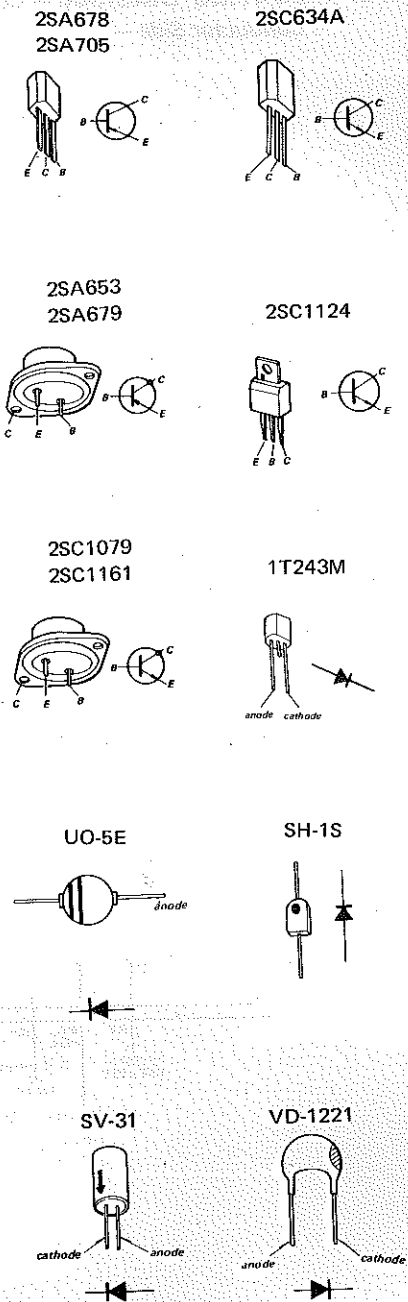
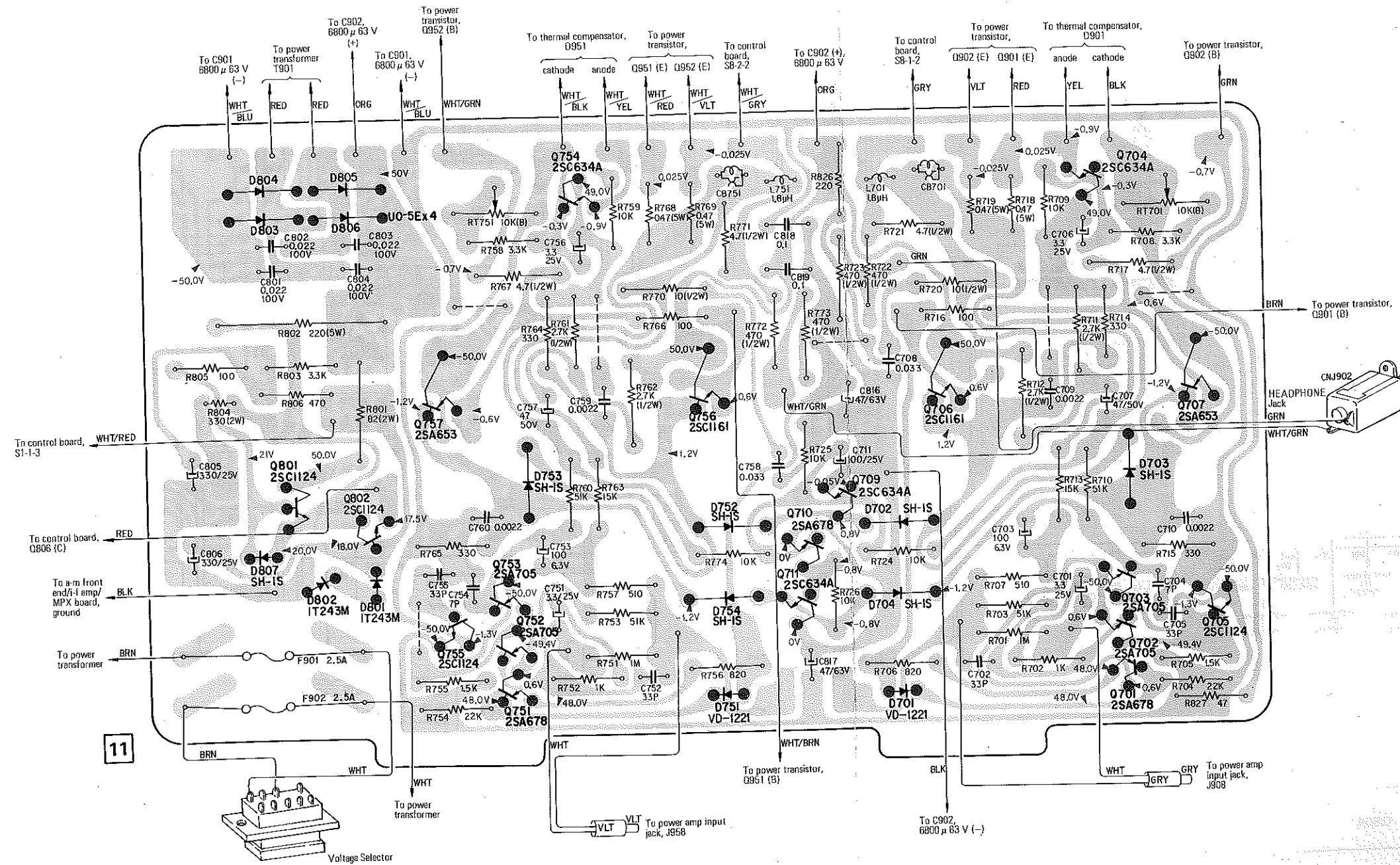
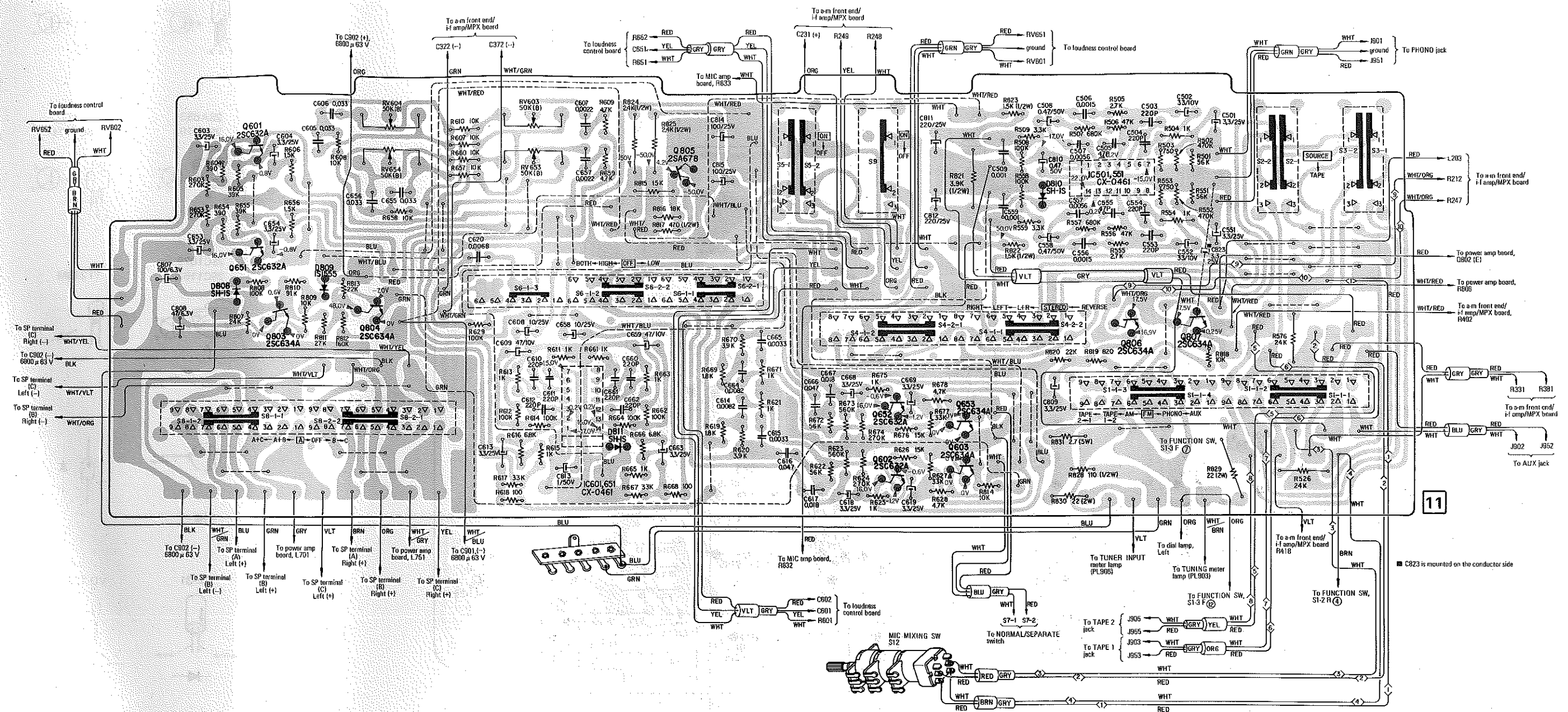
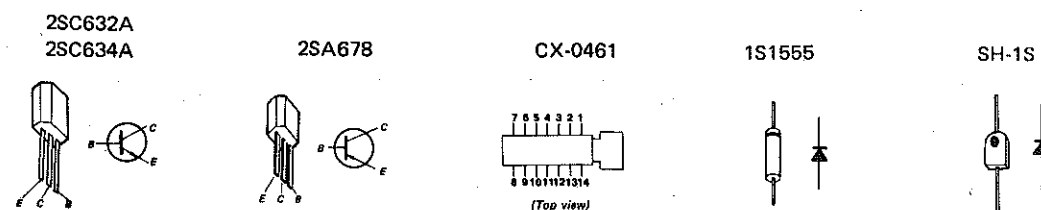


