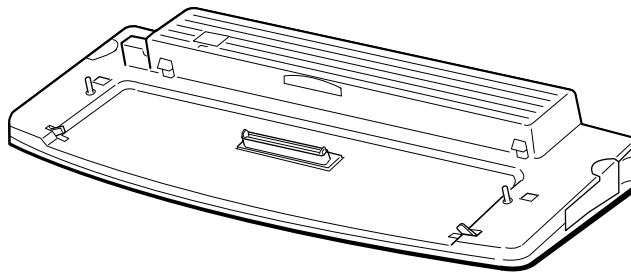


PCGA-PRFX1

SERVICE MANUAL

*US Model
Canadian Model*



SPECIFICATIONS

Connectors SERIAL Connector: RS-232C, D-SUB 9 pin (1)
PRINTER Connector: D-SUB 25 pin (1)
MONITOR Connector: analog RGB, mini D-SUB 15 pin (1)
USB Connector: USB 4 pin (3)
NETWORK Connector: 10BASE-T/100BASE-TX, RJ-45 (1)
MOUSE/KEYBOARD Connector:
PS/2, mini DIN 6 pin (1)

Power requirements
AC adapter

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. 12 ⁵/₈ × 1 ⁵/₈ × 4 ³/₈ inches (w/h/d)
(Approx. 320 × 40 × 110 mm)

Mass Approx. 18 oz. (514 g)

Supplied accessories
Operating instructions (1)

Design and specifications are subject to change without notice.

PORT REPLICATOR

SONY®

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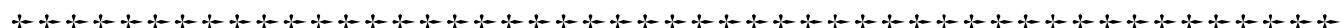
Caution Markings for Lithium/Ion Battery - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

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.



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 \triangle 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 270°C.
- 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.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

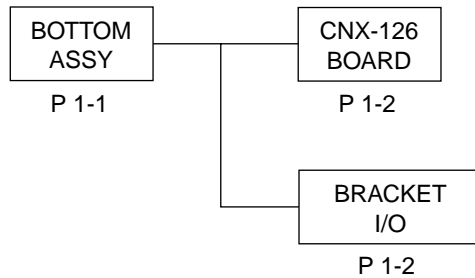
LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE \triangle SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
CHAPTER 1. REMOVAL		
1-1.	Flowchart	1-1
1-2.	Bottom Assy	1-1
1-3.	CNX-126 Board, Bracket I/O	1-2
	(to 1-2)	
CHAPTER 2. SELF DIAGNOSTICS		
2-1.	Outline	2-1
2-2.	Required Tools and Peripheral Devices	2-1
2-3.	Tools and Peripheral Device Connection	2-3
	(to 2-3)	
CHAPTER 3. EXPLODED VIEWS AND PARTS LIST		
	3-1
	(to 3-2)	

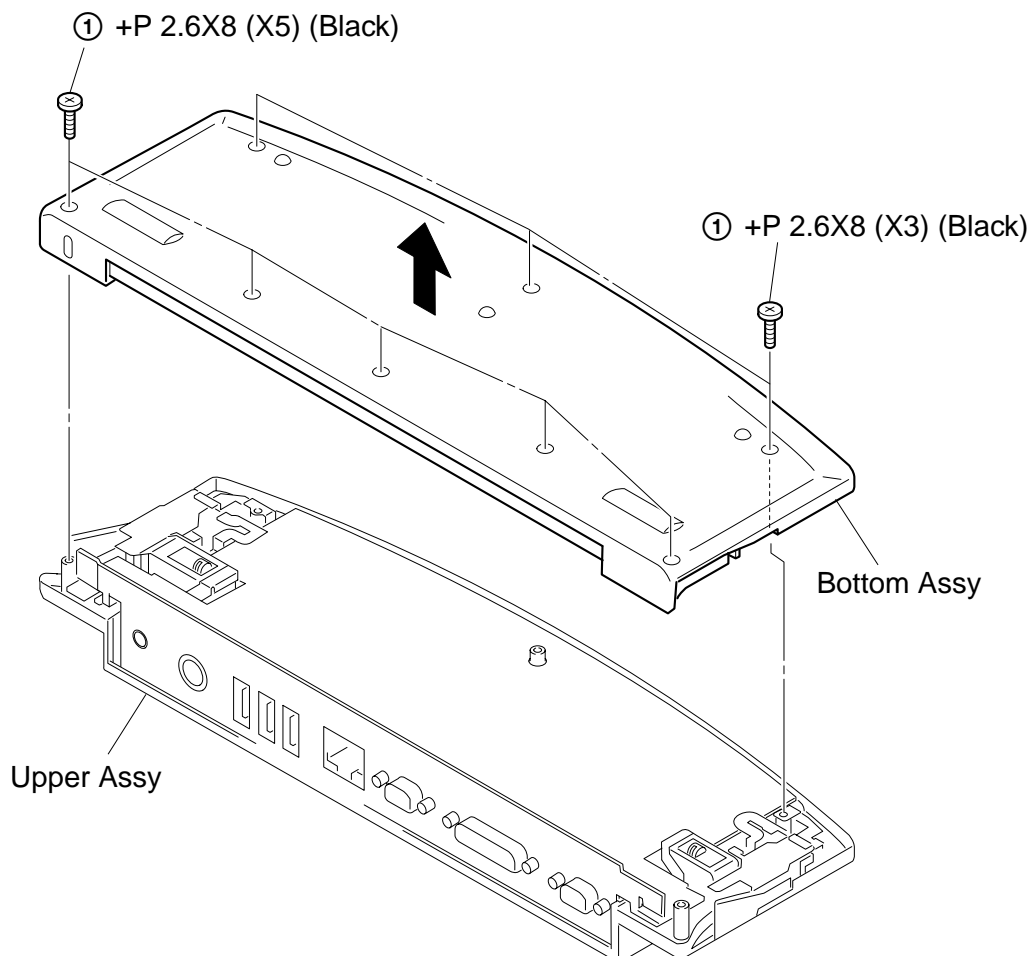
- Abbreviations
UC : US model / Canadian model

