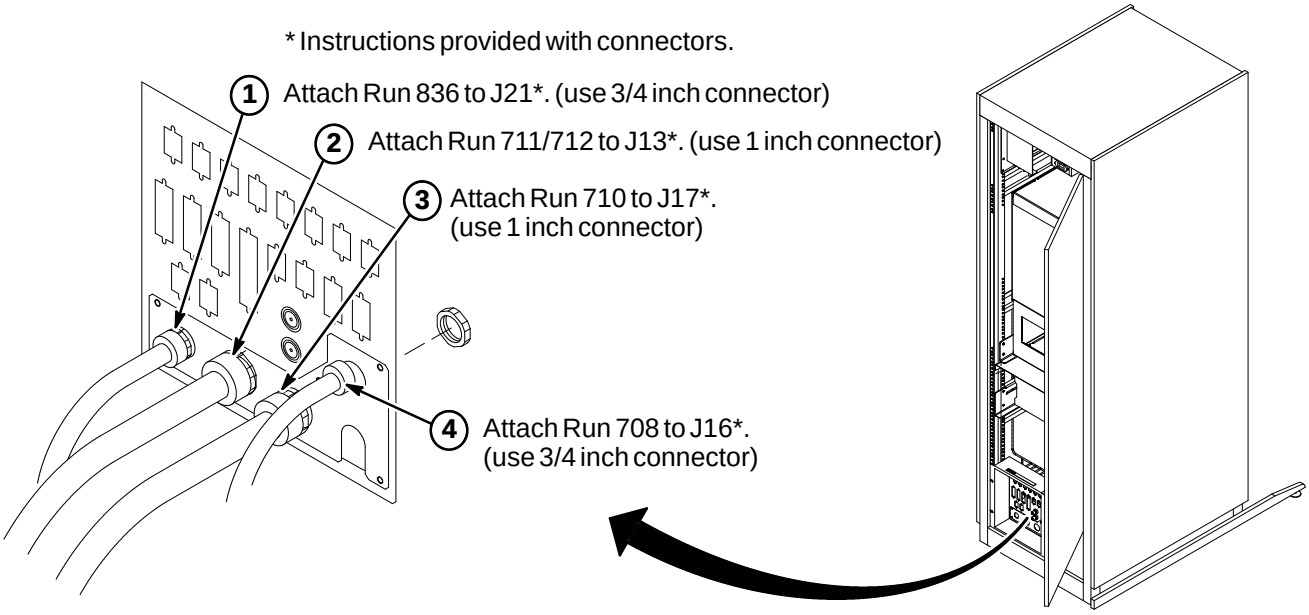
TABLE OF CONTENTS

REV blank

- CONNECT FIBER OPTIC RUNS 708, 710, 711/712, AND 836 TO I/F PANEL

CAUTION

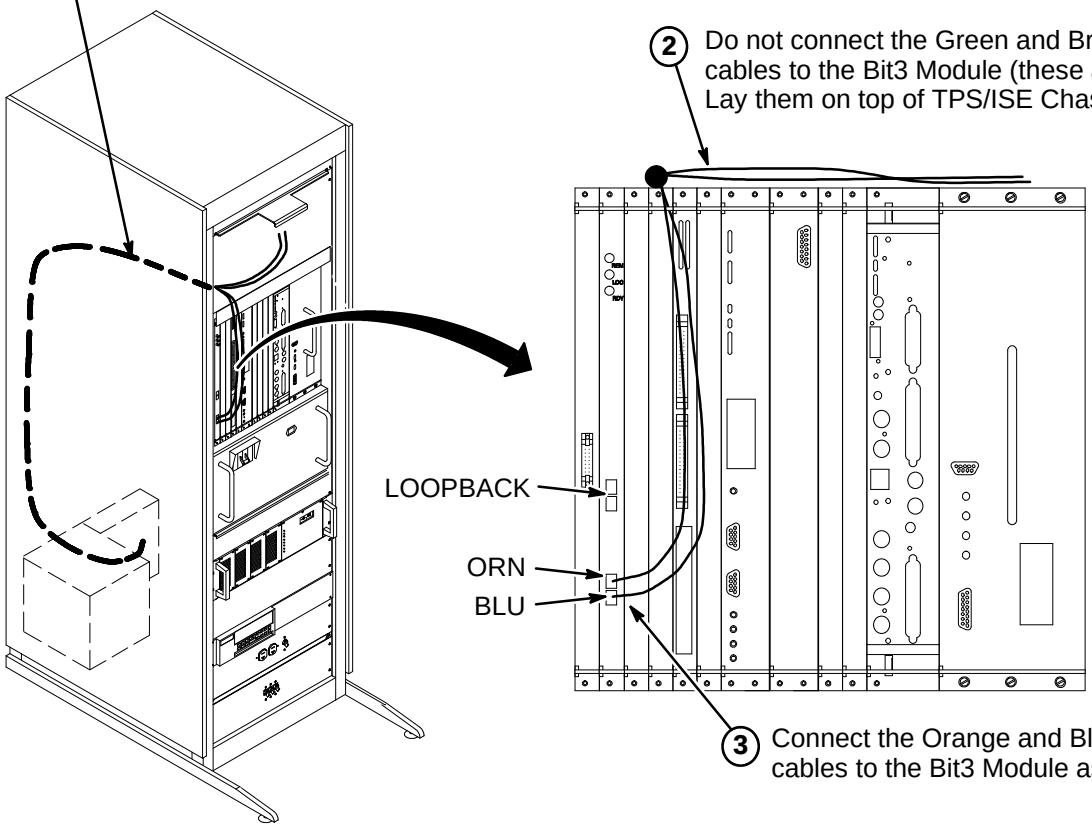
Handle fiber optic cables carefully. Do not bend fiber optic cables to radius smaller than two inches (50mm). Avoid scratching connector ends. Keep connectors protected until ready to connect.



- ROUTE/CONNECT FIBER OPTIC RUN 836 TO BIT3 MODULE

1. Route Run 836 fiber optic cables from cabinet I/F J21 to front of Bit3 module (MR2 A11 A30). Secure cable to side of cabinet.
Do not bend fiber optic cables to radius smaller than two inches (50mm).

2. Do not connect the Green and Brown fiber optic cables to the Bit3 Module (these are spares). Lay them on top of TPS/ISE Chassis.



3. Connect the Orange and Blue fiber optic cables to the Bit3 Module as indicated.

- ROUTE/CONNECT FIBER OPTIC RUNS 708, 710, AND 711/712 TO TYME II

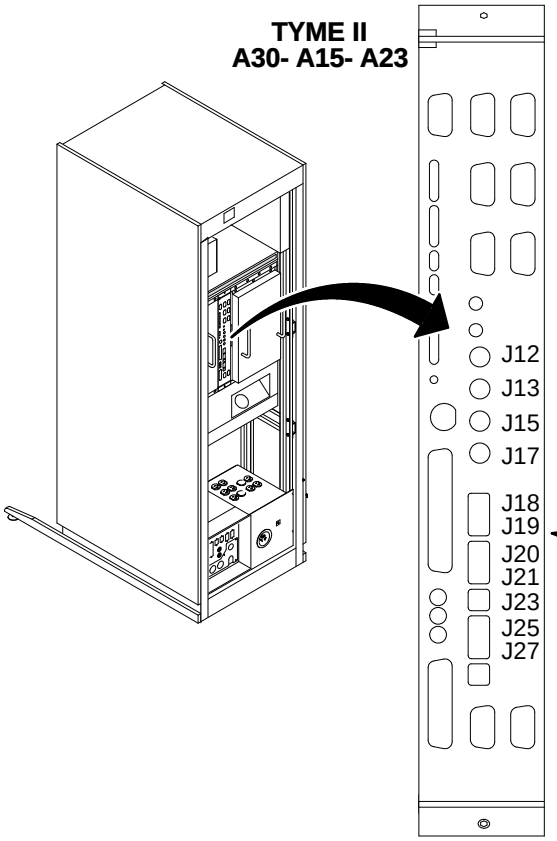
CAUTION

Handle fiber optic cables carefully. Do not bend fiber optic cables to radius smaller than two inches. Avoid scratching connector ends. Keep connectors protected until ready to connect. Do not coil naked outside of cabinet, or store fiber optic cables in bottom of cabinet.

Note:
Runs 708, 710, 711, and 712 are used for both Horizon 5.x and 8.x. The fiber optic connections to the TYME board are different for 5.x and 8.x. The labels on the cables include both the 5.x and 8.x connections.

The table below indicates the connection labels as they should be marked on this end of the fiber optic cables. **Use only the 8.x connections.**

TYME II
A30- A15- A23



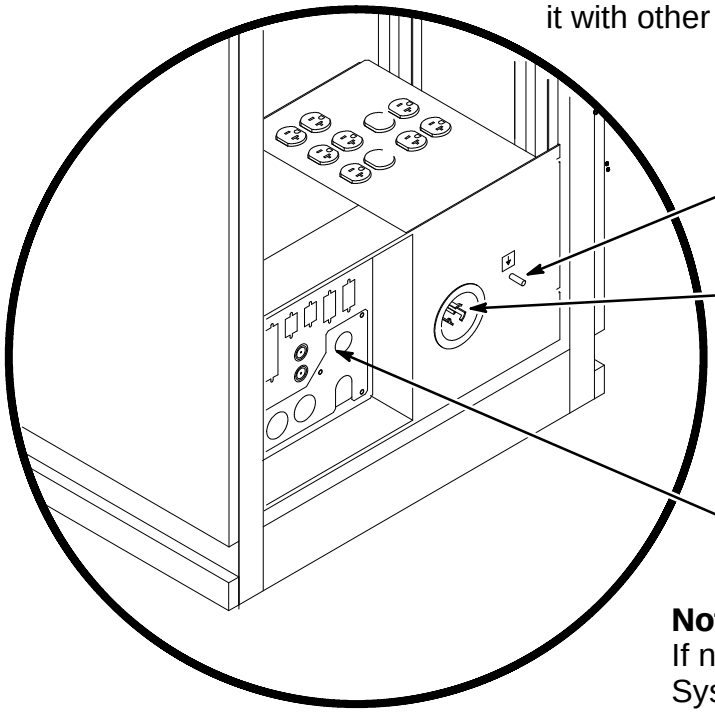
RUN #	5.x	8.x
708- 1	J5	J19
710- 1	J13	J12
710- 2	J15	J13
710- 3	J17	J15
710- 4	J14	J17
710- 5	J4	J18
711- 1	J6,J7	J25,J27
711- 2	J8	J23
712- 1	J9,J10	J20,J21

1. Route/Connect as marked Run 710 fiber optic cables to J12, J13, J15, J17 and J18 on the TYME II Board.
2. Route/Connect as marked Run 708 fiber optic cable to J19 on the TYME II Board.
3. Route/Connect as marked Run 711/712 fiber optic cables to J20, J21, J23, J25, and J27 on the TYME II Board.

Note:
Use tie-wraps to secure fiber optic cables to ISE Chassis cables.

- CONNECT POWER, GROUND, AND DATA CABLES

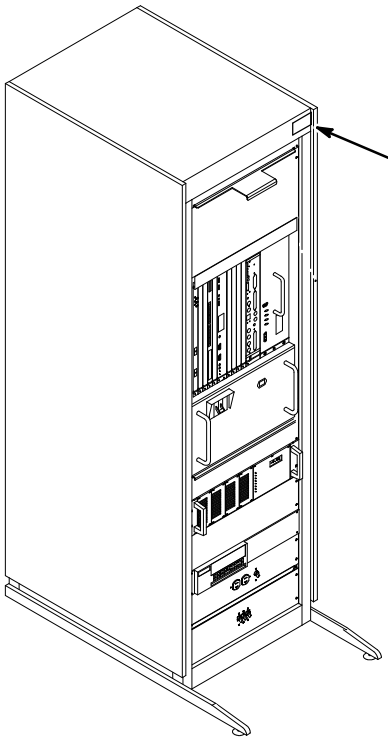
Note:
Locate CERD Test Cable, 2168505 (it is packed with the Operator Workspace cable kit, 2154392). Store it with other test cables or in the System Cabinet.



1. Connect Run 037 GND cable to ground stud.
2. Connect Run 030 cable plug to “J1”. Be sure to push and turn plug for secure connection.
3. Perform Ground Resistance Checks before connecting remaining cabinet cables.
4. Connect remaining cabinet cables as marked.

Note:
If needed, refer to Overview: Section 2 - System Cables, for Cable Map an Run descriptions and designator information located at end of each cable.

- INSTALL INSITE “SYSTEMS” CABINET MAGNET



1. From the OpenSpeed Insite Kit (46- 301708G5), locate the ”Systems” cabinet magnet (46- 320095P5) and attach to front of cabinet as shown.

TABLE OF CONTENTS

1. PREPARATION

1-1 Overview

This Document describes how to connect the ground cable of Patient Cooling Compressor.

1-2 GND CABLE With SCREW Kit (2289497)

Item	Description	Part Number	Qty.
1.	CABLE ASSY	288584	1
2.	SCREW	N9510ZM	1
3.	NUT	N9501BM	1
4.	WASHER	N9501WM	2
5.	PROTECTOR	U0508AC	1
6.	LABEL	U0022BN	1

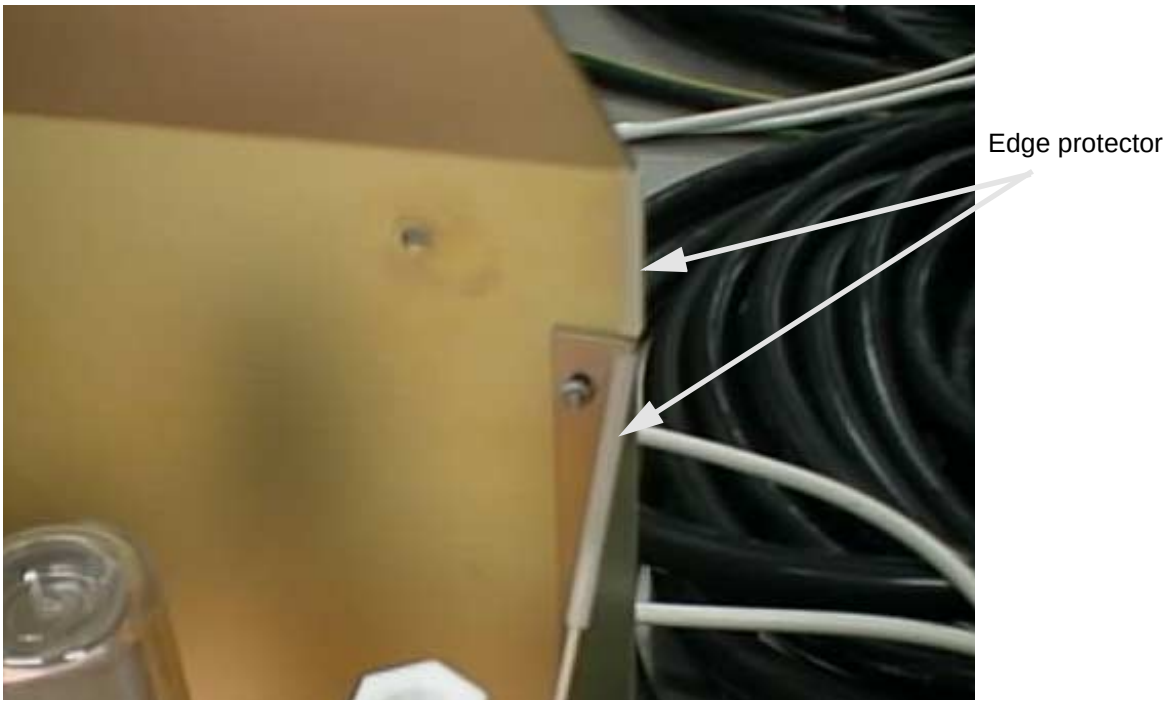
2. GROUND CABLE CONNECTION

1. Verify that the patient cooling is set on the floor and the power is OFF.

PATIENT COOLING MODULE
ILLUSTRATION 1

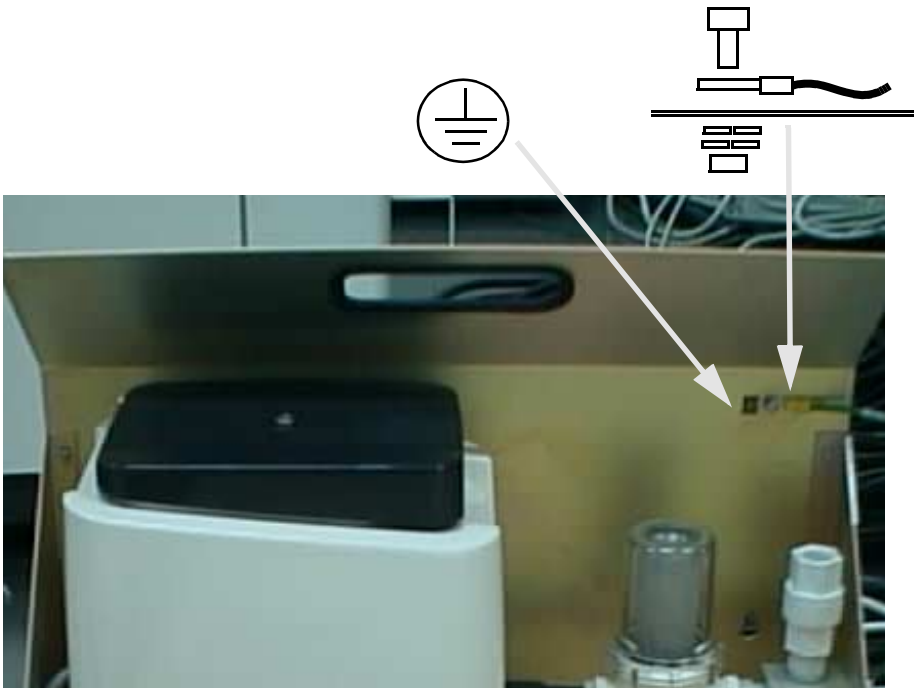
2. GROUND CABLE CONNECTION (CONTINUED)

2. Install edge protector as illustration below.



EDGE PROTECTOR
ILLUSTRATION 2

3. Install ground cable to the rear panel.
4. Attach the Ground label.



GROUND CABLE
ILLUSTRATION 3

Revision History

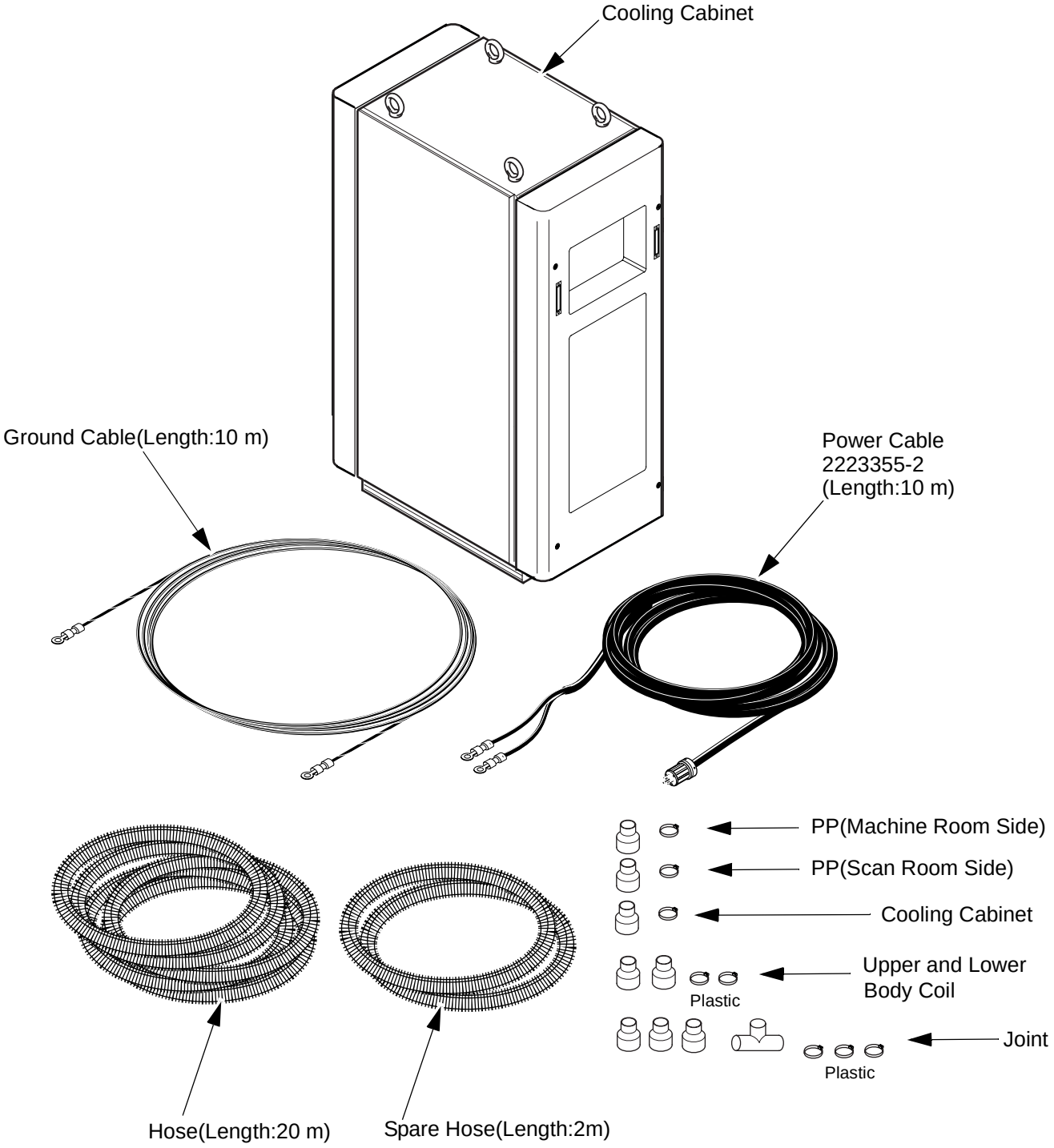
Rev	Date	Author	Primary Reasons For Change
0	Mar. 23, 2001	Y. Masumo	Initial Release

COOLING CABINET INSTALLATION

TABLE OF CONTENTS

1. Preparation

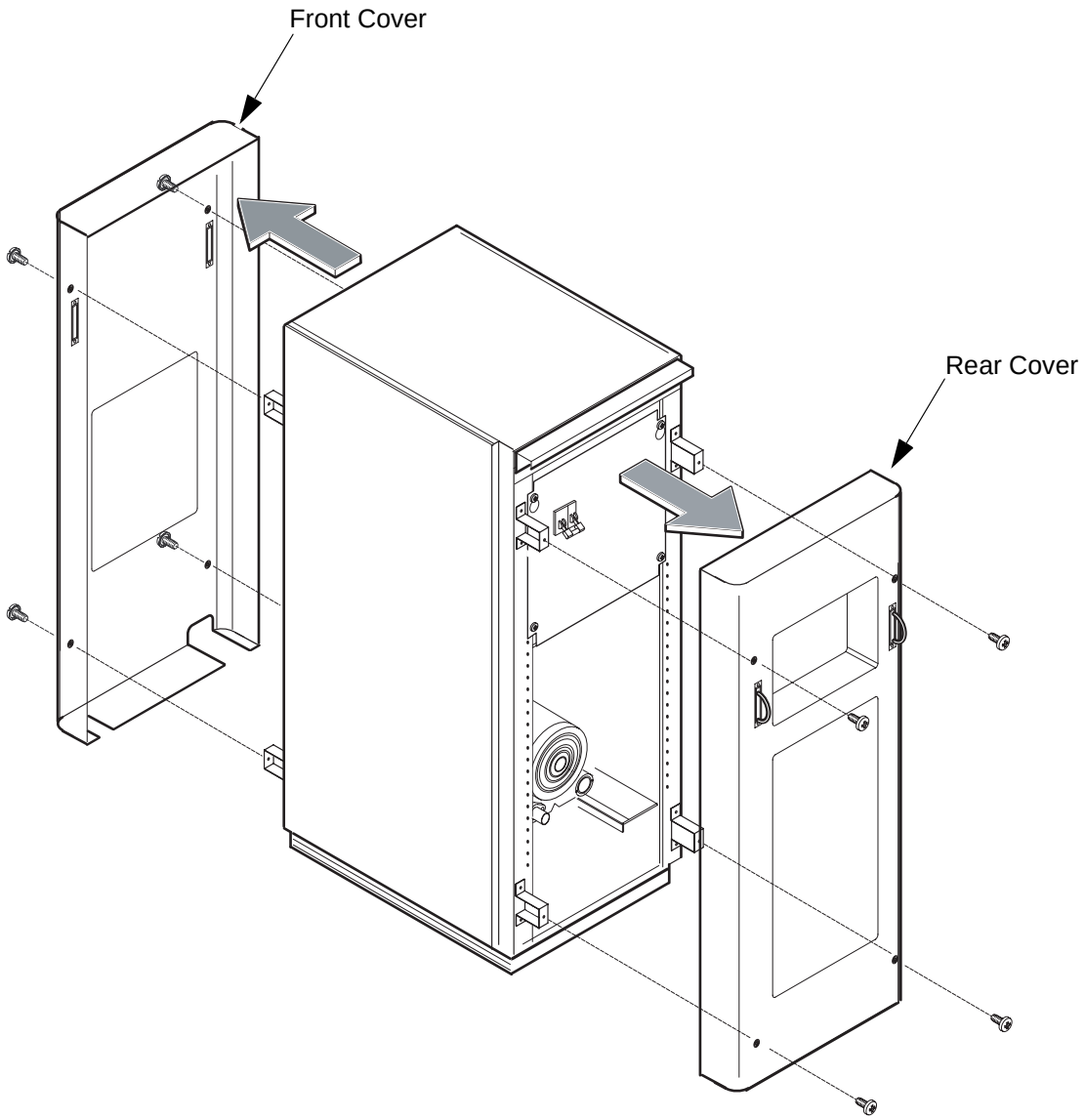
1. Verify that the following parts are shipped before starting the cooling cabinet installation.



COOLING CABINET PARTS CHECK BEFORE STARTING THE INSTALLATION
ILLUSTRATION 1

2. Front and Rear Cover Removal

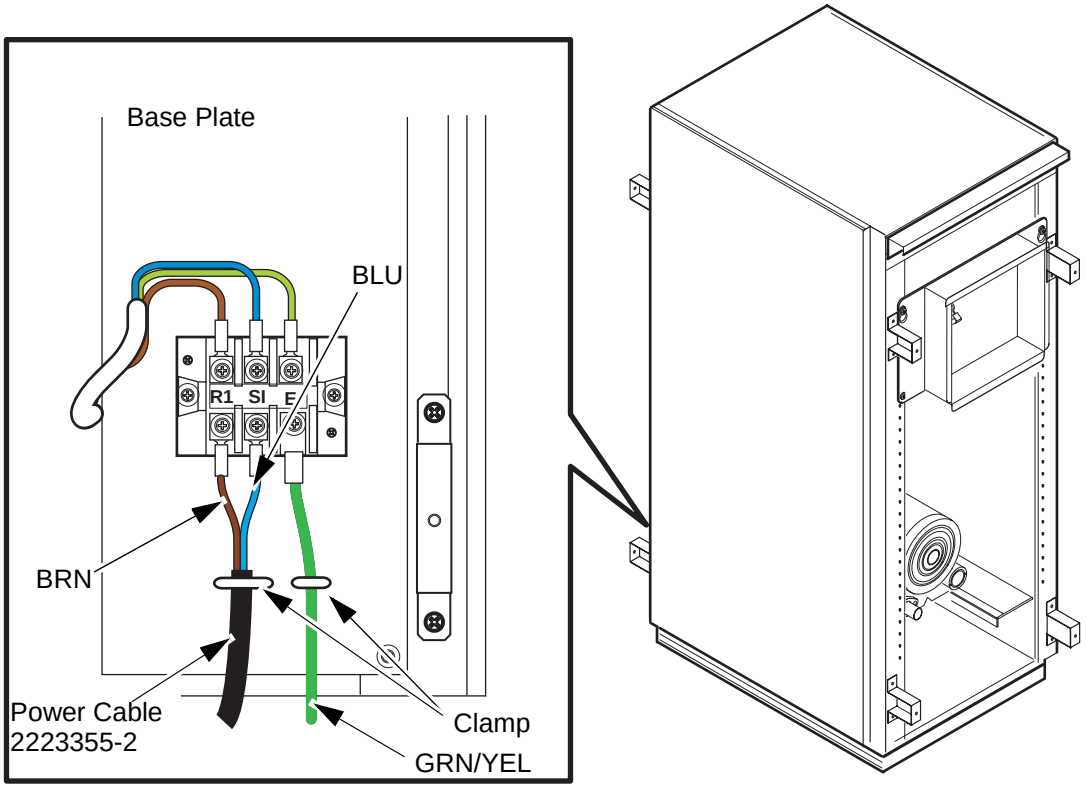
1. Remove the front and rear cover by loosening 4 screws for each side.



FRONT AND REAR COVER REMOVAL
ILLUSTRATION 2

3. Cables Connection

1. Connect the each cables to rear terminal as shown.
2. Fix the each cables to base plate with clamps.

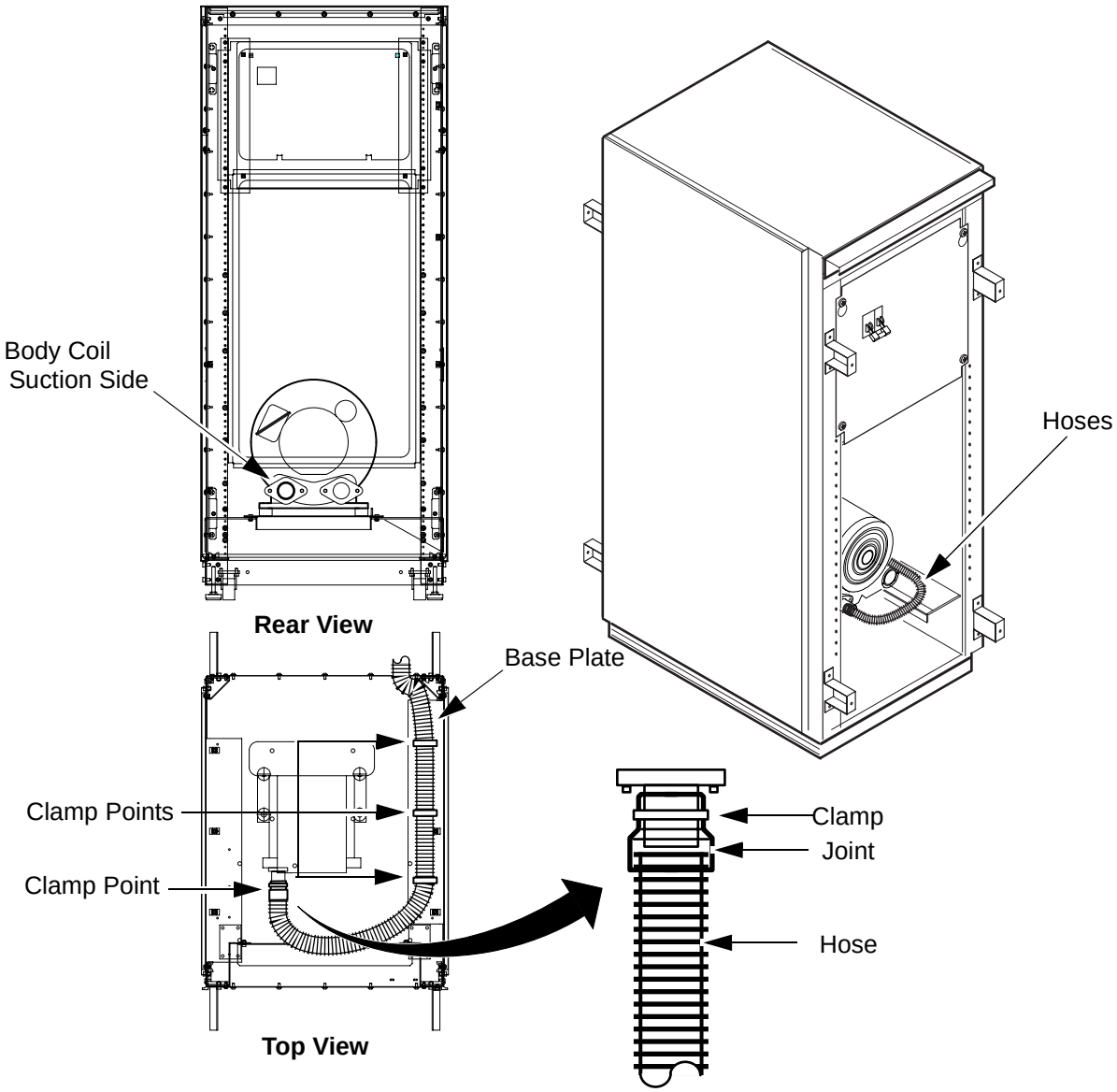


View from rear side

CABLES CONNECTION
ILLUSTRATION 3

4. Hoses Connection

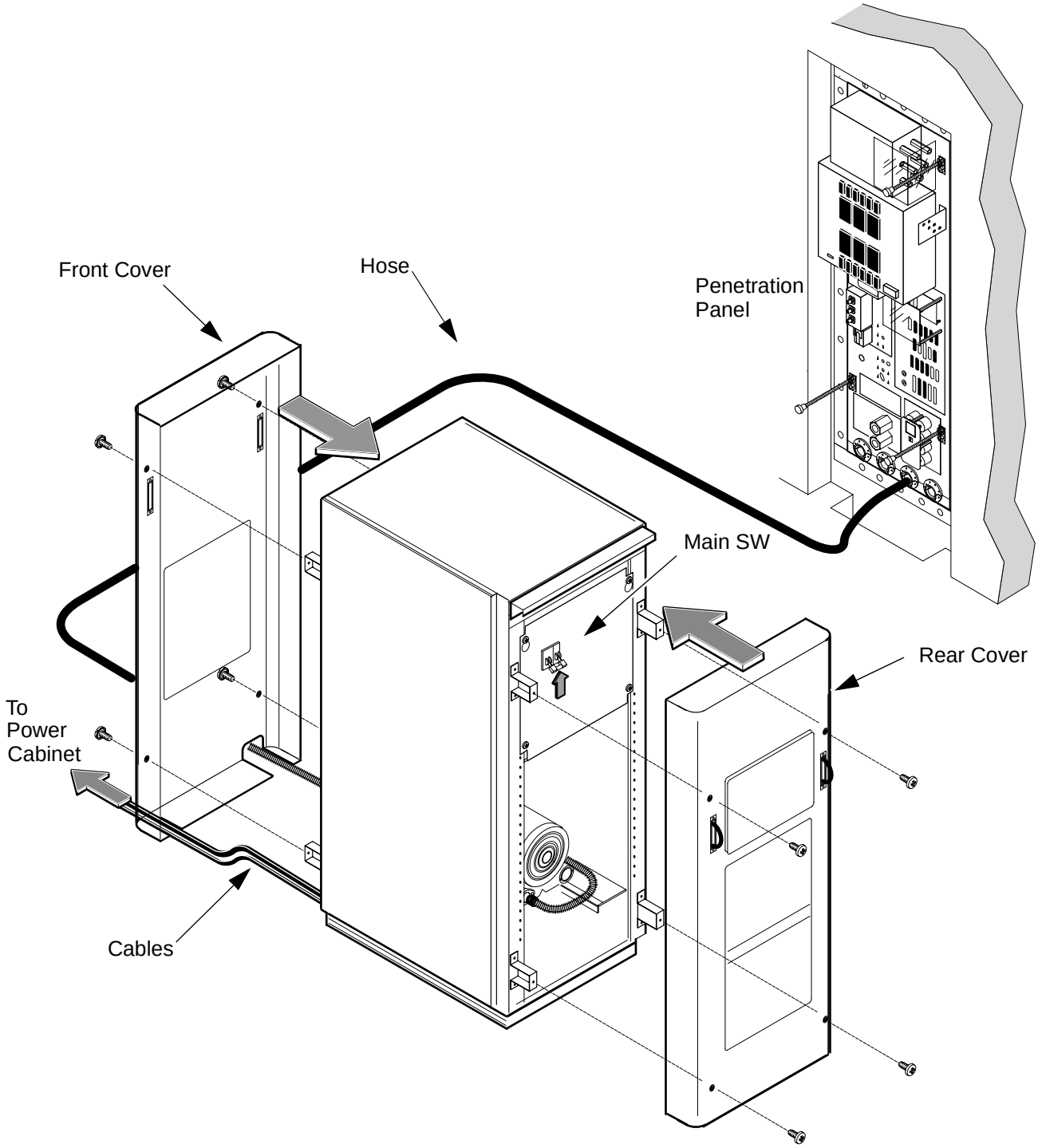
1. Attach the joint to hose end for each side.
2. Install the hose to motor suction side with clamp for each side.
3. Route the hose by refering to the top view.
4. Fix the hose to base plate with 3 clamps.



HOSES CONNECTION
ILLUSTRATION 4

5. Restoration

1. Check that the main switches is power ON.
2. Install the front and rear cover by tightening 4 screws for each side.
3. Connect the hose to penetration panel.



RESTORATION
ILLUSTRATION 5

Revision History

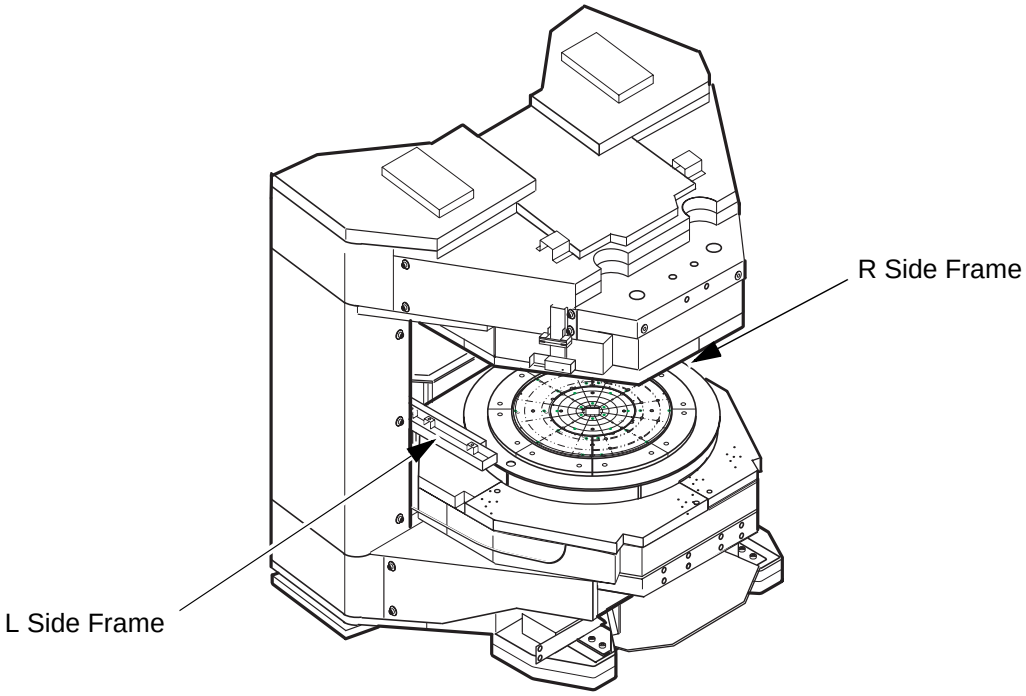
Rev	Date	Author	Primary Reasons For Change
0	Sep 02, 2002	Y.Masumo	Initial Release

FRONT FRAME INSTALLATION

TABLE OF CONTENTS

1. Preparation

1. Verify that the following frames are already installed before starting the frame installation.



FRAMES BEFORE STARTING THE INSTALLATION
ILLUSTRATION 1

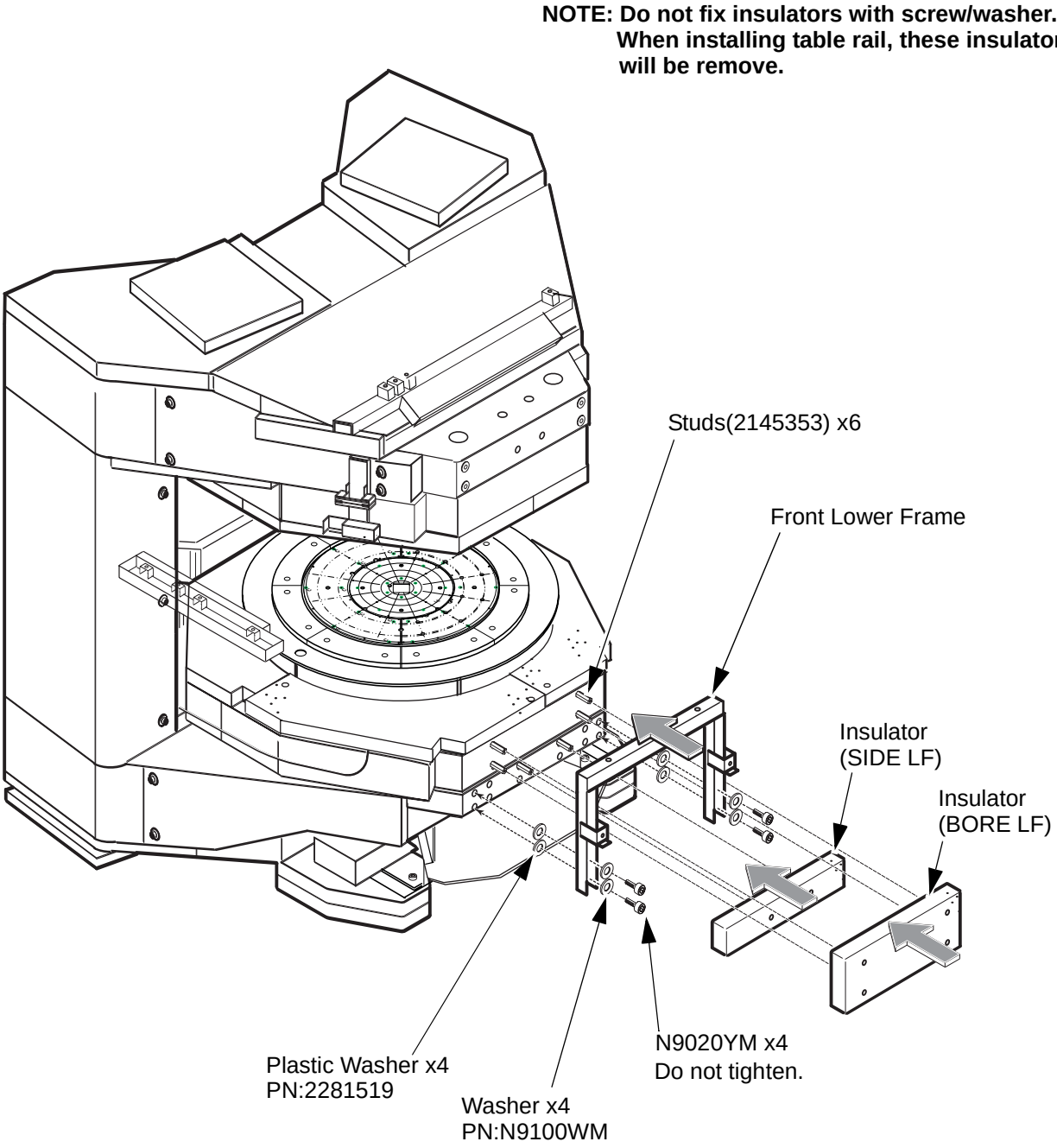
NOTE:
The Magnet heater and sensor cables must be routed around the outside of the magnet Insulator. Do not bury the magnet heater and sensor cables into the insulator.

