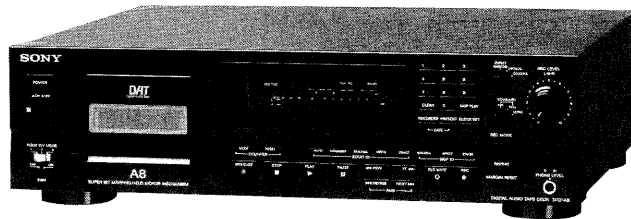


# DTC-A8

## SERVICE MANUAL

US Model  
Canadian Model  
AEP Model  
UK Model



**DAT**  
Digital Audio Tape

**SBM**<sup>TM</sup>  
Super Bit Mapping

Model Name Using Similar Mechanism	DTC-2000ES
Tape Transport Mechanism Type	DATM-55

### SPECIFICATIONS

#### Recording section

Tape	Digital audio tape
Recording head	Rotary head
Recording time	Standard: 120 minutes Long-play: 240 minutes (DT-120)
Tape speed	Standard: 8.15 mm/s Long-play: 4.075 mm/s
Drum rotation	Standard: 2,000 rpm Long-play: 1,000 rpm
Error correction	Double-encoded Reed Solomon code

#### Tape section

Track pitch	13.6 $\mu$ m (20.4 $\mu$ m)
Sampling frequency	48 kHz, 44.1 kHz, 32 kHz
Modulation system	8-10 modulation
Transfer rate	2.46 Mbit / sec
Number of channels	2 channels, stereo
D / A conversion (quantization)	Standard: 16-bit linear Long-play: 12-bit non-linear

#### General section

##### Power requirements

Where purchased	Power requirements
US, Canadian model	120 V AC, 60 Hz
AEP, UK, German model	220 - 240 V AC, 50/60 Hz

Power consumption	33W (US, Canadian model) 34W (AEP, UK, German model)
-------------------	---

Dimensions	Approx 430 x 125 x 350 mm (w/h/d) (17 x 5 x 13 <sup>7</sup> / <sub>16</sub> inches) (not including rack mount adaptor)
------------	--

Weight	Approx 6.0 kg (13 lb 3.6 oz)
--------	------------------------------

##### Remote commander RM-D868 (supplied)

Remote control system	Infrared control
Power requirements	3V DC, with two size-AA (R6) batteries
Dimensions	Approx 45 x 185 x 20 mm (w/h/d) (1 <sup>12</sup> / <sub>16</sub> x 7 <sup>3</sup> / <sub>16</sub> x 13 <sup>13</sup> / <sub>16</sub> inches)
Weight	Approx 100g (3.5 oz) incl. batteries

—Continued on next page—

DIGITAL AUDIO TAPE DECK  
**SONY**<sup>®</sup>

- Supplied accessories
- AC power cord (1)
  - Pin-plug audio connecting cords (2)
  - Remote commander (remote) RM-DS6S (1)
  - Size-AA (R6) batteries (2)
  - Rack mount adaptors (2)
  - Screws (M5 × 12) (4)
  - Decorative washers (4)
  - Operating instructions (1)
  - Warranty card (1) (US, Canadian model)

#### Input Connectors

##### Analog Input

Connector	Type	Input impedance	Rated input level
LINE	Pin-plug jack	47 kilohms	-4 dBs
LINE	Phone-plug jack	47 kilohms	-4 dBs

##### Digital Input

Connector	Type	Input impedance	Rated input level
COAXIAL	Pin-plug jack	75 ohms	0.5 Vp-p
OPTICAL	Optical jack	—	—

#### Output Connectors

##### Analog Output

Connector	Type	Output impedance	Rated output level	Load impedance
LINE	Pin-plug jack	1 kilohm	-4 dBs	10 kilohms or more
LINE	Phone-plug jack	1 kilohm	-4 dBs	10 kilohms or more
HEADPHONES	Stereo- phone-plug jack	100 ohms	1.2 mW	32 ohms

##### Digital Output

Connector	Type	Output impedance	Rated output level	Load impedance
COAXIAL	Pin-plug jack	75 ohms	0.5 Vp-p	75 ohms
OPTICAL	Optical jack	—	(wavelength 660nm)	—

Foot switch jacks      Phone-plug jack × 2

#### Audio characteristics

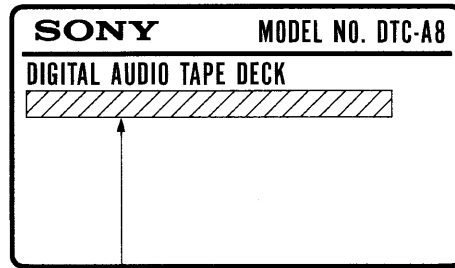
Frequency response*	Standard: 2-22,000 Hz (±0.5 dB) Long-play: 2-14,500 Hz (±0.5dB)
Signal-to-noise ratio*	90 dB or more (Standard and long-play mode)
Dynamic range*	90 dB or more (Standard and long-play mode)
Total harmonic distortion*	Standard: 0.005% or less (1 kHz) Long-play: 0.008% or less (1 kHz)
Wow and flutter	Below measurable limit (±0.001% W.PEAK)

\* During analog input with the SBM function off

Design and specifications are subject to change without notice.

#### MODEL IDENTIFICATION

—Model Number label (Carved on Back Panel)—



US, Canadian model : AC 120V 60Hz 33W  
AEP, UK, German model : AC 220-240V~50/60Hz 34W



#### Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.


#### Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

#### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

## CAUTION

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

### ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering.  
Udskiftning må kun ske med batteri af samme fabrikat og type.  
Lever det brugte batteri tilbage til leverandøren.

### ADVARSEL

Eksplosjonsfare ved feilaktig skifte av batteri.  
Benytt samme batteritype eller en tilsvarende type anbefalt av apparatfabrikanten.  
Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

### VARNING

Explosionsfara vid felaktigt batteribyte.  
Använd samma batterityp eller en likvärdig typ som rekommenderas av apparattillverkaren.  
Kassera använt batteri enligt gällande föreskrifter.

### VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu.  
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

## SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

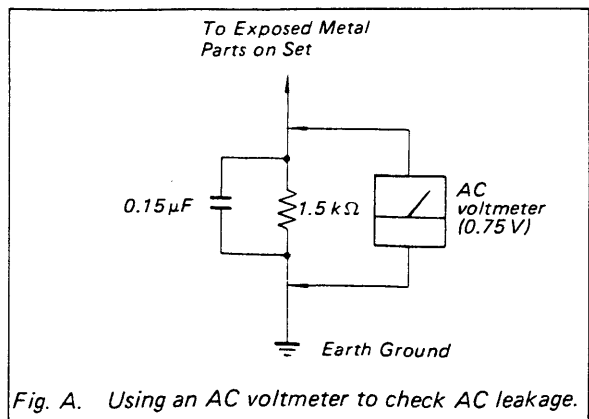


Fig. A. Using an AC voltmeter to check AC leakage.

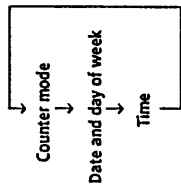
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## SECTION 1 GENERAL

### To display the date or time

Press **PRESENT**.  
Each time you press the **PRESENT** button, the display changes in the following order:



### Adjusting the clock

- 1** Press **CLOCK SET** repeatedly until the item you want to change begins to flash.
- 2** Press **◀REW** or **FF▶** to decrease or increase the displayed item.
- 3** Press **CLOCK SET** repeatedly until the seconds begin to flash, then press **CLOCK SET** a gain. The clock starts.

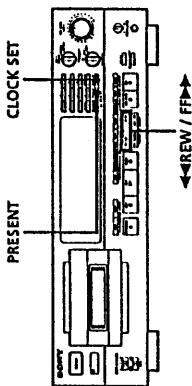
For more accurate time recordings Adjust the clock once a week.

### Notes

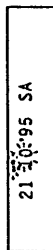
- When you first set the clock after unpacking the deck, "----" will appear when you press the **CLOCK SET** button. This is normal. Set the clock according to the procedures above.
- Your deck uses a back-up battery to keep the clock running when the power is turned off. The life of the battery under normal use is approximately seven years. When the battery starts to run down, the clock will stop operating normally. When this occurs, have the battery replaced (for a fee) at your dealer or nearest Sony Service Center.

### Setting the Clock

Your deck has a built-in clock to keep track of the current date and time. Once you set the date and time, this information will be recorded on the tape along with the audio signal during recording, allowing you to check the recording date of the tape during playback at a later time.



- 1** With the unit stopped, press **CLOCK SET**. The year indication begins to flash.
- 2** Press **◀REW** or **FF▶** to decrease or increase the displayed year, then press **CLOCK SET**. The year indication stops flashing and the month indication begins to flash.



- 3** Repeat step 2 until all items have been set. After setting the seconds, press **CLOCK SET** to start the clock.

The day of the week is displayed as follows:  
 Sunday: "SU", Monday: "MO", Tuesday: "TU",  
 Wednesday: "WE", Thursday: "TH", Friday: "FR",  
 Saturday: "SA".

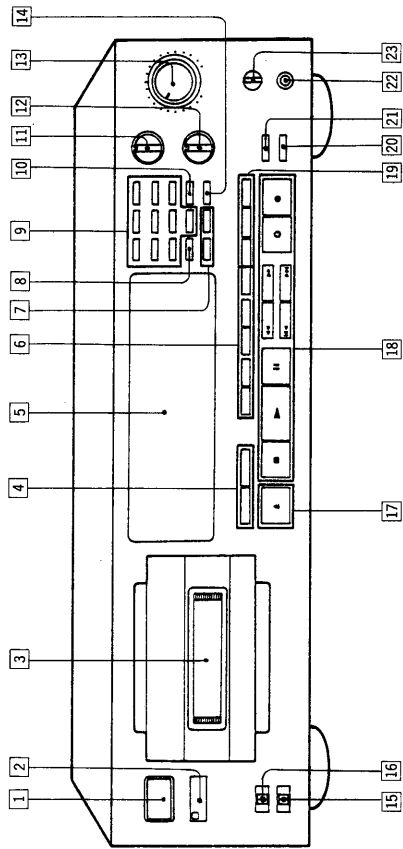
#### Time display

- Models for the U.S.A. and Canada  
 Time is displayed in a 12-hour format with midnight and noon indicated as follows:  
 Midnight: 12:00 AM  
 Noon: 12:00 PM
- Models for the U.K. and Europe  
 Time is displayed in a 24-hour format with midnight and noon indicated as follows:  
 Midnight: 0:00  
 Noon: 12:00



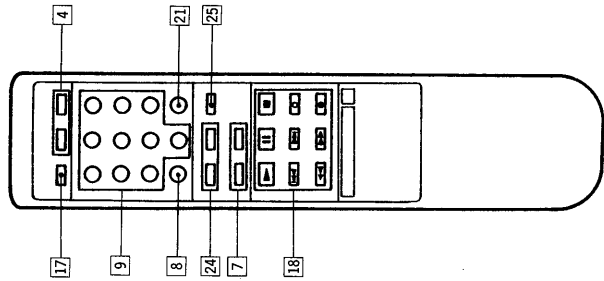
# IDENTIFYING THE PARTS

—Main Section—



- 1 POWER switch
- 2 Remote control sensor
- 3 Cassette holder
- 4 COUNTER buttons
- 5 MODE button
- 6 RESET button
- 7 Display window
- 8 START ID buttons
- 9 AUTO button
- 10 RENUMBER button
- 11 REHEARSAL button
- 12 WRITE button
- 13 ERASE button
- 14 DATE buttons
- 15 RECORDED button
- 16 PRESENT button
- 17 CLEAR button
- 18 Number buttons (0 to 9)
- 19 SKIP PLAY button
- 20 INPUT select switch
- 21 ANALOG
- 22 OPTICAL
- 23 COAXIAL
- 24 REC MODE select switch
- 25 STANDARD 48k
- 26 STANDARD 44.1k
- 27 LONG

—Remote Commander Section (RM-D868)—



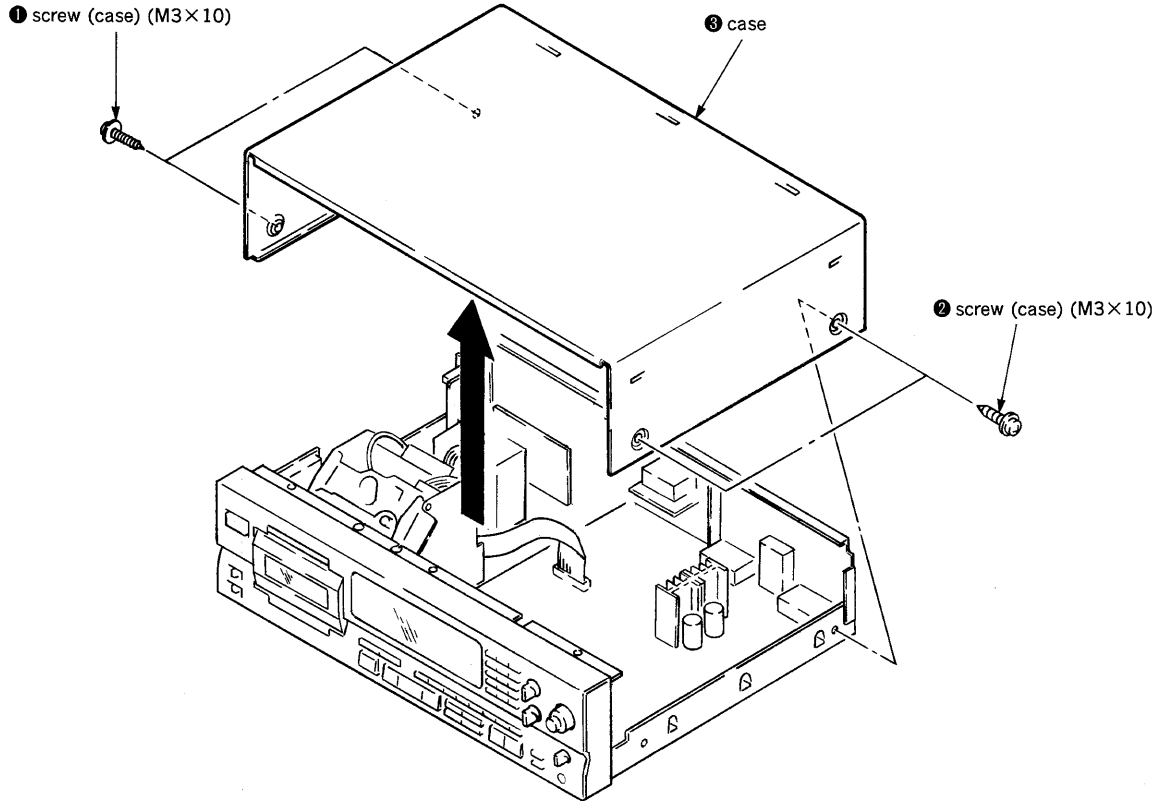
- 13 REC (recording) LEVEL control
- 14 CLOCK SET button
- 15 SBM (super bit mapping) switch
- 16 FOOT SW MODE switch
- 17 OPEN/CLOSE button
- 18 Tape operation buttons
  - STOP button
  - ▶ PLAY button
  - ⏸ PAUSE button
  - ◀◀ REW (rewind) button
  - ▶▶ FF (fast-forward) button
  - ◀◀ PREVIOUS AMS\* button
  - ▶▶ NEXT AMS\* button
  - REC MUTE(record muting) button
  - REC (recording) button
- 19 SKIP ID buttons
- 20 REHEARSAL button
- 21 WRITE button
- 22 ERASE button
- 23 MARGIN RESET button
- 24 REPEAT button
- 25 PHONES (stereo phone) jack
- 26 PHONE (headphones) LEVEL control
- 27 RMS buttons
- 28 CHECK button
- 29 ENTER button
- 30 M.SCAN button

\* AMS is an abbreviation for Automatic Music Sensor.

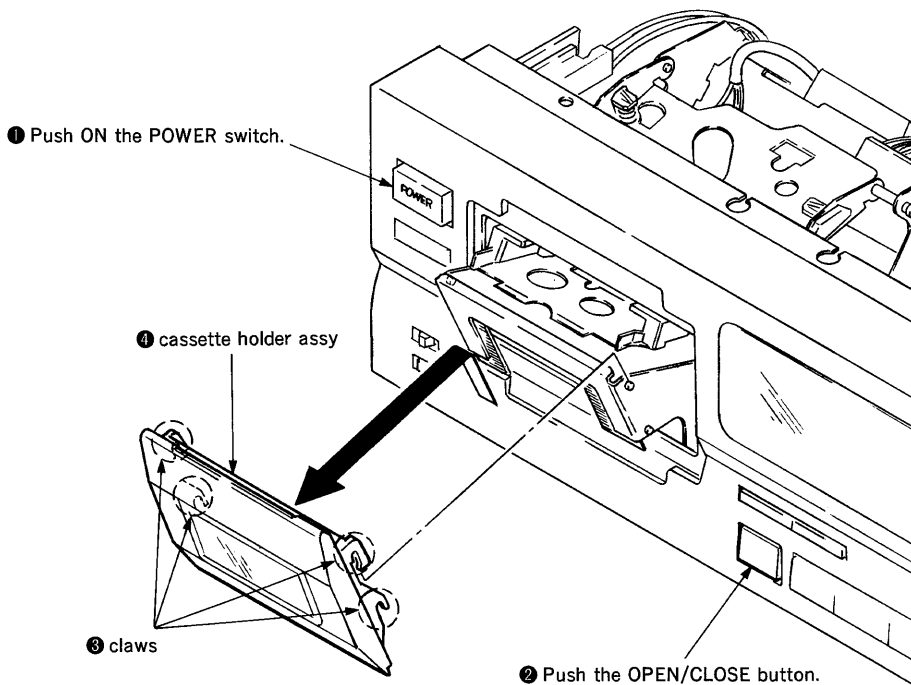
## SECTION 2 DISASSEMBLY

**Note :** Follow the disassembly procedure in the numerical order given.

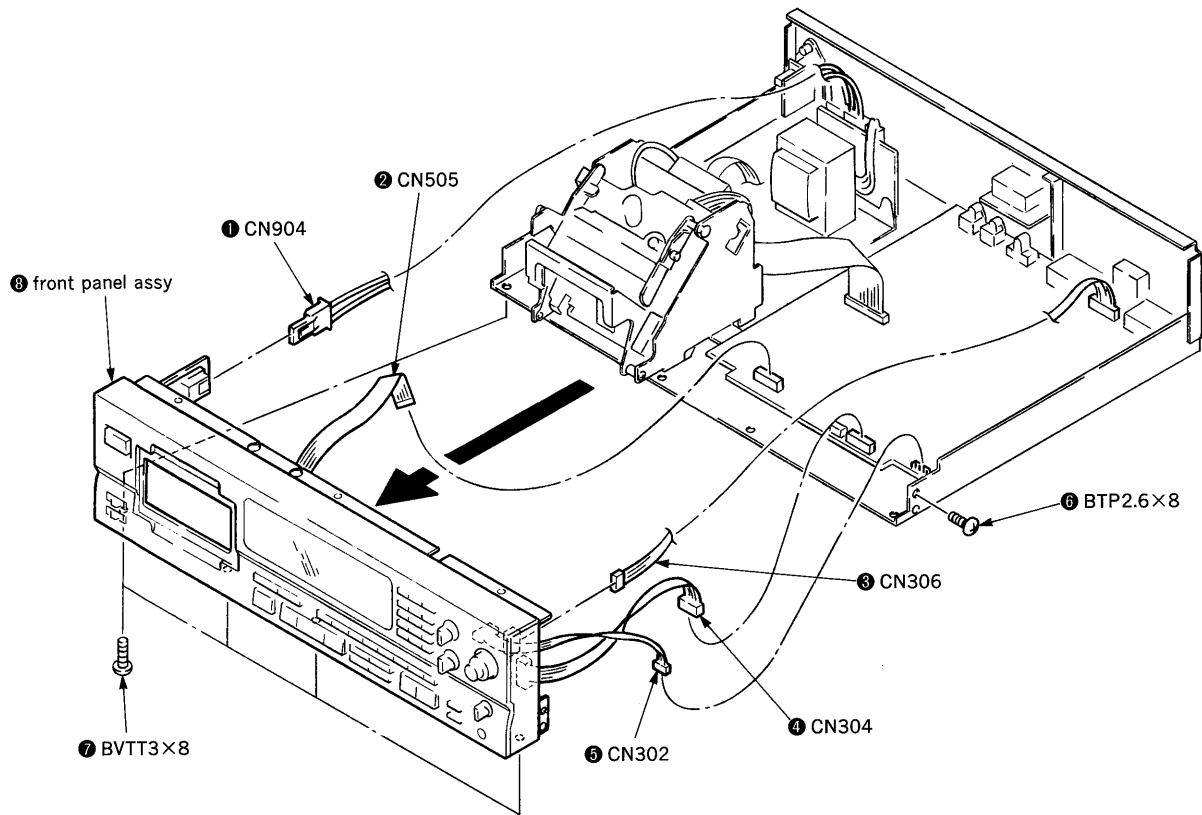
### 2-1. CASE



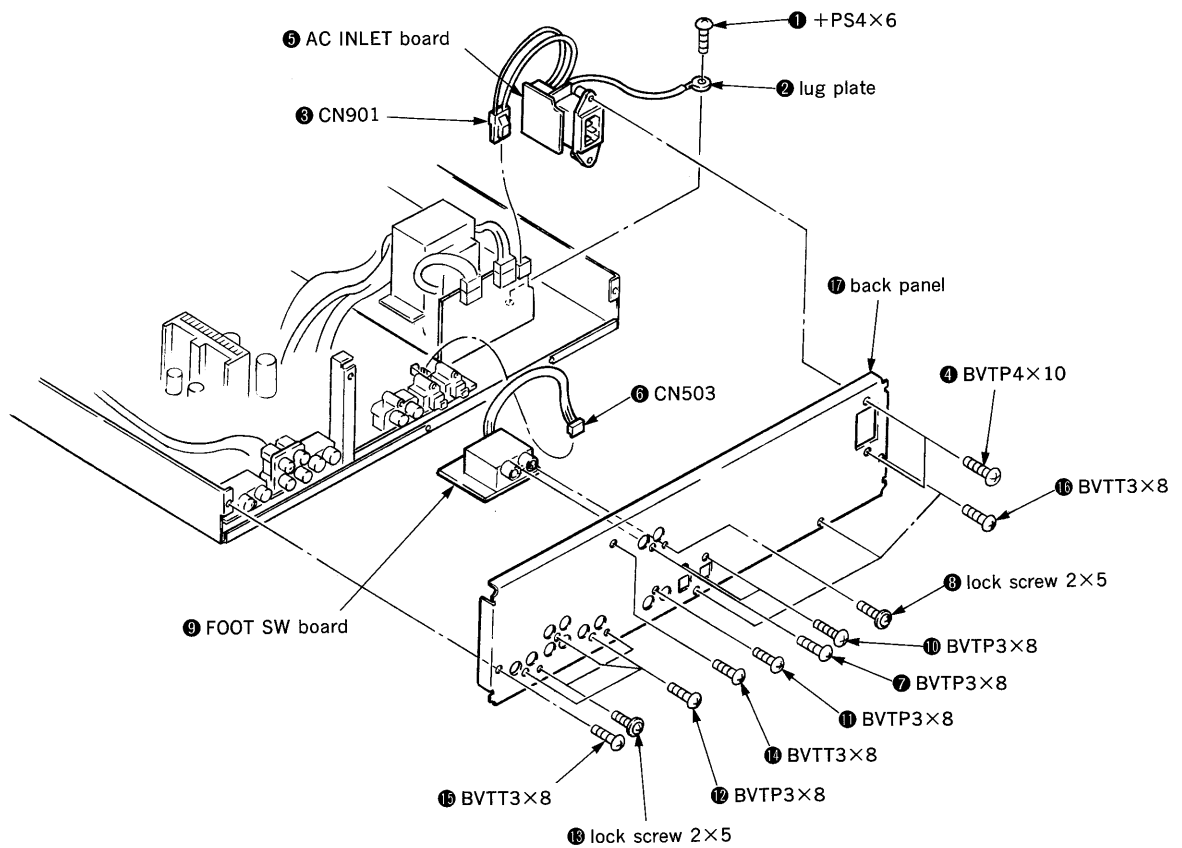
### 2-2. CASSETTE HOLDER ASSY



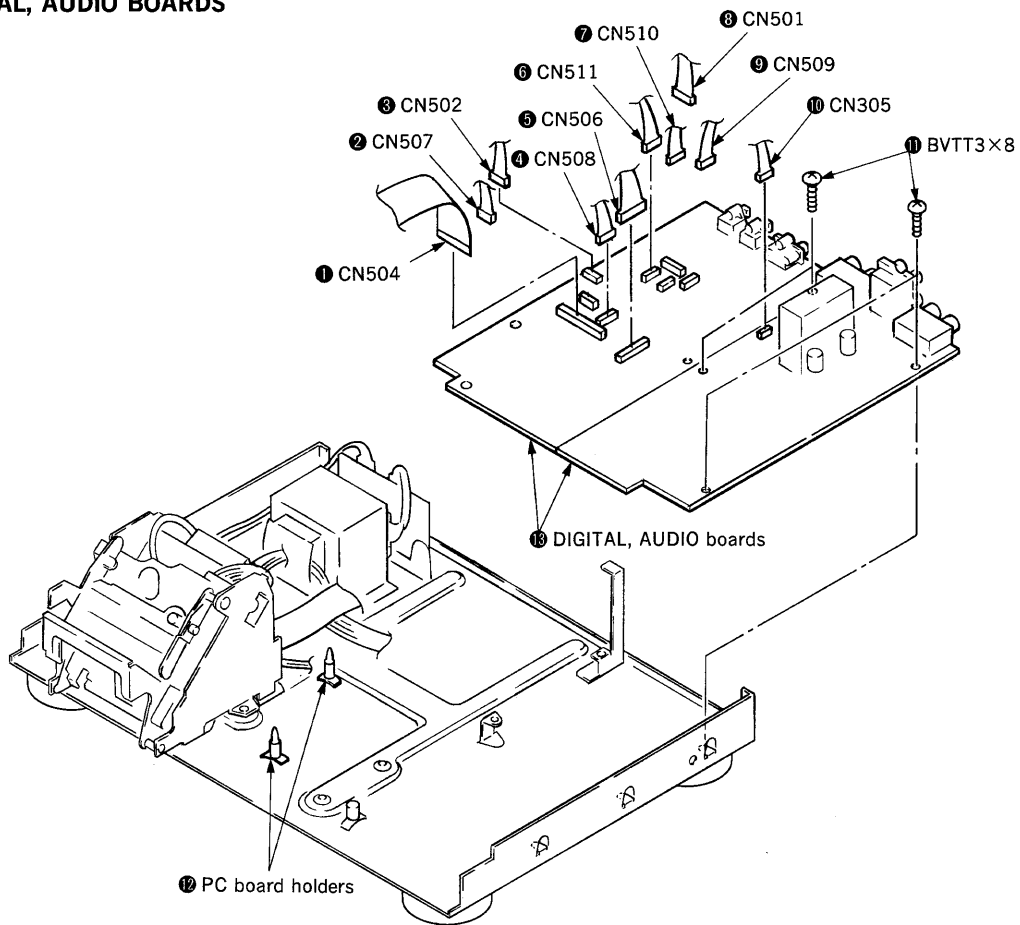
### 2-3. FRONT PANEL ASSY



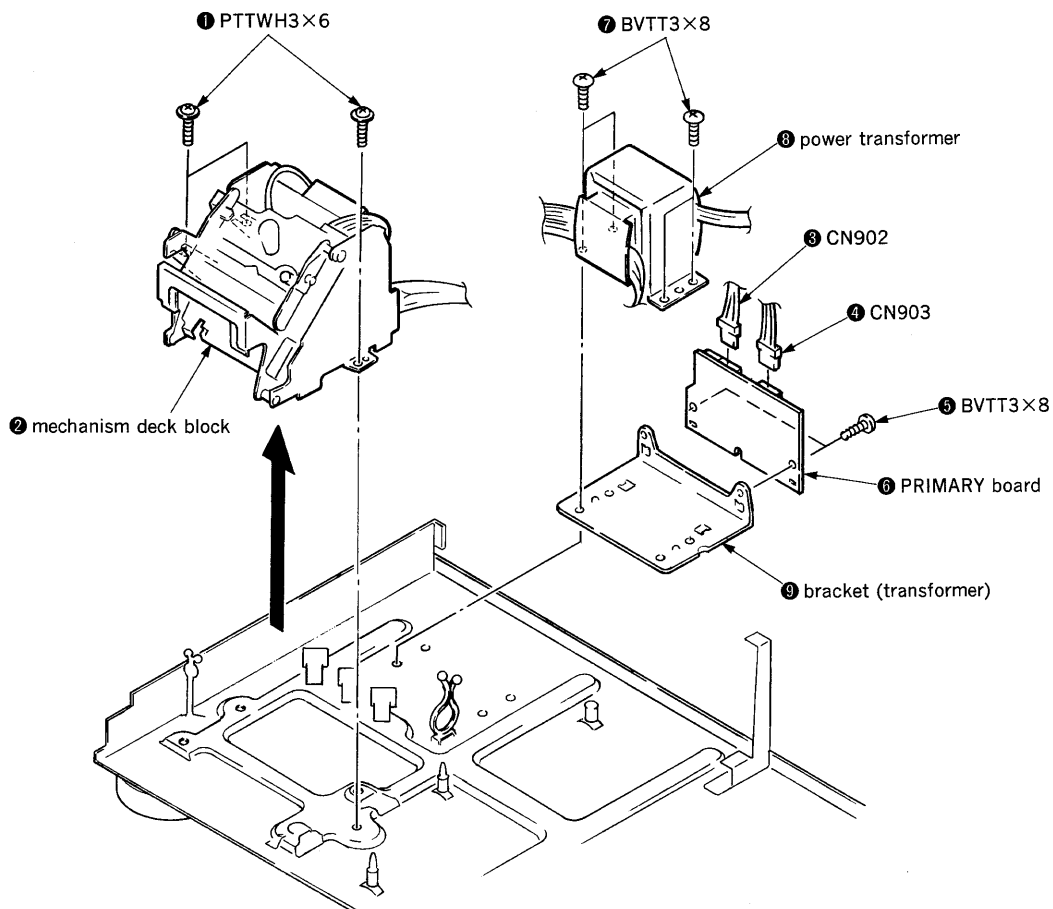
### 2-4. BACK PANEL



## 2-5. DIGITAL, AUDIO BOARDS



## 2-6. MECHANISM DECK BLOCK, POWER TRANSFORMER



## SECTION 3 ADJUSTMENTS

### PRECAUTION

1. The adjustments are performed in the sequence that they are described.
2. The required test tapes are :
  - TY-7111 (8-909-812-00) .....Level
  - TY-7252 (8-909-822-00) .....Tracking
  - TY-7551 (8-909-814-00) .....Function
  - TY-30B (8-892-358-00) .....Blank

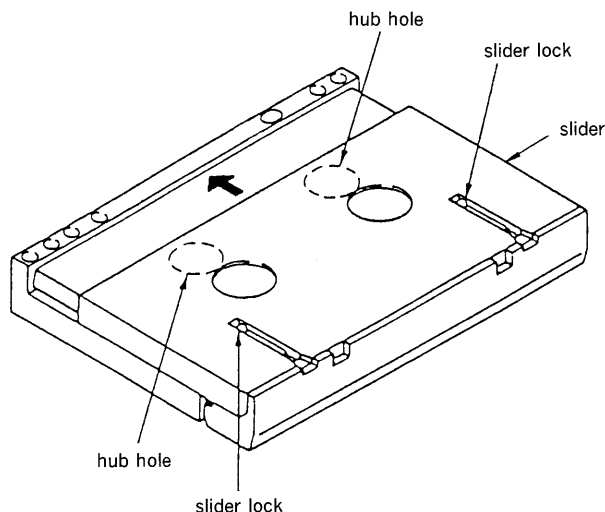
The required torque meter is :

TW-7131 (8-909-708-71) .....FWD

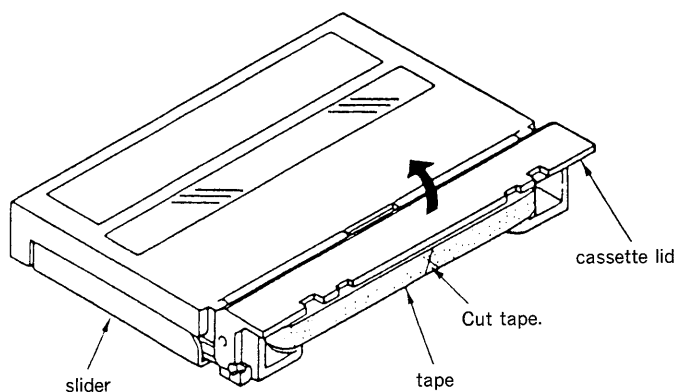
3. Switch and Control Settings
  - FOOT SW MODE switch : 2
  - REC MODE switch : 48k (STANDARD)
  - REC LEVEL control : Minimum
  - PHONE LEVEL control : Minimum

#### 4. Preparation of End Sensor Cassette

- (1) Push the slider locks of a cassette tape and slide the slider in the direction of the arrow.



