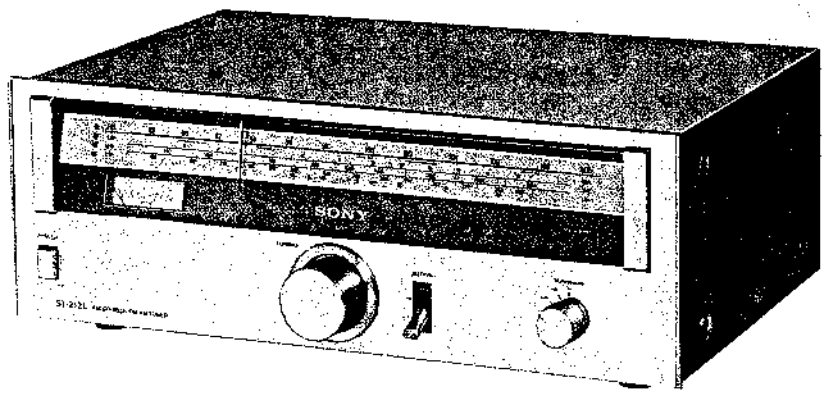
ST-212L

AEP Model
UK Model



FM STEREO/FM-AM TUNER

SPECIFICATIONS

GENERAL

System:	FM stereo, FM/AM superheterodyne tuner
Power Requirements:	220 V ac, 50 Hz (AEP model) 240 V ac, 50 Hz (UK model)
Power Consumption:	14 W
Dimensions:	Approx. 407 (w) x 150 (h) x 300 (d) mm 16 (w) x 5⅞ (h) x 11⅞ (d) inches including projecting parts and controls
Weight:	Approx. 4.6 kg, 10 lb 2 oz (net) Approx. 5.6 kg, 12 lb 6 oz (in shipping carton)

FM SECTION

Tuning Range:	87.5 – 108 MHz
Antenna Terminals:	300 Ω, balanced 75 Ω, unbalanced
Intermediate Frequency:	10.7 MHz
Usable Sensitivity:	5.0 μV S/N = 30 dB
S/N Ratio:	60 dB (mono) 50 dB (stereo)
Harmonic Distortion:	at 1 kHz 0.8 % (mono) 1.2 % (stereo)
Separation:	20 dB at 1 kHz
Frequency Response:	30 Hz – 15 kHz ± 3 dB
Capture Ratio:	2.5 dB
AM Suppression Ratio:	46 dB
Image Rejection:	28 dB (108 MHz)
IF Rejection:	55 dB (88 MHz)
Output Level/Impedance:	380 mV, 10 kΩ, 75 kHz deviation

– Continued on page 2 –

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS 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.

SONY®
SERVICE MANUAL

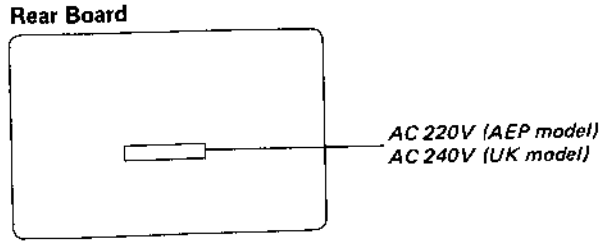
AM SECTION

Tuning Range:	MW 530 – 1,605 kHz LW 150 – 350 kHz SW 5.8 – 15.8 MHz
Antenna:	MW/LW built-in ferrite-rod antenna MW/LW/SW external antenna terminal
Intermediate Frequency:	455 kHz (AEP model) 468 kHz (UK model)
Usable Sensitivity:	389 µV/m, built-in antenna 125 µV/m, external antenna at 1,000 Hz
S/N Ratio:	38 dB at 50 mV/m
Harmonic Distortion:	1.5 % at 400 Hz
Image Rejection:	31 dB at 1,605 kHz
IF Rejection:	24 dB at 530 kHz

