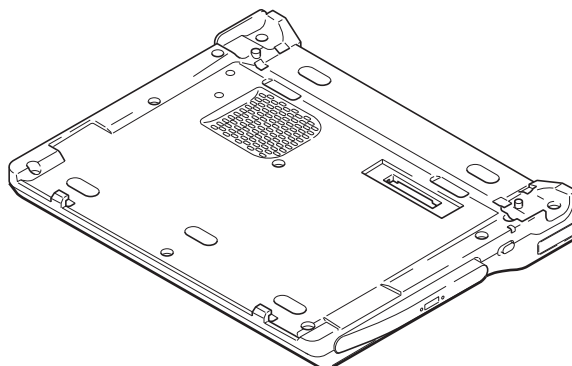


PCGA-DSD5/DSM5

SERVICE MANUAL

US Model
Canadian Model



 S400



Specifications

Drive performance

CD-RW / DVD Docking Station (PCGA-DSM5)
Reading speed: 24X max. CD-ROM / CD-R reading,
12X max. CD-RW reading,
8X max. DVD-ROM reading,
Writing speed: 8X max. CD-R writing,
4X max. CD-RW writing,
Disk diameter 4 3/4 inch (12cm), 3 inch (8cm)
Multi-session correspondence
DVD Docking Station (PCGA-DSD5)
Reading speed: 24X max. CD-ROM reading,
8X max. DVD-ROM reading,
Disk diameter 4 3/4 inch (12cm), 3 inch (8cm)
Multi-session correspondence

Floppy disk drive

3.5" 1.44MB / 720KB

Connectors

SERIAL Connector: RS-232C, D-SUB 9 pin (1)
PRINTER Connector: ECP, D-SUB 25 pin (1)
MONITOR Connector: analog RGB, mini D-SUB 15 pin (1)
USB Connector: USB 4 pin (2)
i.LINK (IEEE 1394) Connector S400 4pin(1) S400=400Mbps
NETWORK Connector: RJ-45 (1)*
Docking Connector: Dedicated connector 100pin(1)

Power source AC adapter or battery pack (only when it is attached to the notebook computer)

Operating temperature

41 °F to 95 °F (5 °C to 35 °C)
(temperature gradient less than 18 °F (10 °C)/hour)

Operating humidity

20 % to 80 % (not condensed), provided that humidity is less than 65 % at 95 °F (35 °C)
(hygrometer reading of less than 84 °F (29 °C))

Storage temperature

-4 °F to 140 °F (-20 °C to 60 °C)
(temperature gradient less than 18 °F (10 °C)/hour)

Storage humidity

10 % to 90 % (not condensed), provided that humidity is less than 20 % at 140 °F (60 °C)
(hygrometer reading of less than 95 °F (35 °C))

Dimensions

Approx. 11.0 × 0.8(0.9 backside) × 9.3 inches (w/h/d)
(Approx. 279.5 × 18.5(21.5 backside) × 235.0 mm)
(the projecting parts are not included)

Mass

PCGA-DSM5 2.38 lbs. (1,080 g)
PCGA-DSD5 2.27 lbs. (1,030 g)

Supplied accessories

Operating instructions (1)
Warranty card (1)

* There is a NETWORK Connector for the correspondence to 10BASE-T, 100BASE-TX.

Design and specifications are subject to change without notice.

CD-RW/DVD Docking Station
DVD Docking Station
SONY®

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Caution Markings for Lithium/Ion Battery - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

CAUTION: The battery pack used in this device may present a fire or chemical burn hazard if mistreated. Do not disassemble, heat above 100°C (212°F) or incinerate.

Dispose of used battery promptly.
Keep away from children.

CAUTION: Changing the back up battery.

- Overcharging, short circuiting, reverse charging, mutilation or incineration of the cells must be avoided to prevent one or more of the following occurrences; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.
- If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any protection.



Service and Inspection Precautions

1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify areas requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the Δ mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

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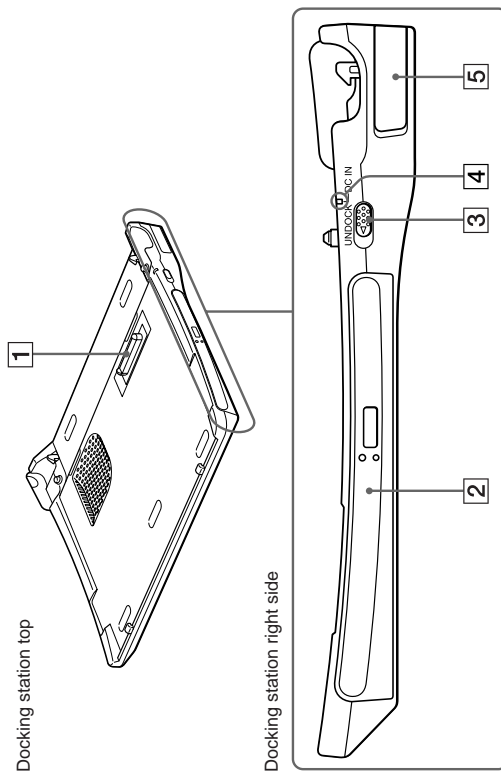
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- Abbreviations
UC : US model / Canadian model

