

TC-R503/R503ES

SERVICE MANUAL

TC-R503:
US Model
Canadian Model

TC-R503ES:
AEP Model
UK Model
E Model



Dolby noise reduction manufactured under license from
Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol  are trademarks of
Dolby Laboratories Licensing Corporation.

SPECIFICATIONS

Recording system 4-track 2-channel stereo
Fast-forward and rewind time Approx. 90 sec. (with C-60 cassette)
Bias frequency 105 kHz
Signal-to-noise ratio (NAB, at peak level)

Cassette	DOLBY NR switch		
	OFF	B-TYPE ON	C-TYPE ON
TYPE IV (Sony METAL-ES)	59 dB	66 dB	72 dB
TYPE II (Sony UX-S)	58 dB	65 dB	71 dB
TYPE I (Sony HF-S)	54 dB	61 dB	67 dB

Total harmonic distortion 1.0% (with Sony METAL-ES cassettes)
Frequency response DOLBY NR OFF
• With TYPE IV cassette (Sony METAL-ES)
30 – 17,000 Hz (± 3 dB)
30 – 15,000 Hz (± 3 dB, 0 VU recording)
• With TYPE II cassette (Sony UX-S)
30 – 17,000 Hz (± 3 dB)
• With TYPE I cassette (Sony HF-S)
30 – 15,000 Hz (± 3 dB)
Wow and flutter 0.05% WRMS (NAB)
Inputs Line inputs (phono jacks)
Sensitivity 77.5mV (-20 dB)
Input impedance 50 kilohms
Outputs Line outputs (phono jacks)
Rated output level 0.44 V (-5 dB) at
load impedance 47 kilohms
Load impedance over 10 kilohms
Headphones output (stereo phone jack)
Output level variable from -20 dB to
 $-\infty$ dB at load impedance 8 ohms

Tape Transport Mechanism Type	TC-CMAY B-12
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General

Power requirements 120 V AC, 60 Hz
Power consumption 20 Watts
Dimensions Approx. 430 x 110 x 285 mm (w/h/d)
(17 x 4 $\frac{3}{8}$ x 11 $\frac{1}{4}$ inches)
Weight Approx. 4.7 kg (10 lbs 6 oz)
Power requirements
US, Canadian model: 120V ac, 60 Hz
AEP model: 220V ac, 50/60 Hz
UK model: 240V ac, 50/60 Hz
E model: 120, 220, 240V ac adjustable, 50/60 Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND 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 TRAME ET
UNE MARQUE  SUR LES DIAGRAMMES SCHÉ-
MATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES
POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REM-
PLACER CES COMPOSANTS QUE PAR DES PIÈCES
SONY DONT LES NUMÉROS SONT DONNÉS DANS CE
MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR
SONY.

STEREO CASSETTE DECK

SONY®



TC

FEATURES

- The Dolby HX PRO* system improves the linearity of the tape's high range response during recording.
- The record/playback head is made of a laser amorphous magnetic alloy using LC-OFC winding.
- The roto-bilateral head assures the same performance characteristics in either tape transport direction.
- For optimum performance in the Dolby NR system, the recording level can be calibrated to the sensitivity of each tape played back.
- Quick reverse function prevents tape transport on the leader tape.
- The AMS, blank skip and music scan functions allow easy access to a desired selection.

- Timer-activated play/recording is possible using the optional timer.
- The optional remote control unit enables various operations to be remotely controlled.
- The digital linear counter indicates the recording or playback time which has elapsed on the tape.
- Bright FL-display peak program meters indicate the transient peaks.
- B and C type Dolby NR system reduces noise.

* "Dolby", the double-D symbol and HX PRO are trade marks of the Dolby Laboratories Licensing Corporation. Noise reduction and HX PRO headroom extension manufactured under license from Dolby Laboratories Licensing Corporation.
HX PRO originated by Bang and Olufsen.

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 microamperes). 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)

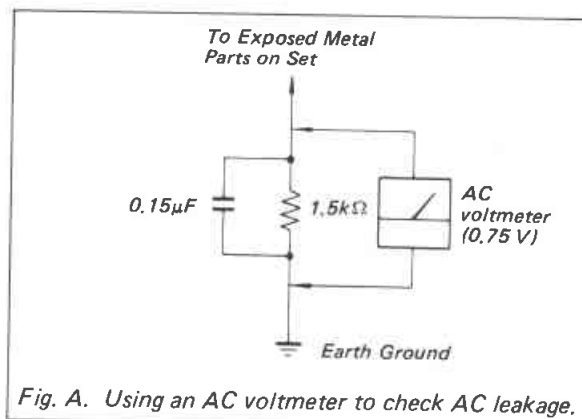
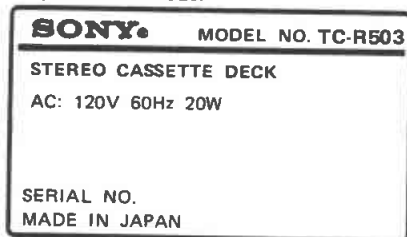


Fig. A. Using an AC voltmeter to check AC leakage.

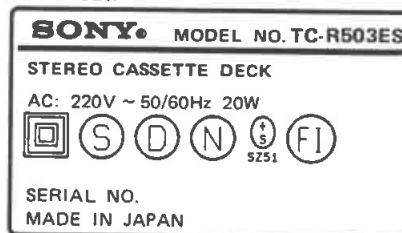
MODEL IDENTIFICATION

— Specification Label —

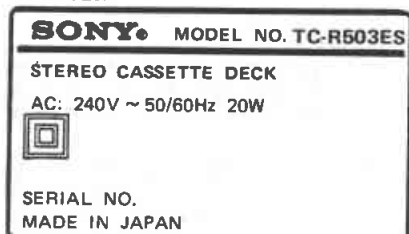
US, Canadian model



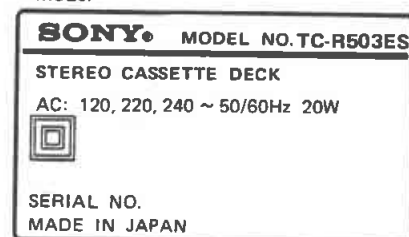
AEP model



UK model



E model



SECTION 1 ADJUSTMENTS

1-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:

record/playback head	pinch roller
erase head	rubber belts
capstan	idler
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	30 to 70 g·cm (0.42 to 0.97 oz·inch)
REV	CQ-102RC	30 to 70 g·cm (0.42 to 0.97 oz·inch)
FF REW	CQ-201B	80 to 160 g·cm (1.12 to 2.22 oz·inch)

1-2. ELECTRICAL ADJUSTMENTS

Note: The adjustment should be performed in the order given in this service manual.
The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.

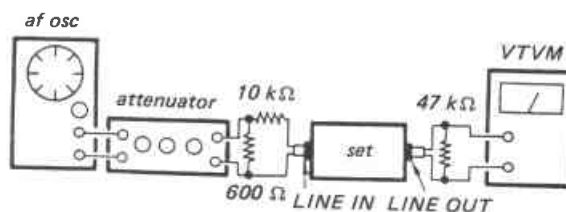
DOLBY NR switch: OFF
TIMER switch: OFF
REC CAL knob: CENTER (center click)
BIAS ADJ knob: CENTER (center click)

- Set the TAPE select switches according to the tape as follows.

Tape	Tape type indicator
CS-121	TYPE I
CS-221	TYPE II
CS-412	TYPE IV

- Standard Record:
Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

— Record Mode —



Standard Input Level

	LINE IN
source impedance	10 kΩ
input level	0.2 V (−10 dB)

Standard Output Level

	LINE OUT
load impedance	47 kΩ
output level	0.44 V (−5 dB)

Test Tape:

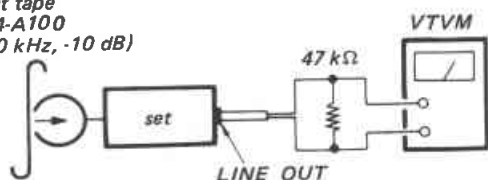
Type	Signal	Used for
P-4-A100	10kHz, −10dB	Azimuth Adjustment
P-4-L300	315 Hz, 0dB	Level Adjustment
WS-48B	3 kHz, 0dB	Tape Speed Adjustment

Record/Playback Head Azimuth Adjustment

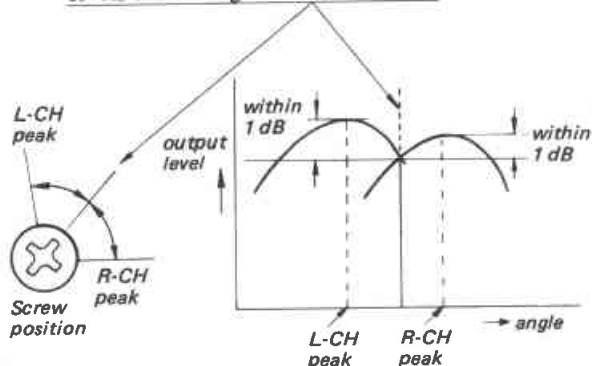
Procedure: Adjust both FWD and REV.

1. Mode: playback

test tape
P-4-A100
(10 kHz, -10 dB)

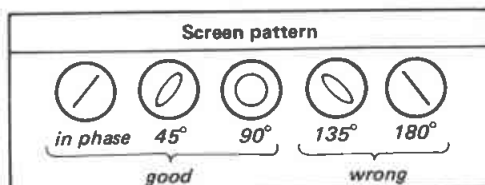
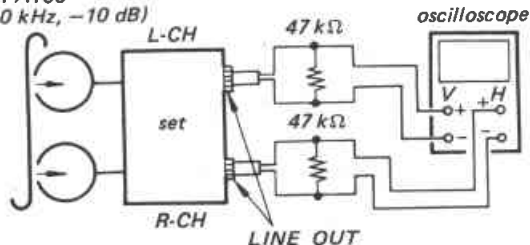


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB.



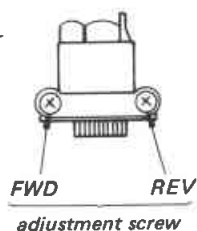
3. Phase Check
Mode: playback

test tape
P-4-A100
(10 kHz, -10 dB)



Adjustment Location:

— Record/Playback head —



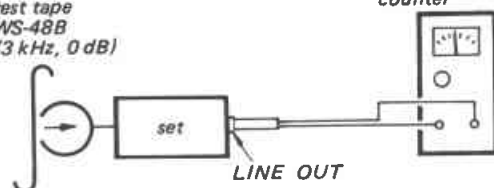
Tape Speed Adjustment

Procedure:

Mode: FWD playback

speed checker
LFM-30
or
digital frequency
counter

test tape
WS-48B
(3 kHz, 0 dB)



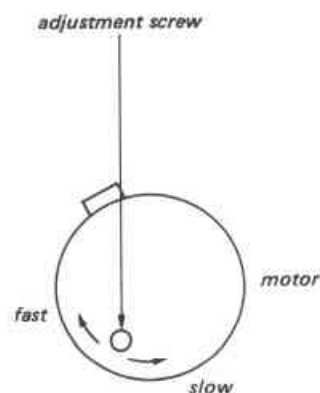
Specification:

Speed checker	Digital frequency counter
-1 - +1%	2,970 - 3,030 Hz

Frequency difference between the beginning and the end of the tape should be within 1.5% (45 Hz).

Adjustment Location:

Adjust with a screwdriver. When turning adjustment resistor of clockwise, speed will be fast.

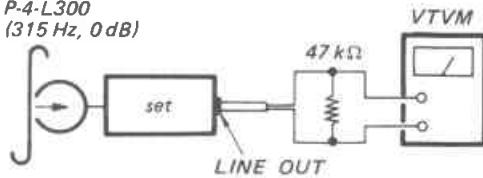


Playback Level adjustment

Procedure:

1. Mode: playback

test tape
P-4-L300
(315 Hz, 0 dB)



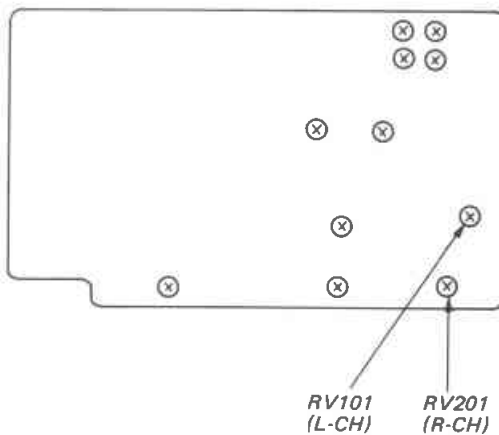
2. Adjust RV101 (L-CH) and RV201 (R-CH) to obtain the specified LINE OUT level.

Specification: LINE OUT level: 0.41 – 0.46 V
(-5.5 to -4.5 dB)

Level difference between channels: less than 0.5 dB

Confirm that the LINE OUT level is not changed when repeating playback and stop modes.

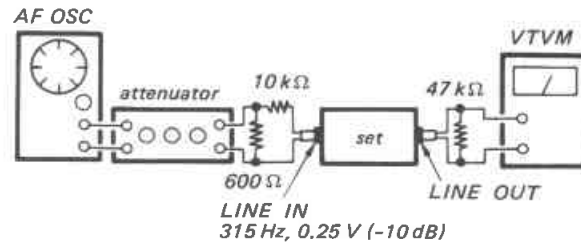
Adjustment Location: AUDIO board



Meter Level adjustment

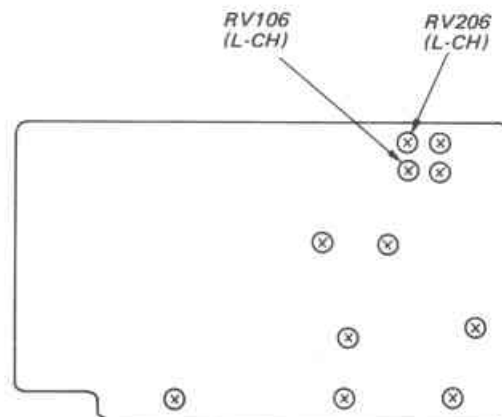
Procedure:

1. Mode: record



2. Adjust the REC LEVEL knob for -5 dB reading on VTVM.
3. Adjust RV106 (L-CH) and RV206 (R-CH) for the point where meter 0VU (-4 dB) section segments lights up.
4. Confirm that all the meter segments light up when adjusting the REC LEVEL knob for +9 dB reading on VTVM.

Adjustment Location: AUDIO board



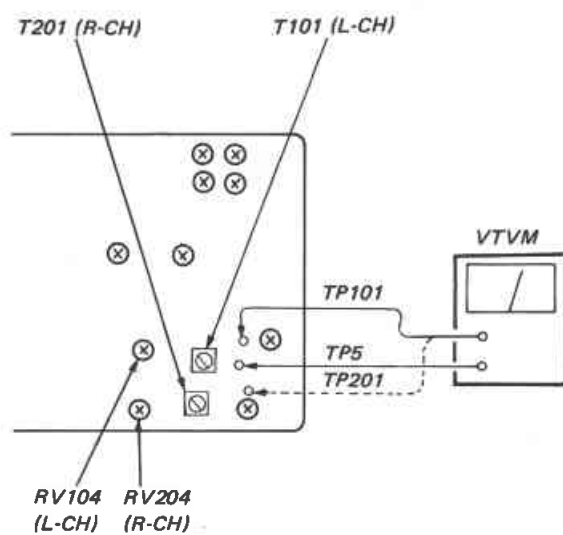
Bias Consumption Current Adjustment

This adjustment should be performed when replacing IC305, T101, T201.

Procedure:

1. Adjust RV104 (L-CH), RV204 (R-CH) for mechanical center.
2. Connect a VTVM between TP5 and TP101 (L-CH), TP201 (R-CH) on audio board.
3. Insert CS-412 and put into REC/FWD mode.
4. Adjust T101 (L-CH), T201 (R-CH) for a minimum reading (reference: 40 mV) on VTVM.

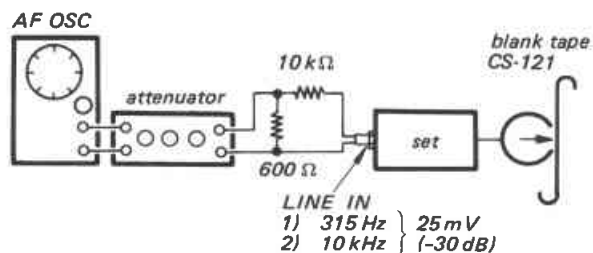
Adjustment Location: AUDIO board


Record Bias Adjustment
Setting:

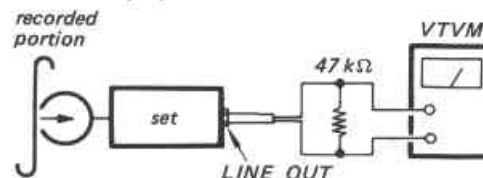
REC LEVEL control: standard record
(See page 5.)

Procedure:

1. Mode: record

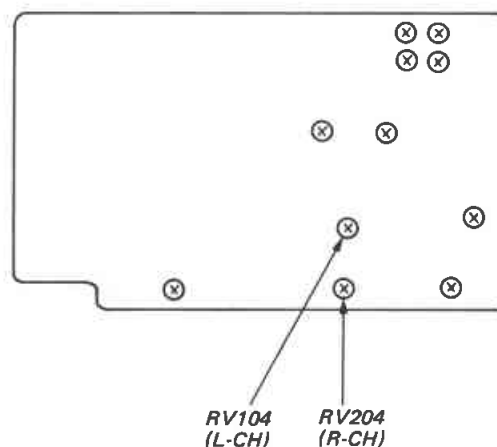


2. Mode: playback



3. Confirm that the 10 kHz playback output is 0 dB relative the 315 Hz output. If necessary, adjust RV104 (L-CH), RV204 (R-CH) and repeat the steps given above.

Adjustment Location: AUDIO board



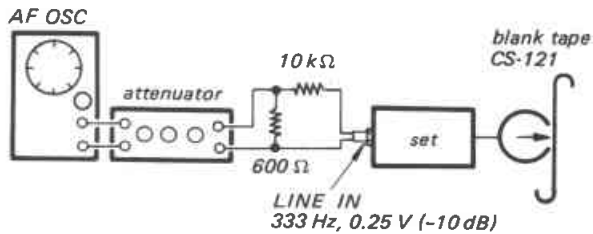
Record Level Adjustment

Setting:

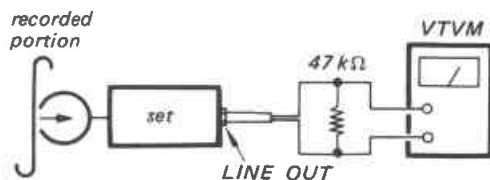
REC LEVEL control: standard record
(See page 5.)

Procedure:

1. Mode: record



2. Mode: playback

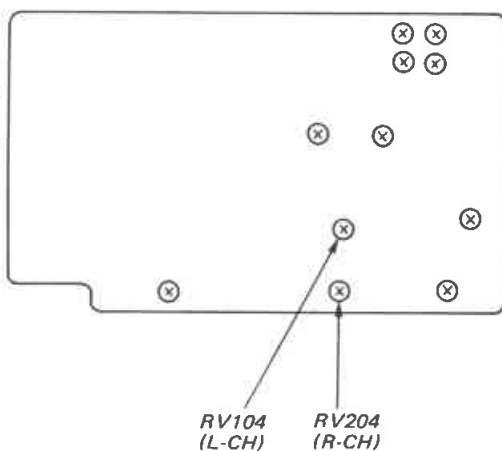


3. Confirm that the signal level is within the specification below. If necessary, adjust RV103 (L-CH), RV203 (R-CH) and repeat the step 1-3.