- (2) Open the cassette lid and cut tape.



- (3) Turn the hubs to take-up tape (for both T and S sides).

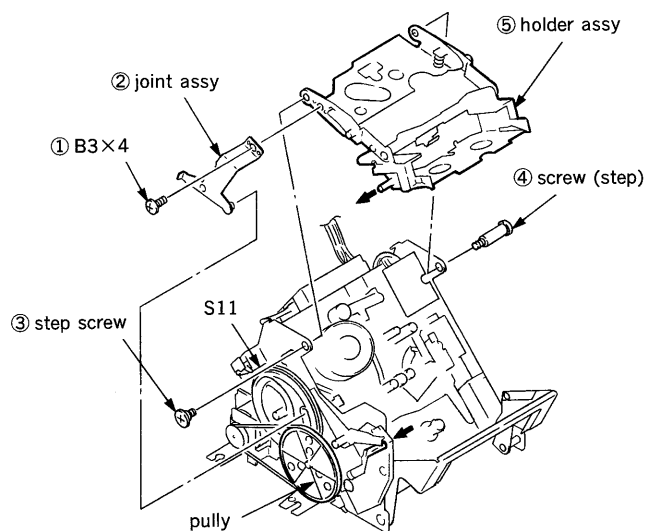
The end sensor cassette tape for end sensor adjustment is now prepared.

5. Take care never to turn RV1 and RV2 within the RF AMP board of the cassette compartment section.

6. When adjusting tape pass and each guide, as shown below, it is a good practice to remove the holder assy and use the holder jig for DAT (J-8000-002-A). This facilitates adjustment work.

- When removing and installing the holder assy, turn the pulley counterclockwise and set loading OUT condition for easy removal and installation.
- When adjusting, turn the pulley clockwise and turn on the CASSETTE TABLE IN switch (S11) to set loading IN condition. Then, set the test tape.

**Note :** When installing, align the arrowed portions.



#### 7. Test Mode

- To enter the test mode, short between TP (MAIN-TEST) and the GND on the DIGITAL board, then turn on the power. The meter scale within the fluorescent indicator tube (FL701) will flash. Press the OPEN/CLOSE key and set the test tape. (The specified tape should be used for each adjustment.)

Test Mode (Short between TP (MAIN-TEST) and GND)

- ① Have "DPG" display lit in the fluorescent indicator tube.

(Press the AMS key.)

- S2, T2 and F Guide Adjustments
- End Sensor Adjustment
- Tape Pass Fine Adjustment (×1.5FWD mode)
- DPG Adjustment

- ② Have "TR" display lit in the fluorescent indicator tube.

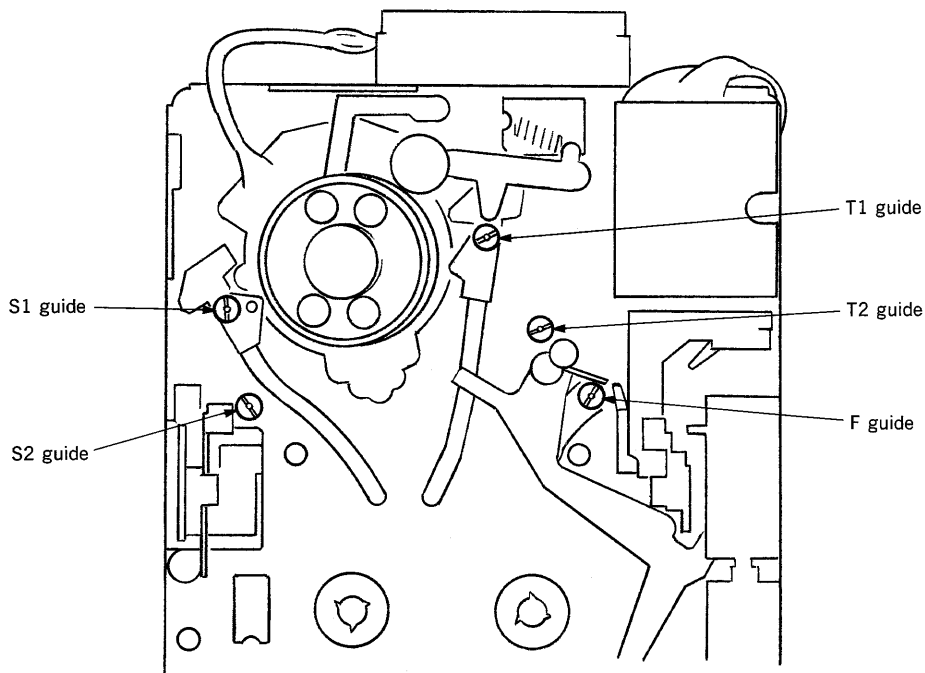
(Press the key.)

- FWD Torque Adjustment
  - FWD Back Tension Adjustment
- (Torque measurement mode)

- To release the test mode, remove the short between TP (MAIN-TEST) and GND. After necessary adjustment is completed, be sure to release the test mode.

8. After adjustment is completed, perform the following checks to verify the tape speed.
  - (1) Check that with the REC MODE switch set to STANDARD 48k, tape is normally recorded and played back. (×1)
  - (2) Check that with the REC MODE switch set to LONG, tape is normally recorded and played back. (×0.5)
  - (3) Check that in performing the CUE (▶+▶▶) or REVIEW (▶+◀◀) operation, "kyur kyur" sound is heard. (×3, ×8)
  - (4) Check that after performing the FF (▶▶) or REW (◀◀) operation, the time display is appropriate. (×16)
  - (5) Check that the AMS (▶▶▶, ◀◀◀) operation is normal.

**Adjustment Location :** mechanism deck block



### 3-1. MECHANICAL ADJUSTMENTS

When replacing any drum related parts, after S2, T2 and F guide adjustments have been made, tape pass fine adjustment ( $\times 1.5$ FWD mode) in Electrical adjustment should be performed.

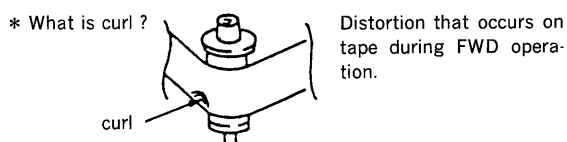
#### S2, T2 and F Guide Adjustments

##### Adjustment Method :

1. Enter the Test Mode ① (see page 9.) and set the test tape TY-7252 (8-909-822-00).
2. Set the REC MODE switch to STANDARD 48k and press the AMS  $\blacktriangleright\blacktriangleright$  key.

While in FWD mode, check that there is no curl on the upper and lower flanges of the S2, T2 and F guides.

If any curl is present, put the S2, T2 and F guide of concern back in the high position and adjust by adjusting the direction of tightening.



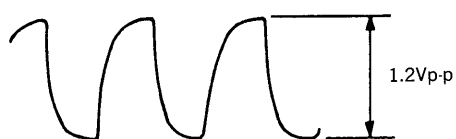
### 3-2. ELECTRICAL ADJUSTMENTS

#### End Sensor Adjustment

When removing the holder assy and when replacing the mechanism deck block, this adjustment should be performed.

##### Adjustment Method :

1. Connect the CH-1 terminal of an oscilloscope to TP (S-END) and the CH-2 terminal to TP (T-END) on the DIGITAL board.
2. Enter the Test Mode ① (see page 9.) and set the end sensor cassette tape (see page 9.).
3. Set the STOP  $\blacksquare$  mode.
4. Adjust RV502 (S-END) and RV501 (T-END) on the DIGITAL board so that the respective peak to peak values of the waveforms on the oscilloscope are 1.2 Vp-p.



Adjustment Location : See page 13.

#### FWD Torque Adjustment

##### Adjustment Method :

1. Enter the Test Mode ② (Torque Measurement Mode) (see page 9.) and set the torque meter TW-7131 (8-909-708-71).
2. Press the PLAY  $\blacktriangleright$  key.
3. Press the  $\blacktriangleright\blacktriangleright$  key or  $\blacktriangleleft\blacktriangleleft$  key and adjust so that the FWD torque value (T side take-up torque) is within the range of 11 to 13 g $\cdot$ cm.
4. When the torque meter is circulating around, check the indicated value.

#### FWD Back Tension Adjustment

##### Adjustment Method :

1. Enter the Test Mode ② (Torque Measurement Mode) (see page 9.) and set the torque meter TW-7131 (8-909-708-71).
2. Press the PLAY  $\blacktriangleright$  key.
3. Press the AMS  $\blacktriangleright\blacktriangleright$  key or  $\blacktriangleleft\blacktriangleleft$  key and adjust so that the back tension (S side) is within the range of  $8.5 \pm 0.5$  g $\cdot$ cm.
4. When the torque meter is circulating around, check the indicated value.
5. Verify that the maximum value is less than 9.5 g $\cdot$ cm.

#### REV Torque Check and REV Back Tension Check

##### Check Method :

1. After FWD torque adjustment and FWD back tension adjustment are completed, press the PLAY  $\blacktriangleright$  key again and set REV  $\blacktriangleleft$  mode.
2. Check that the REV torque value is within the range of 13.5 to 17.5 g $\cdot$ cm and that the REV back tension value is within the range of 7.5 to 11.5 g $\cdot$ cm.

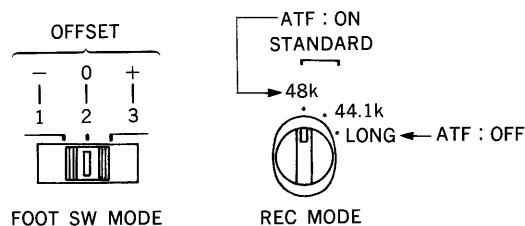
#### Tape Pass Fine Adjustment ( $\times 1.5$ FWD Mode)

When replacing any drum related parts, be sure to perform this adjustment.

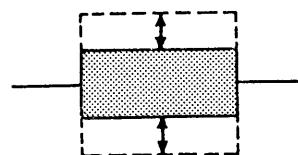
##### Adjustment Method :

1. Connect the CH-1 terminal of an oscilloscope to TP (RF) and the CH-2 terminal to TP (SWP) on the DIGITAL board.
2. Enter the Test Mode ① (see page 9.) and set the test tape TY-7252 (8-909-822-00).
3. Press the AMS  $\blacktriangleright\blacktriangleright$  key.

Role of each switch in test mode

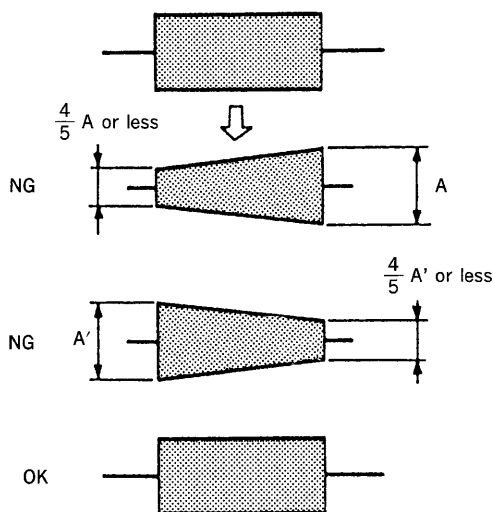


4. Put the REC MODE switch to the LONG (ATF: OFF) position and put the FOOT SW MODE switch to either the 1 or 3 position (OFFSET: - or +), fine adjust both the S1 guide and T1 guide so that the RF signal waveform of the oscilloscope repeatedly contracts and expands in vertical directions as it has the same shape.



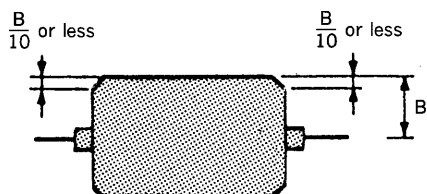
- \* Adjust the direction of tightening to complete this adjustment. If there is curl on any of the upper and lower flanges of the S2, T2 and F guides, adjust the guide of concern.

- Put the REC MODE switch to the STANDARD 48k (ATF: ON) position and put the FOOT SW MODE switch to either the 1 or 3 position (OFFSET: - or +), then check the RF signal waveform.



- Put the REC MODE switch to the STANDARD 48k (AFT: ON) position and put the FOOT SW MODE switch to the 2 position (OFFSET: 0), then check the RF signal waveform.

- Verify that the peak value (B) of the RF signal waveform is 60mV or more.
- Verify that the flat position of the RF signal waveform has undershoots of 10% or less.



- If any of the specified values are not satisfied, repeat items 3 to 6.

**Adjustment Location :** See page 10.

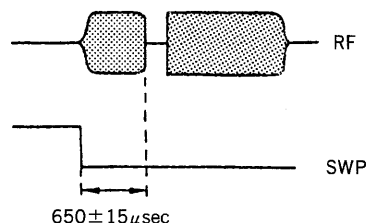
### DPG Adjustment

When replacing any drum related parts, be sure to perform this adjustment.

#### Adjustment Method :

- Connect the CH-1 terminal of an oscilloscope to TP (RF) and the CH-2 terminal to TP (SWP) on the DIGITAL board.
- Enter the Test Mode ① (see page 9.) and set the test tape TY-7252 (8-909-822-00).
- Put the REC MODE switch to the STANDARD 48k (ATF: ON) position and put the FOOT SW MODE switch to the 2 position (OFFSET: 0).

- Press the AMS (▶▶) key.
- Press the PLAY (▶) key.
- "DPG OK" is displayed in the fluorescent indicator tube. Check that there is a difference of  $650 \pm 15 \mu\text{sec}$  between the oscilloscope's SWP signal and the RF signal.



**Adjustment Location :** See page 13.

### CHECK AND REPLACEMENT FOR DATE FUNCTION

#### Clock IC Back-up Check

- When replacing the lithium battery (BATT501) or replacing any of the clock IC (IC518) and peripheral parts, the clock will be reset.

(The DATE display will be '--- --' [---h---m---s] even when the [PRESENT] button is pushed.)

Perform the back-up check by the following procedure.

- Connect a DC voltmeter between the DIGITAL board's TP (BATT+) as (+) side on the TP (BATT-) as (-) side.
- With the POWER switch of the set OFF, check that the voltage (1) is less than +20mV. (If the measured value is more than +20mV, inspect the IC518 and peripheral parts and replace as needed.)
- With the POWER switch of the set ON, check that the voltage (1) is less than 0mV (minus indication), (If plus indication, inspect the D510 and peripheral parts and replace as needed.)
- When these voltages are normal, set the clock to the current date and time according to the instruction manual. (year/month/day/day of week/hours/minutes/seconds)\*
- After the clock is set in item (4), turn off the POWER switch once and in several seconds, turn on the power again and make sure that the clock is operating.

**Adjustment Location :** See page 13.



**Replacement of Back-up Battery**

The back-up battery for clock is designed to serve for more than seven years under normal service conditions (room temperature and ordinary humidity).

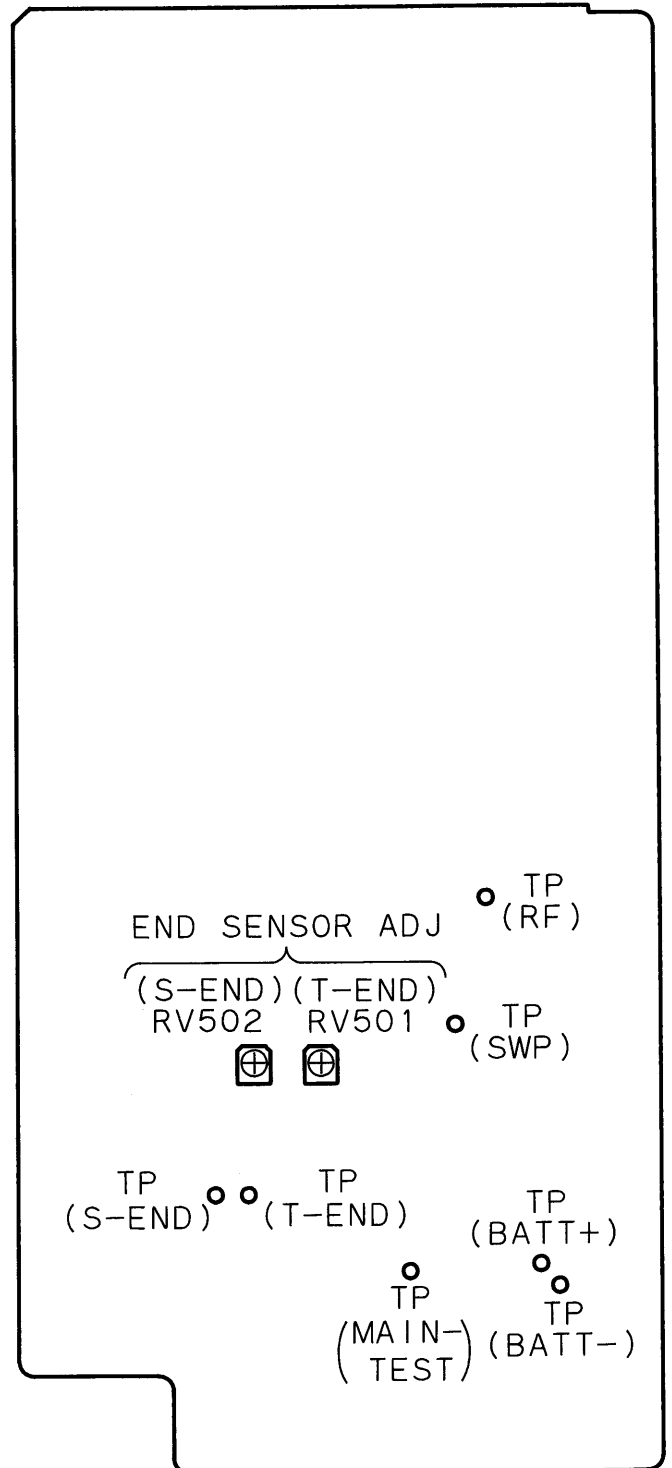
When replacing the battery, take note of the following :

- Perform the above "Clock IC Back-up Check" and remedy the cause of battery consumption.
- The open voltage of the battery as removed is 3.0V or more when it is new. If this voltage is 2.0V or less, then battery is fully consumed and needs to be replaced.
- After the battery is replaced, perform the "Clock IC Back-up Check" again and set the clock.
- The coin type lithium battery (CR2032) is used for replacement.

\* For description of the clock setting, see page 4.

**Adjustment and Check Locations :**

DIGITAL board—component side—



## SECTION 4 DIAGRAMS

### 4-1. IC PIN DESCRIPTIONS

#### • SBM+Digital Filter (IC308 CXD8482Q)

Pin No.	Pin Name	I/O	Pin Description
1	TEST	I	Test input pin. "H" for test mode and "L" for normal mode. (Fixed at "L" level in this set.)
2	NC	—	Empty pin
3	SYNC	I	Sync mode setting pin. "H" for INT master mode and "L" for EXT slave mode.
4	INIT	I	A/D converter power down mode input from main microcomputer (IC501). ("H" active) (This IC is set OFF in digital input/output mode.)
5	NC	—	Empty pin
6	CFLG	O	FE calibration flag output (Not used in this set, empty pin.)
7, 8	VDD	—	Power supply pin (+5V)
9	LRKI	I	L/R clock input (Not used in this set, fixed at "L" level.)
10	BKI	I	Beat clock input (Not used in this set, fixed at "L" level.)
11	NC	—	Empty pin
12	DLI	I	L channel data input (Not used in this set, fixed at "L" level.)
13	DRI	I	R channel data input (Not used in this set, fixed at "L" level.)
14	IFLG	O	FE sync flag output (Not used in this set, empty pin.)
15, 16	NC	—	Empty pin
17	FE	I	FE select input (Not used in this set, fixed at "L" level.)
18	AL2	I	Data signal (L) input (Not used in this set, fixed at "L" level.)
19	AR2	I	Data signal (R) input (Not used in this set, fixed at "L" level.)
20	AL1	I	Data signal (L) input from A/D converter (IC307).
21	AR1	I	Data signal (R) input from A/D converter (IC307).
22, 23	VSS	—	GND
24, 25	CVSS	—	GND
26	FCLK	O	Output of 128fs master clock for FE to A/D converter (IC307).
27	MCLK	I	Input of 256fs master clock from FS clock generator (IC310).
28	CVDD	—	Power supply pin (+5V)
29	NC	—	Empty pin
30	IBIT	I	64fs input data mode select input ("H": 4bit, "L": 1bit) (Fixed at "L" level in this set.)
31	NC	—	Empty pin
32	VSS	—	GND
33	SCALE	I	Scale select input ("H": ×4, "L": ×5) (Fixed at "L" level in this set.)
34	ISEL1	I	FS select of input data (Fixed at "L" level in this set.)
35	ISEL2	I	FS select of input data (Fixed at "L" level in this set.)
36	NC	—	Empty pin
37	DITH	I	Dither control input. Dither active when "H" and stopped when "L". (Not used in this set, empty pin.)
38	BOOST	I	Boost control input. Boost active when "H" and normal when "L". (Fixed at "H" level in this set.)
39	VDD	—	Power supply pin (+5V)
40	MODE	I	Serial data signal input from main microcomputer (IC501).
41	SHIFT	I	Shift clock signal input from main microcomputer (IC501). (Shift when ↓, latch when ↑)
42	LATCH	I	Latch pulse signal input from main microcomputer (IC501).
43	NC	—	Empty pin
44	LC	I	Low cut control input. "H" for low frequency cut and "L" for flat. (Fixed at "H" level in this set.)
45	SBM	I	Super Bit Mapping (SBM) control input from main microcomputer (IC501). ("H": ON, "L": OFF)

Pin No.	Pin Name	I/O	Pin Description
46	NC	—	Empty pin
47	OSEL	I	FS select of data output. ("H" : 2FS output or EX mode, "L" : FS output) (Fixed at "L" level in this set.)
48	OBIT	I	Bit select of data output. ("H" : 24 bits, "L" : 16 bits) (Fixed at "L" level in this set.)
49	DRO	O	Write clock output (Not used in this set, empty pin.)
50	DLO	O	L/R channel data signal output
51	NC	—	Empty pin
52, 53	VSS	—	GND
54	BCK	I	Bit clock input from digital filter (IC314).
55	NC	—	Empty pin
56	LRCK	I	L/R clock input from digital filter (IC314).
57	OFLG	O	Outside sync flag output (Not used in this set, empty pin.)
58	VDD	—	Power supply pin (+5V)
59	OVR	O	R channel side overflow flag output (Not used in this set, empty pin.)
60	OVL	O	L channel side overflow flag output (Not used in this set, empty pin.)

● Main Microcomputer (IC501 CXP87532-011Q)

Pin No.	Pin Name	I/O	Pin Description																
1	SBM-ON	O	SBM (Super Bit Mapping) ON/OFF select pin ("L" : OFF, "H" : ON)																
2	LCF-ON	O	Not used.																
3	OBIT-SEL	O	Not used.																
4, 5	—	—	Empty pin																
6	PRE-EMPH	O	Not used.																
7	AUSO	O	Digital filter control serial data output pin																
8	AUSC	O	Digital filter control serial clock output pin																
9	VCO-EN	O	DIGITAL IN REC mode only for "H" output.																
10	XOPT/COA	O	DIGITAL IN OPTICAL/COAXIAL select pin ("L" : COAXIAL, "H" : OPTICAL)																
11	XADLD	O	A/D digital filter control latch output pin																
12	XDALD	O	D/A digital filter control latch output pin																
13	FADE-WE	O	Not used.																
14	FADE-RST	O	Not used.																
15	XANA/DIG	O	ANALOG/DIGITAL IN select output pin ("L" : ANALOG IN, "H" : DIGITAL IN)																
16	XREC/PB	O	Record/playback select output pin ("L" : REC, "H" : PB)																
17	XREPRO	O	Not used.																
18	MIC-ATT	O	Not used.																
19	MIC-ON	O	Not used.																
20	RTC-DT	I/O	Clock IC serial data input/output pin																
21	RTC-SC	O	Clock IC serial data output pin																
22	RTC-CE	O	Clock IC chip enable output pin																
23—27	—	—	Empty pin																
28	FS48	O	<table border="1"> <thead> <tr> <th></th> <th>Fs 48kHz</th> <th>Fs 44.1kHz</th> <th>Fs 32kHz</th> </tr> </thead> <tbody> <tr> <td>Pin ⑳</td> <td>H</td> <td>L</td> <td>L</td> </tr> <tr> <td>Pin ㉑</td> <td>L</td> <td>H</td> <td>L</td> </tr> <tr> <td>Pin ㉒</td> <td>L</td> <td>L</td> <td>H</td> </tr> </tbody> </table>		Fs 48kHz	Fs 44.1kHz	Fs 32kHz	Pin ⑳	H	L	L	Pin ㉑	L	H	L	Pin ㉒	L	L	H
	Fs 48kHz	Fs 44.1kHz		Fs 32kHz															
Pin ⑳	H	L		L															
Pin ㉑	L	H		L															
Pin ㉒	L	L	H																
29	FS44	O																	
30	FS32	O																	
31	XLM	O	Line mute output pin ("L" : ON, "H" : OFF)																
32	—	—	Empty pin																
33	SLV-MUT	O	Not used.																
34	XSLV-SEL	O	Not used.																
35—38	AF3-AF0	I	Pull-up fixed.																
39	MP	—	Connected to GND.																
40	XRST	I/O	System reset input/output pin ("L" : ACTIVE)																
41	VSS	—	GND																
42	XTAL	O	Not used.																
43	EXTAL	I	Operating clock input pin (9.408MHz)																
44	XDISP-REQ	O	Pin for communication request output to display controller.																
45	—	—	Not used.																
46	XMECH-REQ	O	Pin for communication request output to mechanism microcomputer.																
47	—	—	Not used.																
48	XDISP-ACK	I	Pin for communication acknowledge input from display controller.																
49	DM-DI	I	Pin for serial data input from another microcomputer.																
50	DM-DO	O	Pin for serial data output to another microcomputer.																
51	DM-CK	O	Pin for serial clock output to another microcomputer.																
52	XSBYS	I	Pin for SBYS input from master DAT-DSP IC.																
53	SR-DTI	I	Pin for serial data input from master DAT-DSP IC.																