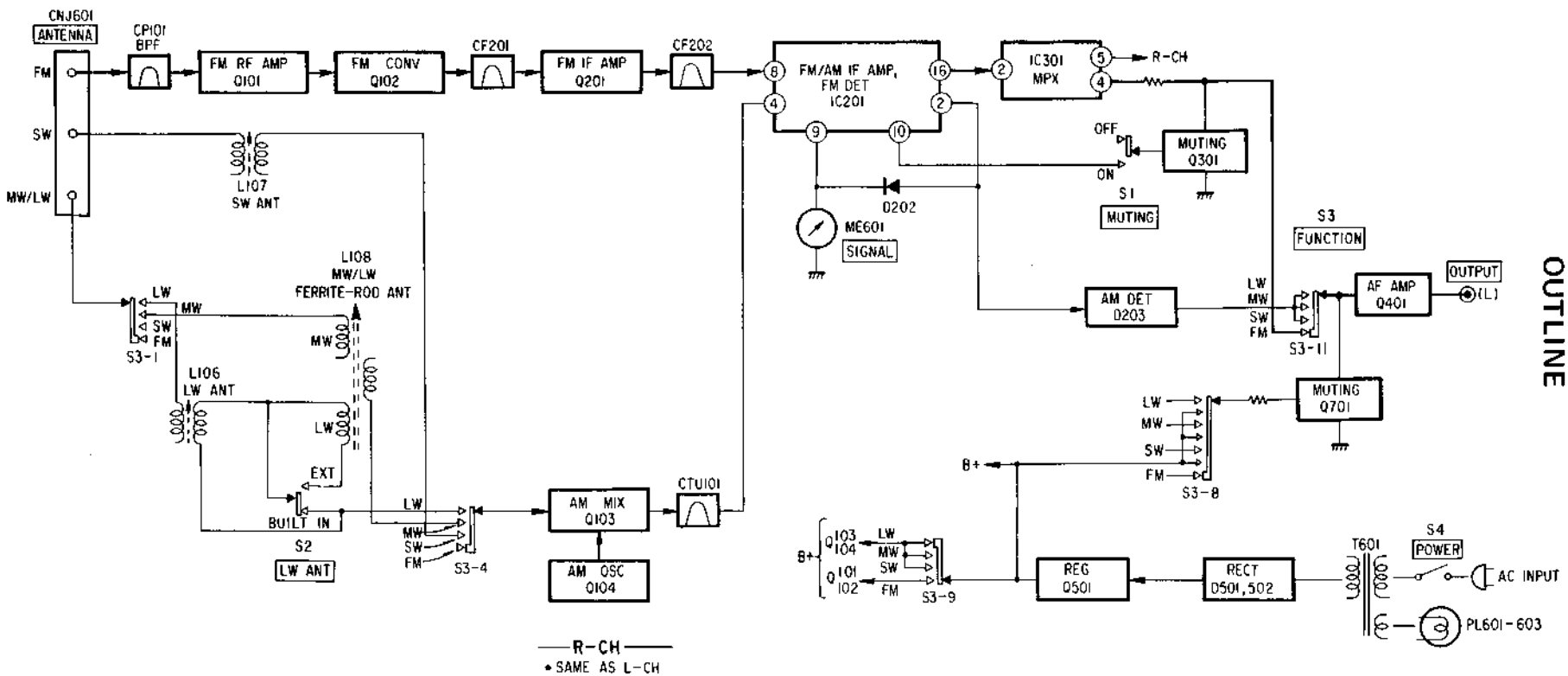
MODEL IDENTIFICATION

– Specification Label –

Rear Board



1-1. BLOCK DIAGRAM



SECTION 2
DISASSEMBLY

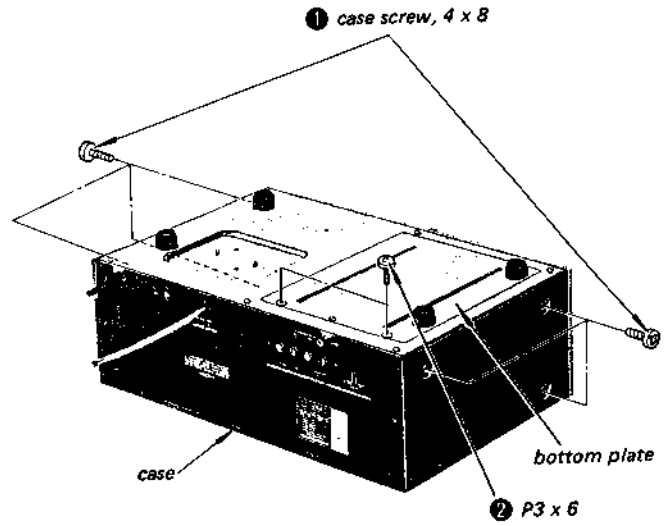
2-1. REMOVAL

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

CASE AND BOTTOM PLATE REMOVAL

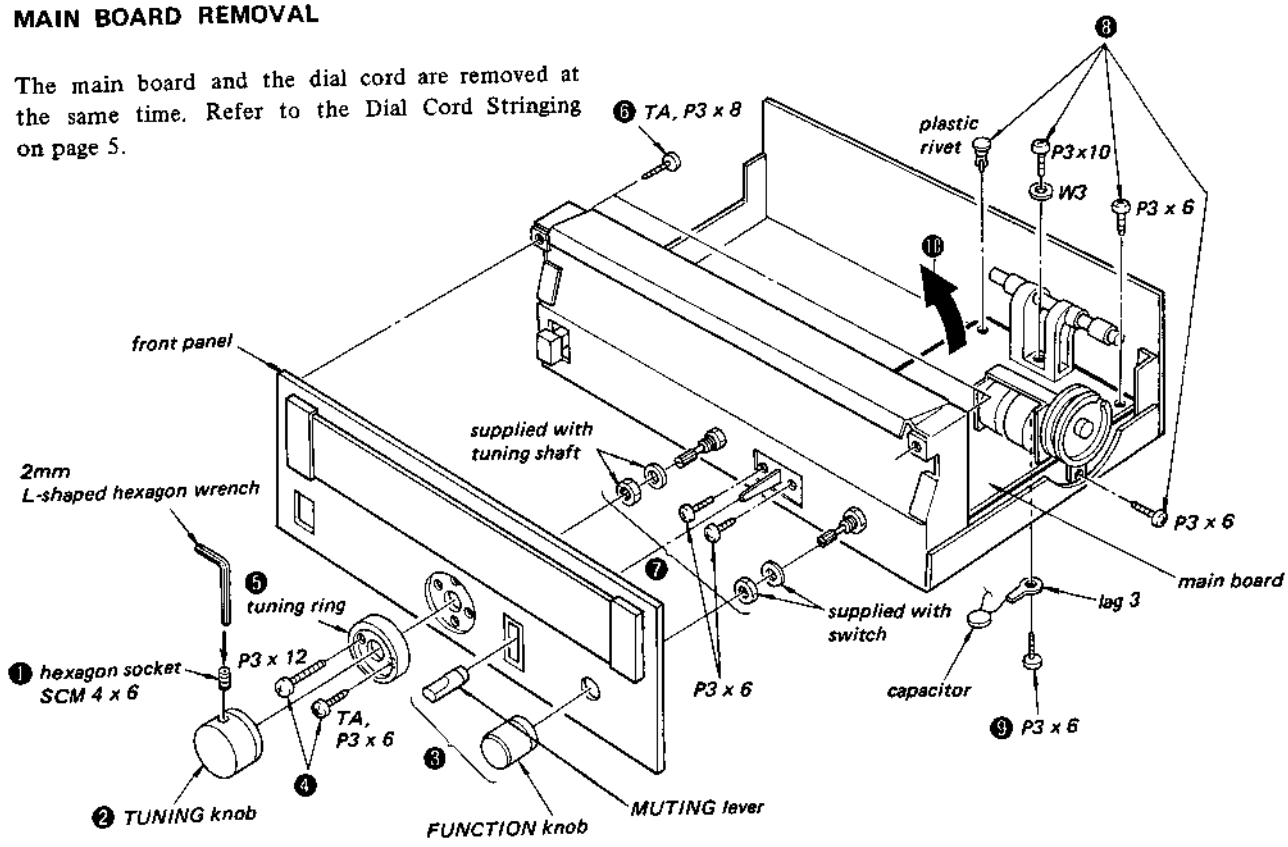
Case Removal: ❶ (six screws).
Each component side of the circuit boards can be checked.

Bottom Plate Removal: ❷ (two screws).
Each conductor side of the circuit boards can be checked.



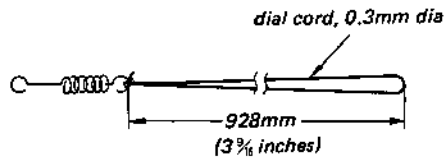
MAIN BOARD REMOVAL

The main board and the dial cord are removed at the same time. Refer to the Dial Cord Stringing on page 5.



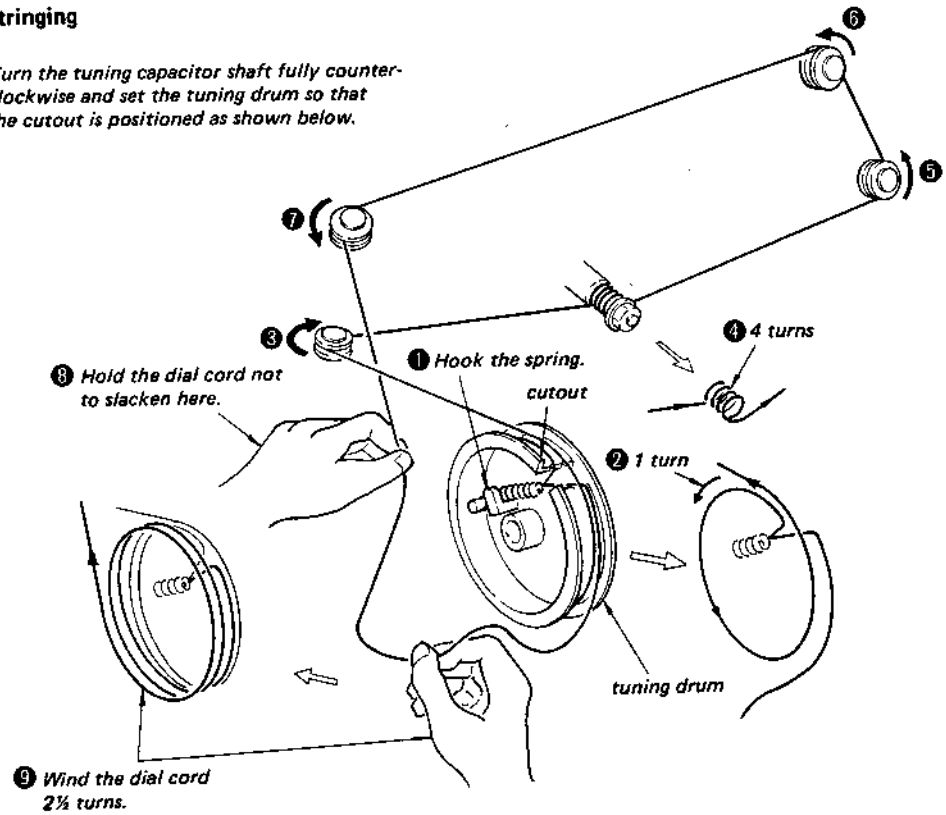
2-2. DIAL CORD STRINGING

1. Preparation



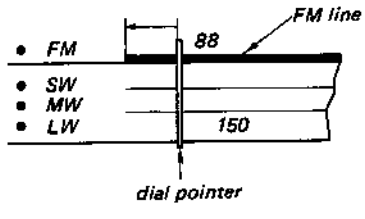
2. Stringing

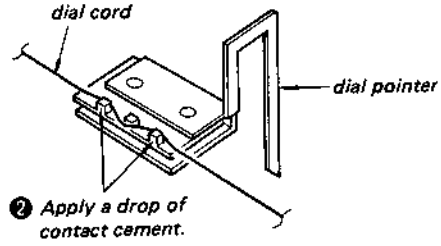
Turn the tuning capacitor shaft fully counterclockwise and set the tuning drum so that the cutout is positioned as shown below.



3. Dial Pointer Installation

❶ *Turn the tuning capacitor shaft fully counterclockwise (frequency minimum) and slide the dial pointer to the left end of FM line.*