Required Tool:

Items	Qty	Type/Parts Number	Part
100 cm Ruler	1	Non ferrous	Front Upper Frame Adjustment
15 cm Ruler	1	Non ferrous	Front Upper Frame Adjustment
Level Gauge	1	Non ferrous	Front Deck Plate Adjustment
Metric Allen Wrench Set	1	Non ferrous	Frame/Insulator Installation

2. Front Lower Frame Installation

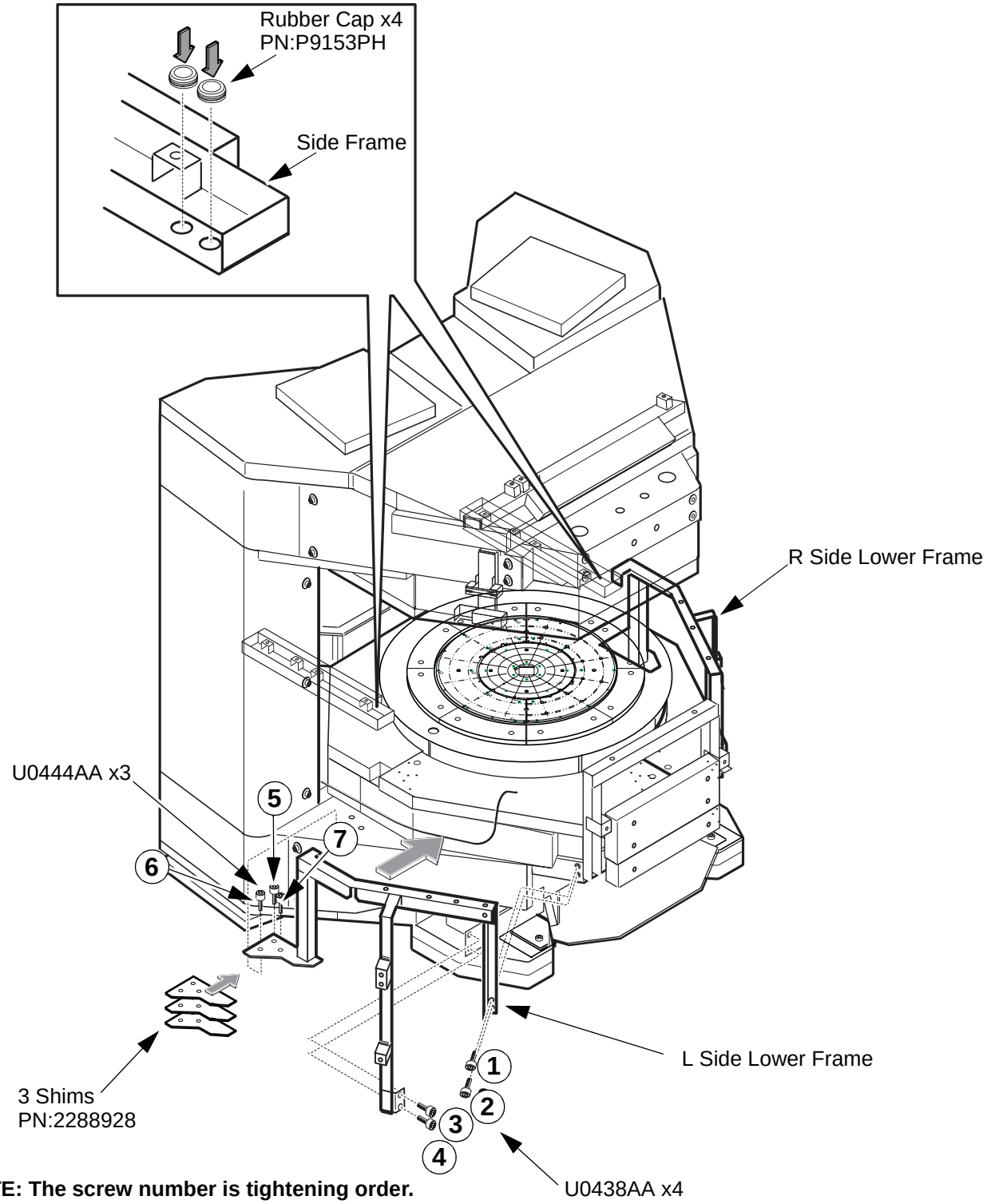
1. Install Front Lower frame with 4 plastic washers(2281519), 4 washers(N9100WM) and 4 screws(N9020YM: M10).Do not tighten.
2. Install 6 Studs(2145353) and Front Insulators(BORE LF and SIDE FL) to the magnet front lower side.Do not fix insulator with screw/washer.When installing table rail, these insulators will be remove.



FRONT LOWER FRAME INSTALLATION
ILLUSTRATION 2

3. Side Lower Frame Installation

1. Install R and L Side Lower Frames to magnet with 3 shims and 7 screws(U0438AAx4 and U0444AAx3) for each frames.
2. Install 4 Caps to holes of R and L side frames inside.



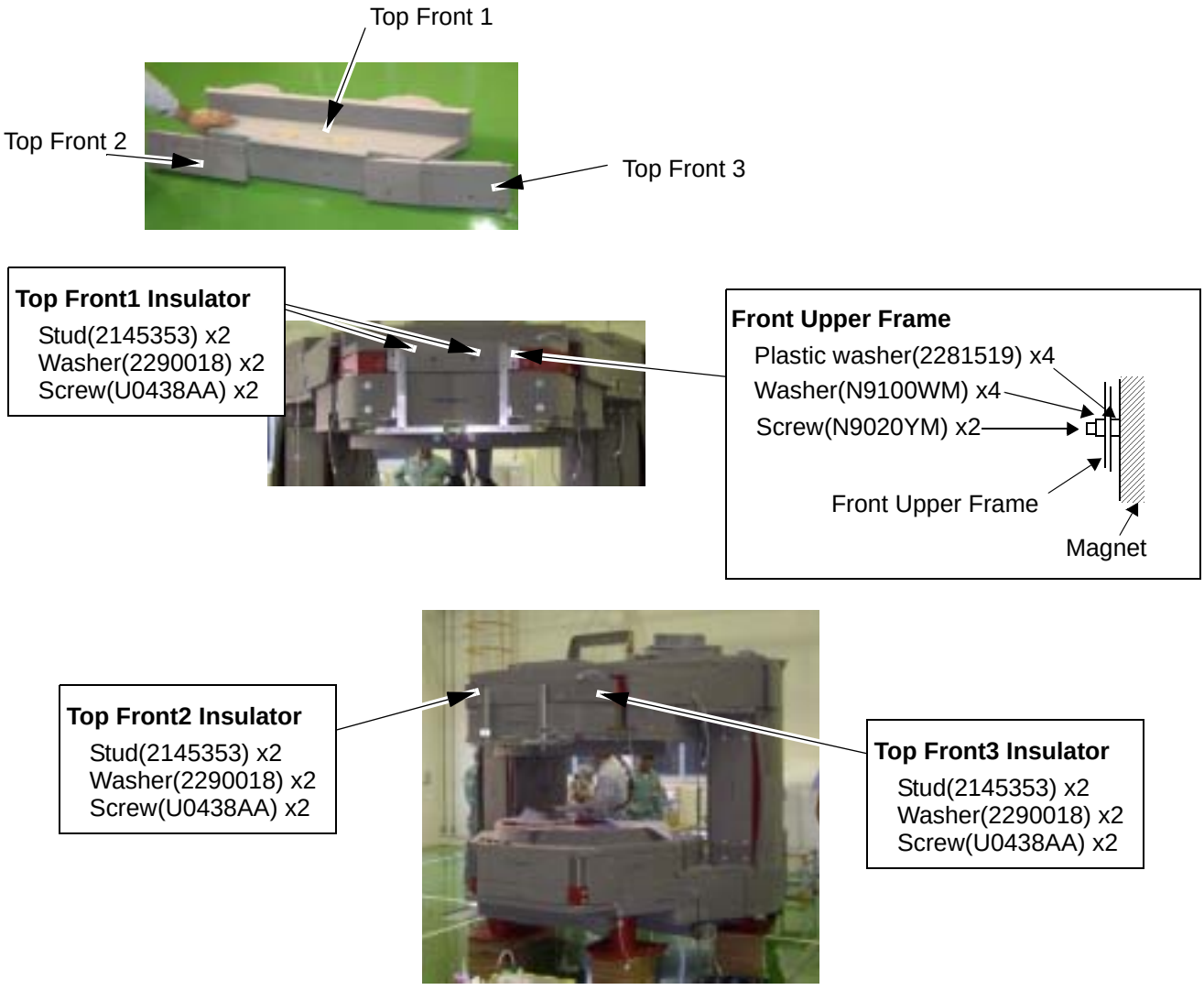
NOTE: The screw number is tightening order.

SIDE LOWER FRAME INSTALLATION
ILLUSTRATION 3

4. Front Upper Frame Installation

1. Install Insulator(Top Front1) to the magnet with 2 studs(2145353) and 2 screws(U0438AA) / washers(2290018).
2. Install Front Upper Frame to the magnet with plastic washers(2281519:large x4) and 4 screws(N9020YM x4 with washers N9100WM x4). This is temporary tightening.
3. Install Insulator(Top Front2) to the magnet with 2 studs(2145353) and 2 screws(U0438AA) / washers(2290018).
4. Install Insulator(Top Front3) to the magnet with 2 studs(2145353) and 2 screws(U0438AA) / washers(2290018).

NOTE: After installing deck plates, adjust front upper frame according to procedure in page 9.

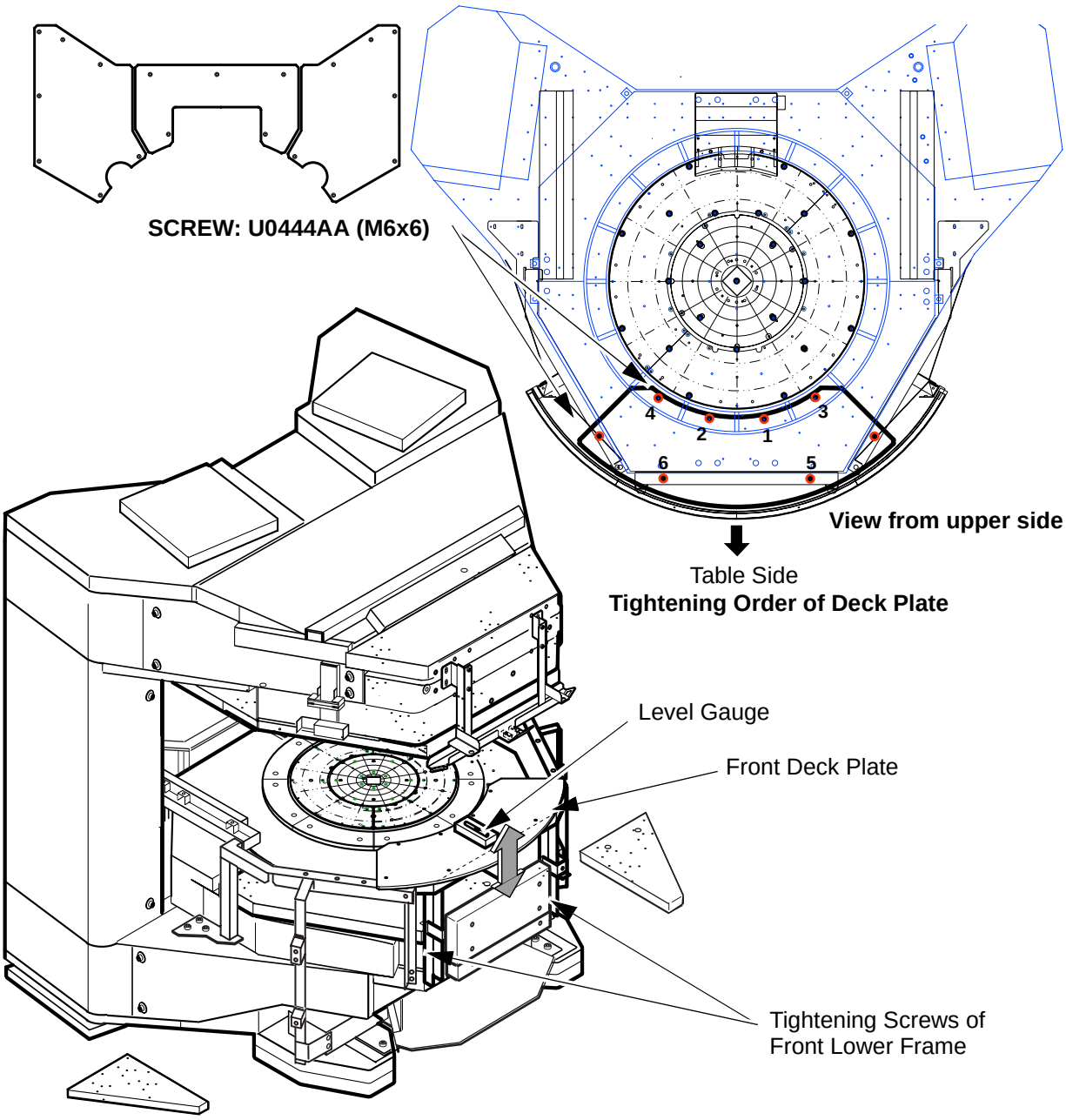


FRONT UPPER FRAME INSTALLATION
ILLUSTRATION 4

5. Magnet Deck Plates(Front Deck Plate) Installation (1 of 3)

1. Set Front Deck Plate onto the front lower frame.
2. Install the No.1,2,3,4,5 and 6 screws(temporary tightening-Inside screw:U0444AAx6) of front deck plate.Do not tighten.
3. Tighten the 6 screws according to tightening order of deck plate.
4. Adjust height of front deck plate become to horizontal surface using level gauge.
5. Tighten the 4 screws of front lower frame.

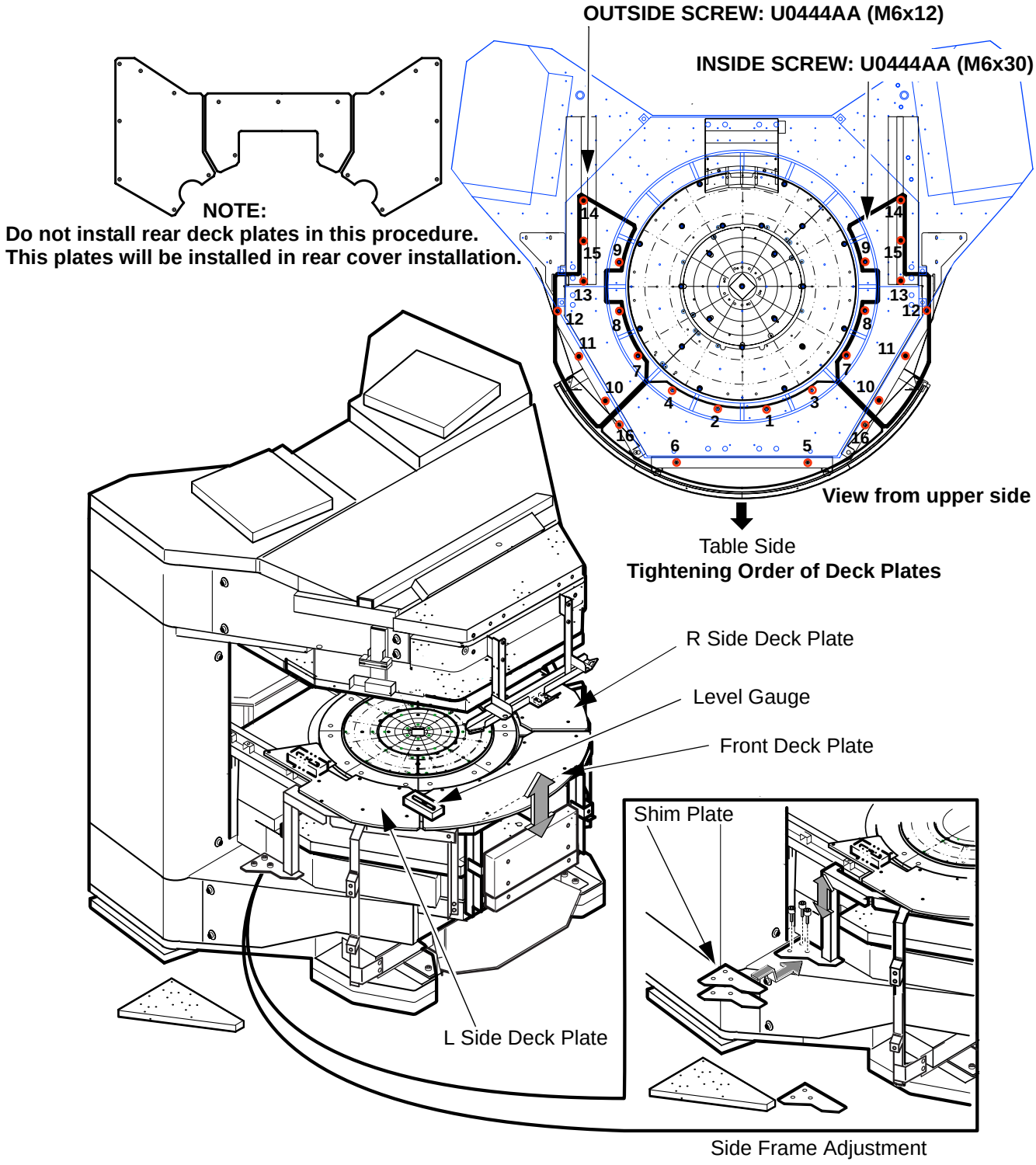
NOTE:
Do not install rear deck plates in this procedure.
This plates will be installed in rear cover installation.



MAGNET FRONT DECK PLATES INSTALLATION
ILLUSTRATION 5

5. Magnet Deck Plates(Front Side Deck Plates) Installation (2 of 3)

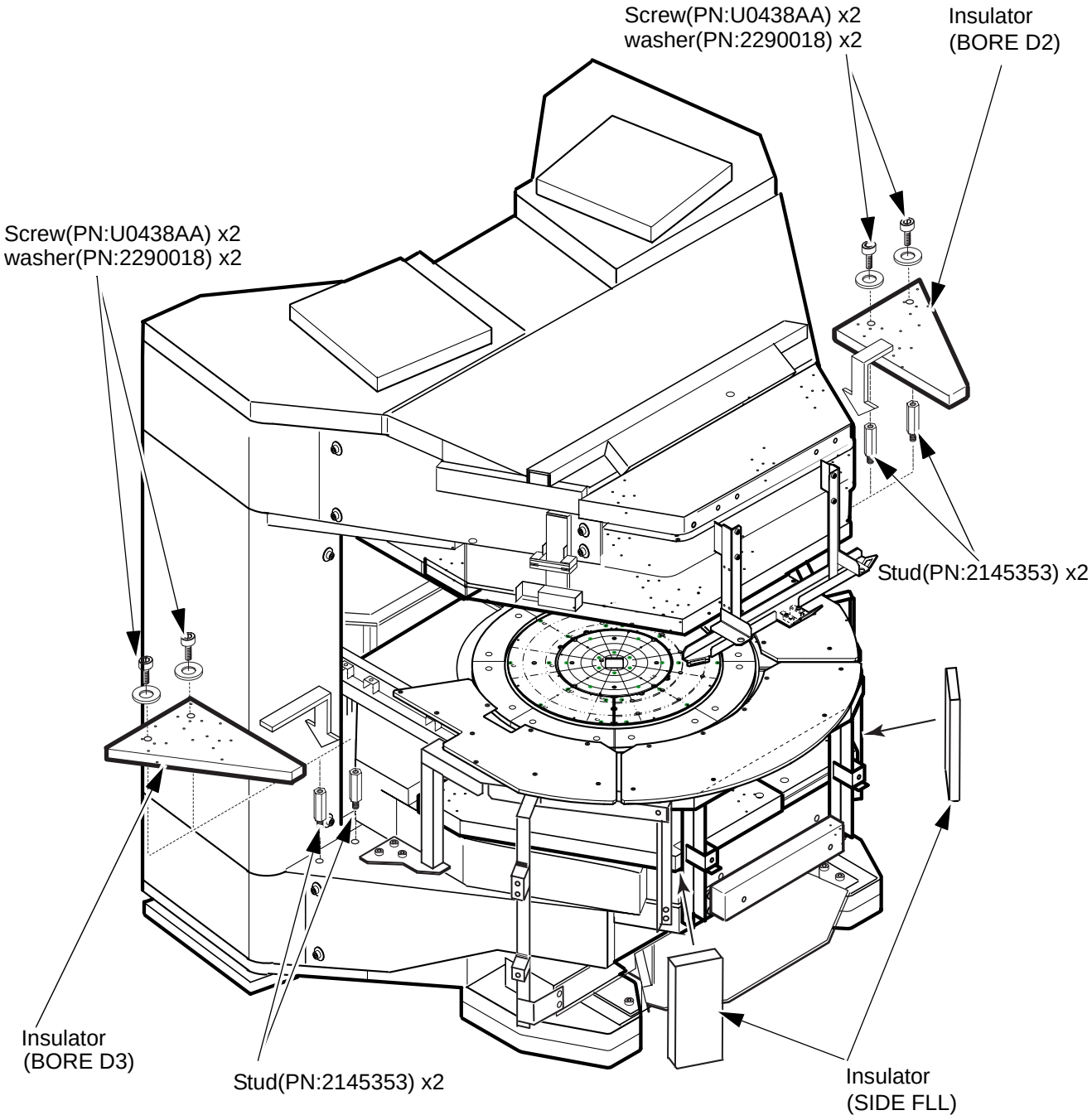
1. Install R and L Side Deck Plates onto the side lower frames with 36 screws.Do not tighten.
2. Tighten 36 screws of R and L side deck plates according to tightening order.
3. Tighten 2 screws (No.16) of front deck plate.
4. Check that the height of side deck plates are horizontal surface using level gauge.
5. Check that the all deck plates are horizontal plane.If not,readjust the front and side frames.



MAGNET FRONT DECK PLATES INSTALLATION(CONTINUED)
ILLUSTRATION 6

5. Magnet Deck Plates(Front Side Deck Plates) Installation (3 of 3)

6. Install BORE D3 and D2 Insulators to the magnet with 2 studs(PN:2145353) and 2 washers(PN:2290018)/screws(U0438AA) for each side.
7. Install 2 Insulators(SIDE FLL x2) to magnet lower front side with tape.
8. After installed front deck plates, perform front upper frame adjustment. (go to next page.)



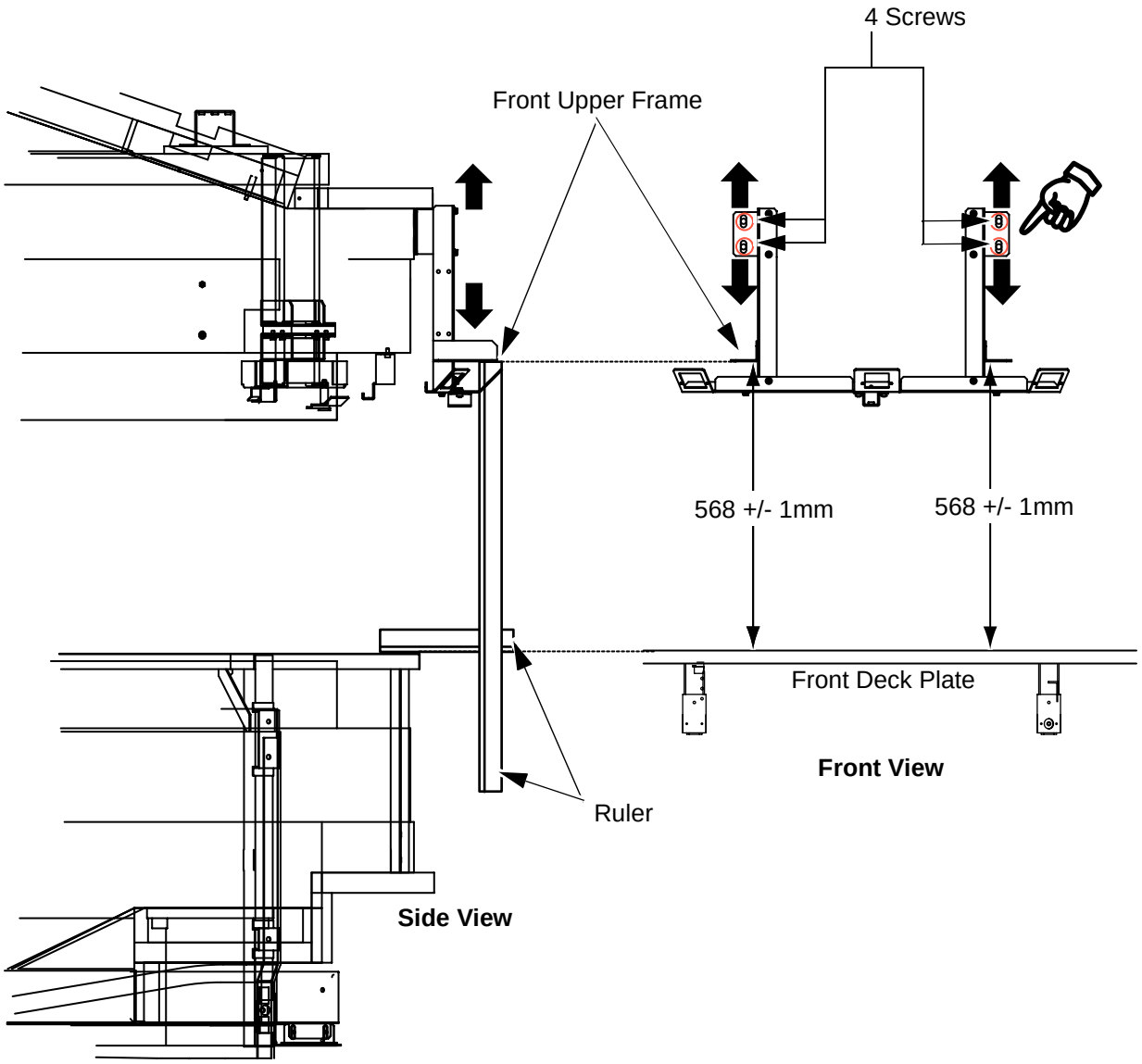
MAGNET FRONT DECK PLATES INSTALLATION(CONTINUED)
ILLUSTRATION 7

6. Front Upper Frame Adjustment

NOTE: This adjustment needs two persons.

1. Loosen 4 screws fixing front upper frame to the magnet upper side.
2. Adjust front upper frame position become to dimension of 568 +/-1 mm from front deck plate surface to front upper frame at two points.
3. Tighten 4 screws.
4. Check that the dimension is 568 +/-1 mm.

NOTE: If this adjustment is not properly, front cover can not be installed to frames.



FRONT UPPER FRAME ADJUSTMENT
ILLUSTRATION 8

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Nov 26, 2002	Y. Masumo	Initial Release for YD Magnet

BODY COIL INSTALLATION

TABLE OF CONTENTS

WARNING!

FERROUS MATERIAL HAZARD! THE CRIMP TOOL, AND OTHER TOOLS AND PARTS REQUIRED FOR THIS INSTALLATION CONTAIN FERROUS MATERIAL AND WILL BE STRONGLY ATTRACTED TO MAGNET AND MAY BECOME DANGEROUS PROJECTILES. IF MAGNET IS AT FULL FIELD – KEEP ALL FERROUS TOOLS AT LEAST 10 FEET AWAY FROM THE MAG-NET.

1. Preparation

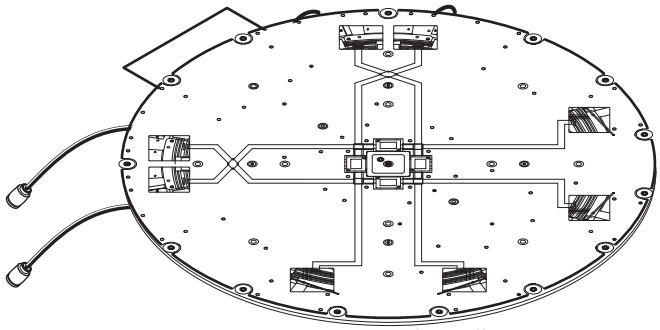
1. Verify that the following parts are already installed before starting the body coil installation.

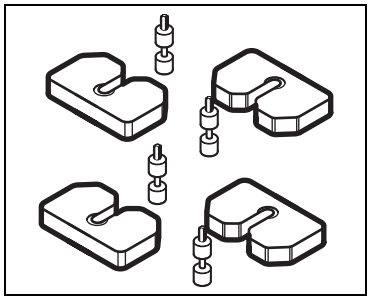
WARNING!

The Body Coil is 20 kg in weight, be very carefully in installation, and do not damage the upper and lower body coil.

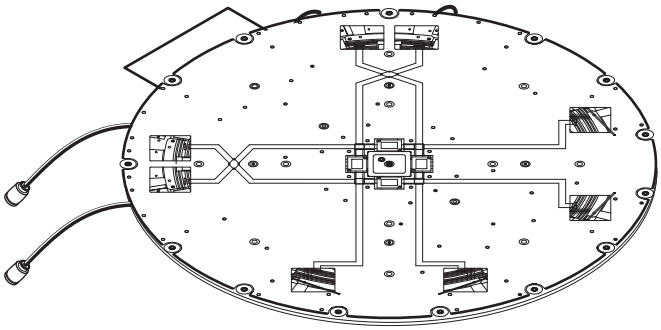
CAUTION

•At least two people are required to install the Upper and lower Body Coil.
•Do not stand body coil to wall etc.

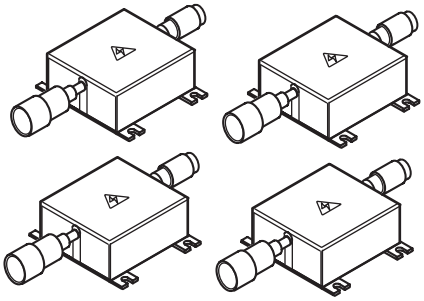

Upper Body Coil

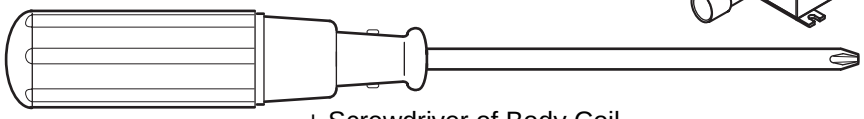

Upper Body Coil Install Tool


Center Flange(Upper)


Lower Body Coil


Center Flange(Lower)


Filter Box


+ Screwdriver of Body Coil

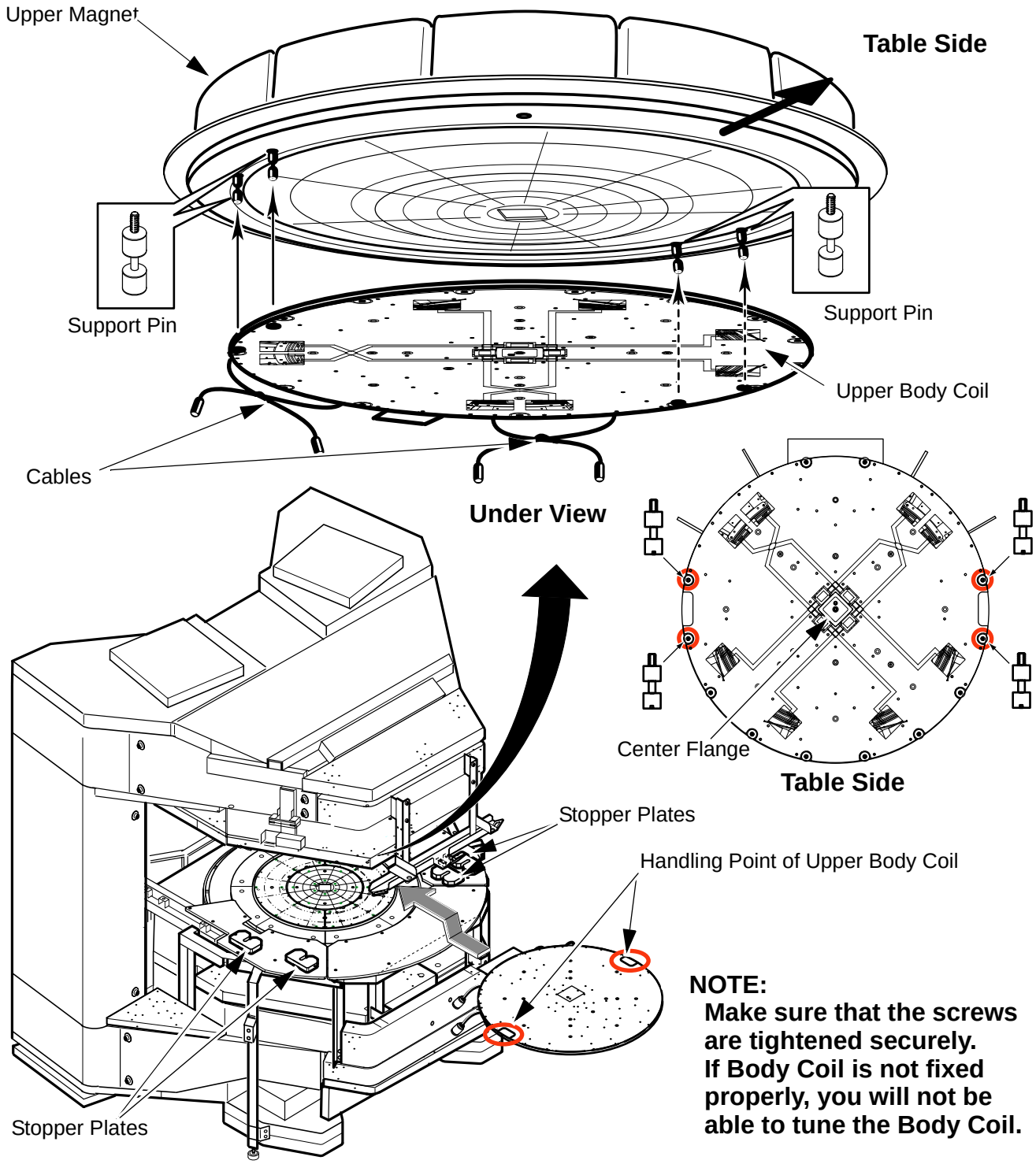
PREPARATION
ILLUSTRATION 1

Required Tool:

Items	Qty	Type/Parts Number	Part
Phillips Screwdriver (+ Type)	1	Non ferrous	Body Coil(Use attached screwdriver)
Phillips Screwdriver (- Type)	1	Non ferrous	Install Tool

2. Upper Body Coil Installation

1. Tighten 4 Support Pins to upper magnet side as illustration.
2. Tie the cables of body coil as illustration.
3. Put 4 Stopper Plates onto side deck plates.
4. Install Upper Body Coil to support pins of upper magnet.



NOTE:
Make sure that the screws are tightened securely. If Body Coil is not fixed properly, you will not be able to tune the Body Coil.

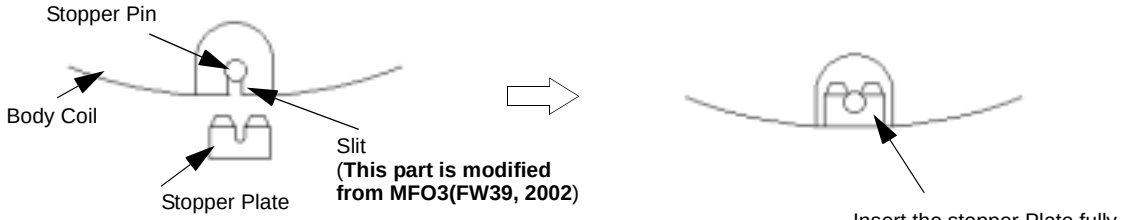
UPPER BODY COIL INSTALLATION
ILLUSTRATION 2

2. Upper Body Coil Installation(Continued)

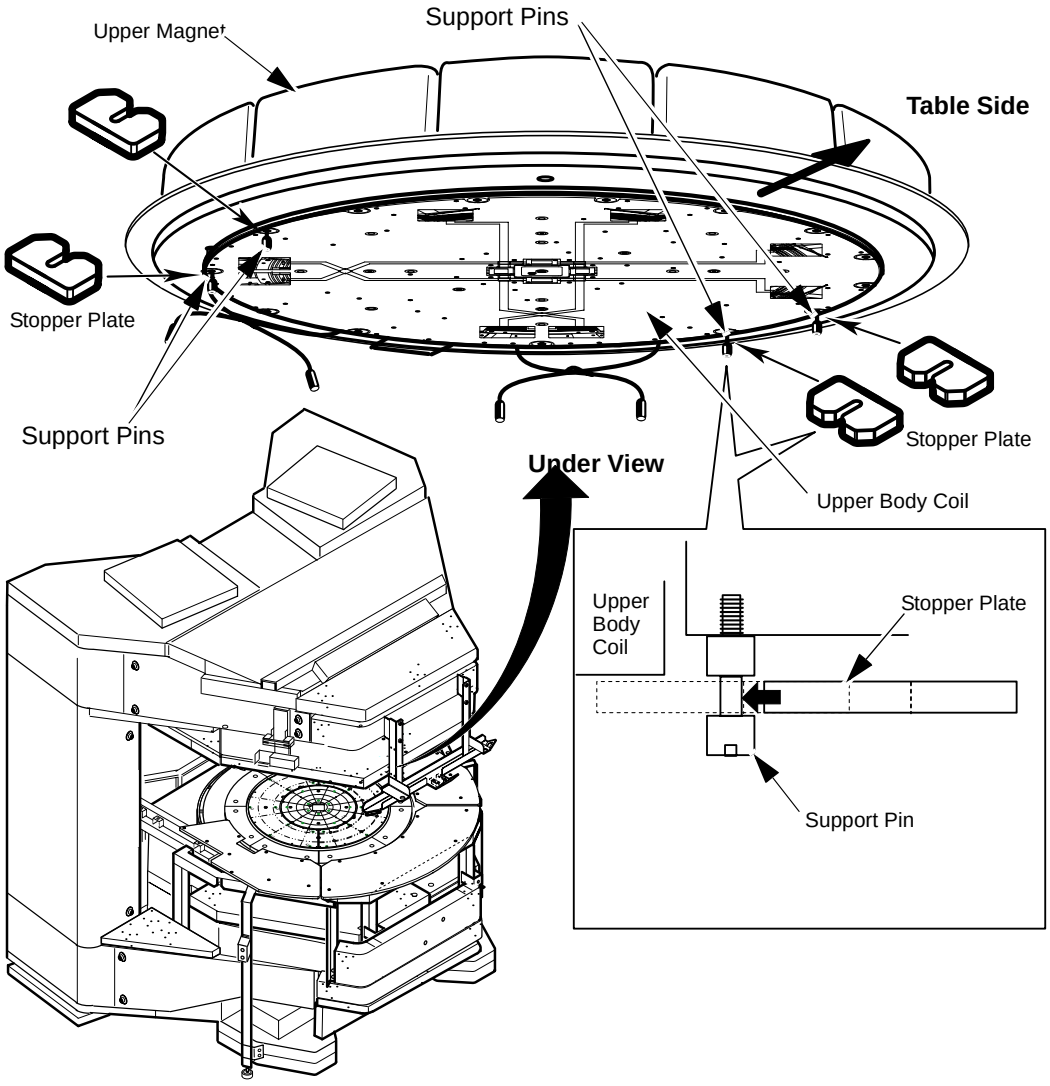
5. Insert 4 stopper plates to support pins holding upper body coil

CAUTION

The design of Body Coil is changed from MFO3(FW40, 2002).
Because of the change, it is very important to insert the stopper plate fully so that the Body Coil won't be unhooked.



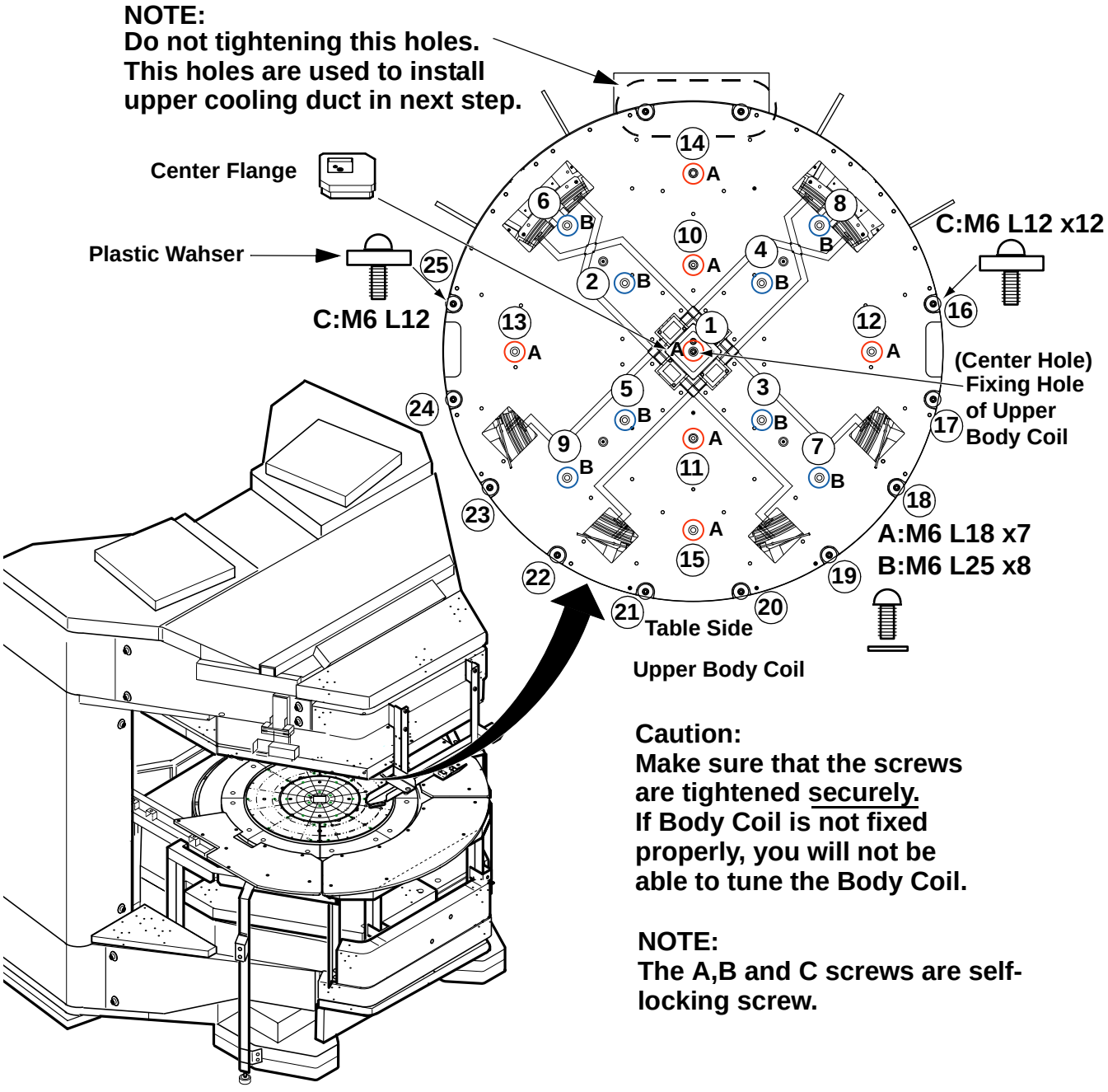
STOPPER PLATE INSTALLATION
ILLUSTRATION 3



UPPER BODY COIL INSTALLATION(CONTINUED)
ILLUSTRATION 4

2. Upper Body Coil Installation(Continued)

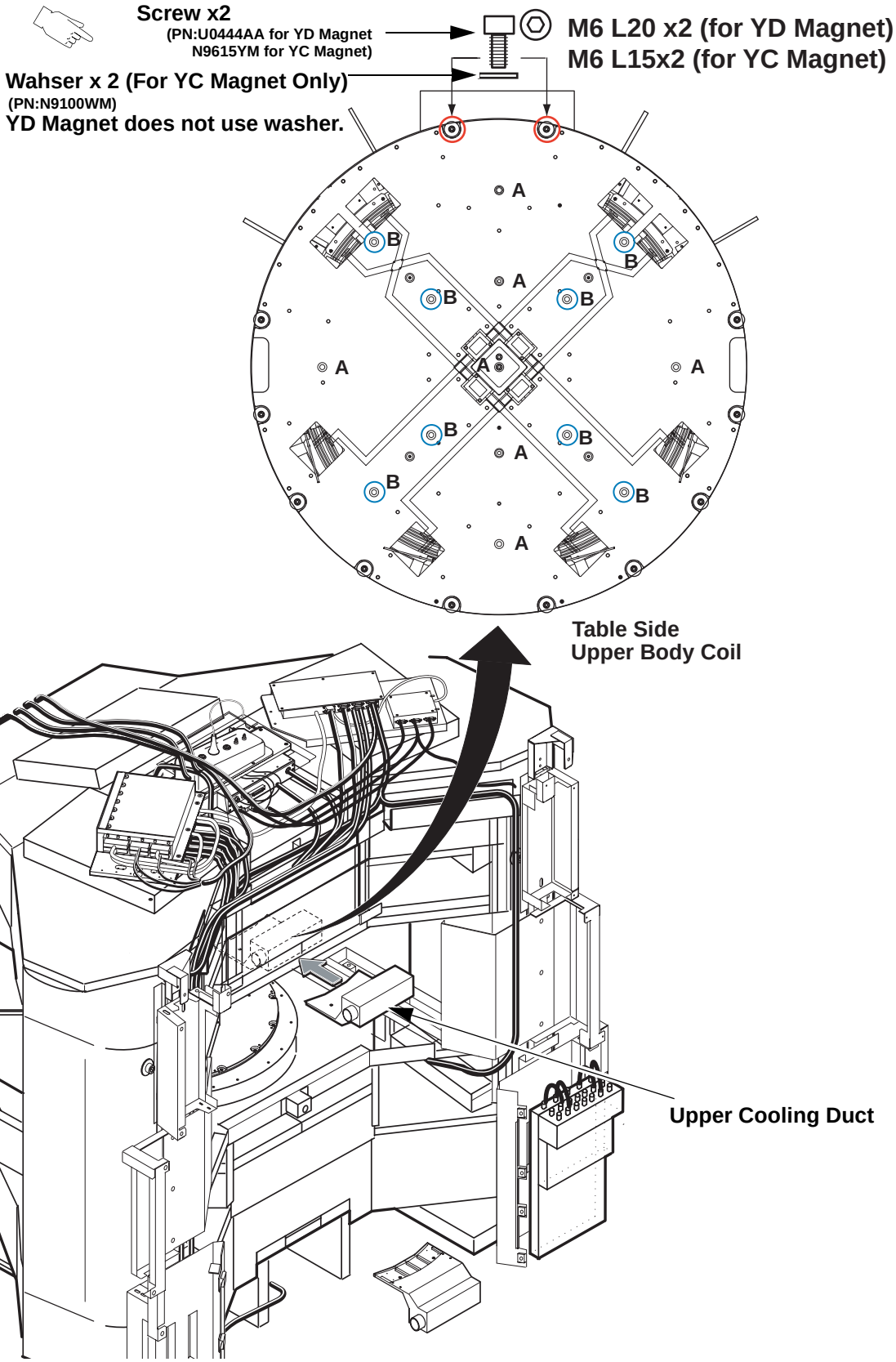
6. Set Center Flange to center of upper body coil, tighten a screw/washer(A:M6L18) to center hole of upper body coil holding by hand.Do not tighten.
7. Tighten 8 washers/screws (B:M6L25) to B screw holes of body coil.Do not tighten.
8. Tighten 6 washers/screws (A:M6L18) to A screw holes of body coil.Do not tighten.
9. Tighten 6 plastic washers/screws(C:M6L12) to C screw holes of body coil.Do not tighten.
10. Tighten center screw holding upper body coil to upper side.
11. Tighten A and B screws strongly according to tightening order as illustration.
12. Remove stopper plates holding to upper side and remove support pins from upper coil.
13. Tighten 4 plastic washers/screws(C:M6L12) to C screw holes of body coil strongly.



