

SERVICE MANUAL

AM/FM STEREO RECEIVER

**SANSUI 8080DB/9090DB
890DB/990DB**



Sansui

SANSUI ELECTRIC CO., LTD.

This service manual is designed for service engineers to repair, adjust, maintain and order the replacement parts of the 8080DB/9090DB, 890DB/990DB correctly.

When ordering the parts, use the stock number and parts name specifically referring to the Parts Location and Parts Lists.

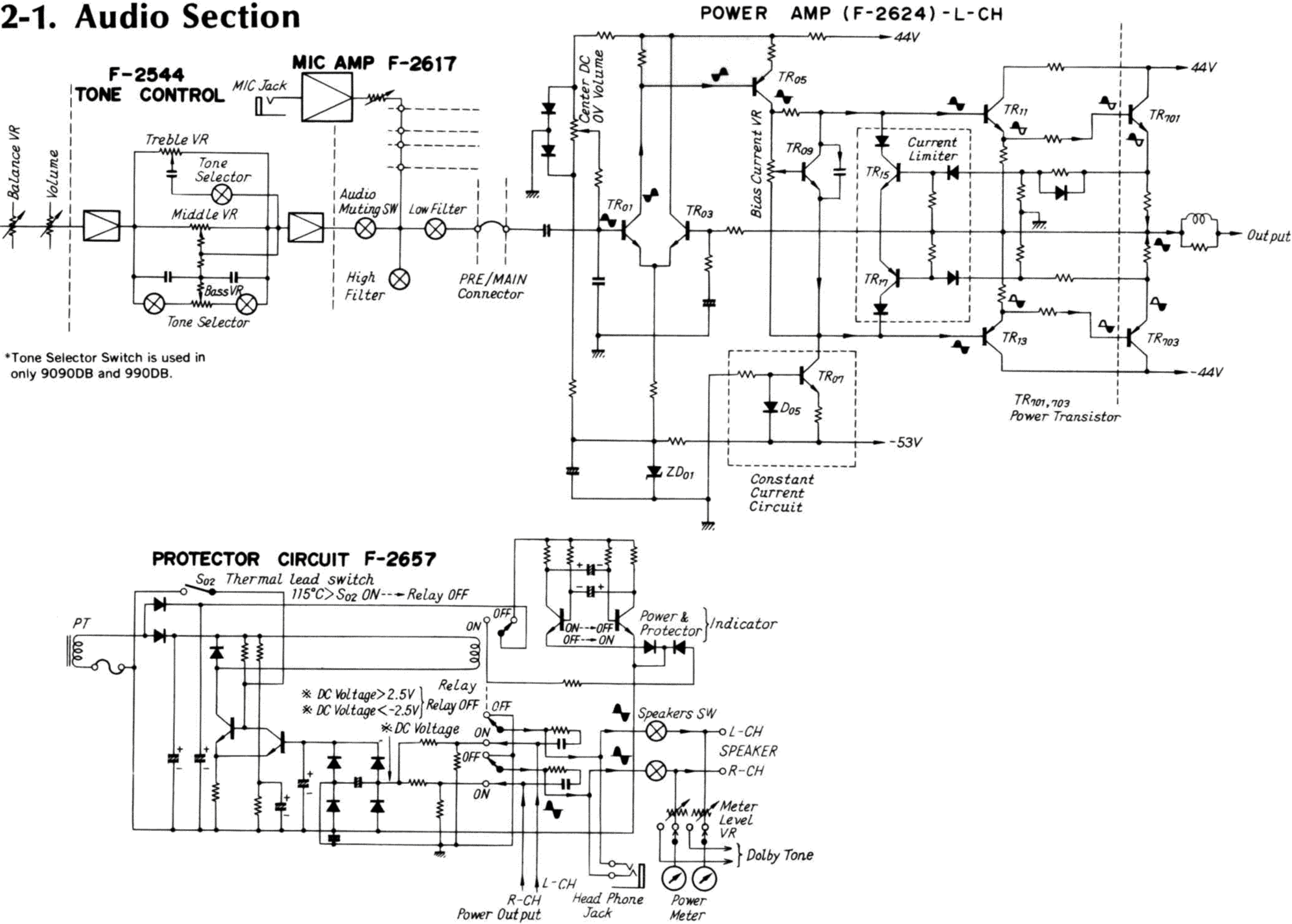
For general usage and maintenance of the unit, please refer to the Operating Instructions attached with the unit.

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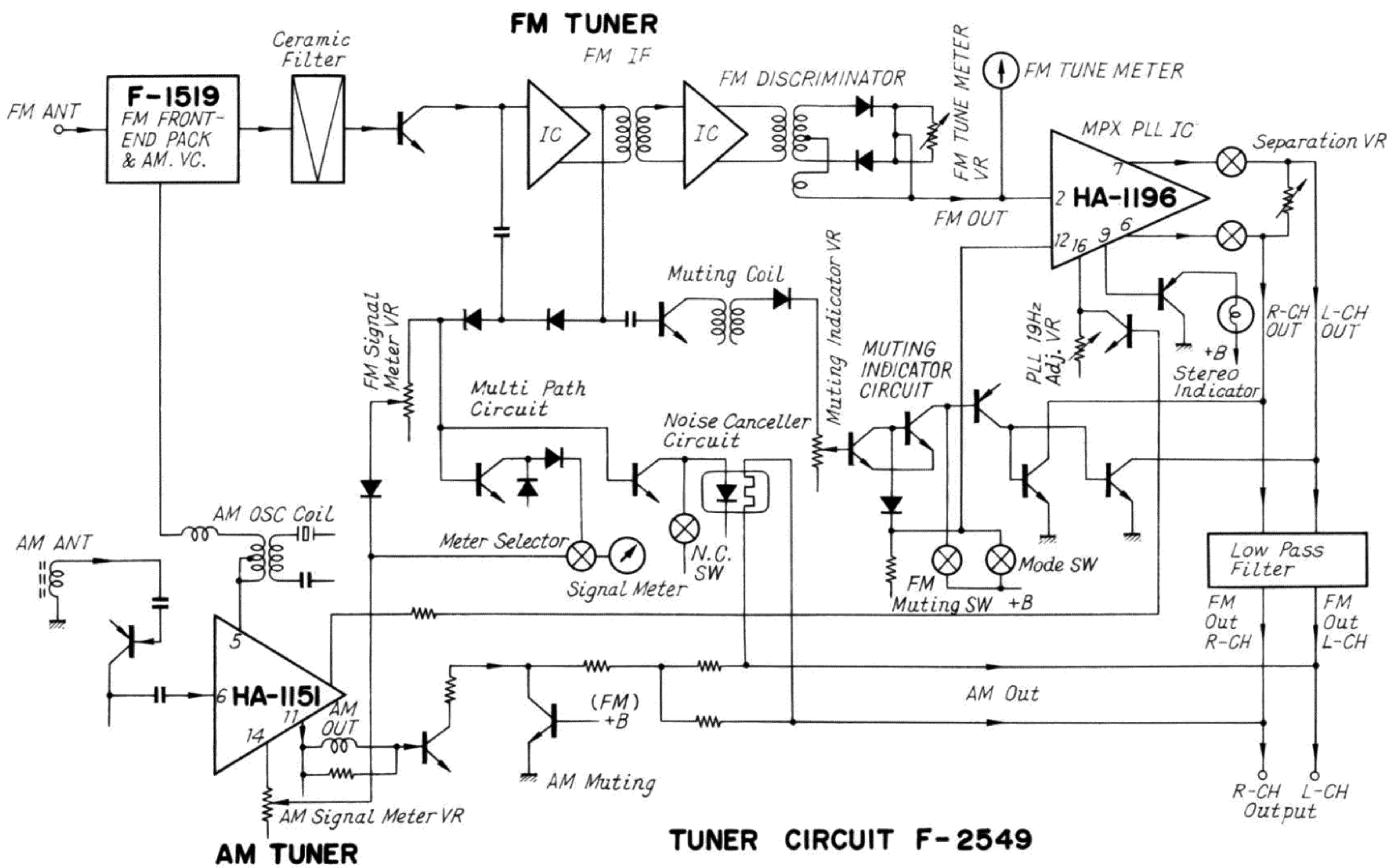
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2. BLOCK DIAGRAM

