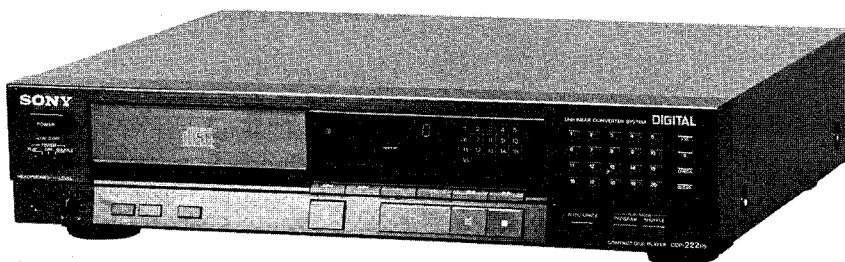


# CDP-222ESD/505ESD /910

## SERVICE MANUAL



(PHOTO: CDP-222ESD)

CDP-222ESD:  
*AEP Model*  
*UK Model*  
*E Model*

CDP-505ESD:  
*US Model*  
*Canadian Model*

CDP-910:  
*US Model*

### SPECIFICATIONS

System	Compact disc digital audio system
Disc	Compact disc
Laser	Semiconductor laser ( $\lambda = 780 \text{ nm}$ )
Laser output	Max. 44.6 $\mu\text{W}$ *
	* This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.
Spindle speed	200 rpm to 500 rpm (CLV)
Scan velocity	1.2–1.4 m/sec.
Error correction	Sony Super Strategy Cross Interleave Reed Solomon Code
Number of channel	Two
D/A conversion	16-bit linear
Frequency response	2 – 20,000 Hz $\pm 0.5 \text{ dB}$
Signal-to-noise ratio	More than 102 dB
Dynamic range	More than 95 dB
Harmonic distortion	Less than 0.003% (1 kHz)
Channel separation	More than 98 dB (1 kHz)
Wow and flutter	Below measurable limit
Output jacks	

	Max. output level	Load impedance	Output impedance
LINE OUT	2 V (50 k $\Omega$ )	More than 10 k $\Omega$	—
*DIGITAL OUT	0.5 V <sub>p-p</sub> (75 $\Omega$ )	75 $\Omega$	75 $\Omega$
HEAD-PHONES	28 mW Variable, max	32 $\Omega$	—

\*DIGITAL OUT: CDP-222ESD, CDP-505ESD

### General

#### Power requirements

CDP-222ESD:	AEP model
	220 V AC 50/60 Hz
	UK model
	240 V AC 50 Hz
	E model
	120, 220 or 240 V AC adjustable, 50/60 Hz

#### CDP-505ESD, CDP-910:

120 V AC 60 Hz

#### Power consumption

15W

#### Dimensions

Approx. 430 x 100 x 335 mm (w/h/d)  
(17 x 4 x 13 $\frac{1}{4}$  inches)

#### Weight

Approx. 5.3 kg (11 lb 11 oz), net

### SAFETY-RELATED COMPONENT WARNING!!

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

COMPACT DISC PLAYER  
**SONY**<sup>®</sup>



**AUD**

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**GENERAL DESCRIPTION**

**Direct selection**

You can play a desired selection simply by pressing the corresponding numeric button (1-20).

**Program play**

You can play up to 20 selections in the desired order. Selections can be programmed even after play begins.

**Variety of playing modes**

Disc, program, shuffle and repeat playing modes.

**Large and easy-to-read window display**

Shows the elapsed playing time, the remaining time of the selection being played, the remaining time of the whole disc or remaining programmed selection numbers.

**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 2 V AC range are suitable. (See Fig. A)

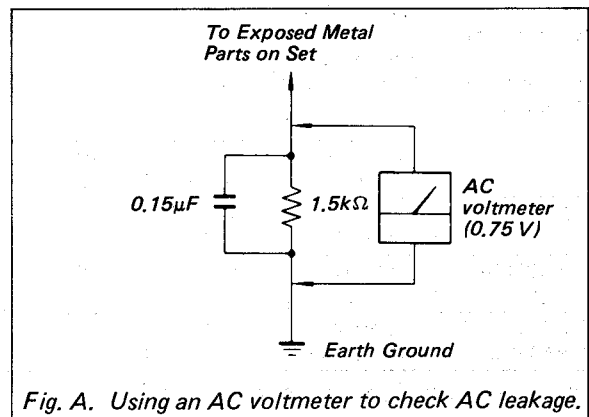


Fig. A. Using an AC voltmeter to check AC leakage.

## PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to follow carefully the instructions below when servicing.

### WARNING !!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30 cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

### 1. Laser Diode Properties

- Material: GaAlAs
- Wavelength: 780 nm
- Emission Duration: continuous
- Laser Output: max. 0,4 mW\*

\* This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.

- Classification: Class Ib

2. During service, do not take the Optical Pick-up Block apart, and do not adjust the APC circuit. If there is a breakdown in the APC circuit (including laser diode), replace the entire Optical Pick-up Block (including APC board).

## BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

I dette apparat anvendes laserlys. Derfor skal nedenstående instruktioner nøje følges under service.

Følg iøvrigt instruktionerne i servicemanualen.

### ADVARSEL!!

Under service må øjnene ikke komme nær objektiv-linsen på den optiske pick-up enhed. I tilfælde af at det er nødvendigt at kontrollere udsendelsen af laserlys, skal det ske i en afstand af mere end 25 cm fra den optiske pick-up.

### 1. Laser-dioe data

- Materiale: GaAlAs
- Bølgelængde: 780 nm
- Udstråling: Kontinuerlig
- Laseroutput: Max. 0,4 mW\*

\* Målt i 1,6 mm afstand fra overfladen af objektiv-linsen på den optiske pick-up enhed.

- Klassifikation: Klasse IIIb.

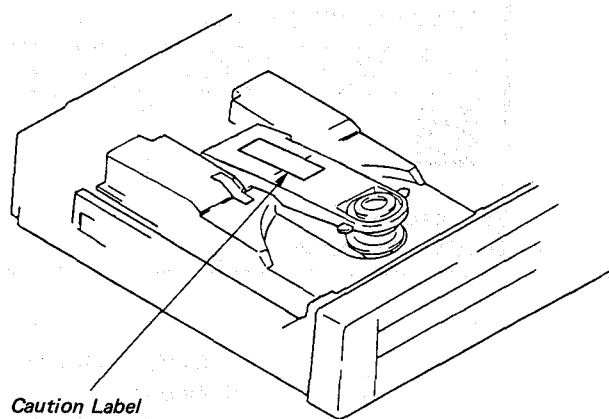
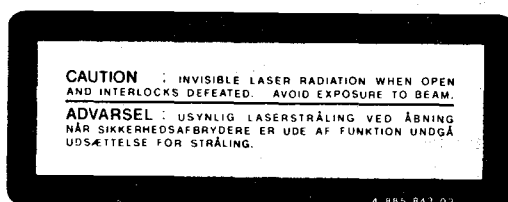
2. Adskil aldrig den optiske pick-up enhed under service, og juster ikke APC kredsløbet (Automatic Power Control). Hvis APC kredsløbet (incl. laser-dioden) bryder ned, skal hele den optiske pick-up enhed (incl. APC printkortet) udskiftes.

## LASER WARNING LABEL

## LASER ADVARSEL MÆRKNING




Følgende mærkning findes indvendig i apparatet:

Advarsel Mærkning



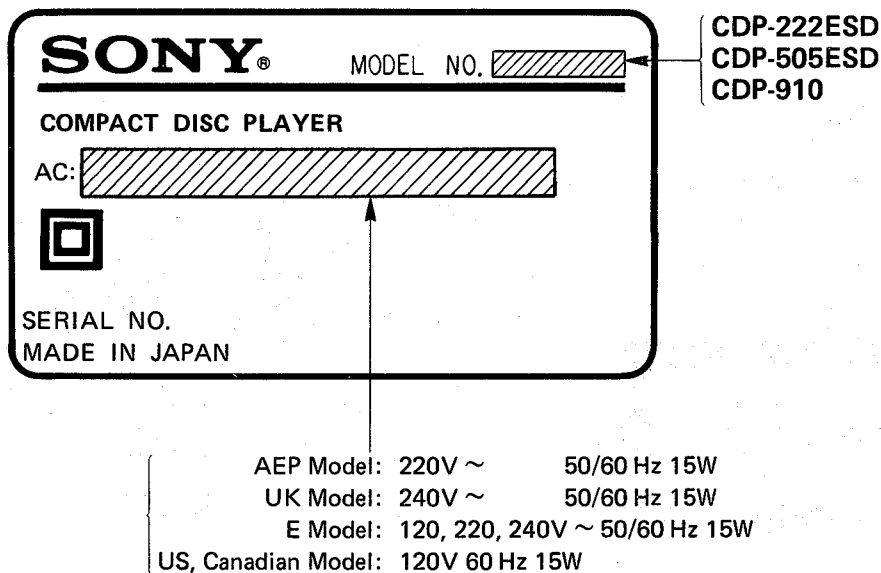
# TROUBLE CHECKS

The following checks will assist in the correction of most problems which you may encounter with your unit. Should any problem persist after you have made these checks, consult your nearest Sony service facility. Before going through the check list below, first refer back to the connection and operating procedures.

TROUBLE	CAUSES	REMEDY
The disc compartment does not close when a disc is inserted and the  button is pressed.	The disc is not placed correctly.	Center the disc correctly in the disc compartment.
Play does not start.	Dirty disc	Clean the disc.
	The disc is inserted with the label surface downward.	Place the disc with the label surface up.
	The  button is engaged.	Press the  button again to release it.
	Moisture condensation	Wait for approx. one hour after turning on the unit then start play.
Sound is not heard.	Loose connection	Connect the cords firmly.
	The DIGITAL OUT switch is set to ON while using the LINE OUT jacks.	Set the DIGITAL OUT switch to OFF.
	The LEVEL control is set to the minimum.	Turn the LEVEL control clockwise.
Display window does not illuminate even when the power turns on.	The AC power cord is disconnected.	Connect the AC power cord firmly.
Play begins when the POWER switch is turned on.	The TIMER switch is set to PLAY or SHUFFLE.	Set the TIMER switch to OFF.

\*The above "TROUBLE CHECKS" table has been reprinted from the OPERATION MANUAL of CDP-222ESD for the service man's convenience of interviewing customers.

## MODEL IDENTIFICATION

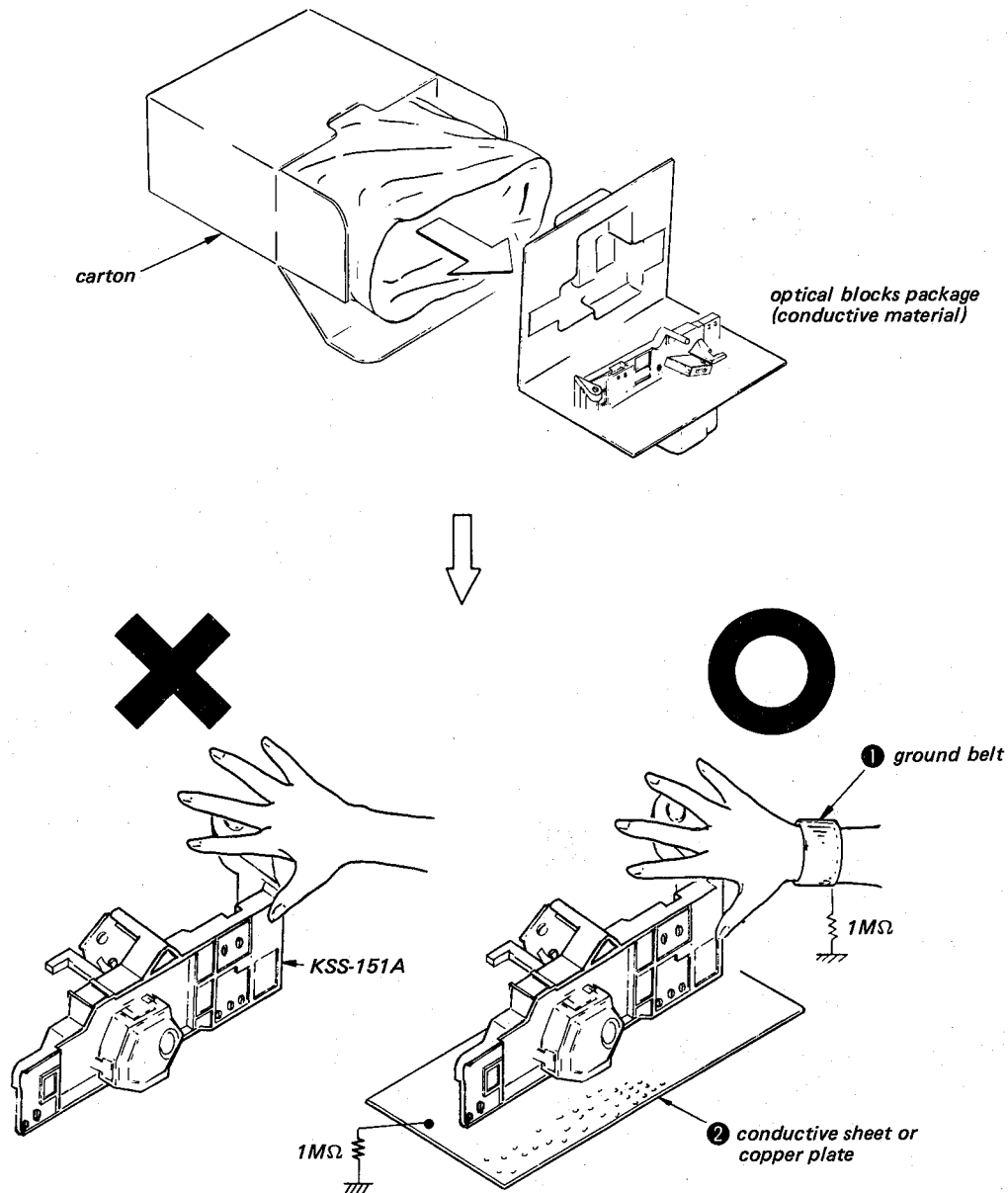


## NOTES ON HANDLING THE OPTICAL BLOCK (KSS-151A)

The laser diode inside the optical block may be damaged by static electricity in clothes or the human body.

The following procedures are required when unpacking and repairing KSS-151A in order to avoid static electricity damage.

1. Body grounding  
Be sure to wear a ground belt (less than  $10^8 \Omega$ ) in order to release the static electricity stored in the body.
2. Workbench grounding  
Place a conductive sheet (less than  $10^9 \Omega$ ) or copper plate on the bench where KSS-151A is to be placed to ground it.
3. Static electricity in the clothing will not be released by the ground belt, so be careful not to let KSS-151A touch clothing.



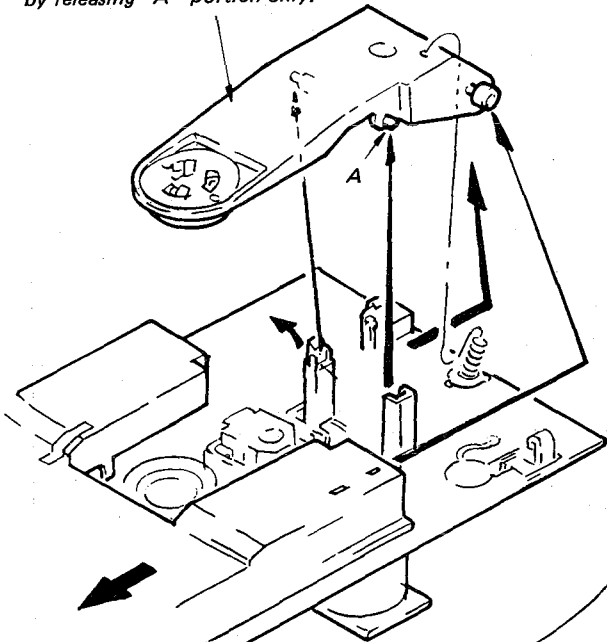
**NOTES ON CHECKING THE LASER DIODE  
AND FOCUS SEARCH OPERATION**

**[CAUTION]**

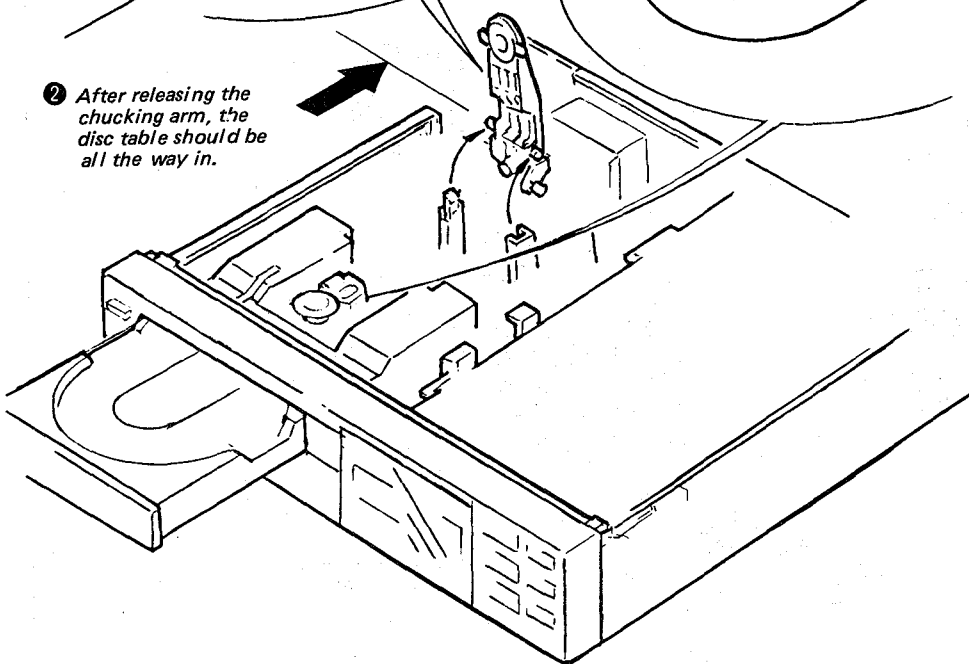
The laser beam on this set is converged by the objective lens in the optical block so that it focuses on the disc reflective surface. Therefore, when checking light emission of the laser diode, be sure to keep the eyes more than 30 cm away from the objective lens.

Check if the following operation is performed by looking at the objective lens after releasing the chucking arm and turning the POWER switch on. (Optical block should be at the innermost circumference when checking.) At the same time the LASER DIODE'S LIGHT EMISSION may be checked.

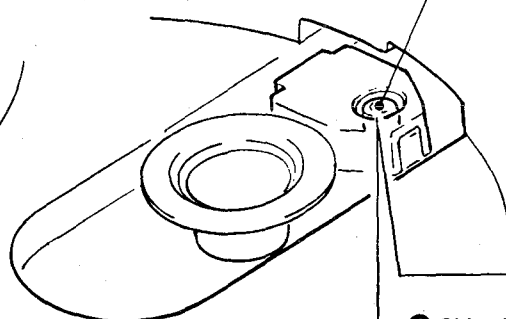
- ① Release the chucking arm.  
This figure shows the entire chucking arm released, but checking can be done by releasing "A" portion only.



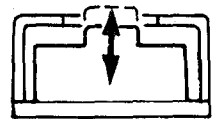
- ② After releasing the chucking arm, the disc table should be all the way in.



- ③ When the POWER switch is turned on, diffused laser light can be seen.