UPPER BODY COIL INSTALLATION(CONTINUED)
ILLUSTRATION 5

2. Upper Body Coil Installation(Continued)

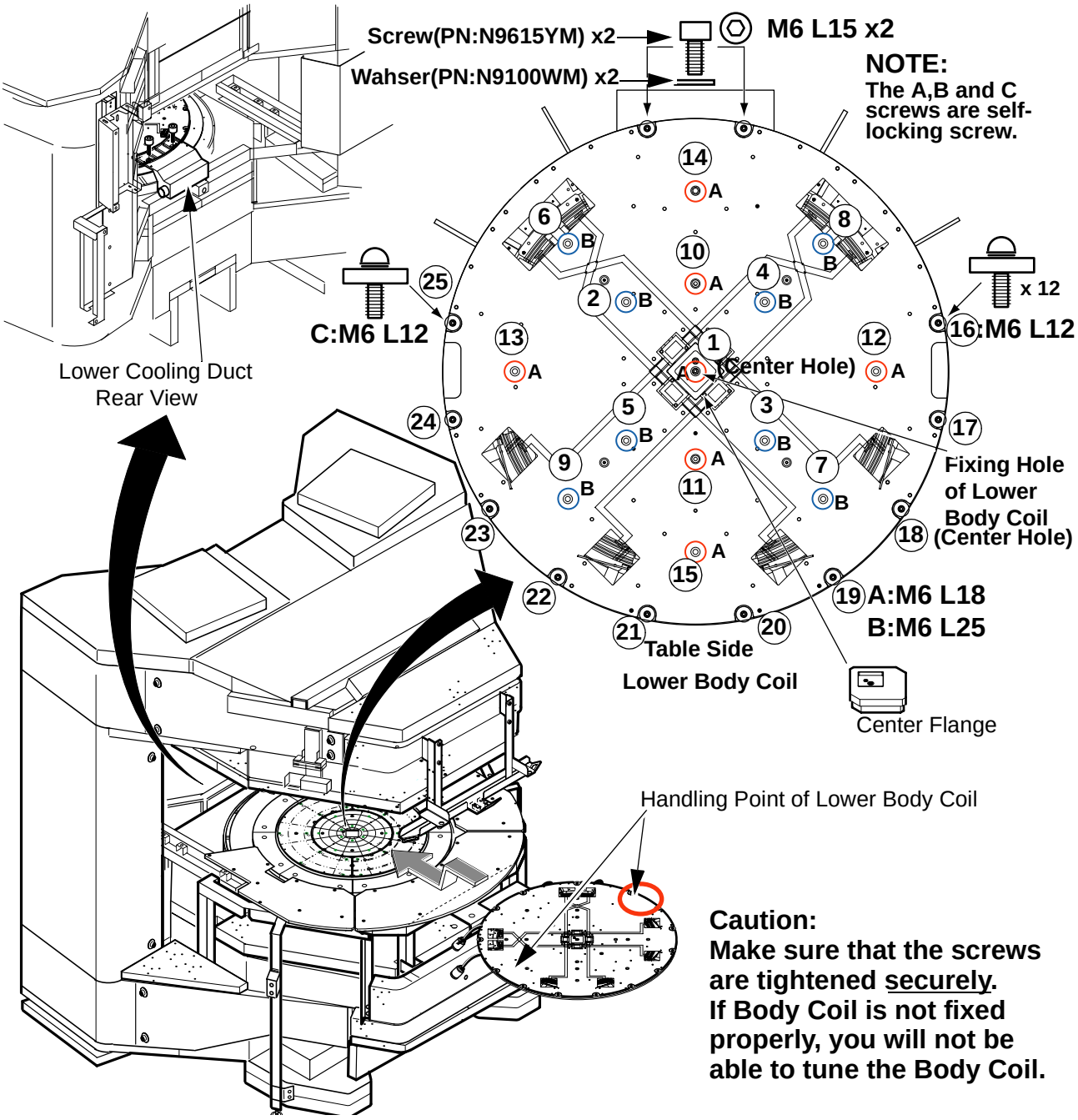
14.Install Upper Cooling Duct to rear side of upper body coil with 2 screws/washers.



UPPER BODY COIL INSTALLATION(CONTINUED)
ILLUSTRATION 6

3. Lower Body Coil Installation

1. Set center flange to center of upper body coil.
2. Put Lower Cooling Duct to rear side of lower magnet.
3. Install Lower Body Coil on the lower magnet, and then install cooling duct to coil rear side.
4. Install a screw (A:M6L18) to center hole of lower body coil.Do not tighten.
5. Install 8 washers/screws (B:M6L25) to B screw holes of body coil.Do not tighten.
6. Install 6 washers/screws (A:M6L18) to A screw holes of body coil.Do not tighten.
7. Install 10 plastic washers/screws(C:M6L12) to C screw holes of body coil.Do not tighten.
8. Tighten center screw strongly.
9. Tighten A and B screws strongly according to tightening order as illustration.
10. Tighten C screws from center to out side strongly



LOWER BODY COIL INSTALLATION
ILLUSTRATION 7

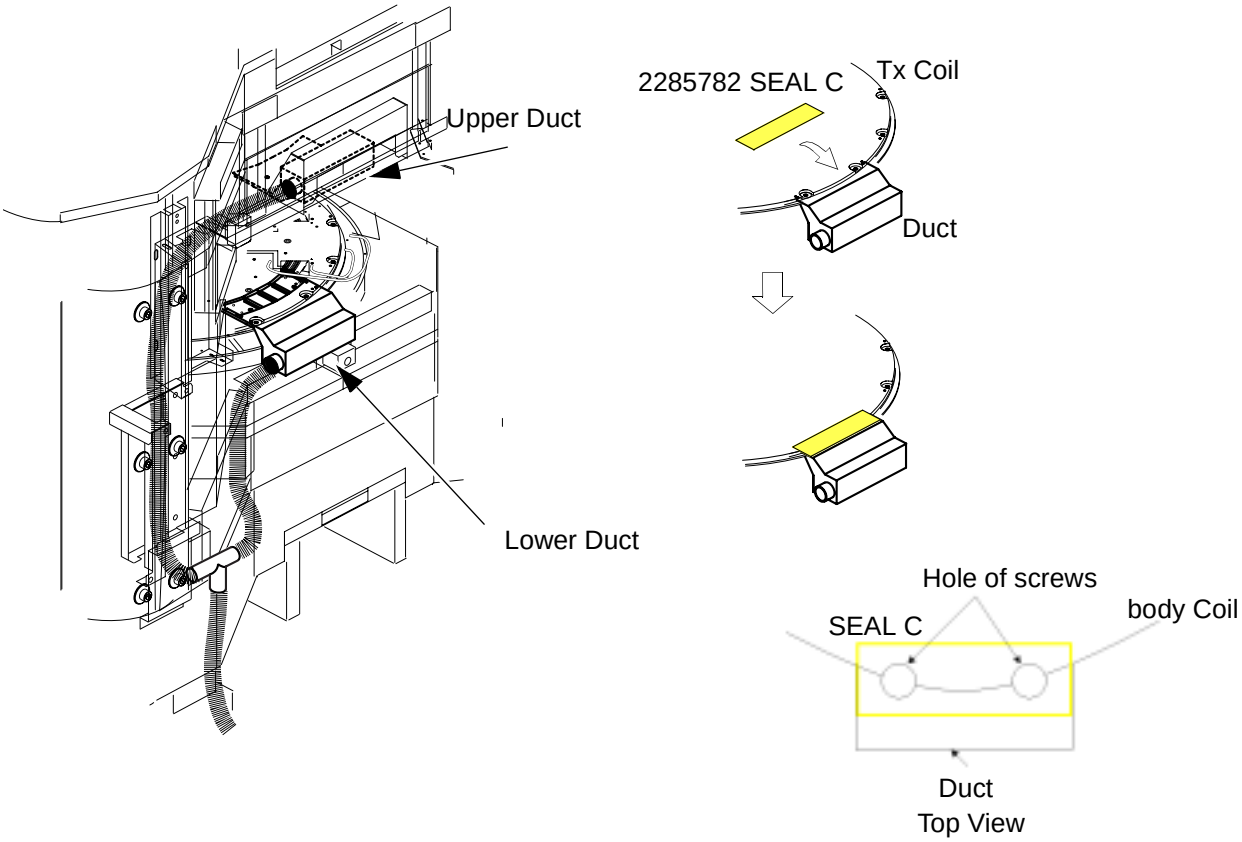
4. Body Coil Seal Attachment:

It is necessary to attach the tape on duct and body coil to avoid the air leakage.

Attach the tape(2285782 SEAL C) between body coil and duct to seal the holes of screws according to the illustration. Perform it for upper and lower duct.

Note

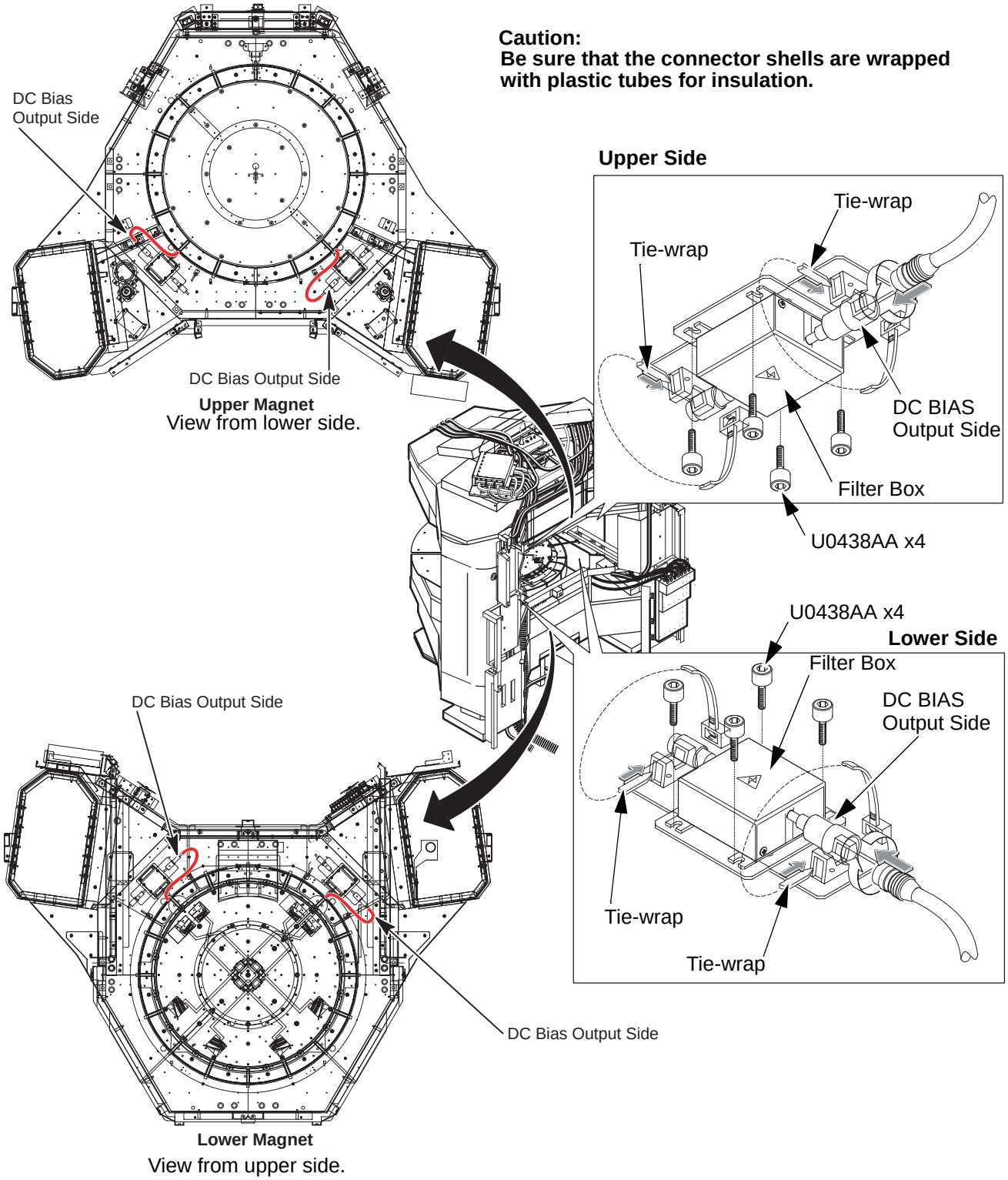
SEAL C(2285782) is included in the Body Coil Kit.
The color of seal is yellow.



DUCT INSTALLATION
ILLUSTRATION 8

5. Filter Box Installation

1. Connect the Cables(Output side) of body coils to 4 filters(Output side).
2. Install the 4 filters to filter BRKT with 4 screws(U0438AA).
3. Fix the filter cables with tie-wraps.



FILTER BOX INSTALLATION
ILLUSTRATION 9

6. DC Bias Cables /RF Cables Wiring

DANGER!!

THE SSM OUTPUTS VERY HIGH VOLTAGE. BE SURE TO TURN THE SSM POWER OFF BEFORE CONNECTING DC BIAS CABLES. HANDLING DC BIAS CABLES WITHOUT TURNING SSM POWER OFF MAY CAUSE SERIOUS INJURY OR DEATH DUE TO ELECTRIC SHOCK.

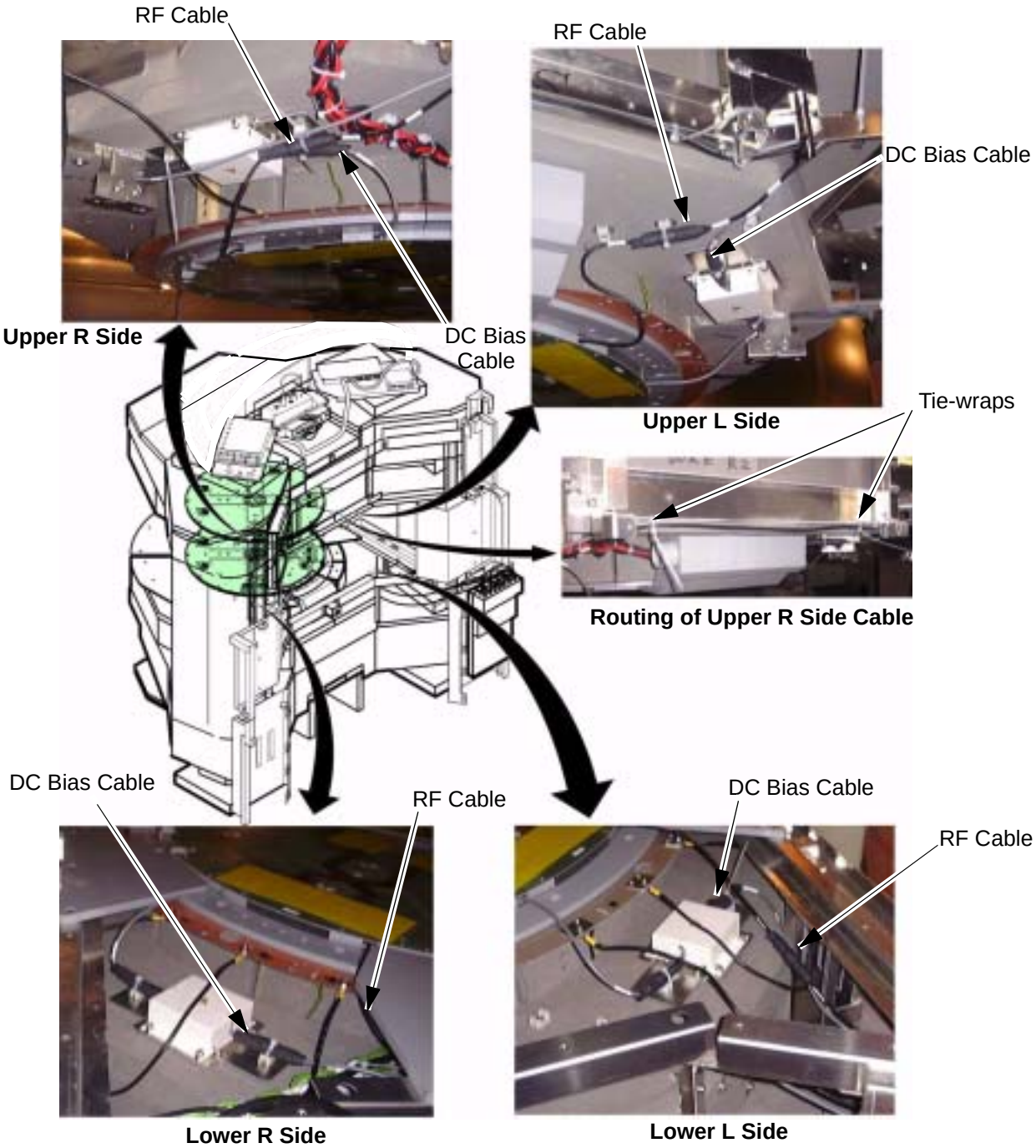
CAUTION

When connecting the DC cables, make sure that connectors DO NOT TOUCH the frame, other connectors, or any other conductive materials.

NOTE:
Before connecting RF cables, perform body coil tuning.
Refer to body coil tuning.

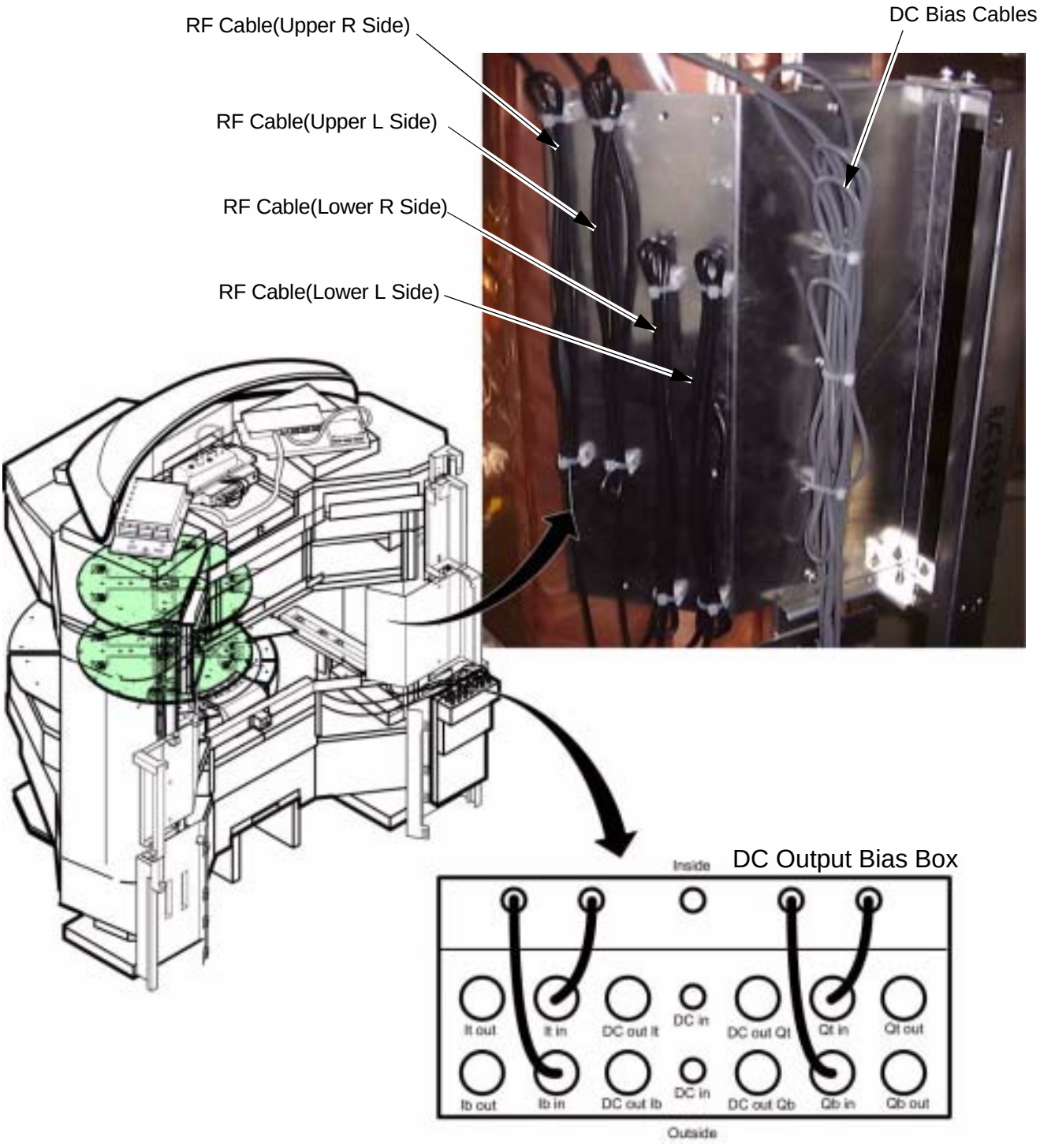
6. DC Bias Cables /RF Cables Wiring(Continued)

1. Connect 4 DC Bias Cables to 4 filters(Input side).
2. Connect 4 DC Bias Cables to DC Output Box.Refer to illustration 9. After connecting DC Bias Cables, go to body coil tuning procedure.
3. After body coil tuning, Connect 4 RF Cables to RF connector of body coil.
4. Connect 4 RF Cables to DC Output Box.
5. Route and fix DC Bias Cables and RF Cables to QHB side with tie-wraps as illustration 8 and 9.



DC BIAS CABLES / RF CABLES WIRING
ILLUSTRATION 10

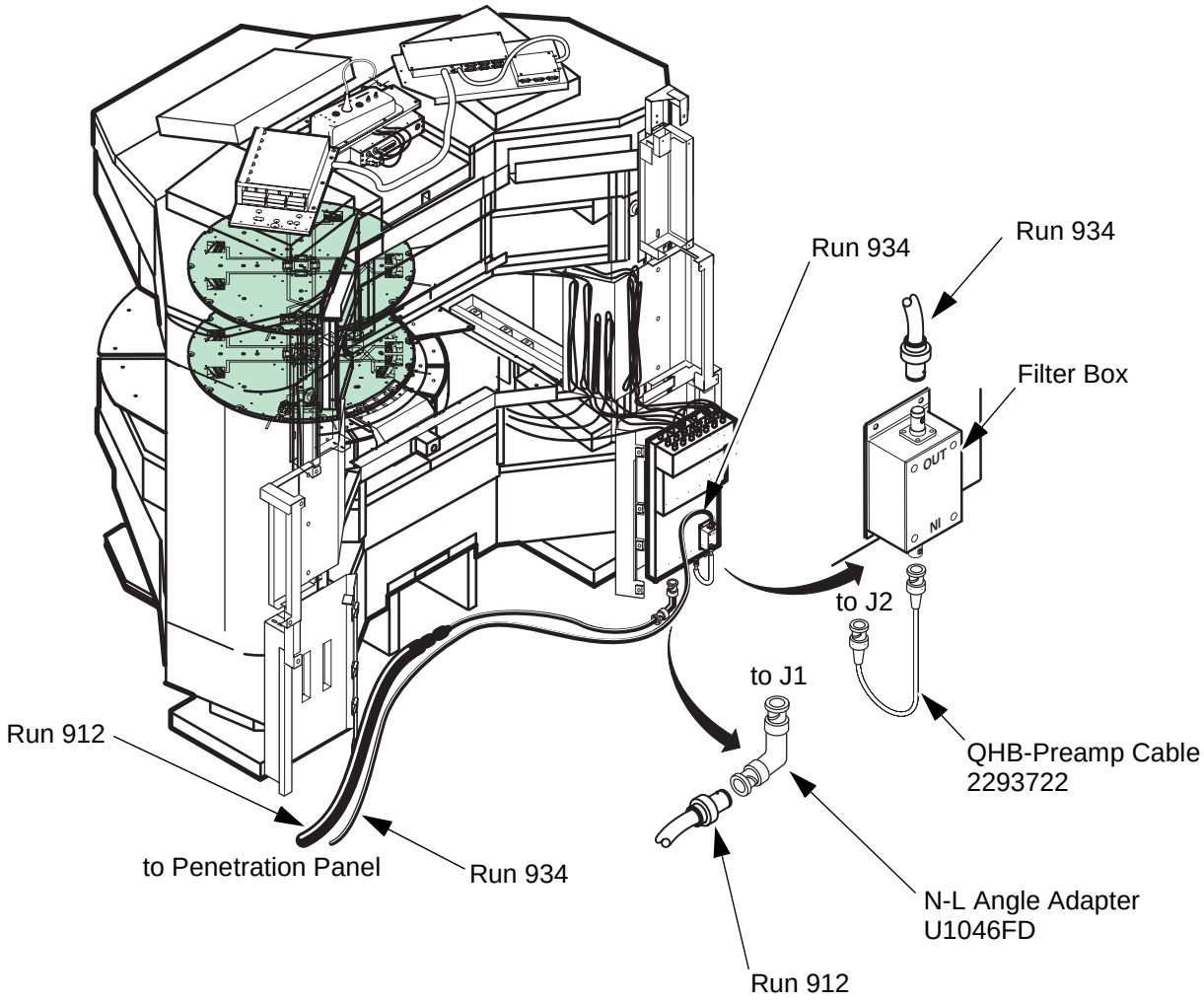
6. DC Bias Cables /RF Cables Wiring(Continued)



DC BIAS CABLES / RF CABLES WIRING(CONTINUED)
ILLUSTRATION 11

6. DC Bias Cables / RF Cables Wiring(Continued)

6. Connect Run 912 to J1 connector of QHB under side with N-L Angle Adapter(U1046FD).
7. Connect QHB-Preamp Cable to J2 connector of QHB and input side of filter box.
8. Connect Run 934 to output side of filter box.



DC BIAS CABLES / RF CABLES WIRING(CONTINUED)
ILLUSTRATION 12

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Mar 09, 2001	K.Tsumagari	Initial Release
1	May 19, 2001	K.Tsumagari	Misc Change
2	Jan 07 , 2002	K.Tsumagari	Misc Change
3	July 16 , 2002	Y. Masumo	P3: Added Caution for MFO3 Body Coil
4	Nov 26 , 2002	Y. Masumo	P6: Added YD Magnet Information. P16: Added Body Coil Seal Attachment

MAGNET DUCT INSTALLATION

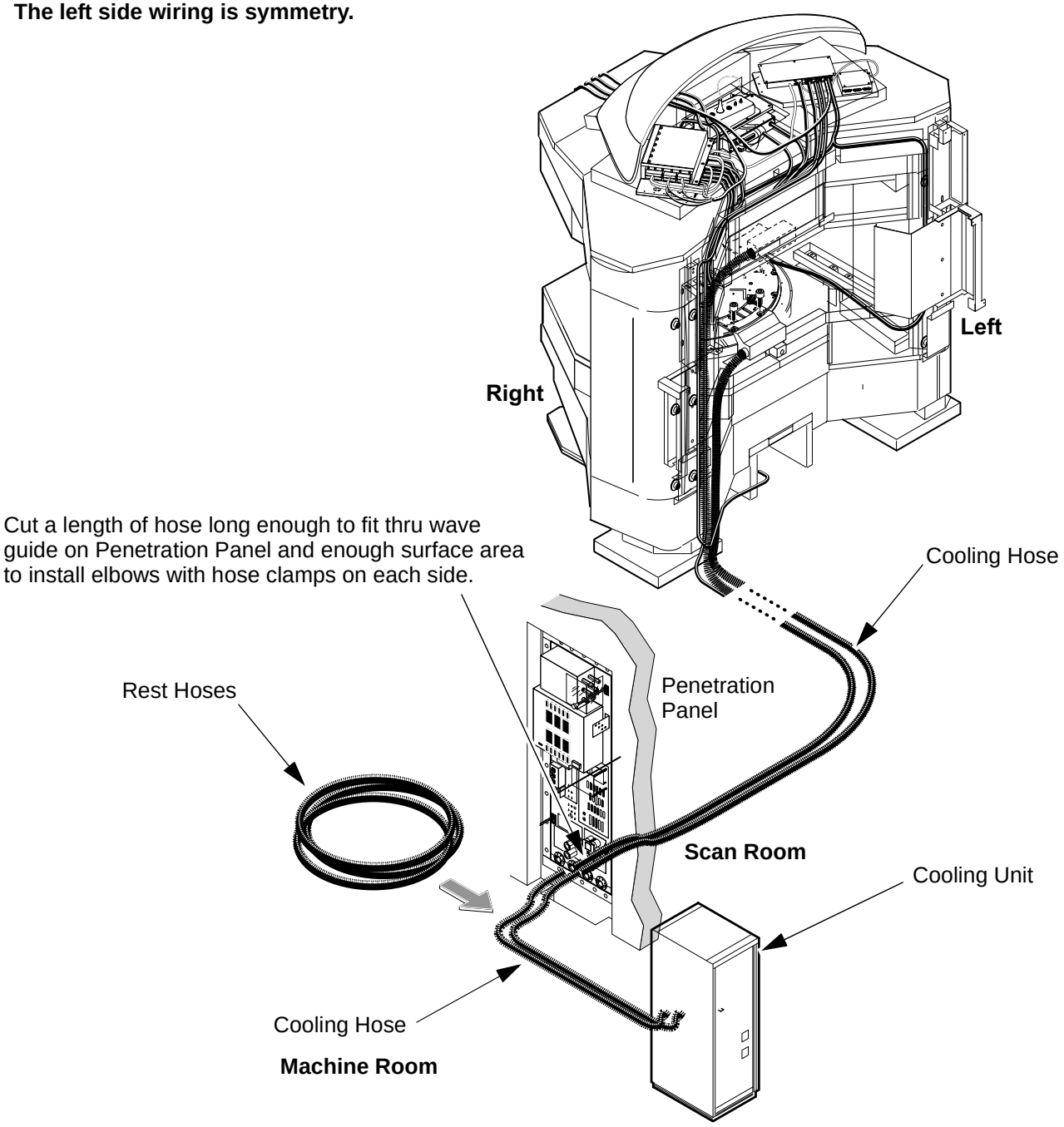
TABLE OF CONTENTS

1. Preparation

GENERAL NOTES:

- **The duct hoses must be routed to cable wiring side.**
- **First route the hoses from the magnet to penetration panel in scan room side,and then cut the hoses.Next route the hoses from penetration panel to cooling cabinet in machine room side.**

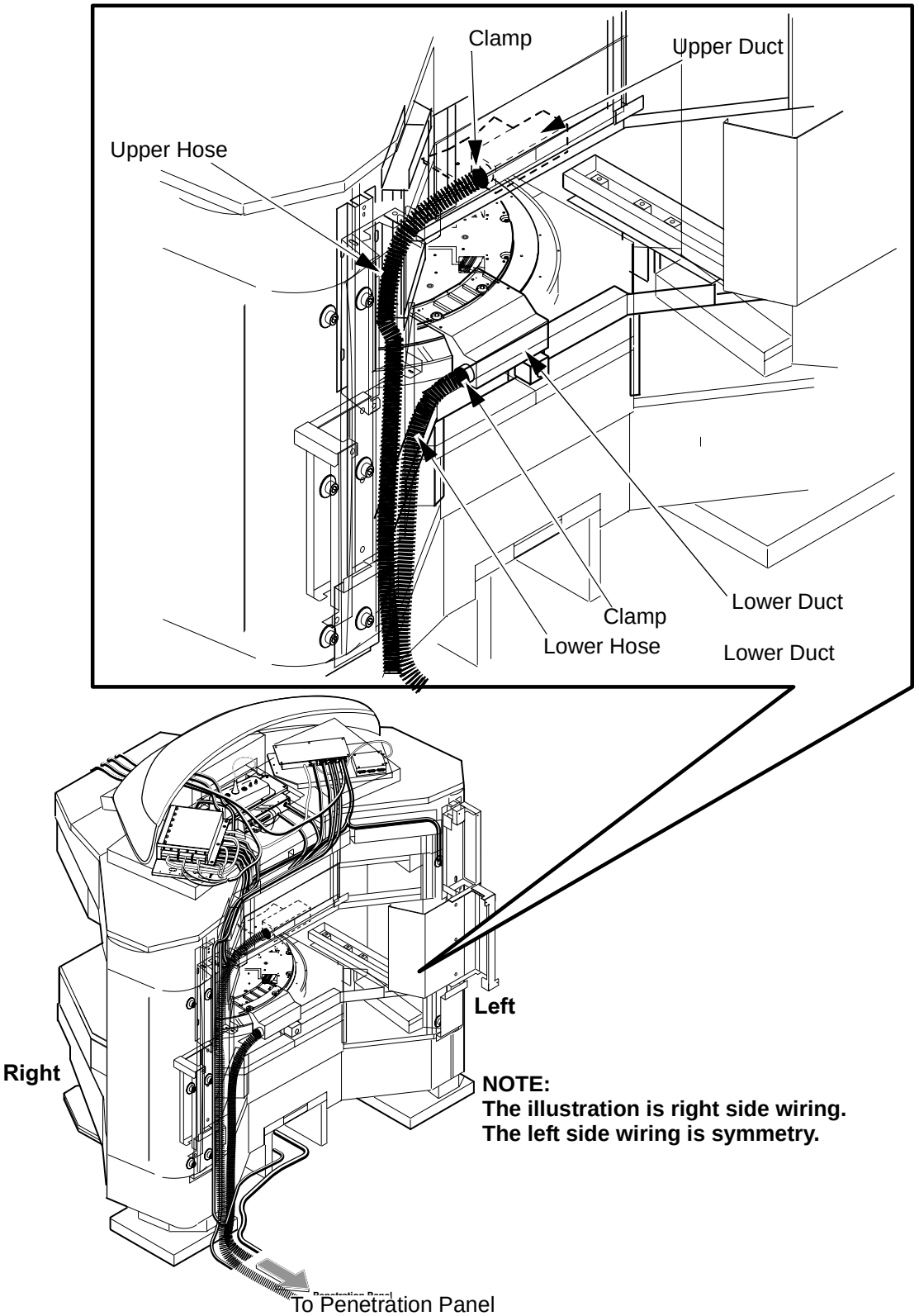
NOTE:
The illustration is right side wiring.
The left side wiring is symmetry.



PREPARATION
ILLUSTRATION 1-1

2. Duct Installation

1. Install Upper and Lower Ducts/Plates to the body coil with 2 screws for each duct.
2. Route the Upper and Lower Hoses to the magnet according to site layout.
3. Joint hoses to each duct with clamp,and fix hoses to rear frame with tie-wraps.



DUCT INSTALLATION
ILLUSTRATION 2-1

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Mar 26, 2001	K.Tsumagari	Initial Release

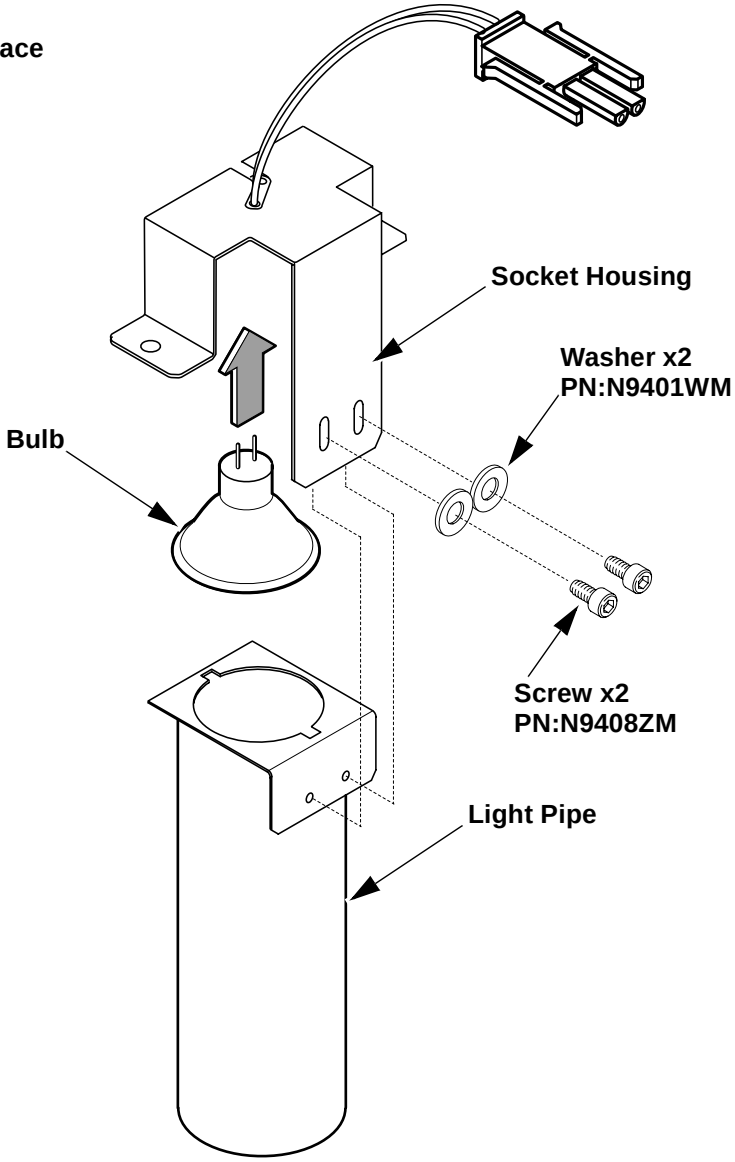
PCM INSTALLATION

TABLE OF CONTENTS

1. PCM Installation

1. Assemble two PCM Lights.
   a. Install the bulb to socket housing.
   b. Install the socket housing assy to light pipe with 2 screws(N9408ZM)/washers(N9401WM).

NOTE:
Do not touch the bulb surface and reflector inner side.

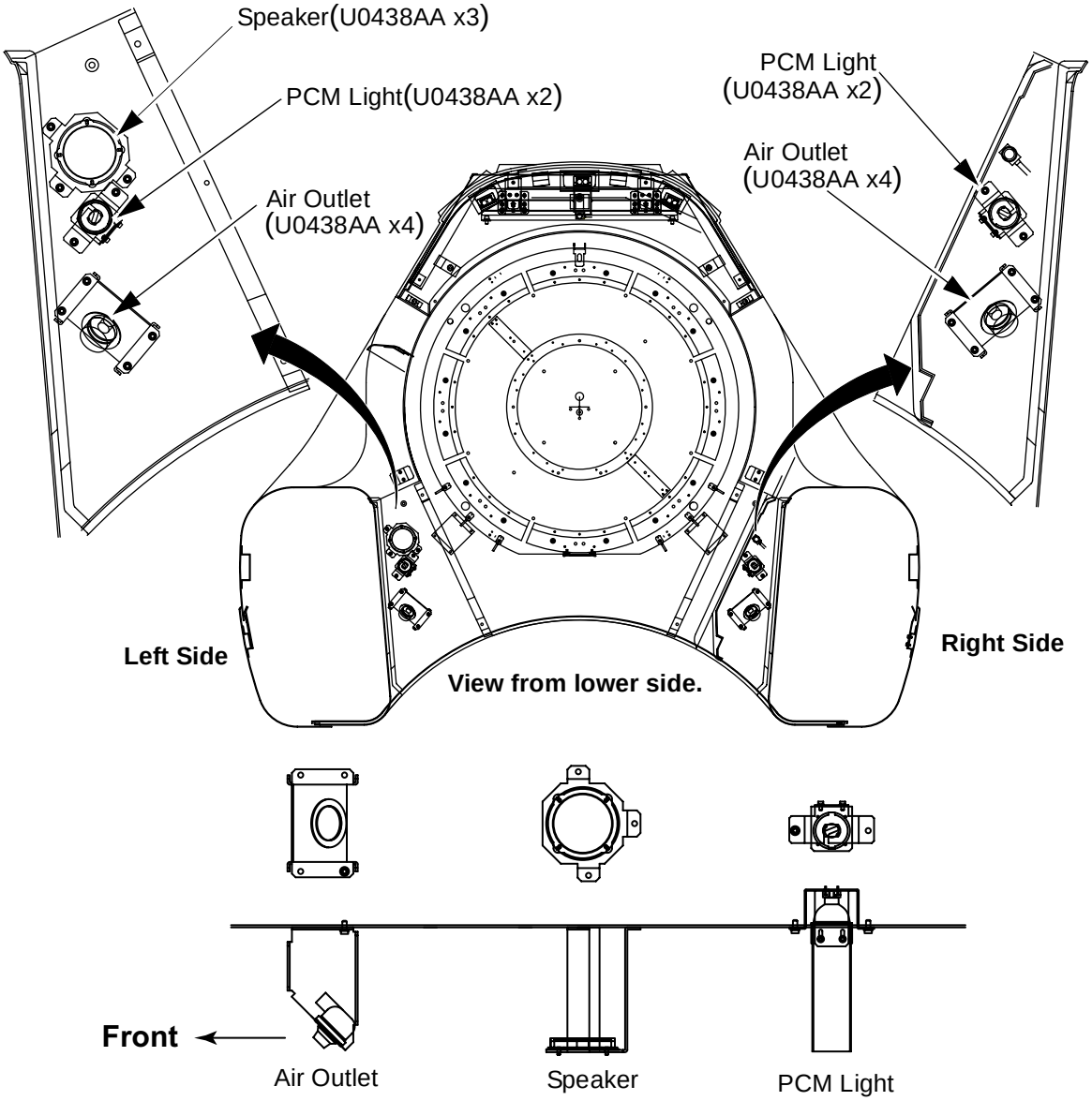


PCM INSTALLATION
ILLUSTRATION 1

1. PCM Installation(Continued)

2. Connect the speaker cables to speaker.
3. Install the speaker to left PCM base with 3 screws(U0438AA).
4. Connect PCM Light connector to PCM light for each side.
5. Install two PCM Lights to R and L PCM base with 2 screws(U0438AA) for each side.
6. Install two Air Outlet to R and L PCM base with 4 screws(U0438AA) for each side.

NOTE: Before install speaker and PCM light, connect each connectors.