2-1. Audio Section

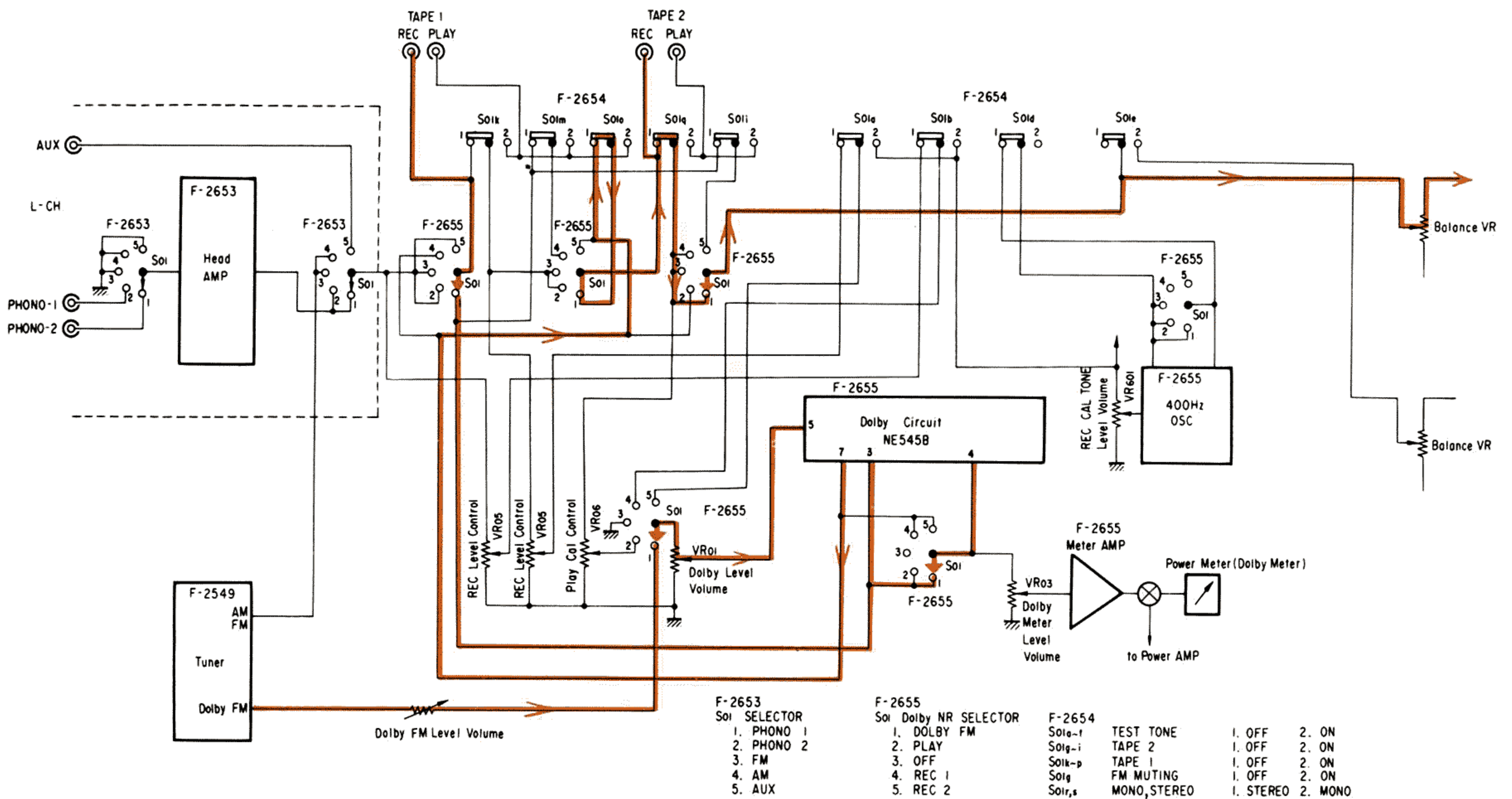


2-2. Tuner Section

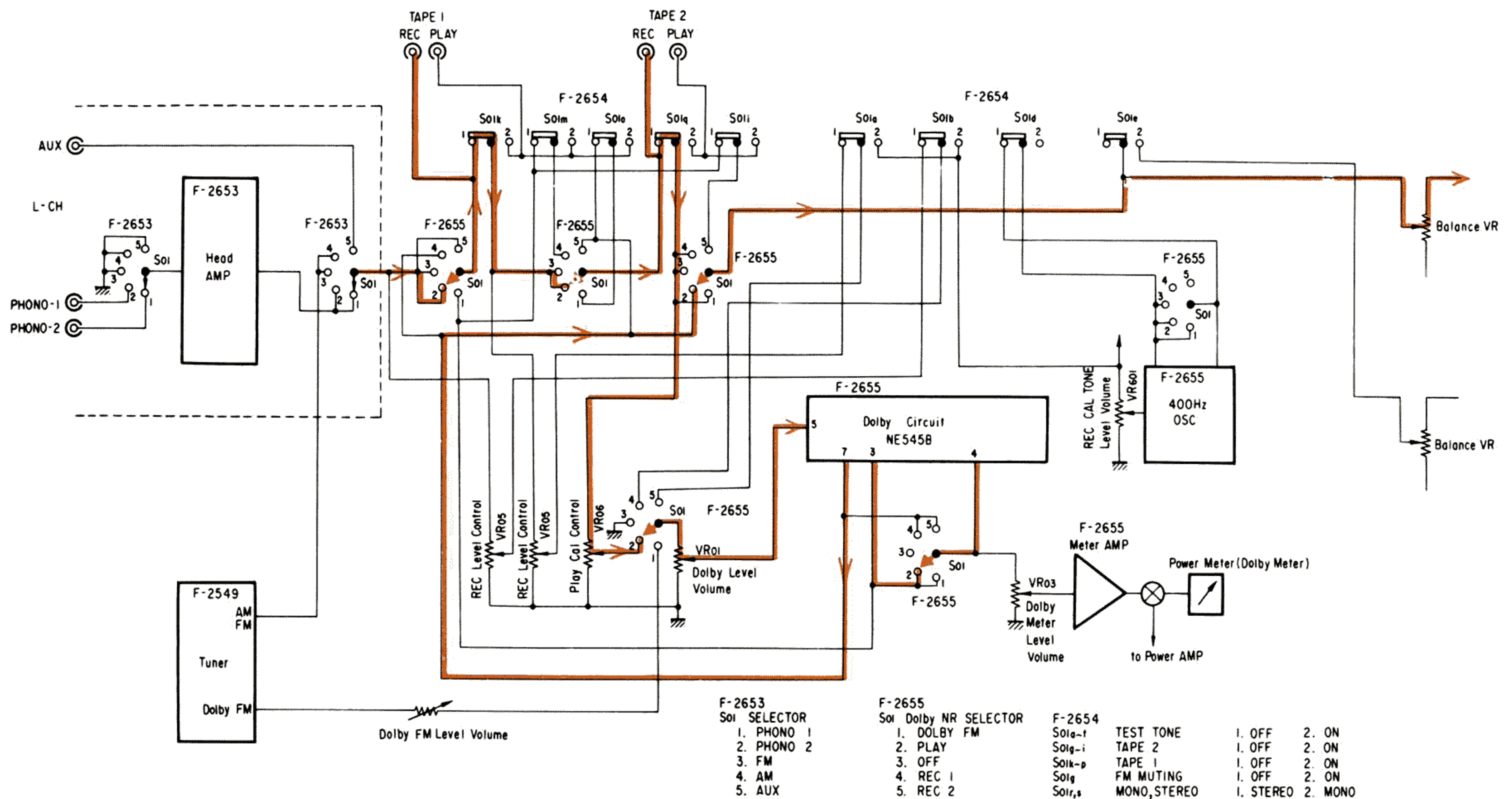