5-7. MOUNTING DIAGRAM — Power Amplifier/Power Supply Board —
— Conductor Side —



Transistor	Q801	Q802	Q757	Q754	Q753	Q752	Q756	Q710	Q709	Q706	Q704	Q703	Q702	Q701	Q707	Q705
Location			Q755													

5-6. MOUNTING DIAGRAM — Control Board —
— Conductor Side — (CCB-115)

[illegible]

STR-7065

USA Model



FM STEREO/FM-AM RECEIVER

SPECIFICATIONS

Fm Tuner Section

Tuning range:	87.5 MHz to 108 MHz
Usable sensitivity:	1.6 μ V
Signal-to-noise ratio:	70 dB
Capture ratio:	1.0 dB
Frequency response:	20 Hz to 15 kHz $\pm$ 1 dB
Stereo separation:	Better than 38 dB at 400 Hz

A-m Tuner Section:

Tuning range:	530 kHz to 1,605 kHz
Sensitivity:	53 dB/m, built-in antenna at 1,000 kHz 30 μ V, external antenna
Signal-to-noise ratio:	50 dB at 50 mV/m

Audio Amplifier Section:

Continuous RMS

power output: (Less than 0.2 % THD)	Both channels driven simultaneously 60 + 60 watts (8 ohms) at 20 Hz to 20 kHz 70 + 70 watts (8 ohms) 85 + 85 watts (4 ohms) at 1 kHz One channel driven 85 + 85 watts (8 ohms), 110 + 110 watts (4 ohms)
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Dynamic power output: (IHF constant power supply method)	240 watts (8 ohms) 380 watts (4 ohms)
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Harmonic distortion:	Less than 0.2 % at rated output Less than 0.1 % at 1 watt output
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General

Power requirements:	120 volts, 60 Hz ac
Power consumption:	180 watts
Dimensions:	471 (w) x 157 (h) x 375 (d) mm 18 ⁹ / ₁₆ x 6 ³ / ₁₆ x 14 ³ / ₄ inches
Net weight:	15.2 kg (33 lb 8 oz)

SONY
SERVICE MANUAL

SECTION 7

ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
COMPLETE CIRCUIT BOARDS		
8-982-709-11	fm front-end board (FAF-022BWG)	
8-982-709-27	a-m front-end/i-f amp/MPX board	
8-982-709-12	control board (CCB-115)	
8-982-709-25	loudness control board	
8-982-709-26	MIC amp board	
8-982-709-22	power amp/power supply board	

SEMICONDUCTORS

D101	diode	1S351M
D102	diode	1T243M
D201	diode	1T22A
D202	diode	1T22A
D203	diode	1S1555
D204	diode	1T22A
D205	diode	1T22A
D206	diode	1S1555
D207	diode	1T22A
D208	diode	1T22A
D701(D751)	diode	VD-1221
D702(D752)	diode	SH-1S
D703(D753)	diode	SH-1S
D704(D754)	diode	SH-1S
D801	diode	1T243M
D802	diode	1T243M
D803	diode	UO-5E
D804	diode	UO-5E
D805	diode	UO-5E
D806	diode	UO-5E
D807	diode	SH-1S
D808	diode	SH-1S
D809	diode	1S1555
D810	diode	SH-1S
D811	diode	SH-1S
D901(D951)	diode	SV-31

Q101	FET	2SK42
Q102	FET	2SK23A
Q103	transistor	2SC403C
Q104	transistor	2SC710
Q201	transistor	2SC403C
Q202	transistor	2SC403C
Q203	transistor	2SC403C
Q204	FET	2SK23A
Q205	transistor	2SC633A

Ref. No.	Part No.	Description
Q206	transistor	2SC633A
Q207	FET	2SK23A
Q301	transistor	2SC631A
Q302	transistor	2SC631A
Q303	transistor	2SC633A
Q304	transistor	2SC633A

Q501(Q551)	transistor	2SA705
Q502(Q552)	transistor	2SC632A

Q601(Q651)	transistor	2SC632A
Q602(Q652)	transistor	2SC632A
Q603(Q653)	transistor	2SC634A

Q701(Q751)	transistor	2SA678
Q702(Q752)	transistor	2SA705
Q703(Q753)	transistor	2SA705
Q704(Q754)	transistor	2SC634A
Q705(Q755)	transistor	2SC1124
Q706(Q756)	transistor	2SC1161
Q707(Q757)	transistor	2SA653

Q708	-----	
Q709	transistor	2SC634A
Q710	transistor	2SA678
Q711	transistor	2SC634A
Q801	transistor	2SC1124
Q802	transistor	2SC1124
Q803	transistor	2SC634A
Q804	transistor	2SC634A
Q805	transistor	2SA678
Q806	transistor	2SC634A
Q807	transistor	2SC634A

Q901(Q951)	transistor	2SC1079
Q902(Q952)	transistor	2SA679

IC201	IC	CX-0412
IC301	IC	CX-0431
IC401	IC	CX-0451
IC501	IC	CX-0461
IC601	IC	CX-0461

TRANSFORMERS, COILS & INDUCTORS

B1	1-417-014-21	balun
CFT401	1-403-150-00	CFT
IFT101	1-403-295-12	IFT, fm 10.7 MHz
L101	1-401-489-00	coil, fm antenna
L102	1-425-446-12	coil, fm rf 1
L103	1-425-668-00	coil, fm rf 2
L104	1-405-377-00	coil, fm osc
L105	1-407-184-00	inductor, micro 3.3 μ H

Ref. No.	Part No.	Description
L106	1-407-184-00	inductor, micro 3.3 μ H
L201	1-407-418-00	coil, trap; SCA
L202	1-407-163-00	inductor, micro 33 μ H
L203	1-407-169-00	inductor, micro 100 μ H
L401	1-407-169-00	inductor, micro 100 μ H
L402	1-407-592-00	inductor, micro 100 μ H
L701(L751)	1-401-439-62	inductor, micro 1.8 μ H
L901	1-401-439-62	bar antenna, a-m
MU301	1-464-009-00	MPX unit
T201	1-403-291-00	transformer, discriminator 10.7 MHz
T202	1-403-299-00	transformer, muting
T301	1-425-729-00	transformer, switching 38 kHz
T401	1-405-459-00	coil, MW osc
T402	1-403-128-00	IFT, a-m
T801	1-442-030-00	transformer, power

CAPACITORS

All capacitance values are in μ F except as indicated with p, which means μ F.

C101	1-102-880-11	15 p	± 0.5 pF	50 V	ceramic
C102	-----				
C103	1-102-880-11	15 p	± 0.5 pF	50 V	ceramic
C104	1-102-064-11	0.75 p	± 10 %	50 V	ceramic
C105	1-102-880-11	15 p	± 0.5 pF	50 V	ceramic
C106	1-102-848-11	180 p	± 0.5 pF	50 V	ceramic
C107	1-101-923-11	0.01	± 80 %	25 V	ceramic
C108	1-101-923-11	0.01	± 80 %	25 V	ceramic
C109	1-101-923-11	0.01	± 80 %	25 V	ceramic
C110	1-101-918-11	0.001	± 80 %	25 V	ceramic
C111	1-101-924-11	0.022	± 80 %	25 V	ceramic
C112	1-101-924-11	0.022	± 80 %	25 V	ceramic
C113	1-101-924-11	0.022	± 80 %	25 V	ceramic
C114	1-101-923-11	0.01	± 80 %	25 V	ceramic
C115	1-102-875-11	7 p	± 5 %	50 V	ceramic
C116	1-102-875-11	7 p	± 5 %	50 V	ceramic
C117	1-102-986-11	10 p	± 0.5 pF	50 V	ceramic
C118	1-102-114-11	470 p	± 10 %	50 V	ceramic
C119	1-101-118-11	0.01	± 20 %	50 V	ceramic
C120	1-102-986-11	10 p	± 0.5 pF	50 V	ceramic
C121	1-101-924-11	0.022	± 80 %	25 V	ceramic
C122	1-105-679-12	0.033	± 10 %	50 V	mylar
C123	1-121-391-11	1		50 V	electrolytic
C124	1-101-924-11	0.022	± 80 %	25 V	ceramic
C125	1-101-118-11	0.01	± 20 %	50 V	ceramic
C126	1-101-118-11	0.01	± 20 %	50 V	ceramic
C127	1-102-986-11	10 p	± 0.5 pF	50 V	ceramic
C128	1-101-924-11	0.022	± 80 %	25 V	ceramic

C201	1-101-118-11	0.01	± 20 %	50 V	ceramic
C202	1-101-923-11	0.01	± 80 %	25 V	ceramic
C203	1-102-100-11	0.0022	± 5 %	50 V	ceramic

