brother®

SERVICE MANUAL

MODEL: PT-9600/3600

MECHANISMS & ELECTRONICS

SERVICE MANUAL

MODEL: PT-9600/3600

PREFACE

This publication is a service manual covering the specifications, theory of operation, disassembly/reassembly procedure, and troubleshooting and error message of the Brother PT-9600/3600. It is intended for service personnel and other concerned persons to accurately and quickly provide after-sale service for our PT-9600/3600.

To perform appropriate maintenance so that the machine is always in best condition for the customer, the service personnel must adequately understand and apply this manual.

This manual is made up of four chapters and appendices.

CHAPTER I	**SPECIFICATIONS**
CHAPTER II	**THEORY OF OPERATION**
CHAPTER III	**DISASSEMBLY AND REASSEMBLY**
CHAPTER IV	**TROUBLESHOOTING AND ERROR MESSAGE**
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CHAPTER I   SPECIFICATIONS

1.1   MECHANICAL SPECIFICATIONS

1.1.1   External Appearance

PT-9600 (Europe)
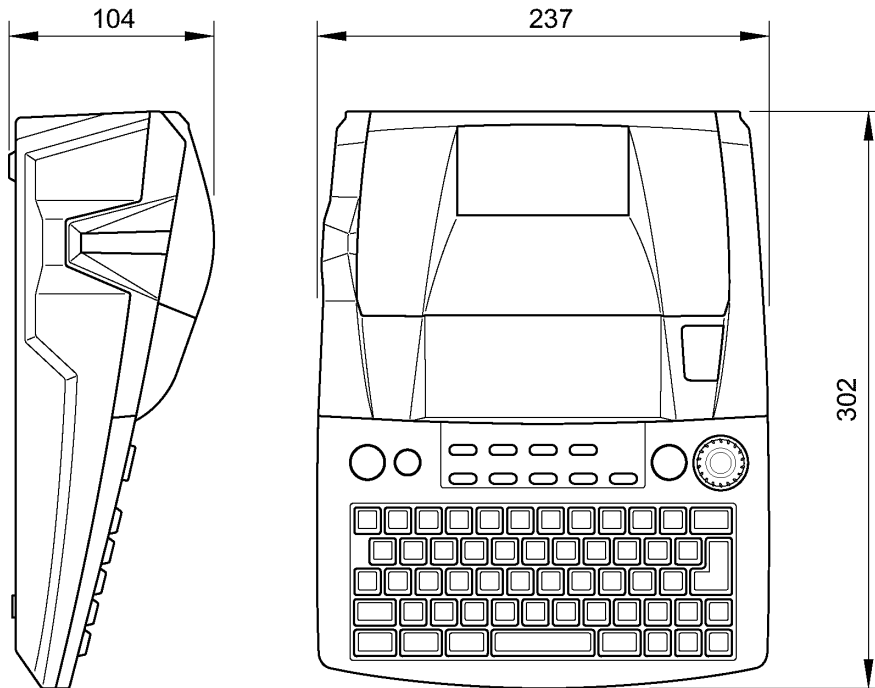
PT-9600/3600 (U.S.A./CANADA)
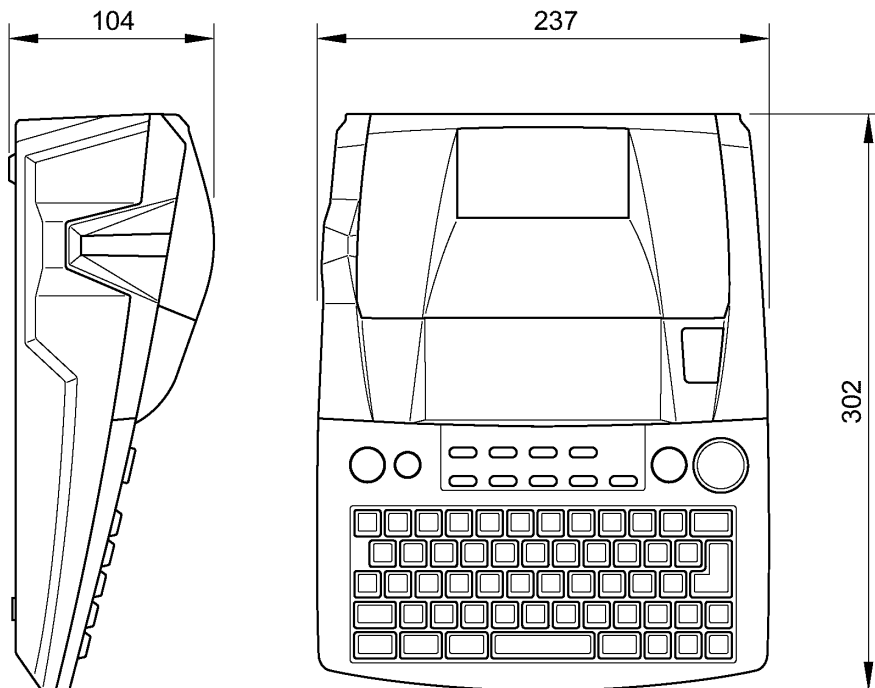
Fig. 1.1-1 External Appearance (1)

PT-3600 (Europe)
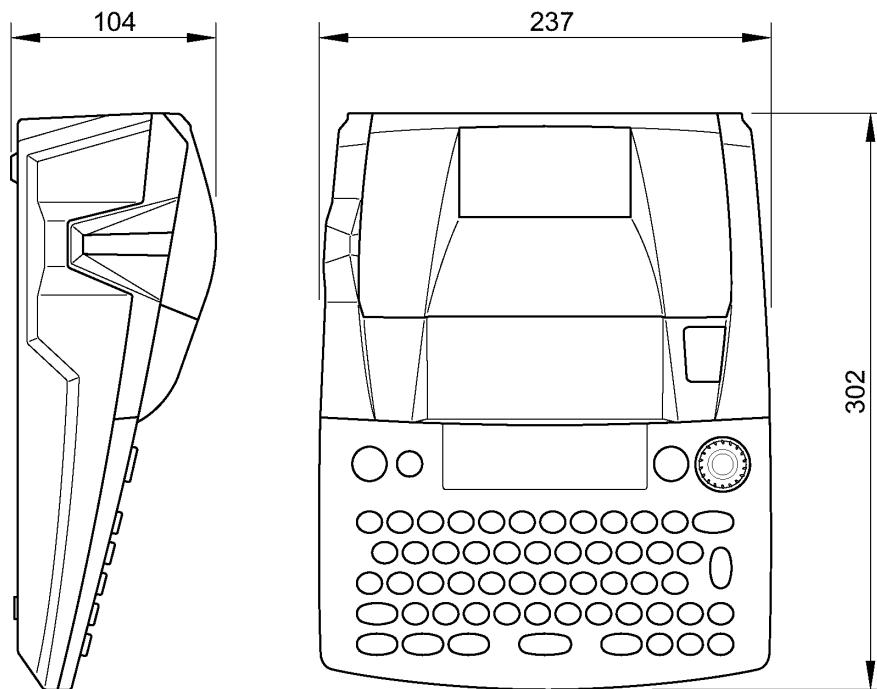
Fig. 1.1-1 External Appearance (2)

[1]   Dimensions(W x D x H)   237 mm x 302 mm x 104 mm

[2]   Weight   Machine proper   Approx. 1.9kg
                                                 Approx. 2.0kg (including a tape cassette)
                      In package   Approx. 4.0kg

1.1.2   Keyboard

[1]   Entry system   Rubber key pad (PT-3600 Europe)
                                                 Full keyboard (PT-9600/PT-3600 U.S.A.)

[2]   Number of alphanumeric and symbol keys   39

[3]   Number of function keys   27 (PT-9600)
                                                 21 (PT-3600 U.S.A.)
                                                 19 (PT-3600 Europe)
                                                 (excluding "ON/OFF" key, "PRINT" key)

[4]   Key arrangement   See Fig. 1.1-2.

1.1.3   Display

[1]   Display type   Liquid crystal display (LCD)
                                                 (PT-9600 having Back-light)

[2]   Configuration (See Fig. 1.1-2.)   119 dots wide by 24 dots high and
        guidance

[3]   Number of indicators (See Fig. 1.1-2.)   : 32

[4]   Field-of-view angle adjustment   : Fixed by a resistor.

1.1.4 Printing Mechanism

[1] Print method — Thermal transfer onto plastic tapes (laminate tape and non-laminated tape) or special tapes (instant lettering tape, non-laminated thermal film tape, iron-on transfer tape, and porous-stamp tape, and *AV labels tape)
(Fixed print head and tape feeding mechanism)
* AV labels tape : PT-9600/PT-3600 U.S.A. only

[2] Print speed (max.) — 285 dots (20.1 mm) per second

[3] Print head

Type — Thermal print head
Heat generator — Consists of 384 heating elements vertically aligned
Size of heating element — 0.08 mm wide by 0.0705 mm high

[4] Character size (dots)

Character size (Point size)	dots Height x Width (mm)	Character size (Point size)	dots Height x Width (mm)
6	22 x 17 (1.54 x 1.19)	22	80 x 61 (5.6 x 4.27)
7	26 x 20 (1.82 x 1.4)	24	88 x 67 (6.16 x 4.69)
8	29 x 22 (2.03 x 1.54)	28	102 x 79 (7.14 x 5.53)
9	33 x 25 (2.31 x 1.75)	32	117 x 89 (8.19 x 6.23)
10	37 x 28 (2.59 x 1.96)	36	131 x 101 (9.17 x 7.07)
11	40 x 31 (2.8 x 2.17)	40	146 x 112 (10.22 x 7.84)
12	44 x 34 (3.08 x 2.38)	48	175 x 135 (12.25 x 9.45)
14	51 x 39 (3.57 x 2.73)	56	204 x 157 (14.28 x 10.99)
16	58 x 45 (4.06 x 3.15)	64	234 x 179 (16.38 x 12.53)
18	66 x 50 (4.62 x 3.5)	72	263 x 201 (18.41 x 14.07)
20	73 x 56 (5.11 x 3.92)	76	277 x 213 (19.39 x 14.91)

* Scaling with width settings

WIDE	2
NARROW	2/3
NARROWEST	1/2

* The height and width of printed characters will differ depending on characters. The values in the above list apply to character "H" of HELSINKI.

* The character size refers to the point size.

1.1.5 Tape Cassette

[1] Cassette — Cartridge type

[2] Types of tape cassettes
- Laminated tape cassette — Laminate tape, ink ribbon, and adhesive base tape
- Non-laminated tape cassette — Non-laminated tape and ink ribbon
- Instant lettering tape cassette — Instant lettering tape and ink ribbon
- Iron-on transfer tape cassette — Iron-on transfer tape and ink ribbon
- Stamp tape cassette — Porous-stamp tape and base paper
- Cloth tape cassette — Cloth tape and ink ribbon
- AV (Avery) labels cassette — AV labels and base paper

Note: The tape cassette for Head cleaning is provided.

[3] Tape size

Type of tape	Width	Length
Laminate tape	6, 9, 12, 18, 24, 36 mm	8 m (5 m for the fluorescent coating tape)
Non-laminated tape	6, 9, 12, 18, 24 mm	8 m
Instant lettering tape	12, 18, 24 mm	8 m
Iron-on transfer tape	18 mm	6 m
Porous-stamp tape	18, 24 mm	3 m
Cloth tape	12, 18 mm	4 m
AV address labels tape	24 mm	7 m
AV return address labels tape	24 mm	7 m
AV file folder labels tape	24 mm	7 m
Head cleaning tape	36 mm	2.5 m (Approx. 100 times)

[4] Tape cassette packed with the machine

PT-9600/PT-3600 (Europe) version   Laminated tape cassette (containing a 24-mm-wide black ink ribbon, laminate tape, and adhesive base tape)

PT-3600 U.S.A. version   Laminated tape cassette (containing a 24-mm-wide black ink ribbon, laminated tape, and adhesive base tape) and AV address labels cassette (containing a24-mm-wide AV labels tape and base tape)

1.1.6 Tape Cutter

[1] Tape cutting   (1) Automatic full cutter

(2) Automatic half cutter

Not user-replaceable (1) and (2)

1.1.7 PC Interface

[1] Comunication Interface   USB, Serial interface (RS-232C)(PT-9600 only)

[2] Applicable OSs   Microsoft Windows 95
(for the RS-232C I/F of PT-9600 only)
Microsoft Windows 95/98 SE
Microsoft Windows ME
Microsoft Windows NT 4.0
(for the RS-232C I/F of PT-9600 only)
Microsoft Windows 2000 Professional
Microsoft Windows XP
Macintosh Mac OS 8.6 ~ 9.x
Macintosh Mac OS X 10.1/10.2

[3] Printer emulation   Serial I/F (PT-9600 only)

[4] ASCII, ESC/P   N/A (PT-3600 only)
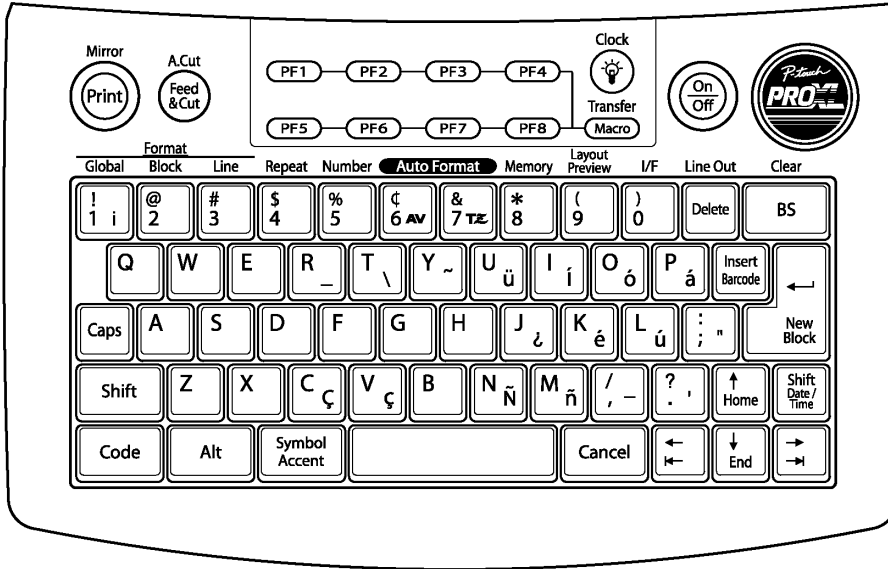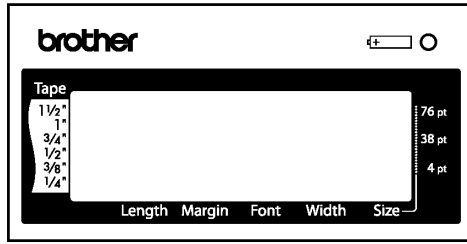
PT-9600 U.S.A./CANADA
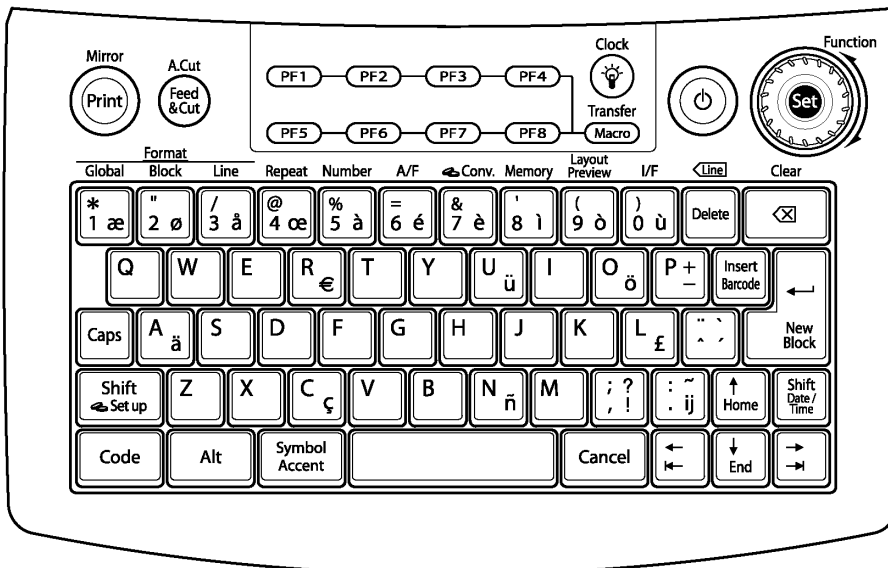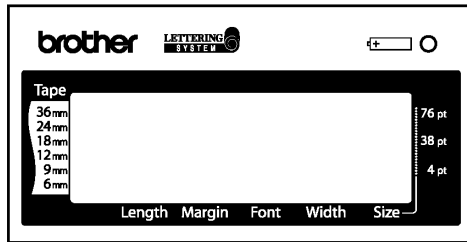
PT-9600 U.K.

Fig. 1.1-2 Key Arrangement (1)
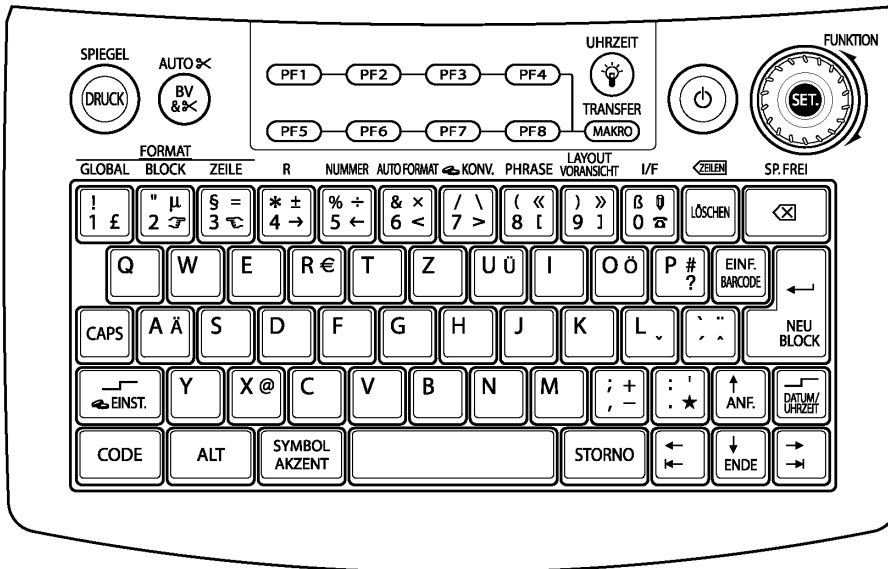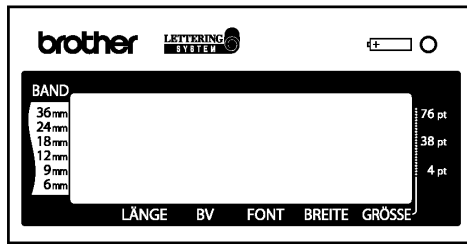
PT-9600 German
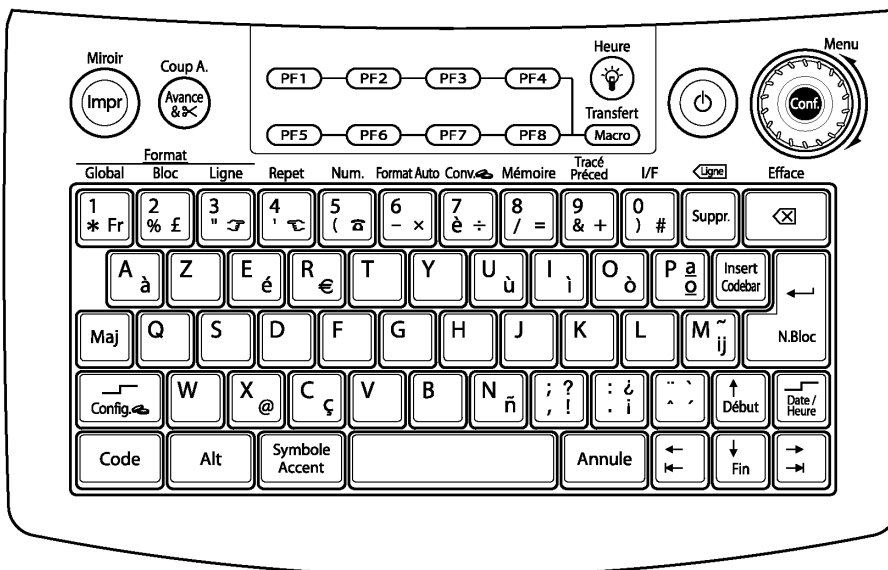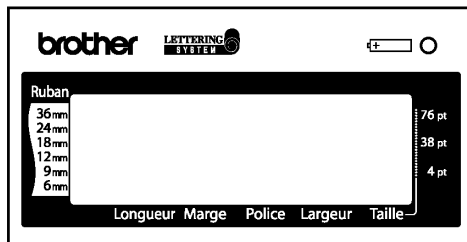
PT-9600 French

Fig. 1.1-2 Key Arrangement (2)
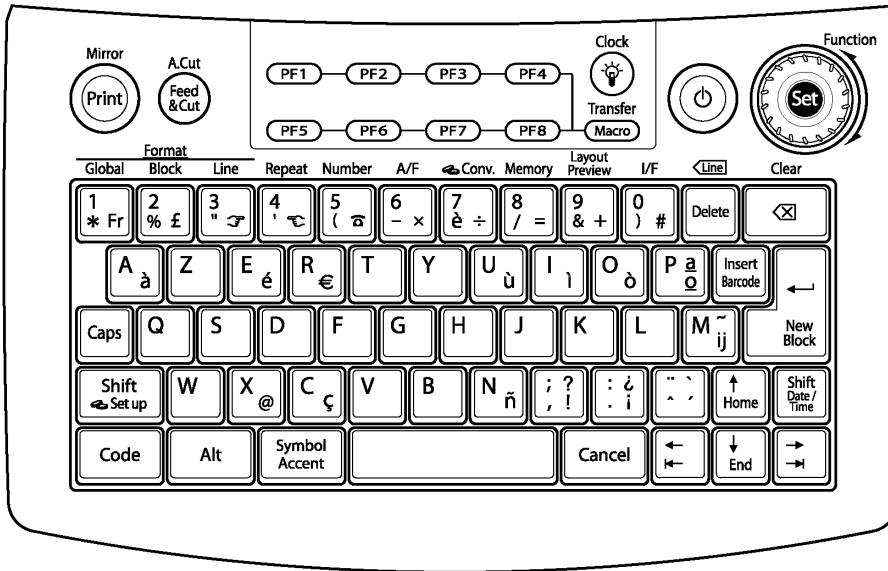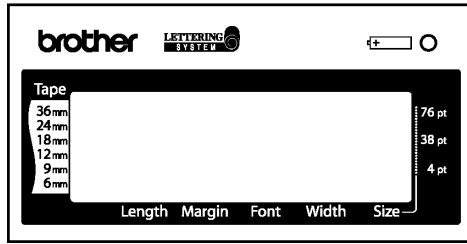
PT-9600 Belgium
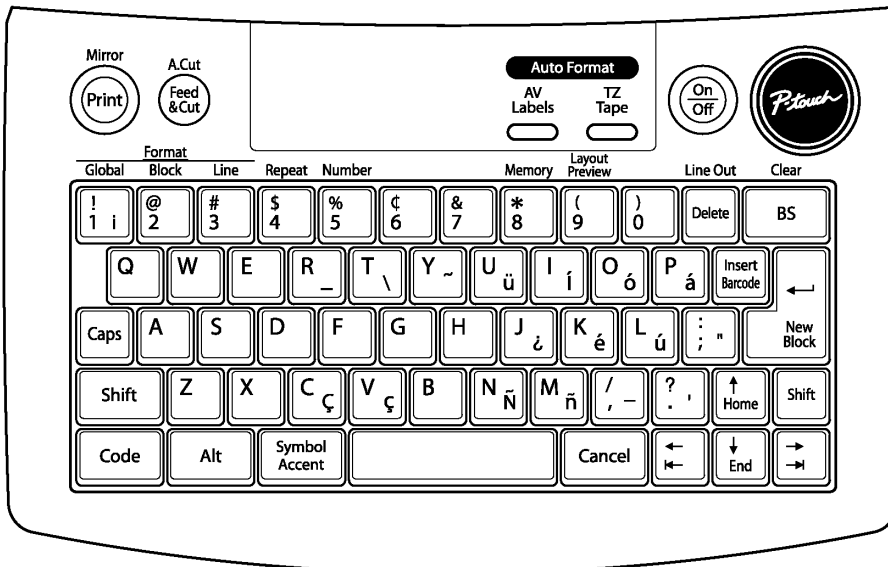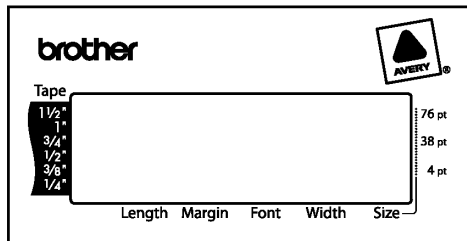
PT-3600 U.S.A.

Fig. 1.1-2 Key Arrangement (3)
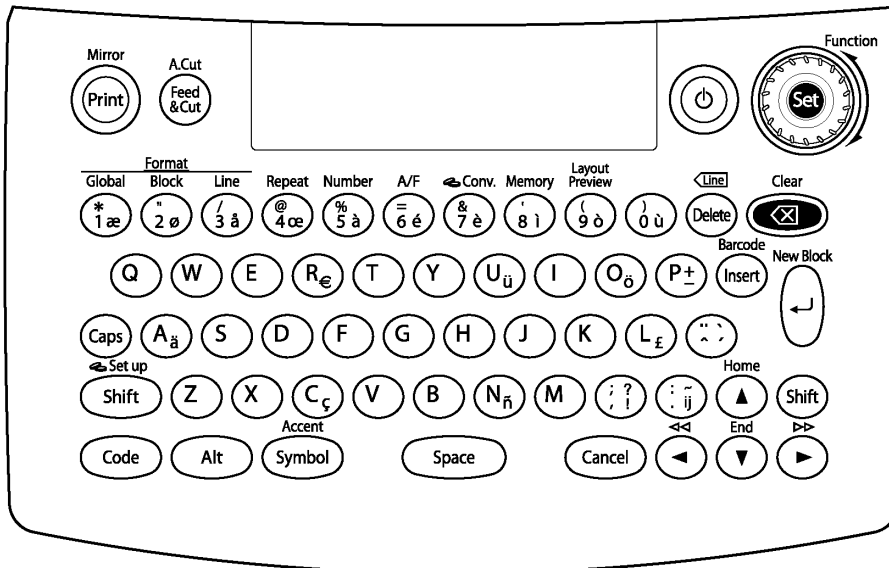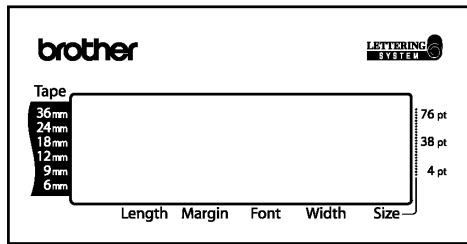
PT-3600 U.K.
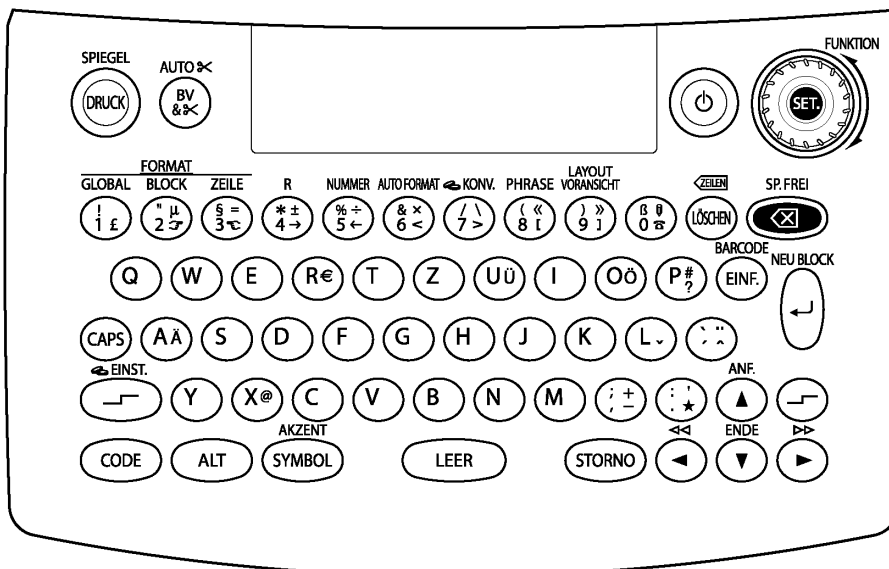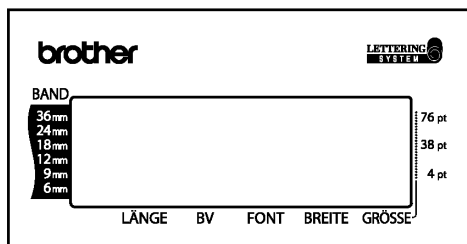
PT-3600 German

Fig. 1.1-2 Key Arrangement (4)
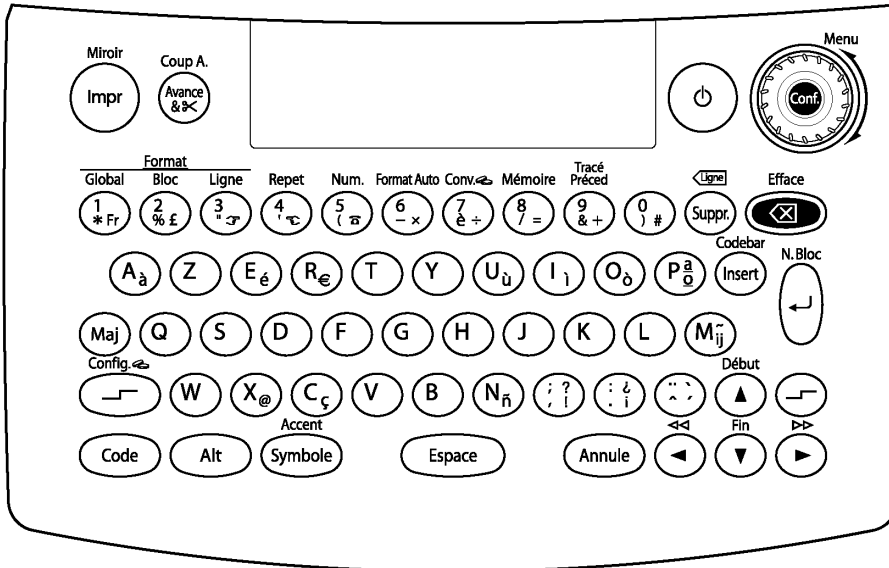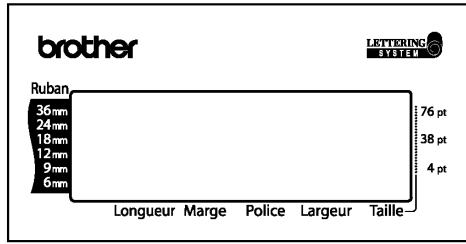
PT-3600 French
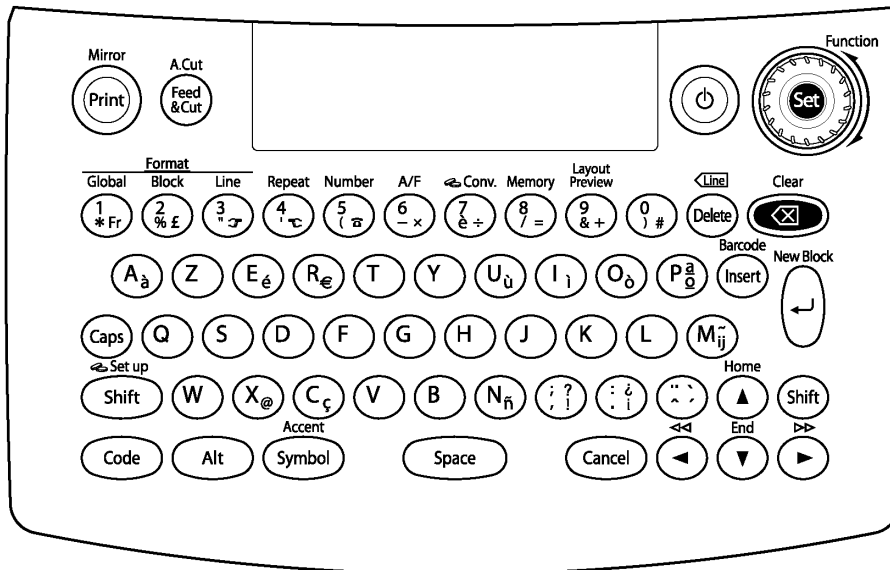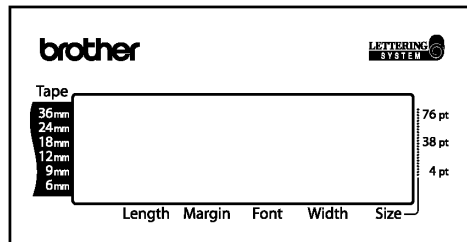
PT-3600 Belgium

Fig. 1.1-2 Key Arrangement (5)

1.2 ELECTRONICS SPECIFICATIONS

1.2.1 Character Generator

[1]	Internal characters	U.S.A./CANADA	: 574 characters (including symbols)
		U.K.	: 584 characters (including symbols)
		German	: 606 characters (including symbols)
		French/Belgium	: 585 characters (including symbols)
[2]	Internal fonts	U.S.A./CANADA versions	: 10
		European versions	: 10
[3]	Internal memory	Text buffer	: 1000 characters
		File memory	: 10000 characters

1.2.2 Power Supply

[1] AC adapter   Dedicated switching system AC adapter (AD9000)

Power supply   Commercially available power (120V AC, 60Hz for North America and Canada, and 230V AC, 50Hz for Europe) is input and stabilized to generate DC voltage by the switching regulator in the machine. The power supply cord is inserted into an inlet.
The protect circuit for the opposite polarity AC adapter is provided.

[2] Storage battery   Dedicated Ni-MH storage battery (BA9600)
(PT-9600 only)

[3] Automatic powering-off Yes

Normal mode   : 5 min ± 30sec.
IF mode   : 30 min ± 30sec.

1.3 KEY COMMANDS FOR SPECIAL FUNCTIONS

1.3.1 Initializing

No powering on the machine with both the "Code" + "R" + "ON/OFF" keys held down will initialize the machine. (Release the ON/OFF key earlier than other keys.)

1.3.2 Demonstration Print

When the machine is turned on, pressing the "D" key with the "Code" key held down will display "SELF PRINT" on the LCD and start demonstration print.
(This key command takes effect only when no data is etered.)

Given below is a demonstration printout that is reduced in size.

CHAPTER II   THEORY OF OPERATION

2.1   OUTLINE OF MECHANISMS

2.1.1   Print Mechanism

■ Structure of Thermal Head

The machine uses thermal transfer printing. The thermal print head has a heat generator consisting of 384 heating elements which are vertically aligned as shown in Fig. 2.1-1. Each heating element is 0.08 mm wide by 0.0705 mm high.

0.0705 mm (1/360 inch)

27.056 mm
(128 elements)

0.08 mm
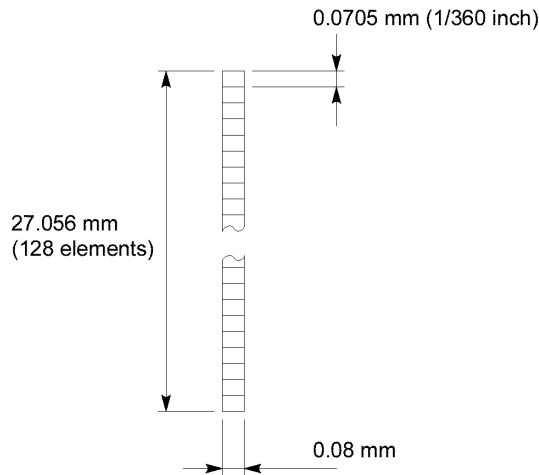
Fig. 2.1-1 Heat Generator of the Thermal Head

■ Printing Process

When the cylindrical rubber platen is pressed against the thermal print head with the tape* and ink ribbon** sandwiched inbetween, the CPU applies electric power to the selected heating elements out of 384.

* Laminate tape when using laminated tape cassettes.
  Non-laminated tape when using non-laminated tape cassettes.
  Instant lettering tape when using instant lettering tape cassettes.
  Iron-on transfer tape when using iron-on transfer tape cassettes.
  Cloth tape when using cloth tape cassettes.
  Thermal tape when using AV (Avery) labels cassettes.

** When using AV labels cassettes or stamp tape cassettes, no ink ribbon is sandwiched.

[For tape cassettes except stamp tape cassettes and AV labels cassettes]

If the selected heating element(s) generates heat, the ink on the sandwiched ribbon will be melted and transferred to the tape, producing a dot(s) on the tape. The ink ribbon and the tape are advanced and then the next heating cycle is repeated, thus forming a character on the tape.

[For AV labels cassettes]

If the selected heating element(s) generates heat, the thermal tape develops itself to produce a dot on the tape. The tape is advanced and the next heating cycle is repeated, thus forming a character on the tape.

[For stamp tape cassettes]

If the selected heating element(s) generates heat, the porous-stamp tape will be melted so that a pore (pores) will be formed in the tape. The tape is advanced and the next heating cycle is repeated, thus forming a character of pores on the tape. The printed stamp tape can be used as the face of a stamp. When the stamp is pressed against the ink-pad, it will absorb ink through the pores.

For laminated tape cassettes, instant lettering tape cassettes, and iron-on transfer tape cassettes, the CPU processes the print data to generate a mirror image so that the printed character can be seen normally when viewed from the other side of the printed face of the tape.

■ Character Formation

While the tape feed motor feeds the tape and ink ribbon (only the tape when using AV labels cassettes or stamp tape cassettes) by 0.0705 mm, the thermal head generates heat once. The feed amount is determined by sending five pulses of the signal per dot (0.0705 mm) when a pair of photointerrupters detect the encode gear fitted over the motor shaft. The feed amount of 0.0705 mm is smaller than the width (0.08 mm) of the heating elements so that the heat generated at one heating cycle will overlap with the next heating cycle. This forms a character having no gap between adjacent printed dots.

2.1.2 Roller Holder ASSY Setting & Retracting Mechanism

This mechanism consists of the release lever, roller release rod, and roller holder/head assy.

The roller holder assy incorporates the platen holder and the sub roller holder. These holders support the platen and the tape feed sub roller so that they can move perpendicularly to the thermal head and the tape feed roller, respectively.

The platen is pressed perpendicularly against the thermal head under a uniform load regardless of the thickness of the tape, so that the tape is fed.

Closing the cassette cover pushes down the release lever which moves the roller release rod to the left (when viewed from the front of the machine). This pivots the roller holder assy around the shaft secured on the thermal head assy so as to press the roller holder assy against the thermal head.

The platen is pressed perpendicularly against the thermal head with the tape and ink ribbon (only the tape when using AV labels cassettes or stamp tape cassettes) sandwiched inbetween under a uniform load by the platen spring.

At the same time, the platen gear becomes engaged with the platen idle gear.

Also, the tape feed sub roller is pressed perpendicularly against the tape feed roller built in the tape cassette with the tape (and base paper when using laminated tape cassettes or stamp tape cassettes) sandwiched inbetween under a uniform load by the sub roller holder springs. At the same time, the sub roller gear becomes engaged with the tape feed roller.

Opening the cassette cover causes the release lever spring to slide the roller release rod in the direction of the arrow. This retracts the roller holder assy from the thermal head, providing you with enough space to replace the tape cassette.
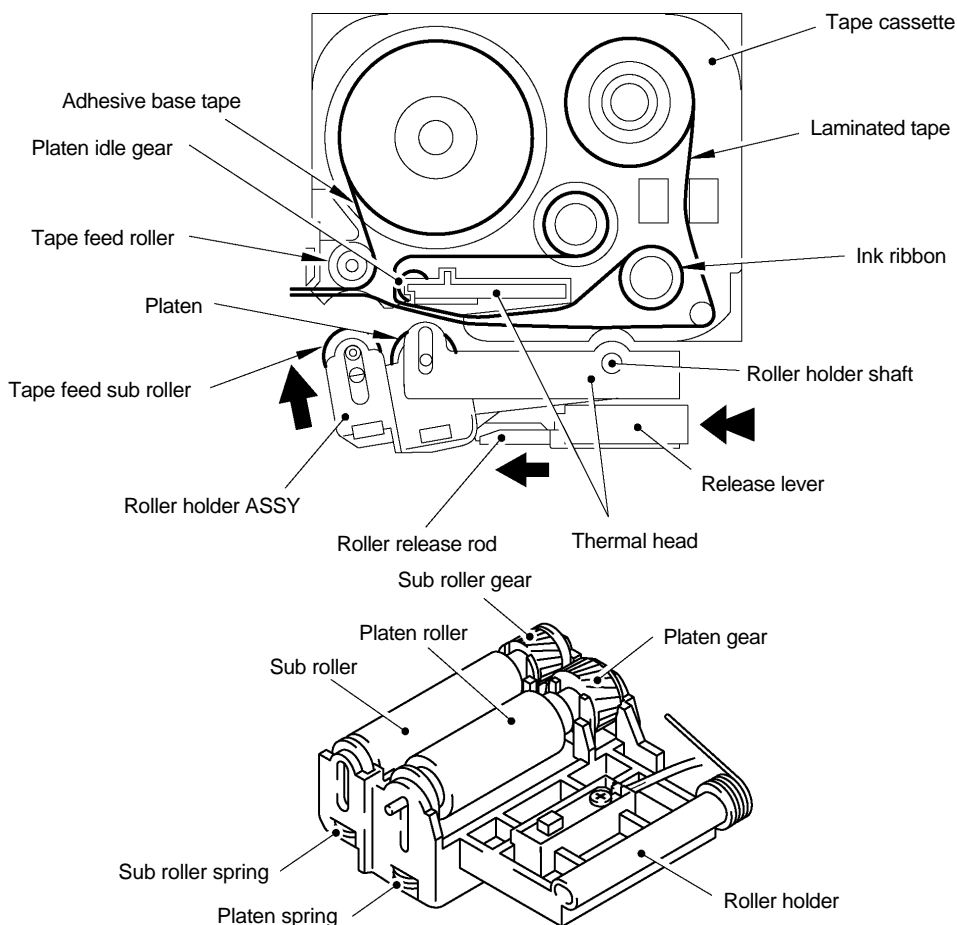
Fig. 2.1-2 Roller Holder ASSY Setting & Retracting Mechanism

2.1.3 Tape & Ribbon Feed Mechanism

This mechanism consists of the tape feed motor, the gear train, and the roller holder ASSY.

■ Tape Feeding

When you load a tape cassette and close the cassette cover, the platen and the thermal head sandwich the tape and ink ribbon (only the tape when using non-laminated thermal film tape cassettes or stamp tape cassettes) inbetween. Also, the tape feed sub roller in the roller holder assy and the tape feed roller inside the tape cassette sandwich the tape (and base paper when using laminated tape cassettes or adhesive base laminated tape) inbetween, as described in Subsection 2.1.2.

As the tape feed motor (stepping motor) rotates, the rotation is transmitted via the gear train to the platen idle gear (which rotates the platen gear) and the tape feed gear (which rotates the tape feed roller and the tape feed sub roller at the same rotation speed).

Accordingly, the sandwiched tape and ink ribbon will be advanced. (When a laminated tape cassette is mounted, the sandwiched laminated tape, adhesive base tape, and ink ribbon will be advanced together.)

The feeding amount of the tape feed sub roller is slightly greater than that of the platen roller.
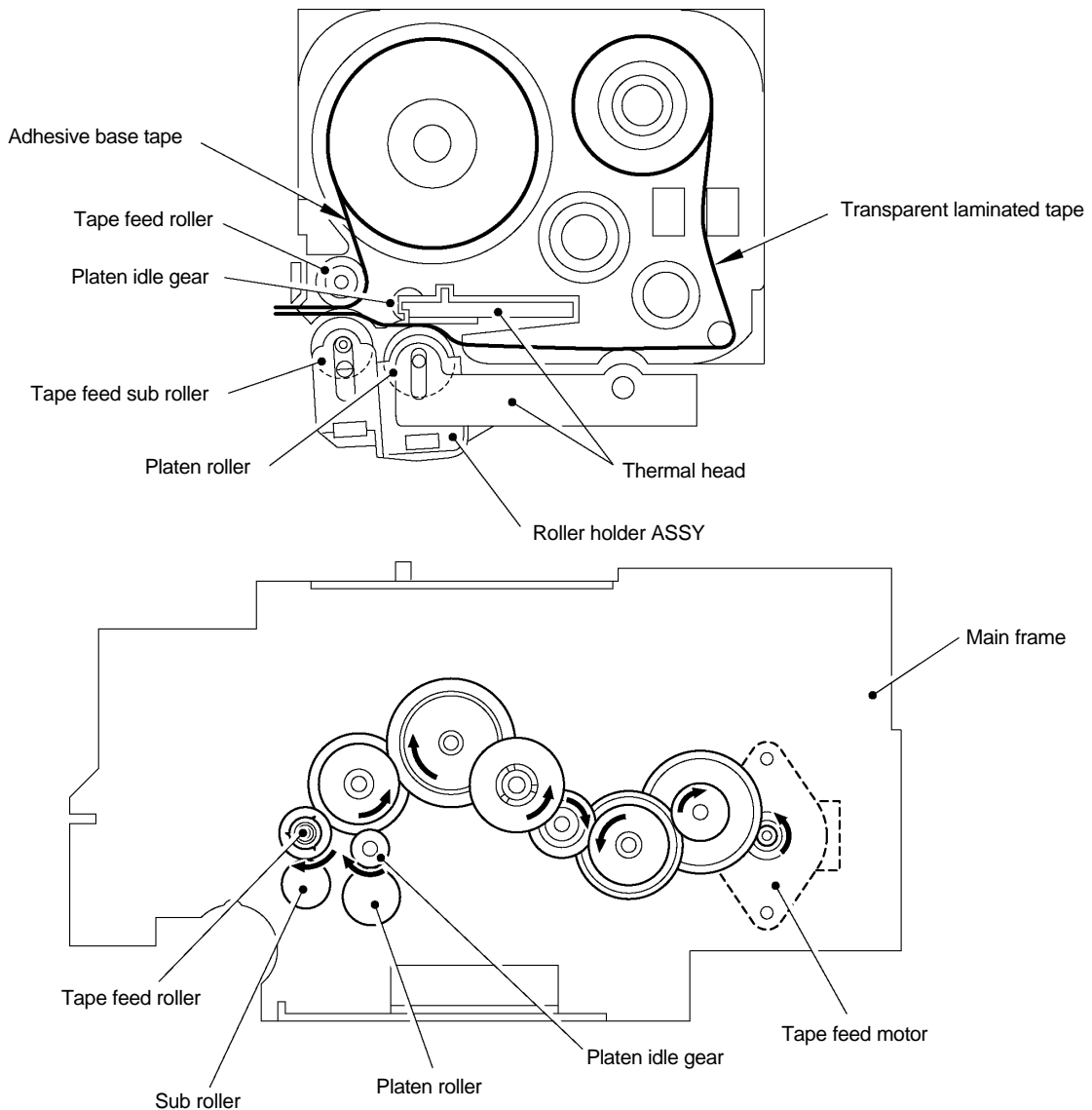
Fig. 2.1-3 Tape Feed Mechanism

■ Adhesive Base Tape Feeding (only for laminated tape cassettes)

A laminated tape cassette contains both a transparent laminated tape roll and a separate adhesive base tape roll.

When a transparent laminated tape and an adhesive base tape pass through the contact point (between the tape feed roller and tape feed sub roller), they are then bonded together into a single, printed tape. The ink printed on the laminated tape is, therefore, sealed up with the adhesive base tape.

■ Ink Ribbon Feeding (except for AV labels cassettes and stamp tape cassettes)

As the main motor rotates, the ribbon drive cam located at the middle of the gear train rotates counterclockwise. When fitted on the ribbon drive cam, the ribbon take-up roll in the tape cassette also rotates to take up the ink ribbon.

To apply proper tension to the ink ribbon between the platen and the ribbon drive cam, the feed amount of the ribbon drive cam is slightly greater than that of the tape feed gear. The difference between the feed speeds at the platen and at the ribbon drive cam is absorbed by the clutch spring which is integrated in the ribbon drive cam and allows the cam to slip.

This way, the ink ribbon is kept tense, which enables the ribbon to clearly separate from the tape at the stabilized angle after printing.
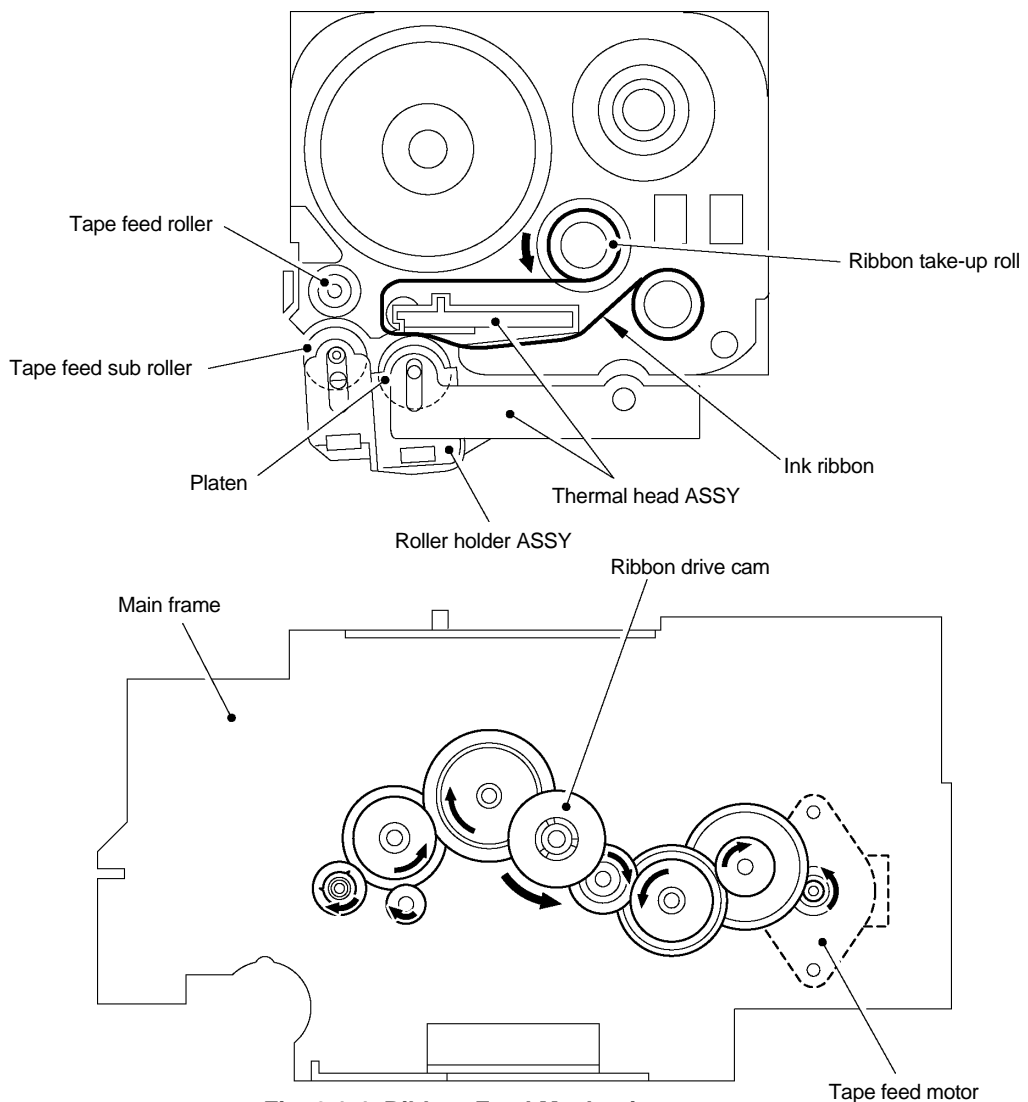
Fig. 2.1-4 Ribbon Feed Mechanism

2.1.4 Tape Automatic Full Cutter Mechanism

The cutter blade fixed into the carriage is moved along the lead shaft so that the tape is cut.

When the worm gear provided on the edge of the cutter motor is rotated, the lead shaft is rotated together so that the carriage is moved in the direction of tape cutting along the lead shaft.

The moving pitch of the carriage is approximately 4.5mm whenever the lead shaft is rotated once. The upper and lower sensors are provided on the lead shaft, where the carriage is moved between them.

When the tape is cut, the carriage is placed on the home position on the lower sensor first, and then the lower sensor rotates the cutter motor while the sensor is being turned ON so that the carriage is moved in the direction of tape cutting.

When the upper sensor detects the carriage, it is turned ON, and the cutter motor is rotated in reverse. Then the carriage is moved to the home position.
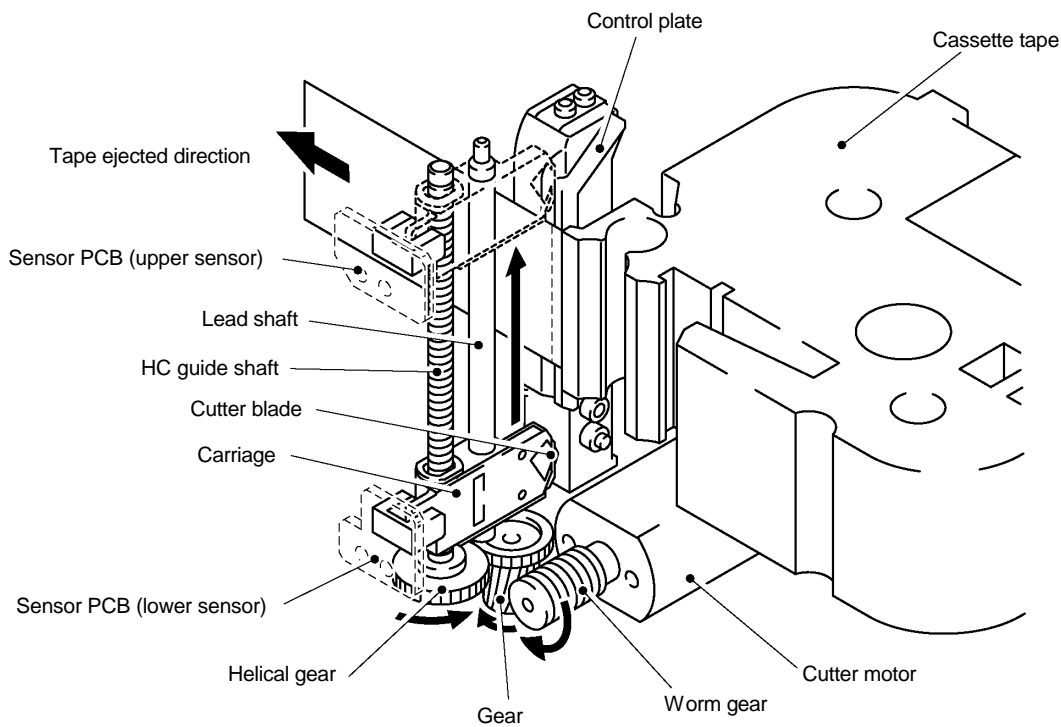
Fig. 2.1-5 Tape Automatic Full Cutter Mechanism

2.1.5 Tape Automatic Half Cutter Mechanism

When the control plate in the half cutter chassis is moved back and forth, the amount how much the cutter blade bites into the tape is changed to switch between half cutter and full cutter.

The cutter moving gear is rotated according to the rotation of the tape control motor so that the tape pressure is moved back and forth through the tape control crank and tape control link.

The amount how much the cutter blade bites into the tape between the tape pressure and control plate is decided depending on the amount how much the tape pressure presses the control plate.