Pin No.	Pin Name	I/O	Pin Description
54	SR-DTO	O	Pin for serial data output to master DAT-DSP IC.
55	SR-CK	O	Pin for serial clock output to master DAT-DSP IC.
56	AVSS	—	GND
57	AVREF	—	Reference voltage pin (+5V)
58	AVDD	—	Power supply pin (+5V)
59	XMECH-BSY	I	Pin for communication busy input from mechanism microcomputer. ("L" : BUSY)
60	FOOT-SW1	I	FOOT SW input 1 pin (REC/PAUSE)
61	FOOT-SW0	I	FOOT SW input 0 pin (MODE)
62	MODE1	I	Fixed at "H" level.
63	MODE0	I	Fixed at "L" level.
64	X24/12	I	24/12-hour system display select input pin ("H" : 12-hour system display (US, Canadian model), "L" : 24-hour system display (AEP, UK, German model)).
65	DATE-ODR	I	YY-MM-DD/DD-MM-YY display select input pin ("L" : Fixed to DD-MM-YY display)
66	PRL-REM	I	Pull-up fixed.
67	X4HEAD	I	Fixed at "H" level.
68	XPRODIO	I	Fixed at "H" level.
69	XFADER	I	Fixed at "H" level.
70	MUT-MONIT	I	Pin for mute monitor input from master DAT-DSP IC.
71	XAES/COA	I	Pull-up fixed.
72	XCNT-S	I	Pull-up fixed.
73	MODE3	I	Fixed at "H" level.
74	MODE2	I	Fixed at "H" level.
75, 76	LED1, 0	O	Not used.
77—85	—	—	Not used.
86	XTEST	I	TEST pin ("L" : TEST MODE)
87	POW-DWN	I	Fixed at "H" level.
88	VSS	—	GND
89	VDD	—	Power supply pin (+5V)
90	VPP	—	Connect to VDD.
91, 92	—	—	Not used.
93	XADINT	O	A/D digital filter initial setting output pin ("L" : INIT)
94	XDAINT	O	D/A digital filter initial setting output pin ("L" : INIT)
95	REC-DIS	O	Recording current control output pin ("L" : Normally, "H" : Recording current forced OFF)
96	EXSY-MUT	O	EXSY output control pin ("L" : Normally, "H" : EXSY forced OFF)
97	XMST-SEL	O	Signal process IC chip select output pin
98	MST-MUTE	O	Playback data mute output pin ("L" : OFF, "H" : ON)
99, 100	—	—	Not used.

• Mechanism Microcomputer (IC502 CXP87532-012Q)

Pin No.	Pin Name	I/O	Pin Description
1	FPM-KI	O	FWD plunger kick control output
2	CAP-RVS	O	Capstan rotation direction control output. "H" for FWD and "L" for REV.
3	BPM-ON	O	Brake plunger ON control output
4	BPM-KI	O	Brake plunger kick control output
5	DRM-ON	O	Drum motor ON control output
6	—	O	} Not used.
7	—	O	
8	—	O	
9	—	O	
10	—	O	
11	—	O	
12	—	O	
13	—	O	
14	—	O	
15	LE-EJCT	O	Loading motor rotation direction control output (Eject direction)
16	LM-LOAD	O	Loading motor rotation direction control output (Loading direction)
17	CM-OUT	O	Cassette compartment motor rotation direction control output (OUT direction)
18	CM-IN	O	Cassette compartment motor rotation direction control output (IN direction)
19	XROM-CK	O	EEPROM serial clock output
20	XROM-DT	I/O	EEPROM serial data input/output
21	—	O	} Not used.
22	—	O	
23	H-FIX	I	} Not used. (Fixed at "H" level.)
24	H-FIX	I	
25	CAS-IN	I	Cassette IN switch input
26	REC-EN	I	REC enable switch input
27	CAS-LCK	I	Cassette compartment lock switch input
28	CAS-OUT	I	Cassette compartment OUT switch input
29	UNLD-SW	I	UNLOAD switch input. "H" in UNLOAD position.
30	LOAD-SW	I	LOAD switch. "H" in STOP position.
31	—	O	} Not used.
32	—	O	
33	—	O	
34	—	O	
35	H-FIX	I	} Not used. (Fixed at "H" level.)
36	H-FIX	I	
37	H-FIX	I	
38	H-FIX	I	
39	MP	—	Connect to GND.
40	XRST	I	Reset input. "L" for reset.
41	VSS	—	GND
42	XTAL	O	Crystal oscillator output pin (9.408MHz). (Not used in this set.)
43	EXTAL	I	Crystal oscillator input pin (9.408MHz)
44	XMECH-BSY	O	Mechanism microcomputer BUSY signal input
45	—	O	Not used.
46	TLED-ON	O	T-END sensor ON output. "H" for ON.
47	SLED-ON	O	S-END sensor ON output. "H" for ON.
48	XSBSY	I	SUB SYNC input from main microcomputer (IC501).

Pin No.	Pin Name	I/O	Pin Description
49	—	I	} Not used.
50	—	O	
51	—	O	
52	XMECH-REQ	I	Communication request input from main microcomputer (IC501).
53	MECH-DTI	I	Serial data input from main microcomputer (IC501).
54	MECH-DTO	O	Serial data output to main microcomputer (IC501).
55	MECH-SCK	I	Serial clock input from main microcomputer (IC501).
56	AVSS	—	A/D port GND
57	AVREF	—	A/D port reference voltage (+5V)
58	AVDD	—	A/D port power supply (+5V)
59	TEND	I	T-END sensor input
60	SEND	I	S-END sensor input
61	H-FIX	I	} Fixed at "H" level.
62	H-FIX	I	
63	THICK	I	Not used.
64	SET-MODE	I	Fixed at "L" level.
65	CAS-MODE	I	Fixed at "H" level.
66	ATF-IN	I	ATF pilot signal input
67	TFG	I	T reel FG signal input
68	SFG	I	S reel FG signal input
69	CFG	I	Capstan FG signal input
70	DFG	I	Drum FG signal input
71	DPG	I	Drum PG signal input
72	DREF	I	Drum reference signal input
73	ATF-S2	I	Input of AFT sampling pulse for DPG automatic adjustment.
74	H-FIX	I	Not used. (Fixed at "H" level.)
75	—	O	Not used.
76	XCAS-TST	I	Test pin. "L" for cassette compartment without test mode.
77	MST-CLK	I	Master clock input
78	PBDT	I	PB data for ATF SYNC.
79	SWP	O	Switching pulse output
80	AGC-PWM	O	Output of PWM signal for AGC.
81	T-PWM	O	Output of PWM signal for T reel.
82	S-PWM	O	Output of PWM signal for S reel.
83	D-PWM	O	Output of PWM signal for drum.
84	C-PWM	O	Output of PWM signal for capstan.
85	H-FIX	I	Not used. (Fixed at "H" level.)
86	XTEST	I	Test pin. "L" for test mode. (Used at D PG, PATH and torque.)
87	POW-DWN	I	Not used. (Fixed at "H" level.)
88	VSS	—	GND
89	VDD	—	+5V power supply
90	VPP	—	Connect to +5V.
91	ATF-S2	O	ATF sampling pulse # 2 output
92	AREA	O	AREA signal output (Not used in this set.)
93	—	O	} Not used.
94	—	O	
95	—	O	
96	XLP-REC	O	LP REC control output. "L" for LP mode REC.

Pin No.	Pin Name	I/O	Pin Description
97	—	O	} Not used.
98	—	O	
99	XTLK	O	Reel motor T LOCK control output. "L" for T LOCK.
100	FPM-ON	O	FWD plunger ON control output



• Master DAT-DSP (IC503 CXD2605Q)

Pin No.	Pin Name	I/O	Pin Description
1	A8	O	External RAM address output
2	A9	O	External RAM address output
3	VDD	—	+5V
4	A10	O	External RAM address output
5	A11	O	External RAM address output
6	A12	O	External RAM address output
7	A13	O	External RAM address output
8	A14	O	External RAM address output
9	XWE	O	External RAM write enable signal output
10	XOE	O	External RAM output enable signal output
11	XEAN	O	External addressing enable signal output
12	TST1	I	Test input (Fixed at "L" level.)
13	XT1O	O	X'tal oscillation circuit 1 output
14	XT1I	I	X'tal oscillation circuit 1 input
15	VSS	—	GND
16	XRST	I	Reset input. "L" for reset.
17	CLKO	O	System clock output. (The frequency is 4.9152 MHz when SELC is set "L" and 8.192MHz when SELC is set "H".) (Not used in this set.)
18	MINT	O	Control byte (1). Bit 1 : Q code decode (intercurve detection) output when "L" and BCK clock output by RX-PLL when "H". (Not used in this set.)
19	ATSY	I	ATF sync signal input
20	MCLK	O	Channel clock (fch) output (Not used in this set.)
21	DREF	O	SBSY cycled Duty 50 signal output
22	SBPM	O	Control byte (1). Bit 1 : Output of monitor signal for data transfer to and from microcomputer when "L" ("L" to permit transfer) and F256 clock output by RX-PLL when "H". (Not used in this set.)
23	EXCK	I	Input of clock for data transfer to and from main microcomputer (IC501).
24	SDSI	I	Serial data input from main microcomputer (IC501).
25	SDSO	O	Serial data output to main microcomputer (IC501).
26	SBSY	O	Output of frame sync signal for data transfer to and from main microcomputer (IC501).
27	PLRF	O	Output of PLL clock divided by 5880. (Not used in this set.)
28	CCLK	O	9.8304MHz output when SELC is "L" and 12.288MHz output when SELC is "H". (Not use in this set.)
29	MUTE	I	Mute input. Set "H" to mute, but REC monitor sound will not be muted.
30	MUTM	O	Mute monitor. "H" in muting.
31	UNLK	O	RX-PLL lock monitor signal output. "L" in locking.
32	RFCT	I	Playback RF signal control. ("L" to enable RF signal and "H" to disable RF signal.)
33	SYMN	O	RF associated C1 check result monitor signal output. (Not used in this set.)
34	SELB	I	Test pin (Fixed at "H" level.)
35	PLCK	O	Control byte (1). Bit 1 : RF-PLL clock output when "L" and F128 clock output by RX-PLL when "H" (Not used in this set.)
36	TST2	I	Test pin (Fixed at "L" level.)
37	RFDT	I	Playback RF signal input
38	XCS	I	Input of chip select signal for data transfer to and from microcomputer. "L" to permit transfer.
39	SWP	I	RF switching pulse. "L" to select A track and "H" to select B track.
40	VSS	—	GND
41	PIPC	O	Output of ATF pilot signal/discrimination signal for recording signal. "H" to output pilot signal.
42	REPB	O	REC/PB discrimination signal output. "H" for REC mode.
43	REDT	O	Recording signal output

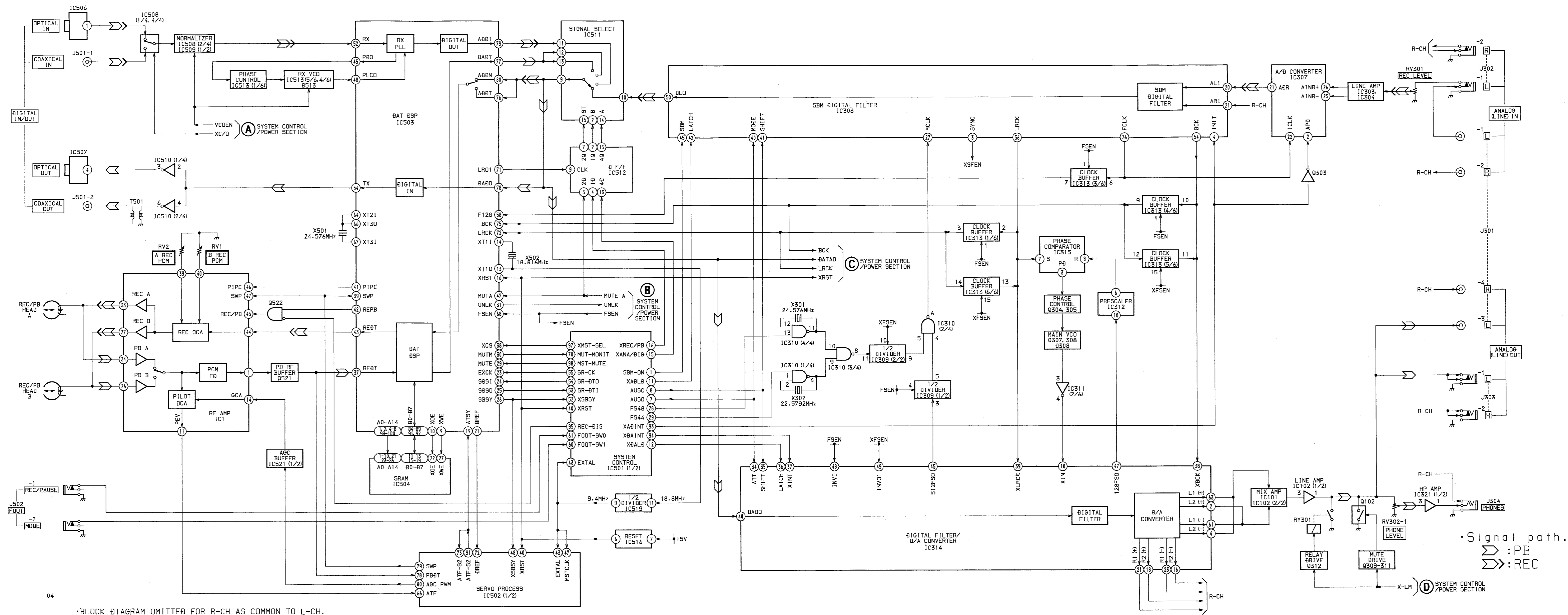
Pin No.	Pin Name	I/O	Pin Description
44	TST4	I	Test pin (Fixed at "L" level.)
45	PDO	O	RX-PLL phase comparator output
46	SELC	I	Oscillation frequency select signal input (Fixed at "L" level in this set. )
47	MUTA	I	Mute input. "H" to mute, and REC monitor sound is also muted.
48	PLCO	I	RX-PLL's external VCO clock input (512fs reference)
49	PLVR	O	Output of phase comparator signal for RX-PLL. (2fs generated from PLL clock.) (Not used in this set.)
50	PLRF	O	Output of phase comparator signal for RX-PLL. (RX SYNC detect signal 2fs) (Not used in this set.)
51	MSSL	I	Master mode/slave mode select. "H" for master mode.
52	RX	I	Digital interface signal input
53	VDD	—	+5V
54	TX	O	Digital interface signal output
55	SELA	I	Test pin (Fixed at "L" level.)
56	EXSY	I/O	External sync signal input/output
57	EXSN	I/O	External sync signal input/output
58	F128	I/O	128fs signal/256fs signal (high speed) input/output
59	F256	O	256fs signal/512fs signal (high speed) output (Not used in this set.)
60	F512	O	512fs signal output (Not used in this set.)
61	ADLF	I	ADDT, ADDI, ADDN serial data LSB/MSB first select input. "L" for LSB first.
62	DALF	I	DADT, DADO serial data LSB/MSB first select input. "L" for LSB first.
63	XT2O	O	X'tal oscillation circuit 2 output
64	XT2I	I	X'tal oscillation circuit 2 input
65	VSS	—	GND
66	XT3O	O	X'tal oscillation circuit 3 output
67	XT3I	I	X'tal oscillation circuit 3 input
68	FSEN	I	F128, BCK, LRCK input/output select input. "H" for output.
69	LR03	O	Inverted LR02 signal (Not used in this set.)
70	LR02	O	Control byte (1). Bit 1: 16BCK delayed LRCK signal when "L" and LRCK clock output by RX-PLL when "H" (Not used in this set.)
71	LR01	O	15BCK delayed LRCK signal
72	LRCK	I/O	fs/2fs (high speed) signal input/output
73	WCK	O	2fs/4fs (high speed) signal output (Not used in this set.)
74	XBCK	O	Inverted BCK signal output
75	BCK	I/O	64fs/128fs (high speed) signal input/output
76	ADDT	I	AD serial data input
77	DADT	O	DA serial data output
78	DADO	I	DIGITAL OUT audio data input
79	ADDI	O	DIGITAL IN audio data output
80	ADDN	I	DIGITAL IN audio data input
81	ERRI	I	DIGITAL OUT Validity flag data input
82	ERRF	O	DADT data's interpolation data/discrimination signal output. "H" for interpolation data.
83	MNTG	O	"H" output indicates that error correction status monitor data is being output to D7 to D0. (Not used in this set.)
84	D7	I/O	External RAM data input/output (MSB)
85	D6	I/O	External RAM data input/output
86	D5	I/O	External RAM data input/output
87	D4	I/O	External RAM data input/output
88	D3	I/O	External RAM data input/output
89	D2	I/O	External RAM data input/output
90	VSS	—	GND

Pin No.	Pin Name	I/O	Pin Description
91	D1	I/O	External RAM data input/output
92	D0	I/O	External RAM data input/output (LSB)
93	A0	O	External RAM address output
94	A1	O	External RAM address output
95	A2	O	External RAM address output
96	A3	O	External RAM address output
97	A4	O	External RAM address output
98	A5	O	External RAM address output
99	A6	O	External RAM address output
100	A7	O	External RAM address output

• Display Controller (IC701 CXP82316-054Q)

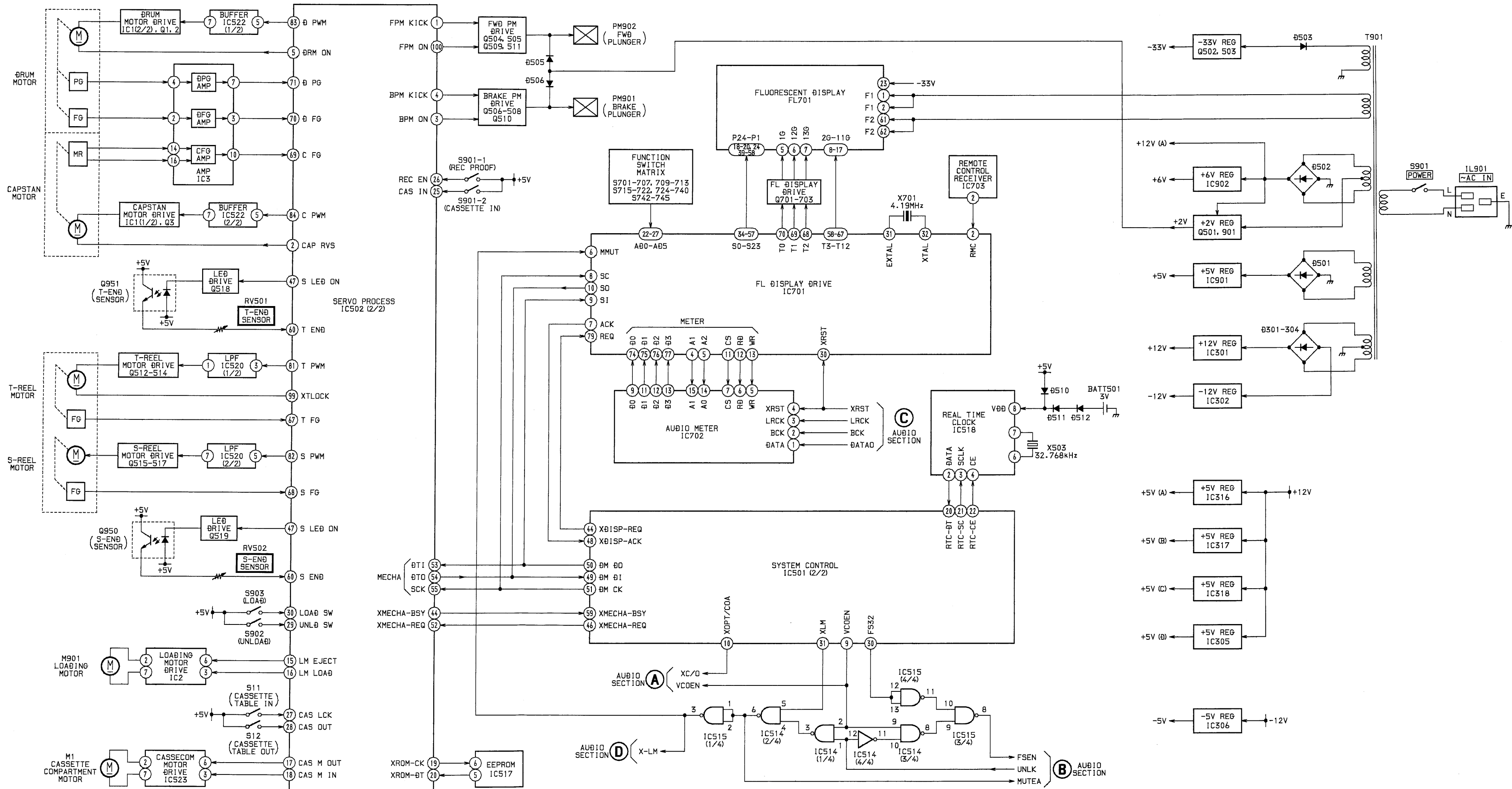
Pin No.	Pin Name	I/O	Pin Description
1	H	I	Fixed at "H" level.
2	RMC	I	Remote control input from IC703.
3	TEST	I	Test mode setting pin
4	A1 METER	O	Address 1 output to IC702.
5	A0 METER	O	Address 0 output to IC702.
6	M MUT	I	Level meter mute input pin
7	ACK	O	Pin for acknowledge output to main microcomputer (IC501).
8	SC	I	Pin for serial clock input from main microcomputer (IC501).
9	SI	I	Pin for serial data input from main microcomputer (IC501).
10	SO	O	Pin for serial data output to main microcomputer (IC501).
11	CS METER	O	Pin for chip select output to IC702.
12	RD METER	O	Pin for read output to IC702.
13	WR METER	O	Pin for write output to IC702.
14	REM SEL	O	} Not used.
15	FWD LED	O	
16	PAUSE LED	O	
17	REC LED	O	
18—21	—	—	Empty pin
22—29	AD0—AD7	I	Key input pins
30	XRST	I/O	System reset pin (active "L")
31	EXTAL	I	System clock input pin
32	XTAL	O	System clock output pin (4.19MHz)
33	VSS	—	GND
34—57	S0—S23	O	FL tube segment output pins
58—70	T12—T0	O	FL tube grid output pins
71	VFDP	I	Power supply pin (-31V)
72	VDD	—	Power supply pin (+5V)
73	NC	—	Connect to VDD.
74—77	D0METER— D3METER	I/O	Pin for data input/output to and from IC702.
78	H	I	Fixed at "H" level.
79	REQ	I	Pin for communication request input from main microcomputer (IC501).
80	MODE	I	Fixed at "H" level.

4-2. BLOCK DIAGRAM—AUDIO SECTION—



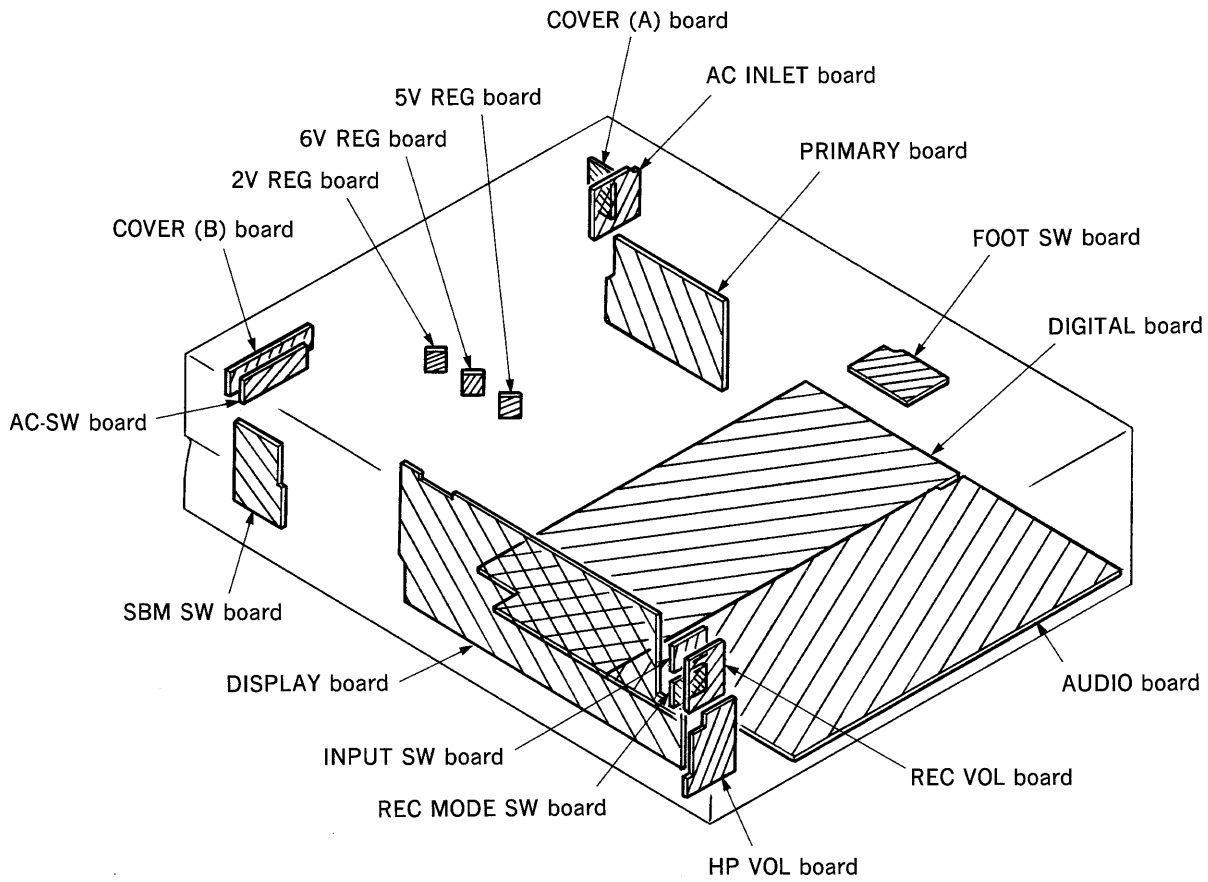
\*BLOCK DIAGRAM OMITTED FOR R-CH AS COMMON TO L-CH.