PCM INSTALLATION(CONTINUED)
ILLUSTRATION 2

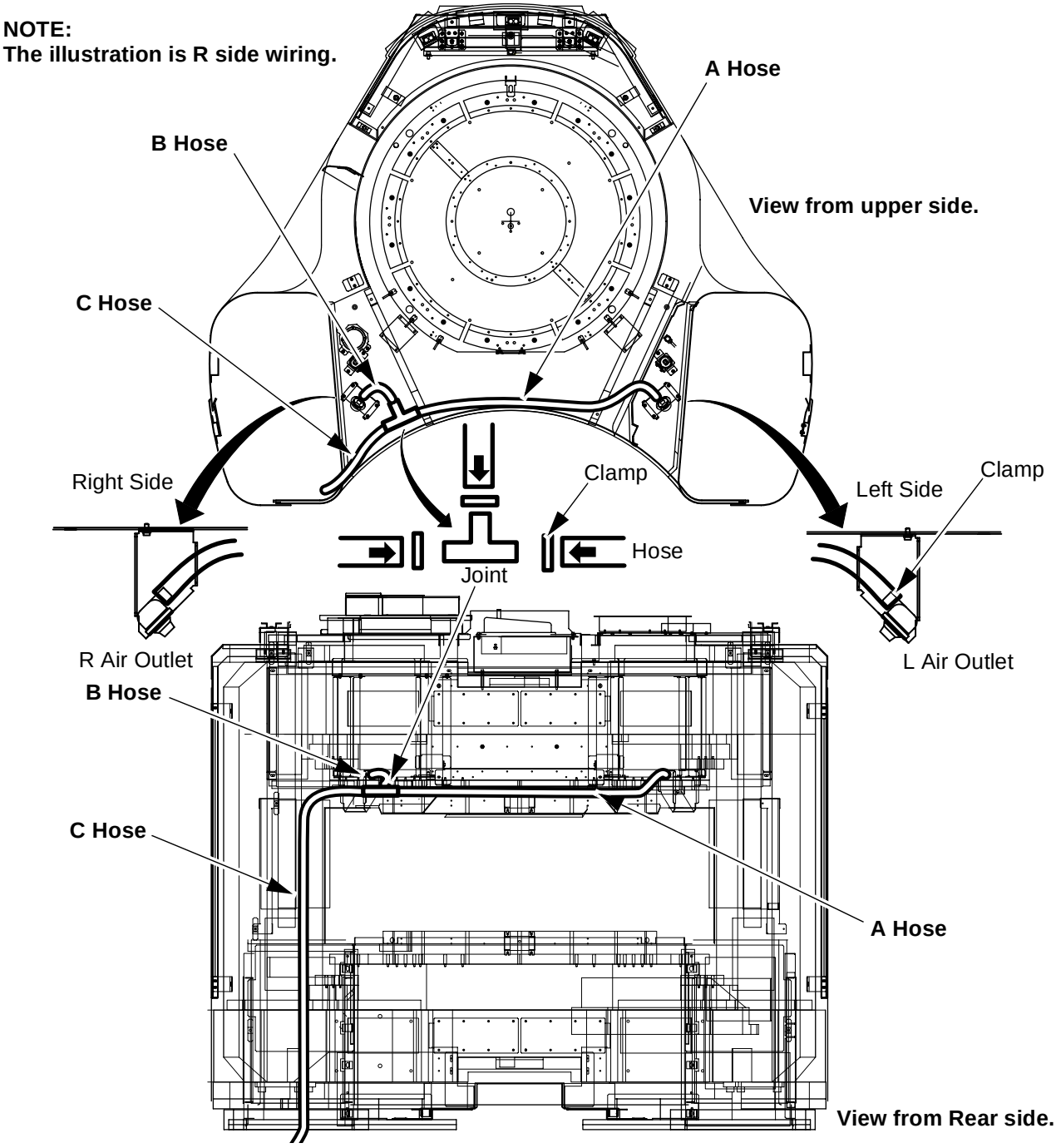
1. PCM Installation(Continued)

1. Cut Patient Hose for each length as illustration.
2. Connect A and B Patient Hoses to R and L air outlet with clamps according to site layout.
3. Connect joint to routed Patient Hoses with clamps.
4. Connect patient hose to joint and penetration panel with clamps.
5. Fix Patient Hoses with tie-wraps.

A Hose **Length: 150 cm**

B Hose **Length: 70 cm**

C Hose



PCM INSTALLATION(CONTINUED)
ILLUSTRATION 3

Revision History

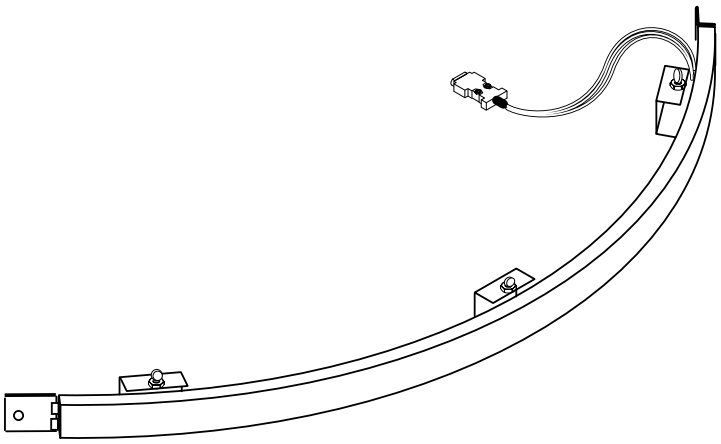
Rev	Date	Author	Primary Reasons For Change
0	Mar 19, 2001	K.Tsumagari	Initial Release
1	May 21, 2001	K.Tsumagari	Patient Hose Installation is added
2	Oct 29 , 2001	K.Tsumagari	Misc Change

TABLE RAIL INSTALLATION

TABLE OF CONTENTS

1. Overview

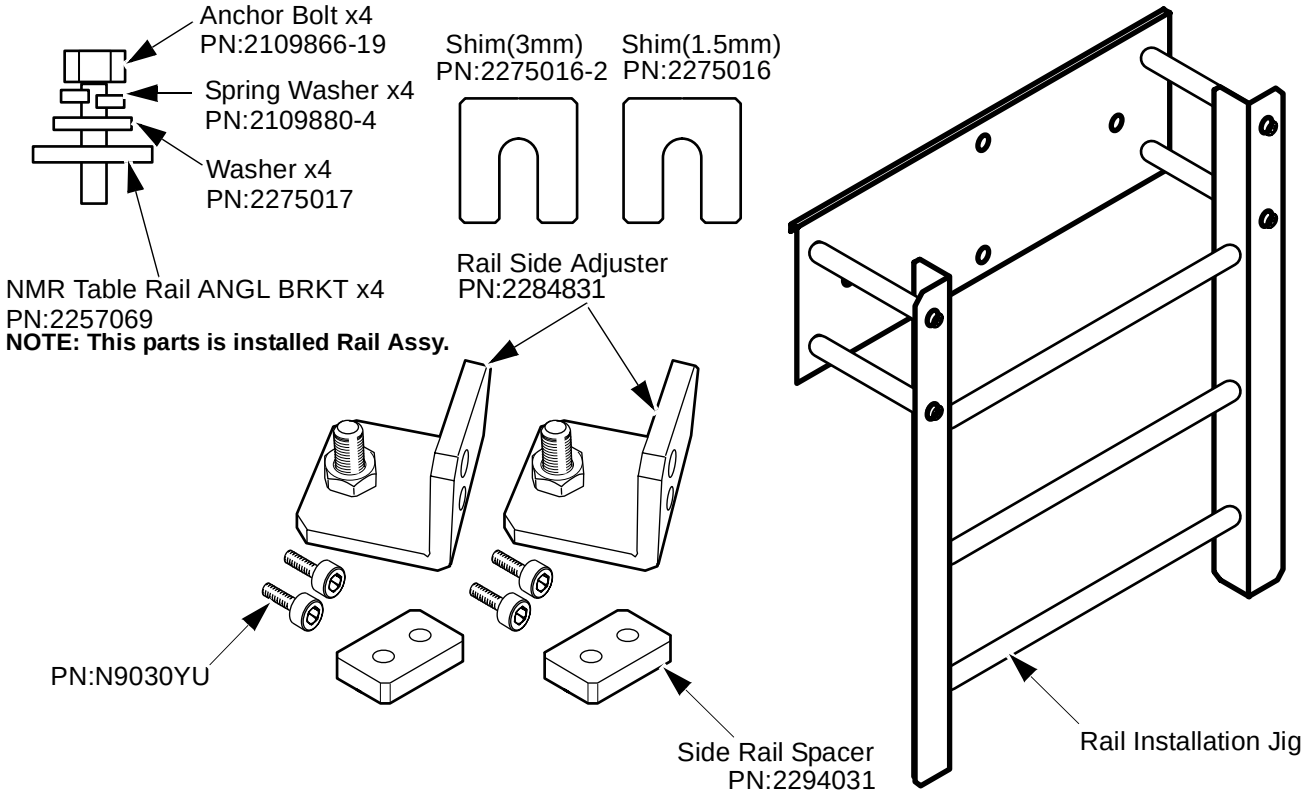
This document describes how to install the table front rail.



RAIL OVERVIEW

2. Preparation

1. Verify that the following parts are already installed before starting the table rail installation.



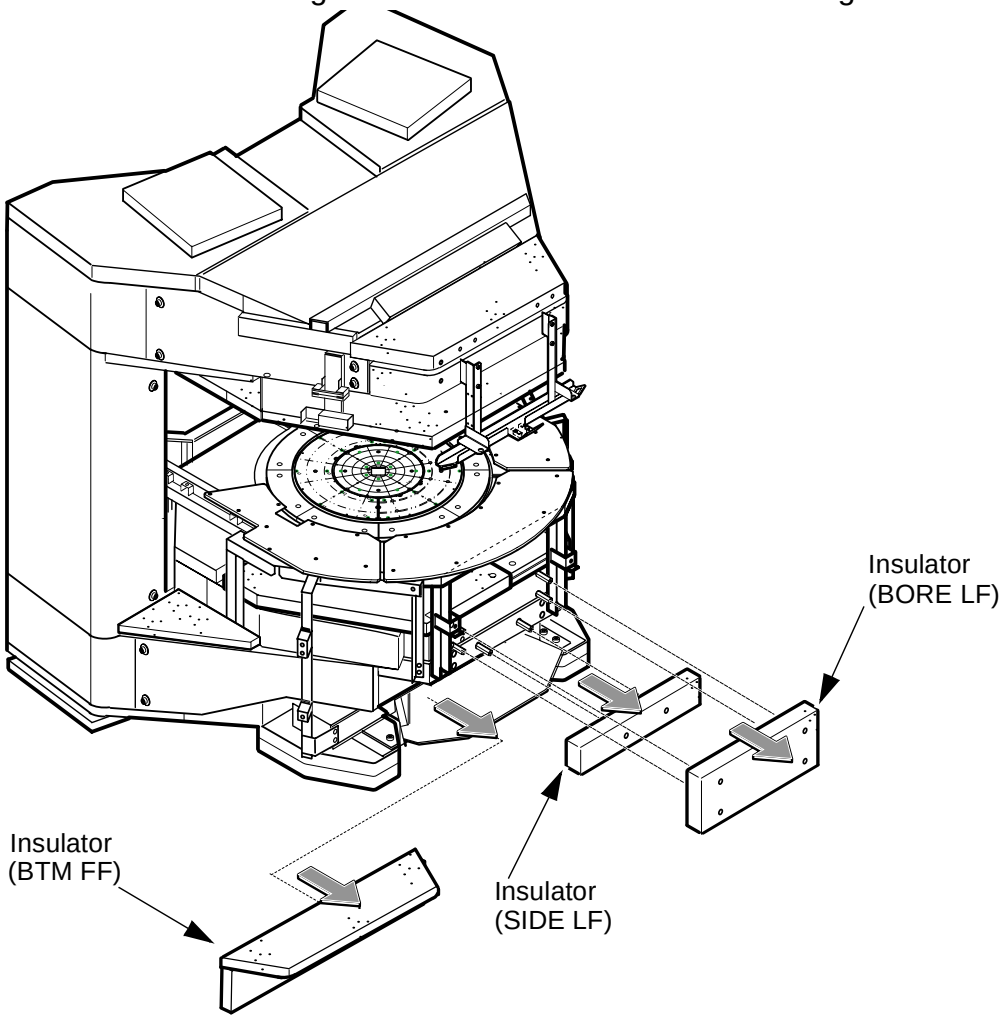
PREPARATION
ILLUSTRATION 1-1

Required Tool:

Items	Qty	Type/Parts Number	Part
Ruler	1	Non ferrous	
Level Gauge	1	Non ferrous	

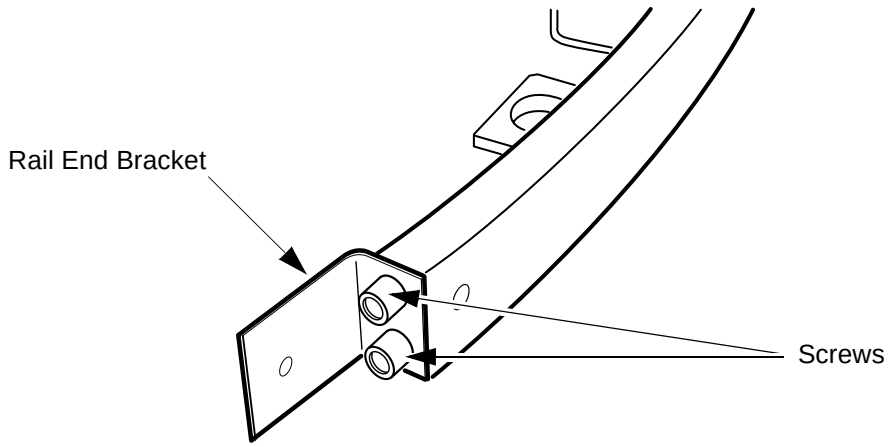
3. Table Front Rail Installation

1. Remove three insulators from magnet front as described in the following illustration.



INSULATOR REMOVAL
ILLUSTRATION 2

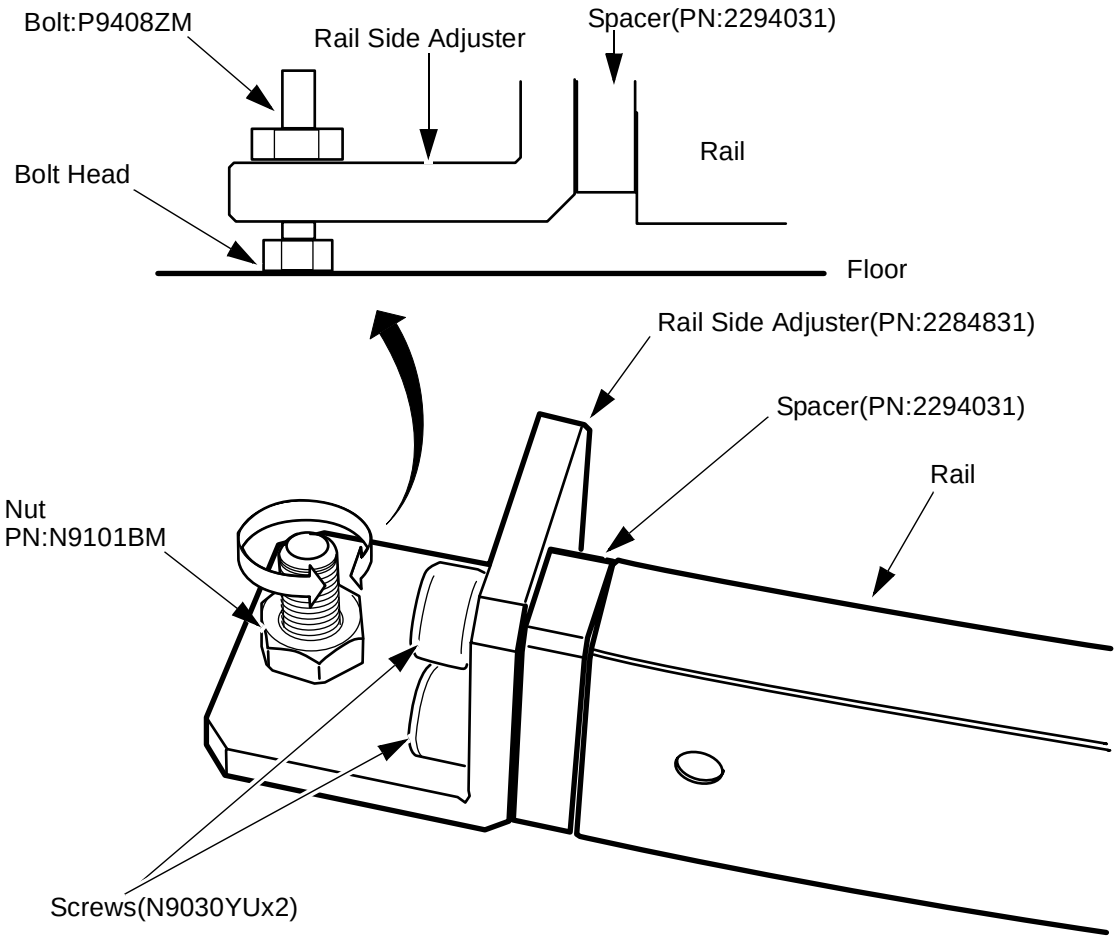
2. Remove two screws and remove rail end brackets at both sides of the rail



RAIL END BRACKET REMOVAL
ILLUSTRATION 3

3. Table Front Rail Installation (Continued)

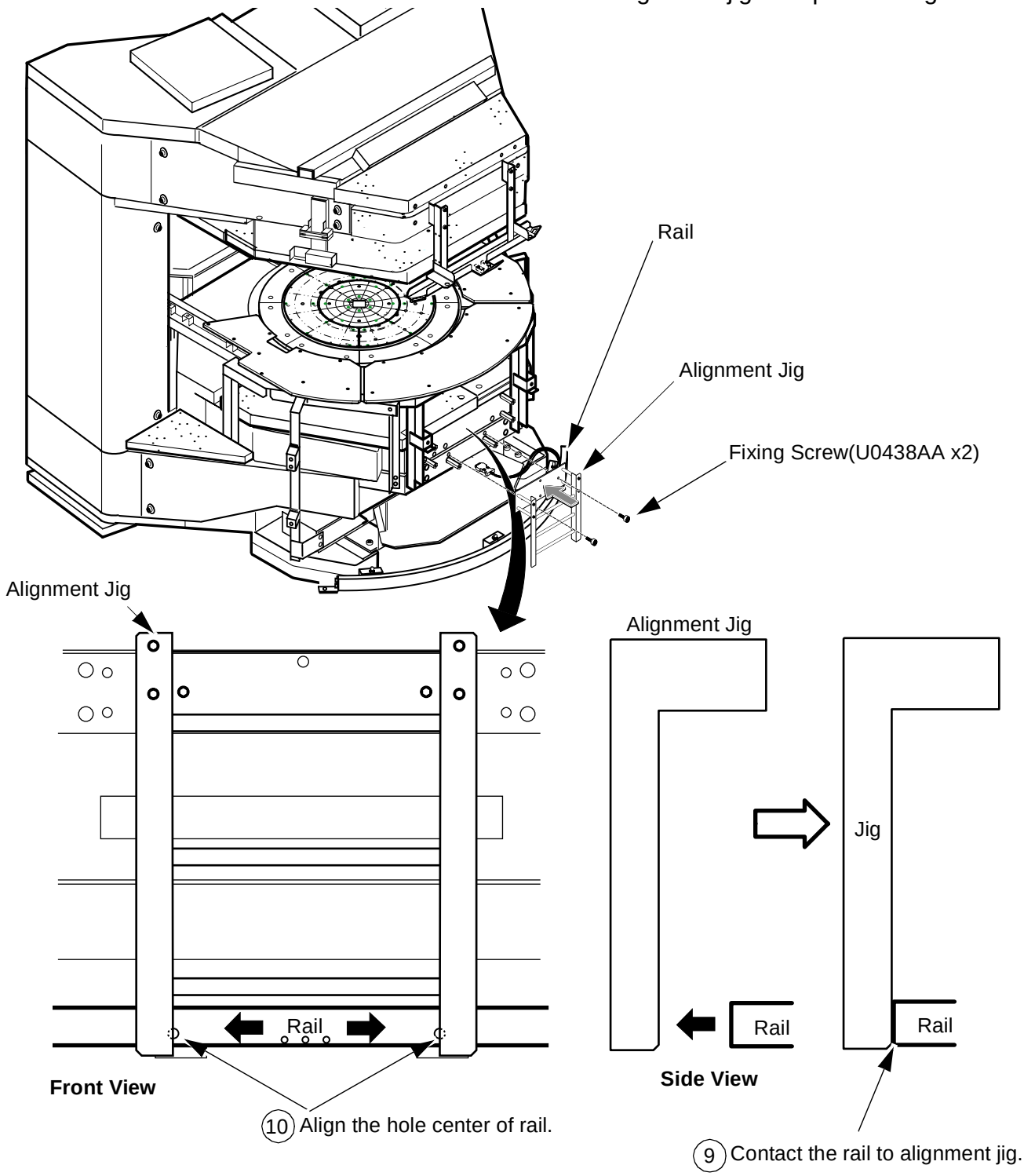
3. Install Spacer(PN:2294031) and Rail Side Adjuster(PN:2284831) with two screws(N9030YU x2) at both sides of the rail.
4. Loosen the Nut(PN:N9101BM) of Rail Side Adjuster, and contact the bolt head(P9408ZM) to floor rotating the bolt.
5. Tighten the nut.



RAIL SIDE ADJUSTER INSTALLATION
ILLUSTRATION 4

3. Table Front Rail Installation (Continued)

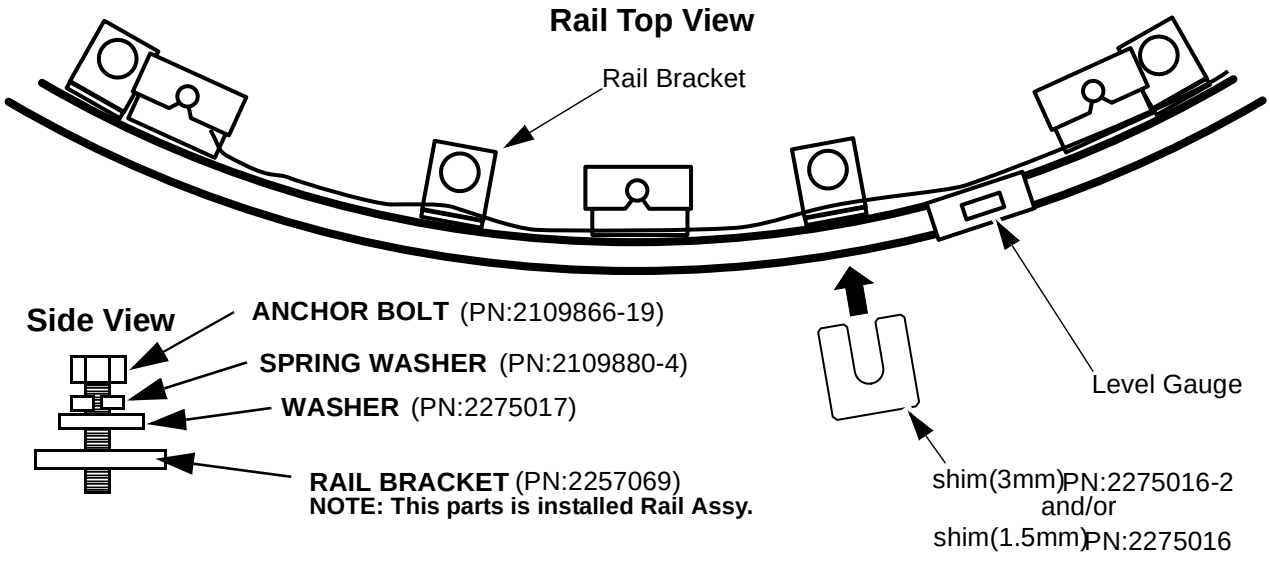
6. Place the rail under the magnet.
7. Set the Alignment jig to the magnet front side with two screws.
8. Move the rail so that the rail touches the Alignment jig.
9. Rotate the rail so that the center of the rail holes and alignment jig side plate is aligned.



RAIL JIG INSTALLATION AND RAIL ADJUSTMENT
ILLUSTRATION 5

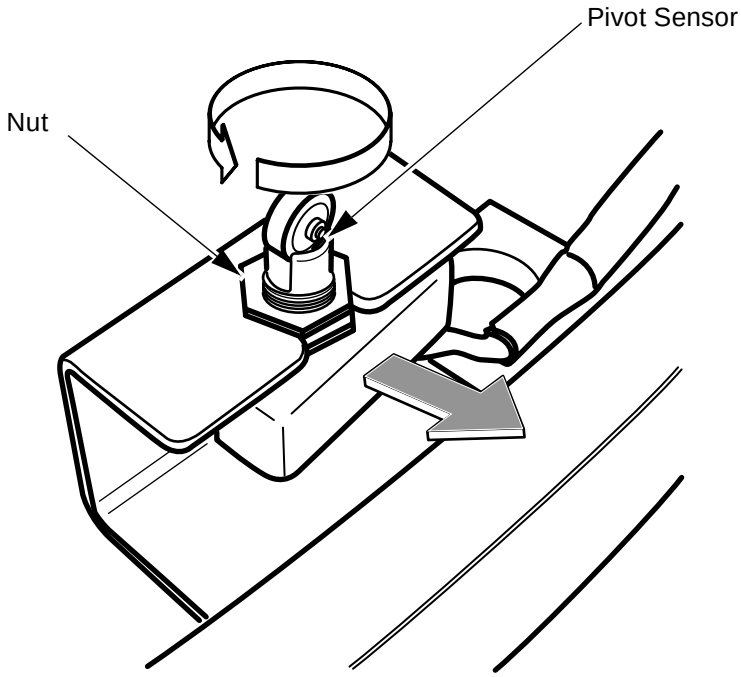
3. Table Front Rail Installation (Continued)

10. Check level of rail using level gauge.
11. If there is inclination, level the rail with shim.
12. Recheck the rail position with rail alignment jig.
13. Fix the Rail to floor with four anchor bolts.



RAIL LEVEL CHECK AND ANCHORING
ILLUSTRATION 6

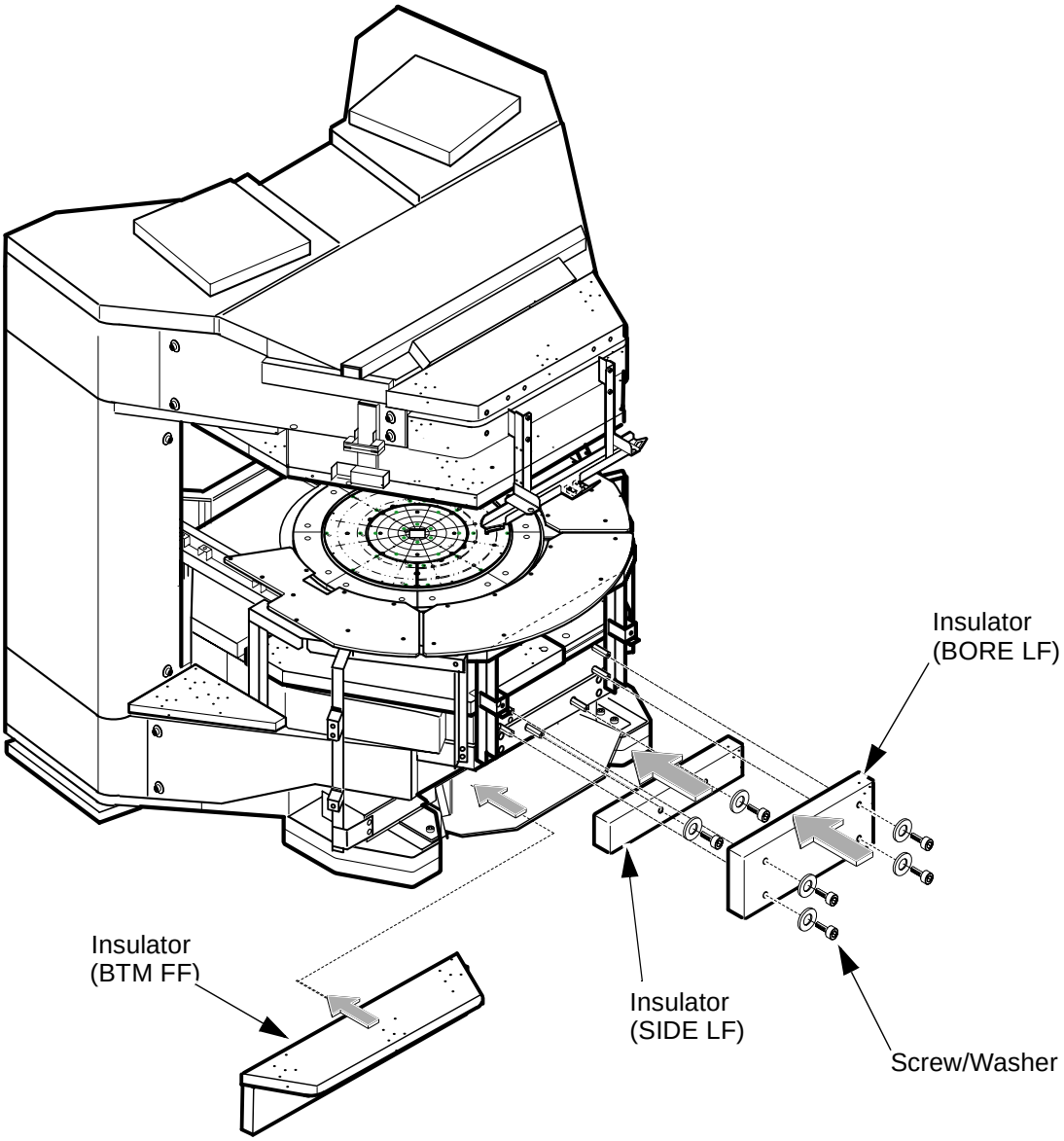
14. Remove three pivot sensors by loosening nut to installing the table.If you do not remove sensors, it hits table under side, and the table is not installed to the rail.



PIVOT SENSOR REMOVAL
ILLUSTRATION 7

3. Table Front Rail Installation (Continued)

15.Restore the three insulators.



INSULATOR INSTALLATION
ILLUSTRATION 8

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Mar 14, 2001	K.Tsumagari	Initial Release
1	May 19, 2001	K.Tsumagari	Parts number is added
2	Jan 10, 2002	K.Tsumagari	Misc change

MAGNET COVER INSTALLATION

VOLUME 1

TABLE OF CONTENTS

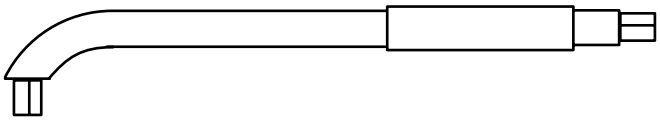
WARNING!

FERROUS MATERIAL HAZARD! THE CRIMP TOOL, AND OTHER TOOLS AND PARTS REQUIRED FOR THIS INSTALLATION CONTAIN FERROUS MATERIAL AND WILL BE STRONGLY ATTRACTED TO MAGNET AND MAY BECOME DANGEROUS PROJECTILES. IF MAGNET IS AT FULL FIELD – KEEP ALL FERROUS TOOLS AT LEAST 10 FEET AWAY FROM THE MAGNET.

1. Preparation

Required Tool:

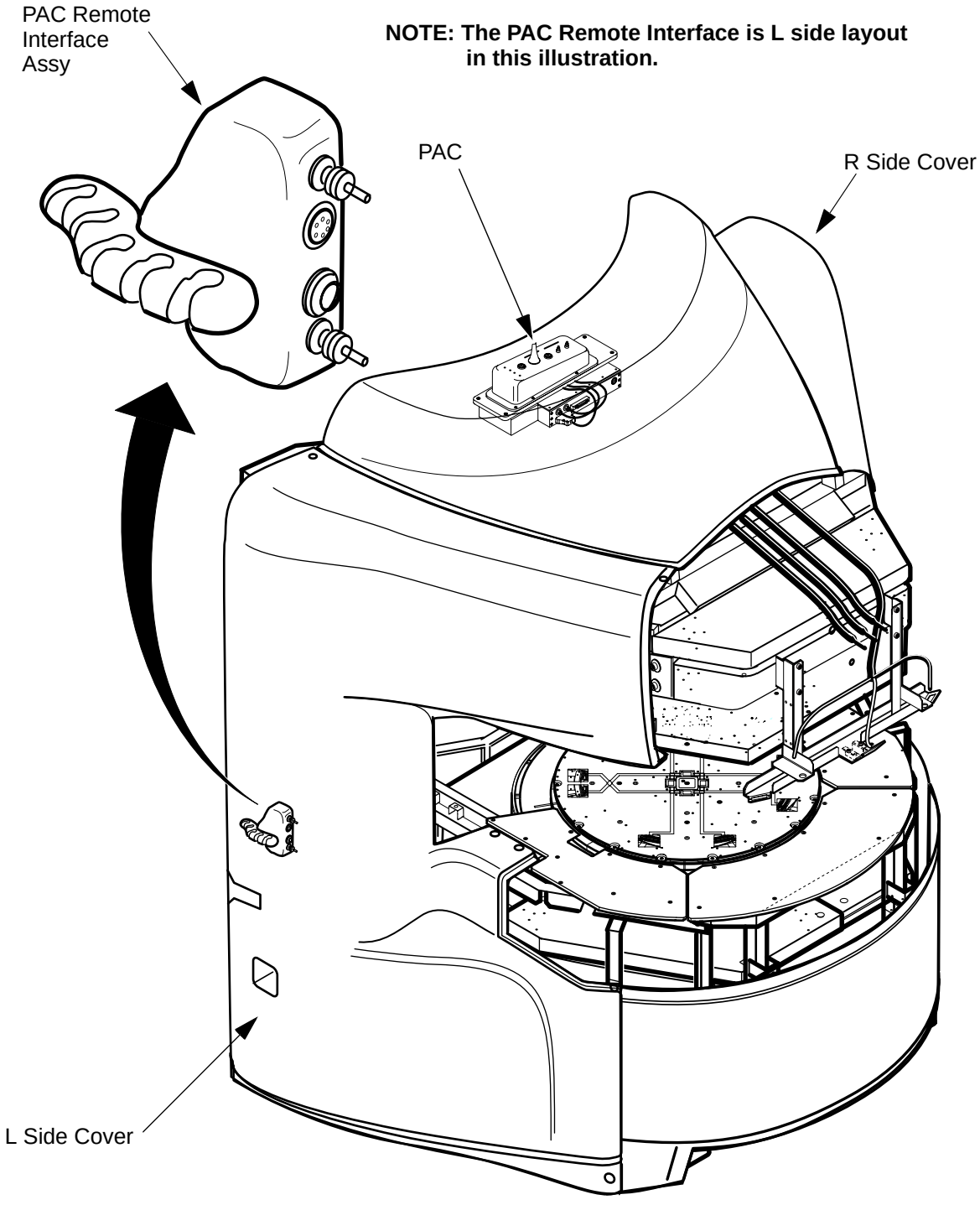
Items	Qty	Type/Parts Number	Part
Metric Allen Wrench Set	1	Non ferrous	
5mm-S Metric Allen Wrench	1	Non ferrous Short Type 46-320470P9	L-Post Cover



5mm-S Metric Allen Wrench

2. DETERMINE PAC REMOTE INTERFACE LOCATION

1. Consult with customer to determine which side of magnet PAC Remote Interface Assy should be located.



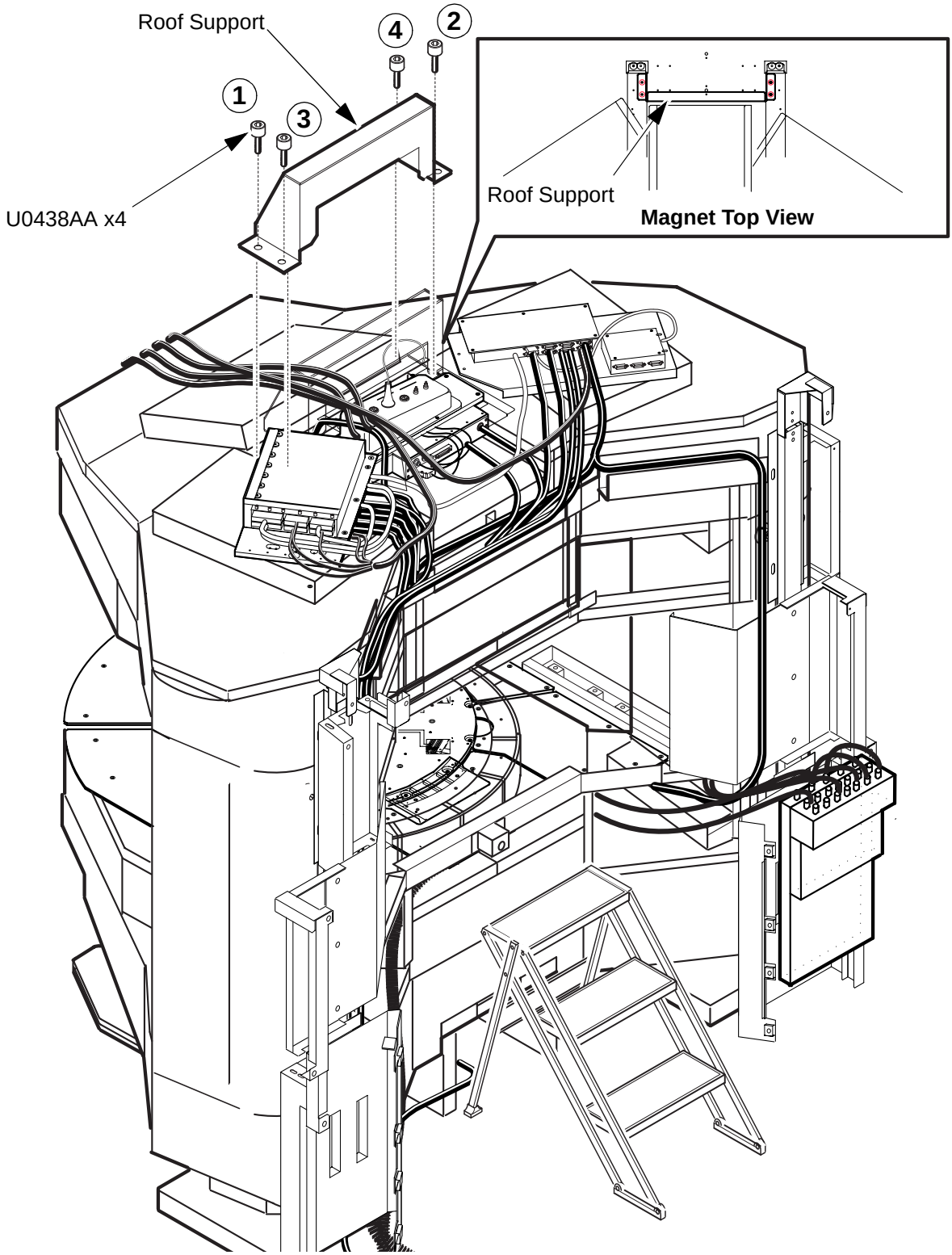
DETERMINE PAC REMOTE INTERFACE LOCATION
ILLUSTRATION 1

3. Top Cover

CAUTION

At least two people are required to install the Top Cover.

1. Install Roof Support onto the magnet top side with 4 screws using step rudder.



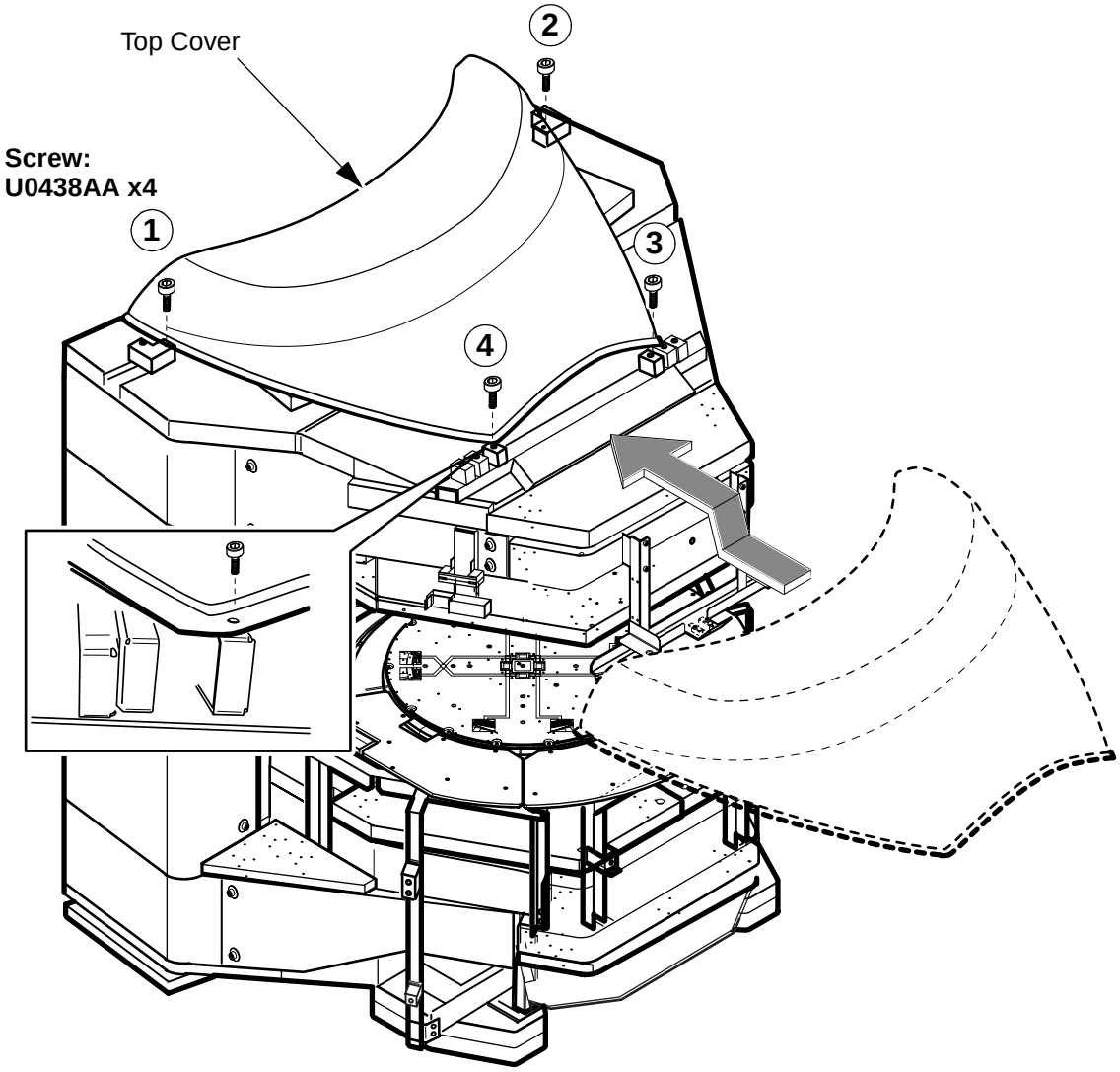
APRON COVER INSTALLATION
ILLUSTRATION 2

3. Top Cover(Continued)

CAUTION

At least two people are required to install the Top Cover.