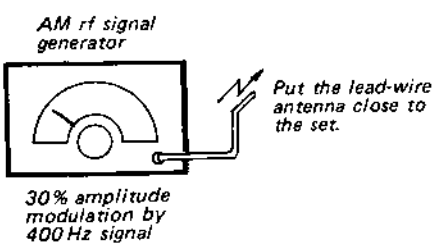


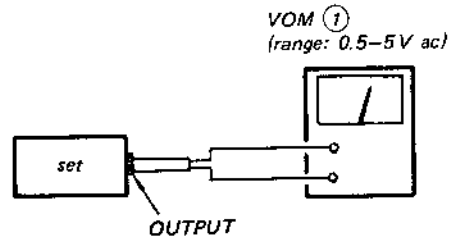


SECTION 3
ADJUSTMENTS

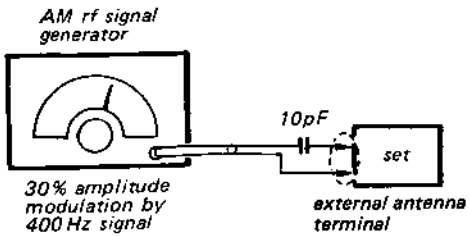
MW, SW SECTION

- **MW**

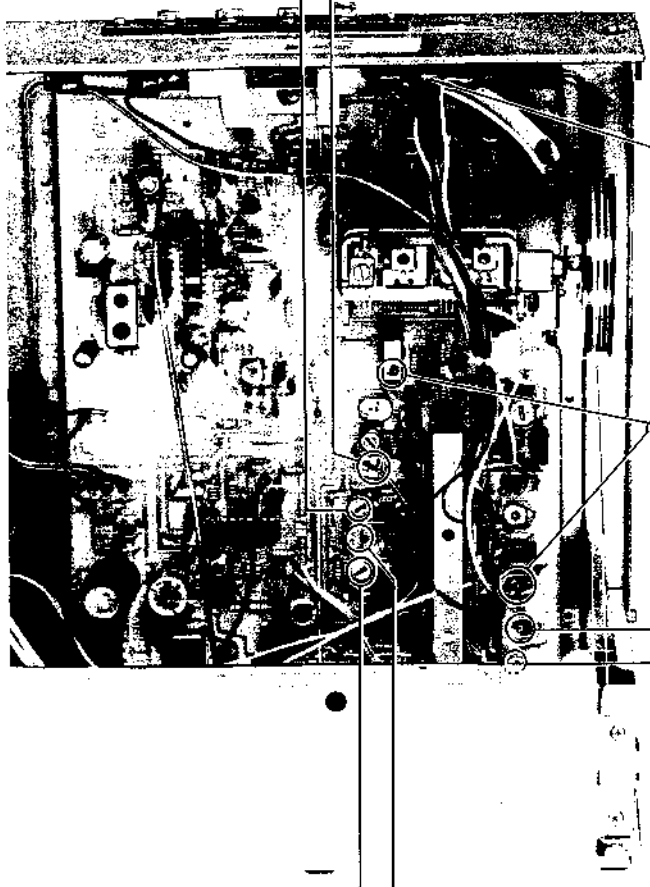




- **SW**



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.



MW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L112	520 kHz
CT107	1680 kHz

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L108	600 kHz
CT104	1400 kHz

AM IF ALIGNMENT	
Adjust for a maximum reading on VOM ①.	
CFU101	455 kHz (468 kHz)

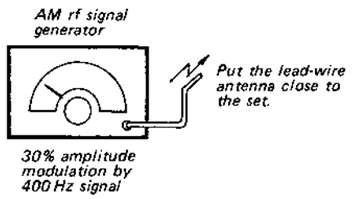
( ): UK model

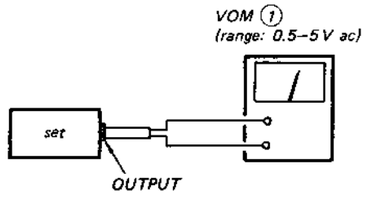
CT103	16.1 MHz
L107	5.5 MHz
Adjust for a maximum reading on VOM ①.	
SW TRACKING ADJUSTMENT	

CT108	16.1 MHz
L113	5.5 MHz
Adjust for a maximum reading on VOM ①.	
SW FREQUENCY COVERAGE ADJUSTMENT	

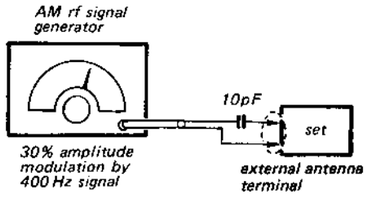
LW SECTION

- **S2 (LW ANT): BUILT IN**

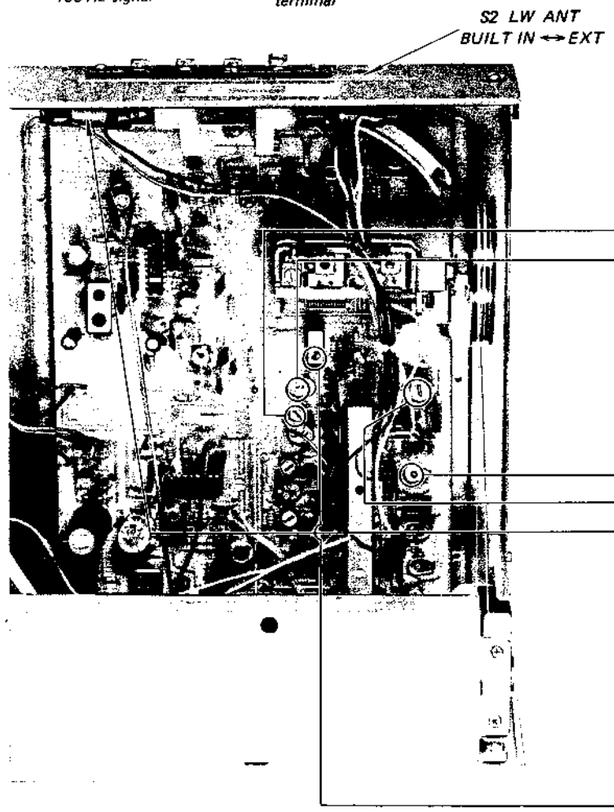




- **S2 (LW ANT): EXT**



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.



LW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L111	145 kHz
CT106	365 kHz

CT105	310 kHz
L106 (S2 : EXT)	180 kHz
L108 (S2 : BUILT IN)	170 kHz
Adjust for a maximum reading on VOM ①.	
LW TRACKING ADJUSTMENT	

AM IF ALIGNMENT	
Adjust for a maximum reading on VOM ①.	
CFU101	455 kHz (468 kHz)

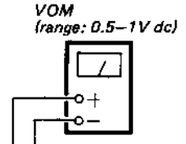
( ): UK model

FM SECTION

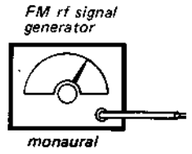
DISCRIMINATOR ALIGNMENT

Procedure:

1. Primary-Side of T201
   1) Detune the set.
   2) Adjust the primary-side core (blue) of T201 for 0V reading on VOM.



2. Secondary-Side o



FM Signal Gene

Carrier frequenc
Modulation:

Output level:

Procedure:

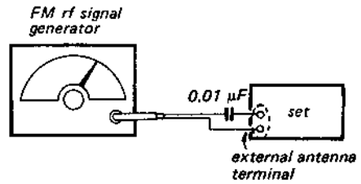
Tune the tun
secondary-side
minimum read

3. Repeat the abo

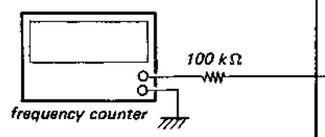
19 kHz Adjustment

A) Regular Method

Procedure:



Carrier frequency: 98 MHz
Modulation: 400 Hz, 75 kHz deviation
Output level: 1 mV (60 dB)

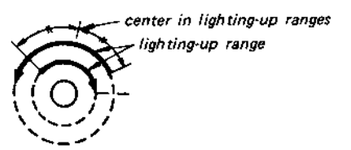


1. Ground the jumper. (See Fig. 1)
2. Turn the set to 98 MHz.
3. Adjust RT301 for 19 kHz ±20 Hz on the counter.

B) Simple Method

Procedure:

1. Tune the set to the FM stereo broadcasting signal.
2. Turn RT301 clockwise or counterclockwise and memorize the lighting-up range of stereo lamp.
3. Secure RT301 at the center in lighting-up range of both turns as shown below.



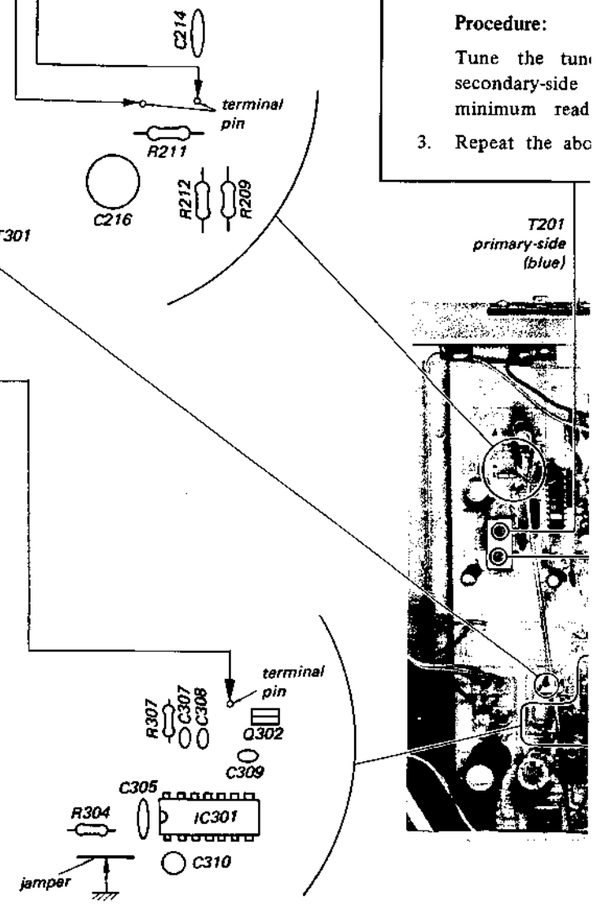


Fig. 1

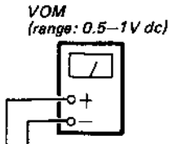
ST-212L

FM SECTION

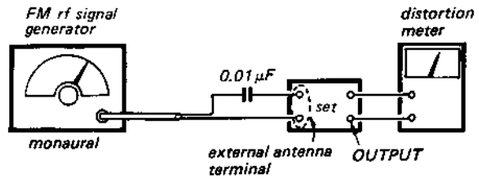
DISCRIMINATOR ALIGNMENT

Procedure:

1. Primary-Side of T201
   1) Detune the set.
   2) Adjust the primary-side core (blue) of T201 for 0V reading on VOM.



2. Secondary-Side of T201



FM Signal Generator Setting:

Carrier frequency 98 MHz
Modulation: 400 Hz, 75 kHz deviation (100 %)
Output level: 1 mV (60 dB)

Procedure:

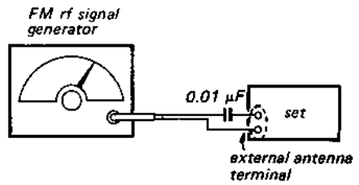
Tune the tuner to 98 MHz and adjust the secondary-side core (black) of T201 for minimum reading on the distortion meter.