Specification:

LINE OUT level: 0.41 – 0.46 V
(-5.5 to -4.5 dB)

Adjustment Location: AUDIO board

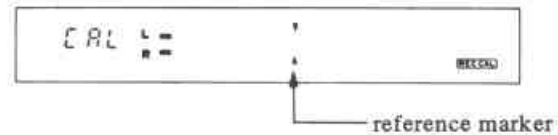


CAL Oscillation Level/CAL Meter Level Adjustment

Conditions:

- REC CAL knob: center (center click)
- Ground system control board TP-1 (CAL mode) as shown in the figure. (Display tube displays CAL, and CAL oscillation state begins.)

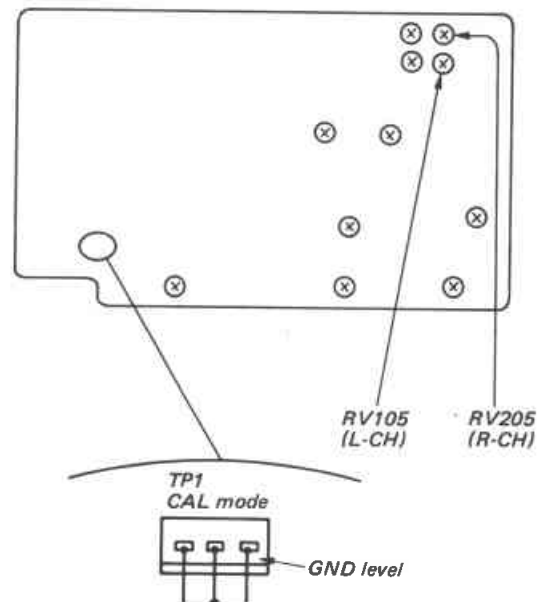
CAL mode display

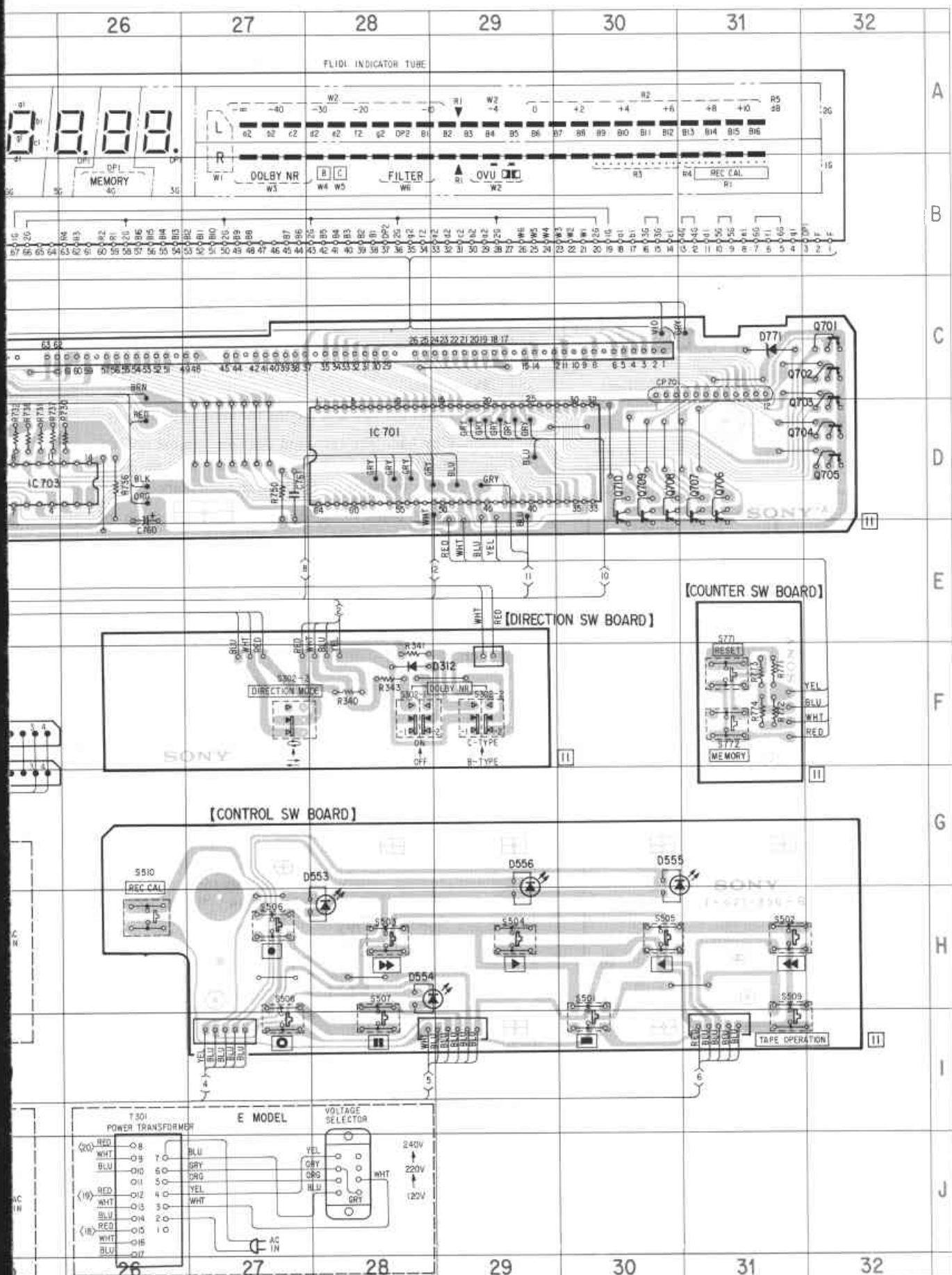


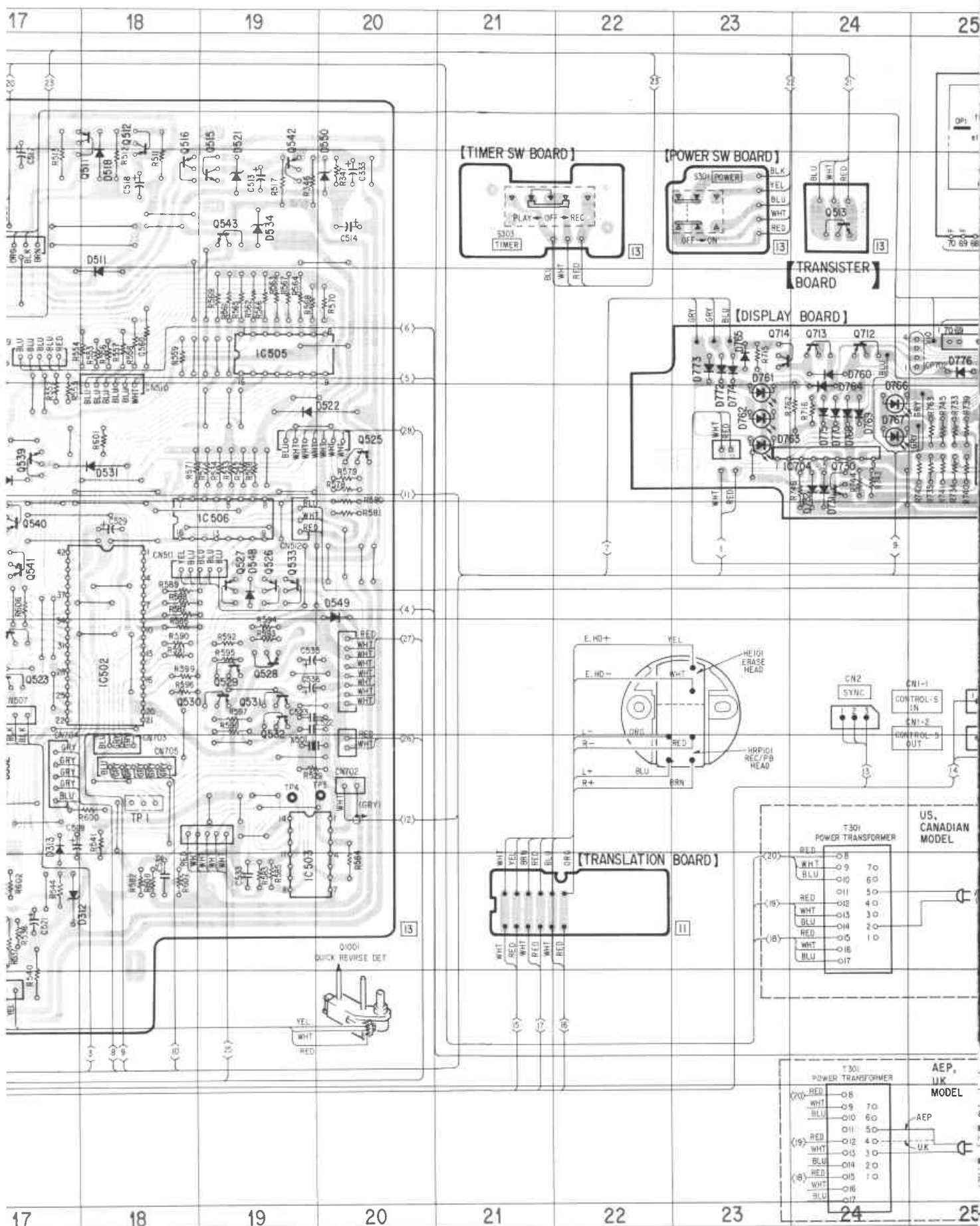
Procedure:

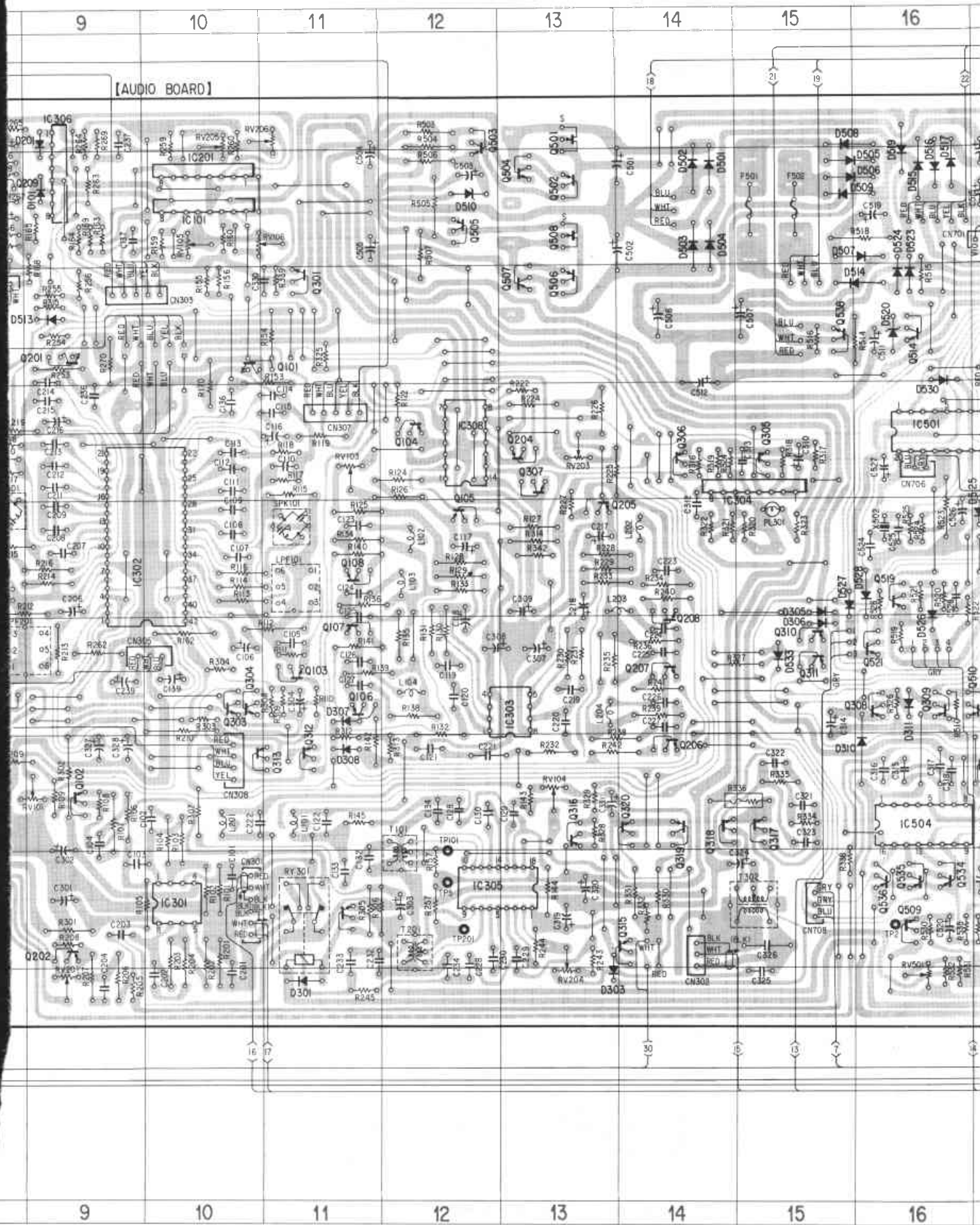
1. Insert CS-121 and record for about 10 seconds.
2. Play back the recorded portion. Adjust RV105 (L-CH) and RV205 (R-CH) so that the level meter registers up to the reference marker.
3. After adjustment, remove the connection of TP1.

Adjustment Location: AUDIO board











Quick Reverse Sensitivity Adjustment

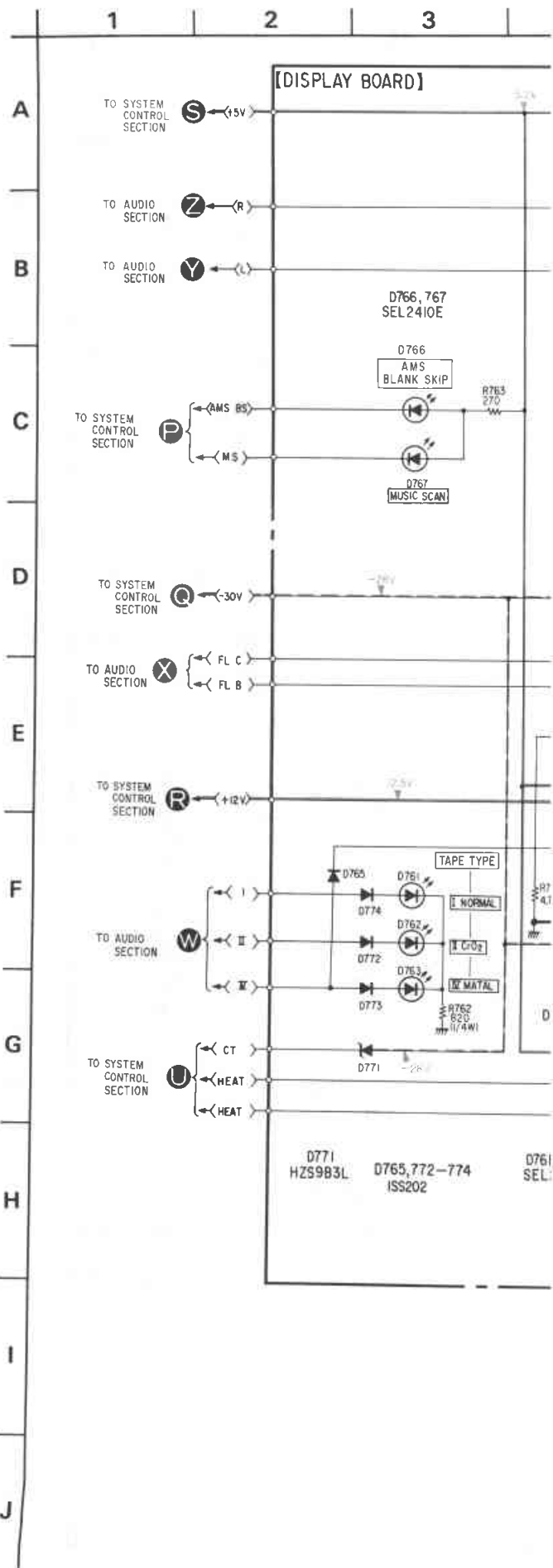
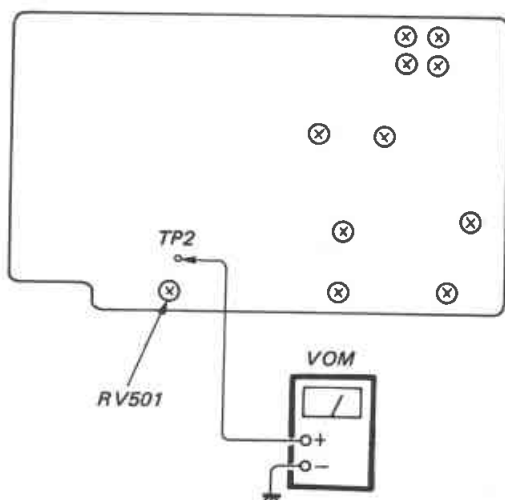
Procedure:

1. Set DIRECTION MODE switch to $\rightleftarrows$.
2. Connect a DC voltmeter to audio board TP2.
3. Insert an empty cassette with no tape wound inside and put into FWD state.
4. Adjust RV501 for 10V reading on the DC voltmeter.
5. Repeat FWD, STOP two or three times and check the voltage again.

Specification: 10 V $\pm$ 0.5 V

6. Set DIRECTION MODE switch to $\curvearrowright$.
7. Insert C-120 and put into FWD state.
8. Conform that the tape reverses before the tape end. (Should reverse at the joint of magnetic portion and the leader tape.)