Ref. No.	Part No.	Description
C204	1-101-923-11	0.01 ± 80 % 25 V ceramic
C205	1-101-118-11	0.01 ± 20 % 50 V ceramic
C206	1-101-923-11	0.01 ± 80 % 25 V ceramic
C207	1-101-923-11	0.01 ± 80 % 25 V ceramic
C208	1-101-918-11	0.001 ± 5 % 50 V ceramic
C209	1-102-977-11	200 p ± 5 % 50 V ceramic
C210	1-101-924-11	0.022 ± 80 % 25 V ceramic
C211	1-102-100-11	0.0022 ± 5 % 50 V ceramic
C212	1-121-651-11	10 16 V electrolytic
C213	1-101-118-11	0.01 ± 20 % 50 V ceramic
C214	1-121-651-11	10 16 V electrolytic
C215	1-105-677-12	0.022 ± 10 % 50 V mylar
C216	1-105-689-12	0.22 ± 10 % 50 V mylar
C217	1-123-068-11	220 16 V electrolytic
C218	1-102-977-11	200 p ± 5 % 50 V ceramic
C219	1-121-413-11	100 6.3 V electrolytic
C220	1-121-651-11	10 16 V electrolytic
C221	1-107-140-11	240 p ± 10 % 50 V silvered mica
C222	1-102-824-11	470 p ± 5 % 50 V ceramic
C223	1-131-196-11	2.2 16 V tantalum
C224	1-102-960-11	24 p ± 5 % 50 V ceramic
C225	1-101-922-11	0.0047 ± 80 % 25 V ceramic
C226	1-101-923-11	0.01 ± 80 % 25 V ceramic
C227	1-105-683-12	0.068 ± 10 % 50 V mylar
C228	1-121-391-11	1 50 V electrolytic
C229	1-121-395-11	4.7 25 V electrolytic
C230	1-121-651-11	10 16 V electrolytic
C231	1-127-022-11	0.47 ± 10 % 10 V solid, aluminum
C232	1-102-960-11	24 p ± 5 % 50 V ceramic
C233	1-101-924-11	0.022 ± 80 % 25 V ceramic
C234	1-101-924-11	0.022 ± 80 % 25 V ceramic
C235	1-101-118-11	0.01 ± 20 % 50 V ceramic
C236	1-121-413-11	100 6.3 V electrolytic
C237	1-101-923-11	0.01 ± 80 % 25 V ceramic
C301	1-121-402-11	33 10 V electrolytic
C302	1-121-352-11	47 10 V electrolytic
C303	1-121-413-11	100 6.3 V electrolytic
C304	1-127-022-11	0.47 10 V solid, aluminum
C305	1-103-575-11	4.700 p ± 5 % 50 V styrol
C306	1-105-661-12	0.001 ± 10 % 50 V mylar
C307	1-123-068-11	220 16 V electrolytic

C321(C371)	1-106-013-12	0.0033 ± 5 % 50 V mylar
C322(C372)	1-121-912-11	1 50 V electrolytic
C323(C373)	1-121-912-11	1 50 V electrolytic
C324(C374)	1-105-661-12	0.001 ± 10 % 50 V mylar
C325(C375)	1-102-973-11	100 p ± 5 % 50 V ceramic
C326(C376)	1-121-352-11	47 10 V electrolytic
C327(C377)	1-121-392-11	3.3 25 V electrolytic

C401	1-105-673-12	0.01 ± 10 % 50 V mylar
C402	-----	
C403	1-102-953-11	18 p ± 25 % 25 V ceramic

Ref. No.	Part No.	Description
C404	1-102-976-11	180 p $\pm 5\%$ 25 V ceramic
C405	1-121-409-11	47 16 V electrolytic
C406	1-105-677-12	0.022 $\pm 10\%$ 50 V mylar
C407	1-103-815-11	390 p $\pm 5\%$ 25 V styrol
C408	1-101-923-11	0.01 $\pm 80\%$ 25 V ceramic
C409	1-101-923-11	0.01 $\pm 80\%$ 25 V ceramic
C410	1-105-677-12	0.022 $\pm 10\%$ 50 V mylar
C411	1-105-669-12	0.0047 $\pm 10\%$ 50 V mylar
C412	1-101-923-11	0.01 $\pm 80\%$ 25 V ceramic
C413	1-105-677-12	0.022 $\pm 10\%$ 50 V mylar
C414		-----
C415	1-102-977-11	200 p $\pm 5\%$ 25 V ceramic
C416	1-102-936-11	3 p ± 0.25 pF 25 V ceramic
C417	1-121-651-11	10 16 V electrolytic
C418	1-121-395-11	4.7 25 V electrolytic
C419	1-121-398-11	10 25 V electrolytic
C420	1-101-923-11	0.01 $\pm 80\%$ 25 V ceramic
C421	1-105-672-12	0.0082 $\pm 10\%$ 50 V mylar
C422	1-105-672-12	0.0082 $\pm 10\%$ 50 V mylar
C423	1-105-672-12	0.0082 $\pm 10\%$ 50 V mylar
C424	1-101-924-11	0.022 $\pm 80\%$ 25 V ceramic
C425	1-121-651-11	10 16 V electrolytic
C426	1-101-924-11	0.022 $\pm 80\%$ 25 V ceramic
C427	1-105-682-12	0.056 $\pm 10\%$ 50 V mylar
C501(C551)	1-131-206-11	3.3 25 V tantalum
C502(C552)	1-121-926-11	33 10 V electrolytic
C503(C553)	1-102-978-11	220 p $\pm 5\%$ 50 V ceramic
C504(C554)	1-102-978-11	220 p $\pm 5\%$ 50 V ceramic
C505(C555)	1-101-880-11	47 p $\pm 5\%$ 50 V ceramic
C506(C556)	1-106-005-12	0.0015 $\pm 5\%$ 50 V mylar
C507(C557)	1-106-019-12	0.0056 $\pm 5\%$ 50 V mylar
C508(C558)	1-121-911-11	0.47 50 V electrolytic
C509(C559)	1-105-661-12	0.001 $\pm 10\%$ 50 V mylar
C510(C560)	1-131-206-11	3.3 25 V tantalum
C511(C561)	1-105-661-12	0.001 $\pm 10\%$ 50 V mylar
C512(C562)	1-123-044-11	33 25 V electrolytic
C513(C563)	1-121-913-11	3.3 25 V electrolytic
C514(C564)	1-121-416-11	100 25 V electrolytic
C515(C565)	1-105-685-12	0.1 $\pm 10\%$ 50 V mylar
C516(C566)	1-121-398-11	10 25 V electrolytic
C601(C651)	1-105-677-12	0.022 $\pm 10\%$ 50 V mylar
C602(C652)	1-102-982-11	180 p $\pm 10\%$ 50 V ceramic
C603(C653)	1-131-206-11	3.3 25 V tantalum
C604(C654)	1-121-392-11	3.3 25 V electrolytic
C605(C655)	1-105-679-12	0.033 $\pm 10\%$ 50 V mylar
C606(C656)	1-105-679-12	0.033 $\pm 10\%$ 50 V mylar
C607(C657)	1-105-665-12	0.0022 $\pm 10\%$ 50 V mylar
C608(C658)	1-121-398-11	10 25 V electrolytic
C609(C659)	1-121-352-11	47 10 V electrolytic
C610(C660)	1-102-978-11	220 p $\pm 5\%$ 50 V ceramic
C611(C661)	1-102-978-11	220 p $\pm 5\%$ 50 V ceramic

Ref. No.	Part No.	Description
C612(C662)	1-102-978-11	220 p $\pm 5\%$ 50 V ceramic
C613(C663)	1-121-392-11	3.3 25 V electrolytic
C614(C664)	1-106-023-12	0.0082 $\pm 5\%$ 50 V mylar
C615(C665)	1-106-013-12	0.0033 $\pm 5\%$ 50 V mylar
C616(C666)	1-106-041-12	0.047 $\pm 5\%$ 50 V mylar
C617(C667)	1-106-031-12	0.018 $\pm 5\%$ 50 V mylar
C618(C668)	1-121-392-11	3.3 25 V electrolytic
C619(C669)	1-121-392-11	3.3 25 V electrolytic
C620	1-105-671-12	0.0068 $\pm 10\%$ 50 V mylar
C701(C751)	1-121-392-11	3.3 25 V electrolytic
C702(C752)	1-102-963-11	33 p $\pm 5\%$ 50 V ceramic
C703(C753)	1-121-413-11	100 6.3 V electrolytic
C704(C754)	1-102-944-11	7 p $\pm 5\%$ 50 V ceramic
C705(C755)	1-102-963-11	33 p $\pm 5\%$ 50 V ceramic
C706(C756)	1-121-392-11	3.3 25 V electrolytic
C707(C757)	1-123-058-11	47 50 V electrolytic
C708(C758)	1-105-679-12	0.033 $\pm 10\%$ 50 V mylar
C709(C759)	1-105-665-12	0.0022 $\pm 10\%$ 50 V mylar
C710(C760)	1-105-665-12	0.0022 $\pm 10\%$ 50 V mylar
C711	1-121-935-11	100 25 V electrolytic
C801	1-105-917-12	0.022 $\pm 10\%$ 200 V mylar
C802	1-105-917-12	0.022 $\pm 10\%$ 200 V mylar
C803	1-105-917-12	0.022 $\pm 10\%$ 200 V mylar
C804	1-105-917-12	0.022 $\pm 10\%$ 200 V mylar
C805	1-123-065-11	330 25 V electrolytic
C806	1-123-065-11	330 25 V electrolytic
C807	1-121-413-11	100 6.3 V electrolytic
C808	1-123-090-11	47 63 V electrolytic
C809	1-121-392-11	3.3 25 V electrolytic
C810	1-121-726-11	0.47 50 V electrolytic
C811	1-121-936-11	220 25 V electrolytic
C812	1-121-936-11	220 25 V electrolytic
C813	1-121-391-11	1 50 V electrolytic
C814	1-121-935-11	100 25 V electrolytic
C815	1-121-935-11	100 25 V electrolytic
C816	1-123-090-11	47 63 V electrolytic
C817	1-123-090-11	47 63 V electrolytic
C818	1-105-725-12	0.1 $\pm 10\%$ 100 V mylar
C819	1-105-725-12	0.1 $\pm 10\%$ 100 V mylar
C820	1-121-410-11	47 25 V electrolytic
C821	1-121-936-11	220 25 V electrolytic
C822	1-105-677-12	0.022 $\pm 10\%$ 50 V mylar
C823	1-121-392-11	3.3 25 V electrolytic
C901	1-123-089-11	6800 63 V electrolytic
C902	1-123-089-11	6800 63 V electrolytic
CT401,402	1-141-095-11	capacitor, trimmer
CV101,102		
CV103,104	1-151-232-12	capacitor, tuning
CV105, 106		

Ref. No.	Part No.	Description
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RESISTORS

All resistance values are in Ω , $\pm 5\%$, $\frac{1}{4}$ W and carbon type unless otherwise indicated.