1-1. Locating Controls and Connectors

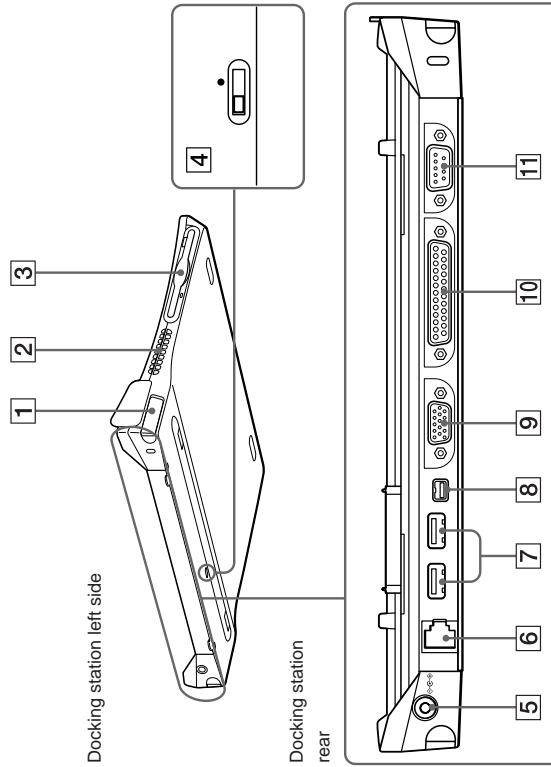
Locating Controls and Connectors

Docking Station Top/Right Side



- 1 Docking connector
- 2 PPGA-DSM5
CD-RW/DVD-ROM combo drive
- 3 PPGA-DSD5
DVD-ROM drive
- 4 UNDOCK switch (page 66)
- 4 DC IN lamp (page 65)
- 5 Release lever (page 67)

Docking Station Left Side/Rear



- 1 Release lever (page 67)
- 2 Ventilator
- 3 Floppy disk drive
- 4 i.LINK network switch
(page 91)
- 5 ⚡ (DC IN) connector
(page 65)
- 6 ⚡ (network) connector
(page 6)
- 7 ♪ USB connector
- 8 S400 i.LINK connector
- 9 ○ MONITOR connector
- 10 🖨️ PRINTER connector
- 11 📡 SERIAL connector

1-2. Attention of i.LINK

The i.LINK compatible unit connected to this set is not recognized. Or, the message such as “Operation is disabled, as DV unit is not connected or the power is not turned on” is displayed.

- Disconnect the i.LINK cable once, and reconnect it. For further information, see “Connecting i.LINK unit” of “Data transfer to i.LINK unit” in the “Extend” of the Online Manual for this set.

The unit connected to the i.LINK connector on the docking station does not operate normally.

- Use the i.LINK connector on this set.

The operation of i.LINK compatible unit connected to this set stopped.

- Finish the operation of the i.LINK compatible unit first, when removing the docking station during the connection of i.LINK compatible unit.

The message “Recording to DV unit failed. Retry after checking the DV unit for power supply and connection state” is displayed during the recording on the tape using the “DVgate” software.

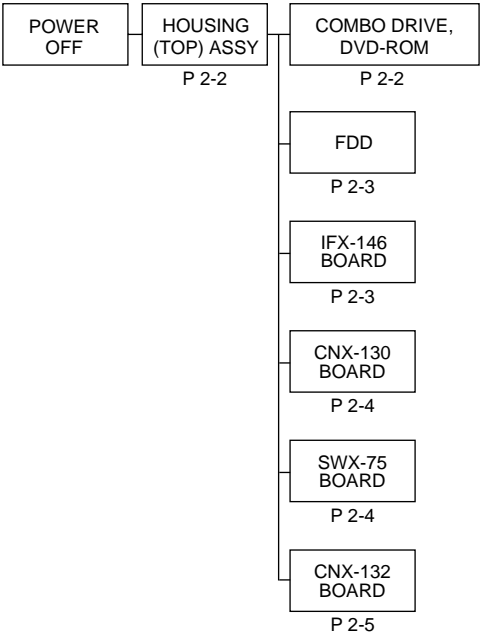
- Check if the power and connection cables are connected correctly to the DV unit. Continuous recording may cause a recording failure even if the unit is connected correctly. In such a case, restart this set after exiting all of the software.

To use the set in more comfortable environment, it is recommended to extend the memory. For further information, see “Extending the memory” (page 109).

The frames drop during the use of “DVgate” software.

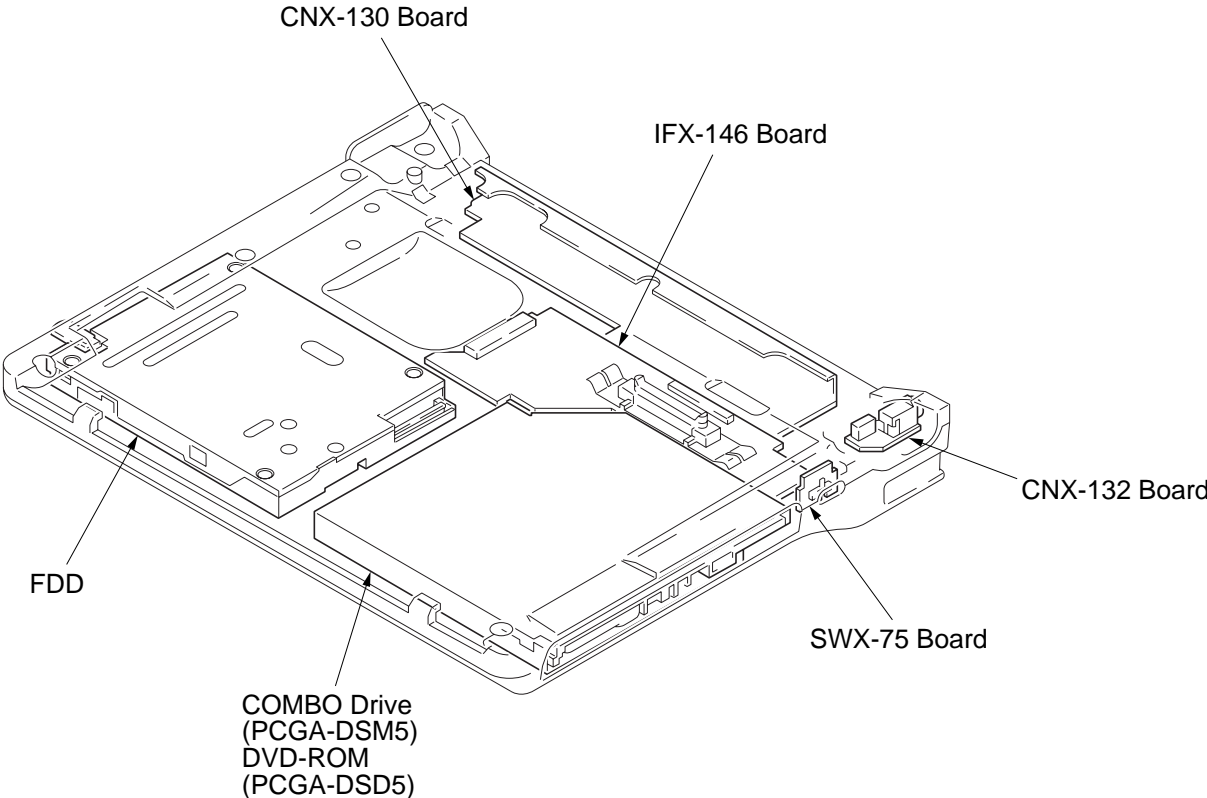
- The frames may drop depending on the operating condition. In such a case, extend the memory. For further information, see “Extending the memory” (page 109).