1-1. Flowchart

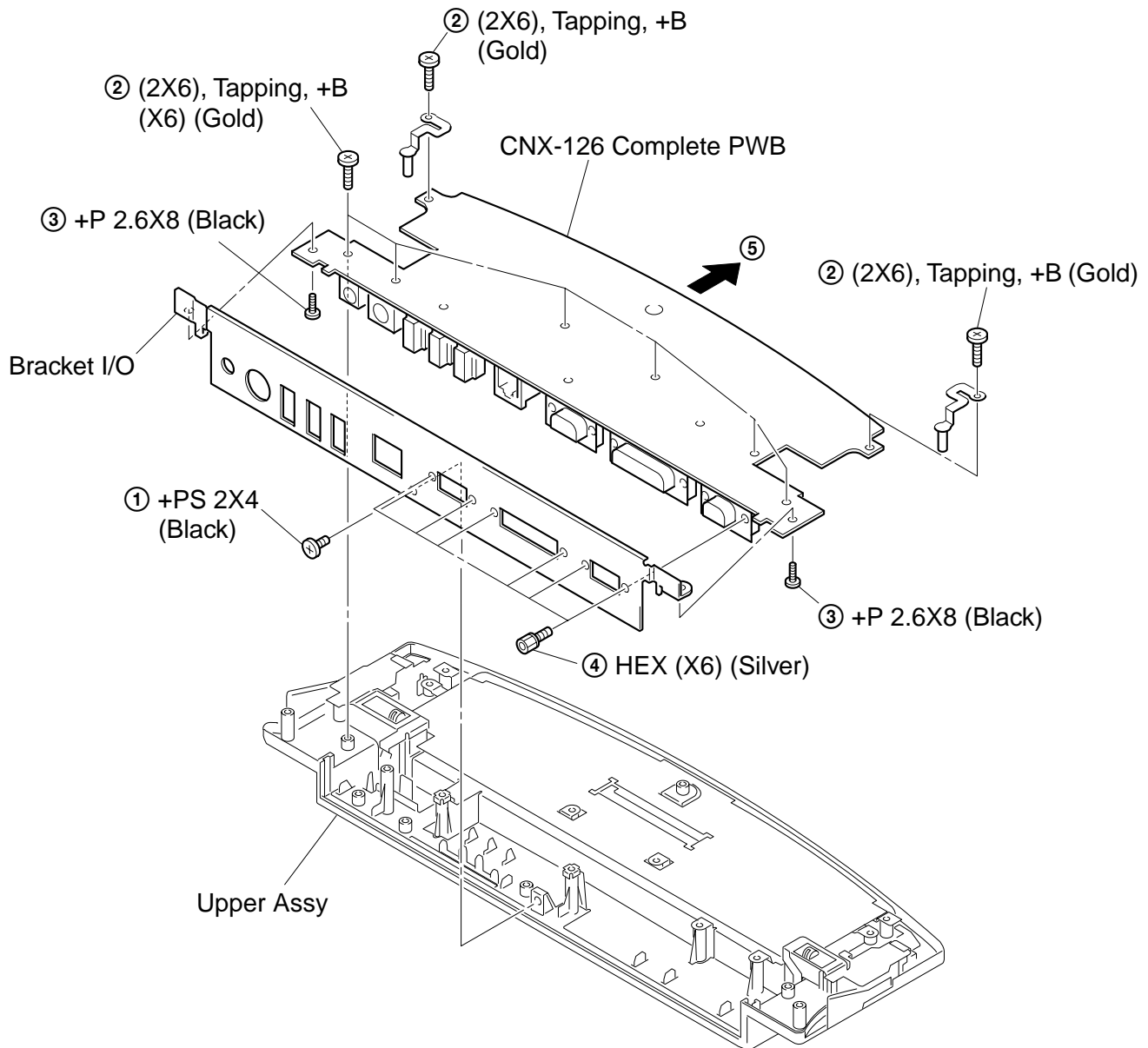


- P XX means pages that appears in this manual.

1-2. Bottom Assy



1-3. CNX-126 Board, Bracket I/O



2-1. Outline

To implement the self diagnostics, prepare the following equipment.

- The notebook computer that can be connected to this machine.
- The dedicated self diagnostics software of the notebook computer that can be connected to this machine.

The self diagnostics software contains various inspection items. The inspection items that can be used by this machine are limited. For example, the following inspection items can be used in the PCG-FX1□□.

- Keyboard test
- Serial port (COM) test
- Parallel port (printer) test
- VGA output test

Refer to Chapter “2. SELF DIAGNOSTICS” of the notebook computer Service Manual for details of the respective inspection items.

2-2. Required Tools and Peripheral Devices

	Tools and Peripheral Devices	Test Items
1	Serial Loopback Tool Specified Loopback Tool (Refer to next page.)	Serial Port (COM) test
2	Parallel Loopback Tool Specified Loopback Tool (Refer to next page)	Parallel Port (printer) test
3	VGA Monitor and Monitor Cable	VGA output test
4	External Keyboard	Keyboard test
5	Notebook Computer (Supported by this machine)	(Diagnostics computer)
6	Diagnostics FD Media	(Diagnostics starting software)
7	Diagnostics CD-ROM Media	(Diagnostics software)

[Reference] On Serial/Parallel Loopback Tool

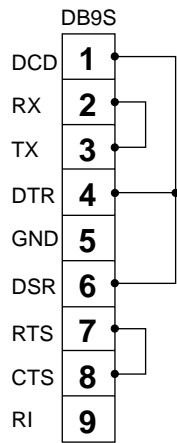
- The serial loopback tool and the parallel loopback tool are necessary for diagnostics of the serial communication line and the parallel communication line. Fabricate the serial loopback tool and the parallel loopback tool locally referring to the connection diagrams shown below.

Serial Loopback Tool : For diagnostics of serial port

SERIAL LOOPBACK CONNECTOR CONNECTION DIAGRAM

- Connector Types DB9S (Female)
- Interface Standard RS-232C
- Loopback Data & Handshake

NOTE: The black round mark "●" indicates soldering.