R104	1-244-665-11	470
R105	1-242-689-11	4.7 k
R106	1-242-696-11	9.1 k
R107	1-242-666-11	510
R108	1-242-673-11	1 k
R109	1-242-642-11	51
R110	1-242-697-11	10 k
R111	1-244-692-11	6.2 k
R112	1-242-666-11	510
R113	1-242-677-11	1.5 k
R114	1-242-685-11	3.3 k
R115	1-242-677-11	1.5 k
R116	1-242-721-11	100 k
R117	1-244-697-11	10 k
R118	1-244-675-11	1.2 k
R119	1-244-708-11	30 k

R201	1-244-655-11	180
R202	1-242-661-11	330
R203	1-242-671-11	820
R204	1-242-693-11	6.8 k
R205	1-242-663-11	390
R206	1-242-680-11	2 k
R207	1-244-649-11	100
R208	1-242-673-11	1 k
R209	1-242-687-11	3.9 k
R210	1-242-673-11	1 k
R211	1-242-649-11	100
R212	1-244-649-11	100
R213	1-242-691-11	5.6 k
R214	1-242-661-11	330
R215	1-242-684-11	3 k
R216	1-242-669-11	680
R217	1-242-663-11	390
R218	1-242-661-11	330
R219	1-242-669-11	680
R220	1-242-663-11	390
R221	1-244-649-11	100
R222	1-242-675-11	1.2 k
R223	1-242-697-11	10 k
R224	1-242-641-11	47
R225	1-242-641-11	47
R226	1-242-721-11	100 k
R227	1-242-745-11	1 M
R228	1-242-745-11	1 M
R229	1-242-721-11	100 k
R230	1-244-649-11	100
R231	1-242-673-11	1 k

Ref. No.	Part No.	Description
R232	1-242-706-11	24 k
R233	1-242-655-11	180
R234	1-242-713-11	47 k
R235	1-244-673-11	1 k
R236	1-242-657-11	220
R237	1-242-705-11	22 k
R238	1-242-703-11	18 k
R239	1-242-649-11	100
R240	1-242-689-11	4.7 k
R241	1-242-632-11	20
R242	1-242-701-11	15 k
R243	1-242-699-11	12 k
R244	1-242-632-11	20
R245	1-242-701-11	15 k
R246	1-242-699-11	12 k
R247	1-242-685-11	3.3 k
R248	1-244-731-11	270 k
R249	1-242-714-11	51 k
R250	1-242-745-11	1 M
R251	1-242-735-11	390 k
R252	1-242-723-11	120 k
R253	1-242-711-11	39 k
R254	1-242-721-11	100 k
R255	1-242-745-11	1 M
R256	1-242-673-11	1 k
R257	1-242-677-11	1.5 k
R301	1-242-669-11	680
R302	1-242-701-11	15 k
R303	1-242-684-11	3 k
R304	1-242-684-11	3 k
R305	1-242-681-11	2.2 k
R306	1-202-559-11	270 $\pm 10\%$ $\frac{1}{4}$ W composition
R321(R371)	1-242-709-11	33 k
R322(R372)	1-242-693-11	6.8 k
R323(R373)	1-242-693-11	6.8 k
R324(R374)	1-242-713-11	47 k
R325(R375)	1-242-724-11	130 k
R326(R376)	1-242-665-11	470
R327(R377)	1-242-693-11	6.8 k
R328(R378)	1-242-681-11	2.2 k
R329(R379)	1-242-663-11	390
R330(R380)	1-242-709-11	33 k
R331(R381)	1-242-681-11	2.2 k
R401	1-242-697-11	10 k
R402	1-242-690-11	5.1 k
R403	1-244-673-11	1 k
R404	1-242-649-11	100
R405	1-242-716-11	62 k
R406	1-242-682-11	2.4 k
R407	1-242-671-11	820

Ref. No. Part No. Description

R408 1-242-697-11 10 k
R409 1-242-673-11 1 k
R410 1-242-656-11 200
R411 1-242-709-11 33 k
R412 1-242-687-11 3.9 k
R413 1-242-693-11 6.8 k
R414 1-242-672-11 910
R415 1-242-641-11 47
R416 1-242-672-11 910
R417 1-242-689-11 4.7 k
R418 1-242-673-11 1 k
R419 1-242-713-11 47 k
R420 1-244-643-11 56

R501(R551) 1-242-715-11 56 k
R502(R552) 1-242-737-11 470 k
R503(R553) 1-242-670-11 750
R504(R554) 1-242-673-11 1 k
R505(R555) 1-242-683-11 2.7 k
R506(R556) 1-242-713-11 47 k
R507(R557) 1-242-741-11 680 k
R508(R558) 1-242-721-11 100 k
R509(R559) 1-242-685-11 3.3 k
R510(R560) 1-242-721-11 100 k
R511(R561) 1-242-721-11 100 k
R512(R562) 1-242-673-11 1 k
R513(R563) 1-242-721-11 100 k
R514(R564) 1-242-718-11 75 k
R515(R565) 1-242-705-11 22 k
R516(R566) 1-242-713-11 47 k
R517(R567) 1-242-671-11 820
R518(R568) 1-242-697-11 10 k
R519(R569) 1-242-657-11 220
R520(R570) 1-242-709-11 33 k
R521(R571) 1-242-685-11 3.3 k
R522(R572) 1-242-673-11 1 k
R523(R573) 1-242-698-11 12 k
R524(R574) 1-242-709-11 33 k
R525(R575) 1-242-697-11 10 k
R526(R576) 1-244-699-11 24 k

R601(R651) 1-244-703-11 18 k
R602(R652) 1-244-717-11 68 k
R603(R653) 1-242-731-11 270 k
R604(R654) 1-242-663-11 390
R605(R655) 1-242-711-11 39 k
R606(R656) 1-242-677-11 1.5 k
R607(R657) 1-242-697-11 10 k
R608(R658) 1-242-697-11 10 k
R609(R659) 1-242-689-11 4.7 k
R610(R660) 1-242-697-11 10 k
R611(R661) 1-242-673-11 1 k
R612(R662) 1-242-721-11 100 k

Ref. No. Part No. Description

R613(R663) 1-242-673-11 1 k
R614(R664) 1-242-721-11 100 k
R615(R665) 1-242-673-11 1 k
R616(R666) 1-242-693-11 6.8 k
R617(R667) 1-242-709-11 33 k
R618(R668) 1-242-649-11 100
R619(R669) 1-242-679-11 1.8 k
R620(R670) 1-242-687-11 3.9 k
R621(R671) 1-242-673-11 1 k
R622(R672) 1-242-715-11 56 k
R623(R673) 1-242-739-11 560 k
R624(R674) 1-242-731-11 270 k
R625(R675) 1-242-673-11 1 k
R626(R676) 1-242-701-11 15 k
R627(R677) 1-242-709-11 33 k
R628(R678) 1-242-689-11 4.7 k
R629 1-242-721-11 100 k

R701(R751) 1-244-745-11 1 M
R702(R752) 1-244-673-11 1 k
R703(R753) 1-244-714-11 51 k
R704(R754) 1-244-705-11 22 k
R705(R755) 1-244-677-11 1.5 k
R706(R756) 1-244-671-11 820
R707(R757) 1-244-666-11 510
R708(R758) 1-244-685-11 3.3 k
R709(R759) 1-244-697-11 10 k
R710(R760) 1-244-714-11 51 k
R711(R761) 1-202-583-11 2.7 k $\pm 10\%$ $\frac{1}{2}$ W composition
R712(R762) 1-202-583-11 2.7 k $\pm 10\%$ $\frac{1}{2}$ W composition
R713(R763) 1-244-701-11 15 k
R714(R764) 1-244-661-11 330
R715(R765) 1-244-661-11 330
R716(R766) 1-244-649-11 100
R717(R767) 1-202-517-11 4.7 $\pm 10\%$ $\frac{1}{2}$ W composition
R718(R768) 1-217-158-11 0.47 $\pm 10\%$ 5 W metal
R719(R769) 1-217-158-11 0.47 $\pm 10\%$ 5 W metal
R720(R770) 1-202-525-11 10 $\pm 10\%$ $\frac{1}{2}$ W composition
R721(R771) 1-202-517-11 4.7 $\pm 10\%$ $\frac{1}{2}$ W composition
R722(R772) 1-202-565-11 470 $\pm 10\%$ $\frac{1}{2}$ W composition
R723(R773) 1-202-565-11 470 $\pm 10\%$ $\frac{1}{2}$ W composition
R724(R774) 1-244-697-11 10 k
R725 1-244-697-11 10 k
R726 1-244-697-11 10 k

R801 1-207-635-11 82 $\pm 10\%$ 2 W wirewound
R802 1-207-688-11 220 $\pm 10\%$ 5 W wirewound
R803 1-244-685-11 3.3 k
R804 1-207-639-11 330 $\pm 10\%$ 2 W wirewound
R805 1-244-649-11 100
R806 1-244-665-11 470
R807 1-242-706-11 24 k
R808 1-242-721-11 100 k