2-1. Flowchart



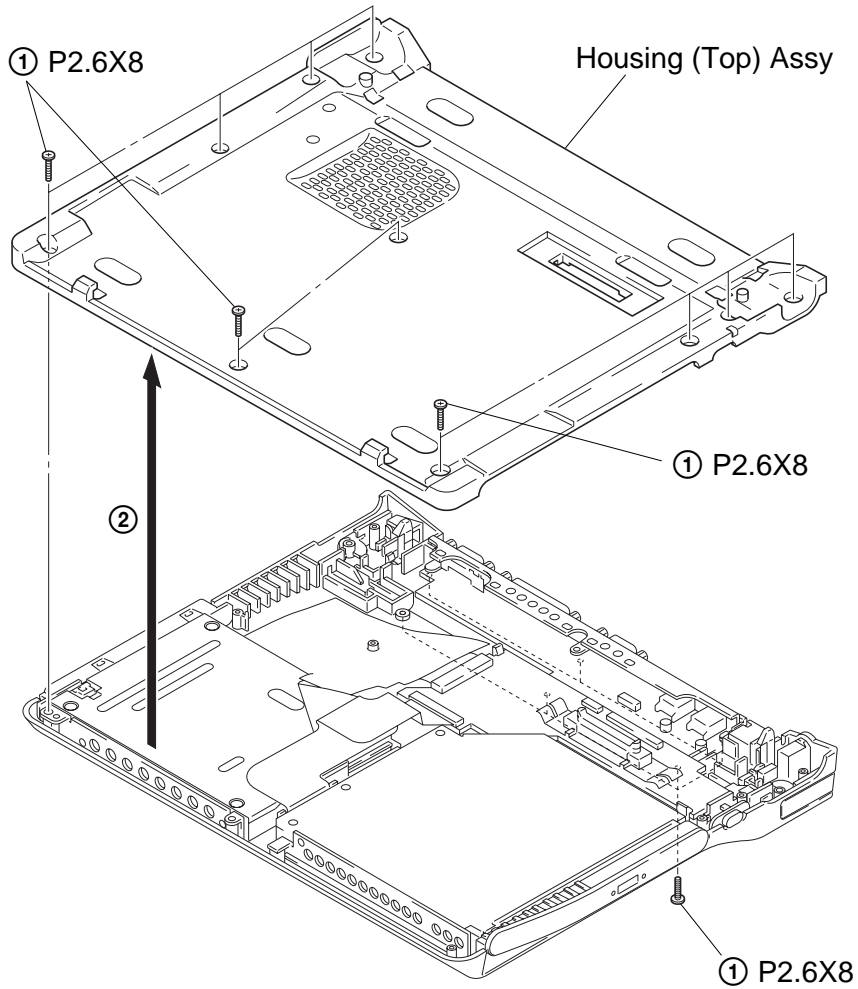
• P XX means pages that appears in this manual.