2-3. Dolby Mode Section

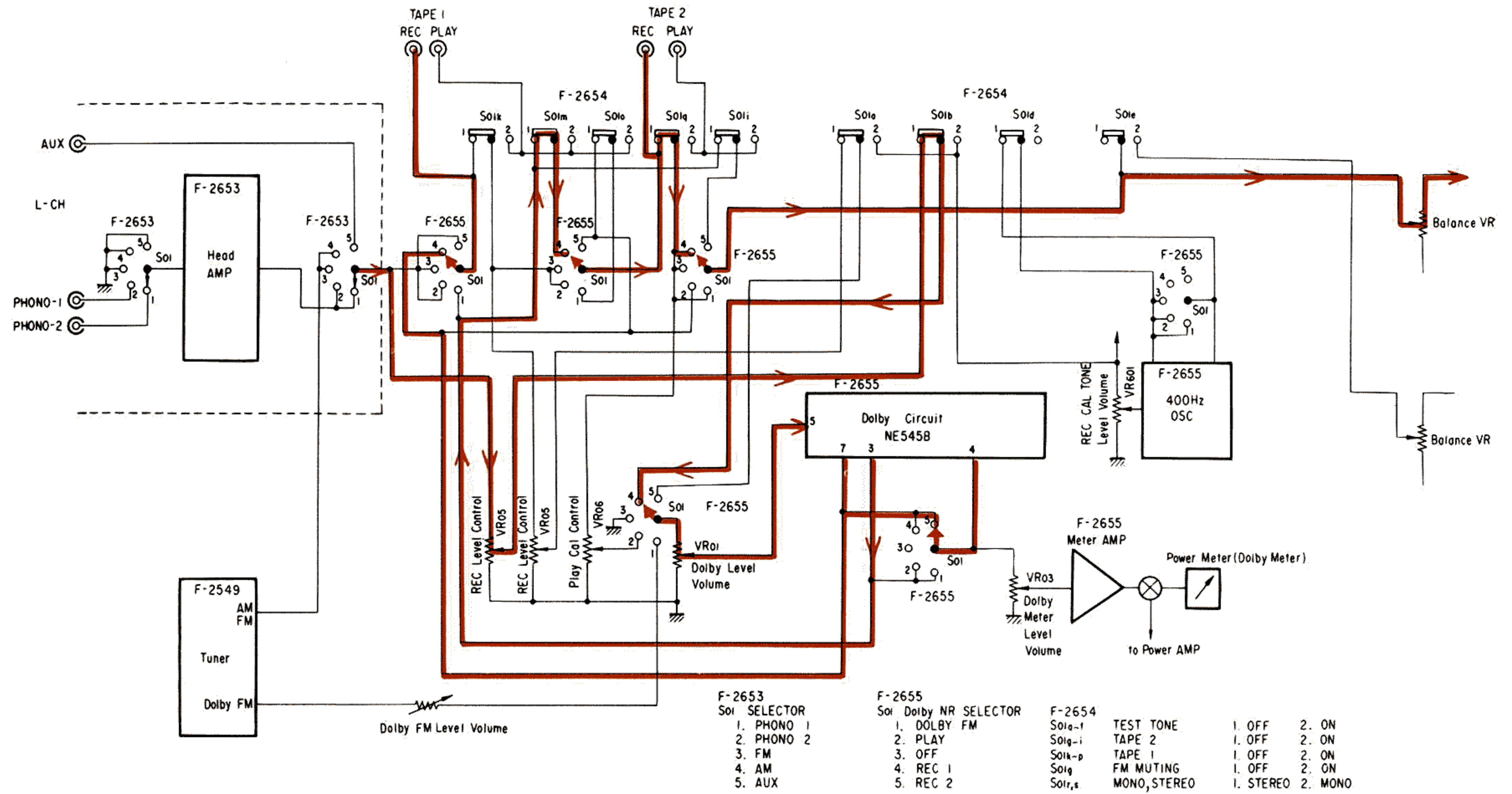
2-3-1. Dolby FM (Dolby NR Selector)