Adjustment Location: AUDIO board



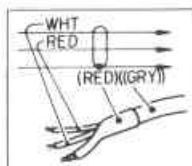


● Semiconductors Lead Layout

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D101	B-9	D555	H-30	Q207	F-14	Q538	C-15
D201	A-9	D556	H-29	Q208	E-14	Q539	D-17
D301	I-11	D731	D-24	Q209	B-8	Q540	E-17
D302	D-17	D732	D-24	Q301	C-11	Q541	E-17
D303	I-14	D760	C-24	Q302	H-11	Q542	B-19
D305	E-15	D761	D-23	Q303	F-10	Q543	B-19
D306	F-15	D762	D-23	Q304	F-10	Q701	C-32
D307	F-11	D763	D-23	Q305	D-15	Q702	C-32
D308	G-11	D764	D-24	Q306	D-14	Q703	D-32
D310	G-16	D765	C-23	Q307	D-13	Q704	D-32
D311	F-16	D766	D-24	Q308	F-16	Q705	D-32
D312 (DISPLAY) SW	F-28	D767	D-24	Q309	F-16	Q706	D-31
		D768	D-24	Q310	F-15	Q707	D-31
D312 (AUDIO)	H-17	D769	D-24	Q311	F-15	Q708	D-31
		D770	D-24	Q312	G-11	Q709	D-30
D313	G-17	D771	C-31	Q313	G-11	Q710	D-30
		D772	C-23	Q315	H-14	Q712	C-24
D501	B-14	D773	C-23	Q316	G-13	Q713	C-24
D502	B-14	D774	C-23	Q317	G-15	Q714	C-23
D503	B-14	D775	D-24	Q318	G-15	Q730	D-24
D504	B-14	D776	C-25	Q319	G-14	Q1001	I-20
D505	B-15	IC101	B-10	Q320	G-14	Q1002	D-3
D506	B-15			Q501	A-13	Q1003	A-3
D507	B-16	IC201	B-10	Q502	B-13	Q503	A-12
D508	A-15	IC301	H-10	Q503	A-12		
D509	B-15	IC302	E-10	Q504	B-13	Q505	B-12
D510	B-12	IC303	F-13	Q505	B-12	Q506	C-13
D511	C-18	IC304	D-15	Q506	C-13	Q507	C-13
D512	F-17	IC305	H-12	Q508	B-13	Q509	H-16
D513	C-9	IC306	D-9	Q510	F-16	Q511	A-18
D514	C-16	IC307	C-6	Q512	A-18	Q513	B-24
D515	B-16	IC308	D-12	Q514	C-16	Q515	B-19
D516	B-16	IC501	D-16	Q516	B-19	Q518	H-17
D517	B-16	IC502	F-18	Q519	E-16	Q520	E-17
D518	B-18	IC503	G-19	Q521	F-16	Q522	F-17
D519	B-16	IC504	G-16	Q523	F-17	Q525	D-20
D520	C-16	IC505	C-19	Q526	E-19	Q527	E-19
D521	B-19	IC506	E-19	Q528	F-19	Q529	F-19
D522	D-20	IC701	D-28	Q530	F-19	Q531	F-19
D523	C-16	IC703	D-25	Q532	F-19	Q533	E-19
D524	C-16	IC704	D-24	Q534	H-16	Q535	H-16
D525	E-17	Q101	C-11	Q536	H-16	Q537	G-17
D526	E-16			Q538	F-19	Q539	D-17
D527	E-15	Q102	G-9	Q540	E-17		
D528	E-16	Q103	F-11	Q541	E-17	Q542	B-19
D530	C-16	Q104	D-12	Q543	B-19	Q701	C-32
D531	D-18	Q105	E-12	Q702	C-32	Q703	D-32
D532	G-17	Q106	F-11	Q704	D-32	Q705	D-32
D533	F-15	Q107	F-11	Q706	D-31	Q707	D-31
D534	B-19	Q108	E-11	Q708	D-31	Q709	D-30
D548	E-19	Q109	B-8	Q710	D-30	Q712	C-24
D549	E-20	Q201	C-9	Q713	C-24	Q714	C-23
D550	B-20	Q202	H-9	Q730	D-24	Q1001	I-20
D551	I-7	Q203	F-8	Q1002	D-3	Q1003	A-3
D552	I-5	Q204	D-13	Q1003	A-3	Q1003	A-3
D553	H-28	Q205	E-13				
D554	H-28	Q206	G-14				

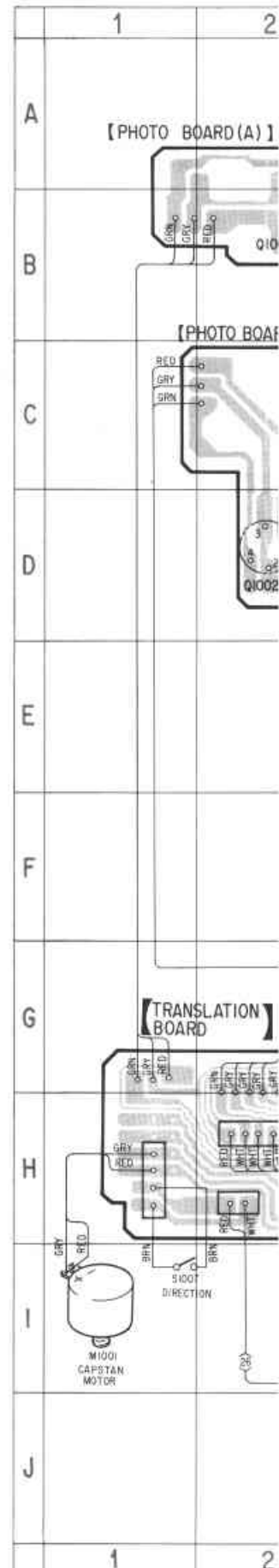
Note:

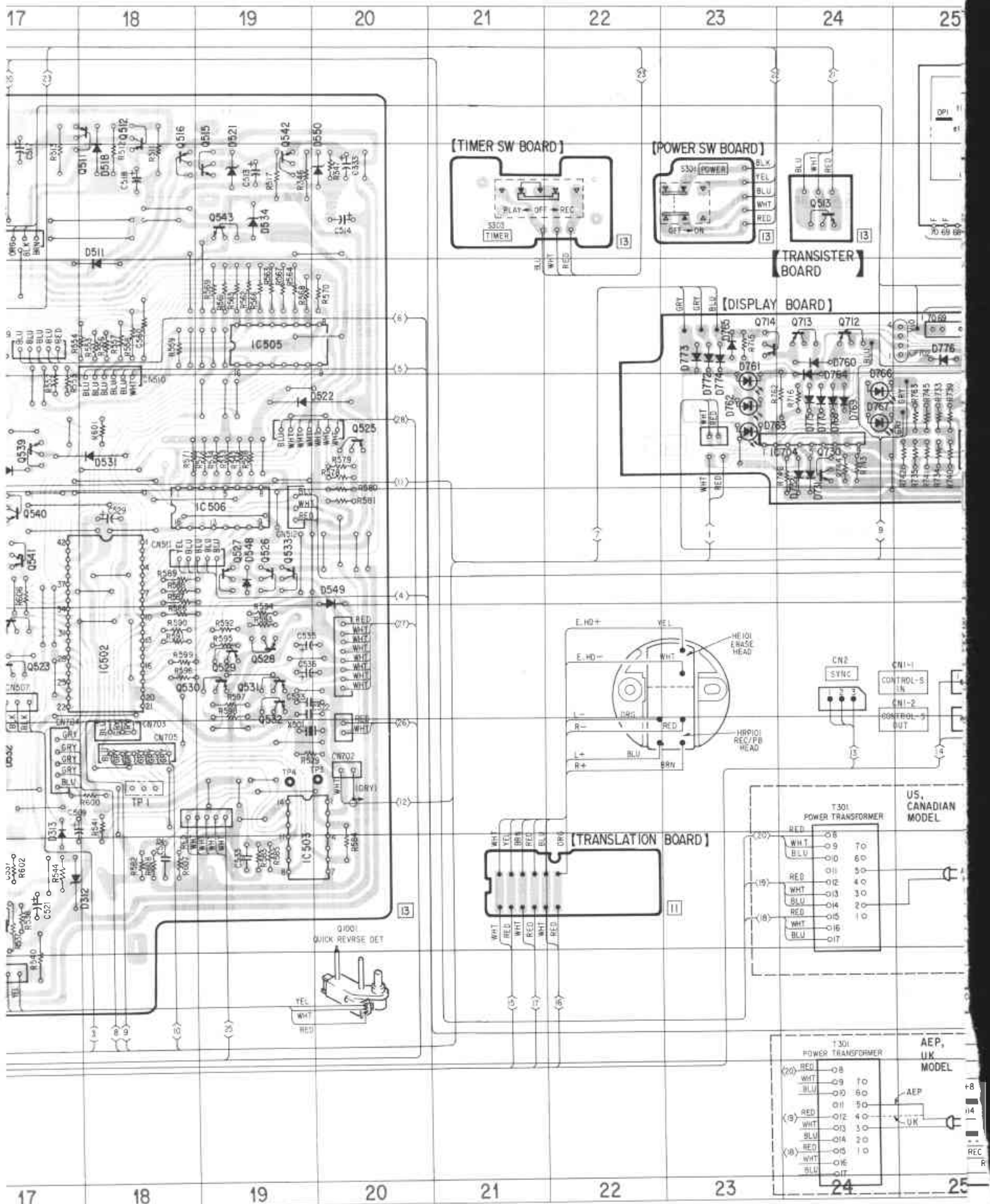
- Color code of sleeving over the end of the jacket.

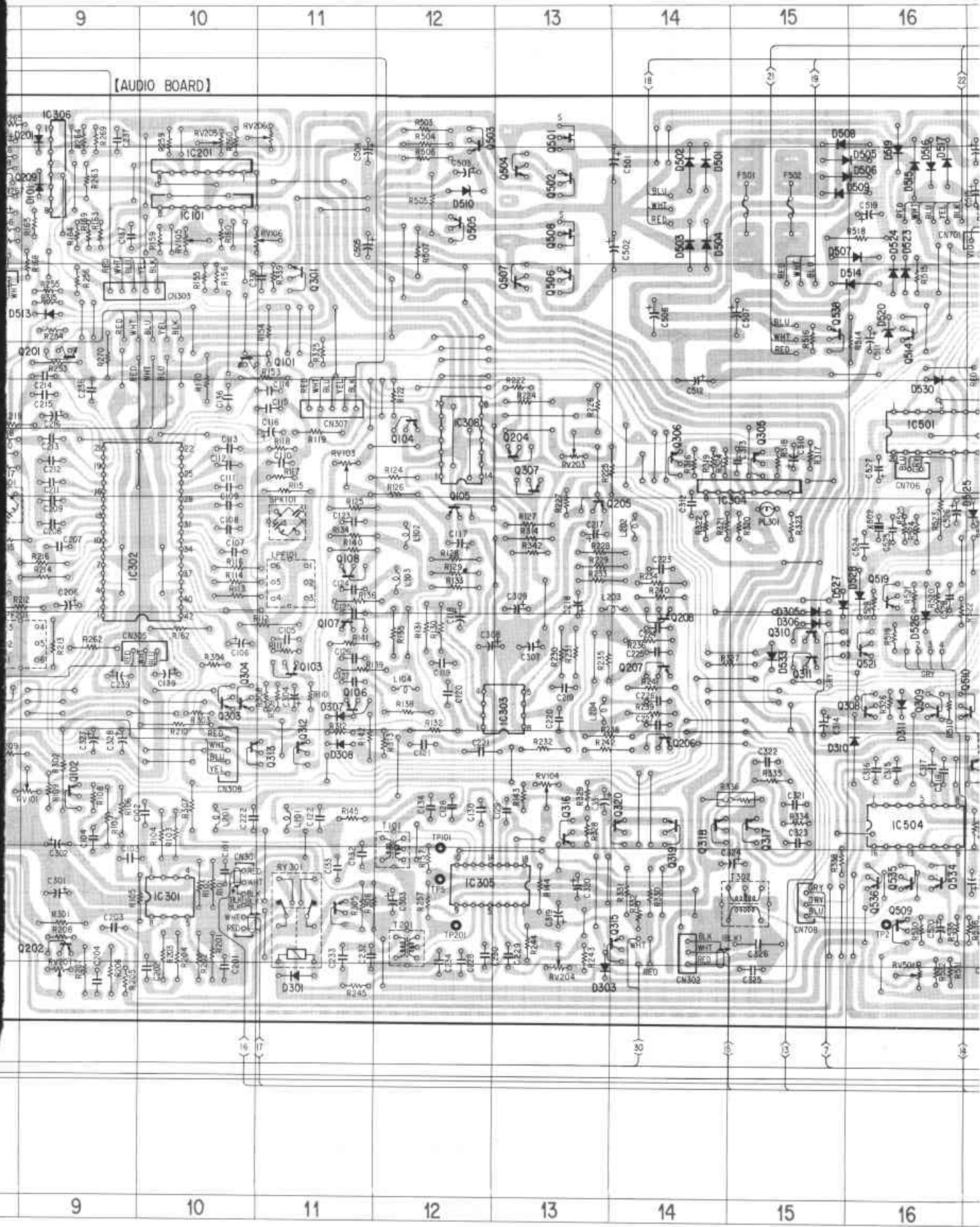


- : parts extracted from the component side.
- : parts extracted from the conductor side.

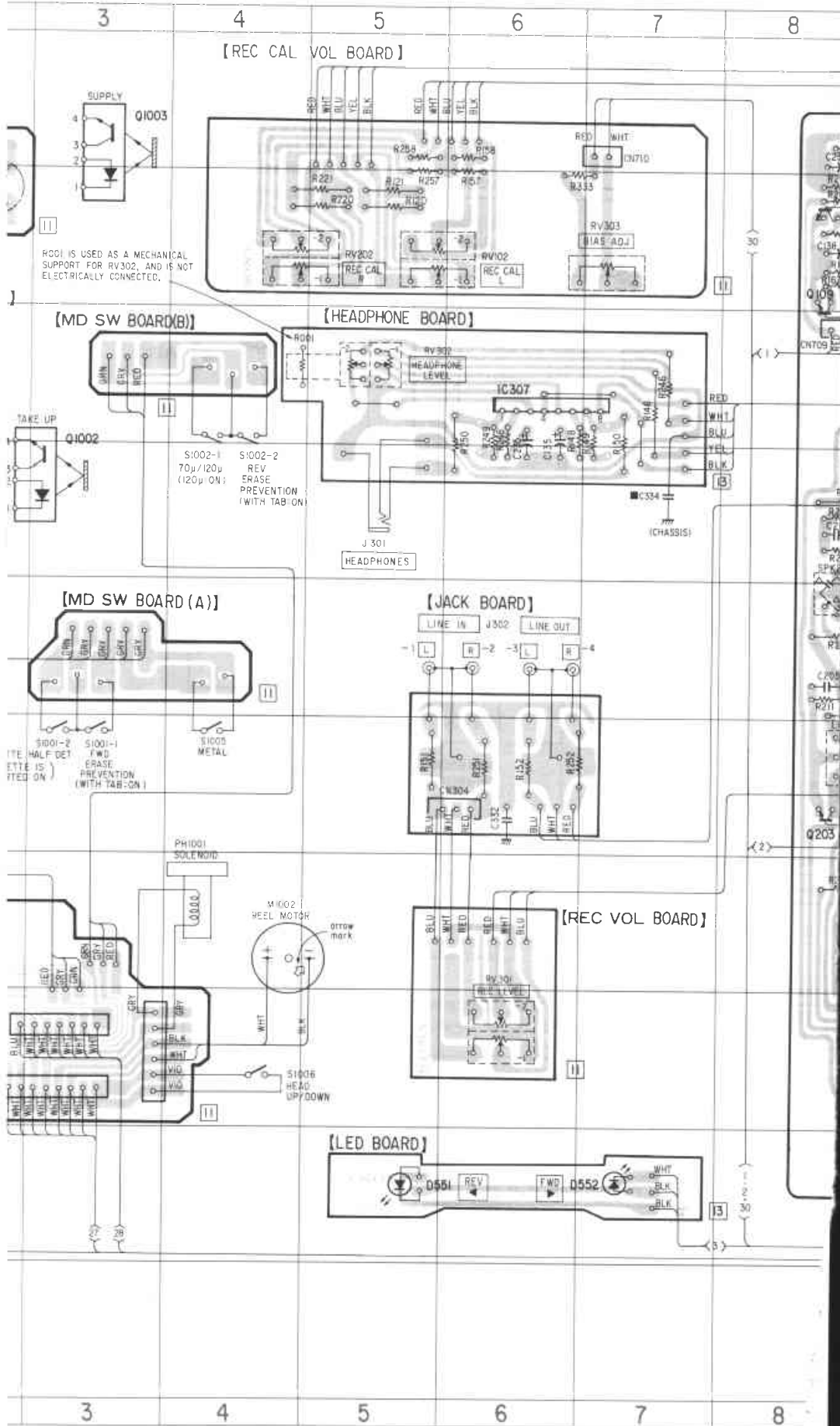
2-2 MOUNTING DIAGRA







- See page 11 for semiconductor Lead Layouts.

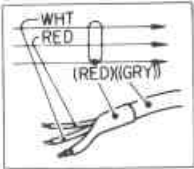


● Semiconductors Lead Layout

Ref.No.	Location	Ref.No.	Location	Ref.No.	Location	Ref.No.	Location
D101	B-9	D555	H-30	Q207	F-14	Q538	C-15
D201	A-9	D556	H-29	Q208	E-14	Q539	D-17
D301	I-11	D731	D-24	Q209	B-8	Q540	E-17
D302	D-17	D732	D-24	Q301	C-11	Q541	E-17
D303	I-14	D760	C-24	Q302	H-11	Q542	B-19
D305	E-15	D761	D-23	Q303	F-10	Q543	B-19
D306	F-15	D762	D-23	Q304	F-10	Q701	C-32
D307	F-11	D763	D-23	Q305	D-15	Q702	C-32
D308	G-11	D764	D-24	Q306	D-14	Q703	D-32
D310	G-16	D765	C-23	Q307	D-13	Q704	D-32
D311	F-16	D766	D-24	Q308	F-16	Q705	D-32
		D767	D-24	Q309	F-16	Q706	D-31
D312	F-28	D768	D-24	Q310	F-15	Q707	D-31
(DISPLAY)		D769	D-24	Q311	F-15	Q708	D-31
SW		D770	D-24	Q312	G-11	Q709	D-30
D312	H-17	D771	C-31	Q313	G-11	Q710	D-30
(AUDIO)		D772	C-23	Q315	H-14	Q712	C-24
D313	G-17	D773	C-23	Q316	G-13	Q713	C-24
D501	B-14	D774	C-23	Q317	G-15	Q714	C-23
D502	B-14	D775	D-24	Q318	G-15	Q730	D-24
D503	B-14	D776	C-25	Q319	G-14	Q1001	I-20
D504	B-14			Q320	G-14	Q1002	D-3
D505	B-15	IC101	B-10	Q501	A-13	Q1003	A-3
D506	B-15	IC201	B-10	Q502	B-13		
D507	B-16	IC301	H-10	Q503	A-12		
D508	A-15	IC302	E-10	Q504	B-13		
D509	B-15	IC303	F-13	Q505	B-12		
D510	B-12	IC304	D-15	Q506	C-13		
D511	C-18	IC305	H-12	Q507	C-13		
D512	F-17	IC306	D-9	Q508	B-13		
D513	C-9	IC307	C-6	Q509	H-16		
D514	C-16	IC308	D-12	Q510	F-16		
D515	B-16	IC501	D-16	Q511	A-18		
D516	B-16	IC502	F-18	Q512	A-18		
D517	B-16	IC503	G-19	Q513	B-24		
D518	B-18	IC504	G-16	Q514	C-16		
D519	B-16	IC505	C-19	Q515	B-19		
D520	C-16	IC506	E-19	Q516	B-19		
D521	B-19	IC701	D-28	Q518	H-17		
D522	D-20	IC703	D-25	Q519	E-16		
D523	C-16	IC704	D-24	Q520	E-17		
D524	C-16			Q521	F-16		
D525	E-17	Q101	C-11	Q522	F-17		
D526	E-16	Q102	G-9	Q523	F-17		
D527	E-15	Q103	F-11	Q525	D-20		
D528	E-16	Q104	D-12	Q526	E-19		
D530	C-16	Q105	E-12	Q527	E-19		
D531	D-18	Q106	F-11	Q528	F-19		
D532	G-17	Q107	F-11	Q529	F-19		
D533	F-15	Q108	E-11	Q530	F-19		
D534	B-19	Q109	B-8	Q531	F-19		
D548	E-19	Q201	C-9	Q532	F-19		
D549	E-20	Q202	H-9	Q533	E-19		
D550	B-20	Q203	F-8	Q534	H-16		
D551	I-7	Q204	D-13	Q535	H-16		
D552	I-5	Q205	E-13	Q536	H-16		
D553	H-28	Q206	G-14	Q537	G-17		
D554	H-28						

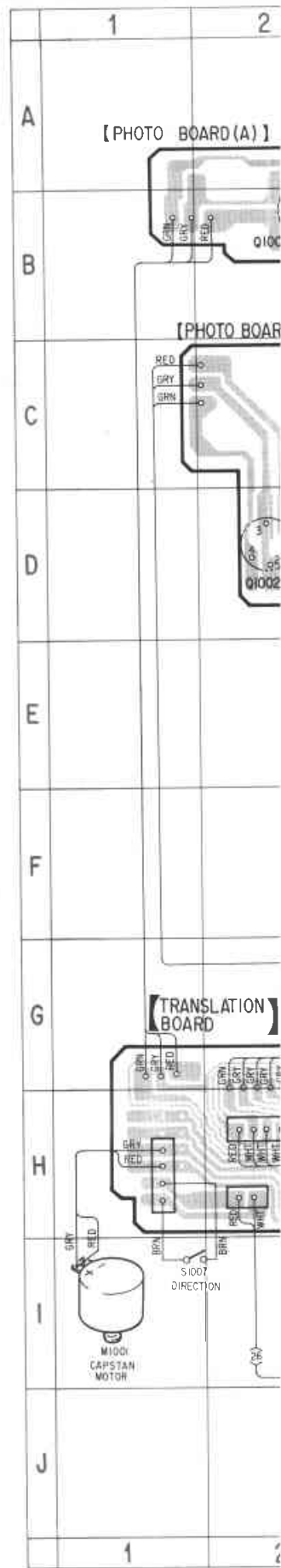
Note:

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

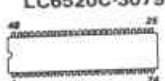
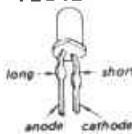
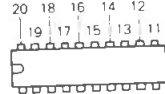
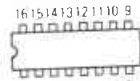
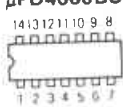
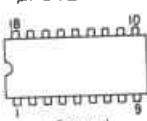


- — : parts extracted from the component side.
- — : parts extracted from the conductor side.