3. Repeat the above steps 1 and 2 several times.

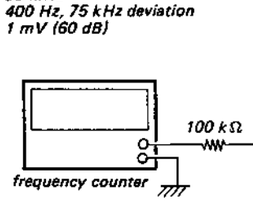
19 kHz Adjustment

A) Regular Method

Procedure:



Carrier frequency: 98 MHz
Modulation: 400 Hz, 75 kHz deviation
Output level: 1 mV (60 dB)

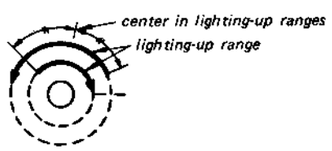


1. Ground the jumper. (See Fig. 1)
2. Turn the set to 98 MHz.
3. Adjust RT301 for 19 kHz ±20 Hz on the counter.

B) Simple Method

Procedure:

1. Tune the set to the FM stereo broadcasting signal.
2. Turn RT301 clockwise or counterclockwise and memorize the lighting-up range of stereo lamp.
3. Secure RT301 at the center in lighting-up range of both turns as shown below.



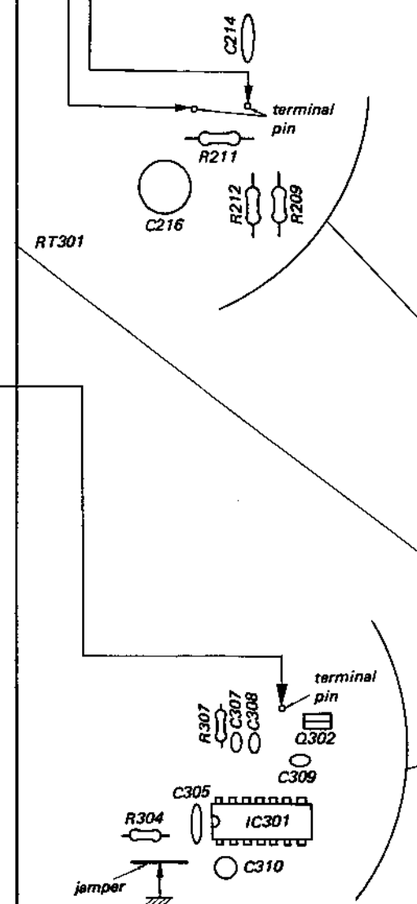
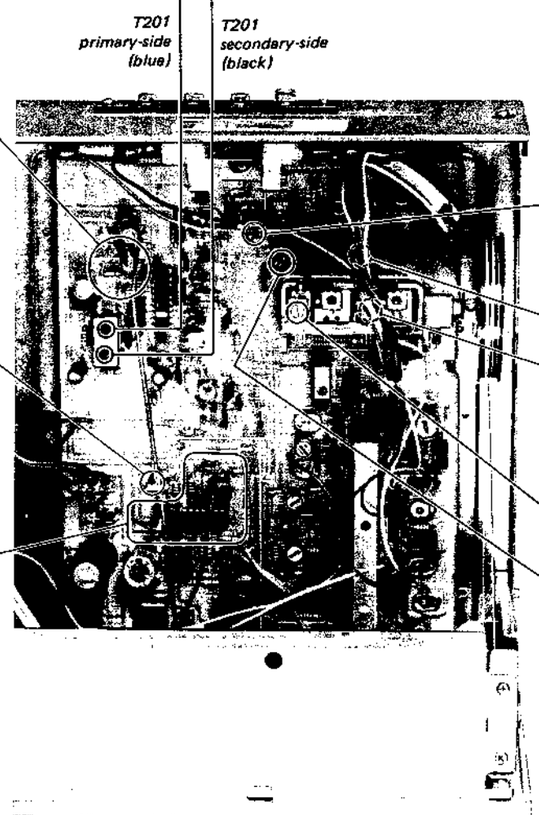
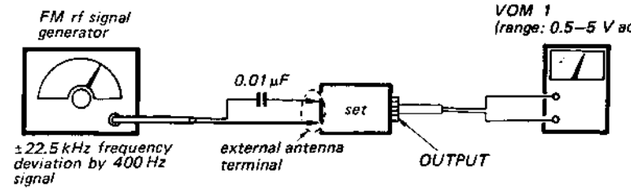


Fig. 1





- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM IF ALIGNMENT	
Adjust for a maximum reading on VOM ①.	
T101	10.7 MHz

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
L102, 103	87.2 MHz (87.5 MHz)
CT101	108.4 MHz (108 MHz)

( ): in West Germany

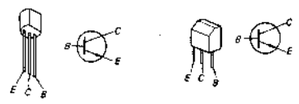
FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
CT102	108.4 MHz (108 MHz)
L105	87.2 MHz (87.5 MHz)

( ): in West Germany

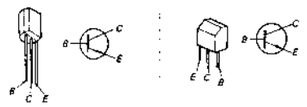
SECTION 4
DIAGRAMS

- **Replacement Semiconductors**
  For replacement, use semiconductors except in ( ).

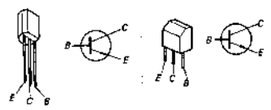
Q101, 102: 2SC930 (2SC1342B)
Q201 : 2SC930 (2SC1342C)



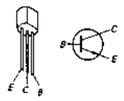
Q103: 2SC710 (2SC460B)
Q104: 2SC710 (2SC460C)



Q301, 401, 451 : 2SC1364 (2SC458C)
Q701, 702 : 2SC1364 (2SC458C)
Q302, 351 : 2SC1364 (2SC458)

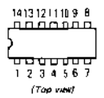


Q501: 2SD667A (2SD667)

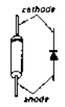


IC201: HA11211

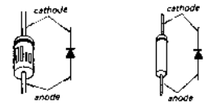
IC301: HA1156W



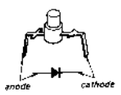
D101, 102 : 1S2076A (1S2076)
D201, 301 : 1S2076A (1S2076)
D202, 203 : 1T22AM (1N34A)
D501, 502 : 10E2 (1N4002)



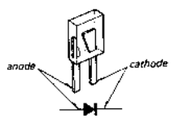
D503: EQB01-13 (HZ12C-2)