4-3. BLOCK DIAGRAM—SYSTEM CONTROL/POWER SECTION—

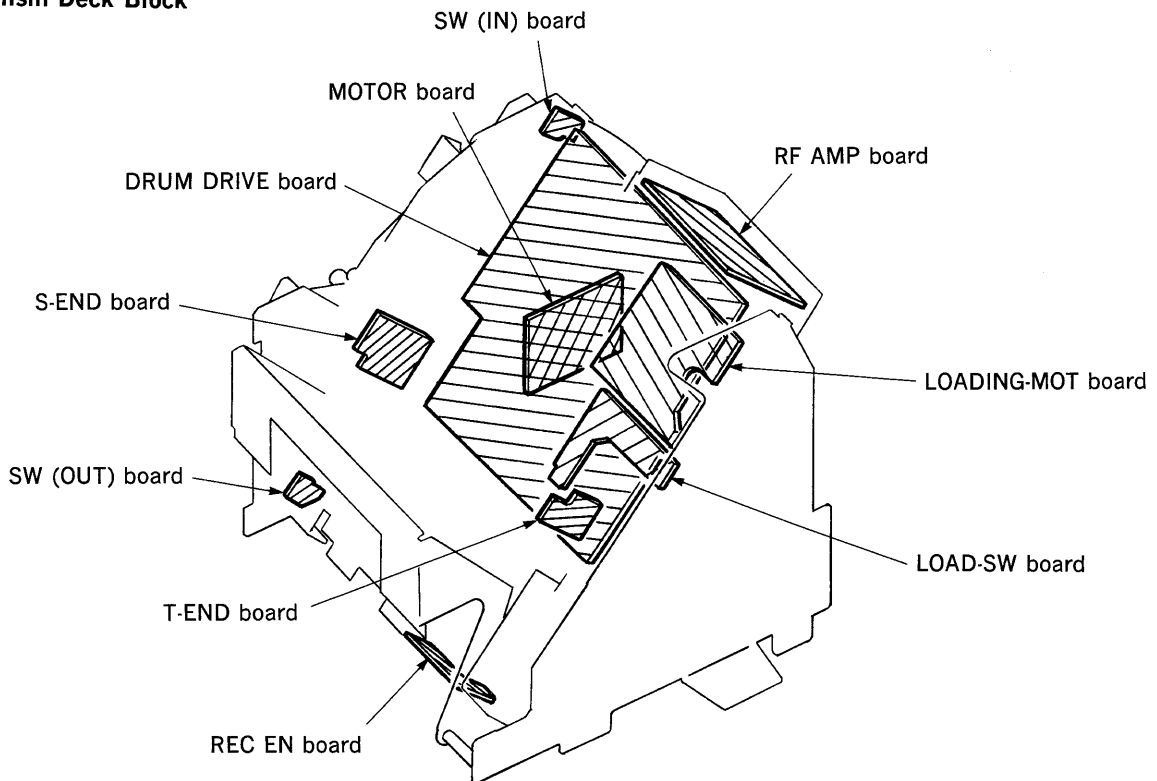


4-4. CIRCUIT BOARDS LOCATION

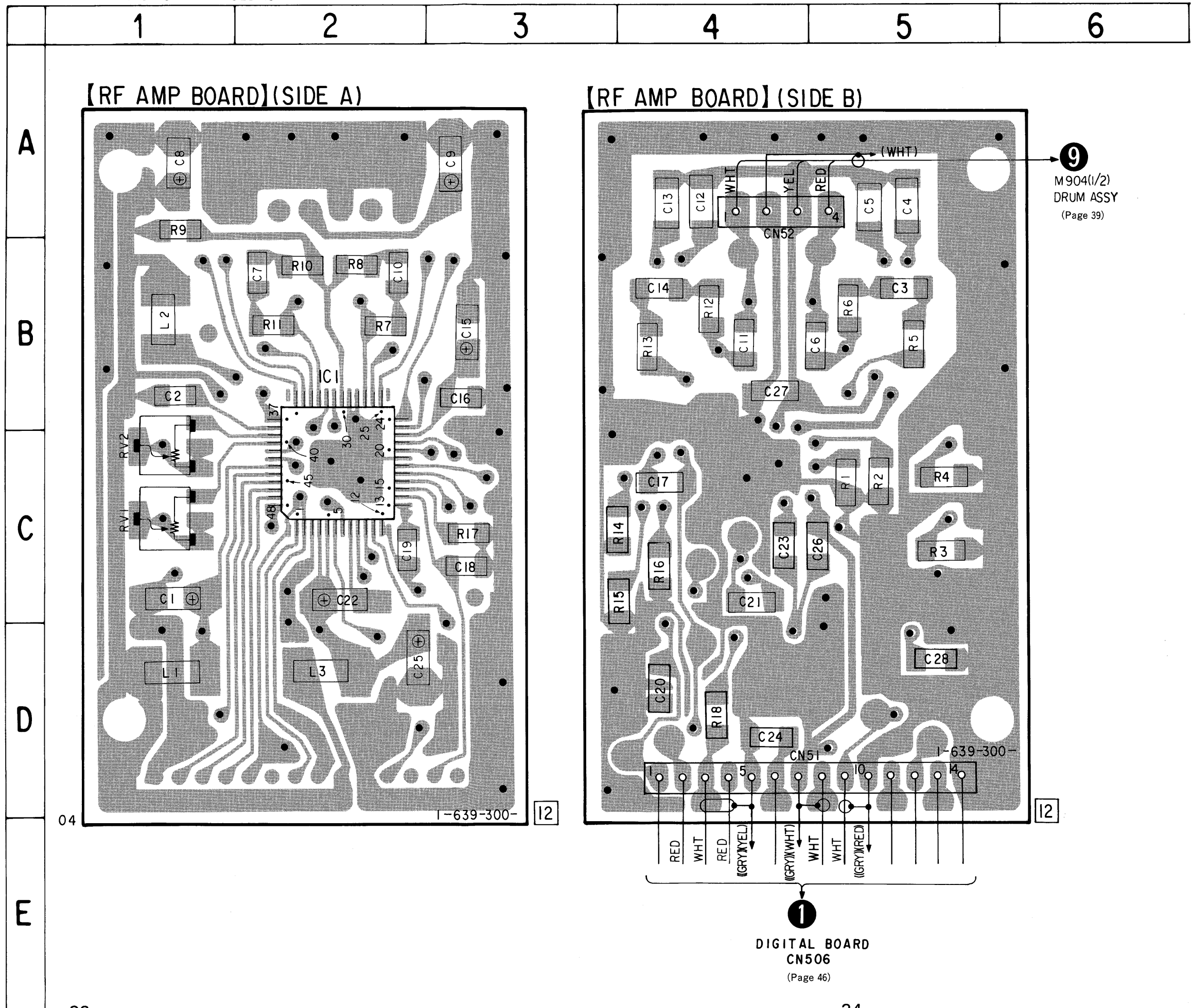
• Main Section



• Mechanism Deck Block



4-5. PRINTED WIRING BOARD—RF SECTION—

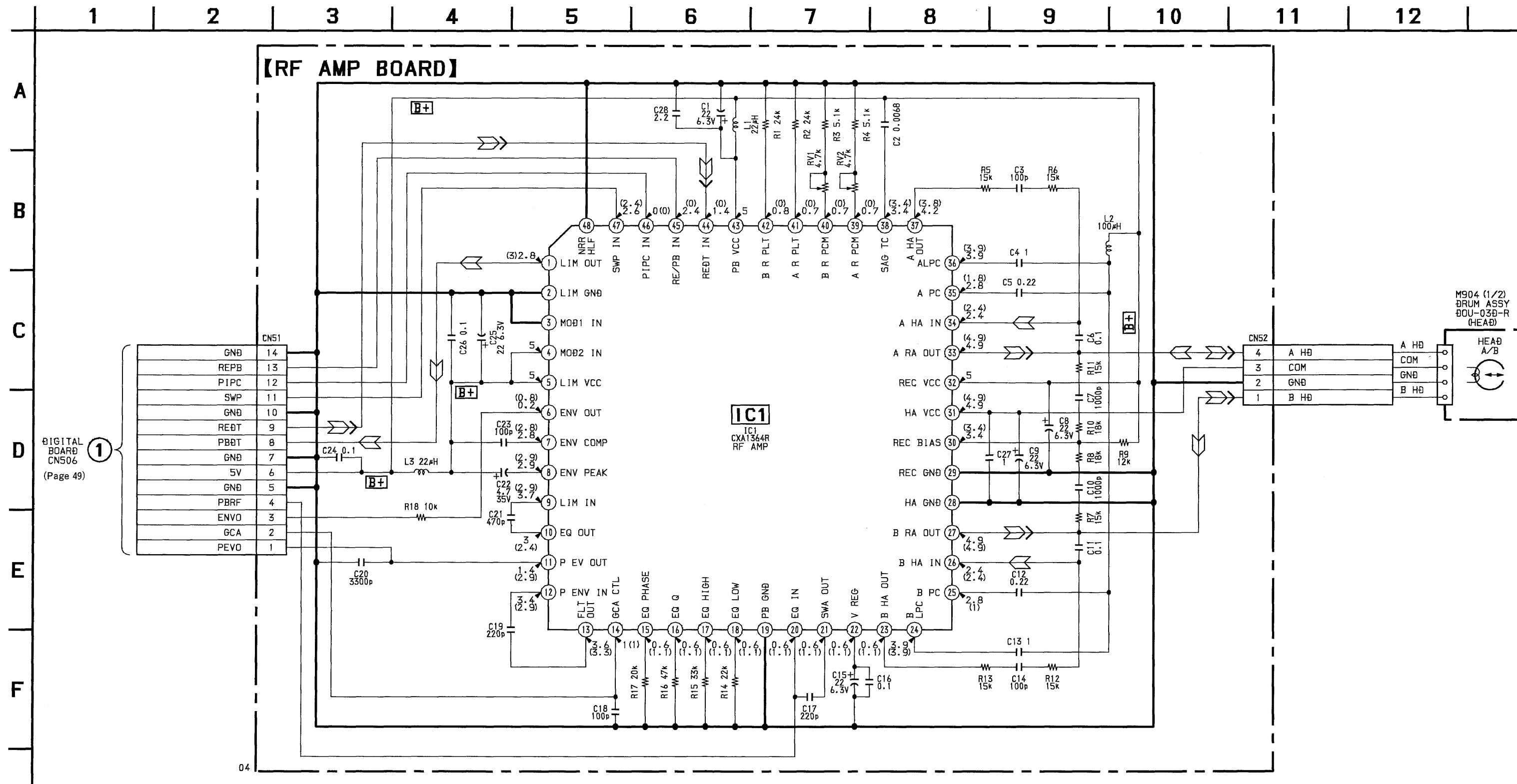


**Note:**

- — : parts extracted from the component side.
- : Through hole.
- ▨ : Pattern on the side which is seen.  
(The other layer's patterns are not indicated.)



4-6. SCHEMATIC DIAGRAM—RF SECTION— • Refer to page 64 for IC Block Diagrams.



**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and 1/4 W or less unless otherwise specified.
- **B+**: B+ Line
- Voltage is dc with respect to ground under no-signal conditions.
- no mark: PB
- ( ): REC
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- — : PB
- — : REC

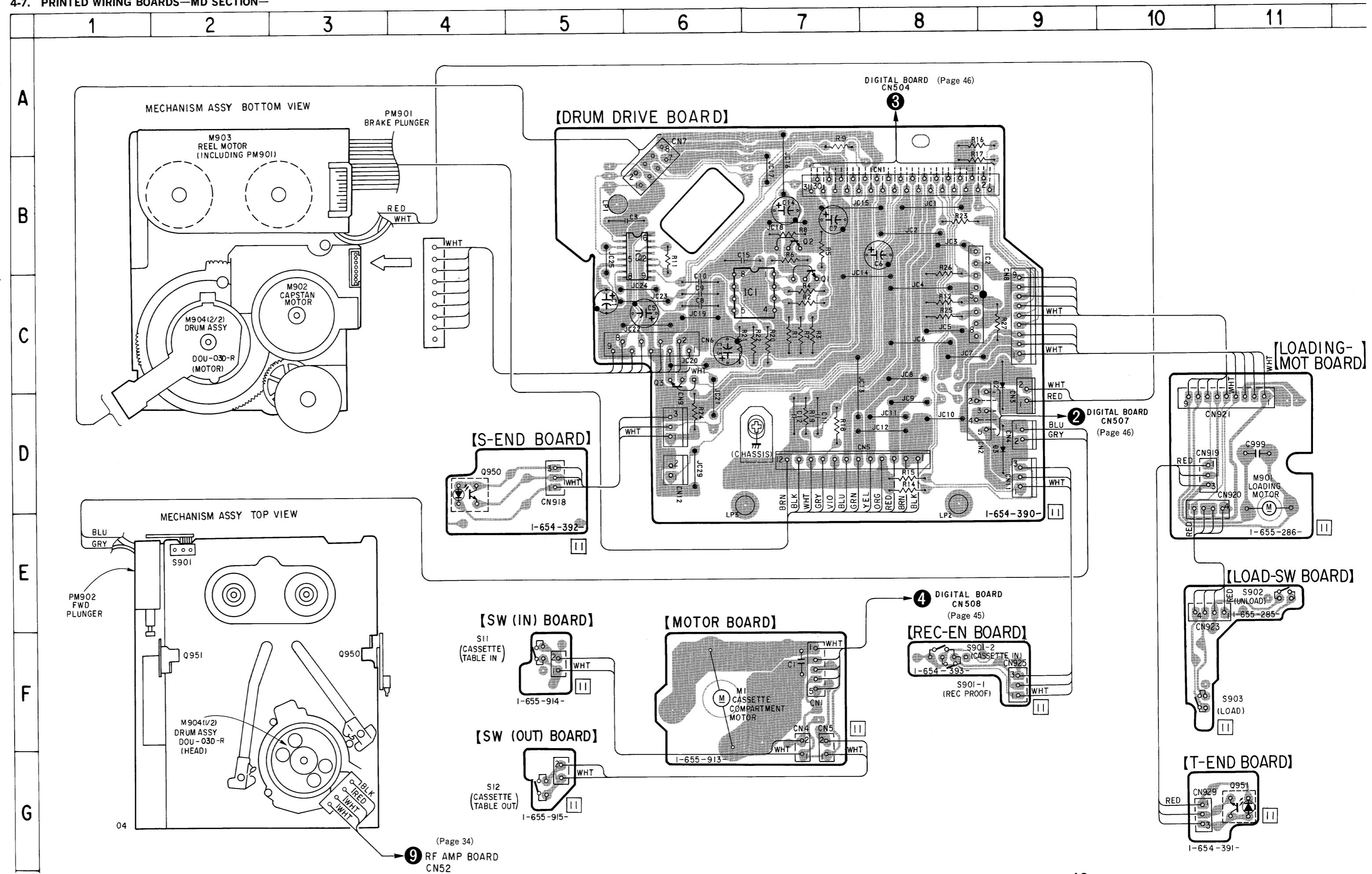
4-7. PRINTED WIRING BOARDS—MD SECTION—

• Semiconductor Location

Ref. No.	Location
D2	C-9
D3	D-9
IC1	C-7
IC2	B-8
IC3	B-6
Q1	B-7
Q2	B-7
Q3	C-6
Q950	D-4
Q951	G-11

Note:

- : parts extracted from the component side.
- ▨ : Pattern on the side which is seen.





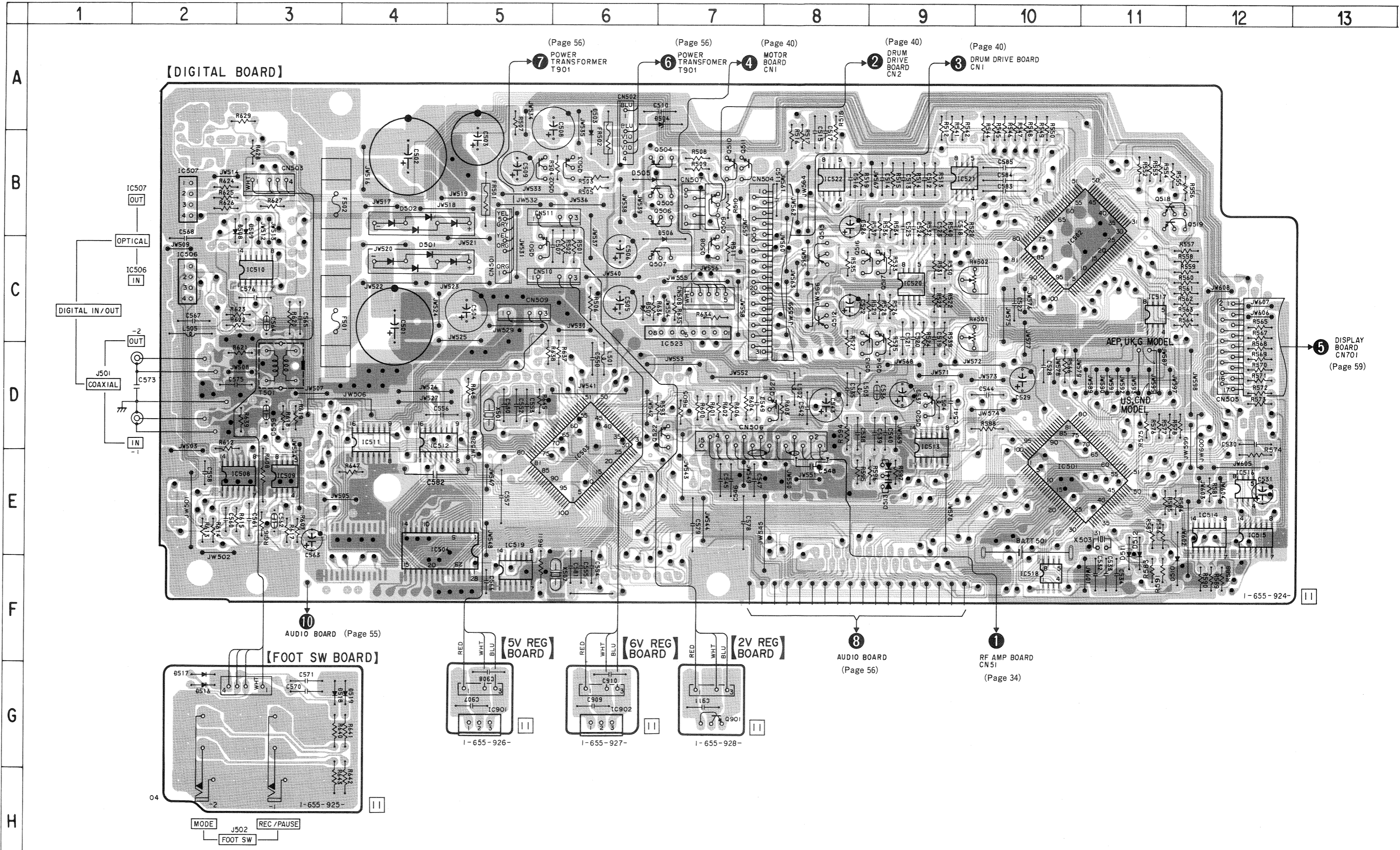


4-9. PRINTED WIRING BOARDS—DIGITAL SECTION—

• Semiconductor Location

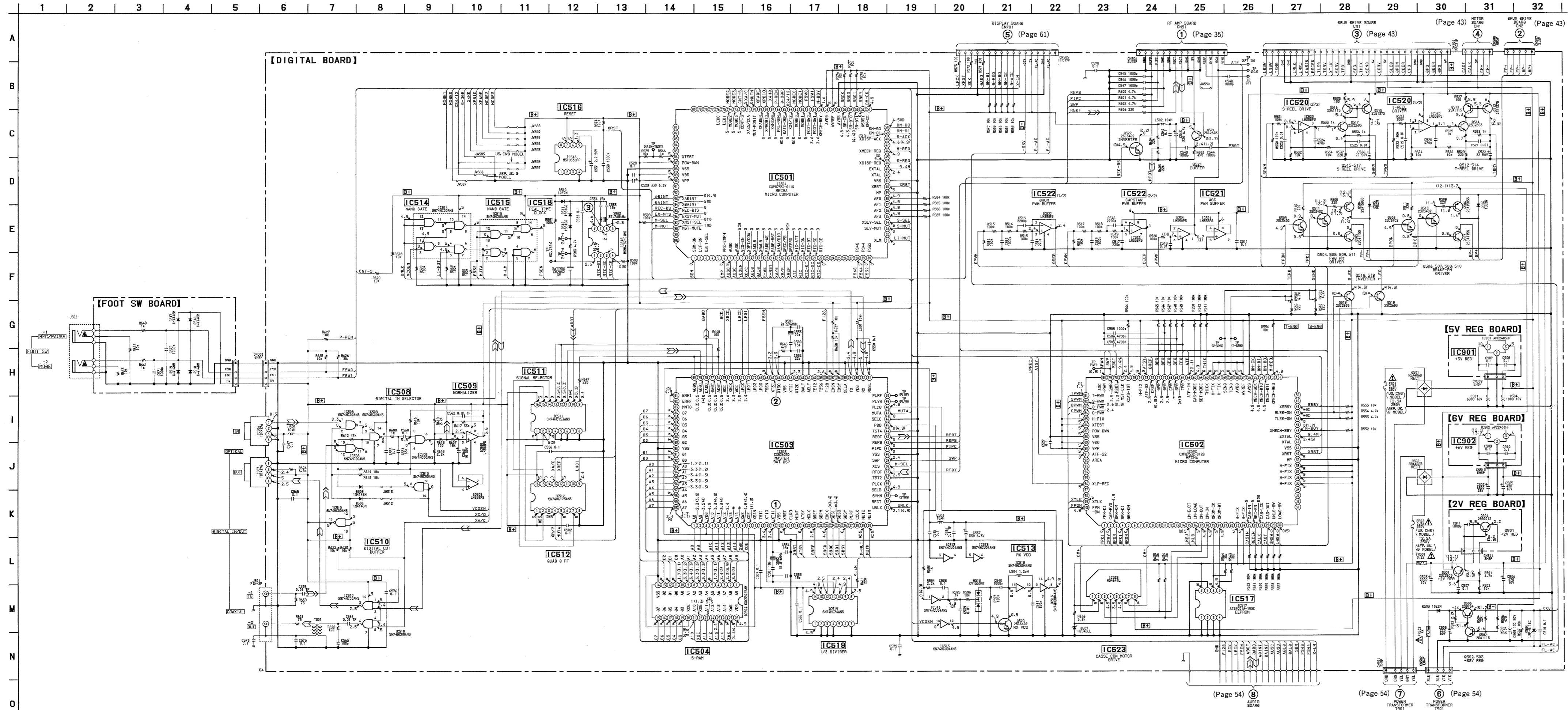
Ref. No.	Location	Ref. No.	Location
D501	C-4	IC517	C-11
D502	B-4	IC518	F-10
D503	A-6	IC519	F-5
D504	A-7	IC520	C-9
D505	B-6	IC521	B-9
D506	B-7	IC522	B-8
D507	C-6	IC523	C-7
D508	B-2	IC901	G-5
D509	B-3	IC902	G-6
D510	E-11		
D511	E-11	Q501	C-5
D512	E-11	Q502	B-5
D513	E-9	Q503	B-6
D516	G-2	Q504	B-7
D517	G-2	Q505	B-7
D518	G-3	Q506	B-7
D519	G-4	Q507	C-7
		Q508	C-7
IC501	E-10	Q509	B-7
IC502	B-10	Q510	B-7
IC503	D-6	Q511	B-7
IC504	E-4	Q512	C-8
IC506	C-2	Q513	D-8
IC507	B-2	Q514	D-9
IC508	E-3	Q515	C-8
IC509	E-3	Q516	C-8
IC510	C-3	Q517	C-9
IC511	D-4	Q518	B-11
IC512	D-4	Q519	B-11
IC513	D-9	Q520	D-9
IC514	E-12	Q521	D-8
IC515	E-12	Q522	D-7
IC516	E-12	Q901	G-7

- Note:
- : parts extracted from the component side.
  - : Through hole.
  - : indicates side identified with part number.
  - ▨ : Pattern on the side which is seen.
  - ▩ : Pattern on the rear side.
  - Abbreviation  
CND : Canadian model  
G : German model

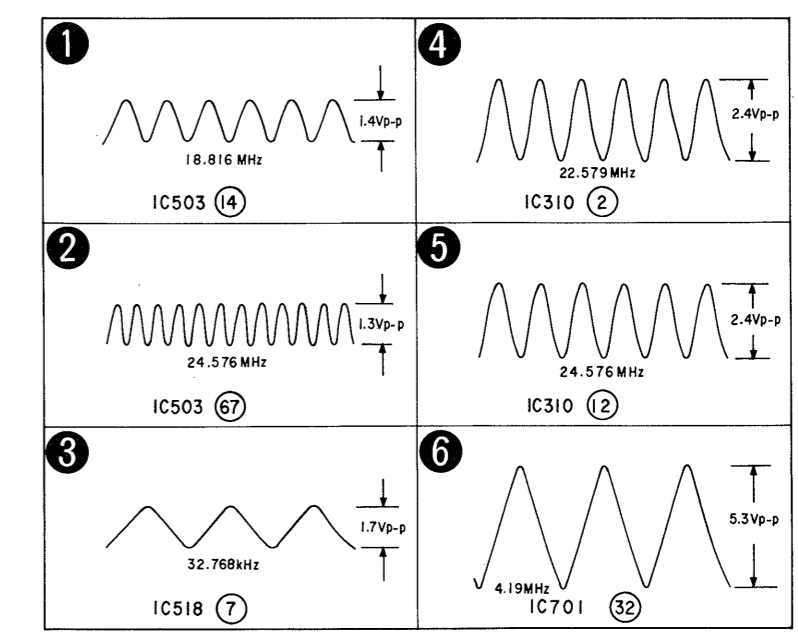




4-10. SCHEMATIC DIAGRAM—DIGITAL SECTION— Refer to page 64 for IC Block Diagrams.



Waveforms



**Note:**  
 • All capacitors are in  $\mu F$  unless otherwise noted.  $pF$  :  $\mu F$  50WV or less are not indicated except for electrolytics and tantalums.  
 • All resistors are in  $\Omega$  and 1/4 W or less unless otherwise specified.

**Note:**  
 The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

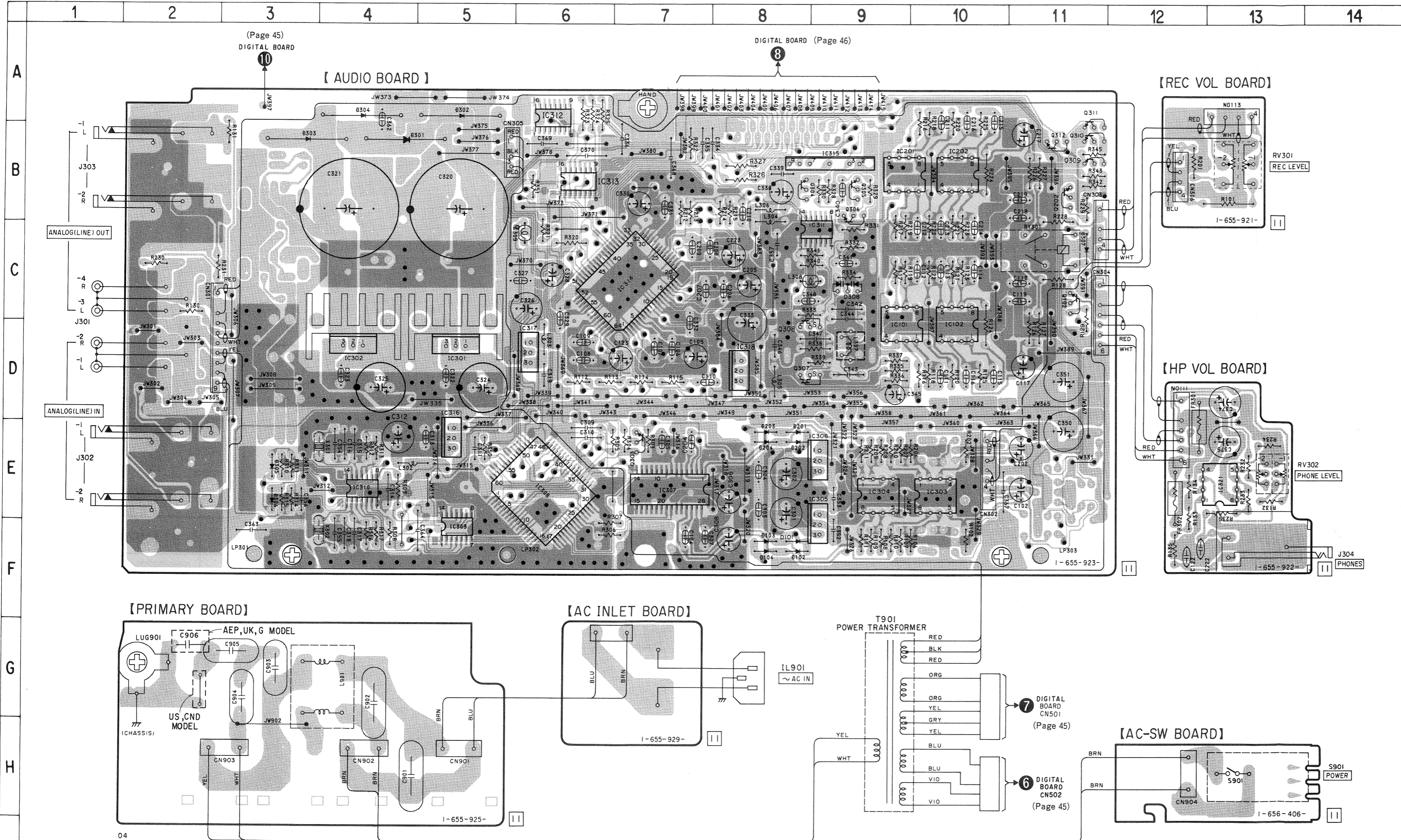
**Note:**  
 Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- $\square$  : fusible resistor.
- $B+$  : B+ Line
- $B-$  : B- Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: PB
- ( ): REC
- \* : Impossible measurement point
- Voltages are taken with a VOM (Input Impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path
- $\square$  : PB
- $\square$  : REC
- Abbreviation
- CND : Canadian model
- G : German model





4-12. PRINTED WIRING BOARDS—AUDIO SECTION—



● Semiconductor Location

Ref. No.	Location
D101	F-8
D102	F-8
D103	F-8
D104	F-8
D201	E-8
D202	E-8
D203	E-8
D204	E-8
D301	B-4
D302	A-5
D303	B-3
D304	A-4
D305	E-3
D306	E-3
D307	C-11
D308	C-9
IC101	D-9
IC102	D-10
IC201	B-9
IC202	B-10
IC301	D-5
IC302	D-4
IC303	E-10
IC304	E-9
IC305	E-9
IC306	E-9
IC307	E-7
IC308	E-6
IC309	E-5
IC310	E-4
IC311	C-8
IC312	B-6
IC313	B-6
IC314	C-7
IC315	B-9
IC316	E-5
IC317	D-6
IC318	D-8
IC321	E-13
Q102	C-11
Q202	B-11
Q303	E-7
Q304	B-8
Q305	B-9
Q306	B-9
Q307	D-8
Q308	D-8
Q309	B-11
Q310	B-11
Q311	A-11
Q312	B-11

Note:

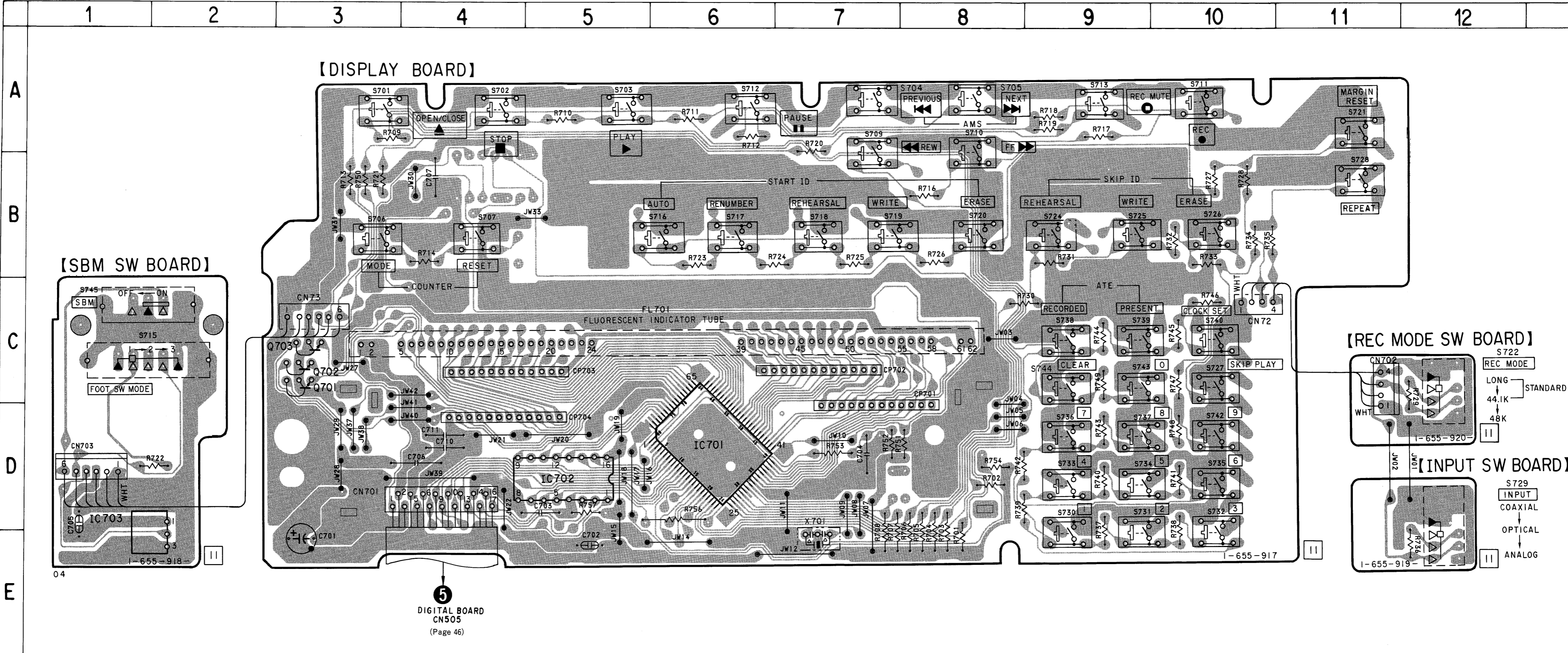
- : parts extracted from the component side.
- : Through hole.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern on the rear side.
- Abbreviation  
CND : Canadian model  
G : German model