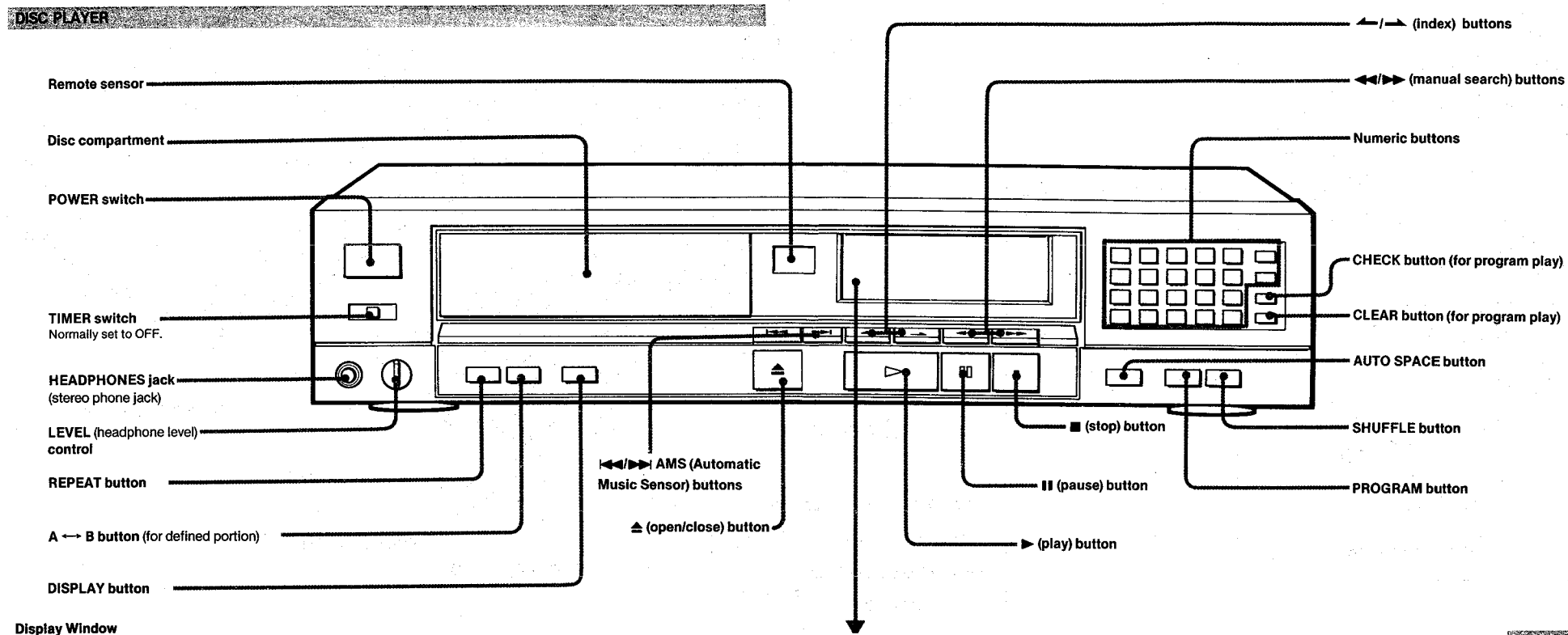


- ④ Objective lens moves up and down (2 - 3 times)

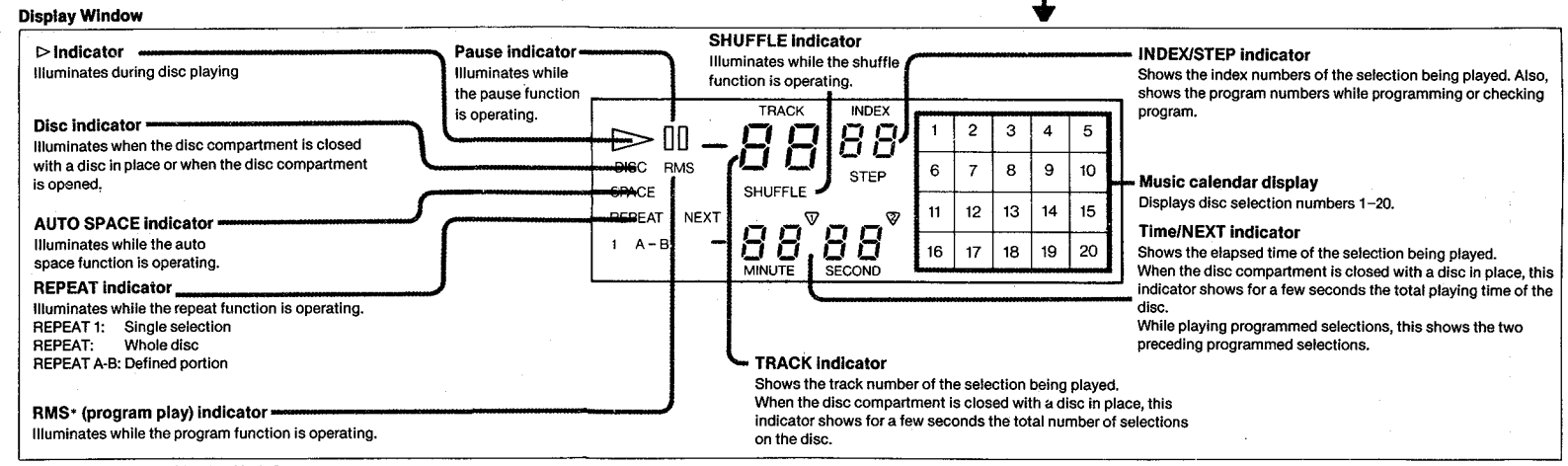
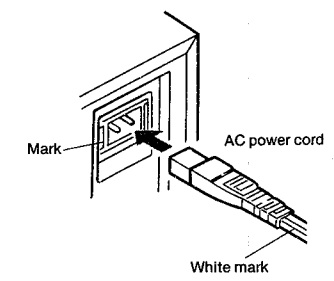


side view of the objective lens

# LOCATION OF CONTROLS

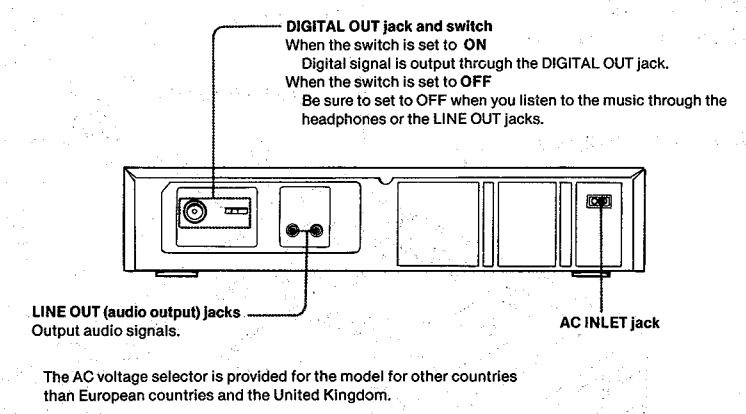


**AC power cord**  
 A white mark is visible on one lead of the power cord. Plug the cord into the AC INLET jack at the rear of the player so that its white mark matches the mark on the AC INLET jack. This aligns the polarity of the power cord for optimum sound quality.



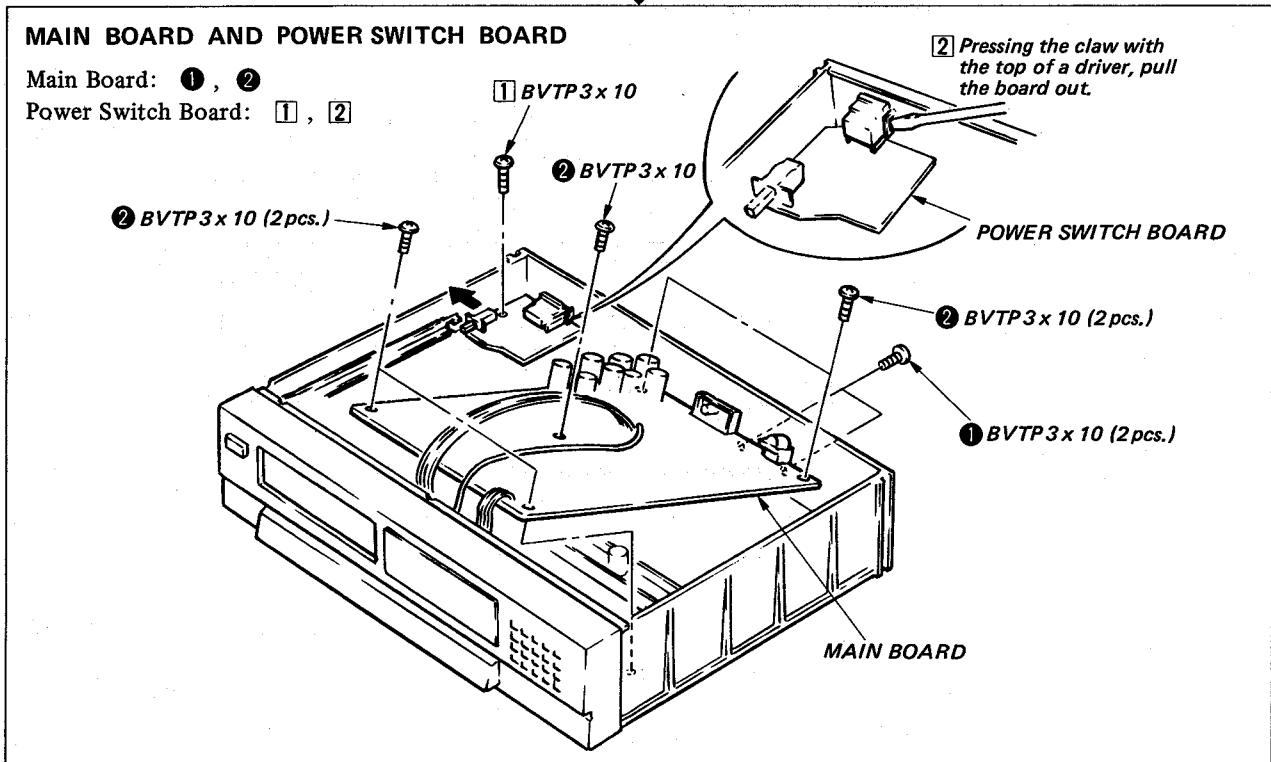
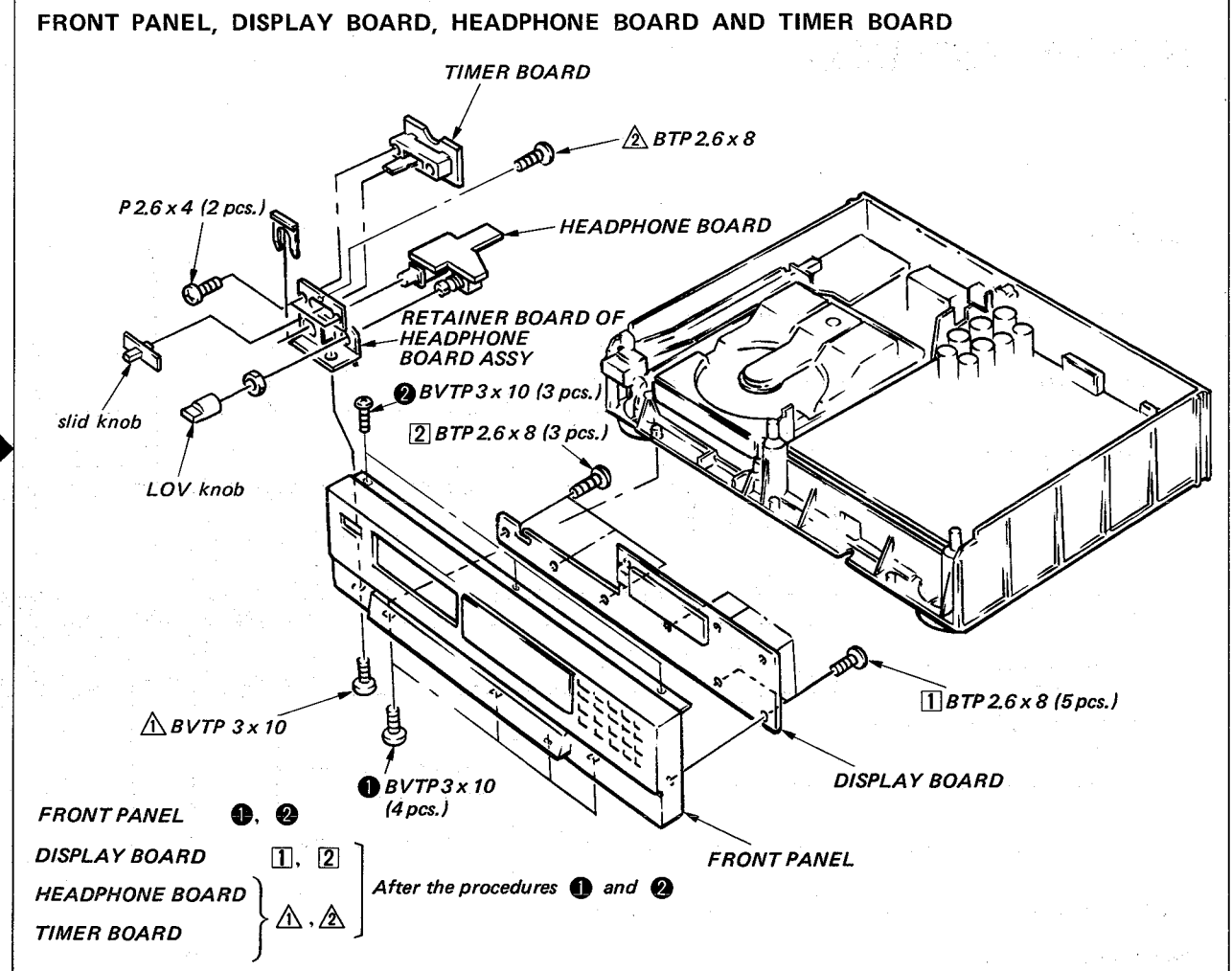
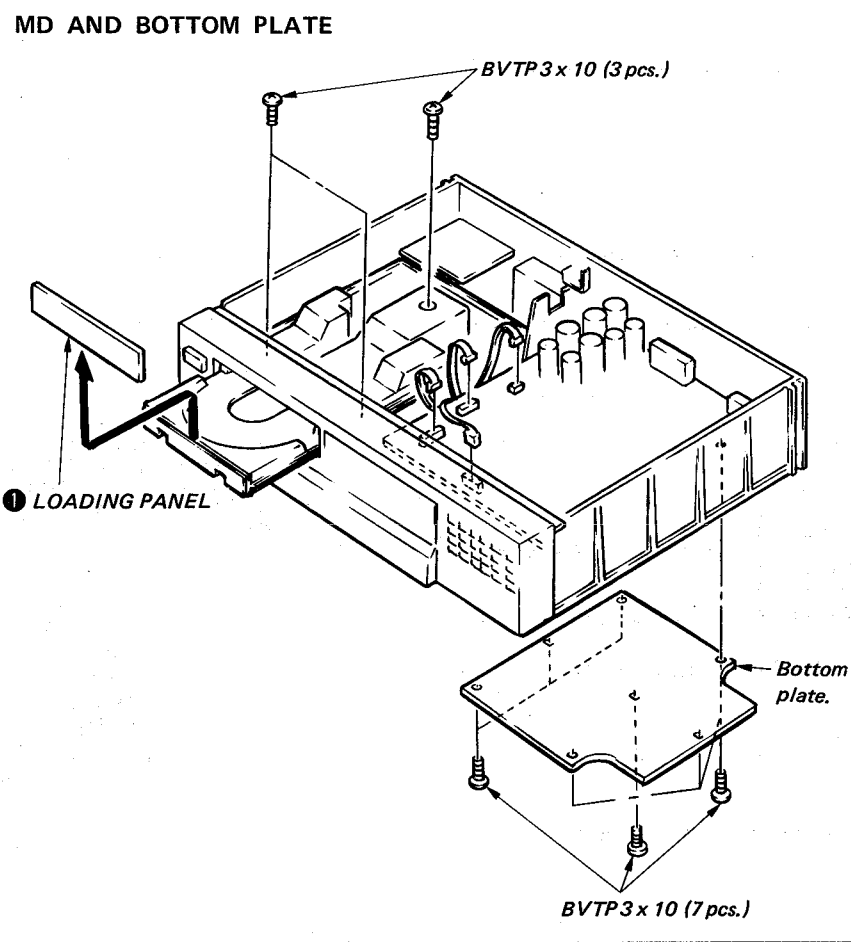
\* RMS is an abbreviation of Random Music Sensor.

## DESCRIPTION ON REAR PANEL



## SECTION 1 DISASSEMBLY

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



Remove 4 screws on the both sides.



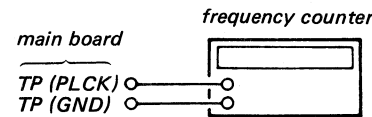
## SECTION 2 ADJUSTMENTS

### ELECTRICAL ADJUSTMENTS

1. Perform adjustments in the order given.
2. Use YEDS-1 disc unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.

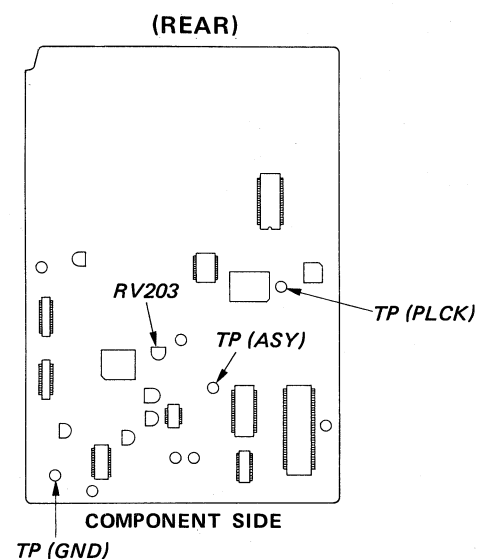
#### RF PLL Frequency Adjustment/Lock Frequency Check

##### Procedure:



1. Ground test point TP (ASY).
2. Connect the frequency counter to the test points TP (PLCK) and TP (GND).
3. Turn POWER switch on.
4. Adjust RV203 so that the reading on the frequency counter is 4.3218 MHz ± 30 kHz. ... (RF PLL frequency adjustment)
5. Remove the grounding wire from TP (ASY).
6. Put the disc (YEDS-1) in and press button.
7. Confirm that the reading on the frequency counter is locked at 4.3218 MHz.

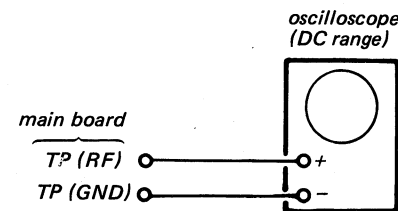
##### Adjustment Location: main board



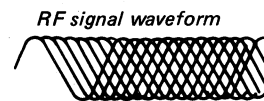
#### Focus Bias Adjustment

This adjustment should be made after replacing the Optical Pick-up Block.

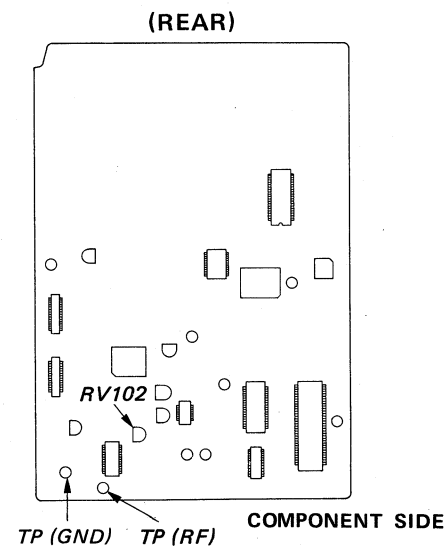
##### Procedure:



1. Connect oscilloscope to the test points TP (RF) and TP (GND).
2. Turn POWER switch on.
3. Put the disc (YEDS-1) in and press ▷ button.
4. Adjust RV102 for an optimum waveform eye pattern. Optimum eye pattern means that shape "◊" can be clearly distinguished at the center of the waveform.



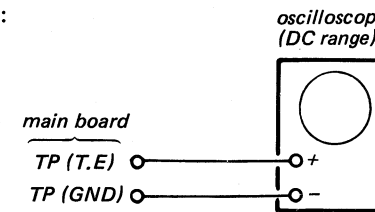
##### Adjustment Location: main board



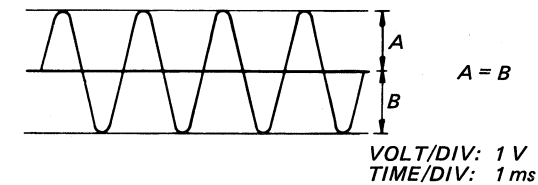
#### E-F Balance Adjustment

This adjustment should be made after replacing the Optical Pick-up Block.

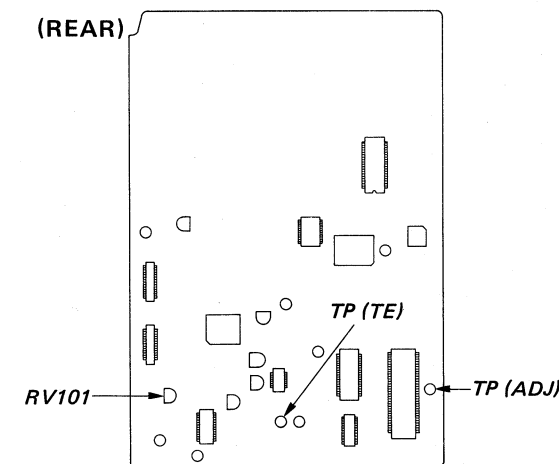
##### Procedure:



1. Connect the oscilloscope to the test points TP (T.E) and TP (GND).
2. Ground TP (GND) to set an adjustment mode.
3. Turn POWER switch on.
4. Put the disc (YEDS-1) in and press ▷ button.
5. Adjust RV101 so that the traverse waveform is symmetrical above and below.
6. After adjustment, cancel the adjustment mode.



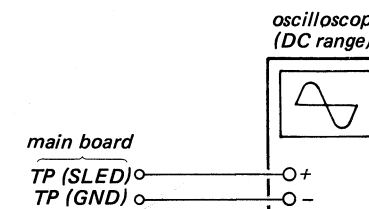
##### Adjustment Location: main board



#### SLED MOTOR OFF-SET ADJUSTMENT

This adjustment should be made after replacing the Optical Pick-up Block.

##### Procedure:



### REFERENCE

#### Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, this adjustment is not recommended generally to be performed.

Focus/tracking gains determine the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

Symptoms	Gain	Focus	Tracking
• The time until music starts becomes longer for STOP → ▷PLAY or automatic selection (◀▶ buttons pressed. (Normally takes about 2 seconds.)		low	low or high
• Music does not start and disc continues to rotate for STOP → ▷PLAY or automatic selection (◀▶ buttons pressed.)		—	low
• Disc table opens shortly after STOP → ▷PLAY.	low or high	—	—
• Sound is interrupted during PLAY. Or time counter display stops progressing.		—	low
• More poise during 2-axis device operation.	high	high	high

1. Keep the set flat.
2. Connect the oscilloscope to TP (SLED) and TP (GND).
3. Turn Power switch on.
4. Adjust RV204 so that the reading of the oscilloscope will be within ±50mV.

The following

— Simple Adjust

**Note:** Since exact number the position adjustment are or the original

##### Procedure:

main board  
TP (FE) ○

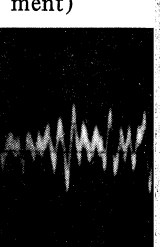
TP (TE) ○

1. Keep the set flat.
- If the set cannot be positioned the 2 axis device

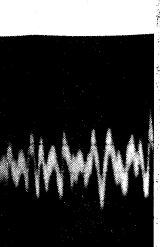
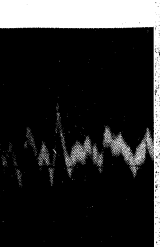
2. Insert the button.

3. Connect the (GND).

4. Adjustment shown in the ment)



• Incorrect E from the adj



necessary in  
even if it is  
ore, this ad-  
to be per-

cup follow-  
mechanical  
-axis device

stment is at

1 the 2-axis

sceptible to  
more easily.

ptoms below

Tracking

low or high

low

low

high

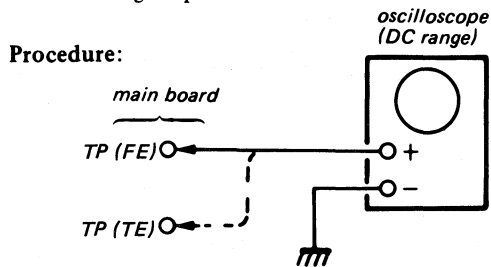
(D) and TP

the oscillo-

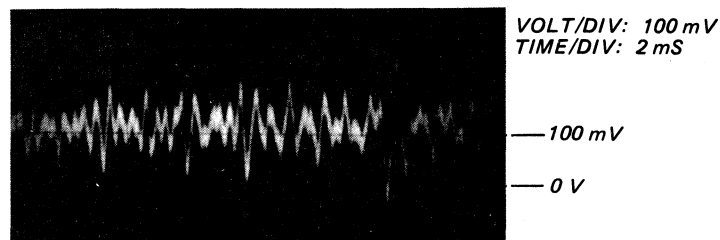
The following is a simple adjustment method.