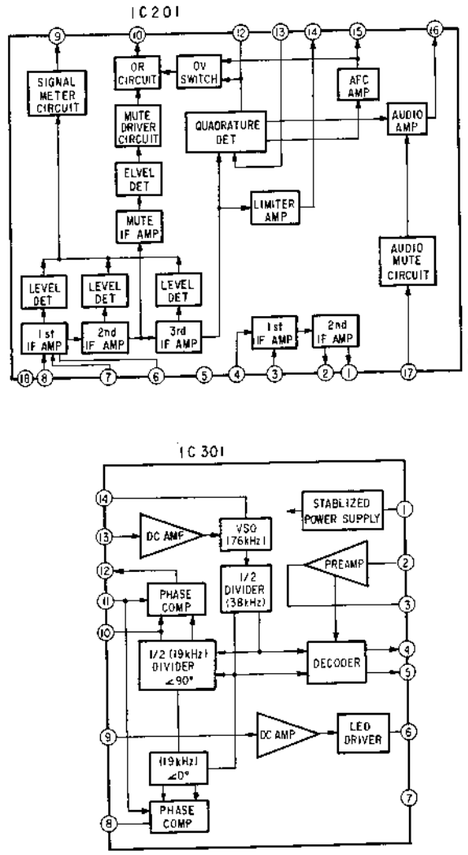
D601–604: SEL103R



D605: GL9PR2

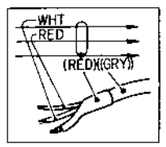


4-1. MOUNTING DIAGRAM



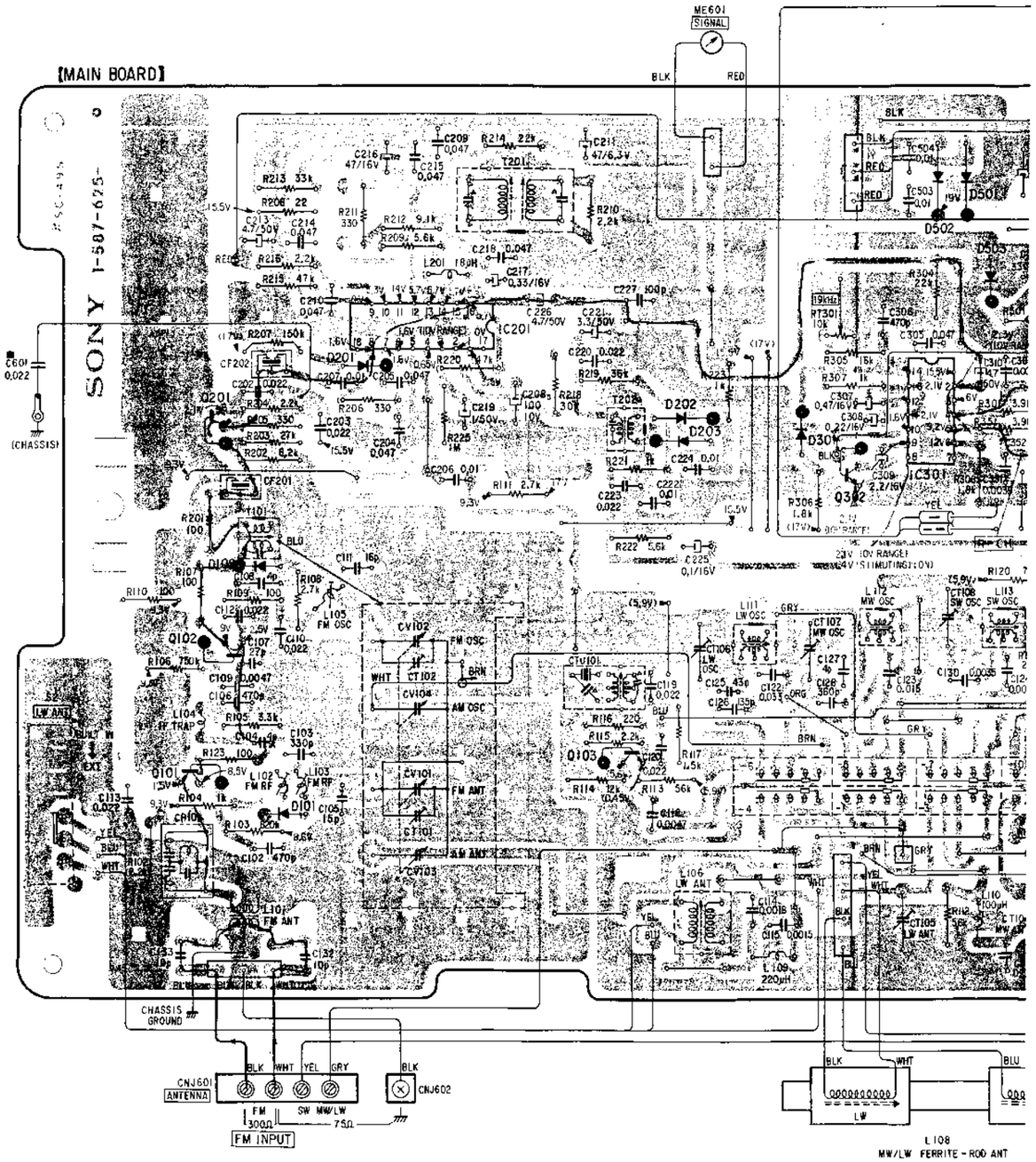
Note:

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

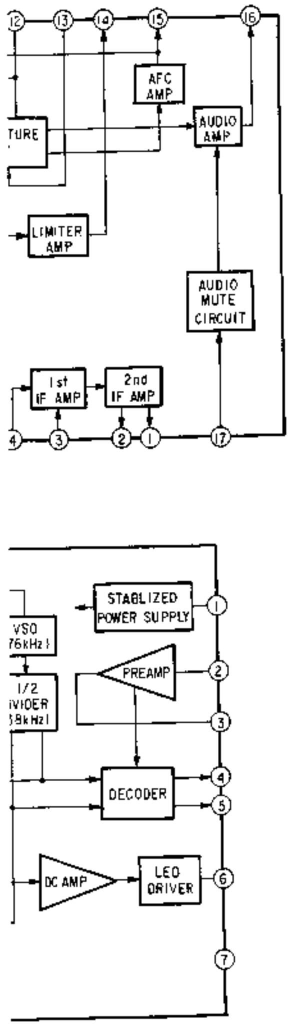


- ■ : part mounted on the conductor side.
- [ ]← : indicates side identified with part number.
- : B+ pattern.
- —→—: signal path
  —→—: L-CH
  —→—: R-CH
- < > : AM (MW, SW, LW)
  no mark : FM

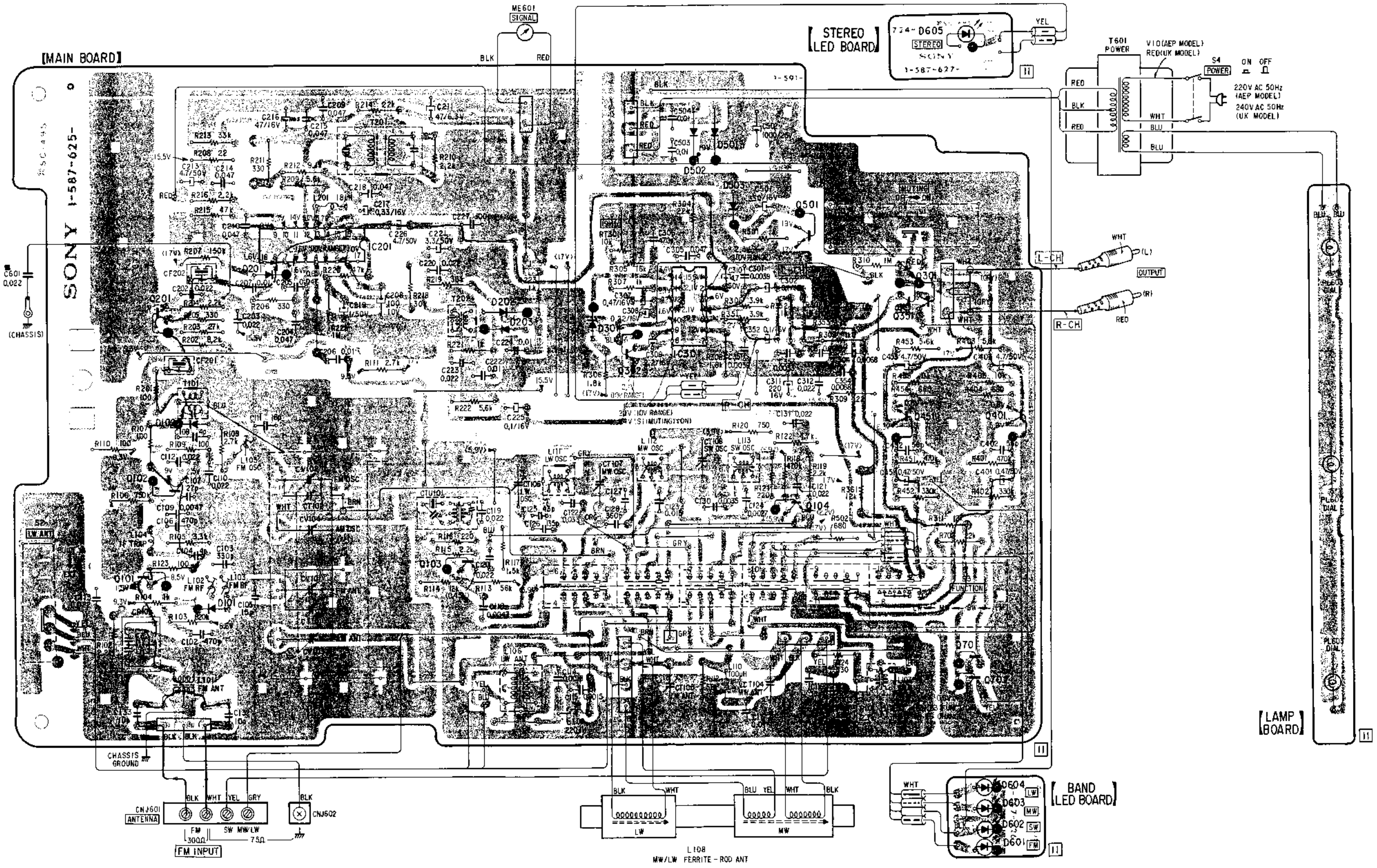
D	102 101	201	202 203	301	502 501 503
Q IC	201 101 102	IC201	103	302	IC301



D	102 101	201		202 203	301		502 501 503				605 604 603 602 601				
Q · IC	201 101 102	IC201	103	302	IC301	104	501	351 451	301	701 702	401				