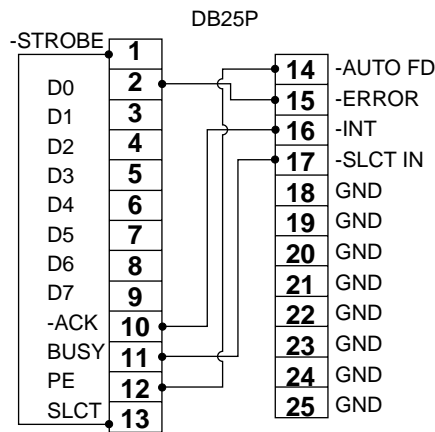


Parallel Loopback Tool : For diagnostics of parallel port

PARALLEL LOOPBACK CONNECTOR CONNECTION DIAGRAM

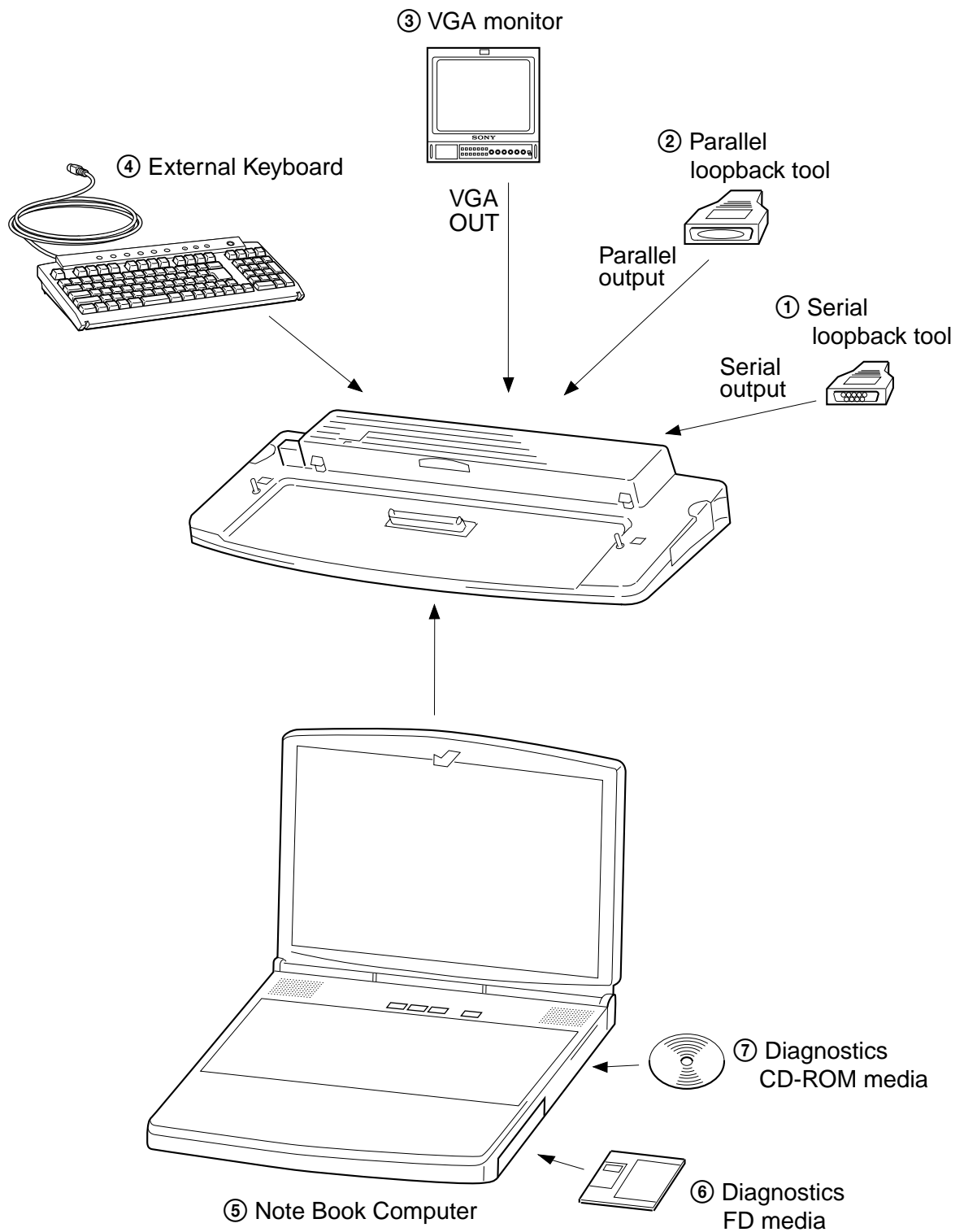
- Connector Types DB25P(Male)
- Interface Standard Centronics
- Loopback Status to Commands

NOTE: The black round mark "●" indicates soldering.