4-13. PRINTED WIRING BOARDS—PANEL SECTION—

● Semiconductor Location

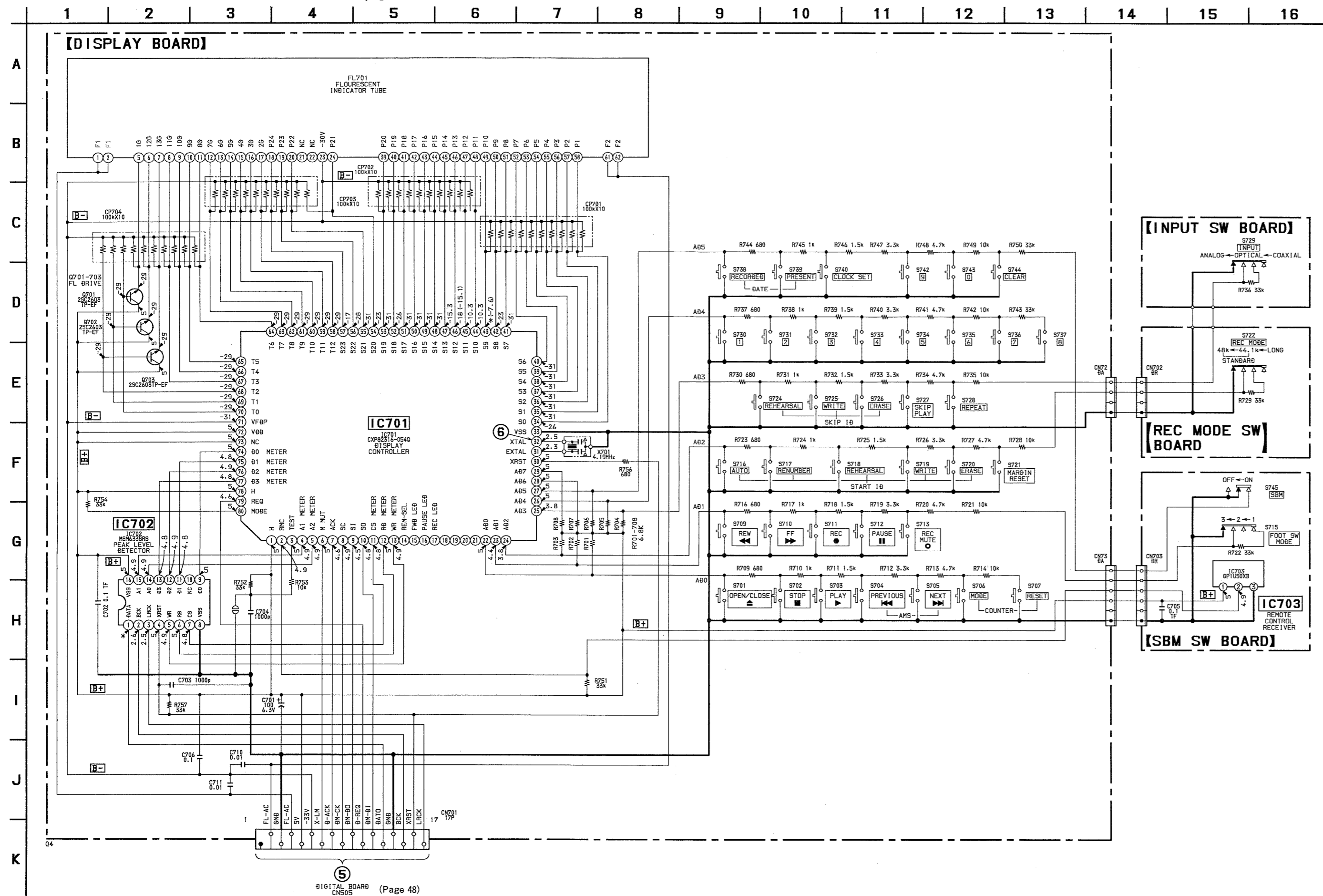
Ref. No.	Location
IC701	D-6
IC702	D-5
IC703	D-1
Q701	C-3
Q702	C-3
Q703	C-3



5  
DIGITAL BOARD  
CN505  
(Page 46)

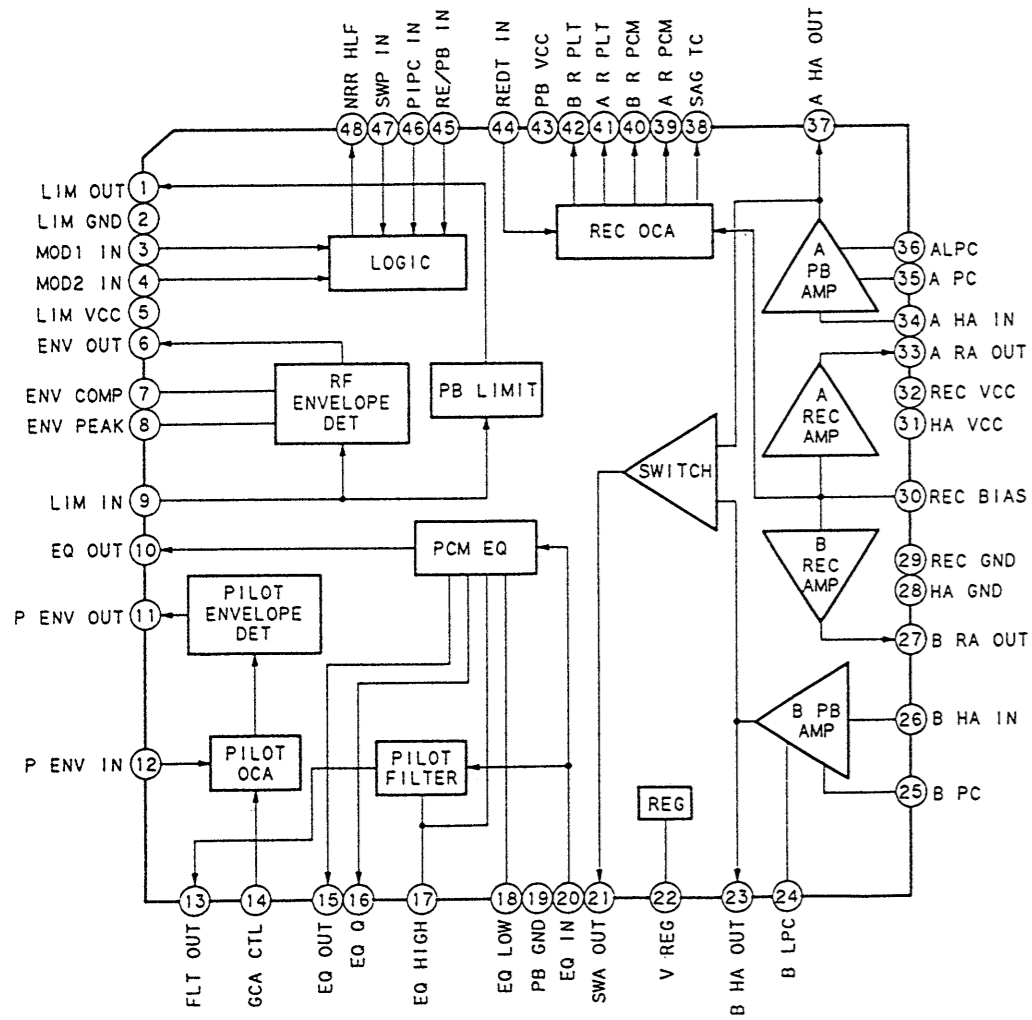
Note:  
 ● — : parts extracted from the component side.  
 ● : Pattern on the side which is seen.



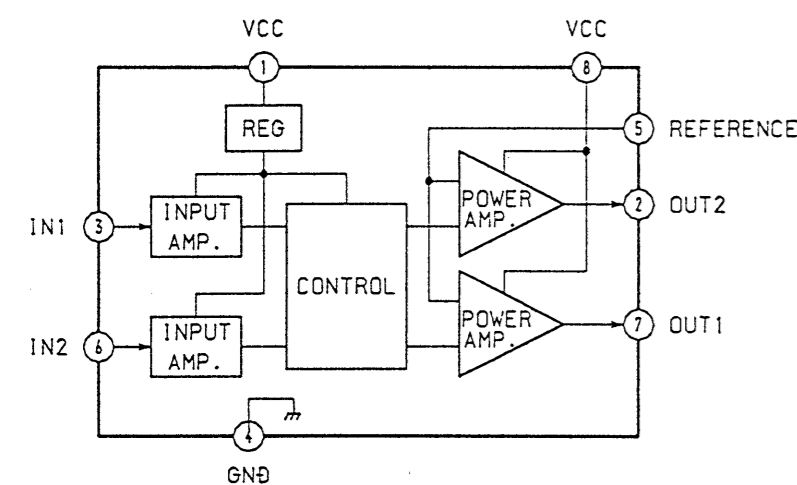


- Note:**
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$  :  $\mu\text{M}$ F 50WV or less are not indicated except for electrolytics and tantalums.
  - All resistors are in  $\Omega$  and 1/4 W or less unless otherwise specified.
  - $\Delta$  : internal component.
  - $\text{B}+$  : B+ Line
  - $\text{B}-$  : B- Line
  - Voltage and waveforms are dc with respect to ground under no-signal conditions.
  - no mark: PB  
( ): REC  
\* : Impossible measurement point
  - Voltages are taken with a VOM (Input Impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
  - Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
  - Circled numbers refer to waveforms.