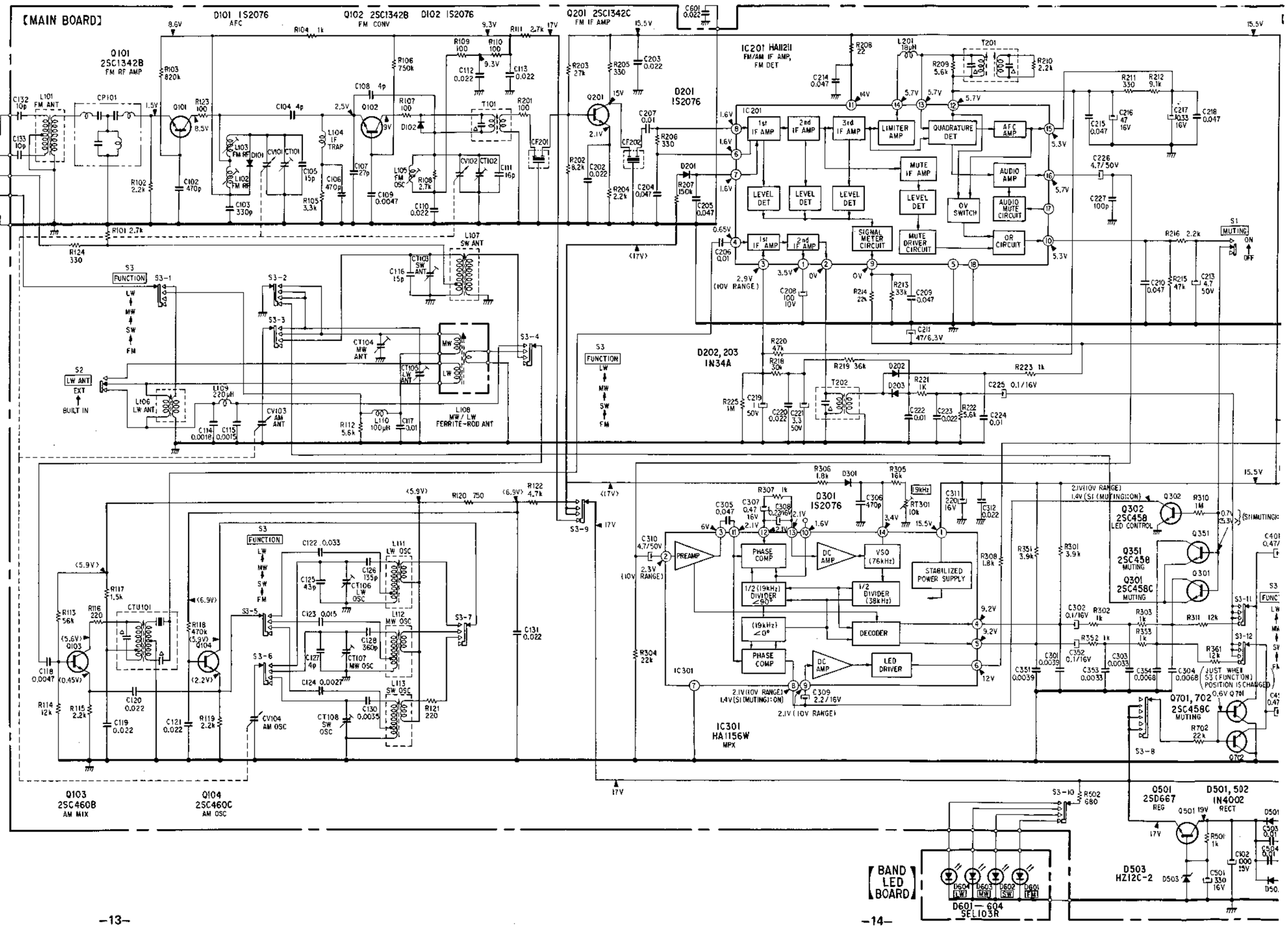
er the end of the jacket.



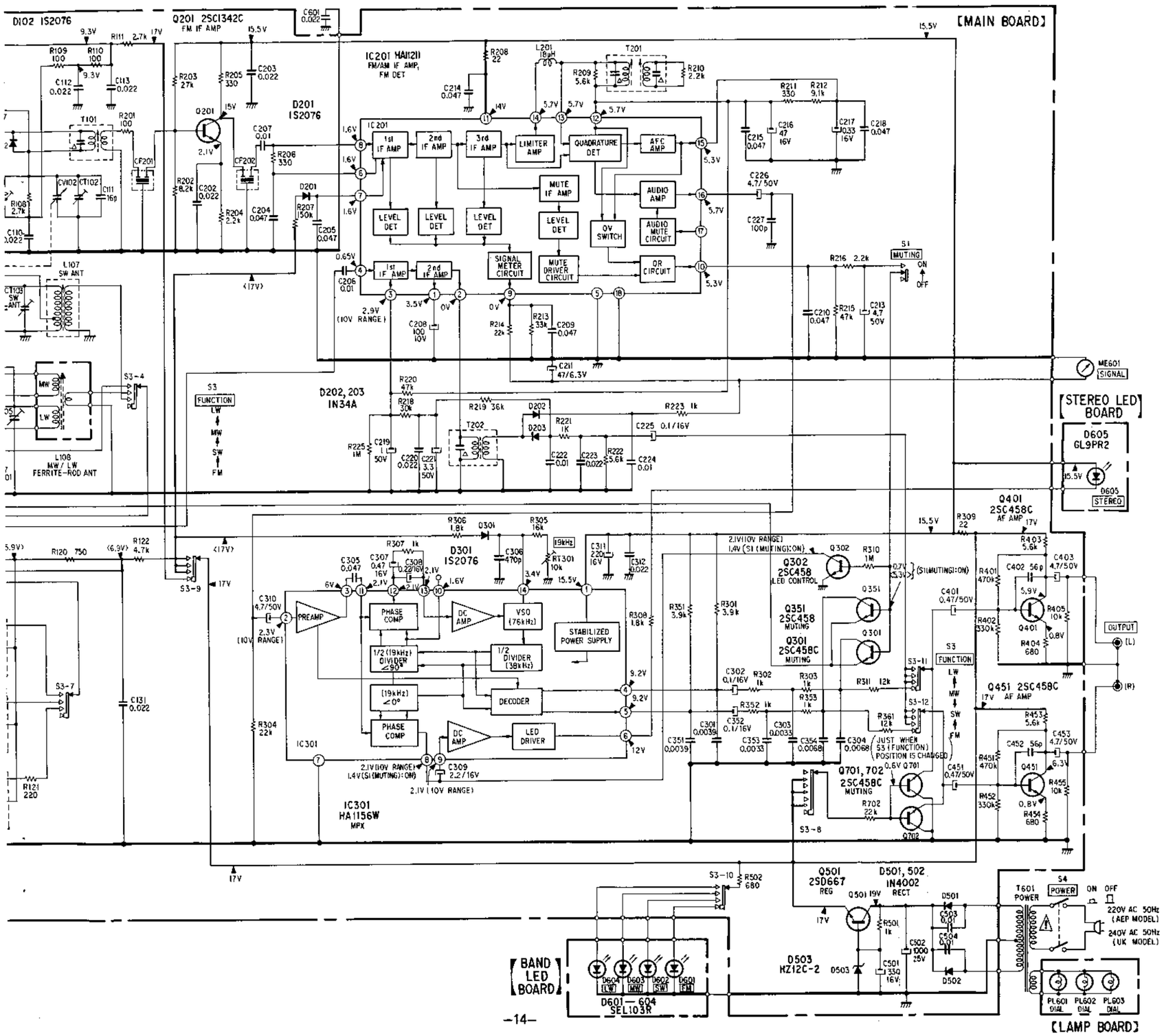
: conductor side.

ntified with part number.

V)


[MAIN BOARD]
Q101 2SC1342B FM RF AMP
D101 1S2076 AFC
Q102 2SC1342B FM CONV
D102 1S2076
Q201 2SC1342C FM IF AMP
D201 1S2076
IC201 HA1121 FM/AM IF AMP, FM DET
1st IF AMP
2nd IF AMP
3rd IF AMP
LIMITER AMP
QUADRATURE DET
AFC AMP
AUDIO AMP
AUDIO MUTE CIRCUIT
MUTE IF AMP
MUTE DRIVER CIRCUIT
SIGNAL METER CIRCUIT
LEVEL DET
OR CIRCUIT
OV SWITCH
S1 MUTING
S2 LW ANT EXT / BUILT IN
S3 FUNCTION LW MW SW FM
L106 LW ANT
L107 SW ANT
L108 MW / LW FERRITE-ROD ANT
L109 220µH
L110 100µH
CV103 AM ANT
CV104 AM OSC
L111 LW OSC
L112 MW OSC
L113 SW OSC
CT106 LW OSC
CT107 MW OSC
CT108 SW OSC
CTU101
Q103 2SC460B AM MIX
Q104 2SC460C AM OSC
D202, 203 1N34A
T201
T202
D301 1S2076
IC301 HA1156W MPX
PREAMP
PHASE COMP
DC AMP
VCO (76kHz)
STABILIZED POWER SUPPLY
1/2 (19kHz) DIVIDER ∠90°
1/2 DIVIDER (38kHz)
(19kHz) ∠0°
DECODER
LED DRIVER
Q302 2SC458 LED CONTROL
Q351 2SC458 MUTING
Q301 2SC458C MUTING
Q701, 702 2SC458C MUTING
Q0501 2SD667 REG
D501, 502 1N4002 RECT
D503 HZ12C-2
D601 – 604 SEL103R
[BAND LED BOARD]
ANTENNA
FM 300Ω
SW 75Ω
MW / LW