2-2. Main Electrical Parts Location Diagram

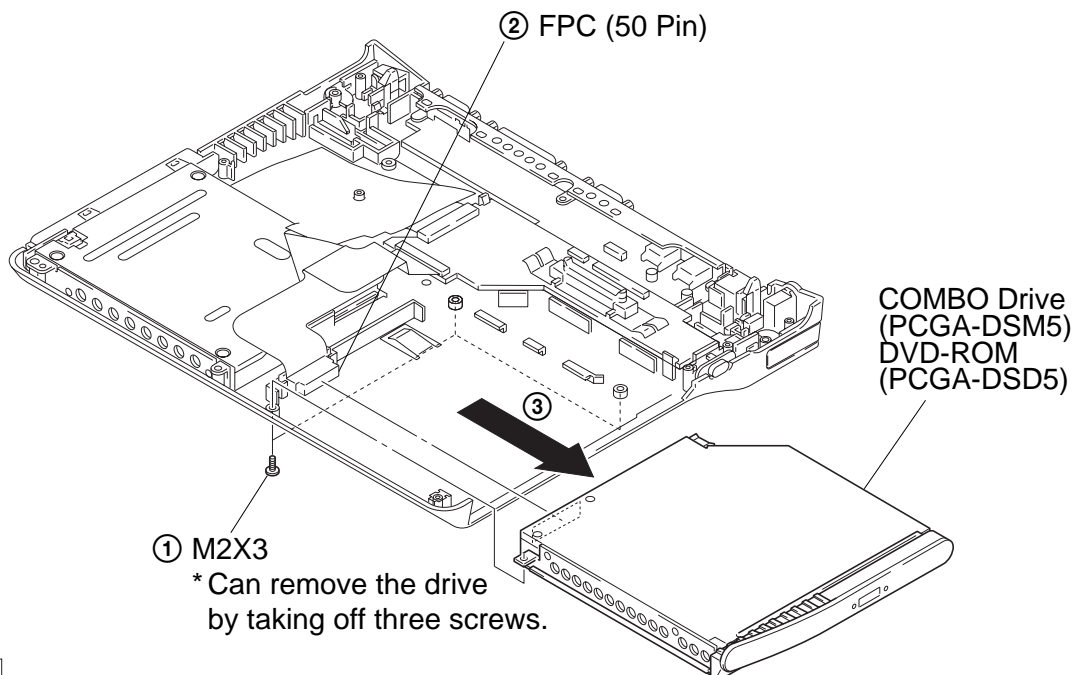


2-3. Removal

1. Housing (Top) Assy

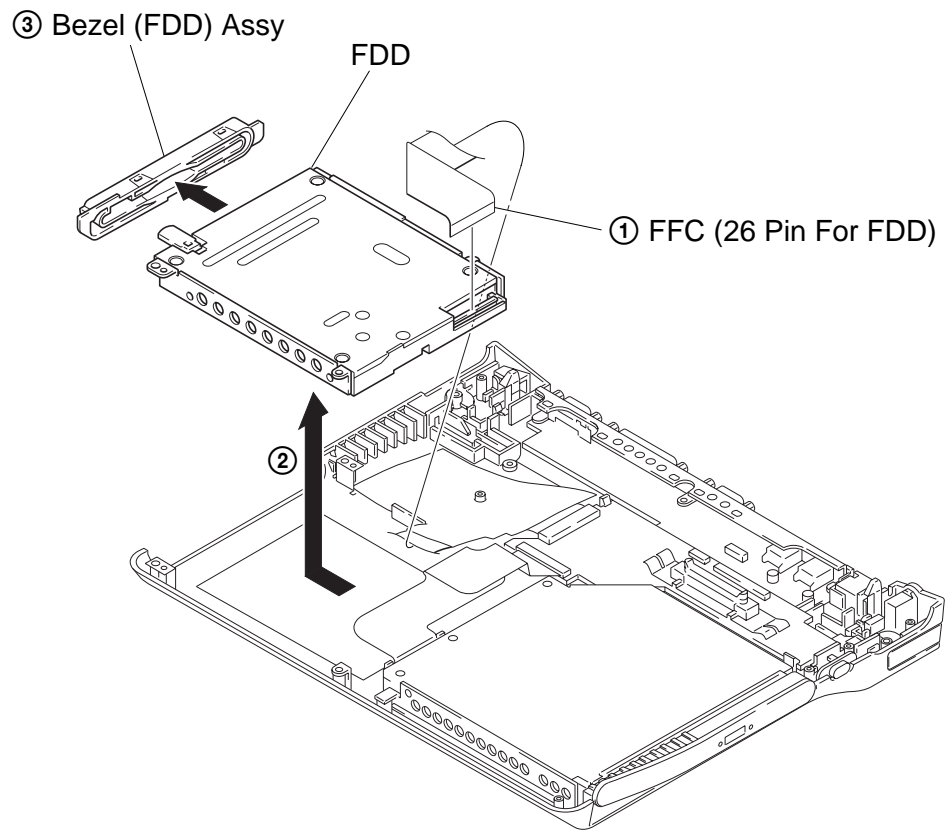


2. COMBO Drive, DVD-ROM

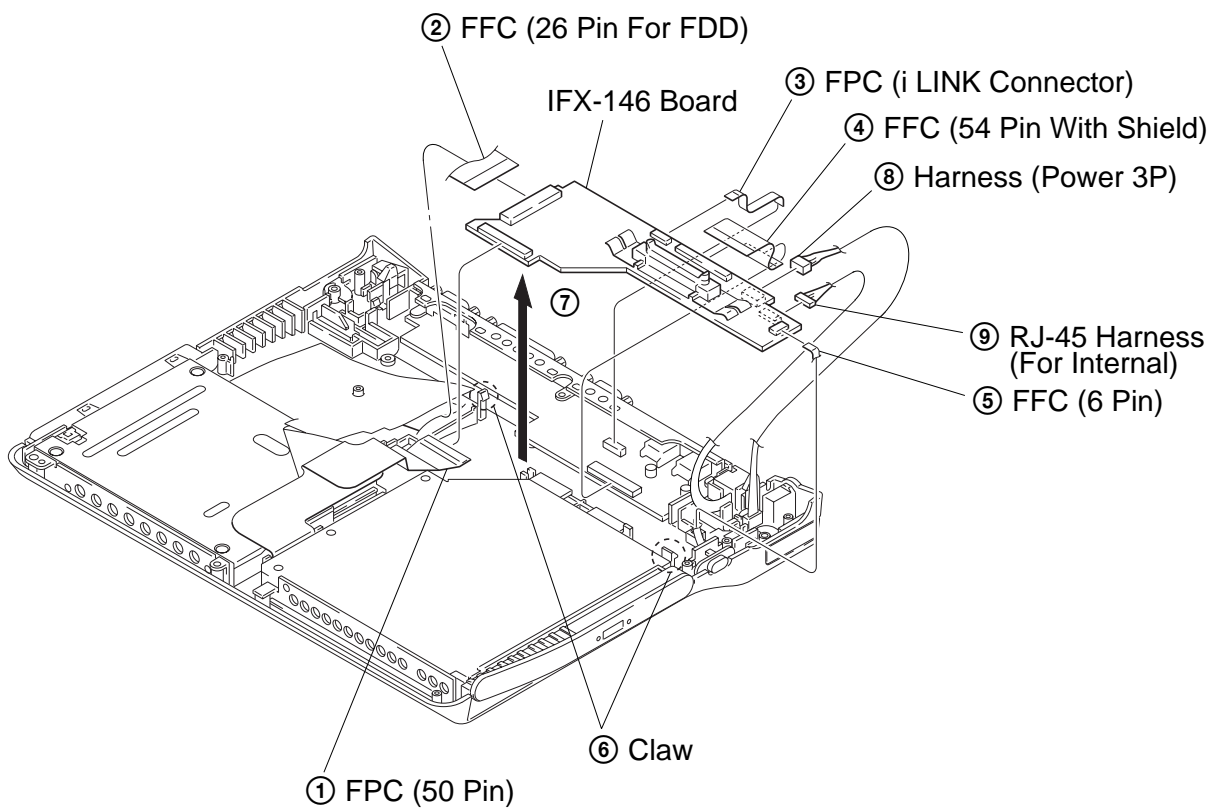