For half cutter, the tape is cut so that only the peeling line is remained as shown in Fig.
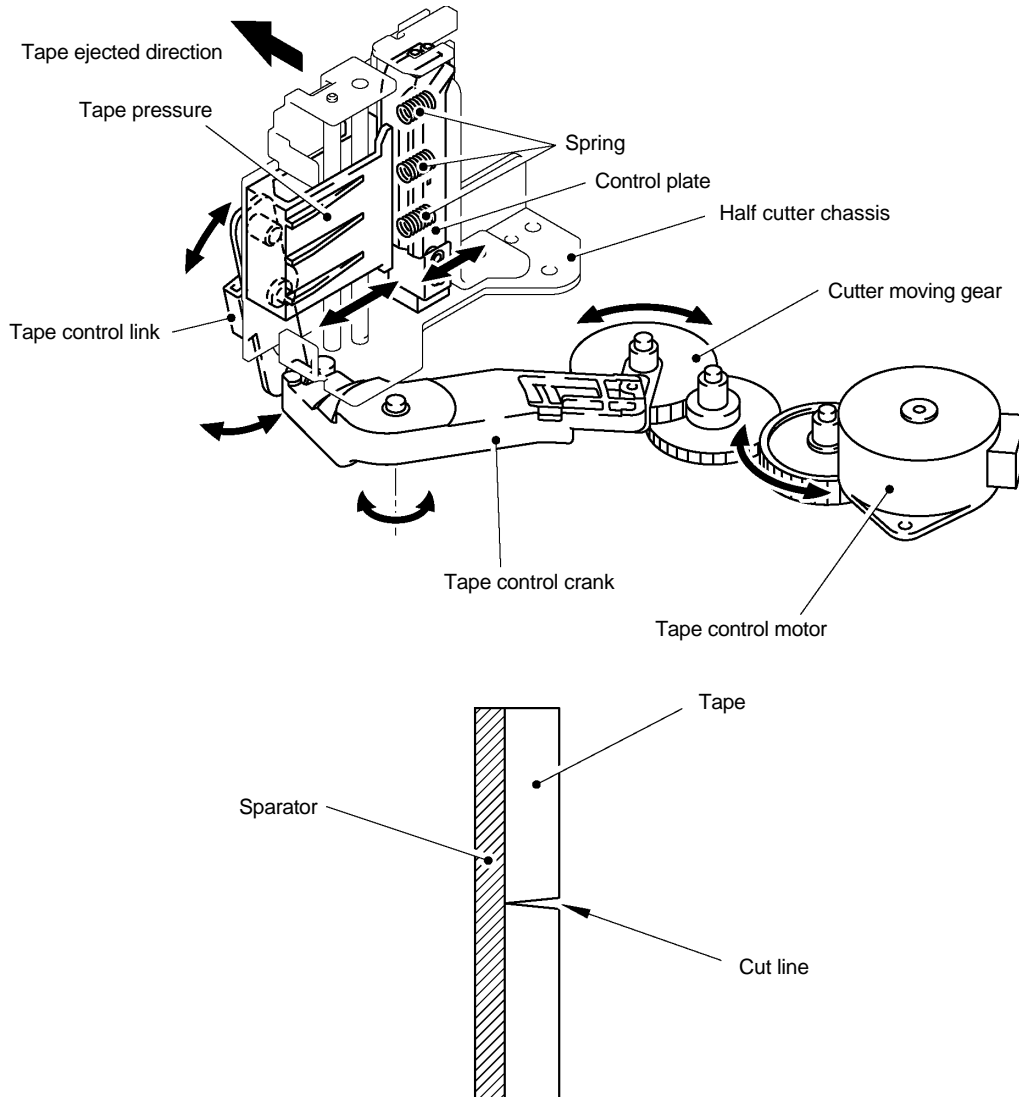
Fig. 2.1-6 Tape Automatic Half Cutter Mechanism

2.1.6 Tape Eject Mechanism (Full Cut Only)

The mechanism sends the full cut tape to the outside of the machine.

When the tape is full cut, it is fixed by the tape pressure, the eject rubber provided on the eject shaft and the eject roller.

After the tape is cut, the tape pressure is released, and the eject shaft is rotated at the same time so that the tape fixed by the eject rubber and eject roller is ejected.

The eject shaft is rotated by the eject motor. The rotation of the eject shaft is synchronous with the movement that the tape pressure is released.
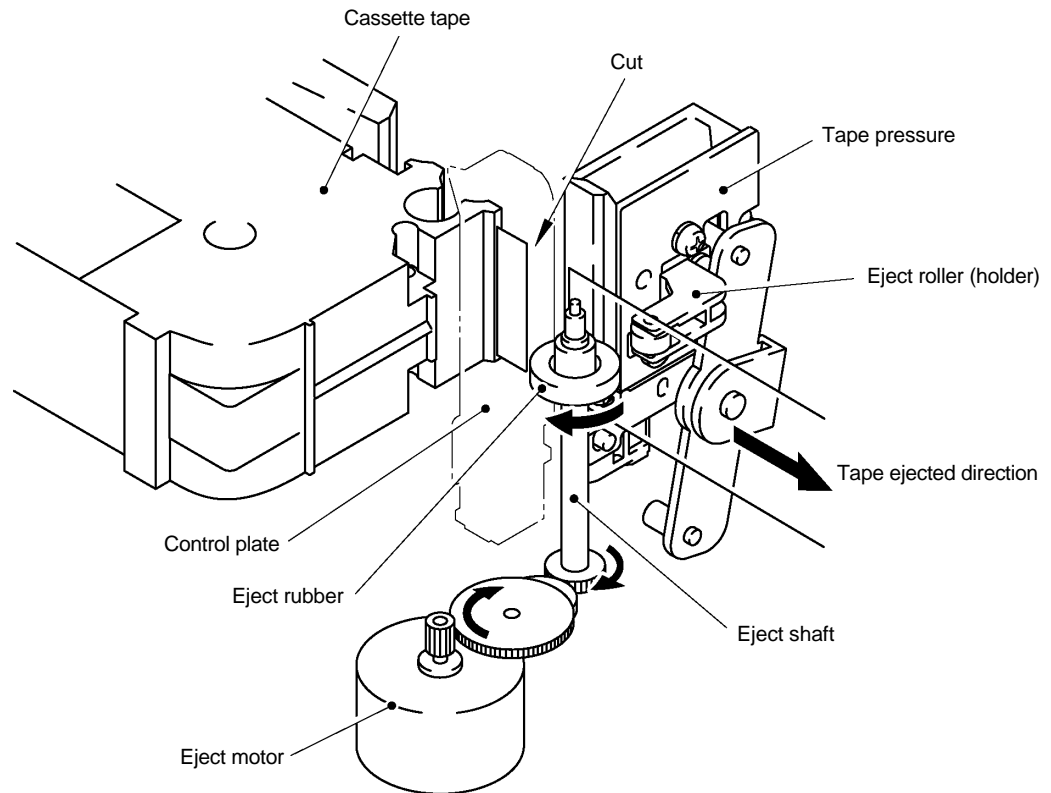
Fig. 2.1-7 Tape Eject Mechanism (Full Cut Only)

2.1.7 Release Button

Pressing the release button releasing the cassette cover.
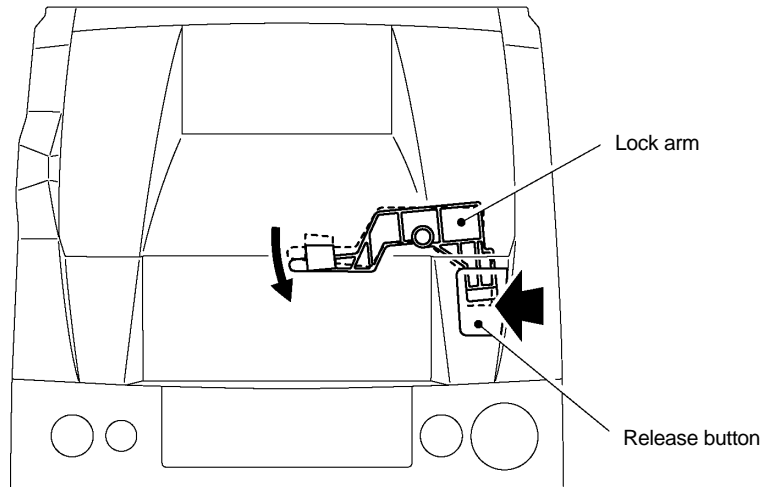
Fig. 2.1-8 Release Button

2.1.8 Roller Holder ASSY & Cassette Cover Interlocking Mechanism

Closing the cassette cover pushes down the roller release lever and brings the top of the lever into the hooked section provided on the inside of the cassette cover.

AS described in Section 2.1.2 "Roller Holder ASSY Setting & Retracting Mechanism", the roller release lever shifts the roller holder release rod so that the roller holder ASSY is pressed towards the head ASSY side.

(Roller holder ASSY retracted)   (Roller holder ASSY engaged)
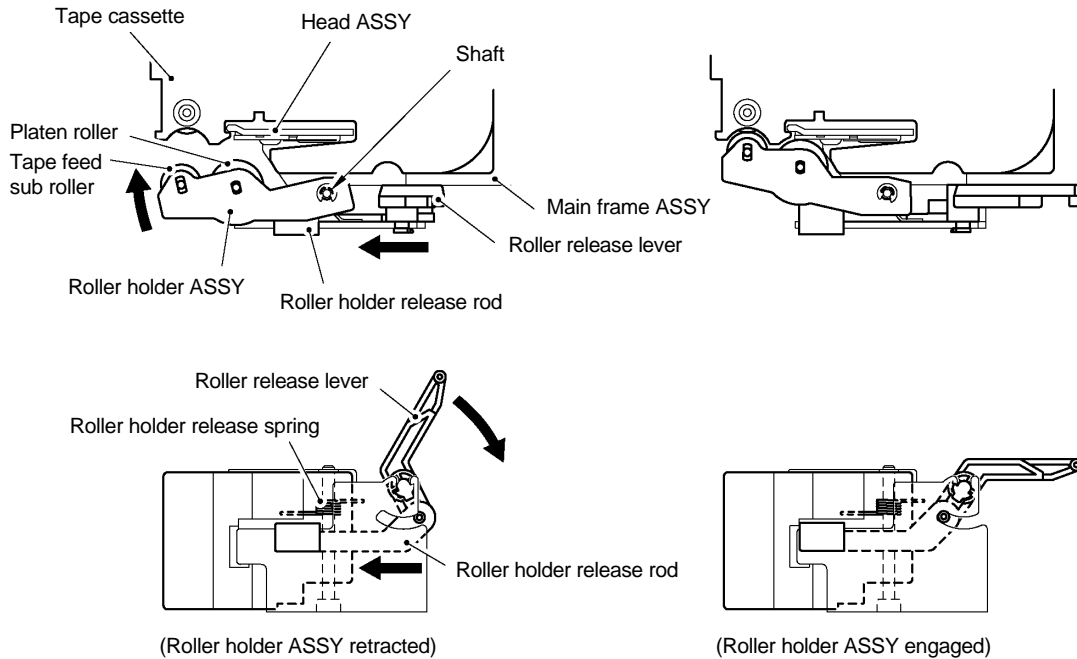
Fig. 2.1-9 Roller Release Lever and Roller Holder Release Rod

<Opening>

Cassette cover sensor tab

Release button

Lock arm

<Closing>

Hook

Cassette cover sensor tab

Cassette cover

Lock arm
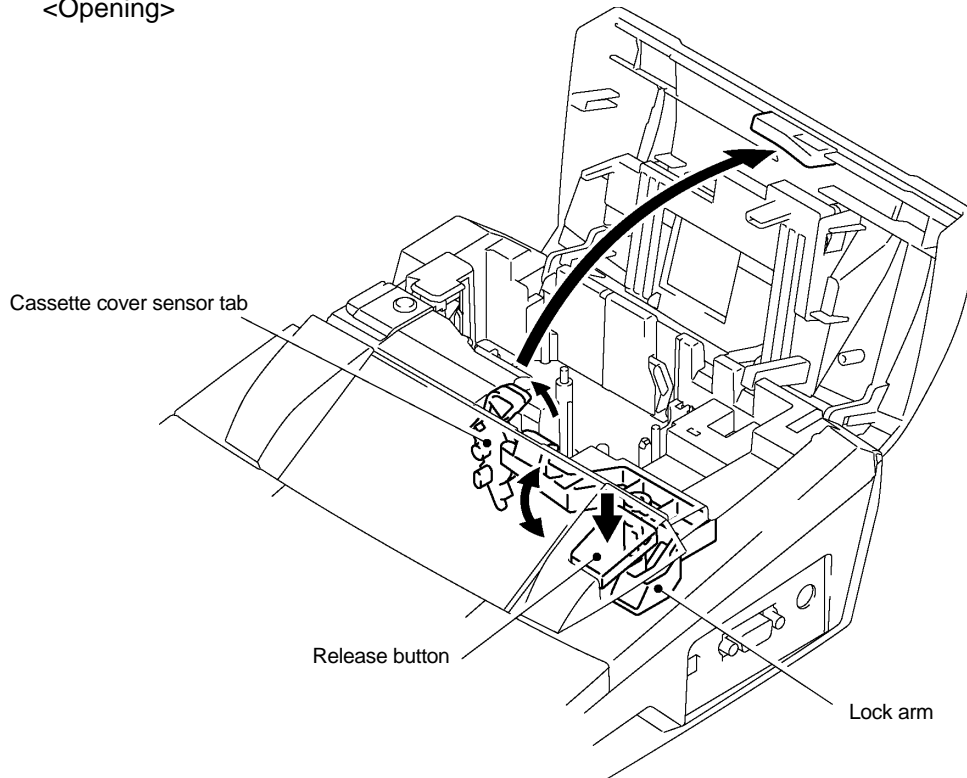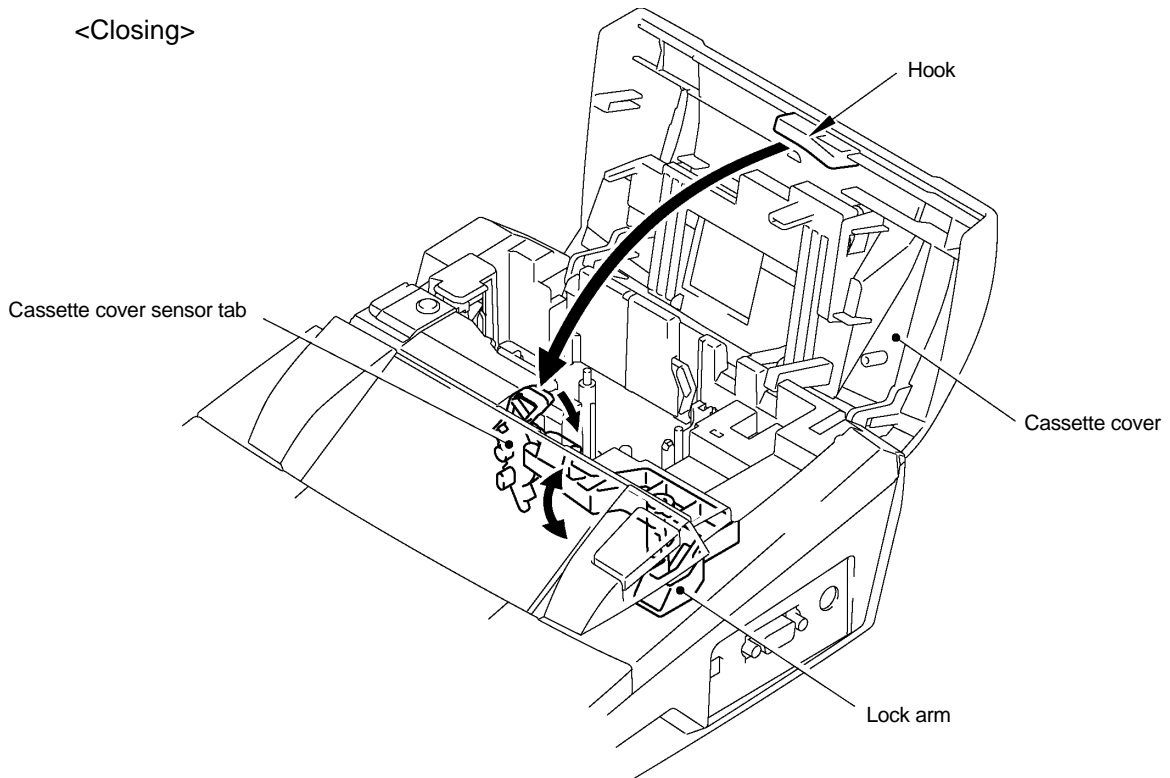
Fig. 2.1-10 Roller Holder ASSY & Cassette Cover Interlocking Mechanism

Opening the cassette cover pulls up the roller release lever placed in the hooked section of the cassette cover, which shifts the roller holder release rod so that the roller holder ASSY is retracted from the head ASSY side by the roller holder release spring.

2.1.9 AV Label Print Start Position Detector Mechanism (PT-9600/PT-3600 U.S.A.)

This mechanism makes it possible to print at the proper position on Avery (AV) labels half-cut in a 24-mm-width AV labels tape.

As shown below, it uses a reflection photosensor named AV print position sensor (AV sensor PCB ASSY). When a black detection mark (lower mark) printed on the back of an AV labels tape comes to the AV print position sensor, the sensor receives no reflected light, signaling the print start position.

(1) Pressing the "Print" key will start tape feeding.

(2) When a lower black detection mark on the back of an AV labels tape comes to the AV print position sensor, printing will start.

(3) When the printed label exits from the tape cutter position, tape feeding will stop. The AV labels tape will be automatically cut off.
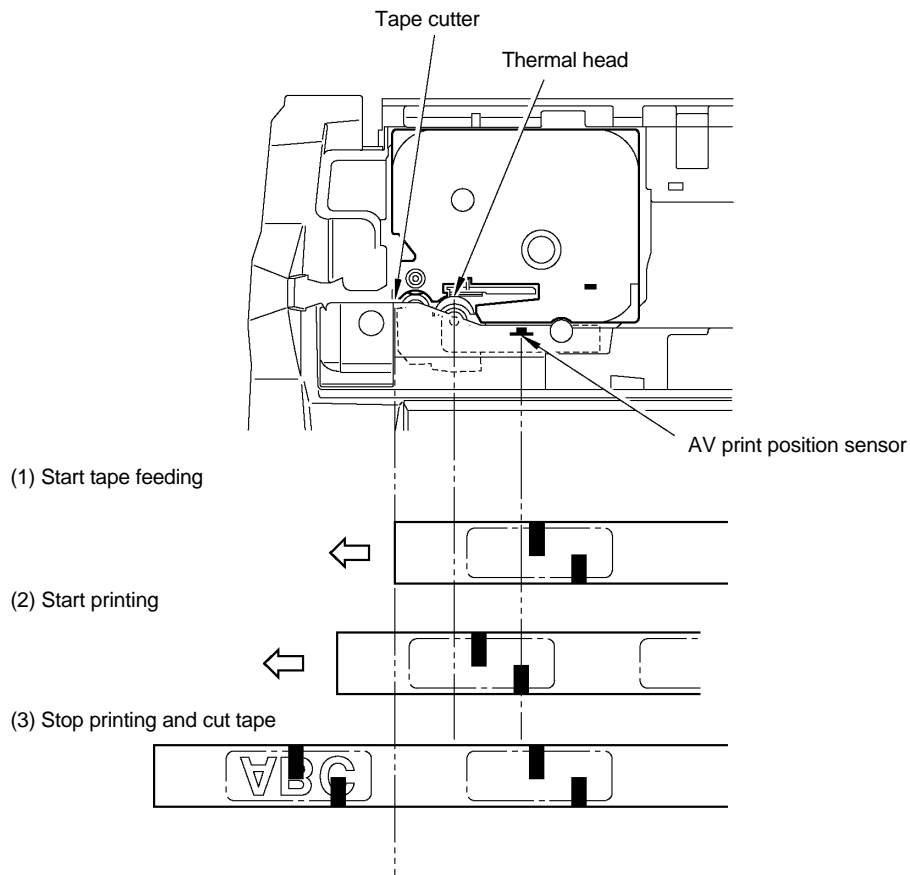
Fig. 2.1-11 AV Label Print Start Position Detector Mechanism

2.2 OUTLINE OF CONTROL ELECTRONICS

2.2.1 Configuration

Fig. 2.2-1 shows a block diagram of the control electronics of the PT-9600/3600.

■ Main PCB

This manages all the PT-9600/3600 components including thermal print head, motors, sensors, memorys, I/Fs.

■ LCD PCB

The LCD PCB consists of the circuit controlling the LCD display. The LCD consists of 119 dots x 24 dots and guidance.

■ Key PCB

This is a flexible PCB of the sheet type.

■ Tape Feed Motor

The tape feed motor is the drive to feed both the ribbon and the tape. This Ø25 stepping motor runs at a drive voltage of VH (24V).

■ Tape Control Motor

The tape control motor presses the tape when the tape is cut. It also controls to switch between full cutter and half cutter.

■ Carriage Motor

The carriage motor moves the cutter carriage. It also switches that the cutter carriage goes up and down by its rotating and reversing.

■ Eject Motor

The eject motor ejects the cut tape.

■ Thermal Head

The thermal head has 384 dots x 1dots (360dpi), thin-film configuration and incorporates a drive circuit. The drive voltage is VH (24V).

■ Cutter Sensor PCB 1&2

The cutter sensor PCBs 1 & 2 detect the position of the cutter carriage.

■ Cassette & Cover Open Sensor PCB

The cassette sensor PCB is equipped with the sensor which detects the cassette tape width and ink ribbon type, and the sensor (mechanical switch) which detects the open cassette cover.

■ Tape end sensor PCB

The tape end sensor PCB uses a photo-interrupter to detect the tape end (zebra) pattern.

■ AV Sensor PCB (PT-9600/PT-3600 U.S.A.)

The reflex photo-interrupter which detects the print starting position on the Avery cassette tape is mounted on the AV sensor PCB.

■ AV Cassette Sensor (PT-9600/PT-3600 U.S.A.)

The AV cassette sensor detects that the Avery cassette tape is installed or not.

■ LED PCB (PT-9600)

The LED for the back light is mounted on the LED PCB.

■ Navi Dial PCB (European versions)

The navi dial switch is mounted on the Navi dial PCB.
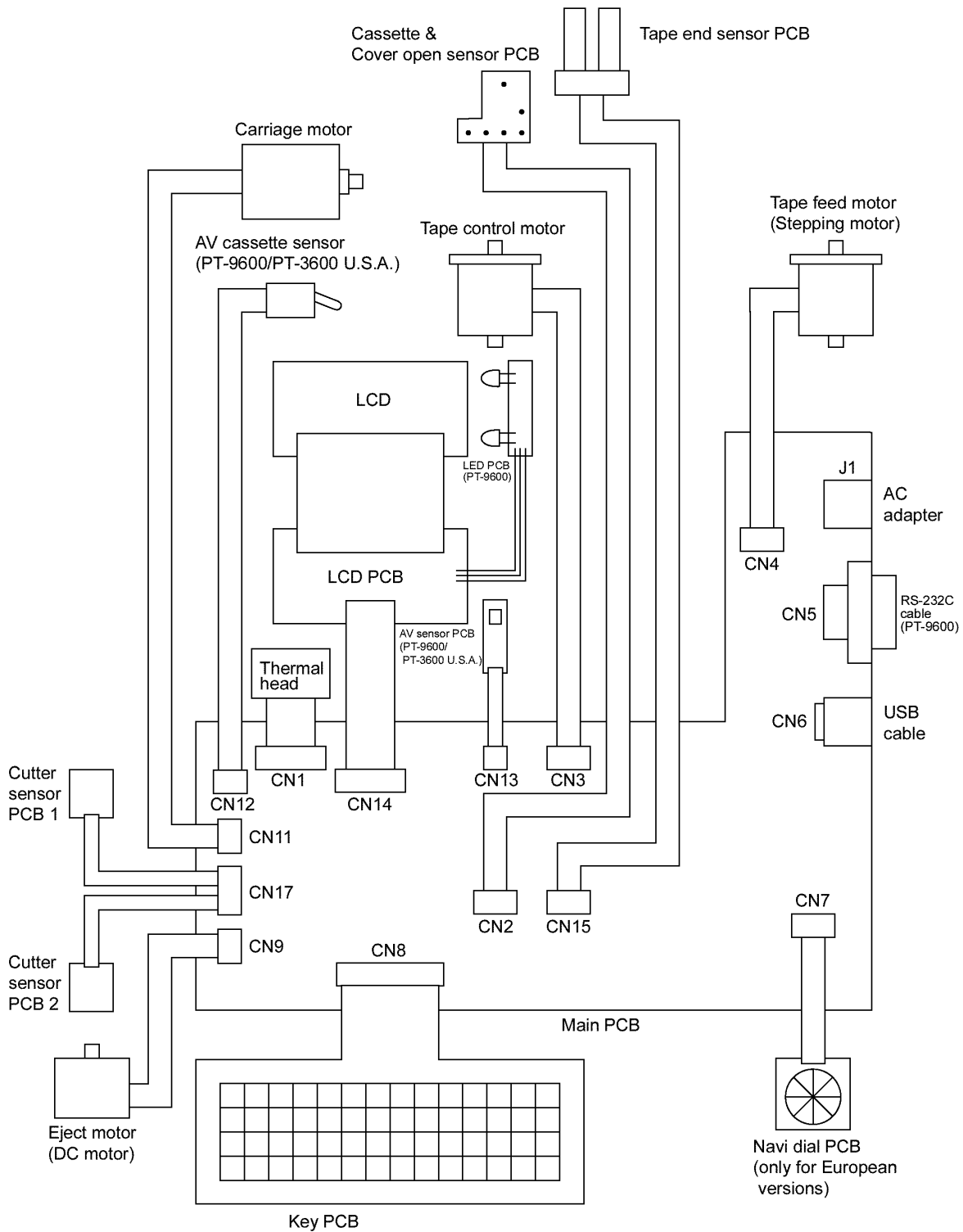
Fig. 2.2-1 Block diagram of the control electronics

2.2.2 Main PCB

[1] Block Diagram

Fig. 2.2-2 shows a block diagram of the Main PCB. The main PCB consists of the following.

(1) CPU

(2) ROM (Mask ROM : 16 Mb)

(3) Flash ROM : 16 Mb (PT-9600 only)

(4) SRAM : 256 Kb

(5) DRAM : 16 Mb

(6) EEPROM : 4 Kb

(7) Step motor (tape feed) drive circuit

(8) Step motor (tape control) drive circuit

(9) DC motor (carriage) drive circuit

(10) Thermal head drive circuit

(11) Oscillator circuit

(12) Supply voltage detect circuit

(13) Environmental temperature detect circuit

(14) Head temperature detect circuit

(15) AC adapter detect circuit

(16) Storage battery voltage detect circuit (PT-9600 only)

(17) AV sensor circuit (excluding PT-3600 Europe model)

(18) AV cassette sensor circuit (excluding PT-3600 Europe model)

(19) LCD driver

(20) Power supply circuit

(21) Key/solder point detect circuit

(22) RS-232C/USB interface circuit (RS-232C : PT-9600 only)

(23) RTC drive circuit (PT-9600 only)

(24) Jog dial circuit (EU only)

(25) Cassette sensor circuit (5 elements)

(26) Tape end sensor circuit

(27) Cover open circuit

(28) Cutter sensor circuit

(29) VH, VCC ON/OFF circuit

(30) Charge ON/OFF circuit (PT-9600 only)

(31) Reset circuit

```
┌─────────────────┐        ┌──────────────────────────────┐
│ Tape feed motor │        │         LCD STN              │
│    (Step)       │        │ (119 dots x 24 dots + guidance)│
└─────────────────┘        └──────────────────────────────┘                    ┌──────────────────────┐
        ▲                              ▲                                        │   SRAM : 256 Kb      │
┌─────────────────┐        ┌──────────────────────┐                            └──────────────────────┘
│Step motor drive │◄───    │    LCD driver        │                            ┌──────────────────────┐
│    circuit      │        │  (NJU 6450 x 2)      │                            │   Mask ROM : 16Mb    │
└─────────────────┘        └──────────────────────┘                            └──────────────────────┘
┌─────────────────┐                 ▲                                          ┌──────────────────────┐
│Tape control motor│                │                                          │  Flash ROM : 16Mb    │
│    (Step)       │        ┌──────────────────────┐                            │  (PT-9600 only)      │
└─────────────────┘        │                      │                            └──────────────────────┘
        ▲                  │                      │                            ┌──────────────────────┐
┌─────────────────┐        │                      │                            │   DRAM : 16Mb        │
│Step motor drive │◄───    │                      │                            └──────────────────────┘
│    circuit      │        │                      │                            ┌──────────────────────┐
└─────────────────┘        │                      │                            │  USB interface circuit│
┌─────────────────┐        │                      │                            └──────────────────────┘
│Carriage motor(DC)│       │                      │                            ┌──────────────────────┐
└─────────────────┘        │                      │                            │   EEPROM : 4Kb       │
        ▲                  │        CPU           │                            └──────────────────────┘
┌─────────────────┐        │     M30802SGP        │                            ┌──────────────────────┐
│DC motor drive   │◄───    │     (M16C/80)        │                            │RS-232C interface circuit│
│   circuit       │        │                      │                            │  (PT-9600 only)      │
└─────────────────┘        │ Internal ROM : N/A   │                            └──────────────────────┘
┌─────────────────┐        │ Internal RAM : 10 KB │                            ┌──────────────────────┐
│Tape eject motor(DC)│     │                      │                            │  RTC drive circuit   │
└─────────────────┘        │                      │                            │  (PT-9600 only)      │
        ▲                  │                      │                            └──────────────────────┘
┌─────────────────┐        │                      │                            ┌──────────────────────┐
│DC motor drive   │◄───    │                      │                            │Key detect circuit 72key(MAX)│
│   circuit       │        │                      │                            │Solder point 8 pcs. (MAX)│
└─────────────────┘        │                      │                            └──────────────────────┘
┌─────────────────┐        │                      │                            ┌──────────────────────┐
│  Thermal head   │        │                      │                            │  Jog dial circuit    │
│ 360dpi, 384dot  │        │                      │                            │  (EU only)           │
└─────────────────┘        │                      │                            └──────────────────────┘
        ▲                  │                      │                            ┌──────────────────────┐
┌─────────────────┐        │                      │                            │ Cassette sensor circuit│
│Thermal head drive│◄───   │                      │                            │  (5 elements)        │
│   circuit       │        │                      │                            └──────────────────────┘
└─────────────────┘        │                      │                            ┌──────────────────────┐
┌─────────────────┐        │                      │                            │ Tape end sensor circuit│
│Oscillation circuit│───   │                      │                            └──────────────────────┘
└─────────────────┘        │                      │                            ┌──────────────────────┐
┌─────────────────┐        │                      │                            │ Cover open sensor circuit│
│Supply voltage   │───     │                      │                            └──────────────────────┘
│ detect circuit  │        │                      │                            ┌──────────────────────┐
└─────────────────┘        │                      │                            │ Cutter sensor circuit (x2)│
┌─────────────────┐        │                      │                            └──────────────────────┘
│Environmental    │───     │                      │                            ┌──────────────────────┐
│tempreture detect│        │                      │                            │  VH ON/OFF circuit   │
│    circuit      │        │                      │                            └──────────────────────┘
└─────────────────┘        │                      │                            ┌──────────────────────┐
┌─────────────────┐        │                      │                            │  VCC ON/OFF circuit  │
│Head tempreture  │───     │                      │                            └──────────────────────┘
│ detect circuit  │        │                      │                            ┌──────────────────────┐
└─────────────────┘        │                      │                            │ Charge ON/OFF circuit│
┌─────────────────┐        │                      │                            │  (PT-9600 only)      │
│AC adapter detect│───     │                      │                            └──────────────────────┘
│    circuit      │        │                      │                            ┌──────────────────────┐
└─────────────────┘        │                      │                            │    Reset circuit     │
┌─────────────────┐        │                      │                            └──────────────────────┘
│Storage battery  │───     │                      │
│voltage detect   │        └──────────────────────┘
│circuit(PT-9600) │
└─────────────────┘
┌─────────────────┐
│AV sensor circuit│───
│(excluding       │
│PT-3600 Europe)  │
└─────────────────┘
┌─────────────────┐
│AV cassette      │───
│sensor circuit   │
│(excluding 3600) │
└─────────────────┘
┌─────────────────┐        ┌──────────────────────┐
│AC adapter 24V,  │───►    │                      │───► VH (+24V)
│    2.5A         │        │                      │
└─────────────────┘        │  Power supply        │───► +5BV (+5V)
┌─────────────────┐        │   circuit            │
│Lithium battery 3V│───►   │                      │───► VCC (+5V)
└─────────────────┘        │                      │
┌─────────────────┐        │                      │───► +3BV (+3V)
│Ni-MH battery    │───►    │                      │
│(PT-9600 only)   │        └──────────────────────┘
│9.6 V, 1500mAh   │                 ▲
└─────────────────┘                 │  Charge
```

Fig. 2.2-2 Block Diagram of Main PCB

[2] Solder Ponits

Fig. 2.2-3 shows the solder point circuit.
One of solder points SP1 - SP8 (L, A, B, C, D, E, F, S) is soldered according to the resistance level of the thermal head.
When the thermal head is replaced, solder it according to the rank of the replaced thermal head.
The solder points are read once immediately after the power is turned on.
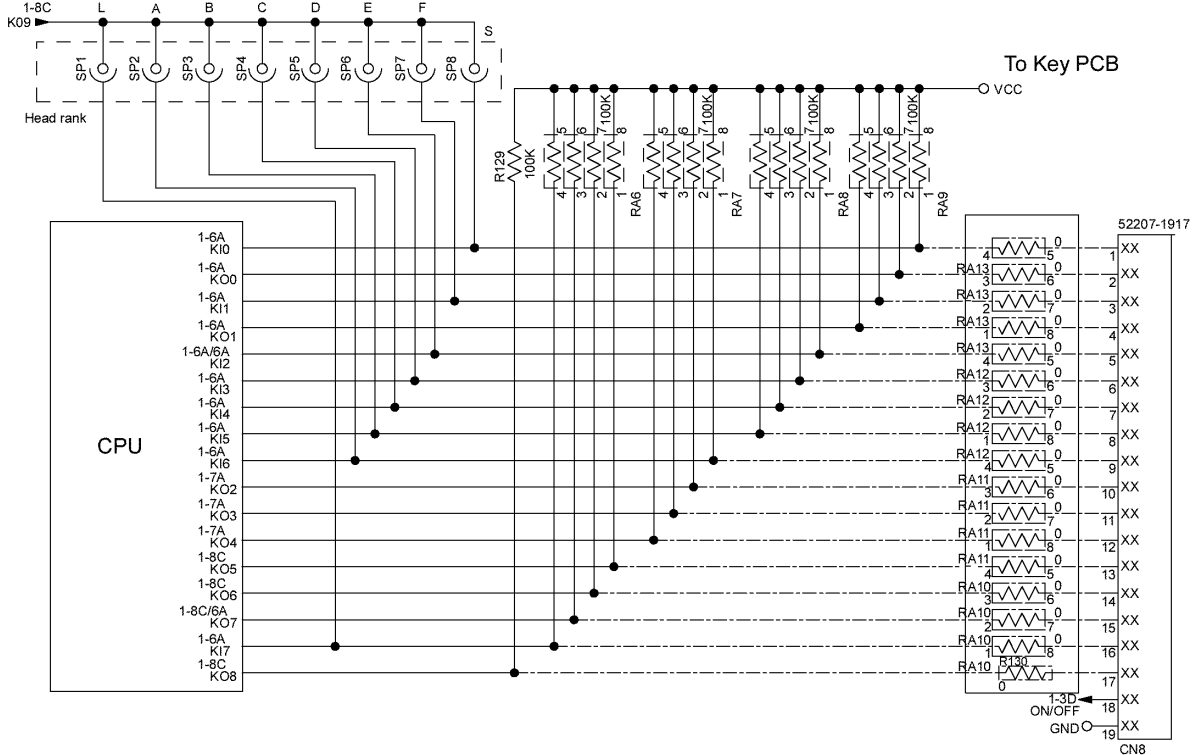
Fig. 2.2-3 Solder Point Circuit

[3] Cassette Sensor & AV Cassette Sensor Circuit

The sensor circuit consists of a 5-switch cassette sensor (CSNS0 through CSNS4) and AV cassette sensor (AVSW).
Loading a tape cassette turns on some of those five switches on the cassette sensor while keeping other switches off depending upon the ID encoding holes provided in the tape cassette currently loaded. If an encoding ID hole is closed, the corresponding sensor switch goes on.
The AV cassette sensor (AVSW) is provided for distinguishing AV labels cassettes from TZ cassettes.
With the states of those sensor switches, the CPU identifies the tape width, ink ribbon type of the tape cassette , and TZ/AV type, as listed in Table 2.2-1.
Fig 2.2-4 shows the cassette sensor and AV cassette sensor cirsuit.
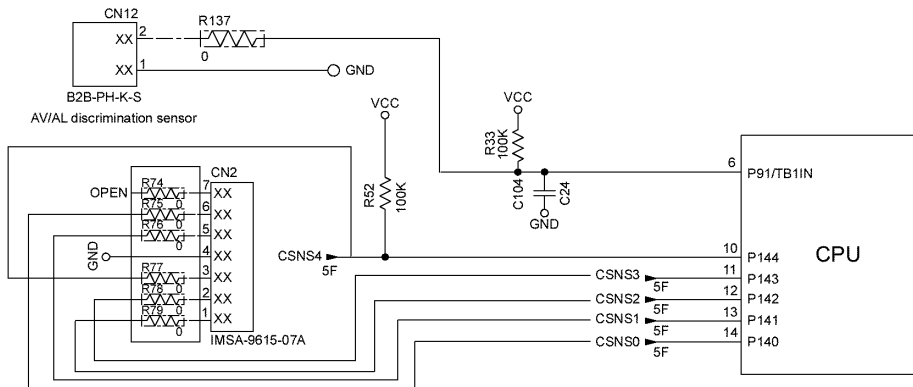
Fig. 2.2-4 Cassette Sensor and AV Cassette Sensor Cirsuit

II-16

Table 2.2-1 Coded Values for Identifying Tape Cassette Type

Width		Cassette type	CSNS0	CSNS1	CSNS2	CSNS3	CSNS4	AVSW
TZ		No tape cassette loaded	0	0	0	0	0	0
	6mm	Laminated tape cassette	0	0	1	0	0	0
		Non-laminated tape cassette	0	0	1	1	0	0
	9mm	Laminated tape cassette	1	1	1	0	0	0
		Non-laminated tape cassette	1	1	0	0	0	0
	12mm	Laminated tape cassette, Stamp tape cassette M	0	1	0	0	0	0
		Non-laminated tape cassette	0	1	1	1	0	0
	18mm	Laminated tape cassette, Stamp tape cassette L	1	0	1	1	0	0
		Non-laminated tape cassette	1	0	0	0	0	0
		Instant lttering tape cassette, Iron-on transfer tape cassette	1	1	1	0	1	0
	24mm	Laminated tape cassette	1	0	1	1	1	0
		Non-laminated tape cassette	1	0	0	0	1	0
	36mm	Laminated tape cassette	0	0	0	1	0	0
		Non-laminated tape cassette	0	0	0	0	1	0
AV label	24mm	Address labels cassette	1	0	1	0	0	1
		Return address labels cassette	1	0	0	1	1	1
		File folder labels cassette	1	0	0	1	0	1
	36mm	AV2667	1	1	0	1	0	1
		AV26100	0	1	0	1	0	1
		AV30100	0	1	0	1	1	1
		AV3070	1	1	0	1	1	1

CSNS4 ● ● CSNS3
● CSNS2
● CSNS1
● CSNS0
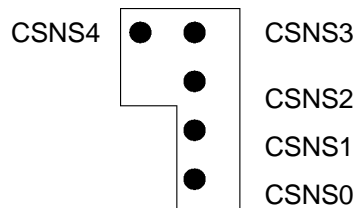
Position of Sensor Switches

CSNS0 to CSNS4 & AV
1 : Switch ON (ID hole closed)
0 : Switch OFF (ID hole opened)

2.2.3 LCD PCB

The ICs (U1, U4) controlling the LCD and LCD display are mounted on the LCD PCB.
The LCD PCB receives the display data to be sent from the main PCB and displays it on the LCD.
For the details on the circuit diagram, refer to Appendix 2.

CHAPTER III   DISASSEMBLY AND REASSEMBLY

■ Safety Precautions

(1)   The disassembly or reassembly work should be carried out on a grounded antistatic sheet. Otherwise, the LSIs and electronic parts may be damaged due to the electricity charged in your body.

(2)   When transporting PCBs, be sure to wrap them in conductive sheets such as aluminum foil.

(3)   When using soldering irons and other heat-generating tools, take care not to damage the resin parts such as wires, PCBs, and covers.

(4)   Be careful not to lose screws,washers, or other parts removed for parts replacement.

(5)   Tighten screws to the torque values listed below.

■ Tightening Torque List

Location	Screw type	Q'ty	Tightening torque N•cm (kgf•cm)
Tape end sensor PCB	Taptite, bind B M2.6x8	2	39.2 ± 10 (4.0 ± 1.0)
LCD support LCD holder	Taptite, bind B M2.6x8	4	39.2 ± 10 (4.0 ± 1.0)
Bottom cover	Taptite, bind B M2.6x10	12	39.2 ± 10 (4.0 ± 1.0)
Chassis ASSY	Taptite, bind B M2.6x8	3	39.2 ± 10 (4.0 ± 1.0)
Half frame unit	Screw, bind M3x6	4	58.8 ± 10 (6.0 ± 1.0)
Main PCB	Screw, bind B M2.6x8	5	39.2 ± 10 (4.0 ± 1.0)
Tape guide	Screw, bind M3x6	1	58.8 ± 10 (6.0 ± 1.0)
AV cassette sensor ASSY	Screw, pan M1.7x6	1	14.7 ± 5 (1.5 ± 0.5)
Cutter sensor ASSY	Screw, pan M2x4	2	14.7 ± 5 (1.5 ± 0.5)
Carriage motor ASSY	Screw, pan M2x4	2	39.2 ± 10 (4.0 ± 1.0)
Tape control motor	Screw, pan M2.6x3.5	2	39.2 ± 10 (4.0 ± 1.0)
Tape feed motor ASSY	Screw, pan M2.6x3.5	2	39.2 ± 10 (4.0 ± 1.0)
Thermal head ASSY	Screw, pan (S/P washer) M3x8	2	58.8 ± 10 (6.0 ± 1.0)
Eject shaft spring	Screw, pan M1.7x3	1	14.7 ± 5 (1.5 ± 0.5)
*1 Jog PCB	Taptite, bind B M2.6x8	3	39.2 ± 10 (4.0 ± 1.0)
Keyboard plate	Taptite, bind B M2.6x8	6	39.2 ± 10 (4.0 ± 1.0)
Eject motor ASSY	Screw, pan M1.7x3	2	14.7 ± 5 (1.5 ± 0.5)
AV sensor PCB ASSY	Taptite, bind B M2x4	1	14.7 ± 5 (1.5 ± 0.5)

*1 : Only for European versions.

3.1 DISASSEMBLY PROCEDURE

[1] Removing the Tape Cassette

(1) Push the release button and open the cassette cover fully.

(2) Pull the tape cassette up and out of the machine.
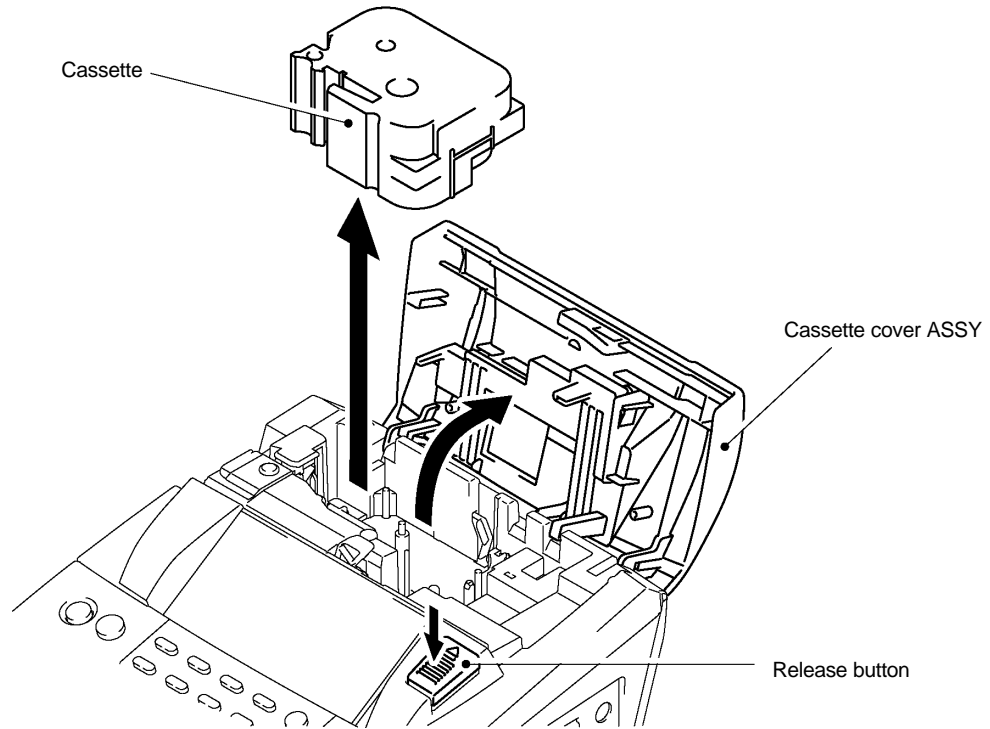
Fig. 3.1-1 Removing the Tape Cassette

[2]   Disassembling the Cassette Cover ASSY

(1)   Push the hinges of the cassette cover outwards and take off the cassette cover ASSY.

Cassette cover ASSY

Hinge

Hinge
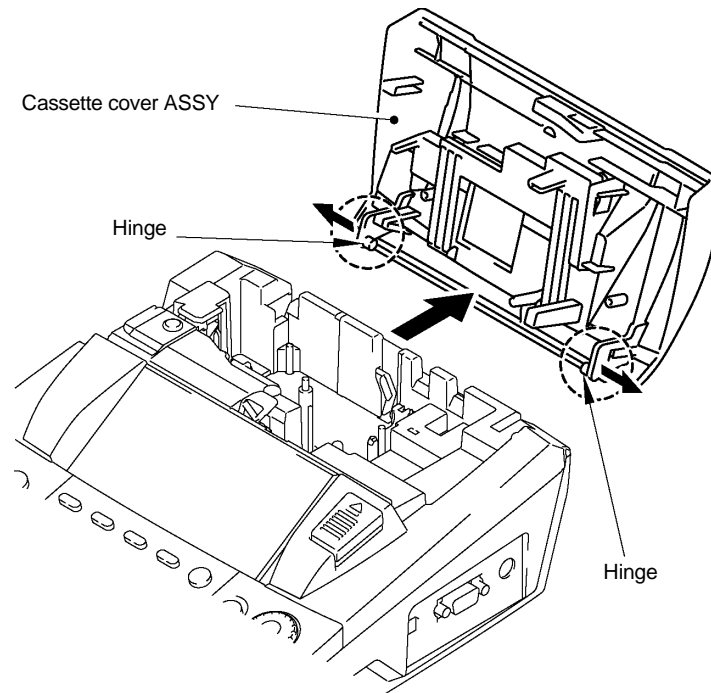
Fig. 3.1-2 Removing the Cassette Cover ASSY (1)

(2)   Release the hooks of both sides and push the two pins outward as shown in the figure below to remove the cassette presser from the cassette cover ASSY.

(3)   Remove the two cassette presser springs from the cassette cover ASSY.

Hook

Cassette presser

Pin

Pin

Hook

Cassette presser spring

Cassette presser spring

Cassette cover ASSY
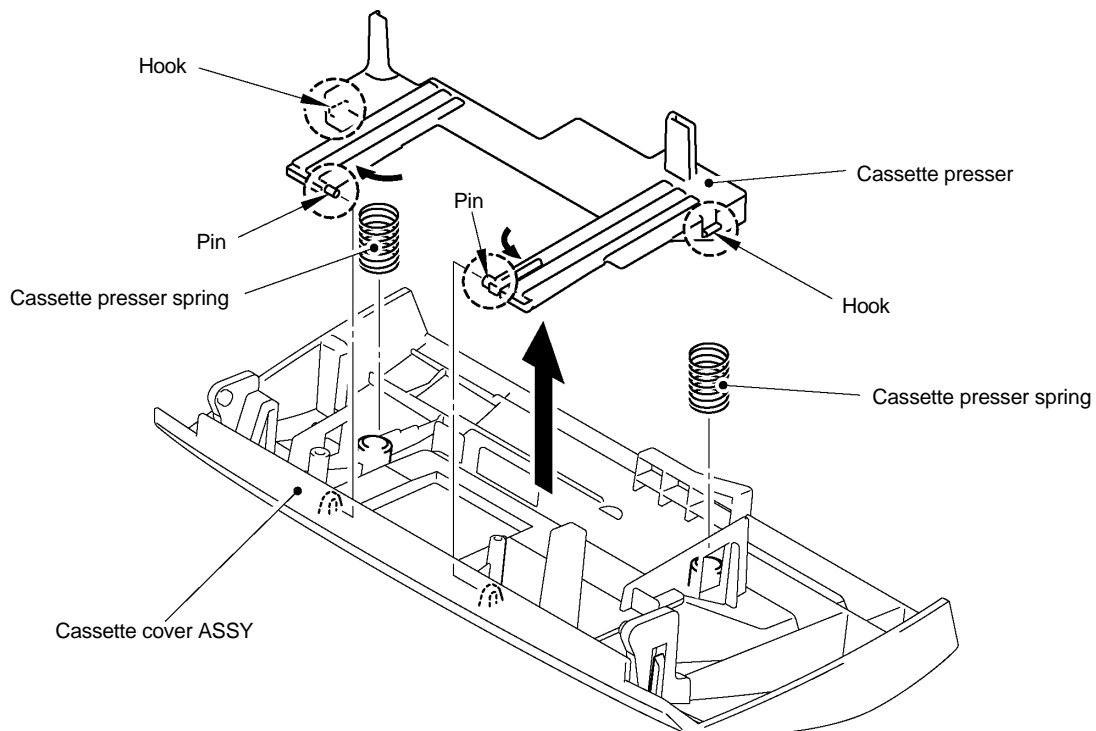
Fig. 3.1-3 Removing the Cassette Cover ASSY (2)

[3]   Removing the Screw from Bottom Cover

(1)   Turn the machine over.

(2)   Release the hooks in two places to remove the battery lid (PT-9600 only).

(3)   Disconnect the connector to remove the battery (PT-9600 only).
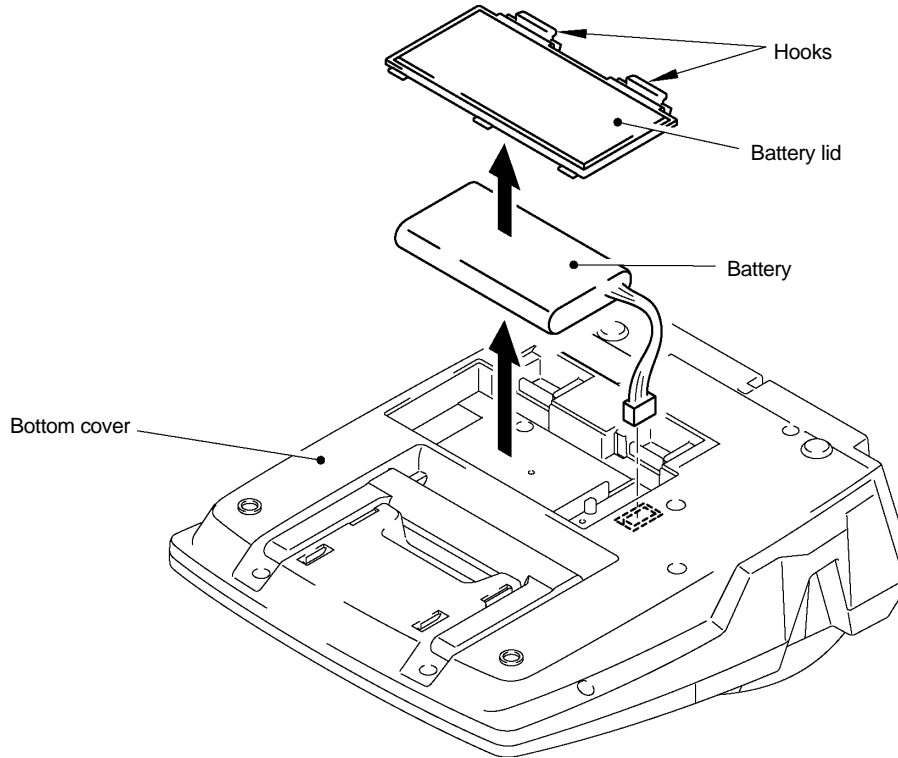
Fig. 3.1-4 Removing the Screw from Bottom Cover (1)

(3)   Remove the twelve screws from the bottom cover.

(4)   Turn the machine up.
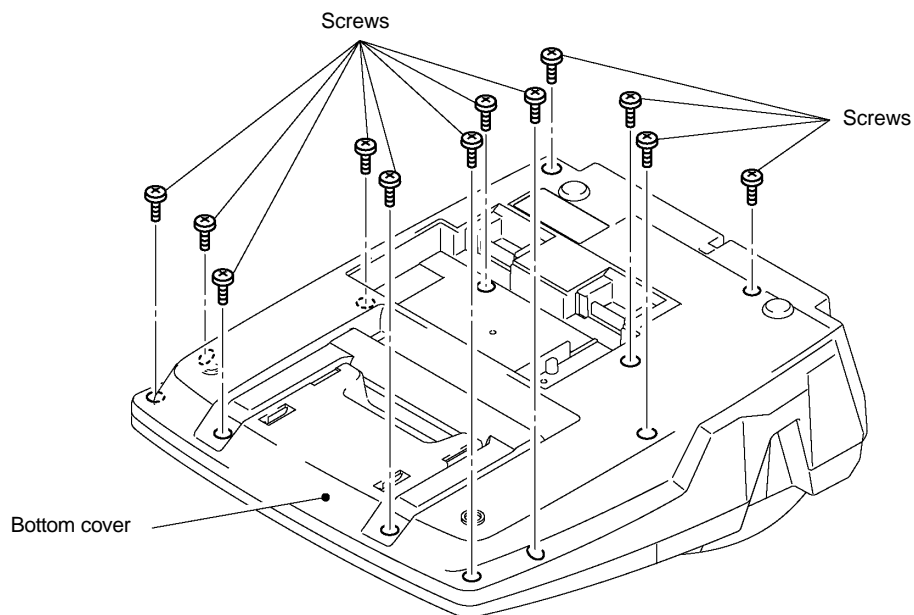
Fig. 3.1-5 Removing the Screw from Bottom Cover (2)

[4]   Removing the KB Unit/Rubber Key Unit

(1)   Release the front hooks in four places and then release the hooks of both left and right sides while lifting the front portion of the KB unit.

(2)   Disconnect the jog PCB ASSY harness from the connector on the main PCB while lifting the KB unit or rubber key unit (PT-9600/PT-3600 EU only).

(3)   Unlock the FPC cable connector on the main PCB and disconnect the FPC cable.

(4)   Turn the KB unit or rubber key unit over and remove a screw to detach the FG wire "A" and the KB unit or rubber key unit (PT-9600/PT-3600 U.S.A./CANADA only).

(5)   Pull the FPC cable out of the ferrite core (PT-9600/PT-3600 EU only).