ST-212L



Note:

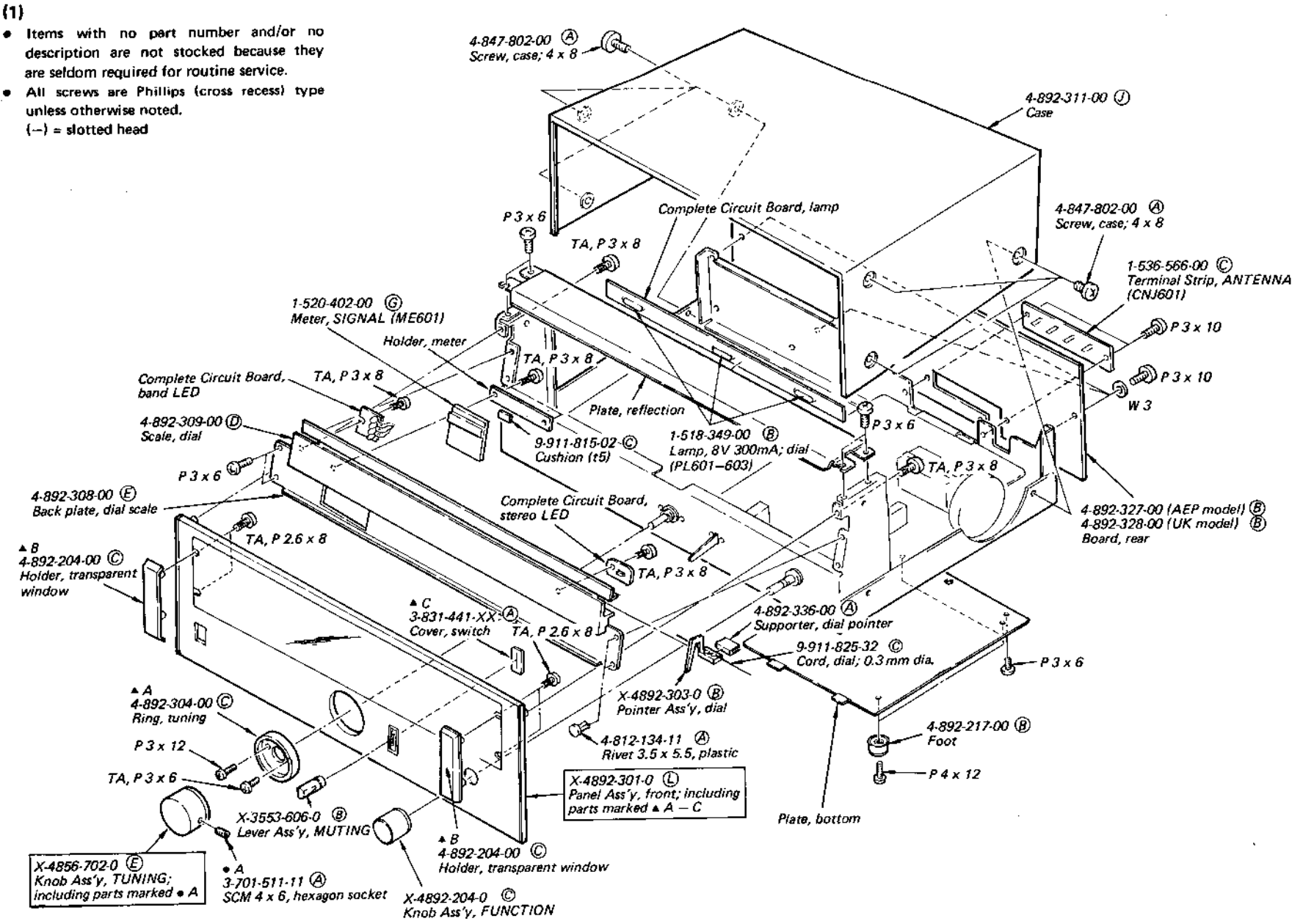
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000kΩ
- △ : internal component.
- ——— : B+ bus.
- ▭ : panel designation.
- ▭ : adjustment for repair.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under detuned conditions with a VOM (20 kΩ/V).
  < > : AM (MW, SW, LW)
  no mark: FM
- Voltage variations may be noted due to normal production tolerances.
- Switch

Ref. No.	Switch	Position
S1	MUTING	OFF
S2	LW ANT	BUILT IN
S3-1 to S3-12	FUNCTION	FM
S4	POWER	OFF

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

(1)

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head



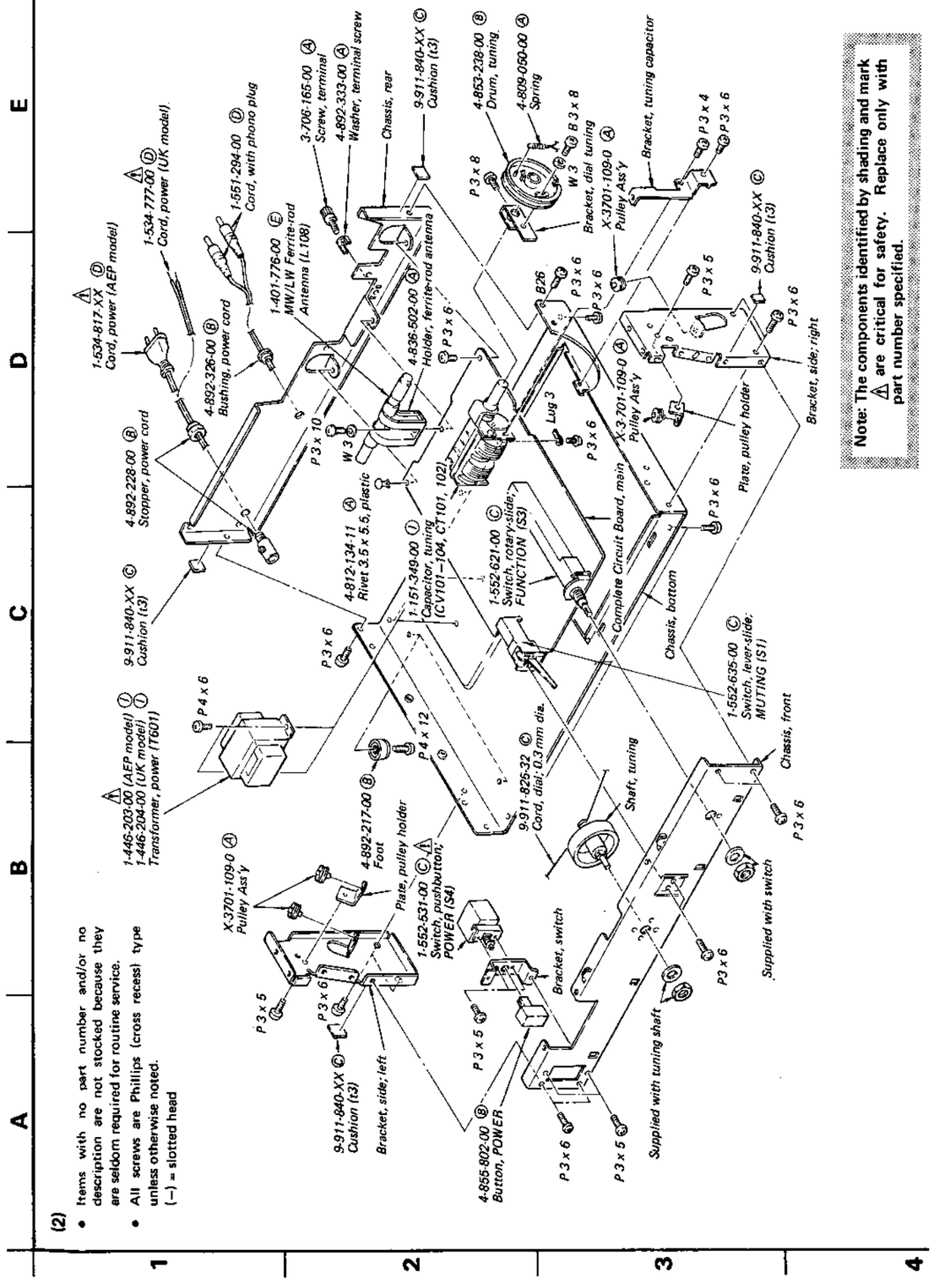
(2)

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head

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

Ref. No.	
L101	
L104	
L106	
L107	
L108	
L109	
L110	
L111	
D601–60	
D605	
⇒ D501, 502	
⇒ D503	
⇒ D301	
⇒ D202, 20	
⇒ D101, 201	
⇒ D102	
IC201	
IC301	
⇒ Q701, 702	
⇒ Q401, 451	
⇒ Q501	
⇒ Q301, 351	
⇒ Q302	
⇒ Q101, 102	
⇒ Q103, 104	
⇒ Q201	