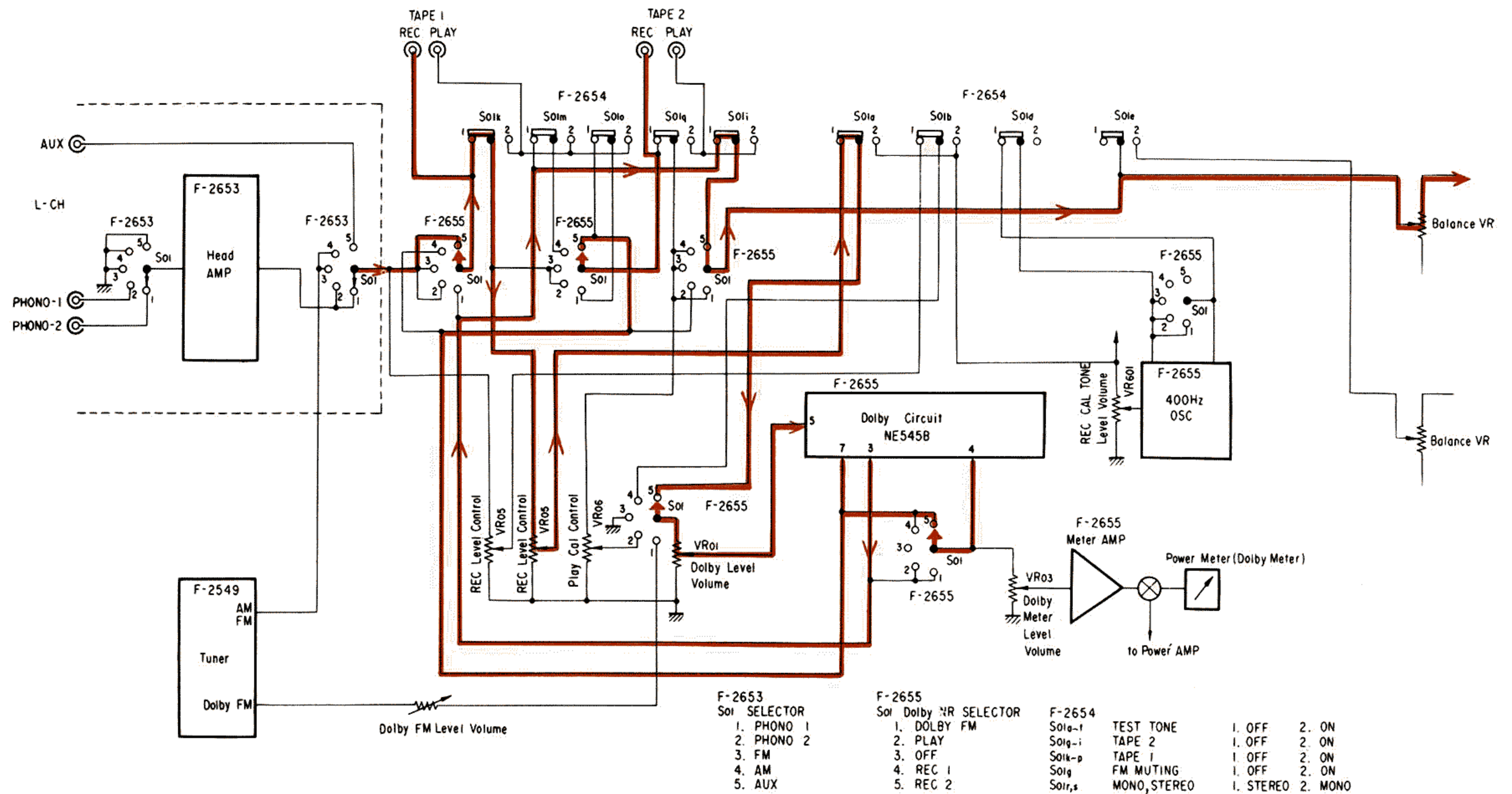
2-3-2. Play (Dolby NR Selector)



2-3-3. Rec (1) (Dolby NR Selector)



2-3-4. Rec (2) (Dolby NR Selector)