(6)   Remove the KB unit or rubber key unit.
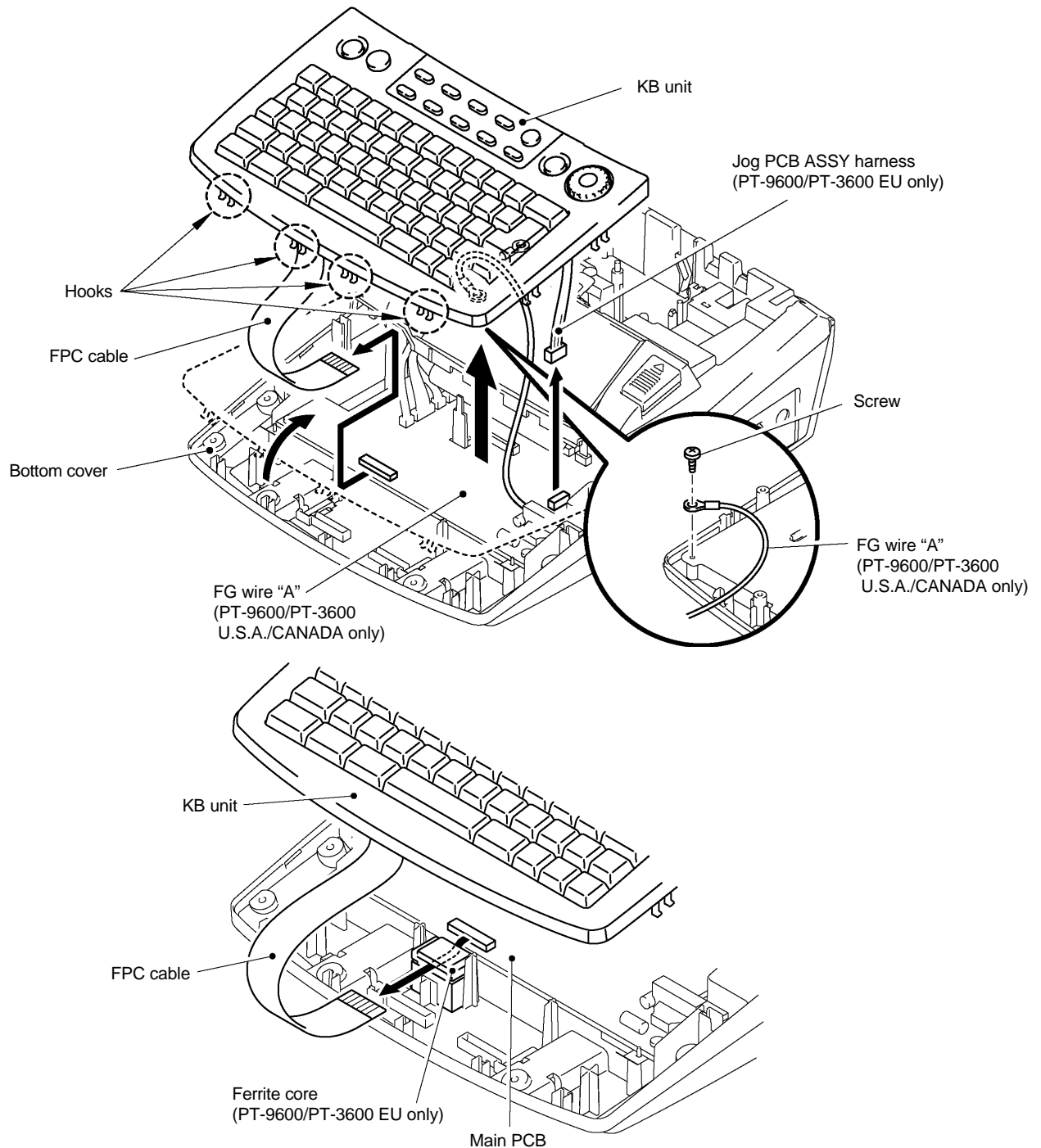
Fig. 3.1-6 Removing the KB Unit/Rubber Key Unit

[5]   Disassembling the KB Unit/Rubber Key Unit

   (1)   Release the hooks of the key C in four places to remove from the KB unit
         (PT-9600/PT-3600 U.S.A.).

   (2)   Release the hooks of the key D in two places to remove from the KB unit
         (PT-9600/PT-3600 U.S.A.).

   (3)   Remove the key C RET wire from the key C (PT-9600/PT-3600 U.S.A.).

         Note: Be sure not to break the hooks on the key when removing the wire.

   (4)   Remove the key D SP wire from the key D (PT-9600/PT-3600 U.S.A.).

         Note: Be sure not to break the hooks on the key when removing the wire.
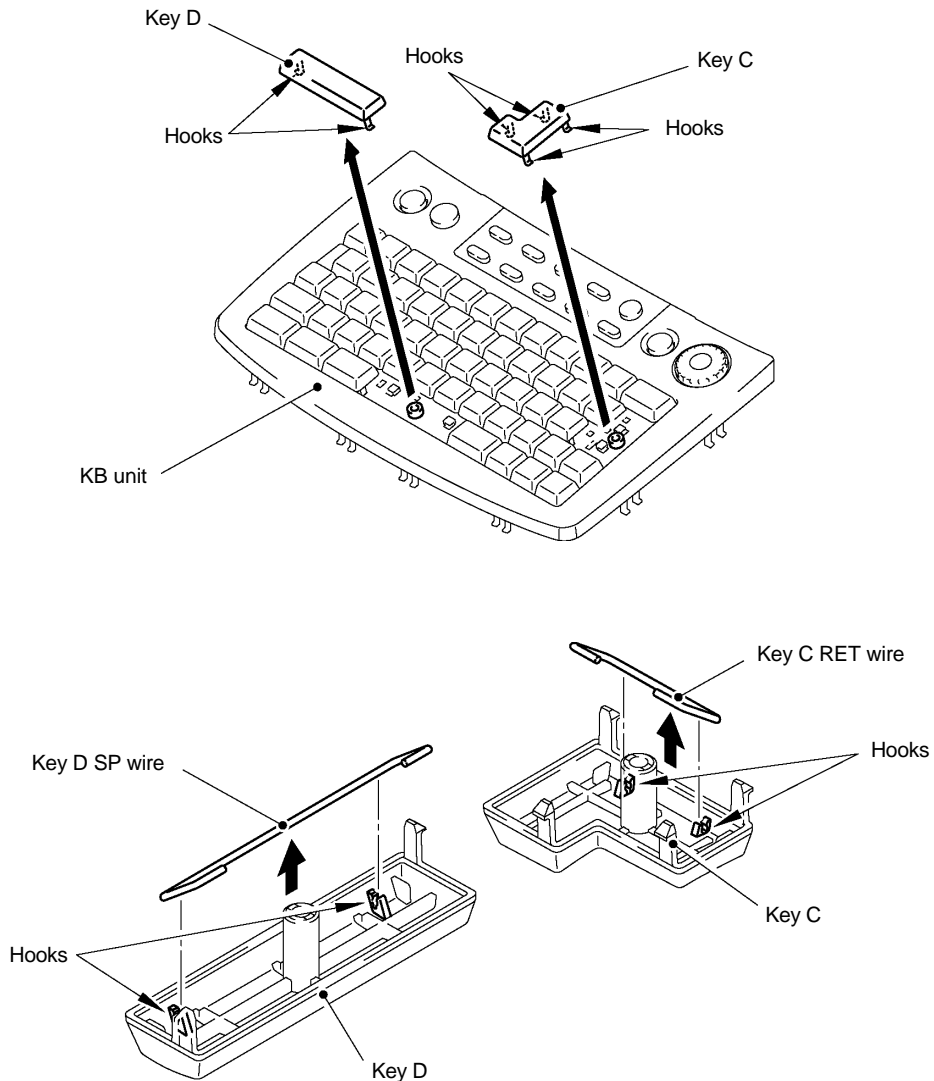
Fig. 3.1-7 Disassembling the KB Unit/Rubber Key Unit (1)

(5)   Turn the KB unit or rubber key unit over.

(6)   Remove four screws to remove the jog PCB ASSY and the jog dial from the KB unit or rubber key unit (EU only).

Screws

Screw

Jog PCB ASSY

Screw

Jog dial

KB unit or rubber key unit
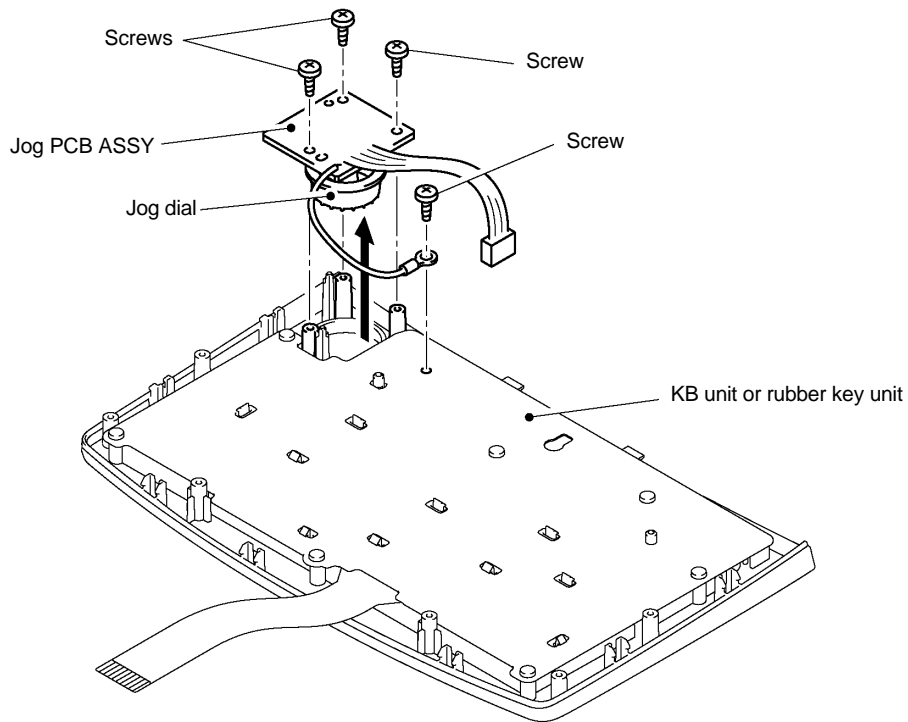
Fig. 3.1-8 Disassembling the KB Unit/Rubber Key Unit (2)

(7)   Remove the job dial from the jog PCB ASSY (EU only).

Jog dial

Jog PCB ASSY
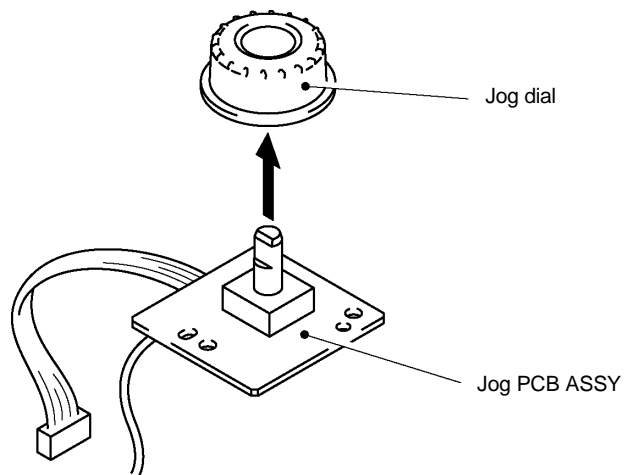
Fig. 3.1-9 Disassembling the KB Unit/Rubber Key Unit (3)

(8) Remove five screws and release hooks in ten places to remove the fix plate from the body KB cover.

Screw

Screw (No screw for EU spec.)

Screw (No screw for U.S.A. spec.)

Screws

Fix plate

PCB

Hooks

Hooks

Hooks
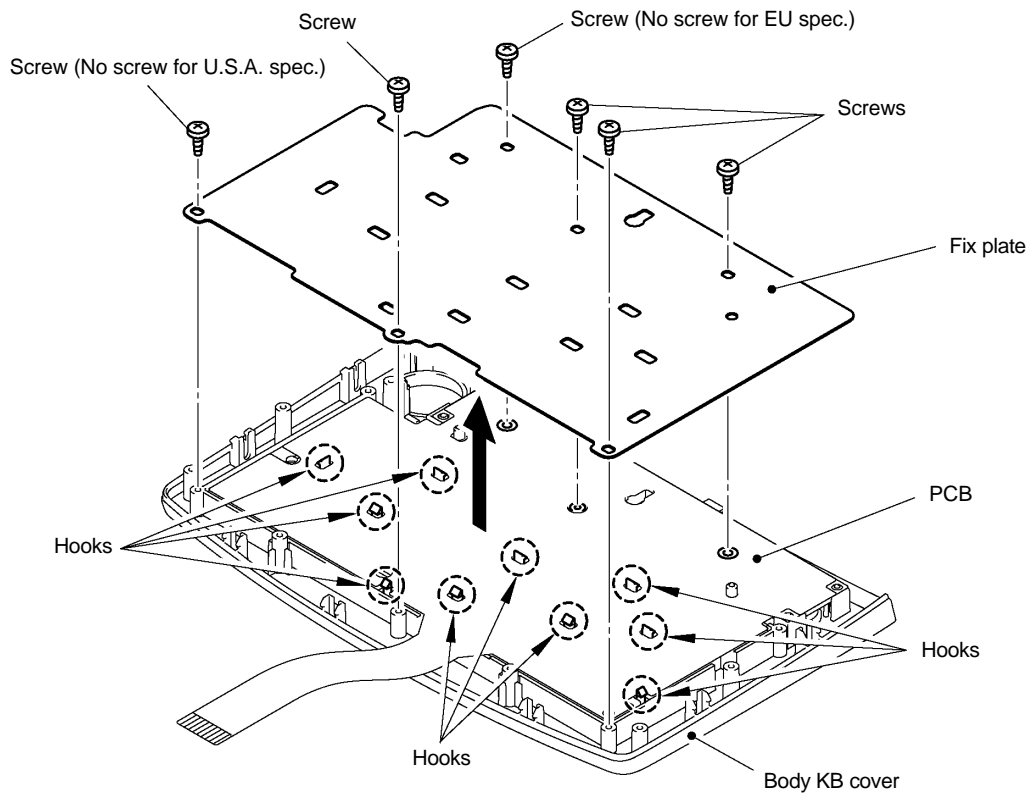
Body KB cover

Fig. 3.1-10 Disassembling the KB Unit/Rubber Key Unit (4)

(9) Remove the PCB from the body KB cover.

PCB
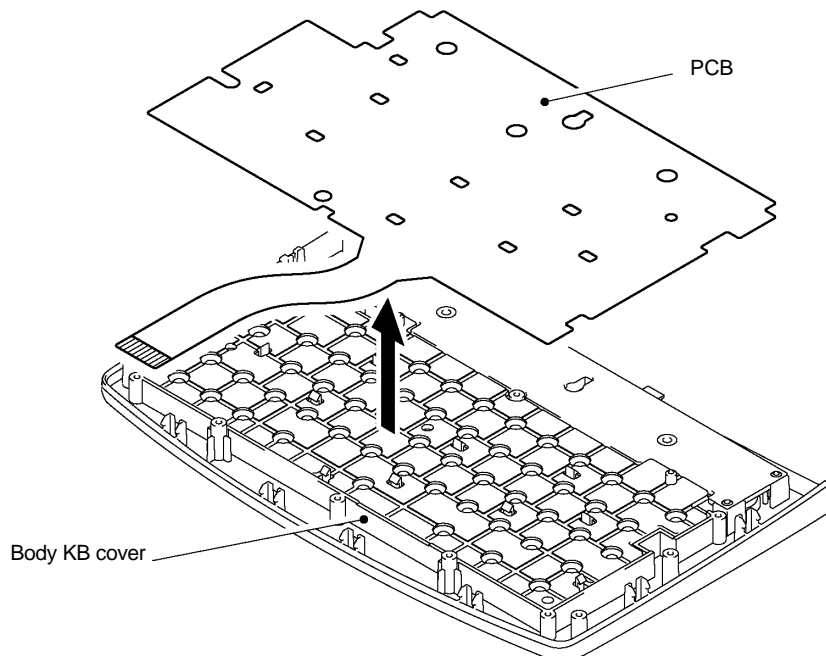
Body KB cover

Fig. 3.1-11 Disassembling the KB Unit/Rubber Key Unit (5)

(10) Remove the contact rubber and the function rubber from the body KB cover (PT-9600/PT-3600 U.S.A. only).

Function rubber

Body KB cover

Contact rubber
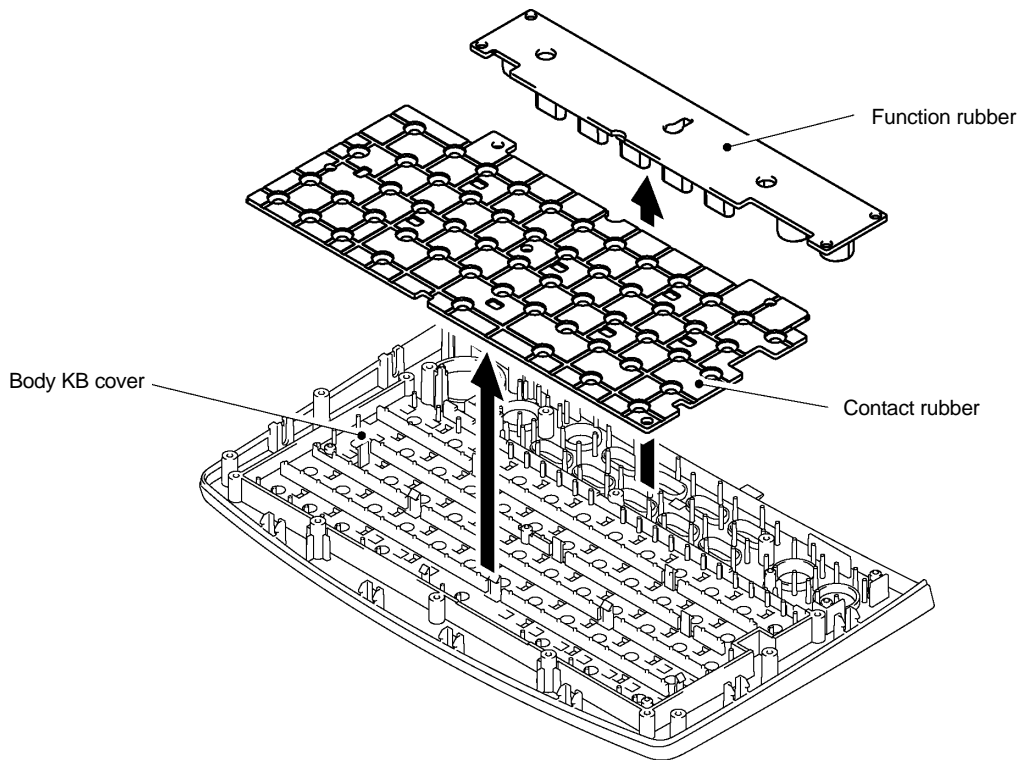
Fig. 3.1-12 Disassembling the KB Unit/Rubber Key Unit (6)

(11) Remove the rubber key from the body KB cover (PT-9600 EU only).

Rubber key

Body KB cover
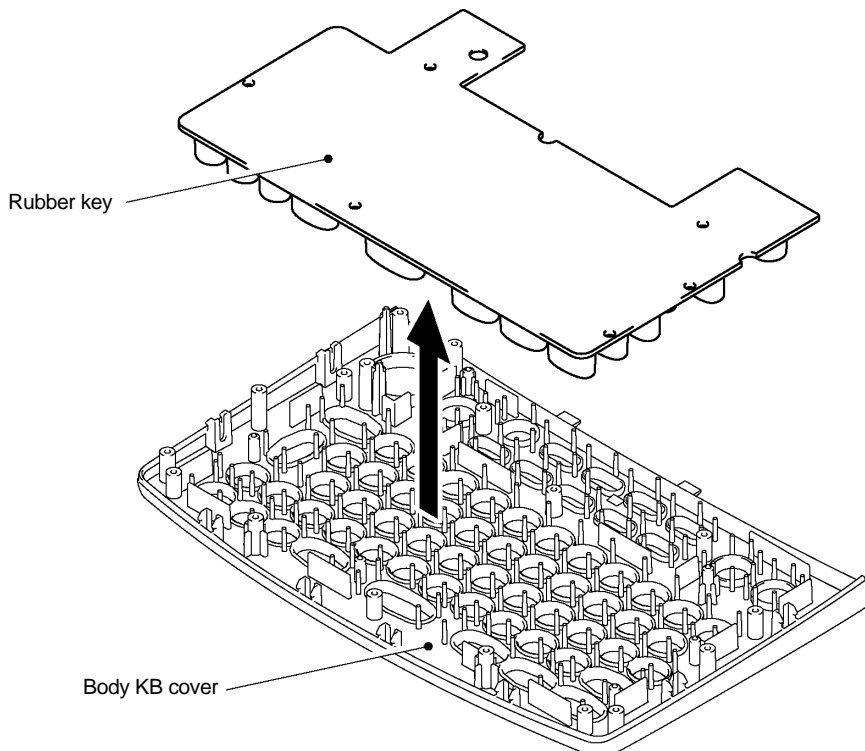
Fig. 3.1-13 Disassembling the KB Unit/Rubber Key Unit (7)

[6] Removing the Body Cover

(1) Release the hooks in four places to remove the body cover from the bottom cover.

Note: Check the state of the release lever being in the release position before removing the body cover.

(2) Lift and hold the body cover while disconnecting the LCD PCB cable, the tape end sensor cable and the cassette sensor cable from the main PCB ASSY.

(3) Remove the body cover.
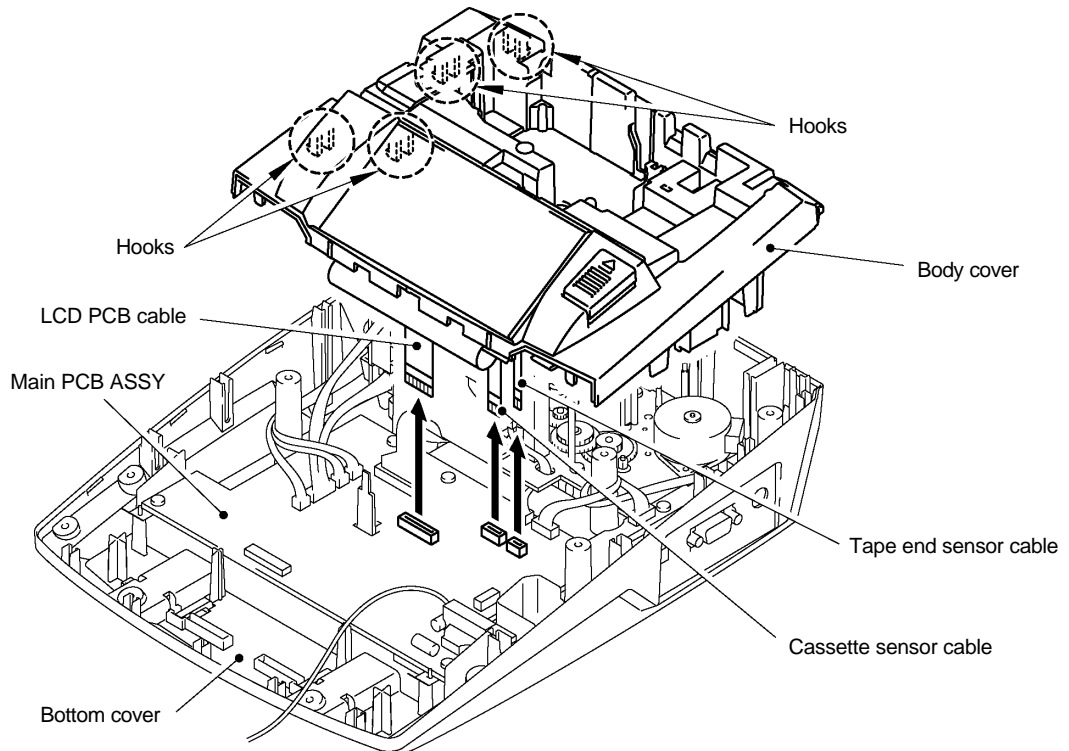
Fig. 3.1-14 Removing the Body Cover

[7]   Removing the Chassis Unit

Note: During the following job, handle the connectors and harnesses gently not to damage them.

    (1)   Remove the following harnesses from the main PCB ASSY.

        - Tape feed motor harness

        - Carriage motor harness

        - Eject motor harness

        - Tape control motor harness

        - Cutter sensor harness

        - AV cassette sensor harness (PT-9600/PT-3600 U.S.A. only)

        - AV sensor harness (PT-9600/PT-3600 U.S.A. only)

        - Thermal head harness

    (2)   Remove three screws from the chassis unit.
Detach the FG wire "C" of the main PCB from the chassis unit.

    (3)   Remove the chassis unit from the bottom cover.
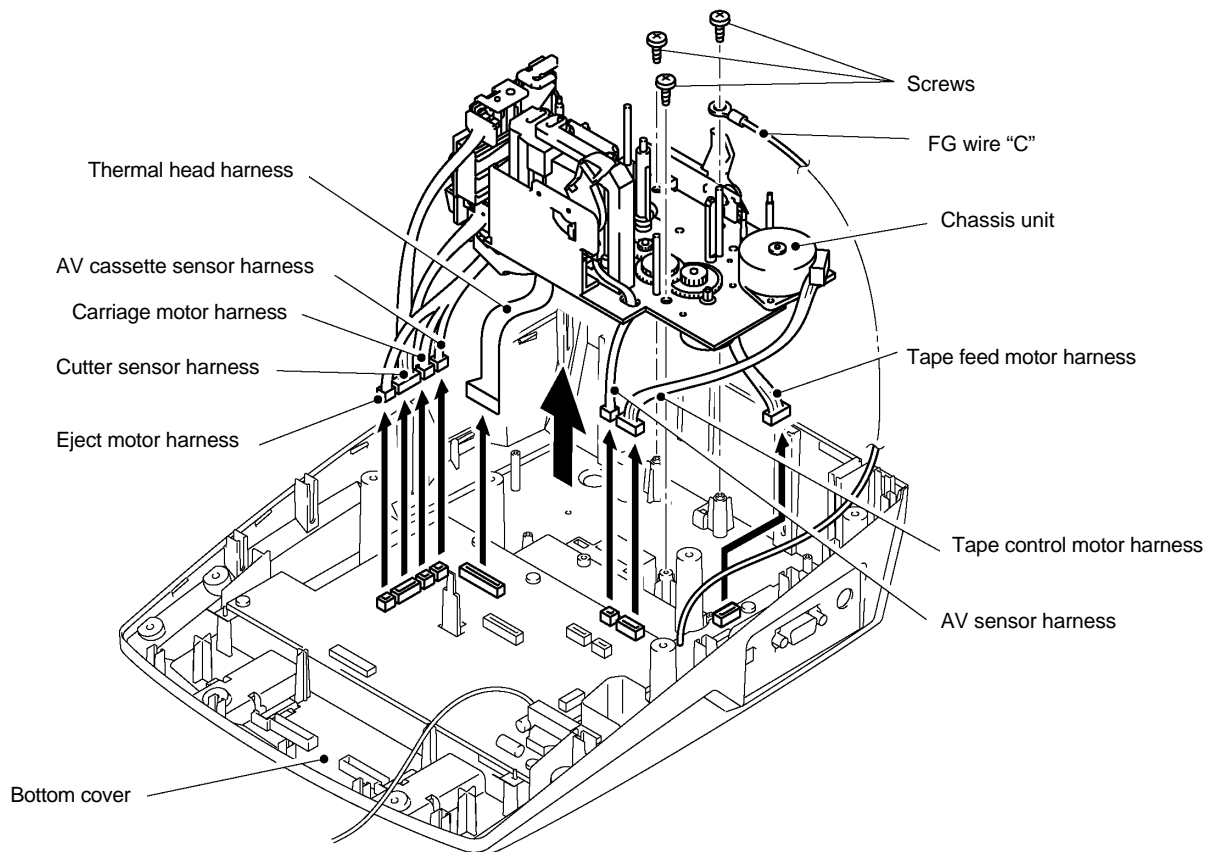
Fig. 3.1-15 Removing the Chassis Unit

[8] Disassembling the Chassis Unit

■ Removing the Eject Unit

(1) Remove a screw to remove the eject unit from the chassis unit.
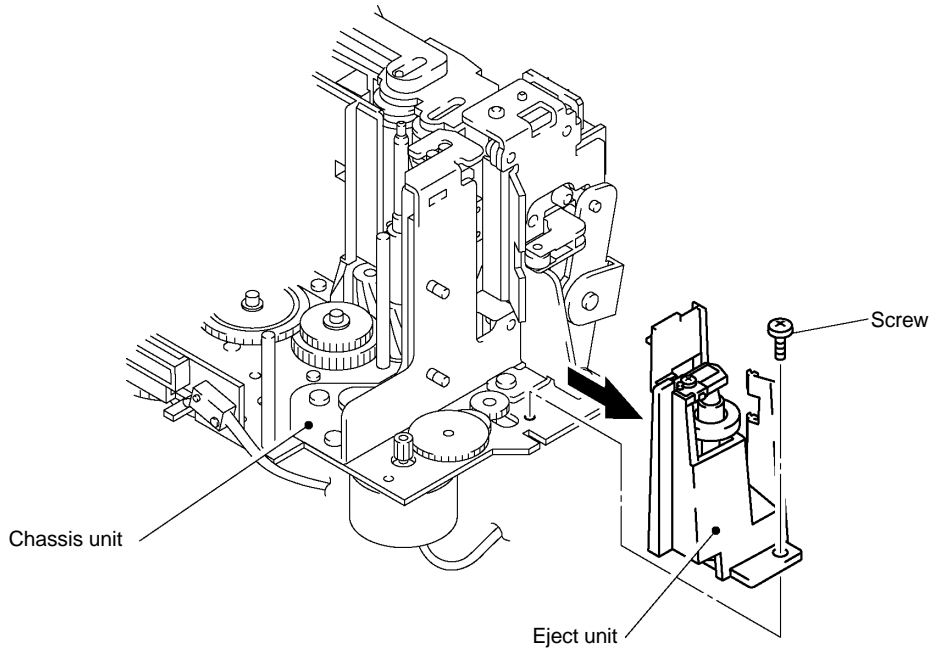
Fig. 3.1-16 Removing the Eject Unit (1)

(2) Remove a screw to remove the eject shaft spring from the eject unit.
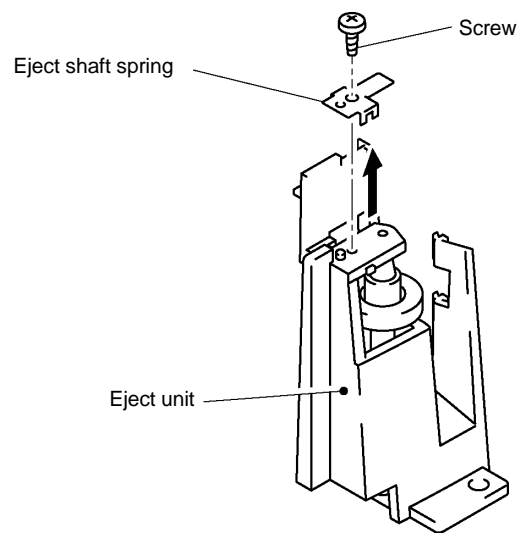
Fig. 3.1-17 Removing the Eject Unit (2)

(3)   Remove the eject roller ASSY from the tape guide.

Eject roller ASSY

Tape guide
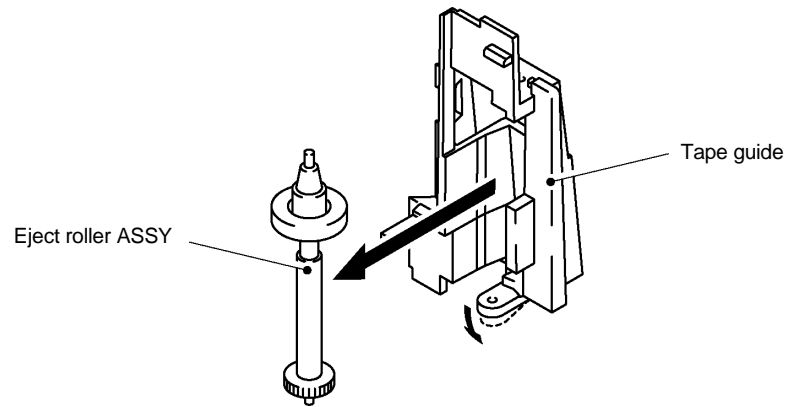
Fig. 3.1-18 Removing the Eject Unit (3)

(4)   Remove the eject rubber from the eject roller shaft.
(5)   Remove the eject gear from the eject roller shaft.

Eject rubber

Eject roller shaft

Eject gear
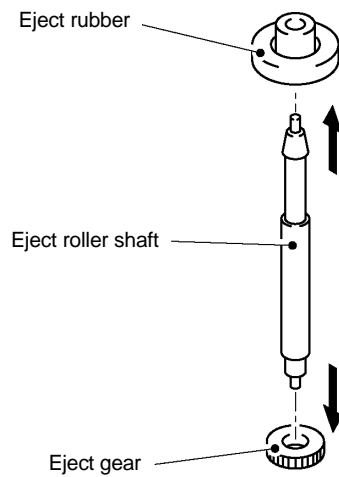
Fig. 3.1-19 Removing the Eject Unit (4)

■ Removing the Head/Roller Holder Unit

(1)   Remove the two screws and press the back of the head/roller holder unit to remove it.

Note: First, ensure to push the roller holder in the direction shown by the arrow and then remove it from the head/roller holder unit.

Screws

Head/roller holder unit
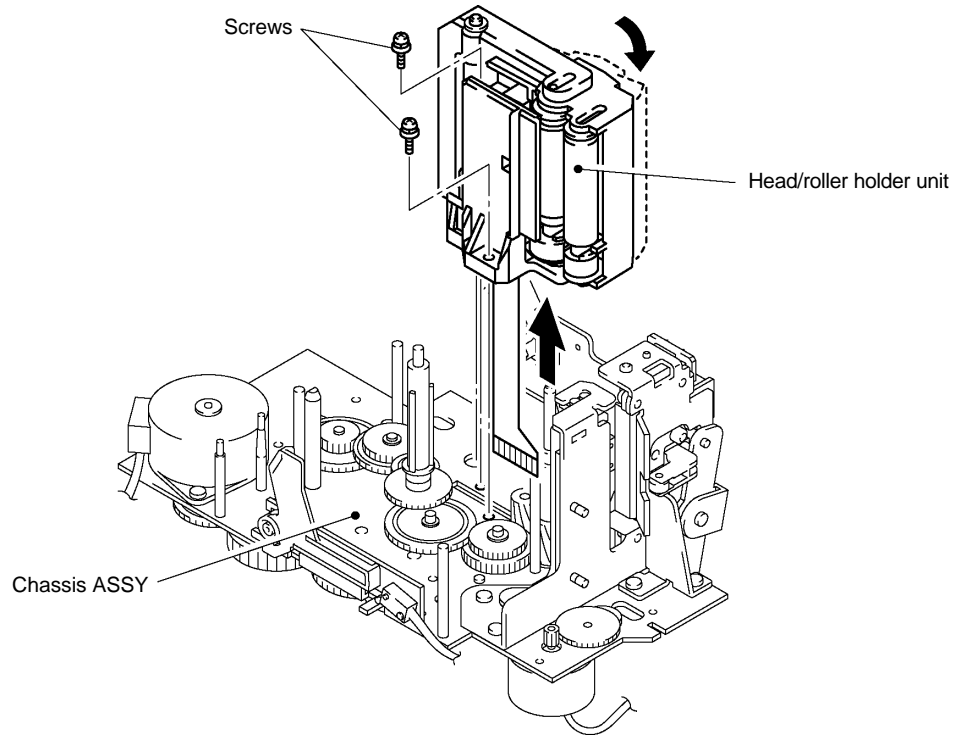
Chassis ASSY

Fig. 3.1-20 Removing the Head/Roller Holder Unit

■ Disassembling the Half Cutter Chassis ASSY

(1) Remove six screws to remove the half cutter chassis ASSY from the chassis ASSY.

Warning : Take care not to get injured in your fingers with the cutter blade.
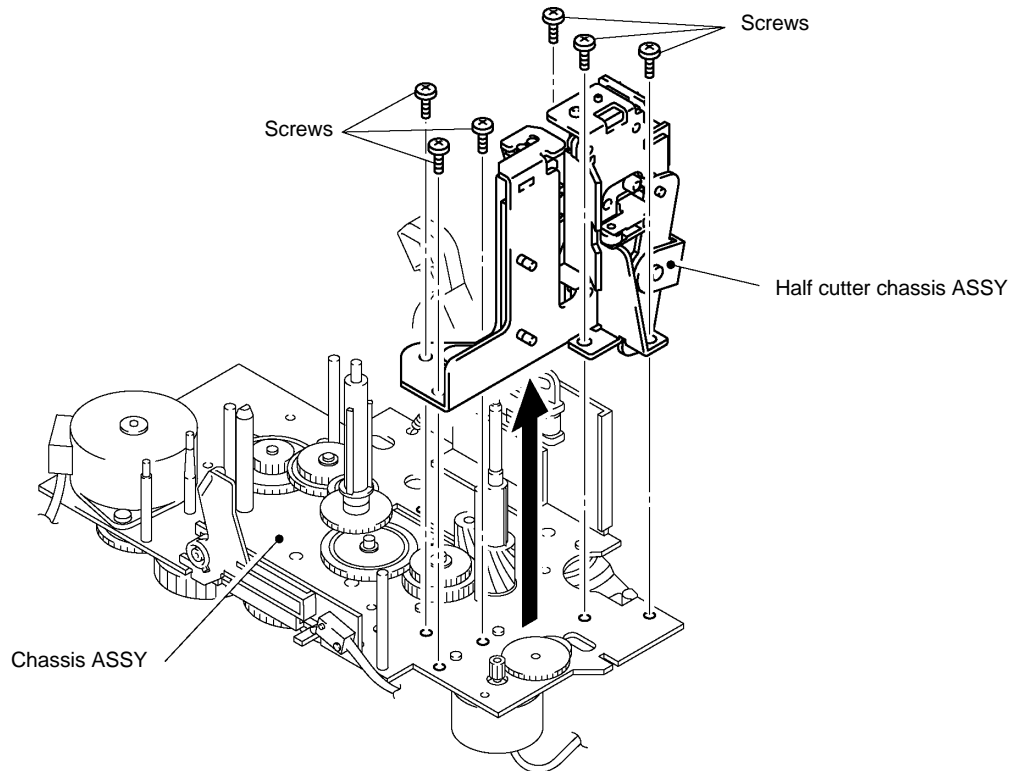
Fig. 3.1-21 Removing the Half Cutter Chassis ASSY (1)

(2) Remove two screws to remove the HC support plate from the half cutter chassis ASSY.

(3) Remove two screws to remove the cutter sensor PCB ASSY from the half cutter chassis ASSY.
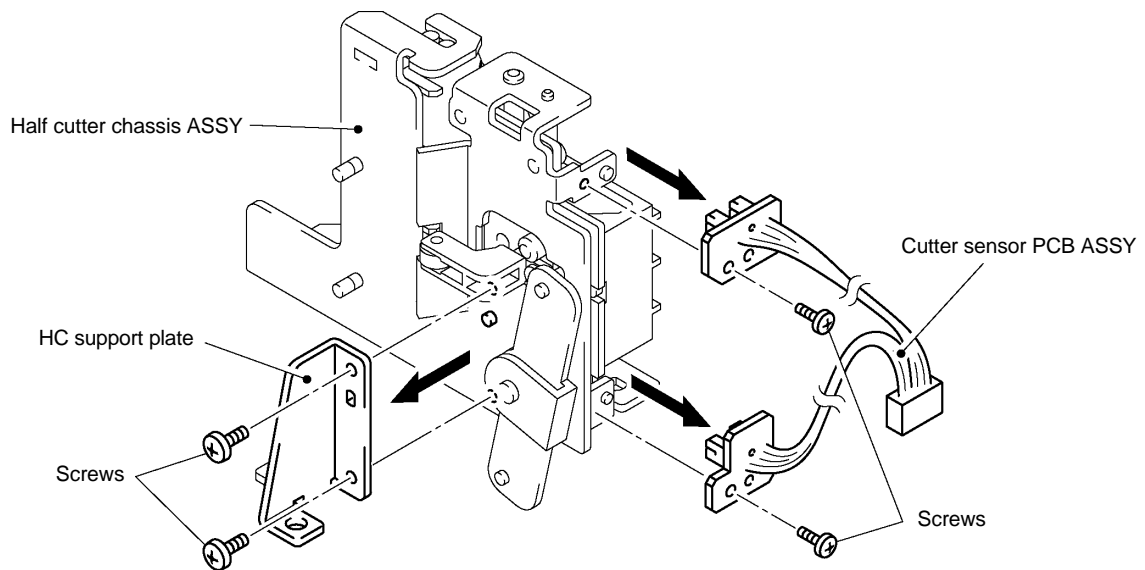
Fig. 3.1-22 Removing the Half Cutter Chassis ASSY (2)

■ Removing the Tape Feed Motor

  (1)   Remove two screws to remove the tape feed motor from the chassis ASSY.

Chassis ASSY

Tape feed motor

Screws
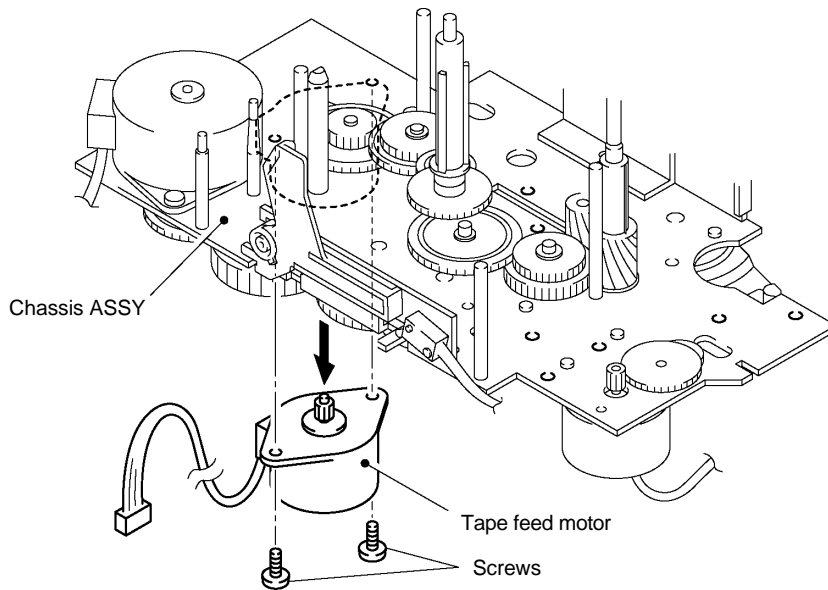
Fig. 3.1-23 Removing the Tape Feed Motor

■ Removing the Double Gear 1 and Eject Idle Gear

  (1)   Remove the components from the chassis ASSY in such the order as the retaining ring, the
         double gear 1 and the eject idle gear.

Retaining ring

Double gear 1

Eject idle gear
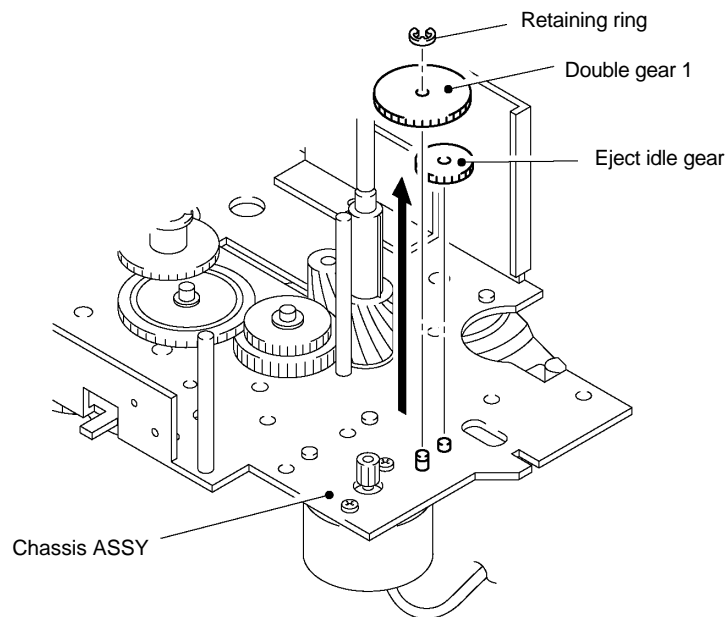
Chassis ASSY

Fig. 3.1-24 Removing the Double Gear 1 and Eject Idle Gear

■ Removing the Eject Motor ASSY
  (1) Remove two screws to remove the eject motor ASSY from the chassis ASSY.

Screws

Chassis ASSY
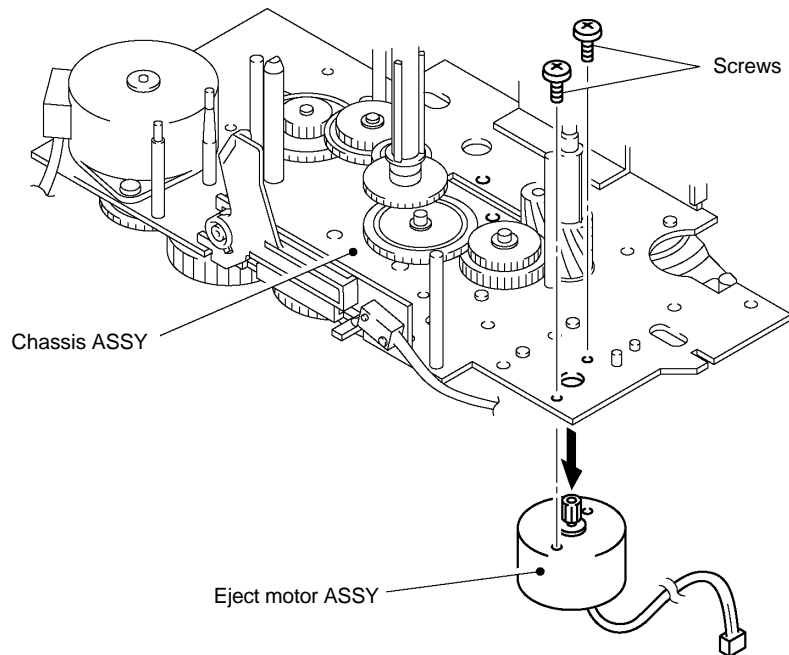
Eject motor ASSY

Fig. 3.1-25 Removing the Eject Motor ASSY

■ Removing the Tape Control Motor ASSY
  (1) Remove two screws to remove the tape control motor ASSY from the chassis ASSY.

Screws

Tape control
motor ASSY
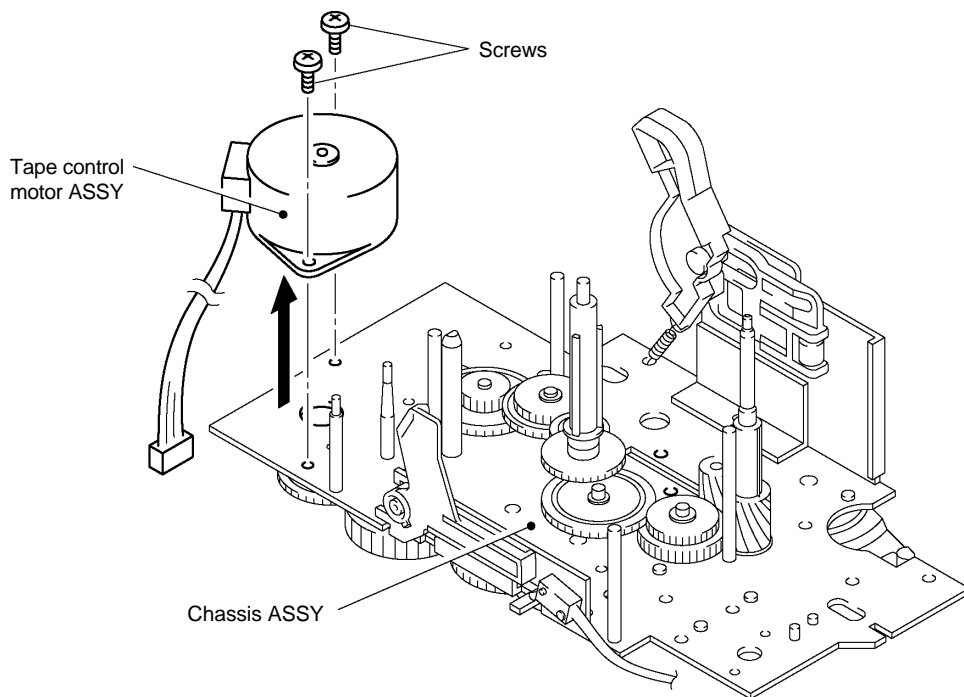
Chassis ASSY

Fig. 3.1-26 Removing the Tape Control Motor ASSY

■ Removing the Carriage Motor Unit

(1)   Remove a screw to remove the carriage motor unit from the chassis ASSY.

Chassis ASSY

Screw

Carriage motor unit
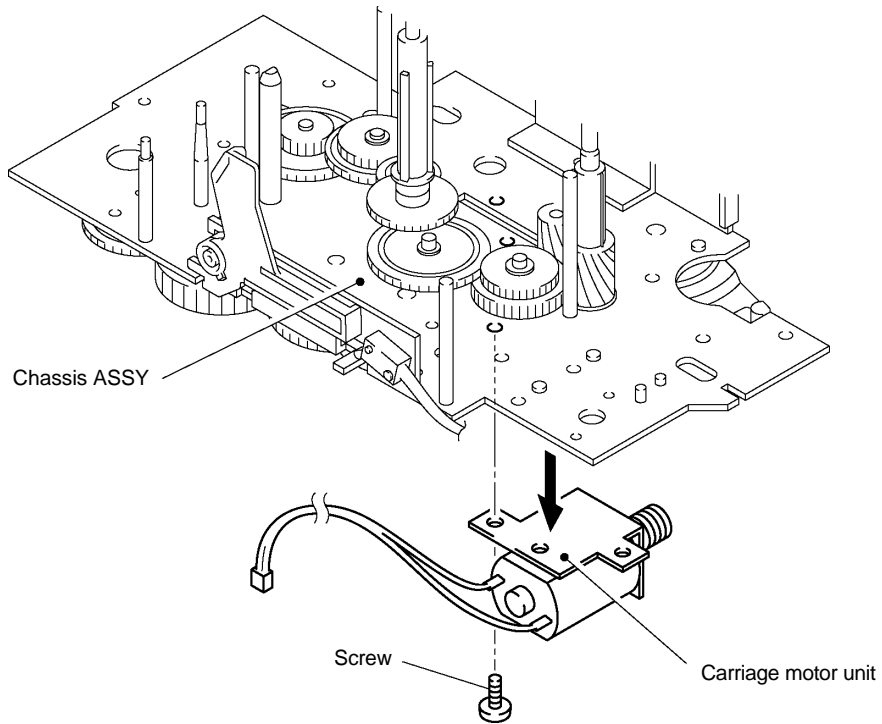
Fig. 3.1-27 Removing the Carriage Motor ASSY (1)

(2)   Remove two screws and detach the HC motor holder from the carriage motor ASSY.

Carriage motor ASSY

HC motor holder

Screws
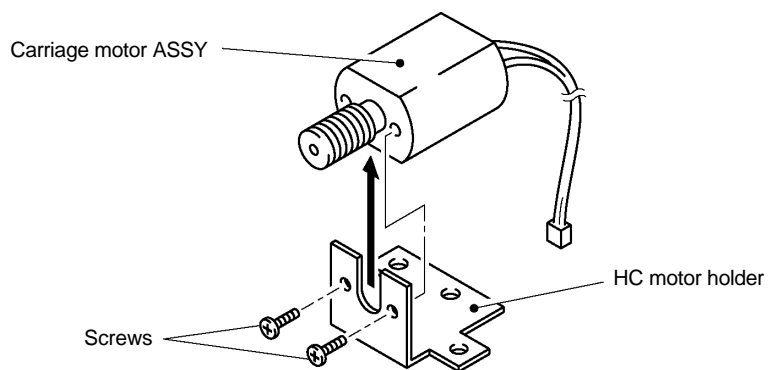
Fig. 3.1-28 Removing the Carriage Motor ASSY (2)

■ Removing the Roller Release Rod

    (1)   Pull the release lever spring slightly to remove it.

    (2)   Remove the retaining ring and pull the release lever out from the shaft.

    (3)   Remove the roller release rod.

    (4)   As the release rod roller is secured in place by the elasticity of the resin of the roller release rod, press the shaft of the release rod roller to remove it from the roller release rod.
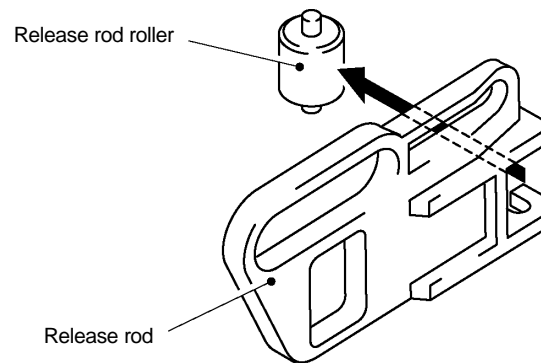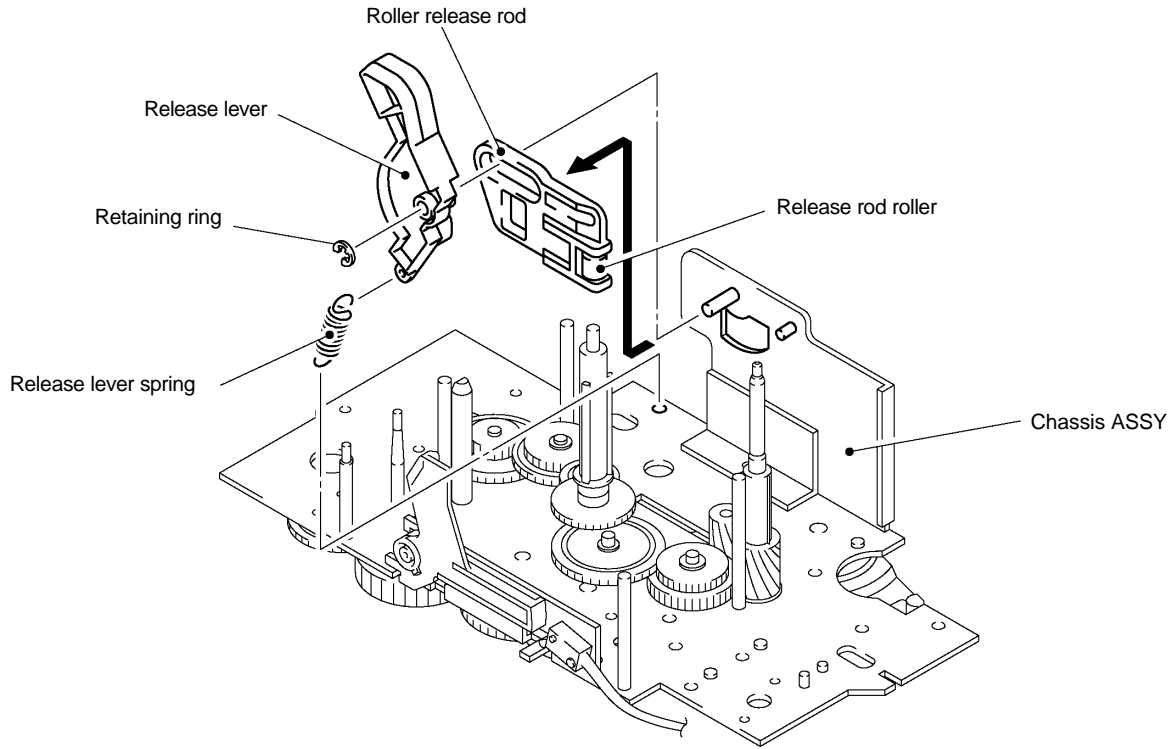
Fig. 3.1-29 Removing the Roller Release Rod

■ Removing the AV Sensor Actuator/AV Cassette Sensor ASSY (PT-9600/PT-3600 U.S.A. only)
   (1)   Remove a screw to remove the AV cassette sensor ASSY from the chassis ASSY.