2. Install Top Cover onto the frames of magnet top with 4 screws(U0438AA).

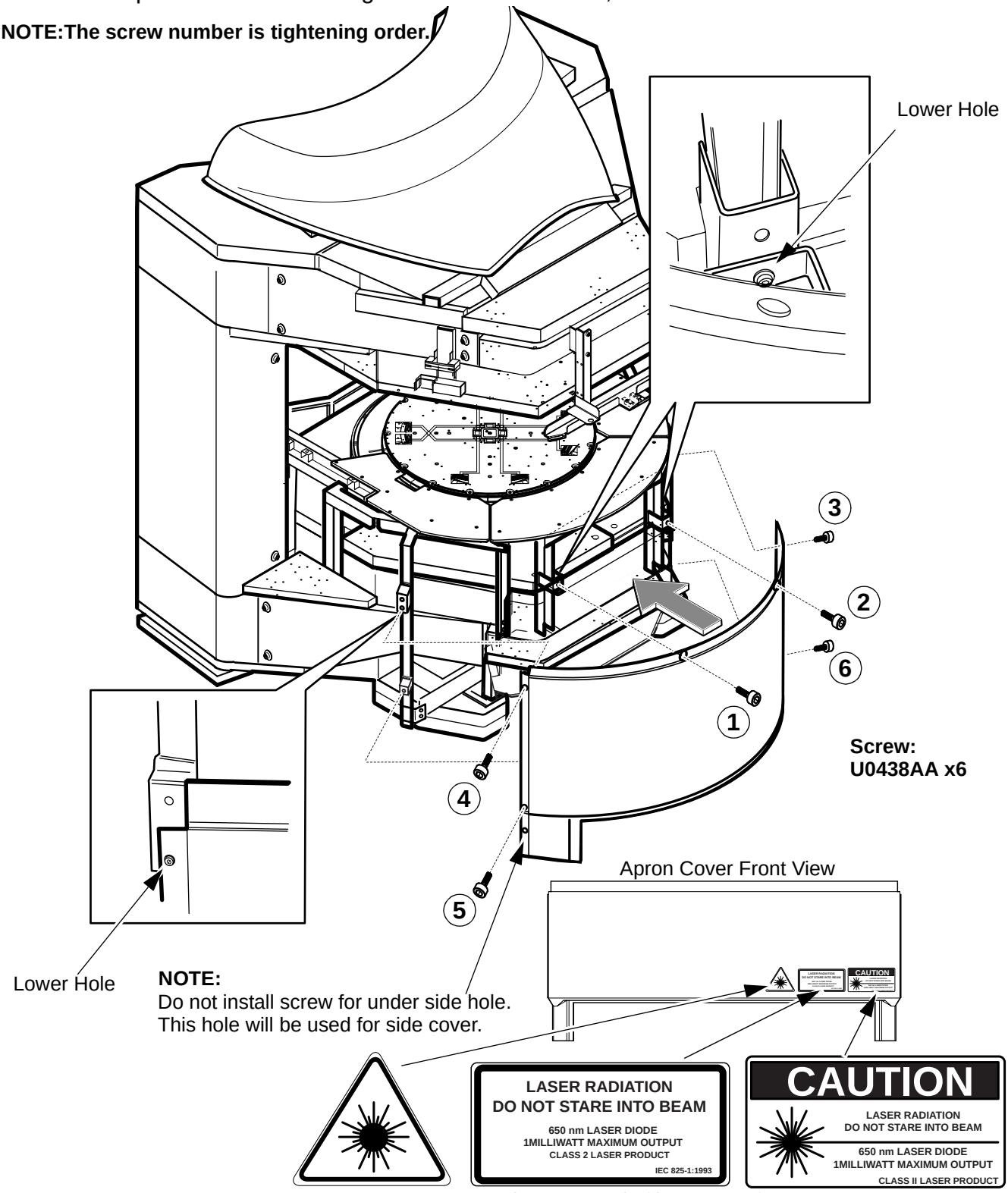


APRON COVER INSTALLATION
ILLUSTRATION 3

4. Apron Cover

1. Install the Apron Cover to the front and side frame of the Magnet with 6 screws(U0438AA).
2. Peel the protection film from right under side of cover, and attach three seals as illustration.

NOTE:The screw number is tightening order.



Choose a seal of language of your country.

APRON COVER INSTALLATION
ILLUSTRATION 4

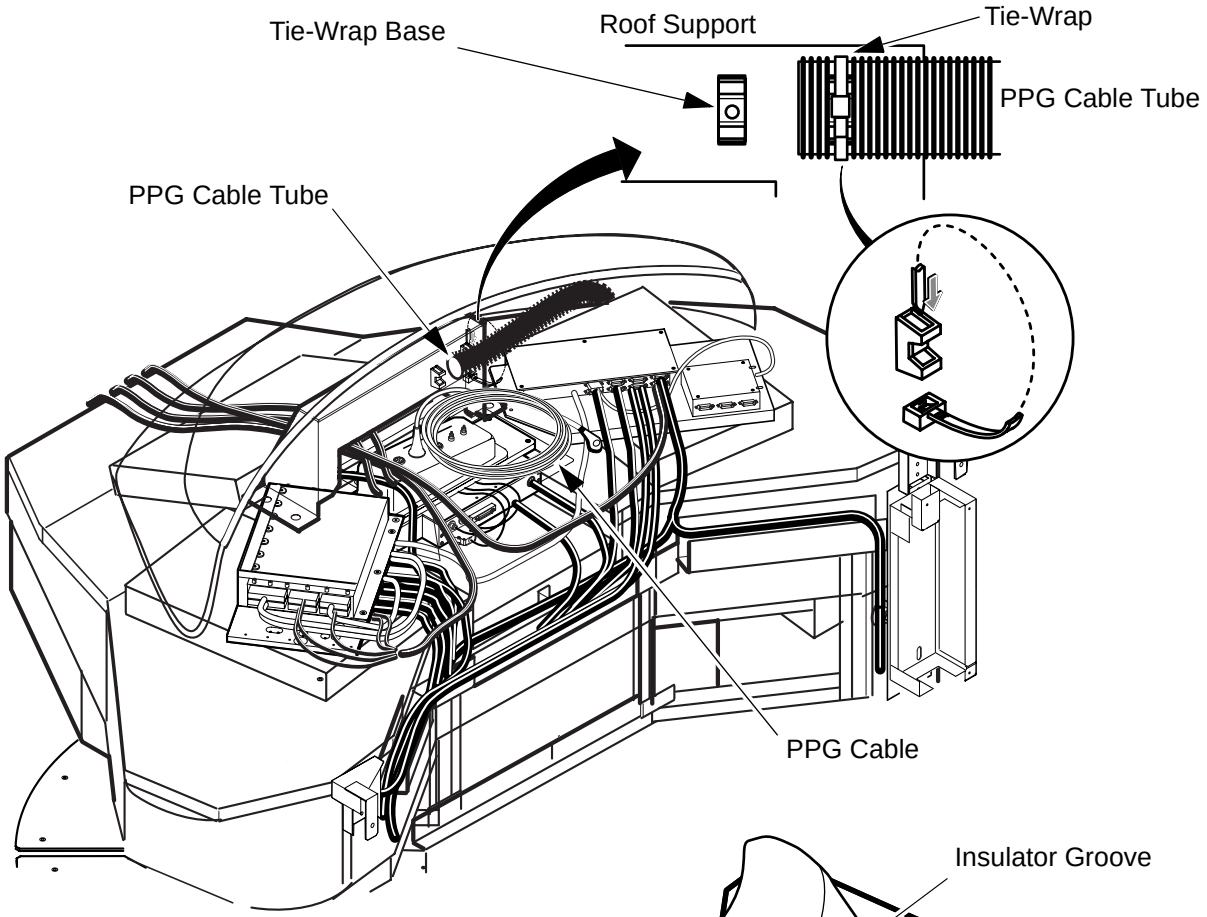
5. Side Cover

CAUTION

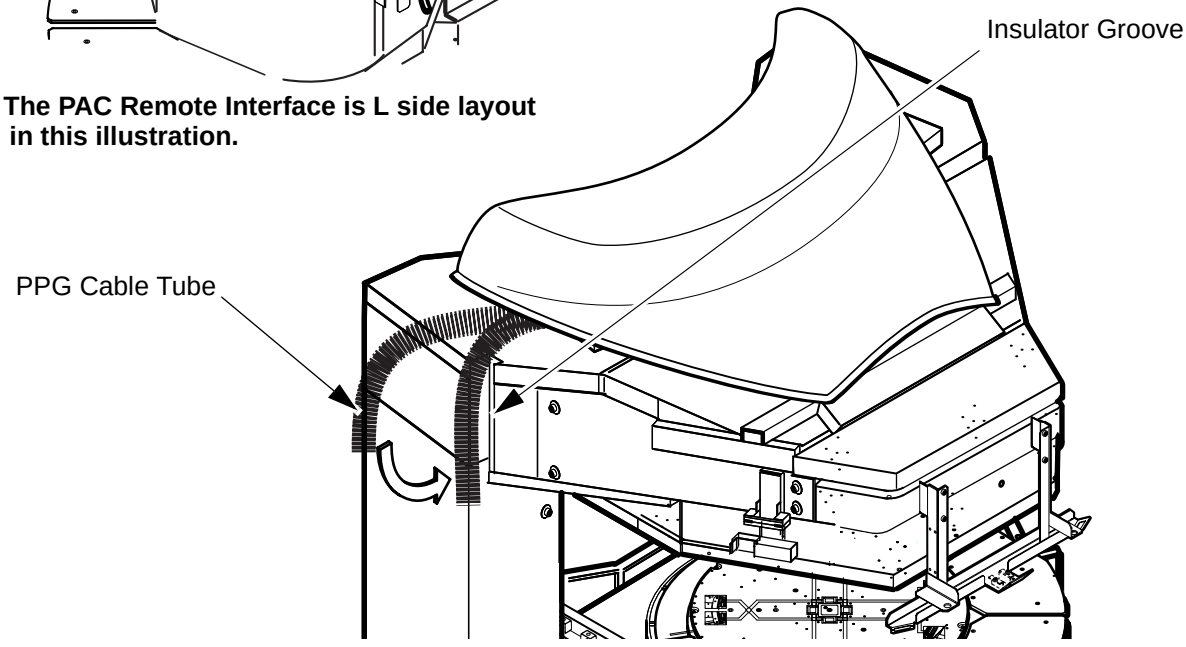
At least two people are required to install the Side Covers.

PAC Remote Interface Side:

1. Install PPG Cable Tube to roof support with tie-wrap.
2. Route PPG Cable Tube to insulator groove of PAC remote interface side.



NOTE: The PAC Remote Interface is L side layout in this illustration.

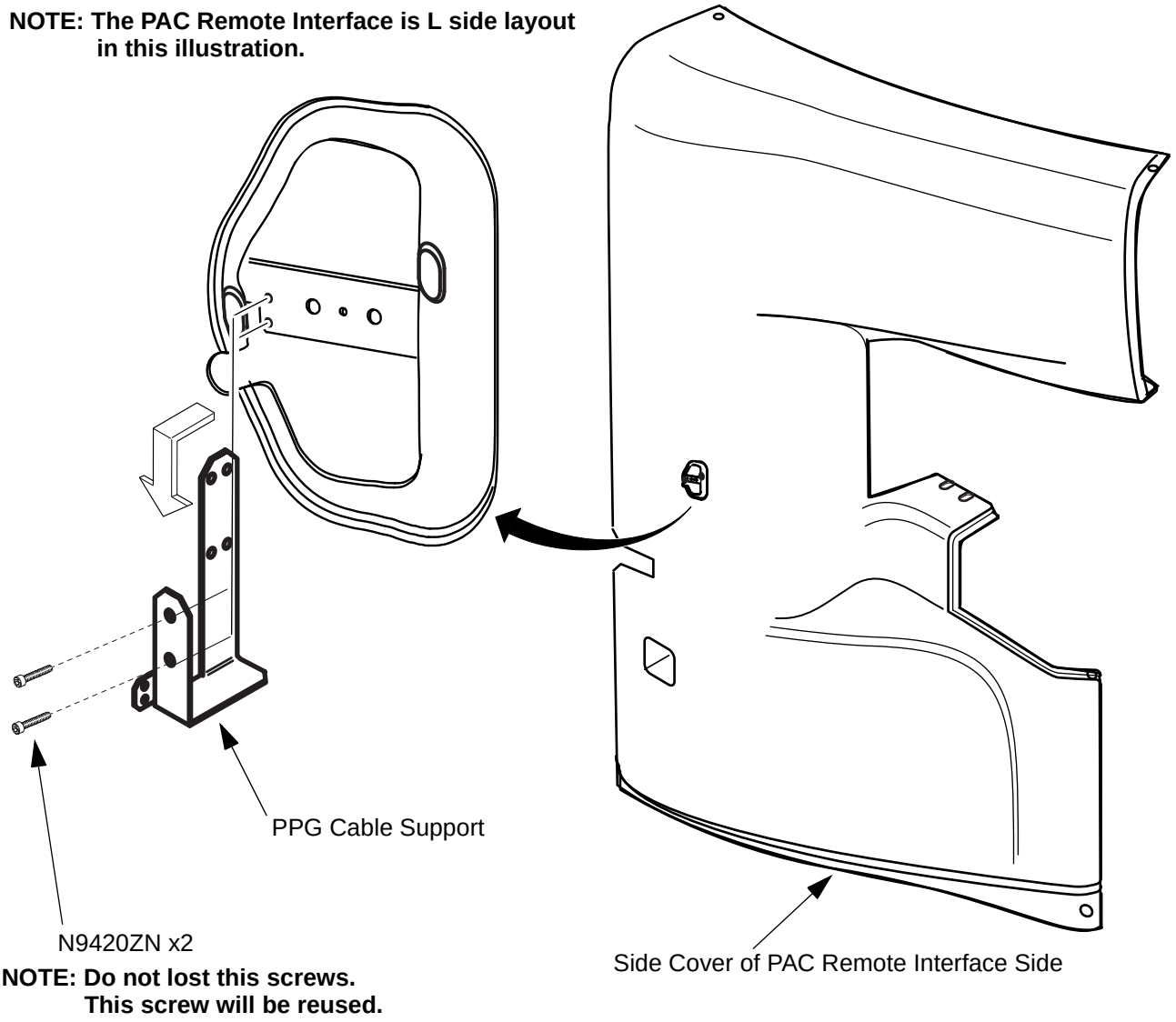


SIDE COVER INSTALLATION
ILLUSTRATION 5

5. Side Cover(Continued)

3. Remove PPG Cable Support by loosening 2 screws from side cover of PAC remote interface side.

NOTE: The PAC Remote Interface is L side layout in this illustration.

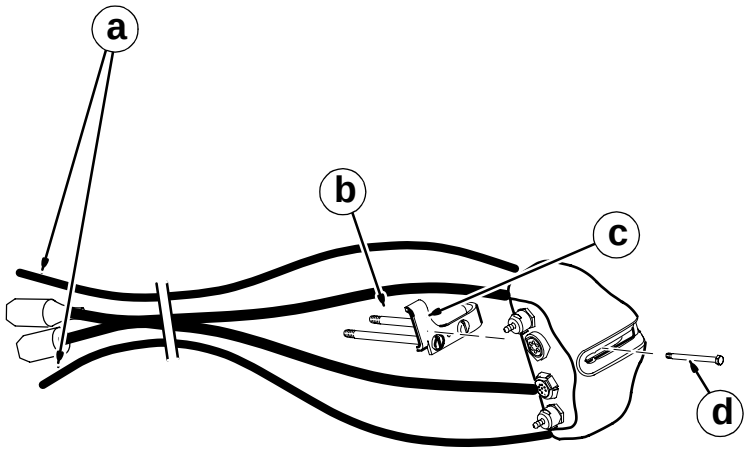


NOTE: Do not lost this screws. This screw will be reused.

SIDE COVER INSTALLATION
ILLUSTRATION 6

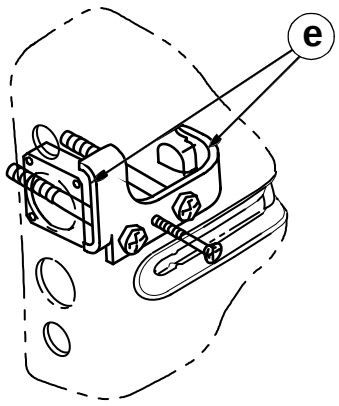
5. Side Cover(Continued)

4. Install the PAC Remote Interface Assy to the L or R Side Cover according to site layout.
   a. Apply tape around end of pneumatic tubes and mark “TOP” to the opposite end of the tube connected to the top connector in the Remote PAC Interface Assembly and “BOT-TOM” to the tube connected to the lower connector.
   b. Insert two (2) screws M6 x 70mm (2109873-33) screws into Clip (2221023).
   c. Insert Clip with screws into shell as shown with top cable and tube above Clip and bottom cable and tube below.
   d. Hold in place by inserting provided M4 screw thru slot and turning about 3 or 4 turns into Clip.



PREPARE CABLES AND TUBES FOR ROUTING
ILLUSTRATION 7

   e. Make sure each side of clip is mounted behind housing blocks.

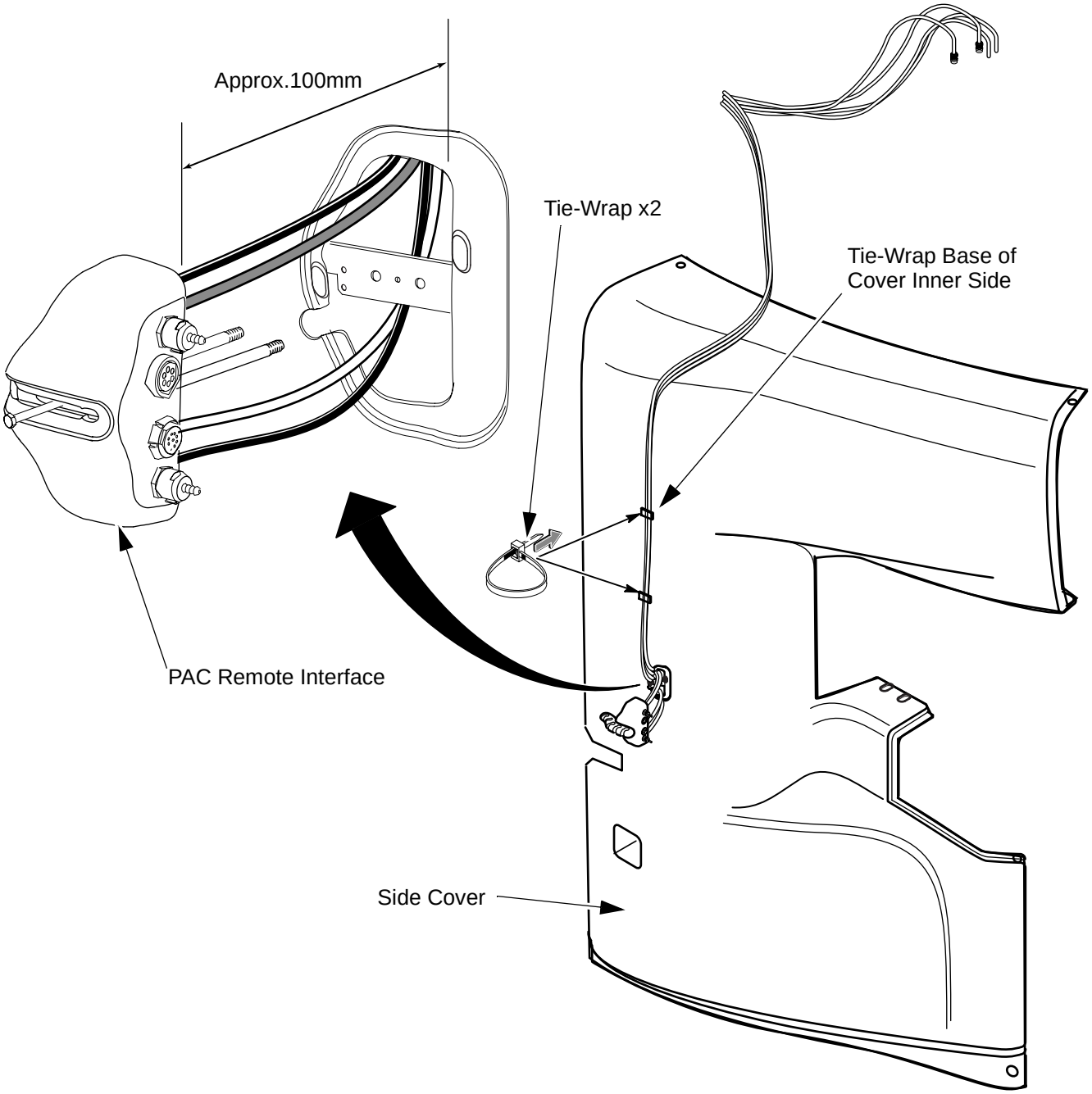


POSITION REMOTE PAC INTERFACE MOUNTING CLIP
ILLUSTRATION 8

5. Side Cover(Continued)

5. Fix cables and tubes of PAC Remote Interface to inner side of side cover with 2 tie-wraps, then keep clearance approx.100mm between PAC remote interface and side cover outside.
   Note:Top two cables will be routed thru top opening and bottom two cables will be routed thru lower opening.

NOTE: The PAC Remote Interface is L side layout in this illustration.

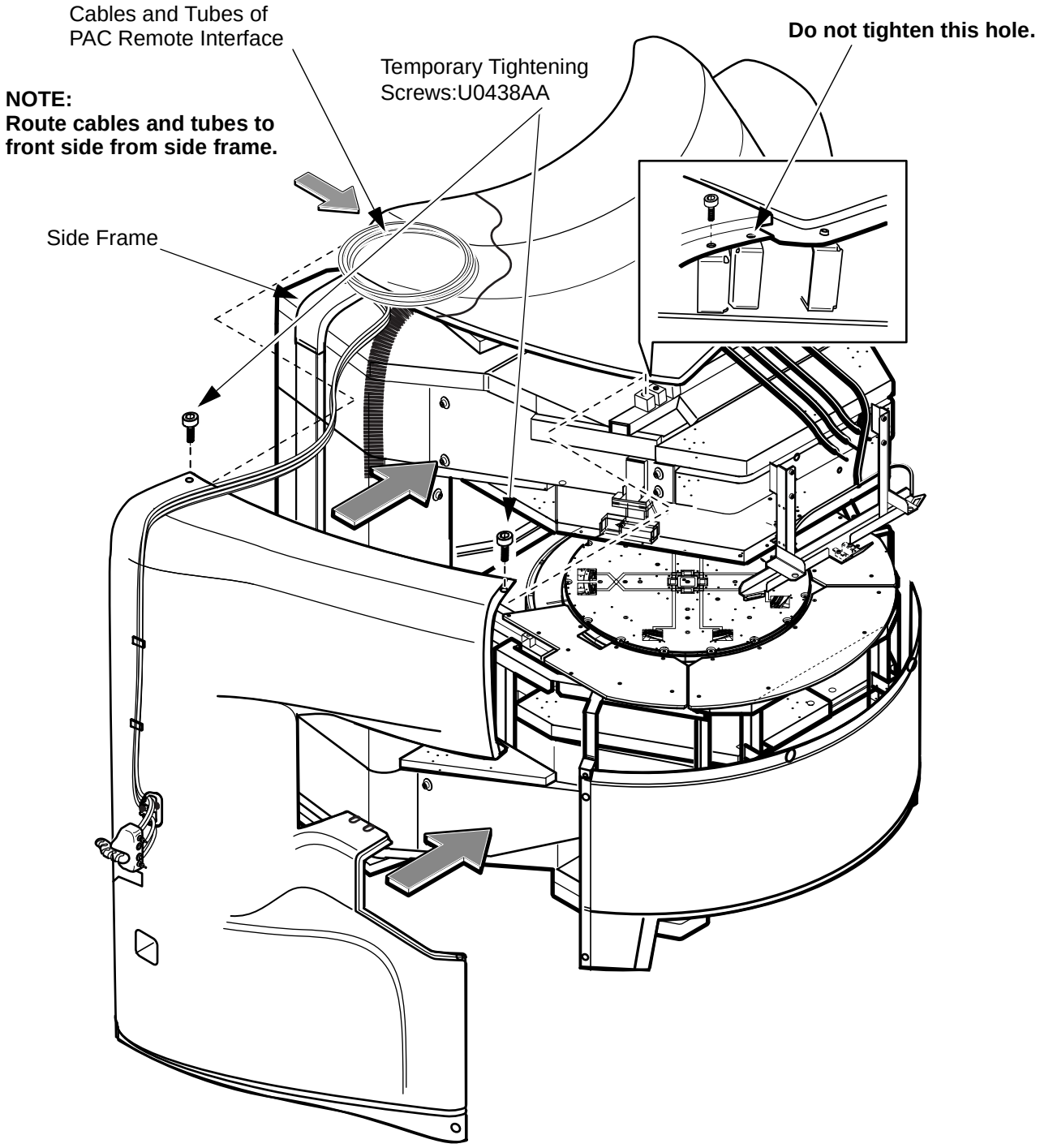


SIDE COVER INSTALLATION
ILLUSTRATION 9

5. Side Cover(Continued)

6. Put PAC remote interface cables and tubes of side cover onto the magnet.
7. Install Side Cover of PAC remote interface side to the magnet with 2 screws of cover upper side.This side cover installation is temporary fixing.

CAUTION:
Be careful not to damage cable when installing side cover.

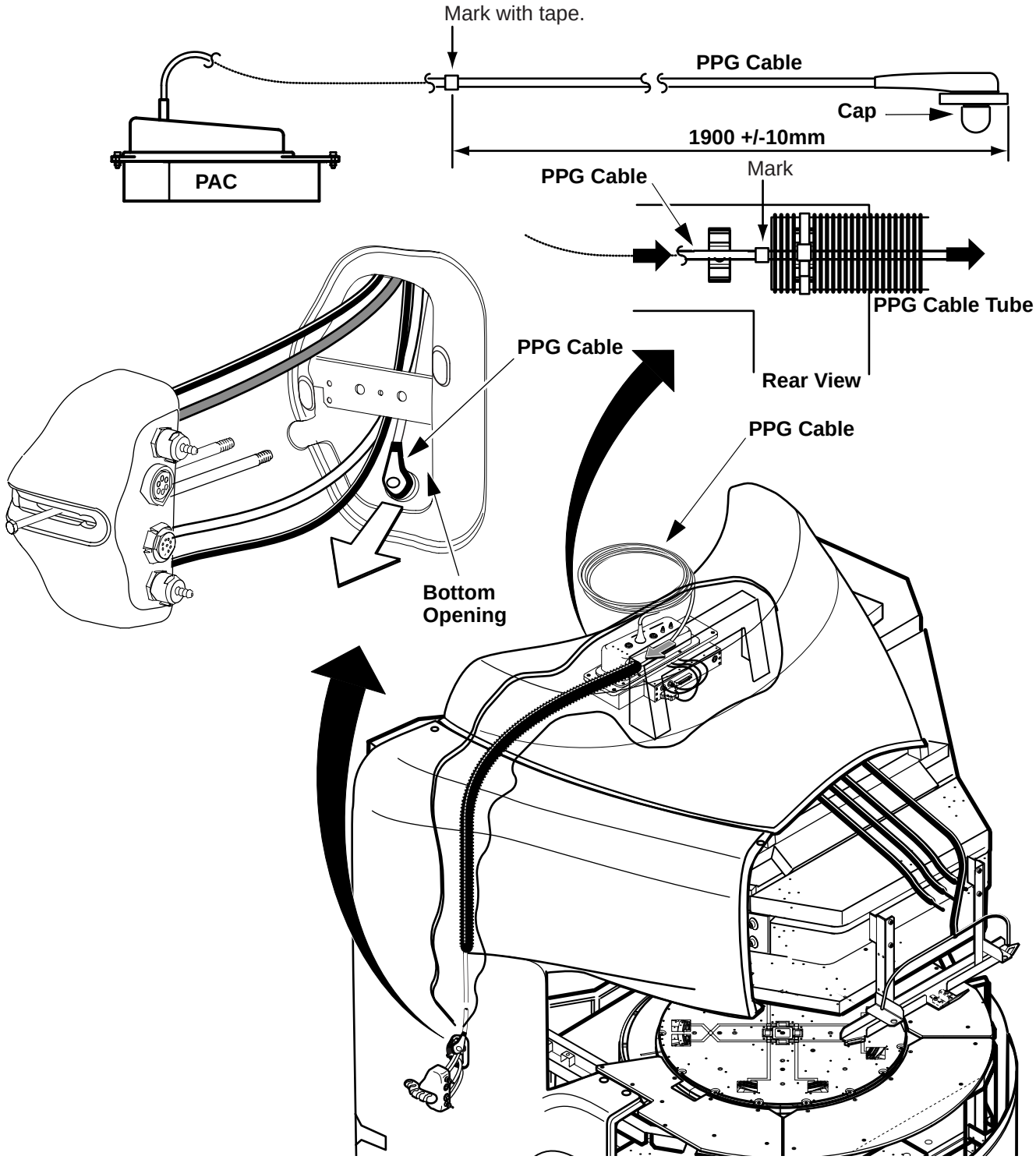


SIDE COVER INSTALLATION
ILLUSTRATION 10

5. Side Cover(Continued)

8. Mark 1900 +/-10mm position from probe side of PPG cable with tape using ruler.
9. Insert PPG Cable into tube until cable marked position.
10. Draw PPG Cable Probe from bottom opening of PAC remote interface hole.
11. Send PPG Cable from upper magnet side so that there is not rest.

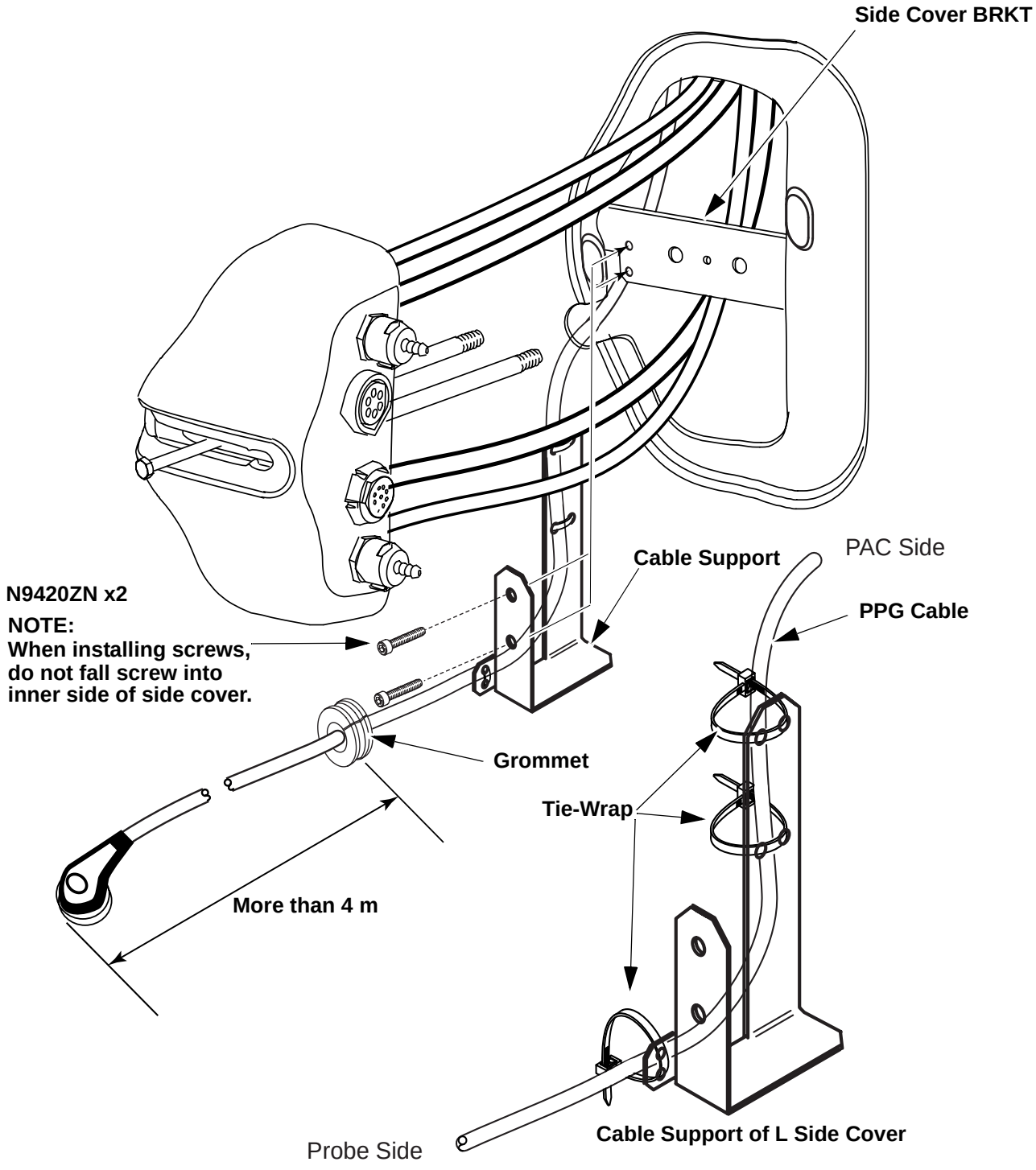
Caution: When inserting PPG cable, protection cap must be installed to PPG probe.



SIDE COVER INSTALLATION
ILLUSTRATION 11

5. Side Cover(Continued)

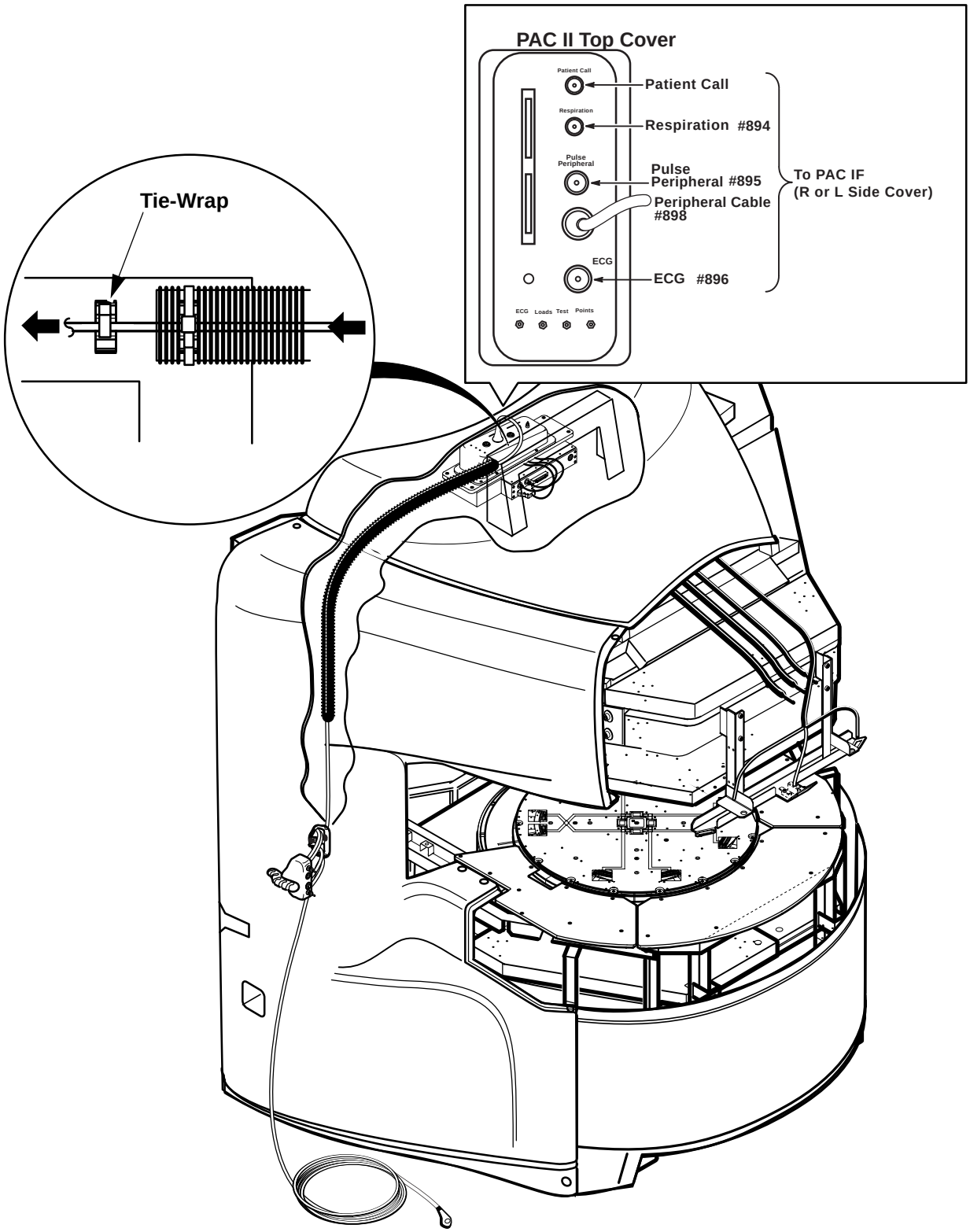
12. Attach grommet to PPG cable.Check that there is more than 4 m between grommet and probe of PPG cable.
13. Attach Cable Support to PPG cable with 3 tie-wraps(U0200AC).
14. Install Cable Support to side cover BRKT with removed 2 screws.



SIDE COVER INSTALLATION
ILLUSTRATION 12

5. Side Cover(Continued)

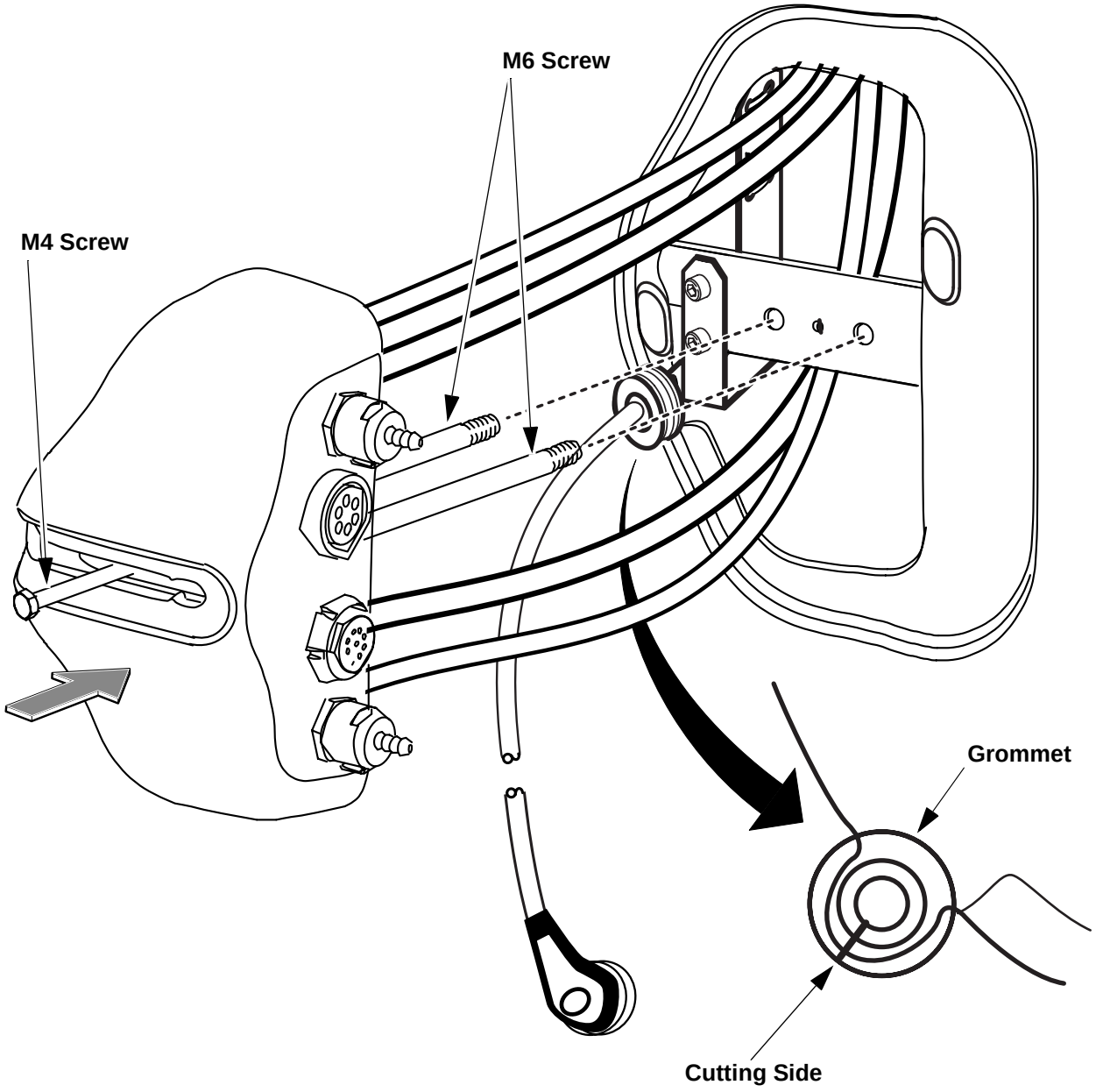
15.Pull PPG Cable lightly from upper magnet side.
16.Fix PPG Cable to roof support with tie-wrap.
17.Connect cables and tubes of PAC Remote Interface Assy to PAC on the magnet.



INSTALLING REMOTE PAC INTERFACE
ILLUSTRATION 13

5. Side Cover(Continued)

18. Set Grommet/PPG Cable to side cover, then direct cutting side of grommet to bottom side.
19. Use **M4** screw thru slot to lift and guide small end of Clamp over block inside housing.
20. Using screwdriver thru housing slot, tighten down the **M6** screws to lock housing in place.
21. Remove **M4** screw and save for use at later time since it would be required if Remote PAC Interface Assembly would need to be removed at any time in the future. OR Turn the M4 screw inward until there is clearance for sliding the PAC Hanger Bar in T5 into place.



INSTALLING REMOTE PAC INTERFACE
ILLUSTRATION 14

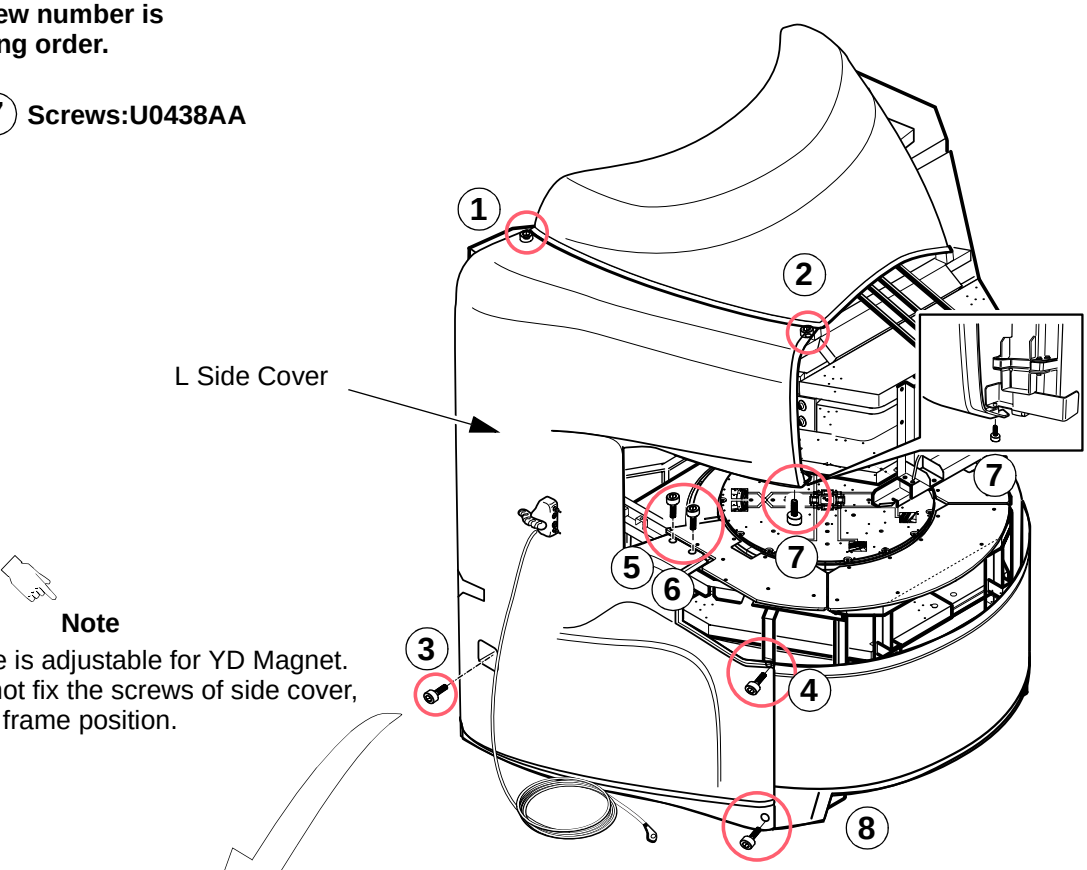
5. Side Cover(Continued)

22.Fix Side Cover of PAC interface side with 8 screws.

NOTE:
PAC Remote Interface is L side layout in this illustration.

NOTE:
The screw number is tightening order.

(1) ~ (7) Screws:U0438AA



U00444AA

Note

This Frame is adjustable for YD Magnet.
If you cannot fix the screws of side cover,
Adjust this frame position.

SIDE COVER INSTALLATION
ILLUSTRATION 15

5. Side Cover(Continued)

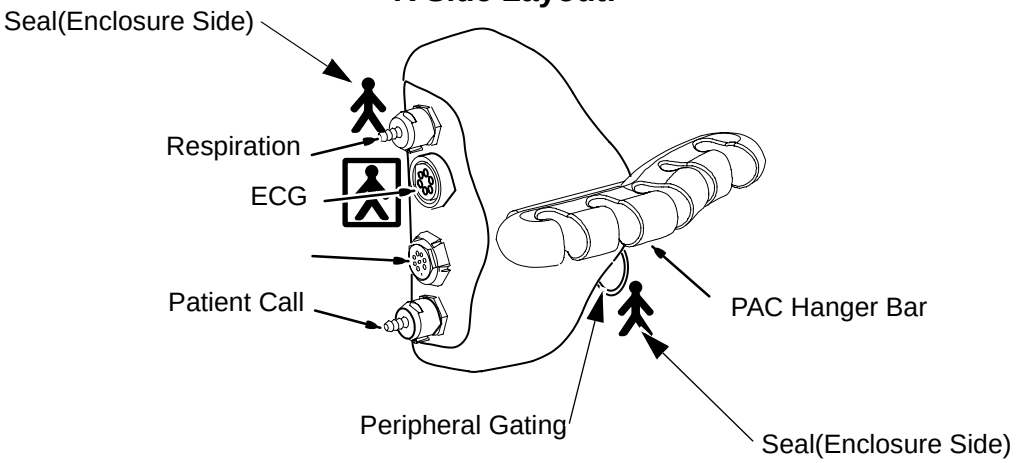
Another Side:

23.Install the dummy PAC Remote Interface for another side cover.(There is no cable connection)
24.Install the another side cover with 8 screws.(Refer to previous page.)