2-2 MOUNTING DIAGRAM



Semiconductor Lead Layouts

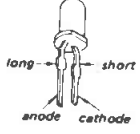
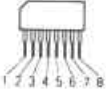
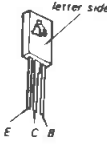
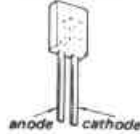
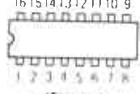
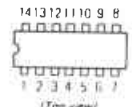
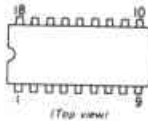
	HD614042SA87 M5220P μPC4570C-1  (Top view)	2SA1345 2SA1346 2SA1348 2SC634-SP 2SC3399 2SC3400 2SC3402 2SC3901 
10E2N HZS6A1L HZS7B2L HZS7C1L HZS9B3L HZS9C1L HZS12C1L 	LC6520C-3079  (Top view)	
GL-3PR7 GL-3HY7 SEL2410E TLG124A 	M50761-417P  (Top view)	2SA1409-L 2SB647 2SB1013 2SC2001 2SC3622A-L 2SD1387 
GL-9NG260 	M5201L M5218L 	2SB731 2SD809-K 
CX10034 TC4019BP  (Top view)	NJM2903S μPC4570HA 	2SD774 
CX20187  (Top view)	TC4069UBP μPD4066BC  (Top view)	2SD1585-L 
	μPC1297CA  (Top view)	2SK246-GR2 
	2SA1150 2SA1175 	

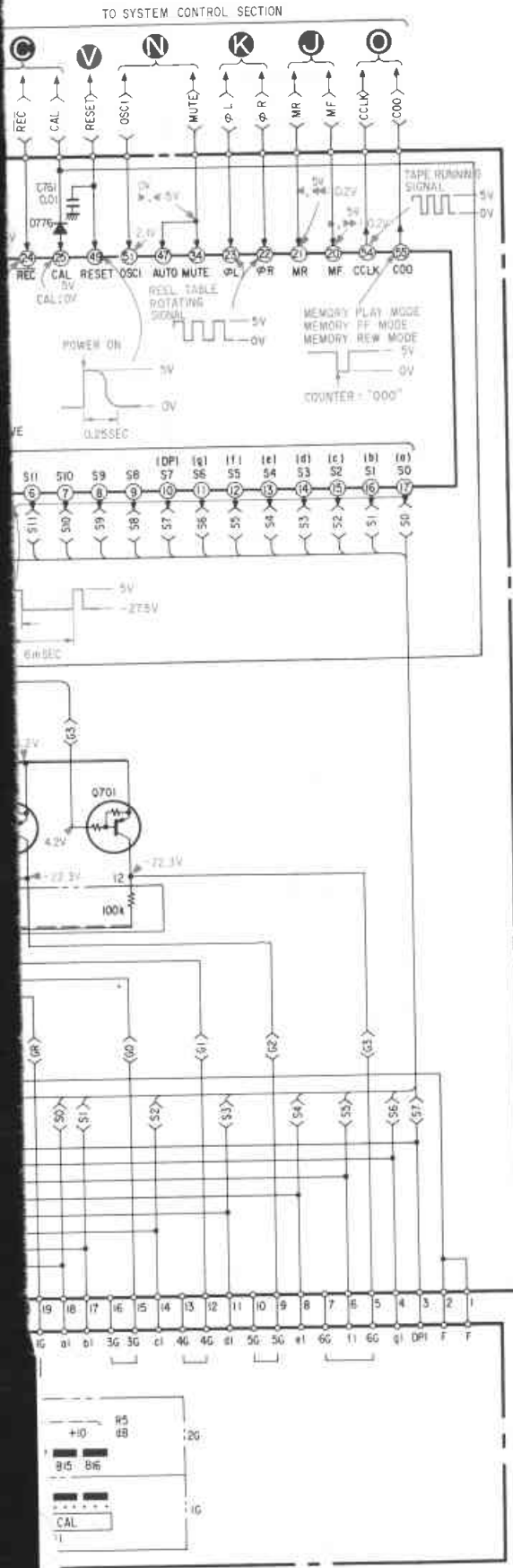
14



- | Ref. No. | Switch | Position |
|----------|--------|----------|
| S771 | MEMORY | OFF |
| S772 | RESET | OFF |

● Semiconductor Lead Layouts

	HD614042SA87 M5220P μPC4570C-1  (Top view)	2SA1345 2SA1346 2SA1348 2SC634-SP 2SC3399 2SC3400 2SC3402 2SC3901 
10E2N HZS6A1L HZS7B2L HZS7C1L HZS9B3L HZS9C1L HZS12C1L 	LC6520C-3079  (Top view)	2SA1409-L 2SB647 2SB1013 2SC2001 2SC3622A-L 2SD1387 
GL-3PR7 GL-3HY7 SEL2410E TLG124A 	M5201L M5218L 	2SB731 2SD809-K 
GL-9NG260 	NJM2903S μPC4570HA 	2SD774 
CX10034 TC4019BP  (Top view)	TC4069UBP μPD4066BC  (Top view)	2SD1585-L 
CX20187  (Top view)	μPC1297CA  (Top view)	2SK246-GR2 
	2SA1150 2SA1175 	

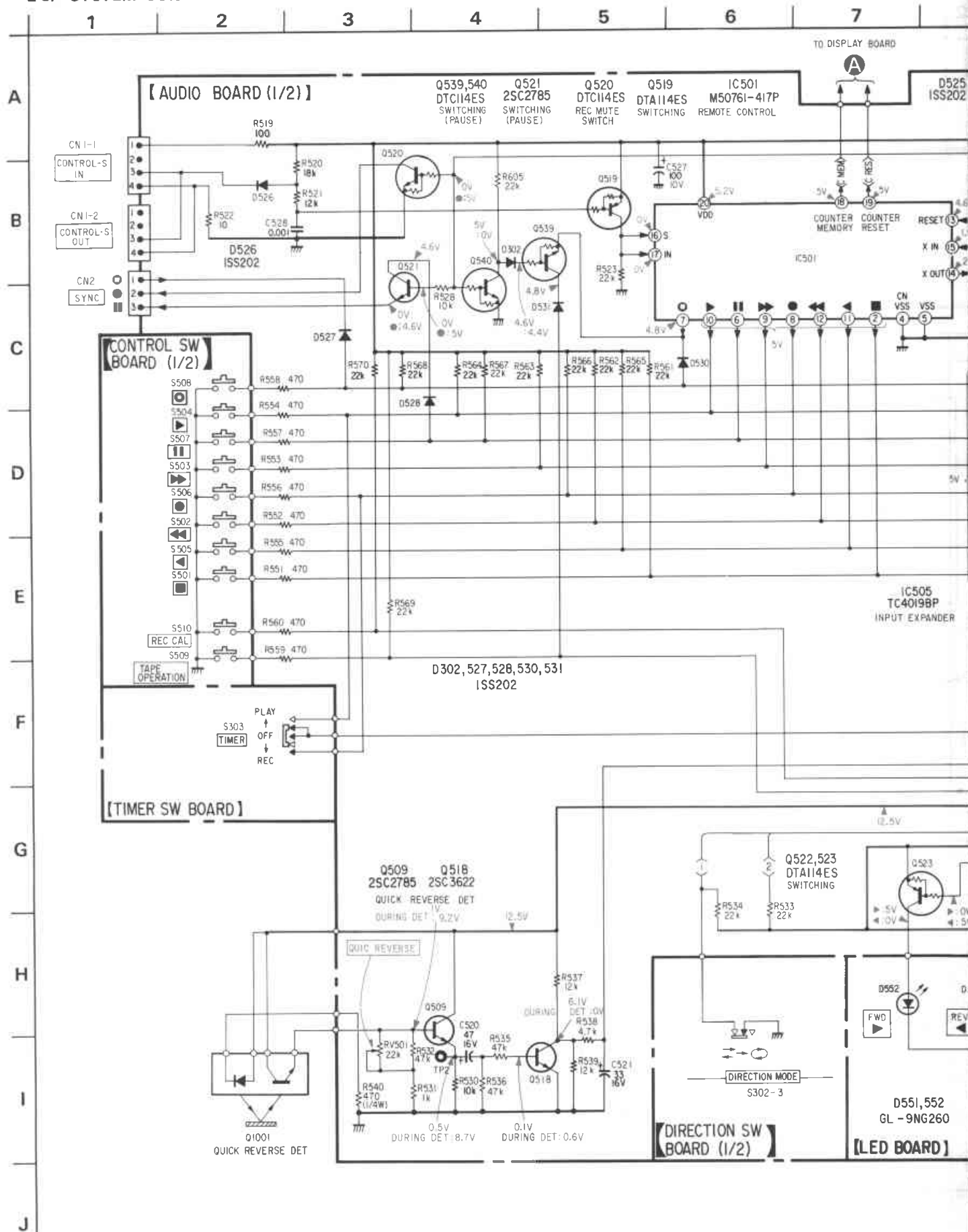


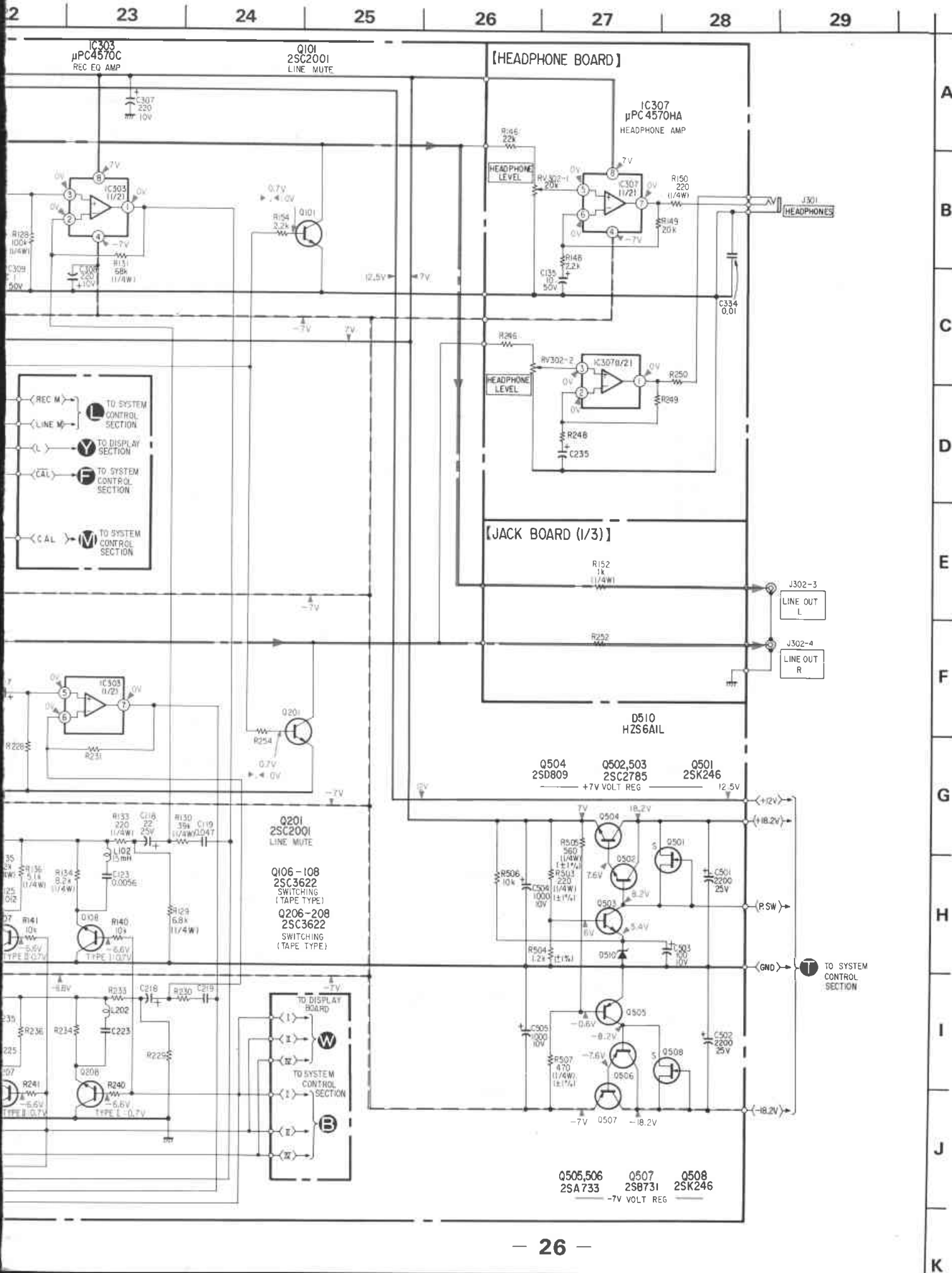
Note:

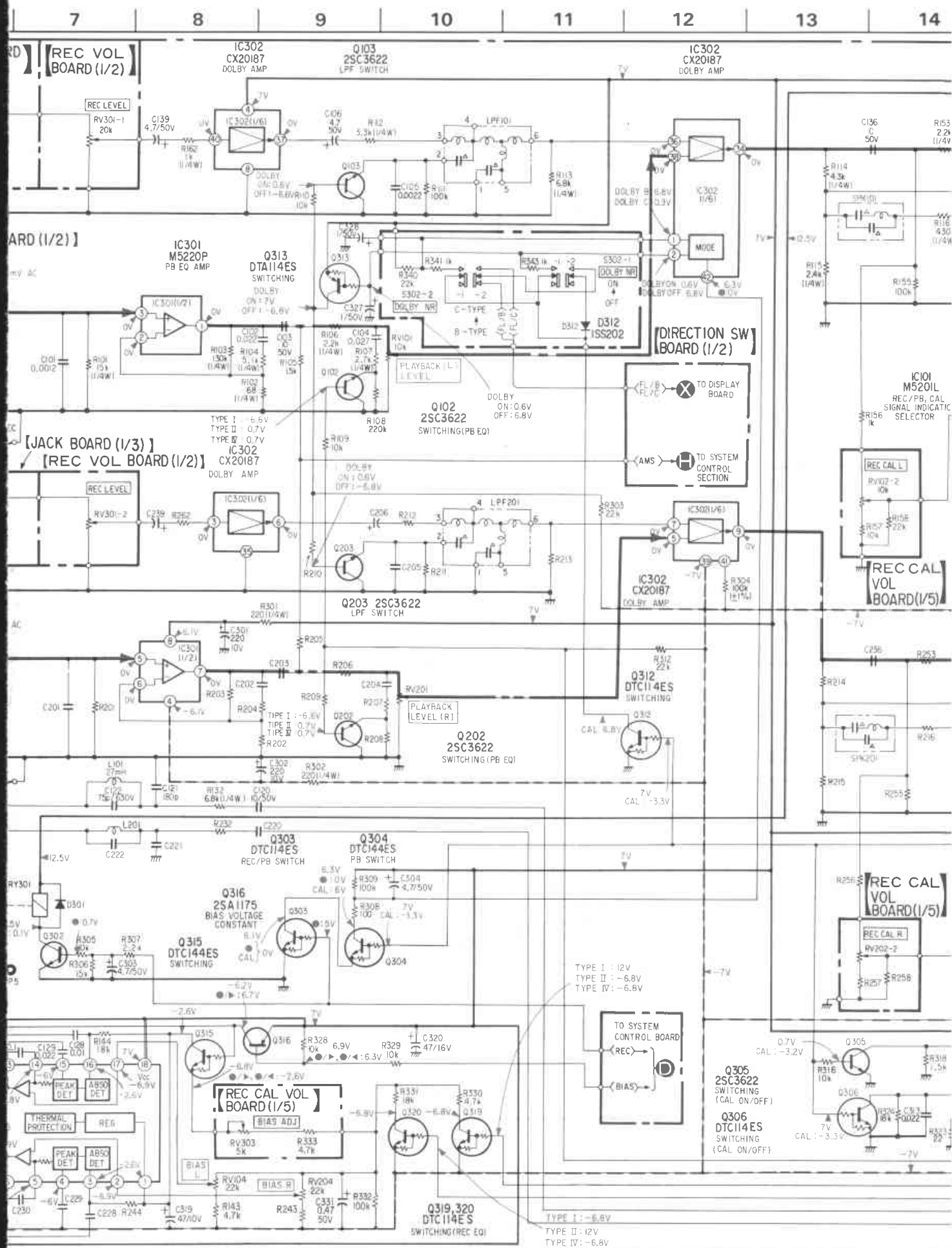
- All capacitors are in μF unless otherwise note 50WV or less are not indicated except for e and tantalums.
- All resistors are in Ω and $\frac{1}{6}$ W or less unless specified.
- ——— : B+ bus.
- - - - : B- bus.
- Voltages are dc with respect to ground unless noted.
- Readings are taken under no-signal cond VOM (50k Ω /V).
no mark: STOP
▶ : FWD ◀ : REW ◀ : REV
▶▶ : FF ◻ : REC
- Switches

Ref. No.	Switch	Position
S771	MEMORY	OFF
S772	RESET	OFF

2-3. SYSTEM CONTROL SECTION SCHEMATIC DIAGRAM



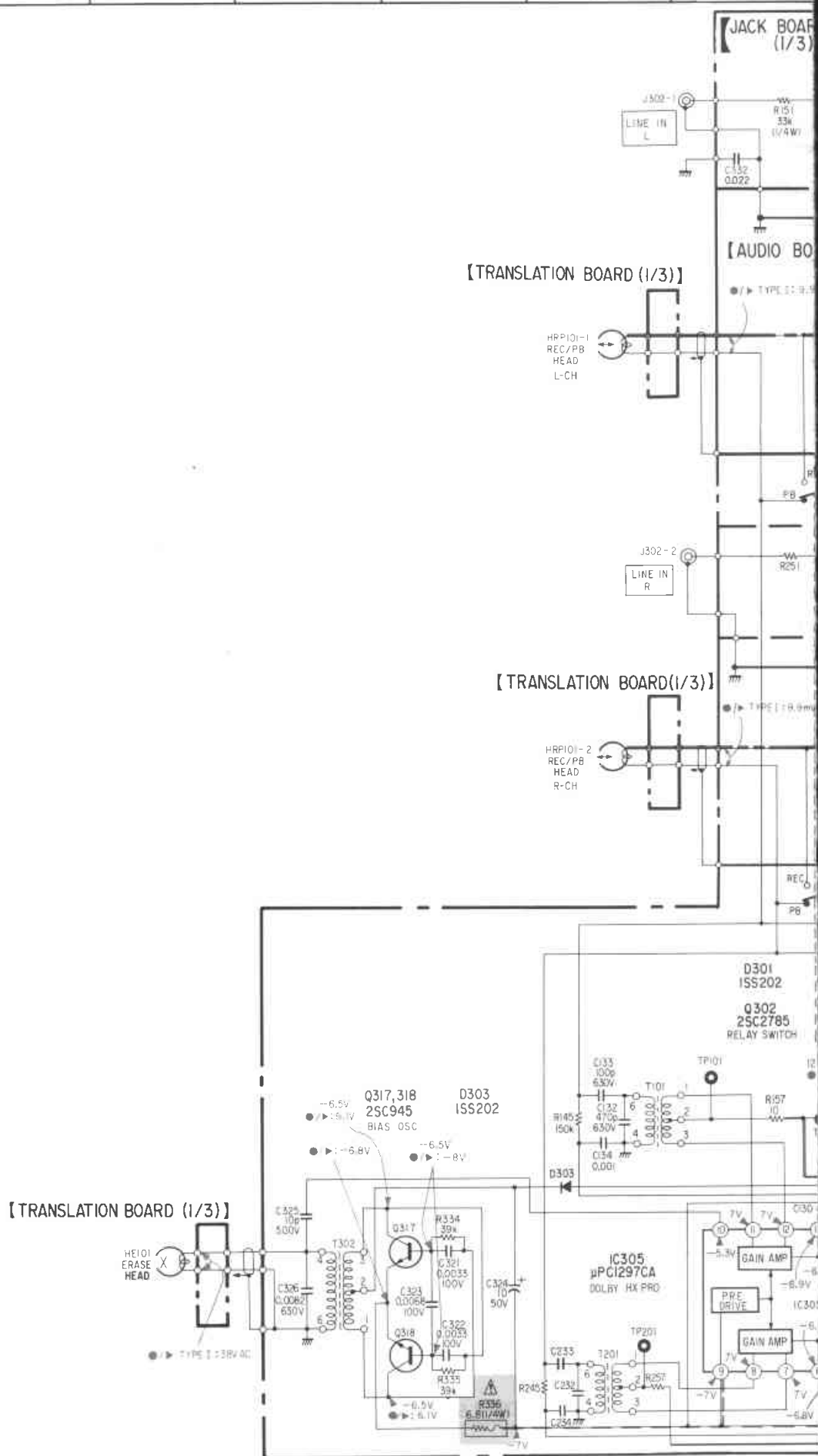






AUDIO SECTION SCHEMATIC DIAGRAM

1 2 3 4 5 6



Note:

- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{6}$ W or less unless otherwise specified.