Chassis ASSY

AV cassette sensor ASSY

Screw
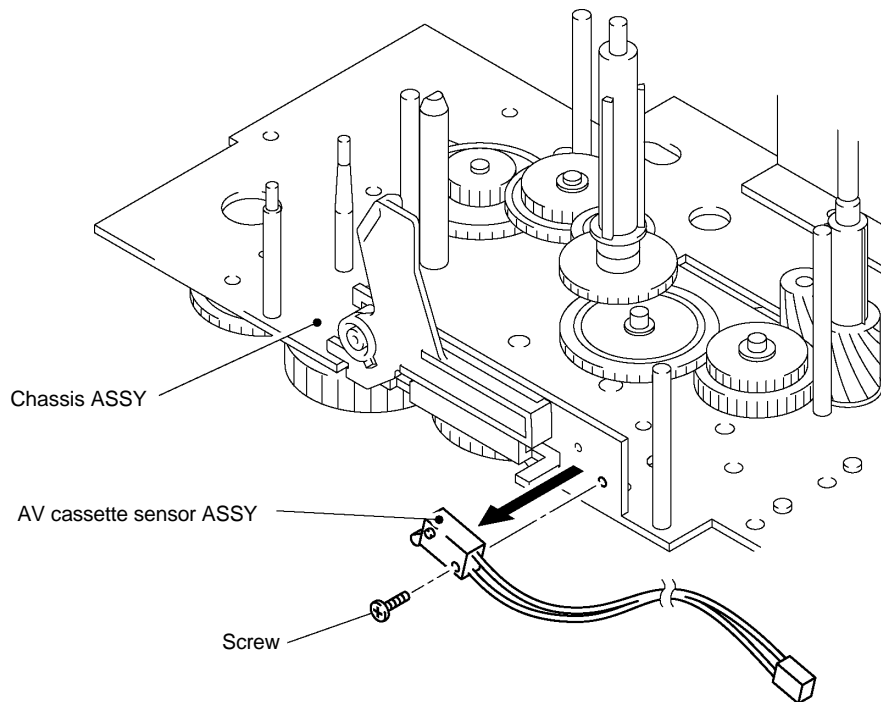
Fig. 3.1-30 Removing the AV Sensor Actuator/AV Cassette Sensor ASSY (1)

   (2)   Take the AV sensor actuator and the AV sensor spring off the chassis ASSY along the shaft slot shape of the chassis.
   (3)   Remove the AV sensor spring from the AV sensor actuator.

AV sensor spring

AV sensor actuator

Chassis ASSY
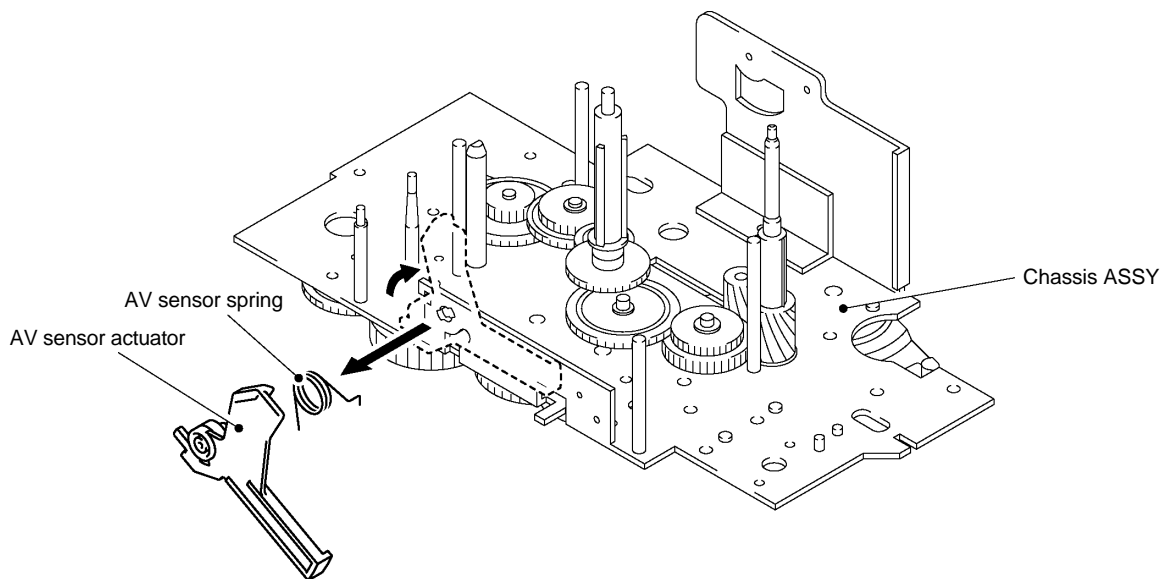
Fig. 3.1-31 Removing the AV Sensor Actuator/AV Cassette Sensor ASSY (2)

■ Disassembling the Head/Roller Holder Unit

(1)   Remove the retaining ring from the top of the head ASSY, and pull the roller holder shaft downward to remove it.

(2)   While tilting the bottom of the roller holder ASSY toward you, remove the roller holder ASSY from the head ASSY.

Note: Do not touch the platen rubber; doing so may adversely affect the printing quality.
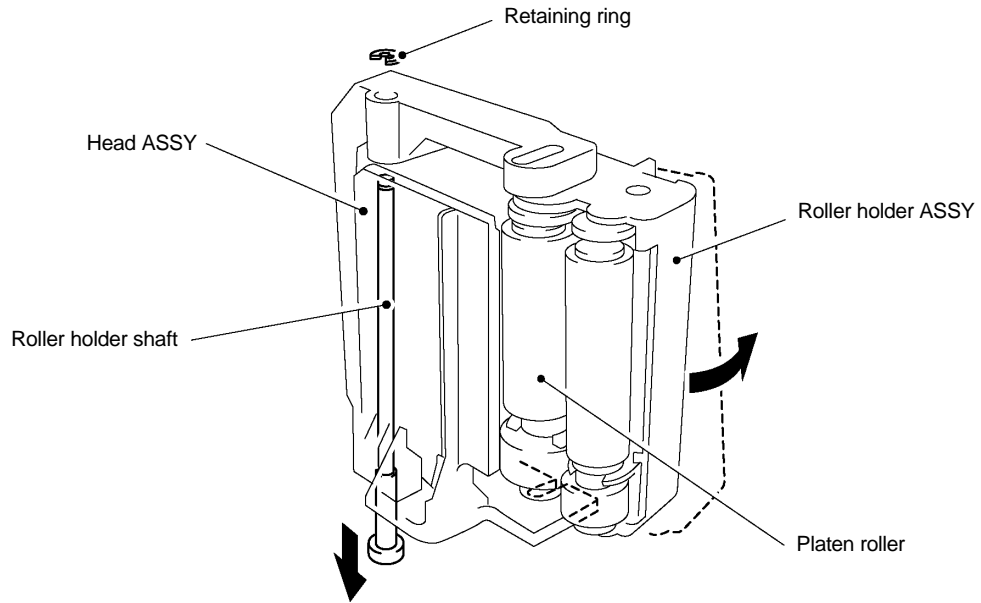
Fig. 3.1-32 Disassembling the Head/Roller Holder Unit (1)

(3)   Remove the roller holder release spring.

Note: Take care not to lose the roller holder release spring which is removed simultaneously when the roller holder ASSY is removed.
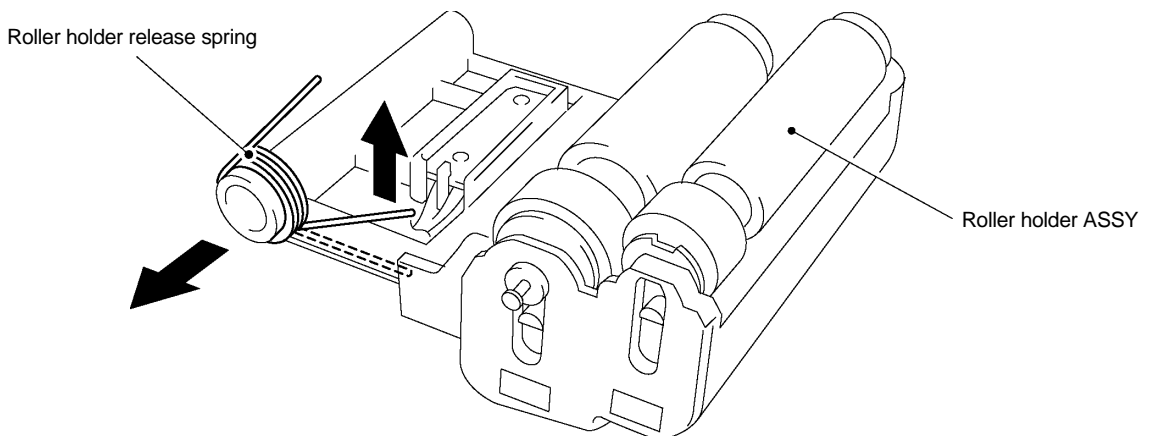
Fig. 3.1-33 Disassembling the Head/Roller Holder Unit (2)

(4)   Remove a screw to remove the AV sensor PCB from the roller holder ASSY (PT-9600/PT-3600 U.S.A. only).

Screw

AV sensor PCB
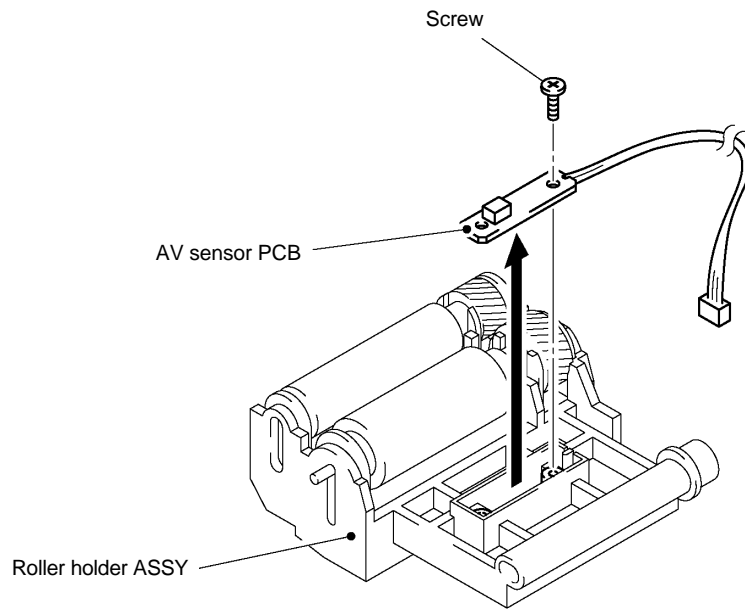
Roller holder ASSY

Fig. 3.1-34 Disassembling the Head/Roller Holder Unit (3)

[9]   Removing the Main PCB

(1)   Remove five screws and lift the main PCB as shown below to remove it with pulling the serial connector (PT-9600 only) and the USB connector from the slots of the bottom cover.

Screws

Screws

Main PCB

Serial connector
(PT-9600 only)

USB connector
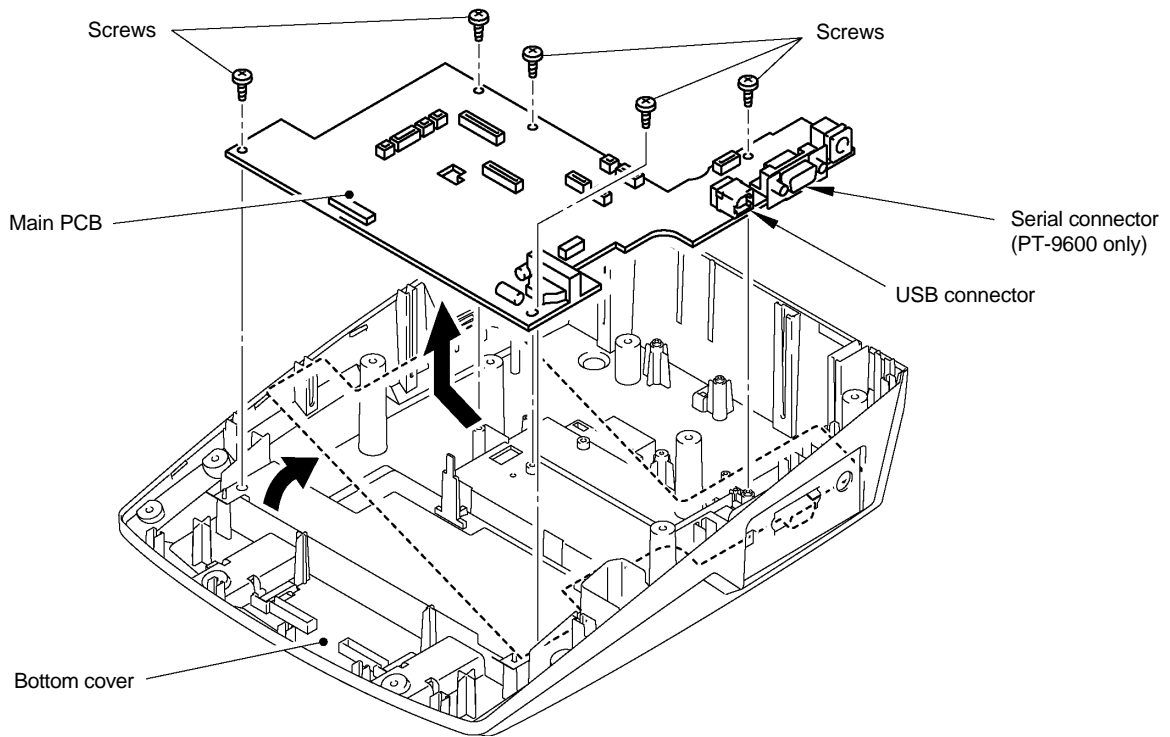
Bottom cover

Fig. 3.1-35 Removing the Main PCB (1)

(2)   Remove the sheet A from the bottom cover.

(3)   Remove the shield plate D from the bottom cover.

Sheet A

Shield plate D

Bottom cover
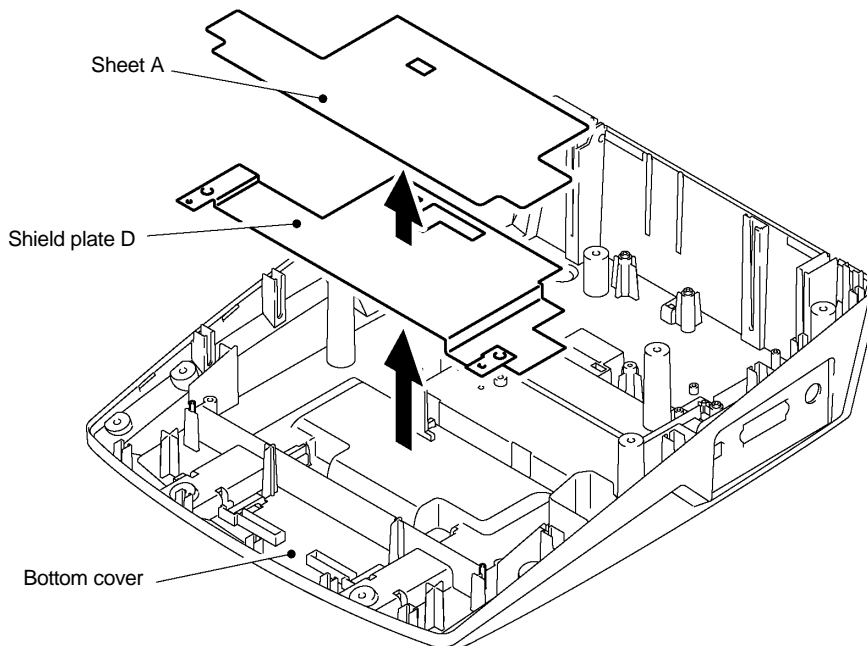
Fig. 3.1-36 Removing the Main PCB (2)

[10] Removing the LCD Module Unit

(1) Remove four screws to remove the LCD module unit from the body cover.
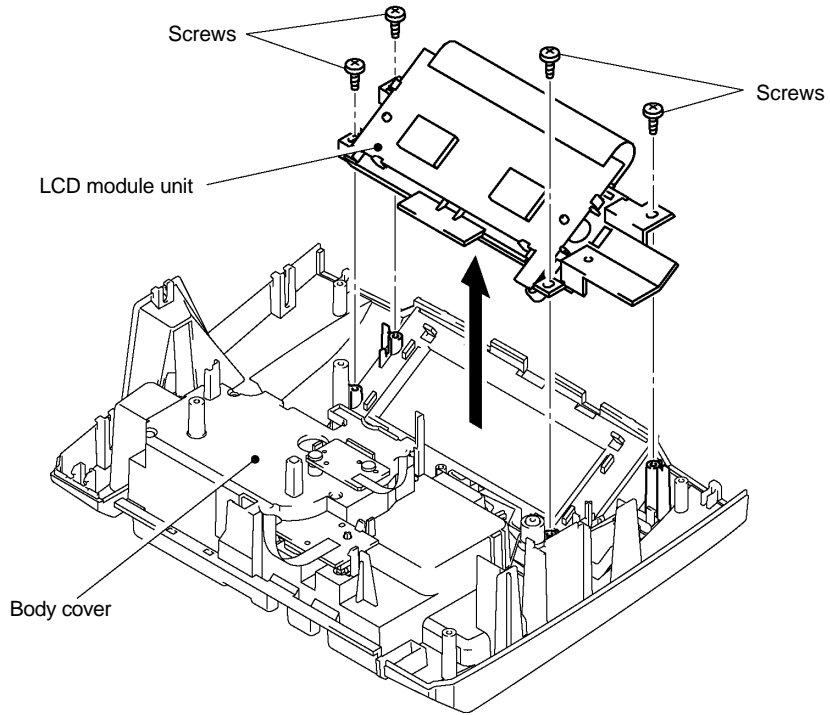
Fig. 3.1-37 Removing the LCD Module Unit (1)

(2) Release the hooks "A" in three places to remove the light plate ASSY from the LCD module unit (PT-9600 only).
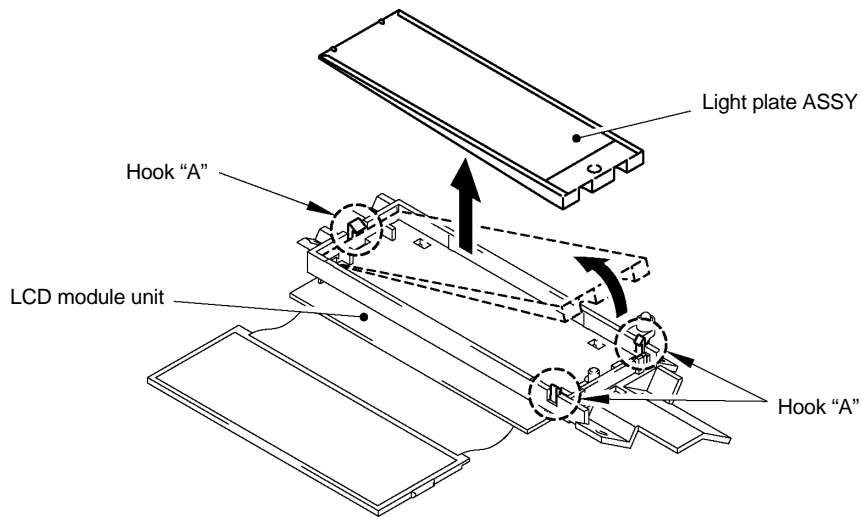
Fig. 3.1-38 Removing the LCD Module Unit (2)

(3) Release the hooks "B" of the LCD holder in two places, which fix the LED PCB ASSY (PT-9600 only).

(4) Melt and strip the solder of the LCD PCB ASSY with which the leads (three harnesses) of the LED PCB ASSY are connected. (PT-9600 only)

(5) Detach the diode (SLR-342MC) on the LCD PCB ASSY from the LCD PCB ASSY by melting solder (PT-9600 only).

(6) Release the hooks "C" in four places to detach the LCD holder from the LCD PCB ASSY (PT9600 only).

Diode

Hook "B"

LED PCB ASSY

LCD PCB ASSY

LCD holder

LCD PCB ASSY

Hook "B"

Leads (three harnesses)

LCD holder

Hook "C"

LCD PCB ASSY
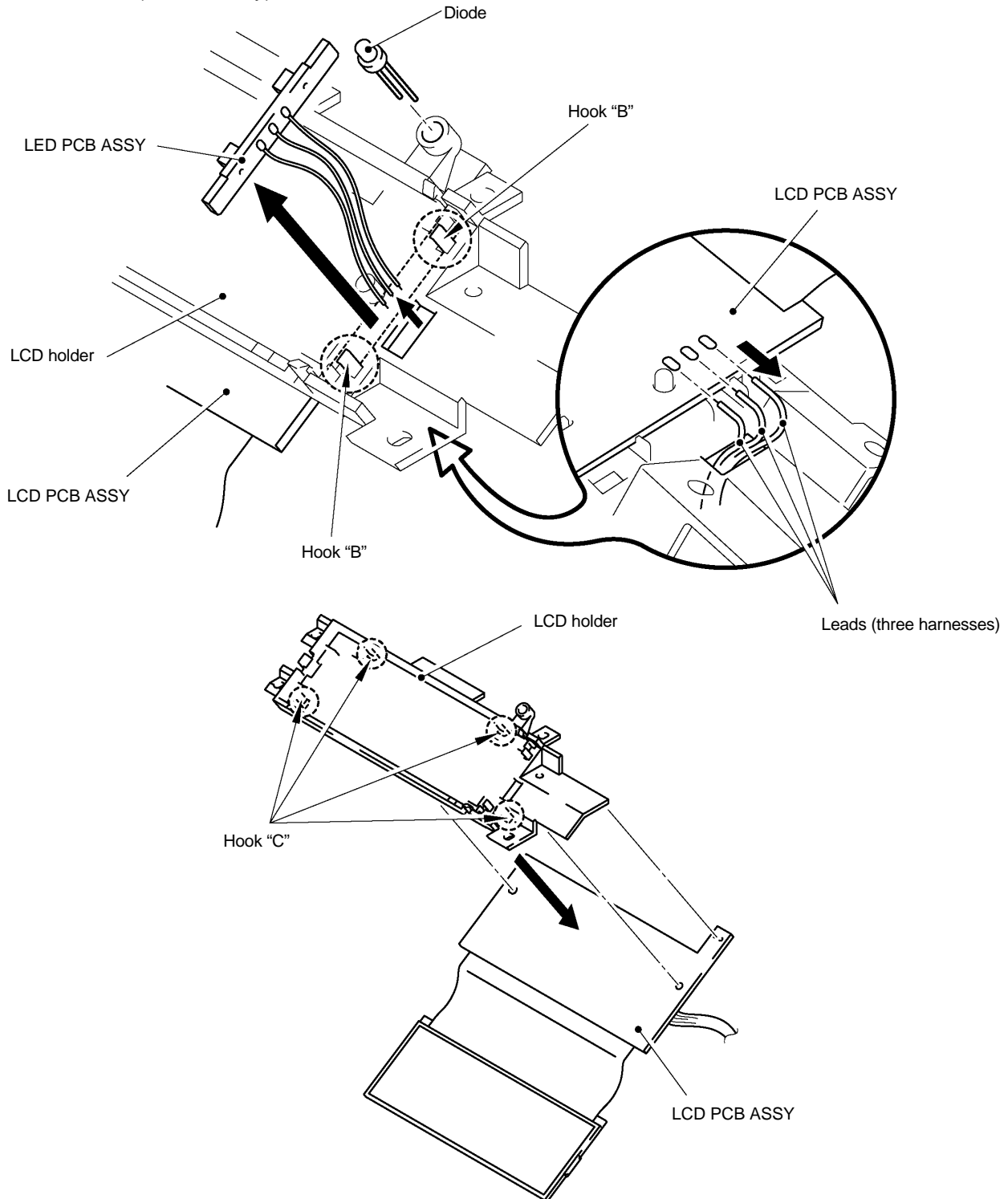
Fig. 3.1-39 Removing the LCD Module Unit (3)

III-25

[11] Removing the Release Button, Tape End Sensor PCB and Cassette Sensor PCB

(1)   Remove the lock arm spring from the lock arm.

(2)   Rotate the lock arm until releasing the hook that fixes it on the body cover, in order to remove the lock arm.
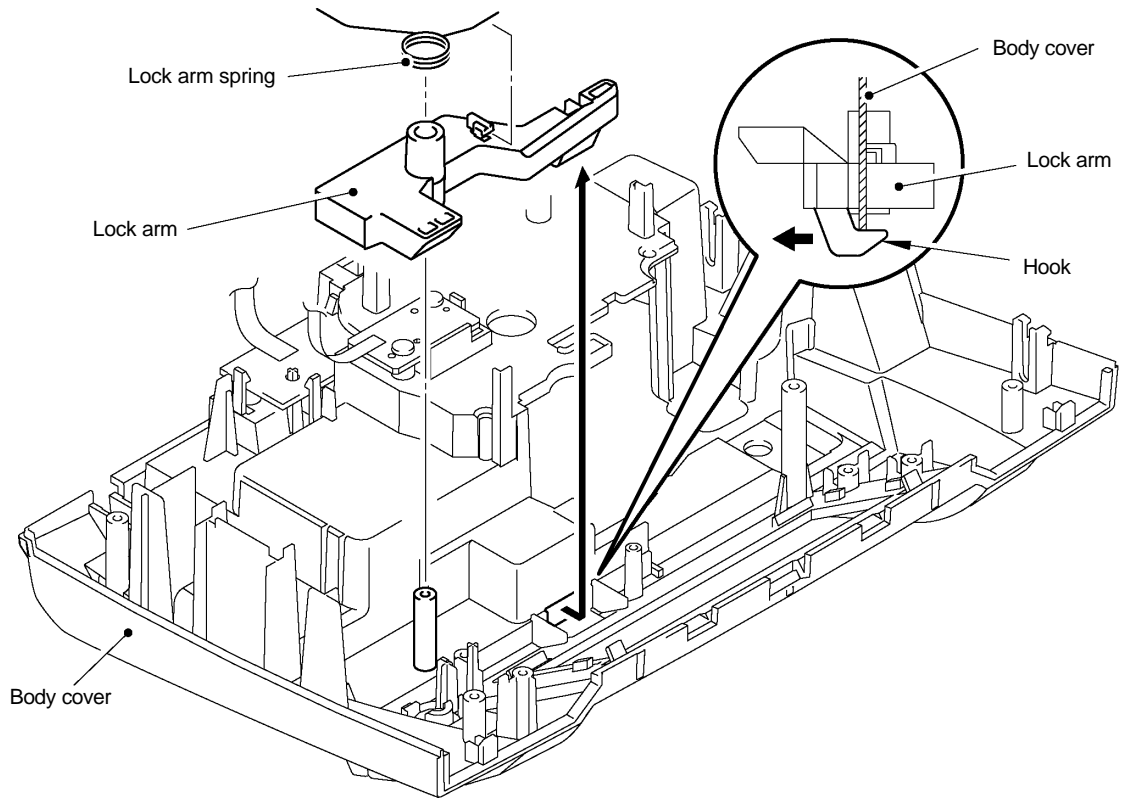
Fig. 3.1-40 Removing the Lock Arm Spring and Lock Arm

(3)   Release the hooks in four places to remove the release button from the body cover.
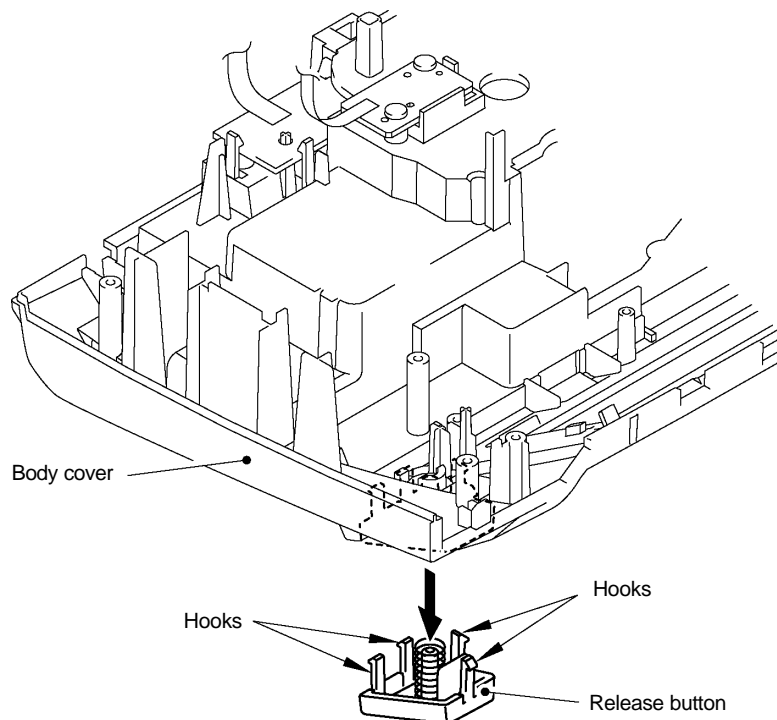
Fig. 3.1-41 Removing the Release Button

III-26

(4)   Remove the release button spring from the release button.

Release button spring
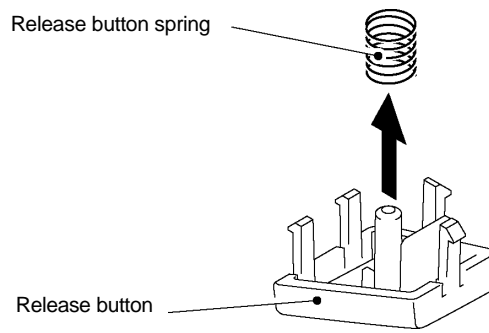
Release button

Fig. 3.1-42 Removing the Release Button Spring

(5)   Remove two screws to remove the tape end sensor PCB from the body cover.

Screws

Tape end sensor PCB
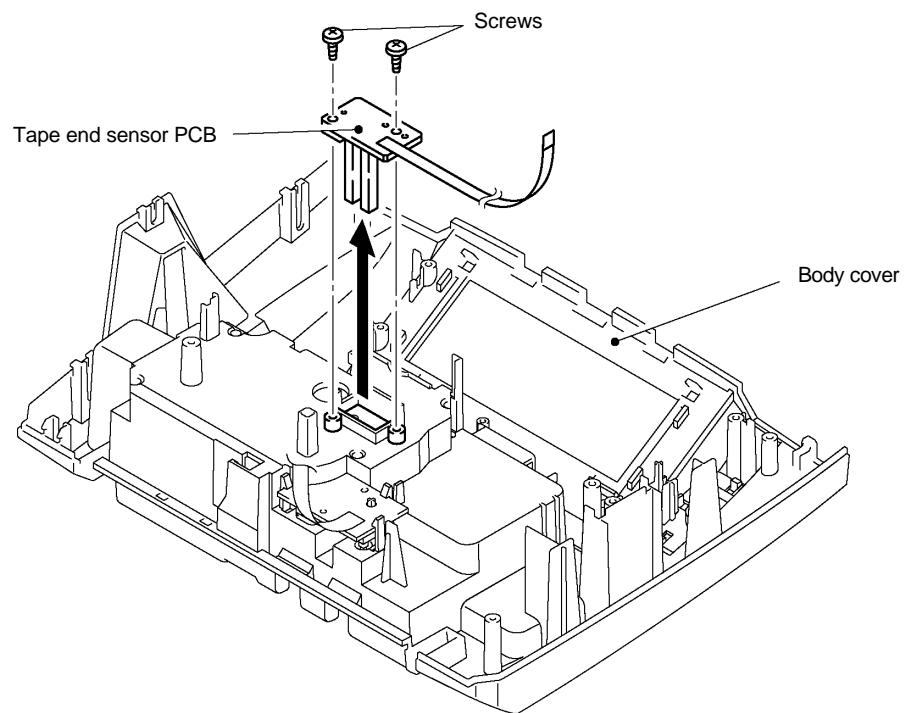
Body cover

Fig. 3.1-43 Removing the Tape End Sensor PCB

(6)   Release the hooks in three places to remove the cassette sensor PCB from the body cover.

Cassette sensor PCB

Body cover

Hooks
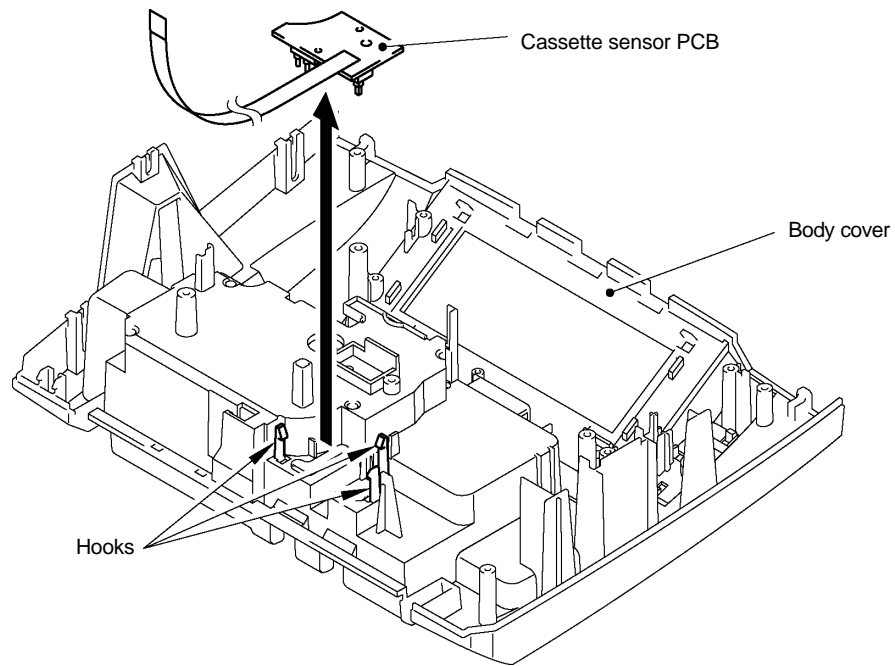
Fig. 3.1-44 Removing the Cassette Sensor PCB

3.2 REASSEMBLY PROCEDURE

[1] Reassembling the Cassette Sensor PCB, Tape End Sensor PCB and Release Button

(1) Observe whether there is no deformation on the switches of the cassette sensor PCB.

(2) Embed the cassette sensor PCB on the body cover, reeving each switch into each slot of the body cover.

Note: Make sure to embed the PCB by the hooks in three places of the body cover.

(3) Push and release each switch to verify their normal reaction.
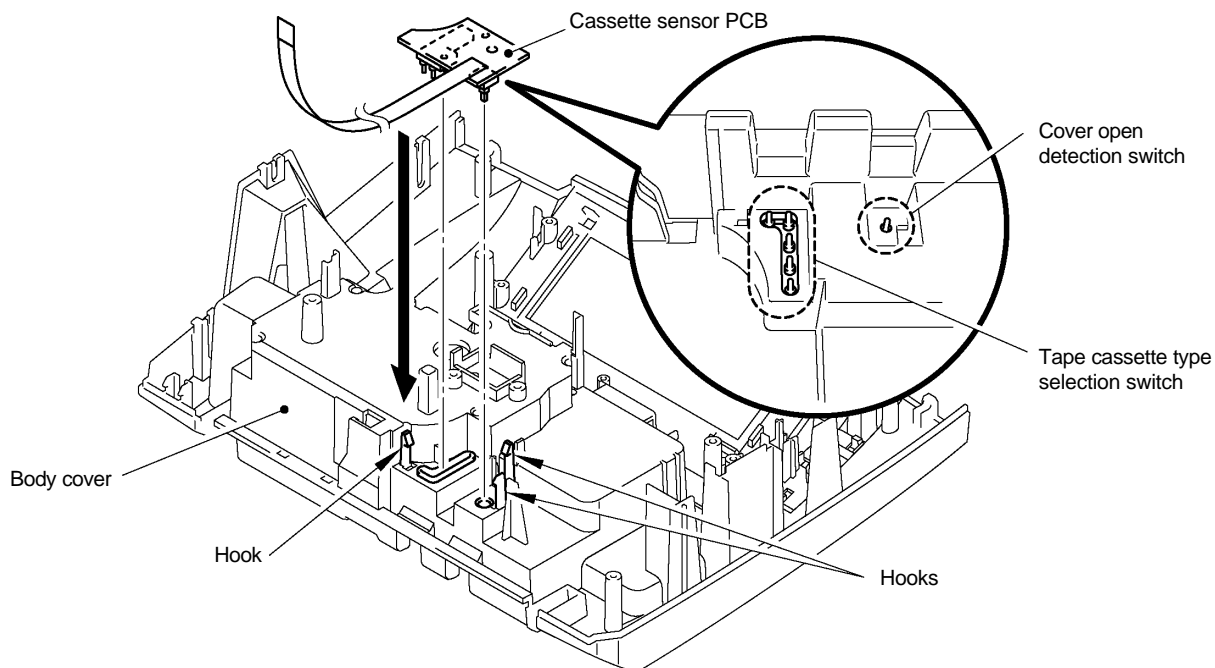
Fig. 3.2-1 Reassembling the Cassette Sensor PCB

(4) Reassemble the tape end sensor PCB with the two screws into the body cover.
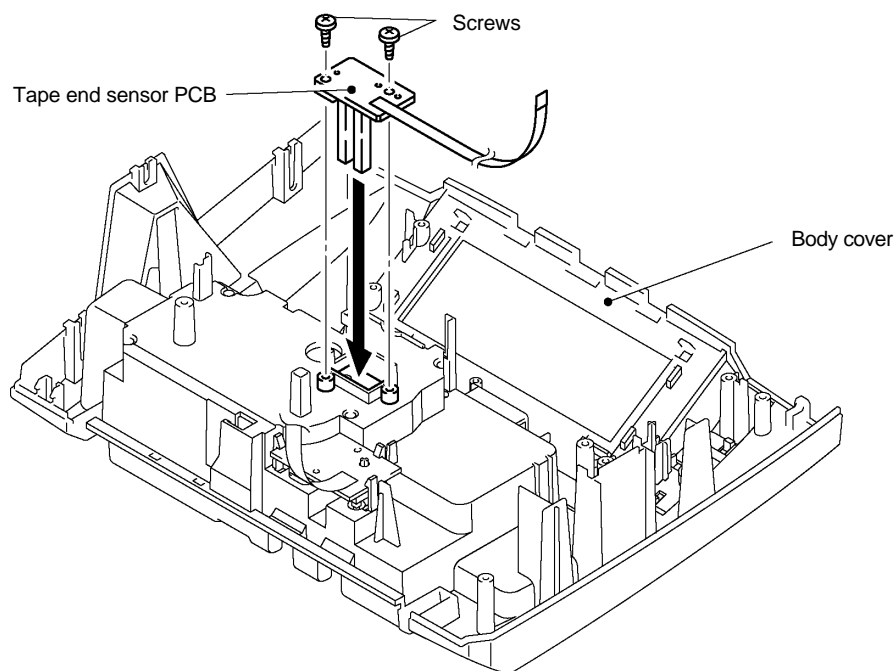
Fig. 3.2-2 Reassembling the Tape End Sensor PCB

(5)   Reassemble the release button spring into the release button.

Note: Apply the silicon grease (Shin-Etsu Chemical brand G501) by a half rice-grain sized drop per centimeter to full around the stem and the stem head of the release button.

Release button spring

Release button

Apply grease.
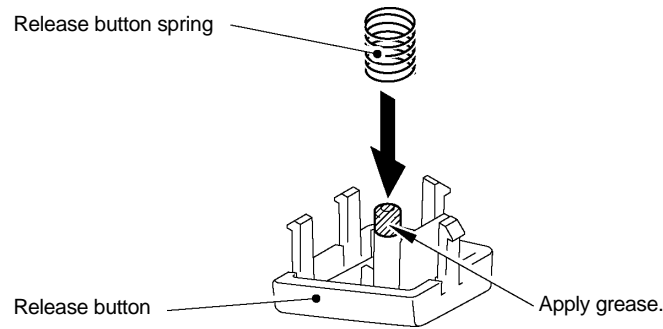
Fig. 3.2-3 Reassembling the Release Button (1)

(6)   Reassemble the release button on the body cover.

Note: Make sure to secure the hooks of the release button in four places of the body cover.

Body cover

Hooks

Hooks
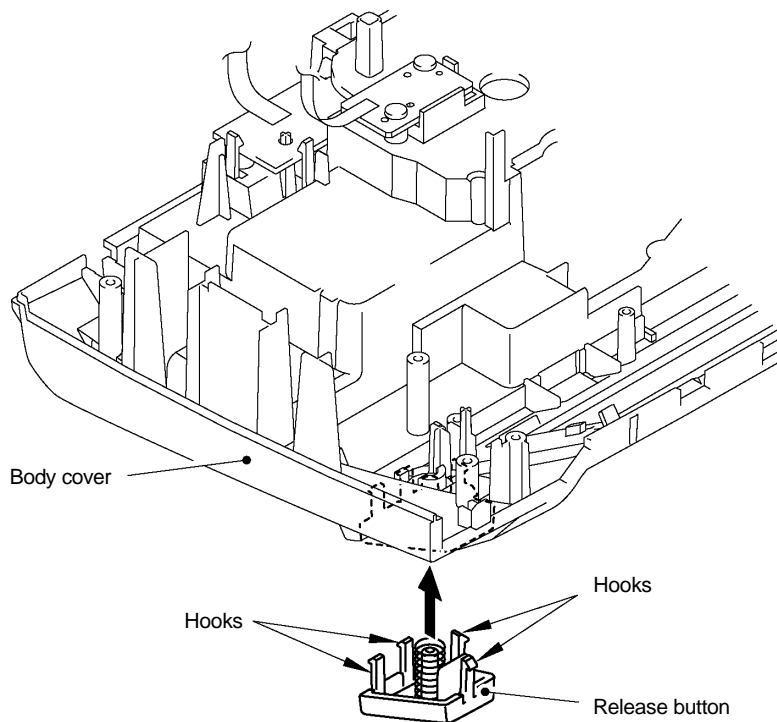
Release button

Fig. 3.2-4 Reassembling the Release Button (2)

(7)   Assemble the lock arm on the pin of the body cover and rotate the hook of the lock arm to insert the hook into the "A" of the body cover.

(8)   Reassemble the lock arm spring on the lock arm to be effect against the body cover as shown below.

Note: Apply the silicon grease (Shin-Etsu Chemical brand G501) by a half rice-grain sized drop on each "B" portion of lock arm.
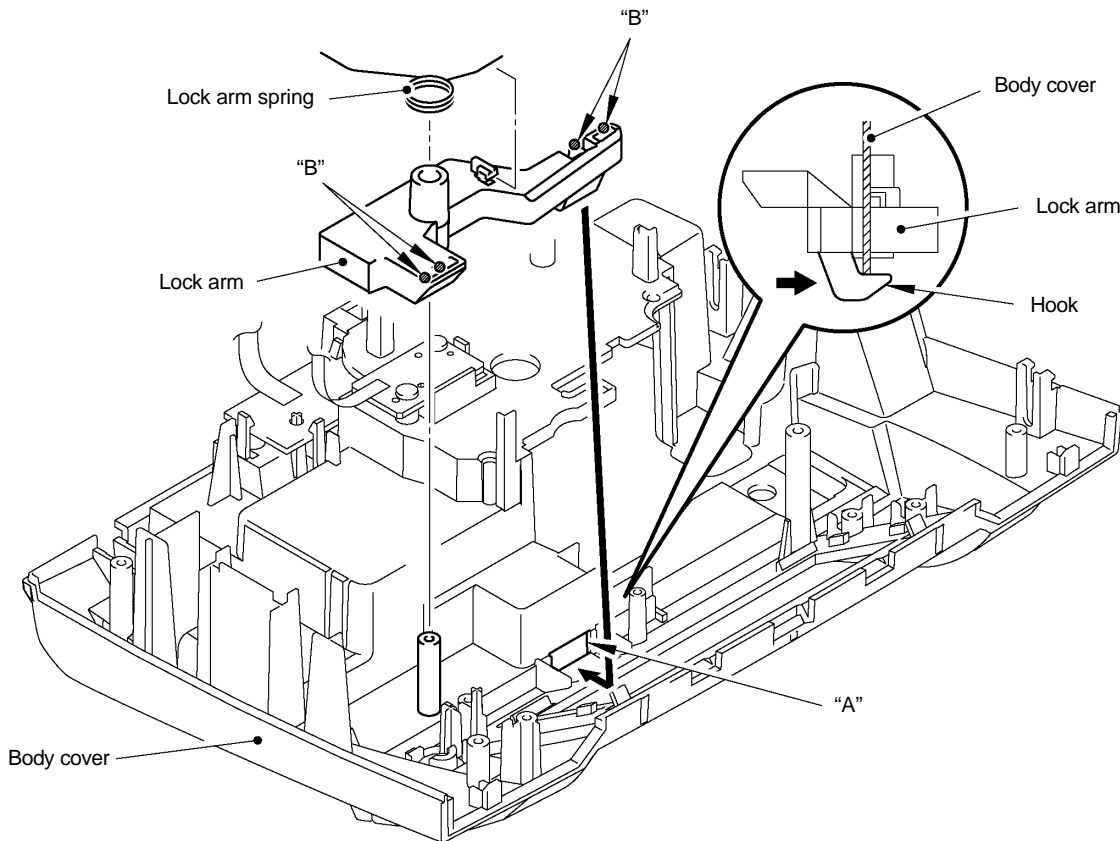
Fig. 3.2-5 Reassembling the Lock Arm and Lock Arm Spring

[2]   Reassembling the LCD Module Unit

(1)   Attach the LCD holder to the LCD PCB ASSY with the hooks "C" in four places and two pins.

Note: Handle the LCD flexible cable carefully not to put any damage on it.

LCD Holder

Pin

Hook "C"

Pin

Hook "C"

LCD PCB ASSY

LCD flexible cable
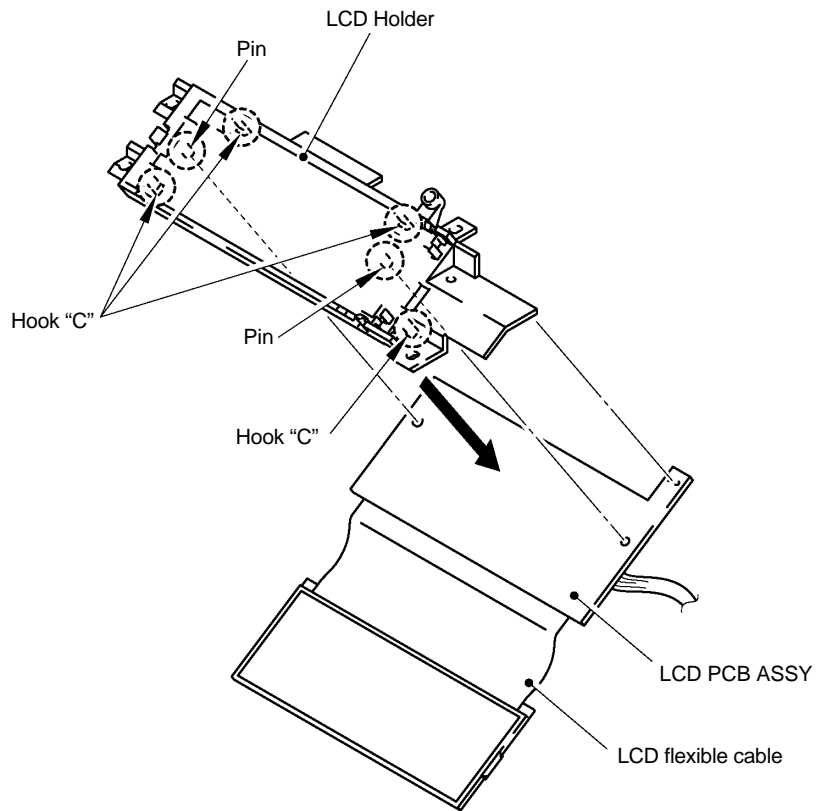
Fig. 3.2-6 Reassembling the LCD Module Unit (1)

(2) Insert the diode (SLR-342MC) in the LCD holder and solder it to the LCD PCB ASSY (PT-9600 only).

Note: Do not mix up the plus and minus pins of the diode. The longer pin is for "plus" while the shorter pin is "minus".

(3) Insert the LED PCB ASSY into the hooks "B" in two places of the LCD holder (PT-9600 only).

(4) Pass the leads (three harnesses) of the LED PCB ASSY through the slot of the LCD holder and solder it to the LCD PCB ASSY (PT-9600 only).

Note: Solder the leads (three harnesses) to the LCD PCB ASSY in accordance with the color indications on the LCD substrate.
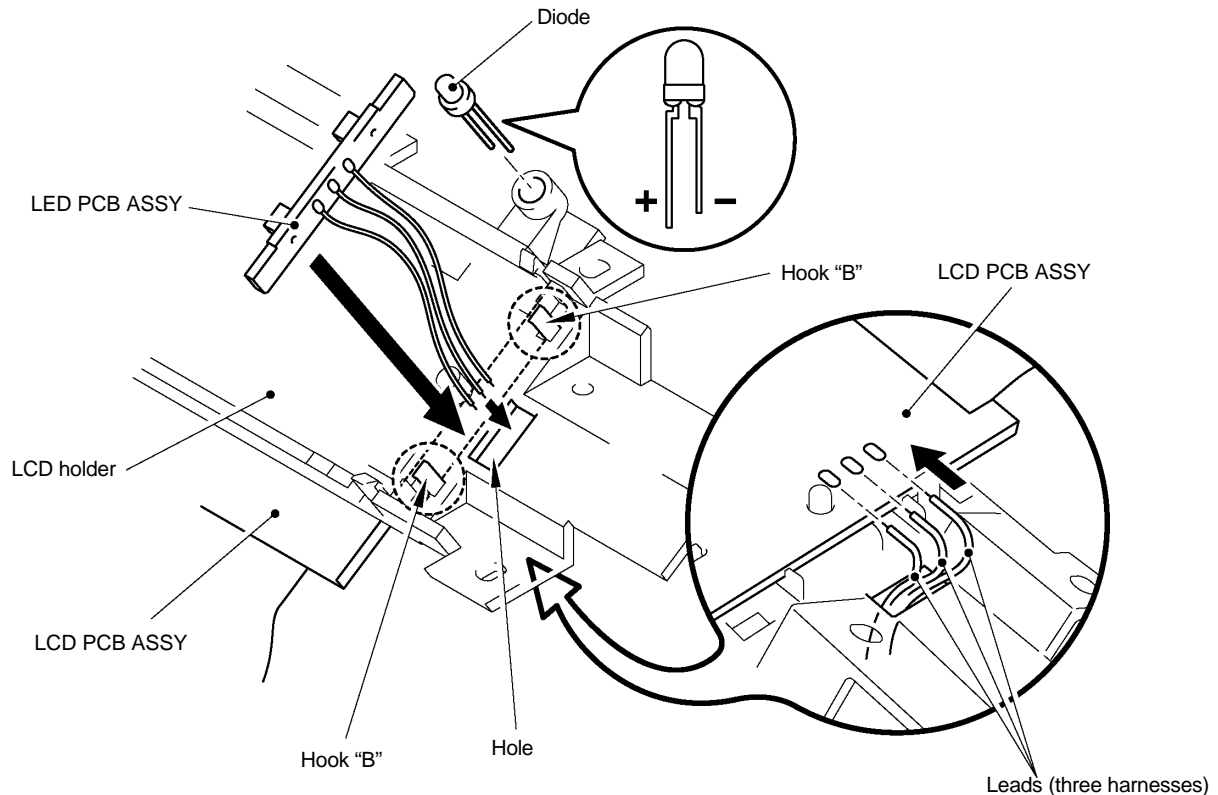
Fig. 3.2-7 Reassembling the LCD Module Unit (2)

(5) Reassemble the light plate ASSY to the LCD module unit fixing with the hooks in three places.
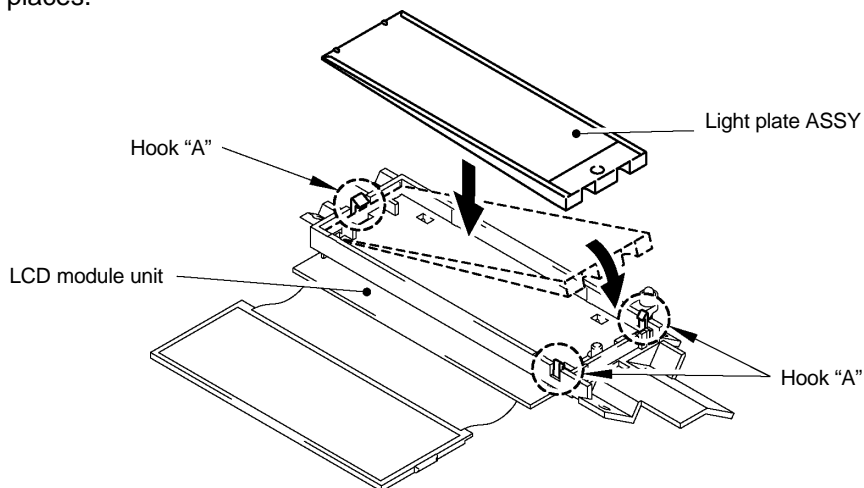
Fig. 3.2-8 Reassembling the LCD Module Unit (3)

III-33

(6) Fit the LCD module unit on the pin shown in the figure below and secure four screws to assemble it into the body cover.

Screws

Screws

LCD module unit

Body cover

Pin
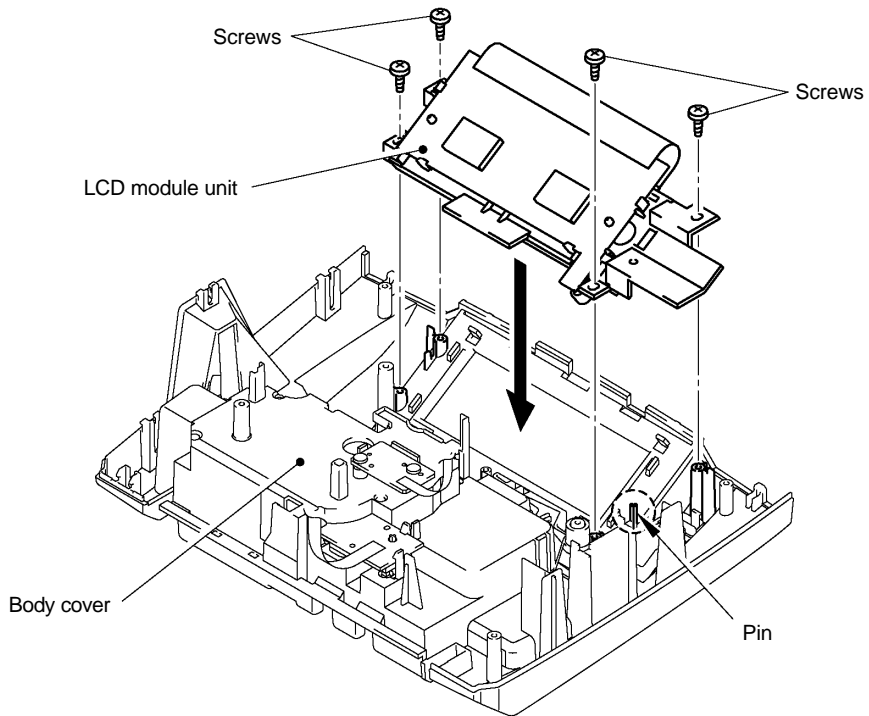
Fig. 3.2-9 Reassembling the LCD Module Unit (4)

[3]   Reassembling the Main PCB

(1)   Fit the shield plate D on the two pins of the bottom cover.