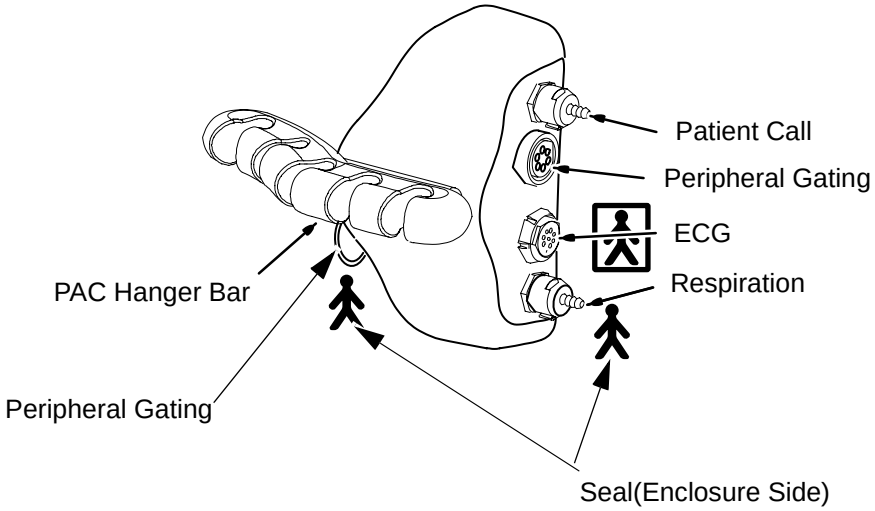
PAC Remote Interface Side:

25.Attach cables as indicated below.
26.Slide PAC Hanger Bar (2221023) into position.
27.Attach the three seals to side cover as illustration.

R Side Layout:



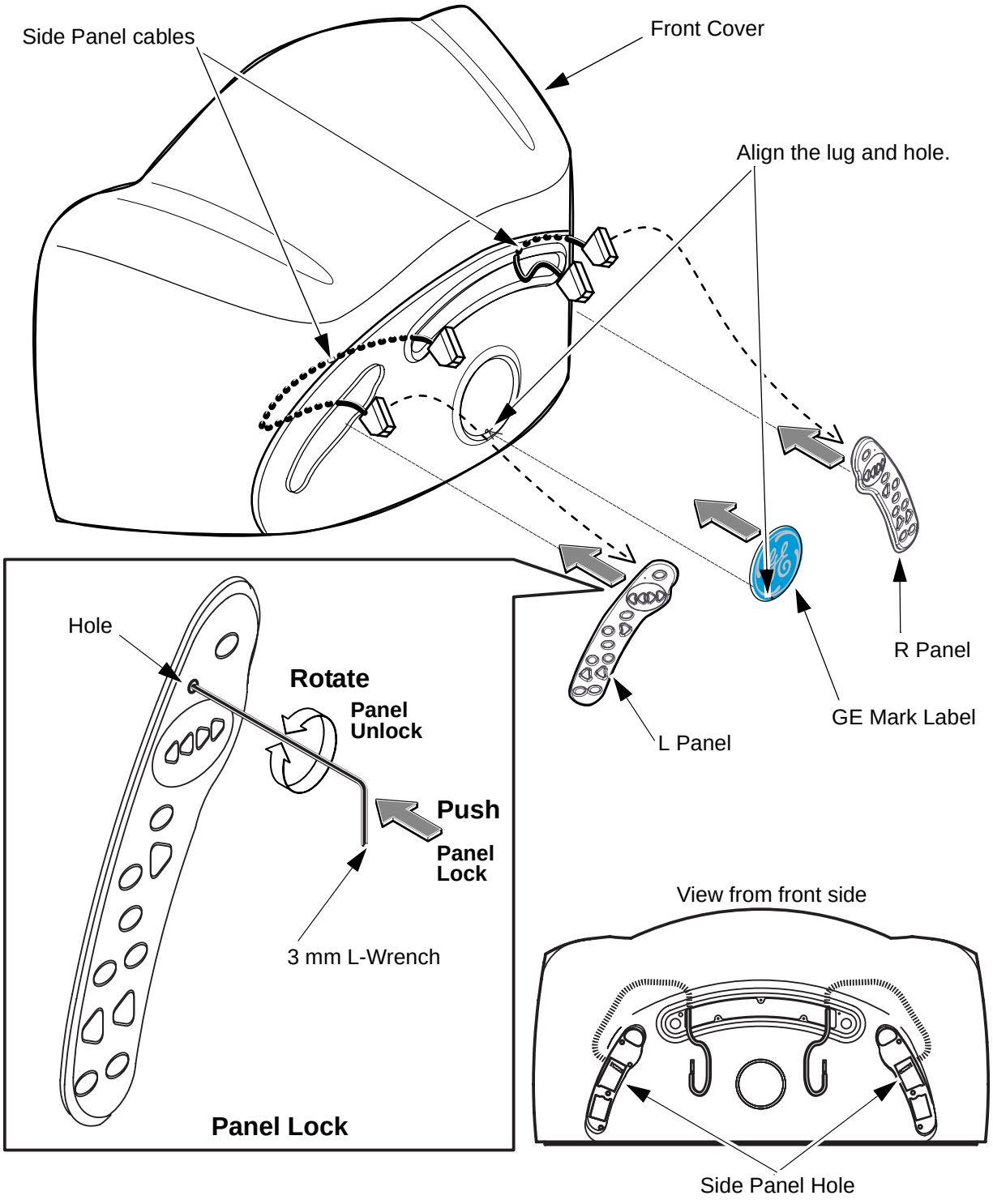
L Side Layout:



INSTALL PAC HANGER BAR AND SEAL
ILLUSTRATION 16

6. Front Cover

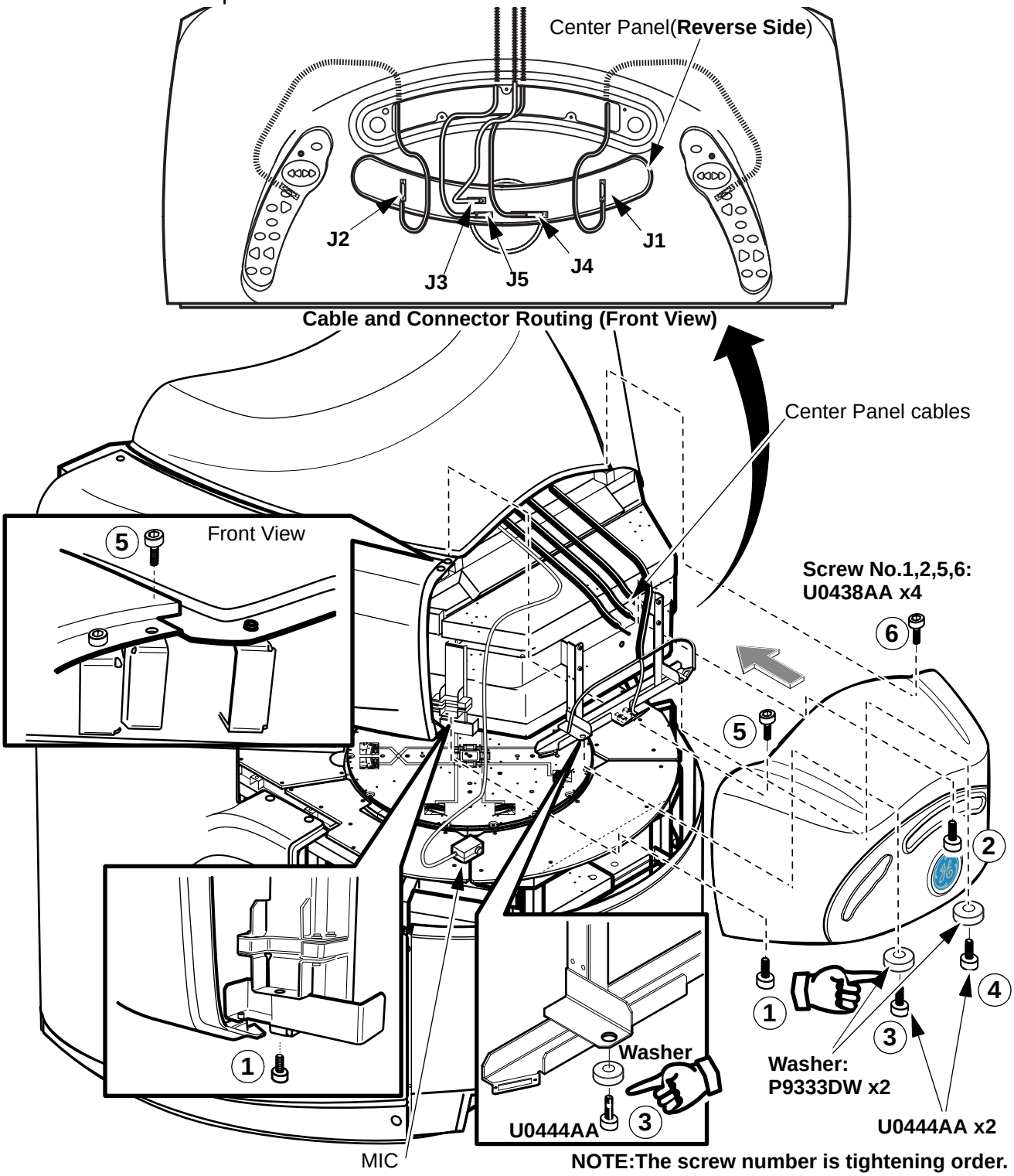
1. Before installing front cover, Install the following parts to front cover.
   a. Install the GE Mark label aligning the lug and hole.
   b.Route the R and L panel cables from side panel holes to center panel hole.
   c.Connect side panel cable to L panel, and attach the L panel to front cover.
   d.Connect side panel cable to R panel, and attach the R panel to front cover.



FRONT COVER INSTALLATION
ILLUSTRATION 17

6. Front Cover(Continued)

2. Route the MIC cable as illustration and put the MIC on deck plate.
3. Install Front Cover to the Magnet front side with 6screws(U0438AA x4,U0444AA x2) and 2washers(P9333DW).
4. Connect the all cables to J1~J5 connectors of center panel.
5. Attach the center panel to front cover.



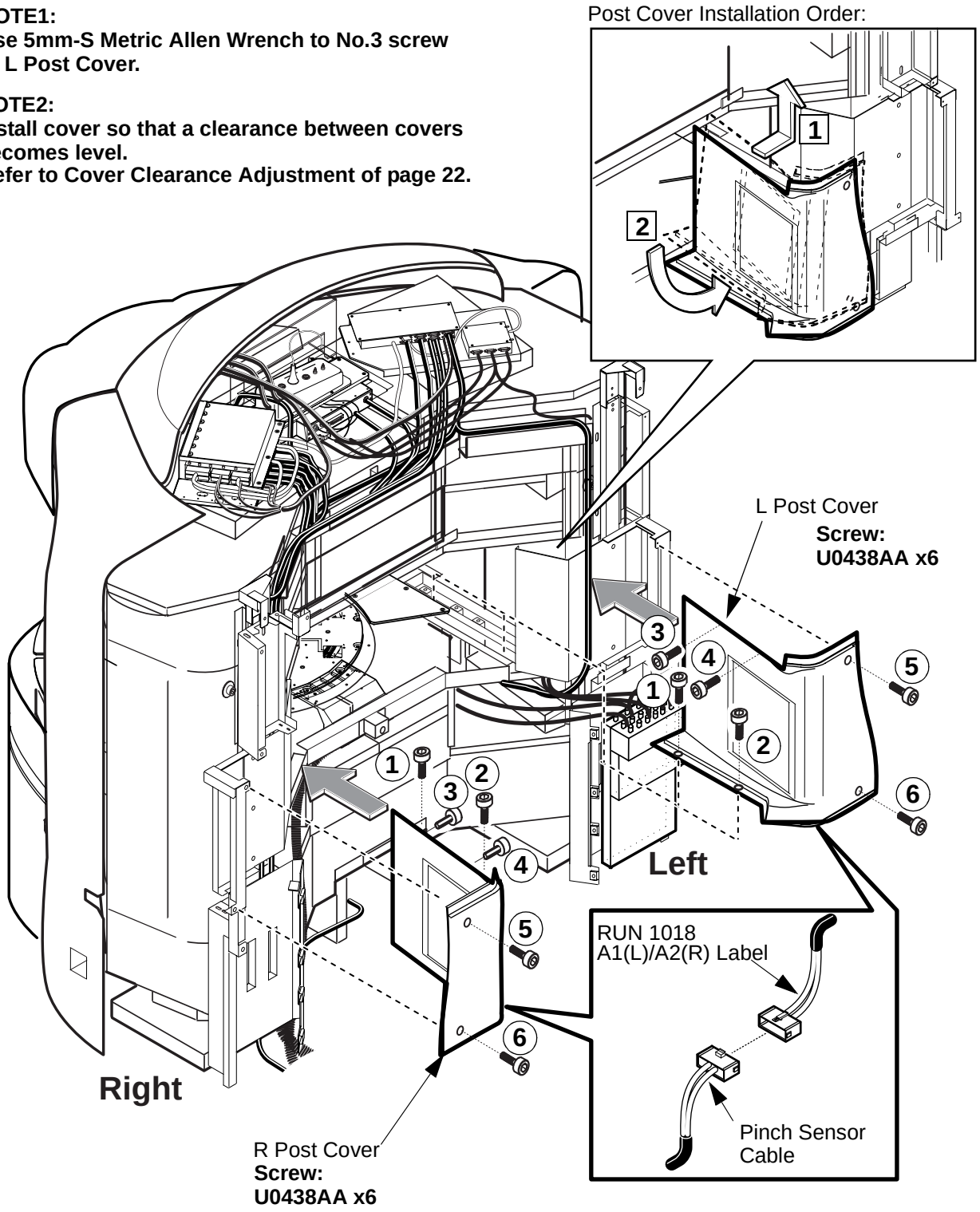
FRONT COVER INSTALLATION
ILLUSTRATION 18

7. Post Cover

1. Put R and L Post covers near post inside, connect pinch sensor connector of post cover to A1(L)/A2(R) label cables of run 1018 for each side.
2. Install R and L Post Covers to magnet frame with 6 screws(U0438AA) for each cover according to the installation order.

NOTE1:
Use 5mm-S Metric Allen Wrench to No.3 screw of L Post Cover.

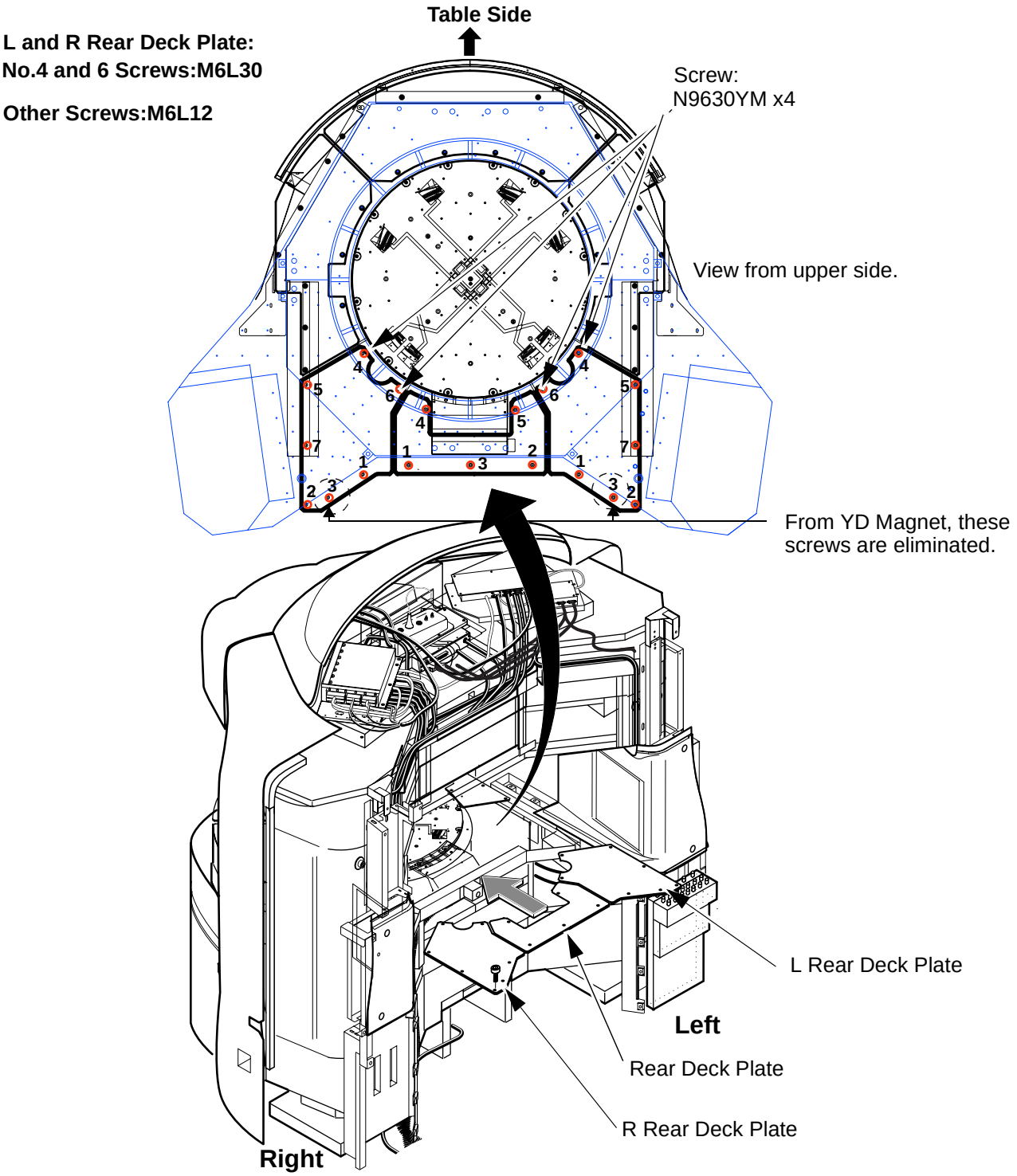
NOTE2:
Install cover so that a clearance between covers becomes level.
Refer to Cover Clearance Adjustment of page 22.



POST COVER INSTALLATION
ILLUSTRATION 19

8. Rear Deck Plate

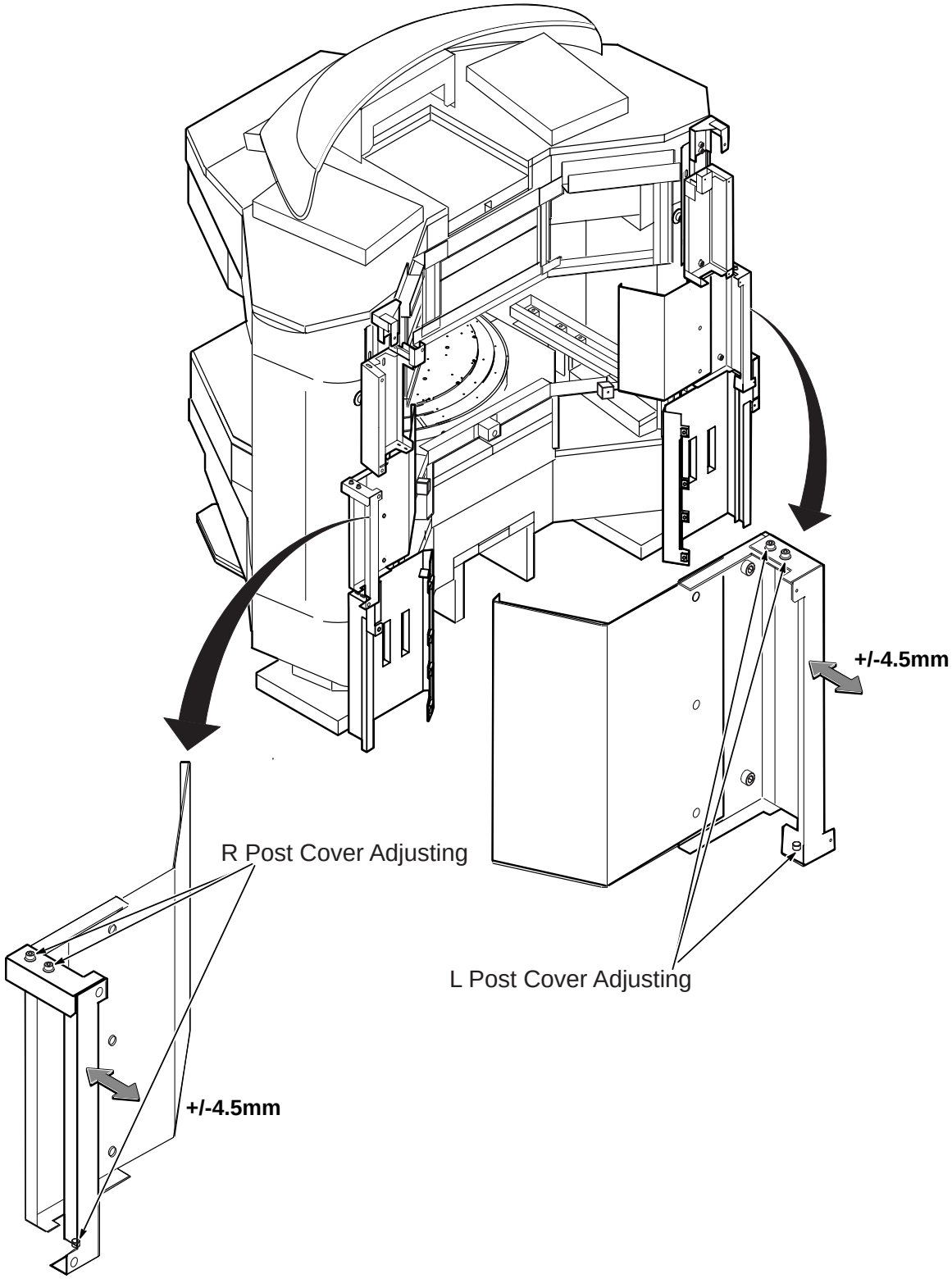
1. Check that the all connection and routing of cables and units are normal.
2. Install Rear Deck Plates with screws(temporary tightening: U0444AA x 17 for YD Magnet. N9630YM x4 plus U0438AA x15 for YC Magnet) onto the rear lower frames. Tighten the 19 screws on rear deck plates.



REAR DECK PLATE INSTALLATION
ILLUSTRATION 20

9. Post Cover Clearance Adjustment

1. Install post cover so that a clearance between covers becomes level.



POST COVER CLEARANCE ADJUSTMENT
ILLUSTRATION 21

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Mar 09, 2001	K.Tsumagari	Initial Release
1	May 19, 2001	K.Tsumagari	1. Top Cover installation is added 2. Misc Change
2	Oct 29, 2001	K.Tsumagari	Misc Change
3	Jan 08, 2002	K.Tsumagari	Page 19: Changed fixing screws of front cover.
4	Nov 26, 2002	Y.Masumo	Page 16: Added YD Information.

UNPACKING SOP

DIMENSIONS

- SIZE OF THE PACKING BOX= LENGTH x BREADTH x HEIGHT = 2860 X 1145 X 1070 mm

- WEIGHT OF THE TABLE = 750 lbs

- WEIGHT OF DOLLIES = 100 lbs

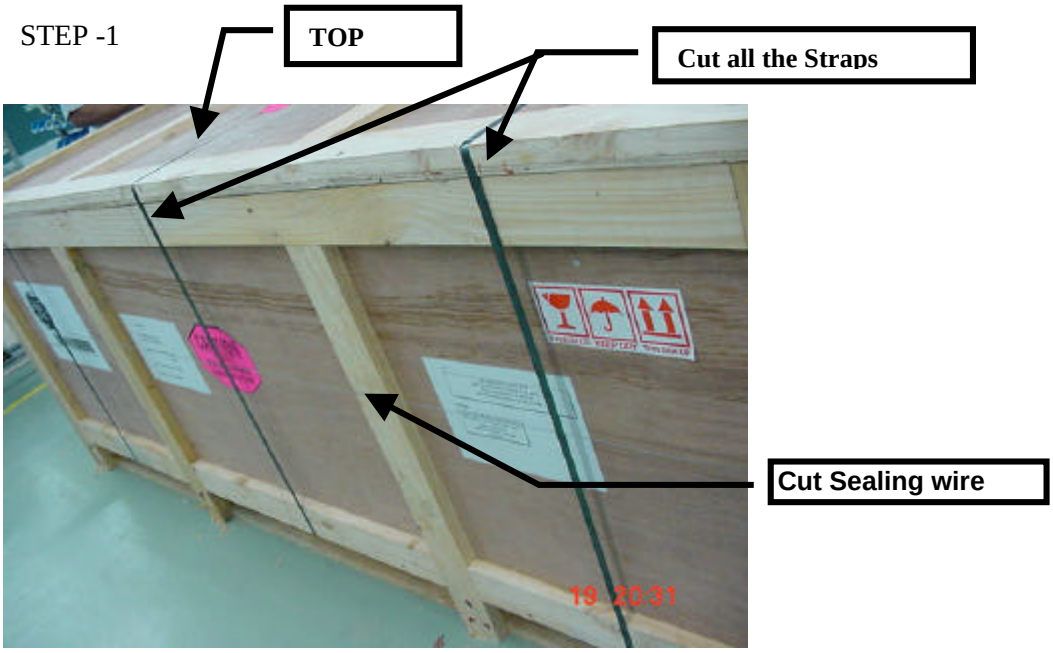
- WEIGHT OF THE PACKING BOX = 250 lbs (APPROX)

- WEIGHT OF THE TABLE WITH PACKING = 1100 lbs (APPROXIMATELY)

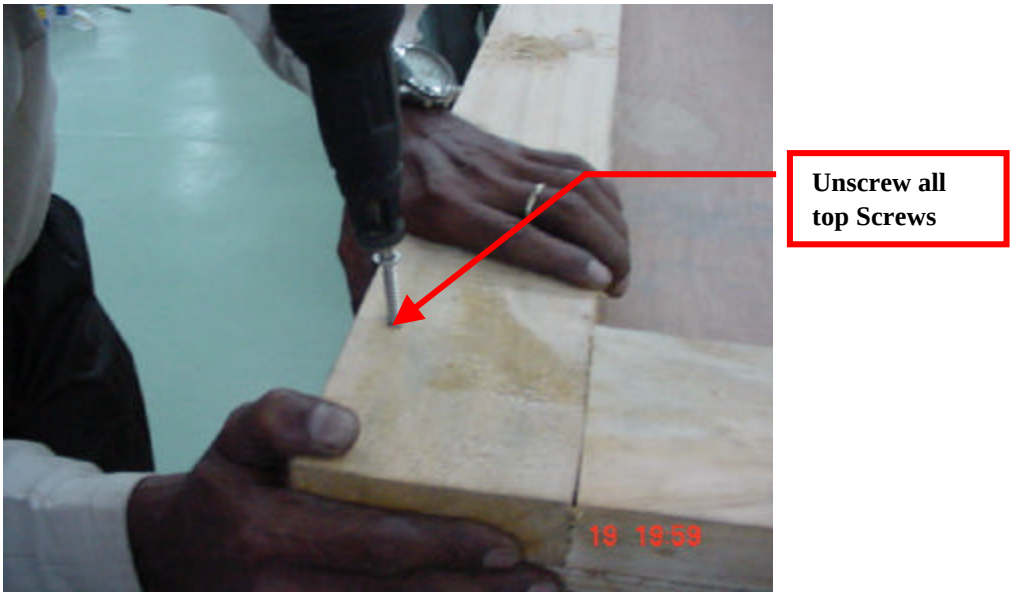
INSPECT TILT WATCH & SHOCK WATCH FOR CONDITION

UNPACKING SOP

STEP -1



STEP -2



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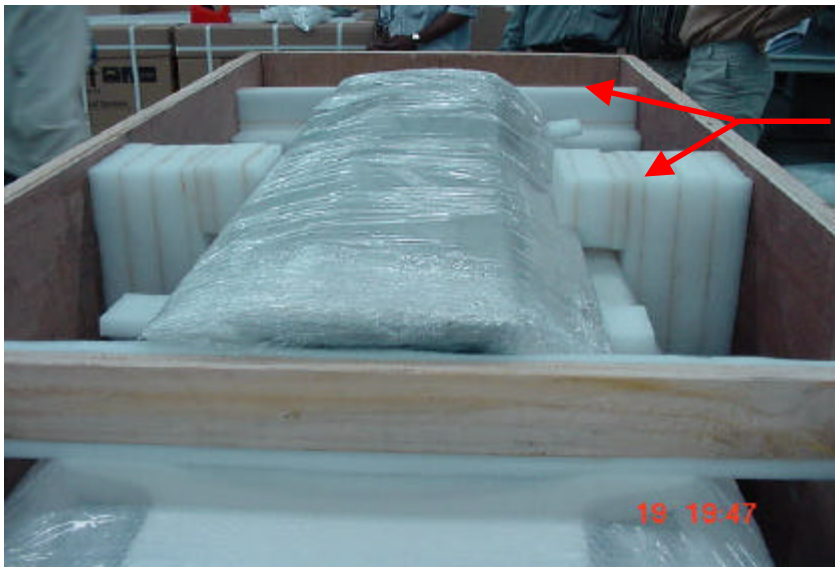
UNPACKING SOP

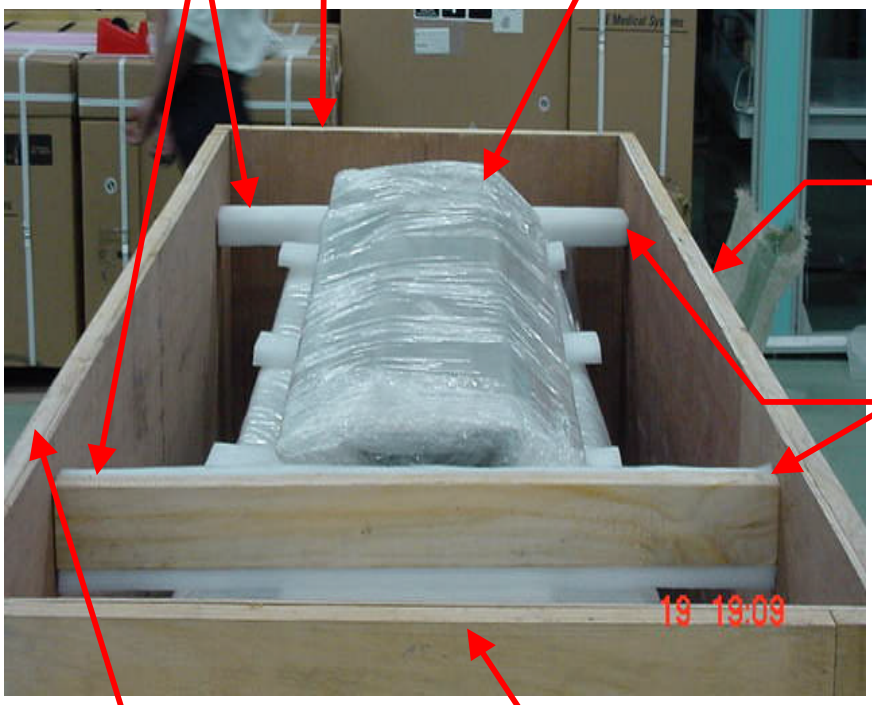
STEP -3

STEP -4



UNPACKING SOP

STEP -5



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STEP -6

CAUTION:

DO NOT REMOVE THE 3 SCREWS ON EACH SIDE PANEL MARKED BY STICKERS ON THE OUTSIDE OF THE BOX AS " DO NOT REMOVE THESE SCREWS WHILE UNPACKING". THESE SCREWS HOLD THE RAMP FOR UNLOADING TABLE USING DOLLY (RAMP KEPT INSIDE)

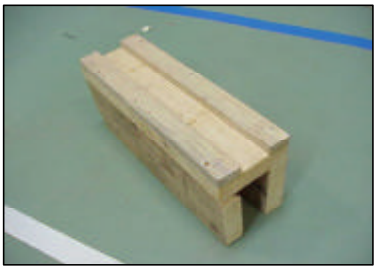
DO NOT REMOVE these Screws during Unpacking

UNPACKING SOP

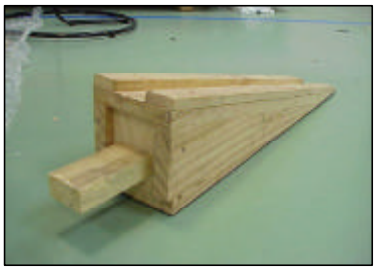
Check for availability of All Parts as per accompanying packing list.All loose parts except IV Pole have been packed seperately in Card-board Box placed on Floor of Box. IV Pole is strapped to Top of the Table with proper packing material in between.

STEP 7

AFTER REMOVING THE SIDE PANEL UNSCREW THE 3 SCREWS ON EACH OF THE SIDE PANELS AND TAKE THE RAMP OUT. EACH RAMP HAS GOT 2 PARTS NAMELY A STRAIGHT PORTION AND A SLOPING PORTION.



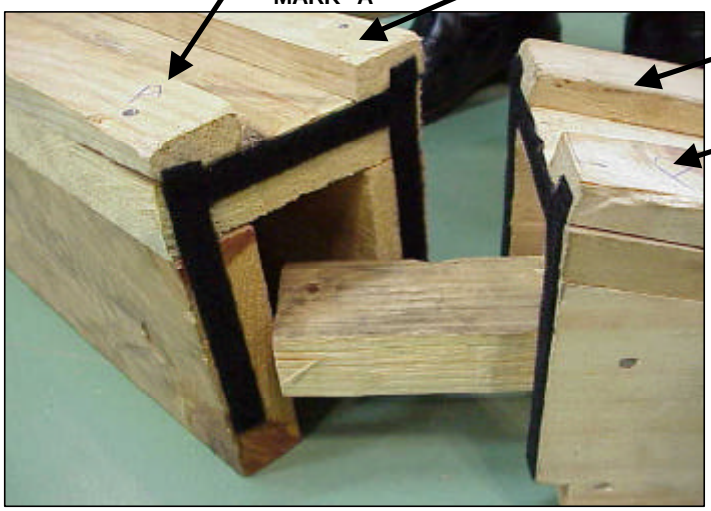
STRAIGHT PORTION



SLOPING PORTION

STEP 8:

ASSEMBLE THE RAMP AS SHOWN BELOW.



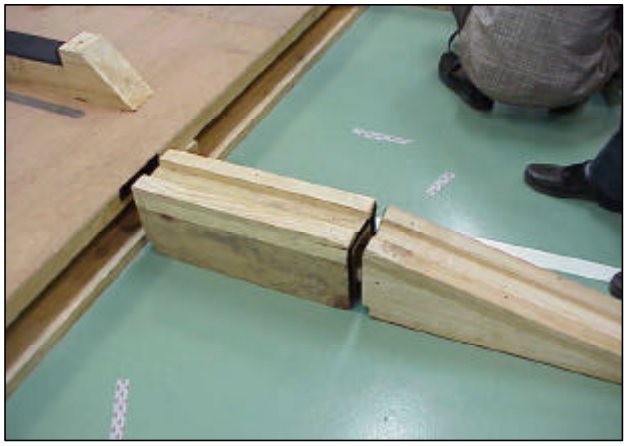
ASSEMBLE STRAIGHT PORTION MARKED "A" WITH SLOPING PORTION MARKED "A" ONLY AND SIMILARLY "B" TO "B".ENSURE VELCRO IS STUCK ON FAST.

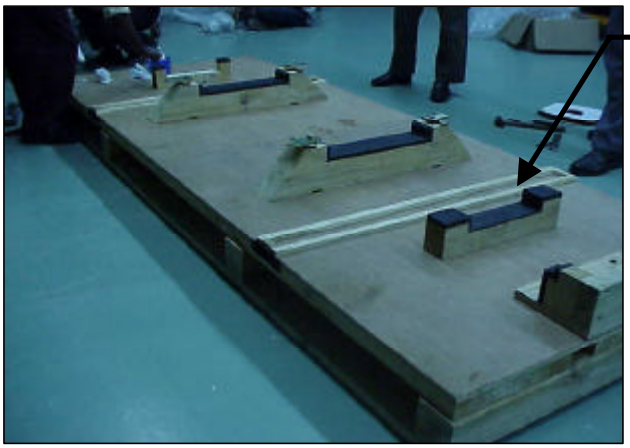
NOTE: FURTHER DOLLIES WOULD HAVE A HOOK/ PIN TYPE ARRANGEMENT INSTEAD OF VELCRO.

RAMP ASSEMBLY

STEP 9

ASSEMBLE RAMP ONTO SIDE OF PACKAGE BOX. VELCRO IS STUCK ON SIDE OF BOX FOR THIS.





GUIDE-RAILS

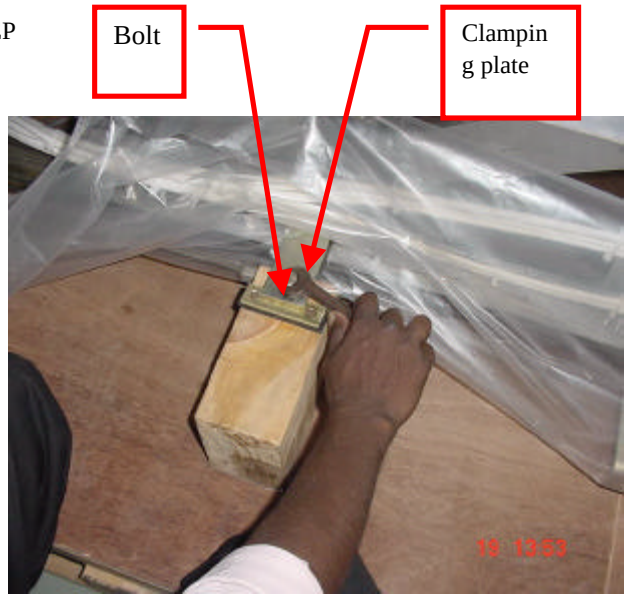
NOTE: ENSURE THAT THE GUIDE ON THE RAMP COINCIDES WITH THE GUIDE ON THE PACKAGE BOX.

UNPACKING SOP

STEP 10

AFTER STTING UP THE RAMP, THE FOUR CLAMPING BOLTS HAVE TO BE REMOVED.

STEP



CAUTION:
Remove all four Bolts and four Clamping plates before lifting the Table from the Pallet

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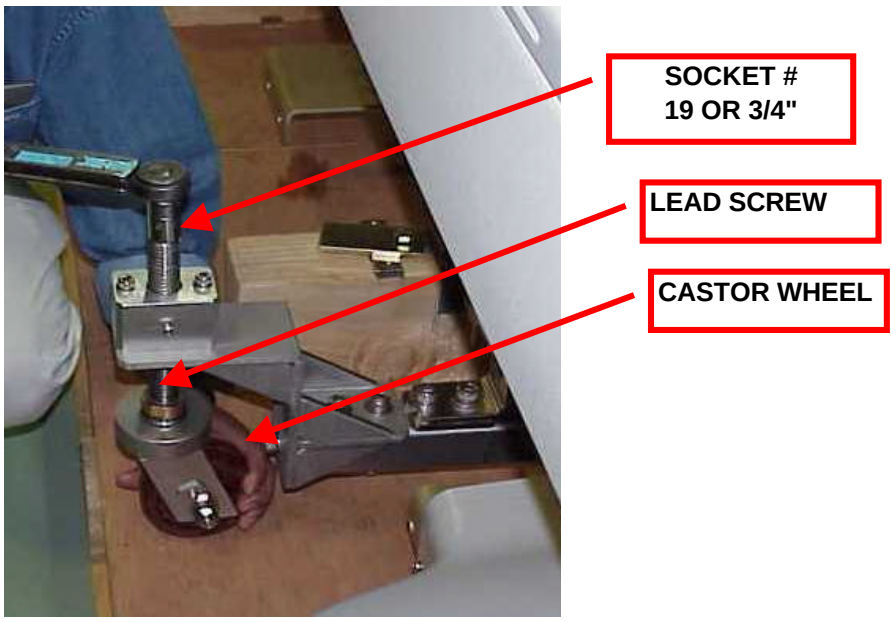
UNPACKING SOP



NOTE : WHILE JACKING UP THE CASTOR WHEELS, HOLD THEM IN SUCH A WAY THAT THEY FACE TOWARDS THE TABLE - THIS IS TO PREVENT THE TABLE FROM SLIPPING AWAY FROM THE PALLET (PACKING). (WOODEN GUIDE RAILS ARE ALSO PROVIDED TO AVOID SLIPPAGE)

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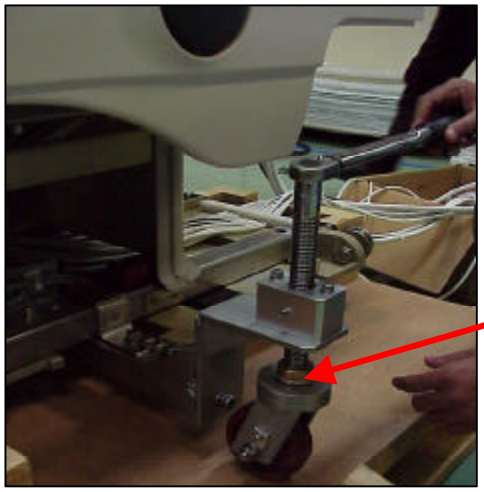
UNPACKING SOP

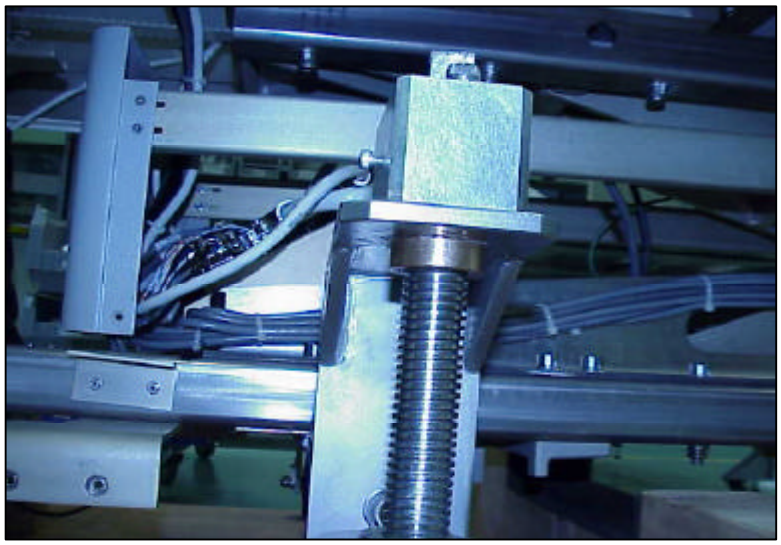
STEP 11 : JACK UP THE FOUR DOLLY WHEELS AS SHOWN IN THE PICTURE



CAUTION : ALL FOUR LEADSCREWS TO BE JACKED UP SIMULTANEOUSLY BY SAME EXTENT.

