

TA-F435R/F535R

SERVICE MANUAL

AEP Model

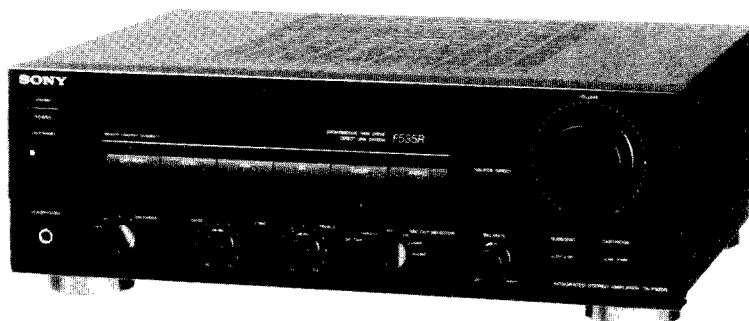


Photo : TA-F535R

SPECIFICATIONS

Amplifier

Continuous RMS power output (both channels driven simultaneously)

Model for Germany

		TA-F535R	TA-F435R
DIN, 1 kHz	4 ohms	110 W + 110 W	85 W + 85 W
	8 ohms	90 W + 90 W	80 W + 80 W
20 Hz - 20 kHz	4 ohms	80 W + 80 W	75 W + 75 W
	8 ohms	75 W + 75 W	65 W + 65 W

Model for Scandinavian countries, Switzerland, Spain and Portugal

		TA-F535R	TA-F435R
DIN, 1 kHz	8 ohms	85 W + 85 W	75 W + 75 W
20 Hz - 20 kHz	8 ohms	70 W + 70 W	60 W + 60 W

Model for other countries

		TA-F535R	TA-F435R
DIN, 1 kHz	4 ohms	110 W + 110 W	85 W + 85 W
	8 ohms	90 W + 90 W	80 W + 80 W
20 Hz - 20 kHz	4 ohms	80 W + 80 W	75 W + 75 W
	8 ohms	75 W + 75 W	65 W + 65 W

Input

Input jack	Jack type	Sensitivity	Impedance
PHONO (MM)	Phono	2.0 mV	50 kilohms
PHONO (MC)*	Phono	0.25 mV	100 ohms
TUNER, CD, AUX, DAT/TAPE 1 TAPE 2	Phono	150 mV	50 kilohms

S/N

	TA-F535R	TA-F435R
PHONO (MM)	94 dB	94 dB
PHONO (MC)*	76 dB	—
TUNER, CD, AUX, DAT/TAPE 1 TAPE 2	103 dB	103 dB

*PHONO (MC): only for TA-F535R

Output

Output jack	Jack type	Voltage/impedance
REC OUT	Phone jack	Voltage 150 mV Impedance 1 kohm
SPEAKERS	—	Model for Scandinavian countries, Switzerland, Spain and Portugal 8 - 16 ohms Model for other countries 4 - 16 ohms
HEADPHONES	Stereophone jack	Accepts low and high impedance headphones

Tone controls

	Response	Turnover frequency
BASS	±7 dB (100 Hz)	300 Hz
TREBLE	±6 dB (10 kHz)	5 kHz

— Continued on next page —



INTEGRATED STEREO AMPLIFIER
SONY®

Harmonic distortion	Less than 0.008 % at 10 W output
Intermodulation (IM) distortion (60 Hz : 7 kHz = 4:1)	Less than 0.008 % at 10 W output
Frequency response	PHONO: RIAA equalization curve ±0.5 dB TUNER, CD, AUX, DAT/TAPE 1, TAPE 2: 7 Hz – 100 kHz ±3 dB
Residual noise	Less than 170 µV (network A)
Damping factor	70 (8 ohms, 1 kHz)
General	
System	Preamplifier: Low-noise, equalizer amplifier Power amplifier: Pure-complementary SEPP OCL power amplifier with all stages directly coupled
Power requirements	220 V – 230 V AC, 50/60 Hz
Power consumption	Model for Germany TA-F535R: 230 W TA-F435R: 200 W Model for Scandinavian countries, Switzerland, Spain and Portugal TA-F535R: 180 W TA-F435R: 135 W Model for other European countries TA-F535R: 230 W TA-F435R: 200 W
Dimensions	Approx. 430 x 150 x 375 mm (w/h/d) (17 x 6 x 14 7/8 inches)
Mass	TA-F535R: Approx. 9.7 kg (21 lb 7 oz) TA-F435R: Approx. 8.8 kg (19 lb 7 oz)
Supplied accessories	Remote commander RM-S311 (1) Sony SUM-3 (NS) batteries (2)

The above values are measured at 230 V AC.

Design and specifications are subject to change without notice.

Note

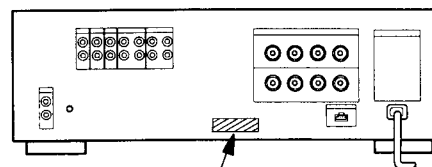
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

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MODEL IDENTIFICATION

— BACK PANEL —



TA-F435R :
 4-957-931-3□ : AEP1 model
 4-957-931-4□ : AEP2 model
 4-957-931-5□ : German model
TA-F535R :
 4-957-931-0□ : AEP1 model
 4-957-931-1□ : AEP2 model
 4-957-931-2□ : German model

Note :

There are two typed of AEP models which are depend on countries.
 AEP2 model :Model for Scandinavian countries, Switzerland,
 Spain, and Portugal.
 AEP1 model :Model for other European countries.

SAFETY-RELATED COMPONENT WARNING!!

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

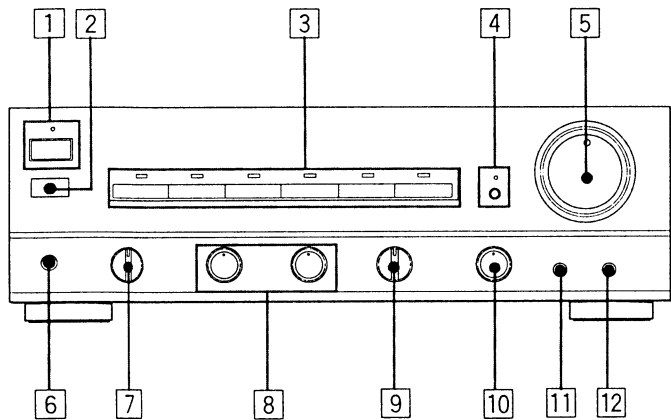
SECTION 1
GENERAL

Identifying the Parts and Controls

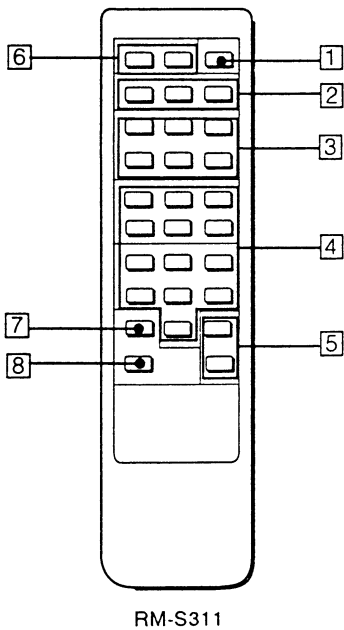
This section describes about each name of this amplifier and remote commander.

This section is extracted from instruction manual.

Front Panel



- 1 POWER switch and STANDBY indicator
- 2 Remote control sensor
- 3 Function selectors and indicators
- 4 SOURCE DIRECT button and indicator
- 5 VOLUME control and indicator
Adjusts the sound level.
Immediately after turning on the POWER switch, the VOLUME indicator blinks and then lights steadily. In case of shorting of circuit of the speaker outputs, etc., the indicator remains blinking. In such case, turn off the unit and check the connected components and speaker system.
- 6 HEADPHONES jack
- 7 SPEAKERS selector
- 8 TONE (BASS/TREBLE) controls
- 9 REC OUT SELECTOR
- 10 BALANCE control
- 11 SUBSONIC switch (TA-F535R)
- 12 CARTRIDGE selector (TA-F535R)



Remote Commander

- 1 POWER switch
- 2 TUNER operation buttons
TUNER: Select the TUNER mode.
PRESET +/- buttons: Select the preset station.
- 3 CD operation buttons
◀▶: Automatic music sensor.
D. (Disc) SKIP: Disc skip (for CD player equipped with a multi-disc changer)
▶: The amplifier enters the CD mode and the CD player starts playback automatically.
■: Stop.
⏸: Pause.
- 4 TAPE 2 DECK A/DECK B operation buttons
◀▶: Fast winding.
■: Stop.
◀: The amplifier enters the TAPE 2 mode and the tape deck starts reverse playback automatically.
▶: The amplifier enters the TAPE 2 mode and the tape deck starts forward playback automatically.
●: Recording.
⏸: Pause. (Only for DECK B)
- 5 VOL (Volume) +/- buttons
- 6 PHONO operation buttons
START: Pressing START automatically selects the PHONO mode on the amplifier and starts playback of the turntable system.
STOP: Stops playback of the turntable system.
- 7 DAT/TAPE 1 button
Selects the DAT or TAPE 1 mode.
- 8 AUX button
Selects the AUX mode.

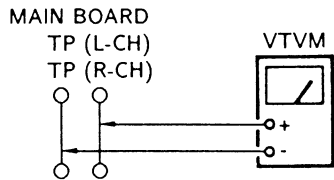
SECTION 2
ELECTRICAL ADJUSTMENTS

Note :

- 1. DC BIAS adjustments should be made one minute after the POWER switch is turned on (POWER ON).
- 2. After replacing the power transistors, DC BIAS adjustments should be made.

DC Bias Adjustment (with no signal input)

Procedure :



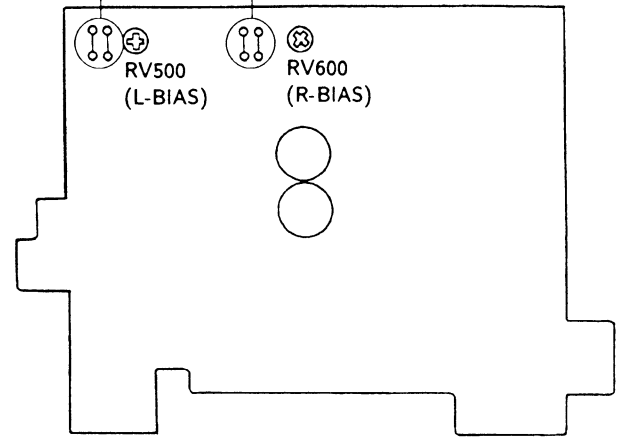
	Adjustment part	Reading on VTVM
L-CH	RV500	7mV
R-CH	RV600	7mV

Adjustment Location :

[MAIN BOARD]

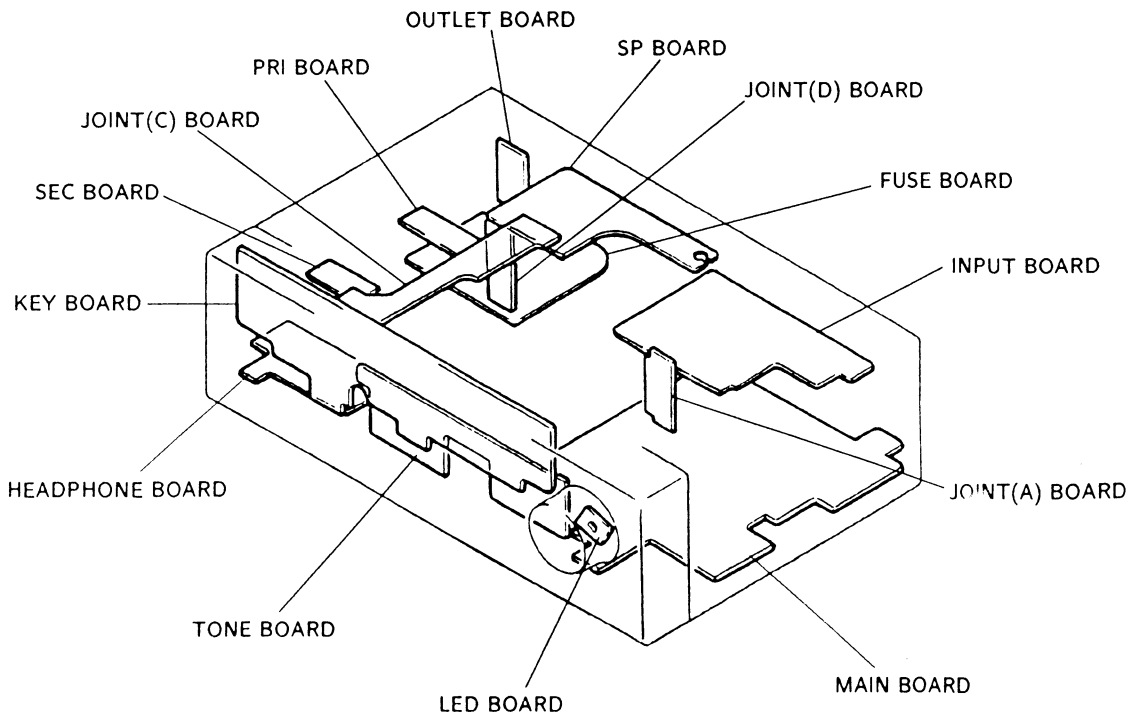
- COMPONENT SIDE -

TP (L-CH) TP (R-CH)