— Simple Adjustment —

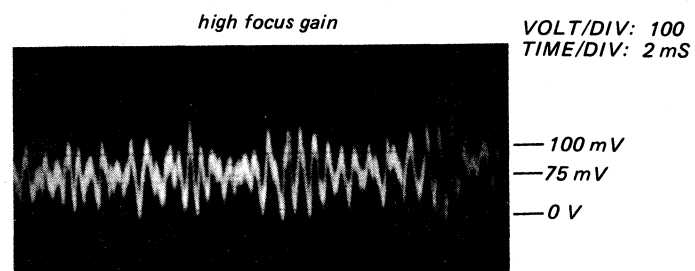
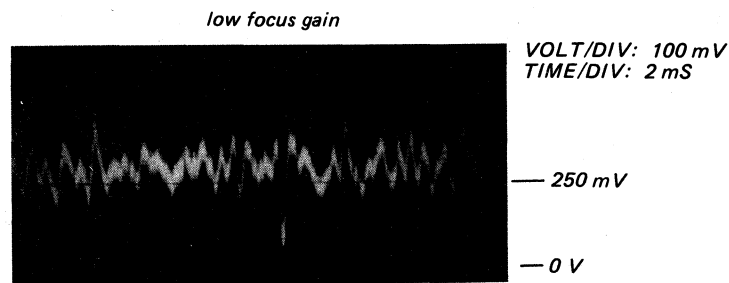
**Note:** Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.



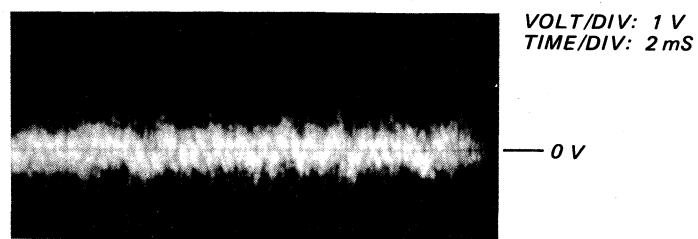
1. Keep the set flat.  
If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2 axis device.
2. Insert the disc (YEDS-1) and press ▷PLAY button.
3. Connect the oscilloscope to TP (FE) and TP (GND).
4. Adjustment RV201 so that the waveform is as shown in the picture below. (focus gain adjustment)



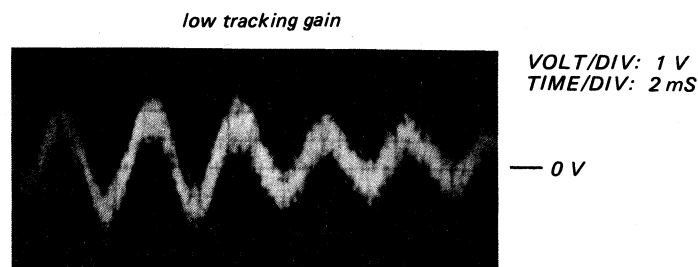
● Incorrect Examples (DC level is quite different from the adjusted waveform) (below)



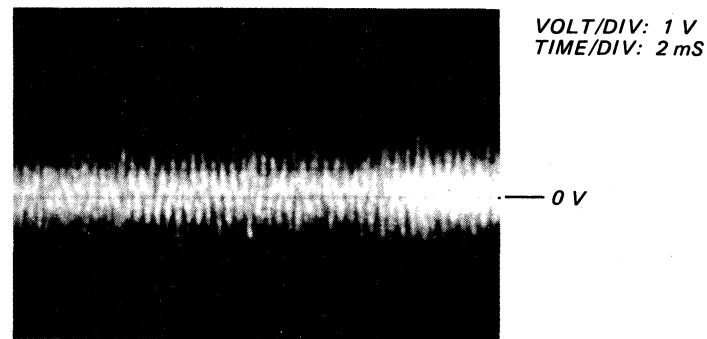
5. Connect the oscilloscope to TP (TE).
6. Adjust RV202 so that the waveform is as shown in the picture below. (tracking gain adjustment)



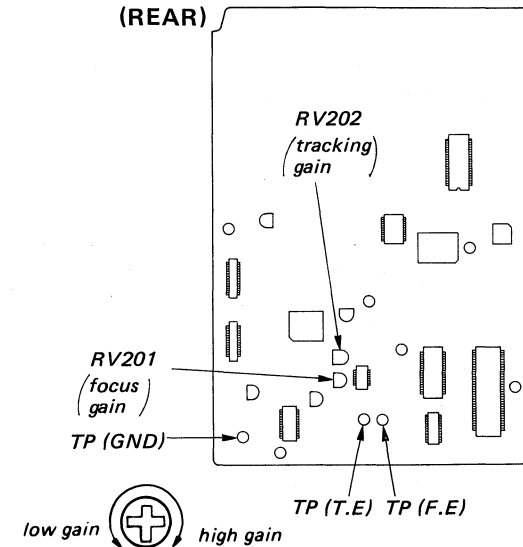
● Incorrect Examples (fundamental wave appears)



high tracking gain (higher frequency of the fundamental wave than above)



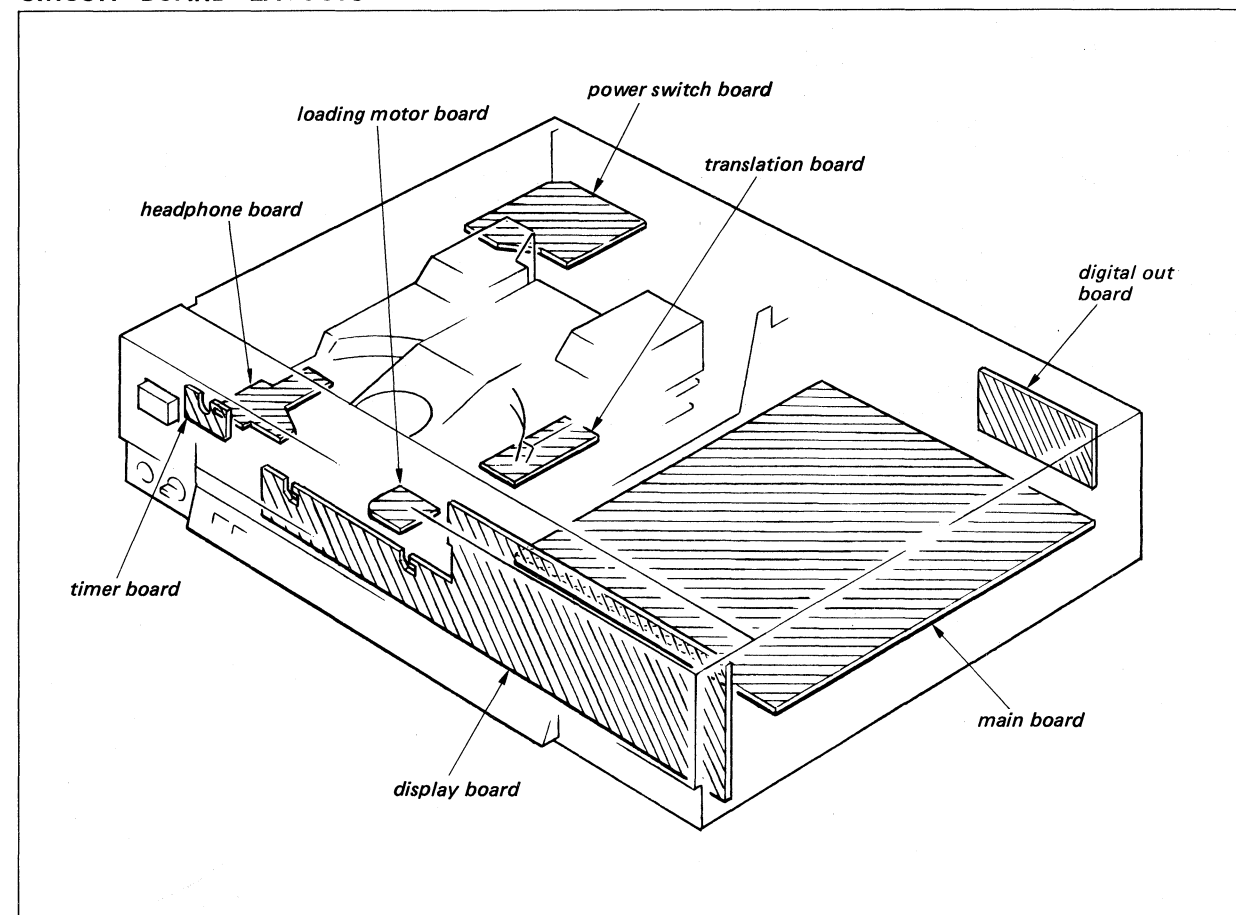
**Adjustment Location: main board (REAR)**



● Semiconductor Lead Layouts

1SS202-1 HZS33-2L HZS9B-2L HZS4.3NB3 cathode anode	TC74HCV04P TC74HC02P 1413121110 9 8 1 2 3 4 5 6 7 (Top view)	CXD1088Q 34 22 44 12 11	CXA1081M 30 16 1 15 (Top view)	CXD1125Q 64 40 85 25 MARKING SIDE VIEW
DF02M RDF02M	MC14053BF TDA1541-N5 28 15 1 14 (Top view)	STA341M M5218L 1 2 3 4 5 6 7 8	M5F7905 M5F79M15 COMMON IN OUT	LA6500-FA 2SA1428Y 1 2 3 4 5 E C B
GP08DPKG23	LC6523H-3270 30 16 1 15 (Top view)	NJM4560S 1 2 3 4 5 6 7 8 9	LC3516AML-15 (Top view)	2SC3622A-K E C B
NE5532P 8 7 6 5 1 2 3 4 (Top view)	MSM6404A-181RS 42 40 35 30 25 27 1 5 10 15 21 (Top view)	M5F7805 M5F7815 IN GND OUT	CXA1082AQ 64 37 1 36 12 13 24 25	DTC114ES DTA114ES 2SC634SP E C B
	CXP5016H-206S 64 33 1 32 (Top view)			2SB734 2SD774 E C B

CIRCUIT BOARD LAYOUTS

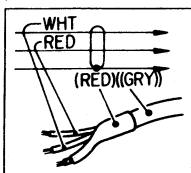


# SECTION 3 DIAGRAMS

## 3-1. MOUNTING DIAGRAM

### Note:

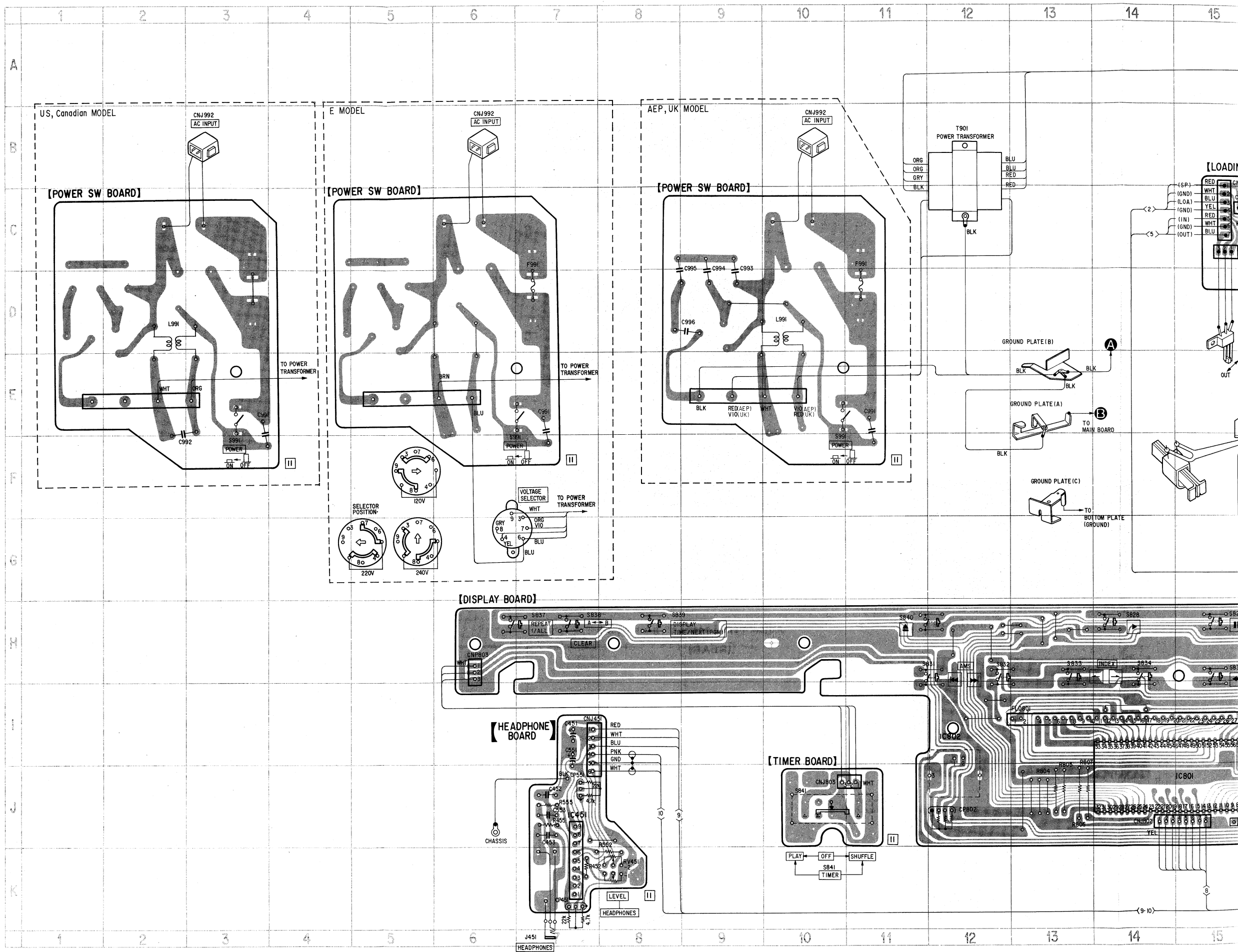
- Color code of sleeving over the end of the jacket.

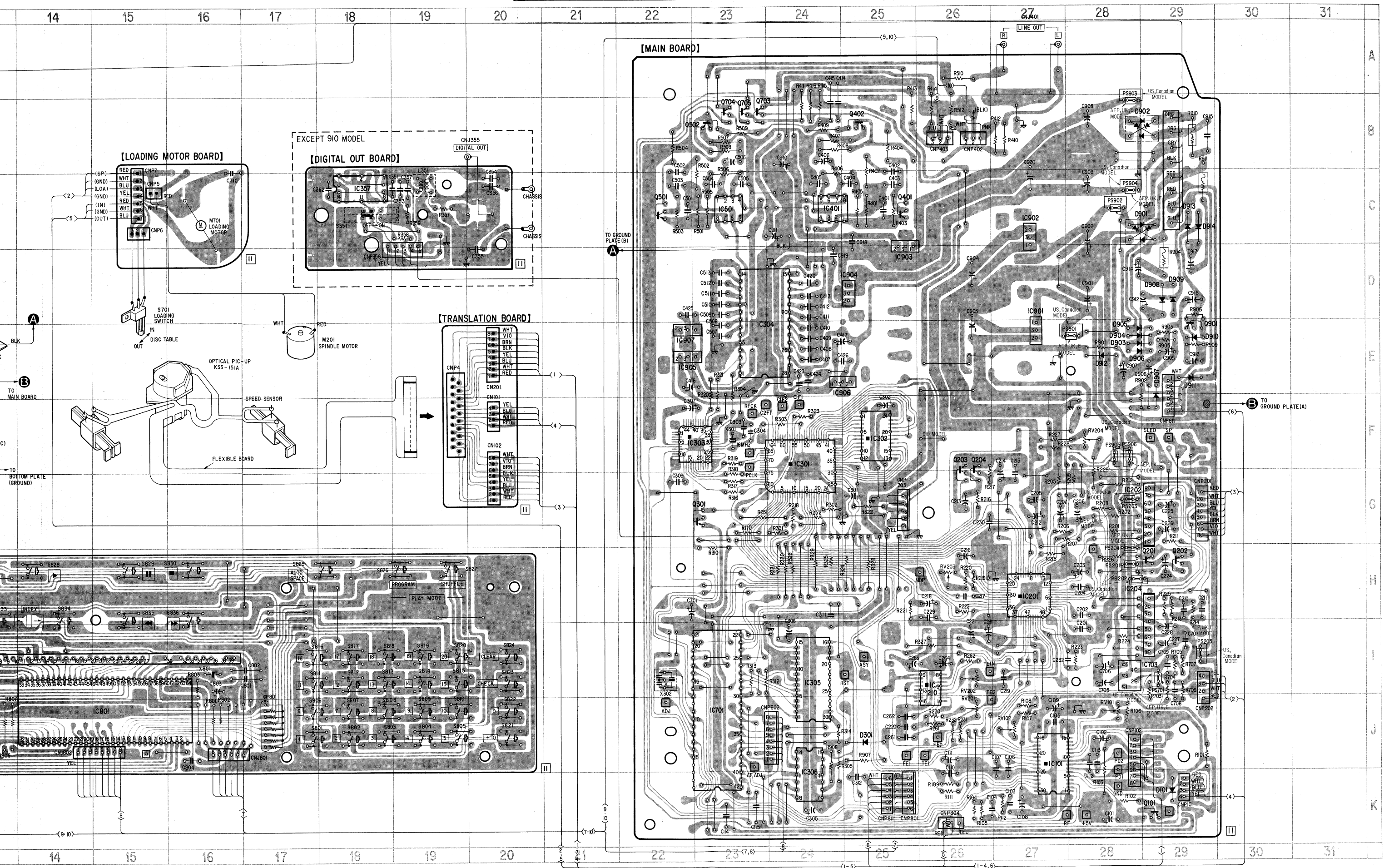


- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : part mounted on the conductor side.

### SEMICONDUCTOR LOCATIONS

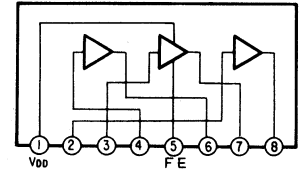
Ref. No.	Location	Ref. No.	Location
D101	K-29	IC401	C-24
D301	J-25	IC451	J-7
D901	C-29	IC501	C-23
D902	B-29	IC701	J-23
D903	E-28	IC703	I-29
D904	E-28	IC801	J-15
D905	E-28	IC802	I-12
D906	E-28	IC901	D-27
D907	E-29	IC902	C-27
D908	D-29	IC903	D-25
D909	D-29	IC904	D-25
D910	E-29	IC905	E-22
D911	E-29	IC906	E-24
D912	E-28	IC907	E-22
D913	C-29		
D914	C-29	Q101	K-29
		Q201	H-29
IC101	J-27	Q202	H-29
IC201	H-27	Q203	F-26
IC202	G-28	Q204	F-26
IC204	H-28	Q301	G-23
IC210	I-26	Q401	C-25
IC301	E-24	Q402	B-25
IC302	F-25	Q501	C-22
IC303	F-23	Q502	B-23
IC304	E-23	Q703	B-23
IC305	I-24	Q704	B-23
IC306	J-24	Q705	B-23
IC357	C-18	Q901	E-29



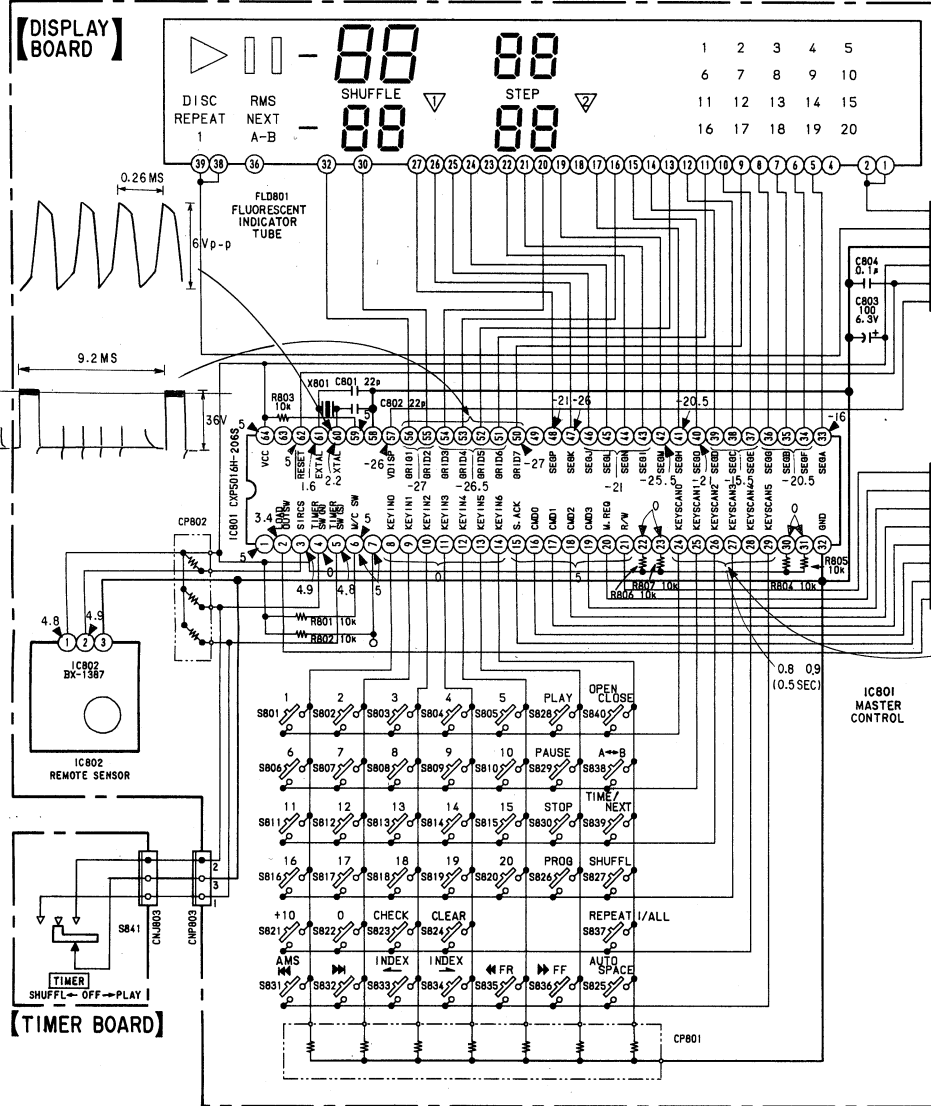
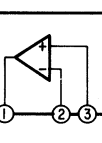