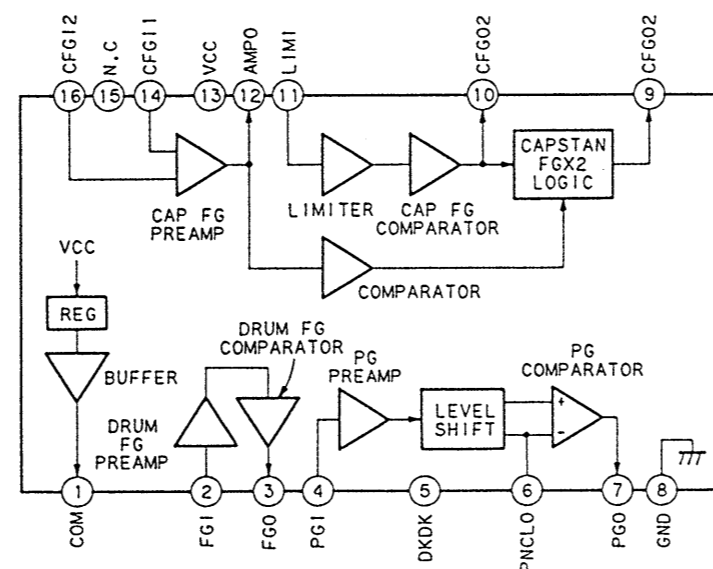
IC1 CXA1364R



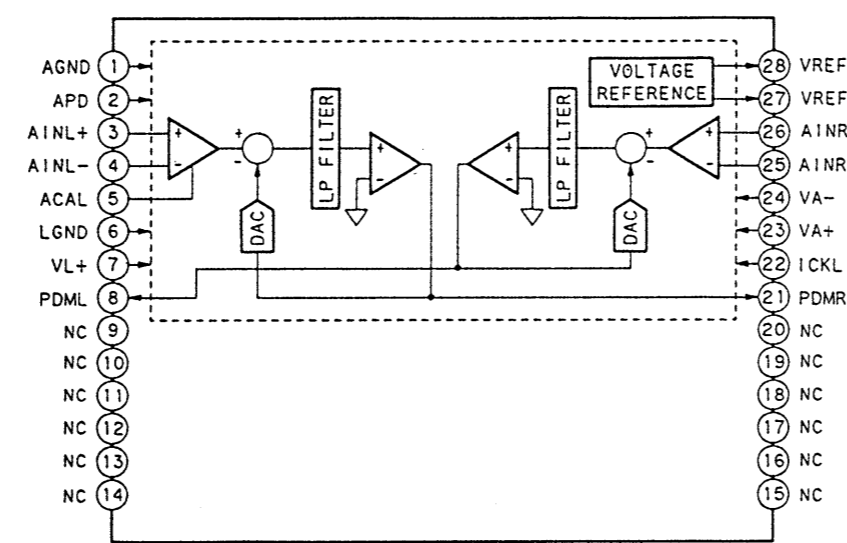
IC2, 523 M54641L



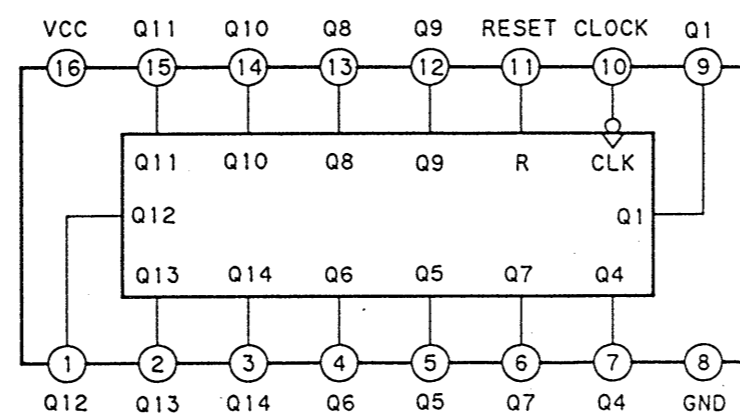
IC3 CX20115A



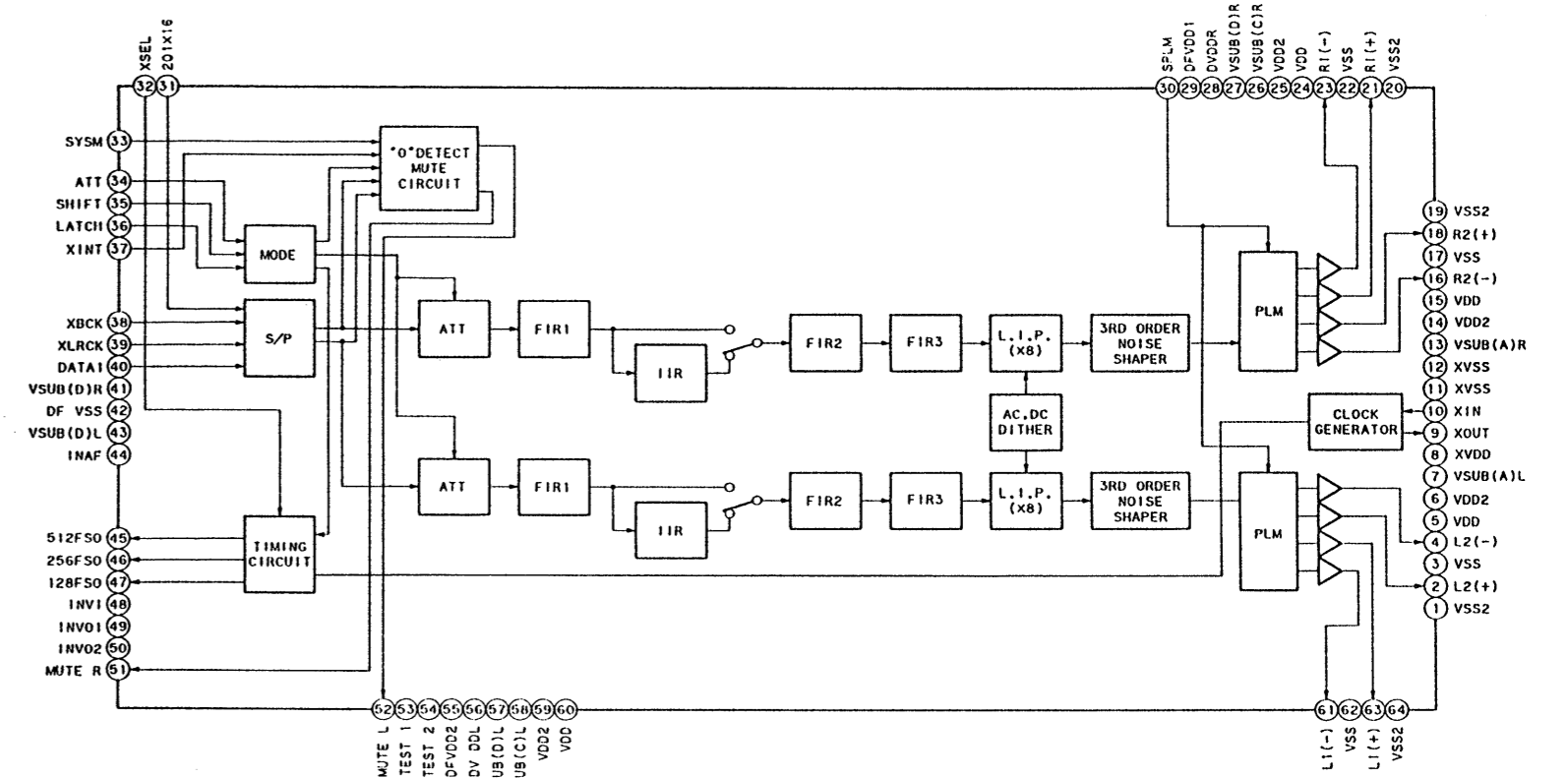
IC307 CXD8493M



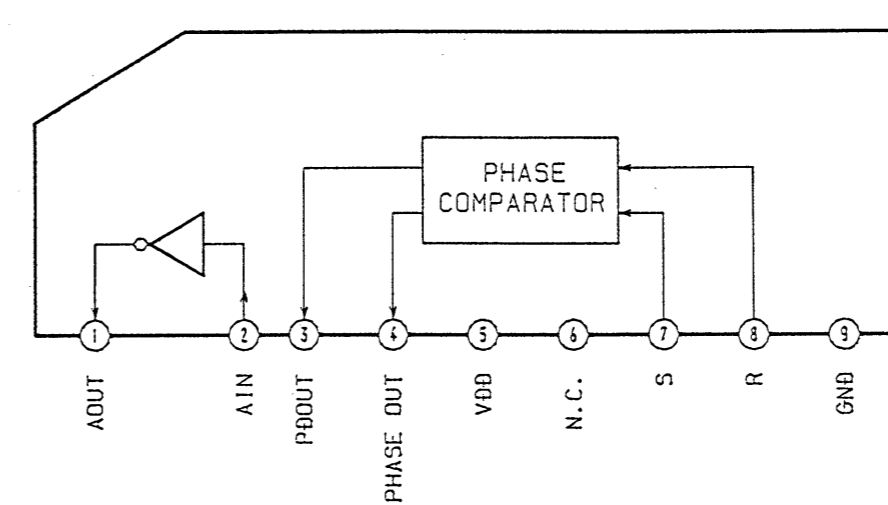
IC312 SN74HC4020ANS



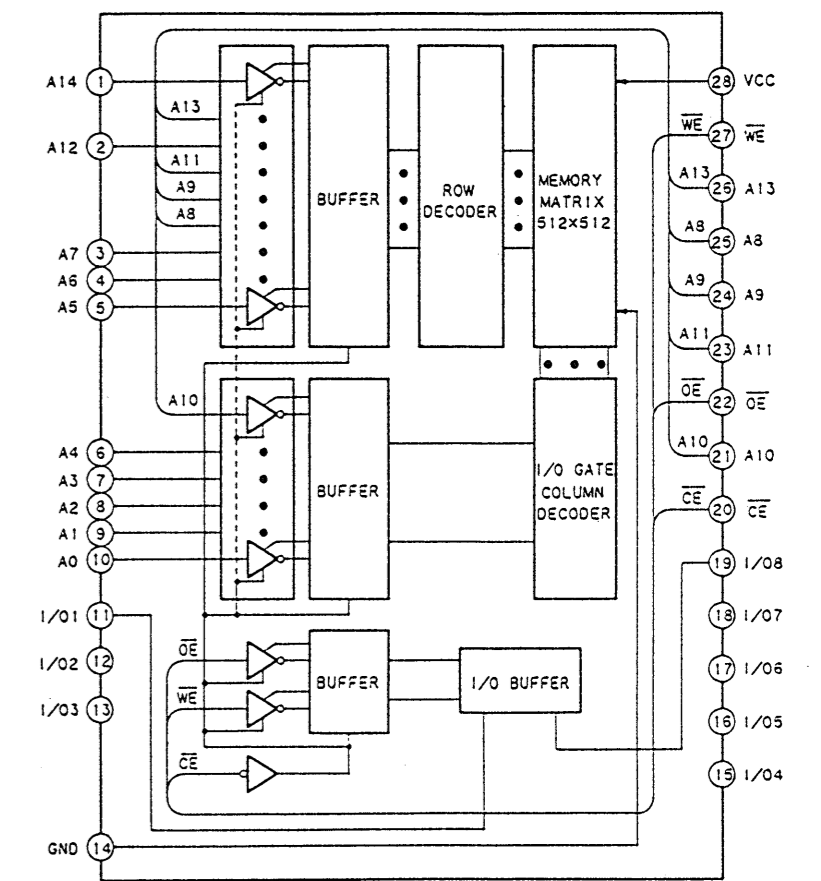
IC314 CXD8505Q



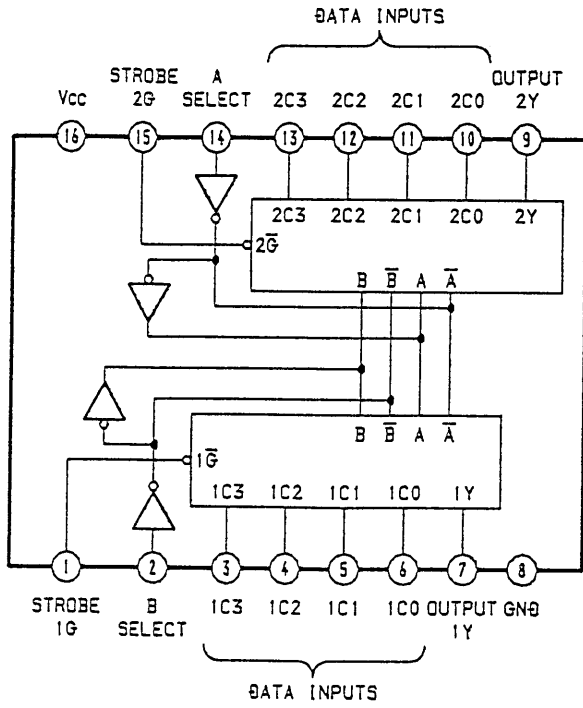
IC315 TC5081AP



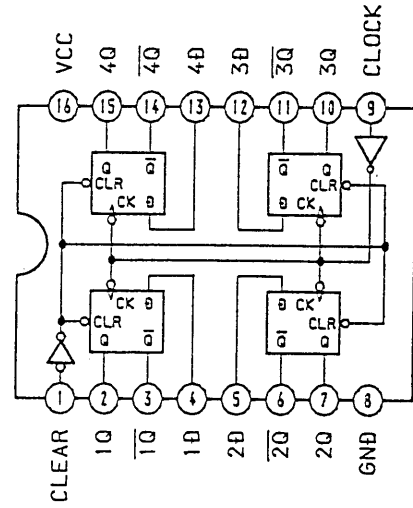
IC504 CXK58257AM



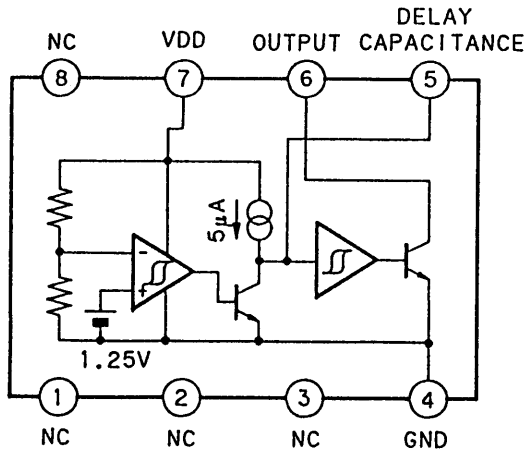
IC511 SN74HC153ANS



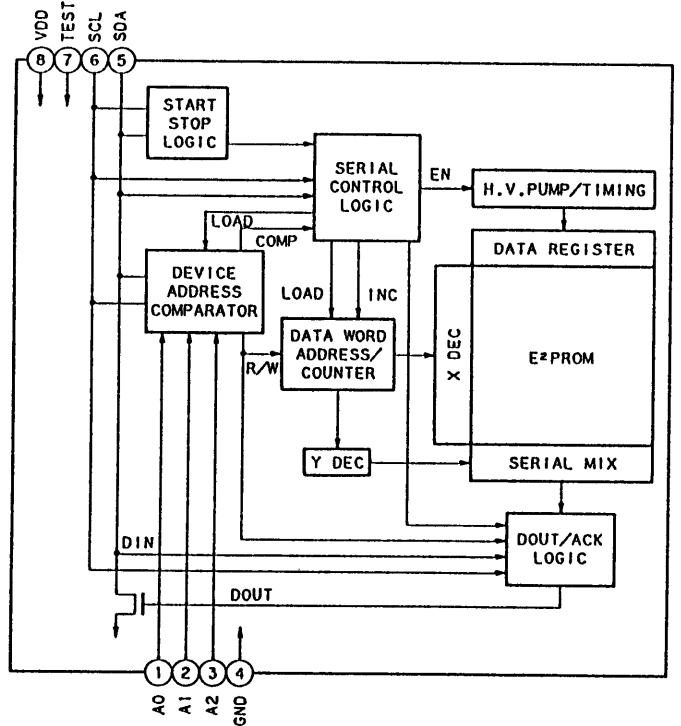
IC512 MC74HC175F



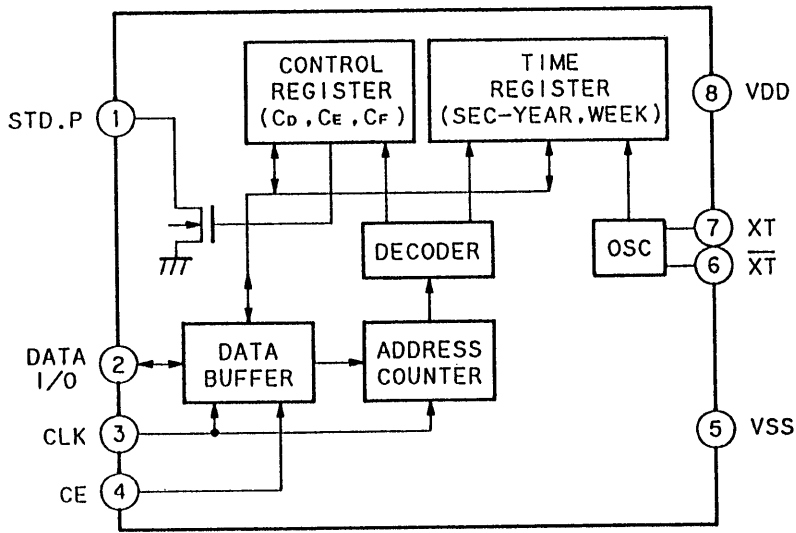
IC516 M51953BFP



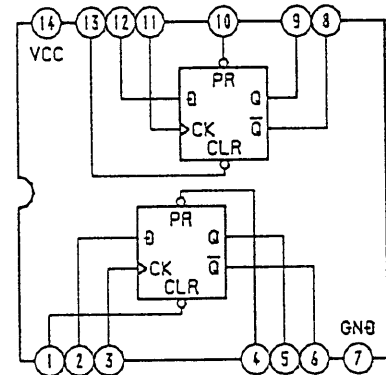
IC517 AT24C01ASC



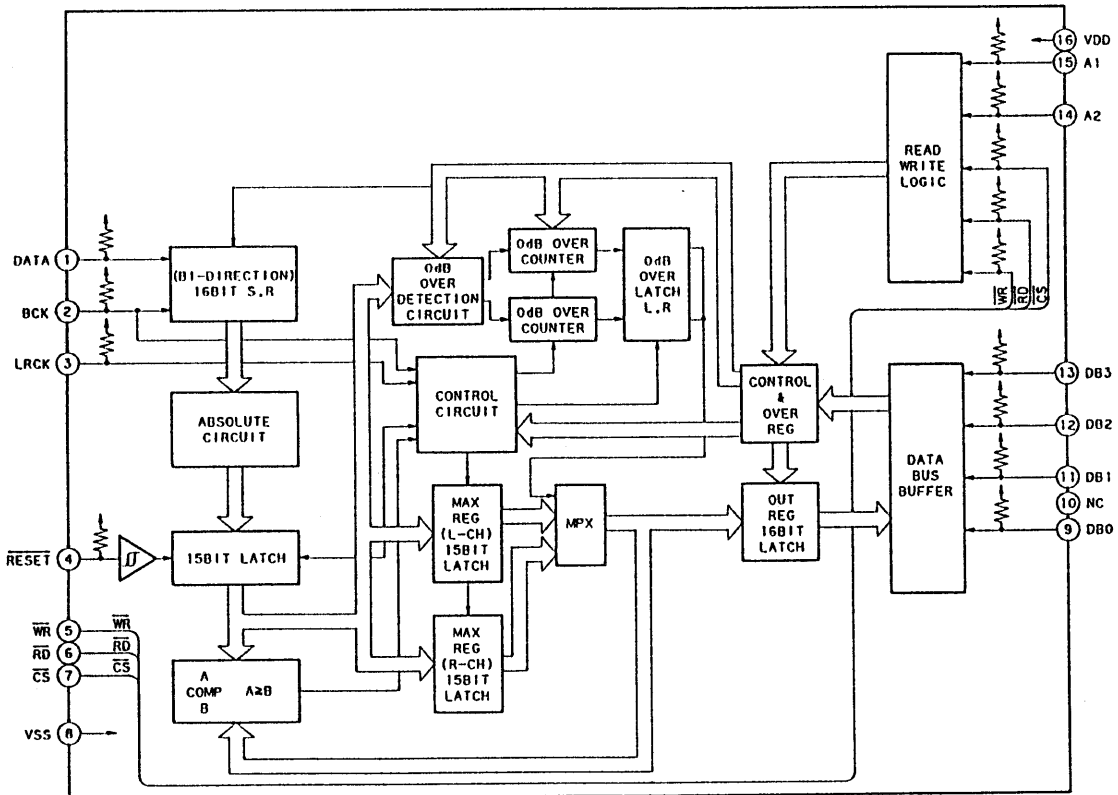
IC518 MSM6782MS



IC519 SN74HC74ANS



IC702 MSM6338RS



## SECTION 5 EXPLODED VIEWS

**NOTE:**

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation  
G : German model

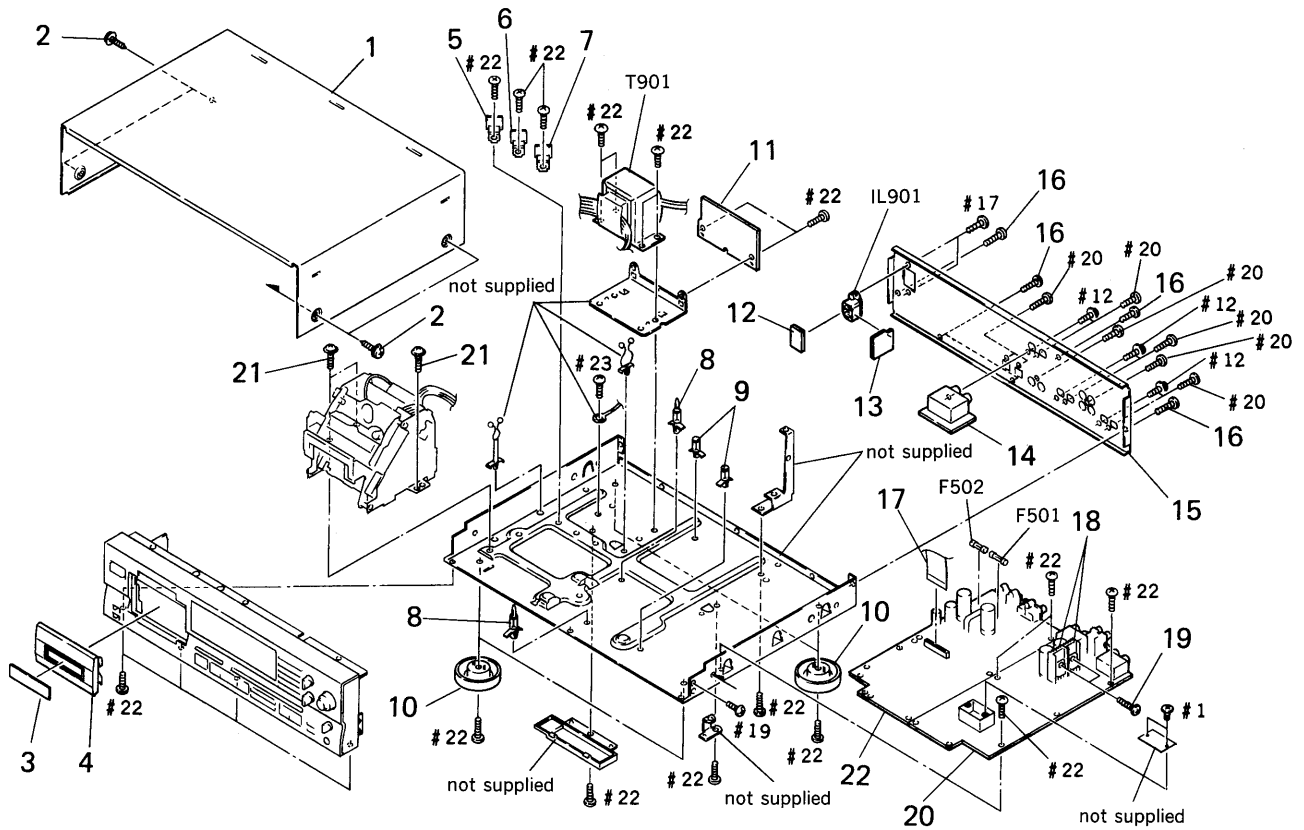
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts  
Example :  
KNOB, BALANCE (WHITE)... (RED)

- Parts Color    Cabinet's Color  
 ↑                    ↑
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

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

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

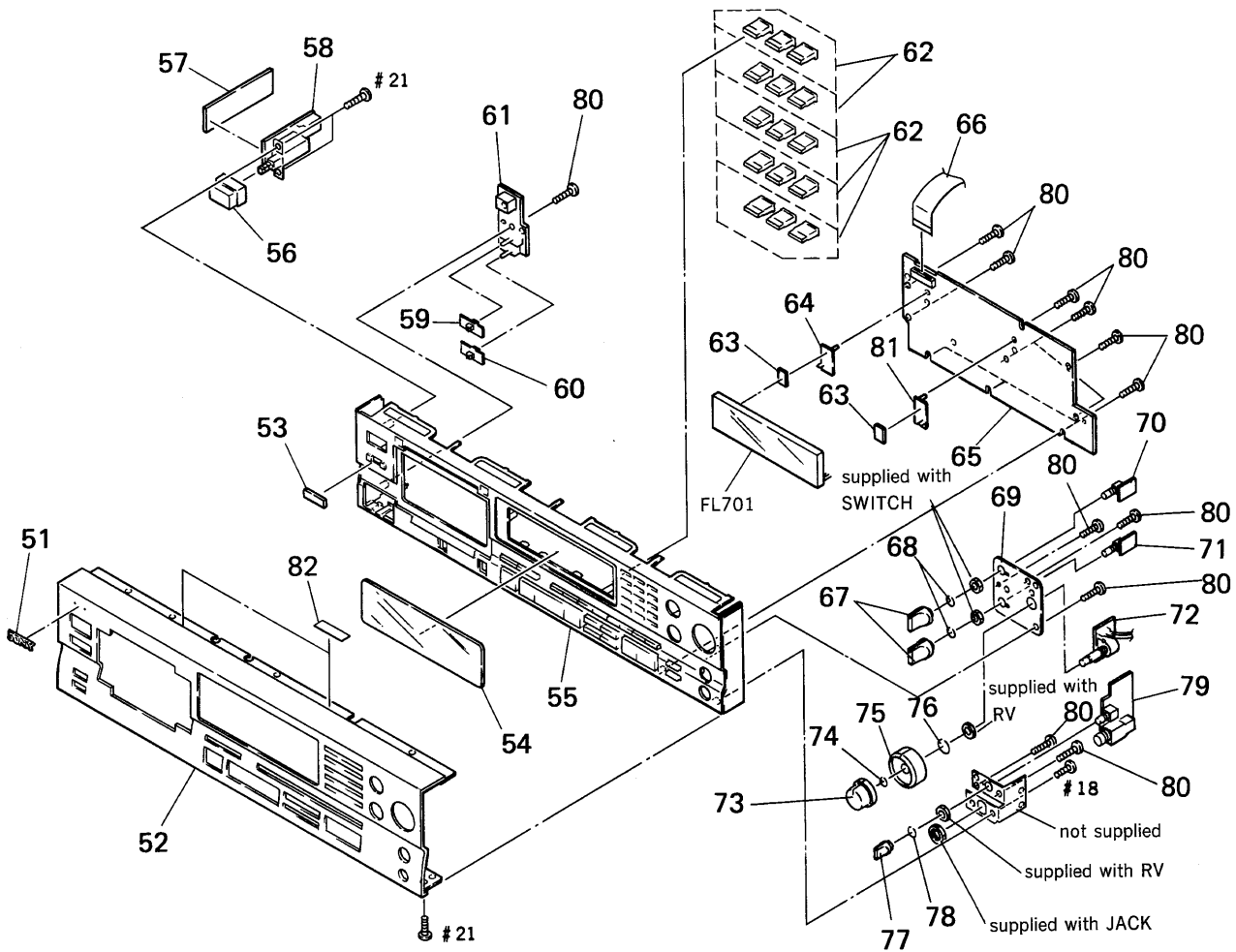
### 5-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	3-350-407-41	CASE	
2	3-704-366-21	SCREW (CASE) (M3X10)	
3	3-374-275-11	WINDOW (670)	
4	3-374-279-01	HOLDER (670)	
*	5	1-655-928-11	2V REG BOARD
*	6	1-655-927-11	6V REG BOARD
*	7	1-655-926-11	5V REG BOARD
8	4-924-098-01	HOLDER, PC BOARD	
* 9	3-670-570-00	SPACER, SUPPORT	
10	4-956-885-01	FOOT (F58175S2W)	
* 11	1-655-925-11	PRIMARY BOARD	
* 12	1-655-931-11	COVER (A) BOARD	
* 13	1-655-929-11	AC INLET BOARD	
* 14	1-655-930-11	FOOT SW BOARD	
* 15	3-920-798-12	PANEL, BACK (US, Canadian)	
* 15	3-920-798-22	PANEL, BACK (AEP, UK, G)	

Ref. No.	Part No.	Description	Remark
16	3-703-685-21	SCREW (+BV 3X8)	
17	1-769-542-11	WIRE (FLAT TYPE) (31 CORE)	
18	4-363-146-71	HEAT SINK, V. OUT	
19	2-259-121-01	SCREW, TR	
* 20	A-2007-346-A	AUDIO BOARD, COMPLETE	
21	4-886-821-11	SCREW, S TIGHT, +PTWH 3X6	
* 22	A-2007-424-A	DIGITAL BOARD, COMPLETE (US, Canadian)	
* 22	A-2007-425-A	DIGITAL BOARD, COMPLETE (AEP, UK, G)	
$\triangle$ F501	1-532-286-00	FUSE (T2. 5A/250V) (AEP, UK, G)	
$\triangle$ F501	1-576-105-11	FUSE (2. 5A/250V) (US, Canadian)	
$\triangle$ F502	1-532-286-00	FUSE (T2. 5A/250V) (AEP, UK, G)	
$\triangle$ F502	1-576-105-11	FUSE (2. 5A/250V) (US, Canadian)	
$\triangle$ IL901	1-251-234-11	INLET, AC (~ AC IN)	
$\triangle$ T901	1-427-912-11	TRANSFORMER, POWER (US, Canadian)	
$\triangle$ T901	1-427-913-11	TRANSFORMER, POWER (AEP, UK, G)	

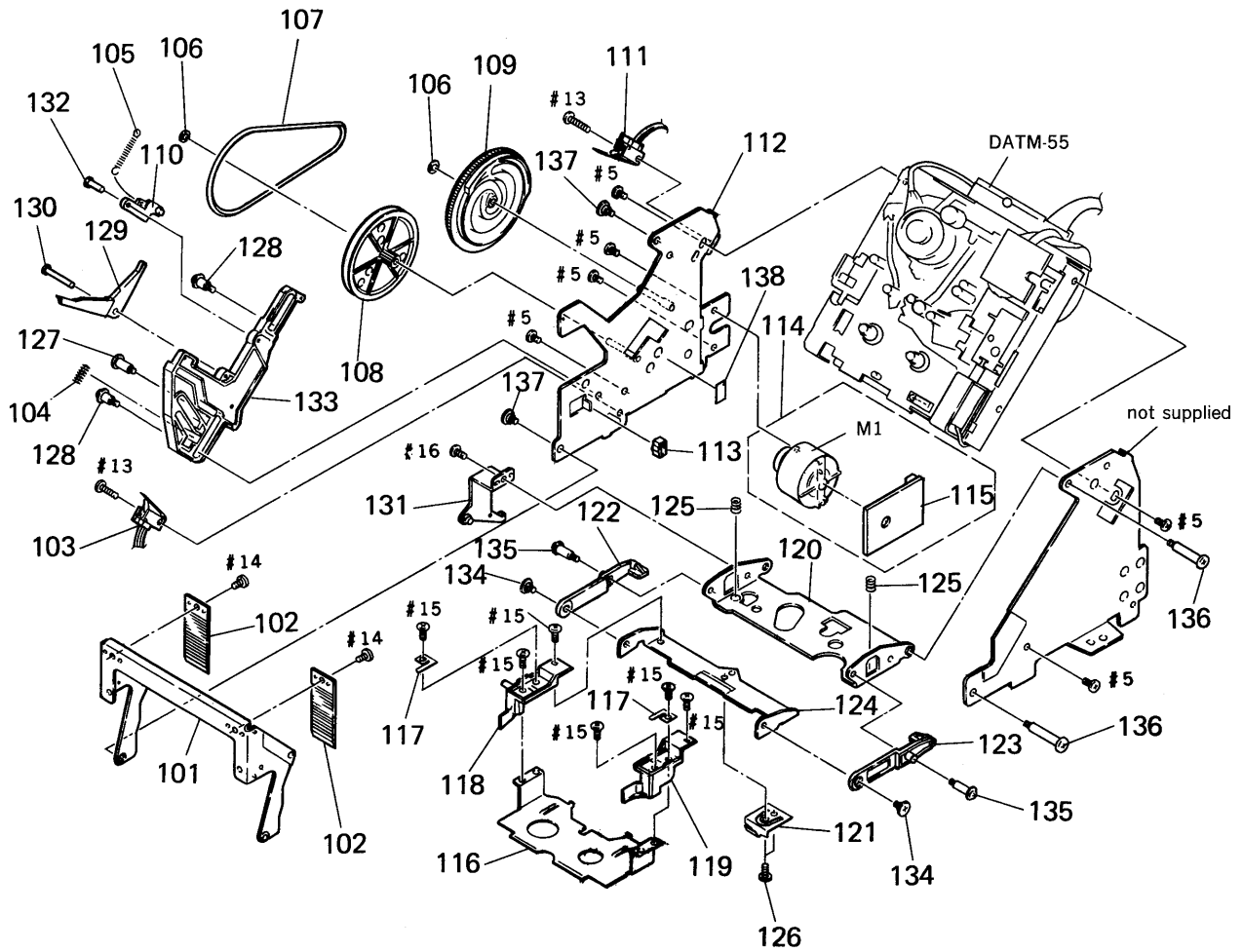
## 5-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	4-942-568-01	EMBLEM (NO. 5), SONY	
52	3-368-713-51	PANEL (FRONT)	
53	3-364-919-01	FILTER	
54	3-368-698-01	WINDOW (FL TUBE)	
55	X-3369-702-1	ESCUTCHEON (PANEL) ASSY	
56	4-917-460-72	KNOB, POWER	
* 57	1-656-407-11	COVER (B) BOARD	
* 58	1-656-406-11	AC-SW BOARD	
59	3-382-651-01	KNOB	
60	3-382-651-11	KNOB	
* 61	1-655-918-11	SBM SW BOARD	
62	3-364-927-01	BUTTON (10 KEY)	
63	2-389-320-01	CUSHION	
* 64	4-922-523-01	HOLDER (RIGHT)	
* 65	A-2007-340-A	DISPLAY BOARD, COMPLETE	
66	1-769-541-11	WIRE (FLAT TYPE) (17 CORE)	
67	4-908-097-21	KNOB	

Ref. No.	Part No.	Description	Remark
68	3-350-440-01	SPRING	
* 69	3-920-796-01	BRACKET (REC VOL)	
* 70	1-655-919-11	INPUT SW BOARD	
* 71	1-655-920-11	REC MODE SW BOARD	
* 72	1-655-921-11	REC VOL BOARD	
73	3-382-635-01	KNOB (REC-R)	
74	3-356-957-01	SPRING	
75	3-382-634-01	KNOB (REC-L)	
76	3-382-627-01	SPRING, RING	
77	3-354-931-01	KNOB (DIA. 10)	
78	3-354-981-01	SPRING (SUS), RING	
* 79	1-655-922-11	HP VOL BOARD	
80	4-951-620-01	SCREW (2. 6X8), +BVTP	
* 81	4-922-524-01	HOLDER (LEFT)	
82	3-831-441-XX	CUSHION, SPEAKER	
FL701	1-517-382-11	INDICATOR TUBE, FLUORESCENT	

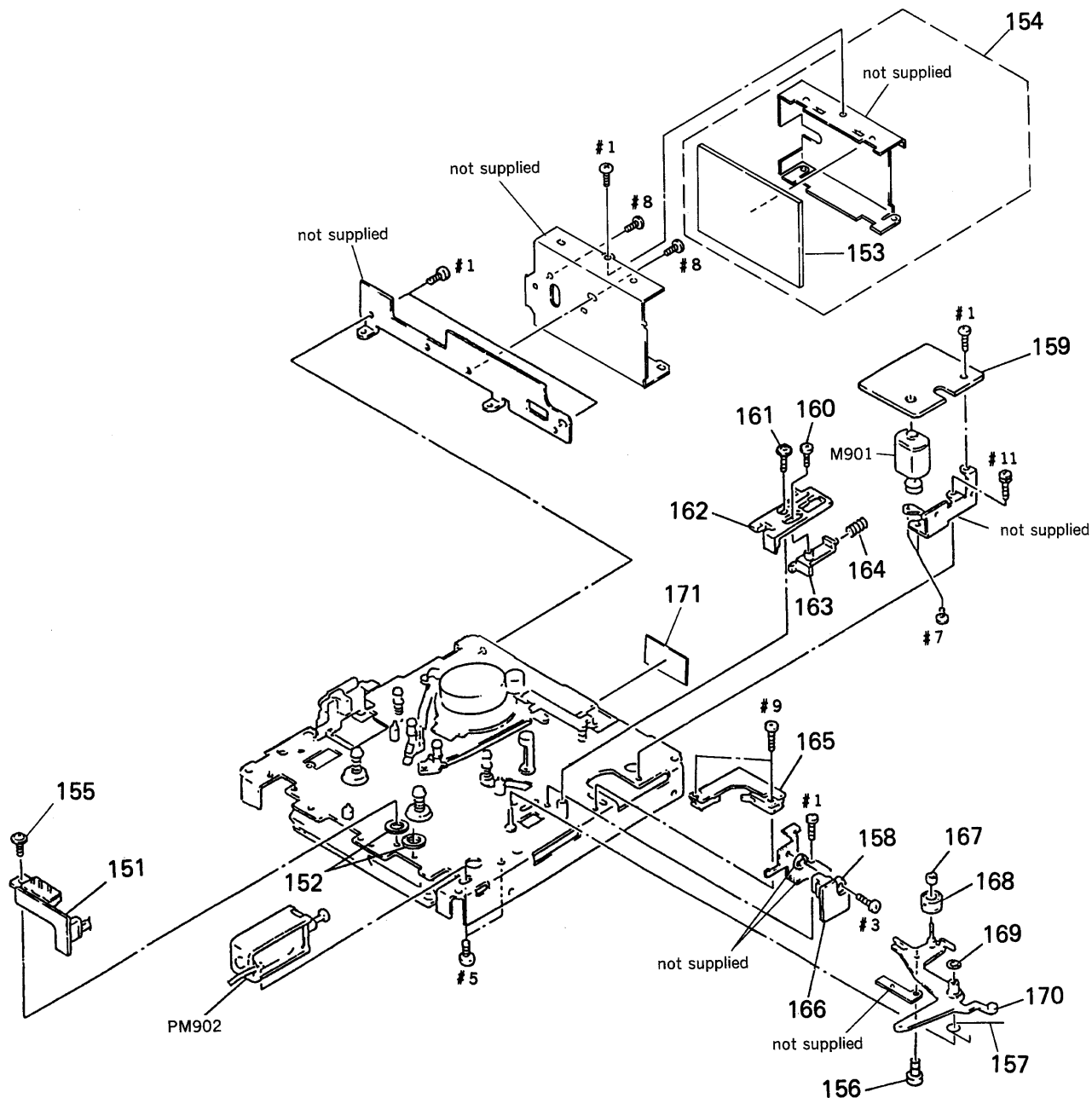
### 5-3. CASSETTE COMPARTMENT SECTION



Ref. No.	Part No.	Description	Remark
	101	4-931-474-01 HOLDER (WINDOW)	
	102	4-931-469-01 PLATE, ORNAMENTAL	
*	103	1-655-915-11 SW (OUT) BOARD	
	104	3-537-215-00 SPRING, COMPRESSION	
	105	3-549-810-00 SPRING, TENSION	
	106	3-307-948-21 WASHER, NYLON	
	107	4-931-470-01 BELT (DRIVING)	
	108	4-931-459-01 PULLEY	
	109	4-931-477-01 GEAR (CAM)	
	110	4-931-460-01 ARM (SLIDER)	
*	111	1-655-914-11 SW (IN) BOARD	
*	112	X-4919-023-1 PLATE ASSY, SIDE	
	113	4-887-175-00 RUBBER, STOPPER	
	114	A-2003-448-A MOTOR ASSY (CASSETTE COMPARTMENT)	
*	115	1-655-913-11 MOTOR BOARD	
	116	4-931-476-01 HOLDER (LOWER)	
	117	3-366-308-01 SPRING (SIDE), PLATE	
	118	4-931-484-01 HOLDER (C-LEFT)	
	119	4-931-486-01 HOLDER (C-RIGHT)	
*	120	3-369-235-01 PLATE, FULCRUM	

Ref. No.	Part No.	Description	Remark
	121	4-931-461-01 SPRING (CENTER), LEAF	
	122	4-931-481-01 ARM (LIMITER L)	
	123	4-931-473-01 ARM (LIMITER R)	
*	124	4-931-485-01 HOLDER (C-INNER)	
	125	3-537-214-00 SPRING, COMPRESSION	
	126	3-352-517-01 SCREW (M2X2.5)	
	127	4-931-471-01 SCREW (STEP)	
	128	4-932-336-01 SCREW (STEP)	
	129	4-931-490-01 LEVER (LINK)	
	130	4-931-468-01 SHAFT (PRESS FITTING)	
*	131	X-4919-020-1 JOINT ASSY	
	132	4-936-626-01 SHAFT (ARM PRESS FITTING)	
	133	4-931-492-01 SLIDER (CAM)	
	134	3-312-161-00 SCREW, STEP, PRECISION	
	135	4-918-991-01 SCREW, STEP	
	136	4-931-463-01 SCREW (STEP)	
	137	2-236-956-00 SCREW, STEP	
	138	3-846-312-01 SPACER	
	M1	A-2003-660-A MOTOR ASSY (CASSETTE COMPARTMENT)	

5-4. MECHANISM DECK SECTION (1)  
(DATM-55)

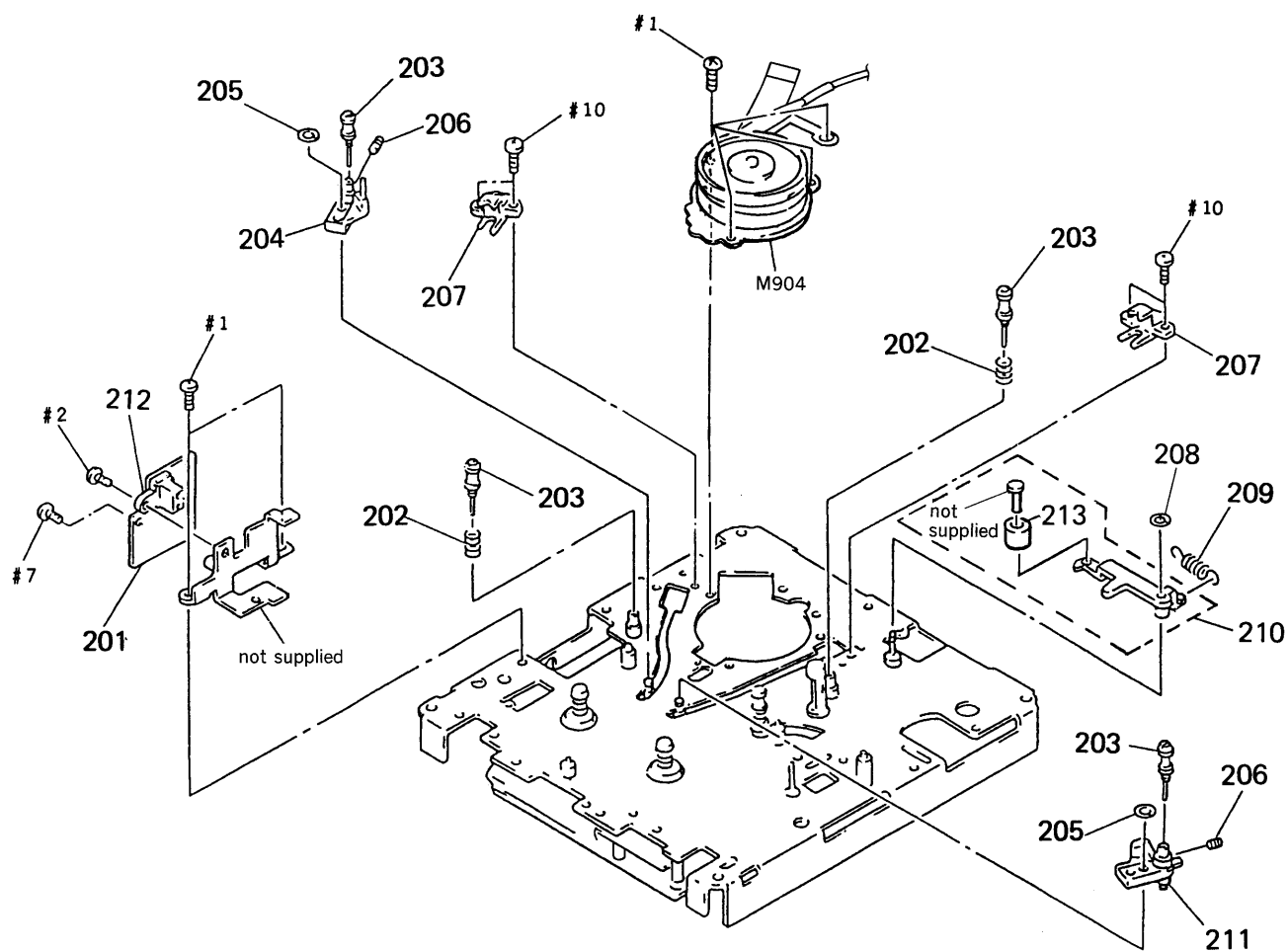


Ref. No.	Part No.	Description	Remark
* 151	1-654-393-11	REC-EN BOARD	
152	3-344-781-01	WASHER, POLYETHYLENE	
* 153	A-2006-455-A	RF AMP BOARD, COMPLETE	
* 154	A-2001-587-A	RF COMPLETE ASSY BOARD, COMPLETE	
155	3-321-041-01	SCREW (M1.7X3.5), TAPPING	
156	3-704-244-01	SCREW (P1.7X1.6)	
157	3-367-352-01	SPRING (PINCH)	
158	A-2004-299-A	DETECTION (R) ASSY, E	
* 159	1-655-286-11	LOADING-MOT BOARD	
160	2-623-756-01	SCREW, (B1.7X3), TAPPING	
161	3-703-502-11	SCREW	
162	3-362-148-01	SLIDER (PINCH)	

Ref. No.	Part No.	Description	Remark
163	3-362-149-01	SLIDER (LIMITTER)	
164	3-564-035-00	SPRING, COMPRESSION	
* 165	1-655-285-11	LOAD-SW BOARD	
* 166	1-654-391-11	T-END BOARD	
167	3-337-626-01	CAP, PINCH ROLLER	
168	X-3337-610-1	PINCH ROLLER ASSY	
169	3-701-436-11	WASHER, STOPPER	
170	X-3362-021-1	LEVER (PINCH ROLLER) ASSY	
171	3-366-886-01	SHEET (RF BRACKET)	
M901	A-2004-301-A	MOTOR ASSY, CONTROL	
PM902	1-454-522-11	SOLENOID, PLUNGER	