(2)   Assemble the sheet A on the bottom cover.
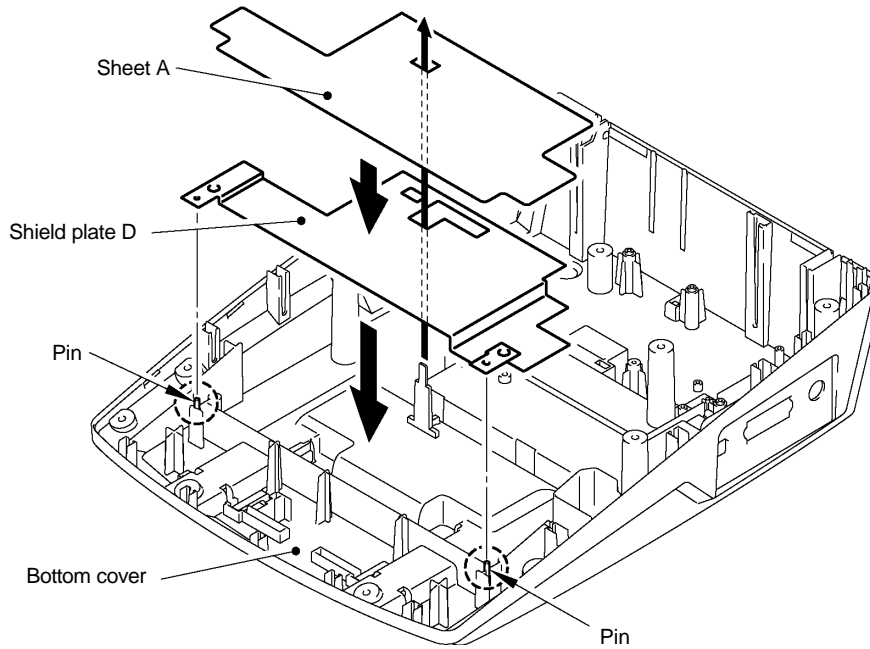
Fig. 3.2-10 Reassembling the Main PCB (1)

(3)   First, insert the serial connector (PT-9600 only) and the USB connector to the slots of the bottom cover. Then secure the main PCB on the bottom cover with five screws.
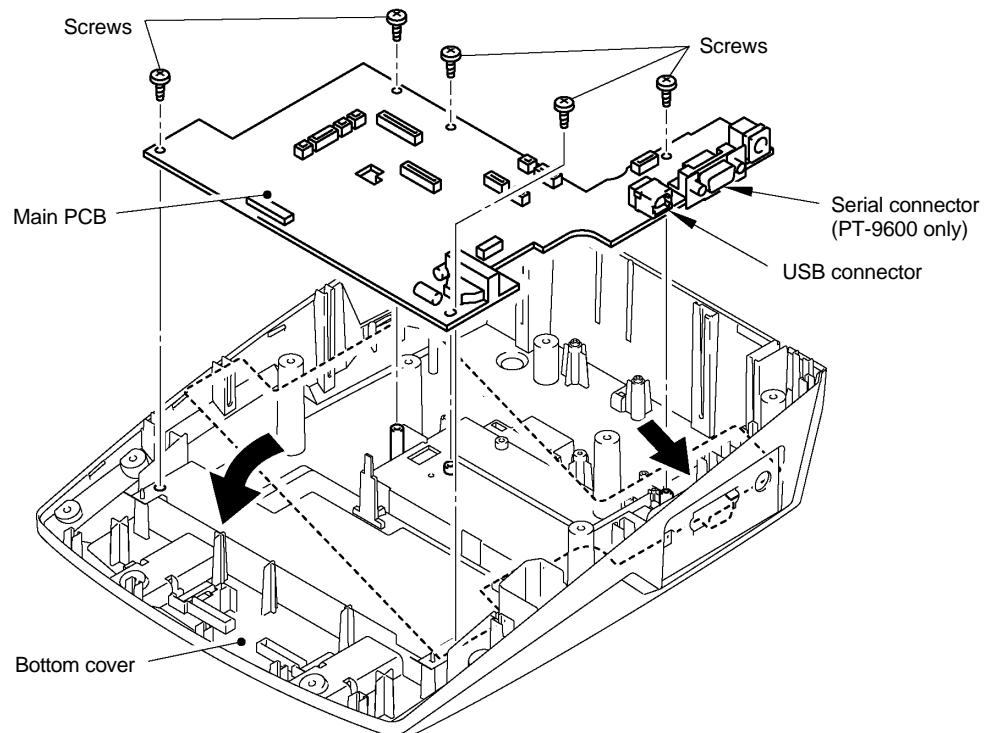
Fig. 3.2-11 Reassembling the Main PCB (2)

[4]   Reassembling the Components of the Chassis Unit

■ Reassembling the Head/Roller Holder Unit

(1)   Connect the AV sensor PCB with the roller holder ASSY with a single screw (PT-9600/PT-3600 U.S.A. only).

Note: Pay attention not to have the AV sensor PCB harness between the substrate and the screw boss.

Screw

AV sensor PCB
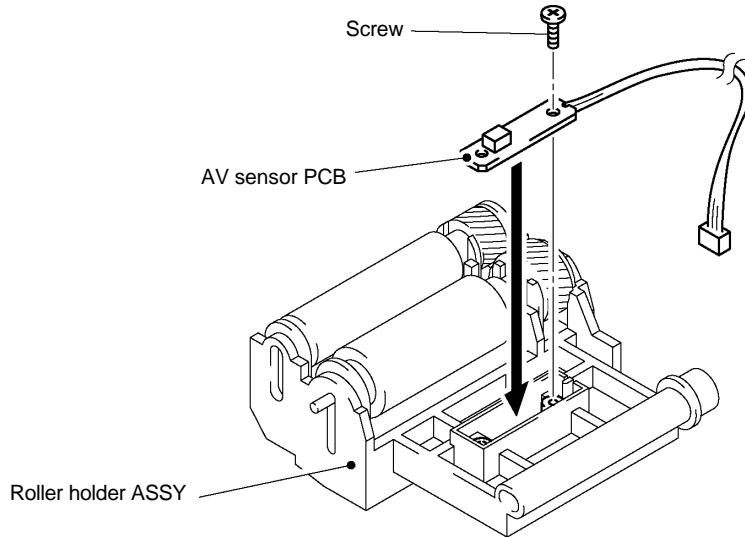
Roller holder ASSY

Fig. 3.2-12 Reassembling the Head/Roller Holder Unit (1)

(2) Fit the roller holder release spring over the bottom end of the roller holder ASSY, with one end of the roller holder release spring inserted into the groove in the roller holder. Insert the upper and end of the platen shaft into the hole of the head ASSY while slightly tilting the roller holder ASSY.

(3) Attach the roller holder ASSY to the head ASSY, with the bottom end of the platen shaft being inserted in the slit in the head ASSY.

Note 1: The roller release spring must be caught in the correct portion of the head ASSY.

Note 2: Apply the silicon grease (Shin-Etsu Chemical brand G501) by a quarter rice-grain sized drop with a brush on each end of platen shaft.

Note 3: Pass the AV sensor harness over the roller holder release spring as indicating in "A" shown below, when assembling the roller holder ASSY to the head ASSY.
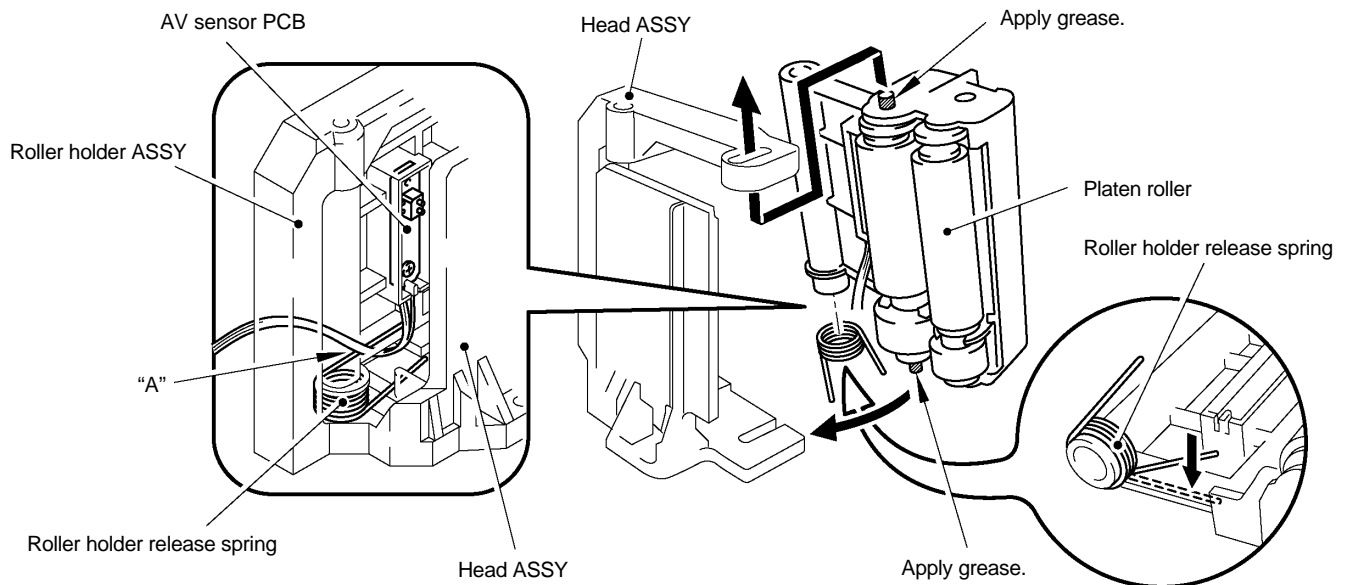
Fig. 3.2-13 Reassembling the Head/Roller Holder Unit (2)

(4) Insert the roller holder shaft from the bottom of the head ASSY, then secure the shadt using the retaining ring.

Note: Press the back of the roller holder ASSY to check its smooth rotation.
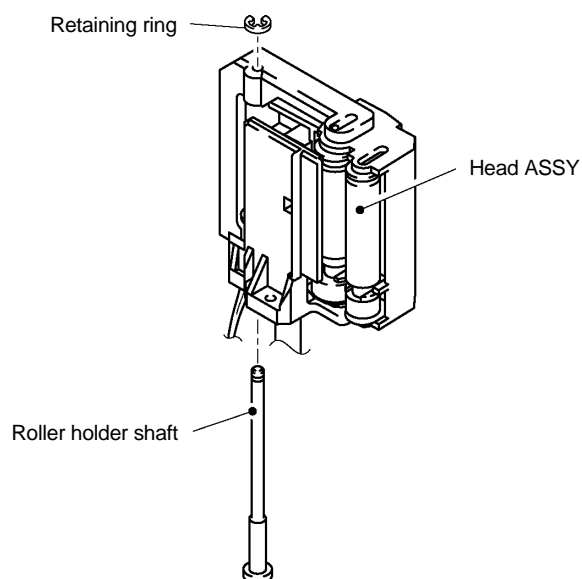
Fig. 3.2-14 Reassembling the Head/Roller Holder Unit (3)

■ Reassembling the AV Sensor Actuator (PT-9600/PT-3600 U.S.A. only)

(1) Assemble the AV sensor spring on the AV sensor actuator.

(2) Assemble the AV sensor actuator on the chassis ASSY in the position according to the slot shape of the chassis ASSY.

Note: Verify after the assembly whether the AV sensor actuator moves without a hitch.
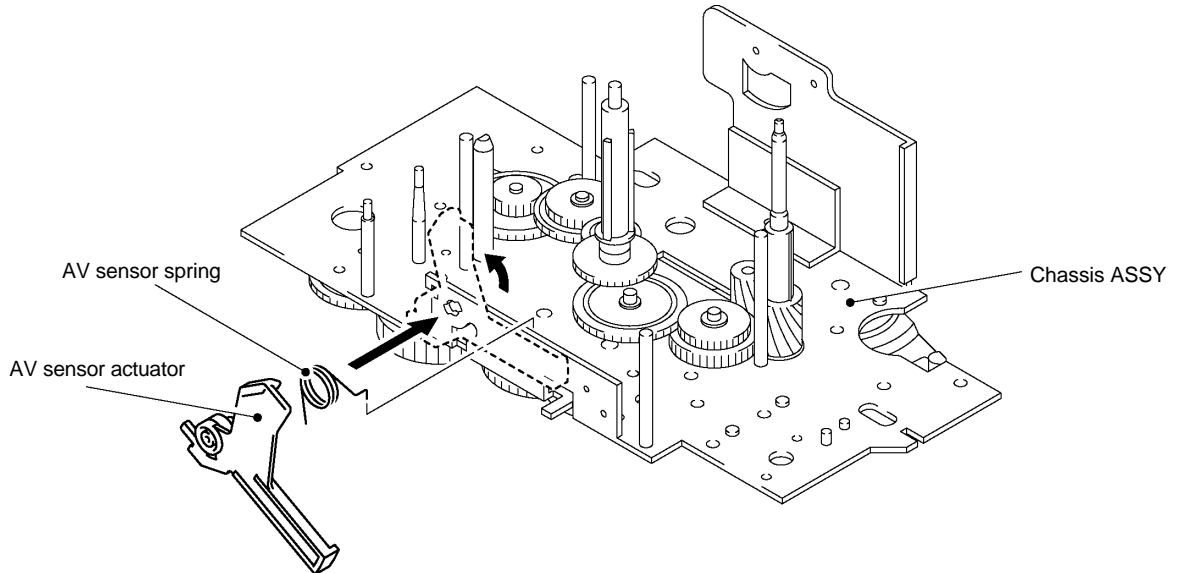
Fig. 3.2-15 Reassembling the AV Sensor Actuator(1)

(3) Assemble the AV cassette sensor ASSY on the chassis ASSY with a screw after fitting the positioning pin of the sensor ASSY in the slot "A" of the chassis ASSY.
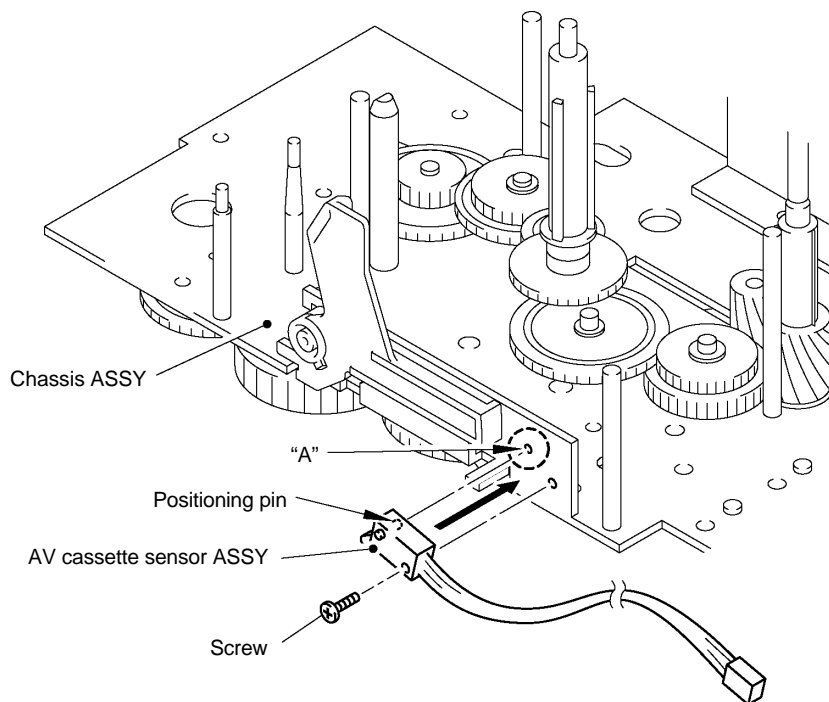
Fig. 3.2-16 Reassembling the AV Sensor Actuator(2)

■ Reassembling the Roller Release Rod

(1) Attach the release rod roller in the slit in the roller release rod. Attach the roller release rod on the shaft of the chassis ASSY.

Note: Apply the silicon grease (Shin-Etsu Chemical brand G501) by a rice-grain sized drop to full around of the release rod roller.

(2) Attach the release lever on the roller release rod. Secure them using the retaining ring.

Note: Apply the silicon grease (Shin-Etsu Chemical brand G501) by a rice-grain sized drop to the rubbing portion between the roller release rod and the release lever.

(3) Hook the end of the release lever spring on the hole of the release lever. Hook the other end of the release lever spring on the tab of the chassis ASSY.
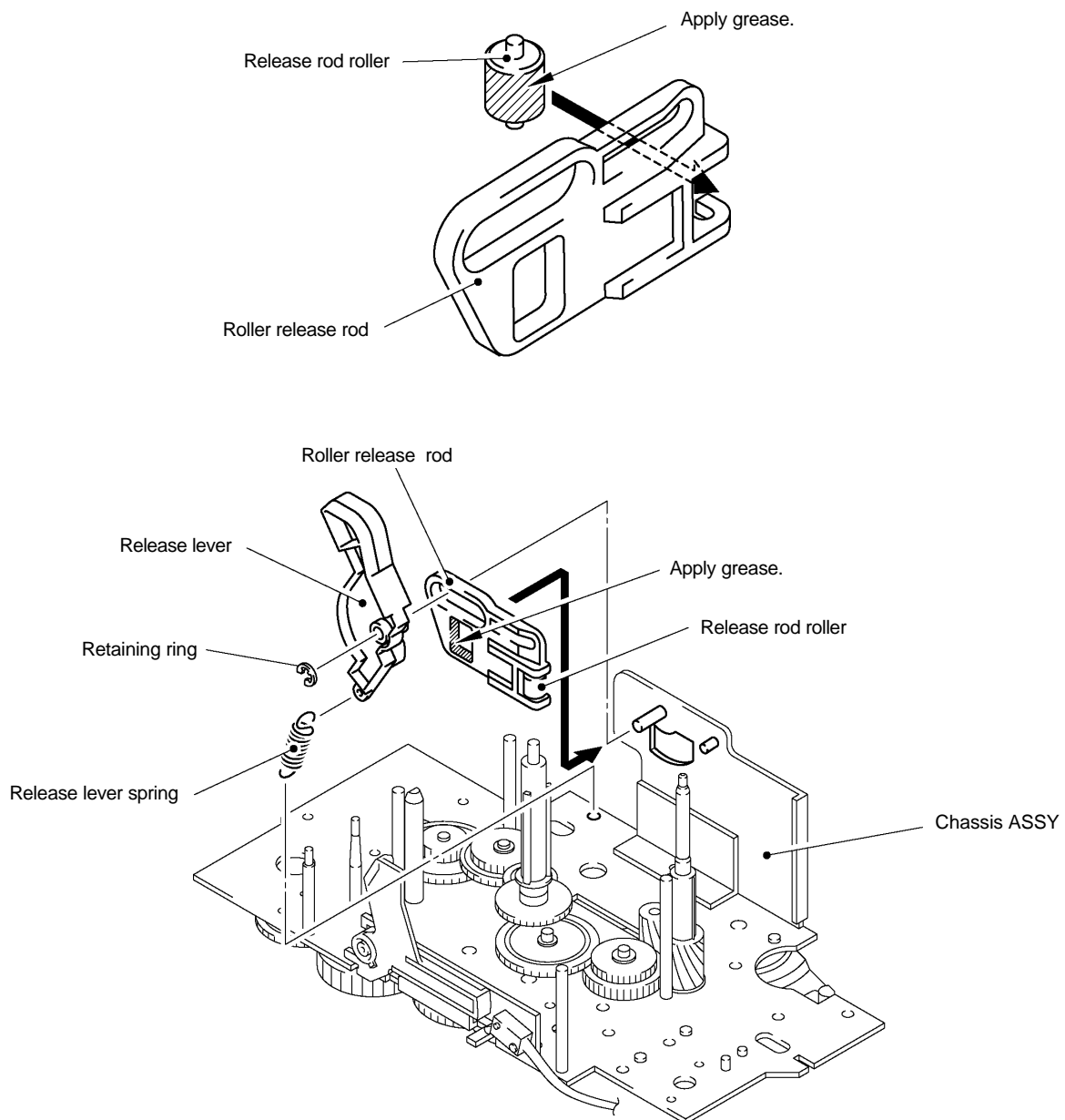
Fig. 3.2-17 Reassembling the Roller Release Rod

III-39

■ Reassembling the Carriage Motor ASSY

(1) Assemble the HC motor holder on the carriage motor ASSY with two screws.

Note: Apply the silicon grease (Shin-Etsu Chamical brand G501) by a half rice-grain sized drop on "A" portion of carriage motor ASSY.
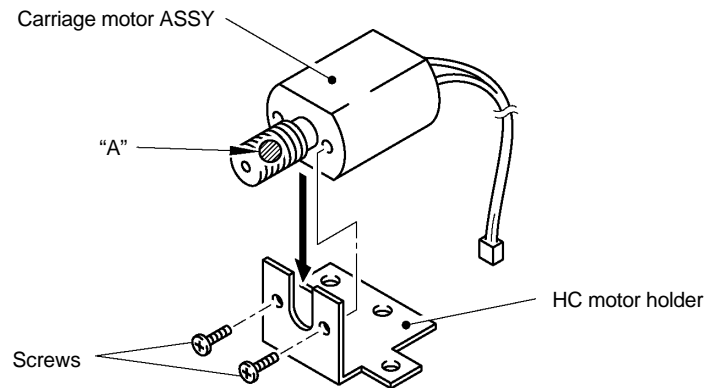
Fig. 3.2-18 Reassembling the Carriage Motor ASSY (1)

(2) Assemble the carriage motor ASSY on the chassis ASSY with a screw.

Note: Fit the holes on the HC motor holder in two places, first, to the two positioning bosses of the back of chassis ASSY and then secure the screw.
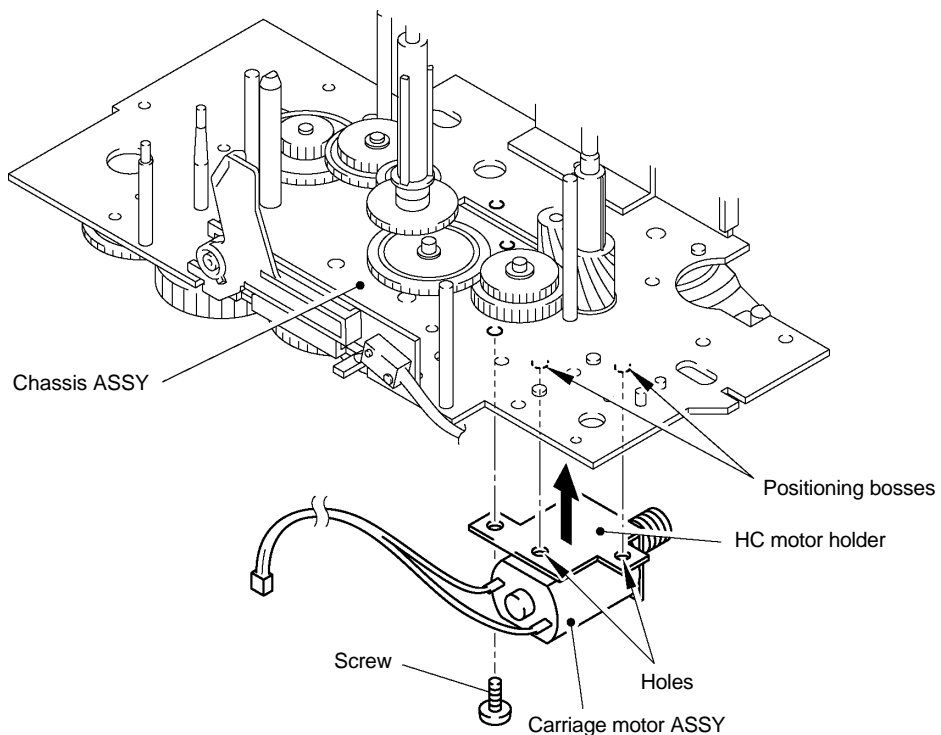
Fig. 3.2-19 Reassembling the Carriage Motor ASSY (2)

■ Reassembling the Tape Control Motor ASSY

(1) Assemble the tape control motor ASSY on the chassis ASSY with two screws.

Screws

Tape control
motor ASSY
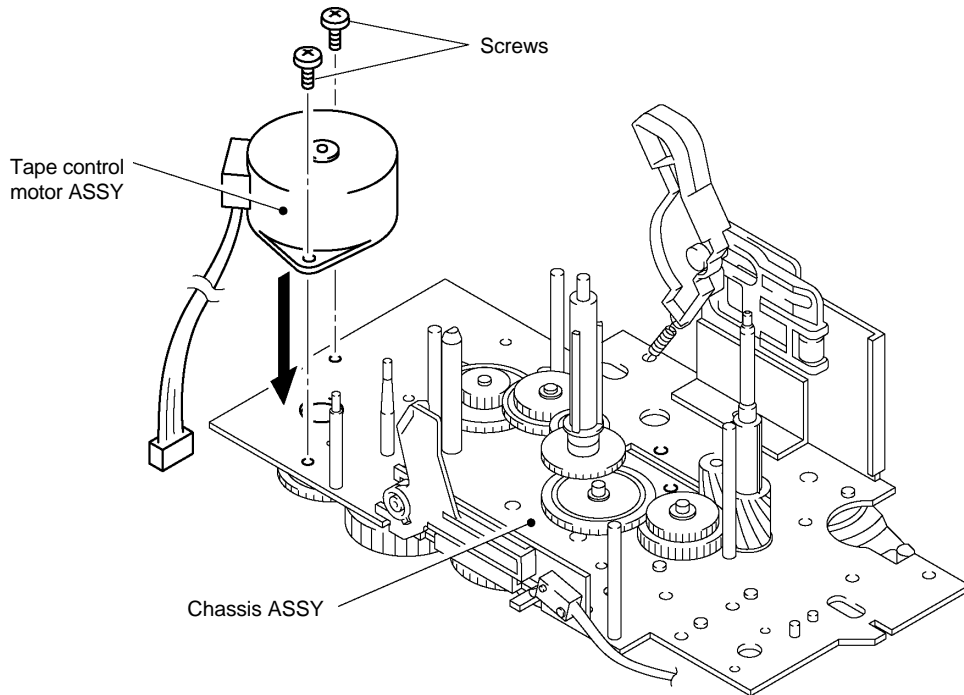
Chassis ASSY

Fig. 3.2-20 Reassembling the T Control Motor ASSY

■ Reassembling the Eject Motor ASSY

(1) Assemble the eject motor ASSY on the chassis ASSY with two screws.

Screws

Chassis ASSY
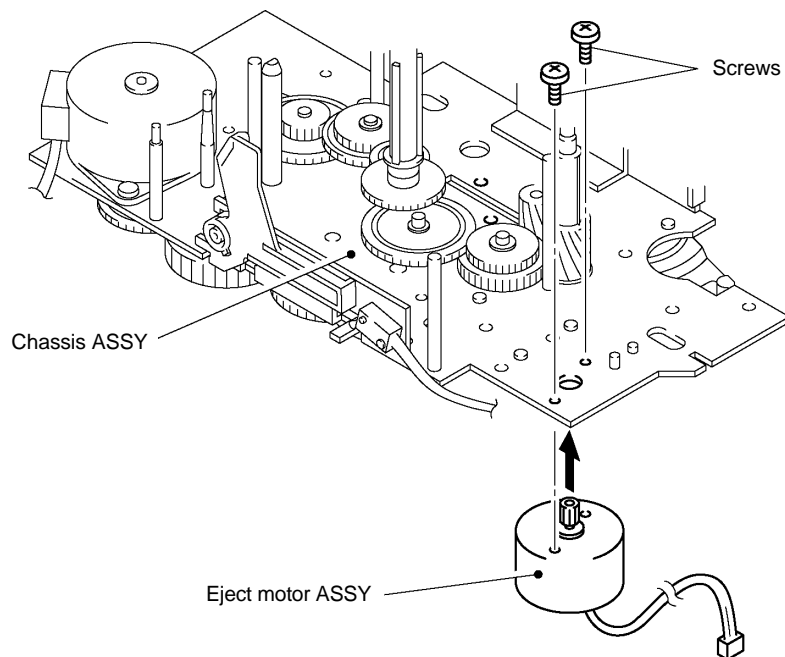
Eject motor ASSY

Fig. 3.2-21 Reassembling the Eject Motor ASSY

■ Reassembling the Eject Idle Gear and Double Gear 1

(1) Assemble such the components as retaining ring, eject idle gear, and double gear 1 on the chassis ASSY in this order.
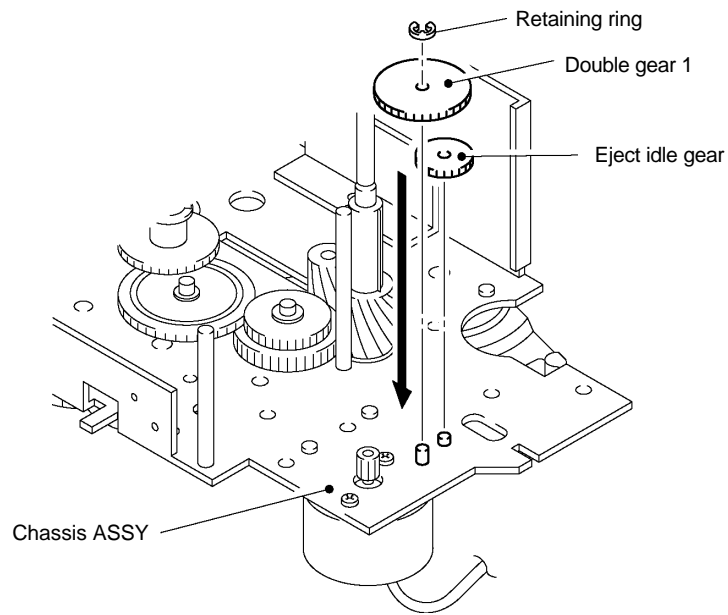
Fig. 3.2-22 Reassembling the Eject Idle Gear and Double Gear 1

■ Reassembling the Tape Feed Motor

(1) Assemble the tape feed motor on the chassis ASSY with two screws.
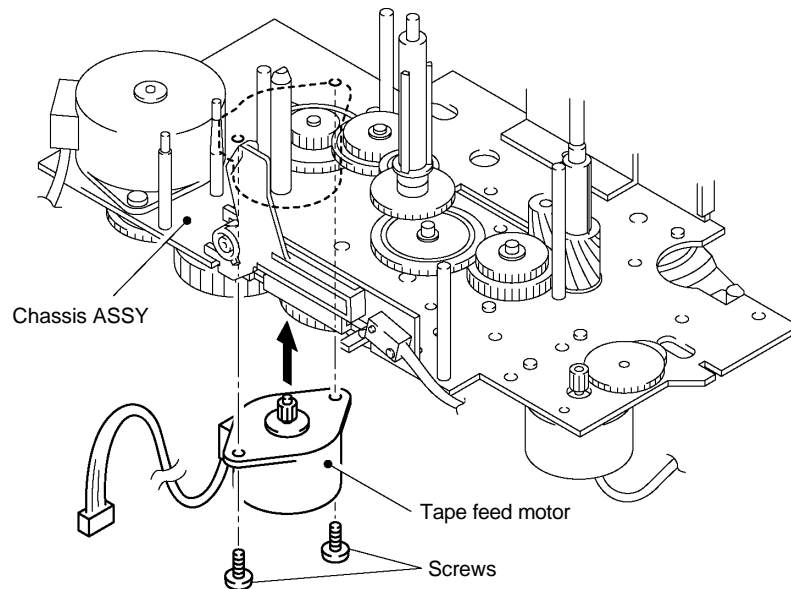
Fig. 3.2-23 Reassembling the Tape Feed Motor

■ Reassembling the Half Cutter Chassis ASSY

(1)   Fit the cutter sensor PCB ASSY to the positioning pins and secure it on the half cutter chassis ASSY with two screws.

(2)   Fit the HC support plate to the positioning pins and secure it on the half cutter chassis ASSY with two screws.
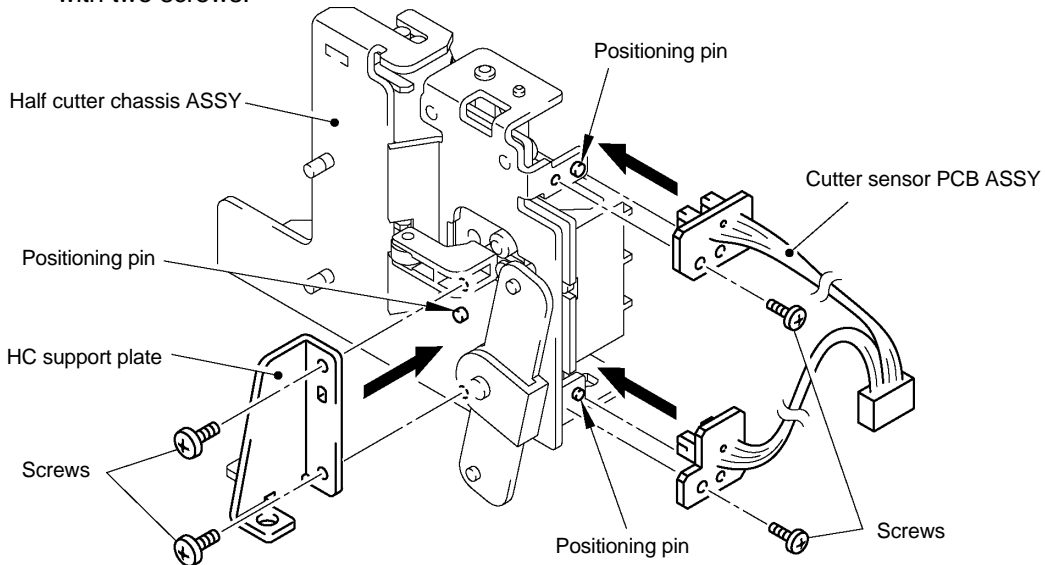
Fig. 3.2-24 Reassembling the Half Cutter Chassis ASSY (1)

(3)   Fit the half cutter chassis ASSY to the positioning pins in two places and secure it on the chassis ASSY with six screws.

Warning: Take care not to get injured in your fingers with the cutter blade.

Note: Apply the silicon grease (Shin-Etsu Chemical brand G501) by a half rice-grain sized drop with a brush on "A" portion of control plate.
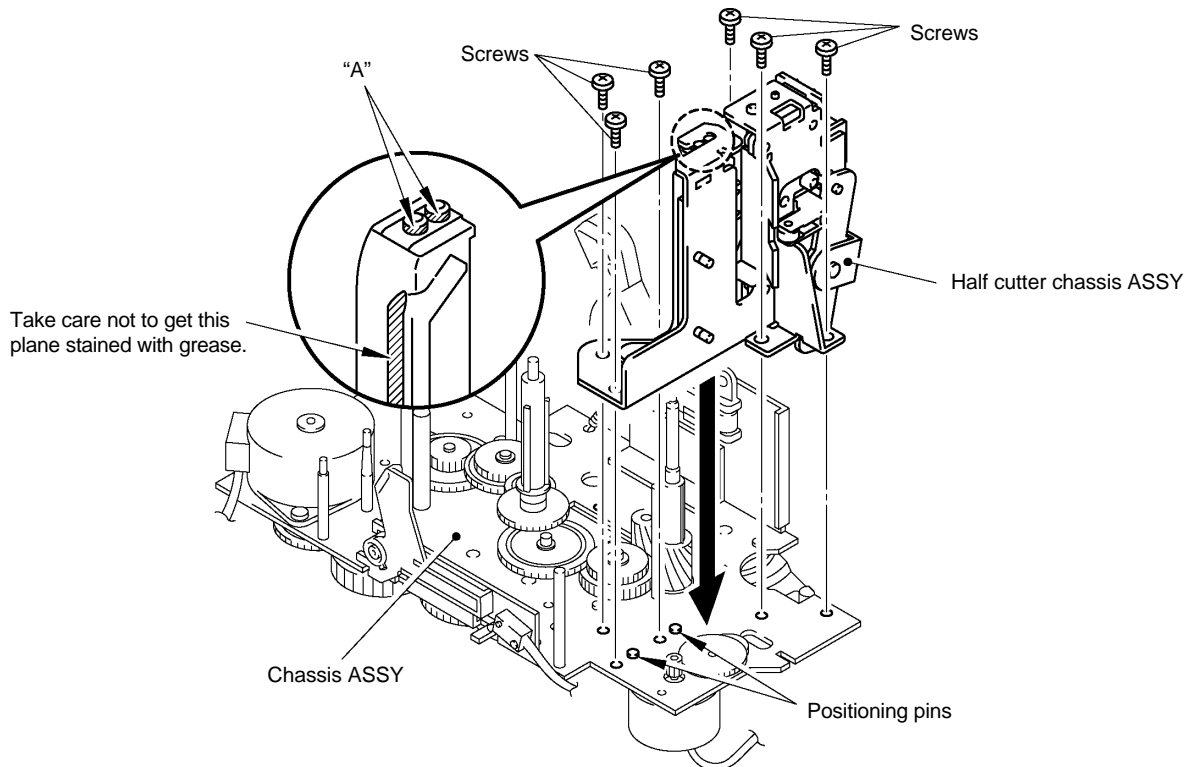
Fig. 3.2-25 Reassembling the Half Cutter Chassis ASSY (2)

III-43

■ Installing the Head/Roller Holder Unit

(1) Pass the thermal head harness and the AV sensor harness through the slots, shown in figure below, of the chassis ASSY.

(2) Assemble the head/roller holder unit on the chassis ASSY with two screws.

Note: Apply the silicon grease (Shin-Etsu Chemical brand G501) by a half rice-grain sized drop when assembling to the main frame.

(3) Move the release lever to check for the correct operation of the head/roller holder unit.
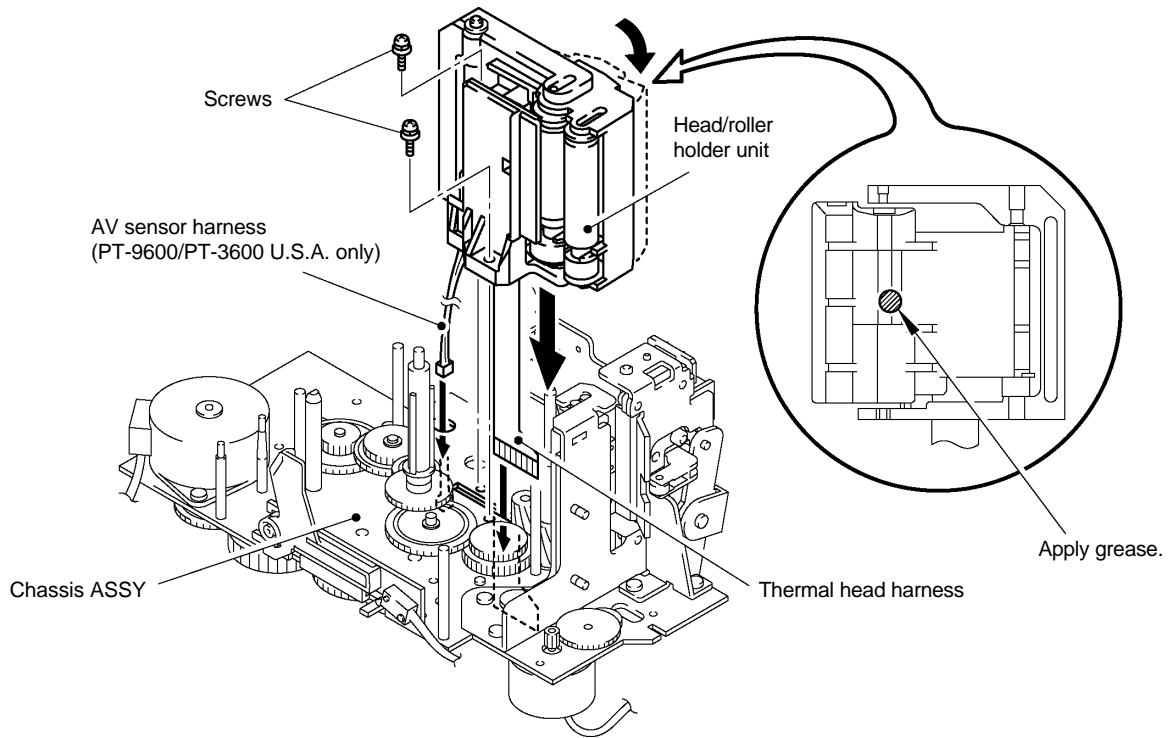
Fig. 3.2-26 Installing the Head/Roller Holder Unit

■ Reassembling the Eject Unit

    (1)   Assemble the eject gear on the eject roller shaft.

    (2)   Assemble the eject rubber on the eject roller shaft.
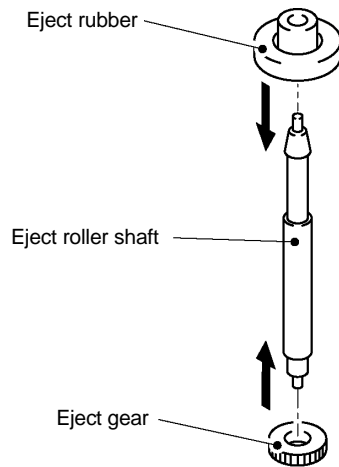
Fig. 3.2-27 Reassembling the Eject Unit (1)

    (3)   Assemble the eject roller ASSY on the tape guide.

Note: Apply the silicon grease (Shin-Etsu Chemical brand G501) by a quarter rice-grain sized drop to the both tips of the eject roller shaft. Make sure not to apply the silicon grease to the eject rubber.
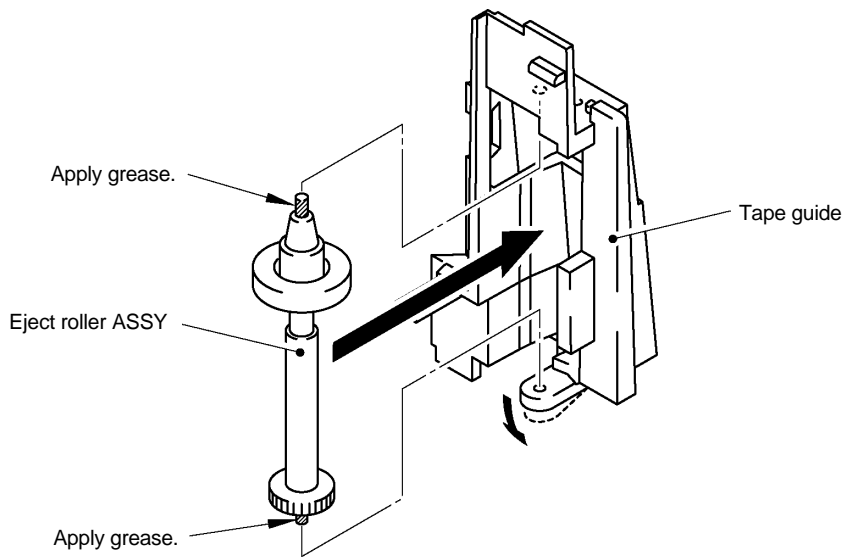
Fig. 3.2-28 Reassembling the Eject Unit (2)

(4)   Secure the eject shaft spring to the eject unit with a screw.
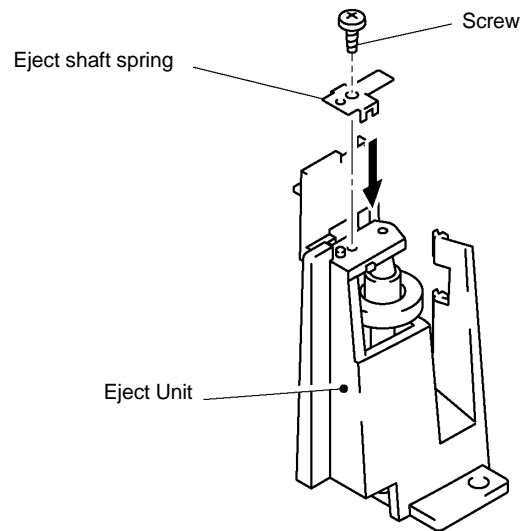
Fig. 3.2-29 Reassembling the Eject Unit (3)

(5)   Fit the positioning pin of the eject unit to the slit of the chassis ASSY and secure it to the chassis ASSY with a screw.
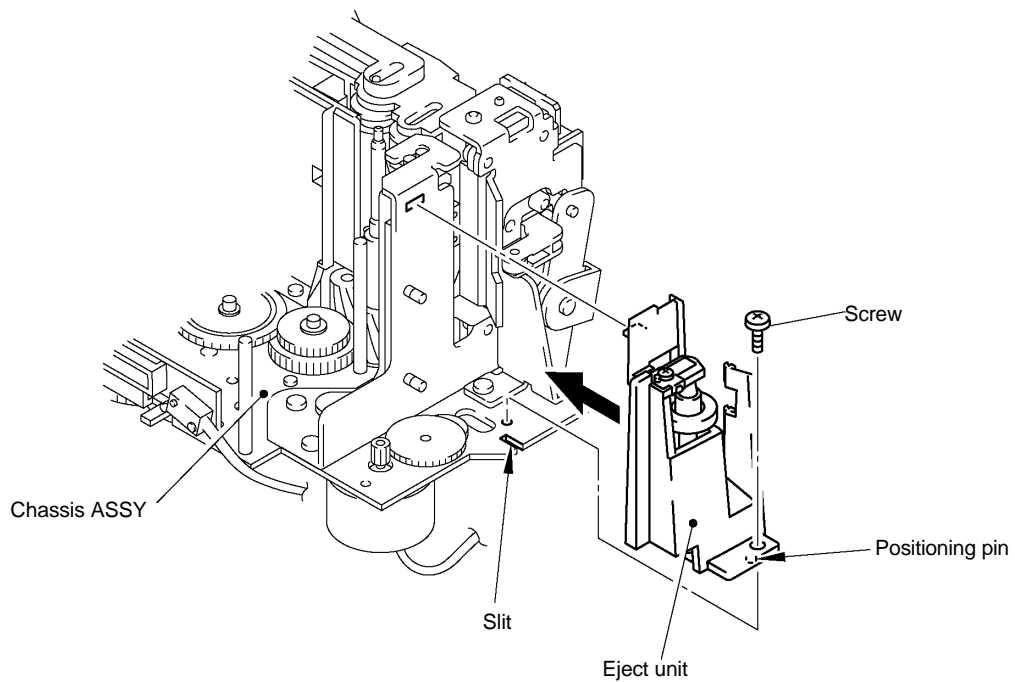
Fig. 3.2-30 Reassembling the Eject Unit (4)

[5]   Installing the Chassis Unit

(1) Fit the chassis unit to the bosses in three places and secure it to the bottom cover with three screws. Secure FG wire "C" together.

Note: Pay attention not to have any cables and harnesses between the bottom cover and the frame.

(2) Fit the following harnesses on the main PCB ASSY.

- Tape feed motor harness

- Carriage motor harness

- Eject motor harness

- Tape control motor harness

- Cutter sensor harness

- AV cassette sensor harness (PT-9600/PT-3600 U.S.A.)

- AV sensor harness (PT-9600/PT-3600 U.S.A.)

- Thermal head harness

Note: Apply the silicon grease (Shin-Etsu Chemical brand G501) by a half rice-grain sized drop on each gears.
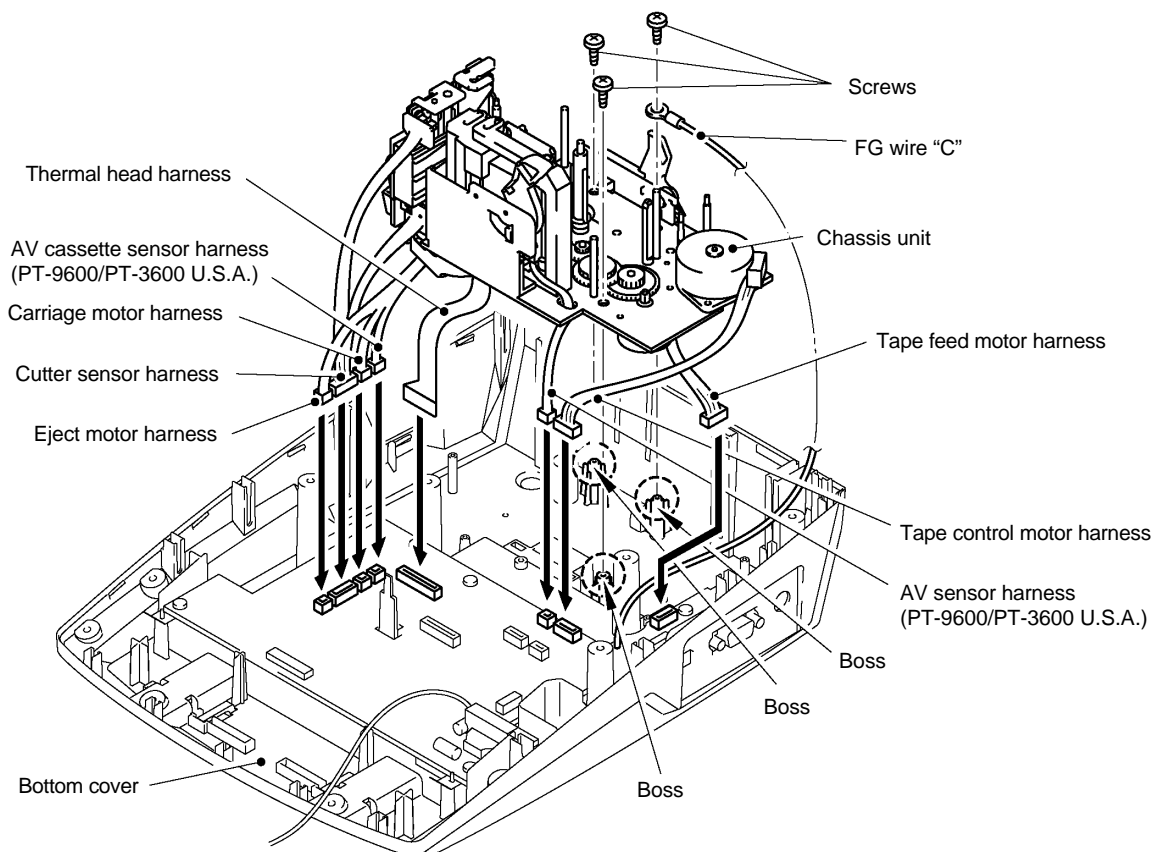
Fig. 3.2-31 Installing the Chassis Unit (1)
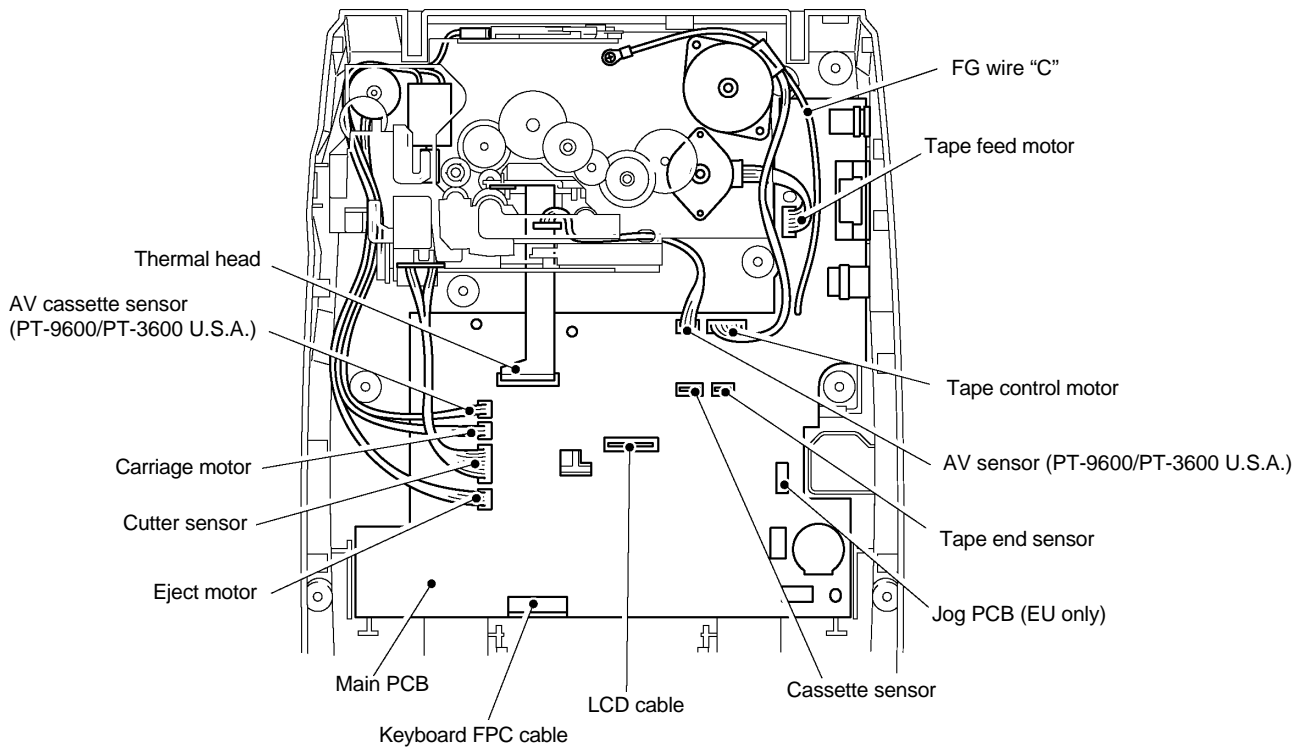
Fig. 3.2-32 Installing the Chassis Unit (2)

Thermal head

AV cassette sensor
(PT-9600/PT-3600 U.S.A.)

Carriage motor

Cutter sensor

Eject motor

Main PCB

Keyboard FPC cable

LCD cable

Cassette sensor

FG wire "C"

Tape feed motor

Tape control motor

AV sensor (PT-9600/PT-3600 U.S.A.)

Tape end sensor

Jog PCB (EU only)

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[6]   Reassembling the Body Cover

(1)   Hold the body cover while inserting the LCD PCB cable, the tape end sensor cable and cassette sensor cable to the main PCB ASSY.

(2)   Install the body cover to the bottom cover until confirming click noise sounds.