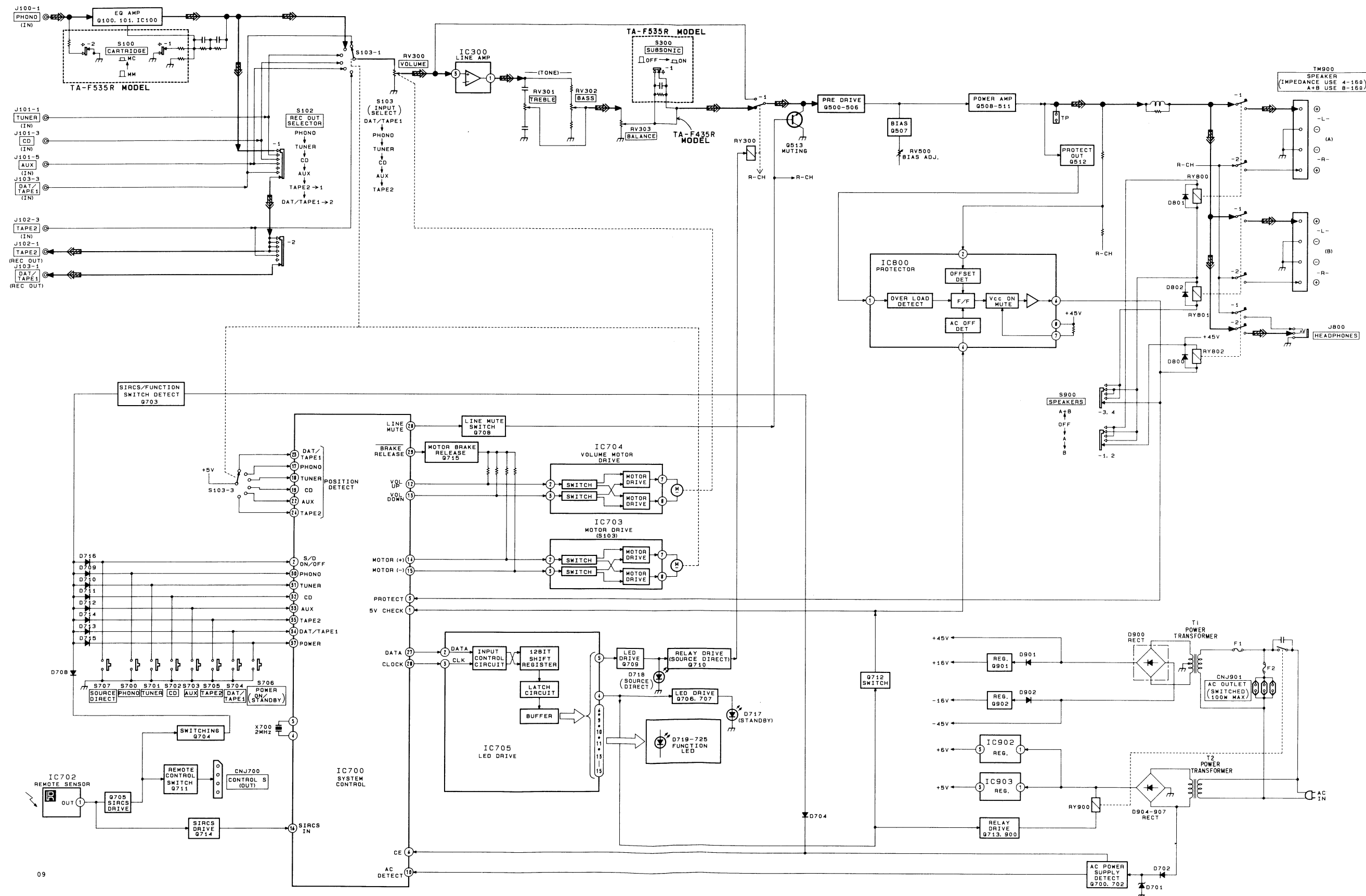


SECTION 3
DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION



3-2. BLOCK DIAGRAM



09

● IC700 System Controller (M50720-358SP)

Pin No.	Pin Name	I / O	Description
1	5V CHECK	I	Power supply (+5V) check.
2	S/D ON/OFF	I	Source direct ON/OFF control input.
3	PROTECT	I	Protection signal input.
4	X OUT	O	Connected oscillator circuit.
5	X IN	I	Connected oscillator circuit.
6	CE	I	Signal input for a return to normal position.
7	RESET	I	Reset signal input. ("L" : RESET)
8	VDD	I	+5 Volts power supply.
9	CNTR	I	Ground.
10	AC DET	I	AC power supply detection input.
11	C	I	Connected 0.1μF capacitor.
12	VOL UP	O	Volume control (up) signal output.
13	VOL DOWN	O	Volume control (down) signal output.
14	MOTOR NORM	O	Motor (normal turn) signal output.
15	MOTOR RVS	O	Motor (reverse turn) signal output.
16	SIRCS IN	I	Serial data input (SIRCS).
17	S1	I	Function selector positioning detection input (PHONO).
18	S2	I	Function selector positioning detection input (TUNER).
19	S3	I	Function selector positioning detection input (CD).
20	CNVSS	—	Ground.
21	VSS	—	Ground.
22	S4	I	Function selector positioning detection input (AUX).
23	S5	I	Function selector positioning detection input (TAPE 1).
24	S6	I	Function selector positioning detection input (TAPE 2).
25	S7	I	Connected the resistor 22 kilohms.
26	CLOCK	O	Shift register for LED (CLK).
27	DATA	O	Shift register for LED (DATA).
28	LINE MUTE	O	Line mute signal output.
29	BRAKE RELEASE	O	Motor drive control signal output. ("L" : BRAKE RELEASE)
30	PHONO	I	Function control input for Phono mode.
31	TUNER	I	Function control input for Tuner mode.
32	CD	I	Function control input for CD mode.
33	AUX	I	Function control input for AUX mode.
34	TAPE1	I	Function control input for Tape 1 mode.
35	TAPE2	I	Function control input for Tape 2 mode.
36	—	—	Connected the resistor 22 kilohms.
37	POWER ON/OFF	I	Power ON/OFF control input.
38	K0	I	Ground.
39	K1	I	Ground.
40	K2	I	Microcomputer operation mode selection input.
41	K3	I	Microcomputer operation mode selection input. Ground.
42	MUTE	I	Connected the resistor 22 kilohms.

• SEMICONDUCTOR LEAD LAYOUTS

BA6208

GP1U52XB

M5218AL
μ PC1237HA

TA7805S
TA7806S

DTA124ES
DTC124ES
2SC2603-EF
2SC3622A-LK

2SA1175-HFE

2SA1265N-M-RO
2SA1516-M-RO
2SC3182N-M-RO
2SC3907-M-RO

2SA1837
2SC4793

2SC1841-PAFAEA

2SC2229-0Y-TPE6

2SC2259-FG

2SD2012

2SK246-GR

HZS6C1L
HZS7C2L
HZS16-2L
UZ-3.0BS
11ES2

RBV-602-01

1N4148M
1S1585
10E2

SEL2215R-CD

SEL3210S-CD
SEL3810A-CD

SEL3510C-CD

• SEMICONDUCTOR LOCATION

Ref. No.	Location
D703	I - 9
D704	I - 9
D708	I - 5
D709	H - 13
D710	H - 13
D711	H - 11
D712	H - 10
D713	H - 7
D714	H - 9
D715	H - 6
D716	H - 13
D717	J - 4
D718	H - 16
D719	E - 13
D720	H - 8
D721	H - 6
D722	H - 9
D723	H - 11
D724	H - 12
D725	H - 14
D800	E - 4
IC702	H - 4
IC705	I - 12
Q700	I - 9
Q701	I - 8
Q702	I - 8
Q703	I - 10
Q704	H - 6
Q705	H - 5
Q706	I - 5
Q707	I - 5
Q709	I - 13

Note:

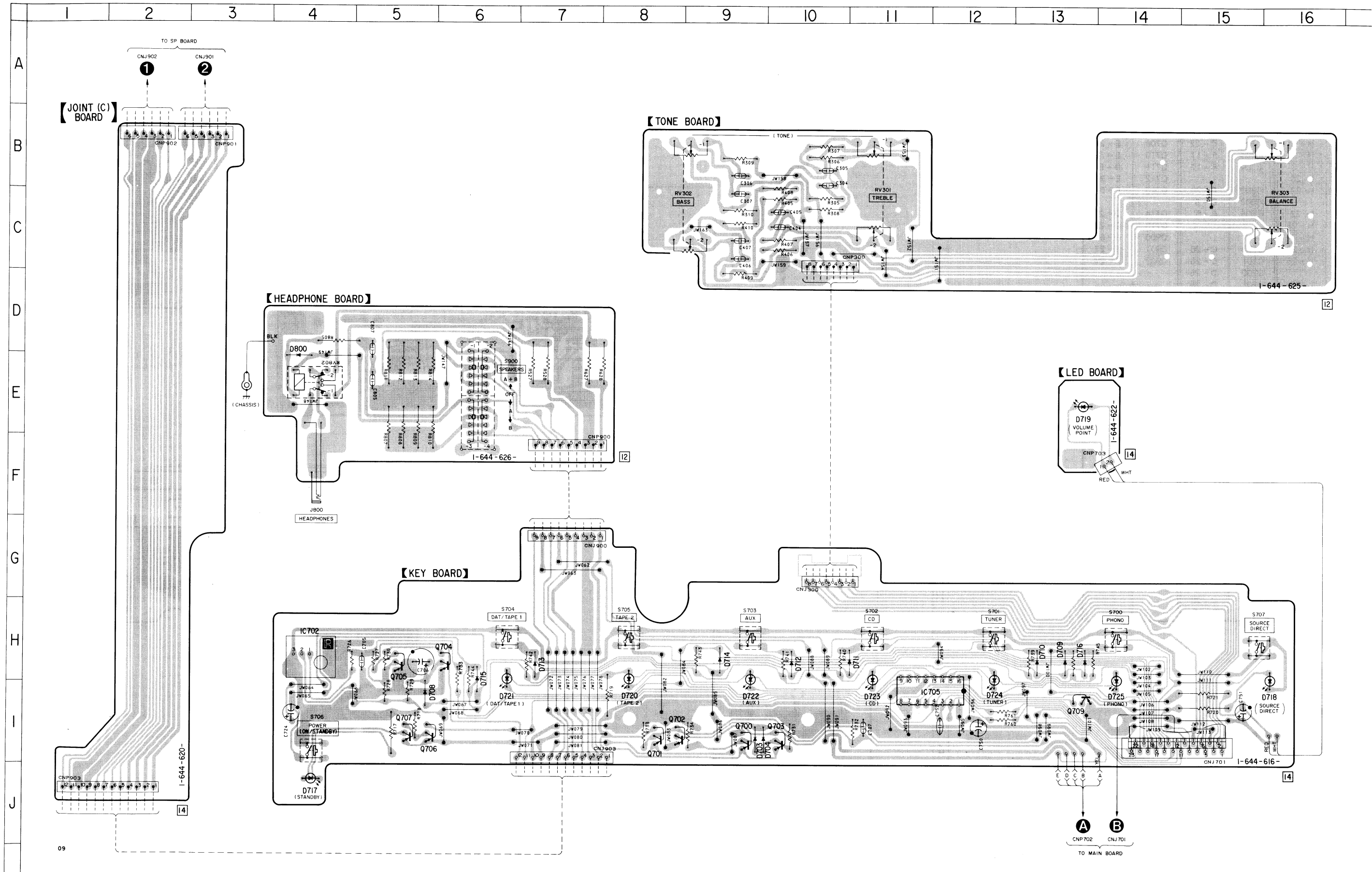
- : parts extracted from the component side.
- ⬢ : Pattern on the side which is seen.