Ref. No. Part No. Description

R809 1-242-697-11 10 k
R810 1-242-720-11 91 k
R811 1-242-707-11 27 k
R812 1-242-726-11 160 k
R813 1-242-705-11 22 k
R814 1-242-697-11 10 k
R815 1-242-701-11 15 k
R816 1-242-703-11 18 k
R817 1-202-565-11 470 $\pm 10\%$ $\frac{1}{2}$ W composition
R818 1-242-697-11 10 k
R819 1-242-671-11 820
R820 1-242-705-11 22 k
R821 1-202-587-11 3.9 k $\pm 10\%$ $\frac{1}{2}$ W composition
R822 1-202-577-11 1.5 k $\pm 10\%$ $\frac{1}{2}$ W composition
R823 1-202-577-11 1.5 k $\pm 10\%$ $\frac{1}{2}$ W composition
R824 1-202-582-11 2.4 k $\pm 10\%$ $\frac{1}{2}$ W composition
R825 1-202-582-11 2.4 k $\pm 10\%$ $\frac{1}{2}$ W composition
R826 1-244-657-11 220
R827 1-244-641-11 47
R828 1-202-550-11 110 $\pm 10\%$ $\frac{1}{2}$ W composition
R829 1-207-630-11 22 $\pm 10\%$ 2 W wirewound
R830 1-207-630-11 22 $\pm 10\%$ 2 W wirewound
R831 1-207-929-11 2.7 $\pm 10\%$ 5 W wirewound
R832 1-202-510-11 2.4 k $\pm 10\%$ $\frac{1}{2}$ W composition
R833 1-202-510-11 2.4 k $\pm 10\%$ $\frac{1}{2}$ W composition

R901(R951) 1-244-697-11 10 k
R902(R952) 1-244-697-11 10 k
R903(R953) 1-244-719-11 82 k
R904(R954) 1-244-735-11 390 k
R905 1-202-645-11 1 M $\pm 10\%$ $\frac{1}{2}$ W composition

RT201 1-222-845-11 100 k (B), adjustable
RT202 1-221-978-11 4.7 k (B), adjustable

RT301 1-221-978-11 4.7 k (B), adjustable

RT401 1-221-997-11 2.2 k (B), adjustable

RT701 1-221-967-11 10 k (B), adjustable
(RT751)

RV501 1-224-103-11 50 k (C), variable (MIC MIXING)
(RV551)

RV601 1-224-102-11 250 k (B)/250 k (M), variable
(VOLUME)

RV602 1-224-102-11 250 k (B)/250 k (M), variable
(BALANCE)

RV603 1-224-101-11 50 k (B), variable (TREBLE)
(RV653)

RV604 1-224-101-11 50 k (B), variable (BASS)
(RV654)

Ref. No. Part No. Description

SWITCHES

S1 1-516-199-00 switch, rotary/slide (FUNCTION)
S2 1-516-036-00 switch, lever (MONITOR 1)
S3 1-516-036-00 switch, lever (MONITOR 2)
S4 1-516-196-00 switch, rotary/slide (MODE)
S5 1-516-036-00 switch, lever (LOUDNESS)
S6 1-516-197-00 switch, rotary/slide (FILTER)
S7 1-514-524-00 switch, slide (NORMAL/SEPARATE)
S8 1-514-198-00 switch, rotary/slide (SPEAKER)
S9 1-516-036-00 switch, lever (MUTING)
S10 1-514-448-00 switch, slide (DE-EMPHASIS)
S11 1-516-007-00 switch, seesaw (POWER)
S12-1 ~ 3 switch, MIC MIXING
(built in RV501, 551)

FILTERS

CF201,202 { 1-527-507-12 fm i-f, ceramic 10.70 MHz (red)
1-527-507-22 fm i-f, ceramic 10.66 MHz (black)
1-527-507-32 fm i-f, ceramic 10.74 MHz (white)
1-527-507-42 fm i-f, ceramic 10.62 MHz (green)
1-527-507-52 fm i-f, ceramic 10.78 MHz (yellow)

MISCELLANEOUS

CB701 1-515-194-00 breaker, circuit
(CB751)
CP201 1-231-193-00 encapsulated component
CP301,302 1-231-224-00 encapsulated component
CP901 1-231-057-12 encapsulated component,
0.033 μ F + 120 Ω
CNJ901 1-509-517-00 connector, REC/PB
CNJ902 1-507-265-00 jack, HEADPHONE
CNJ903,904 1-509-403-00 outlet, ac
CNJ905
CNJ906 1-507-394-00 jack, MIC
CNJ907
F901,902 1-532-269-00 fuse, 2.5 A
J901 ~ 908 1-507-393-00 jack, phono; 8-p
(J951 ~ 958)
M901 1-520-140-00 meter, TUNING
M902 1-520-141-00 meter, TUNER INPUT
PL901,902 1-518-116-00 lamp, dial 11V/0.36 A
PL903 1-518-124-00 lamp, TUNING 8 V/0.25 A
PL904 1-518-151-00 lamp, pointer
PL905 1-518-158-00 lamp, STEREO
PL906 1-518-124-00 lamp, TUNER INPUT meter 8 V/0.25 A
PL907 ~ 912 1-518-121-00 lamp, AUX, PHONO, FM, A-M,
TAPE, MIC 4.5 V/0.04 A
VS901 1-526-520-00 selector, voltage
1-509-437-00 socket, power transistor
1-517-057-00 holder, meter lamp; 2-p

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
	1-533-090-00	holder, dial lamp
	1-534-526-21	cord, power
	1-535-055-00	lug terminal
	1-536-353-00	terminal post, U-shaped (single)
	1-536-354-00	terminal post (C)
	1-536-355-00	terminal post, U-shaped (double)

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
	1-536-395-00	terminal strip, 1L1C
	1-536-398-00	terminal strip, 2L2C
TM901 ~ TM904	1-536-415-00	screw terminal strip, 4-p (ANTENNA)
	1-582-233-00	jumper board, 8-p phono jack

SONY CORPORATION

2K0518-1

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SECTION 1

TECHNICAL DESCRIPTION

1-1. SPECIFICATIONS

Fm Tuner Section

Tuning range:	87.5 MHz to 108 MHz
Antenna terminals:	300 ohms balanced 75 ohms unbalanced
Intermediate frequency:	10.7 MHz
Sensitivity:	2.0 μ V (IHF), 1.6 μ V (S/N = 30 dB)
Image rejection:	70 dB
I-f rejection:	100 dB
Spurious rejection:	90 dB
A-m suppression:	56 dB
Capture ratio:	1.0 dB
Selectivity:	70 dB, IHF
Signal-to-noise ratio:	70 dB
Frequency response:	20 Hz to 15 kHz $\pm$ 1 dB

Harmonic distortion:	Mono 0.2 % at 400 Hz, 100 % modulation Stereo 0.5 % at 400 Hz, 100 % modulation
----------------------	--

Stereo separation: Better than 38 dB at 400 Hz

19 kHz, 38 kHz suppression: 40 dB

SCA suppression: 55 dB

Muting level: Less than 5 μ V

A-m Tuner Section

Tuning range:	530 kHz to 1,605 kHz
Antenna:	Built-in bar antenna and external antenna terminal
Intermediate frequency:	455 kHz

Sensitivity:	53 dB/m, built-in bar antenna at 1,000 kHz 30 μ V, external antenna
Image rejection:	50 dB at 1,000 kHz
I-f rejection:	40 dB at 1,000 kHz
Signal-to-noise ratio:	50 dB at 50 mV/m
Harmonic distortion:	0.8 % at 50 mV/m
Amplifier Section	
Continuous RMS power output: (rated output)	Both channels driven simultaneously 60 + 60 watts (8 ohms) at 20 Hz to 20 kHz
(Less than 0.2 % THD)	70 + 70 watts (8 ohms) 85 + 85 watts (4 ohms) at 1 kHz One channel driven 85/85 watts (8 ohms) 110/110 watts (4 ohms)

Dynamic power output: (IHF constant power supply method)	240 watts (8 ohms) 380 watts (4 ohms)
--	--

Power bandwidth, IHF: 15 Hz to 35 kHz

Damping factor: 50 (8 ohms)

Harmonic distortion: Less than 0.2 % at rated output
Less than 0.1 % at 1 watt output

IM distortion: (60 Hz : 7 kHz = 4 : 1)
Less than 0.2 % at rated output
Less than 0.1 % at 1 watt output

Frequency response:	PHONO RIAA equalization curve $\pm$ 1 dB MIC 100 Hz to 10 kHz $\pm$ 0 dB AUX TAPE REC/PB (input)
---------------------	--

POWER AMP } 10 Hz to 100 kHz $\pm$ 0 dB

Signal-to-noise ratio:

	S/N	Weighting network	Input level
PHONO	74 dB	A	2 mV
MIC	65 dB	B	1 mV
AUX	90 dB	A	150 mV
TAPE			
REC/PB (input)			
POWER AMP	110 dB		1 V

Input sensitivity and impedance:

	Maximum sensitivity	Impedance
PHONO	2 mV	47 k ohms
MIC	1 mV	47 k ohms
AUX	150 mV	50 k ohms
TAPE		
REC/PB (input)		
POWER AMP	1 V	50 k ohms

Note: Maximum sensitivity means the input level at which the rated output is provided into 8 ohms (with both channels driven at full volume) at 1 kHz.

Output level and impedance:

	Level	Impedance
REC OUT	250 mV	10 k ohms
REC/PB (output)	30 mV	82 k ohms
PREAMP OUTPUT	1 V	4.7 k ohms

HEADPHONE: Accepts all low and high impedance headphones.

SPEAKER: Accepts 4 ~ 16 ohm speakers.