3-2. SCHEMATIC DIAGRAM

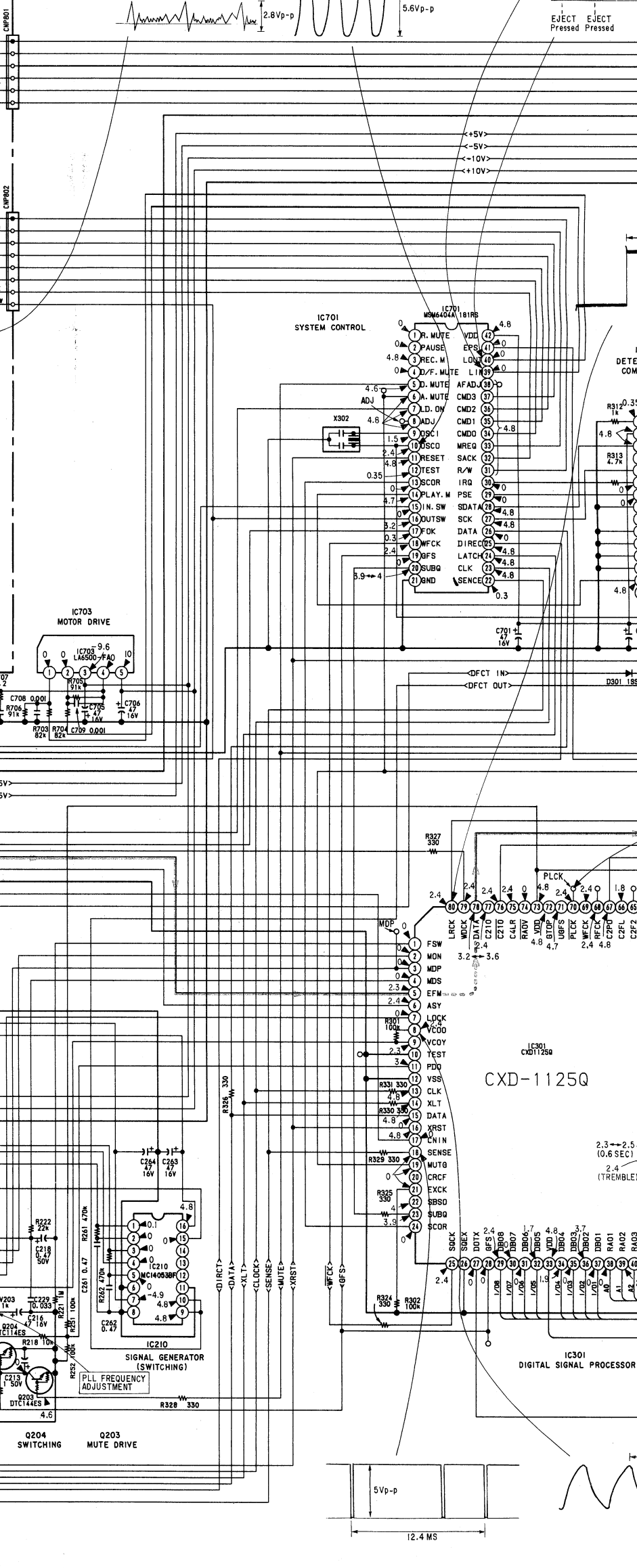
IC202 STA341M



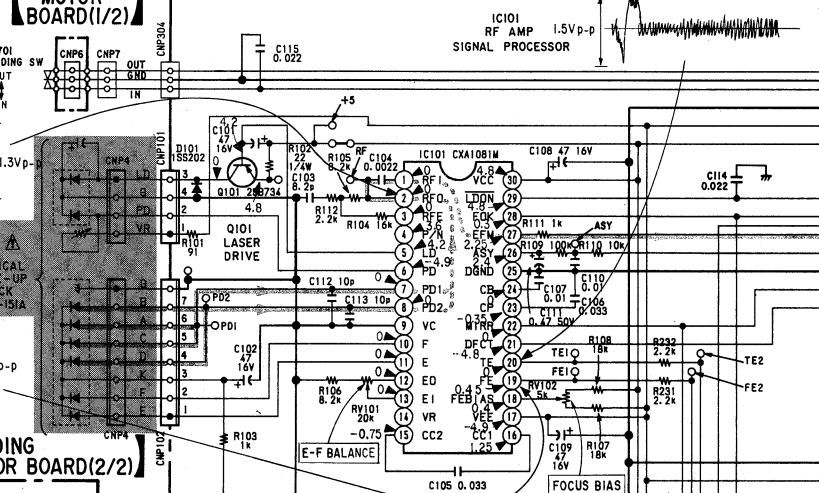
IC204 M5



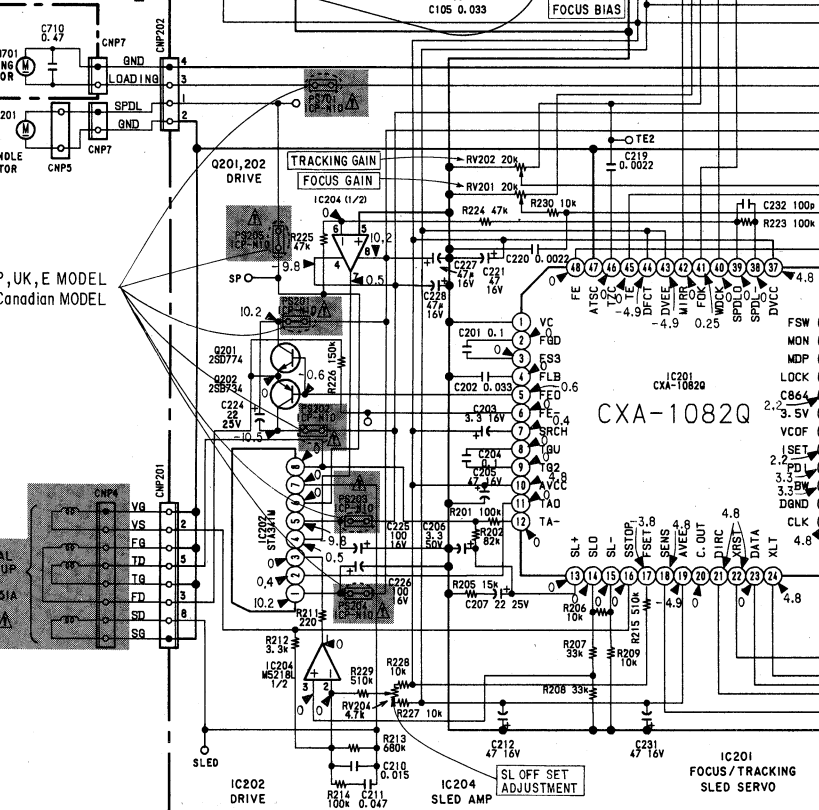
MAIN BOARD



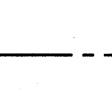
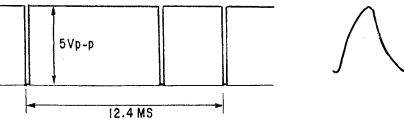
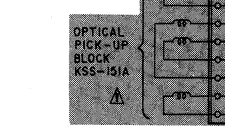
LOADING MOTOR BOARD (1/2)



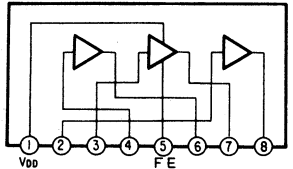
LOADING MOTOR BOARD (2/2)



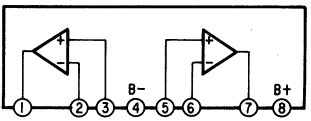
AEP, UK, E MODEL  
US, Canadian MODEL



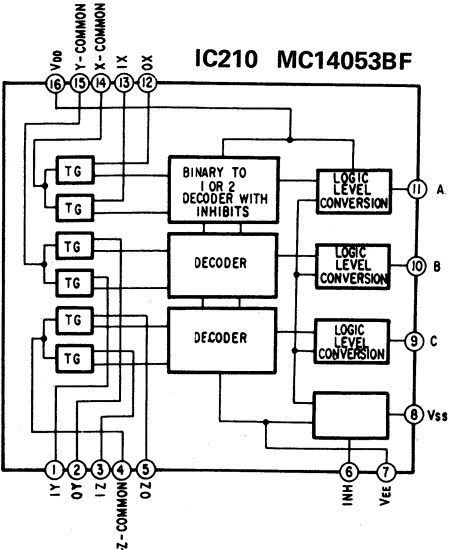
### IC202 STA341M



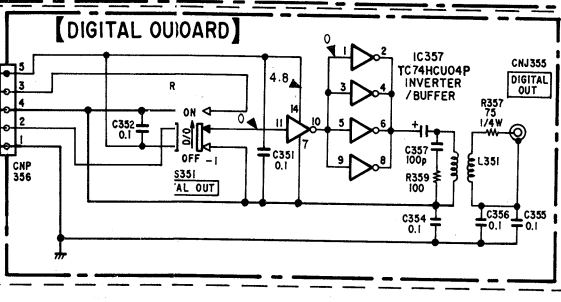
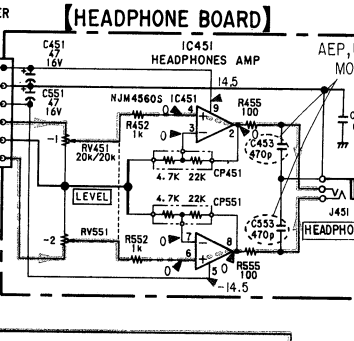
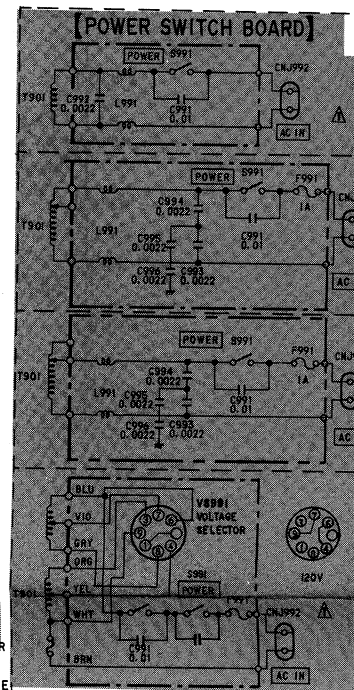
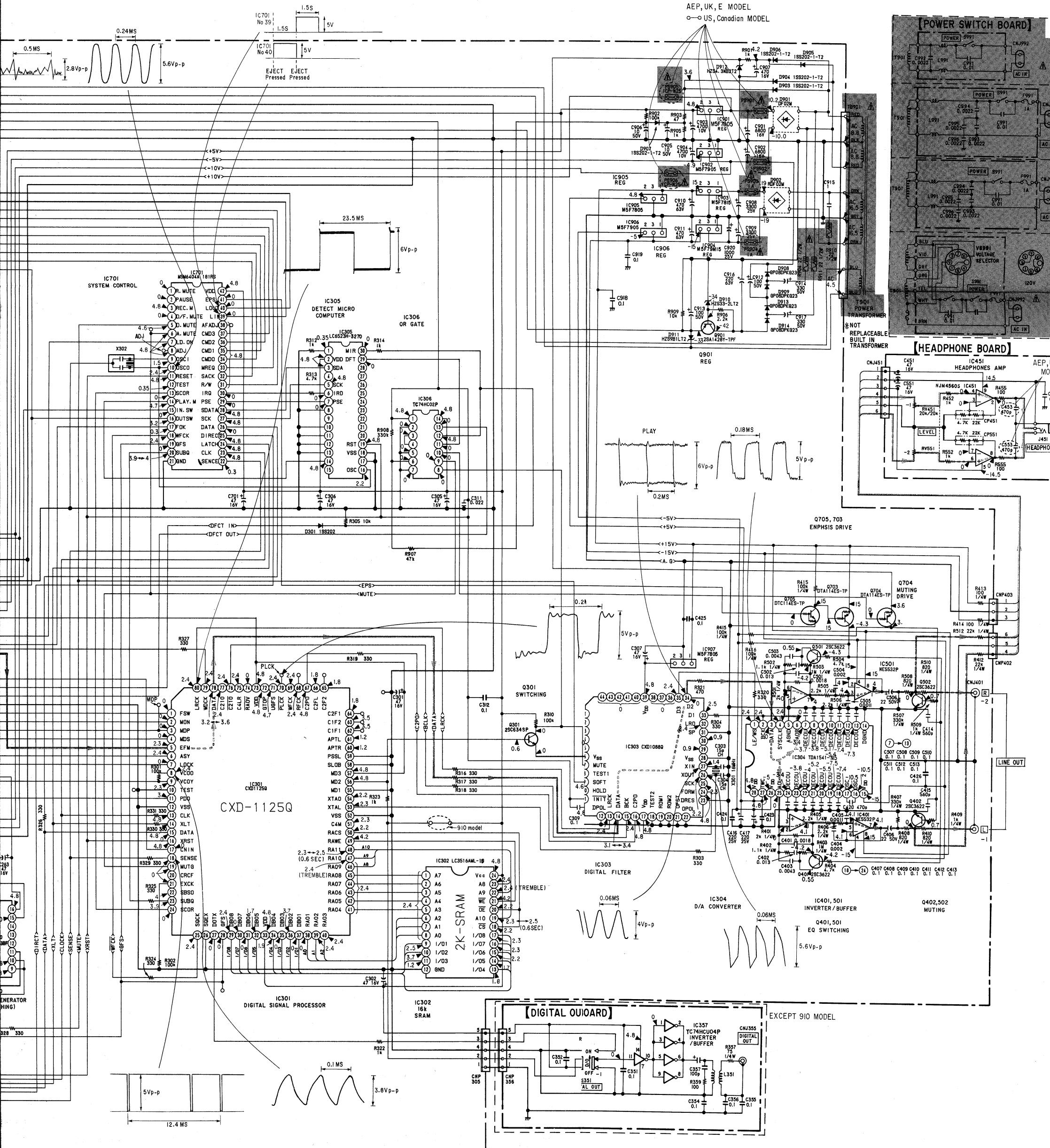
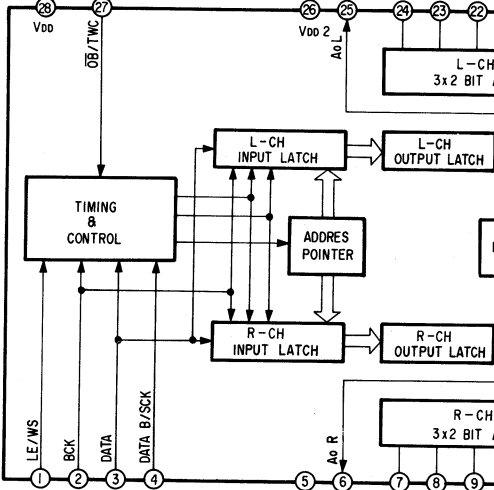
### IC204 M5218L

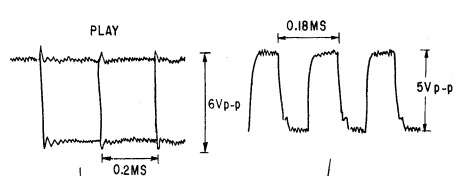
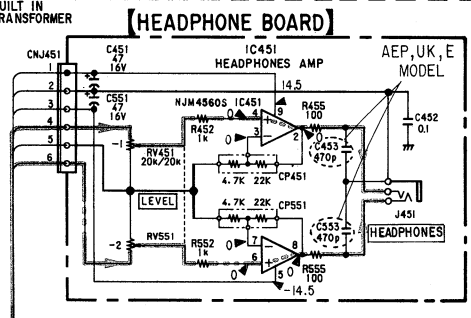
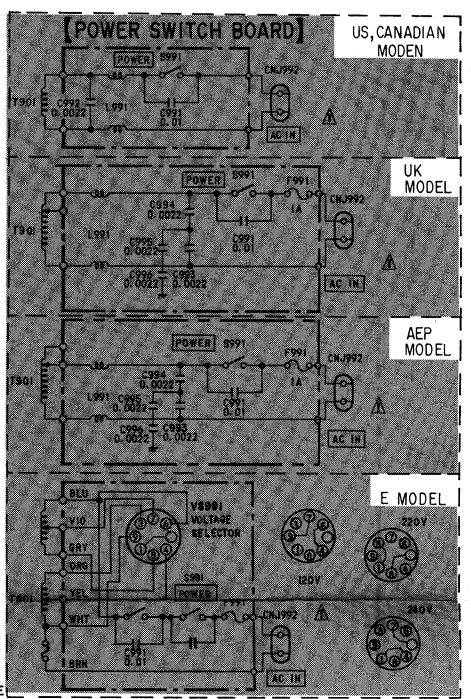
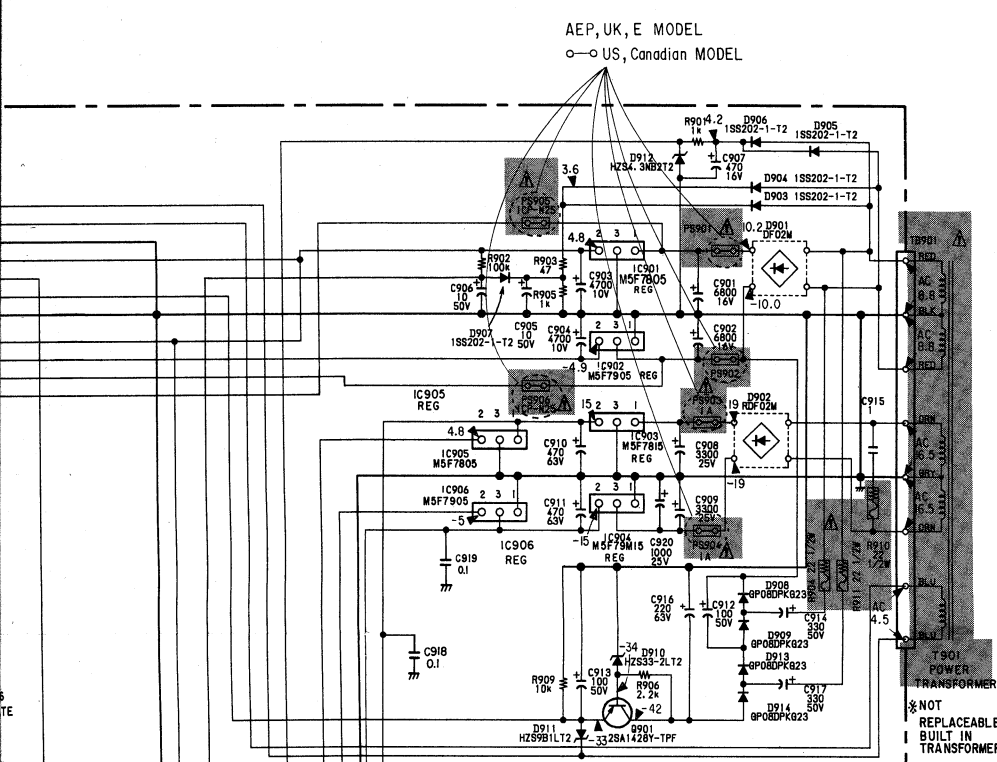
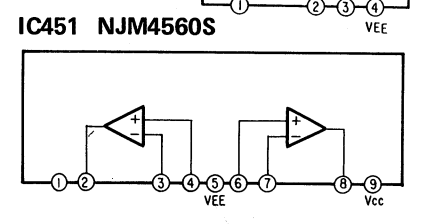
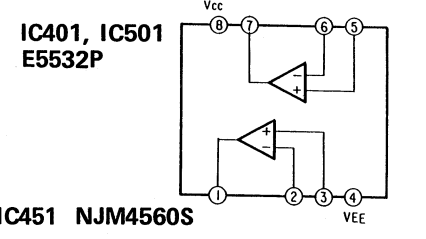
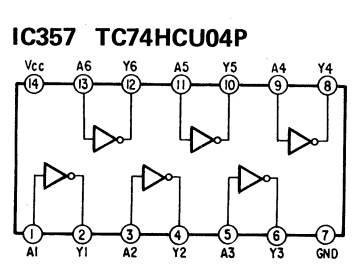
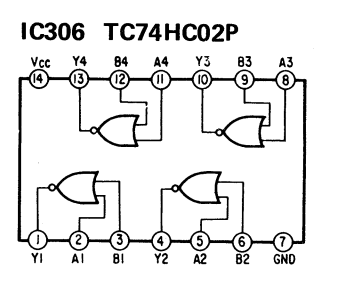
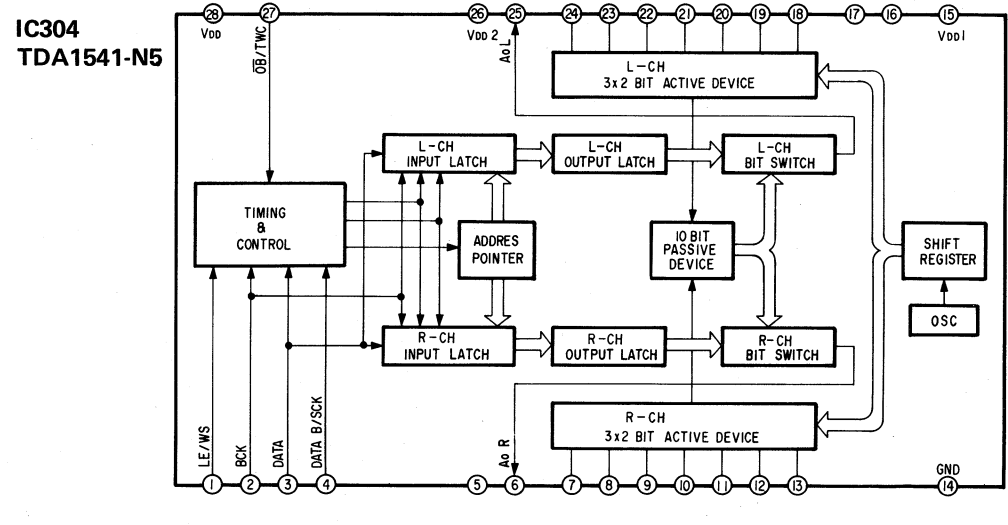
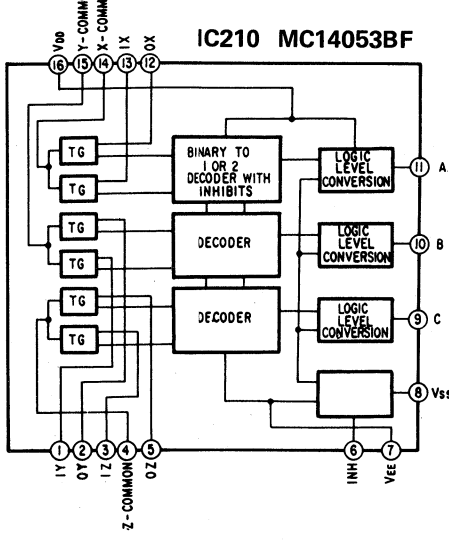