Note: Pay attention not to have any cables and harnesses between the both covers when combining them.
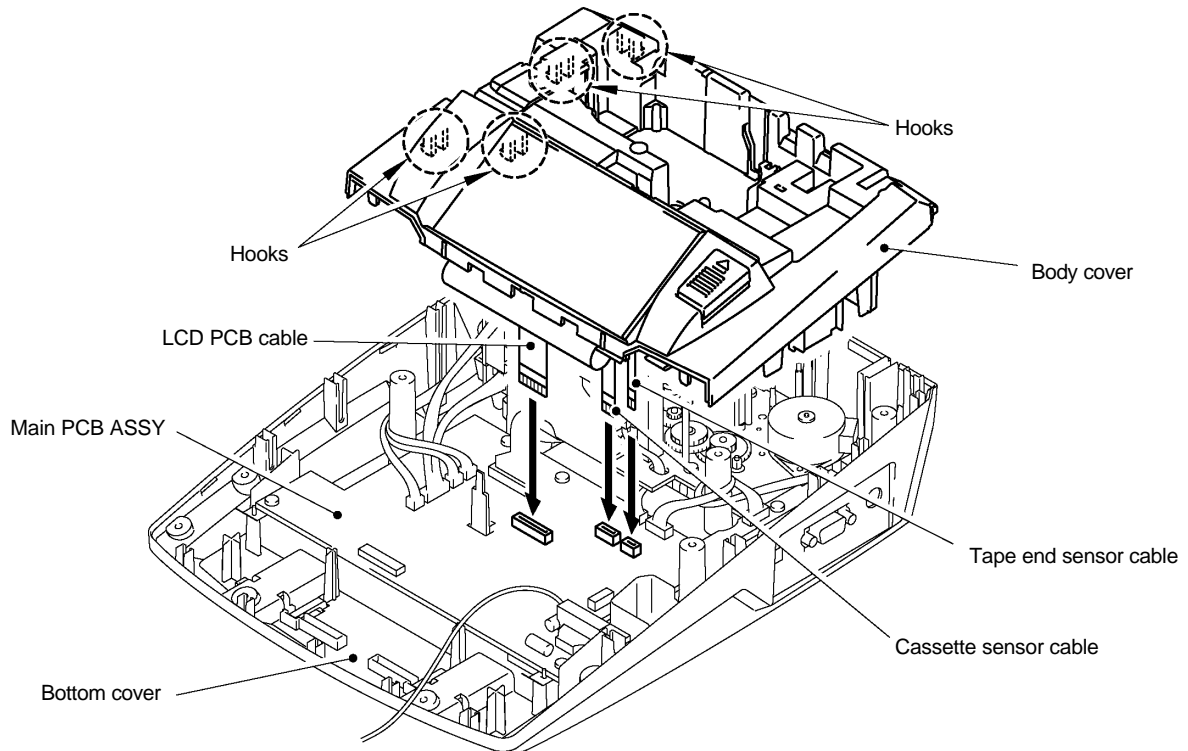
Fig. 3.2-33 Reassembling the Body Cover

[7]   Reassembling the KB Unit/Rubber Key Unit

(1)   Fit the slots on the contact rubber and the function rubber to the pins on the body KB cover and assemble them (PT-9600, PT-3600 U.S.A. only).
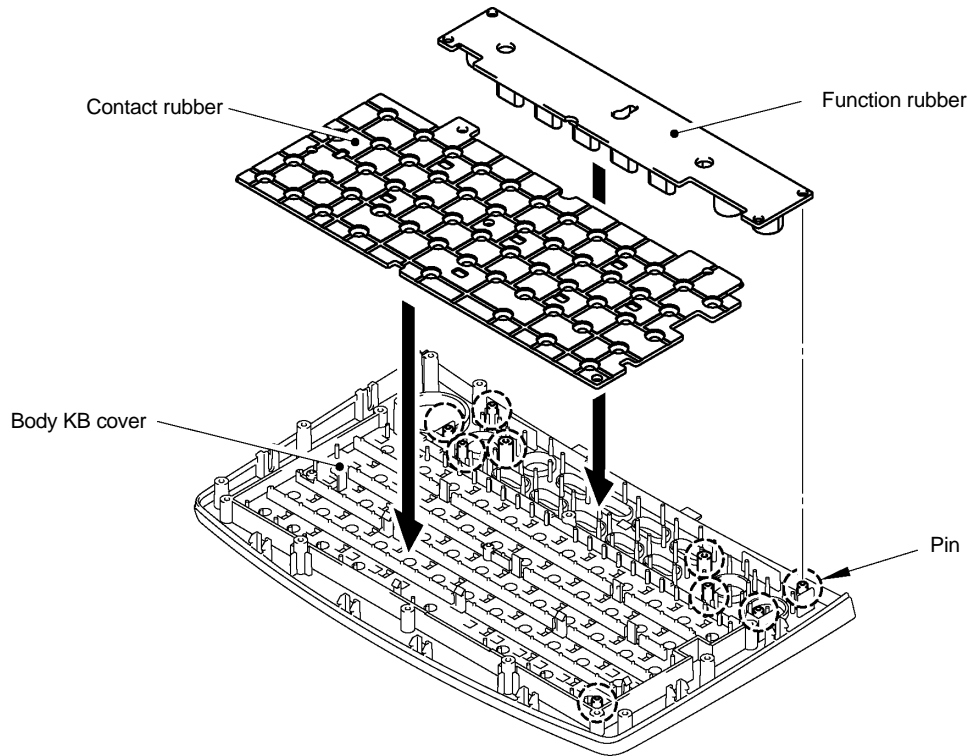
Fig. 3.2-34 Reassembling the KB Unit/Rubber Key Unit (1)

(2)   Fit the slots on the rubber key to the pins on the body KB cover and assemble them (PT-3600 EU only).
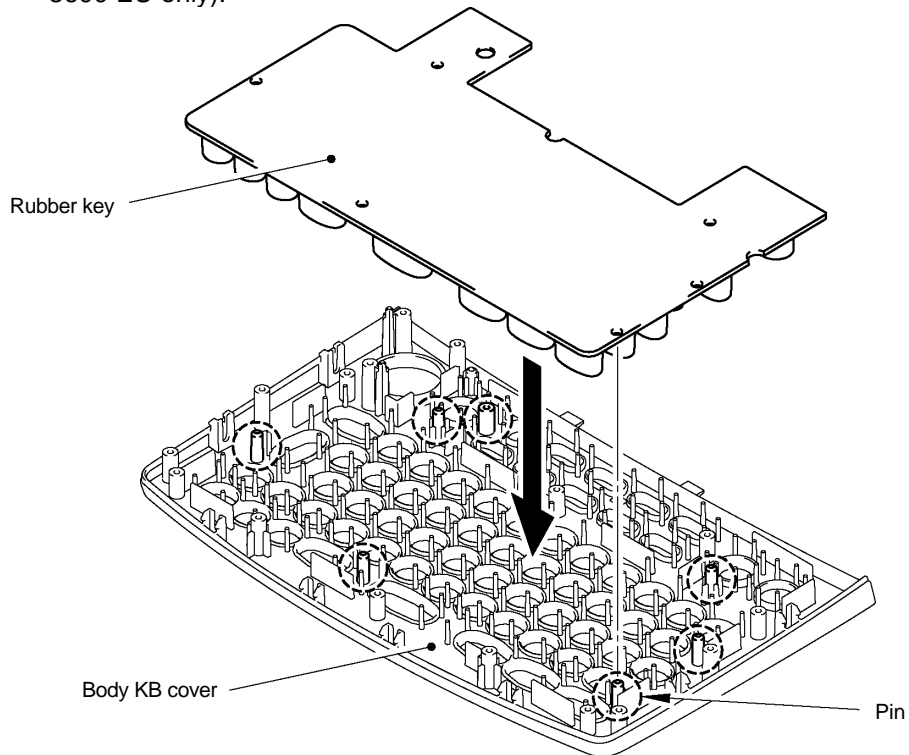
Fig. 3.2-35 Reassembling the KB Unit/Rubber Key Unit (2)

III-50

(3)   Fit the slot on the PCB to the hooks on the body KB cover and assemble them.
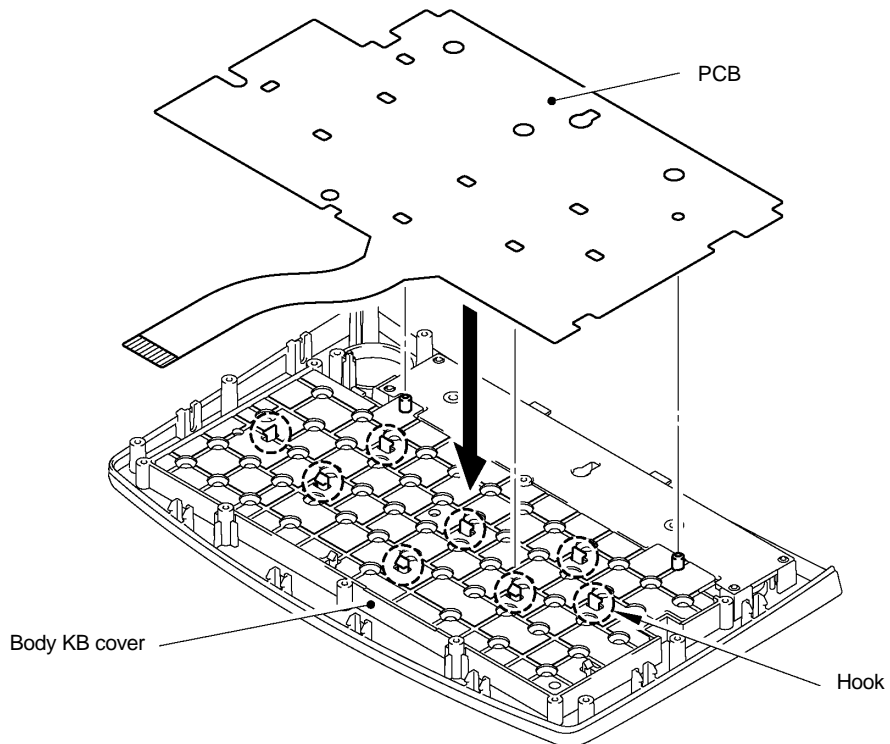
Fig. 3.2-36 Reassembling the KB Unit/Rubber Key Unit (3)

(4)   Fit the fix plate to the hooks in ten places on the body KB cover and secure it to the body
       KB cover with five screws.
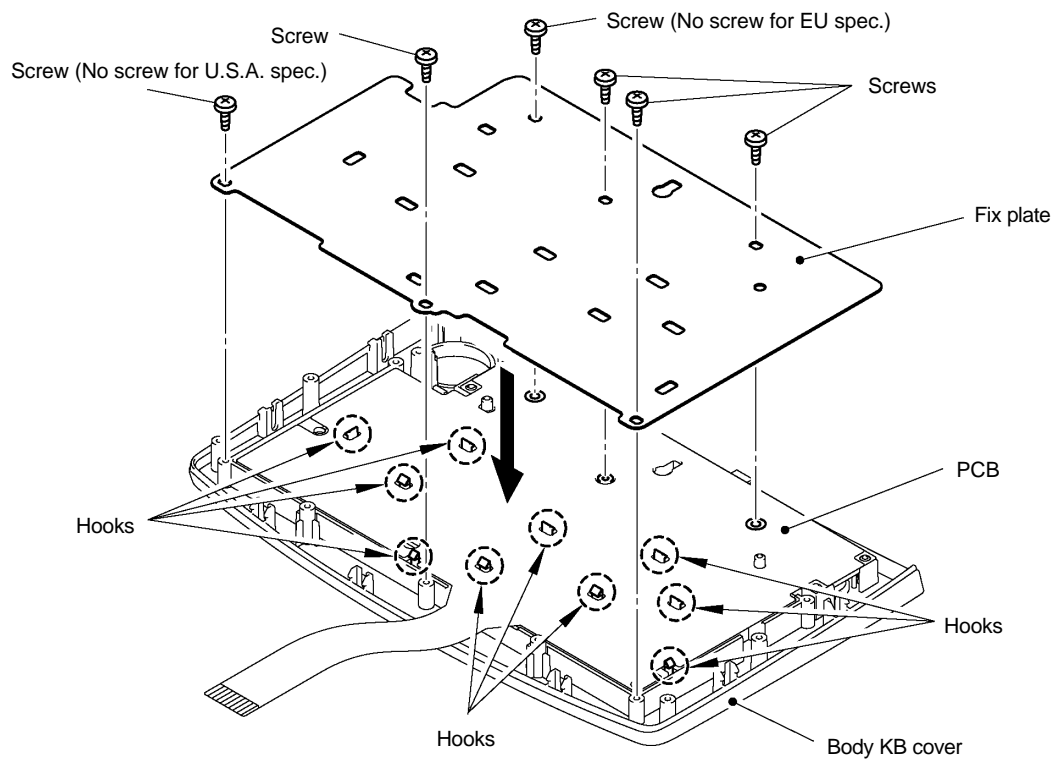
Fig. 3.2-37 Reassembling the KB Unit/Rubber Key Unit (4)

(5)   Fit the jog dial to the notch of the shaft of the jog PCB ASSY to assemble them.
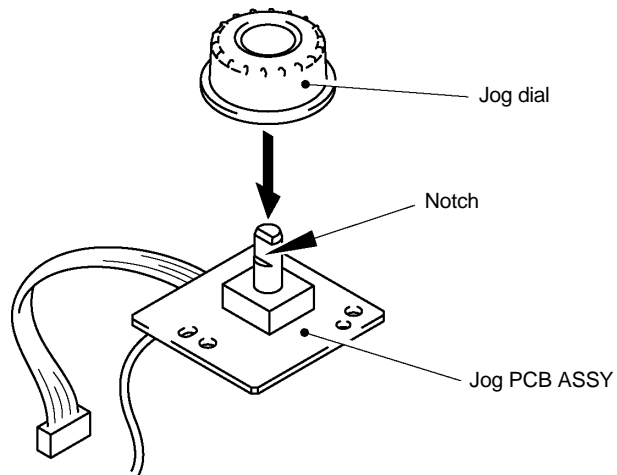
Fig. 3.2-38 Reassembling the KB Unit/Rubber Key Unit (5)

(6)   Fit the jog PCB ASSY on the two pins and secure it to the KB unit or rubber key unit with three screws (EU only).

(7)   Secure the FG wire "B" of the jog PCB ASSY to the KB unit or rubber key unit (EU only).
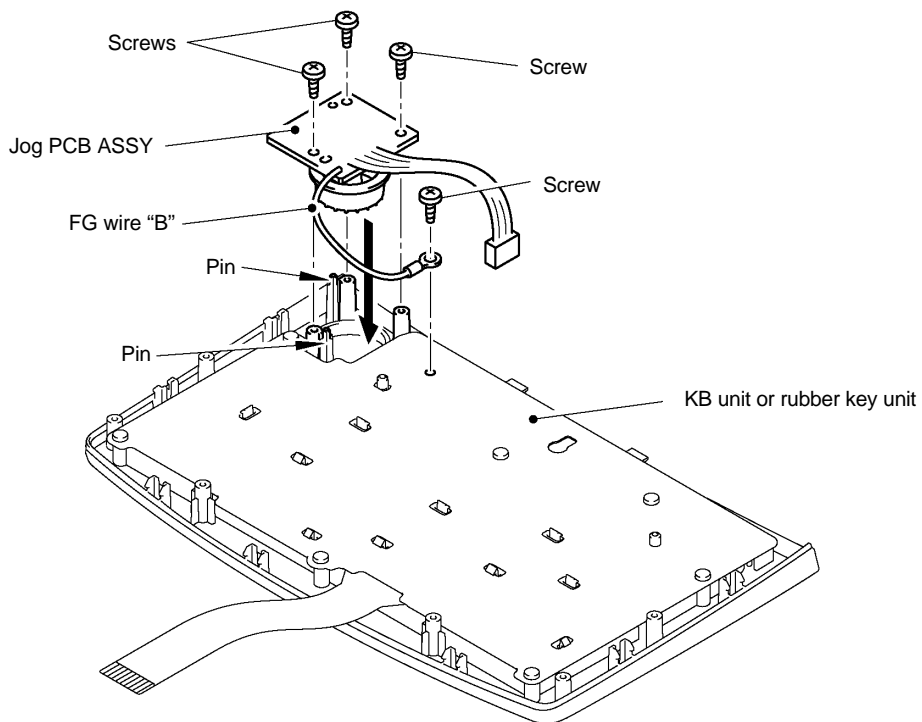
Fig. 3.2-39 Reassembling the KB Unit/Rubber Key Unit (6)

(8)   Install the key C SP wire on the key C (PT-9600/PT-3600 U.S.A.).

(9)   Install the key D SP wire on the key D (PT-9600/PT-3600 U.S.A.).

(10)   Install the key C on the KB unit (PT-9600/PT-3600 U.S.A.).

(11)   Install the key D on the KB unit (PT-9600/PT-3600 U.S.A.).
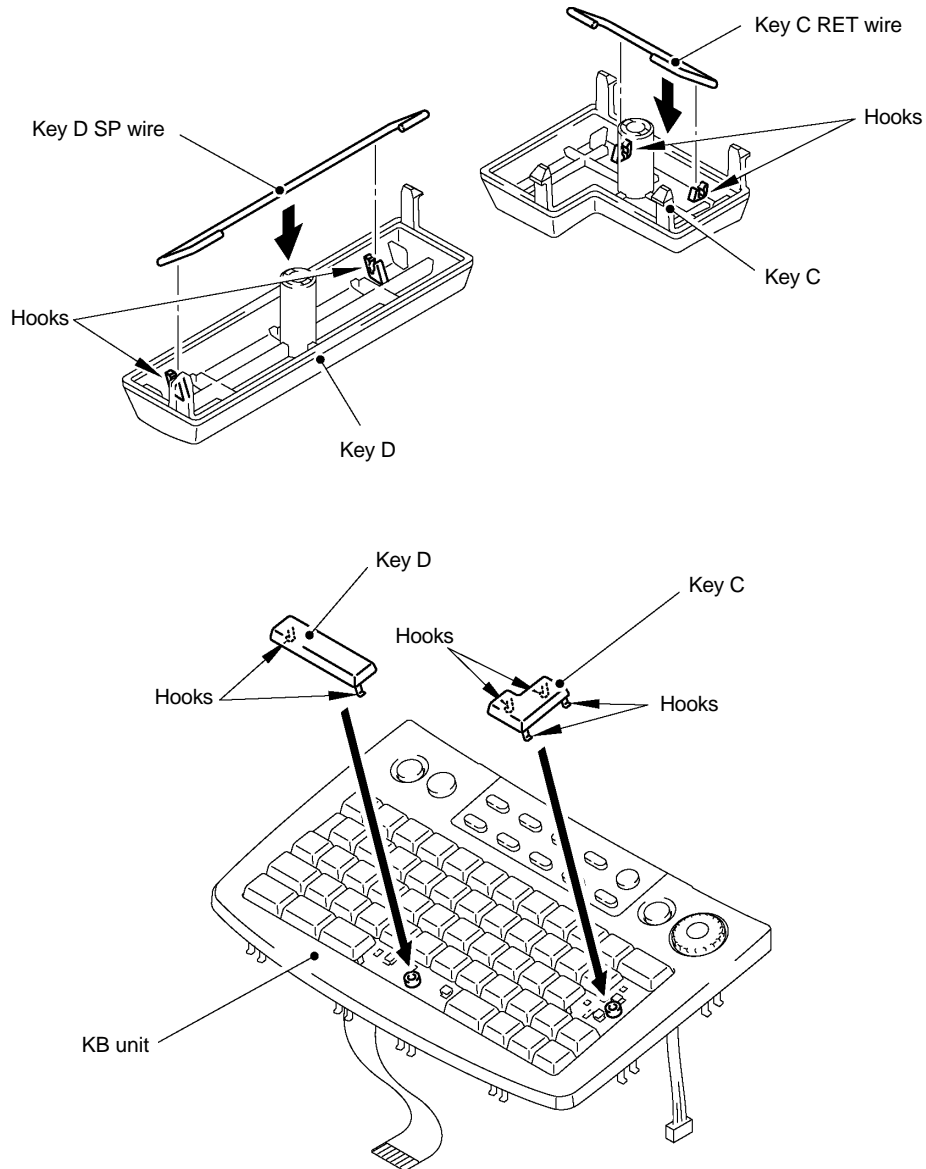
Fig. 3.2-40 Reassembling the KB Unit/Rubber Key Unit (7)

[8] Installing the KB Unit/Rubber Key Unit

(1) Secure the FG wire "A" to the back of the KB unit or rubber key unit with a screw (for U.S.A./CANADA spec. only).

(2) Connect the jog PCB ASSY harness to the connector on the main PCB and lock it. (for EU spec. only)

(3) Insert the FPC cable into the connector on the main PCB and lock it while holding the KB unit or rubber key unit up (for U.S.A./CANADA spec. only).

(4) Hold the KB unit or rubber key unit while passing the FPC cable though the slit of the ferrite core and insert the harness to the connector on the main PCB (for EU spec. only).

Note: Exchange the cushion of the ferrite core, if it is damaged.

(5) Assemble the KB unit or rubber key unit to the bottom cover with the hooks in eight places until confirming click noise sounds.

Note 1: Be sure not to catch the FG wire "A" between any hooks.

Note 2: Ensure that no harness rides on the support lib of the jog PCB (for EU spec. only).
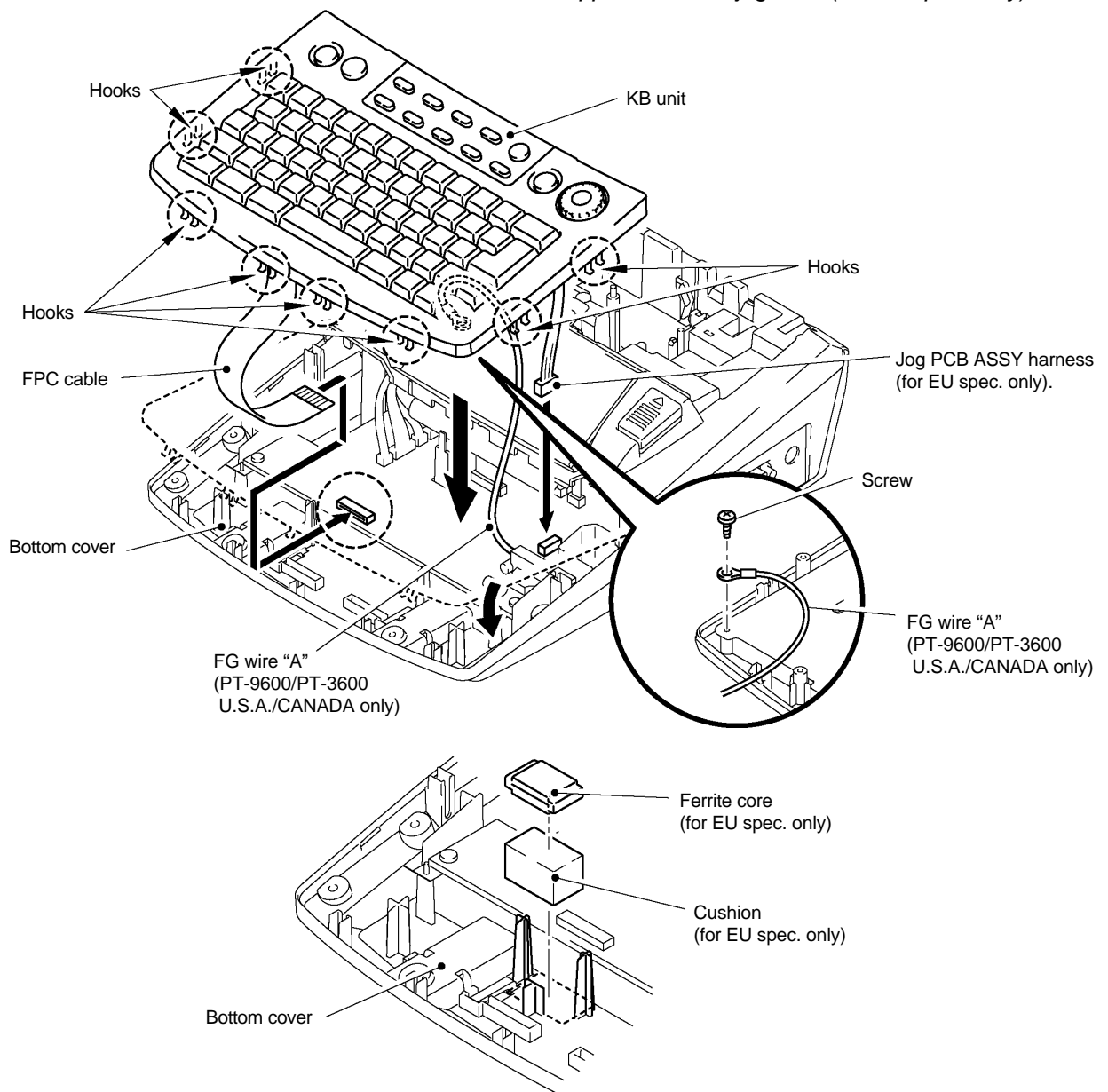
Fig. 3.2-41 Installing the KB Unit/Rubber Key Unit

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[9]   Reassembling the Bottom Cover

(1)   Turn the machine over.

(2)   Assemble the bottom cover with twelve screws.
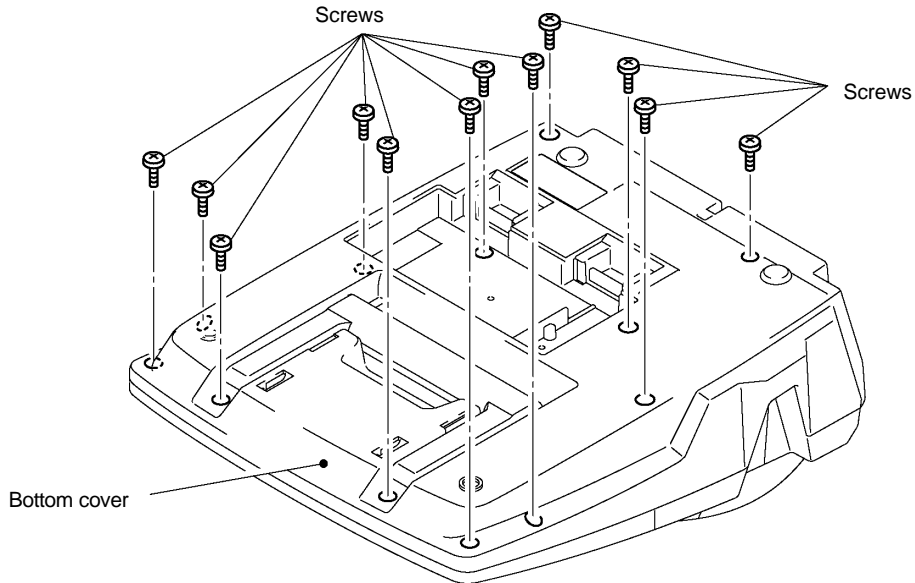
Fig. 3.2-42 Reassembling the Bottom Cover (1)

(3)   Connect the battery connector to the connector of the bottom cover and contain the battery in the machine (PT-9600 only).

(4)   Fit the battery lid "A" to the slits of the bottom cover in three places and push the battery lid until the "B" can be nipped (PT-9600 only).

Note: Exchange the cushions of the battery lid if those are broken (PT-9600 only).

(5)   Turn the machine up.
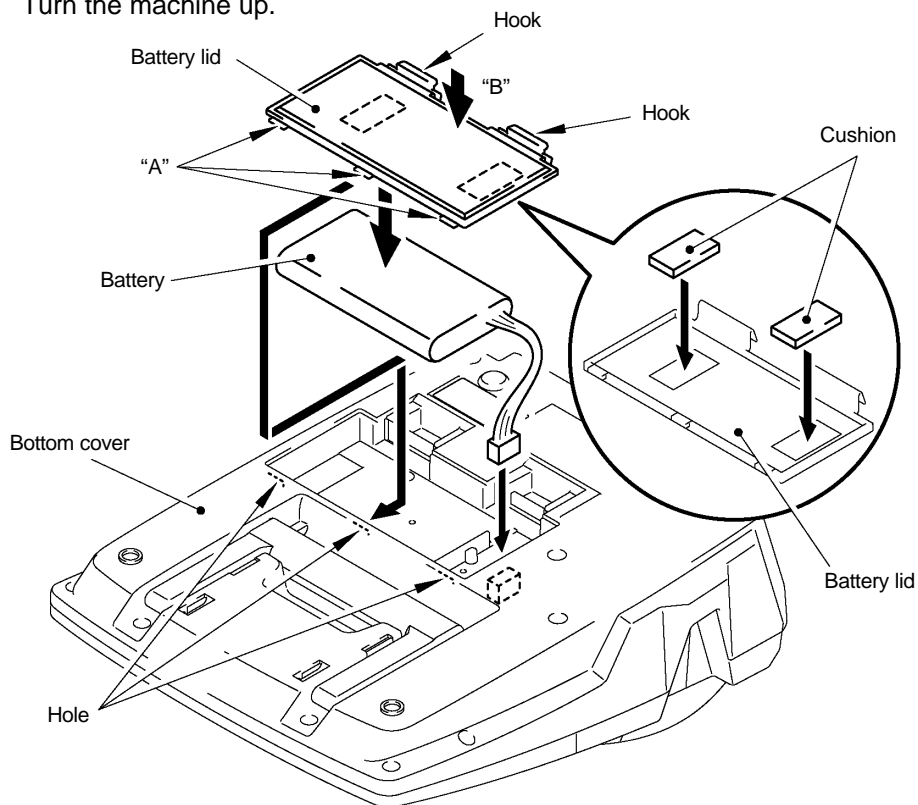
Fig. 3.2-43 Reassembling the Bottom Cover (2)

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[10] Reassembling the Cassette Cover ASSY

(1) Assemble the cassette presser spring to the cassette cover ASSY.

(2) Insert the hinges of the cassette presser to the "A" portions of the cassette cover ASSY respectively and then insert the hooks of the cassette presser to the "B" portions of the cassette cover ASSY in two places.
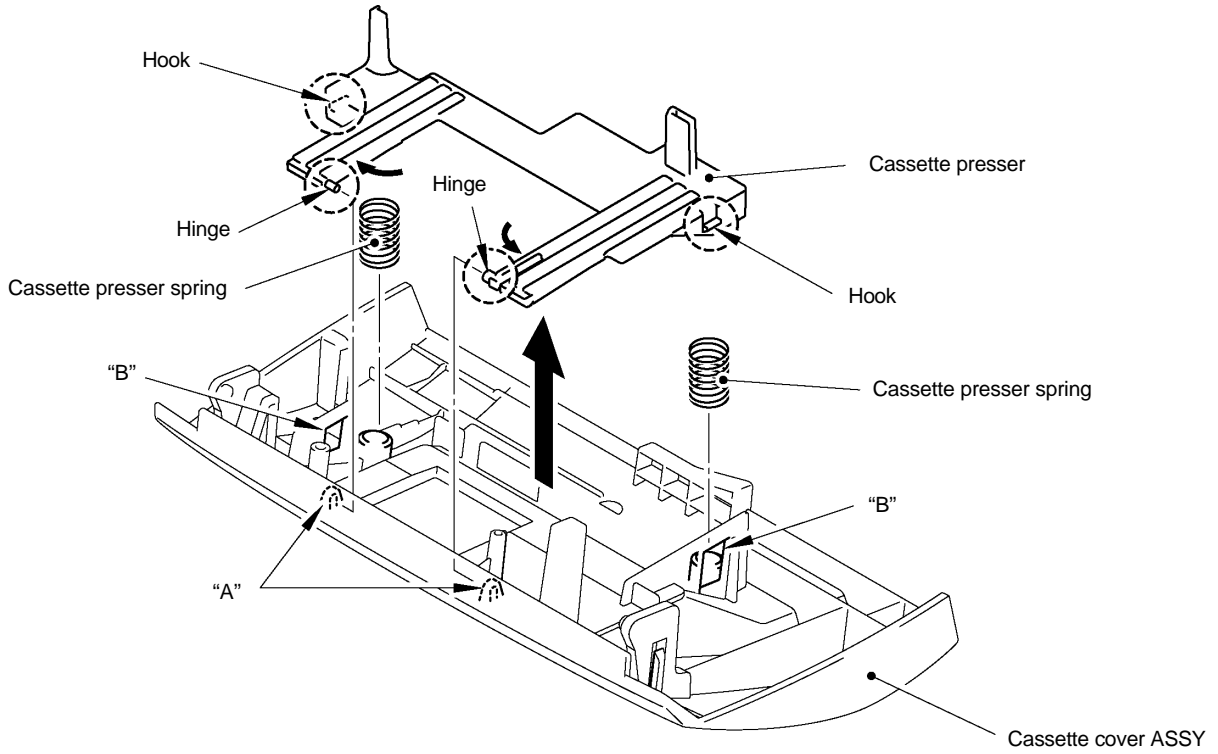
Fig. 3.2-44 Reassembling the Cassette Cover ASSY (1)

(3) Push the hinge of the cassette cover ASSY into the slots of the machine until confirming click noise sounds.

Note 1: Examine the opening action of the cassette cover after installing it. Press the release button. If the cassette cover opens fully without stopping at the expected stop position, exchange the brake pad.

Note 2: After attaching brake pad, apply the silicon grease (Shin-Etsu Chemical brand G501) by a half rice-grain sized drop uniformly with a brush.
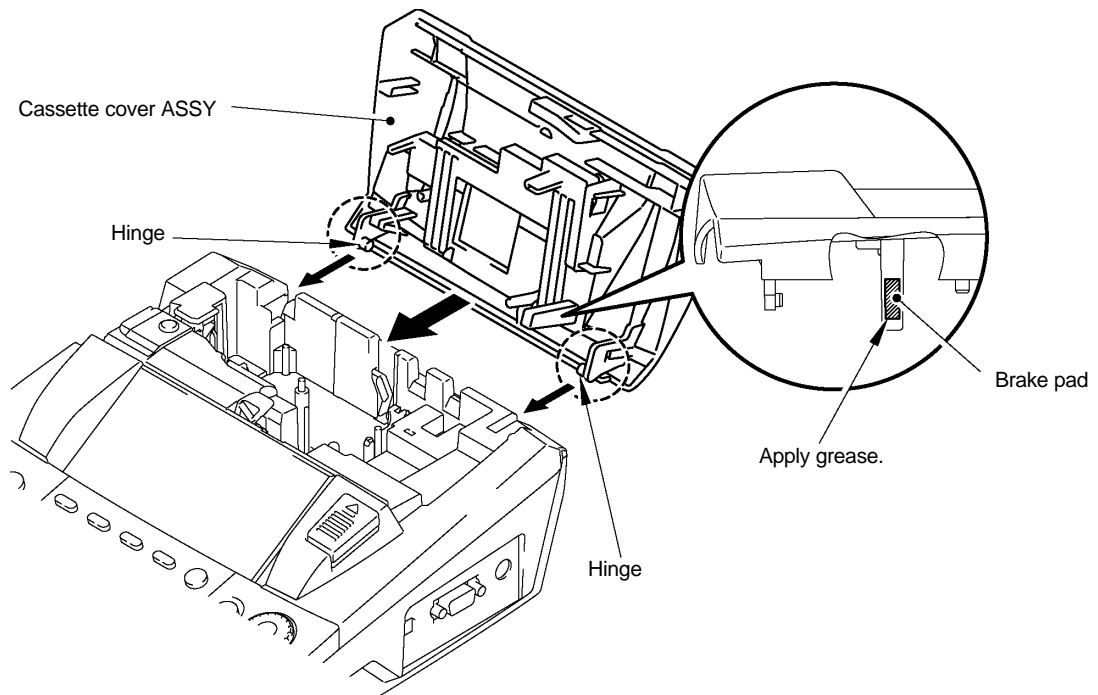
Fig. 3.2-45 Reassembling the Cassette Cover ASSY (2)

[11] Reassembling the Tape Cassette

(1)   Pull up the release lever.

(2)   Install the tape cassette.

(3)   Close the cassette cover.

Tape cassette

Release lever

Cassette cover
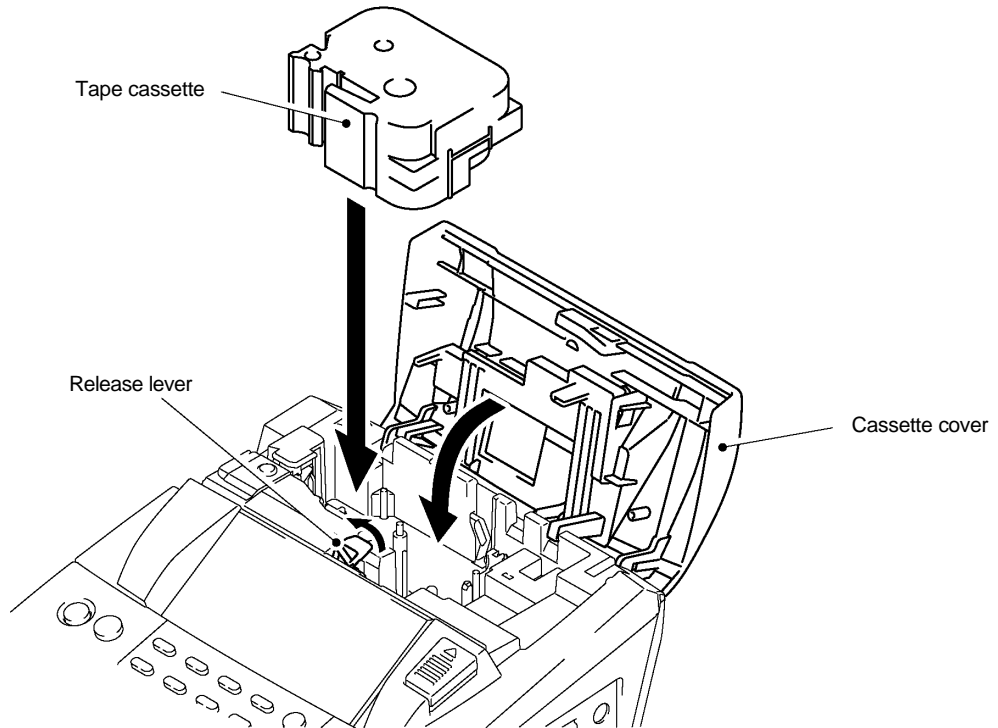
Fig. 3.2-46 Reassembling the Tape Cassette

[12] Final Check

1. Inspection Mode Starting Procedure

The Inspection Mode is initiated by holding down the "Code", "K" and "ON/OFF" keys simultaneously when the internal RAM is cleared while electrical power is OFF.   (The display shifts to one as shown in Fig.2 when shifting to the Inspection Mode.)

However, the error processing will be started when the solder point error occurred, and the display shifts to one as shown in Fig.1.

Note: First, release the "ON/OFF" key and then release the "Code" and "K" keys.

1.1. Solder Point Check

This mode checks the solder points. Operation finishes with displaying as shown in Fig.1, if the same type of solder points is ON for more than 2 points, or no solder point is ON.
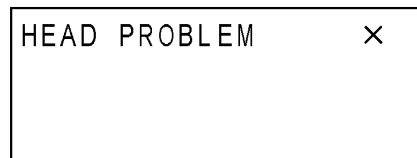
```
┌─────────────────────────────┐
│ HEAD PROBLEM          ✕     │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 1

2. Modes for Inspection
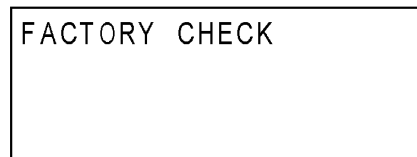
```
┌─────────────────────────────┐
│ FACTORY CHECK               │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 2

These Modes are used to perform the final inspection for the repaired products. The list below shows the inspection modes. Make good use of these modes in classifying into the modes to be applied and not to be applied according to the details of repairs.

Note 1: Depression of the mode selection key allows shifting to the other mode when you are in the initial level of every mode.

Note 2: The modes, the latter half of Note 2, are also provided in addition to the modes listed below, but are not applied for the inspection: Cut Mode (" U " key), Print Mode 2 (" I " key), Avery Control Value Display Mode (" O " key), Information Mode (" P " key), Factory Set Mode 1 (" T " key), and Factory Set Mode 2 (" Y " key). Details of these modes are left out as not used for the inspection operation.

Note 3: The following modes are used only at the replacement of main PCB: Specification Change Mode (" 1 " key), AC Adapter Rank Adjustment Mode (" 2 " key), RS I/F Port Check Mode (" 0 " key), Clock Display Mode (" Q " key), Charge Check Mode (" W " key), and USB Mode (" A " key).

Note 4: Full Cutter Adjustment Mode (" F " key) and Tape Control Motor Excitation-Phase Check Mode (" G " key) are used at the replacement of main PCB and the parts of the cutter mechanism.

* Specification Change Mode : " 1 " key

* AC Adapter Rank Adjustment Mode : " 2 " key

* Sensor Check Mode : " 3 " key

* LCD Display Check Mode : " 4 " key

* Half Cutter Adjustment Mode : " 5 " key

* Key Inspection Mode : " 6 " key

* Print Mode 1 : " 7 " key

* Avery Detection Voltage Mode : " 8 " key

* Avery Print Mode : " 9 " key

* RS I/F Port Check Mode : " 0 " key

* Clock Display Mode : " Q " key

* Charge Check Mode : " W " key

* Avery Control Value Display Mode : " E " key

* Margin Set Mode : " R " key

* USB Mode : " A " key

* Full Cutter Adjustment Mode : " F " key

* Tape Control Motor Excitation-Phase Check Mode: " G " key

2.1. Specification Change Mode (" 1 " key)

This mode determines a country unique specification.

(1)   Press the "RET" key while the LCD displays as shown in Fig. 2. The display shifts to the Specification Change Mode as shown in Fig. 3.

```
COUNTRY  SET          *



```
Fig. 3

(2)   Press the "RET" key. The display shifts to one as shown in Fig.4.
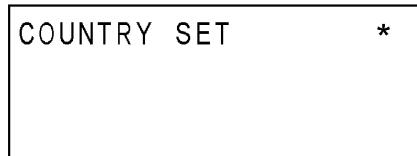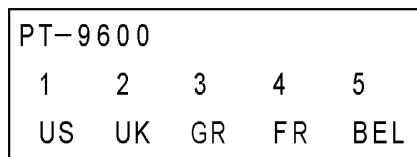
```
PT-9600

1    2    3    4    5

US   UK   GR   FR   BEL
```
Fig. 4

(3)   Select a country by pressing the number key (1 through 5).

(4)   The machine writes the country setting into the EEPROM when the "RET" key is pressed and also shifts to the AC Adapter Rank Adjustment Mode as shown in Fig. 5.

2.2. AC Adapter Rank Adjustment Mode (" 2 " key)

This mode detects the source voltage (output voltage of adapter) precisely.

```
┌─────────────────────────────────┐
│ ADAPTER RANK ADJ.     *         │
│                                 │
│                                 │
│                                 │
└─────────────────────────────────┘
```
Fig. 5

(1)   Press the "RET" key. The display shifts to one as shown in Fig.6.

Note : Use a DC regulated power supply because 24±0.1V voltage must be supplied through the AC jack as the standard voltage.

```
┌─────────────────────────────────┐
│ ADAPTER  RANK  ADJ.             │
│   A/D          ○or×             │
│                                 │
│                                 │
└─────────────────────────────────┘
```
Fig. 6

(2)   If the source voltage falls into the specified voltage (22V through 26V), " ○ " will be displayed; if out of the range, "X" will be displayed.

(3)   Press the "RET" key. The machine reads the voltage, writes it into the EEPROM and then shifts to the Sensor Check Mode as shown in Fig.7.

2.3. Sensor Check Mode (" 3 " key)

This mode checks the functions of any sensors.

```
┌─────────────────────────────────┐
│ SENSOR  CHECK            *      │
│                                 │
│                                 │
│                                 │
└─────────────────────────────────┘
```
Fig. 7

(1)   Press the "RET" key. The display shifts to one as shown in Fig.8.
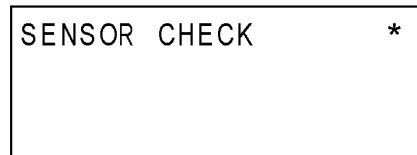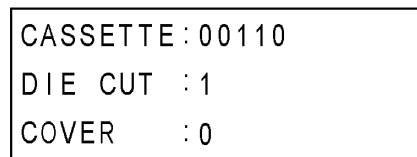
```
┌─────────────────────────────────┐
│ CASSETTE:00110                  │
│ DIE CUT :1                      │
│ COVER    :0                     │
└─────────────────────────────────┘
```
Fig. 8

(2)   The machine checks the functions of the cassette sensor, the die cut cassette sensor and the cover open sensor and displays the current state. (Push the switch; then "1" is displayed, and release it; then "0" is displayed.)

(3)   Press the "RET" key while the LCD displays as shown in Fig.8 after closing the cassette cover. The display shifts to the LCD Display Check Mode as shown in Fig.9.

2.4. LCD Display Check Mode (" 4 " key)

This mode checks the quality of LCD display.
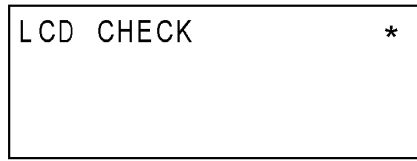
```
┌─────────────────────────────┐
│ L CD  CHECK            *     │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 9

(1) Press the "RET" key. The display shifts to the LCD Check 1 Mode as shown in Fig.10.
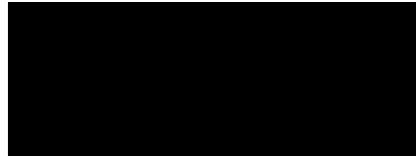
All dots on
All guidance on

Fig. 10

(2) Press the "RET" key. The display shifts to the LCD Check 2 Mode as shown in Fig.11.
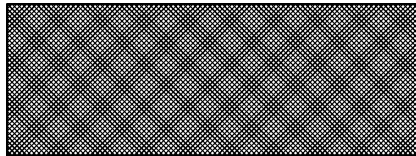
All slanting lines on
All guidance off

Fig. 11

(3) Press the "RET" key. The display shifts to the LCD Check 3 Mode as shown in Fig.12.
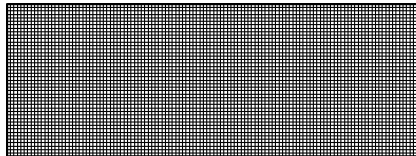
All cross lines on
All guidance on

Fig. 12

(4) Press the "RET" key. The display shifts to the LCD Contrast Set Mode as shown in Fig. 13.
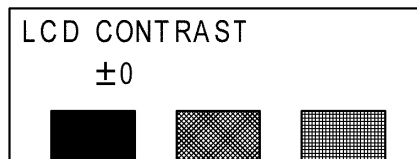
```
┌─────────────────────────────┐
│ LCD  CONTRAST               │
│     ±0                      │
│   ▅▅▅   ▓▓▓   ▒▒▒           │
└─────────────────────────────┘
```
Fig. 13

(5) Press the arrow keys(←— or —→). The figure on the LCD changes to "-1" or "+1". If the density of the LCD is too high, select "-1" and if too thin, select "+1". Then press the "RET" key to write the selection into the EEPROM.

Note 1: If you select the default setting "±0", the display shifts automatically to the Half Cutter Adjustment Mode.

Note 2: If you select "+1" or "-1", return to the step Fig.10 and repeat the steps until reaching the step Fig.12. Press the "RET" key at the end of the step Fig.12. The display shifts to the Half Cutter Adjustment Mode.

(6) Press the "RET" key while the LCD displays as shown in Fig.12. The display shifts to the Half Cutter Adjustment Mode as shown in Fig.14.

2.5. Half Cutter Adjustment Mode (" 5 " key)

This mode checks the half cut function.

```
┌─────────────────────────────┐
│ HALF CUTTER ADJ.       *    │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```

Fig. 14

(1)   Press the "RET" key. The display shifts to one as shown in Fig.15.

```
┌─────────────────────────┐
│ 1:CUT PRE1 200-160 5    │
│ 2:CUT PRE2 180    5     │
│ 3:HALF SET 180    1     │
└─────────────────────────┘
```
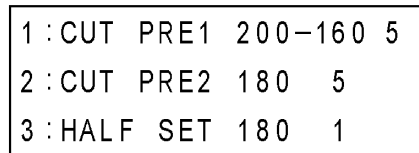
Fig. 15

(2)   Press the "1" key. The display shifts to the Print Mode 1 that enables to set and print the sample print to examine the cutter blade length.

(3)   Press the numeric keys to enter the cutting range and step length.

(4)   The entered value is fixed by pressing the "RET" key and then the sample printing is started. After the completion of printing, the display returns to the initial display of the setting-item selection.

Note 1: Press only the "RET" key to start the sample printing, if you accept the default setting values.

Note 2: To determine the sample print quality, set the feed length of the tape to 30 mm and reduce the step length from 200 to 160 by 5 steps. The acceptable print quality should be one to be hardly observed a tiny cutting scar at step 200. See the print sample shown in Fig.16. The half cut should be located below the numerical figure.

(Example: Step 200 through step 160)

200	195	190	185	180	175	170	165	160
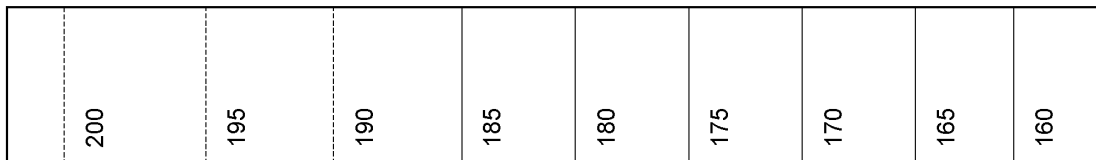
Fig. 16

(5) Press the "2" key. The display shifts to the Print Mode 2 that enables to set and print the sample print to examine the cutter blade length.

(6) Use the numeric keys to enter the central step number for cutting and the step numbers forward and backward by the specified step interval from the central step number for cutting examination.

(7) Press the "RET" key to fix the above entries. The machine starts the sample printing. Three lines of half cut operation are executed forward and backward according to the specified step length as shown in Fig.17. After printing, the display returns as shown in Fig 15 that enables to select the initial items.

Note 3: Press only the "RET" key to start the sample printing, if you accept the default setting values.

(Example: Step 185 ± 5 is specified)

185	184	183	182	181	180	179	178	177	176	175

Fig. 17

(8) Press the "3" key. The display shifts to the Half Cut Blade Length Adjustment Mode.

(9) Use the numeric keys to enter the central step number and the step length.

(10) Press the "RET" key to write the above entries into the EEPROM. The machine execute three lines of half cut operation forward and backward around the central step number according to the specified step length as shown in Fig.18. After printing, the display returns as shown in Fig 15 that enables to select the initial items.

Note 4: Prease only the "RET" key to sent the sample printing, if you accept the default setting values.

(Example: Step 180 ± 1 is specified)

181	180	179

Fig. 18

(11) Press the "RET" key while the LCD displays as shown in Fig.15. The display shifts to the Key Check Mode as shown in Fig.19.

Note 5: You must enter the Full Cutter Adjustment Mode and the Tape Control Motor Excitation-Phase Check Mode after the replacement of the main PCB or the parts of the cutter mechanism.

2.6. Full Cutter Adjustment Mode (" F " key)

This mode adjusts the location of the full cutter.

(1) Press the "F" key while the LCD displays as shown in Fig.19. The display shifts to the Full Cutter Adjustment Mode as shown if Fig. 20.

```
+-----------------------------+
| KEY CHECK              *     |
|                             |
|                             |
|                             |
+-----------------------------+
```

Fig. 19

```
+-----------------------------+
| FULL CUTTER ADJ.      *      |
|                             |
|                             |
|                             |
+-----------------------------+
```
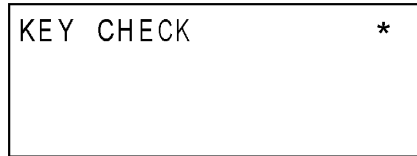
Fig. 20

(2) Press the "RET" key. The display shifts as shown in Fig.21.

```
+-----------------------------+
| HALF VAL.         180        |
| FULL SET   -15   3           |
|                             |
+-----------------------------+
```
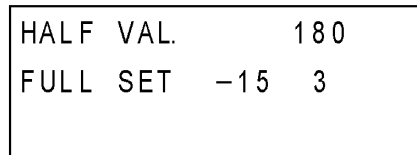
Fig. 21

(3) Press the "F" key. The display shifts to the Full Cut Blade Length Adjustment Mode.

(4) Use the numeric keys to enter the differential from the half cut step numbers and the step length.

(5) Press the "RET" key to write the above entries into the EEPROM. The machine execute three lines of full cut operation forward and backward around the central step number according to the specified step length as shown in Fig.22. After printing, the display returns as shown in Fig 21 that enables to select the initial items.

Note: If you accept the default settings, press the "RET" key to start the sample printing.

(Example: Half cut is 180 and step length is fixed to 15)

162   165   168
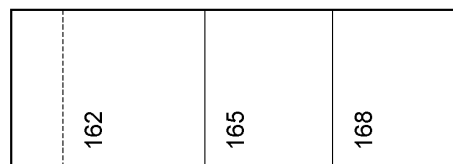
Fig. 22

(6) Press the "G" key while the LCD displays as shown in Fig.20. The display shifts to the Tape Control Motor Excitation-Phase Check Mode as shown if Fig. 23.

2.7. Tape Control Motor Excitation-Phase Check Mode (" G " key)

This mode checks the excitation-phase of the tape control motor.
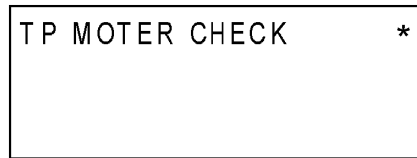
```
┌─────────────────────────────┐
│ T P  M O T E R  C H E C K      * │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 23

(1) Press the "RET" key. The display shifts to the one as shown in Fig.24.
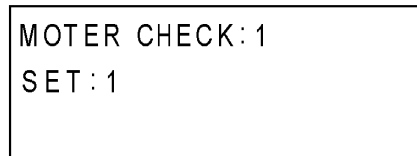
```
┌─────────────────────────────┐
│ M O T E R  C H E C K : 1        │
│ S E T : 1                   │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 24

(2) Press the "1" key to enter the mode for the phase positioning of tape control motor.

(3) Shift the phase of the tape control motor by pressing the "Space" key one by one to add the excitation on the selected phase for 3 seconds. On the other hand, change the LCD display at the same time. See the following table (Table 1) showing the combinations of the number displayed on the LCD and the excitation phase of the motor.

LCD display	4	3	2	1
Excitation phase of motor	CD	DA	AB	BC

Table 1

(4) Press the "2" key to enter the mode to set the starting phase of the tape control motor.

(5) Use the numeric key to write the starting phase of the tape control motor into the EEPROM. See the following table (Table 2) showing the combinations of the input value and the starting phase of the motor.

Input value	4	3	2	1
Starting phase	DA	AB	BC	CD

Table 2

(6) Press the "6" key while the LCD displays as shown in Fig.23. The display shifts to the Key Check Mode as shown if Fig. 19.

2.8. Key Check Mode (" 6 " key)

This mode checks the layout of the keyboard and its' continuity.
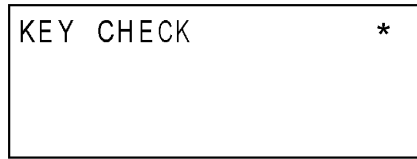
```
┌─────────────────────────────┐
│ KEY CHECK              *     │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 19

(1)   Press the "RET" key. The display shifts to one as shown in Fig.25.

Note 1: The numbers of keys are different depending on the specification. The key check is, therefore, required by the every specified specification.

(2)   The display as shown in Fig.19 indicates a key to be pressed. When the pressed key is proper, it will indicate a next key to be pressed. When the pressed key is not proper, it will indicate the key to be pressed and also display "X" as shown in Fig.26.