-  : L-CH signal path.
-  : R-CH signal path.

- Components for right channel have same values as for left channel. Reference numbers are coded from
- Δ : internal component.
-  : fusible resistor.
-  : B+ bus.
-  : B- bus.
-  : adjustment for repair.
- AC voltage readings in the bias oscillator with a VTVM.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 k Ω /V).
- Voltage variations may be noted due to normal production tolerances.

no mark: STOP

 : FWD  : REW  : REC

 : FF  : REV

- Switches

Ref. No.	Switch	Position
S302-1	DOLBY NR	OFF
S302-2	DOLBY NR	B

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

Note: 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.

Note:

- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{6}$ W or less unless otherwise specified.
- : B+ bus.
- : B- bus.
- : adjustment for repair.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 k Ω /V).
- no mark: STOP
- : FWD : REW : REV
- : FF : REC
- Switches

Ref. No.	Switch	Position
S301	POWER	OFF
S303	TIMER	OFF
S302-3	DIRECTION MODE	
S501		OFF
S502		OFF
S503		OFF
S504		OFF
S505		OFF
S506		OFF
S507		OFF
S508		OFF
S509	REC CAL	OFF
S510	TAPE OPERATION	OFF
S1001-1	ERASE PREVENTION (FWD)	OFF
S1002-1	70/120 μ	OFF
S1001-2	CASSETTE HALF DET	OFF
S1002-2	ERASE PREVENTION (REV)	OFF
S1005	METAL	OFF
S1006	HEAD UP/DOWN	OFF
S1007	DIRECTION	OFF

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

Note: 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.

SECTION 3

EXPLODED VIEWS AND PARTS LIST

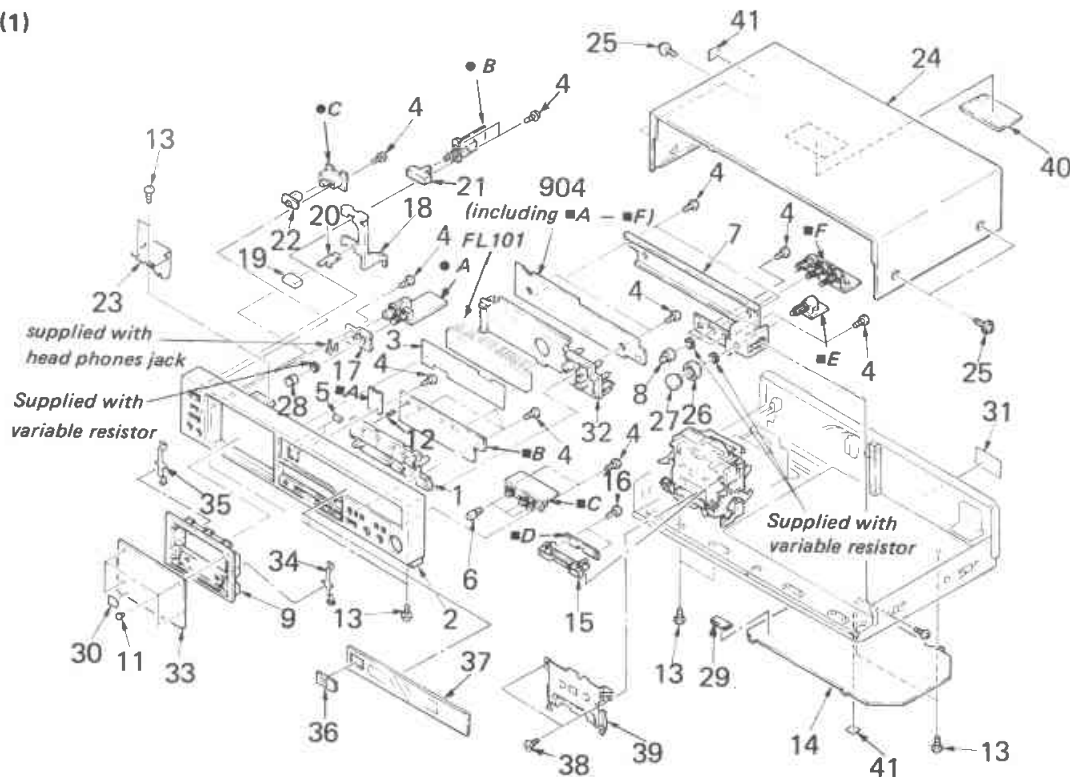
NOTE:

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

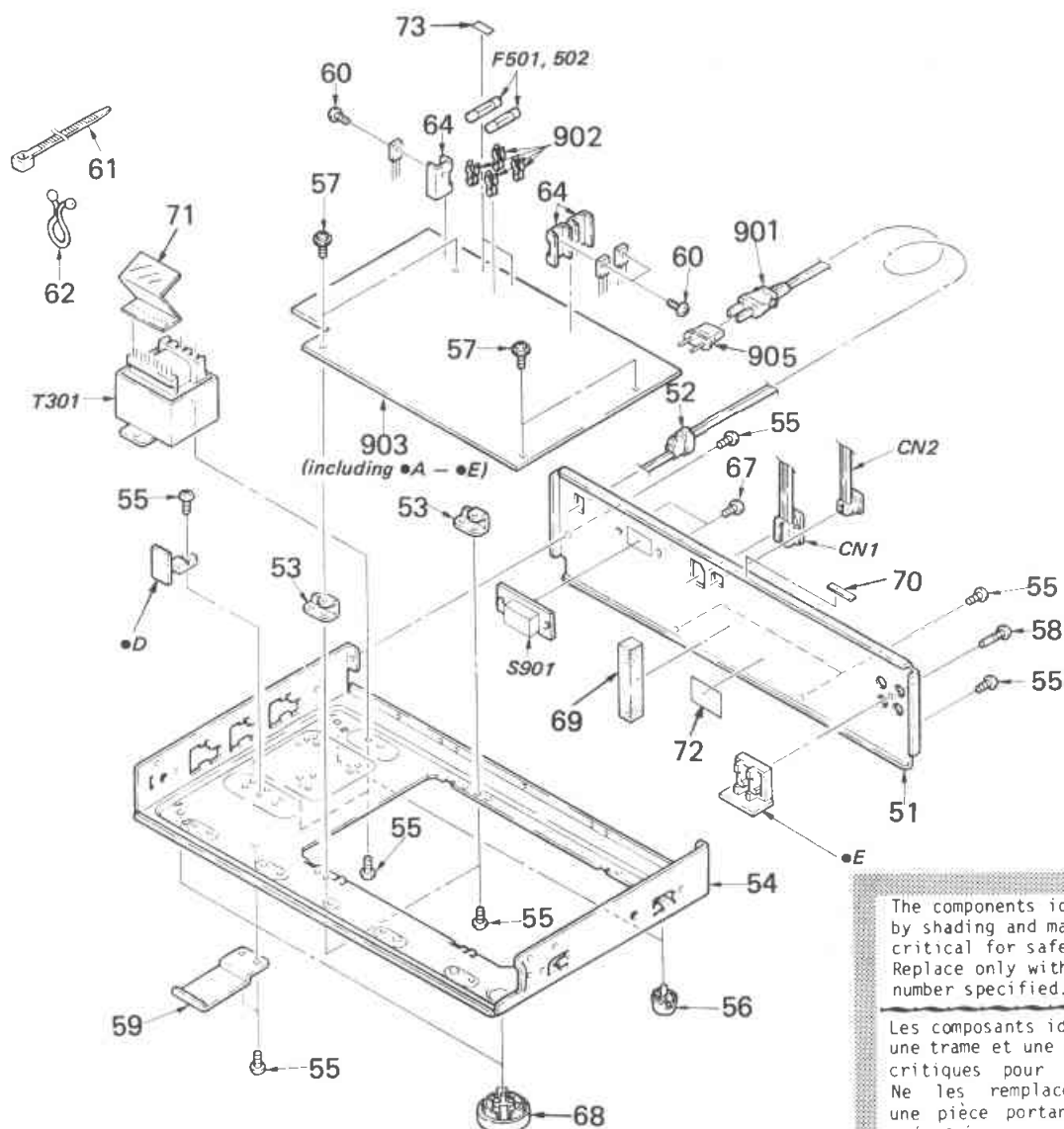
Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

(1)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	X-3332-502-1	BUTTON ASSY, CONTROL		23	*3-333-616-01	PLATE, SHIELD, REEL MOTOR	
2	X-3332-512-1	(R503).....PANEL ASSY, FRONT		24	3-332-511-01	CASE	
	X-3332-513-1	(R503ES)...PANEL ASSY, FRONT		25	4-886-821-01	SCREW, M3 CASE	
3	*3-332-505-01	FILTER		26	3-332-519-01	KNOB (LEFT), REC VOL	
4	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S		27	3-332-518-01	KNOB (RIGHT), REC VOL	
5	3-332-502-01	BUTTON, RESET		28	4-902-067-11	KNOB, CONTROL	
6	4-855-804-11	KNOB, SQUARE		29	*3-332-536-01	SHEET (B), VIBRATION PROOF	
7	*3-332-508-01	CHASSIS (H), SUB		30	3-703-710-41	STICKER, SONY SYMBOL (12)	
8	3-304-929-11	KNOB, HEADPHONE		31	3-332-442-01	(R503ES:AEP)...LABEL, BLIND	
9	X-3332-511-1	HOLDER ASSY, CASSETTE		32	*3-332-507-01	HOLDER, FL TUBE	
10	7-685-751-09	SCREW +BVTT 3X6 (S)		33	3-332-543-11	WINDOW, CASSETTE	
11	*3-337-123-01	PIN, STOPPER, CASSETTE WINDOW		34	3-307-372-00	SPRING (RIGHT)	
12	*3-332-539-01	RUBBER, SPACER		35	3-307-371-00	SPRING (LEFT)	
13	7-685-752-04	SCREW +BVTT 3X8 (S)		36	3-332-504-02	ESCUTCHEON, R.M	
14	*3-332-418-01	PLATE, BOTTOM		37	3-332-506-03	PLATE (H), TRANSPARENT	
15	*3-332-532-01	HOUSE, LED		38	7-621-772-00	SCREW +B 2X3	
16	7-685-133-19	SCREW +BTP 2.6X6 TYPE2 N-S		39	*3-332-547-01	PLATE, ORNAMENTAL	
17	*3-332-517-01	BRACKET, HEADPHONE		40	*3-332-535-01	SHEET (A), VIBRATION PROOF	
18	*3-332-516-01	LEVER, EJECT		41	3-703-079-21	(R503ES:UK)...LABEL, CAUTION (BACK)	
19	3-304-419-31	BUTTON, EJECT			3-703-680-00	(R503:US).....LABEL, CAUTION, SUB, NEW UL	
20	*3-332-515-01	SLIDER, EJECT		904	*A-2095-603-A	MOUNTED PCB, FL	
21	3-332-417-01	KNOB (POWER), PUSH		FL101	1-519-340-11	INDICATOR TUBE, FLUORESCENT	
22	3-307-538-21	KNOB, SWITCH, TIMER					

(2)



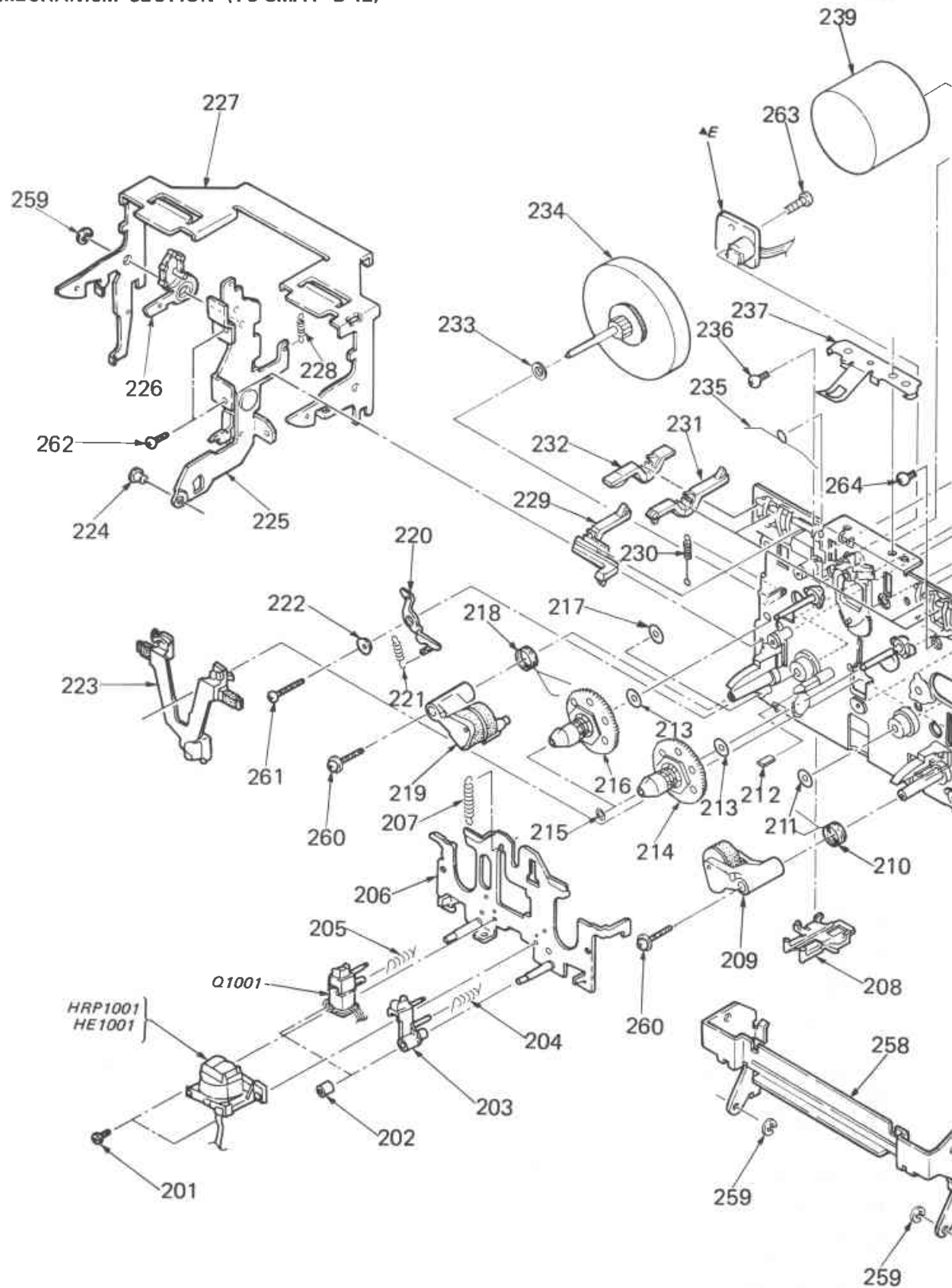
The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

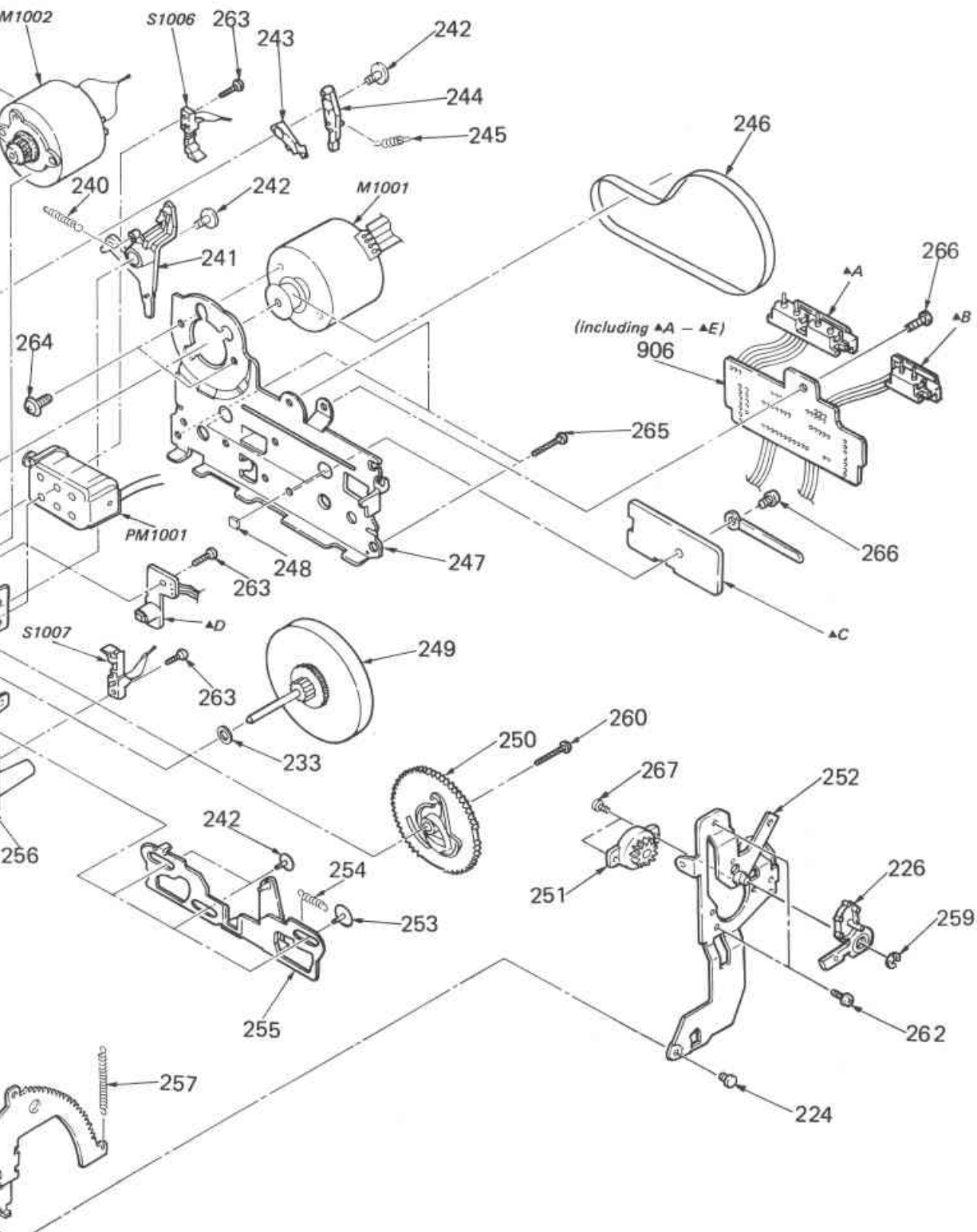
Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