### IC210 MC14053BF



### IC304 TDA1541-N5

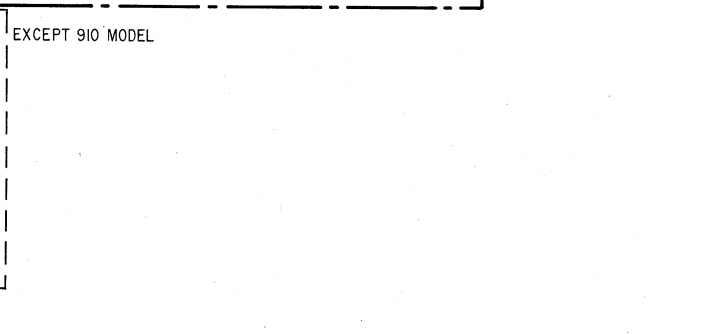
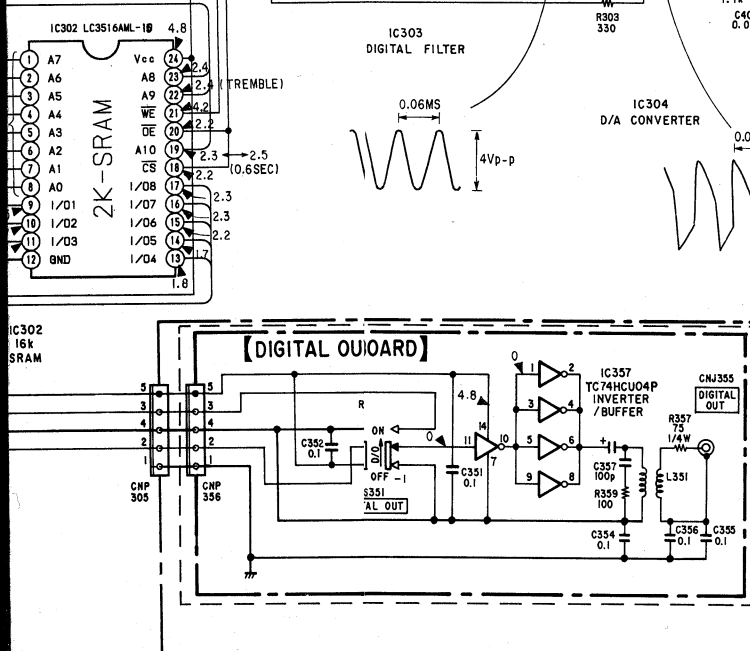




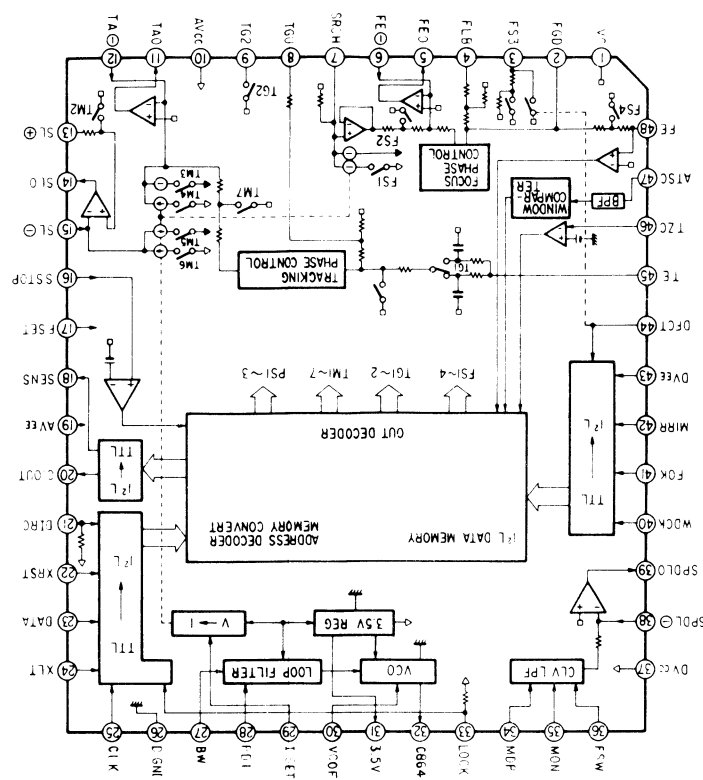
- Note:**
- All capacitors are in  $\mu F$  unless otherwise noted.  $\rho F$ :  $\mu F$  50WV or less are not indicated except for electrolytics and tantalums.
  - Main signal path
  - L-CH signal path
  - R-CH signal path
  - fusible resistor.
  - B+ bus.
  - Voltagages are dc with respect to ground unless otherwise noted.
  - Readings are taken under STOP conditions with a VOM (50 k $\Omega$ /V). no mark: STOP
  - Voltage variations may be noted due to normal production tolerances.
  - Waveforms are taken to ground in PLAY mode by using oscilloscope. Voltage variations may be noted due to normal production tolerances.
  - Switches:

Ref. No.	Switch	Position
S351	DIGITAL OUT (222ESD, 505ESD) (LOADING SWITCH)	OFF
S701	1	OFF
S801	2	OFF
S802	3	OFF
S803	4	OFF
S804	5	OFF
S805	6	OFF
S806	7	OFF
S807	8	OFF
S808	9	OFF
S809	10	OFF
S810	11	OFF
S811	12	OFF
S812	13	OFF
S813	14	OFF
S814	15	OFF
S815	16	OFF
S816	17	OFF
S817	18	OFF
S818	19	OFF
S819	20	OFF
S820	+10	OFF
S821	0	OFF
S822	CHECK	OFF
S823	CLEAR	OFF
S824	AUTO SPACE	OFF
S825	PROGRAM	OFF
S826	SHUFFLE	OFF
S827	▶	OFF
S828	■	OFF
S829	▶▶	OFF
S830	▶▶▶	OFF
S831	▶▶▶▶	OFF
S832	▶▶▶▶▶	OFF
S833	▶▶▶▶▶▶	OFF
S834	▶▶▶▶▶▶▶	OFF
S835	▶▶▶▶▶▶▶▶	OFF
S836	▶▶▶▶▶▶▶▶▶	OFF
S837	REPEAT I/ALL	OFF
S838	A↔B	OFF
S839	DISPLAY TIME	OFF
S840	▲	OFF
S841	▲	OFF
S991	POWER	OFF

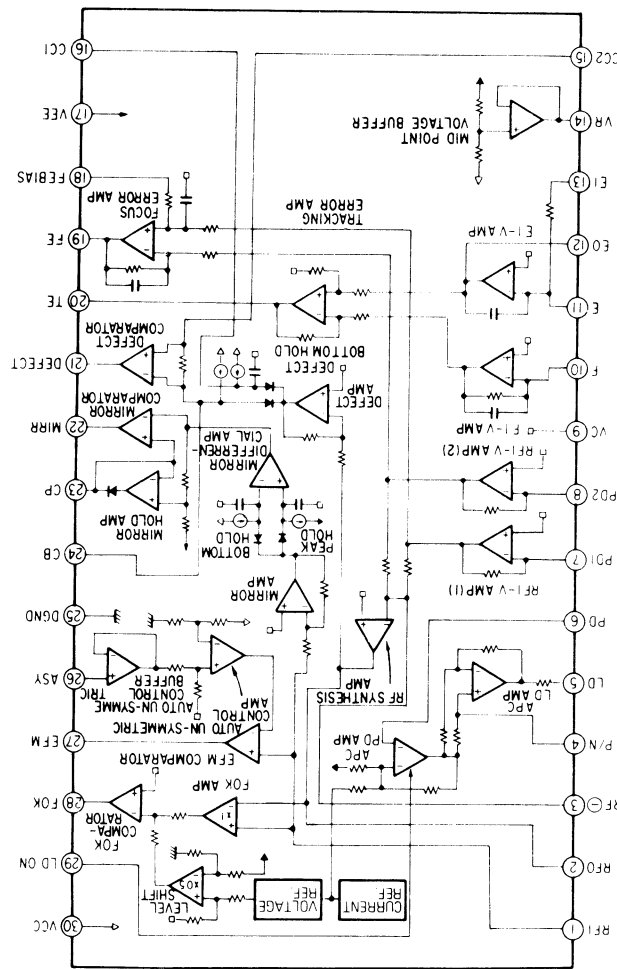
**Note:** The components identified by shading and mark are critical for safety. Replace only with part number specified.



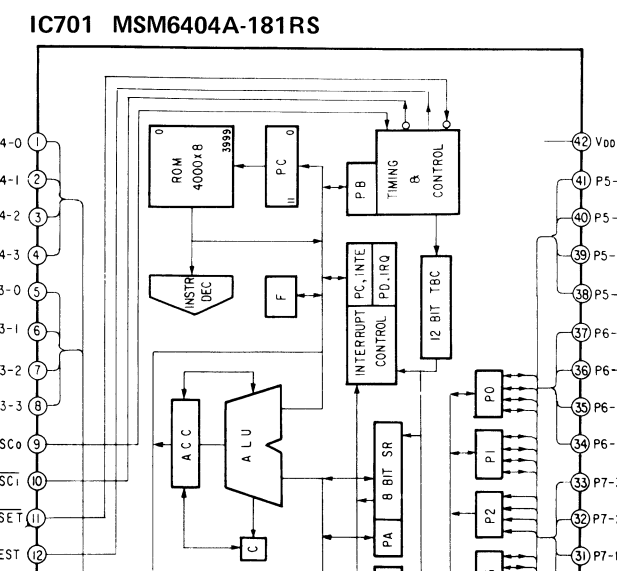
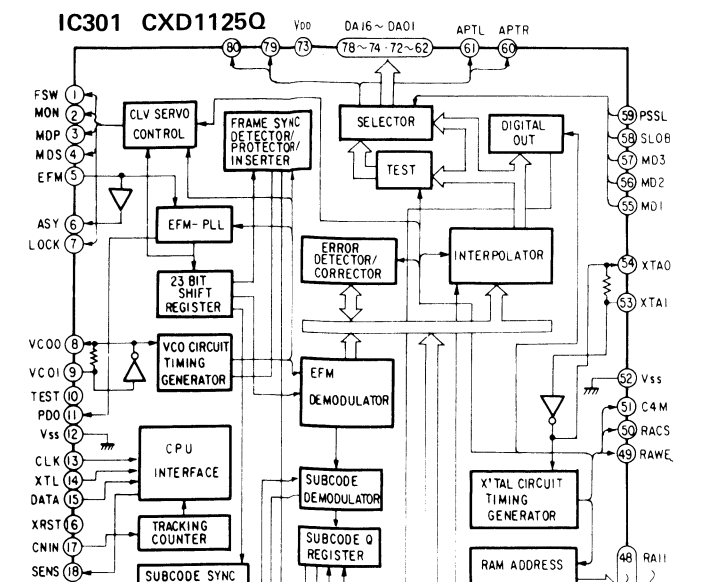
SECTION 4  
EXPLODED VIEWS AND PARTS LIST



IC201 CXA10820



IC101 CXA1081M

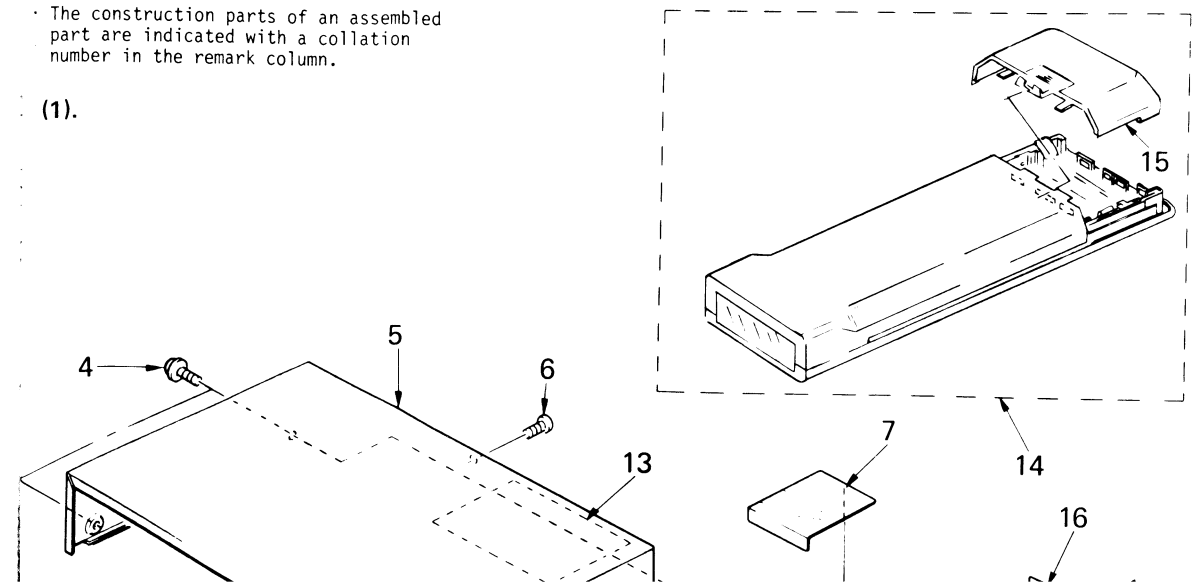


NOTE:

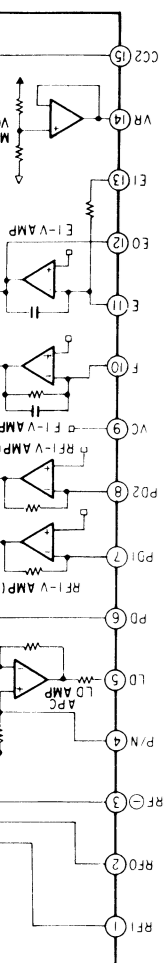
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

The components identified by shading and mark are critical for safety. Replace only with part number specified.

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







IC101 CX

CDP-222ESD/505ESD/910

CDP-222ESD/505ESD/910

### SECTION 4 EXPLODED VIEWS AND PARTS LIST

**NOTE:**

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

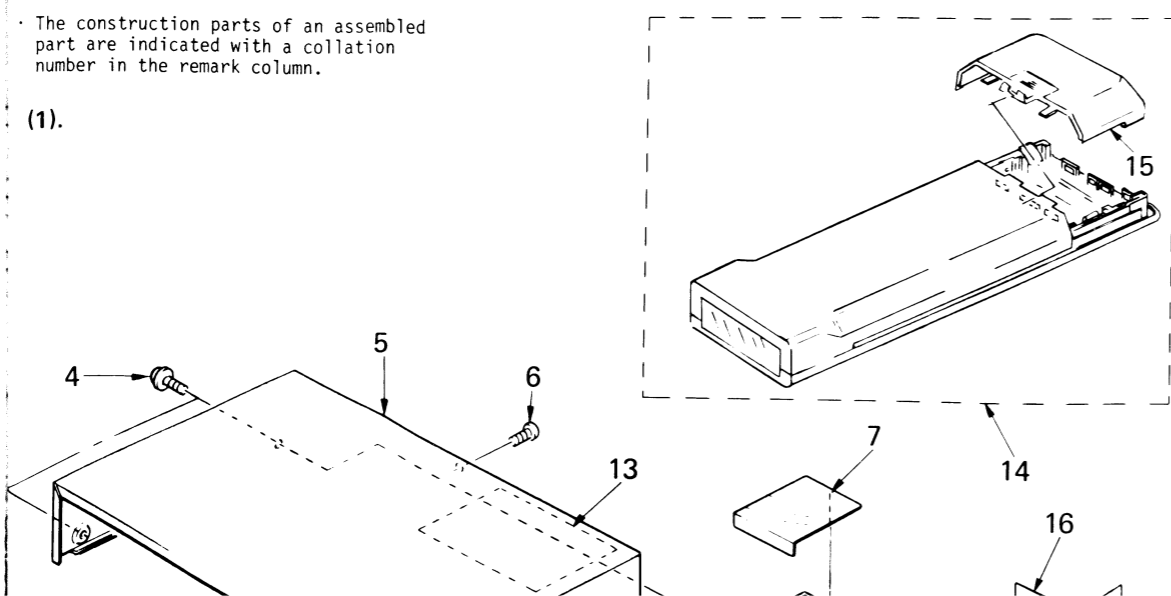
The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

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

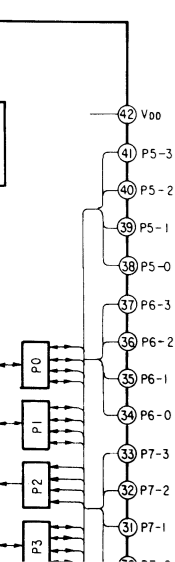
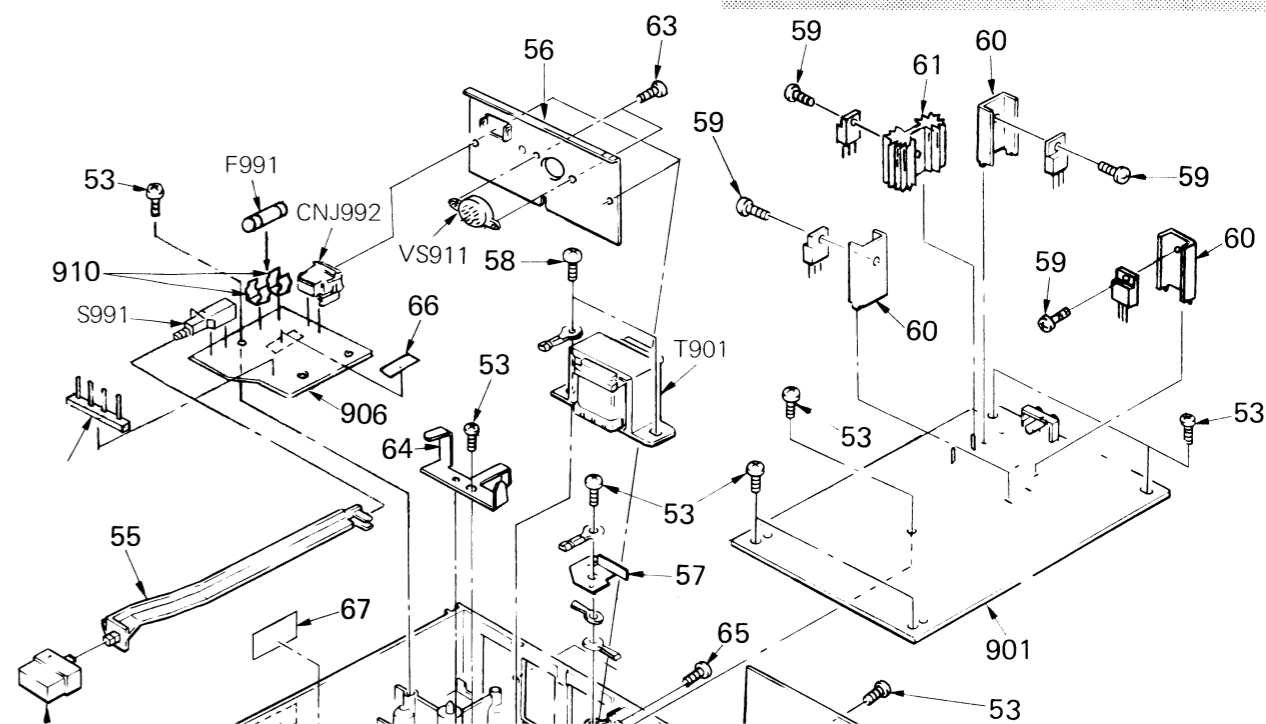
The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

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

(1).



(2).