```
┌─────────────────────────────┐
│ KEY CHECK                   │
│                             │
│            " 1 "            │
│                             │
└─────────────────────────────┘
```
Fig. 25
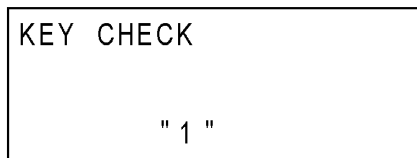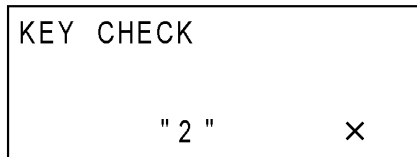
```
┌─────────────────────────────┐
│ KEY CHECK                   │
│                             │
│            " 2 "        ×   │
│                             │
└─────────────────────────────┘
```
Fig. 26

(3)   After the completion of full key check, it displays as shown in Fig.27 and the machine prints the contents as shown in Fig.28. The detail of Fig. 28 is as follows.

- Upper : KEY check result ("○ " for acceptable, "X" for unacceptable)

- Middle : Country specification

- Lower : Head rank

```
┌─────────────────────────────┐
│ KEY CHECK                   │
│                             │
│                             │
│                      OK     │
└─────────────────────────────┘
```
Fig. 27
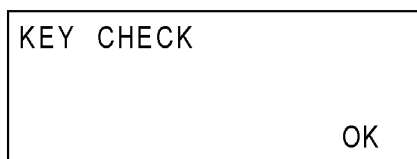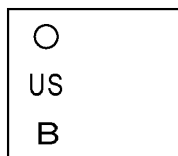
```
┌──────────┐
│ ○        │
│ US       │
│ B        │
└──────────┘
```
Fig. 28

(4) After cutting the tape, the mode returns to the Print Mode 1 as shown in Fig.33.

Note 2: For the product including the jog dial specification, this mode shifts to the Jog Check Mode as shown in Fig. 29 after the completion of full key check skipping the OK display and OK print processes. (Depress of the "Z" key allows shifting to the Jog Check Mode).
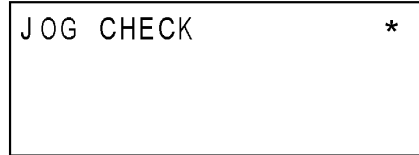
```
┌────────────────────────────┐
│ JOG CHECK              *    │
│                            │
│                            │
│                            │
└────────────────────────────┘
```
Fig. 29

(5) Press the "RET" key while the LCD displays as shown in Fig.29. The display shifts to one as shown in Fig.30.

(6) The arrow sign (⟵ or ⟶) moves synchronizing with the rotating direction of the jog dial. Press the "Set" key (the central button of the jog dial) when the arrow sign reaches the left by 3 points. (just above the first cursor at the left end) in the left mode as shown in Fig.31.

(7) If any error is detected, the machine displays as shown in Fig.32.

(8) When no error is confirmed, the display shifts to the right mode. Do the same check to the right direction.

(9) When all the check completes successfully the machine displays "OK" and then prints the same contents as shown in Fig.28.

(10) After cutting the tape, the mode shifts to the Print Mode 1 as shown in Fig.33.

```
┌────────────────────────────┐
│ JOG CHECK                  │
│                            │
│                            │
│      __    ⟸      __       │
└────────────────────────────┘
```
Fig. 30

```
┌────────────────────────────┐
│ JOG CHECK                  │
│                            │
│                            │
│   ⟸      __      __        │
└────────────────────────────┘
```
Fig. 31
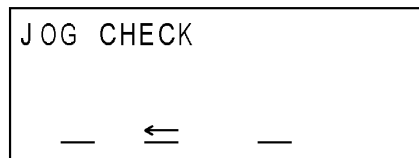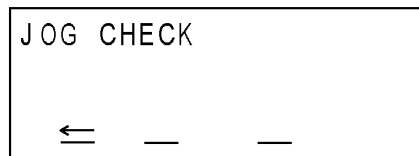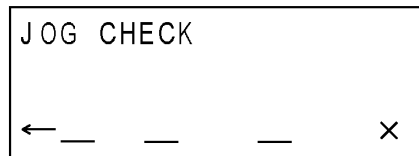
```
┌────────────────────────────┐
│ JOG CHECK                  │
│                            │
│                            │
│ ⟵__     __     __     ×    │
└────────────────────────────┘
```
Fig. 32

2.9. Print Mode 1 (" 7 " key)

This mode verifies the print quality and the print accuracy.

```
┌─────────────────────────────┐
│ PRINT1                    * │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
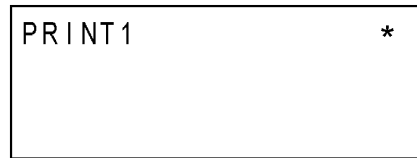
Fig. 33

(1) Press the "RET" key to start to print. After the completion of printing, this mode shifts to the Avery Detection Voltage Mode as shown in Fig.34.

Note: If the AC Adapter Rank Adjustment Mode and the Half Cutter Adjustment Mode were not completed (i.e., setting values had not been written in the EEPROM), the machine does not start to print.

(2) Verify the print quality and the print accuracy of the print sample.

69.2±3.5mm
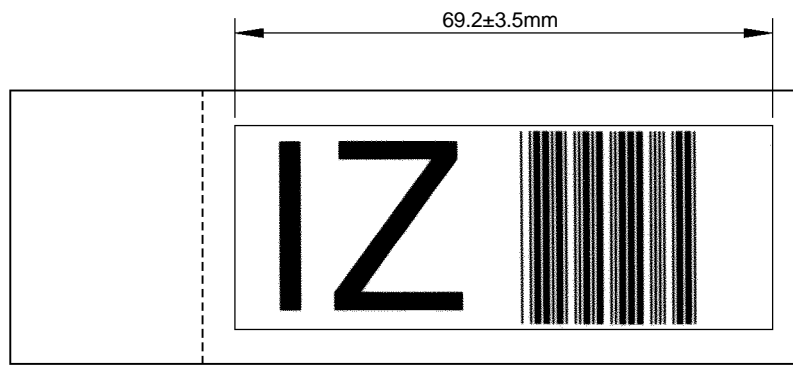
Print Sample 1

2.10. Avery Detection Voltage Mode (" 8 " key)

This mode reads the detection mark of the avery cassette and the reference voltage level of it, and writes the voltage level into the EEPROM of the main PCB.

Note 1: This mode is used only for PT-9600 and PT-3600 (U.S.A. version).

Note 2: Make sure to use an address labels cassette. Do not use any types of cassettes other than the avery cassette.

```
┌─────────────────────────────┐
│ AVERY MARK SET            * │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```

Fig. 34

(1)   Press the "RET" key. The display shifts to the Avery Detection Voltage Mode as shown in Fig.35.

(2)   Confirm that the detection section "A" of the address labels cassette is white. Then set it to the machine and close the cassette cover.

```
SET WHITE
AVERY TAPE
```

Fig. 35
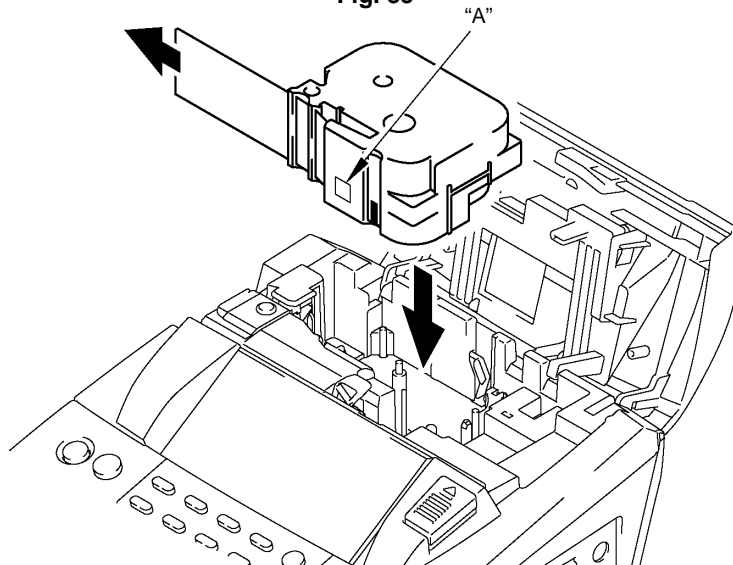
(3)   Press the "RET" key. The display shifts to one as shown in Fig.36.

(4)   Remove the cassette. Draw out the tape until the black section appears at the detection section of the address labels cassette. Then replace the cassette and close the cassette cover.

```
SET BLACK
AVERY TAPE
```

Fig. 36
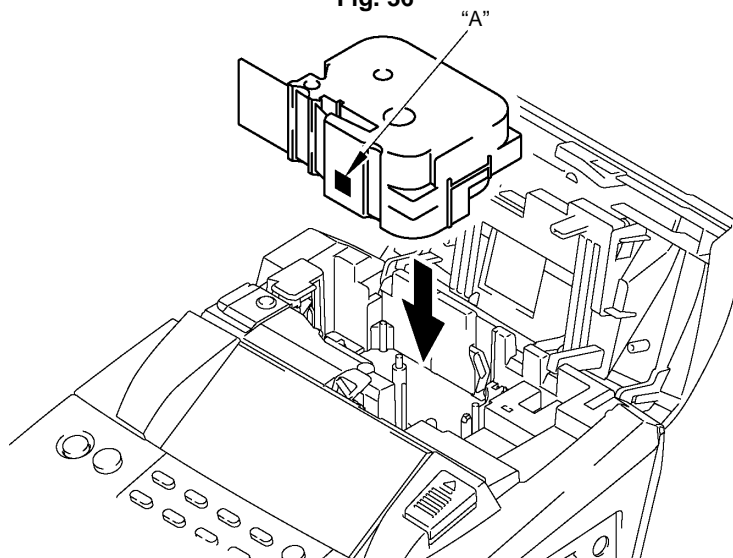
(5) Press the "RET" key. The display shifts to one as shown in Fig.37.

```
┌─────────────────────────────────┐
│ PRESS RET KEY                   │
│ TO SET                          │
│                                 │
│                                 │
└─────────────────────────────────┘
```
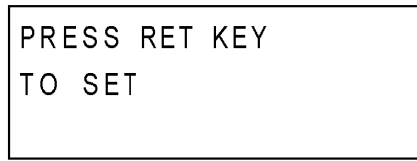
Fig. 37

(6) Press the "RET" key. The display shifts to one as shown in Fig.38.

Note 3: Here, if returns to the display as shown in Fig.35, restart from the step (2).

```
┌─────────────────────────────────┐
│ PORT & LEVEL                    │
│ COMPLETED                       │
│                                 │
│                                 │
└─────────────────────────────────┘
```

Fig. 38

(7) Press the "RET" key while the LCD displays as shown in Fig.38. The display shifts to the Avery Print Mode as shown in Fig.39.

2.11. Avery Print Mode (" 9 " key)

This mode verifies the start position of printing area of the print sample of the avery cassette.

Note 1: This mode is used only for PT-9600 and PT-3600 (U.S.A. version).

Note 2: Make sure to use an address labels cassette. Do not use any types of cassettes other than the avery cassette.

```
┌─────────────────────────────────┐
│ AVERY PRINT            *        │
│                                 │
│                                 │
│                                 │
└─────────────────────────────────┘
```
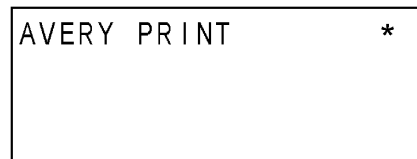
Fig. 39

(1) Press the "RET" key. The display shifts to one as shown in Fig.40.

(2) Set the address labels cassette to the machine and close the cassette cover.

```
┌─────────────────────────────────┐
│ SET ADDRESS                     │
│ AVERY TAPE                      │
│                                 │
│                                 │
└─────────────────────────────────┘
```

Fig. 40

(3) Press the "RET" key. The machine starts to print.

5±1.5mm   56.7±2.8mm

Print Sample 2

(4) After the completion of printing, the machine cuts the tape automatically and shifts the display to one as shown in Fig.41.

(5) Check the start position of the print area of the print sample.
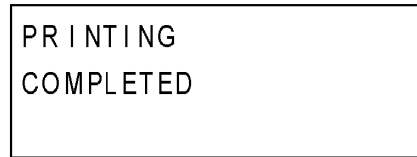
```
┌─────────────────────────────┐
│ PRINTING                    │
│ COMPLETED                   │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 41

(6) Press the "RET" key while the LCD displays as shown in Fig.41. The display shifts to the RS I/F Port Check Mode as shown in Fig. 42.

2.12. RS I/F Port Check Mode (" 0 " key)

This mode checks the RS I/F port.

Note: This mode is used only for PT-9600.
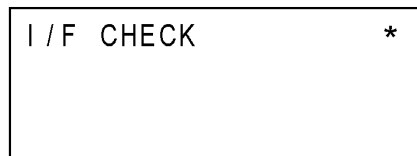
```
┌─────────────────────────────┐
│ I/F CHECK              *     │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 42

(1) Press the "RET" key. The display shifts to one as shown in Fig.43.
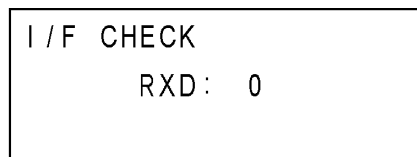
```
┌─────────────────────────────┐
│ I/F CHECK                   │
│        RXD:  0              │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 43

(2) The machine checks the RS-232C I/F port. (Displays "RXD" on the LCD).

(3) Press the "RET" key while the LCD displays as shown in Fig.43. The display shifts to the Clock Display Mode as shown in Fig.44.

2.13. Clock Display Mode (" Q " key)

This mode corrects the clock display accurately.

Note: This mode is used only for PT-9600.
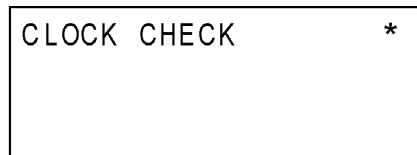
```
┌─────────────────────────────┐
│ CLOCK CHECK            *     │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 44

(1) Press the "RET" key. The display shifts to one as shown in Fig.45.

(2) Once resets the RTC time and reads the current time to display.
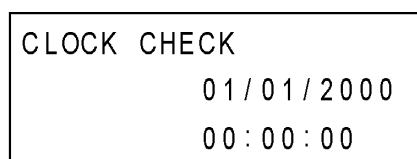
```
┌─────────────────────────────┐
│ CLOCK CHECK                 │
│        01/01/2000           │
│        00:00:00             │
│                             │
└─────────────────────────────┘
```
Fig. 45

(3)　Press the "RET" key while the LCD displays as shown in Fig.45.　The display shifts to the Charge Check Mode as shown in Fig.46.

2.14.　Charge Check Mode (" W " key)

This mode checks the charging function.

Note: This mode is used only for PT-9600.

```
┌─────────────────────────────┐
│ CHARGE CHECK            *    │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
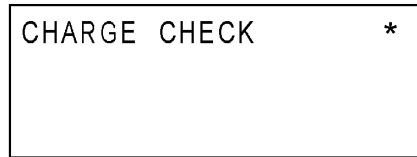
Fig. 46

(1)　Press the "RET" key.　The display shifts to one as shown in Fig.47.

```
┌─────────────────────────────┐
│ CHARGE CHECK                │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
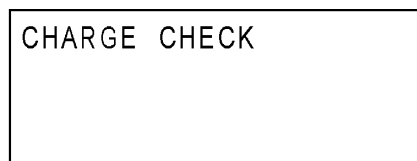
Fig. 47

(2)　Depression of the "BL" key changes the CHON value to "0".　The CHON values can be changed over by every depression of the "BL" key.

(3)　Press the "RET" key while the LCD displays as shown in Fig.47.　The display shifts to the Margin Set Mode as shown in Fig.48.

2.15.　Avery Adjust Mode (" E " key)

This mode sets the correction value of the print start position of avery tape.

Note 1: This mode is used only for PT-9600 and PT-3600 (U.S.A. version).

Note 2: You may skip this submode if the print sample by the Avery Print Mode gets into the specified zone.

```
┌─────────────────────────────┐
│ AVERY ADJUST           *    │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
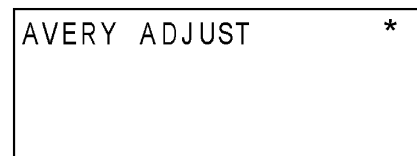
Fig. 48

(1)　Press the "RET" key. The display shifts to one as shown in Fig.49 and the correction value currently written in the EEPROM.

(Example: Displays the default value)

```
┌─────────────────────────────┐
│ AVERY ADJUST                │
│ ±0 mm                       │
│                             │
│                             │
└─────────────────────────────┘
```
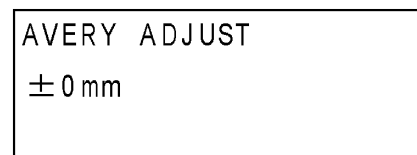
Fig. 49

(2) If you want to set a minus correction value, correct the current value according to one of the following key operations. The result will be displayed as shown in Fig.50.

To move the print start position by the following amount:	Press:
The correction value is displayed as "±0 mm".	" ← "+ "0" key
to the left side by approx. 0.5 mm (7 dots).	" ← "+ "1" key
to the left side by approx. 1.0 mm (14 dots).	" ← "+ "2" key
to the left side by approx. 1.5 mm (21 dots).	" ← "+ "3" key
to the left side by approx. 2.0 mm (28 dots).	" ← "+ "4" key
to the left side by approx. 2.5 mm (35 dots).	" ← "+ "5" key
to the left side by approx. 3.0 mm (43 dots).	" ← "+ "6" key
to the left side by approx. 3.5 mm (50dots).	" ← "+ "7" key
to the left side by approx. 4.0mm (57 dots).	" ← "+ "8" key
to the left side by approx. 4.5 mm (64 dots).	" ← "+ "9" key

(Example: Corrects by about 1.0 mm to the left side)

```
AVERY ADJUST

-1.0mm

```

Fig. 50

(3) If you want to set a plus correction value, correct the current value according to one of the following key operations. The result will be displayed as shown in Fig.51.

To move the print start position by the following amount:	Press:
The correction value is displayed as "±0 mm".	" → "+ "0" key
to the right side byYapprox. 0.5 mm (7 dots).	" → "+ "1" key
to the right side by approx. 1.0 mm (14 dots).	" → "+ "2" key
to the right side by approx. 1.5 mm (21 dots).	" → "+ "3" key
to the right side by approx. 2.0 mm (28 dots).	" → "+ "4" key
to the right side by approx. 2.5 mm (35 dots).	" → "+ "5" key
to the right side by approx. 3.0 mm (43 dots).	" → "+ "6" key
to the right side by approx. 3.5 mm (50dots).	" → "+ "7" key
to the right side by approx. 4.0mm (57 dots).	" → "+ "8" key
to the right side by approx. 4.5 mm (64 dots).	" → "+ "9" key

(Example: Corrects by about 1.0 mm to the right side)

```
AVERY ADJUST

+1.0mm

```

Fig. 51

(4) Press the "RET" key. The machine writes the entered correction value described above into the EEPROM and displays as shown in Fig.52.

```
ADJUSTMENT

COMPLETED

```

Fig. 52

(5) Press the "RET" key while the LCD displays as shown in Fig.52. The display shifts to the RS I/F Port Check Mode as shown in Fig.53.

Note: Press the "9" key before shifting to the Margin Set Mode. The display shifts to the Avery Print Mode. Check again the start position of printing area of the sample print.

2.16. Margin Set Mode (" R " key)
This mode adjusts the margin cut length.

Note 1: You may skip this mode if the print sample by the Print Mode 1 gets into the specified zone.

```
MARGIN SET            *


```

Fig. 53

(1) Press the "RET" key. The display shifts to one as shown in Fig.54.

```
1:COUNTER ROT.   120
2:LAYER            2
3:OFFSET          +0
```

Fig. 54

(2) Press the "1" key and set the number of counter rotation pulses at the margin cut process (10 through 150 pulses).

Note 2: The number of counter rotation pulses is the number of counter rotation pulses after the print operation.

(3) Press the "2" key and set the number of superimposed dots at the margin cut process (0 through 3 dots).

Note 3: The number of superimposed dots is the number of the superimposed dots required at the normal rotation after the counter rotation.

(4) Press the "3" key and set the number of offset pulses at the margin cut process (-4 through +4 pulses).

Note 4: The number of offset pulses is the number of offset pulses to adjust the print start position at the margin cut process.

(5)   Use the " ← " and " → " keys to set each value for the steps (2) through (4), and then press the "RET" key to fix them in order to write into the EEPROM.

(6)   The display shifts to the Factory Mode 1 as shown in Fig.55.
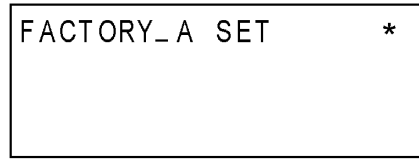
```
┌─────────────────────────────┐
│ FACTORY_A SET          *    │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 55

(7)   The Factory Set Mode 1 is not used for the inspection. Press the "A" key to shift to the USB Mode as shown in Fig.56.

2.17. USB Mode (" A " key)

This mode writes the serial number of USB into the main PCB.

```
┌─────────────────────────────┐
│ USB_ID SET             *    │
│                             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 56

(1)   Press the "RET" key. The display shifts to one as shown in Fig.57.

(2)   Enter the key word of four digits in the key word screen displayed as shown in Fig.57. The display shifts to one as shown in Fig.58.

Note 1: Key word is 3600.

```
┌─────────────────────────────┐
│ KEY WORD                    │
│        * * * *              │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 57

(3)   Display the default value (000000001).

Note 2: If the serial number has been written into the PCB, that value is displayed here.

(4)   Enter the serial number of nine digits printed on the ID plate of the product (Example: Enter G1J497693 if the printed number is E60125-G1J497693).

```
┌─────────────────────────────┐
│ USB                         │
│ * * * * * * * *             │
│                             │
│                             │
└─────────────────────────────┘
```
Fig. 58

(5)   Press the "RET" key to write the serial number into the EEPROM.

(6)   Now all inspection is completed. Press the "ON/OFF" key to turn the power OFF.

3.   Verification of the USB function
When you exchange the main PCB, make sure to carry out the print check after the completion of exchange. First, connect the PC with this product (P-Touch). Then enter some text to carry out the print check.

CHAPTER IV TROUBLESHOOTING AND ERROR MESSAGE

4.1 OVERVIEW

This section gives the service personnel some of the troubleshooting procedures to be followed if an error or malfunction occurs with this machine. It is impossible to anticipate all of the possible troubles which may occur in future and determine the troubleshooting procedures, so this chapter covers some sample troubles. However, those samples will help service personnel pinpoint and repair other defective elements if he/she analyzes and examines them well.

■ Precautions

Be sure to observe the following precautions to prevent the secondary problems from happening during troubleshooting.

(1) Get a good idea of what the trouble is. Whenever more than one trouble source is found, plan the most reasonable repairing procedure after reviewing the relationship between them.

(2) When supplying power to this machine having problems from either the Ni-MH battery pack or the AC adapter, make sure that its output voltage level. (Ni-MH battery pack : 9-12V, AC adapter : 23-25V under no load.)

(3) When supplying power from a stabilized power unit, use the power unit with approx. 3A capacity and adjust the output level to the one as described above. When connecting it to this machine, be careful with the polarity.

(4) When using a circuit tester for testing the conductivity, remove the Ni-MH battery pack and the AC adapter from this machine.

■ After Repairing

After repairing the defective section, be sure to check again (refer to CHAPTER III, 3.2, [12] Final Check) to see if the repaired section works correctly. Also make a note of the troubleshooting procedure so that it will be handy should problems occur in the future.

4.2 TROUBLESHOOTING GUIDE

■ If any error message is displayed on the LCD :	Go to Section 4.3.
■ If any of the following problems occurs : - Printing is performed with specific dots omitted - The tape cassette type is not detected correctly - No printing is performed - The interface malfunctions (RS-232C) - The Interface malfunctions (USB) - The tape is not fed correctly - The tape is not cut - Half cut failure - Forced tape eject failure	Go to Section 4.4.

4.3 ERROR MESSAGE

Check the error message that shows the current machine status as listed below.

Note 1: "_" indicates a space.

Note 2: "X" indicates a numeric value.

Note 3: "#" indicates a function that is not available for that destination.

Note 4: The machine returns to the previous screen after the deletion of the message unless otherwise specified in <Supplement>.

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
When the power is ON: The high-voltage adapter is used. <Supplement> The system is turned OFF approx. two seconds after the message is displayed.	WRONG_ADAPTER!_____ _____ _____	CHANGER_ADAPTATEUR!_ _____ _____	FALSCHER_ADAPTER!___ _____ _____	CHANGE_ADAPTOR!_____ _____ _____	CHANGER_ADAPTATEUR!_ _____ _____
When the power is ON: The low-voltage adapter is used after the deactivation of the system due to a power error during the previous printing or tape feeding with the power ON: <Supplement> After the message is displayed, it is replaced with an opening message.					
When the power is ON: The low-voltage adapter is used. <Supplement> The system is turned OFF approx. two seconds after the message is displayed.					
While printing (when using the batteries): The batteries are weak. <Supplement> After the operation is completed or the message is deleted, the machine returns to the text input mode.	BATTERIES_WEAK!_____ _____ _____	PILES_USEES!_____ _____ _____	BATTERIEN_SCHWACH!__ _____ _____	BATTERIES_WEAK!_____ _____ _____	PILES_USÉES!_____ _____ _____
While feeding the tape (when using the batteries): The batteries are weak. <Supplement> After the operation is completed or the message is deleted, the machine returns to the text input mode.					
When the power is ON: The high-voltage batteries are used. <Supplement> The system is turned OFF approx. two seconds after the message is displayed.	REPLACE_BATTERIES!___ _____ _____	REMPLACER_PILES!_____ _____ _____	BATTERIEN_WECHSELN!_ _____ _____	REPLACE_BATTERIES!___ _____ _____	REMPLACER_PILES!_____ _____ _____
Text input mode: When pressing an "Ordinary Character" key. The text buffer memory is full. <Supplement> Overwriting cases are excluded.	BUFFER_FULL!_____ _____ _____	MEMOIRE_PLEINE!_____ _____ _____	SPEICHER_VOLL!_____ _____ _____	BUFFER_FULL!_____ _____ _____	MÉMOIRE_PLEINE!_____ _____ _____
Text input mode: When pressing a "Dead Character" key. The text buffer memory is full. <Supplement> Overwriting cases are excluded. See "INSERT" common to all modes.					
Text input mode: When pressing the "Space" key. The text buffer memory is full. <Supplement> Overwriting cases are excluded.					
Text input mode: When pressing the "Return" key. The text buffer memory is full.					
Text input mode: When pressing the "New Block" key. The text buffer memory is full.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Text input mode: When pressing the "Accent" key. The text buffer memory is full. <Supplement> In insert mode.	BUFFER_FULL! _____ _____ _____	MEMOIRE_PLEINE! _____ _____ _____	SPEICHER_VOLL! _____ _____ _____	BUFFER_FULL! _____ _____ _____	MÉMOIRE_PLEINE! _____ _____ _____
Text input mode: When pressing the "Symbol" key. The text buffer memory is full. <Supplement> In insert mode.					
Text input mode: When pressing the "PF" key. The text buffer memory is full. <Supplement> Overwriting cases are excluded. See "INSERT" common to all modes.					
Auto format input mode: When pressing an "Ordinary Character" key. The text buffer memory is full.					
Auto format input mode: When pressing a "Dead Character" key. The text buffer memory is full.					
Auto format input mode: When pressing a "Space" key. The text buffer memory is full.					
Auto format input mode: When pressing a "Symbol" key. The text buffer memory is full.					
Auto format input mode: When pressing a "Accent" key. The text buffer memory is full.					
Auto format input mode: When pressing a "PF" key. The text buffer memory is full.					
Function select mode: When pressing the "Set" key, or A "Symbol" or "Accent" is selected when the text buffer memory is full. <Supplement> In insert mode, after the message is deleted, the machine returns to the text input mode.					
Dead mode: When pressing the "Return" key. The text buffer memory is full in overwrite mode.					
Dead mode: When pressing the "New Block" key. The text buffer memory is full in overwrite mode.					
Symbol input mode: When pressing the "Set" key. The text buffer memory is full. <Supplement> Overwriting cases are excluded. After the message is deleted, the machine returns to the text input mode.					
Symbol input mode: When pressing the "Code+Set" key. The text buffer memory is full. <Supplement> Overwriting cases are excluded. After the message is deleted, the machine returns to the text input mode.					
Accent input mode: When pressing the "Set" key. The text buffer memory is full. <Supplement> Overwriting cases are excluded. After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Accent input mode: When pressing the "Code+Set" key. The text buffer memory is full. \<Supplement\> Overwriting cases are excluded. After the message is deleted, the machine returns to the text input mode.	BUFFER_FULL! _____ _____ _____	MEMOIRE_PLEINE! _____ _____ _____	SPEICHER_VOLL! _____ _____ _____	BUFFER_FULL! _____ _____ _____	MÉMOIRE_PLEINE! _____ _____ _____
Barcode input mode: When pressing the "Set" key. The text buffer memory is full. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Style setting mode (DATE/TIME): When pressing the "Set" key. The text buffer memory is full. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Currency data input mode: When pressing the "Set" key. The text buffer memory is full. \<Supplement\> After the message is deleted, the machine returns to the text input mode.				#################### #################### ####################	#################### #################### ####################
Template data input mode: When pressing an "Ordinary Character" key. The text buffer memory is full.				BUFFER_FULL! _____ _____ _____	MÉMOIRE_PLEINE! _____ _____ _____
Template data input mode: When pressing a "Dead Character" key. The text buffer memory is full.					
Template data input mode: When pressing the "Space" key. The text buffer memory is full.					
Template data input mode: When pressing the "Symbol" key. The text buffer memory is full.					
Template data input mode: When pressing the "Accent" key. The text buffer memory is full.					
Template data input mode: When pressing the "PF" key. The text buffer memory is full.					
Database display mode: When pressing the "Set" key. The number of characters in the selected record is more than the allowable number for the text buffer memory.					
Text input mode: When pressing the "Return" key. More than 16 lines are entered.	16_LINE_LIMIT! _____ _____ _____	MAX._16_LIGNES! _____ _____ _____	MAX._16_ZEILEN! _____ _____ _____	16_LINE_LIMIT! _____ _____ _____	MAX._16_LIGNES! _____ _____ _____
Dead mode: When pressing the "Return" key. More than 16 lines are entered. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "BS" key. More than 16 lines are entered.					
Text input mode: When pressing the "Delete" key. More than 16 lines are entered.					
Currency data input mode: When pressing the "Set" key. More than 16 lines are entered. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Text input mode: When pressing the "Print" key. There is no data in the text buffer memory.	BUFFER_EMPTY! _____ _____ _____	MEMOIRE_VIDE! _____ _____ _____	SPEICHER_LEER! _____ _____ _____	BUFFER_EMPTY! _____ _____ _____	MÉMOIRE_VIDE! _____ _____ _____
Text input mode: When pressing the "Layout Preview" key. There is no data in the text buffer memory.					
Text input mode: When pressing the "Repeat" key. There is no data in the text buffer memory.					
Text input mode: When pressing the "Number" key. There is no data in the text buffer memory.					
Function select mode: When pressing the "Set" key. The "Layout Preview" key is selected when there is no data in the text buffer memory. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. The "Repeat" or "Number" key is selected when there is no data in the text buffer memory. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Auto format input mode: When pressing the "Print" key. There is no data in the text buffer memory.					
Menu select mode (A/F): When pressing the "Print" key. There is no data in the text buffer memory.					
Menu select mode (A/F): When pressing the "Set" key after selecting the "Print" key. There is no data in the text buffer memory.					
File number setting mode: When pressing the "Set", "Print" keys. There is no data in the text buffer memory.					
Menu select mode (memory): When pressing the "Print" key. There is no data in the text buffer memory.					
Menu select mode (memory): When pressing the "Set" key after selecting the "Print" key. There is no data in the text buffer memory.					
Template data input mode: When pressing the "Print" key. There is no data in the text buffer memory.					
Menu select mode (template): When pressing the "Print" key. There is no data in the text buffer memory.					
Menu select mode (template): When pressing the "Set" key after selecting "Print", "Next", or "Record". There is no data in the text buffer memory.					
Print range specify mode: When pressing the "Set", "Print" keys. There is no data in the text buffer memory.					
While printing: When performing continuous memory printing or continuous record printing. There is no data in the text buffer memory.					
I/F online state (waiting): There is no data in the text buffer memory during the execution of printing from the PC.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
I/F online state (printing): There is no data in the text buffer memory during the execution of printing from the PC.	BUFFER_EMPTY! _____ _____ _____	MEMOIRE_VIDE! _____ _____ _____	SPEICHER_LEER! _____ _____ _____	BUFFER_EMPTY! _____ _____ _____	MÉMOIRE_VIDE! _____ _____ _____
Text input mode: When pressing the "Print" key. The tape cassette is not installed. <Supplement> After the message is deleted, the machine returns to the text input mode.	TAPE_EMPTY! _____ _____ _____	PAS_DE_RUBAN! _____ _____ _____	BAMD_LEER! _____ _____ _____	NO_TAPE! _____ _____ _____	PAS_DE_RUBAN! _____ _____ _____
Text input mode: When pressing the "Layout Preview" key The tape cassette is not installed. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key . The "Layout Preview" key is selected when the tape cassette is not installed. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Auto format input mode: When pressing the "Print" key. The tape cassette is not installed.					
Menu select mode (A/F): When pressing the "Print" key. The tape cassette is not installed.					
Menu select mode (A/F): When pressing the "Print", "Set" keys. The tape cassette is not installed.					
Print copies select mode: When pressing the "Print", "Set" keys. The tape cassette is not installed.					
Numberings select mode: When pressing the "Print", "Set" keys. The tape cassette is not installed.					
While printing: You try to cut the tape when the tape cassette is not installed.					
While feeding the tape: You try to cut the tape when the tape cassette is not installed.					
File number select mode: When pressing the "Print", "Set" keys. The tape cassette is not installed.					
Menu select mode (memory): When pressing the "Print" key. The tape cassette is not installed.					
Menu select mode (memory): When pressing the "Print", "Set" keys. The tape cassette is not installed.					
Template data input mode: When pressing the "Print" key. The tape cassette is not installed.					
Menu select mode (template): When pressing the Print key. The tape cassette is not installed.					
Menu select mode (template): When pressing the "Set" key after selecting "Print", "Next", or "Record". The tape cassette is not installed.					
Print range specify mode: When pressing the "Print", "Set" keys. The tape cassette is not installed.					
While receiving data (USB & entering during reception): When executing printing from the PC. The tape cassette is not installed.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
While waiting in the I/F online state: The tape cassette is not installed during the execution of printing from the PC.	TAPE_EMPTY! _____ _____ _____	PAS_DE_RUBAN! _____ _____ _____	BAMD_LEER! _____ _____ _____	NO_TAPE! _____ _____ _____	PAS_DE_RUBAN! _____ _____ _____
Text input mode: When pressing the "Print" key. The text length is out of the printable range.	TEXT_TOO_LONG! _____ _____ _____	TROP_LONG! _____ _____ _____	TEXT_ZU_LANG! _____ _____ _____	TEXT_TOO_LONG! _____ _____ _____	TROP_LONG! _____ _____ _____
Text input mode: When pressing the "Layout Preview" key. The text length is out of the printable range.					
Function select mode: When pressing the "Set" key. The "Layout Preview" is selected when the text length is out of the printable range. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Auto format input mode: When pressing the "Print" key. The text length is out of the printable range.					
Menu select mode (A/F): When pressing the "Print" key. The text length is out of the printable range.					
Menu select mode (A/F): When pressing the "Print", "Set" keys. The text length is out of the printable range.					
Print copies select mode: When pressing the "Print", "Set" keys. The text length is out of the printable range. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. The text length is out of the printable range. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode: When pressing the "Set", "Print" keys. The text length is out of the printable range.					
Menu select mode (memory): When pressing the "Print" key. The text length is out of the printable range.					
Menu select mode (memory): When pressing the "Print", "Set" keys. The text length is out of the printable range.					
Template data input mode: When pressing the "Print" key. The text length is out of the printable range.					
Menu select mode (template): When pressing the "Print" key. The text length is out of the printable range.					
Menu select mode (template): When pressing the "Set" key after selecting "Print", "Next", or "Record". The text length is out of the printable range.					
Print range specify mode: When pressing the "Set", "Print" keys. The text length is out of the printable range.					
While printing: When performing numbering printing, continuous memory printing, or continuous record printing. The text length is out of the printable range. <Supplement> During numbering printing, after the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Text input mode: When pressing the "Print" key. The print image is larger than the tape length setting.	TEXT_TOO_LONG! ‾‾‾ ‾‾‾	TROP_LONG! ‾‾‾ ‾‾‾	TEXT_ZU_LANG! ‾‾‾ ‾‾‾	TEXT_TOO_LONG! ‾‾‾ ‾‾‾	TROP_LONG! ‾‾‾ ‾‾‾
Text input mode: When pressing the "Layout Preview" key. The print image is larger than the tape length setting.					
Function select mode: When pressing the "Set" key. The print image is larger than the tape length setting and "Layout Preview" is selected. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. The print image is larger than the tape length setting. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. The print image is larger than the tape length setting. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode: When pressing the "Set", "Print" keys. The print image is larger than the tape length setting.					
Menu select mode (memory): When pressing the "Print" key. The print image is larger than the tape length setting.					
Menu select mode (memory): When pressing the "Print", "Set" keys. The print image is larger than the tape length setting.					
Print range specify mode When pressing the "Set", "Print" keys. The print image is larger than the tape length setting.					
While printing: When performing numbering printing, continuous memory printing, or continuous record printing. The print image is larger than the tape length setting. <Supplement> During numbering printing, after the message is deleted, the machine returns to the text input mode.					
I/F online state (waiting): The text length is larger than the tape length setting during the execution of printing from the PC.					
I/F online state (printing): The text length is larger than the tape length setting during the execution of printing from the PC. <Supplement> After the message is deleted, the machine returns to the online/waiting state.					
Text input mode: When pressing the "Print" key. The text you try to print is longer than 1 meter.	LENGTH_LIMIT! ‾‾‾ ‾‾‾	LONGUEUR_LIMITE! ‾‾‾ ‾‾‾	ZU_LANG! ‾‾‾ ‾‾‾	LENGTH_LIMIT! ‾‾‾ ‾‾‾	LONGUEUR_LIMITÉE! ‾‾‾ ‾‾‾
Text input mode: When pressing the "Layout Preview" key. The print tape length is longer than 1 meter.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Function select mode: When pressing the "Set" key. The print tape length is longer than 1 meter and "Layout Preview" is selected. <Supplement> After the message is deleted, the machine returns to the text input mode.	LENGTH_LIMIT! _____ _____ _____	LONGUEUR_LIMITE! _____ _____ _____	ZU_LANG! _____ _____ _____	LENGTH_LIMIT! _____ _____ _____	LONGUEUR_LIMITÉE! _____ _____ _____
Print copies select mode: When pressing the "Print", "Set" keys. The text you try to print is longer than 1 meter. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. The text you try to print is longer than 1 meter. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode: When pressing the "Set", "Print" keys. The text you try to print is longer than 1 meter.					
Menu select mode (memory): When pressing the "Set", "Print" keys. The text you try to print is longer than 1 meter.					
Menu select mode (memory): When pressing the "Print", "Set" keys. The text you try to print is longer than 1 meter.					
While printing: When performing continuous memory printing. The text you try to print is longer than 1 meter.					
While receiving data (USB): When executing printing from the PC. The text you try to print is longer than 1 meter.					
I/F online state (waiting): The text you try to print is longer than 23 centimeters during the execution of printing from the PC.					
Memory select mode: When pressing the "Set" key. No file is registered in the text memory and "Recall", "Clear", or "Print" is selected.	NO_FILES! _____ _____ _____	PAS_DE_FICHIER! _____ _____ _____	KEINE_PHRASE! _____ _____ _____	NO_FILES! _____ _____ _____	PAS_DE_FICHIER! _____ _____ _____
File number select mode: When pressing the "Set" key. Registration of a file results in full memory. <Supplement> After the message is deleted, the machine returns to the memory select mode.	MEMORY_FULL! _____ _____ _____	MEMOIRE_PLEINE! _____ _____ _____	SPEICHER_VOLL! _____ _____ _____	MEMORY_FULL! _____ _____ _____	MÉMOIRE_PLEINE! _____ _____ _____
Text input mode: When pressing the "Print", "Feed" keys. The tape cutter does not operate.	CUTTER_ERROR! _____ _____ _____	ERREUR_COUPE! _____ _____ _____	MESSER_FEHLER! _____ _____ _____	CUTTER_ERROR! _____ _____ _____	ERREUR_COUPE! _____ _____ _____
Print copies select mode: When pressing the "Print", "Set" keys. The tape cutter does not operate. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. The tape cutter does not operate. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Layout select mode (A/F): When pressing the "Feed" key. The tape cutter does not operate.					
Auto format input mode: When pressing the "Print", "Feed" keys. The tape cutter does not operate.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Menu select mode (A/F): When pressing the "Print", "Feed" keys. The tape cutter does not operate.	CUTTER_ERROR! _____ _____	ERREUR_COUPE! _____ _____	MESSER_FEHLER! _____ _____	CUTTER_ERROR! _____ _____	ERREUR_COUPE! _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The tape cutter does not operate.					
File number select mode (memory): When pressing the "Set", "Print" keys. The tape cutter does not operate.					
Menu select mode (memory): When pressing the "Print" key. The tape cutter does not operate.					
Menu select mode (memory): When pressing the "Print", "Set" keys. The tape cutter does not operate.					
Template data input mode: When pressing the "Print", "Feed" keys. The tape cutter does not operate.					
Menu select mode (template): When pressing the "Print" key. The tape cutter does not operate.					
Menu select mode (template): When pressing the "Set" key. The tape cutter does not operate after "Print", "Next", or "Record" is selected.					
Print range specify mode: When pressing the "Set", "Print" keys. The tape cutter does not operate.					
While receiving I/F data: The tape cutter does not operate during the execution of printing from the PC.					
I/F offline state (waiting): The tape cutter does not operate during the execution of printing from the PC. <Supplement> Only ON/OFF actuation enables returning to the origin point.					
Currency data input mode: When pressing the "Set" key. The output result is longer than 10 digits. <Supplement> After the message is deleted, the machine returns to the text input mode.	OVERFLOW! _____ _____ _____	SURCAPACITE! _____ _____ _____	KAPAZITÄT_ERSCHÖPET! _____ _____	################### ################### ###################	################### ################### ###################
Currency data input mode: When pressing the "Set" key. The rate is set to 0. <Supplement> After the message is deleted, the machine returns to the text input mode.	DIVIDE_BY_ZERO _____ ERROR! _____ _____	ERREUR_ZERO! _____ _____ _____	FEHLER!_KURS=0 _____ _____ _____	################### ################### ###################	################### ################### ###################
Auto format input mode: When pressing the "Print" key. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm.	SET_36mm! _____ _____ _____	FIXE_A_36mm! _____ _____ _____	36mm_BAND_EINLEGEN!_ _____ _____	SET_36mm_TAPE! _____ _____ _____	FIX_À_36mm! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys The 36 mm tape layout is selected but the installed tape cassette is not 36 mm.					
File number select mode: When pressing the "Print" key. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm.					
Menu select mode (memory): When pressing the "Print" key. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm.					
While printing: When performing continuous memory printing. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Template data input mode: When pressing the "Print" key. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm.	SET_36mm! _____ _____	FIXE_A_36mm! _____ _____	36mm_BAND_EINLEGEN!_ _____	SET_36mm_TAPE! _____ _____	FIX_À_36mm! _____ _____
Menu select mode (template): When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm.					
Print range specify mode: When pressing the "Set", "Print" keys. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm.					
Auto format input mode: When pressing the "Print" key. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm.	SET_24mm! _____ _____ _____	FIXE_A_24mm! _____ _____ _____	24mm_BAND_EINLEGEN!_ _____ _____	SET_24mm_TAPE! _____ _____ _____	FIX_À_24mm! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm.					
File number select mode: When pressing the "Print" key. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm.					
While printing: When performing continuous memory printing. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm.					
Template data input mode: When pressing the "Print" key. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm.					
Print range specify mode: When pressing the "Set", "Print" keys. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm.					
Auto format input mode: When pressing the "Print" key. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm.	SET_18mm! _____ _____ _____	FIXE_A_18mm! _____ _____ _____	18mm_BAND_EINLEGEN!_ _____ _____	SET_18mm_TAPE! _____ _____ _____	FIX_À_18mm! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm.					
File number select mode: When pressing the "Print" key. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm.					
While printing: When performing continuous memory printing. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Template data input mode: When pressing the "Print" key. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm.	SET_18mm! ———— ———— ————	FIXE_A_18mm! ———— ———— ————	18mm_BAND_EINLEGEN!_ ———— ————	SET_18mm_TAPE! ———— ———— ————	FIX_À_18mm! ———— ———— ————
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm.					
Print range specify mode: When pressing the "Set", "Print" keys. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm.					
Auto format input mode: When pressing the "Print" key. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm.	SET_12mm! ———— ———— ————	FIXE_A_12mm! ———— ———— ————	12mm_BAND_EINLEGEN!_ ———— ————	SET_12mm_TAPE! ———— ———— ————	FIX_À_12mm! ———— ———— ————
Menu select mode (A/F): When pressing the "Print", "Set" keys. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm.					
File number select mode: When pressing the "Print" key. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm.					
While printing: When performing continuous memory printing. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm.					
Template data input mode: When pressing the "Print" key. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm.					
Print range specify mode: When pressing the "Set", "Print" keys. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm.					
Auto format input mode: When pressing the "Print" key. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm.	SET_9mm! ———— ———— ————	FIXE_A_9mm! ———— ———— ————	9mm_BAND_EINLEGEN! __ ———— ————	SET_9mm_TAPE! ———— ———— ————	FIX_À_9mm! ———— ———— ————
Menu select mode (A/F): When pressing the "Print", "Set" keys. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm.					
File number select mode: When pressing the "Print" key. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
While printing: When performing continuous memory printing. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm.	SET_9mm! _____ _____	FIXE_A_9mm! _____ _____	9mm_BAND_EINLEGEN! __ _____	SET_9mm_TAPE! _____ _____	FIX_À_9mm! _____ _____
Template data input mode: When pressing the "Print" key. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm.					
Print range specify mode: When pressing the "Set", "Print" keys. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm.					
While printing: The 6 mm tape layout is selected but the installed tape cassette is not 6 mm.	SET_6mm! _____ _____	FIXE_A_6mm! _____ _____	6mm_BAND_EINLEGEN! __ _____	SET_6mm_TAPE! _____ _____	FIX_À_6mm! _____ _____
Template data input mode: When pressing the "Print" key. The 6 mm tape layout is selected but the installed tape cassette is not 6 mm.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 6 mm tape layout is selected but the installed tape cassette is not 6 mm.					
Print range specify mode: When pressing the "Set", "Print" keys. The 6 mm tape layout is selected but the installed tape cassette is not 6 mm.					
Auto format input mode: When pressing the "Print" key. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm (displayed in inches).	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_1-1/2"_TAPE! _____ _____	FIX_À_1-1/2po! _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm (displayed in inches).					
File number select mode: When pressing the "Print" key. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm (displayed in inches).					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm (displayed in inches).					
While printing (continuous memory printing): The 36 mm tape layout is selected but the installed tape cassette is not 36 mm (displayed in inches).					
Template data input mode: When pressing the "Print" key. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm (displayed in inches).					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm (displayed in inches).					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Print range specify mode: When pressing the "Set", "Print" keys. The 36 mm tape layout is selected but the installed tape cassette is not 36 mm (displayed in inches).	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_1-1/2"_TAPE! _____ _____ _____	FIX_À_1-1/2po! _____ _____ _____
Auto format input mode: When pressing the "Print" key. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm (displayed in inches).	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_1"_TAPE! _____ _____ _____	FIX_À_1po! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm (displayed in inches).					
File number select mode: When pressing the "Print" key. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm (displayed in inches).					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm (displayed in inches).					
While printing (continuous memory printing): The 24 mm tape layout is selected but the installed tape cassette is not 24 mm (displayed in inches).					
Template data input mode: When pressing the "Print" key. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm (displayed in inches).					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm (displayed in inches).					
Print range specify mode When pressing the "Set", "Print" keys. The 24 mm tape layout is selected but the installed tape cassette is not 24 mm (displayed in inches).					
Auto format input mode: When pressing the "Print" key. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm (displayed in inches).	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_3/4"_TAPE! _____ _____ _____	FIX_À_3/4po! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm (displayed in inches).					
File number select mode: When pressing the "Print" key. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm (displayed in inches).					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm (displayed in inches).					
While printing (continuous memory printing): The 18 mm tape layout is selected but the installed tape cassette is not 18 mm (displayed in inches).					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Template data input mode: When pressing the "Print" key. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm (displayed in inches).	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_3/4"_TAPE! _____ _____ _____	FIX_À_3/4po! _____ _____ _____
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm (displayed in inches).					
Print range specify mode When pressing the "Set", "Print" keys. The 18 mm tape layout is selected but the installed tape cassette is not 18 mm (displayed in inches).					
Auto format input mode: When pressing the "Print" key. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm (displayed in inches).	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_1/2"_TAPE! _____ _____ _____	FIX_À_1/2po! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm (displayed in inches).					
File number select mode: When pressing the "Print" key. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm (displayed in inches).					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm (displayed in inches).					
While printing: When performing continuous memory printing. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm (displayed in inches).					
Template data input mode: When pressing the "Print" key. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm (displayed in inches).					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm (displayed in inches).					
Print range specify mode: When pressing the "Set", "Print" keys. The 12 mm tape layout is selected but the installed tape cassette is not 12 mm (displayed in inches).					
Auto format input mode: When pressing the "Print" key. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm (displayed in inches).	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_3/8"_TAPE! _____ _____ _____	FIX_À_3/8po! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm (displayed in inches).					
File number select mode: When pressing the "Print" key. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm (displayed in inches).					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm (displayed in inches).	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_3/8"_TAPE! _____ _____ _____	FIX_À_3/8po! _____ _____ _____
While printing: When performing continuous memory printing. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm (displayed in inches).					
Template data input mode: When pressing the "Print" key. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm (displayed in inches).					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm (displayed in inches).					
Print range specify mode: When pressing the "Set", "Print" keys. The 9 mm tape layout is selected but the installed tape cassette is not 9 mm (displayed in inches).					
While printing: When performing continuous memory printing. The 6 mm tape layout is selected but the installed tape cassette is not 6 mm (displayed in inches).	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_1/4"_TAPE! _____ _____ _____	FIX_À_1/4po! _____ _____ _____
Template data input mode: When pressing the "Print" key. The 6 mm tape layout is selected but the installed tape cassette is not 6 mm (displayed in inches).					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The 6 mm tape layout is selected but the installed tape cassette is not 6 mm (displayed in inches).					
Print range specify mode: When pressing the "Set", "Print" keys. The 6 mm tape layout is selected but the installed tape cassette is not 6 mm (displayed in inches).					
Auto format input mode: When pressing the "Print" key. The AV2067 tape layout is selected but the installed tape cassette is not AV2067 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV2067_TAPE! _____ _____ _____	FIX_À_AV2067! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The AV2067 tape layout is selected but the installed tape cassette is not AV2067 (displayed in inches).					
File number select mode: When pressing the "Print" key. The AV2067 tape layout is selected but the installed tape cassette is not AV2067 tape.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The AV2067 tape layout is selected but the installed tape cassette is not AV2067 tape.					
While printing: When performing continuous memory printing. The AV2067 tape layout is selected but the installed tape cassette is not AV2067 tape.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Template data input mode: When pressing the "Print" key. The AV2067 tape layout is selected but the installed tape cassette is not AV2067 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV2067_TAPE! _____ _____ _____	FIX_À_AV2067! _____ _____ _____
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The AV2067 tape layout is selected but the installed tape cassette is not AV2067 tape.					
Print range specify mode: When pressing the "Set", "Print" keys. The AV2067 tape layout is selected but the installed tape cassette is not AV2067 tape.					
Auto format input mode: When pressing the "Print" key. The AV1957 tape layout is selected but the installed tape cassette is not AV1957 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV1957_TAPE! _____ _____ _____	FIX_À_AV1957! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The AV1957 tape layout is selected but the installed tape cassette is not AV1957 tape.					
File number select mode: When pressing the "Print" key. The AV1957 tape layout is selected but the installed tape cassette is not AV1957 tape.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The AV1957 tape layout is selected but the installed tape cassette is not AV1957 tape.					
While printing: When performing continuous memory printing. The AV1957 tape layout is selected but the installed tape cassette is not AV1957 tape.					
Template data input mode: When pressing the "Print" key. The AV1957 tape layout is selected but the installed tape cassette is not AV1957 tape.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The AV1957 tape layout is selected but the installed tape cassette is not AV1957 tape.					
Print range specify mode: When pressing the "Set", "Print" keys. The AV1957 tape layout is selected but the installed tape cassette is not AV1957 tape.					
Auto format input mode: When pressing the "Print" key. The AV1789 tape layout is selected but the installed tape cassette is not AV1789 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV1789_TAPE! _____ _____ _____	FIX_À_AV1789! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The AV1789 tape layout is selected but the installed tape cassette is not AV1789 tape.					
File number select mode: When pressing the "Print" key. The AV1789 tape layout is selected but the installed tape cassette is not AV1789 tape.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The AV1789 tape layout is selected but the installed tape cassette is not AV1789 tape.	##################### ##################### #####################	##################### ##################### #####################	##################### ##################### #####################	SET_AV1789_TAPE! _____ _____ _____	FIX_À_AV1789! _____ _____ _____
While printing: When performing continuous memory printing. The AV1789 tape layout is selected but the installed tape cassette is not AV1789 tape.					
Template data input mode: When pressing the "Print" key. The AV1789 tape layout is selected but the installed tape cassette is not AV1789 tape.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The AV1789 tape layout is selected but the installed tape cassette is not AV1789 tape.					
Print range specify mode: When pressing the "Set", "Print" keys. The AV1789 tape layout is selected but the installed tape cassette is not AV1789 tape.					
Barcode input mode: When pressing the "Set" key. The input data is less than 4 digits.	4_DIGITS_MINIMUM!_____ _____ _____	4_DIGITS_MINIMUM!_____ _____ _____	MINDESTENS_4 _____ ZIFFERN! _____ _____	MIN_4_DIGITS_!_____ _____ _____	4_DIGITS_MINIMUM!_____ _____ _____
Barcode input mode: When pressing the "Set" key. The input data is less than specified number of digits.	INPUT_WHOLE_CODE! ___ _____ _____	CODE_INCOMPLET! _____ _____ _____	DATEN_UNVOLLST! _____ _____ _____	INPUT_WHOLE_CODE! ___ _____ _____	CODE_INCOMPLET! _____ _____ _____
Barcode input mode: When pressing the "Set" key. A to D are not entered for start/stop codes with Codabar or A to D are entered for other than start/stop codes.	INPUT_ABCD_AT_BEGIN_ &_END! _____ _____	ENTRER_ABCD_AU_DEBUT &_FIN! _____ _____	BITTE_ABCD_AM_ANFANG UND_ENDE_EINGEBEN!___	##################### ##################### #####################	##################### ##################### #####################
While receiving I/F data: An receive error occurs due to a buffer error during data reception. <Supplement> After the message is deleted, the machine returns to the text input mode.	INTERFACE_ERROR!_____ _____ _____	ERREUR_INTERFACE! ___ _____ _____	INTERFACE_FEHLER! ___ _____ _____	INTERFACE_ERROR! _____ _____ _____	ERREUR_INTERFACE!____ _____ _____
I/F online state (waiting): A receive error occurs due to a buffer error during data reception. <Supplement> After the message is deleted, the machine returns to the offline state.					
While receiving data (USB): The tape is replaced with a different one before reception of the print command after data reception during tape replacement. <Supplement> After the message is deleted, the machine returns to the text input mode.	TAPE_CASSETTE _____ CHANGED! _____ _____	CASSETTE_CHANGEE! ___ _____ _____	KASSETTE_WURDE _____ GEWECHSELT! _____ _____	CASSETTE_CHANGED! ___ _____ _____	CASSETTE_CHANGÉE! ___ _____ _____
When the power is ON: Initialization fails with the power ON during checksum error handling due to a destroyed keyword.	EEPROM_ERROR! _____ _____ _____	ERREUR_EEPROM! _____ _____ _____	EEPROM_FEHLER! _____ _____ _____	EEPROM_ERROR! _____ _____ _____	ERREUR_EEPROM! _____ _____ _____
Text input mode: When pressing the "Layout Preview" key. The text (height) is out of the printable block range.	TEXT_TOO_HIGH! _____ _____ _____	TROP_HAUT! _____ _____ _____	TEXT_ZU_HOCH! _____ _____ _____	TEXT_TOO_HIGH! _____ _____ _____	TROP_HAUT! _____ _____ _____
Text input mode: When pressing the "Print" key. The text (height) is out of the printable block range.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Numberings select mode: When pressing the "Print", "Set" keys The text (height) is out of the printable block range.	TEXT_TOO_HIGH! _____ _____ _____	TROP_HAUT! _____ _____ _____	TEXT_ZU_HOCH! _____	TEXT_TOO_HIGH! _____ _____ _____	TROP_HAUT! _____ _____ _____
Function select mode: When pressing the "Set" key. The text (height) is out of the printable block range and "Layout Preview" is selected. <Supplement> After the message is deleted, the machine returns to the text input mode.				##################### ##################### #####################	##################### ##################### #####################
File number select mode: When pressing the "Set", "Print" keys. The text (height) is out of the printable block range.				TEXT_TOO_HIGH! _____ _____ _____	TROP_HAUT! _____ _____ _____
While printing: When performing continuous memory printing, continuous record printing. The text (height) is out of the printable block range.					
I/F online state (waiting): When the text (height) cannot be printed due to the width of the installed tape during the execution of printing from the PC. The number of text lines set in parameter setting mode is out of the printable line range for the width of the installed tape.					
I/F online state (printing): The text (height) cannot be printed due to the width of the installed tape during the execution of printing from the PC. <Supplement> After the message is deleted, the machine returns to the online/waiting state.					
Search condition setting mode: When pressing the "Set" key. The record does not exist.	RECORD_NOT_FOUND! ___ _____ _____	ENREGISTREMENT_NON__ TROUVE! _____ _____	NICHT_GEFUNDEN! _____ _____ _____	RECORD_NOT_FOUND! ___ _____ _____	ENREGISTREMENT_NON__ TROUVE! _____ _____
Menu select mode (template): When pressing the "Set" key after "Next", "Record" are selected. The last record is reached.					
Text input mode: When pressing the "Feed" and "Cut" keys. Die cut tape is installed.	##################### ##################### #####################	##################### ##################### #####################	##################### ##################### #####################	CAN'T_FEED_AV _____ LABELS! _____ _____	PAS_ALIMEN! _____ _____ _____
While printing: Die cut tape sensor fails to detect. <Supplement> After the message is deleted, the machine returns to the text input mode.	##################### ##################### #####################	##################### ##################### #####################	##################### ##################### #####################	FEED_ERROR! _____ _____ _____	ALIM_ERREUR! _____ _____ _____
During transfer/restore/backup: An error occurs during data communications. <Supplement> Recovery is possible only with ON/OFF key.	TRANSFER_MODE: _____ ERROR! _____ _____	ERREUR_TRANSFERT! ___ _____ _____	TRANSFERFEHLER! _____ _____ _____	TRANSFER_MODE: _____ ERROR! _____ _____	ERREUR_TRANSFERT! ___ _____ _____
Form setting mode: When pressing the right or left arrow keys. The tape margin, tape length, block margin, and/or block length are set to outside their allowable range.	VALUE_OUT_OF_RANGE!_ CHECK_VALUE_AND _____ RE-ENTER. _____	VALEUR_HORS_LIMITE!_ VERIFIER_VALEUR_ET___ ENTRER_DE_NOUVEAU__	WERT_NICHT_MÖGLICH!_ BITTE_WERT_PRÜFEN ___ UND_NEU_EINGEBEN. ___	VALUE_OUT_OF_RANGE!_ CHECK_VALUE_AND _____ RE-ENTER. _____	VALEUR_HORS_LIMITE!_ VERIFIER_VALEUR_ET___ ENTRER_DE_NOUVEAU__
Form setting mode: When pressing the "Set" key. The tape margin, tape length, block margin, and/or block length are set to outside their allowable range.					
Form setting mode: When pressing the "Dialset" key. The tape margin, tape length, block margin, and/or block length are set to outside their allowable ranges.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Print range specify mode: When pressing the "Set" key. The input value is incorrect.	VALUE_OUT_OF_RANGE!_ CHECK_VALUE_AND _____ RE-ENTER. _____	VALEUR_HORS_LIMITE!_ VERIFIER_VALEUR_ET___ ENTRER_DE_NOUVEAU__	WERT_NICHT_MÖGLICH!_ BITTE_WERT_PRÜFEN ___ UND_NEU_EINGEBEN. ___	VALUE_OUT_OF_RANGE!_ CHECK_VALUE_AND _____ RE-ENTER. _____	VALEUR_HORS_LIMITE!_ VERIFIER_VALEUR_ET___ ENTRER_DE_NOUVEAU__
Search condition setting mode: When pressing the "Set" key. The input value is incorrect.					
Format setting mode (I/F): When pressing the right or left arrow keys. The input tape length value is set to outside its allowable range.					
Format setting mode (I/F): When pressing the Set key. The input tape length value is set to outside its allowable range.					
Format setting mode (I/F): When pressing the Set key. The input tape length value is set to outside its allowable range.					
When the power is ON: The low-voltage batteries are used after the deactivation of the system due to a low-voltage power error during the previous printing or tape feeding. <Supplement> After the message is displayed, it is replaced with an opening message.	CHARGE_BATTERIES! ___ _____ _____	CHARGE_BATTERIES! ____ _____ _____	BATTERIEN_LADEN! _____ _____ _____	CHARGE_BATTERIES! ___ _____ _____	CHARGER_PILES! _____ _____ _____
When the power is ON: The low-voltage batteries are used. <Supplement> The system is turned OFF approx. 2 seconds after the message is displayed.					
Text input mode: When pressing the "Print" key. The end of the tape is detected.	TAPE_END! _____ _____ _____	FIN_DE_RUBAN! _____ _____ _____	BAND_ZU_ENDE! _____ _____ _____	TAPE_END! _____ _____ _____	FIN_DE_RUBAN! _____ _____ _____
Auto format input mode: When pressing the "Print" key. The end of the tape is detected.					
Menu select mode (A/F): When pressing the "Print" key. The end of the tape is detected.					
Print copies select mode: When pressing the "Print", "Set" keys. The end of the tape is detected. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. The end of the tape is detected. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode: When pressing the "Set", "Print" keys. The end of the tape is detected.					
Menu select mode (memory): When pressing the "Print" key. The end of the tape is detected.					
Menu select mode (memory): When pressing the "Set" key after selecting "Print". The end of the tape is detected.					
Template data input mode: When pressing the "Print" key. The end of the tape is detected.					
Menu select mode (template): When pressing the "Print" key. The end of the tape is detected.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Menu select mode (template): When pressing the "Set" key after "Print", "Next", or "Record" is selected. The end of the tape is detected.	TAPE_END! _____ _____ _____	FIN_DE_RUBAN! _____ _____ _____	BAND_ZU_ENDE! _____ _____ _____	TAPE_END! _____ _____ _____	FIN_DE_RUBAN! _____ _____ _____
Print range specify mode: When pressing the "Set", "Print" keys. The end of the tape is detected.					
While printing: When performing numbering printing or continuous memory printing. The end of the tape is detected. <Supplement> During printing, after the message is deleted, the machine returns to the text input mode.					
While receiving I/F data: The end of the tape is detected during the execution of printing from the PC.					
While printing I/F: The end of the tape is detected during the execution of printing from the PC.					
I/F online state (waiting): The end of the tape is detected during the execution of printing from the PC.					
I/F online state (printing): The end of the tape is detected during the execution of printing from the PC. <Supplement> After the message is deleted, the machine returns to the online/waiting state.					
While registering macro operations: Data entry with more than 64 keys occurs.	MACRO_ERROR! _____ _____ _____	ERREUR_MACRO! _____ _____ _____	MAKRO_FEHLER! _____ _____ _____	MACRO_ERROR! _____ _____ _____	ERREUR_MACRO! _____ _____ _____
When the power is ON: The cassette cover is opened.	CLOSE_CASSETTE _____ COVER! _____ _____	FERMER_LE_CAPOT! ____ _____ _____	BANDFACHDECKEL _____ SCHLIESSEN! _____ _____	CLOSE_CASSETTE _____ COVER! _____ _____	FERMER_LE_CAPOT! ____ _____ _____
Text input mode: When pressing the "Number" key. There is only a time stamp or an external character function mark in the text buffer.	NUMBERING_ERROR! ____ NO_TEXT_AVAILABLE ____ FOR_THIS_FUNCTION. ___	DENOMBREMENT_ERREUR! TEXTE_NON_DISPO_POUR DENOMBREMENT_FCT. ___	NUMMERIERUNGS-_____ FUNKTION_MIT_DIESEM_ TEXT_NICHT_MÖGLICH.__	NUMBERING_ERROR!____ NO_TEXT_AVAILABLE ____ FOR_THIS_FUNCTION. ___	ERREUR_NUMÉROTAGE__ TEXTE_NON_DISPONIBLE FONCTION_NUMÉROTAGE _
Text input mode: When pressing a PF key (template registered). There is no data base with link settings.	NO_DATABASE_OR _____ INCORRECT_FORMAT! ___	PAS_DE_DATABASE_OU __ FORMAT_INCORRECT! ___	KEINE_DATENBANK_ODER FALSCHES_FORMAT! ____	NO_DATABASE_OR _____ INCORRECT_FORMAT! ___	PAS_DE_BASE_DE _____ DONNÉES_OU_FORMAT __ INCORRECT! _____
Registration destination select mode: When pressing a PF key. Templates and external characters are registered.	PF_KEY_ASSIGNED_TO __ PC! _____ CANNOT_OVERWRITE ___	TOUCHE_PF_ASSIGNE __ VERS_PC! _____ RE_ENREG_IMPOSSIBLE_	PF_TASTE_IST_PC _____ ZUGEWIESEN! _____ NICHTÜBERSCHREIBBAR!	PF_KEY_ASSIGNED_TO __ PC! _____ CANNOT_OVERWRITE ___	TOUCHE_PF_ASSIGNE __ VERS_PC! _____ RE-ENREG_IMPOSSIBLE_
Text input mode: When pressing the "Print" key. The input external characters are larger than the size setting.	IMAGE_CHARACTER_SIZE ERROR! _____ _____	ERREUR_TAILLE_CARACT IMAGE! _____ _____	LOGO/GRAFIK_GRÖSSE __ FEHLER! _____ _____	IMAGE_CHARACTER_SIZE ERROR! _____ _____	ERREUR_TAILLE_CARACT IMAGE! _____ _____
Text input mode: When pressing the "Layout Preview" key. The input external characters are larger than the size setting.					
Auto format input mode: When pressing the "Print" key. The input external characters are larger than the size setting.					
Menu select mode (A/F): When pressing the "Print" key. The input external characters are larger than the size setting.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Print copies select mode: When pressing the "Print", "Set" keys. The input external characters are larger than the size setting. <Supplement> After the message is deleted, the machine returns to the text input mode.	IMAGE_CHARACTER_SIZE ERROR! _____ _____	ERREUR_TAILLE_CARACT IMAGE! _____ _____	LOGO/GRAFIK_GRÖSSE __ FEHLER! _____ _____	IMAGE_CHARACTER_SIZE ERROR! _____ _____	ERREUR_TAILLE_CARACT IMAGE! _____ _____
Numberings select mode: When pressing the "Print", "Set" keys. The input external characters are larger than the size setting. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode: When pressing the "Set", "Print" keys. The input external characters are larger than the size setting.					
Menu select mode (memory): When pressing the "Print" key. The input external characters are larger than the size setting.					
Menu select mode (memory): When pressing the "Set" key after selecting "Print". The input external characters are larger than the size setting.					
Template data input mode: When pressing the "Print" key. The input external characters are larger than the size setting.					
Menu select mode (template): When pressing the "Print" key. The input external characters are larger than the size setting.					
Menu select mode (template): When pressing the "Set" key after "Print", "Next", or "Record" is selected. The input external characters are larger than the size setting.					
While printing: When performing numbering printing or continuous memory printing. The input external characters are larger than the size setting. <Supplement> During printing, after the message is deleted, the machine returns to the text input mode.					
Auto format input mode: When pressing the "Print" key. The stamp L tape layout is selected but the installed tape cassette is not stamp L tape.	SET_STAMP-L! _____ _____ _____	FIXE_A_TIMBRE-G! _____ _____ _____	BAND_STEMPEL(GR)! ___ _____ _____	SET_STAMP-L! _____ _____ _____	FIX_À_TIMBRE-G! _____ _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The stamp L tape layout is selected but the installed tape cassette is not stamp L tape.					
File number select mode: When pressing the "Print" key. The stamp L tape layout is selected but the installed tape cassette is not stamp L tape.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after selecting "Print". The stamp L tape layout is selected but the installed tape cassette is not stamp L tape.					
While printing: When performing continuous memory printing. The stamp L tape layout is selected but the installed tape cassette is not stamp L tape.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Template data input mode: When pressing the "Print" key. The stamp L tape layout is selected but the installed tape cassette is not stamp L tape.	SET_STAMP-L! _____ _____ _____	FIXE_A_TIMBRE-G! _____ _____	BAND_STEMPEL(GR)! ____ _____	SET_STAMP-L! _____ _____	FIX_À_TIMBRE-G! _____ _____
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The stamp L tape layout is selected but the installed tape cassette is not stamp L tape.					
Print range specify mode: When pressing the "Set", "Print" keys. The stamp L tape layout is selected but the installed tape cassette is not stamp L tape.					
Auto format input mode: When pressing the "Print" key. The stamp M tape layout is selected but the installed tape cassette is not stamp M tape.	SET_STAMP-M! _____ _____ _____	FIXE_A_TIMBRE-M! _____ _____	BAND_STEMPEL(MI)! ____ _____	SET_STAMP-M! _____ _____	FIX_À_TIMBRE-M! _____ _____
Menu select mode (A/F): When pressing the "Print", "Set" keys. The stamp M tape layout is selected but the installed tape cassette is not stamp M tape.					
File number select mode: When pressing the "Print" key. The stamp M tape layout is selected but the installed tape cassette is not stamp M tape.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after selecting "Print". The stamp M tape layout is selected but the installed tape cassette is not stamp M tape.					
While printing: When performing continuous memory printing. The stamp M tape layout is selected but the installed tape cassette is not stamp M tape.					
Template data input mode: When pressing the "Print" key. The stamp M tape layout is selected but the installed tape cassette is not stamp M tape.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The stamp M tape layout is selected but the installed tape cassette is not stamp M tape.					
Print range specify mode: When pressing the "Set", "Print" keys. The stamp M tape layout is selected but the installed tape cassette is not stamp M tape.					
Text input mode: When pressing the "Return" key. The total number of lines in each block is more than 50.	50_LINE_LIMIT _____ REACHED! _____	MAX._50_LIGNES! _____ _____	ZUVIELE_ZEILEN! _____ _____	50_LINE_LIMIT _____ REACHED! _____	MAX._50_LIGNES! _____ _____
Text input mode: When pressing the "New Block" key. The total number of lines in each block is more than 50.					
Dead mode: When pressing the "Return" key. The total number of lines in each block is more than 50. <Supplement> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Dead mode: When pressing the "New Block" key. The total number of lines in each block is more than 50. <Supplement> After the message is deleted, the machine returns to the text input mode.	50_LINE_LIMIT _____ REACHED! _____ _____	MAX._50_LIGNES! _____ _____ _____	ZUVIELE_ZEILEN! _____ _____ _____	50_LINE_LIMIT _____ REACHED! _____ _____	MAX._50_LIGNES! _____ _____ _____
Currency data input mode: When pressing the "Set" key. The total number of lines in each block is more than 50. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numbering starting point specify mode: When pressing the "Set" key. A time stamp or an external character is selected.	WRONG_CHARACTER! ___ _____ _____	CARACTERE_INVALIDE ___ _____ _____	FEHL-EINGABE _____ _____ _____	INVALID_CHARACTERS! ___ _____ _____	CARACTÈRE_INVALIDE! ___ _____ _____
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	LINE_LIMIT! _____ 16_LINES_MAXIMUM ___ ON 36mm TAPE	TROP_DE_LIGNES! _____ 36mm _____ MAX._16_LIGNES _____	ZUVIELE_ZEILEN! _____ MAX. _16 ZEILEN AUF 36mm BANDBREITE_	LINE_LIMIT! _____ 36mm _____ 16_LINE_LIMIT _____	TROP_DE_LIGNES! _____ 36mm _____ MAX._16_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.	LINE_LIMIT! _____ 13_LINES_MAXIMUM ___ ON 24mm TAPE	TROP_DE_LIGNES! _____ 24mm _____ MAX._13_LIGNES _____	ZUVIELE_ZEILEN! _____ MAX. _13_ ZEILEN AUF 24mm BANDBREITE_	LINE_LIMIT! _____ 24mm _____ 13_LINE_LIMIT _____	TROP_DE_LIGNES! _____ 24mm _____ MAX._13_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.	LINE_LIMIT! _____ 10_LINES_MAXIMUM ___ ON 18mm TAPE	TROP_DE_LIGNES! _____ 18mm _____ MAX._10_LIGNES _____	ZUVIELE_ZEILEN! _____ MAX. _10_ ZEILEN AUF 18mm BANDBREITE_	LINE_LIMIT! _____ 18mm _____ 10_LINE_LIMIT _____	TROP_DE_LIGNES! _____ 18mm _____ MAX._10_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement> After the message is deleted, the machine returns to the text input mode.	LINE_LIMIT! _____ 10_LINES_MAXIMUM ___ ON 18mm TAPE	TROP_DE_LIGNES! _____ 18mm _____ MAX._10_LIGNES _____	ZUVIELE_ZEILEN! _____ MAX. _10_ ZEILEN AUF 18mm BANDBREITE_	LINE_LIMIT! _____ 18mm _____ 10_LINE_LIMIT _____	TROP_DE_LIGNES! _____ 18mm _____ MAX._10_LIGNES _____
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. \<Supplement> After the message is deleted, the machine returns to the text input mode.	LINE_LIMIT! _____ 6_LINES_MAXIMUM ___ ON 12mm TAPE	TROP_DE_LIGNES! _____ 12mm _____ MAX._6_LIGNES _____	ZUVIELE_ZEILEN! _____ MAX. _6_ ZEILEN AUF 12mm BANDBREITE_	LINE_LIMIT! _____ 12mm _____ 6_LINE_LIMIT _____	TROP_DE_LIGNES! _____ 12mm _____ MAX._6_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. \<Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	LINE_LIMIT! _____ 6_LINES_MAXIMUM ___ ON 12mm TAPE	TROP_DE_LIGNES! _____ 12mm _____ MAX._6_LIGNES _____	ZUVIELE_ZEILEN! _____ MAX. _6_ ZEILEN AUF 12mm BANDBREITE_	LINE_LIMIT! _____ 12mm _____ 6_LINE_LIMIT _____	TROP_DE_LIGNES! _____ 12mm _____ MAX._6_LIGNES _____
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	LINE_LIMIT! _____ 4_LINES_MAXIMUM ___ ON 9mm TAPE	TROP_DE_LIGNES! _____ 9mm _____ MAX._4_LIGNES _____	ZUVIELE_ZEILEN! _____ MAX. _4_ ZEILEN AUF 9mm BANDBREITE_	LINE_LIMIT! _____ 9mm _____ 4_LINE_LIMIT _____	TROP_DE_LIGNES! _____ 9mm _____ MAX._4_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	LINE_LIMIT! _____ 3_LINES_MAXIMUM ___ ON 6mm TAPE	TROP_DE_LIGNES! _____ 6mm _____ MAX._3_LIGNES _____	ZUVIELE_ZEILEN! _____ MAX. _3_ ZEILEN AUF 6mm BANDBREITE_	LINE_LIMIT! _____ 6mm _____ 3_LINE_LIMIT _____	TROP_DE_LIGNES! _____ 6mm _____ MAX._3_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	LINE_LIMIT! _____ 3_LINES_MAXIMUM ___ ON 6mm TAPE	TROP_DE_LIGNES! _____ 6mm _____ MAX._3_LIGNES _____	ZUVIELE_ZEILEN! _____ MAX. _3_ ZEILEN AUF 6mm BANDBREITE_	LINE_LIMIT! _____ 6mm _____ 3_LINE_LIMIT _____	TROP_DE_LIGNES! _____ 6mm _____ MAX._3_LIGNES _____
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ 1-1/2"_TAPE _____ 16_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_1-1/2po _____ MAX._16_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ 1-1/2"_TAPE _____ 16_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_1-1/2po _____ MAX._16_LIGNES _____
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ 1"_TAPE _____ 13_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_1po _____ MAX._13_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ 3/4"_TAPE _____ 10_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_3/4po _____ MAX._10_LIGNES _____

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ 3/4"_TAPE _____ 10_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_3/4po _____ MAX._10_LIGNES _____
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ 1/2"_TAPE _____ 6_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_1/2po _____ MAX._6_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ 1/2"_TAPE _____ 6_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_1/2po _____ MAX._6_LIGNES _____
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ 3/8"_TAPE _____ 4_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_3/8po _____ MAX._4_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ 1/4"_TAPE _____ 3_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_1/4po _____ MAX._3_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV3067_TAPE _____ 16_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV3067 _____ MAX._16_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV3067_TAPE _____ 16_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV3067 _____ MAX._16_LIGNES _____
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV30102_TAPE _____ 16_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV30102 _____ MAX._16_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. \<Supplement\> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV30102_TAPE _____ 16_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV30102 _____ MAX._16 LIGNES _____
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV26102_TAPE _____ 13_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV26102 _____ MAX._13 LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV2667_TAPE _____ 13_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV2667 _____ MAX._13 LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV2667_TAPE _____ 13_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV2667 _____ MAX._13_LIGNES _____
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV2067_TAPE _____ 10_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV2067 _____ MAX._10_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV2067_TAPE _____ 10_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV2067 _____ MAX._10_LIGNES _____
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV1957_TAPE _____ 9_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV1957 _____ MAX._9_LIGNES _____
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Text input mode: When pressing the "Print" key. Multiple text lines are input and they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV1789_TAPE _____ 8_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV1789 _____ MAX._8_LIGNES _____

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Text input mode: When pressing the "Layout Preview" key. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	LINE_LIMIT! _____ AV1789_TAPE _____ 8_LINE_LIMIT _____	TROP_DE_LIGNES! _____ À_AV1789 _____ MAX._8_LIGNES _____
Function select mode: When pressing the "Set" key. Multiple text lines are input or Layout Preview is selected when they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Print copies select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Numberings select mode: When pressing the "Print", "Set" keys. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
File number select mode (memory): When pressing the "Set", "Print" keys. Multiple text lines are input or they cannot be printed due to the width of the tape.					
While printing: When performing continuous memory printing. Multiple text lines are input or they cannot be printed due to the width of the tape. <Supplement> After the message is deleted, the machine returns to the text input mode.					
Auto format input mode: When pressing the "Print" key. The AV2667 tape layout is selected but the installed tape cassette is not AV2667 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV2667_TAPE! _____ _____ _____	FIX_À_AV2667! _____ _____ _____
Auto format menu select mode: When pressing the "Print", "Set" keys. The AV2667 tape layout is selected but the installed tape cassette is not AV2667 tape.					
File number select mode: When pressing the "Print" key. The AV2667 tape layout is selected but the installed tape cassette is not AV2667 tape.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The AV2667 tape layout is selected but the installed tape cassette is not AV2667 tape.					
While printing: When performing continuous memory printing. The AV2667 tape layout is selected but the installed tape cassette is not AV2667 tape.					
Template data input mode: When pressing the "Print" key. The AV2667 tape layout is selected but the installed tape cassette is not AV2667 tape.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The AV2667 tape layout is selected but the installed tape cassette is not AV2667 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV2667_TAPE! ____ _____ _____	FIX_À_AV2667! _____ _____ _____
Print range specify mode: When pressing the "Set", "Print" keys. The AV2667 tape layout is selected but the installed tape cassette is not AV2667 tape.					
Auto format input mode: When pressing the "Print" key. The AV26102 tape layout is selected but the installed tape cassette is not AV26102 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV26102_TAPE! ____ _____ _____	FIX_À_AV26102! _____ _____ _____
Auto format menu select mode: When pressing the "Print", "Set" keys. The AV26102 tape layout is selected but the installed tape cassette is not AV26102 tape.					
File number select mode: When pressing the "Print" key. The AV26102 tape layout is selected but the installed tape cassette is not AV26102 tape.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The AV26102 tape layout is selected but the installed tape cassette is not AV26102 tape.					
While printing: When performing continuous memory printing. The AV26102 tape layout is selected but the installed tape cassette is not AV26102 tape.					
Template data input mode: When pressing the "Print" key. The AV26102 tape layout is selected but the installed tape cassette is not AV26102 tape.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The AV26102 tape layout is selected but the installed tape cassette is not AV26102 tape.					
Print range specify mode: When pressing the "Set", "Print" keys. The AV26102 tape layout is selected but the installed tape cassette is not AV26102 tape.					
Auto format input mode: When pressing the "Print" key. The AV30102 tape layout is selected but the installed tape cassette is not AV30102 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV30102_TAPE! ____ _____ _____	FIX_À_AV30102! _____ _____ _____
Auto format menu select mode: When pressing the "Print", "Set" keys. The AV30102 tape layout is selected but the installed tape cassette is not AV30102 tape.					
File number select mode: When pressing the "Print" key. The AV30102 tape layout is selected but the installed tape cassette is not AV30102 tape.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The AV30102 tape layout is selected but the installed tape cassette is not AV30102 tape.					

Error Conditions	Display				
	U.K./BELGIUM	FRENCH	GERMAN	U.S.A.	CANADA
While printing: When performing continuous memory printing. The AV30102 tape layout is selected but the installed tape cassette is not AV30102 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV30102_TAPE! _____ _____ _____	FIX_À_AV30102! _____ _____ _____
Template data input mode: When pressing the "Print" key. The AV30102 tape layout is selected but the installed tape cassette is not AV30102 tape.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The AV30102 tape layout is selected but the installed tape cassette is not AV30102 tape.					
Print range specify mode: When pressing the "Set", "Print" keys. The AV30102 tape layout is selected but the installed tape cassette is not AV30102 tape.					
Auto format input mode: When pressing the "Print" key. The AV3067 tape layout is selected but the installed tape cassette is not AV3067 tape.	#################### #################### ####################	#################### #################### ####################	#################### #################### ####################	SET_AV3067_TAPE! _____ _____ _____	FIX_À_AV3067! _____ _____ _____
Auto format menu select mode: When pressing the "Print", "Set" keys. The AV3067 tape layout is selected but the installed tape cassette is not AV3067 tape.					
File number select mode: When pressing the "Print" key. The AV3067 tape layout is selected but the installed tape cassette is not AV3067 tape.					
Menu select mode (memory): When pressing the "Print" key. When pressing the "Set" key after "Print" is selected. The AV3067 tape layout is selected but the installed tape cassette is not AV3067 tape.					
While printing: When performing continuous memory printing. The AV3067 tape layout is selected but the installed tape cassette is not AV3067 tape.					
Template data input mode: When pressing the "Print" key. The AV3067 tape layout is selected but the installed tape cassette is not AV3067 tape.					
Menu select mode (template): When pressing the "Print" key. When pressing the "Set" key after "Print", "Next", or "Record" is selected. The AV3067 tape layout is selected but the installed tape cassette is not AV3067 tape.					
Print range specify mode: When pressing the "Set", "Print" keys. The AV3067 tape layout is selected but the installed tape cassette is not AV3067 tape.					

4.4 TROUBLESHOOTING FLOWS

[1] Printing is performed with specific dots omitted