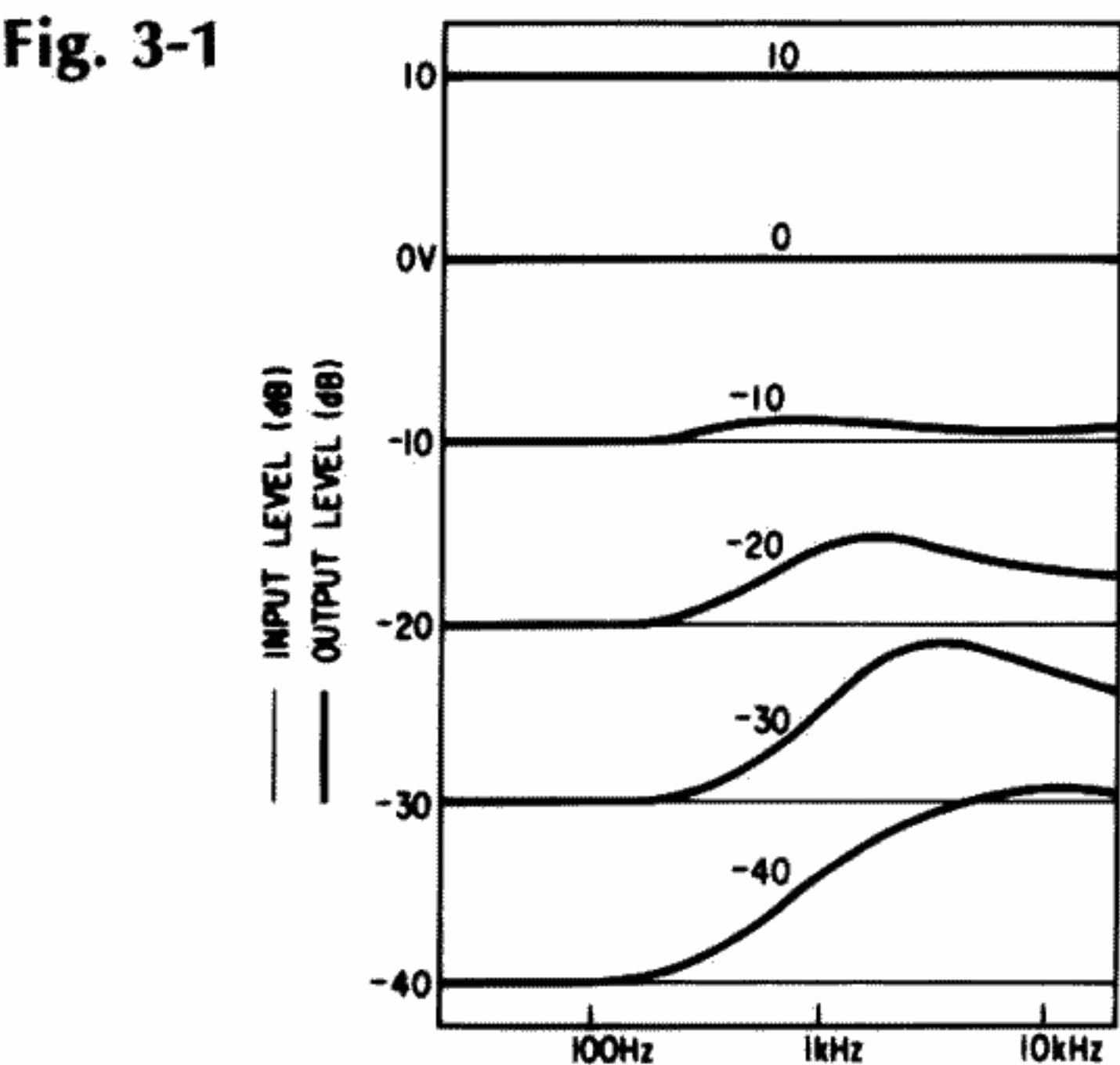


3. OPERATION OF DOLBY FM SYSTEM

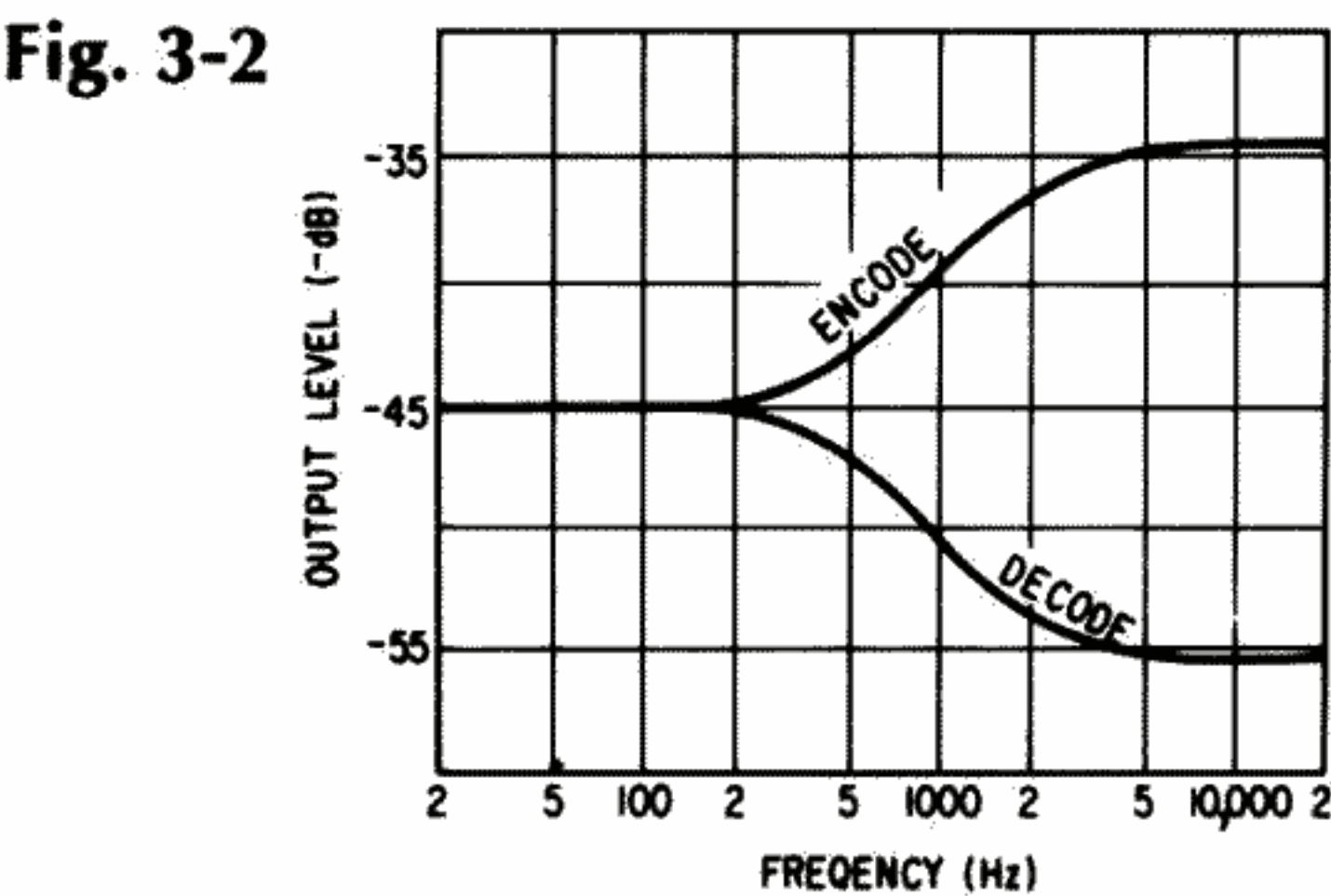
This Dolby Noise Reduction System Type B used in this unit is not only available for encoding of the FM dolbyized signal but also useful for encoding and decoding of other signals. Therefore it is possible and effective to combine with other products such as a cassette deck without Dolby system.

Dolby FM System

FM broadcasting system is originally able to produce a very high quality audio performance; however, FM stereophonic broadcasting system incurs a 20dB Signal-Noise ratio decrease. When Dolby B Type Noise Reduction system is used for a FM stereo, Signal-Noise ratio (S/N) is conspicuously improved and this ratio is at about 10dB.



Whole range output Frequency Response characteristics against input level.



Low level Frequency Response characteristics of encode and decode processors.

4. ADJUSTMENTS

4-1. Dolby Circuit Adjustment

4-1-1. Input Level Adjustment of Dolby IC (NE545B) (See Fig. 4-2)

- Note: 1. Speaker Selector.....A
2. Master VolumeMinimam
3. Balance Volume.....Center
4. SelectorAUX
5. Accessory SwitchOFF
6. REC Level VolumeMAX
7. Dolby Selector SwitchREC 1

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR
		FROM	TO			
1.	L-CH	400Hz 80mV Audio OSC.	AUX Terminal	REC Terminal TAPE I VTVM	VR01 F-2655	Output 270mV
2.	R-CH	Same as above	AUX Terminal	REC Terminal TAPE I VTVM	VR02 F-2655	Same as above