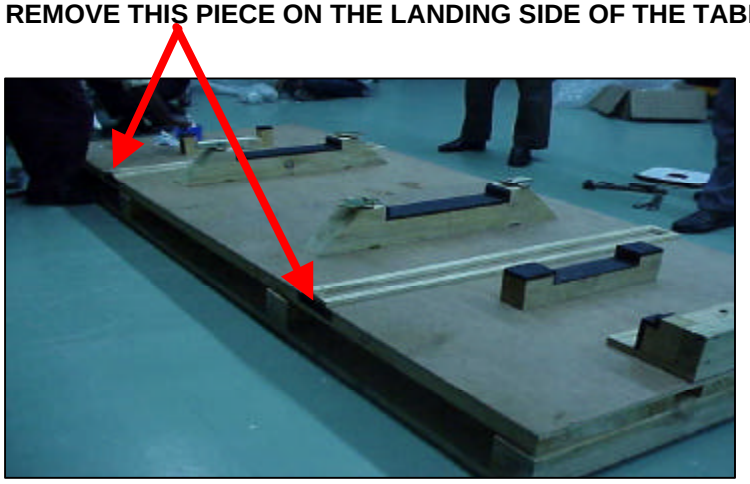
LOCK NUT TO BE MOVED UP THE LEAD SCREW

Note: JACK UP TILL THE TOP OF THE LEAD-SCREW AS SHOWN. ALSO THE BRASS LOCK-NUT'S FACE SHOULD MATE WITH LOWER SURFACE OF THE DOLLY FRAME AS SHOWN BELOW

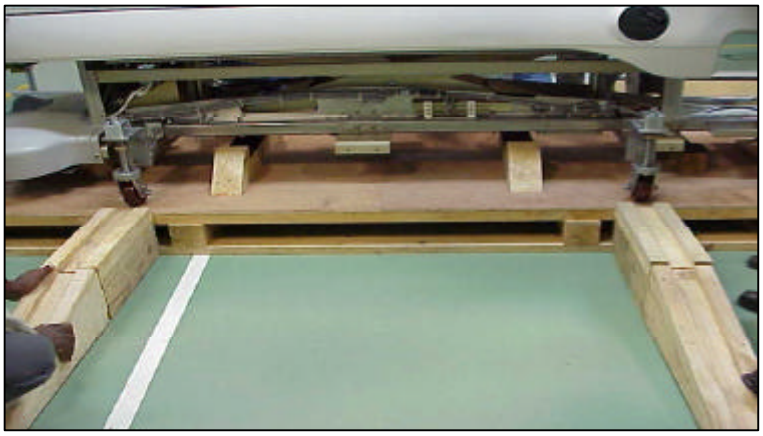


UNPACKING SOP

STEP 12 : REMOVE THIS PIECE ON THE LANDING SIDE OF THE TABLE



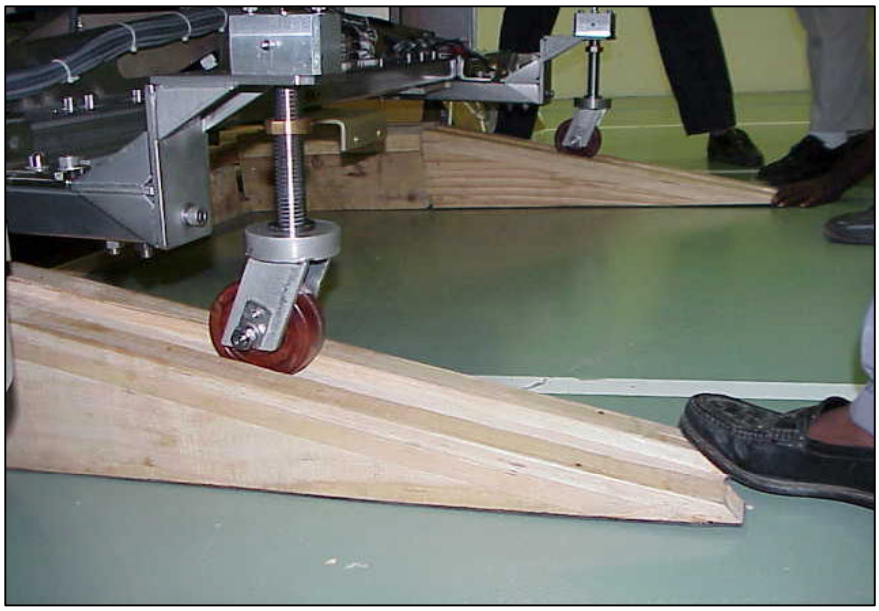
STEP 13 : MOVE THE TABLE TO THE GROUND USING THE RAMP.



CAUTION : ALL POINTS ON TABLE SHOULD CLEAR THE PACKING LOCATORS INCLUDING CABLES.

UNPACKING SOP

NOTE THAT PROPER SUPPORT IS REQUIRED TO ENSURE THE TABLE MOVEMENT IS SLOW AND GRADUAL - TWO PEOPLE BETWEEN THE TWO RAMPS AND ONE PERSON AT THE ENDS OF THE TABLE.



CAUTION : WHILE UNWRAPPING THE BUBBLE SHEET - PLEASE DO NOT USE ANY SHARP TOOLS AS ELECTRICAL WIRING MIGHT GET CUT

				Dr.				
				Ch.				
						Doc. No.	Rev. No.	Page
				App.				

TABLE OF CONTENTS

1. Overview

This procedure describes how to install Multi-Channel Select/Head Switch (MSHS).

2. Man Power

Two people to install MSHS

3. Required Tool

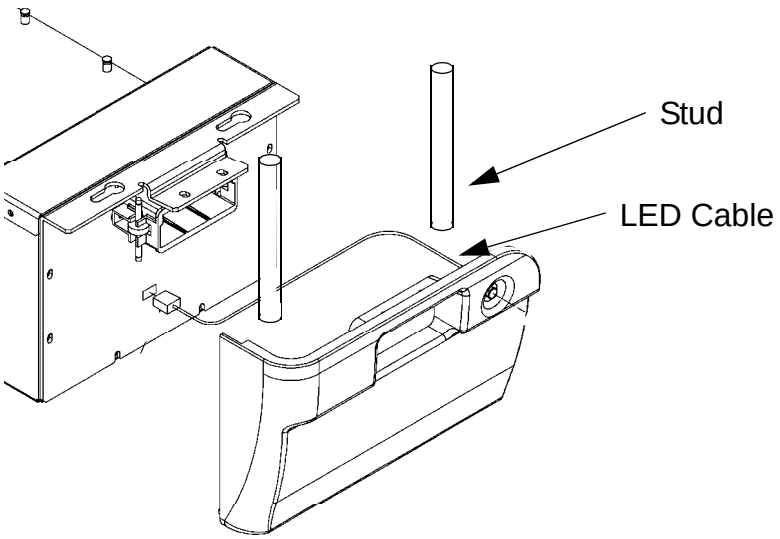
Item	Description
1.	5/16" standard non-magnetic screwdriver

4. Procedure

1. Carefully place the MSHS under the front of the table and rest it on top of the UP/DOWN pedal assembly. See Illustration 1.
2. Install the two studs at the both sides of the Table. See Illustration 1.
3. Position a person on each end of the MSHS.
4. Locate the extension screws and put 2 screws in easy reach of each person.
5. With a person supporting each end of the MSHS raise it high enough until all the cables can be connected.
6. Connect each cable to its correct location on the MSHS.
7. Once all the cables have been connected then completely raise the MSHS and place it so that it is flush against the patient table.

CAUTION

Be careful not to cut or disconnect the MSHS LED cable by stud when installing the MSHS.

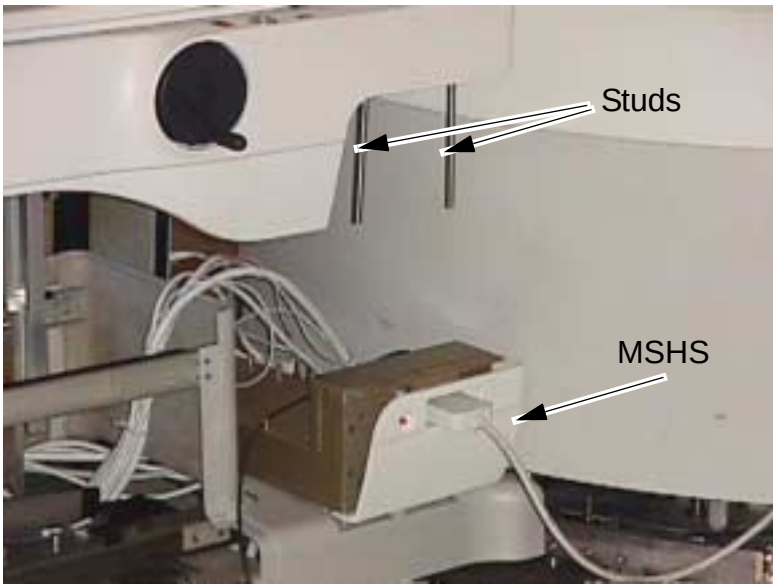


4. Procedure (continued)

8. Insert one extension screw on each side of the MSHS and install these diagonally opposite of each other. Finger tighten.
9. Insert the remaining 2 screws and finger tighten.
10. Use the screwdriver to tighten the extension screws until snug.

CAUTION

Do not over-tighten the screws. Damage to the threads in the corresponding steel plate or to those on the screws will result.



MSHS
ILLUSTRATION 1

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Feb 9, 2001	Y. Masumo	Initial Version
1	Oct 28, 2001	Y. Masumo	Misc Correction

SWING TABLE INSTALLATION

TABLE OF CONTENTS

1. Required Tools

- •Non-ferrous Metric Hexagon Wrench Set
- •Level Gauge

2. Prerequisite

- •Ware Plate is already installed.
- •Table Rail is already installed.

3. Overview

This manual describes following items.

- •Table installation onto the table rail
- •Table level check
- •Pivot sensor height adjustment of table rail

4. Mounting the Table on the Front Rail

1. Move the table into position using the shipping dollies attached.
2. Position the table at approximately 15 degrees off center. Carefully slide the cables under the magnet and retrieve them from the back of the magnet. Make sure they are pulled all the way through and temporarily ties wrap them together.

Note:

- •The Swing Table weighs approximately 750 lbs. If the cables are not pulled through and temporarily tie wrapped, they could get caught in the Table Rail and severed by the table swing motion.
- •After installed the table, do not remove dollies.The dollies need adjustment procedure of table.

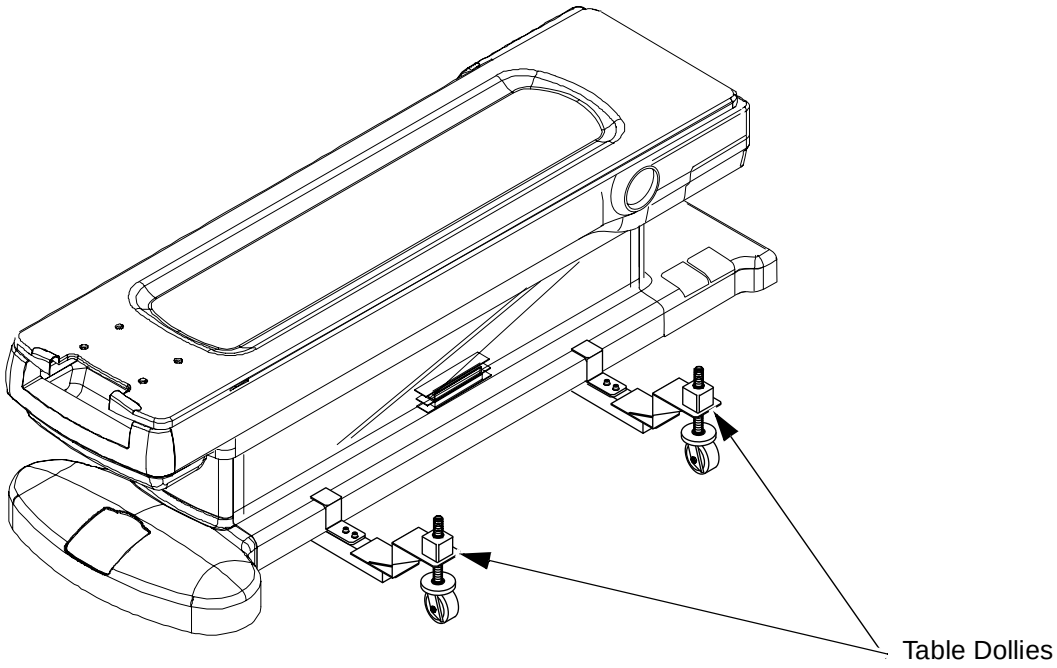


TABLE DOLLIES
ILLUSTRATION 1

4. Mounting the Table on the Front Rail (continued)

3. Remove Wheel Cover from the table.
4. Remove the Rail Wheels from the front of the table and slowly slide the table between the table Rail and the magnet itself. Use the shipping dollies to adjust for height clearance.
5. Once the table is in position, restore the table rail wheels and bolt them tight. Use the second safety lock nut to lock the bolt in position.

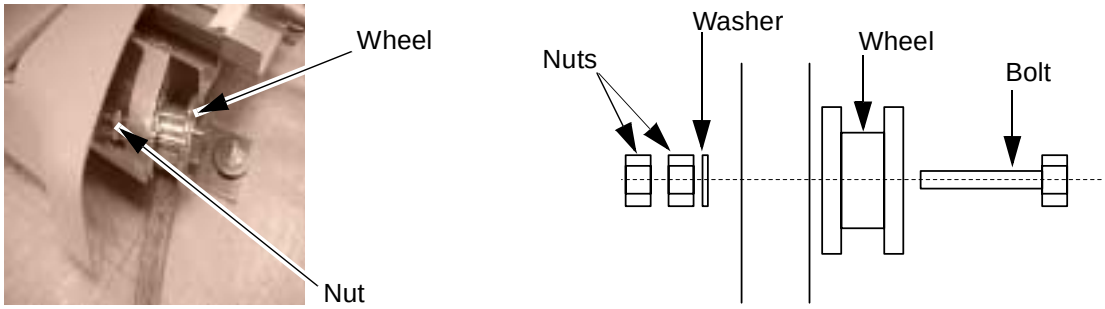


TABLE RAIL WHEEL REMOVAL
ILLUSTRATION 2

6. Using the shipping dollies, slowly drop the table into position.

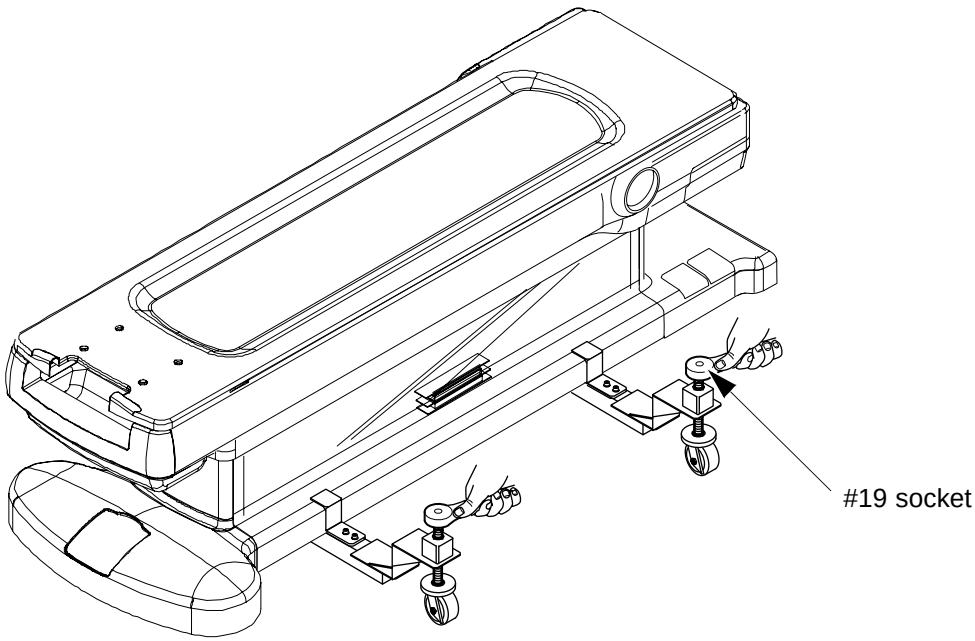


TABLE POSITIONING
ILLUSTRATION 3

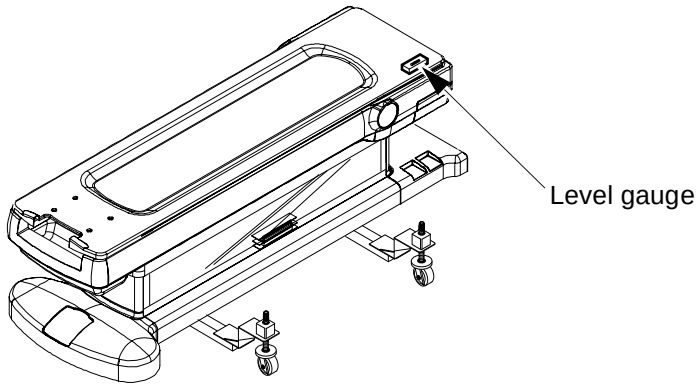
5. Table Level Check

5-1 Overview

Table leveling is achieved by proper placement of the correct amount of shims under the table Rail during the initial Swing Table Installation. There are no adjustments on the Swing Table wheels. Shimming the Swing Table Rail is the sole method used to adjust table level FRONT to BACK (ANTERIOR to POSTERIOR) and Left to right. If re-shimming the table is required to achieve proper level, it will be necessary to perform all of the Mechanical Table Installation procedure alignments before adjusting the Sensor Adjustment Assembly. Failure to do perform the Installation procedures and measurements will result in table misalignment and severe problems achieving proper image quality.

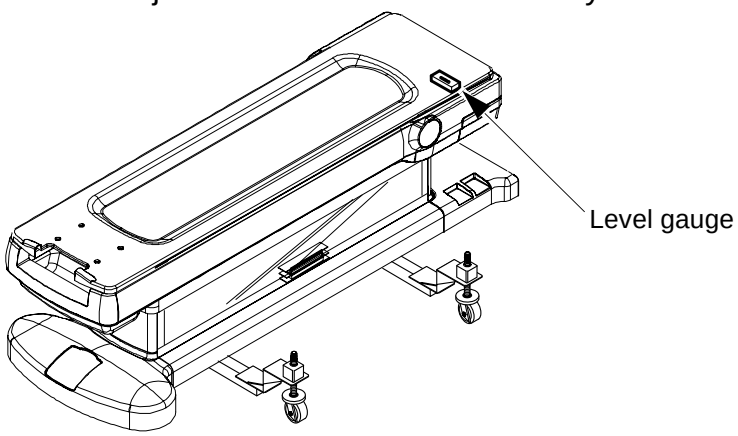
5-2 Table Level Check Procedure

1. Move the Table to the Zero position.
2. Place level gauge on the side of the table.
   Insure that the table is level, front to back.
   If you find this out of adjustment, you will need to re-shim the Swing Table Rail.
   Refer to Section 6 “Table Level Adjustment” if reshim is necessary.



LEVELING THE TABLE FRONT TO BACK
ILLUSTRATION 4

3. Place Table level gauge across the cradle (Magnet side of the cradle).
   Check the level of the table Left to right at the approximate center of the Swing Table.
   If you find this out of adjustment, you will need to re-shim the Swing Table Rail.
   Refer to Section 6 “Table Level Adjustment” if reshim is necessary.



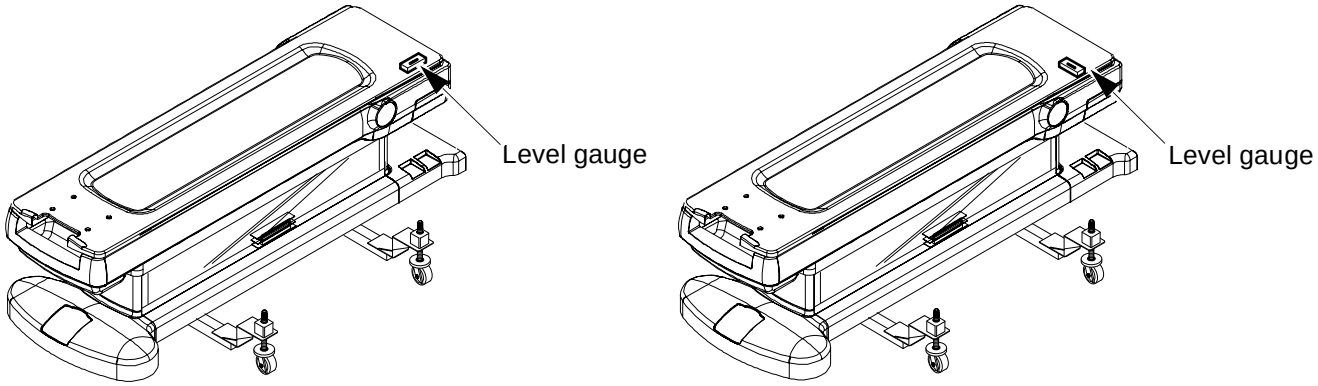
LEVELING THE TABLE LEFT TO RIGHT
ILLUSTRATION 5

5-2 Table Level Check Procedure (continued)

4. If the Table is leveled, remove the dollies from the table.
5. Remove the temporary tie wraps and connect the table cables to the mating cables at the rear of the magnet.
6. Mount all three of the position switches to the Table Front Rail. Connect the position switches to their respective cables. To prevent these cables from being cut by the table roller wheels and Front Rail, use ty-wraps or any other means to secure them out of the way. Failure to do this may cause damage to the cables.

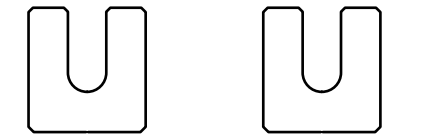
6. Table Level Adjustment

1. Using the shipping dollies, slowly move the table height so that the Table is leveled front to back and left to right.



LEVELING THE TABLE
ILLUSTRATION 6

2. Loosen the four rail anchor bolts
3. Insert the shims under the rail (four anchor positions) until the rail touches the table front wheels.

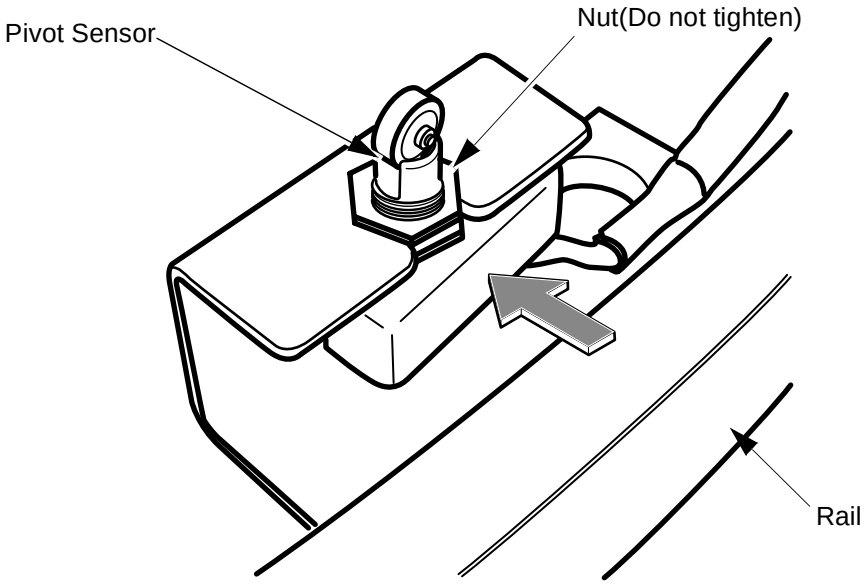


SHIM PLATE
ILLUSTRATION 7

4. Using the dolly remove the table from the rail.
5. Adjust the rail position using adjustment jig.
   (Refer to Installation/7~8th day/Table Rail Installation).
6. Install the Table. Do not remove dolly after the table installation.The dolly will be used to the table swing position adjustment.

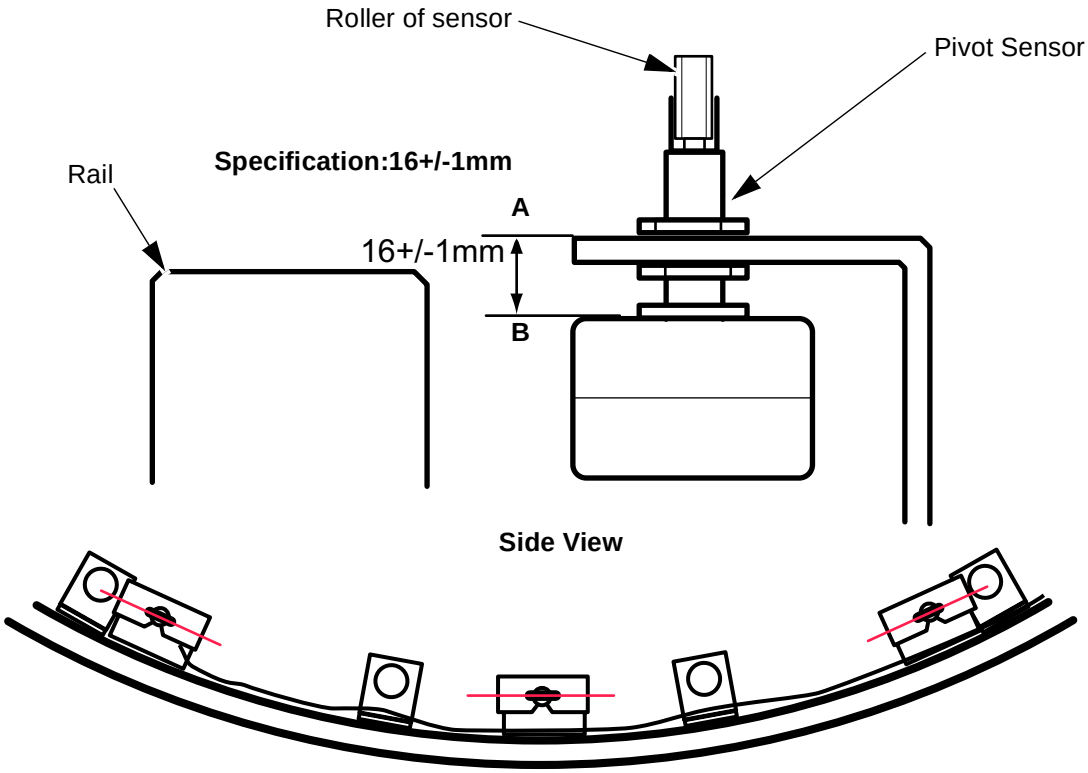
7. Pivot Sensor Height Adjustment

1. After the table installation, restore three pivot sensors to table rail bracket.Do not fix pivot sensor with nut.



PIVOT SENSOR RESTORATION
ILLUSTRATION 8

2. Adjust height of pivot sensor so that distance between A and B becomes 16+/-1mm with nuts.
3. After adjustment of three pivot sensors, check that three sensors are parallel to the rail.



PIVOT SENSOR HEIGHT ADJUSTMENT
ILLUSTRATION 9

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Feb 7, 2001	Y. Masumo	Initial Version
1	Mar 27, 2001	K.Tsumagari	Procedure is changed
2	May 23, 2001	K.Tsumagari	Misc Change

TABLE OF CONTENTS

1. TABLE CABLE WIRING

1. Send the Cables of the Table through the Table duct to the rear of the Magnet..

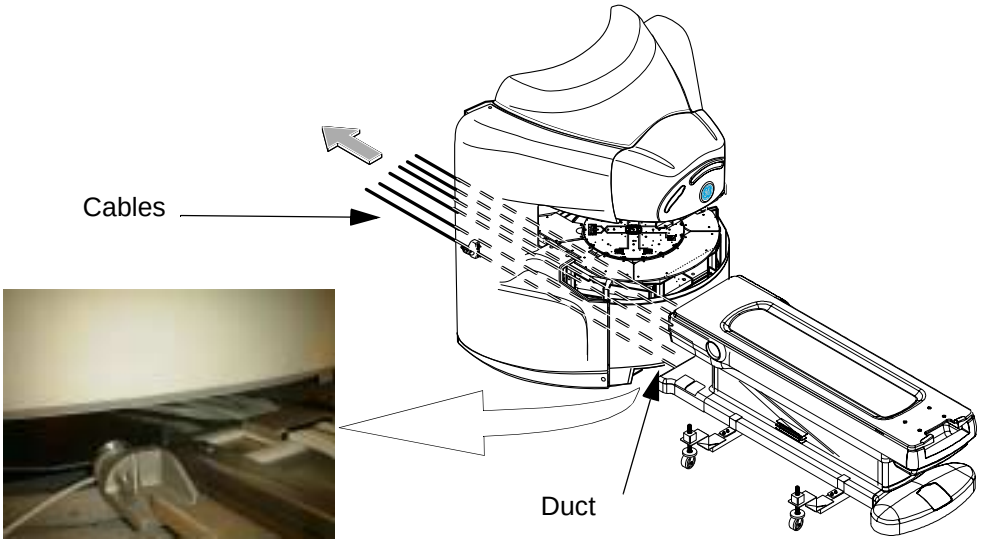
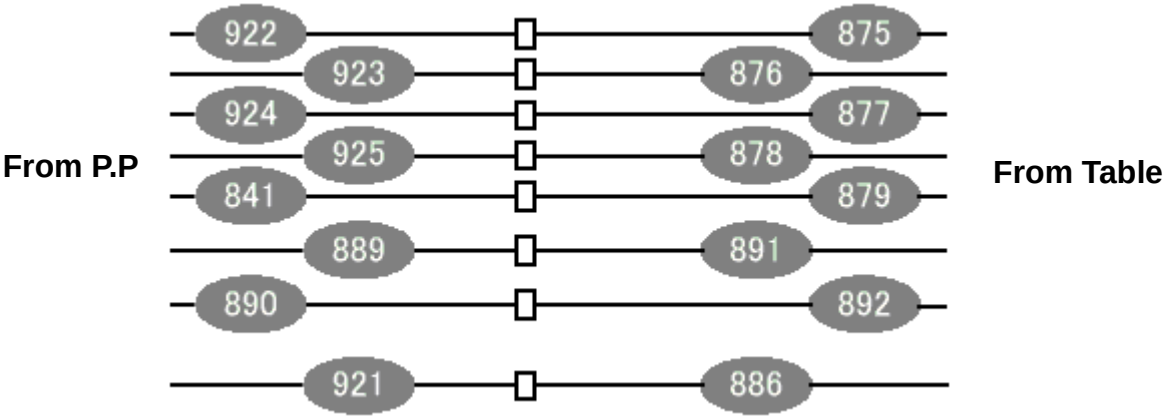


TABLE CABLE WIRING
ILLUSTRATION 1

2. Connect the cables at the rear of the Magnet according to the following illustration.



CABLE CONNECTION
ILLUSTRATION 2

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Dec 13, 2000	Y. Masumo	Initial Release
1	June 4, 2001	Y.Masumo	Misc Correction
2	Oct 16, 2001	Y.Masumo	Updated Illustration 1

TABLE OF CONTENTS

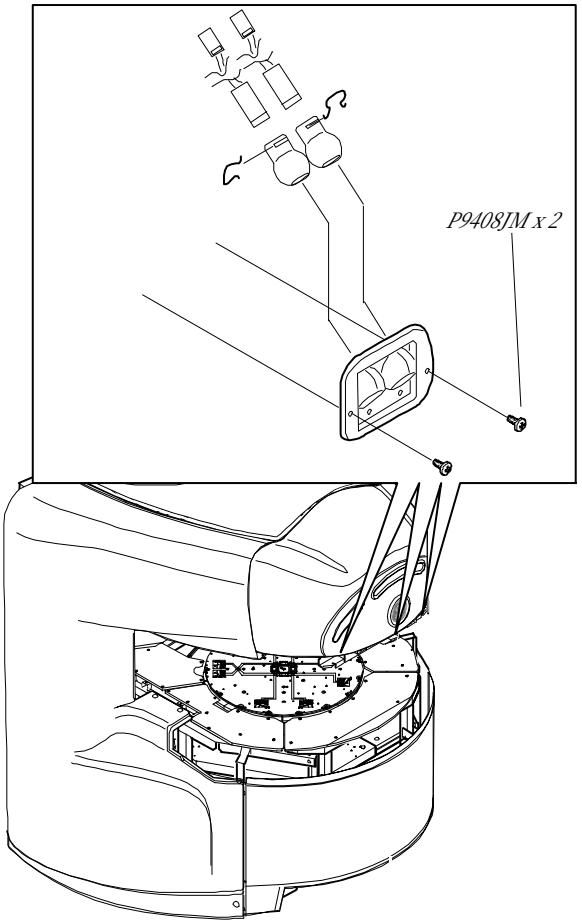
1. Overview

This procedure describes how to install laser light

2. Procedure

1. Turn SSM Breaker OFF at Power Cabinet PDU.
2. Install two Laser Light with two screws at left, right, and center position. See Illustration 1.

Note
It is not necessary to install laser light covers.



ILL EXAMPLE
ILLUSTRATION 1

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Mar 23, 2001	Y. Masumo	Initial Version
1	May 18, 2001	Y. Masumo	Misc Correction

MAGNET COVER INSTALLATION

VOLUME 2

TABLE OF CONTENTS

WARNING!

FERROUS MATERIAL HAZARD! THE CRIMP TOOL, AND OTHER TOOLS AND PARTS REQUIRED FOR THIS INSTALLATION CONTAIN FERROUS MATERIAL AND WILL BE STRONGLY ATTRACTED TO MAGNET AND MAY BECOME DANGEROUS PROJECTILES. IF MAGNET IS AT FULL FIELD – KEEP ALL FERROUS TOOLS AT LEAST 10 FEET AWAY FROM THE MAGNET.

1. Preparation

Required Tool:

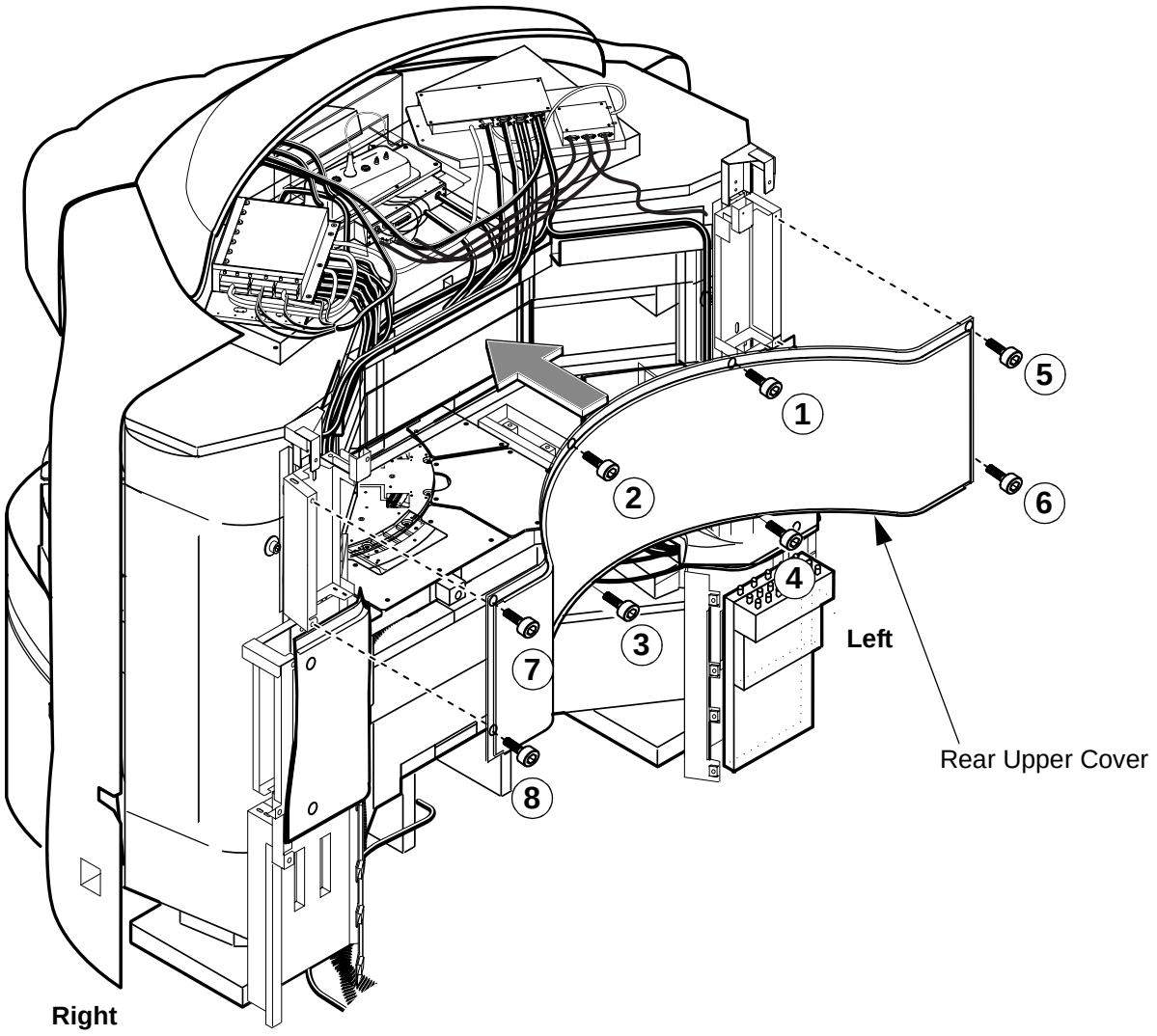
Items	Qty	Type/Parts Number	Part
Metric Allen Wrench Set	1	Non ferrous	

2. Rear Upper Cover

1. Check that the all connection and routing of cables and units are normal.
2. Install Rear Upper Cover to the Rear side of the magnet with 8 screws(U0438AA).

NOTE1:The number is tightening order of screw.

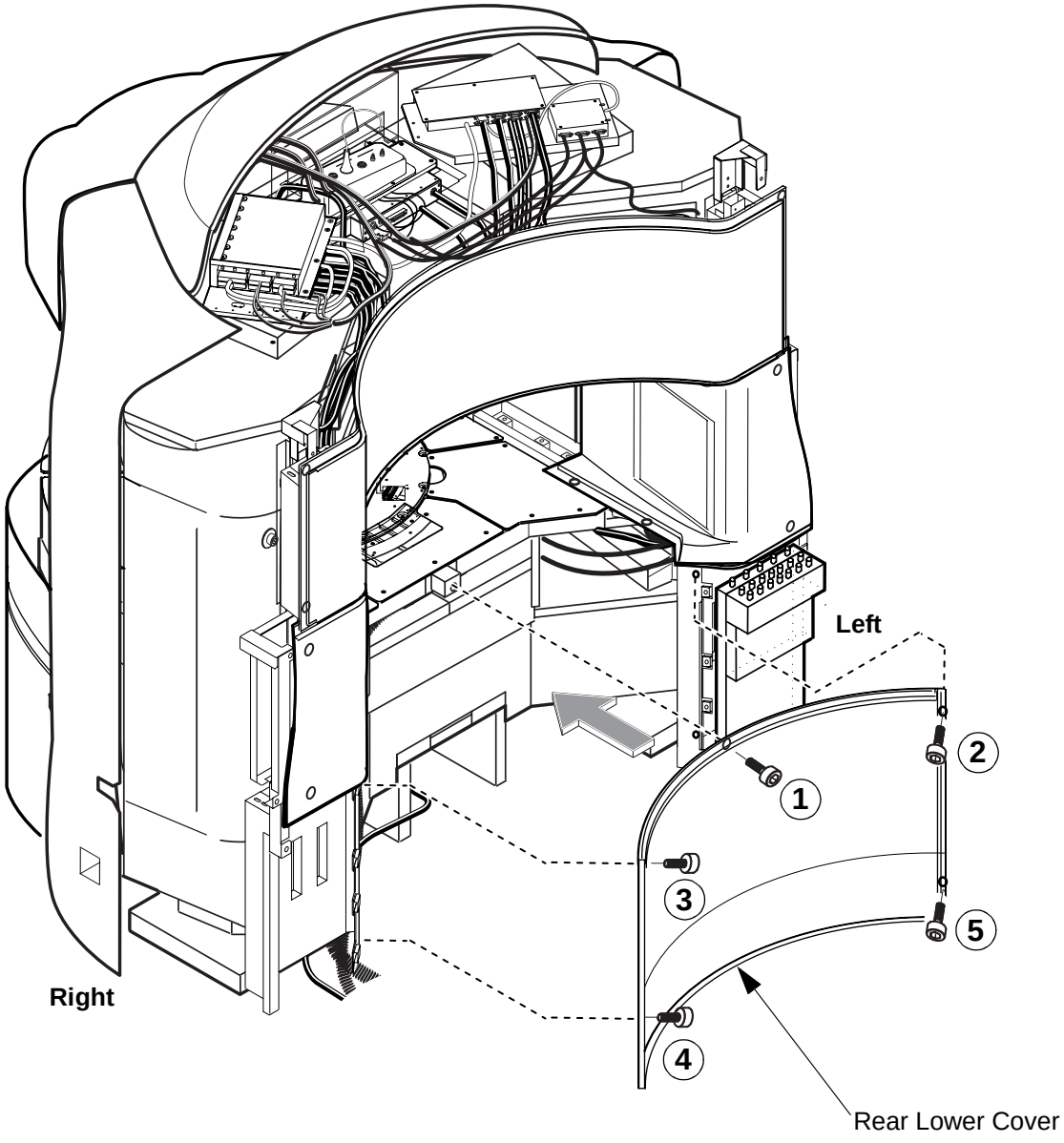
NOTE2:Install cover so that a clearance between covers becomes level.
Refer to Cover Clearance Adjustment of page 14.



REAR UPPER COVER INSTALLATION
ILLUSTRATION 1

3. Rear Lower Cover

1. Install Rear Lower Cover to the Rear side of the magnet with 5 screws(U0438AA).

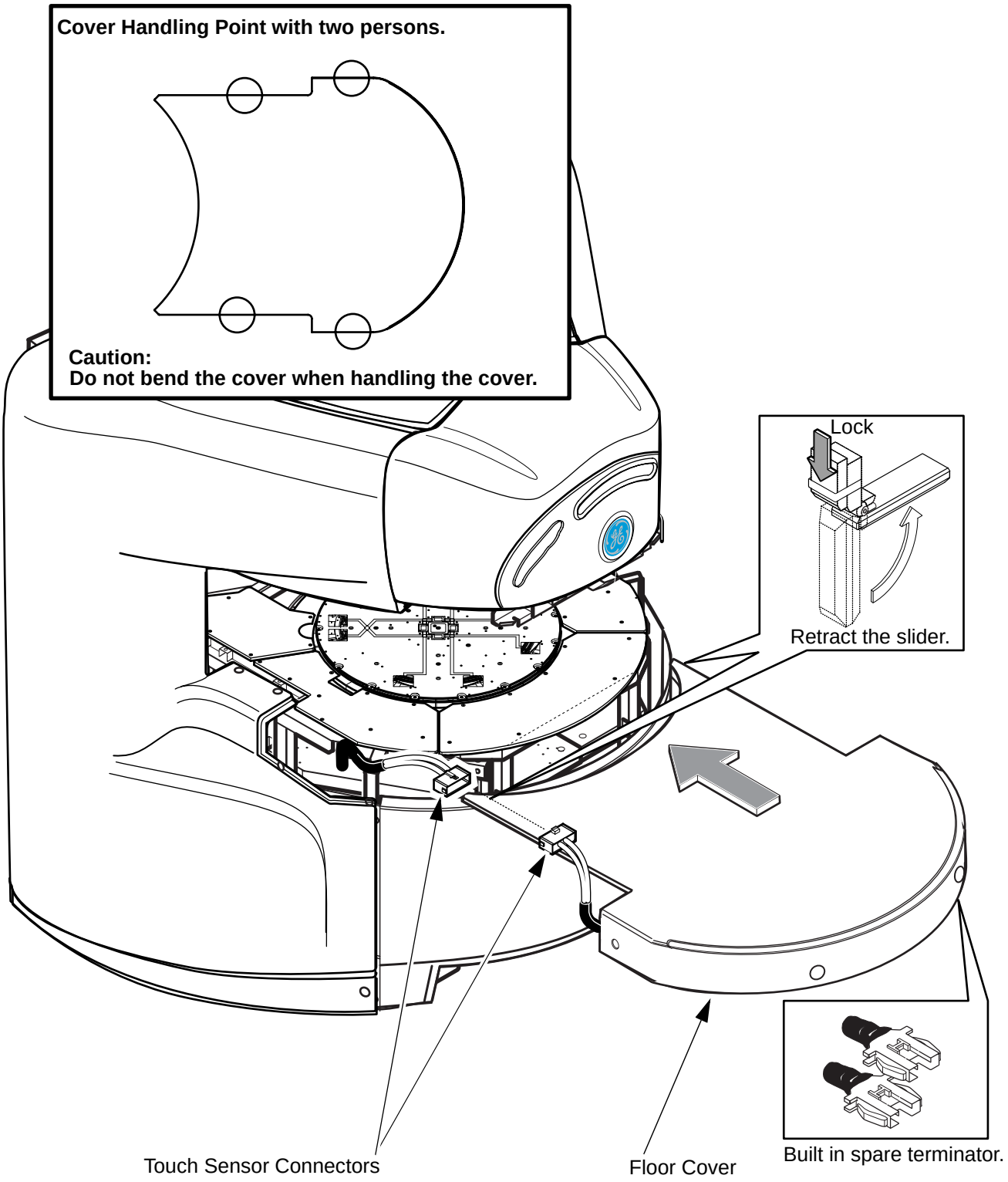


NOTE: The number is tightening order of screw.