No.	Part No.	Description	Remarks
51	*3-332-541-01 *3-332-541-21 *3-332-541-31 *3-332-541-41	(R503).....PLATE, JACK (R503ES:E)....PLATE, JACK (R503ES:AEP)...PLATE, JACK (R503ES:UK)....PLATE, JACK	
52	3-703-244-00 3-703-571-00	(R503ES:AEP,UK)...BUSHING (2104), CORD (R503,R503ES:E)...BUSHING (S)(4516), CORD	
53	*3-332-410-01	BRACKET (2), PC BOARD	
54	*3-332-426-41	CHASSIS	
55	7-685-752-04	SCREW +BVTT 3X8 (S)	
56	X-4864-303-0	FOOT ASSY	
57	3-703-249-01	SCREW, S TIGHT, +PTTWH 3X6	
58	3-703-473-00	SCREW, TERMINAL	
59	*3-332-534-01	PLATE, SHIELD, HEAD	
60	7-685-871-01	SCREW +BVTT 3X6 (S)	
61	*3-337-402-01 3-701-748-00	BAND, BINDING CLAMP	
62	*3-315-159-01 *3-701-417-00	PURSE LOCK (DIA. 14) PURSE LOCK (11 DIA.)	
64	*3-312-615-31	HEAT SINK	
67	7-685-133-19	(R503ES:E)...SCREW +BTP 2.6X6 TYPE 2 N-S	
68	X-3337-104-1	FOOT ASSY, ORNAMENTAL	
69	*3-332-537-01	RUBBER, STOPPER	

No.	Part No.	Description	Remarks
70	9-911-837-XX	CUSHION(A), FILTER	
71	*3-337-136-01	COVER, TRANSFORMER SAFETY	
72	3-703-044-26	(R503).....LABEL, CAUTION	
73	3-708-948-15	(R503ES)...LABEL, FUSE	
901	▲.1-534-817-XX ▲.1-551-188-XX ▲.1-551-628-00 ▲.1-551-884-00	(R503ES:AEP)...CORD, POWER (R503ES:E)....CORD, POWER (R503).....CORD, POWER (R503ES:UK)....CORD, POWER	
902	1-533-162-00	HOLDER, FUSE	
903	*A-2095-602-A *1-618-920-11	MOUNTED PCB, AUDIO PC BOARD, AUDIO	
905	▲.1-526-565-00	(R503ES:E)...AC PLUG ADAPTOR	
CN1	1-558-235-11	CORD (WITH CONNECTOR) 4P (CONTROL-S)	
CN2	*1-558-520-11	CORD (WITH CONNECTOR) 3P (SYNC)	
F501	▲.1-532-285-11	(R503ES)...FUSE, TIME-LAG (1.25A)	
F501	▲.1-532-741-11	(R503)....FUSE, GLASS TUBE (1.25A)	
F502	▲.1-532-285-11	(R503ES)...FUSE, TIME-LAG (1.25A)	
F502	▲.1-532-741-11	(R503)....FUSE, GLASS TUBE (1.25A)	
S901	▲.1-570-307-11	(R503ES:E)...SWITCH, VOLTAGE CHANGE	
T301	▲.1-448-551-11	(R503).....TRANSFORMER, POWER	
T301	▲.1-448-552-11	(R503ES:AEP,UK)...TRANSFORMER, POWER	
T301	▲.1-448-553-11	(R503ES:E).....TRANSFORMER, POWER	

(3) MECHANISM SECTION (TC-CMAY B-12)





No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201	3-391-109-01	SCREW, WASHER		241	X-3391-146-1	ARM ASSY, PLAY	
202	3-391-110-01	NUT, ADJUSTMENT		242	3-391-126-01	CAP	
203	3-391-111-01	GUIDE, TAPE		243	3-391-141-01	ARM (A)	
204	3-391-112-01	SPRING (RIGHT)		244	3-391-142-01	ARM (B)	
205	3-391-187-01	SPRING (L)		245	3-391-140-01	SPRING (A)	
				246	3-391-192-01	BELT, MAIN	
206	X-3391-103-1	HEAD ASSY, PLATE		247	*3-391-130-01	BRACKET (B), F/W	
207	3-391-114-01	SPRING		248	3-391-129-01	SPACER	
208	3-391-137-01	HOLDER, REED		249	X-3391-145-1	F/W ASSY	
209	X-3391-104-1	PINCH ROLLER ASSY		250	3-391-190-01	GEAR (D), CAM	
210	3-391-115-01	SPRING (RIGHT)		251	X-3391-151-1	DAMPER ASSY	
				252	*X-3391-150-1	BKT ASSY, DAMPER	
211	3-391-119-01	SEAL, WASHER OIL		253	3-391-143-01	CAP	
212	3-391-162-01	REFLECTOR		254	3-391-127-01	SPRING	
213	3-701-437-11	WASHER		255	X-3391-112-1	PLATE ASSY, SLIDE	
214	X-3391-142-1	REEL ASSY, T		256	X-3391-110-1	CHASSIS ASSY	
215	3-701-436-11	WASHER, 1.6		257	3-391-184-01	SPRING	
				258	*3-391-182-01	HOLDER, CASSETTE	
216	X-3391-144-1	REEL ASSY		259	7-624-105-04	STOP RING 2.3, TYPE -E	
217	3-391-117-01	SEAL, WASHER OIL		260	7-685-107-19	SCREW +P 2X12 TYPE2 SLIT	
218	3-391-116-01	SPRING (LEFT)		261	7-685-105-19	SCREW +P 2X8 TYPE2 SLIT	
219	X-3391-105-1	PINCH ROLLER ASSY		262	7-685-790-04	SCREW +PTT 2.6X4 (S)	
220	3-391-121-01	ARM, EJECT SAFETY		263	7-685-104-19	SCREW +P 2X6 TYPE2 SLIT	
				264	7-628-253-90	SCREW +PS 2.6X4	
221	3-391-122-01	SPRING (A)		265	7-685-131-19	SCREW +P 2.6X4 TYPE2 NON-SLIT	
222	3-391-120-01	CALLOR		266	7-685-750-04	SCREW +PTT 3X5 (S)	
223	X-3391-108-1	BRAKE ASSY		267	7-685-780-04	SCREW +PTT 2X3 (S)	
224	3-391-183-01	SHAFT (B), HOLDER FULCRUM		906	1-589-052-11	BLOCK, PC BOARD	
225	*X-3391-152-1	ARM ASSY, EJECT		HE101 } X-3391-143-1	HEAD ASSY, ROTARY		
				HRP101 }			
226	3-391-185-01	LEVER, STOP		M1001	X-3391-130-1	MOTOR ASSY, CAPSTAN	
227	*3-391-180-01	ARM, EJECT		M1002	X-3391-118-1	MOTOR ASSY, REEL	
228	3-391-181-01	SP, LEVER RETURN		PM1001	1-454-440-11	SOLENOID, PLUNGER	
229	3-391-193-01	LEVER, METAL		S1006	1-570-721-11	SWITCH, LEAF	
230	3-391-139-01	SPRING		S1007	1-570-719-11	SWITCH, LEAF	
231	3-391-188-01	LEVER, REC					
232	3-391-178-01	LEVER, PACK					
233	3-701-438-11	WASHER, 2.5					
234	X-3391-125-1	F/W ASSY					
235	3-391-124-01	SPRING					
236	3-391-118-01	SCREW, WASHER					
237	3-391-177-01	SPRING					
238	X-3391-111-1	IDLER ASSY					
239	3-391-132-01	PLATE, SHIELD					
240	3-391-133-01	SPRING					

SECTION 4
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:µF, PF:µµF.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

- MMH : mH, UH : µH

SEMICONDUCTORS

In each case, U : µ, for example:

UA...: µA..., UPA...: µPA..., UPC...: µPC,
UPD...: µPD...

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.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
901	 1-534-817-XX	(R503ES:AEP)...CORD, POWER
	 1-551-188-XX	(R503ES:E)....CORD, POWER
	 1-551-628-00	(R503).....CORD, POWER
	 1-551-884-00	(R503ES:UK)....CORD, POWER
902	1-533-162-00	HOLDER, FUSE
903	*A-2095-602-A	MOUNTED PCB, AUDIO
	*1-618-920-11	PC BOARD, AUDIO
904	*A-2095-603-A	MOUNTED PCB, FL
905	 1-526-565-00	(R503ES:E)...AC PLUG ADAPTOR
906	1-589-052-11	BLOCK, PC BOARD
C101	1-110-196-00	MYLAR 0.0012MF 5% 50V
C102	1-136-157-00	FILM 0.022MF 5% 50V
C103	1-124-186-00	ELECT 10MF 20% 50V
C104	1-136-158-00	FILM 0.027MF 5% 50V
C105	1-161-375-00	CERAMIC 0.0022MF 30% 16V
C106	1-124-927-11	ELECT 4.7MF 20% 50V
C107	1-110-203-00	MYLAR 0.0047MF 5% 50V
C108	1-136-173-00	FILM 0.47MF 5% 50V
C109	1-136-167-00	FILM 0.15MF 5% 50V
C110	1-136-155-00	FILM 0.015MF 5% 50V
C111	1-136-169-00	FILM 0.22MF 5% 50V
C112	1-136-163-00	FILM 0.068MF 5% 50V
C113	1-136-161-00	FILM 0.047MF 5% 50V
C114	1-130-481-00	MYLAR 0.0068MF 5% 50V
C115	1-136-153-00	FILM 0.01MF 5% 50V
C116	1-124-927-11	ELECT 4.7MF 20% 50V
C117	1-124-927-11	ELECT 4.7MF 20% 50V
C118	1-124-908-11	ELECT 22MF 20% 25V
C119	1-136-161-00	FILM 0.047MF 5% 50V
C120	1-124-186-00	ELECT 10MF 20% 50V
C121	1-162-285-31	CERAMIC 180PF 10% 50V
C122	1-136-273-91	FILM 75PF 5% 630V
C123	1-130-480-00	MYLAR 0.0056MF 5% 50V
C124	1-136-153-00	FILM 0.01MF 5% 50V
C125	1-136-154-00	FILM 0.012MF 5% 50V
C126	1-130-480-00	MYLAR 0.0056MF 5% 50V
C127	1-130-480-00	MYLAR 0.0056MF 5% 50V
C128	1-136-153-00	FILM 0.01MF 5% 50V
C129	1-136-157-00	FILM 0.022MF 5% 50V
C130	1-136-165-00	FILM 0.1MF 5% 50V
C132	1-136-478-11	FILM 470PF 5% 630V
C133	1-136-433-11	FILM 100PF 5% 630V
C134	1-130-471-00	MYLAR 0.001MF 5% 50V
C135	1-124-907-00	ELECT 10MF 20% 50V
C136	1-124-186-00	ELECT 10MF 20% 50V
C137	1-124-185-00	ELECT 4.7MF 20% 50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description
C138	1-124-905-11	ELECT 3.3MF 20% 50V
C139	1-124-927-11	ELECT 4.7MF 20% 50V
C201	1-110-196-00	MYLAR 0.0012MF 5% 50V
C202	1-136-157-00	FILM 0.022MF 5% 50V
C203	1-124-186-00	ELECT 10MF 20% 50V
C204	1-136-158-00	FILM 0.027MF 5% 50V
C205	1-161-375-00	CERAMIC 0.0022MF 30% 16V
C206	1-124-927-11	ELECT 4.7MF 20% 50V
C207	1-110-203-00	MYLAR 0.0047MF 5% 50V
C208	1-136-173-00	FILM 0.47MF 5% 50V
C209	1-136-167-00	FILM 0.15MF 5% 50V
C210	1-136-155-00	FILM 0.015MF 5% 50V
C211	1-136-169-00	FILM 0.22MF 5% 50V
C212	1-136-163-00	FILM 0.068MF 5% 50V
C213	1-136-161-00	FILM 0.047MF 5% 50V
C214	1-130-481-00	MYLAR 0.0068MF 5% 50V
C215	1-136-153-00	FILM 0.01MF 5% 50V
C216	1-124-927-11	ELECT 4.7MF 20% 50V
C217	1-124-927-11	ELECT 4.7MF 20% 50V
C218	1-124-908-11	ELECT 22MF 20% 25V
C219	1-136-161-00	FILM 0.047MF 5% 50V
C220	1-124-186-00	ELECT 10MF 20% 50V
C221	1-162-285-31	CERAMIC 180PF 10% 50V
C222	1-136-273-91	FILM 75PF 5% 630V
C223	1-130-480-00	MYLAR 0.0056MF 5% 50V
C224	1-136-153-00	FILM 0.01MF 5% 50V
C225	1-136-154-00	FILM 0.012MF 5% 50V
C226	1-130-480-00	MYLAR 0.0056MF 5% 50V
C227	1-130-480-00	MYLAR 0.0056MF 5% 50V
C228	1-136-153-00	FILM 0.01MF 5% 50V
C229	1-136-157-00	FILM 0.022MF 5% 50V
C230	1-136-165-00	FILM 0.1MF 5% 50V
C232	1-136-478-11	FILM 470PF 5% 630V
C233	1-136-433-11	FILM 100PF 5% 630V
C234	1-130-471-00	MYLAR 0.001MF 5% 50V
C235	1-124-907-00	ELECT 10MF 20% 50V
C236	1-124-186-00	ELECT 10MF 20% 50V
C237	1-124-185-00	ELECT 4.7MF 20% 50V
C238	1-124-905-11	ELECT 3.3MF 20% 50V
C239	1-124-927-11	ELECT 4.7MF 20% 50V
C301	1-124-444-00	ELECT 220MF 20% 10V
C302	1-124-444-00	ELECT 220MF 20% 10V
C303	1-124-927-11	ELECT 4.7MF 20% 50V
C304	1-124-927-11	ELECT 4.7MF 20% 50V
C307	1-124-444-00	ELECT 220MF 20% 10V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C308	1-124-444-00	ELECT	220MF	20%	10V
C309	1-124-903-00	ELECT	1MF	20%	50V
C310	1-124-927-11	ELECT	4.7MF	20%	50V
C312	1-136-157-00	FILM	0.022MF	5%	50V
C313	1-136-157-00	FILM	0.022MF	5%	50V
C314	1-124-470-11	ELECT	470MF	20%	6.3V
C315	1-136-166-00	FILM	0.12MF	5%	50V
C316	1-136-165-00	FILM	0.1MF	5%	50V
C317	1-162-205-31	CERAMIC	18PF	5%	50V
C318	1-162-205-31	CERAMIC	18PF	5%	50V
C319	1-124-892-11	ELECT	47MF	20%	10V
C320	1-123-332-00	ELECT	47MF	20%	16V
C321	1-130-285-00	FILM	0.0033MF	5%	100V
C322	1-130-285-00	FILM	0.0033MF	5%	100V
C323	1-130-293-91	FILM	0.0068MF	5%	100V
C324	1-124-907-00	ELECT	10MF	20%	50V
C325	1-107-202-00	MICA	10PF	5%	500V
C326	1-129-713-00	FILM	0.0082MF	10%	630V
C327	1-124-903-00	ELECT	1MF	20%	50V
C328	1-124-903-00	ELECT	1MF	20%	50V
C329	1-124-903-00	ELECT	1MF	20%	50V
C330	1-161-375-00	CERAMIC	0.0022MF	30%	16V
C331	1-124-902-00	ELECT	0.47MF	20%	50V
C332	1-161-494-00	CERAMIC	0.022MF	30%	25V
C333	1-124-892-11	ELECT	47MF	20%	10V
C334	1-161-330-00	CERAMIC	0.01MF	30%	25V
C501	1-124-563-11	ELECT	2200MF	20%	25V
C502	1-124-563-11	ELECT	2200MF	20%	25V
C503	1-124-443-00	ELECT	100MF	20%	10V
C504	1-124-473-11	ELECT	1000MF	20%	10V
C505	1-124-473-11	ELECT	1000MF	20%	10V
C506	1-124-618-11	ELECT	2200MF	20%	35V
C507	1-124-898-11	ELECT	4700MF	20%	16V
C509	1-124-927-11	ELECT	4.7MF	20%	50V
C511	1-124-927-11	ELECT	4.7MF	20%	50V
C512	1-124-897-11	ELECT	3300MF	20%	16V
C513	1-124-927-11	ELECT	4.7MF	20%	50V
C514	1-124-888-11	ELECT	2200MF	20%	6.3V
C515	1-124-122-11	ELECT	100MF	20%	50V
C516	1-124-122-11	ELECT	100MF	20%	50V
C517	1-124-932-11	ELECT	100MF	20%	100V
C518	1-124-122-11	ELECT	100MF	20%	50V
C519	1-124-927-11	ELECT	4.7MF	20%	50V
C520	1-123-332-00	ELECT	47MF	20%	16V
C521	1-124-896-00	ELECT	33MF	20%	16V
C522	1-162-211-31	CERAMIC	33PF	5%	50V
C523	1-162-211-31	CERAMIC	33PF	5%	50V
C524	1-162-284-31	CERAMIC	150PF	10%	50V
C525	1-162-284-31	CERAMIC	150PF	10%	50V
C526	1-124-927-11	ELECT	4.7MF	20%	50V
C527	1-124-443-00	ELECT	100MF	20%	10V
C528	1-162-294-31	CERAMIC	0.001MF	10%	50V
C529	1-124-443-00	ELECT	100MF	20%	10V
C532	1-162-294-31	CERAMIC	0.001MF	10%	50V
C533	1-162-294-31	CERAMIC	0.001MF	10%	50V
C535	1-124-892-11	ELECT	47MF	20%	10V
C536	1-124-892-11	ELECT	47MF	20%	10V
C537	1-136-166-00	FILM	0.12MF	5%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C760	1-123-661-00	ELECT	100MF	20%	6.3V
C761	1-161-379-00	CERAMIC	0.01MF	30%	16V
CN1	1-558-235-11	CORD (WITH CONNECTOR) 4P (CONTROL-S)			
CN2	*1-558-520-11	CORD (WITH CONNECTOR) 3P (SYNC)			
CNP301*1-564-509-11		PLUG, CONNECTOR 6P			
CNP302*1-564-506-11		PLUG, CONNECTOR 3P			
CNP303*1-564-508-11		PLUG, CONNECTOR 5P			
CNP304*1-564-506-11		PLUG, CONNECTOR 3P			
CNP305*1-564-506-11		PLUG, CONNECTOR 3P			
CNP307*1-564-508-11		PLUG, CONNECTOR 5P			
CNP308*1-564-507-21		PLUG, CONNECTOR 4P			
CNP505*1-564-506-11		PLUG, CONNECTOR 3P			
CNP507*1-564-506-11		PLUG, CONNECTOR 3P			
CNP509*1-564-339-21		PIN, CONNECTOR 5P			
CNP510*1-564-340-00		PIN, CONNECTOR 6P			
CNP511*1-564-339-31		PIN, CONNECTOR 5P			
CNP512*1-564-506-11		PLUG, CONNECTOR 3P			
CNP701*1-564-510-11		PLUG, CONNECTOR 7P			
CNP702*1-564-505-11		PLUG, CONNECTOR 2P			
CNP703*1-564-506-11		PLUG, CONNECTOR 3P			
CNP704*1-564-508-11		PLUG, CONNECTOR 5P			
CNP705*1-564-509-11		PLUG, CONNECTOR 6P			
CNP706*1-564-505-31		PLUG, CONNECTOR 2P			
CNP708*1-564-506-11		PLUG, CONNECTOR 3P			
CNP709*1-564-505-41		PLUG, CONNECTOR 2P			
CNP710*1-564-505-11		PLUG, CONNECTOR 2P			
CP701	1-232-239-00	COMPOSITION CIRCUIT BLOCK			
CP702	1-232-632-11	COMPOSITION CIRCUIT BLOCK			
D101	8-719-940-76	DIODE 1SS132			
D201	8-719-940-76	DIODE 1SS132			
D301	8-719-940-76	DIODE 1SS132			
D302	8-719-940-76	DIODE 1SS132			
D303	8-719-940-76	DIODE 1SS132			
D305	8-719-940-76	DIODE 1SS132			
D306	8-719-940-76	DIODE 1SS132			
D307	8-719-940-76	DIODE 1SS132			
D308	8-719-940-76	DIODE 1SS132			
D310	8-719-200-77	DIODE 10E2N			
D311	8-719-940-76	DIODE 1SS132			
D312	8-719-933-49	(AUDIO BOARD).....DIODE HZS7C1L			
D312	8-719-940-76	(DIRECTION SW BOARD)...DIODE 1SS132			
D313	8-719-940-76	DIODE 1SS132			
D501	8-719-200-77	DIODE 10E2N			
D502	8-719-200-77	DIODE 10E2N			
D503	8-719-200-77	DIODE 10E2N			
D504	8-719-200-77	DIODE 10E2N			
D505	8-719-200-77	DIODE 10E2N			
D506	8-719-200-77	DIODE 10E2N			
D507	8-719-200-77	DIODE 10E2N			
D508	8-719-200-77	DIODE 10E2N			
D509	8-719-200-77	DIODE 10E2N			
D510	8-719-933-33	DIODE HZS6A1L			
D511	8-719-200-77	DIODE 10E2N			
D512	8-719-940-76	DIODE 1SS132			
D513	8-719-940-76	DIODE 1SS132			
D514	8-719-940-76	DIODE 1SS132			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
D515	8-719-200-77	DIODE 10E2N
D516	8-719-200-77	DIODE 10E2N
D517	8-719-200-77	DIODE 10E2N
D518	8-719-200-77	DIODE 10E2N
D519	8-719-940-76	DIODE 1SS132
D520	8-719-933-49	DIODE HZS12C1L
D521	8-719-933-47	DIODE HZS7B2L
D522	8-719-200-77	DIODE 10E2N
D523	8-719-940-76	DIODE 1SS132
D524	8-719-940-76	DIODE 1SS132
D525	8-719-940-76	DIODE 1SS132
D526	8-719-940-76	DIODE 1SS132
D527	8-719-940-76	DIODE 1SS132
D528	8-719-940-76	DIODE 1SS132
D530	8-719-940-76	DIODE 1SS132
D531	8-719-940-76	DIODE 1SS132
D532	8-719-940-76	DIODE 1SS132
D533	8-719-940-76	DIODE 1SS132
D534	8-719-933-47	DIODE HZS7B2L
D548	8-719-940-76	DIODE 1SS132
D549	8-719-940-76	DIODE 1SS132
D550	8-719-933-59	DIODE HZS9C1L
D551	8-719-919-20	DIODE GL-9NG260
D552	8-719-919-20	DIODE GL-9NG260
D553	8-719-933-27	DIODE GL-3PR7
D554	8-719-919-00	DIODE GL-3HY7
D555	8-719-812-43	DIODE TGL124A
D556	8-719-812-43	DIODE TGL124A
D731	8-719-940-76	DIODE 1SS132
D732	8-719-940-76	DIODE 1SS132
D760	8-719-940-76	DIODE 1SS132
D761	8-719-301-43	DIODE SEL2410E
D762	8-719-301-43	DIODE SEL2410E
D763	8-719-301-43	DIODE SEL2410E
D764	8-719-940-76	DIODE 1SS132
D765	8-719-940-76	DIODE 1SS132
D766	8-719-301-43	DIODE SEL2410E
D767	8-719-301-43	DIODE SEL2410E
D768	8-719-940-76	DIODE 1SS132
D769	8-719-940-76	DIODE 1SS132
D770	8-719-940-76	DIODE 1SS132
D771	8-719-933-58	DIODE HZS9B3L
D772	8-719-940-76	DIODE 1SS132
D773	8-719-940-76	DIODE 1SS132
D774	8-719-940-76	DIODE 1SS132
D775	8-719-940-76	DIODE 1SS132
D776	8-719-940-76	DIODE 1SS132
F501	1-532-285-11	(R503ES)...FUSE, TIME-LUG (1.25A)
F501	1-532-741-11	(R503)....FUSE, GLASS TUBE (1.25A)
F502	1-532-285-11	(R503ES)...FUSE, TIME-LAG (1.25A)
F502	1-532-741-11	(R503)....FUSE, GLASS TUBE (1.25A)
FL101	1-519-340-11	INDICATOR TUBE, FLUORESCENT
HE101	X-3391-143-1	HEAD ASSY, ROTARY
HRP101		