PRINTED WIRING BOARD — KEY BOARD SECTION —

CONDUCTOR LOCATION

No.	Location
3	I - 9
4	I - 9
8	I - 5
9	H - 13
10	H - 13
11	H - 11
12	H - 10
13	H - 7
14	H - 9
15	H - 6
16	H - 13
17	J - 4
18	H - 16
19	E - 13
20	H - 8
21	H - 6
22	H - 9
23	H - 11
24	H - 12
25	H - 14
26	E - 4
27	H - 4
28	I - 12
29	I - 9
30	I - 8
31	I - 8
32	I - 10
33	H - 6
34	H - 5
35	I - 5
36	I - 5
37	I - 13

component side.
which is seen.



3-4. PRINTED WIRING BOARD — MAIN BOARD SECTION —

• See page 8 for Semiconductor Lead Layouts.

• SEMICONDUCTOR LOCATION

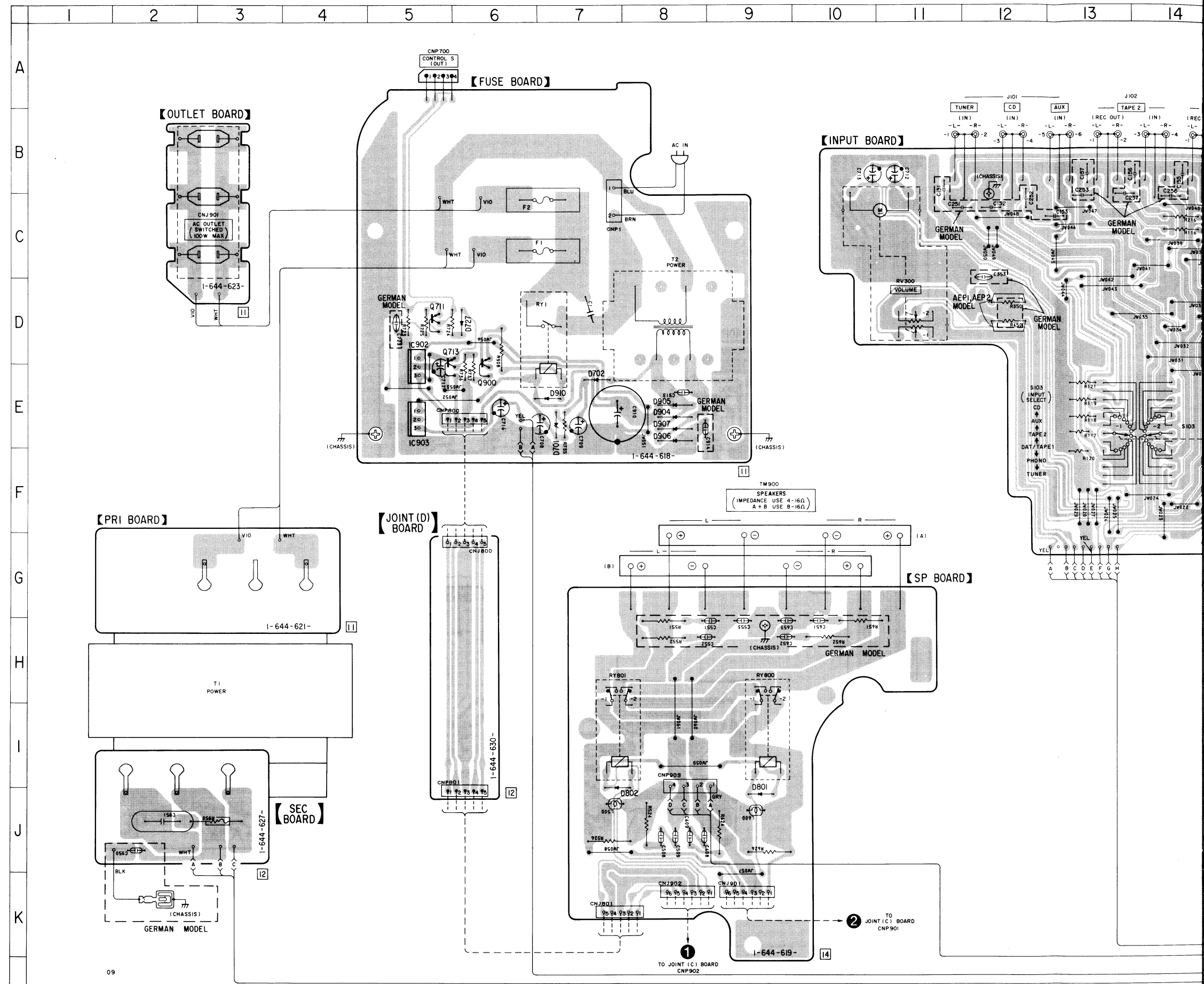
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D100	C - 24	D909	E - 28	Q609	I - 26
D500	H - 21	D910	E - 7	Q610	J - 27
D501	H - 19			Q611	J - 25
D502	I - 20			Q612	J - 27
D503	I - 20	IC100	D - 25	Q613	E - 23
		IC300	F - 21		
D504	H - 21	IC700	D - 22	Q708	E - 24
D505	H - 21	IC703	F - 17	Q710	E - 23
D506	H - 21	IC704	F - 17	Q711	D - 5
D507	I - 20			Q712	E - 21
D508	I - 22	IC800	F - 20	Q713	F - 5
		IC902	D - 5		
D509	I - 22	IC903	E - 5	Q714	D - 20
D600	H - 28			Q715	C - 23
D601	H - 27			Q900	E - 6
D602	H - 26	Q100	C - 26	Q901	E - 27
D603	H - 26	Q101	C - 26	Q902	F - 27
		Q200	D - 26		
D604	I - 28	Q201	D - 26		
D605	I - 28	Q500	H - 20		
D606	I - 28				
D607	I - 26	Q501	H - 21		
D608	J - 28	Q502	H - 20		
		Q503	I - 20		
D609	J - 28	Q504	I - 21		
D700	D - 23	Q505	I - 20		
D701	E - 7				
D702	E - 7	Q506	H - 19		
D705	E - 22	Q507	J - 22		
		Q508	I - 21		
D706	E - 22	Q509	I - 20		
D707	F - 22	Q510	J - 23		
D727	D - 6				
D728	E - 24	Q511	J - 21		
D729	E - 24	Q512	I - 22		
		Q513	E - 23		
D801	J - 9	Q600	H - 27		
D802	J - 7	Q601	H - 28		
D900	H - 22				
D901	G - 25	Q602	H - 27		
D902	G - 25	Q603	I - 28		
		Q604	I - 28		
D904	E - 8	Q605	I - 28		
D905	E - 8	Q606	H - 26		
D906	E - 8				
D907	E - 8	Q607	J - 26		
D908	F - 28	Q608	I - 27		

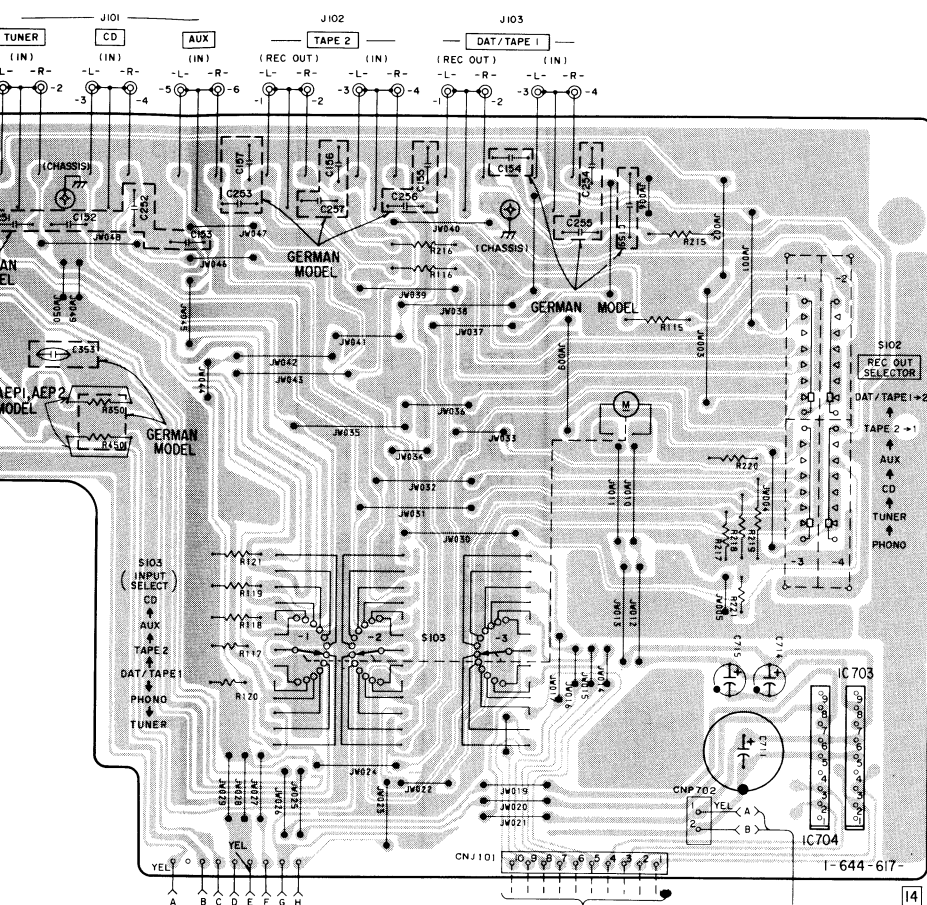
Note:

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

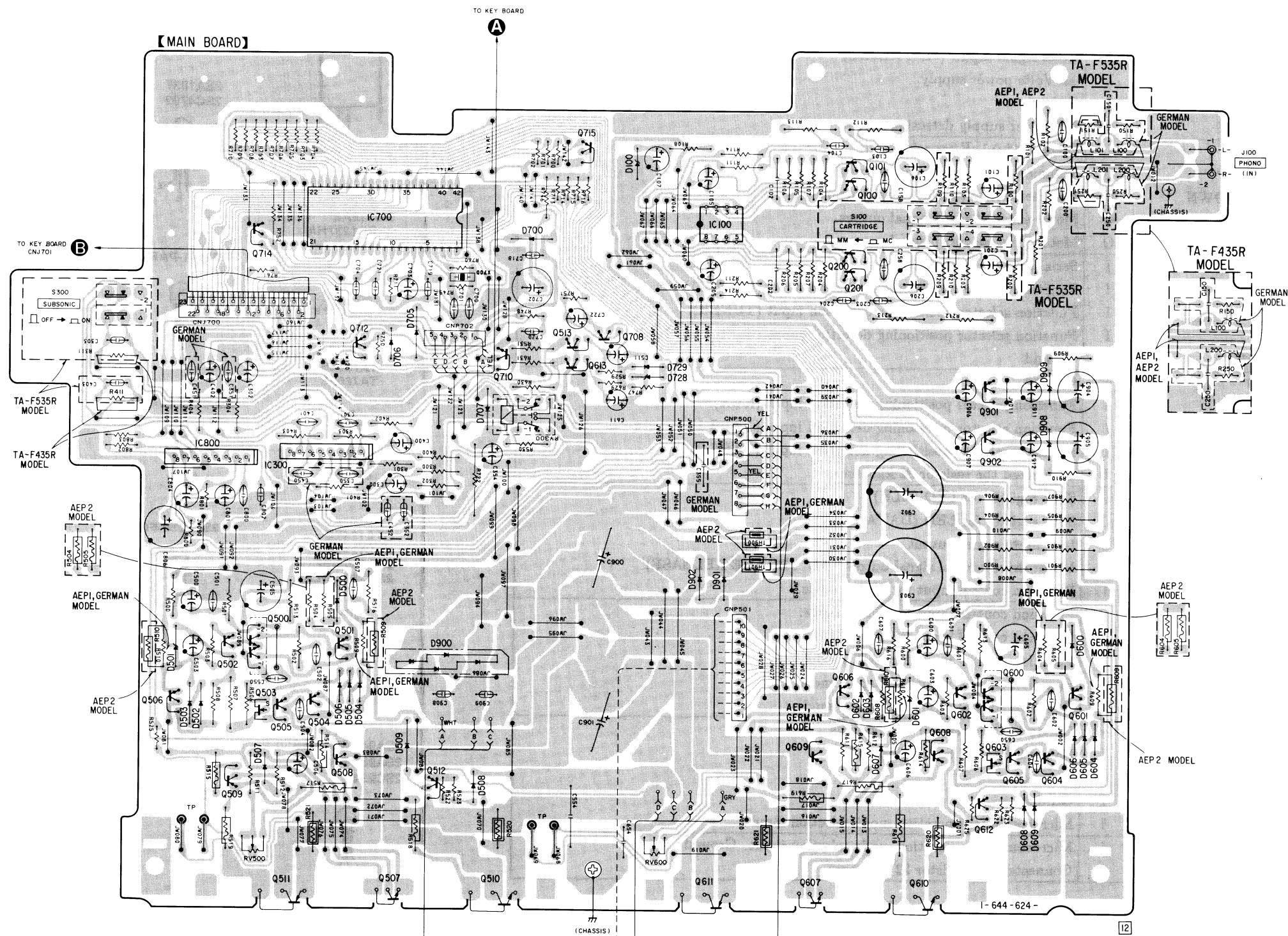
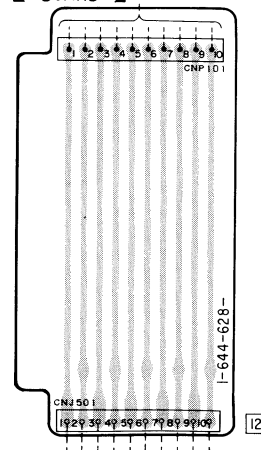
Note :

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 AEP2 model :Model for Scandinavian countries, Switzerland, Spain, and Portugal.
 AEP1 model :Model for other European countries.