Tone controls: BASS $\pm$ 10 dB at 100 Hz
TREBLE $\pm$ 10 dB at 10 kHz

High filter: 12 dB/oct. above 9 kHz

Low filter: 12 dB/oct. below 50 Hz

Loudness control: + 10 dB at 50 Hz, + 4 dB at 10 kHz
(Attenuation : 30 dB)

General:

System: Superheterodyne fm/a-m, switching MPX
Complementary symmetry circuit (SEPP OTL), Direct output coupling

Power requirements: 120 volts, 60 Hz ac

Power consumption: 180 watts

AC outlets: 2 switched, 200 watts, total
1 unswitched, 200 watts

Dimensions: 471 (w) x 157 (h) x 375 (d) mm
18⁹/₁₆ x 6³/₁₆ x 14³/₄ inches

Net weight: 15.2 kg (33 lb 8 oz)

Shipping weight: 18.9 kg (41 lb 11 oz)

1-2. CIRCUIT DESCRIPTION DIGEST

1. Noise Elimination Circuit for Tuner Section

This circuit is used to eliminate noises due to B+ voltage fluctuation of tuner when changing the FUNCTION switch S1 to FM or AM from other position. Referring to Fig. 1-1, when S1 is changed

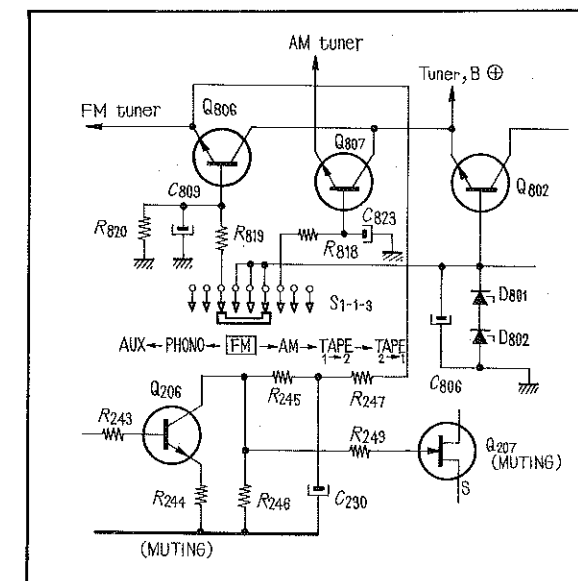


Fig. 1-1. Noise elimination circuit for tuner section

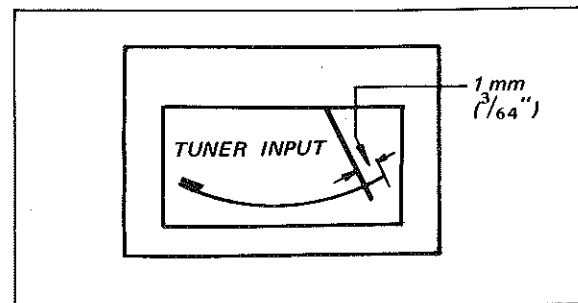


Fig. 3-9. TUNER INPUT meter calibration

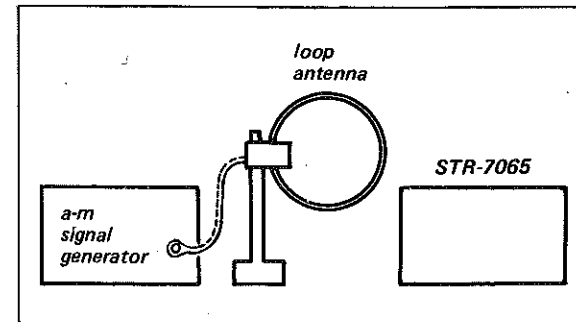
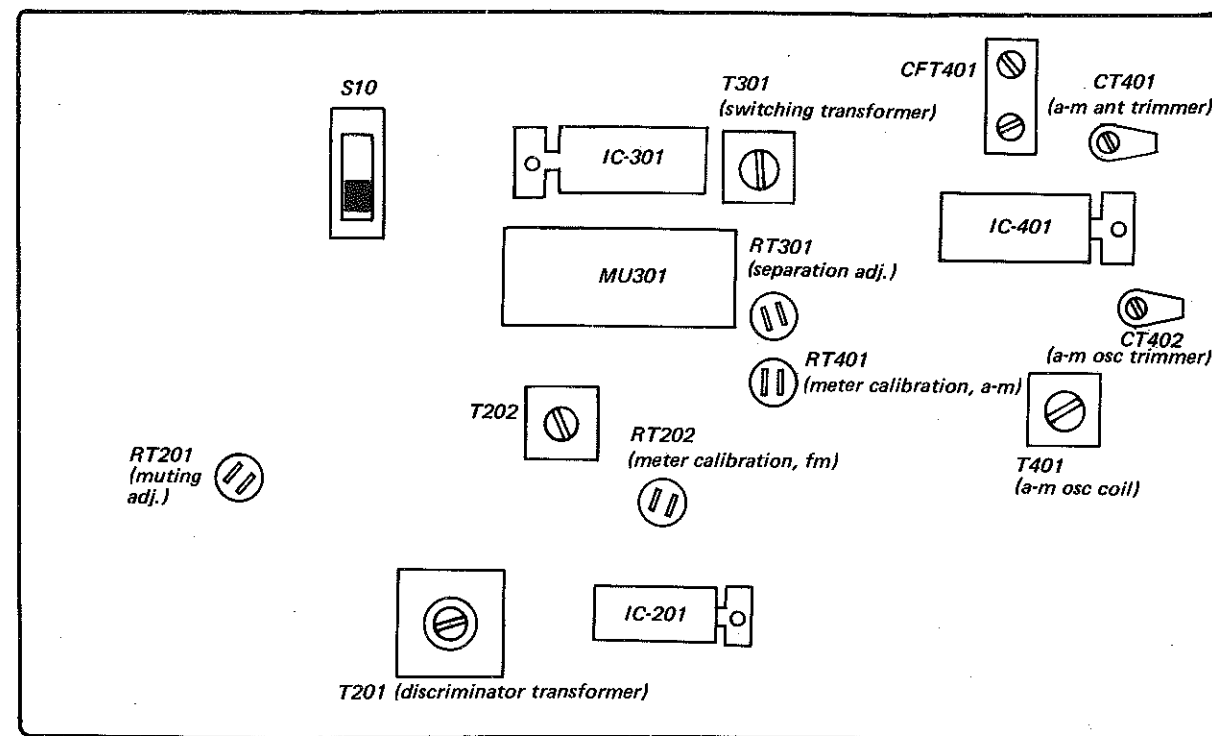


Fig. 3-10. Tuner input meter calibration test setup (A-m)

Adjustment Parts Location

A-m Front End/I-f Amplifier/MPX Board
— Component Side —

rear panel side
↑



front panel side
↓

Fig. 3-11. Adjustment parts location

3-9. POWER-AMPLIFIER ADJUSTMENT

Dc-Bias Adjustment

Serious deficiencies in performance, such as thermal runaway of power transistors, will result if this adjustment is improperly set.

CAUTION

To avoid accidental power transistor damage, increase the ac line voltage gradually, using a variable transformer.

Test Equipment Required

1. Dc millivoltmeter
2. Variable transformer
3. Screwdriver, 3 mm ($1/8$ ") blade

Preparation

1. Remove the wooden case.
2. Connect the dc millivoltmeter across the test points as shown in Fig. 3-12.
3. Turn the adjustable resistors RT701 and RT751 on the power amp/power supply board fully counterclockwise as shown in Fig. 3-12.
4. Set the variable transformer for minimum output.

Procedure

1. Turn on POWER switch, and increase the line voltage up to the rated value (120 V).
2. Adjust RT701 (RT751) for 50 mV reading on the meter.