ELECTRICAL PARTS

Ref.No.	Part No.	Description
IC101	8-759-602-48	IC M5201L
IC201	8-759-602-48	IC M5201L
IC301	8-759-111-44	IC UPC4570C-1
IC302	8-752-018-70	IC CX20187
IC303	8-759-106-41	IC UPC4570C
IC304	8-759-600-02	IC M5218L
IC305	8-759-106-56	IC UPC1297CA
IC306	8-759-600-02	IC M5218L
IC307	8-759-106-61	IC UPC4570HA
IC308	8-759-140-66	IC UPD4066BC
IC501	8-759-602-47	IC M50761-417P
IC502	8-759-802-56	IC LC6520C-3079
IC503	8-759-240-69	IC TC4069UBP
IC504	8-759-700-46	IC CX10034
IC505	8-759-240-19	IC TC4019BP
IC506	8-759-240-19	IC TC4019BP
IC701	8-759-302-98	IC HD614042SA87
IC703	8-759-240-69	IC TC4069UBP
IC704	8-759-700-48	IC NJM2903S
J301	1-507-796-21	JACK (HEADPHONES)
J302	1-507-908-11	JACK, PIN 4P (LINE IN/OUT)
L101	1-408-929-00	MICRO INDUCTOR 27MMH
L102	1-408-926-11	MICRO INDUCTOR 15MMH
L103	1-408-923-00	MICRO INDUCTOR 8.2MMH
L104	1-408-924-00	MICRO INDUCTOR 10MMH
L201	1-408-929-00	MICRO INDUCTOR 27MMH
L202	1-408-926-11	MICRO INDUCTOR 15MMH
L203	1-408-923-00	MICRO INDUCTOR 8.2MMH
L204	1-408-924-00	MICRO INDUCTOR 10MMH
LPF101	1-231-388-00	FILTER, LOW PASS
LPF201	1-231-388-00	FILTER, LOW PASS
M1001	X-3391-130-1	MOTOR ASSY, CAPSTAN
M1002	X-3391-118-1	MOTOR ASSY, REEL
PL301	1-518-386-00	LAMP, PILOT
PM1001	1-454-440-11	SOLENOID, PLUNGER
Q101	8-729-100-13	TRANSISTOR 2SC2001
Q102	8-729-107-98	TRANSISTOR 2SC3622A-L
Q103	8-729-107-98	TRANSISTOR 2SC3622A-L
Q104	8-729-107-98	TRANSISTOR 2SC3622A-L
Q105	8-729-107-98	TRANSISTOR 2SC3622A-L
Q106	8-729-107-98	TRANSISTOR 2SC3622A-L
Q107	8-729-107-98	TRANSISTOR 2SC3622A-L
Q108	8-729-107-98	TRANSISTOR 2SC3622A-L
Q109	8-729-806-28	TRANSISTOR 2SC3402
Q201	8-729-100-13	TRANSISTOR 2SC2001
Q202	8-729-107-98	TRANSISTOR 2SC3622A-L
Q203	8-729-107-98	TRANSISTOR 2SC3622A-L
Q204	8-729-107-98	TRANSISTOR 2SC3622A-L
Q205	8-729-107-98	TRANSISTOR 2SC3622A-L
Q206	8-729-107-98	TRANSISTOR 2SC3622A-L
Q207	8-729-107-98	TRANSISTOR 2SC3622A-L
Q208	8-729-107-98	TRANSISTOR 2SC3622A-L
Q209	8-729-806-28	TRANSISTOR 2SC3402
Q301	8-729-806-28	TRANSISTOR 2SC3402
Q302	8-729-600-27	TRANSISTOR 2SC634SP
Q303	8-729-806-28	TRANSISTOR 2SC3402

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.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q304	8-729-806-38	TRANSISTOR 2SC3399
Q305	8-729-107-98	TRANSISTOR 2SC3622A-L
Q306	8-729-806-28	TRANSISTOR 2SC3402
Q307	8-729-806-20	TRANSISTOR 2SA1345
Q308	9-986-159-01	TRANSISTOR 2SA1348
Q309	9-986-159-01	TRANSISTOR 2SA1348
Q310	9-986-159-01	TRANSISTOR 2SA1348
Q311	9-986-159-01	TRANSISTOR 2SA1348
Q312	8-729-806-28	TRANSISTOR 2SC3403
Q313	9-986-159-01	TRANSISTOR 2SA1348
Q315	8-729-806-38	TRANSISTOR 2SC3399
Q316	8-729-117-54	TRANSISTOR 2SA1175
Q317	8-729-600-27	TRANSISTOR 2SC634SP
Q318	8-729-600-27	TRANSISTOR 2SC634SP
Q319	8-729-806-28	TRANSISTOR 2SC3402
Q320	8-729-806-28	TRANSISTOR 2SC3402
Q501	8-729-201-56	TRANSISTOR 2SK246GR2
Q502	8-729-600-27	TRANSISTOR 2SC634SP
Q503	8-729-600-27	TRANSISTOR 2SC634SP
Q504	8-729-180-92	TRANSISTOR 2SD809-K
Q505	8-729-117-54	TRANSISTOR 2SA1175
Q506	8-729-117-54	TRANSISTOR 2SA1175
Q507	8-729-173-13	TRANSISTOR 2SB731
Q508	8-729-201-56	TRANSISTOR 2SK246GR
Q509	8-729-600-27	TRANSISTOR 2SC634SP
Q510	8-729-806-28	TRANSISTOR 2SC3402
Q511	8-729-364-72	TRANSISTOR 2SB647
Q512	8-729-110-68	TRANSISTOR 2SA1409-L
Q513	8-729-107-25	TRANSISTOR 2SD1585-K
Q514	8-729-806-26	TRANSISTOR 2SC3901
Q515	8-729-600-27	TRANSISTOR 2SC634SP
Q516	8-729-180-92	TRANSISTOR 2SD809-K
Q518	8-729-107-98	TRANSISTOR 2SC3622A-L
Q519	9-986-159-01	TRANSISTOR 2SA1348
Q520	8-729-806-28	TRANSISTOR 2SC3402
Q521	8-729-600-27	TRANSISTOR 2SC634SP
Q522	9-986-159-01	TRANSISTOR 2SA1348
Q523	9-986-159-01	TRANSISTOR 2SA1348
Q525	9-986-159-01	TRANSISTOR 2SA1348
Q526	8-729-801-83	TRANSISTOR 2SB1013
Q527	8-729-205-02	TRANSISTOR 2SB1150
Q528	8-729-177-43	TRANSISTOR 2SD774
Q529	8-729-801-83	TRANSISTOR 2SB1013
Q530	8-729-801-83	TRANSISTOR 2SB1013
Q531	8-729-801-93	TRANSISTOR 2SD1387
Q532	8-729-801-93	TRANSISTOR 2SD1387
Q533	8-729-801-83	TRANSISTOR 2SB1013
Q534	9-986-159-01	TRANSISTOR 2SA1348
Q535	9-986-159-01	TRANSISTOR 2SA1348
Q536	9-986-159-01	TRANSISTOR 2SA1348
Q537	8-729-806-28	TRANSISTOR 2SC3402
Q538	8-729-107-98	TRANSISTOR 2SC3622A-L
Q539	8-729-806-28	TRANSISTOR 2SC3402
Q540	8-729-806-28	TRANSISTOR 2SC3402
Q541	9-986-159-01	TRANSISTOR 2SA1348
Q542	8-729-180-92	TRANSISTOR 2SD809-K
Q543	8-729-806-28	TRANSISTOR 2SC3402