JOINT (A) BOARD



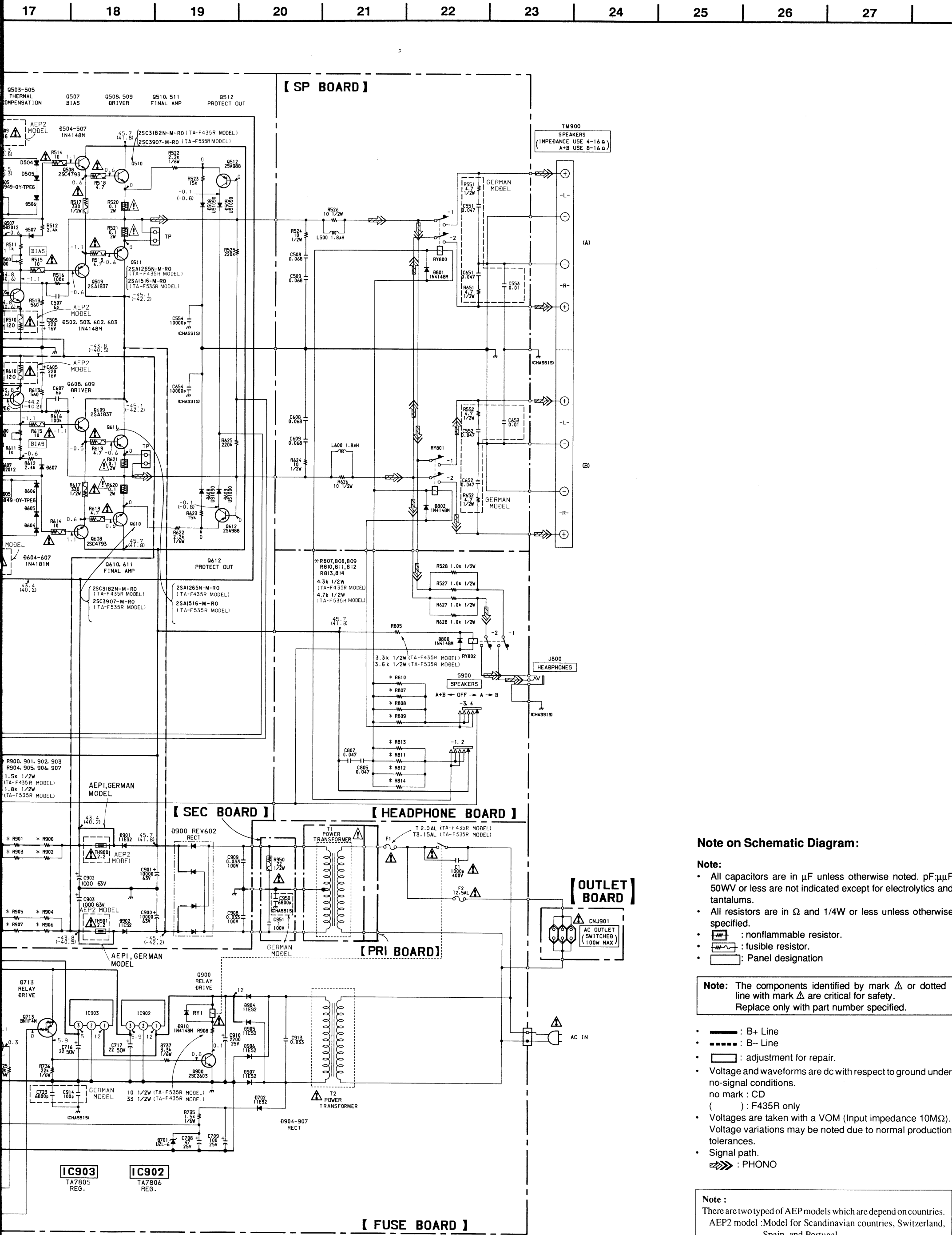
- See page 19 for IC Block Diagrams.



【 SP BOARD 】

RV301 RV302 RV303
TREBLE BASS BALANCE





Note on Schematic Diagram:

- Note:**
- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and 1/4W or less unless otherwise specified.
 - $\square$: nonflammable resistor.
 - $\square$: fusible resistor.
 - $\square$: Panel designation

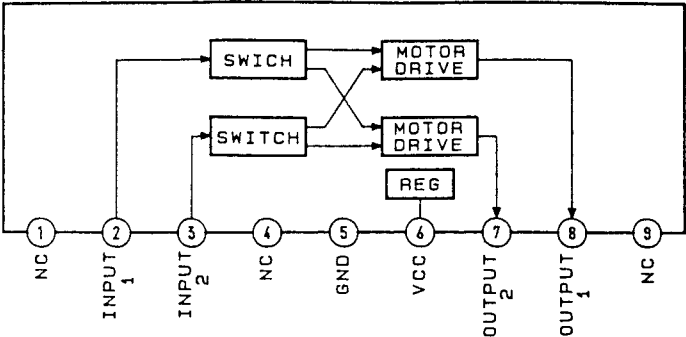
Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- --- : B+ Line
- --- : B- Line
- $\square$: adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
no mark : CD
() : F435R only
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Signal path.
 $\Rightarrow$: PHONO

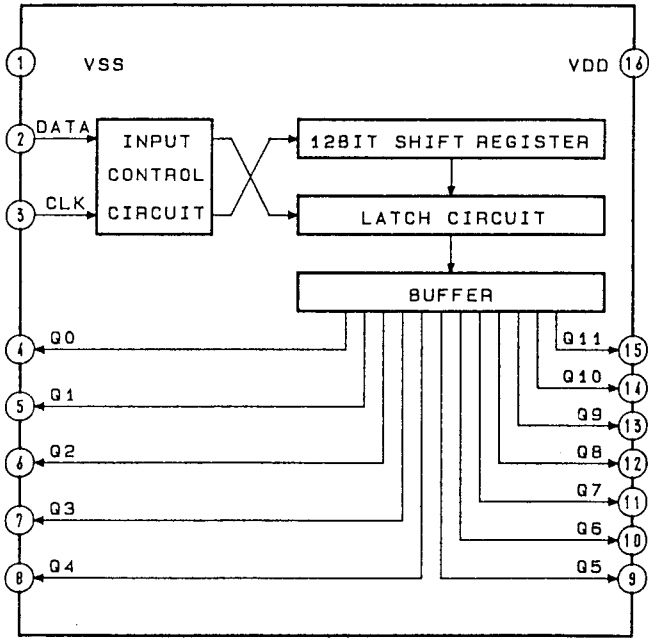
Note :
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3-6. IC BLOCK DIAGRAMS

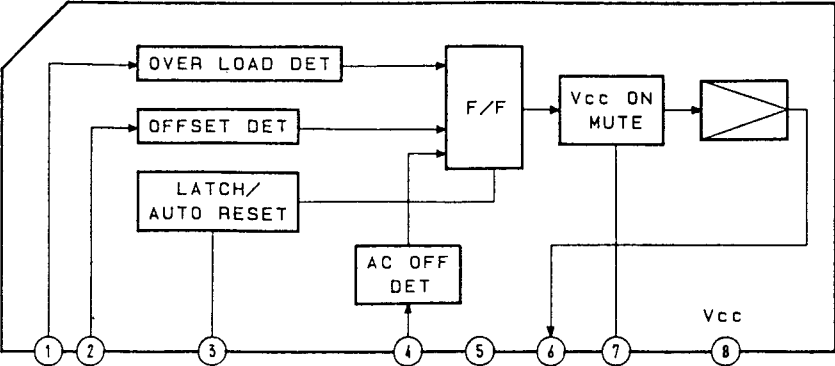
IC703, 704 BA6208



IC705 M50253P



IC800 UPC1237HA



SECTION 4
EXPLODED VIEWS

4-2. CHA

NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

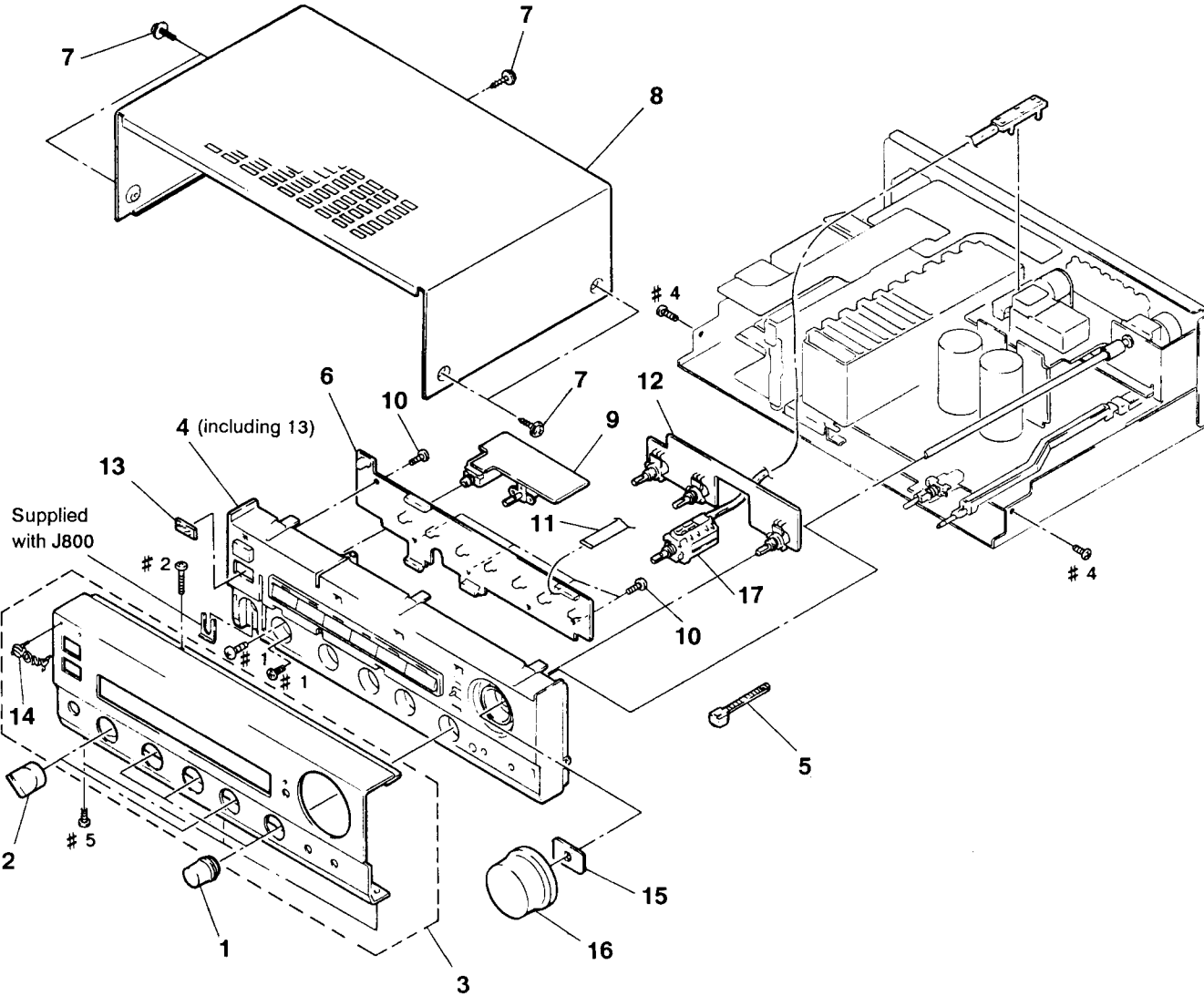
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.
- G : German model.