REAR LOWER COVER INSTALLATION
ILLUSTRATION 2

4. Floor Cover

1. Retract and lock two slider of floor cover rear end.
2. Put the Floor Cover onto the lower coil with two person, and then connect the cables of touch sensor.

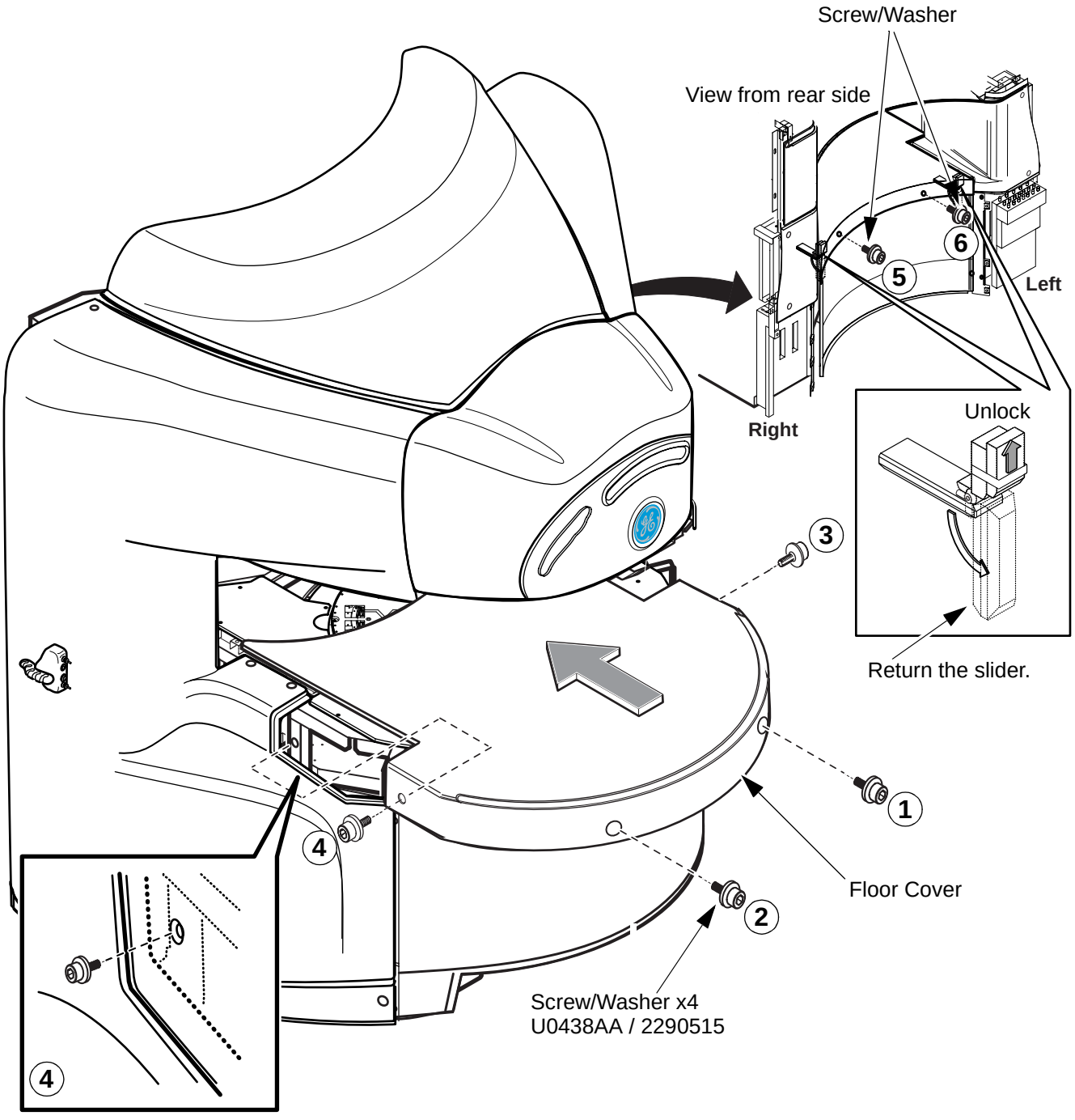


FLOOR COVER INSTALLATION
ILLUSTRATION 3

4. Floor Cover(Continued)

3. After setting floor cover, unlock slider lock and return 2 slider.
4. Install Floor Cover onto the lower coil with 6 screws(U0438AA)/washers(2290515).

NOTE: Install cover so that a clearance between covers becomes level.
Refer to Cover Clearance Adjustment of page 14.

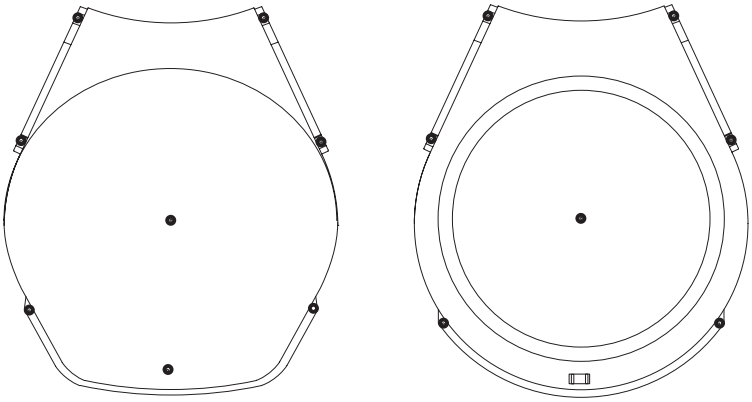


FLOOR COVER INSTALLATION
ILLUSTRATION 4

5. Ceiling Cover

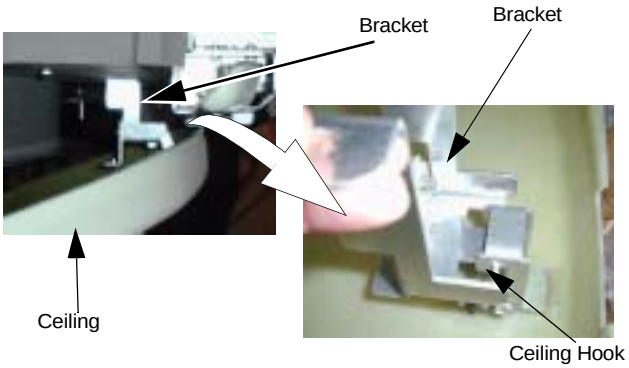
Note

New ceiling cover is introduced from 1Q of 2003. Identify the cover by the shape.



CEILING COVER COMPARISON
ILLUSTRATION 5

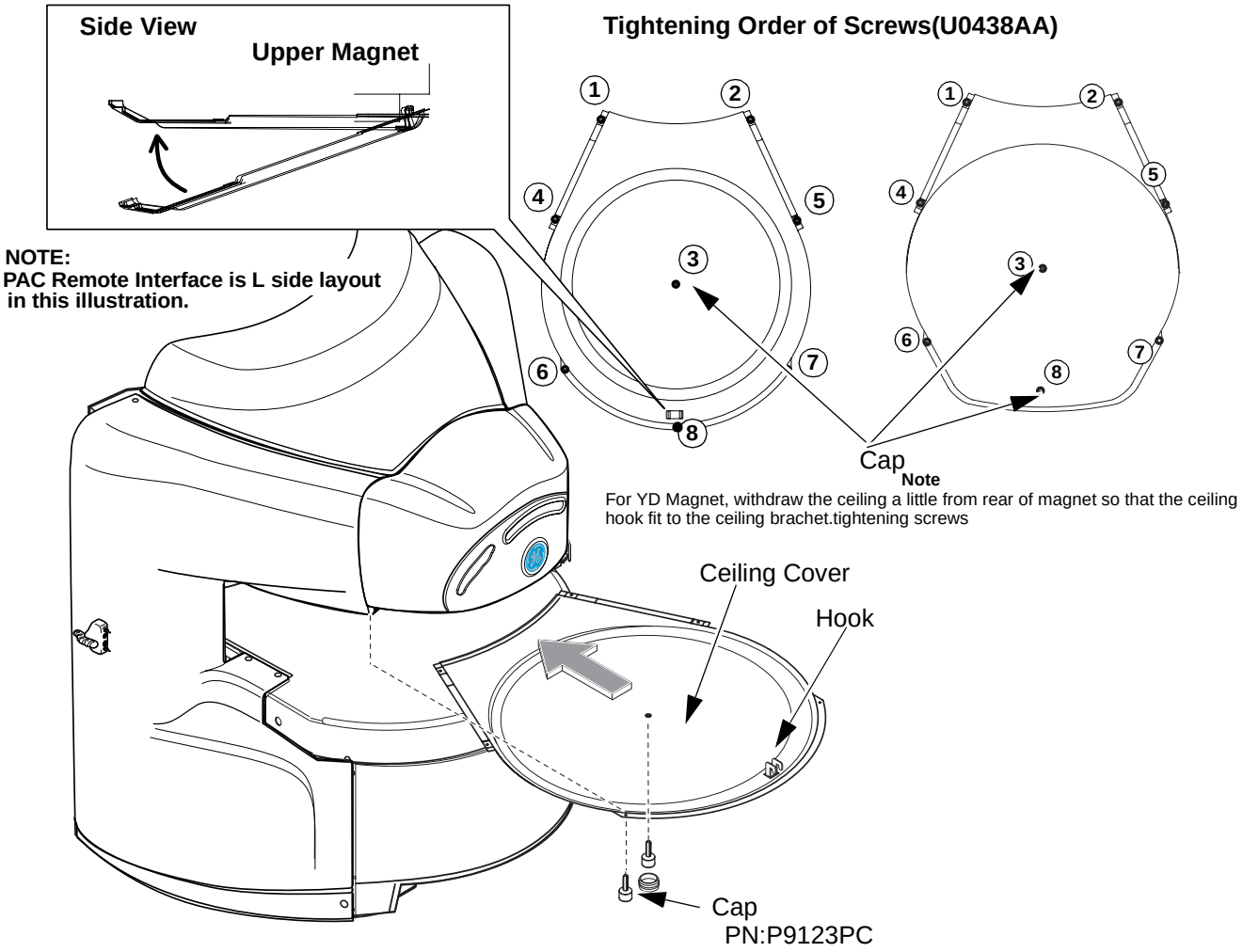
5. Hang the ceiling cover hook to upper magnet bracket.
   For new type ceiling, hook the ceiling according to the following illustration.



HOOK THE CEILING
ILLUSTRATION 6

5. Ceiling Cover (continued)

6. Install Ceiling Cover to the upper magnet with 8 screws(U0438AA) and center cap(P9123PC) according to tightening order.Hang the ceiling cover bracket to upper magnet bracket.
7. Install Ceiling Cover to the upper magnet with 7 screws according to tightening order.



NOTE: Install cover so that a clearance between covers becomes level.
Refer to Cover Clearance Adjustment of page 14.

CEILING COVER INSTALLATION
Illustration 7

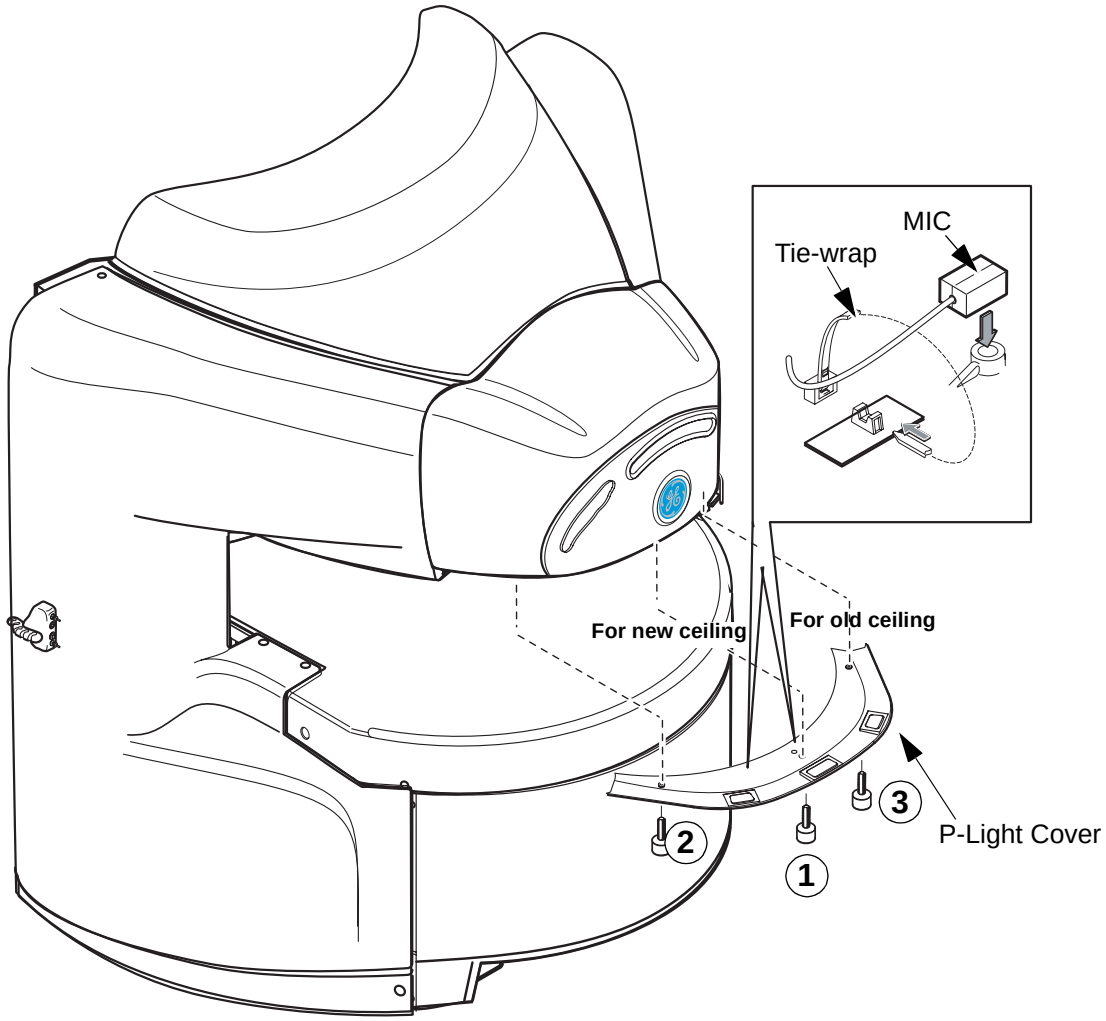
6. P-Light Cover

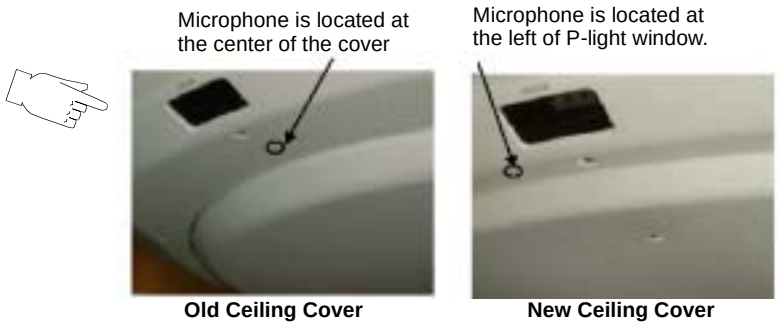
1. Route peripheral cable to partition of side,ceiling and P-light covers according to site layout.
2. Install the MIC to hole of P-Light Cover,and then fix the cable with tie-wrap.
3. Install P-Light Cover under the P-Light with 3 screws(U0438AA).

NOTE1:The number is tightening order of screw.

NOTE2:PAC Remote Interface is L side layout in this illustration.

NOTE3:Install cover so that a clearance between covers becomes level.
Refer to Cover Clearance Adjustment of page 15.



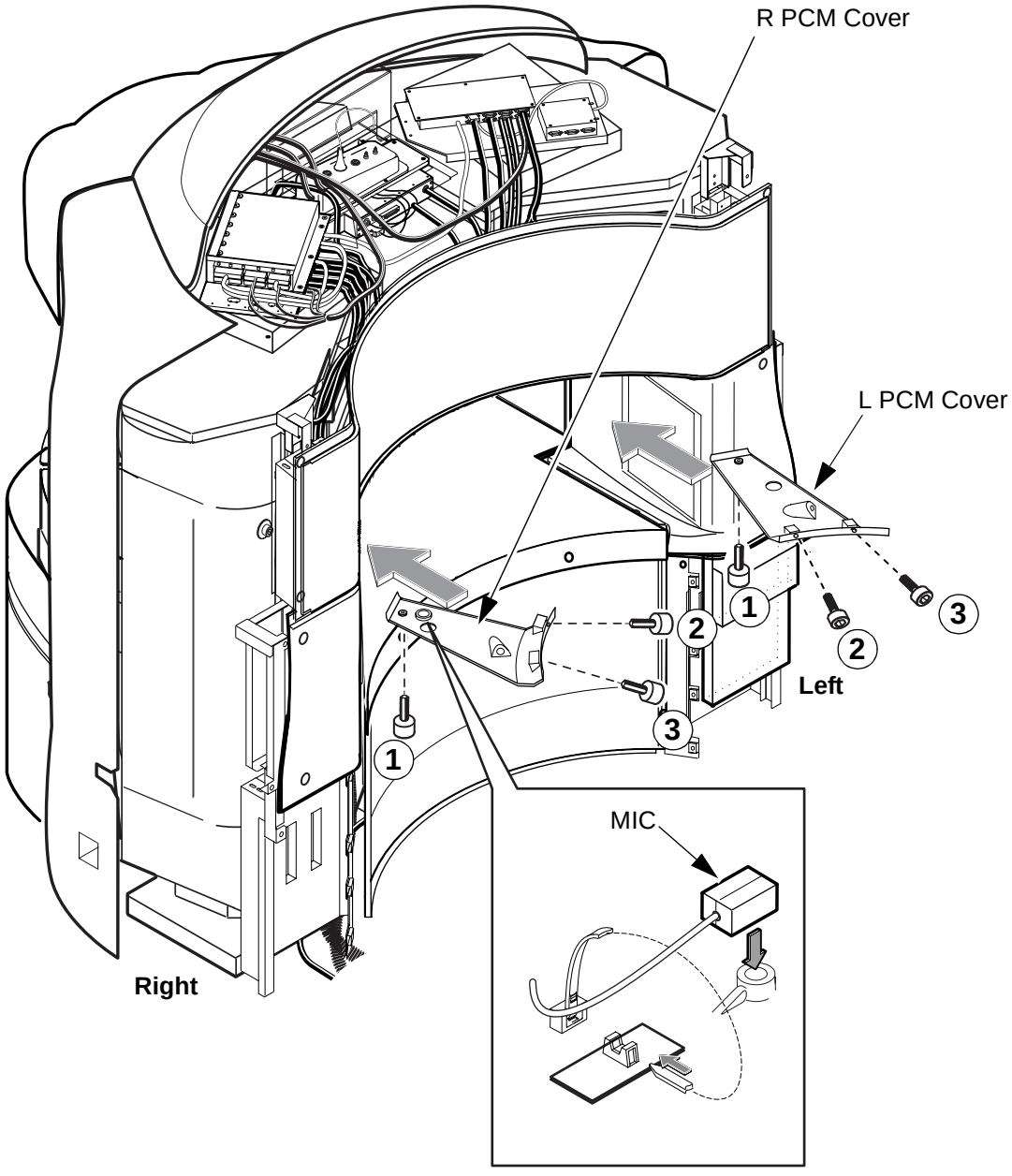


P-LIGHT COVER INSTALLATION
ILLUSTRATION 8

7. PCM Cover

1. Install the MIC to R PCM cover.
2. Install two PCM Covers onto the upper ceiling with 3 screws(U0438AA) for each cover.

NOTE: The number is tightening order of screw.

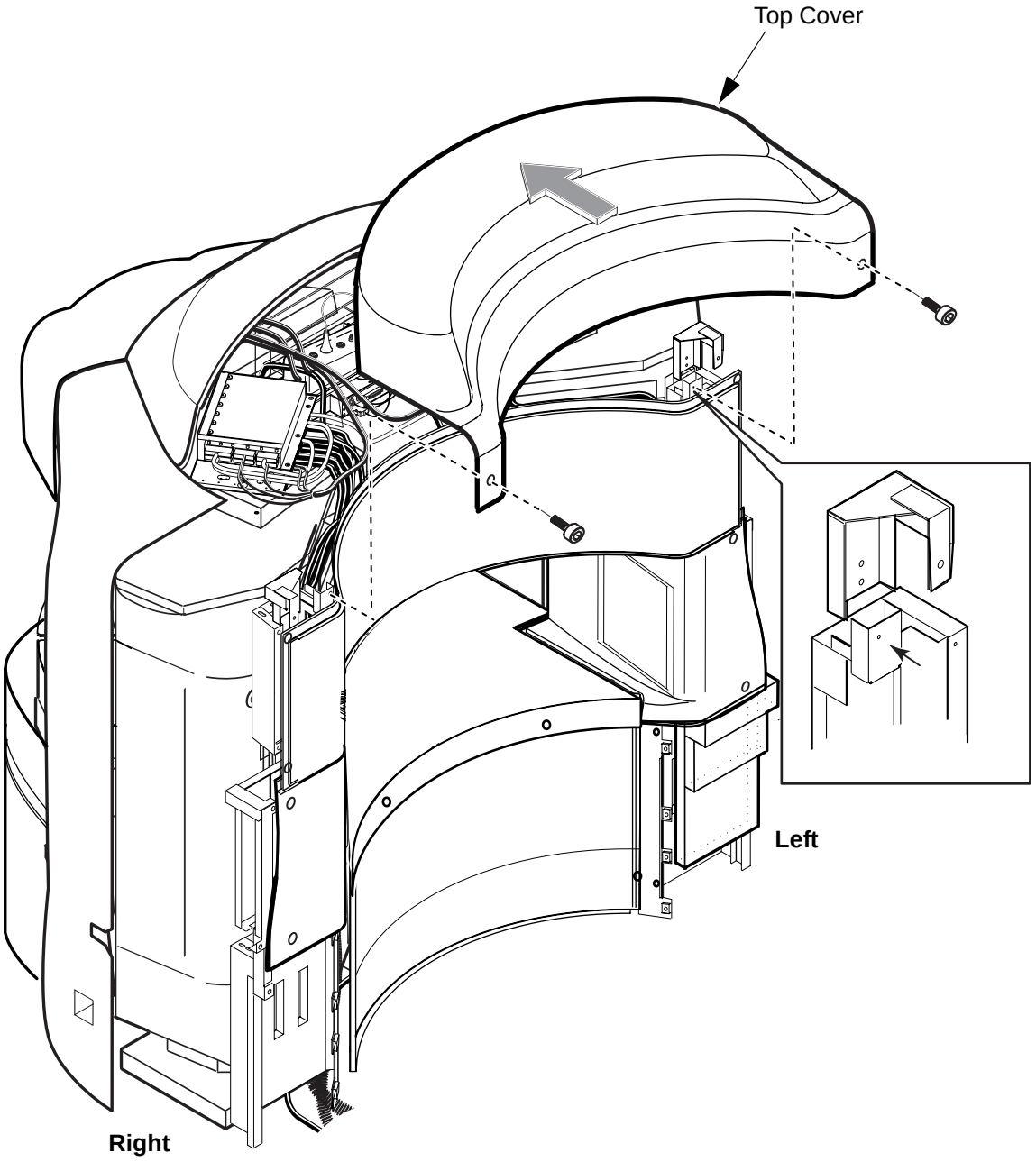


PCM COVER INSTALLATION
ILLUSTRATION 9

8. Top Cover

1. Install Top Cover onto the top of the magnet with 2 screws(U0438AA).

NOTE1:Install cover so that a clearance between covers becomes level.
Refer to Cover Clearance Adjustment of page 14.

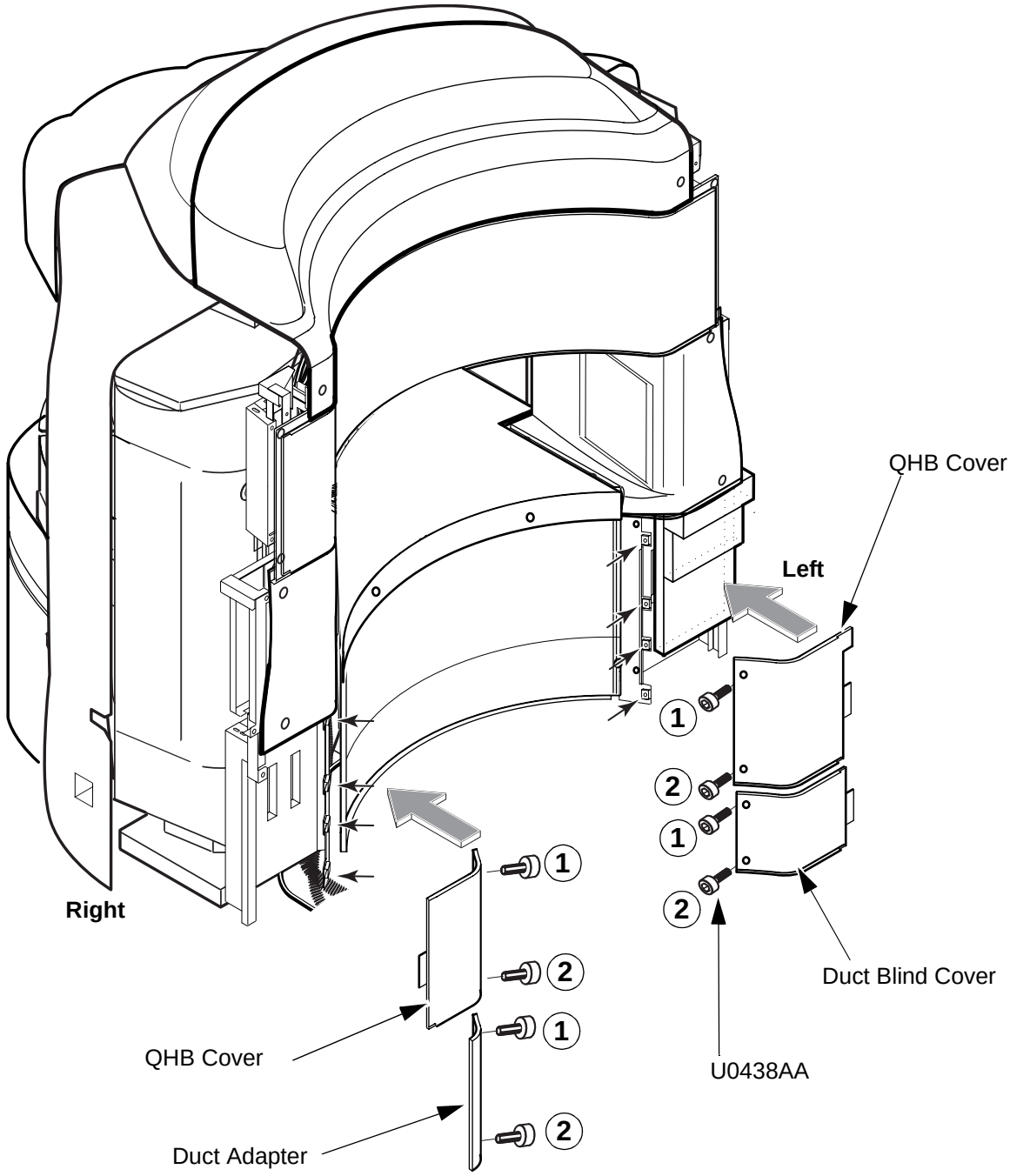


TOP COVER INSTALLATION
ILLUSTRATION 10

9. QHB / Blind Cover

1. Install two QHB Covers to the rear side of the Magnet with 2 screws(U0438AA) for each cover.
2. Install Duct Blind Cover to R or L rear side of the magnet with 2 screws(U0438AA).
3. Install Duct adapter to R or L rear side of the magnet with 2 screws(U0438AA).

NOTE1:The illustration is R side wiring.
NOTE2:Install cover so that a clearance between covers becomes level.
Refer to Cover Clearance Adjustment of page 14.



NOTE3:The number is tightening order of screw.

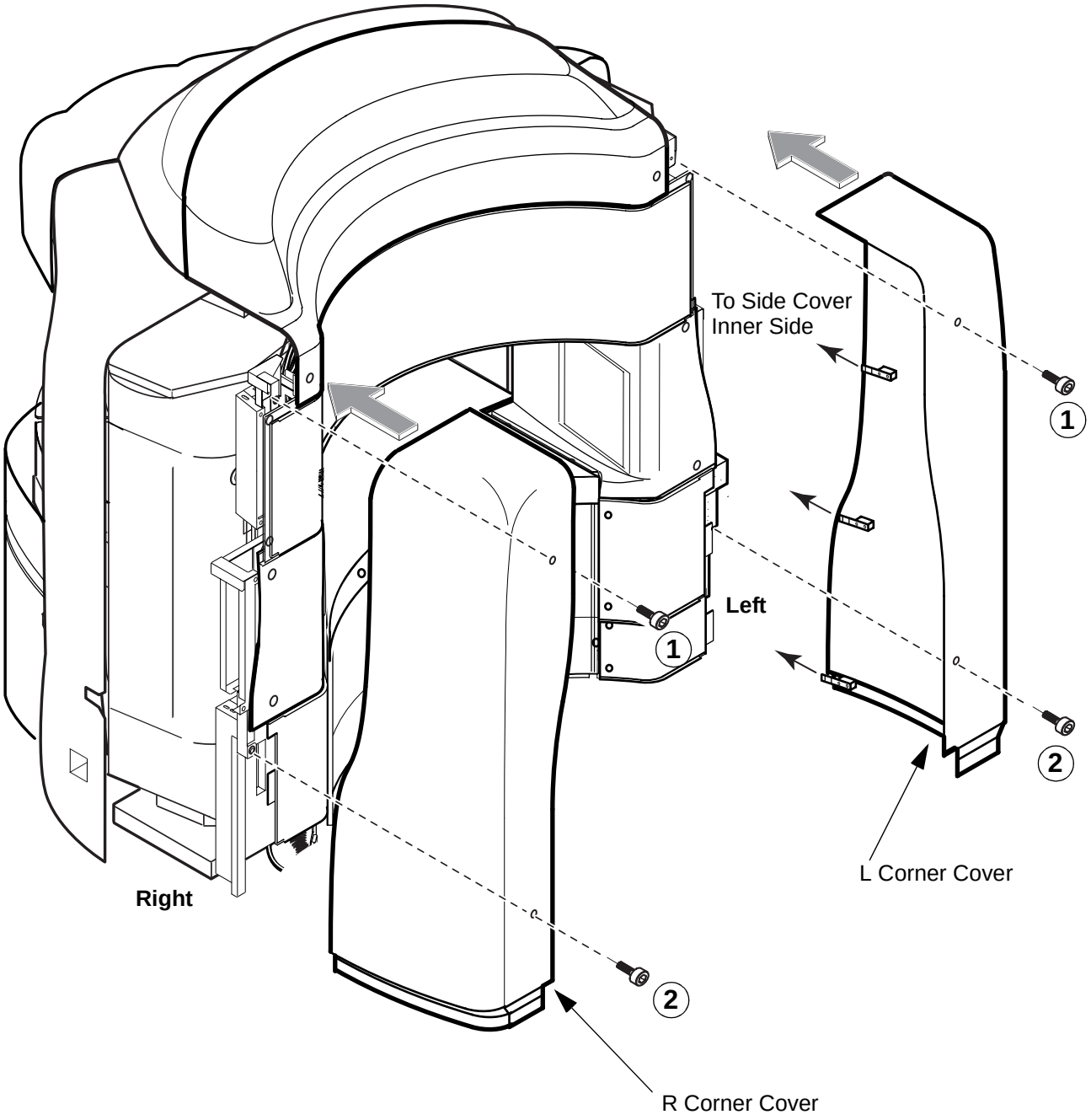
QHB / BLIND COVER INSTALLATION
ILLUSTRATION 11

10.Corner Cover

1. Install R and L Corner Covers to the R and L side of the Magnet with 2 screws(U0438AA) for each cover.

NOTE1:The number is tightening order of screw.

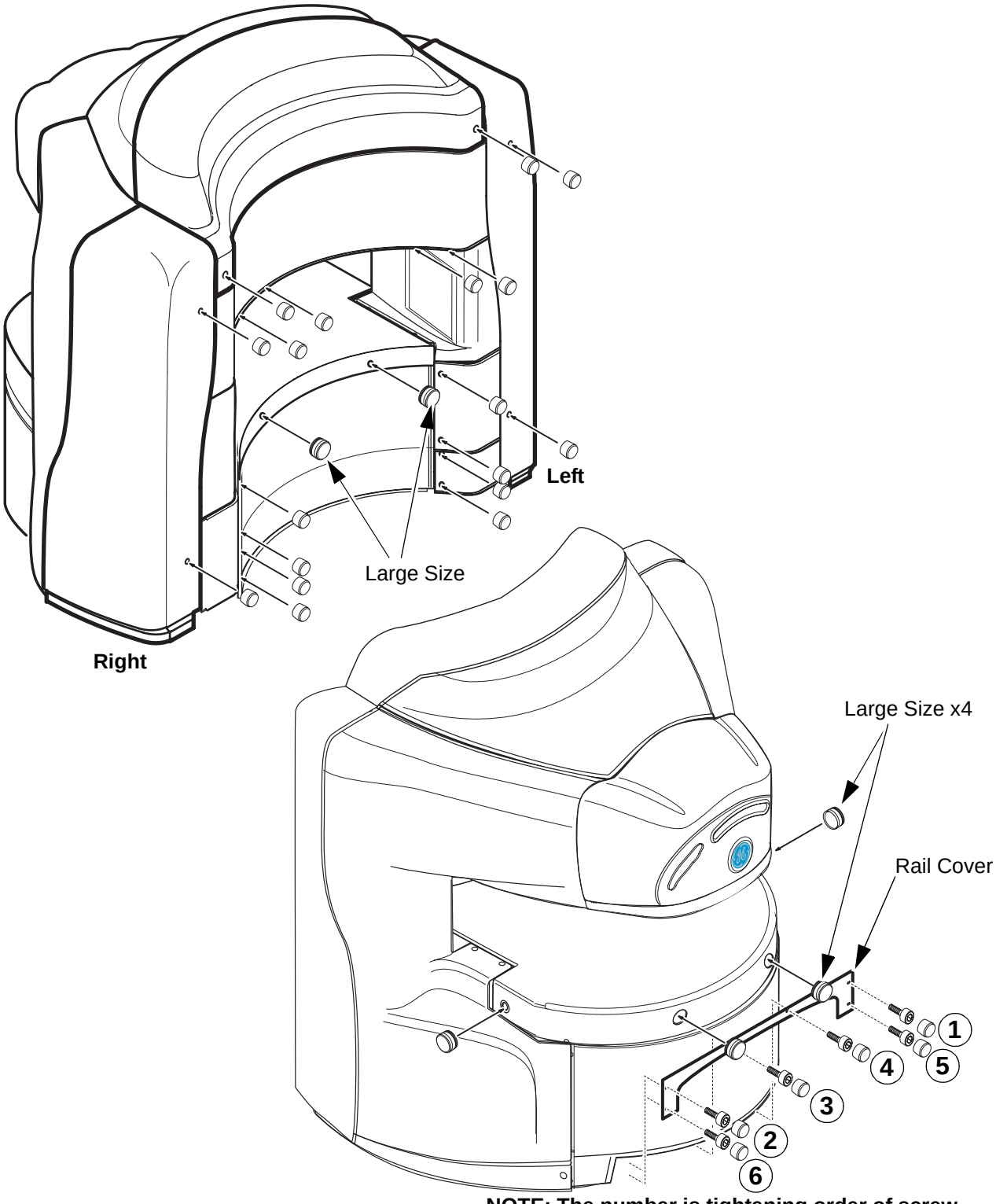
NOTE2:Install cover so that a clearance between covers becomes level.
Refer to Cover Clearance Adjustment of page 14.



CORNER COVER INSTALLATION
ILLUSTRATION 12

11.Rail Cover/Cap

1. Install Rail Cover to the front lower side of the Magnet with 6 screws(U0438AA).
2. Install 4 Caps(large size) to hole of front side.
3. Install 18 Caps(small size) and 2 Caps(large size) to hole of rear side.

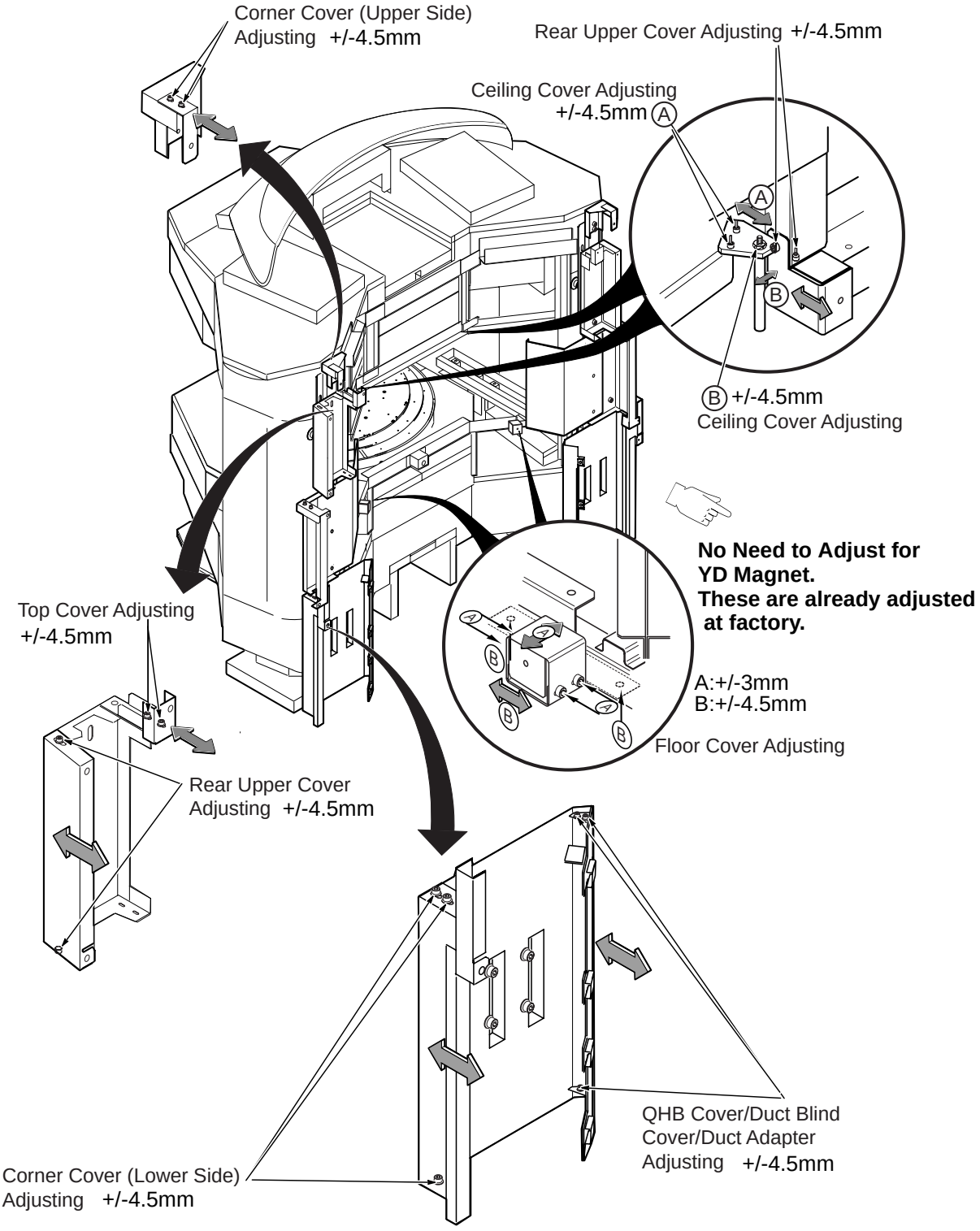


NOTE: The number is tightening order of screw.

RAIL COVER AND CAP INSTALLATION
ILLUSTRATION 13

12.Cover Clearance Adjustment

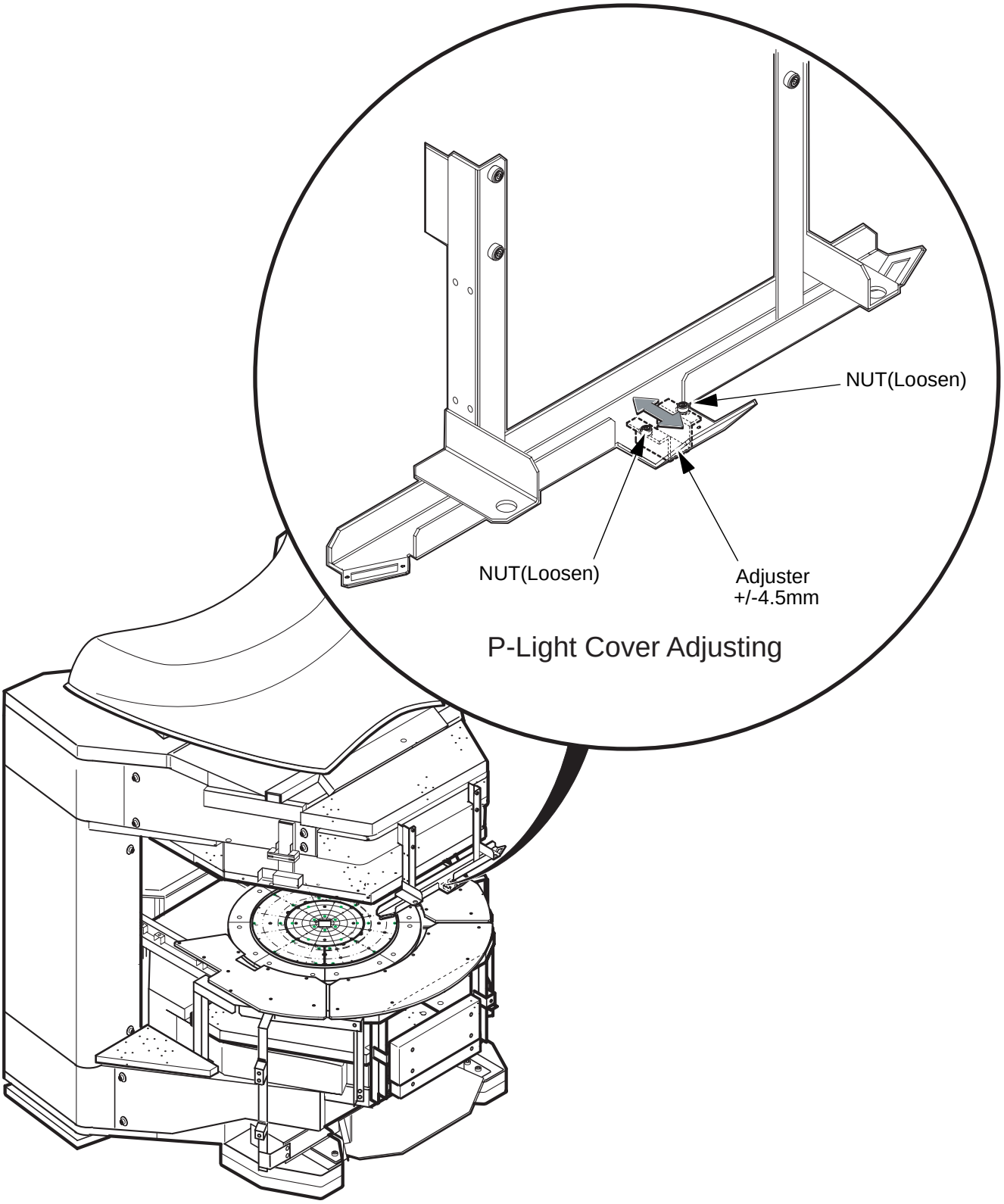
1. Install cover so that a clearance between covers becomes level.



COVER CLEARANCE ADJUSTMENT
ILLUSTRATION 14

12.Cover Clearance Adjustment(Continued)

1. Install cover so that a clearance between covers becomes level.



COVER CLEARANCE ADJUSTMENT(CONTINUED)
ILLUSTRATION 15

Revision History

Rev	Date	Author	Primary Reasons For Change
0	Mar 07, 2001	K.Tsumagari	Initial Release
1	May 21, 2001	K.Tsumagari	1. Cover clearance adjustment is added 2. Misc Change
2	Jan 08, 2002	K.Tsumagari	Page 15: Changed front upper frame
3	Nov 27, 2002	Y.Masumo	Page 7 and 8: Added New ceiling Information Page 15: Added YD Magnet Information.