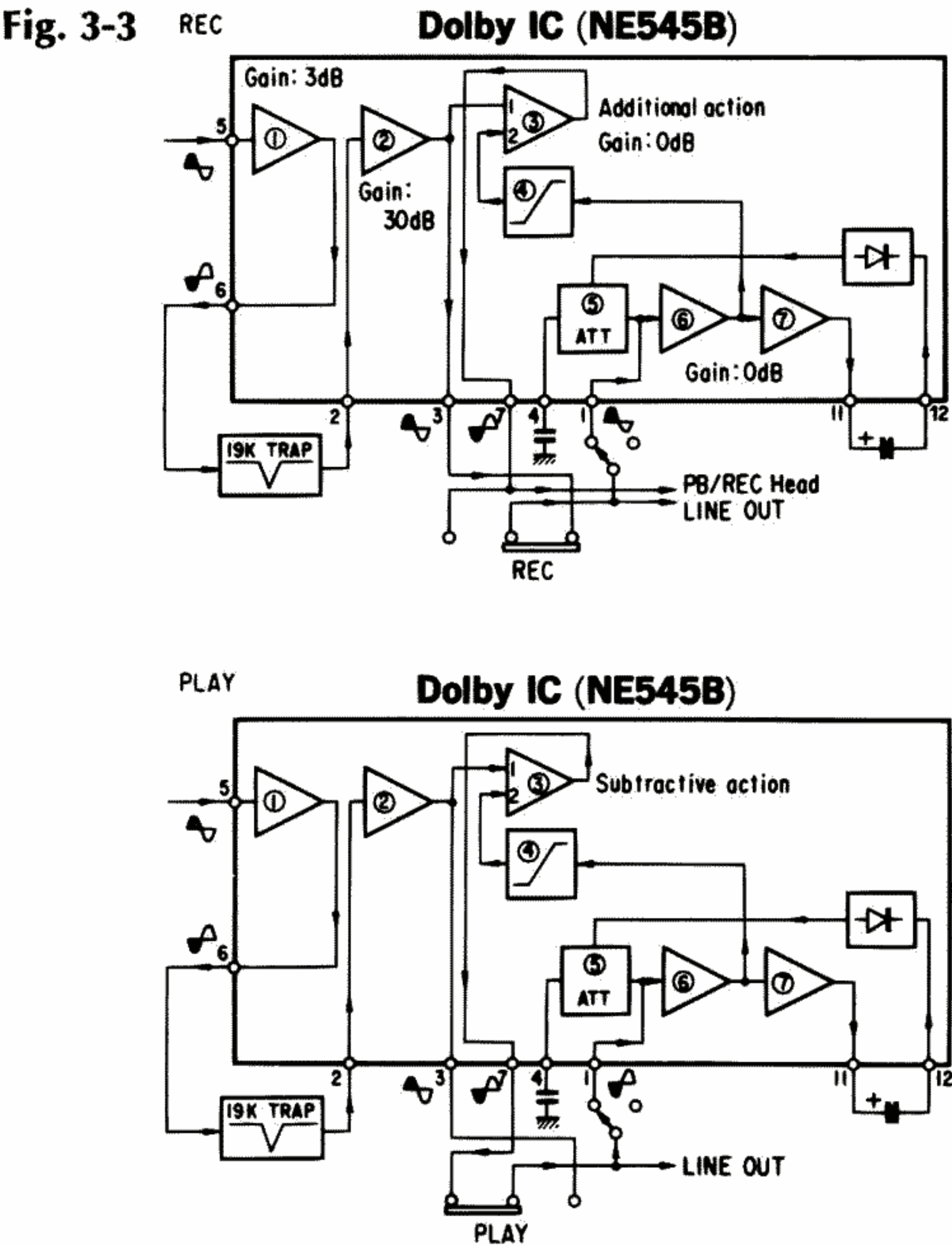
Principles

The S/N of the FM becomes worse when the frequency is high and the level is low. Because of this reason, the middle and high range of the low level signal is expanded by a FM station. Then the signal will be compressed proportionally along the expanded level by a receiving side. (See Fig. 1, 2)

This unit employs a IC NE545B for a main Dolby circuit. The Operating diagram is shown in the Fig. 3-3.

Complementary items

- When Dolby FM system is being used, the de-emphasis of FM-out is 25μs.
- The input level of Dolby FM is at 50% modulation and ±37.5kHz.
- This unit has an own 400Hz Oscillator for Dolby Tone in order to adjust itself to the Dolby level.



4-1-2. Calibration Tone Volume & Dolby Meter Volume Adjustment (See Fig. 4-1, 4-2)

- Note:**
1. Speaker SelectorA
 2. Master VolumeMinimum
 3. Balance VolumeCenter
 4. Accessory SwitchOFF
 5. Dolby Selector SwitchREC 1

Step

1. Turn on the Dolby REC CAL TONE Switch.
2. Connect VTVM to the front TAPE I REC terminal.
3. Adjust VR601 on the circuit board, F-2655 to obtain 270mV on indication of VTVM.
4. Adjust both VR03 (L-CH) and VR04 (R-CH) on the circuit board, F-2655 so that indicator of power meter will be center of Dolby mark.