2-3. Tools and Peripheral Device Connection

System Connection Diagram

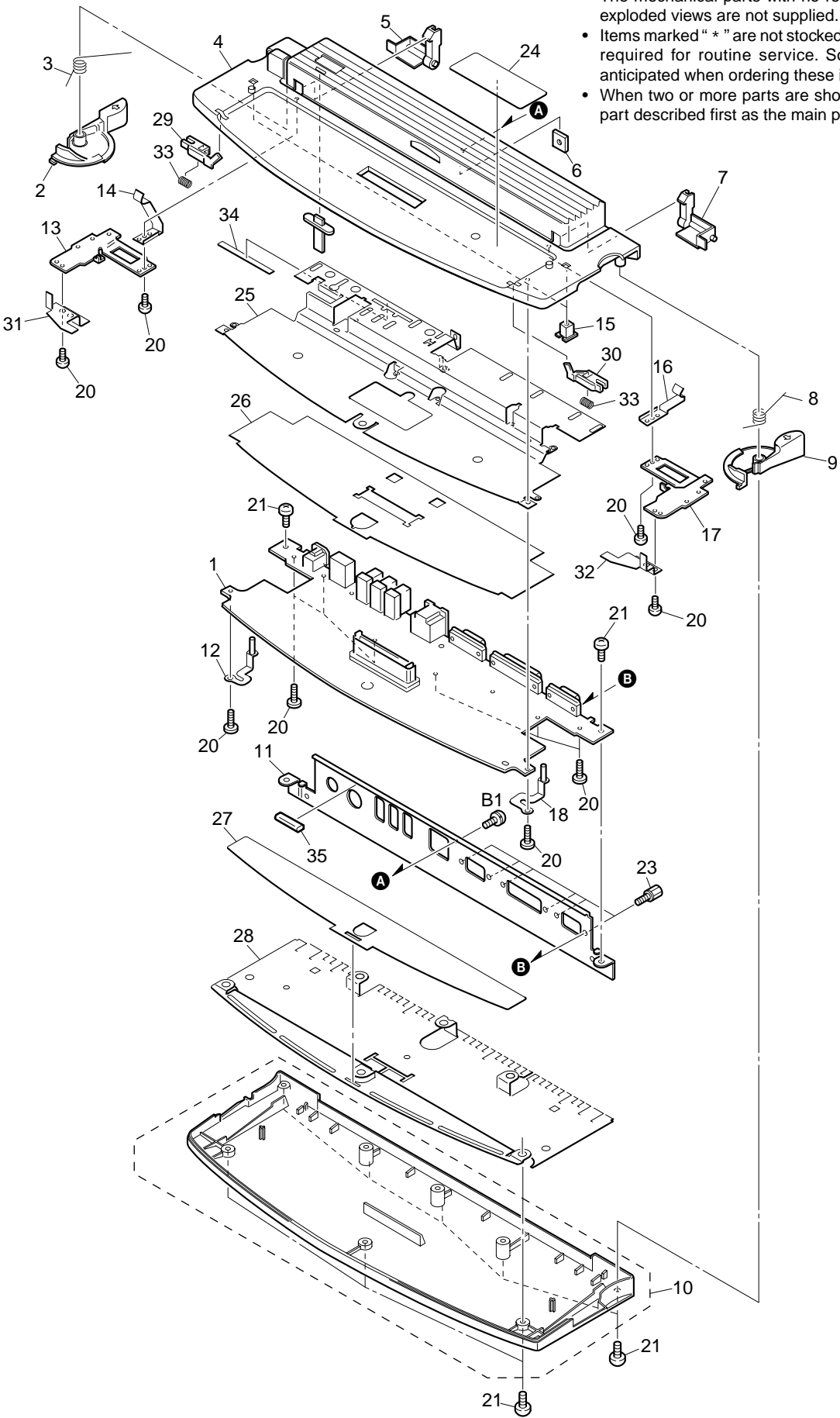


CHAPTER 3.

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 two or more parts are shown in parallel, use the part described first as the main part.



3-1

Ref.No.	Part No.	Description
1	A-8066-583-A	COMPLETE PWB CNX-126
2	4-641-015-11	LEVER L APR
3	4-641-037-01	LEVER SPRING L
4	X-4623-432-2	UPPER ASSY
5	4-641-020-11	HOOK L APR
6	3-718-233-01	NUT, PLATE
7	4-641-016-11	HOOK R APR
8	4-641-036-01	LEVER SPRING R
9	4-641-014-11	LEVER R APR
10	X-4623-433-3	BOTTOM ASSY
* 11	4-652-049-01	BRACKET I/O
12	X-4623-435-1	PIN L ASSY
* 13	4-641-032-01	PLATE HOOK L
14	4-641-035-01	HOOK SPRING L
15	4-641-029-11	POP UP BAR APR
16	4-641-034-01	HOOK SPRING R
* 17	4-641-031-01	PLATE HOOK R
18	X-4623-434-1	PIN R ASSY
20	3-727-903-11	SCREW (2X6), TAPPING, +B
21	4-641-736-01	+P2.6X8
* 23	4-635-966-01	SCREW (HEX)
* 24	4-641-660-11	CAUTION LABEL
25	4-652-047-01	SHIELD UPPER
26	4-652-054-01	INSULATOR UPPER
27	4-652-055-01	INSULATOR BOTTOM
28	4-652-048-01	SHIELD BOTTOM
29	4-653-139-01	HOOK FRONT L
30	4-653-140-01	HOOK FRONT R
31	4-653-141-01	PLATE HOOK FRONT L
32	4-653-142-01	PLATE HOOK FRONT R
33	4-653-143-01	SPRING HOOK FRONT
34	4-654-155-01	GASKET (SH)
35	4-654-156-01	GASKET (DIN)
B1	7-628-253-00	SCREW+PS 2X4

Ref.No.	Part No.	Description
		ACCESSORY

	4-652-489-11	MANUAL, INSTRUCTION

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