Confidential

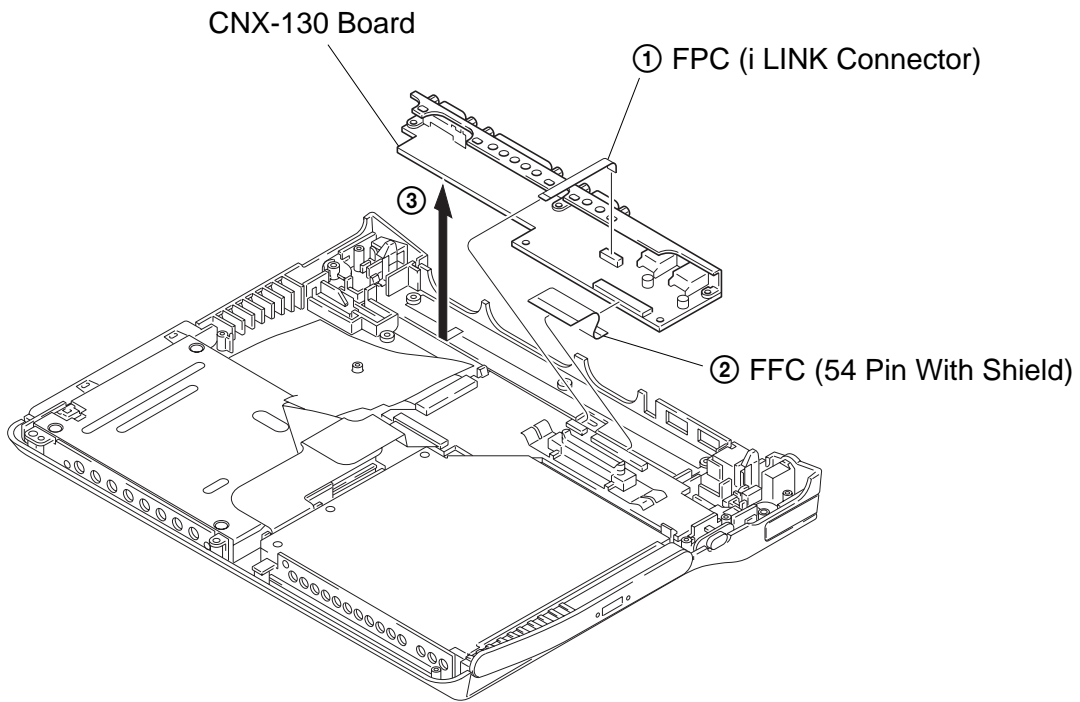
3. FDD



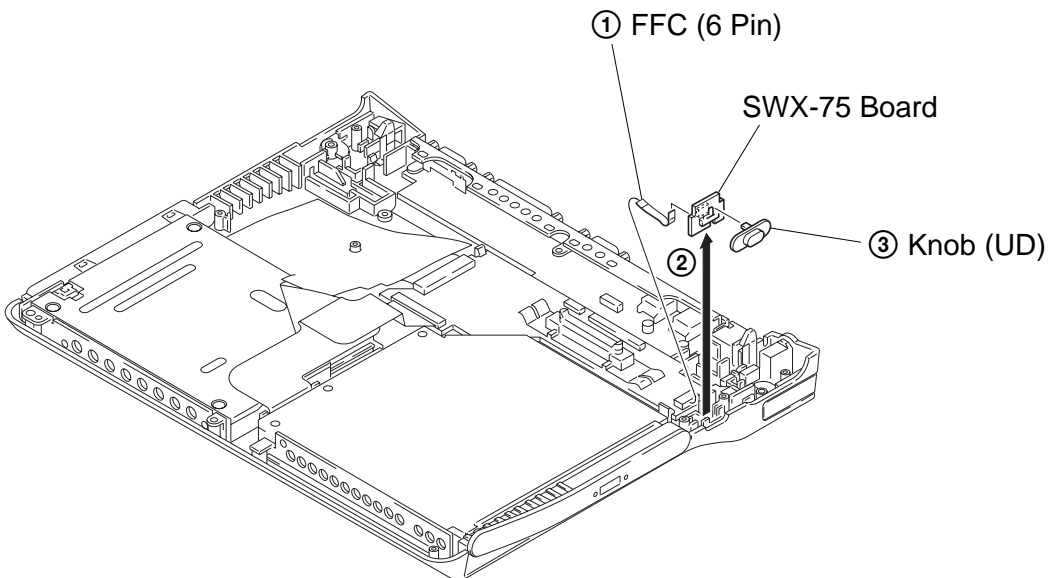
4. IRX-146 Board



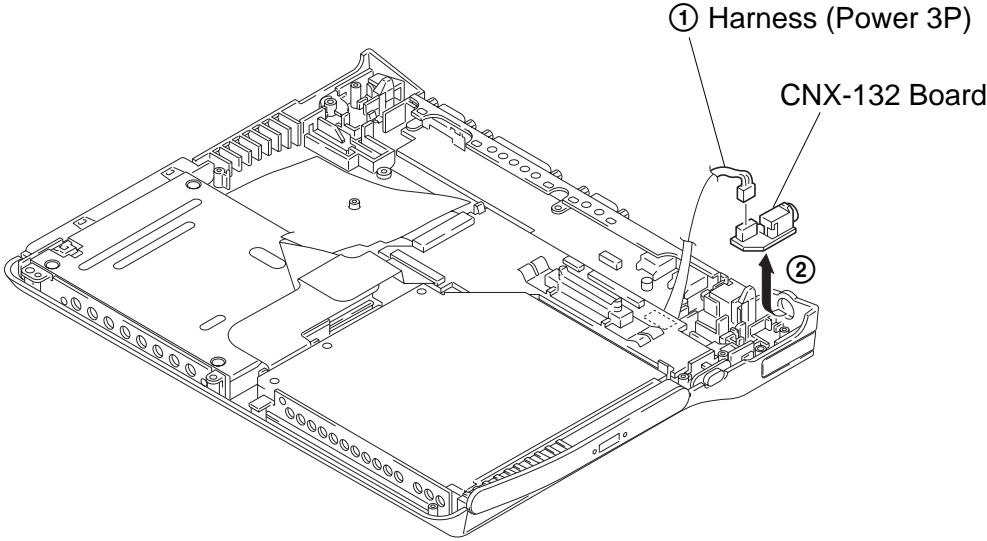
5. CNX-130 Board



6. SWX-75 Board



7. CNX-132 Board



CHAPTER 3.