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q701	8-729-806-16	TRANSISTOR 2SA1346
Q702	8-729-806-16	TRANSISTOR 2SA1346
Q703	8-729-806-16	TRANSISTOR 2SA1346
Q704	8-729-806-16	TRANSISTOR 2SA1346
Q705	8-729-806-16	TRANSISTOR 2SA1346
Q706	8-729-806-16	TRANSISTOR 2SA1346
Q707	8-729-806-16	TRANSISTOR 2SA1346
Q708	8-729-806-16	TRANSISTOR 2SA1346
Q709	8-729-806-16	TRANSISTOR 2SA1346
Q710	8-729-806-16	TRANSISTOR 2SA1346
Q712	8-729-806-16	TRANSISTOR 2SA1346
Q713	8-729-806-16	TRANSISTOR 2SA1346
Q714	8-729-806-16	TRANSISTOR 2SA1346
Q730	8-729-806-34	TRANSISTOR 2SC3400
Q1001	X-3391-141-1	SENSOR ASSY
Q1002	1-807-509-11	PHOTO SENSOR
Q1003	1-807-509-11	PHOTO SENSOR
R001	1-247-752-11	CARBON 1K 5% 1/2W
R101	1-249-460-11	CARBON 15K 5% 1/4W
R102	1-247-698-11	CARBON 68 5% 1/4W
R103	1-246-524-00	CARBON 130K 5% 1/4W
R104	1-247-148-00	CARBON 5.1K 5% 1/4W
R105	1-249-431-11	CARBON 15K 5% 1/6W
R106	1-247-717-11	CARBON 2.2K 5% 1/4W
R107	1-247-718-11	CARBON 2.7K 5% 1/4W
R108	1-247-887-00	CARBON 220K 5% 1/6W
R109	1-249-429-11	CARBON 10K 5% 1/6W
R110	1-249-429-11	CARBON 10K 5% 1/6W
R111	1-249-441-11	CARBON 100K 5% 1/6W
R112	1-247-719-11	CARBON 3.3K 5% 1/4W
R113	1-247-723-11	CARBON 6.8K 5% 1/4W
R114	1-246-488-00	CARBON 4.3K 5% 1/4W
R115	1-247-140-00	CARBON 2.4K 5% 1/4W
R116	1-247-122-00	CARBON 430 5% 1/4W
R117	1-249-427-11	CARBON 6.8K 5% 1/6W
R118	1-249-415-11	CARBON 680 5% 1/6W
R119	1-247-713-11	CARBON 1K 5% 1/4W
R120	1-247-725-11	CARBON 10K 5% 1/4W
R121	1-249-465-11	CARBON 47K 5% 1/4W
R122	1-249-429-11	CARBON 10K 5% 1/6W
R124	1-249-433-11	CARBON 22K 5% 1/6W
R125	1-247-725-11	CARBON 10K 5% 1/4W
R126	1-247-725-11	CARBON 10K 5% 1/4W
R127	1-249-421-11	CARBON 2.2K 5% 1/6W
R128	1-249-469-11	CARBON 100K 5% 1/4W
R129	1-247-723-11	CARBON 6.8K 5% 1/4W
R130	1-249-464-11	CARBON 39K 5% 1/4W
R131	1-249-467-11	CARBON 68K 5% 1/4W
R132	1-247-723-11	CARBON 6.8K 5% 1/4W
R133	1-247-704-11	CARBON 220 5% 1/4W
R134	1-247-724-11	CARBON 8.2K 5% 1/4W
R135	1-249-462-11	CARBON 22K 5% 1/4W
R136	1-247-148-00	CARBON 5.1K 5% 1/4W
R138	1-247-726-11	CARBON 33K 5% 1/4W
R139	1-247-720-11	CARBON 3.9K 5% 1/4W
R140	1-249-429-11	CARBON 10K 5% 1/6W
R141	1-249-429-11	CARBON 10K 5% 1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R142	1-249-429-11	CARBON	10K	5%	1/6W
R143	1-249-425-11	CARBON	4.7K	5%	1/6W
R144	1-249-432-11	CARBON	18K	5%	1/6W
R145	1-215-473-00	CARBON	150K	5%	1/6W
R146	1-249-433-11	CARBON	22K	5%	1/6W
R148	1-249-421-11	CARBON	2.2K	5%	1/6W
R149	1-215-452-00	CARBON	20K	5%	1/6W
R150	1-247-704-11	CARBON	220	5%	1/4W
R151	1-247-726-11	CARBON	33K	5%	1/4W
R152	1-247-713-11	CARBON	1K	5%	1/4W
R153	1-247-717-11	CARBON	2.2K	5%	1/4W
R154	1-249-421-11	CARBON	2.2K	5%	1/6W
R155	1-249-441-11	CARBON	100K	5%	1/6W
R156	1-249-417-11	CARBON	1K	5%	1/6W
R157	1-249-393-11	(AUDIO BOARD)...CARBON	10	5%	1/6W
R157	1-249-429-11	(REC CAL VOL BOARD)...CARBON	10K	5%	1/6W
R158	1-249-433-11	CARBON	22K	5%	1/6W
R159	1-249-424-11	CARBON	3.9K	5%	1/6W
R160	1-249-429-11	CARBON	10K	5%	1/6W
R162	1-247-713-11	CARBON	1K	5%	1/4W
R163	1-249-433-11	CARBON	22K	5%	1/6W
R164	1-249-433-11	CARBON	22K	5%	1/6W
R165	1-249-408-11	CARBON	180	5%	1/6W
R166	1-249-436-11	CARBON	39K	5%	1/6W
R167	1-249-417-11	CARBON	1K	5%	1/6W
R168	1-249-429-11	CARBON	10K	5%	1/6W
R169	1-249-429-11	CARBON	10K	5%	1/6W
R170	1-249-465-11	CARBON	47K	5%	1/4W
R201	1-249-460-11	CARBON	15K	5%	1/4W
R202	1-247-698-11	CARBON	68	5%	1/4W
R203	1-246-524-00	CARBON	130K	5%	1/4W
R204	1-247-148-00	CARBON	5.1K	5%	1/4W
R205	1-249-431-11	CARBON	15K	5%	1/6W
R206	1-247-717-11	CARBON	2.2K	5%	1/4W
R207	1-247-718-11	CARBON	2.7K	5%	1/4W
R208	1-247-887-00	CARBON	220K	5%	1/6W
R209	1-249-429-11	CARBON	10K	5%	1/6W
R210	1-249-429-11	CARBON	10K	5%	1/6W
R211	1-249-441-11	CARBON	100K	5%	1/6W
R212	1-247-719-11	CARBON	3.3K	5%	1/4W
R213	1-247-723-11	CARBON	6.8K	5%	1/4W
R214	1-246-488-00	CARBON	4.3K	5%	1/4W
R215	1-247-140-00	CARBON	2.4K	5%	1/4W
R216	1-247-122-00	CARBON	430	5%	1/4W
R217	1-249-427-11	CARBON	6.8K	5%	1/6W
R218	1-249-415-11	CARBON	680	5%	1/6W
R219	1-247-713-11	CARBON	1K	5%	1/4W
R220	1-247-725-11	CARBON	10K	5%	1/4W
R221	1-249-465-11	CARBON	47K	5%	1/4W
R222	1-249-429-11	CARBON	10K	5%	1/6W
R224	1-249-433-11	CARBON	22K	5%	1/6W
R225	1-247-725-11	CARBON	10K	5%	1/4W
R226	1-247-725-11	CARBON	10K	5%	1/4W
R227	1-249-421-11	CARBON	2.2K	5%	1/6W
R228	1-249-469-11	CARBON	100K	5%	1/4W
R229	1-247-723-11	CARBON	6.8K	5%	1/4W
R230	1-249-464-11	CARBON	39K	5%	1/4W
R231	1-249-467-11	CARBON	68K	5%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R232	1-247-723-11	CARBON	6.8K	5%	1/4W
R233	1-247-704-11	CARBON	220	5%	1/4W
R234	1-247-724-11	CARBON	8.2K	5%	1/4W
R235	1-249-462-11	CARBON	22K	5%	1/4W
R236	1-247-148-00	CARBON	5.1K	5%	1/4W
R238	1-247-726-11	CARBON	33K	5%	1/4W
R239	1-247-720-11	CARBON	3.9K	5%	1/4W
R240	1-249-429-11	CARBON	10K	5%	1/6W
R241	1-249-429-11	CARBON	10K	5%	1/6W
R242	1-249-429-11	CARBON	10K	5%	1/6W
R243	1-249-425-11	CARBON	4.7K	5%	1/6W
R244	1-249-432-11	CARBON	18K	5%	1/6W
R245	1-215-473-00	CARBON	150K	5%	1/6W
R246	1-249-433-11	CARBON	22K	5%	1/6W
R248	1-249-421-11	CARBON	2.2K	5%	1/6W
R249	1-215-452-00	CARBON	20K	5%	1/6W
R250	1-247-704-11	CARBON	220	5%	1/4W
R251	1-247-726-11	CARBON	33K	5%	1/4W
R252	1-247-713-11	CARBON	1K	5%	1/4W
R253	1-247-717-11	CARBON	2.2K	5%	1/4W
R254	1-249-421-11	CARBON	2.2K	5%	1/6W
R255	1-249-441-11	CARBON	100K	5%	1/6W
R256	1-249-417-11	CARBON	1K	5%	1/6W
R257	1-249-393-11	(AUDIO BOARD)...CARBON	10	5%	1/6W
R257	1-249-429-11	(REC CAL VOL BOARD)...CARBON	10K	5%	1/6W
R258	1-249-433-11	CARBON	22K	5%	1/6W
R259	1-249-424-11	CARBON	3.9K	5%	1/6W
R260	1-249-429-11	CARBON	10K	5%	1/6W
R262	1-247-713-11	CARBON	1K	5%	1/4W
R263	1-249-433-11	CARBON	22K	5%	1/6W
R264	1-249-433-11	CARBON	22K	5%	1/6W
R265	1-249-408-11	CARBON	180	5%	1/6W
R266	1-249-436-11	CARBON	39K	5%	1/6W
R267	1-249-417-11	CARBON	1K	5%	1/6W
R268	1-249-429-11	CARBON	10K	5%	1/6W
R269	1-249-429-11	CARBON	10K	5%	1/6W
R270	1-249-465-11	CARBON	47K	5%	1/4W
R301	1-247-704-11	CARBON	220	5%	1/4W
R302	1-247-704-11	CARBON	220	5%	1/4W
R303	1-249-433-11	CARBON	22K	5%	1/6W
R304	1-215-469-00	METAL	100K	1%	1/6W
R305	1-249-429-11	CARBON	10K	5%	1/6W
R306	1-249-431-11	CARBON	15K	5%	1/6W
R307	1-249-421-11	CARBON	2.2K	5%	1/6W
R308	1-249-405-11	CARBON	100	5%	1/6W
R309	1-249-441-11	CARBON	100K	5%	1/6W
R312	1-249-433-11	CARBON	22K	5%	1/6W
R313	1-249-433-11	CARBON	22K	5%	1/6W
R314	1-249-441-11	CARBON	100K	5%	1/6W
R315	1-249-429-11	CARBON	10K	5%	1/6W
R316	1-249-429-11	CARBON	10K	5%	1/6W
R317	1-249-441-11	CARBON	100K	5%	1/6W
R318	1-249-419-11	CARBON	1.5K	5%	1/6W
R319	1-249-437-11	CARBON	47K	5%	1/6W
R320	1-249-413-11	CARBON	470	5%	1/6W
R321	1-249-411-11	CARBON	330	5%	1/6W
R322	1-249-432-11	CARBON	18K	5%	1/6W
R323	1-249-397-11	CARBON	22	5%	1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R324	1-249-432-11	CARBON	18K	5%	1/6W	
R325	1-249-429-11	CARBON	10K	5%	1/6W	
R326	1-249-429-11	CARBON	10K	5%	1/6W	
R327	1-249-425-11	CARBON	4.7K	5%	1/6W	
R328	1-249-429-11	CARBON	10K	5%	1/6W	
R329	1-249-429-11	CARBON	10K	5%	1/6W	
R330	1-249-425-11	CARBON	4.7K	5%	1/6W	
R331	1-249-432-11	CARBON	18K	5%	1/6W	
R332	1-249-441-11	CARBON	100K	5%	1/6W	
R333	1-249-425-11	CARBON	4.7K	5%	1/6W	
R334	1-249-436-11	CARBON	39K	5%	1/6W	
R335	1-249-436-11	CARBON	39K	5%	1/6W	
R336	A 1-217-385-00	FUSIBLE	6.8	5%	1/4W	F
R337	1-249-405-11	CARBON	100	5%	1/6W	
R338	1-249-425-11	CARBON	4.7K	5%	1/6W	
R339	1-249-433-11	CARBON	22K	5%	1/6W	
R340	1-249-433-11	CARBON	22K	5%	1/6W	
R341	1-249-417-11	CARBON	1K	5%	1/6W	
R342	1-249-429-11	CARBON	10K	5%	1/6W	
R343	1-249-417-11	CARBON	1K	5%	1/6W	
R346	1-247-717-11	CARBON	2.2K	5%	1/4W	
R347	1-249-429-11	CARBON	10K	5%	1/6W	
R503	1-214-713-00	METAL	220	1%	1/4W	
R504	1-214-731-00	METAL	1.2K	1%	1/4W	
R505	1-214-723-00	METAL	560	1%	1/4W	
R506	1-249-429-11	CARBON	10K	5%	1/6W	
R507	1-214-721-00	METAL	470	1%	1/4W	
R508	1-249-433-11	CARBON	22K	5%	1/6W	
R510	1-249-433-11	CARBON	22K	5%	1/6W	
R511	1-214-747-00	METAL	5.6K	1%	1/4W	
R512	1-214-755-00	METAL	12K	1%	1/4W	
R513	1-249-462-11	CARBON	22K	5%	1/4W	
R514	1-247-721-11	CARBON	4.7K	5%	1/4W	
R515	1-247-849-00	CARBON	5.6K	5%	1/6W	
R516	1-249-417-11	CARBON	1K	5%	1/6W	
R517	1-247-717-11	CARBON	2.2K	5%	1/4W	
R518	1-247-752-11	CARBON	1K	5%	1/2W	
R519	1-249-405-11	CARBON	100	5%	1/6W	
R520	1-249-432-11	CARBON	18K	5%	1/6W	
R521	1-249-430-11	CARBON	12K	5%	1/6W	
R522	1-249-393-11	CARBON	10	5%	1/6W	
R523	1-249-433-11	CARBON	22K	5%	1/6W	
R524	1-215-493-00	CARBON	1M	5%	1/6W	
R525	1-249-422-11	CARBON	2.7K	5%	1/6W	
R526	1-249-441-11	CARBON	100K	5%	1/6W	
R528	1-249-429-11	CARBON	10K	5%	1/6W	
R529	1-215-493-00	CARBON	1M	5%	1/6W	
R530	1-249-429-11	CARBON	10K	5%	1/6W	
R531	1-249-417-11	CARBON	1K	5%	1/6W	
R532	1-249-437-11	CARBON	47K	5%	1/6W	
R533	1-249-433-11	CARBON	22K	5%	1/6W	
R534	1-249-433-11	CARBON	22K	5%	1/6W	
R535	1-249-437-11	CARBON	47K	5%	1/6W	
R536	1-249-437-11	CARBON	47K	5%	1/6W	
R537	1-249-430-11	CARBON	12K	5%	1/6W	
R538	1-249-425-11	CARBON	4.7K	5%	1/6W	
R539	1-249-430-11	CARBON	12K	5%	1/6W	

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R540	1-247-708-11	CARBON	470	5%	1/4W	
R541	1-249-433-11	CARBON	22K	5%	1/6W	
R542	1-249-433-11	CARBON	22K	5%	1/6W	
R543	1-247-808-00	CARBON	110	5%	1/6W	
R544	1-249-425-11	CARBON	4.7K	5%	1/6W	
R551	1-249-413-11	CARBON	470	5%	1/6W	
R552	1-249-413-11	CARBON	470	5%	1/6W	
R553	1-249-413-11	CARBON	470	5%	1/6W	
R554	1-249-413-11	CARBON	470	5%	1/6W	
R555	1-249-413-11	CARBON	470	5%	1/6W	
R556	1-249-413-11	CARBON	470	5%	1/6W	
R557	1-249-413-11	CARBON	470	5%	1/6W	
R558	1-249-413-11	CARBON	470	5%	1/6W	
R559	1-249-413-11	CARBON	470	5%	1/6W	
R560	1-249-413-11	CARBON	470	5%	1/6W	
R561	1-249-433-11	CARBON	22K	5%	1/6W	
R562	1-249-433-11	CARBON	22K	5%	1/6W	
R563	1-249-433-11	CARBON	22K	5%	1/6W	
R564	1-249-433-11	CARBON	22K	5%	1/6W	
R565	1-249-433-11	CARBON	22K	5%	1/6W	
R566	1-249-433-11	CARBON	22K	5%	1/6W	
R567	1-249-433-11	CARBON	22K	5%	1/6W	
R568	1-249-433-11	CARBON	22K	5%	1/6W	
R569	1-249-433-11	CARBON	22K	5%	1/6W	
R570	1-249-433-11	CARBON	22K	5%	1/6W	
R571	1-249-433-11	CARBON	22K	5%	1/6W	
R572	1-249-433-11	CARBON	22K	5%	1/6W	
R578	1-249-431-11	CARBON	15K	5%	1/6W	
R579	1-249-425-11	CARBON	4.7K	5%	1/6W	
R580	1-249-430-11	CARBON	12K	5%	1/6W	
R581	1-215-452-00	CARBON	20K	5%	1/6W	
R582	1-249-435-11	CARBON	33K	5%	1/6W	
R583	1-249-435-11	CARBON	33K	5%	1/6W	
R584	1-247-887-00	CARBON	220K	5%	1/6W	
R585	1-247-887-00	CARBON	220K	5%	1/6W	
R586	1-249-408-11	CARBON	180	5%	1/6W	
R587	1-249-408-11	CARBON	180	5%	1/6W	
R588	1-249-408-11	CARBON	180	5%	1/6W	
R589	1-249-408-11	CARBON	180	5%	1/6W	
R590	1-249-423-11	CARBON	3.3K	5%	1/6W	
R591	1-249-423-11	CARBON	3.3K	5%	1/6W	
R592	1-249-417-11	CARBON	1K	5%	1/6W	
R593	1-249-415-11	CARBON	680	5%	1/6W	
R594	1-249-421-11	CARBON	2.2K	5%	1/6W	
R595	1-249-417-11	CARBON	1K	5%	1/6W	
R596	1-249-417-11	CARBON	1K	5%	1/6W	
R597	1-249-417-11	CARBON	1K	5%	1/6W	
R598	1-249-417-11	CARBON	1K	5%	1/6W	
R599	1-249-418-11	CARBON	1.2K	5%	1/6W	
R600	1-249-405-11	CARBON	100	5%	1/6W	
R601	1-249-413-11	CARBON	470	5%	1/6W	
R602	1-249-425-11	CARBON	4.7K	5%	1/6W	
R604	1-249-435-11	CARBON	33K	5%	1/6W	
R605	1-249-433-11	CARBON	22K	5%	1/6W	
R606	1-249-441-11	CARBON	100K	5%	1/6W	
R607	1-249-409-11	CARBON	220	5%	1/6W	
R608	1-249-409-11	CARBON	220	5%	1/6W	

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
R715	1-249-429-11	CARBON 10K 5% 1/6W
R716	1-249-425-11	CARBON 4.7K 5% 1/6W
R730	1-215-452-00	METAL 20K 1% 1/6W
R731	1-215-452-00	METAL 20K 1% 1/6W
R732	1-215-452-00	METAL 20K 1% 1/6W
R733	1-215-452-00	METAL 20K 1% 1/6W
R734	1-215-452-00	METAL 20K 1% 1/6W
R735	1-215-452-00	METAL 20K 1% 1/6W
R736	1-215-452-00	METAL 20K 1% 1/6W
R737	1-215-445-00	METAL 10K 1% 1/6W
R738	1-215-445-00	METAL 10K 1% 1/6W
R739	1-215-445-00	METAL 10K 1% 1/6W
R740	1-215-445-00	METAL 10K 1% 1/6W
R741	1-215-445-00	METAL 10K 1% 1/6W
R742	1-215-445-00	METAL 10K 1% 1/6W
R743	1-215-460-00	METAL 43K 1% 1/6W
R744	1-215-425-00	METAL 1.5K 1% 1/6W
R745	1-249-425-11	CARBON 4.7K 5% 1/6W
R746	1-249-425-11	CARBON 4.7K 5% 1/6W
R750	1-249-433-11	CARBON 22K 5% 1/6W
R762	1-247-712-11	CARBON 820 5% 1/4W
R763	1-249-410-11	CARBON 270 5% 1/6W
R771	1-249-417-11	CARBON 1K 5% 1/6W
R772	1-249-433-11	CARBON 22K 5% 1/6W
R773	1-249-417-11	CARBON 1K 5% 1/6W
R774	1-249-433-11	CARBON 22K 5% 1/6W
RV101	1-230-630-11	RES, ADJ, CARBON 10K
RV102	1-237-274-11	RES, VAR, CARBON 10K/10K (REC CAL L)
RV103	1-230-632-11	RES, ADJ, CARBON 33K
RV104	1-228-995-00	RES, ADJ, CARBON 22K
RV105	1-228-996-00	RES, ADJ, CARBON 47K
RV106	1-228-995-00	RES, ADJ, CARBON 22K
RV201	1-230-630-11	RES, ADJ, CARBON 10K
RV202	1-237-274-11	RES, VAR, CARBON 10K/10K (REC CAL R)
RV203	1-230-632-11	RES, ADJ, CARBON 33K
RV204	1-228-995-00	RES, ADJ, CARBON 22K
RV205	1-228-996-00	RES, ADJ, CARBON 47K
RV206	1-228-995-00	RES, ADJ, CARBON 22K
RV301	1-226-754-31	RES, VAR 20K/20K (REC LEVEL)
RV302	1-230-313-00	RES, VAR, CARBON 20K/20K (HEADPHONES LEVEL)
RV303	1-237-615-11	RES, VAR, CARBON 5K (REC BIAS)
RV501	1-228-995-00	RES, ADJ, CARBON 22K
RY301	1-515-645-11	RELAY
S301	1-570-103-21	SWITCH, PUSH (1 KEY)(POWER)
S302	1-570-982-11	SWITCH, PUSH (3 KEY) (DOLBY NR/DIRECTION MODE)
S303	1-554-208-00	SWITCH, SLIDE (TIMER)
S501	1-554-980-11	SWITCH, KEY BOARD (STOP)
S502	1-554-980-11	SWITCH, KEY BOARD (REW)
S503	1-554-980-11	SWITCH, KEY BOARD (FF)
S504	1-554-980-11	SWITCH, KEY BOARD (FWD)
S505	1-554-980-11	SWITCH, KEY BOARD (REV)
S506	1-554-980-11	SWITCH, KEY BOARD (REC)
S507	1-554-980-11	SWITCH, KEY BOARD (PAUSE)
S508	1-554-980-11	SWITCH, KEY BOARD (REC MUTE)
S509	1-554-980-11	SWITCH, KEY BOARD (TAPE OPERATION)

ELECTRICAL PARTS

Ref.No.	Part No.	Description
S510	1-554-980-11	SWITCH, KEY BOARD (REC CAL)
S771	1-554-980-11	SWITCH, KEY BOARD (RESET)
S772	1-554-980-11	SWITCH, KEY BOARD (MEMORY)
S901	1-570-307-11	(R503ES:E)...SWITCH, VOLTAGE CHANGE
S1001	1-570-720-11	SWITCH, PUSH (1 KEY)
S1002	1-570-720-11	SWITCH, PUSH (1 KEY)
S1005	1-570-723-11	SWITCH, PUSH (1 KEY)
S1006	1-570-721-11	SWITCH, LEAF
S1007	1-570-719-11	SWITCH, LEAF
SPK101	1-235-186-00	ENCAPSULATED COMPONENT
SPK201	1-235-186-00	ENCAPSULATED COMPONENT
T101	1-433-316-11	TRANSFORMER, BIAS STEP UP
T201	1-433-316-11	TRANSFORMER, BIAS STEP UP
T301	1-448-551-11	(R503)...TRANSFORMER, POWER
T301	1-448-552-11	(R503ES:AEP,UK)...TRANSFORMER, POWER
T301	1-448-553-11	(R503ES:E)...TRANSFORMER, POWER
T302	1-433-315-11	TRANSFORMER, BIAS OSCILLATION
TP1	*1-560-061-00	PIN, CONNECTOR 3P
X501	1-567-160-00	OSCILLATOR, CERAMIC, 4.19MHz
X502	1-527-532-00	OSCILLATOR, CERAMIC, 400kHz

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-558-233-11	CORP (WITH CONNECTOR)(SIRCS)4P
1-558-787-11	COR, CONNECTION
3-318-958-01	CUSHION (LEFT), LOWER
3-318-959-01	CUSHION (RIGHT), LOWER
3-318-960-01	CUSHION (LEFT), UPPER
3-318-961-01	CUSHION (RIGHT), UPPER
3-324-801-61	(R503)...INDIVIDUAL CARTON
3-324-801-71	INDIVIDUAL CARTON
3-701-630-00	BAG, POLYETHYLENE
3-703-450-01	(R503)...INSTRUCTION
3-703-710-41	STICKER, SONY SYMBOL (12)
3-765-958-11	(R503ES)...MANUAL, INSTRUCTION
3-765-958-21	(R503)...MANUAL, INSTRUCTION
3-765-958-31	(R503:Canadian)...MANUAL, INSTRUCTION
3-765-958-41	(R503ES:AEP,E)...MANUAL, INSTRUCTION
4-858-078-00	SHEET, PROTECTION

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Sony Corporation
Audio Group

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