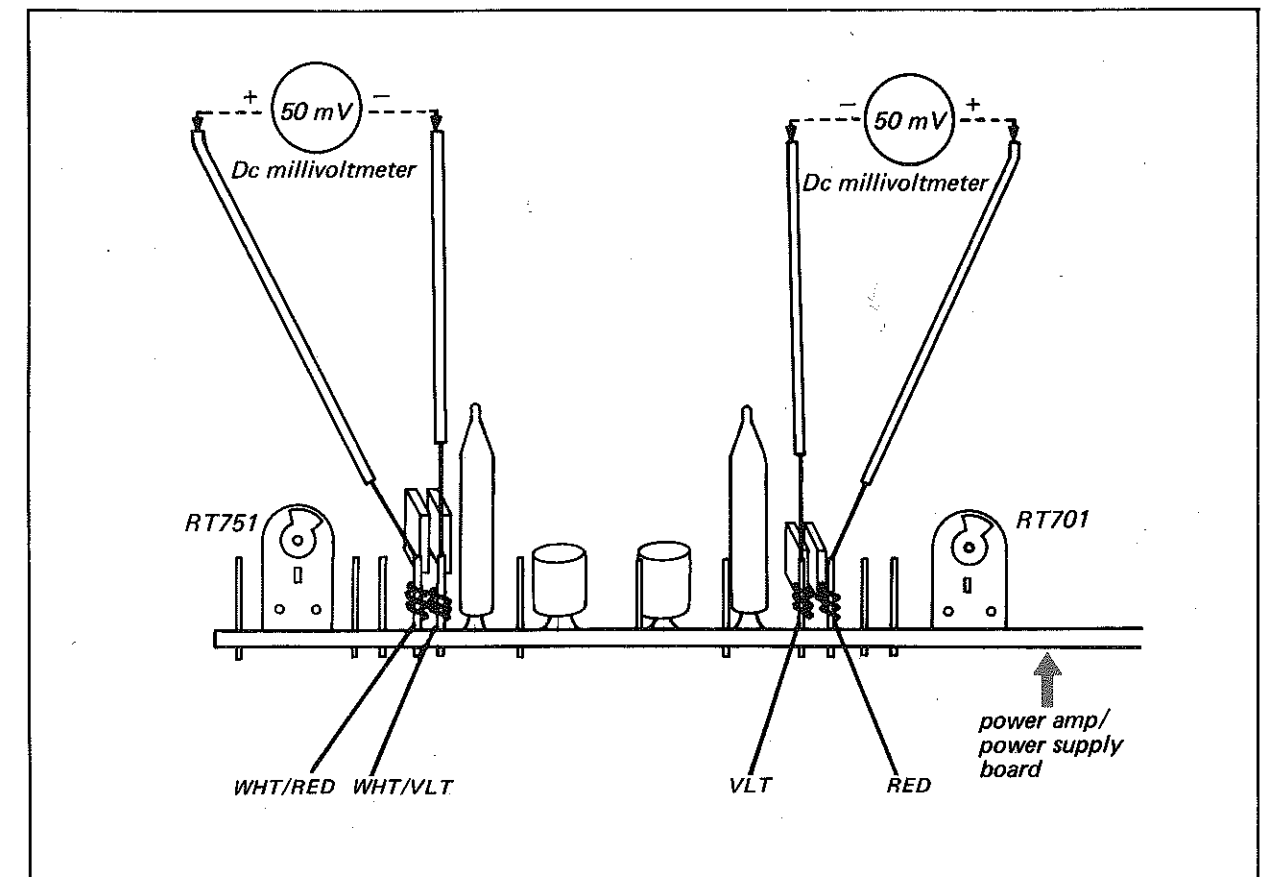
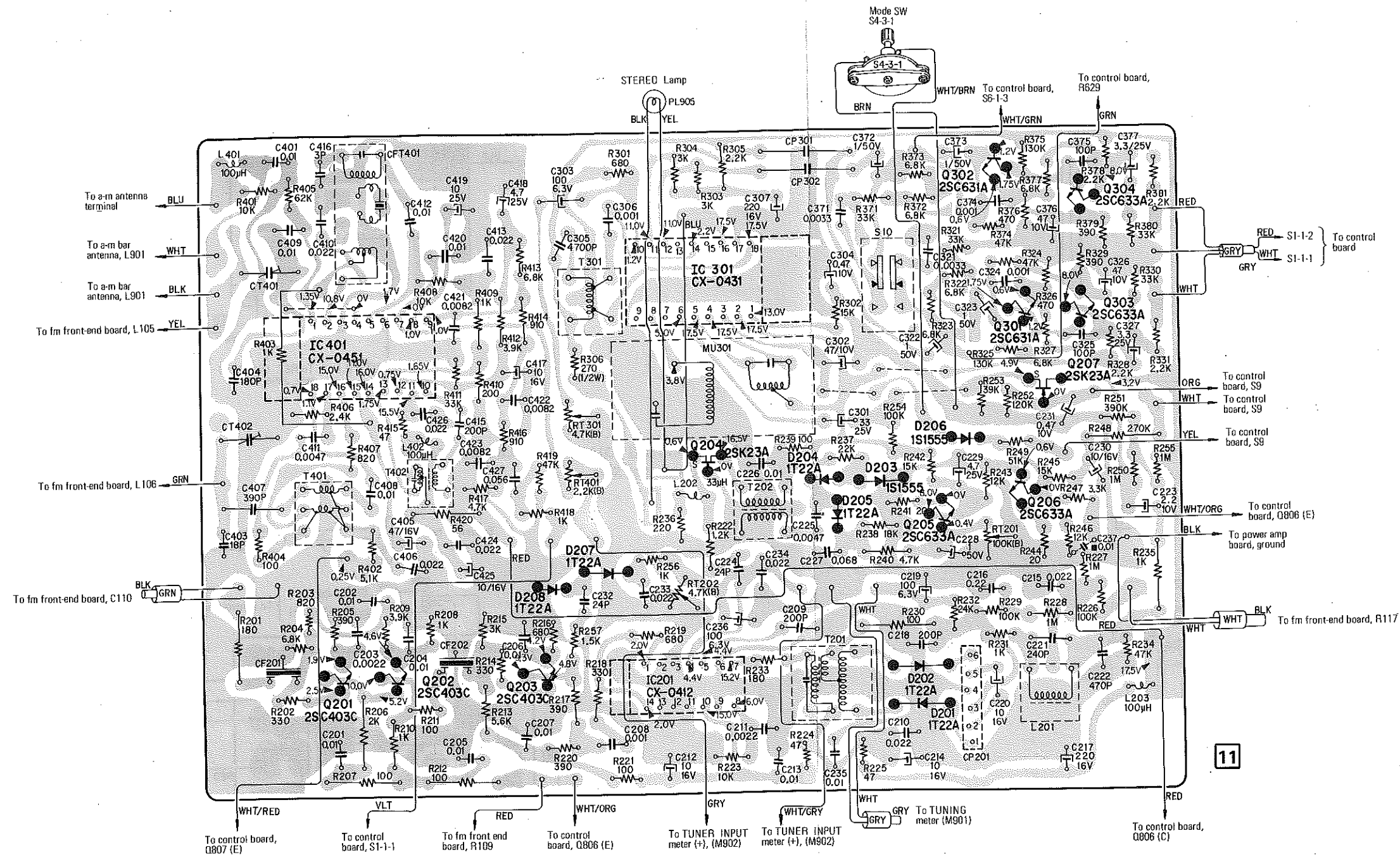


Fig. 3-12. Power-amplifier adjustment test setup

5-5. MOUNTING DIAGRAM – A-m Front End/I-f Amplifier/MPX Board
– Conductor Side –



■ C237 is mounted on the conductor side

Transistor
Location

Q201

Q202

Q203

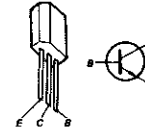
Q204

Q205

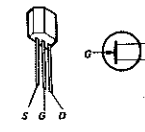
Q302
Q301 Q207
Q206

Q304
Q303

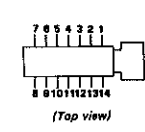
2SC403C
2SC631A
2SC633A



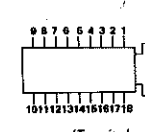
2SK23A



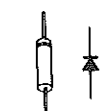
CX-0412



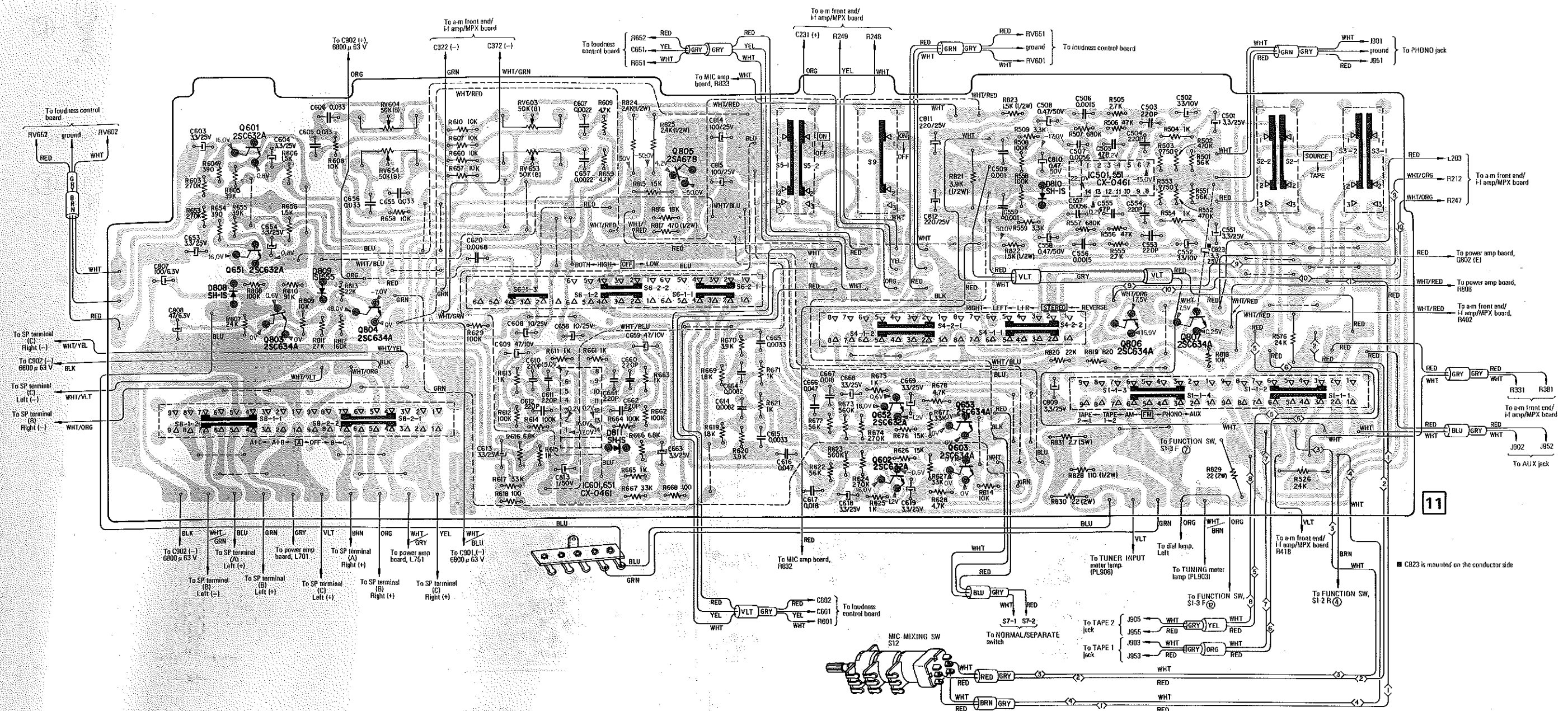
CX-0431
CX-0451



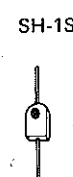
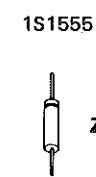
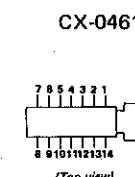
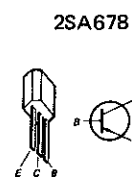
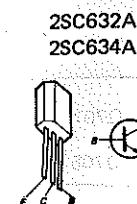
1T22A
1S1555