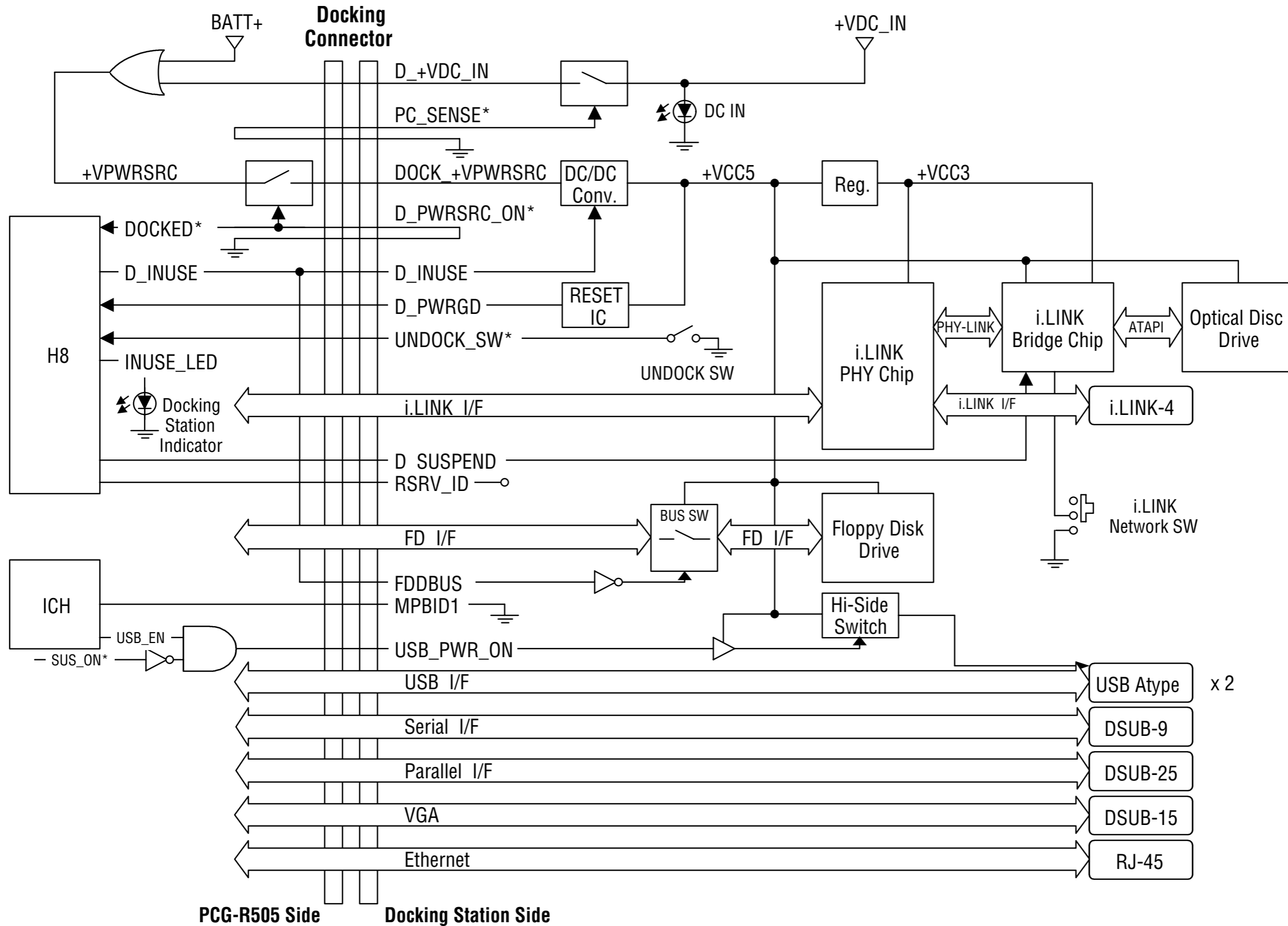
SELF DIAGNOSTICS

< ATTENTION >

**Please confirm “Self Diagnostics” method which will be informed
you with distribution of “Self Diagnostics” software.**