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

Note:

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AEP1 model: Model for other European countries

4-1. FRONT PANEL SECTION



not supplied

Ref. No.	Part No.	Description
1	4-949-931-01	KNOB (DIA. 21)
2	4-951-344-01	KNOB (R21), FLAT
3	A-4353-110-A	PANEL ASSY, FRONT (F435R)
3	A-4353-112-A	PANEL ASSY, FRONT (F535R)
4	X-4942-573-1	PANEL (BASE) ASSY
5	3-655-653-21	BAND (TAITON), BINDING
* 6	A-4347-648-A	KEY BOARD, COMPLETE (AEP)
* 6	A-4347-649-A	KEY BOARD, COMPLETE (G)
7	3-704-366-01	SCREW (CASE) (M3X8)
8	4-931-031-11	CASE

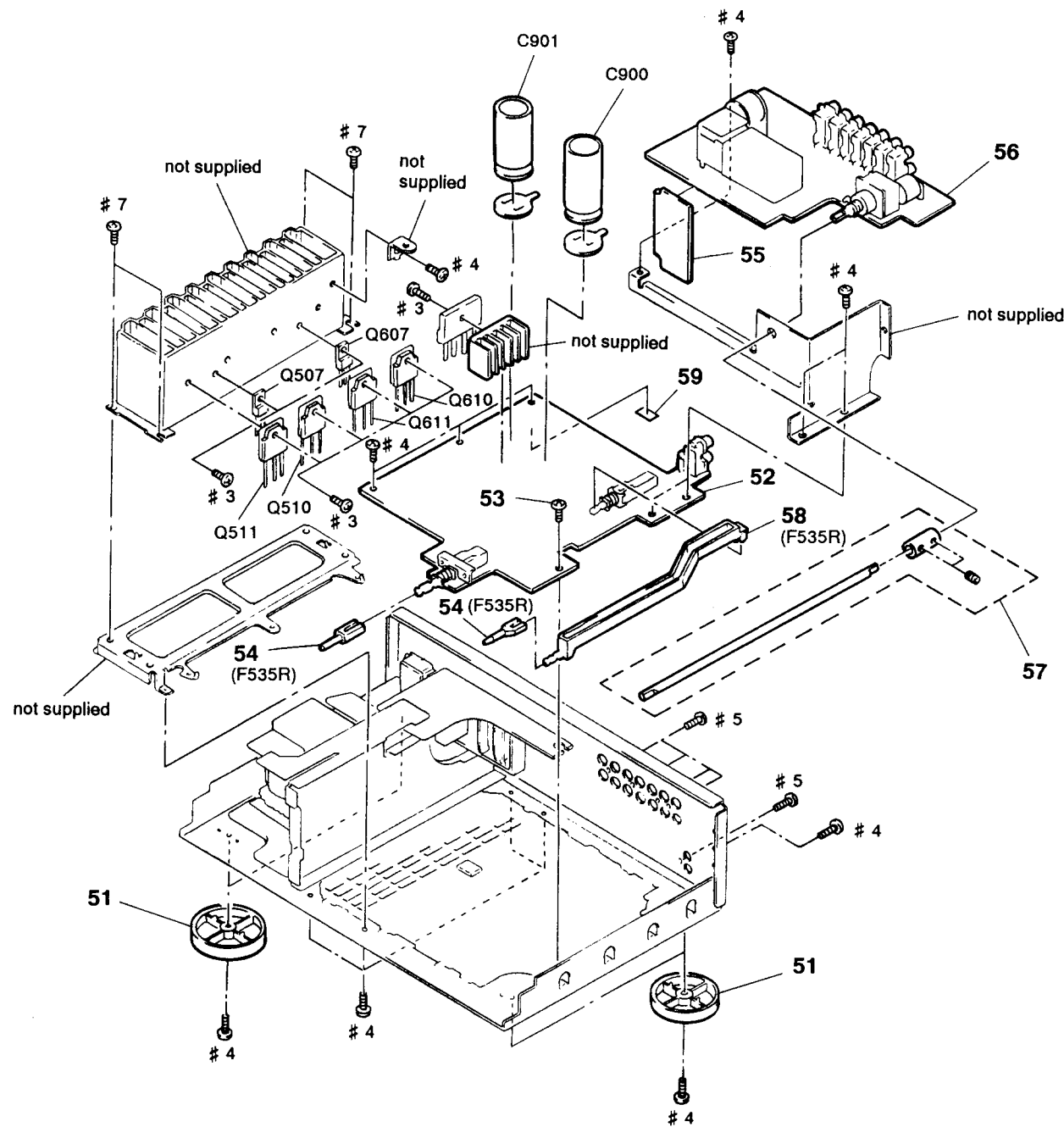
Ref. No.	Part No.	Description
* 9	1-644-626-11	HEADPHONE BOARD
10	4-951-620-01	SCREW (2.6X8), +BVTP
11	1-590-499-31	WIRE, FLAT TYPE (23 CORE)
* 12	1-644-625-11	TONE BOARD
13	4-931-911-01	FILTER
14	4-942-568-01	EMBLEM (NO.5), SONY
* 15	1-644-622-14	LED BOARD
16	X-4942-575-1	KNOB (R53) ASSY
17	1-692-148-11	SWITCH, ROTARY SLIDE

Remark

Ref. No.	Part
51	4-95
* 52	A-43
* 52	A-43
* 52	A-43
* 52	A-43
* 52	A-43
* 52	A-43
53	4-88
54	4-93
* 55	1-64
* 56	A-43
* 56	A-43
57	X-49

4-2. CHASSIS SECTION-1

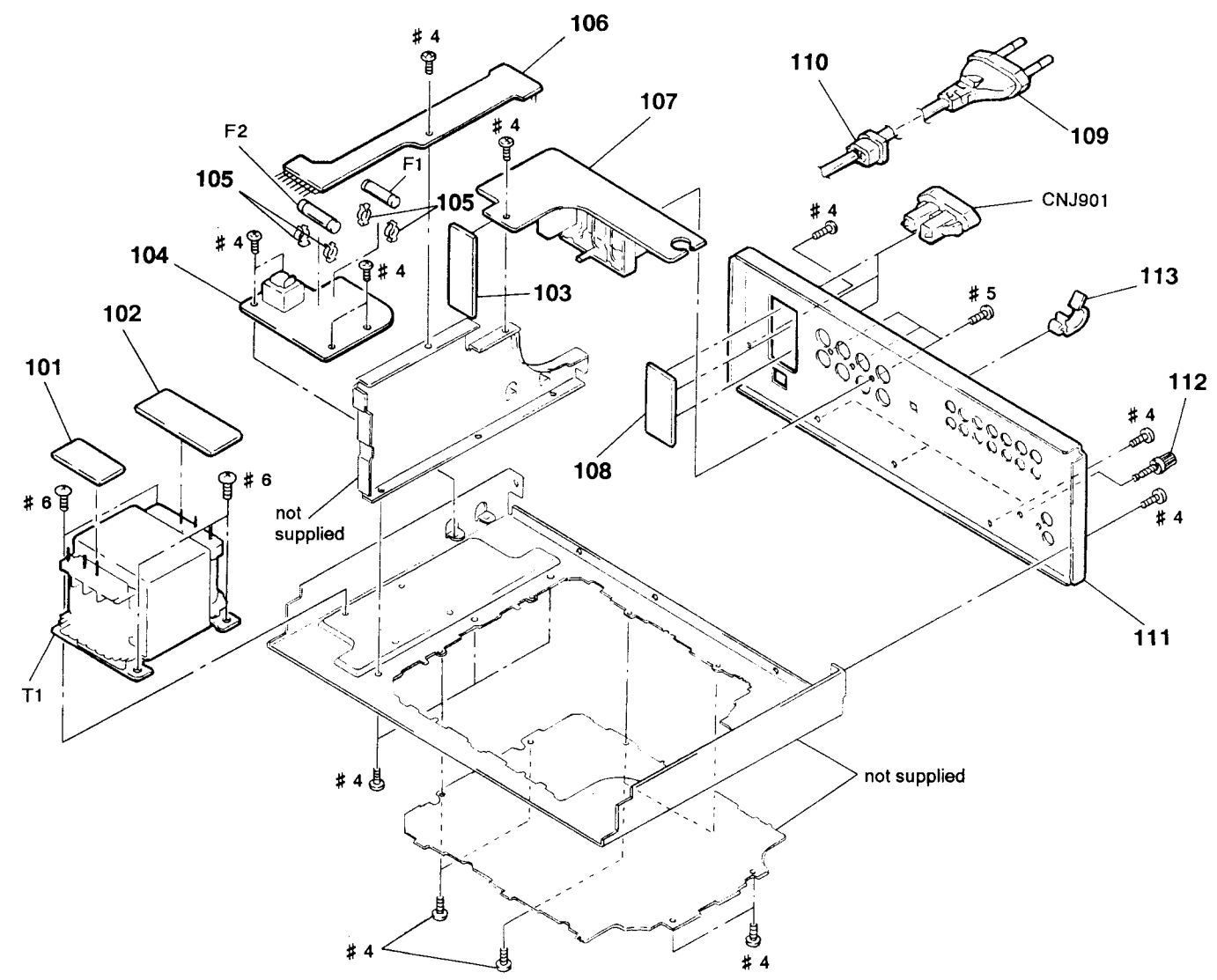
Identified by mark Δ with mark Δ are part number
Models which are avian countries, and Portugal and European countries



Ref.No.	Part No.	Description
51	4-956-885-11	FOOT (F58175S2W)
* 52	A-4360-486-A	MAIN BOARD, COMPLETE (F435R:AEP1)
* 52	A-4360-487-A	MAIN BOARD, COMPLETE (F435R:AEP2)
* 52	A-4360-488-A	MAIN BOARD, COMPLETE (F435R:G)
* 52	A-4360-489-A	MAIN BOARD, COMPLETE (F535R:AEP1)
* 52	A-4360-490-A	MAIN BOARD, COMPLETE (F535R:AEP2)
* 52	A-4360-491-A	MAIN BOARD, COMPLETE (F535R:G)
53	4-886-821-11	SCREW, S TIGHT, +PTIWH 3X6
54	4-931-641-01	BUTTON (DIA. 4) (F535R)
* 55	1-644-628-11	JOINT (A) BOARD
* 56	A-4347-650-A	INPUT BOARD, COMPLETE (AEP)
* 56	A-4347-651-A	INPUT BOARD, COMPLETE (G)
57	X-4942-809-1	SHAFT ASSY

Ref.No.	Part No.	Description
* 58	4-951-345-01	ROD, PUSH SWITCH (F535R)
59	9-911-847-XX	CUSHION, RUBBER
Q507	8-729-209-15	TRANSISTOR 2SD2012
Q510	8-729-020-88	TRANSISTOR 2SC3182N-M-RO (F435R)
Q510	8-729-020-90	TRANSISTOR 2SC3907-M-RO (F535R)
Q511	8-729-020-89	TRANSISTOR 2SA1265N-M-RO (F435R)
Q511	8-729-020-91	TRANSISTOR 2SA1516-M-RO (F535R)
Q607	8-729-209-15	TRANSISTOR 2SD2012
Q610	8-729-020-88	TRANSISTOR 2SC3182N-M-RO (F435R)
Q610	8-729-020-90	TRANSISTOR 2SC3907-M-RO (F535R)
Q611	8-729-020-89	TRANSISTOR 2SA1265N-M-RO (F435R)
Q611	8-729-020-91	TRANSISTOR 2SA1516-M-RO (F535R)

4-3. CHASSIS SECTION-2



Ref.No.	Part No.	Description
* 101	1-644-627-11	SEC BOARD
* 102	1-644-621-11	PRI BOARD
* 103	1-644-630-11	JOINT (D) BOARD
* 104	A-4347-654-A	FUSE BOARD, COMPLETE (F535R:AEP)
* 104	A-4347-655-A	FUSE BOARD, COMPLETE (F535R:G)
* 104	A-4347-688-A	FUSE BOARD, COMPLETE (F435R:AEP)
* 104	A-4347-689-A	FUSE BOARD, COMPLETE (F435R:G)
* 105	1-533-213-31	HOLDER, FUSE
* 106	1-644-620-14	JOINT (C) BOARD
* 107	1-644-619-14	SP BOARD
* 108	1-644-623-11	OUTLET BOARD
* 109	1-575-651-11	CORD, POWER
* 110	3-703-244-00	BUSHING (2104), CORD
* 111	4-957-931-01	PANEL, BACK (F535R:AEP1)
* 111	4-957-931-11	PANEL, BACK (F535R:AEP2)

Ref.No.	Part No.	Description
* 111	4-957-931-21	PANEL, BACK (F535R:G)
* 111	4-957-931-31	PANEL, BACK (F435R:AEP1)
* 111	4-957-931-41	PANEL, BACK (F435R:AEP2)
* 111	4-957-931-51	PANEL, BACK (F435R:G)
112	4-947-010-01	SCREW, FEEDER FIXED
* 113	4-949-235-01	HOOK
* CNJ901	1-526-794-11	OUTLET, AC
* F1	1-532-203-00	FUSE, TIME LAG (T2A) (F435R)
* F1	1-532-237-00	FUSE, TIME LAG (T3.15A) (F535R)
* F2	1-532-203-00	FUSE, TIME LAG (T2A) (F435R)
* F2	1-532-286-00	FUSE, TIME LAG (T2.5A) (F535R)
* T1	1-423-595-11	TRANSFORMER, POWER (F535R)
* T1	1-423-596-11	TRANSFORMER, POWER (F435R:AEP1,G)
* T1	1-423-597-11	TRANSFORMER, POWER (F435R:AEP2)

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

FUSE	HEADPHONE
1. Press the FUSE button on the front of the device. 2. The FUSE button is located on the front of the device, near the bottom left corner.	1. Press the HEADPHONE button on the front of the device. 2. The HEADPHONE button is located on the front of the device, near the bottom right corner.

- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)

$\uparrow$
Parts color

$\uparrow$
Cabinet's color
- SEMICONDUCTORS
In each case, u: μ , for example:
 $uA...: \mu A..., uPA...: \mu PA...,$
 $uPB...: \mu PB..., uPC...: \mu PC...,$
 $uPD...: \mu PD...$
- CAPACITORS
 $uF: \mu F$
- COILS
 $uH: \mu H$
- Hardware (# mark) list is given in the last of this parts list.

INPUT

Ref. No.	Part No.	Description			Remark
C156	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C157	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C159	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C251	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C252	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C253	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C254	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C255	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C256	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C257	1-162-286-31	CERAMIC	220PF	10%	50V (G)
C353	1-164-058-11	CERAMIC	33PF	5%	50V (G)
C711	1-124-471-00	ELECT	1000uF	20%	6.3V
C712	1-124-907-11	ELECT	10uF	20%	50V
C713	1-124-907-11	ELECT	10uF	20%	50V
C714	1-124-907-11	ELECT	10uF	20%	50V
C715	1-124-907-11	ELECT	10uF	20%	50V
< JACK >					
* CNJ101	1-691-180-11	CONNECTOR (BOARD TO BOARD)	10P		
< CONNECTOR >					
* CNP702	1-564-505-11	PLUG, CONNECTOR	2P		
< IC >					
IC703	8-759-962-08	IC	BA6208		
IC704	8-759-962-08	IC	BA6208		
< JACK >					
J101	1-566-883-71	JACK, PIN 6P (AUX/CD/TUNER)			
J102	1-566-882-51	JACK, PIN 4P (TAPE 2)			
J103	1-566-882-51	JACK, PIN 4P (DAT/TAPE 1) (AEP)			
J103	1-566-882-61	JACK, PIN 4P (DAT/TAPE 1) (G)			
< RESISTOR >					
R115	1-247-713-11	CARBON	1K	5%	1/4W
R116	1-247-713-11	CARBON	1K	5%	1/4W
R117	1-259-500-11	CARBON	1M	5%	1/6W
R118	1-259-500-11	CARBON	1M	5%	1/6W
R119	1-259-500-11	CARBON	1M	5%	1/6W
R120	1-259-500-11	CARBON	1M	5%	1/6W
R121	1-259-500-11	CARBON	1M	5%	1/6W
R215	1-247-713-11	CARBON	1K	5%	1/4W
R216	1-247-713-11	CARBON	1K	5%	1/4W
R217	1-259-500-11	CARBON	1M	5%	1/6W
R218	1-259-500-11	CARBON	1M	5%	1/6W
R219	1-259-500-11	CARBON	1M	5%	1/6W
R220	1-259-500-11	CARBON	1M	5%	1/6W
R221	1-259-500-11	CARBON	1M	5%	1/6W
R350	1-247-700-11	CARBON	100	5%	1/4W (G)

INPUT

JOINT (A)

JOINT (C)

JOINT (D)

KEY

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R450	1-247-700-11	CARBON 100 5% 1/4W (G) < VARIABLE RESISTOR >		C706	1-126-176-11	ELECT 220uF 20% 10V	
RV300	1-241-913-11	RES, VAR CARBON 120K/120K (VOLUME) < SWITCH >		C707	1-136-161-00	FILM 0.047uF 5% 50V	
S102	1-571-115-11	SWITCH, SLIDE (REC OUT SELECTOR)		C724	1-124-927-11	ELECT 4.7uF 20% 100V	
S103	1-692-142-11	SWITCH, ROTARY (WITH MOTOR) (INPUT SELECTOR)		C750	1-124-916-11	ELECT 22uF 20% 63V	
*****				C751	1-124-916-11	ELECT 22uF 20% 63V	
*	1-644-628-11	JOINT (A) BOARD ***** < JACK >		C752	1-164-085-11	CERAMIC 0.001uF 10% 50V	
* CNJ501	1-691-180-11	CONNECTOR (BOARD TO BOARD) 10P < CONNECTOR >		< JACK >			
CNP101	1-691-167-11	PIN, CONNECTOR 10P		* CNJ300	1-565-321-11	SOCKET, CONNECTOR (PC BOARD) 8P	
*****				* CNJ701	1-568-865-11	SOCKET, CONNECTOR 23P	
*	1-644-620-14	JOINT (C) BOARD ***** < CONNECTOR >		CNJ900	1-562-088-00	SOCKET, CONNECTOR 9P	
* CNP901	1-580-854-11	PIN, CONNECTOR (PC BOARD) 6P		* CNJ903	1-561-652-00	SOCKET, CONNECTOR 12P	
* CNP902	1-580-854-11	PIN, CONNECTOR (PC BOARD) 6P		< DIODE >			
* CNP903	1-560-443-11	PIN, CONNECTOR 12P		D703	8-719-987-63	DIODE 1N4148M	
*****				D704	8-719-987-63	DIODE 1N4148M	
*	1-644-630-11	JOINT (D) BOARD ***** < JACK >		D708	8-719-933-39	DIODE HZS6C1L	
* CNJ800	1-691-175-11	CONNECTOR (BOARD TO BOARD) 5P < CONNECTOR >		D709	8-719-987-63	DIODE 1N4148M	
CNP801	1-691-162-11	PIN, CONNECTOR 5P		D710	8-719-987-63	DIODE 1N4148M	
*****				D711	8-719-987-63	DIODE 1N4148M	
*	A-4347-648-A	KEY BOARD, COMPLETE (AEP) *****		D712	8-719-987-63	DIODE 1N4148M	
*	A-4347-649-A	KEY BOARD, COMPLETE (G) ***** < CAPACITOR >		D713	8-719-987-63	DIODE 1N4148M	
C705	1-164-085-11	CERAMIC 0.001uF 10% 50V		D714	8-719-987-63	DIODE 1N4148M	
				D715	8-719-987-63	DIODE 1N4148M	
				D716	8-719-987-63	DIODE 1N4148M	
				D717	8-719-313-69	DIODE SEL3210S-CD	
				D718	8-719-313-72	LED SEL3810A-CD	
				D720	8-719-018-46	DIODE SEL3510C-CD	
				D721	8-719-018-46	DIODE SEL3510C-CD	
				D722	8-719-018-46	DIODE SEL3510C-CD	
				D723	8-719-018-46	DIODE SEL3510C-CD	
				D724	8-719-018-46	DIODE SEL3510C-CD	
				D725	8-719-018-46	DIODE SEL3510C-CD	
				< IC >			
				IC702	8-749-920-83	IC GPIU52XB	
				IC705	8-759-635-31	IC M50253P	
				< TRANSISTOR >			
				Q700	8-729-900-63	TRANSISTOR DTA124ES	
				Q701	8-729-900-63	TRANSISTOR DTA124ES	
				Q702	8-729-900-36	TRANSISTOR DTC124ES	
				Q703	8-729-900-63	TRANSISTOR DTA124ES	
				Q704	8-729-620-05	TRANSISTOR 2SC2603-EF	
				Q705	8-729-620-05	TRANSISTOR 2SC2603-EF	
				Q706	8-729-900-63	TRANSISTOR DTA124ES	
				Q707	8-729-900-63	TRANSISTOR DTA124ES	
				Q709	8-729-900-63	TRANSISTOR DTA124ES	

KEY**LED****MAIN**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< RESISTOR >							
R717	1-247-710-11	CARBON 560 5% 1/4W		*	A-4360-486-A	MAIN BOARD, COMPLETE (F435R:AEP1) *****	
R718	1-249-433-11	CARBON 22K 5% 1/4W		*	A-4360-487-A	MAIN BOARD, COMPLETE (F435R:AEP2) *****	
R719	1-247-702-11	CARBON 150 5% 1/4W		*	A-4360-488-A	MAIN BOARD, COMPLETE (F435R:G) *****	
R720	1-247-703-11	CARBON 180 5% 1/4W		*	A-4360-489-A	MAIN BOARD, COMPLETE (F535R:AEP1) *****	
R721	1-247-703-11	CARBON 180 5% 1/4W		*	A-4360-490-A	MAIN BOARD, COMPLETE (F535R:AEP2) *****	
R726	1-249-429-11	CARBON 10K 5% 1/4W		*	A-4360-491-A	MAIN BOARD, COMPLETE (F535R:G) *****	
R727	1-249-429-11	CARBON 10K 5% 1/4W		7-685-648-79 SCREW +BVTP 3X12 TYPE2 IT-3 (F535R)			
R728	1-249-417-11	CARBON 1K 5% 1/4W		< CAPACITOR >			
R729	1-249-417-11	CARBON 1K 5% 1/4W		C100	1-164-077-11	CERAMIC 220PF 10% 50V	
R730	1-249-429-11	CARBON 10K 5% 1/4W		C101	1-123-369-00	ELECT 4.7uF 20% 50V	
R731	1-249-433-11	CARBON 22K 5% 1/4W		C102	1-161-377-00	CERAMIC 0.0047uF 30% 16V	
R732	1-249-438-11	CARBON 56K 5% 1/4W		C103	1-136-162-00	FILM 0.056uF 5% 50V	
R733	1-249-433-11	CARBON 22K 5% 1/4W		C104	1-137-471-11	FILM 0.016uF 5% 50V	
R734	1-249-433-11	CARBON 22K 5% 1/4W		C105	1-126-059-11	ELECT 10uF 20% 50V	
R738	1-249-433-11	CARBON 22K 5% 1/4W		C106	1-124-910-11	ELECT 47uF 20% 50V (F435R)	
R739	1-249-433-11	CARBON 22K 5% 1/4W		C106	1-126-541-11	ELECT 330uF 20% 16V (F535R)	
R740	1-249-433-11	CARBON 22K 5% 1/4W		C107	1-126-059-11	ELECT 10uF 20% 50V	
R741	1-249-433-11	CARBON 22K 5% 1/4W		C150	1-162-282-31	CERAMIC 100PF 10% 50V (G)	
R742	1-249-433-11	CARBON 22K 5% 1/4W		C158	1-164-073-11	CERAMIC 100PF 10% 50V	
R743	1-249-433-11	CARBON 22K 5% 1/4W		C200	1-164-077-11	CERAMIC 220PF 10% 50V	
R744	1-249-433-11	CARBON 22K 5% 1/4W		C201	1-123-369-00	ELECT 4.7uF 20% 50V	
R745	1-249-433-11	CARBON 22K 5% 1/4W		C202	1-161-377-00	CERAMIC 0.0047uF 30% 16V	
R753	1-249-429-11	CARBON 10K 5% 1/4W		C203	1-136-162-00	FILM 0.056uF 5% 50V	
R760	1-249-405-11	CARBON 100 5% 1/4W		C204	1-137-471-11	FILM 0.016uF 5% 50V	
R761	1-249-405-11	CARBON 100 5% 1/4W		C205	1-126-059-11	ELECT 10uF 20% 50V	
< SWITCH >				C206	1-124-910-11	ELECT 47uF 20% 50V (F435R)	
S700	1-554-303-21	SWITCH, TACTILE (PHONO)		C206	1-126-541-11	ELECT 330uF 20% 16V (F535R)	
S701	1-554-303-21	SWITCH, TACTILE (TUNER)		C250	1-162-282-31	CERAMIC 100PF 10% 50V (G)	
S702	1-554-303-21	SWITCH, TACTILE (CD)		C258	1-164-073-11	CERAMIC 100PF 10% 50V	
S703	1-554-303-21	SWITCH, TACTILE (AUX)		C300	1-123-369-00	ELECT 4.7uF 20% 50V	
S704	1-554-303-21	SWITCH, TACTILE (DAT/TAPE 1)		C301	1-164-073-11	CERAMIC 100PF 10% 50V	
S705	1-554-303-21	SWITCH, TACTILE (TAPE 2)		C302	1-123-369-00	ELECT 4.7uF 20% 50V	
S706	1-554-303-21	SWITCH, TACTILE (POWER)		C303	1-136-166-00	FILM 0.12uF 5% 50V (F535R)	
S707	1-554-303-21	SWITCH, TACTILE (SOURCE DIRECT)		C350	1-164-073-11	CERAMIC 100PF (G)	
*****				C351	1-164-073-11	CERAMIC 100PF 10% 50V (G)	
*	1-644-622-14	LED BOARD *****		C352	1-136-161-00	FILM 0.047uF 5% 50V (G)	
< CONNECTOR >				C354	1-124-791-11	ELECT 1.0uF 20% 100V	
* CNP703	1-564-505-11	PLUG, CONNECTOR 2P		C355	1-162-306-11	CERAMIC 0.01uF 20% 16V (G)	
< DIODE >				C400	1-123-369-00	ELECT 4.7uF 20% 50V	
D719	8-719-028-38	DIODE SEL2215R-CD		C401	1-164-073-11	CERAMIC 100PF 10% 50V	