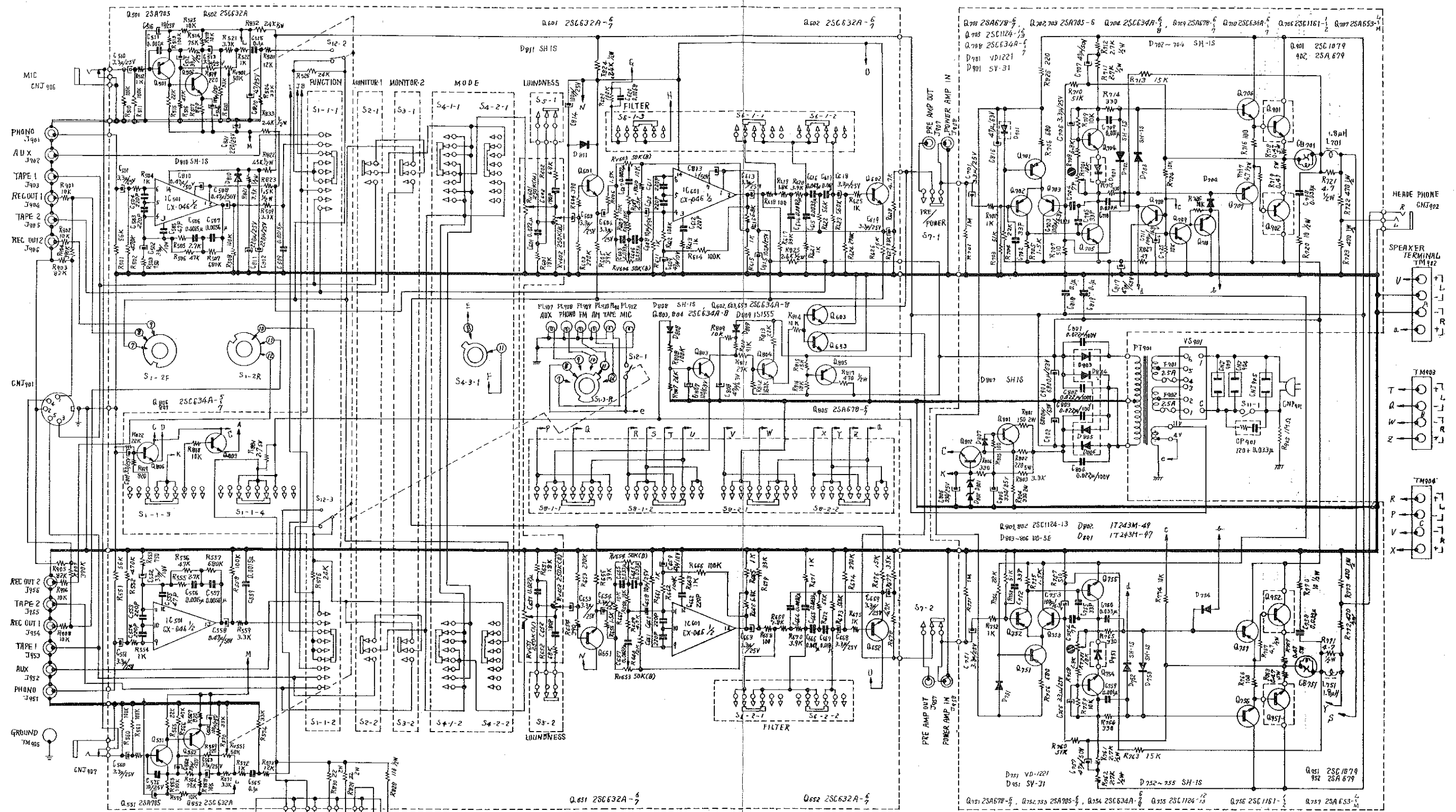
5-6. MOUNTING DIAGRAM – Control Board – – Conductor Side – (CCB-115)



Transistor Location	Q601	Q651	Q803	Q804	Q805	Q652	Q602	Q653	Q603	Q806	Q807
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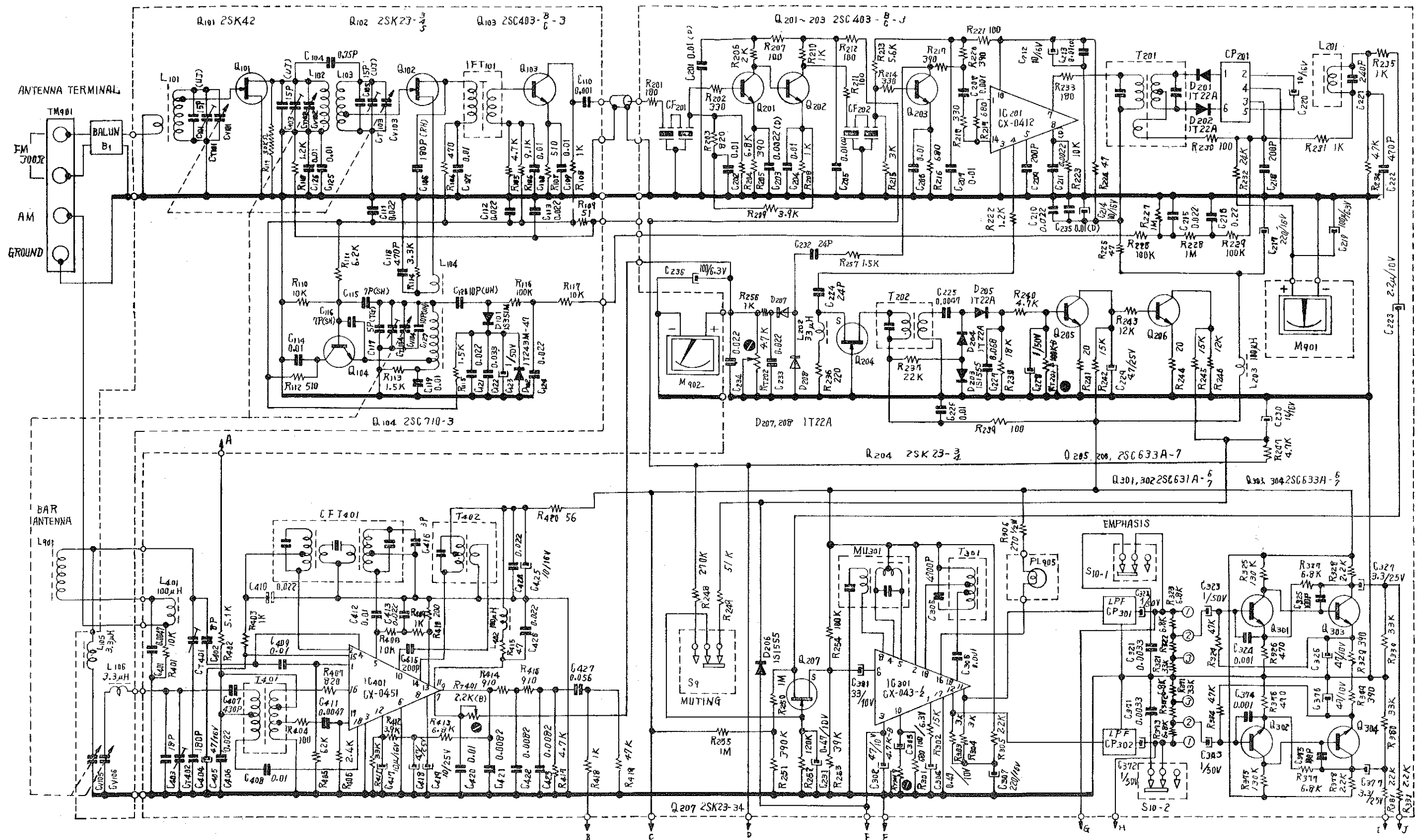


SONY STR-7065 CIRCUIT DIAGRAM/DIAGRAMME DE CIRCUIT/SCHALTBIKD



- S1 : FUNCTION SW: FM STEREO POSITION
 S2 : MONITOR-1 SW: SOURCE POSITION
 S3 : MONITOR-2 SW: " "
 S4 : MODE SW: STEREO " "
 S5 : LOUDNESS SW: ON " "
 S6 : FILTER SW: OFF " "
 S7 : PRE/MAIN AMP SW: NORMAL "

- PL901,902 : DIAL LAMP
 PL903,906 : METER LAMP
 PL904 : DIAL INDICATOR LAMP
 PL907-912 : FUNCTION
 AUX - PHONO - FM - AM - TAPE - MIC
 RV601,651 : VOLUME CONTROL
 RV602,652 : BALANCE



R_{T201} : MUTING LEVEL ADJ.
R_{T202} : FM INPUT METER ADJ.
R_{T301} : STEREO SEPARATION ADJ.

R_{T401} : AM INPUT METER ADJ.

PL905 : STEREO INDICATOR LAMP

S₉ : MUTING SW ON POSITION

S₁₀ : EMPHASIS SW 75μ sec. POSITION.