```
┌─────────────────────┐
│ Specific dots are   │
│ omitted in printing.│
└─────────────────────┘
           │
           ▼
      ╱─────────╲                    ┌──────────────────────────────────────┐
     ╱ Is the    ╲      YES          │ The thermal head is dirty.           │
    ╱  thermal    ╲ ──────────────►  │ Clean the thermal head using the head│
    ╲  head dirty?╱                  │ cleaning tape or a cotton swab       │
     ╲           ╱                   │ directly (refer to figure below).    │
      ╲─────────╱                    │                                      │
           │ NO                      │                                      │
           │                         │                                      │
           │                         └──────────────────────────────────────┘
           ▼
      ╱─────────╲           YES      ┌──────────────────────────────────┐
     ╱ Is the    ╲ ──────────────►   │ Replace the roller holder ASSY.  │
    ╱  platen     ╲                  └──────────────────────────────────┘
    ╲  rubber     ╱
     ╲ deformed? ╱
      ╲─────────╱
           │ NO
           ▼
┌─────────────────────────────┐
│ The thermal head is defective.│
│ Replace the thermal head ASSY.│
└─────────────────────────────┘
```

[2] The tape cassette type is not detected correctly

```
                                    ┌─────────────────────┐
                                    │ The tape cassette type is │
                                    │ not identified correctly. │
                                    └─────────────────────┘
                                                │
        ┌──────────────┐        Is the harness           Does only the
        │ Once disconnect the │  YES  and connector of AV   YES   AV label tape cassette
        │ connector and connect │◄───  cassette sensor ASSY  ◄───    not perform?
        │ it again.      │       disconnected?
        └──────────────┘              │ NO                          │ NO
                                       ▼                             ▼
        ┌──────────────┐        Does the              Is the cassette        ┌──────────────┐
        │ Replace the AV  │  NO   AV sensor actuator    sensor cable connected  NO  │ Connect the cassette │
        │ sensor actuator. │◄───   act smoothly?          correctly?         ───►│ sensor cable correctly. │
        └──────────────┘              │ YES                        │ YES         └──────────────┘
                                       ▼                             ▼
        ┌──────────────┐        Is the AV               Is any of the lines    YES ┌──────────────┐
        │ Replace the AV   │  YES  cassette sensor harness  in the cassette sensor  ───►│ Replace the cassette │
        │ cassette sensor ASSY. │◄─  broken?               cable broken?            │ sensor ASSY.      │
        └──────────────┘              │ NO                         │ NO          └──────────────┘
                                       ▼                             ▼
        ┌──────────────┐        Are input               Are input          NO  ┌──────────────┐
        │ Defect of the AV  │  NO   signal into P91        signals into P140-P144  ───►│ The cassette sensor │
        │ cassette sensor ASSY. │◄─  of the CPU(U5)          of the CPU(U5)          │ ASSY is defective.   │
        │ Exchange it.     │       normal?                 normal?                │ Replace the cassette │
        └──────────────┘              │ YES                        │ YES         │ sensor ASSY.      │
                                       └──────────┬─────────────────┘            └──────────────┘
                                                  ▼
                                    ┌─────────────────────┐
                                    │ The CPU(U5) is defective. │
                                    │ Replace the main PCB ASSY. │
                                    └─────────────────────┘
```

[3] No printing is performed

```
┌─────────────────────────────┐
│ The tape is fed correctly.  │
│ But no printing is performed.│
└─────────────────────────────┘
              │
              ▼
        ◇ Is the print          NO    ┌──────────────────────┐
        head flat cable connected ───► │ Connect the print head│
        correctly? ◇                   │ flat cable correctly. │
              │                        └──────────────────────┘
             YES
              │
              ▼
        ◇ Are signals for the    NO    ┌──────────────────────────┐
        thermal head normal? ◇  ─────► │ The CPU(U5) is defective.│
              │                        │ Replace the main PCB ASSY.│
             YES                       └──────────────────────────┘
              │
              ▼
        ◇ Is VH for printing 24V±4%? ◇  NO   ┌──────────────────────────┐
              │                       ─────► │ The main PCB is defective.│
             YES                             │ Replace the main PCB ASSY.│
              │                              └──────────────────────────┘
              ▼
┌─────────────────────────────┐
│ The thermal head is defective.│
│ Replace the thermal head ASSY.│
└─────────────────────────────┘
```

[4] The interface malfunctions (RS-232C):(PT-9600 only)

```
┌─────────────────────────────┐
│ The serial interface malfunctions.│
└─────────────────────────────┘
              │
              ▼
        ◇ Is the RS-232C cable    NO    ┌──────────────────────┐
        connected correctly? ◇   ─────► │ Connect the RS-232C  │
              │                         │ cable correctly.     │
             YES                        └──────────────────────┘
              │
              ▼
        ◇ Are the waveform of     YES   ┌──────────────────────────┐
        the RS-232C normal? ◇    ─────► │ The RS-232C driver(U1) or│
              │                         │ the CPU(U5) is defective. │
             NO                         │ Replace the main PCB ASSY.│
              │                         └──────────────────────────┘
              ▼
┌─────────────────────────────┐
│ The RS-232C cable is defective.│
│ Replace the RS-232C cable.   │
└─────────────────────────────┘
```

[5] The Interface malfunctions (USB)

```
                  ┌──────────────────────┐
                  │ The interface port cannot │
                  │ operate normally.        │
                  └──────────┬───────────┘
                             │
                             ▼
                        ╱─────────╲
                       ╱ Interface   ╲         ┌────────────────────┐
                      ╱  cable        ╲   NO   │ Connect the interface │
                      ╲  connected to  ╱──────▶│ cable connectly.      │
                       ╲ CN6 on       ╱        └────────────────────┘
                        ╲ the main PCB?╱
                         ╲───────────╱
                             │ YES
                             ▼
                        ╱─────────╲
                       ╱ During      ╲         ┌────────────────────┐
                      ╱ printing      ╲   NO   │ The PDIUSBD12(U2)     │
                      ╲ in the interface╱──────▶│ is defective.        │
                       ╲ port mode,    ╱        │ Replace the main PCB ASSY. │
                       ╲ Vout = 3.3V  ╱         └────────────────────┘
                        ╲ on pin 27 of the╱
                         ╲ PDIUSBD12(U2)?╱
                          ╲───────────╱
                             │ YES
                             ▼
                        ╱─────────╲
                       ╱ Signals     ╲         ┌────────────────────┐
                      ╱ issued        ╲   NO   │ The PDIUSBD12(U2) or  │
                      ╲ from the       ╱──────▶│ CPU(U5) is defective. │
                       ╲ PDIUSBD12(U2) ╱        │ Replace the main PCB ASSY. │
                       ╲ on the main PCB╱        └────────────────────┘
                        ╲ are normal?  ╱
                         ╲───────────╱
                             │ YES
                             ▼
                  ┌──────────────────────┐
                  │ The interface cable is  │
                  │ defective.              │
                  │ Replace it.             │
                  └──────────────────────┘
```

[6] The tape is not fed correctly

```
                    ┌─────────────────┐
                    │  The tape is not │
                    │  fed correctly.  │
                    └─────────────────┘
                             │
              ┌──────────────────────────────┐
              │ Replace the tape cassette     │
              │ with a new one and perform    │
              │ test printing                 │
              └──────────────────────────────┘
                             │
                    ┌─────────────────┐      YES    ┌──────────────────────────┐
                    │  Is the tape     │──────────▶ │ End of repair.            │
                    │  fed correctly?  │            │ The defective tape cassette│
                    └─────────────────┘            │ has been corrected.        │
                             │ NO                   └──────────────────────────┘
                    ┌─────────────────┐
                    │  Does any oil    │      YES    ┌──────────────────┐
                    │  adhere to the   │──────────▶ │ Clean the roller. │
                    │  tape feed       │            └──────────────────┘
                    │  sub roller?     │
                    └─────────────────┘
                             │ NO
                    ┌─────────────────┐                ┌──────────────────────┐
                    │  Is the          │      YES      │ Replace the roller    │
                    │  pressure of the │──────────────▶│ holder ASSY.          │
                    │  center of the   │               └──────────────────────┘
                    │  tape feed sub   │
                    │  roller          │
                    │  925gf±10%?      │
                    └─────────────────┘
                             │ NO
```

Is the tape feed motor rotating? — YES →

Is the tape feed motor connected correctly? — NO → Connect the motor correctly.
— YES ↓

Is the motor harness broken? — NO → Replace the motor ASSY with a new one.
— YES ↓ (C)

Is the tape feed motor rotating? — NO ↓

Does the tepe feed motor rotate correctly when the roller release lever is set without the tape cassette? — NO →

Is the gear for the tape feed sub roller deformed? — NO → YES

— YES ↓
Replace the roller holder ASSY.

Does the tape feed motor rotate correctly when the roller release lever is set with the tape cassette? — NO → (B)
— YES ↓ (A)

Are output signals from pin 30-33 of the CPU(U5) normal? — NO → The CPU(U5) is defective. Replace the main PCB ASSY.
— YES ↓

Are output signals from pin 10, 12, 14, 16 of the QA1 normal? — NO → QA1 is defective. Replace the main PCB ASSY.
— YES ↓

The problem has been corrected.

```
      (A)                    (B)
                              │
                              ▼
                    ╱───────────────────╲
                   ╱  Is the black        ╲
                  ╱  rubber on the tape feed ╲   YES    ┌──────────────────────────┐
                 ╱ sub roller deformed or is it ╲──────▶│ Replace the roller holder ASSY. │
                 ╲  slipping against the tape   ╱       └──────────────────────────┘
                  ╲ feed roller in the tape    ╱
                   ╲    cassete?             ╱
                    ╲───────────────────╱
                              │ NO
                              ▼
                    ╱───────────────────╲
                   ╱   Is the black rubber ╲      NO     ┌──────────────────────────┐
                  ╱  on the tape feed sub roller ╲──────▶│ Reset the rubber correctly. │
                  ╲  set between the ribs of the ╱       └──────────────────────────┘
                   ╲   tape feed roller?       ╱
                    ╲───────────────────╱
                              │ YES
                              ▼
                    ╱───────────────────╲
                   ╱                       ╲    YES      ╭──────────────────────────╮
                  ╱  Is the tape fed correctly? ╲───────▶│ The problem has been corrected. │
                   ╲                         ╱           ╰──────────────────────────╯
                    ╲───────────────────╱                            ▲
                              │ NO  ◀──── (A)                         │
                              ▼                                       │
                    ╱───────────────────╲                            │
                   ╱    Is the print        ╲   YES                   │
                  ╱ pitch (printed character  ╲──────────────────────┘
                  ╲   width) correct?        ╱
                   ╲───────────────────╱
                              │ NO
                              ▼
                    ╱───────────────────╲
                   ╱    Is the motor gear   ╲   YES      ┌──────────────────────────┐
                  ╱ or the driving gear deformed╲───────▶│ Replace the chassis 3600 ASSY │
                  ╲      or loose?           ╱           │ or tape feed motor ASSY.      │
                   ╲───────────────────╱                └──────────────────────────┘
                              │ NO
                              ▼
                    ┌──────────────────────┐
                    │ Replace the tape feed  │
                    │ motor ASSY.            │
                    └──────────────────────┘
                              │ NO
                              ▼
                    ╱───────────────────╲
                   ╱                       ╲   YES       ╭──────────────────────────╮
                  ╱  Is the tape fed correctly? ╲───────▶│ The problem has been corrected. │
                   ╲                         ╱           ╰──────────────────────────╯
                    ╲───────────────────╱
                              │ NO
                              ▼
                             (C)
```

[7] The tape is not cut

```
┌──────────────────────────┐
│  The tape cannot be cut.  │
└──────────────────────────┘
              │
              ▼
        ╱ Does the ╲      NO          ╱ Is the carriage ╲    NO   ┌─────────────────────────┐
       ╱ carriage motor ╲──────────▶ ╱  motor harness    ╲──────▶│ Connect the carriage    │
       ╲    rotate?     ╱           ╲  connected?        ╱        │ motor harness correctly.│
        ╲      ╱                     ╲      ╱                      └─────────────────────────┘
         │ YES                          │ YES
         ▼                              ▼
    ╱ Are there any ╲    YES  ┌──────────────┐      ╱ Are the ╲       NO   ┌─────────────────────┐
   ╱ tape chips on the"A"╲───▶│ Clean the    │     ╱ waveforms of pin 56╲──▶│ The CPU(U5) is      │
  ╱ portion of the control╲   │ control panel.│    ╲ and 58 of the CPU(U5)╱  │ defective.          │
  ╲ plate? (refer to figure╱  └──────────────┘    ╲  normal?  ╱           │ Replace the main    │
   ╲    below)   ╱                   │               ╲   ╱               │ PCB ASSY.           │
        │ NO                         ▼                  │ YES            └─────────────────────┘
        │               ╱ Is tape cut normal? ╲  NO     ▼
        │          ◀───╲                      ╱      ╱ Are output ╲      NO   ┌─────────────────────┐
        │               ╲          ╱                ╱ waveforms of pin 5╲────▶│ The motor driver(U14)│
        │                    │ YES                 ╲ and 9 of the motor╱     │ is defective.       │
        │                    ▼                     ╲ driver(U14)      ╱      │ Replace the main    │
        │            ┌──────────────┐               ╲ normal? ╱             │ PCB ASSY.           │
        │            │ End of repair.│                   │ YES               └─────────────────────┘
        │            └──────────────┘                   ▼
        ▼                                          ╱ Are the ╲          NO   ┌─────────────────────┐
   ╱ Does the ╲     YES  ┌──────────────────┐     ╱ waveforms of pin 133╲──▶│ The cutter sensor   │
  ╱ gear unit abnormal╲─▶│ Replace the half │    ╲ and 134 of the CPU(U5)╱  │ is defective.       │
  ╲   sound?   ╱         │ cutter chassis ASSY│   ╲  normal? ╱            │ Replace the cutter  │
        │                │ or carriage motor │        │ YES               │ sensor PCB ASSY.    │
        │ NO             │ ASSY.            │         ▼                   └─────────────────────┘
        ▼                └──────────────────┘  ┌───────────────────────────┐
   ╱ Are there any ╲  YES  ┌──────────────┐    │ The carriage motor is     │
  ╱ adhesive or tape chips╲▶│ Clean the    │    │ defective.                │
  ╲ on the cutter unit? ╱  │ cutter unit.  │    │ Replace the carriage motorASSY.│
        │ NO              └──────────────┘    └───────────────────────────┘
        ▼
┌──────────────────────┐
│ Replace the half cutter│
│ chassis ASSY.         │
└──────────────────────┘
```

Control plate

"A"

IV - 46

[8] Half cut failure

The tape cannot be half cut.

Is the laminated tape used? → NO → Use the laminated tape.

↓ YES

Does the tape control motor rotate? → NO → **Is the motor harness connected properly?** → NO → Connect the motor harness properly.

↓ YES (left branch) / ↓ YES (right branch)

Are there any tape chips on the "A" portion of the control plate? (refer to figure below) → YES → Clean the control panel.

↓ NO

Are output signals from pin 48-51 of the CPU(U5) normal? → NO → The CPU(U5) is defective. Replace the main PCB ASSY.

↓ YES

Clean the control panel. ↓ → **Is half cut normal?** → NO (to left) / YES → End of repair.

Is the output waveform (Q14-Q17) normal? → NO → The transistor (Q14-Q17) is defective. Replace the main PCB ASSY.

↓ YES

The tape control motor is defective. Replace the tape control motor ASSY.

Are there any adhesive or tape chips on the half cutter unit? → YES → Replace the half cutter chassis ASSY.

↓ NO

Does the moving gear operate properly? → YES → Replace the half cutter chassis ASSY.

↓ NO

Replace the half cutter chassis ASSY.

"A"

Control plate

[9] Forced tape eject failure

```
┌─────────────────────────┐
│  The tape cannot be      │
│  ejected.                │
└─────────────────────────┘
             │
             ▼
      ╱─────────────╲
     ╱  Are there any ╲        ┌──────────────────────┐
    ╱  adhesive or tape ╲ YES  │ Clean the half cutter│
    ╲  chips on the     ╱─────▶│ chassis ASSY.        │
     ╲ cutter unit?    ╱       │ (around the cutter)  │
      ╲───────────────╱        └──────────────────────┘
             │ NO
             ▼
```

Are there any adhesive or tape chips on the cutter unit? — YES → Clean the half cutter chassis ASSY. (around the cutter)

NO ↓

Does the eject motor rotate? — NO → **Is the motor harness connected properly?** — NO → Connect the motor harness properly.

YES ↓ (eject motor rotate)   YES ↓ (motor harness connected)

Does the gear emit abnormal sound? — YES → Replace the eject idle gear and double gear 1.

Is the waveform for CPU(U5) pin43 normal? — NO → The CPU(U5) is defective. Replace the main PCB ASSY.

NO ↓ (gear abnormal sound)   YES ↓ (CPU waveform normal)

Does the eject unit operate properly? — NO → Replace the eject unit. (eject gear)

Is the waveform C for Q29 normal? — YES → The eject motor ASSY is defective. Replace the eject motor ASSY.

YES ↓ (eject unit operate)   NO ↓ (Q29 waveform)

Is the eject rubber contaminated by oil or like that? — YES → Clean the eject rubber.

Q29 is defective. Replace the main PCB ASSY.

NO ↓ (eject rubber)

Does the eject rollers shaft fit between two pins of the tape guide? — NO → Fit the eject rollers shaft.

YES ↓

┌─────────────────────────┐
│ Replace the half cutter │
│ chassis ASSY.   │
└─────────────────────────┘

CPU

CODE	LA8988001
NAME	MAIN PCB CIR 9600

Power Supply Circuits

Memory Circuits
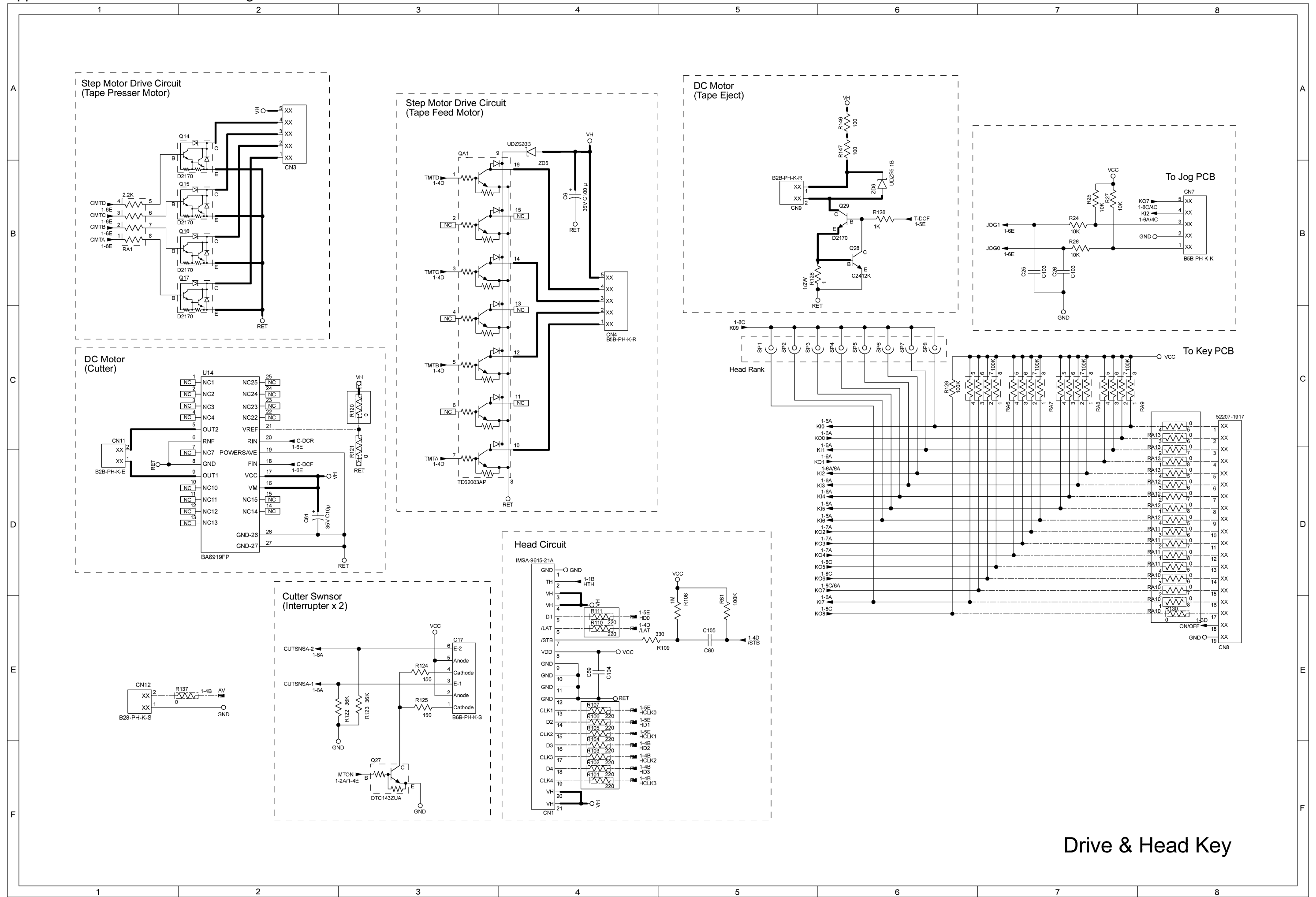
Drive & Head Key
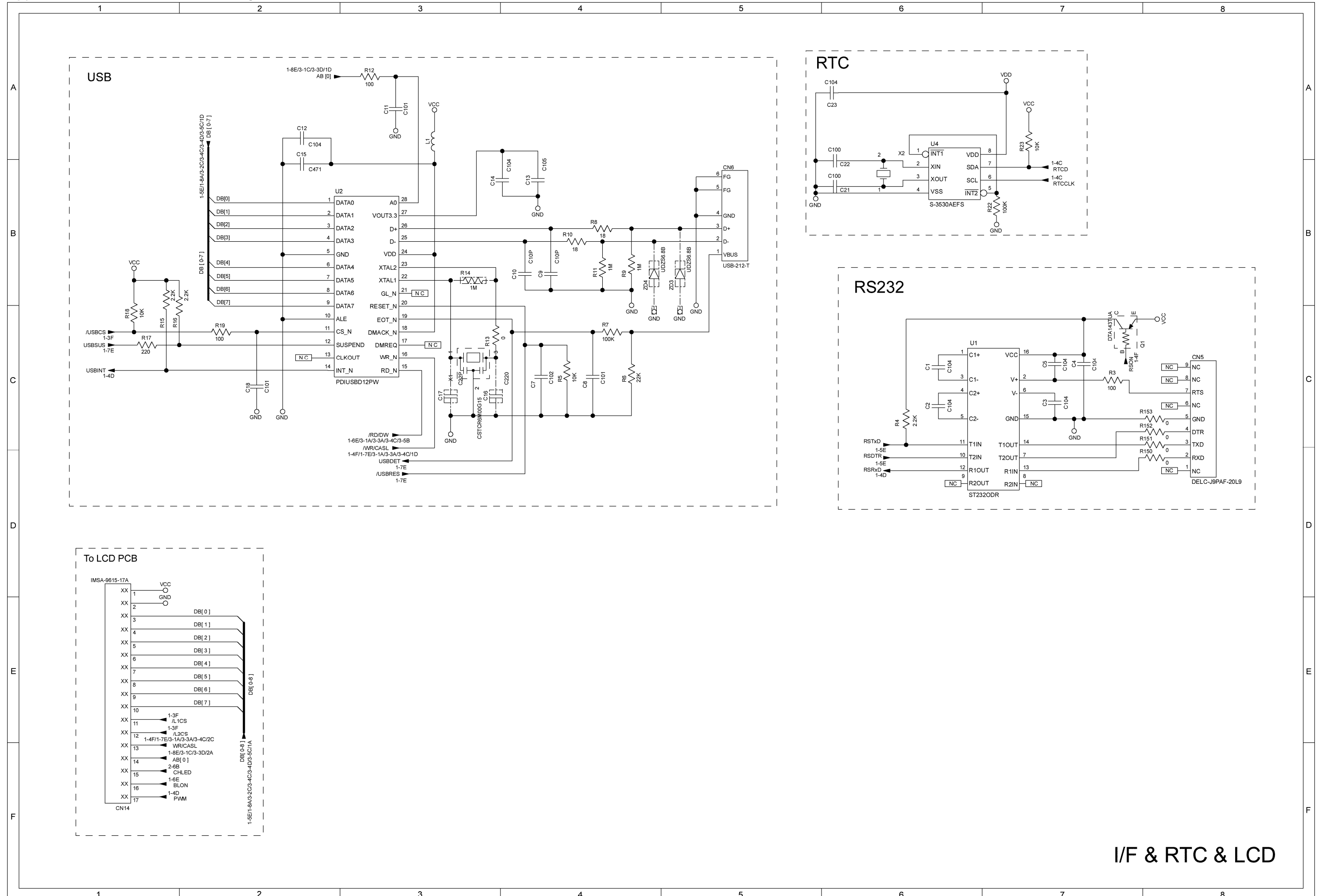
I/F & RTC & LCD

Appendix 2. LCD PCB Circuit Diagram
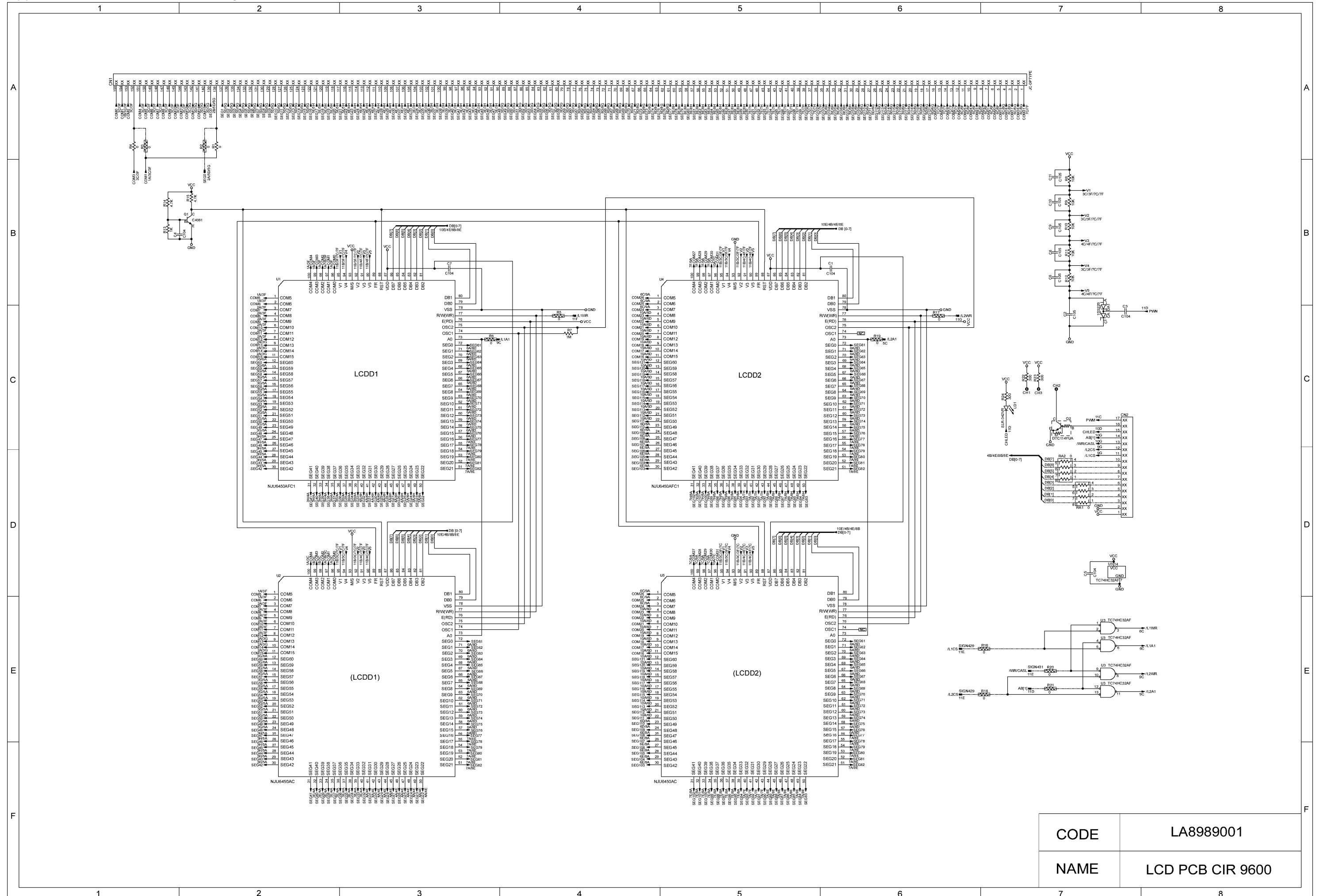
CODE	LA8989001
NAME	LCD PCB CIR 9600

brother