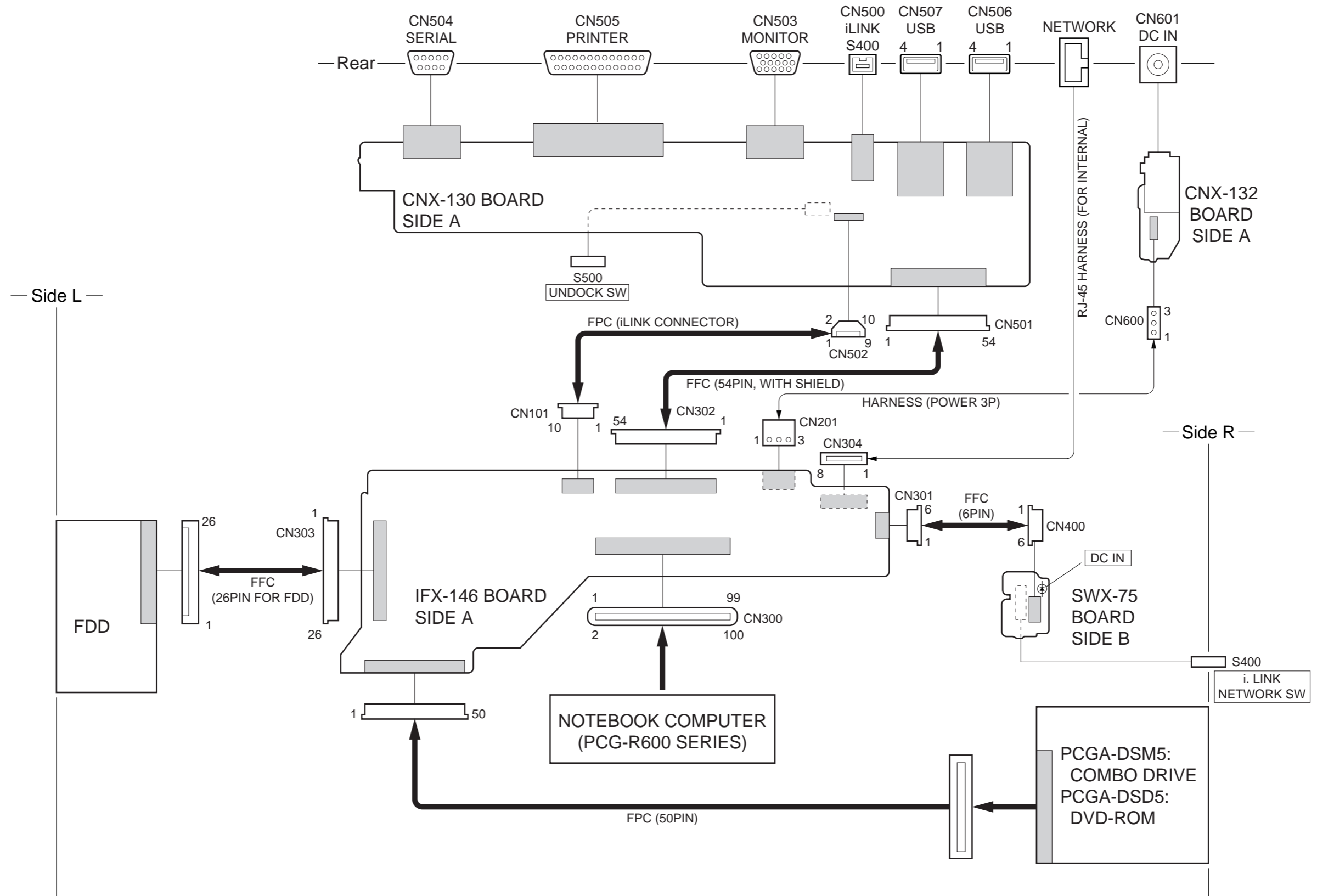
CHAPTER 4. BLOCK DIAGRAM

– OVERALL BLOCK DIAGRAM –



CHAPTER 5. FRAME HARNESS DIAGRAM

- FROM board connector (direct connection)
- Harness (connector at both end)
- Harness (soldered at one end)



CHAPTER 6.

EXPLODED VIEWS AND PARTS LIST

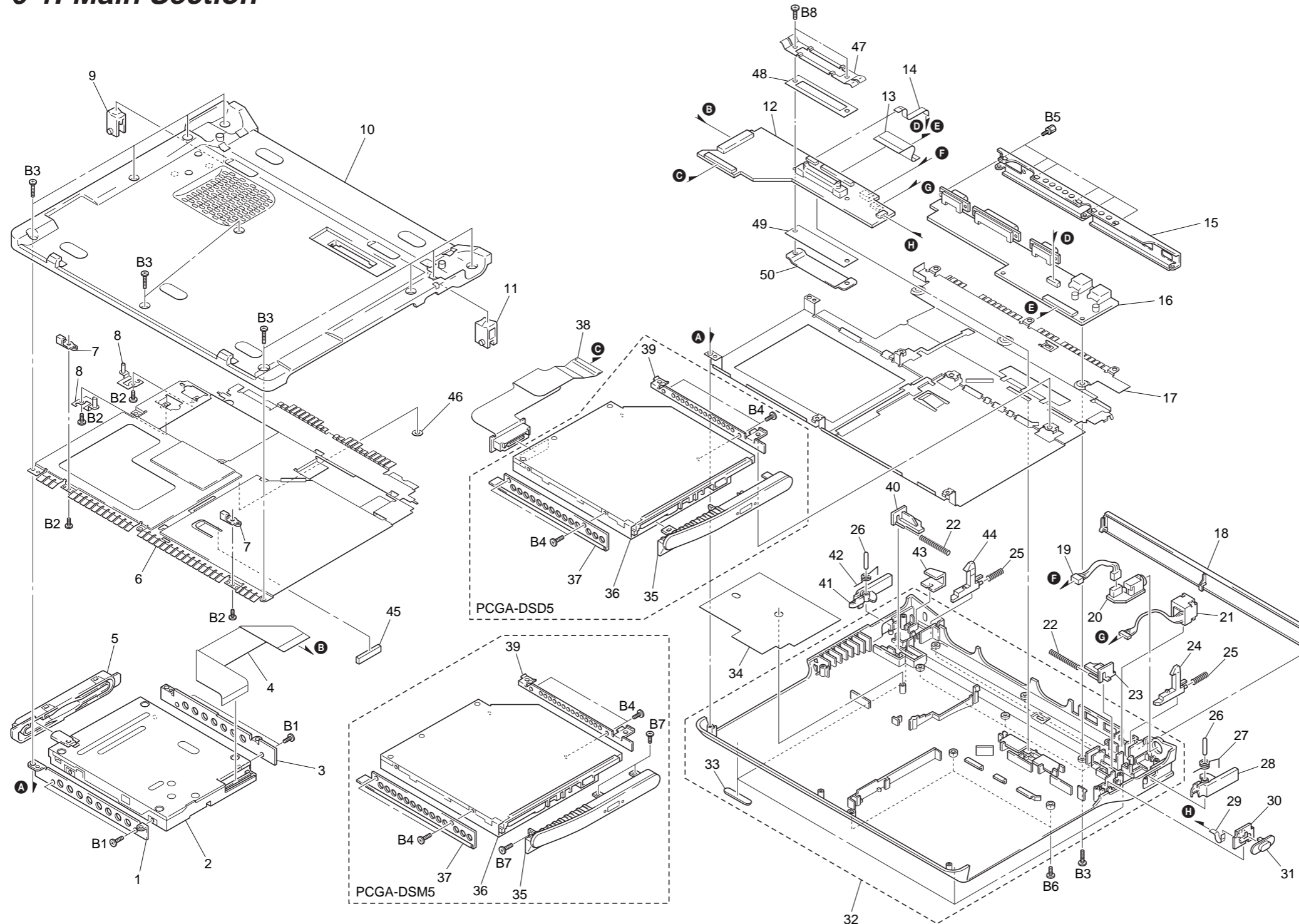
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- When the same reference numbers are written down in the list, please use the one listed in the first place as the main part.