Fig. 4-1

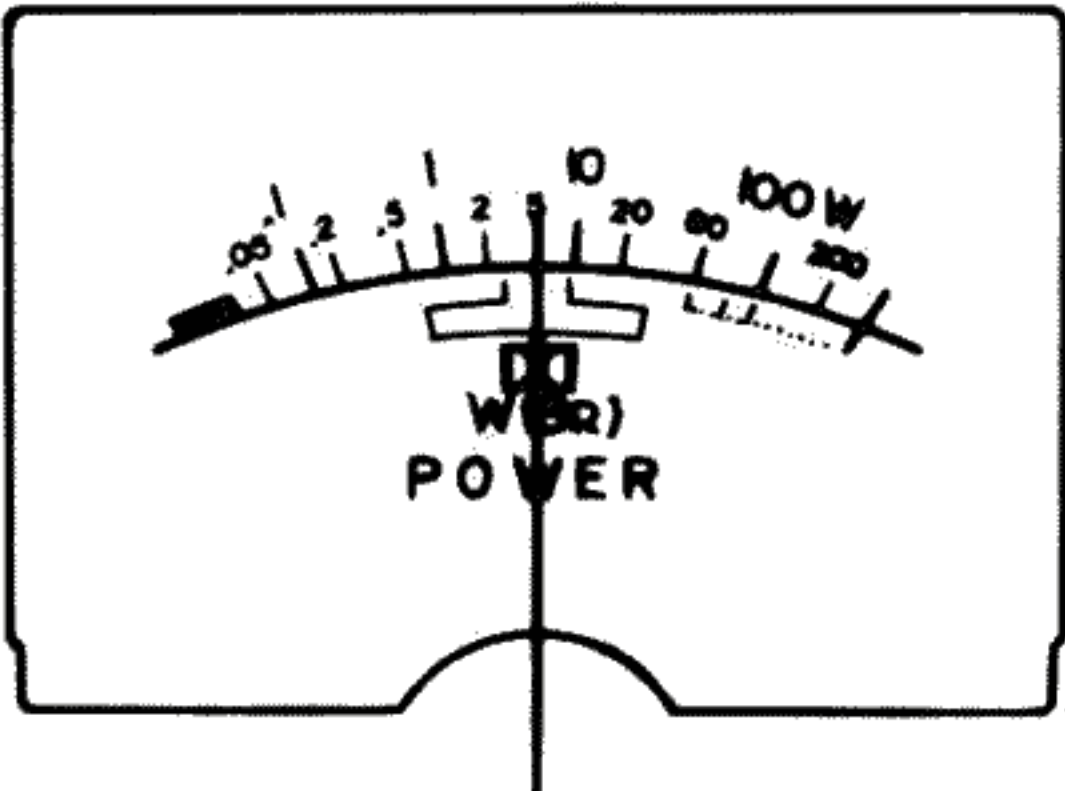


Fig. 4-2

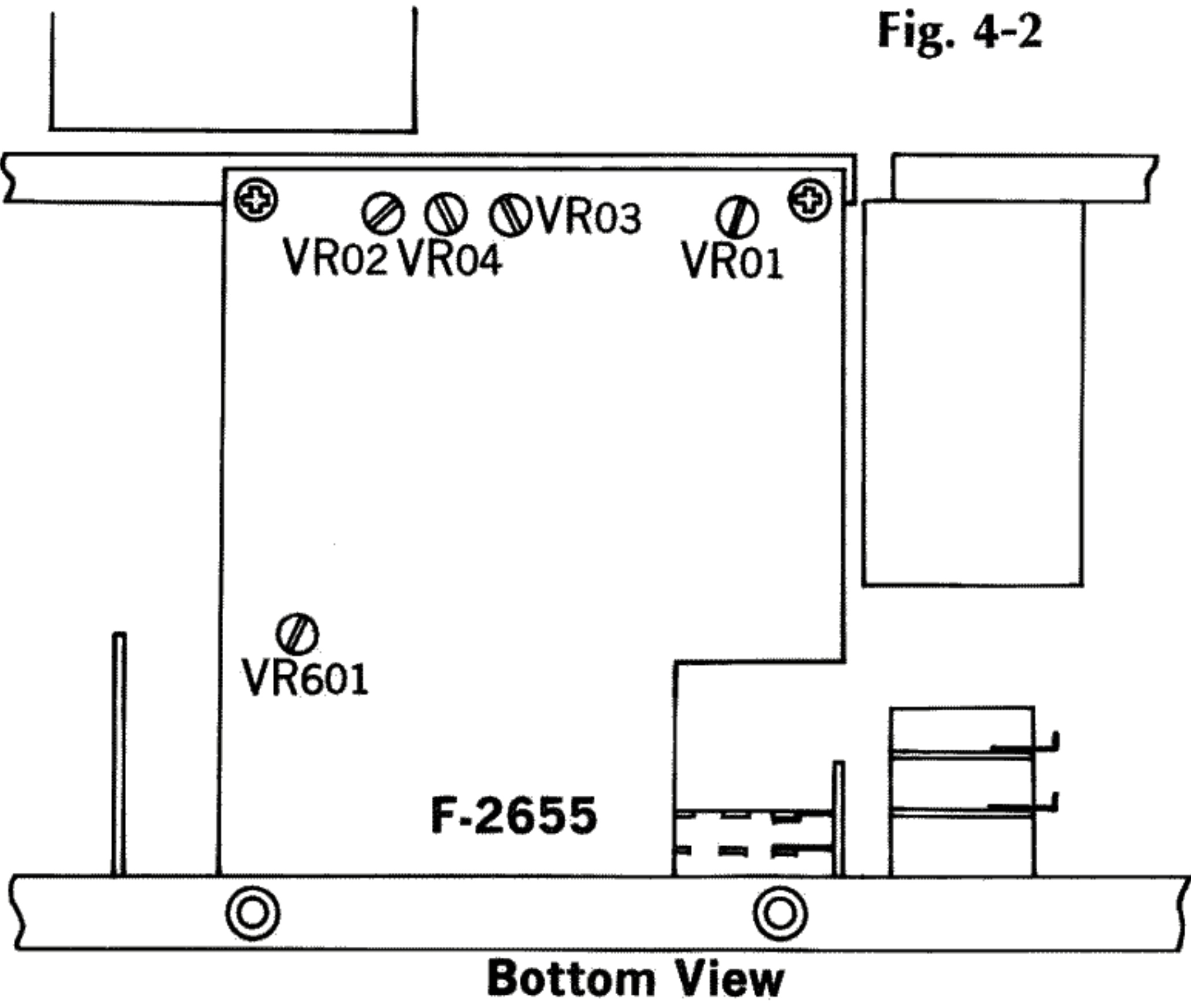
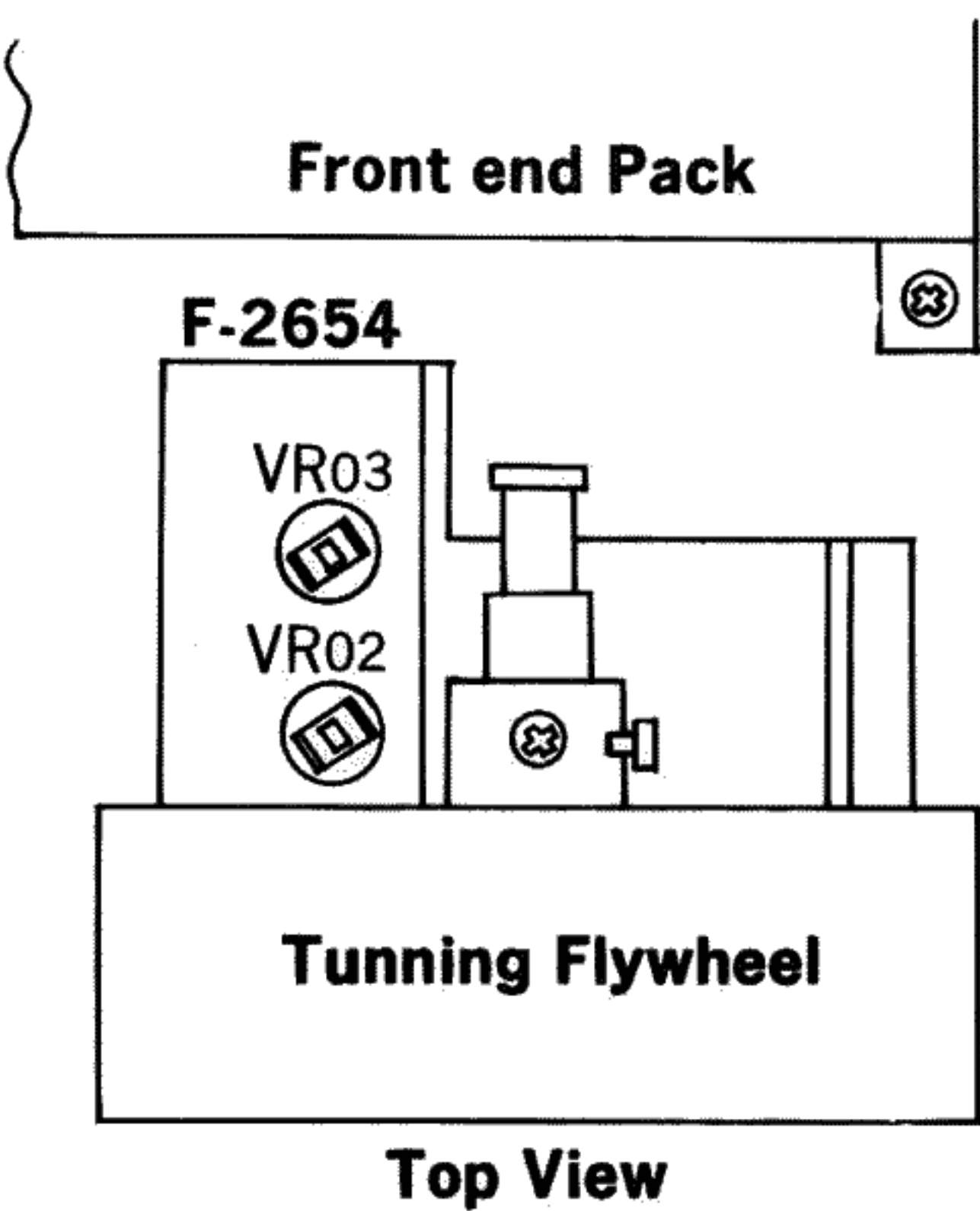