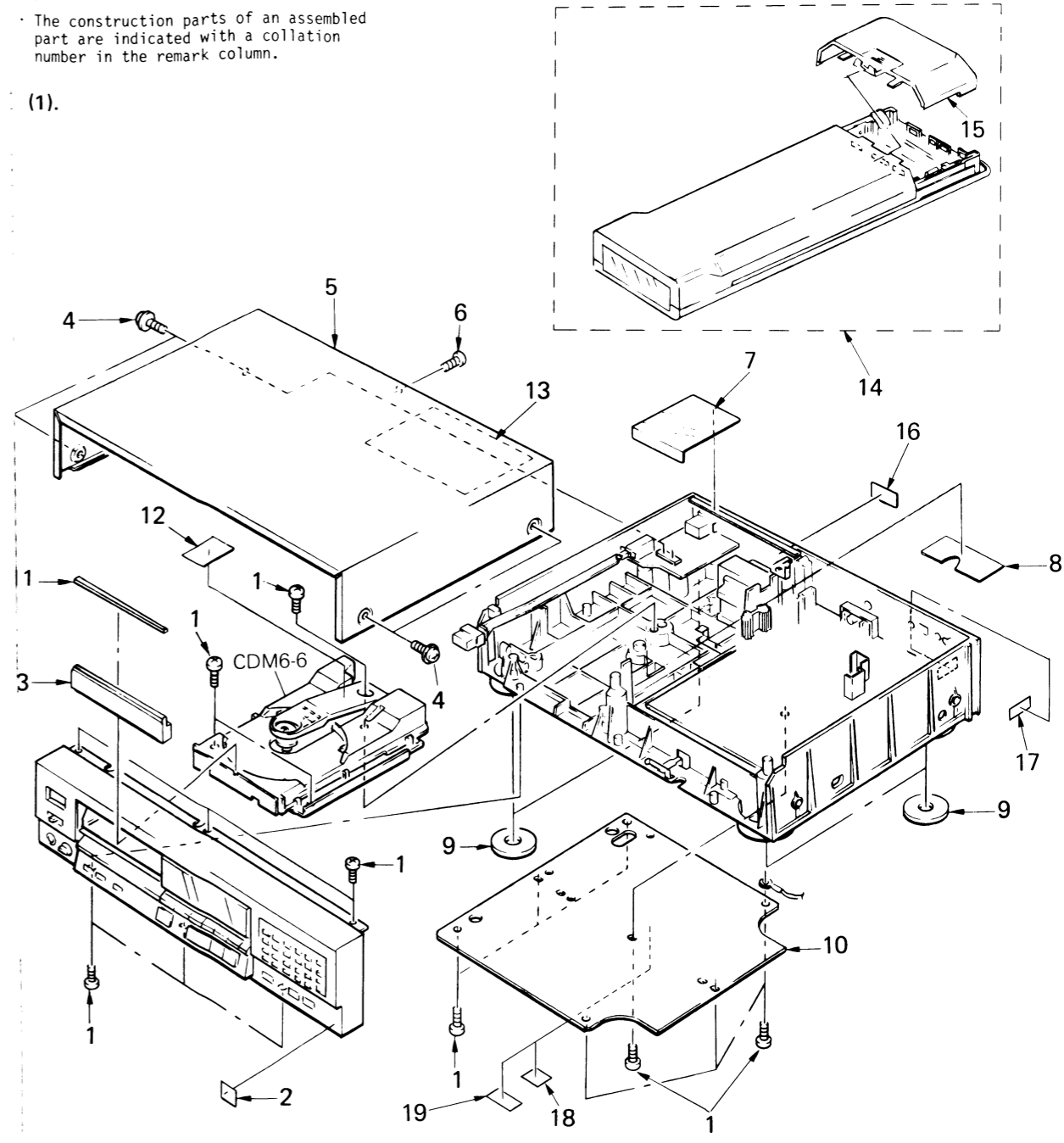
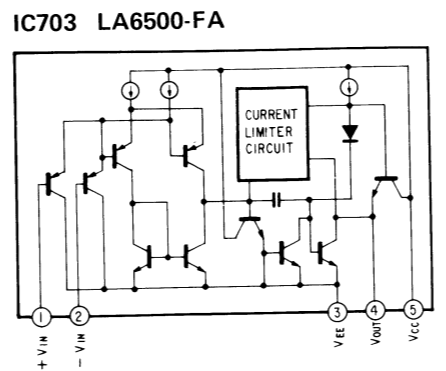
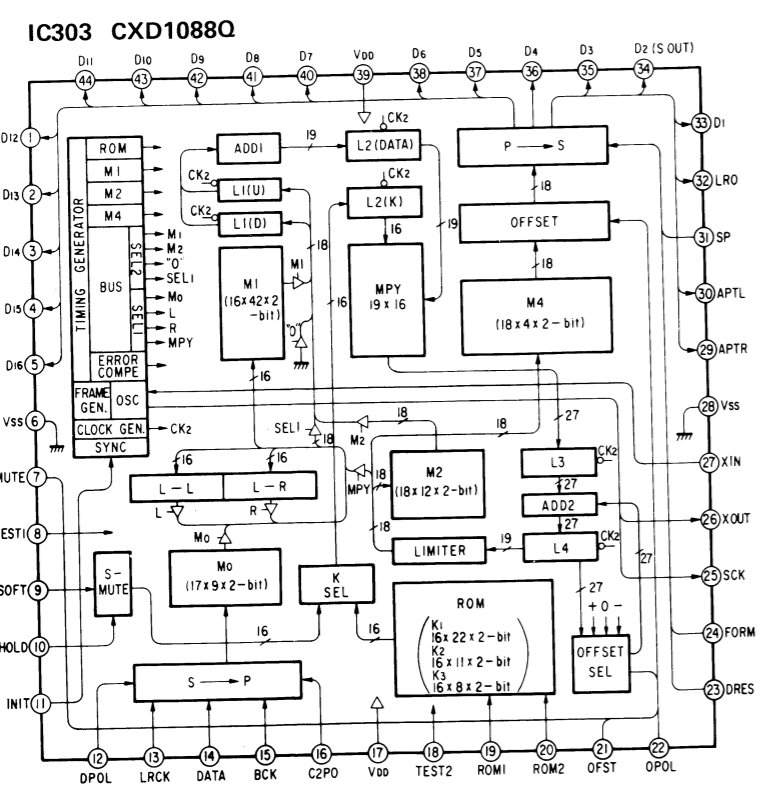
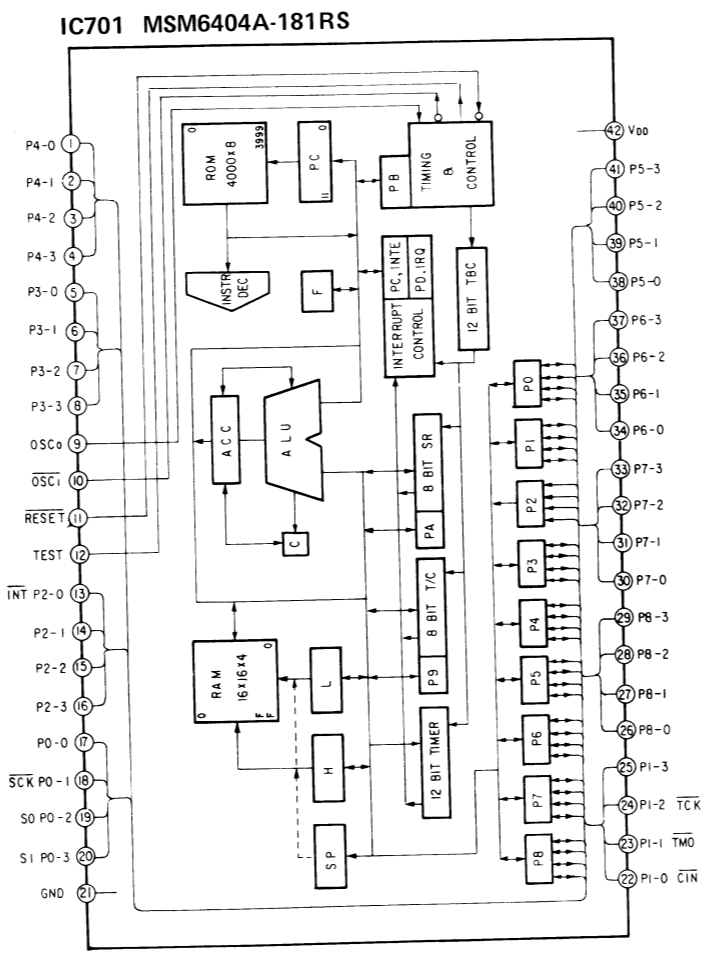
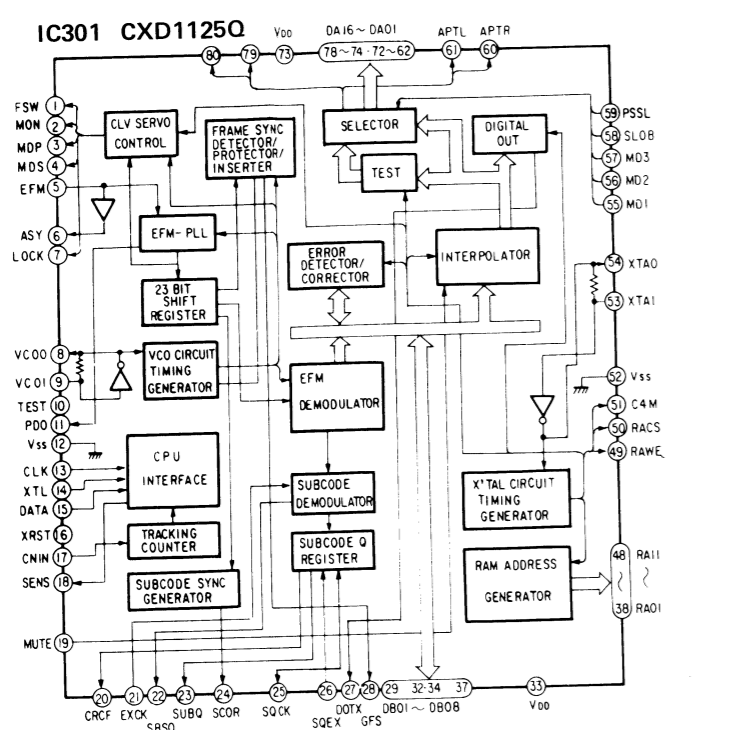
# SECTION 4 EXPLODED VIEWS AND PARTS LIST

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

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



Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	11	4-912-933-01	ESCUTCHEON, LOADING PANEL	
2	3-703-710-41	STICKER, SONY SYMBOL (12)	12	*4-913-955-01	DUMPER (D)	
3	4-912-961-01	PANEL, LOADING	13	*4-917-634-01	DAMPER (C)	
4	3-703-135-31	SCREW, TAPPING	14	1-463-817-11	REMOTE COMMANDER (RM-D350A)	
5	4-912-939-01	CASE	15	4-917-494-01	LID, BATTERY CASE	
6	3-703-473-11	SCREW, TERMINAL	16	*4-885-838-00	(222)...LABEL, CLASS 1	
7	*4-912-931-01	COVER, POWER	17	*3-701-030-00	LABEL, SERIAL NUMBER	
8	*4-912-910-01	LABEL (ENGLISH), CAUTION	18	3-703-680-00	(505:US,910)...LABEL, CAUTION SUB, NEW UL	
9	4-912-919-01	FOOT	19	3-703-079-21	(UK)...LABEL, CAUTION (BACK)	
0	*4-912-912-21	PLATE, BOTTOM				

SECTION 4

EXPLODED VIEWS AND PARTS LIST

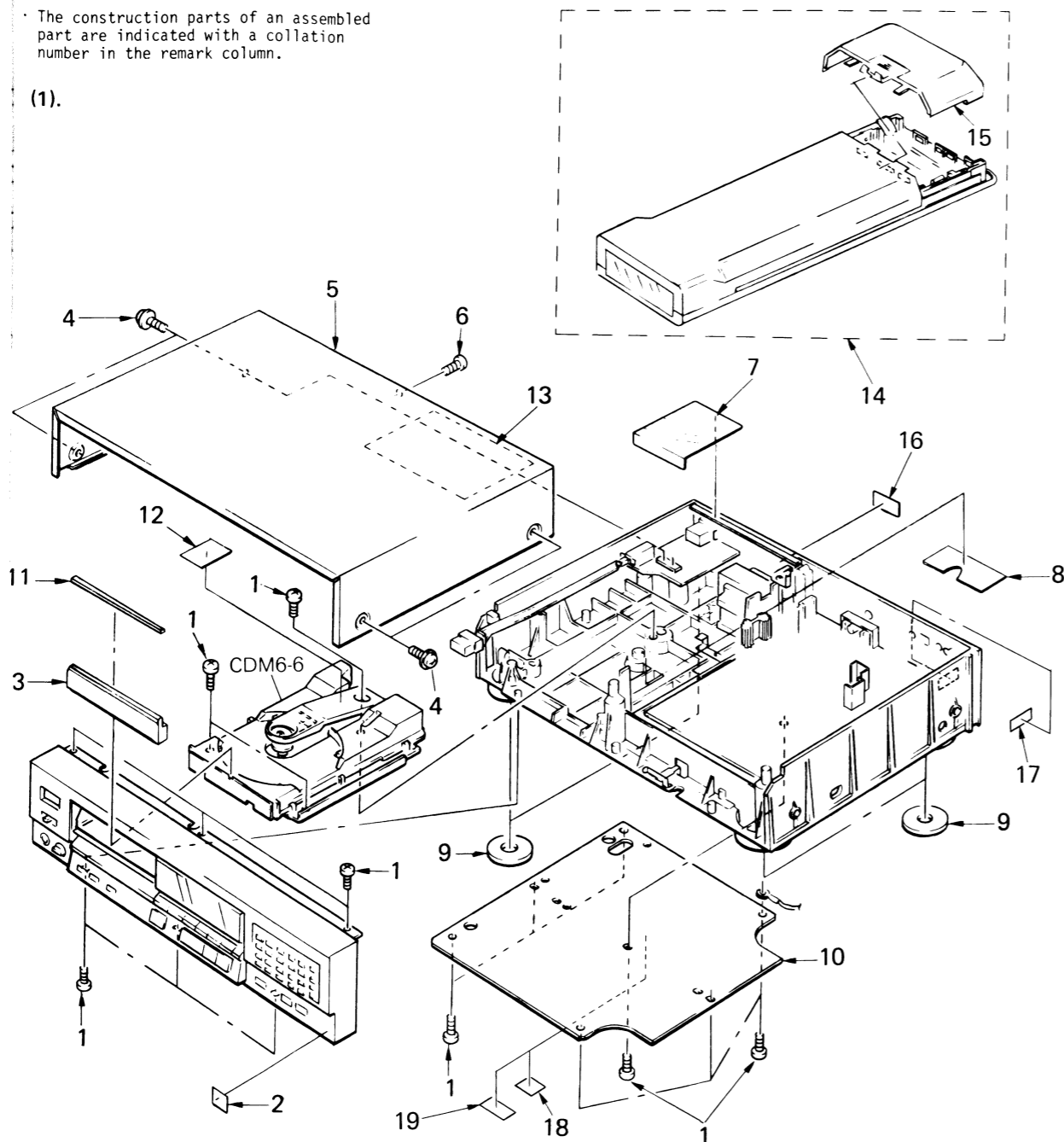
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

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

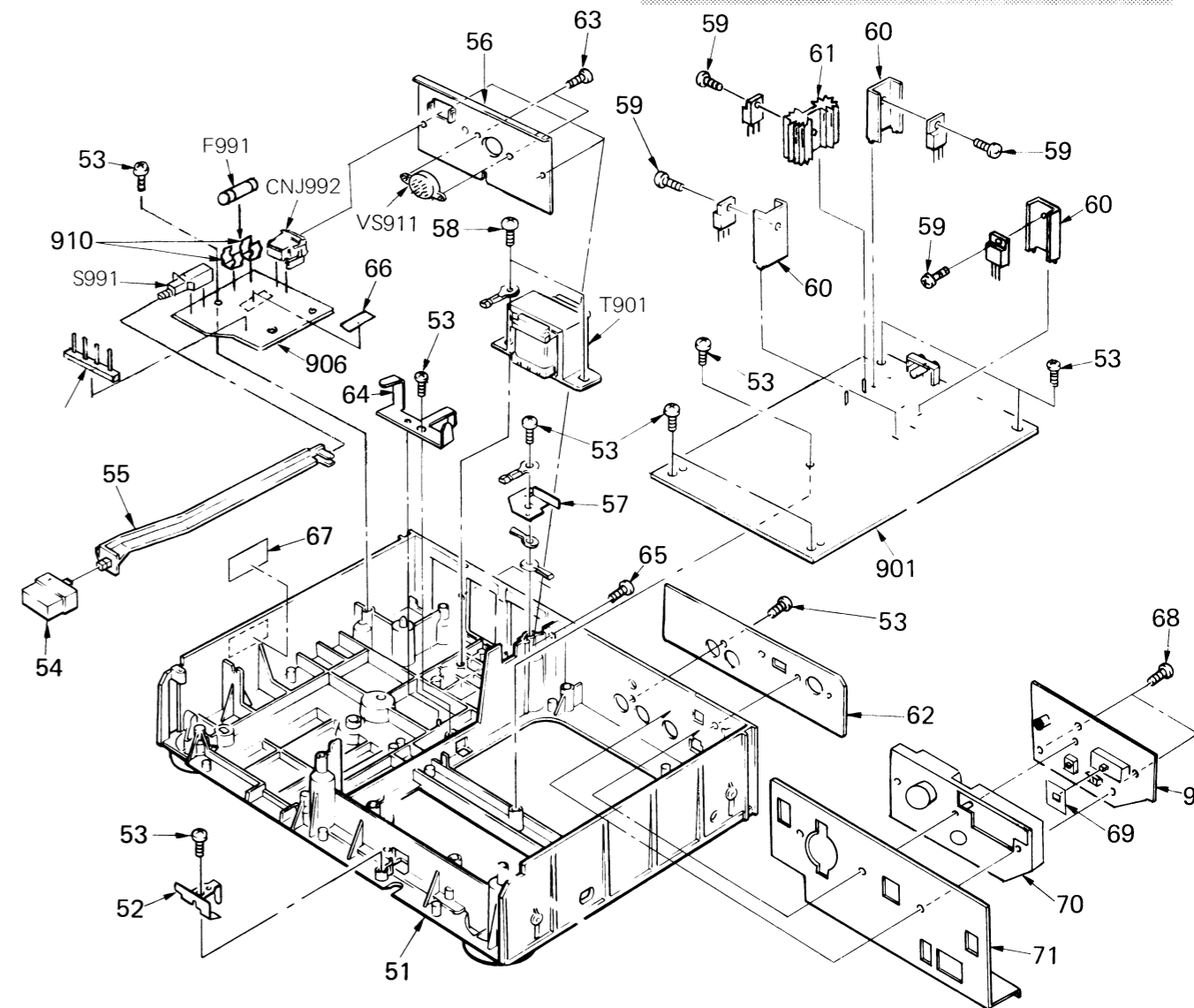
(1).



No.	Part No.	Description	Remarks
1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
2	3-703-710-41	STICKER, SONY SYMBOL (12)	
3	4-912-961-01	PANEL, LOADING	
4	3-703-135-31	SCREW, TAPPING	
5	4-912-939-01	CASE	
6	3-703-473-11	SCREW, TERMINAL	
7	*4-912-931-01	COVER, POWER	
8	*4-912-910-01	LABEL (ENGLISH), CAUTION	
9	4-912-919-01	FOOT	
10	*4-912-912-21	PLATE, BOTTOM	

No.	Part No.	Description	Remarks
11	4-912-933-01	ESCUTCHEON, LOADING PANEL	
12	*4-913-955-01	DUMPER (D)	
13	*4-917-634-01	DAMPER (C)	
14	1-463-817-11	REMOTE COMMANDER (RM-D350A)	
15	4-917-494-01	LID, BATTERY CASE	
16	*4-885-838-00	(222)...LABEL, CLASS 1	
17	*3-701-030-00	LABEL, SERIAL NUMBER	
18	3-703-680-00	(505:US,910)...LABEL, CAUTION SUB, NEW UL	
19	3-703-079-21	(UK)...LABEL, CAUTION (BACK)	

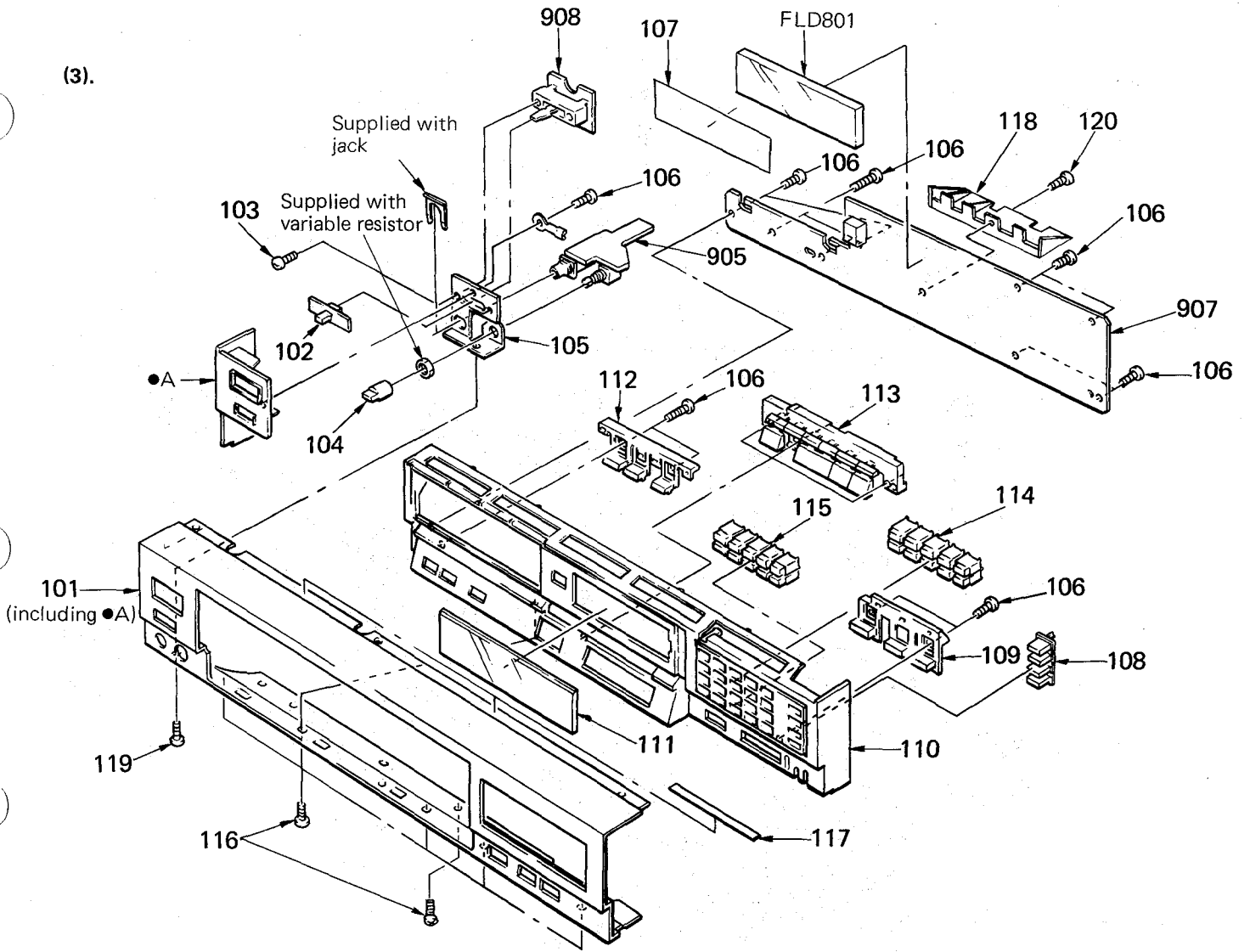
(2).