Ref. No.	Part No.	Description	Remark				Ref. No.	Part No.	Description	Remark			
C402	1-123-369-00	ELECT	4.7uF	20%	50V		C905	1-124-122-11	ELECT	100uF	20%	50V	
C403	1-136-166-00	FILM	0.12uF	5%	50V (F535R)		C906	1-124-122-11	ELECT	100uF	20%	50V	
C450	1-164-073-11	CERAMIC	100PF		(G)		C907	1-124-122-11	ELECT	100uF	20%	50V	
C451	1-164-073-11	CERAMIC	100PF	10%	50V (G)		C908	1-106-379-12	MYLAR	0.033uF	5%	200V	
C452	1-136-161-00	FILM	0.047uF	5%	50V (G)		C909	1-106-379-12	MYLAR	0.033uF	5%	200V	
C500	1-123-369-00	ELECT	4.7uF	20%	50V		C911	1-124-910-11	ELECT	47uF	20%	50V	
C501	1-164-073-11	CERAMIC	100PF	10%	50V		C912	1-124-910-11	ELECT	47uF	20%	50V	
C502	1-164-083-11	CERAMIC	680PF	10%	50V		< JACK >						
C503	1-124-910-11	ELECT	47uF	20%	50V		* CNJ700	1-568-839-11	SOCKET, CONNECTOR 23P				
C504	1-162-550-11	CERAMIC	39PF	5%	500V		< CONNECTOR >						
C505	1-124-120-11	ELECT	220uF	20%	25V		* CNP500	1-564-511-11	PLUG, CONNECTOR 8P				
C506	1-123-306-00	ELECT	47uF	20%	10V		CNP501	1-691-167-11	PIN, CONNECTOR 10P				
C507	1-102-943-00	CERAMIC	6.0PF	+0.5PF	50V		* CNP702	1-564-508-11	PLUG, CONNECTOR 5P				
C511	1-126-049-11	ELECT	22uF	20%	50V		< DIODE >						
C550	1-164-073-11	CERAMIC	100PF	10%	50V		D100	8-719-933-50	DIODE	HZS7C2L			
C554	1-162-306-11	CERAMIC	0.01uF	20%	16V		D500	8-719-987-63	DIODE	1N4148M			
C600	1-123-369-00	ELECT	4.7uF	20%	50V		D501	8-719-933-39	DIODE	HZS6C1L			
C601	1-164-073-11	CERAMIC	100PF	10%	50V		D502	8-719-987-63	DIODE	1N4148M			
C602	1-164-083-11	CERAMIC	680PF	10%	50V		D503	8-719-987-63	DIODE	1N4148M			
C603	1-124-910-11	ELECT	47uF	20%	50V		D504	8-719-987-63	DIODE	1N4148M			
C604	1-162-550-11	CERAMIC	39PF	5%	500V		D505	8-719-987-63	DIODE	1N4148M			
C605	1-124-120-11	ELECT	220uF	20%	25V		D506	8-719-987-63	DIODE	1N4148M			
C606	1-123-306-00	ELECT	47uF	20%	10V		D507	8-719-987-63	DIODE	1N4148M			
C607	1-102-943-00	CERAMIC	6.0PF	+0.5PF	50V		D508	8-719-815-85	DIODE	1S1585			
C611	1-126-049-11	ELECT	22uF	20%	50V		D509	8-719-815-85	DIODE	1S1585			
C650	1-164-073-11	CERAMIC	100PF	10%	50V		D600	8-719-987-63	DIODE	1N4148M			
C654	1-162-306-11	CERAMIC	0.01uF	20%	16V		D601	8-719-933-39	DIODE	HZS6C1L			
C700	1-164-062-11	CERAMIC	47PF	5%	50V		D602	8-719-987-63	DIODE	1N4148M			
C701	1-164-062-11	CERAMIC	47PF	5%	50V		D603	8-719-987-63	DIODE	1N4148M			
C702	1-124-471-00	ELECT	1000uF	20%	6.3V		D604	8-719-987-63	DIODE	1N4148M			
C703	1-124-903-11	ELECT	1uF	20%	50V		D605	8-719-987-63	DIODE	1N4148M			
C704	1-136-153-00	FILM	0.01uF	5%	50V		D606	8-719-987-63	DIODE	1N4148M			
C718	1-136-161-00	FILM	0.047uF	5%	50V		D607	8-719-987-63	DIODE	1N4148M			
C719	1-136-161-00	FILM	0.047uF	5%	50V		D608	8-719-815-85	DIODE	1S1585			
C720	1-136-161-00	FILM	0.047uF	5%	50V		D609	8-719-815-85	DIODE	1S1585			
C721	1-136-168-00	FILM	0.18uF	5%	50V		D700	8-719-200-82	DIODE	11ES2			
C722	1-124-907-11	ELECT	10uF	20%	50V		D705	8-719-987-63	DIODE	1N4148M			
C800	1-164-085-11	CERAMIC	0.001uF	10%	50V		D706	8-719-987-63	DIODE	1N4148M			
C801	1-124-443-00	ELECT	100uF	20%	10V		D707	8-719-987-63	DIODE	1N4148M			
C802	1-136-153-00	FILM	0.01uF	5%	50V		D728	8-719-010-15	DIODE	UZ-3.0BS			
C804	1-124-443-00	ELECT	100uF	20%	10V (F535R)		D729	8-719-987-63	DIODE	1N4148M			
C804	1-124-482-11	ELECT	33uF	20%	35V (F435R)		D900	8-719-302-38	DIODE	RBV-602-01			
C806	1-124-472-11	ELECT	470uF	20%	10V		D901	8-719-200-02	DIODE	10E2			
C900	1-107-415-11	CAP, ELECT	10000uF		63V (F435R)		D902	8-719-200-02	DIODE	10E2			
C900	1-107-416-11	CAP, ELECT	10000uF		63V (F535R)		D908	8-719-933-88	DIODE	HZS16-2L			
C901	1-107-415-11	CAP, ELECT	10000uF		63V (F435R)		D909	8-719-933-88	DIODE	HZS16-2L			
C901	1-107-416-11	CAP, ELECT	10000uF		63V (F535R)								
C902	1-124-922-11	ELECT	1000uF	20%	63V								
C903	1-124-922-11	ELECT	1000uF	20%	63V								
C904	1-124-122-11	ELECT	100uF	20%	50V								