• ⇒: [illegible]



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

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head

SECTION 6
ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
		SEMICONDUCTORS
		Transistors
⇒ Q101, 102	8-729-803-04	(B) 2SC930
⇒ Q103, 104	8-729-671-13	(B) 2SC710
⇒ Q201	8-729-803-04	(B) 2SC930
⇒ Q301, 351, ⇒ Q302	8-729-663-47	(B) 2SC1364
⇒ Q401, 451	8-729-663-47	(B) 2SC1364
⇒ Q501	8-729-306-72	(D) 2SD667A
⇒ Q701, 702	8-729-663-47	(B) 2SC1364
		ICs
IC201	1-800-744-11	(I) HA11211
IC301	8-759-311-56	(J) HA1156W
		Diodes
⇒ D101, 201, ⇒ D102	8-719-923-76	(B) 1S2076A
⇒ D202, 203	8-719-422-21	(A) 1T22AM
⇒ D301	8-719-923-76	(B) 1S2076A
⇒ D501, 502	⚠8-719-200-02	(B) 10E2
⇒ D503	8-719-931-13	(B) EQB01-13
D601–604	8-719-301-03	(B) SEL103R
D605	8-719-900-92	(B) GL9PR2
		COILS
L101	1-417-070-00	(B) FM Antenna
L104	1-409-335-00	(A) FM IF Trap
L106	1-401-709-00	(C) LW Antenna
L107	1-401-777-00	(B) SW Antenna
L108	1-401-776-00	(E) MW/LW Ferrite-rod Antenna
L109	1-407-750-00	(A) 220μH, microinductor
L110	1-407-754-00	(A) 100μH, microinductor
L111	1-405-859-00	(B) LW Osc
L112	1-405-858-00	(B) MW Osc
L113	1-401-777-00	(B) SW Osc
L201	1-407-741-00	(B) 18μH, microinductor
		TRANSFORMERS
T101	1-403-930-00	(B) FM IFT
T201	1-404-011-00	(C) FM Discriminator
T202	1-404-180-00	(B) AM IFT
T601	⚠1-446-203-00	(I) Power (AEP model)
	⚠1-446-204-00	(I) Power (UK model)
CTU101	1-403-163-00	(C) AM IFT (AEP model)
	1-403-823-00	(C) AM IFT (UK model)
		CAPACITORS

All capacitors are in μF and ceramic unless otherwise noted.
50WV or less are not indicated except for electrolytics.
p : μμF, elect : electrolytic

C102	1-102-824-00	(A) 470p	
C103	1-102-832-00	(A) 330p	
C104	1-102-941-00	(A) 4p	
C105	1-102-951-00	(A) 15p	
C106	1-102-824-00	(A) 470p	
C107	1-102-961-00	(A) 27p	
C108	1-102-941-00	(A) 4p	
C109	1-108-234-00	(A) 0.0047	mylar
C110	1-108-242-00	(A) 0.022	mylar
C111	1-102-952-00	(A) 16p	
C112, 113	1-108-242-00	(A) 0.022	mylar
C114	1-103-731-00	(A) 0.0018	polystyrol
C115	1-103-729-00	(A) 0.0015	polystyrol
C116	1-102-951-00	(A) 15p	
C117	1-108-804-00	(A) 0.01	mylar
C118	1-108-234-00	(A) 0.0047	mylar
C119–121	1-108-242-00	(A) 0.022	mylar
C122	1-108-244-00	(A) 0.033	mylar

- ⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

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

Ref. No.	Part No.		Description		
C123	1-108-240-00	(A)	0.015		mylar
C124	1-108-353-00	(A)	0.0027		mylar
C125	1-102-966-00	(A)	43p		
C126	1-103-704-00	(A)	135p		polystyrol
C127	1-102-941-00	(A)	4p		
C128	1-103-714-00	(A)	360p		polystyrol
C130	1-103-738-00	(A)	0.0035		polystyrol
C131	1-108-242-00	(A)	0.022		mylar
C132, 133	1-102-947-00	(A)	10p		
C202, 203	1-108-242-00	(A)	0.022		mylar
C204	1-108-812-00	(A)	0.047		mylar
C205	1-101-006-00	(A)	0.047		
C206, 207	1-108-804-00	(A)	0.01		mylar
C208	1-121-414-00	(A)	100	10V	elect
C209, 210	1-101-006-00	(A)	0.047		
C211	1-121-352-00	(A)	47	6.3V	elect
C213	1-121-395-00	(A)	4.7	50V	elect
C214, 215	1-101-006-00	(A)	0.047		
C216	1-131-405-00	(B)	0.33	16V	tantalum
C217	1-121-409-00	(A)	47	16V	elect
C218	1-101-006-00	(A)	0.047		
C219	1-121-391-00	(A)	1	50V	elect
C220	1-108-242-00	(A)	0.022		mylar
C221	1-121-392-00	(A)	3.3	50V	elect
C222	1-108-804-00	(A)	0.01		mylar
C223	1-108-242-00	(A)	0.022		mylar
C224	1-108-804-00	(A)	0.01		mylar
C225	1-131-209-21	(B)	0.1	16V	tantalum
C226	1-121-395-00	(A)	4.7	50V	elect
C227	1-102-973-00	(A)	100p		
C301, 351	1-108-354-00	(A)	0.0039		mylar
C302, 352	1-131-209-21	(B)	0.1	16V	tantalum
C303, 353	1-108-798-00	(A)	0.0033		mylar
C304, 354	1-108-802-00	(A)	0.0068		mylar
C305	1-108-812-00	(A)	0.047		mylar
C306	1-103-717-00	(A)	470p		polystyrol
C307	1-131-213-21	(B)	0.47	16V	tantalum
C308	1-131-211-21	(B)	0.22	16V	tantalum
C309	1-131-217-21	(B)	2.2	16V	tantalum
C310	1-121-395-00	(A)	4.7	50V	elect

Ref. No.	Part No.		Description		
C311	1-121-421-00		220	16V	elect
C312	1-108-242-00	(A)	0.022		mylar
C401, 451	1-121-726-00	(A)	0.47	50V	elect
C402, 452	1-101-884-00	(A)	56p		
C403, 453	1-121-395-00	(A)	4.7	50V	elect
C501	1-121-521-00	(B)	330	16V	elect
C502	⚠1-121-657-00	(B)	1000	25V	elect
C503, 504	⚠1-108-804-00	(A)	0.01		mylar
C601	1-108-242-00	(A)	0.022		mylar
CT103, 104	1-141-221-00	(A)	Trimmer		
CT105, 106	1-141-222-00	(B)	Trimmer		
CT107	1-141-221-00	(A)	Trimmer		
CT108	1-141-222-00	(B)	Trimmer		
CV101–104, CT101, 102	1-151-349-00	(I)	Tuning		

RESISTORS

All resistors are in ohms. Common ¼W carbon resistors are omitted. Refer to the list on page 21 for their part numbers.

RT301	1-226-236-00	(A)	10k (B), adjustable; 19kHz

SWITCHES

S1	1-552-635-00	(C)	Lever-slide, MUTING
S2	1-552-619-00	(B)	Slide, LW ANT
S3	1-552-621-00	(C)	Rotary-slide, FUNCTION
S4	⚠1-552-531-00	(C)	Pushbutton, POWER

MISCELLANEOUS

CF201, 202	1-527-338-00	(B)	Filter, ceramic
CNJ601	1-536-566-00	(C)	Terminal Strip, ANTENNA
CP101	1-231-436-00	(C)	Bandpass Filter
ME601	1-520-402-00	(G)	Meter, SIGNAL
PL601–603	1-518-349-00	(B)	Lamp, 8V 300mA; dial
	1-551-294-00	(D)	Cord, with phono plug
	⚠1-534-777-00	(D)	Cord, power (UK model)
	⚠1-534-817-XX	(D)	Cord, power (AEP model)

ACCESSORIES AND PACKING MATERIALS

Part No.		Description
1-501-161-00	(C)	Antenna, feeder
3-701-630-00	(A)	Bag, plastic (for instruction manual)
4-891-037-00	(B)	Bag, plastic (for set)
4-892-219-00	(A)	Cushion
4-892-229-00	(B)	Sheet, protection
4-892-330-00	(D)	Carton
4-892-399-00	(C)	Manual, instruction

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

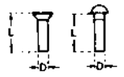
1/4 WATT CARBON RESISTORS Ⓐ

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-576-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-577-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-578-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-579-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-580-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-581-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-582-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-583-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-584-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-585-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-586-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-587-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-588-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-589-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

HARDWARE NOMENCLATURE

Screw: – P 3 x 10

- *L: Length in mm*
- *D: Diameter in mm*
- *Type of head*
- *Indicated slotted-head only. Unless otherwise indicated, it means cross-recessed head (Phillips type).*



Nut, Washer, Retaining ring:

N 3

- *Diameter of usable screw or shaft*
- *Reference designation*

Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		brazier-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

9-958-572-01

Sony Corporation

78K0475-1
Printed in Japan