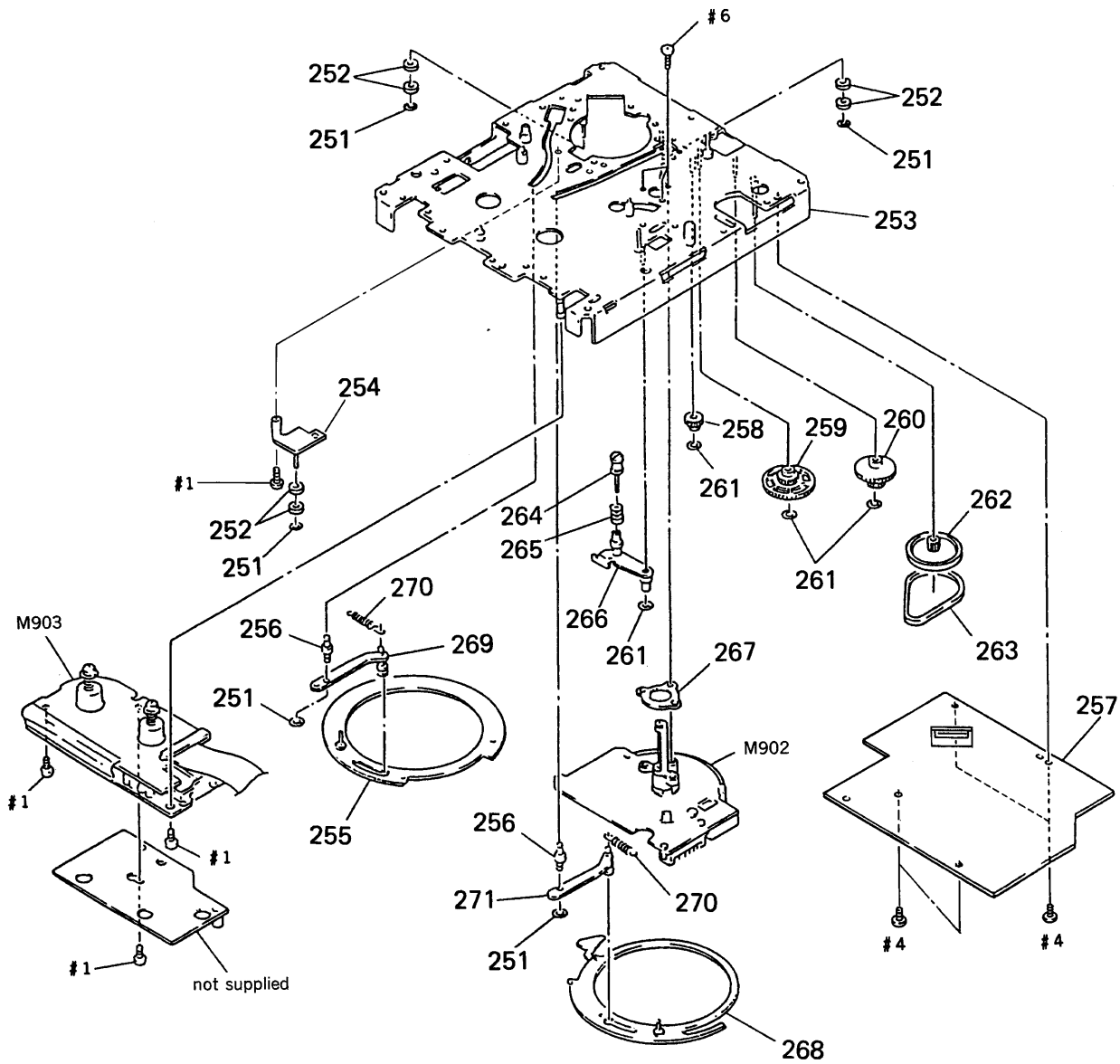
**5-5. MECHANISM DECK SECTION (2)  
(DATM-55)**



Ref. No.	Part No.	Description	Remark
* 201	1-654-392-11	S-END BOARD	
202	3-573-470-00	SPRING, COMPRESSION	
203	X-3337-643-1	GUIDE (RIC) ASSY, ROLLER	
204	X-3362-028-1	SLANT BLOCK (L2) ASSY	
205	3-341-752-11	WASHER, POLYETHYLENE	
206	3-362-152-01	SCREW (RETURN GUIDE BOSS)	
207	3-912-011-01	CATCHER	

Ref. No.	Part No.	Description	Remark
208	3-701-436-11	WASHER, STOPPER	
209	3-307-375-00	SPRING, TENSION	
210	A-2003-487-A	ARM (CLEANING) ASSY	
211	X-3362-029-1	SLANT BLOCK (R2) ASSY	
212	A-2004-300-A	DETECTION (L) ASSY, E	
213	X-3337-655-1	ROLLER (CLEANER) ASSY	
M904	8-848-626-11	DRUM ASSY DOU-03D-R	

5-6. MECHANISM DECK SECTION (3)  
(DATM-55)



Ref. No.	Part No.	Description	Remark
251	3-559-408-11	WASHER, POLYETHYLENE, DIA. 1.2	
252	3-337-622-01	ROLLER, RING	
* 253	X-3362-030-7	CHASSIS ASSY	
254	X-3370-186-1	ARM (RING ROLLER) ASSY	
255	X-3369-705-1	RING (L) ASSY, LOADING	
256	3-362-151-01	BOSS (GUIDE)	
* 257	A-2007-321-A	DRUM DRIVE BOARD, COMPLETE	
258	3-372-619-01	GEAR	
259	3-345-181-01	GEAR (LOADING A)	
260	3-362-155-01	GEAR (A)	
261	3-701-436-11	WASHER, STOPPER	
262	4-932-338-01	PULLEY (A)	

Ref. No.	Part No.	Description	Remark
263	4-913-325-01	BELT, TAKE-UP	
264	X-3337-643-1	GUIDE (RIC) ASSY, ROLLER	
265	3-573-470-00	SPRING, COMPRESSION	
* 266	X-3362-020-1	LEVER (F GUIDE) ASSY	
* 267	3-362-156-01	BRACKET (CAPSTAN)	
268	X-3362-204-1	GEAR (LOAD) ASSY	
* 269	X-3362-024-1	LEVER (LOADING L) ASSY	
270	3-337-653-01	SPRING, TENSION	
* 271	X-3362-025-1	LEVER (LOADING R) ASSY	
M902	8-835-306-01	MOTOR, DC U-17A (CAPSTAN)	
* M903	8-835-205-01	MOTOR, DC U-2A (REEL) (INCLUDING PM901)	

## SECTION 6 ELECTRICAL PARTS LIST

2V REG

5V REG

6V REG

AC INLET

AC-SW

AUDIO

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable
- Abbreviation  
G : German model

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS  
In each case, u:  $\mu$ , for example:  
uA ..:  $\mu$ A.    uPA..:  $\mu$ PA.  
uPB..:  $\mu$ PB.    uPC..:  $\mu$ PC.    uPD..:  $\mu$ PD..
- CAPACITORS  
uF:  $\mu$ F
- COILS  
uH:  $\mu$ H

When indicating parts by reference number, please include the board.

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

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

Ref. No.	Part No.	Description	Remark
*	1-655-928-11	2V REG BOARD ***** < CAPACITOR >	
C911	1-162-294-31	CERAMIC            0.001uF    10%    50V  < CONNECTOR >	
CN511	1-691-765-21	PLUG (MICRO CONNECTOR) 3P  < TRANSISTOR >	
Q901	8-729-209-15	TRANSISTOR    2SD2012 *****	
*	1-655-926-11	5V REG BOARD ***** < CAPACITOR >	
C907	1-164-159-11	CERAMIC            0.1uF            50V	
C908	1-164-159-11	CERAMIC            0.1uF            50V  < CONNECTOR >	
CN509	1-691-765-31	PLUG (MICRO CONNECTOR) 3P  < IC >	
IC901	8-759-144-82	IC    uPC2405HF *****	
*	1-655-927-11	6V REG BOARD ***** < CAPACITOR >	
C909	1-164-159-11	CERAMIC            0.1uF            50V	
C910	1-164-159-11	CERAMIC            0.1uF            50V  < CONNECTOR >	
CN510	1-691-765-41	PLUG (MICRO CONNECTOR) 3P	

Ref. No.	Part No.	Description	Remark
		< IC >	
	IC902 8-759-148-79	IC    uPC2406HF *****	
*	1-655-929-11	AC INLET BOARD *****	
	1-775-047-11	CORD (WITH CONNECTOR)  < AC INLET >	
$\Delta$ IL901	1-251-234-11	INLET, AC (~ AC IN) *****	
*	1-656-406-11	AC-SW BOARD *****	
	1-775-048-11	CORD (WITH CONNECTOR)  < CONNECTOR >	
CN904	1-770-550-11	PIN, CONNECTOR (PC BOARD) 2P  < SWITCH >	
$\Delta$ S901	1-572-267-51	SWITCH, PUSH (AC POWER) (1 KEY) (POWER) *****	
*	A-2007-346-A	AUDIO BOARD, COMPLETE *****	
	2-259-121-01	SCREW, TR	
*	4-363-146-71	HEAT SINK, V. OUT  < CAPACITOR >	
C102	1-126-023-11	ELECT            100uF            20%    25V	
C104	1-130-481-00	MYLAR            0.0068uF        5%      50V	
C105	1-126-023-11	ELECT            100uF            20%    25V	
C106-109	1-136-165-00	FILM            0.1uF            5%      50V	
C110	1-129-702-00	FILM            0.001uF        5%      630V	
C111	1-136-478-11	FILM            470PF            5%      630V	
C112	1-136-478-11	FILM            470PF            5%      630V	
C113	1-136-437-11	FILM            220PF            5%      630V	



**AUDIO**

Ref. No.	Part No.	Description	Remark
D304	8-719-230-02	DIODE 30DF2	
D305	8-719-987-63	DIODE 1N4148M	
D306	8-719-987-63	DIODE 1N4148M	
D307	8-719-987-63	DIODE 1N4148M	
D308	8-719-976-30	DIODE KV1560N	
< IC >			
IC101	8-759-900-72	IC NE5532P	
IC102	8-759-900-72	IC NE5532P	
IC201	8-759-900-72	IC NE5532P	
IC202	8-759-900-72	IC NE5532P	
IC301	8-759-231-58	IC TA7812S	
IC302	8-759-245-86	IC TA79012S	
IC303	8-759-972-47	IC LF412CN	
IC304	8-759-602-83	IC M5238P	
IC305	8-759-094-53	IC TA7805S (LBSONY)	
IC306	8-759-094-68	IC TA79005S-LBSONY	
IC307	8-759-330-53	IC CXD8493M-E1	
IC308	8-759-196-21	IC CXD8482Q	
IC309	8-759-925-90	IC SN74HC74ANS	
IC310	8-759-256-59	IC HD74HC00FPEL	
IC311	8-759-269-92	IC SN74HCU04ANS-E20	
IC312	8-759-926-95	IC SN74HC4020ANS	
IC313	8-759-270-50	IC SN74HC368ANS-E20	
IC314	8-759-287-70	IC CXD8505Q	
IC315	8-759-250-81	IC TC5081AP	
IC316	8-759-094-53	IC TA7805S (LBSONY)	
IC317	8-759-094-53	IC TA7805S (LBSONY)	
IC318	8-759-094-53	IC TA7805S (LBSONY)	
< JACK >			
J301	1-770-163-11	JACK, PIN 4P (ANALOG (LINE) IN/OUT)	
J302	1-563-363-11	JACK, LARGE TYPE 2P (ANALOG (LINE) IN)	
J303	1-563-363-11	JACK, LARGE TYPE 2P (ANALOG (LINE) OUT)	
< COIL >			
L302-306			
	1-410-509-11	INDUCTOR 10uH	
L307	1-426-850-11	COIL (RF)	
L308	1-410-397-21	FERRITE BEAD INDUCTOR	
L309	1-410-397-21	FERRITE BEAD INDUCTOR	
< TERMINAL BOARD >			
LUG301	1-537-770-11	TERMINAL BOARD, GROUND	
LUG302	1-537-770-11	TERMINAL BOARD, GROUND	
LUG304	1-537-770-11	TERMINAL BOARD, GROUND	
< TRANSISTOR >			
Q102	8-729-107-85	TRANSISTOR 2SC3623A-K	

Ref. No.	Part No.	Description	Remark
Q202	8-729-107-85	TRANSISTOR 2SC3623A-K	
Q303	8-729-900-80	TRANSISTOR DTC114ES	
Q304	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q305	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q306	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q307	8-729-200-56	TRANSISTOR 2SK241-GR	
Q308	8-729-200-56	TRANSISTOR 2SK241-GR	
Q309	8-729-900-61	TRANSISTOR DTA114ES	
Q310	8-729-900-80	TRANSISTOR DTC114ES	
Q311	8-729-900-80	TRANSISTOR DTC114ES	
Q312	8-729-900-80	TRANSISTOR DTC114ES	
< RESISTOR >			
R102	1-249-441-11	CARBON 100K 5% 1/4W	
R106	1-249-421-11	CARBON 2.2K 5% 1/4W	
R107	1-249-433-11	CARBON 22K 5% 1/4W	
R108	1-249-425-11	CARBON 4.7K 5% 1/4W	
R109	1-249-425-11	CARBON 4.7K 5% 1/4W	
R110	1-249-401-11	CARBON 47 5% 1/4W	
R111	1-249-401-11	CARBON 47 5% 1/4W	
R112-115			
	1-249-425-11	CARBON 4.7K 5% 1/4W	
R116	1-249-419-11	CARBON 1.5K 5% 1/4W	
R117	1-249-419-11	CARBON 1.5K 5% 1/4W	
R118	1-249-425-11	CARBON 4.7K 5% 1/4W	
R119	1-249-425-11	CARBON 4.7K 5% 1/4W	
R120-123			
	1-249-421-11	CARBON 2.2K 5% 1/4W	
R124	1-249-419-11	CARBON 1.5K 5% 1/4W	
R125	1-249-419-11	CARBON 1.5K 5% 1/4W	
R126	1-249-441-11	CARBON 100K 5% 1/4W	
R127	1-249-407-11	CARBON 150 5% 1/4W	
R128	1-249-407-11	CARBON 150 5% 1/4W	
R129	1-249-429-11	CARBON 10K 5% 1/4W	
R130	1-249-415-11	CARBON 680 5% 1/4W	
R131	1-249-415-11	CARBON 680 5% 1/4W	
R202	1-249-441-11	CARBON 100K 5% 1/4W	
R206	1-249-421-11	CARBON 2.2K 5% 1/4W	
R207	1-249-433-11	CARBON 22K 5% 1/4W	
R208	1-249-425-11	CARBON 4.7K 5% 1/4W	
R209	1-249-425-11	CARBON 4.7K 5% 1/4W	
R210	1-249-401-11	CARBON 47 5% 1/4W	
R211	1-249-401-11	CARBON 47 5% 1/4W	
R212-215			
	1-249-425-11	CARBON 4.7K 5% 1/4W	
R216	1-249-419-11	CARBON 1.5K 5% 1/4W	
R217	1-249-419-11	CARBON 1.5K 5% 1/4W	
R218	1-249-425-11	CARBON 4.7K 5% 1/4W	
R219	1-249-425-11	CARBON 4.7K 5% 1/4W	

**AUDIO**

**COVER (A)**

**COVER (B)**

**DIGITAL**

Ref. No.	Part No.	Description	Remark
R220-223			
	1-249-421-11	CARBON	2. 2K 5% 1/4W
R224	1-249-419-11	CARBON	1. 5K 5% 1/4W
R225	1-249-419-11	CARBON	1. 5K 5% 1/4W
R226	1-249-441-11	CARBON	100K 5% 1/4W
R227	1-249-407-11	CARBON	150 5% 1/4W
R228			
R228	1-249-407-11	CARBON	150 5% 1/4W
R229	1-249-429-11	CARBON	10K 5% 1/4W
R230	1-249-415-11	CARBON	680 5% 1/4W
R231	1-249-415-11	CARBON	680 5% 1/4W
R303	1-249-429-11	CARBON	10K 5% 1/4W
R304-309			
	1-249-413-11	CARBON	470 5% 1/4W
R310	1-249-441-11	CARBON	100K 5% 1/4W
R311	1-249-417-11	CARBON	1K 5% 1/4W
R312	1-247-895-00	CARBON	470K 5% 1/4W
R313	1-249-409-11	CARBON	220 5% 1/4W
R314			
R314	1-249-441-11	CARBON	100K 5% 1/4W
R315	1-249-417-11	CARBON	1K 5% 1/4W
R316	1-247-895-00	CARBON	470K 5% 1/4W
R317	1-249-409-11	CARBON	220 5% 1/4W
R320	1-247-807-31	CARBON	100 5% 1/4W
R321			
R321	1-249-413-11	CARBON	470 5% 1/4W
R322	1-249-441-11	CARBON	100K 5% 1/4W
R323	1-249-409-11	CARBON	220 5% 1/4W
R324	1-249-409-11	CARBON	220 5% 1/4W
R325-327			
	1-249-413-11	CARBON	470 5% 1/4W
R328			
R328	1-249-425-11	CARBON	4. 7K 5% 1/4W
R329	1-249-417-11	CARBON	1K 5% 1/4W
R330	1-249-401-11	CARBON	47 5% 1/4W
R331	1-249-417-11	CARBON	1K 5% 1/4W
R332	1-249-429-11	CARBON	10K 5% 1/4W
R333			
R333	1-249-421-11	CARBON	2. 2K 5% 1/4W
R334	1-249-429-11	CARBON	10K 5% 1/4W
R335	1-249-429-11	CARBON	10K 5% 1/4W
R336	1-249-428-11	CARBON	8. 2K 5% 1/4W
R337	1-249-441-11	CARBON	100K 5% 1/4W
R338-340			
	1-249-417-11	CARBON	1K 5% 1/4W
R341	1-247-895-00	CARBON	470K 5% 1/4W
R342	1-249-437-11	CARBON	47K 5% 1/4W
R343	1-249-441-11	CARBON	100K 5% 1/4W
R345	1-249-429-11	CARBON	10K 5% 1/4W
R350			
R350	1-249-409-11	CARBON	220 5% 1/4W
R351	1-249-413-11	CARBON	470 5% 1/4W
R352	1-249-417-11	CARBON	1K 5% 1/4W

Ref. No.	Part No.	Description	Remark
< RELAY >			
RY301	1-515-726-11	RELAY	
< VIBRATOR >			
X301	1-567-814-11	VIBRATOR, CRYSTAL (24. 576MHz)	
X302	1-567-815-11	VIBRATOR, CRYSTAL (22. 5792MHz)	
*****			
*	1-655-931-11	COVER (A) BOARD	*****
*****			
*	1-656-407-11	COVER (B) BOARD	*****
*****			
*	A-2007-424-A	DIGITAL BOARD, COMPLETE (US, Canadian)	
*	A-2007-425-A	DIGITAL BOARD, COMPLETE (AEP, UK, G)	*****
*****			
	1-533-293-11	HOLDER, FUSE	
	1-550-414-21	HOLDER, BATTERY	
< CAPACITOR >			
C501	1-126-017-11	ELECT	6800uF 20% 16V
C502	1-126-946-11	ELECT	6800uF 20% 25V
C503	1-126-927-11	ELECT	2200uF 20% 10V
C504	1-124-473-11	ELECT	1000uF 20% 10V
C505	1-124-472-11	ELECT	470uF 20% 10V
C506	1-124-472-11	ELECT	470uF 20% 10V
C507	1-164-159-11	CERAMIC	0. 1uF 50V
C508	1-124-919-11	ELECT	220uF 20% 63V
C509	1-124-122-11	ELECT	100uF 20% 50V
C510	1-164-159-11	CERAMIC	0. 1uF 50V
C511	1-164-159-11	CERAMIC	0. 1uF 50V
C512	1-162-294-31	CERAMIC	0. 001uF 10% 50V
C513	1-162-302-11	CERAMIC	0. 0022uF 30% 16V
C514	1-162-286-31	CERAMIC	220PF 10% 50V
C515	1-162-294-31	CERAMIC	0. 001uF 10% 50V
C516	1-162-302-11	CERAMIC	0. 0022uF 30% 16V
C517	1-162-286-31	CERAMIC	220PF 10% 50V
C518	1-162-306-11	CERAMIC	0. 01uF 20% 16V
C519	1-162-306-11	CERAMIC	0. 01uF 20% 16V
C520	1-162-290-31	CERAMIC	470PF 10% 50V
C521	1-162-306-11	CERAMIC	0. 01uF 20% 16V
C522	1-124-916-11	ELECT	22uF 20% 63V
C523	1-162-306-11	CERAMIC	0. 01uF 20% 16V
C524	1-162-290-31	CERAMIC	470PF 10% 50V
C525	1-162-306-11	CERAMIC	0. 01uF 20% 16V

Ref. No.	Part No.	Description		Remark
C526	1-124-916-11	ELECT	22uF	20% 63V
C527	1-164-159-11	CERAMIC	0.1uF	50V
C528	1-164-159-11	CERAMIC	0.1uF	50V
C529	1-124-442-00	ELECT	330uF	20% 6.3V
C530	1-162-294-31	CERAMIC	0.001uF	10% 50V
C531	1-124-925-11	ELECT	2.2uF	20% 100V
C532	1-164-159-11	CERAMIC	0.1uF	50V
C533	1-162-203-31	CERAMIC	15PF	5% 50V
C534	1-162-203-31	CERAMIC	15PF	5% 50V
C535	1-164-159-11	CERAMIC	0.1uF	50V
C536	1-136-165-00	FILM	0.1uF	5% 50V
C537	1-124-442-00	ELECT	330uF	20% 6.3V
C538	1-164-159-11	CERAMIC	0.1uF	50V
C539	1-162-306-11	CERAMIC	0.01uF	20% 16V
C540	1-162-294-31	CERAMIC	0.001uF	10% 50V
C541	1-162-284-31	CERAMIC	150PF	10% 50V
C542	1-164-159-11	CERAMIC	0.1uF	50V
C543	1-124-442-00	ELECT	330uF	20% 6.3V
C544-549				
C550	1-162-294-31	CERAMIC	0.001uF	10% 50V
C550	1-164-159-11	CERAMIC	0.1uF	50V
C552	1-162-207-31	CERAMIC	22PF	5% 50V
C553	1-162-207-31	CERAMIC	22PF	5% 50V
C554	1-162-203-31	CERAMIC	15PF	5% 50V
C555	1-162-203-31	CERAMIC	15PF	5% 50V
C556-558				
C559	1-136-153-00	FILM	0.01uF	5% 50V
C560	1-164-159-11	CERAMIC	0.1uF	50V
C561	1-162-211-31	CERAMIC	33PF	5% 50V
C562	1-136-153-00	FILM	0.01uF	5% 50V
C563	1-124-907-11	ELECT	10uF	20% 50V
C564	1-136-153-00	FILM	0.01uF	5% 50V
C565	1-162-282-31	CERAMIC	100PF	10% 50V
C566-568				
C573	1-164-159-11	CERAMIC	0.1uF	50V
C575	1-164-159-11	CERAMIC	0.1uF	50V
C576	1-164-159-11	CERAMIC	0.1uF	50V
C578	1-164-159-11	CERAMIC	0.1uF	50V
C579	1-164-159-11	CERAMIC	0.1uF	50V
C580	1-162-203-31	CERAMIC	15PF	5% 50V
C581	1-162-205-31	CERAMIC	18PF	5% 50V
C582	1-164-159-11	CERAMIC	0.1uF	50V
C583	1-162-600-11	CERAMIC	0.0047uF	20% 16V
C584	1-162-600-11	CERAMIC	0.0047uF	20% 16V
C585	1-162-294-31	CERAMIC	0.001uF	10% 50V

Ref. No.	Part No.	Description	Remark
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< CONNECTOR >

CN501	1-691-767-11	PLUG (MICRO CONNECTOR) 5P	
CN502	1-691-766-11	PLUG (MICRO CONNECTOR) 4P	
* CN503	1-691-759-61	PIN, CONNECTOR 4P	
* CN504	1-568-845-11	SOCKET, CONNECTOR 31P	
* CN505	1-568-836-11	SOCKET, CONNECTOR 17P	
CN506	1-770-164-11	PIN, CONNECTOR (PC BOARD) 15P	
CN507	1-691-461-11	PIN, CONNECTOR (PC BOARD) 5P	
* CN508	1-564-339-00	PIN, CONNECTOR 5P	

< DIODE >

D501	8-719-312-47	DIODE RBA-406B	
D502	8-719-312-47	DIODE RBA-406B	
D503	8-719-200-77	DIODE 10E2N	
D504	8-719-015-13	DIODE UZP-9.1BC-TP	
D505	8-719-200-77	DIODE 10E2N	
D506	8-719-200-77	DIODE 10E2N	
D507	8-719-985-57	DIODE HZS4BLL-TA	
D508	8-719-987-63	DIODE 1N4148M	
D509	8-719-987-63	DIODE 1N4148M	
D510	8-719-200-77	DIODE 10E2N	
D511	8-719-911-06	DIODE 1SS106	
D512	8-719-911-06	DIODE 1SS106	
D513	8-719-045-72	DIODE KV1550NT	

< FUSE >

△F501	1-532-286-00	FUSE (T2.5A/250V) (AEP, UK, G)	
△F501	1-576-105-11	FUSE (2.5A/250V) (US, Canadian)	
△F502	1-532-286-00	FUSE (T2.5A/250V) (AEP, UK, G)	
△F502	1-576-105-11	FUSE (2.5A/250V) (US, Canadian)	

< FUSIBLE RESISTOR >

△FR501	1-219-136-11	FUSIBLE	0.22	10%	1/4W	F
△FR502	1-212-873-11	FUSIBLE	47	5%	1/4W	F

< IC >

IC501	8-752-863-89	IC CXP87532-011Q	
IC502	8-752-863-91	IC CXP87532-012Q	
IC503	8-752-355-55	IC CXD2605Q	
IC504	8-752-356-96	IC CXK58257AM-10LL	
IC506	8-759-242-84	IC TORX176 (DIGITAL IN/OUT OPTICAL IN)	
IC507	8-759-242-85	IC TOTX176 (DIGITAL IN/OUT OPTICAL OUT)	
IC508	8-759-256-59	IC HD74HC00FPEL	
IC509	8-759-983-69	IC LM358PS	
IC510	8-759-256-59	IC HD74HC00FPEL	
IC511	8-759-926-17	IC SN74HC153ANS	
IC512	8-759-007-80	IC MC74HC175F	
IC513	8-759-269-92	IC SN74HCU04ANS-E20	

<p>The components identified by mark △ or dotted line with mark. △ are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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# DIGITAL

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC514	8-759-256-59	IC HD74HC00FPEL				< RESISTOR >	
IC515	8-759-256-59	IC HD74HC00FPEL					
IC516	8-759-634-43	IC M51953BFP		R501	1-249-425-11	CARBON 4.7K 5% 1/4W	
IC517	8-759-333-79	IC AT24C01A-10SC-TP		R502	1-249-429-11	CARBON 10K 5% 1/4W	
IC518	8-759-333-82	IC MSM6782-01MS-K-R1		R503	1-249-421-11	CARBON 2.2K 5% 1/4W	
				R504	1-249-433-11	CARBON 22K 5% 1/4W	
				R505	1-249-423-11	CARBON 3.3K 5% 1/4W	
IC519	8-759-925-90	IC SN74HC74ANS					
IC520	8-759-983-69	IC LM358PS		R506	1-249-413-11	CARBON 470 5% 1/4W	
IC521	8-759-983-69	IC LM358PS		R507	1-249-429-11	CARBON 10K 5% 1/4W	
IC522	8-759-983-69	IC LM358PS		R508-511			
IC523	8-759-633-65	IC M54641L			1-249-409-11	CARBON 220 5% 1/4W	
		< JACK >		R512-520			
J501	1-770-162-11	JACK, PIN 2P (DIGITAL IN/OUT COAXIAL IN/OUT)			1-249-441-11	CARBON 100K 5% 1/4W	
		< COIL >		R522	1-249-441-11	CARBON 100K 5% 1/4W	
L501-503				R523	1-249-441-11	CARBON 100K 5% 1/4W	
	1-410-509-11	INDUCTOR 10uH		R524	1-249-429-11	CARBON 10K 5% 1/4W	
L504	1-410-498-11	INDUCTOR 1.2uH		R525	1-249-417-11	CARBON 1K 5% 1/4W	
L505	1-410-509-11	INDUCTOR 10uH		R526	1-249-429-11	CARBON 10K 5% 1/4W	
		< TERMINAL BOARD >		R527	1-247-807-31	CARBON 100 5% 1/4W	
LUG503	1-537-770-11	TERMINAL BOARD, GROUND		R528	1-249-417-11	CARBON 1K 5% 1/4W	
		< TRANSISTOR >		R529	1-249-409-11	CARBON 220 5% 1/4W	
Q501	8-729-620-05	TRANSISTOR 2SC2603-EF		R530	1-249-441-11	CARBON 100K 5% 1/4W	
Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE		R531	1-249-441-11	CARBON 100K 5% 1/4W	
Q503	8-729-140-97	TRANSISTOR 2SB734-34		R532	1-249-429-11	CARBON 10K 5% 1/4W	
Q504	8-729-927-11	TRANSISTOR 2SA1585SQR		R533	1-249-417-11	CARBON 1K 5% 1/4W	
Q505	8-729-927-12	TRANSISTOR 2SC4115SQR		R534	1-249-429-11	CARBON 10K 5% 1/4W	
Q506	8-729-927-11	TRANSISTOR 2SA1585SQR		R535	1-247-807-31	CARBON 100 5% 1/4W	
Q507	8-729-927-12	TRANSISTOR 2SC4115SQR		R536	1-249-417-11	CARBON 1K 5% 1/4W	
Q508	8-729-900-80	TRANSISTOR DTC114ES		R537	1-249-409-11	CARBON 220 5% 1/4W	
Q509	8-729-900-80	TRANSISTOR DTC114ES		R539	1-249-409-11	CARBON 220 5% 1/4W	
Q510	8-729-900-80	TRANSISTOR DTC114ES		R540	1-249-409-11	CARBON 220 5% 1/4W	
Q511	8-729-900-80	TRANSISTOR DTC114ES		R541	1-249-441-11	CARBON 100K 5% 1/4W	
Q512	8-729-141-83	TRANSISTOR 2SB1094-LK		R542	1-249-441-11	CARBON 100K 5% 1/4W	
Q513	8-729-119-76	TRANSISTOR 2SA1175-HFE		R544	1-249-441-11	CARBON 100K 5% 1/4W	
Q514	8-729-620-05	TRANSISTOR 2SC2603-EF		R545-547			
Q515	8-729-141-83	TRANSISTOR 2SB1094-LK			1-249-429-11	CARBON 10K 5% 1/4W	
Q516	8-729-119-76	TRANSISTOR 2SA1175-HFE		R548-550			
Q517	8-729-620-05	TRANSISTOR 2SC2603-EF			1-249-441-11	CARBON 100K 5% 1/4W	
Q518	8-729-620-05	TRANSISTOR 2SC2603-EF		R552	1-249-429-11	CARBON 10K 5% 1/4W	
Q519	8-729-620-05	TRANSISTOR 2SC2603-EF		R553	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q520	8-729-900-80	TRANSISTOR DTC114ES		R554	1-249-425-11	CARBON 4.7K 5% 1/4W	
Q521	8-729-620-05	TRANSISTOR 2SC2603-EF		R555	1-249-429-11	CARBON 10K 5% 1/4W	
Q522	8-729-900-80	TRANSISTOR DTC114ES		R556	1-249-429-11	CARBON 10K 5% 1/4W	
				R557-562			
					1-249-441-11	CARBON 100K 5% 1/4W	
				R563-565			
					1-249-429-11	CARBON 10K 5% 1/4W	
				R566	1-249-417-11	CARBON 1K 5% 1/4W	
				R567-570			
					1-249-429-11	CARBON 10K 5% 1/4W	