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. Main Section



| Ref.No. | Part No. | Description |
|---------|--------------|---------------------------------|
| * 1 | 4-652-975-01 | BRACKET (FDD (R)) |
| 2 | 1-772-978-31 | FDD |
| * 3 | 4-652-974-01 | BRACKET (FDD (L)) |
| 4 | 1-815-683-11 | FFC (26 PIN FOR FDD) |
| 5 | X-4623-581-1 | BEZEL (FDD) ASSY |
| * 6 | 4-652-969-01 | PLATE (TOP), SHIELD |
| 7 | X-4623-594-1 | BRACKET (HOOK) ASSY |
| 8 | X-4623-582-1 | GROUND ASSY, MAIN |
| 9 | 4-652-966-01 | SHAFT (PUSH) (L) |
| 10 | X-4623-579-1 | HOUSING (TOP) ASSY |
| 11 | 4-654-139-01 | SHAFT (PUSH) (R) |
| 12 | A-8066-662-A | MOUNTED PWB IFX-146 |
| 13 | 1-815-682-11 | FFC (54 PIN, WITH SHIELD) |
| 14 | 1-823-006-11 | FPC (iLINK CONNECTOR) |
| * 15 | 4-652-971-01 | BRACKET (IO) |
| 16 | A-8066-658-A | MOUNTED PWB CNX-130 |
| * 17 | 4-652-970-01 | PLATE (BOTTOM), SHIELD |
| 18 | X-4623-679-1 | DOOR (JACK) ASSY |
| 19 | 1-961-147-21 | HARNESS (POWER 3P) |
| 20 | A-8066-660-A | MOUNTED PWB CNX-132 |
| 21 | 1-961-140-21 | HARNESS, RJ-45 (FOR INTERNAL) |
| 22 | 4-652-982-01 | SPRING (SLIDER), COIL |
| 23 | 4-652-968-01 | SLIDER (R) |
| 24 | 4-652-965-01 | HOOK (R) |
| 25 | 4-652-981-01 | SPRING (HOOK), COMPRESSION COIL |
| 26 | 4-652-993-01 | SHAFT |
| 27 | 4-652-980-01 | SPRING (R), TORSION |
| 28 | 4-652-963-01 | LEVER (R) |
| 29 | 1-815-681-11 | FFC (6 PIN) |
| 30 | A-8066-659-A | MOUNTED PWB SWX-75 |
| 31 | 4-652-961-01 | KNOB (UD) |
| 32 | X-4623-680-1 | HOUSING (BOTTOM) ASSY |
| 33 | 4-641-449-11 | FOOT (F) |
| 34 | 4-653-453-01 | COVER, FFC |
| 35 | X-4623-580-1 | (DSD5)...BEZEL (T (DVD)) ASSY |
| 35 | X-4623-617-1 | (DSM5)...BEZEL (P (DVD)) ASSY |
| 36 | 1-796-018-11 | (DSD5)...DVD-ROM (X8 SD-C2502) |
| 36 | 1-796-072-12 | (DSM5)...COMBO DRIVE (UJDA710) |
| * 37 | 4-652-972-01 | BRACKET (CD-R (L)) |
| 38 | 1-823-007-11 | FPC (50 PIN) |
| * 39 | 4-652-973-01 | BRACKET (CD-R (R)) |
| 40 | 4-652-967-01 | SLIDER (L) |
| 41 | 4-652-962-01 | LEVER (L) |
| 42 | 4-652-979-01 | SPRING (L), TORSION |
| * 43 | 4-653-152-01 | BRACKET |
| 44 | 4-652-964-01 | HOOK (L) |
| 45 | 4-655-037-01 | SPACER, RIB |
| 46 | 4-655-034-01 | SPACER, BOSS |
| 47 | 4-652-978-01 | PLATE (CONNECTOR), GROUND |
| 48 | 4-652-995-01 | SHEET (GROUND PLATE I/O) |
| 49 | 4-652-994-01 | INSULATING SHEET (BRACKET I/O) |
| * 50 | 4-652-976-01 | BRACKET (CONNECTOR) |
| B1 | 4-646-807-11 | 0 PLATE M2.5 (FDD) (2.5X2.7) |
| B2 | 4-648-320-01 | TAPPING (M2) (3X4) |
| B3 | 7-685-134-19 | SCREW +P2.6X8 TYPE2 NON-SLIT |
| B4 | 4-644-492-91 | ACE (M2), LOCK (2X3) |
| * B5 | 4-635-966-01 | SCREW (HEX) |
| B6 | 4-644-492-41 | ACE (M2), LOCK (2X3) |
| B7 | 4-645-177-01 | SCREW (M1.7X3.5) |
| B8 | 4-644-492-81 | ACE (M2), LOCK |

6-2. Accessories

| <u>Ref.No.</u> | <u>Part No.</u> | <u>Description</u> |
|----------------|-----------------|----------------------------------|
| | | ACCESSORIES ***** |
| | | 4-653-715-11 MANUAL, INSTRUCTION |



PCGA-DSD5/DSM5 (UC)



PCGA-DSD5/DSM5 (UC)

9-872-201-11

2001D0500-1



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English
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