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< IC >							
IC100	8-759-745-61	IC NJM4560D-D		Q610	8-729-020-90	TRANSISTOR 2SC3907-M-RO (F535R)	
IC300	8-759-634-50	IC M5218AL		Q611	8-729-020-89	TRANSISTOR 2SA1265N-M-RO (F435R)	
IC700	8-759-082-11	IC M50720-358SP		Q611	8-729-020-91	TRANSISTOR 2SA1516-M-RO (F535R)	
IC800	8-759-111-68	IC uPC1237HA		Q612	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
< JACK >							
J100	1-580-054-11	JACK, PIN 2P (PHONO)		Q613	8-729-141-26	TRANSISTOR 2SC3622A-LK	
< COIL >				Q708	8-729-900-63	TRANSISTOR DTA124ES	
L100	1-410-979-11	INDUCTOR 220uH (F435R:G)		Q710	8-729-900-36	TRANSISTOR DTC124ES	
L100	1-424-397-11	COIL, CHOKE 200uH (F535R:G)		Q712	8-729-900-63	TRANSISTOR DTA124ES	
L101	1-424-397-11	COIL, CHOKE 200uH (F535R:G)		Q714	8-729-620-05	TRANSISTOR 2SC2603-EF	
L200	1-410-979-11	INDUCTOR 220uH (F435R:G)		Q715	8-729-900-63	TRANSISTOR DTA124ES	
L200	1-424-397-11	COIL, CHOKE 200uH (F535R:G)		Q901	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
L201	1-424-397-11	COIL, CHOKE 200uH (F535R:G)		Q902	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
< TRANSISTOR >				< RESISTOR >			
Q100	8-729-354-52	TRANSISTOR 2SC2545		R100	1-247-700-11	CARBON 100 5% 1/4W (F535R)	
Q101	8-729-354-52	TRANSISTOR 2SC2545		R101	1-249-469-11	CARBON 100K 5% 1/4W	
Q200	8-729-354-52	TRANSISTOR 2SC2545		R102	1-247-706-11	CARBON 330 5% 1/4W	
Q201	8-729-354-52	TRANSISTOR 2SC2545		R103	1-249-469-11	CARBON 100K 5% 1/4W	
Q500	8-729-620-17	TRANSISTOR 2SC2259-FG		R104	1-247-725-11	CARBON 10K 5% 1/4W	
Q501	8-729-119-76	TRANSISTOR 2SA1175-HFE		R105	1-247-710-11	CARBON 560 5% 1/4W	
Q502	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R106	1-247-702-11	CARBON 150 5% 1/4W	
Q503	8-729-224-62	TRANSISTOR 2SK246-GR		R107	1-247-710-11	CARBON 560 5% 1/4W	
Q504	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R108	1-247-716-11	CARBON 1.8K 5% 1/4W	
Q505	8-729-021-74	TRANSISTOR 2SA949-OY-TPE6		R109	1-260-661-11	CARBON 6.8 5% 1/4W (F535R)	
Q506	8-729-021-73	TRANSISTOR 2SC2229-OY-TPE6		R110	1-247-700-11	CARBON 100 5% 1/4W	
Q507	8-729-209-15	TRANSISTOR 2SD2012		R111	1-246-545-00	CARBON 1.0M 5% 1/4W	
Q508	8-729-017-06	TRANSISTOR 2SC4793		R112	1-249-844-11	CARBON 56K 5% 1/2W	
Q509	8-729-017-05	TRANSISTOR 2SA1837		R113	1-249-689-11	CARBON 4.7K 5% 1/2W	
Q510	8-729-020-88	TRANSISTOR 2SC3182N-M-RO (F435R)		R114	1-247-713-11	CARBON 1K 5% 1/4W	
Q510	8-729-020-90	TRANSISTOR 2SC3907-M-RO (F535R)		R150	1-259-434-11	CARBON 1.8K 5% 1/6W (F535R:G)	
Q511	8-729-020-89	TRANSISTOR 2SA1265N-M-RO (F435R)		R150	1-259-436-11	CARBON 2.2K 5% 1/6W (F435R:G)	
Q511	8-729-020-91	TRANSISTOR 2SA1516-M-RO (F535R)		R151	1-259-434-11	CARBON 1.8K 5% 1/6W (F535R:G)	
Q512	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R200	1-247-700-11	CARBON 100 5% 1/4W (F535R)	
Q513	8-729-141-26	TRANSISTOR 2SC3622A-LK		R201	1-249-469-11	CARBON 100K 5% 1/4W	
Q600	8-729-620-17	TRANSISTOR 2SC2259-FG		R202	1-247-706-11	CARBON 330 5% 1/4W	
Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE		R203	1-249-469-11	CARBON 100K 5% 1/4W	
Q602	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R204	1-247-725-11	CARBON 10K 5% 1/4W	
Q603	8-729-224-62	TRANSISTOR 2SK246-GR		R205	1-247-710-11	CARBON 560 5% 1/4W	
Q604	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R206	1-247-702-11	CARBON 150 5% 1/4W	
Q605	8-729-021-74	TRANSISTOR 2SA949-OY-TPE6		R207	1-247-710-11	CARBON 560 5% 1/4W	
Q606	8-729-021-73	TRANSISTOR 2SC2229-OY-TPE6		R209	1-260-661-11	CARBON 6.8 5% 1/4W (F535R)	
Q607	8-729-209-15	TRANSISTOR 2SD2012		R210	1-247-700-11	CARBON 100 5% 1/4W	
Q608	8-729-017-06	TRANSISTOR 2SC4793		R211	1-246-545-00	CARBON 1.0M 5% 1/4W	
Q609	8-729-017-05	TRANSISTOR 2SA1837		R212	1-249-844-11	CARBON 56K 5% 1/2W	
Q610	8-729-020-88	TRANSISTOR 2SC3182N-M-RO (F435R)		R213	1-249-689-11	CARBON 4.7K 5% 1/2W	
				R214	1-247-713-11	CARBON 1K 5% 1/4W	
				R250	1-259-434-11	CARBON 1.8K 5% 1/6W (F535R:G)	
				R250	1-259-436-11	CARBON 2.2K 5% 1/6W (F435R:G)	
				R251	1-259-434-11	CARBON 1.8K 5% 1/6W (F535R:G)	
				R300	1-249-469-11	CARBON 100K 5% 1/4W	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R301	1-247-713-11	CARBON 1K 5% 1/4W		R605	1-247-704-11	CARBON 220 5% 1/4W (AEP1, G)	
R302	1-247-713-11	CARBON 1K 5% 1/4W		R606	1-247-704-11	CARBON 220 5% 1/4W	
R303	1-247-719-11	CARBON 3. 3K 5% 1/4W		R607	1-249-490-11	CARBON 27K 5% 1/2W	
R304	1-247-713-11	CARBON 1K 5% 1/4W		R608	1-247-721-11	CARBON 4. 7K 5% 1/4W	
R311	1-246-545-00	CARBON 1. 0M 5% 1/4W (F535R)		△R609	1-212-875-00	FUSIBLE 56 5% 1/4W F (AEP2)	
R400	1-249-469-11	CARBON 100K 5% 1/4W		R609	1-249-522-11	CARBON 56 5% 1/4W (AEP1, G)	
R401	1-247-713-11	CARBON 1K 5% 1/4W		△R610	1-212-883-00	FUSIBLE 120 5% 1/4W F (AEP2)	
R402	1-247-713-11	CARBON 1K 5% 1/4W		R610	1-247-701-11	CARBON 120 5% 1/4W (AEP1, G)	
R403	1-247-719-11	CARBON 3. 3K 5% 1/4W		R611	1-247-713-11	CARBON 1K 5% 1/4W	
R404	1-247-713-11	CARBON 1K 5% 1/4W		R612	1-249-561-11	CARBON 2. 4K 5% 1/4W	
R411	1-246-545-00	CARBON 1. 0M 5% 1/4W (F535R)		R613	1-247-710-11	CARBON 560 5% 1/4W	
R500	1-247-713-11	CARBON 1K 5% 1/4W		△R614	1-212-857-00	FUSIBLE 10 5% 1/4W F	
R501	1-249-469-11	CARBON 100K 5% 1/4W		△R615	1-212-857-00	FUSIBLE 10 5% 1/4W F	
R502	1-247-704-11	CARBON 220 5% 1/4W		R616	1-249-469-11	CARBON 100K 5% 1/4W	
R503	1-247-717-11	CARBON 2. 2K 5% 1/4W		△R617	1-212-994-00	FUSIBLE 330 5% 1/2W F	
△R504	1-212-889-00	FUSIBLE 220 5% 1/4W F (AEP2)		△R618	1-212-849-00	FUSIBLE 4. 7 5% 1/4W F	
R504	1-247-704-11	CARBON 220 5% 1/4W (AEP1, G)		△R619	1-212-849-00	FUSIBLE 4. 7 5% 1/4W F	
△R505	1-212-889-00	FUSIBLE 220 5% 1/4W F (AEP2)		△R620	1-217-611-00	RES, METAL PLATE 0. 1	
R505	1-247-704-11	CARBON 220 5% 1/4W (AEP1, G)		△R621	1-217-611-00	RES, METAL PLATE 0. 1	
R506	1-247-704-11	CARBON 220 5% 1/4W		R622	1-249-421-11	CARBON 2. 2K 5% 1/4W	
R507	1-249-490-11	CARBON 27K 5% 1/2W		R623	1-249-431-11	CARBON 15K 5% 1/4W	
R508	1-247-721-11	CARBON 4. 7K 5% 1/4W		R625	1-247-887-00	CARBON 220K 5% 1/4W	
△R509	1-212-875-00	FUSIBLE 56 5% 1/4W F (AEP2)		R629	1-247-846-11	CARBON 4. 3K 5% 1/4W	
R509	1-249-522-11	CARBON 56 5% 1/4W (AEP1, G)		R630	1-247-713-11	CARBON 1K 5% 1/4W	
△R510	1-212-883-00	FUSIBLE 120 5% 1/4W F (AEP2)		R631	1-247-887-00	CARBON 220K 5% 1/4W	
R510	1-247-701-11	CARBON 120 5% 1/4W (AEP1, G)		R700	1-249-433-11	CARBON 22K 5% 1/4W	
R511	1-247-713-11	CARBON 1K 5% 1/4W		R701	1-249-433-11	CARBON 22K 5% 1/4W	
R512	1-249-561-11	CARBON 2. 4K 5% 1/4W		R702	1-249-433-11	CARBON 22K 5% 1/4W	
R513	1-247-710-11	CARBON 560 5% 1/4W		R703	1-249-427-11	CARBON 6. 8K 5% 1/4W	
△R514	1-212-857-00	FUSIBLE 10 5% 1/4W F		R704	1-249-427-11	CARBON 6. 8K 5% 1/4W	
△R515	1-212-857-00	FUSIBLE 10 5% 1/4W F		R705	1-249-433-11	CARBON 22K 5% 1/4W	
R516	1-249-469-11	CARBON 100K 5% 1/4W		R706	1-249-433-11	CARBON 22K 5% 1/4W	
△R517	1-212-994-00	FUSIBLE 330 5% 1/2W F		R707	1-249-433-11	CARBON 22K 5% 1/4W	
△R518	1-212-849-00	FUSIBLE 4. 7 5% 1/4W F		R708	1-249-433-11	CARBON 22K 5% 1/4W	
△R519	1-212-849-00	FUSIBLE 4. 7 5% 1/4W F		R709	1-249-433-11	CARBON 22K 5% 1/4W	
△R520	1-217-611-00	RES, METAL PLATE 0. 1		R710	1-249-433-11	CARBON 22K 5% 1/4W	
△R521	1-217-611-00	RES, METAL PLATE 0. 1		R711	1-249-441-11	CARBON 100K 5% 1/4W	
R522	1-249-421-11	CARBON 2. 2K 5% 1/4W		R713	1-249-433-11	CARBON 22K 5% 1/4W	
R523	1-249-431-11	CARBON 15K 5% 1/4W		R714	1-249-433-11	CARBON 22K 5% 1/4W	
R525	1-247-887-00	CARBON 220K 5% 1/4W		R715	1-249-433-11	CARBON 22K 5% 1/4W	
R529	1-247-846-11	CARBON 4. 3K 5% 1/4W		R716	1-249-433-11	CARBON 22K 5% 1/4W	
R530	1-247-713-11	CARBON 1K 5% 1/4W		R722	1-247-253-00	CARBON 3. 6K 5% 1/2W (F535R)	
R531	1-247-887-00	CARBON 220K 5% 1/4W		R722	1-247-758-11	CARBON 3. 3K 5% 1/2W (F435R)	
R600	1-247-713-11	CARBON 1K 5% 1/4W		R746	1-249-433-11	CARBON 22K 5% 1/4W	
R601	1-249-469-11	CARBON 100K 5% 1/4W		R747	1-249-433-11	CARBON 22K 5% 1/4W	
R602	1-247-704-11	CARBON 220 5% 1/4W		R748	1-249-433-11	CARBON 22K 5% 1/4W	
R603	1-247-717-11	CARBON 2. 2K 5% 1/4W		R749	1-247-903-00	CARBON 1M 5% 1/4W	
△R604	1-212-889-00	FUSIBLE 220 5% 1/4W F (AEP2)		R750	1-249-429-11	CARBON 10K 5% 1/4W	
R604	1-247-704-11	CARBON 220 5% 1/4W (AEP1, G)		R751	1-249-430-11	CARBON 12K 5% 1/4W	
△R605	1-212-889-00	FUSIBLE 220 5% 1/4W F (AEP2)		R752	1-249-417-11	CARBON 1K 5% 1/4W	

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

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
		< COIL >					
L500	1-428-133-11	COIL, AIR-CORE		R408	1-247-703-11	CARBON 180 5% 1/4W	
L600	1-428-133-11	COIL, AIR-CORE		R409	1-247-718-11	CARBON 2.7K 5% 1/4W	
		< RESISTOR >		R410	1-249-551-11	CARBON 910 5% 1/4W	
R524	1-247-727-11	CARBON 10 5% 1/2W				< VARIABLE RESISTOR >	
R526	1-247-727-11	CARBON 10 5% 1/2W		RV301	1-241-974-11	RES, VAR, CARBON 10K (TREBLE)	
R551	1-249-482-11	CARBON 4.7 5% 1/2W (G)		RV302	1-241-972-11	RES, VAR, CARBON 10K (BASS)	
R552	1-249-482-11	CARBON 4.7 5% 1/2W (G)		RV303	1-241-973-11	RES, VAR, CARBON 100K/100K (BALANCE)	
R624	1-247-727-11	CARBON 10 5% 1/2W				*****	
R626	1-247-727-11	CARBON 10 5% 1/2W				MISCELLANEOUS	
R651	1-249-482-11	CARBON 4.7 5% 1/2W (G)				*****	
R652	1-249-482-11	CARBON 4.7 5% 1/2W (G)		11	1-590-499-31	WIRE, FLAT TYPE (23 CORE)	
		< RELAY >		17	1-692-148-11	SWITCH, ROTARY SLIDE	
RY800	1-515-676-11	RELAY		△109	1-575-651-11	CORD, POWER	
RY801	1-515-676-11	RELAY		△T1	1-423-595-11	TRANSFORMER, POWER (F535R)	
		< TERMINAL >		△T1	1-423-596-11	TRANSFORMER, POWER (F435R:AEP1,G)	
TM900	1-537-227-11	TERMINAL BOARD (SP) (AEP2)		△T1	1-423-597-11	TRANSFORMER, POWER (F435R:AEP2)	
TM900	1-537-228-11	TERMINAL BOARD (SP) (AEP1,G)				*****	
		*****				ACCESSORIES & PACKING MATERIALS	
*	1-644-625-12	TONE BOARD				*****	
		*****		1-693-131-11	REMOTE COMMANDER (RM-S311)		
		< CAPACITOR >		2-181-754-01	COVER, BATTERY		
C304	1-136-155-00	FILM 0.015uF 5% 50V		3-756-897-11	MANUAL, INSTRUCTION		
C305	1-136-161-00	FILM 0.047uF 5% 50V			(ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP)		
C306	1-136-169-00	FILM 0.22uF 5% 50V		3-756-897-41	MANUAL, INSTRUCTION (AEP)		
C307	1-136-175-00	FILM 0.68uF 5% 50V			(GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP)		
C404	1-136-155-00	FILM 0.015uF 5% 50V		3-756-897-51	MANUAL, INSTRUCTION (GERMAN) (G)		
C405	1-136-161-00	FILM 0.047uF 5% 50V		3-756-897-61	MANUAL, INSTRUCTION (DANISH, FINNISH)		
C406	1-136-169-00	FILM 0.22uF 5% 50V			(AEP)		
C407	1-136-175-00	FILM 0.68uF 5% 50V		*	4-952-575-01	CUSHION	
		< CONNECTOR >		*	4-958-311-01	INDIVIDUAL CARTON (F535R)	
CNP300	1-695-240-11	PIN, CONNECTOR 8P		*	4-958-312-01	INDIVIDUAL CARTON (F435R)	
		< RESISTOR >				*****	
R305	1-259-421-11	CARBON 510 5% 1/4W				*****	
R306	1-246-545-00	CARBON 1.0M 5% 1/4W				HARDWARE LIST	
R307	1-246-545-00	CARBON 1.0M 5% 1/4W				*****	
R308	1-247-703-11	CARBON 180 5% 1/4W		#1	7-682-547-09	SCREW +BVTT 3X6 (S)	
R309	1-247-718-11	CARBON 2.7K 5% 1/4W		#2	7-685-651-79	SCREW +BVTP 3X20 TYPE2 N-S	
R310	1-249-551-11	CARBON 910 5% 1/4W		#3	7-685-648-79	SCREW +BVTP 3X12 TYPE2	
R405	1-259-421-11	CARBON 510 5% 1/4W		#4	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
R406	1-246-545-00	CARBON 1.0M 5% 1/4W		#5	7-621-849-00	SCREW (BV/RING)	
R407	1-246-545-00	CARBON 1.0M 5% 1/4W		#6	7-682-560-04	SCREW +BVTT 4X6 (S)	
				#7	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	

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