Ref. No.	Part No.	Description	Remark
R571-573			
	1-247-807-31	CARBON	100 5% 1/4W
R574	1-249-441-11	CARBON	100K 5% 1/4W
R575-578			
	1-249-429-11	CARBON	10K 5% 1/4W
R581	1-249-441-11	CARBON	100K 5% 1/4W
R583	1-249-425-11	CARBON	4.7K 5% 1/4W
R584-591			
	1-249-441-11	CARBON	100K 5% 1/4W
R593	1-249-417-11	CARBON	1K 5% 1/4W
R594	1-249-421-11	CARBON	2.2K 5% 1/4W
R595	1-249-417-11	CARBON	1K 5% 1/4W
R596	1-249-429-11	CARBON	10K 5% 1/4W
R597	1-249-441-11	CARBON	100K 5% 1/4W
R598	1-249-441-11	CARBON	100K 5% 1/4W
R600-602			
	1-249-425-11	CARBON	4.7K 5% 1/4W
R603	1-249-413-11	CARBON	470 5% 1/4W
R604	1-249-433-11	CARBON	22K 5% 1/4W
R605	1-249-433-11	CARBON	22K 5% 1/4W
R606	1-249-409-11	CARBON	220 5% 1/4W
R607	1-249-431-11	CARBON	15K 5% 1/4W
R608	1-249-417-11	CARBON	1K 5% 1/4W
R611	1-249-409-11	CARBON	220 5% 1/4W
R612	1-249-437-11	CARBON	47K 5% 1/4W
R613	1-249-429-11	CARBON	10K 5% 1/4W
R614	1-249-429-11	CARBON	10K 5% 1/4W
R615	1-247-807-31	CARBON	100 5% 1/4W
R616	1-249-429-11	CARBON	10K 5% 1/4W
R617	1-249-435-11	CARBON	33K 5% 1/4W
R618	1-249-421-11	CARBON	2.2K 5% 1/4W
R619	1-249-421-11	CARBON	2.2K 5% 1/4W
R620	1-247-807-31	CARBON	100 5% 1/4W
R621	1-247-804-11	CARBON	75 5% 1/4W
R622	1-249-429-11	CARBON	10K 5% 1/4W
R623	1-249-429-11	CARBON	10K 5% 1/4W
R624	1-249-427-11	CARBON	6.8K 5% 1/4W
R625-629			
	1-249-429-11	CARBON	10K 5% 1/4W
R634-636			
	1-249-423-11	CARBON	3.3K 5% 1/4W
R637	1-249-429-11	CARBON	10K 5% 1/4W
R638	1-249-429-11	CARBON	10K 5% 1/4W
R639	1-247-804-11	CARBON	75 5% 1/4W
R645	1-249-413-11	CARBON	470 5% 1/4W
R647	1-249-409-11	CARBON	220 5% 1/4W
R648	1-247-807-31	CARBON	100 5% 1/4W

Ref. No.	Part No.	Description	Remark
		< VARIABLE RESISTOR >	
RV501	1-241-763-11	RES, ADJ, CARBON 4.7K	
RV502	1-241-763-11	RES, ADJ, CARBON 4.7K	
		< COIL >	
T501	1-409-594-11	COIL (WITH CORE)	
		< VIBRATOR >	
X501	1-567-814-11	VIBRATOR, CRYSTAL (24.567MHz)	
X502	1-567-816-11	VIBRATOR, CRYSTAL (18.816MHz)	
X503	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)	
*****			
*	A-2007-340-A	DISPLAY BOARD, COMPLETE	
*****			
	2-389-320-01	CUSHION	
*	4-922-523-01	HOLDER (RIGHT)	
*	4-922-524-01	HOLDER (LEFT)	
		< CAPACITOR >	
C701	1-126-177-11	ELECT	100uF 20% 10V
C702	1-136-165-00	FILM	0.1uF 5% 50V
C703	1-162-294-31	CERAMIC	0.001uF 10% 50V
C704	1-162-294-31	CERAMIC	0.001uF 10% 50V
C706	1-164-159-11	CERAMIC	0.1uF 50V
C710	1-162-306-11	CERAMIC	0.01uF 20% 16V
C711	1-162-306-11	CERAMIC	0.01uF 20% 16V
		< CONNECTOR >	
CN701	1-568-860-11	SOCKET, CONNECTOR 17P	
		< COMPOSITION CIRCUIT BLOCK >	
CP701-704			
	1-233-276-11	COMPOSITION CIRCUIT BLOCK (100Kx10)	
		< FLUORESCENT INDICATOR >	
FL701	1-517-382-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC701	8-752-863-90	IC CXP82316-054Q	
IC702	8-759-995-09	IC MSM6338RS	
		< TRANSISTOR >	
Q701	8-729-620-05	TRANSISTOR	2SC2603-EF
Q702	8-729-620-05	TRANSISTOR	2SC2603-EF
Q703	8-729-620-05	TRANSISTOR	2SC2603-EF

# DISPLAY

Ref. No.	Part No.	Description	Remark
< RESISTOR >			
R701-708			
	1-249-427-11	CARBON 6.8K 5%	1/4W
R709	1-249-415-11	CARBON 680 5%	1/4W
R710	1-249-417-11	CARBON 1K 5%	1/4W
R711	1-249-419-11	CARBON 1.5K 5%	1/4W
R712	1-249-423-11	CARBON 3.3K 5%	1/4W
R713	1-249-425-11	CARBON 4.7K 5%	1/4W
R714	1-249-429-11	CARBON 10K 5%	1/4W
R716	1-249-415-11	CARBON 680 5%	1/4W
R717	1-249-417-11	CARBON 1K 5%	1/4W
R718	1-249-419-11	CARBON 1.5K 5%	1/4W
R719	1-249-423-11	CARBON 3.3K 5%	1/4W
R720	1-249-425-11	CARBON 4.7K 5%	1/4W
R721	1-249-429-11	CARBON 10K 5%	1/4W
R723	1-249-415-11	CARBON 680 5%	1/4W
R724	1-249-417-11	CARBON 1K 5%	1/4W
R725	1-249-419-11	CARBON 1.5K 5%	1/4W
R726	1-249-423-11	CARBON 3.3K 5%	1/4W
R727	1-249-425-11	CARBON 4.7K 5%	1/4W
R728	1-249-429-11	CARBON 10K 5%	1/4W
R730	1-249-415-11	CARBON 680 5%	1/4W
R731	1-249-417-11	CARBON 1K 5%	1/4W
R732	1-249-419-11	CARBON 1.5K 5%	1/4W
R733	1-249-423-11	CARBON 3.3K 5%	1/4W
R734	1-249-425-11	CARBON 4.7K 5%	1/4W
R735	1-249-429-11	CARBON 10K 5%	1/4W
R737	1-249-415-11	CARBON 680 5%	1/4W
R738	1-249-417-11	CARBON 1K 5%	1/4W
R739	1-249-419-11	CARBON 1.5K 5%	1/4W
R740	1-249-423-11	CARBON 3.3K 5%	1/4W
R741	1-249-425-11	CARBON 4.7K 5%	1/4W
R742	1-249-429-11	CARBON 10K 5%	1/4W
R743	1-249-435-11	CARBON 33K 5%	1/4W
R744	1-249-415-11	CARBON 680 5%	1/4W
R745	1-249-417-11	CARBON 1K 5%	1/4W
R746	1-249-419-11	CARBON 1.5K 5%	1/4W
R747	1-249-423-11	CARBON 3.3K 5%	1/4W
R748	1-249-425-11	CARBON 4.7K 5%	1/4W
R749	1-249-429-11	CARBON 10K 5%	1/4W
R750-752			
	1-249-435-11	CARBON 33K 5%	1/4W
R753	1-249-429-11	CARBON 10K 5%	1/4W
R754	1-249-435-11	CARBON 33K 5%	1/4W
R756	1-249-415-11	CARBON 680 5%	1/4W
R757	1-249-435-11	CARBON 33K 5%	1/4W

Ref. No.	Part No.	Description	Remark
< SWITCH >			
S701	1-554-937-11	SWITCH, KEY BOARD (OPEN/CLOSE ▲)	
S702	1-554-937-11	SWITCH, KEY BOARD (STOP ■)	
S703	1-554-937-11	SWITCH, KEY BOARD (PLAY ▶)	
S704	1-554-937-11	SWITCH, KEY BOARD (PREVIOUS ◀◀ (AMS))	
S705	1-554-937-11	SWITCH, KEY BOARD (NEXT ▶▶ (AMS))	
S706	1-554-937-11	SWITCH, KEY BOARD (MODE (COUNTER))	
S707	1-554-937-11	SWITCH, KEY BOARD (RESET (COUNTER))	
S709	1-554-937-11	SWITCH, KEY BOARD (REW ◀◀)	
S710	1-554-937-11	SWITCH, KEY BOARD (FF ▶▶)	
S711	1-554-937-11	SWITCH, KEY BOARD (REC ●)	
S712	1-554-937-11	SWITCH, KEY BOARD (PAUSE ■■)	
S713	1-554-937-11	SWITCH, KEY BOARD (REC MUTE ○)	
S716	1-554-937-11	SWITCH, KEY BOARD (AUTO (START ID))	
S717	1-554-937-11	SWITCH, KEY BOARD (RENUMBER (START ID))	
S718	1-554-937-11	SWITCH, KEY BOARD (REHEARSAL (START ID))	
S719	1-554-937-11	SWITCH, KEY BOARD (WRITE (START ID))	
S720	1-554-937-11	SWITCH, KEY BOARD (ERASE (START ID))	
S721	1-554-937-11	SWITCH, KEY BOARD (MARGIN RESET)	
S724	1-554-937-11	SWITCH, KEY BOARD (REHEARSAL (SKIP ID))	
S725	1-554-937-11	SWITCH, KEY BOARD (WRITE (SKIP ID))	
S726	1-554-937-11	SWITCH, KEY BOARD (ERASE (SKIP ID))	
S727	1-554-937-11	SWITCH, KEY BOARD (SKIP PLAY)	
S728	1-554-937-11	SWITCH, KEY BOARD (REPEAT)	
S730	1-554-937-11	SWITCH, KEY BOARD (1)	
S731	1-554-937-11	SWITCH, KEY BOARD (2)	
S732	1-554-937-11	SWITCH, KEY BOARD (3)	
S733	1-554-937-11	SWITCH, KEY BOARD (4)	
S734	1-554-937-11	SWITCH, KEY BOARD (5)	
S735	1-554-937-11	SWITCH, KEY BOARD (6)	
S736	1-554-937-11	SWITCH, KEY BOARD (7)	
S737	1-554-937-11	SWITCH, KEY BOARD (8)	
S738	1-554-937-11	SWITCH, KEY BOARD (RECORDED (DATE))	
S739	1-554-937-11	SWITCH, KEY BOARD (PRESENT (DATE))	
S740	1-554-937-11	SWITCH, KEY BOARD (CLOCK SET)	
S742	1-554-937-11	SWITCH, KEY BOARD (9)	
S743	1-554-937-11	SWITCH, KEY BOARD (0)	
S744	1-554-937-11	SWITCH, KEY BOARD (CLEAR)	

## < VIBRATOR >

X701	1-577-359-21	VIBRATOR, CERAMIC (4.19MHz)	
*****			

**DRUM DRIVE**

**FOOT SW**

Ref.No.	Part No.	Description	Remark		
*	A-2007-321-A	DRUM DRIVE BOARD, COMPLETE *****			
	1-537-770-11	TERMINAL BOARD, GROUND			
		< CAPACITOR >			
C1	1-124-925-11	ELECT	2.2uF	20%	100V
C3	1-162-306-11	CERAMIC	0.01uF	20%	16V
C5-7					
	1-126-923-11	ELECT	220uF	20%	10V
C8	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C9	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C10	1-162-286-31	CERAMIC	220PF	10%	50V
C11	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C12	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C13	1-126-964-11	ELECT	10uF	20%	50V
C14	1-126-923-11	ELECT	220uF	20%	10V
C15	1-162-306-11	CERAMIC	0.01uF	20%	16V
		< CONNECTOR >			
* CN1	1-568-845-11	SOCKET, CONNECTOR 31P			
CN2	1-691-461-11	PIN, CONNECTOR (PC BOARD) 5P			
CN3	1-564-505-11	PLUG, CONNECTOR 2P			
* CN4	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CN5	1-564-515-11	PLUG, CONNECTOR 12P			
* CN6	1-691-465-11	PIN, CONNECTOR (PC BOARD) 9P			
* CN7	1-568-369-11	HOUSING, CONNECTOR (PC BOARD) 8P			
* CN8	1-506-503-11	PIN, CONNECTOR 9P			
* CN9	1-564-337-00	PIN, CONNECTOR 3P			
* CN11	1-564-337-61	PIN, CONNECTOR 3P			
* CN12	1-564-336-00	PIN, CONNECTOR 2P			
		< DIODE >			
D2	8-719-200-82	DIODE	11ES2		
D3	8-719-200-82	DIODE	11ES2		
		< IC >			
IC1	8-759-135-80	IC	uPC358C		
IC2	8-759-633-65	IC	M54641L		
IC3	8-752-060-73	IC	CX20115A-T4		
		< TRANSISTOR >			
Q1	8-729-620-05	TRANSISTOR	2SC2603-EF		
Q2	8-729-801-84	TRANSISTOR	2SB1013-4		
Q3	8-729-801-93	TRANSISTOR	2SD1387		
		< RESISTOR >			
R1	1-249-423-11	CARBON	3.3K	5%	1/4W

Ref.No.	Part No.	Description	Remark		
R2	1-249-429-11	CARBON	10K	5%	1/4W
R3	1-249-407-11	CARBON	150	5%	1/4W
R4	1-249-423-11	CARBON	3.3K	5%	1/4W
R5	1-249-421-11	CARBON	2.2K	5%	1/4W
R6	1-249-435-11	CARBON	33K	5%	1/4W
R7	1-247-807-31	CARBON	100	5%	1/4W
R8	1-249-417-11	CARBON	1K	5%	1/4W
R9	1-249-429-11	CARBON	10K	5%	1/4W
R11	1-249-429-11	CARBON	10K	5%	1/4W
R12	1-249-417-11	CARBON	1K	5%	1/4W
R14-17					
	1-249-441-11	CARBON	100K	5%	1/4W
R18	1-249-409-11	CARBON	220	5%	1/4W
R19	1-249-409-11	CARBON	220	5%	1/4W
R20	1-249-401-11	CARBON	47	5%	1/4W
R21	1-249-429-11	CARBON	10K	5%	1/4W
R22	1-249-433-11	CARBON	22K	5%	1/4W
R23	1-249-403-11	CARBON	68	5%	1/4W
R24	1-249-403-11	CARBON	68	5%	1/4W
R25	1-249-423-11	CARBON	3.3K	5%	1/4W
R26	1-249-423-11	CARBON	3.3K	5%	1/4W
R27	1-249-419-11	CARBON	1.5K	5%	1/4W
		*****			
*	1-655-930-11	FOOT SW BOARD *****			
		< CAPACITOR >			
C570	1-162-294-31	CERAMIC	0.001uF	10%	50V
C571	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< DIODE >			
D516	8-719-987-63	DIODE	1N4148M		
D517	8-719-987-63	DIODE	1N4148M		
D518	8-719-987-63	DIODE	1N4148M		
D519	8-719-987-63	DIODE	1N4148M		
		< JACK >			
J502	1-563-363-11	JACK, LARGE TYPE 2P (FOOT SW)			
		< RESISTOR >			
R640	1-249-417-11	CARBON	1K	5%	1/4W
R641	1-249-417-11	CARBON	1K	5%	1/4W
R642	1-249-429-11	CARBON	10K	5%	1/4W
R643	1-249-429-11	CARBON	10K	5%	1/4W
		*****			

**HP VOL**

**INPUT SW**

**LOAD-SW**

**LOADING-MOT**

**MOTOR**

**PRIMARY**

Ref.No.	Part No.	Description	Remark
*	1-655-922-11	HP VOL BOARD *****	
		< CAPACITOR >	
C122	1-102-114-00	CERAMIC 470PF	10% 50V
C222	1-102-114-00	CERAMIC 470PF	10% 50V
C374	1-126-024-11	ELECT 220uF	20% 25V
C375	1-126-024-11	ELECT 220uF	20% 25V
		< FUSIBLE RESISTOR >	
△FR301	1-212-857-00	FUSIBLE 10 5%	1/4W F
△FR302	1-212-857-00	FUSIBLE 10 5%	1/4W F
		< IC >	
IC321	8-759-981-96	IC RC4560D	
		< JACK >	
J304	1-565-327-11	JACK, LARGE TYPE 1P (PHONES)	
		< RESISTOR >	
R132	1-249-435-11	CARBON 33K 5%	1/4W
R133	1-249-431-11	CARBON 15K 5%	1/4W
R134	1-249-425-11	CARBON 4.7K 5%	1/4W
R135	1-247-807-31	CARBON 100 5%	1/4W
R232	1-249-435-11	CARBON 33K 5%	1/4W
R233	1-249-431-11	CARBON 15K 5%	1/4W
R234	1-249-425-11	CARBON 4.7K 5%	1/4W
R235	1-247-807-31	CARBON 100 5%	1/4W
		< VARIABLE RESISTOR >	
RV302	1-241-537-11	RES, VAR, CARBON 20K/20K (PHONE LEVEL)	
*****			
*	1-655-919-11	INPUT SW BOARD *****	
		< RESISTOR >	
R736	1-249-435-11	CARBON 33K 5%	1/4W
		< SWITCH >	
S729	1-572-758-11	SWITCH, ROTARY (INPUT)	
*****			
*	1-655-285-11	LOAD-SW BOARD *****	
		< SWITCH >	
S902	1-571-489-11	SWITCH, SLIDE (UNLOAD)	

Ref.No.	Part No.	Description	Remark
S903	1-571-489-11	SWITCH, SLIDE (LOAD)	
*****			
*	1-655-286-11	LOADING-MOT BOARD *****	
		< CAPACITOR >	
C999	1-136-165-00	FILM 0.1uF	5% 50V
		< CONNECTOR >	
* CN919	1-564-496-11	PIN, CONNECTOR 3P	
* CN920	1-564-497-11	PIN, CONNECTOR 4P	
*****			
*	1-655-913-11	MOTOR BOARD *****	
		< CAPACITOR >	
C1	1-161-772-11	CERAMIC 0.1uF	10% 25V
		< CONNECTOR >	
* CN1	1-564-498-11	PIN, CONNECTOR 5P	
* CN4	1-564-336-00	PIN, CONNECTOR 2P	
* CN5	1-564-336-61	PIN, CONNECTOR 2P	
*****			
*	1-655-925-11	PRIMARY BOARD *****	
		< CAPACITOR >	
△C901	1-161-744-51	CERAMIC 0.01uF	400V
△C902	1-161-744-51	CERAMIC 0.01uF	400V
△C903-905	1-161-742-00	CERAMIC 0.0022uF	20% 400V
△C906	1-161-742-00	CERAMIC 0.0022uF	20% 400V (AEP, UK, G)
		< CONNECTOR >	
* CN901	1-580-230-31	PIN, CONNECTOR (PC BOARD) 2P	
CN902	1-770-353-21	PIN, CONNECTOR (PC BOARD) 2P	
CN903	1-770-354-11	PIN, CONNECTOR (PC BOARD) 2P	
		< COIL >	
△L901	1-421-915-11	COIL, LINE FILTER	
		< GROUND PLATE >	
* LUG901	3-346-266-12	PLATE, GROUND	
*****			

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**REC MODE SW**

**REC VOL**

**REC-EN**

**RF AMP**

Ref. No.	Part No.	Description	Remark
*	1-655-920-11	REC MODE SW BOARD *****	
		< CONNECTOR >	
CN702	1-691-758-51	PIN, CONNECTOR 3P	
		< RESISTOR >	
R729	1-249-435-11	CARBON 33K 5% 1/4W	
		< SWITCH >	
S722	1-572-758-11	SWITCH, ROTARY (REC MODE)	
*****			
*	1-655-921-11	REC VOL BOARD *****	
		< CONNECTOR >	
* CN306	1-564-519-11	PLUG, CONNECTOR 4P	
		< RESISTOR >	
R101	1-249-434-11	CARBON 27K 5% 1/4W	
R201	1-249-434-11	CARBON 27K 5% 1/4W	
		< VARIABLE RESISTOR >	
RV301	1-241-937-11	RES, VAR, CARBON 20K/20K (REC LEVEL)	
*****			
*	1-654-393-11	REC-EN BOARD *****	
		< SWITCH >	
S901	1-572-459-11	SWITCH, PUSH (REC PROOF, CASSETTE IN)	
*****			
*	A-2006-455-A	RF AMP BOARD, COMPLETE *****	
		< CAPACITOR >	
C1	1-124-778-00	ELECT CHIP 22uF 20% 6.3V	
C2	1-163-019-00	CERAMIC CHIP 0.0068uF 10% 50V	
C3	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C4	1-107-682-11	CERAMIC CHIP 1uF 10% 16V	
C5	1-164-299-11	CERAMIC CHIP 0.22uF 10% 25V	
C6	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C7	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V	
C8	1-124-778-00	ELECT CHIP 22uF 20% 6.3V	
C9	1-124-778-00	ELECT CHIP 22uF 20% 6.3V	
C10	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V	

Ref. No.	Part No.	Description	Remark
C11	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C12	1-164-299-11	CERAMIC CHIP 0.22uF 10% 25V	
C13	1-107-682-11	CERAMIC CHIP 1uF 10% 16V	
C14	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C15	1-124-778-00	ELECT CHIP 22uF 20% 6.3V	
C16	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
C17	1-163-001-11	CERAMIC CHIP 220PF 10% 50V	
C18	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C19	1-163-001-11	CERAMIC CHIP 220PF 10% 50V	
C20	1-164-182-11	CERAMIC CHIP 0.0033uF 10% 50V	
C21	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C22	1-126-603-11	ELECT CHIP 4.7uF 20% 35V	
C23	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C24	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
C25	1-124-778-00	ELECT CHIP 22uF 20% 6.3V	
C26	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
C27	1-107-682-11	CERAMIC CHIP 1uF 10% 16V	
C28	1-164-505-11	CERAMIC CHIP 2.2uF 16V	
		< CONNECTOR >	
* CN51	1-566-207-11	PIN, CONNECTOR (PC BOARD) 14P	
* CN52	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P	
		< IC >	
IC1	8-752-039-01	IC CXA1364R	
		< COIL >	
L1	1-408-781-00	INDUCTOR CHIP 22uH	
L2	1-408-789-21	INDUCTOR CHIP 100uH	
L3	1-408-781-00	INDUCTOR CHIP 22uH	
		< RESISTOR >	
R1	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R2	1-216-082-00	METAL GLAZE 24K 5% 1/10W	
R3	1-216-066-00	METAL CHIP 5.1K 5% 1/10W	
R4	1-216-066-00	METAL CHIP 5.1K 5% 1/10W	
R5-7	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R8	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R9	1-216-075-00	METAL CHIP 12K 5% 1/10W	
R10	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R11-13	1-216-077-00	METAL CHIP 15K 5% 1/10W	
R14	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R15	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R16	1-216-089-00	METAL CHIP 47K 5% 1/10W	
R17	1-216-080-00	METAL CHIP 20K 5% 1/10W	
R18	1-216-073-00	METAL CHIP 10K 5% 1/10W	

**RF AMP**

**S-END**

**SBM SW**

**SW (IN)**

**SW (OUT)**

**T-END**

Ref. No.	Part No.	Description	Remark
		< VARIABLE RESISTOR >	
RV1	1-238-181-11	RES, ADJ, CERMET 4.7K	
RV2	1-238-181-11	RES, ADJ, CERMET 4.7K	
*****			
*	1-654-392-11	S-END BOARD	
		*****	
		< PHOTO SENSOR >	
Q950	1-808-957-11	PHOTO SENSOR	
*****			
*	1-655-918-11	SBM SW BOARD	
		*****	
		< CAPACITOR >	
C705	1-136-165-00	FILM 0.1uF 5% 50V	
		< CONNECTOR >	
CN703	1-691-760-51	PIN, CONNECTOR 5P	
		< IC >	
IC703	8-749-922-36	IC GP1U50XB	
		< RESISTOR >	
R722	1-249-435-11	CARBON 33K 5% 1/4W	
		< SWITCH >	
S715	1-692-478-11	SWITCH, SLIDE (FOOT SW MODE)	
S745	1-570-974-11	SWITCH, SLIDE (SBM)	
*****			
*	1-655-914-11	SW (IN) BOARD	
		*****	
		< SWITCH >	
S11	1-572-247-11	SWITCH, SLIDE (CASSETTE TABLE IN)	
*****			
*	1-655-915-11	SW (OUT) BOARD	
		*****	
		< SWITCH >	
S12	1-570-975-11	SWITCH, SLIDE (CASSETTE TABLE OUT)	
*****			

Ref. No.	Part No.	Description	Remark
*	1-654-391-11	T-END BOARD	
		*****	
		< PHOTO SENSOR >	
Q951	1-808-957-11	PHOTO SENSOR	
*****			
		MISCELLANEOUS	
		*****	
17	1-769-542-11	WIRE (FLAT TYPE) (31 CORE)	
66	1-769-541-11	WIRE (FLAT TYPE) (17 CORE)	
△F501	1-532-286-00	FUSE (T2. 5A/250V) (AEP, UK, G)	
△F501	1-576-105-11	FUSE (2. 5A/250V) (US, Canadian)	
△F502	1-532-286-00	FUSE (T2. 5A/250V) (AEP, UK, G)	
△F502	1-576-105-11	FUSE (2. 5A/250V) (US, Canadian)	
M1	A-2003-660-A	MOTOR ASSY (CASSETTE COMPARTMENT)	
M901	A-2004-301-A	MOTOR ASSY, CONTROL	
M902	8-835-306-01	MOTOR, DC U-17A (CAPSTAN)	
* M903	8-835-205-01	MOTOR, DC U-2A (REEL) (INCLUDING PM901)	
M904	8-848-626-11	DRUM ASSY DOU-03D-R	
PM902	1-454-522-11	SOLENOID, PLUNGER	
△T901	1-427-912-11	TRANSFORMER, POWER (US, Canadian)	
△T901	1-427-913-11	TRANSFORMER, POWER (AEP, UK, G)	
*****			

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Ref. No.	Part No.	Description	Remark
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\*\*\*\*\*  
**HARDWARE LIST**  
 \*\*\*\*\*

- |     |              |                                   |  |
|-----|--------------|-----------------------------------|--|
| #1  | 7-621-255-15 | SCREW +B 2X3                      |  |
| #2  | 7-621-772-20 | SCREW +B 2X5                      |  |
| #3  | 7-621-772-30 | SCREW +B 2X6                      |  |
| #4  | 7-621-773-86 | SCREW +B 2. 6X4                   |  |
| #5  | 7-621-775-08 | SCREW +B 2. 6X3                   |  |
| #6  | 7-627-552-47 | SCREW, PRECISION +P 1. 7X4        |  |
| #7  | 7-627-553-27 | SCREW, PRECISION +P 2X2. 5        |  |
| #8  | 7-627-553-38 | SCREW, PRECISION +P 2X3           |  |
| #9  | 7-627-553-67 | SCREW, PRECISION +P 2X5           |  |
| #10 | 7-627-852-48 | PRECISION SCREW +P1. 7X3. 5 TYPE3 |  |
| #11 | 7-628-253-00 | SCREW +PS 2X4                     |  |
| #12 | 7-621-771-06 | SCREW, LOCK                       |  |
| #13 | 7-621-255-45 | SCREW +P 2X6                      |  |
| #14 | 7-621-772-00 | SCREW +B 2X3                      |  |
| #15 | 7-621-772-10 | SCREW +B 2X4                      |  |
| #16 | 7-682-545-09 | SCREW +B 3X4                      |  |
| #17 | 7-685-660-29 | SCREW +BVTP 4X10 TYPE2 SLIT       |  |
| #18 | 7-685-133-19 | SCREW +BTP 2. 6X6 TYPE2 N-S       |  |
| #19 | 7-685-534-19 | SCREW +BTP 2. 6X8 TYPE2 N-S       |  |
| #20 | 7-685-646-79 | SCREW +BVTP 3X8 TYPE2 IT-3        |  |
| #21 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 N-S        |  |
| #22 | 7-682-548-04 | SCREW +BVTT 3X8 (S)               |  |
| #23 | 7-682-660-09 | SCREW +PS 4X6                     |  |

\*\*\*\*\*

ACCESSORIES & PACKING MATERIALS

\*\*\*\*\*

- |   |              |  |  |
|---|--------------|--|--|
|   | 1-473-087-11 | REMOTE COMMANDER (RM-D868)                       |  |
| △ | 1-551-812-11 | CORD, POWER (US, Canadian)                       |  |
|   | 1-558-271-11 | CORD, CONNECTION                                 |  |
| △ | 1-590-910-11 | CORD, POWER (AEP, UK, G)                         |  |
|   | 2-297-913-00 | WASHER (DIA. 5), ORNAMENTAL                      |  |
| * | 3-384-415-01 | CUSHION  |  |
|   | 3-798-609-11 | MANUAL, INSTRUCTION (ENGLISH, FRENCH,<br>GERMAN) |  |
|   | 3-920-800-01 | RACK (L/R)                                       |  |
| * | 3-921-936-01 | INDIVIDUAL CARTON                                |  |
| * | 3-925-043-01 | PLATE, ORNAMENTAL                                |  |
|   | 4-962-615-01 | COVER, BATTERY (For REMOTE COMMANDER)            |  |
|   | 7-682-276-04 | SCREW +RK 5X12                                   |  |

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