No.	Part No.	Description	Remarks
51	4-912-938-01	CHASSIS	
52	*4-912-925-01	PLATE (C), GROUND	
53	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
54	4-917-460-01	KNOB, POWER	
55	*4-911-063-01	LEVER, POWER SWITCH	
56	*4-912-913-11	(910)...PLATE, JACK	
	*4-912-913-21	(505:US)...PLATE, JACK	
	*4-912-913-31	(Canadian)...PLATE, JACK	
	*4-912-913-41	(UK)...PLATE, JACK	
	*4-912-913-51	(AEP)...PLATE, JACK	
	*4-912-913-61	(E)...PLATE, JACK	
57	*4-912-924-01	PLATE (B), GROUND	
58	7-685-660-11	SCREW +BVTP 4X10 TYPE2 N-S	
59	2-259-121-00	SCREW, TR	
60	*4-902-345-01	HEAT SINK	
61	*4-908-502-01	HEAT SINK	
62	*4-912-930-01	(EXCEPT 910)...PLATE, ORNAMENTAL, JACK	
	4-912-930-51	(910)...PLATE, ORNAMENTAL, JACK	
63	7-682-547-09	(E)...SCREW +B 3X6	
64	*4-912-923-01	PLATE (A), GROUND	
65	7-685-872-09	SCREW +BVTP 3X8 (S)	
66	*3-701-948-14	(222)...LABEL, FUSE	

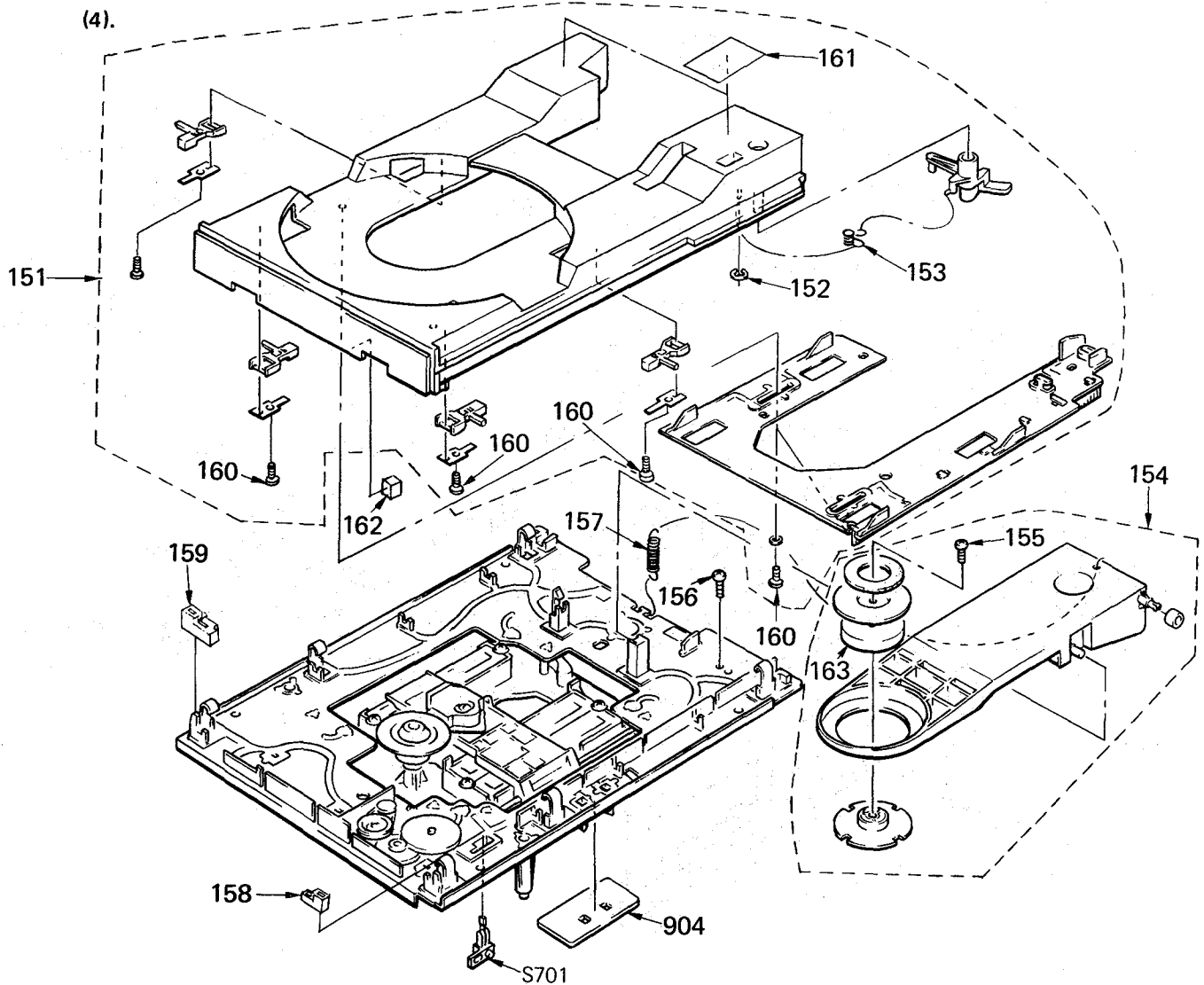
No.	Part No.	Description	Remarks
67	4-885-843-02	(222)...LABEL, CAUTION, LASER	
68	7-685-534-11	SCREW +BTP 2.6X8 TYPE2 N-S	
69	*4-912-946-01	(EXCEPT 910)...COVER, SWITCH	
70	*4-912-940-01	(EXCEPT 910)...ESCUTCHEON, D/O	
71	*4-912-964-01	(EXCEPT 910)...PLATE, SHIELD	
901	*A-4651-130-A	(505)...MOUNTED PCB, MAIN	
	*A-4651-131-A	(910)...MOUNTED PCB, MAIN	
	*A-4651-132-A	(222)...MOUNTED PCB, MAIN	
902	*1-535-137-00	BASE POST 14MM (10MM PITCH)	
906	*1-622-278-11	PC BOARD, POWER SW	
909	*1-622-279-11	(EXCEPT 910)...PC BOARD, D/O	
910	1-533-183-11	(222)...HOLDER, FUSE	
	F991 <b>A</b> .1-532-078-00	(222)...FUSE, TIME-LAG (1A)	
	T901 <b>A</b> .1-448-715-11	(505,910)...TRANSFORMER, POWER	
	T901 <b>A</b> .1-448-717-11	(E)...TRANSFORMER, POWER	
	T901 <b>A</b> .1-448-718-11	(AEP,UK)...TRANSFORMER, POWER	
	VS991 <b>A</b> .1-526-576-41	(E)...SELECTOR, POWER VOLTAGE (VOLTAGE SELECTOR)	

(3).



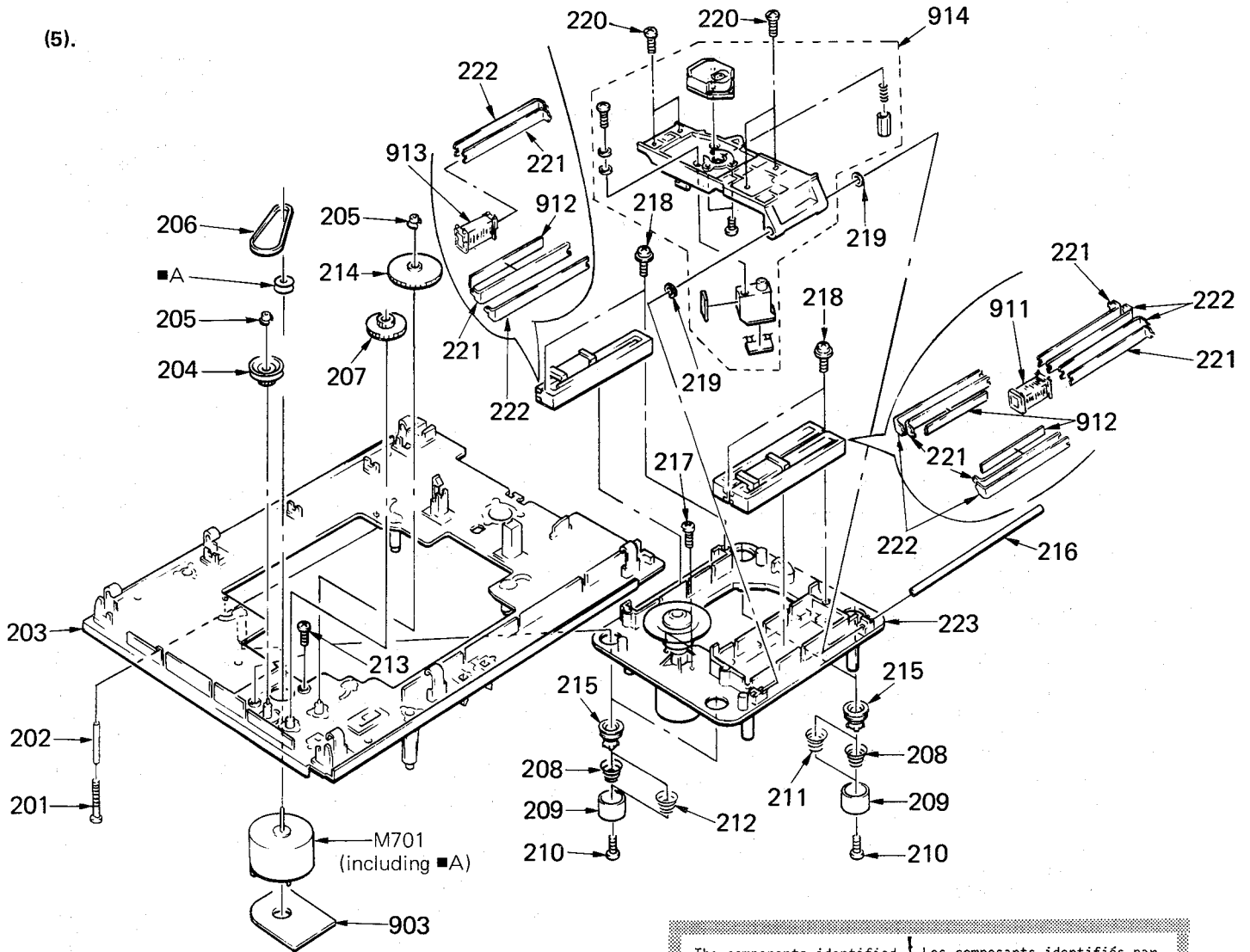
No.	Part No.	Description	Remarks
101	X-4910-456-1	PANEL ASSY, FRONT	
102	3-575-515-41	KNOB, SLIDE SWITCH	
103	7-621-259-25	SCREW +P 2.6X4	
104	4-901-708-11	KNOB, LOV	
105	*4-912-922-01	BRACKET, HEADPHONE	
106	7-685-534-11	SCREW +BTP 2.6X8 TYPE2 N-S	
107	*4-912-926-01	PLATE (B), INDICATION	
108	4-912-921-01	BUTTON, 4 GANG	
109	4-912-916-01	BUTTON (C), CONTROL	
110	4-912-937-01	(910).....PANEL, SUB	
	4-912-937-11	(EXCEPT 910)...PANEL, SUB	

No.	Part No.	Description	Remarks
111	4-912-917-01	PLATE, INDICATION	
112	4-912-915-01	BUTTON (B), CONTROL	
113	X-4910-450-1	BUTTON ASSY, CONTROL	
114	4-912-934-01	BUTTON, 10 GANG	
115	4-912-934-11	BUTTON, 10 GANG	
116	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
117	*4-912-958-01	CUSHION, PANEL	
118	*4-912-935-01	STAY, PANEL	
119	7-682-147-09	SCREW +BVTT 3X6 (S)	
120	7-685-535-11	SCREW +BTP 2.6X10 TYPE2 N-S	
905	*1-620-674-11	PC BOARD, HEADPHONE	
907	*1-620-676-11	PC BOARD, DISPLAY	
908	*1-620-677-11	PC BOARD, TIMER SW	
FLD801	1-519-411-11	INDICATOR TUBE, FLUORESCENT	



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	A-4665-013-A	TABLE ASSY, DISK		159	*4-918-612-01	CUSHION (LEFT)	
152	7-624-190-81	STOP RING 2, TYPE-CS		160	7-685-103-19	SCREW (2X5), + PWTP	
153	4-917-552-01	SPRING		161	*4-913-955-01	DUMPER (D)	
154	A-4681-006-B	ARM ASSY, CHUCKING		162	*4-918-611-01	CUSHION	
155	7-685-790-04	(FORMER)...SCREW +PTT 2.6X4 (S)		163	1-452-340-11	MAGNET	
156	7-621-259-55	SCREW +BVTT 2.6X8 (S)		904	*1-620-668-11	PC BOARD, TRANSLATION	
157	4-917-551-01	SPRING (ARM), TENSION		S701	1-570-203-11	SWITCH, LEAF (LOADING)	
158	*4-918-613-01	CUSHION (RIGHT)					

(5).



The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

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

No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201	7-685-877-01	SCREW +BVTT 3X20 (S)		216	*4-917-579-01	SHAFT, GUIDE	
202	*4-917-588-01	COLLAR		217	7-621-255-10	SCREW +B 2X3	
203	4-917-561-21	CHASSIS (OUTSERT), LOADING		218	*4-917-583-01	BRACKET, YOKE	
204	4-917-546-01	PULLEY (A), LOADING		219	*4-917-582-01	CUSHION, SLIDE	
205	4-910-418-01	BUSHING (DIA. 4)		220	3-318-203-61	SCREW (B1.7X4), TAPPING	
206	4-917-548-01	BELT, DRIVING		221	*4-917-580-01	YOKE (A)	
207	4-910-402-01	GEAR (2), LOADING		222	*4-917-581-01	YOKE (B)	
208	4-917-572-01	SPRING (B)		223	X-4910-455-2	MOTOR ASSY	
209	4-917-508-01	HOLDER, SP		903	*1-620-667-11	PC BOARD, LOADING MOTOR	
210	7-685-535-19	SCREW +BTP 2.6X10 TYPE2 N-S		911	1-422-301-11	COIL (DRIVING)	
211	4-917-571-01	SPRING (A)		912	*1-452-411-11	MAGNET, LINEAR	
212	4-917-573-01	SPRING (E)		913	1-422-302-11	COIL (DETECTION)	
213	7-621-775-40	SCREW +B 2.6X8		914 ▲	8-848-064-01	PICKUP, OPTICS KSS-151A	
214	4-917-550-01	GEAR (A), LOADING		M701	A-4608-320-B	MOTOR ASSY, LOADING	
215	*4-917-584-11	INSULATOR					

## SECTION 5 ELECTRICAL PARTS LIST

**NOTE:**

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

**CAPACITORS:**

MF:  $\mu$ F, PF:  $\mu$ F.

**RESISTORS**

• All resistors are in ohms.

\* F : nonflammable

**COILS**

• MMH : mH, UH :  $\mu$ H

**SEMICONDUCTORS**

In each case, U :  $\mu$ , for example:

UA... :  $\mu$ A..., UPA... :  $\mu$ PA..., UPC... :  $\mu$ PC,

UPD... :  $\mu$ PD...

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

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

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
901	*A-4651-130-A	(222)...MOUNTED PCB, MAIN				
	*A-4651-131-A	(910)...MOUNTED PCB, MAIN				
	*A-4651-132-A	(505)...MOUNTED PCB, MAIN				
902	*1-535-137-00	BASE POST 14MM (10MM PITCH)				
903	*1-620-667-11	PC BOARD, LOADING MOTOR				
904	*1-620-668-11	PC BOARD, TRANSLATION				
905	*1-620-674-11	PC BOARD, HEADPHONE				
906	*1-622-278-11	PC BOARD, POWER SW				
907	*1-620-676-11	PC BOARD, DISPLAY				
908	*1-620-677-11	PC BOARD, TIMER SW				
909	*1-622-279-11	(EXCEPT 910)...PC BOARD, D/O				
910	1-533-183-11	(222)...HOLDER, FUSE				
911	1-422-301-11	COIL (DRIVING)				
912	*1-452-411-11	MAGNET, LINEAR				
913	1-422-302-11	COIL (DETECTION)				
914	$\Delta$ 8-848-064-01	PICKUP, OPTICS-KSS-151A				
C101	1-126-008-11	ELECT	47MF	20%	16V	
C102	1-126-008-11	ELECT	47MF	20%	16V	
C103	1-162-198-31	CERAMIC	8.2PF	10%	50V	
C104	1-130-475-00	MYLAR	0.0022MF	5%	50V	
C105	1-130-489-00	MYLAR	0.033MF	5%	50V	
C106	1-130-489-00	MYLAR	0.033MF	5%	50V	
C107	1-130-483-00	MYLAR	0.01MF	5%	50V	
C108	1-126-008-11	ELECT	47MF	20%	16V	
C109	1-126-008-11	ELECT	47MF	20%	16V	
C110	1-130-483-00	MYLAR	0.01MF	5%	50V	
C111	1-126-043-11	ELECT	0.47MF	20%	50V	
C112	1-162-199-31	CERAMIC	10PF	5%	50V	
C113	1-162-199-31	CERAMIC	10PF	5%	50V	
C114	1-162-294-31	CERAMIC	0.001MF	10%	50V	
C115	1-162-294-31	CERAMIC	0.001MF	10%	50V	
C201	1-130-768-00	FILM	0.1MF	10%	63V	
C202	1-130-489-00	MYLAR	0.033MF	5%	50V	
C203	1-131-368-00	TANTALUM	3.3MF	10%	16V	
C204	1-130-768-00	FILM	0.1MF	10%	63V	
C205	1-126-008-11	ELECT	47MF	20%	16V	
C206	1-124-905-11	ELECT	3.3MF	20%	50V	
C207	1-124-908-11	ELECT	22MF	20%	25V	
C210	1-130-485-00	MYLAR	0.015MF	5%	50V	
C211	1-130-491-00	MYLAR	0.047MF	5%	50V	
C212	1-126-008-11	ELECT	47MF	20%	16V	
C213	1-126-044-11	ELECT	1MF	20%	50V	
C214	1-124-045-00	ELECT	4.7MF	20%	50V	
C215	1-130-479-00	MYLAR	0.0047MF	5%	50V	
C216	1-126-008-11	ELECT	47MF	20%	16V	
C217	1-162-294-31	CERAMIC	0.001MF	10%	50V	

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
C218	1-126-043-11	ELECT	0.47MF	20%	50V	
C219	1-130-475-00	MYLAR	0.0022MF	5%	50V	
C220	1-130-475-00	MYLAR	0.0022MF	5%	50V	
C221	1-126-008-11	ELECT	47MF	20%	16V	
C224	1-124-908-11	ELECT	22MF	20%	25V	
C225	1-126-009-11	ELECT	100MF	20%	16V	
C226	1-126-009-11	ELECT	100MF	20%	16V	
C227	1-126-008-11	ELECT	47MF	20%	16V	
C228	1-126-008-11	ELECT	47MF	20%	16V	
C229	1-130-489-00	MYLAR	0.033MF	5%	50V	
C230	1-161-063-00	CERAMIC	0.1MF	20%	16V	
C231	1-126-008-11	ELECT	47MF	20%	16V	
C232	1-162-282-31	CERAMIC	100PF	10%	50V	
C261	1-136-173-00	FILM	0.47MF	5%	50V	
C262	1-136-173-00	FILM	0.47MF	5%	50V	
C263	1-126-008-11	ELECT	47MF	20%	16V	
C264	1-126-008-11	ELECT	47MF	20%	16V	
C301	1-126-008-11	ELECT	47MF	20%	16V	
C302	1-126-008-11	ELECT	47MF	20%	16V	
C303	1-162-203-31	CERAMIC	15PF	5%	50V	
C304	1-162-203-31	CERAMIC	15PF	5%	50V	
C305	1-126-008-11	ELECT	47MF	20%	16V	
C306	1-126-008-11	ELECT	47MF	20%	16V	
C307	1-126-008-11	ELECT	47MF	20%	16V	
C309	1-161-063-00	CERAMIC	0.1MF	20%	16V	
C311	1-161-494-00	CERAMIC	0.022MF	25V		
C312	1-161-063-00	CERAMIC	0.1MF	20%	16V	
C351	1-161-063-00	(EXCEPT 910)..CERAMIC	0.1MF	20%	16V	
C352	1-161-063-00	(EXCEPT 910)..CERAMIC	0.1MF	20%	16V	
C353	1-130-768-00	(EXCEPT 910)..FILM	0.1MF	10%	63V	
C354	1-162-179-11	(EXCEPT 910)..CERAMIC	0.1MF	50V		
C355	1-162-179-11	(EXCEPT 910)..CERAMIC	0.1MF	50V		
C356	1-162-179-11	(EXCEPT 910)..CERAMIC	0.1MF	50V		
C357	1-162-282-31	(EXCEPT 910)..CERAMIC	100PF	10%	50V	
C401	1-136-253-11	FILM	0.0018MF	3%	100V	
C402	1-130-970-51	FILM	0.013MF	3%	100V	
C403	1-136-232-11	FILM	0.0043MF	3%	100V	
C404	1-136-254-11	FILM	0.002MF	3%	100V	
C405	1-136-227-11	FILM	0.0011MF	3%	100V	
C406	1-126-049-11	ELECT	22MF	20%	50V	
C407	1-130-768-00	FILM	0.1MF	10%	63V	
C408	1-130-768-00	FILM	0.1MF	10%	63V	
C409	1-130-768-00	FILM	0.1MF	10%	63V	
C410	1-130-768-00	FILM	0.1MF	10%	63V	
C411	1-130-768-00	FILM	0.1MF	10%	63V	

## ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C412	1-130-768-00	FILM	0.1MF	10%	63V
C413	1-130-768-00	FILM	0.1MF	10%	63V
C414	1-162-291-31	CERAMIC	560PF	10%	50V
C415	1-162-291-31	CERAMIC	560PF	10%	50V
C416	1-126-024-11	ELECT	220MF	20%	25V
C417	1-126-024-11	ELECT	220MF	20%	25V
C420	1-162-290-31	CERAMIC	470PF	10%	50V
C423	1-161-063-00	CERAMIC	0.1MF	20%	16V
C424	1-161-063-00	CERAMIC	0.1MF	20%	16V
C425	1-161-063-00	CERAMIC	0.1MF	20%	16V
C426	1-161-063-00	CERAMIC	0.1MF	20%	16V
C451	1-123-821-00	ELECT	47MF	20%	16V
C452	1-161-063-00	CERAMIC	0.1MF	20%	16V
C453	1-162-290-31	(222)...CERAMIC	470PF	10%	50V
C501	1-136-253-11	FILM	0.0018MF	3%	100V
C502	1-130-970-51	FILM	0.013MF	3%	100V
C503	1-136-232-11	FILM	0.0043MF	3%	100V
C504	1-136-254-11	FILM	0.002MF	3%	100V
C505	1-136-227-11	FILM	0.0011MF	3%	100V
C506	1-126-049-11	ELECT	22MF	20%	50V
C507	1-130-768-00	FILM	0.1MF	10%	63V
C508	1-130-768-00	FILM	0.1MF	10%	63V
C509	1-130-768-00	FILM	0.1MF	10%	63V
C510	1-130-768-00	FILM	0.1MF	10%	63V
C511	1-130-768-00	(910,505)...CAP,METALIZED FILM	0.1MF		
C512	1-130-768-00	FILM	0.1MF	10%	63V
C513	1-130-768-00	FILM	0.1MF	10%	63V
C551	1-123-821-00	ELECT	47MF	20%	16V
C553	1-162-290-31	(222)...CERAMIC	470PF	10%	50V
C701	1-126-008-11	ELECT	47MF	20%	16V
C705	1-126-008-11	ELECT	47MF	20%	16V
C706	1-126-008-11	ELECT	47MF	20%	16V
C707	1-130-768-00	FILM	0.1MF	10%	63V
C708	1-162-294-31	CERAMIC	0.001MF	10%	50V
C709	1-162-294-31	CERAMIC	0.001MF	10%	50V
C710	1-130-776-00	FILM	0.47MF	5%	63V
C801	1-162-207-31	CERAMIC	22PF	5%	50V
C802	1-162-207-31	CERAMIC	22PF	5%	50V
C803	1-124-225-00	ELECT	100MF	20%	6.3V
C804	1-162-179-11	CERAMIC	0.1MF		50V
C901	1-126-017-11	ELECT	6800MF	20%	16V
C902	1-126-017-11	ELECT	6800MF	20%	16V
C903	1-124-762-00	ELECT	4700MF	20%	10V
C904	1-124-762-00	ELECT	4700MF	20%	10V
C905	1-126-048-11	ELECT	10MF	20%	50V
C906	1-126-048-11	ELECT	10MF	20%	50V
C907	1-126-012-11	ELECT	470MF	20%	16V
C908	1-124-636-00	ELECT	3300MF	20%	25V
C909	1-124-636-00	ELECT	3300MF	20%	25V
C910	1-123-377-00	ELECT	470MF	20%	63V
C911	1-123-377-00	ELECT	470MF	20%	63V
C912	1-126-052-11	ELECT	100MF	20%	50V
C913	1-214-725-00	ELECT	100MF	20%	50V
C914	1-124-912-11	ELECT	330MF	20%	50V
C915	1-130-789-00	FILM	1MF	10%	100V
C916	1-126-064-11	ELECT	220MF	20%	63V
C917	1-124-912-11	ELECT	330MF	20%	50V

## ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C918	1-161-063-00	CERAMIC	0.1MF	20%	16V
C919	1-161-063-00	CERAMIC	0.1MF	20%	16V
C920	1-124-702-11	ELECT	1000MF	20%	25V
C991	1-161-744-00	CERAMIC	0.01MF		400V
C992	1-161-742-00	(505,910)...CAP,CERAMIC	0.0022MF		
C993	1-161-742-00	(AEP,UK)...CERAMIC	0.0022MF	20%	400V
C994	1-161-742-00	(AEP,UK)...CERAMIC	0.0022MF	20%	400V
C995	1-161-742-00	(AEP,UK)...CERAMIC	0.0022MF	20%	400V
C996	1-161-742-00	(AEP,UK)...CERAMIC	0.0022MF	20%	400V
CN101	*1-564-720-11	PIN, CONNECTOR (SMALL TYPE)			4P
CN102	*1-564-724-31	PIN, CONNECTOR (SMALL TYPE)			8P
CN201	*1-564-724-11	PIN, CONNECTOR (SMALL TYPE)			8P
CNJ355	1-507-567-71	JACK, PIN 1P (DIGITAL OUT)			
CNJ401	1-562-999-21	(910).....JACK, PIN 2P (LINE OUT)			
CNJ401	1-563-560-11	(EXCEPT 910)...JACK, PIN 2P (LINE OUT)			
CNJ451	*1-564-509-11	PLUG, CONNECTOR			6P
CNJ992	1-526-929-11	(E).....INLET, AC (AC IN)			
CNJ992	1-526-930-11	(505,910)...INLET, AC (AC IN)			
CNJ992	1-526-931-11	(AEP,UK)...INLET, AC (AC IN)			
CNP4	*1-562-883-11	SOCKET, CONNECTOR			20P
CNP5	*1-564-718-11	PIN, CONNECTOR (SMALL TYPE)			2P
CNP6	*1-564-719-11	PIN, CONNECTOR (SMALL TYPE)			3P
CNP7	*1-564-522-31	PLUG, CONNECTOR			7P
CNP101	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE)			4P
CNP102	*1-564-710-11	PIN, CONNECTOR (SMALL TYPE)			8P
CNP201	*1-564-710-11	PIN, CONNECTOR (SMALL TYPE)			8P
CNP202	*1-564-507-11	PLUG, CONNECTOR			4P
CNP304	*1-564-506-11	PLUG, CONNECTOR			3P
CNP305	*1-564-508-11	(EXCEPT 910)...PLUG, CONNECTOR			5P
CNP356	*1-564-520-11	(EXCEPT 910)...PLUG, CONNECTOR			5P
CNP402	*1-564-506-11	PLUG, CONNECTOR			3P
CNP403	*1-564-506-11	PLUG, CONNECTOR			3P
CNP801	*1-564-340-00	PIN, CONNECTOR			6P
CNP802	*1-564-342-11	PIN, CONNECTOR			8P
CNP803	*1-564-496-11	PIN, CONNECTOR			3P
CP451	1-233-080-11	COMPOSITION CIRCUIT BLOCK			
CP551	1-233-080-11	COMPOSITION CIRCUIT BLOCK			
CP801	1-233-081-11	COMPOSITION CIRCUIT BLOCK			
CP802	1-232-995-11	COMPOSITION CIRCUIT BLOCK			
D101	8-719-107-94	DIODE 1SS202-1			
D301	8-719-107-94	DIODE 1SS202-1			
D901	8-719-937-50	DIODE DFO2M			
D902	8-719-937-49	DIODE RDF02M			
D903	8-719-107-94	DIODE 1SS202-1			
D904	8-719-107-94	DIODE 1SS202-1			
D905	8-719-107-94	DIODE 1SS202-1			
D906	8-719-107-94	DIODE 1SS202-1			
D907	8-719-107-94	DIODE 1SS202-1			
D908	8-719-908-03	DIODE GP08D			
D909	8-719-908-03	DIODE GP08D			
D910	8-719-934-26	DIODE HZS33-2L			
D911	8-719-933-57	DIODE HZS9B2L			
D912	8-719-928-82	DIODE HZS4.3NB3			
D913	8-719-908-03	DIODE GP08D			
D914	8-719-908-03	DIODE GP08D			
F991	1-532-078-00	(222)...FUSE, TIME-LAG (IA)			

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

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



## ELECTRICAL PARTS

Ref.No.	Part No.	Description
FLD801	1-519-411-11	INDICATOR TUBE, FLUORESCENT
IC101	8-752-030-93	IC CXA1081M
IC201	8-752-031-65	IC CXA1082AQ
IC202	8-759-303-90	IC STA341M
IC204	8-759-600-02	IC M5218L
IC210	8-759-009-07	IC MC14053BF
IC301	8-752-322-04	IC CXD1125Q
IC302	8-759-802-74	IC LC3516AML-15
IC303	8-759-939-35	IC CXD1088Q
IC304	8-759-939-94	IC TDA1541-N5
IC305	8-759-804-47	IC LC6523H-3270
IC306	8-759-202-12	IC TC74HC02P
IC357	8-759-202-13	(EXCEPT 910)...IC TC74HCU04P
IC401	8-759-900-72	IC NE5532P
IC451	8-759-700-40	IC NJM4560S
IC501	8-759-900-72	IC NE5532P
IC701	8-759-940-64	IC MSM6404A-181RS
IC703	8-759-803-42	IC LA6500-FA
IC801	8-752-802-24	IC CXP5016H-206S
IC802	8-741-138-70	IC BX-1387
IC901	8-759-604-29	IC 5F7805
IC902	8-759-604-47	IC 5F7905
IC903	8-759-604-34	IC 5F7815
IC904	8-759-604-46	IC 5F79M15
IC905	8-759-604-29	IC 5F7805
IC906	8-759-604-47	IC 5F7905
IC907	8-759-604-29	IC 5F7805
J451	1-563-727-11	JACK, LARGE TYPE (HEADPHONES)
L351	1-421-946-11	(EXCEPT 910)...TRANSFORMER, PULSE
L991	1-421-960-11	TRANSFORMER, LINE FILTER
M701	A-4608-320-B	MOTOR ASSY, LOADING
PS201A	1-532-605-00	(222)...LINK, IC
PS202A	1-532-605-00	(222)...LINK, IC
PS203A	1-532-605-00	(222)...LINK, IC
PS204A	1-532-605-00	(222)...LINK, IC
PS205A	1-532-605-00	(222)...LINK, IC
PS701A	1-532-605-00	(222)...LINK, IC
PS901A	1-532-675-00	(222)...LINK, IC
PS902A	1-532-675-00	(222)...LINK, IC
PS903A	1-532-637-00	(222)...LINK, IC
PS904A	1-532-637-00	(222)...LINK, IC
PS905A	1-532-637-00	(222)...LINK, IC
PS906A	1-532-637-00	(222)...LINK, IC
Q101	8-729-103-43	TRANSISTOR 2SB734
Q201	8-729-177-43	TRANSISTOR 2SD774
Q202	8-729-103-43	TRANSISTOR 2SB734
Q203	8-729-900-80	TRANSISTOR DTC144ES
Q204	8-729-900-80	TRANSISTOR DTC114ES
Q301	8-729-600-27	TRANSISTOR 2SC634SP
Q401	8-729-107-99	TRANSISTOR 2SC3622A-K
Q402	8-729-107-99	TRANSISTOR 2SC3622A-K
Q501	8-729-107-99	TRANSISTOR 2SC3622A-K
Q502	8-729-107-99	TRANSISTOR 2SC3622A-K
Q703	8-729-900-61	TRANSISTOR DTA114ES
Q704	8-729-900-61	TRANSISTOR DTA114ES

## ELECTRICAL PARTS

Ref.No.	Part No.	Description			
Q705	8-729-900-61	TRANSISTOR DTC114ES			
Q901	8-729-205-95	TRANSISTOR 2SA1428Y			
R101	1-215-396-00	CARBON	91	5%	1/6W
R102	1-214-092-00	METAL	22	1%	1/4W
R103	1-249-417-11	CARBON	1K	5%	1/6W
R104	1-215-450-00	CARBON	16K	5%	1/6W
R105	1-249-428-11	CARBON	8.2K	5%	1/6W
R106	1-249-428-11	CARBON	8.2K	5%	1/6W
R107	1-249-432-11	CARBON	18K	5%	1/6W
R108	1-249-432-11	CARBON	18K	5%	1/6W
R109	1-249-441-11	CARBON	100K	5%	1/6W
R110	1-249-429-11	CARBON	10K	5%	1/6W
R111	1-249-417-11	CARBON	1K	5%	1/6W
R112	1-249-421-11	CARBON	2.2K	5%	1/6W
R201	1-249-441-11	CARBON	100K	5%	1/6W
R202	1-249-440-11	CARBON	82K	5%	1/6W
R205	1-249-431-11	CARBON	15K	5%	1/6W
R206	1-249-429-11	CARBON	10K	5%	1/6W
R207	1-249-435-11	CARBON	33K	5%	1/6W
R208	1-249-435-11	CARBON	33K	5%	1/6W
R209	1-249-429-11	CARBON	10K	5%	1/6W
R211	1-249-409-11	CARBON	220	5%	1/6W
R212	1-249-423-11	CARBON	3.3K	5%	1/6W
R213	1-215-489-00	CARBON	680K	5%	1/6W
R214	1-249-441-11	CARBON	100K	5%	1/6W
R215	1-215-486-00	CARBON	510K	5%	1/6W
R216	1-249-429-11	CARBON	10K	5%	1/6W
R217	1-249-433-11	CARBON	22K	5%	1/6W
R218	1-249-429-11	CARBON	10K	5%	1/6W
R219	1-215-471-00	METAL	120K	1%	1/6W
R220	1-215-434-00	METAL	3.6K	1%	1/6W
R221	1-215-493-00	CARBON	1M	5%	1/6W
R222	1-249-433-11	CARBON	22K	5%	1/6W
R223	1-249-441-11	CARBON	100K	5%	1/6W
R224	1-249-437-11	CARBON	47K	5%	1/6W
R225	1-249-437-11	CARBON	47K	5%	1/6W
R226	1-215-473-00	CARBON	150K	5%	1/6W
R227	1-215-445-00	METAL	10K	1%	1/6W
R228	1-215-445-00	METAL	10K	1%	1/6W
R229	1-215-486-00	CARBON	510K	5%	1/6W
R230	1-249-429-11	CARBON	10K	5%	1/6W
R231	1-249-421-11	CARBON	2.2K	5%	1/6W
R232	1-249-421-11	CARBON	2.2K	5%	1/6W
R251	1-215-469-00	METAL	100K	1%	1/6W
R252	1-215-469-00	METAL	100K	1%	1/6W
R261	1-215-485-00	CARBON	470K	5%	1/6W
R262	1-215-485-00	CARBON	470K	5%	1/6W
R301	1-249-441-11	CARBON	100K	5%	1/6W
R302	1-249-441-11	CARBON	100K	5%	1/6W
R303	1-249-411-11	CARBON	330	5%	1/6W
R304	1-249-411-11	CARBON	330	5%	1/6W
R305	1-249-429-11	CARBON	10K	5%	1/6W
R310	1-249-441-11	CARBON	100K	5%	1/6W
R312	1-249-417-11	CARBON	1K	5%	1/6W
R313	1-249-425-11	CARBON	4.7K	5%	1/6W
R314	1-249-417-11	CARBON	1K	5%	1/6W

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## ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R316	1-249-411-11	CARBON	330	5%	1/6W
R317	1-249-411-11	CARBON	330	5%	1/6W
R318	1-249-411-11	CARBON	330	5%	1/6W
R319	1-249-411-11	CARBON	330	5%	1/6W
R320	1-249-411-11	CARBON	330	5%	1/6W
R321	1-249-413-11	CARBON	470	5%	1/6W
R322	1-249-417-11	CARBON	1K	5%	1/6W
R323	1-249-819-11	CARBON	330	5%	1/6W
R324	1-249-411-11	CARBON	330	5%	1/6W
R325	1-249-411-11	CARBON	330	5%	1/6W
R326	1-249-411-11	CARBON	330	5%	1/6W
R327	1-249-411-11	(EXCEPT 910)...CARBON	330	5%	1/6W
R328	1-249-411-11	(EXCEPT 910)...CARBON	330	5%	1/6W
R329	1-249-411-11	(EXCEPT 910)...CARBON	330	5%	1/6W
R330	1-249-411-11	CARBON	330	5%	1/6W
R331	1-249-411-11	CARBON	330	5%	1/6W
R357	1-215-394-00	(EXCEPT 910)...CARBON	75	5%	1/6W
R358	1-249-417-11	(EXCEPT 910)...CARBON	1K	5%	1/6W
R359	1-249-405-11	(EXCEPT 910)...CARBON	100	5%	1/6W
R401	1-249-930-11	CARBON	2K	1%	1/4W
R402	1-249-924-11	CARBON	1.1K	1%	1/4W
R403	1-246-545-00	CARBON	1M	1%	1/4W
R404	1-247-721-11	CARBON	4.7K	1%	1/4W
R405	1-247-717-11	CARBON	2.2K	1%	1/4W
R406	1-247-717-11	CARBON	2.2K	1%	1/4W
R407	1-249-983-11	CARBON	330K	1%	1/4W
R408	1-249-921-11	CARBON	820	1%	1/4W
R409	1-247-713-11	CARBON	1K	1%	1/4W
R410	1-249-921-11	CARBON	820	1%	1/4W
R411	1-249-469-11	CARBON	100K	1%	1/4W
R412	1-247-193-00	CARBON	22K	1%	1/4W
R413	1-247-700-11	CARBON	100	1%	1/4W
R414	1-247-700-11	CARBON	100	1%	1/4W
R415	1-249-469-11	CARBON	100K	1%	1/4W
R416	1-249-469-11	CARBON	100K	1%	1/4W
R452	1-247-713-11	CARBON	1K		1/4W
R455	1-247-700-11	CARBON	100		1/4W
R501	1-249-930-11	CARBON	2K	1%	1/4W
R502	1-249-924-11	CARBON	1.1K	1%	1/4W
R503	1-246-545-00	CARBON	1M	1%	1/4W
R504	1-247-721-11	CARBON	4.7K	1%	1/4W
R505	1-247-717-11	CARBON	2.2K	1%	1/4W
R506	1-247-717-11	CARBON	2.2K	1%	1/4W
R507	1-249-983-11	CARBON	330K	1%	1/4W
R508	1-249-921-11	CARBON	820	1%	1/4W

## ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R509	1-247-713-11	CARBON	1K	1%	1/4W
R510	1-249-921-11	CARBON	820	1%	1/4W
R512	1-247-193-00	CARBON	22K	1%	1/4W
R552	1-247-713-11	CARBON	1K		1/4W
R555	1-247-700-11	CARBON	100		1/4W
R703	1-249-440-11	CARBON	82K	5%	1/6W
R704	1-249-440-11	CARBON	82K	5%	1/6W
R705	1-215-468-00	CARBON	91K	5%	1/6W
R706	1-215-468-00	CARBON	91K	5%	1/6W
R707	1-249-385-11	CARBON	2.2	5%	1/6W
R801	1-249-429-11	CARBON	10K	5%	1/6W
R802	1-249-429-11	CARBON	10K	5%	1/6W
R803	1-249-429-11	CARBON	10K	5%	1/6W
R804	1-249-429-11	CARBON	10K	5%	1/6W
R805	1-249-429-11	CARBON	10K	5%	1/6W
R806	1-249-429-11	CARBON	10K	5%	1/6W
R807	1-249-429-11	CARBON	10K	5%	1/6W
R901	1-249-417-11	CARBON	1K	5%	1/6W
R902	1-249-441-11	CARBON	100K	5%	1/6W
R903	1-249-401-11	CARBON	47	5%	1/6W
R904	1-212-966-11	FUSIBLE	22	5%	1/2W F
R905	1-249-417-11	CARBON	1K	5%	1/6W
R906	1-249-421-11	CARBON	2.2K	5%	1/6W
R907	1-249-437-11	CARBON	47K	5%	1/6W
R908	1-215-481-00	CARBON	330K	5%	1/6W
R909	1-249-429-11	CARBON	10K	5%	1/6W
R910	1-212-966-11	FUSIBLE	22	5%	1/2W F
R911	1-212-966-11	FUSIBLE	22	5%	1/2W F
RV101	1-237-194-11	RES, ADJ, CARBON	20K		
RV102	1-237-192-11	RES, ADJ, CARBON	5K		
RV201	1-237-194-11	RES, ADJ, CARBON	20K		
RV202	1-237-194-11	RES, ADJ, CARBON	20K		
RV203	1-228-990-00	RES, ADJ, METAL GLAZE	1K		
RV204	1-228-993-00	RES, ADJ, METAL GLAZE	4.7K		
RV451	1-237-438-11	RES, VAR, CARBON	20K/20K		(HEADPHONES LEVEL)
S351	1-554-481-00	(EXCEPT 910)...SWITCH, SLIDE			(DIGITAL OUT)
S701	1-570-203-11	SWITCH, LEAF (LOADING)			
S801	1-554-303-21	SWITCH, KEY BOARD	(1)		
S802	1-554-303-21	SWITCH, KEY BOARD	(2)		
S803	1-554-303-21	SWITCH, KEY BOARD	(3)		
S804	1-554-303-21	SWITCH, KEY BOARD	(4)		
S805	1-554-303-21	SWITCH, KEY BOARD	(5)		
S806	1-554-303-21	SWITCH, KEY BOARD	(6)		

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ELECTRICAL PARTS

Ref.No.	Part No.	Description
S807	1-554-303-21	SWITCH, KEY BOARD (7)
S808	1-554-303-21	SWITCH, KEY BOARD (8)
S809	1-554-303-21	SWITCH, KEY BOARD (9)
S810	1-554-303-21	SWITCH, KEY BOARD (10)
S811	1-554-303-21	SWITCH, KEY BOARD (11)
S812	1-554-303-21	SWITCH, KEY BOARD (12)
S813	1-554-303-21	SWITCH, KEY BOARD (13)
S814	1-554-303-21	SWITCH, KEY BOARD (14)
S815	1-554-303-21	SWITCH, KEY BOARD (15)
S816	1-554-303-21	SWITCH, KEY BOARD (16)
S817	1-554-303-21	SWITCH, KEY BOARD (17)
S818	1-554-303-21	SWITCH, KEY BOARD (18)
S819	1-554-303-21	SWITCH, KEY BOARD (19)
S820	1-554-303-21	SWITCH, KEY BOARD (20)
S821	1-554-303-21	SWITCH, KEY BOARD (+10)
S822	1-554-303-21	SWITCH, KEY BOARD (0)
S823	1-554-303-21	SWITCH, KEY BOARD (CHECK)
S824	1-554-303-21	SWITCH, KEY BOARD (CLEAR)
S825	1-554-303-21	SWITCH, KEY BOARD (AUTO SPACE)
S826	1-554-303-21	SWITCH, KEY BOARD (PROGRAM)
S827	1-554-303-21	SWITCH, KEY BOARD (SHUFFLE)
S828	1-554-303-21	SWITCH, KEY BOARD ( ▶ )
S829	1-554-303-21	SWITCH, KEY BOARD ( ■ )
S830	1-554-303-21	SWITCH, KEY BOARD ( ■ )
S831	1-554-303-21	SWITCH, KEY BOARD ( ◀◀ )
S832	1-554-303-21	SWITCH, KEY BOARD ( ▶▶ )
S833	1-554-303-21	SWITCH, KEY BOARD ( ◀ )
S834	1-554-303-21	SWITCH, KEY BOARD ( ◀ )
S835	1-554-303-21	SWITCH, KEY BOARD ( ▶▶ )
S836	1-554-303-21	SWITCH, KEY BOARD ( ▶▶ )
S837	1-554-303-21	SWITCH, KEY BOARD (REPEAT 1/ALL)
S838	1-554-303-21	SWITCH, KEY BOARD (CLEAR)
S839	1-554-303-21	SWITCH, KEY BOARD (TIME/NEXT(PGM))
S840	1-554-303-21	SWITCH, KEY BOARD ( ▲ )
S841	1-570-873-11	SWITCH, SLIDE (TIMER)
S991	1-553-318-00	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)
T901	▲ 1-448-715-11	(505,910)...TRANSFORMER, POWER
T901	▲ 1-448-717-11	(E)...TRANSFORMER, POWER
T901	▲ 1-448-718-11	(AEP,UK)...TRANSFORMER, POWER
TB901	*1-535-121-00	TERMINAL
X301	1-567-741-11	VIBRATOR, CRYSTAL (16MHz)
X302	1-567-686-11	OSCILLATOR, CERAMIC
X801	1-567-192-11	OSCILLATOR, CERAMIC
VS991	▲ 1-526-576-41	(E)...SELECTOR, POWER VOLTAGE (VOLTAGE SELECTOR)

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-526-565-00	(E)...AC PLUG ADAPTOR
1-558-787-11	(910).....CORD, CONNECTION
1-558-787-31	(EXCEPT 910)...CORD, CONNECTION
▲ 1-558-032-11	(UK).....CORD, POWER
▲ 1-558-833-11	(E).....CORD, POWER
▲ 1-558-834-11	(505,910)...CORD, POWER
▲ 1-558-835-11	(AEP).....CORD, POWER
3-536-825-00	BAG, PROTECTING
3-701-630-00	BAG, POLYETHYLENE
3-703-390-01	(505:US,910)...INSTRUCTION
3-795-629-11	(AEP).....INSTRUCTION
3-765-657-11	(222).....MANUAL, INSTRUCTION
3-765-657-21	(505).....MANUAL, INSTRUCTION
3-765-657-31	(Canadian)...MANUAL, INSTRUCTION
3-765-657-41	(AEP).....MANUAL, INSTRUCTION
3-765-925-21	(910).....MANUAL, INSTRUCTION
4-912-943-11	(AEP,UK).....INDIVIDUAL CARTON
4-912-943-21	(505:US).....INDIVIDUAL CARTON
4-912-943-31	(Canadian)...INDIVIDUAL CARTON
4-912-943-41	(E).....INDIVIDUAL CARTON
4-912-943-51	(910).....INDIVIDUAL CARTON
4-912-944-01	CUSHION
*4-912-947-01	(EXCEPT Canadian)...KEY, LOCK
4-913-941-01	HOLDER, COMMANDER
4-858-078-00	(EXCEPT E)...SHEET, PROTECTION
7-632-650-74	(EXCEPT E)...SHEET, PROTECTION 600MM

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