Fig. 4-3



4-1-3. Dolby FM Volume Adjustment (See Fig. 4-3)

- Note:**
1. Selector.....FM Auto
 2. Dolby SelectorDolby FM
 3. REC CAL. TONE Switch.....OFF
 4. Master VolumeMin.

SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR
	FROM	TO			
L-CH	98MHz ANT Input 60dB FM SSG Pilot 19kHz (10% MOD) L-CH 1kHz (25% MOD) R-CH (0% MOD)	FM ANT Terminal 300Ω	REC Terminal TAPE I L-CH VTVM	VR03 F-2654	Output Level 270mV
R-CH	98MHz ANT Input 60dB FM SSG Pilot 19kHz (10% MOD) R-CH 1kHz (25% MOD) L-CH (0% MOD)	Same as above	REC Terminal TAPE I R-CH VTVM	VR02 F-2654	Same as above

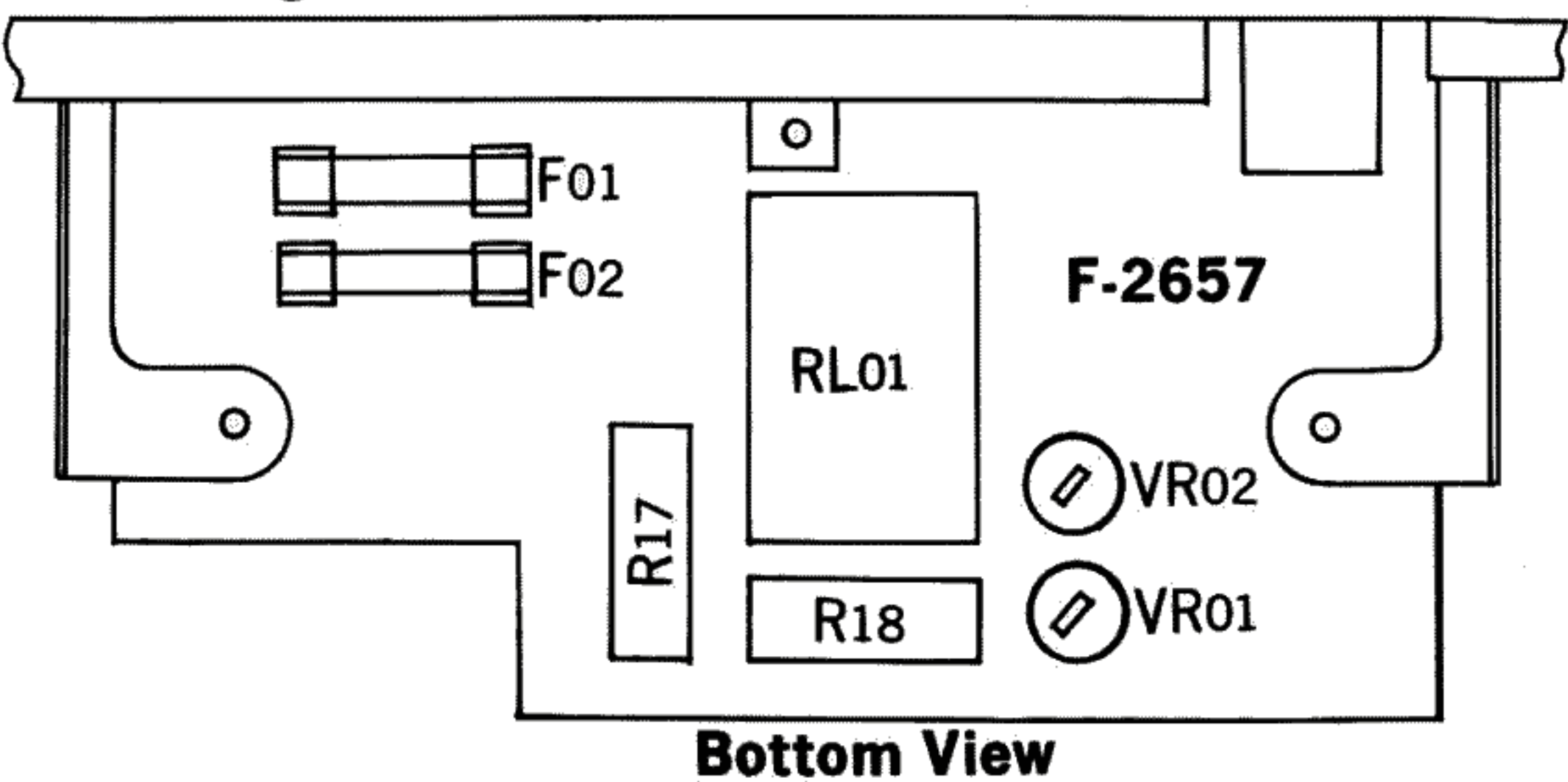
4-2. Adjustment of Audio Section

4-2-1. Power Meter Adjustment (See Fig. 4-4)

- Note:**
1. InputAUX
 2. Speaker load.....8Ω
 3. Input SignalSine Wave (1kHz)
 4. Master VolumeMaximum
 5. For adjustment, run the unit for more than 4 minutes after the power is switched ON.

STEP	MEASURE OUTPUT	LEVEL OUTPUT	ADJUST	ADJUST FOR
L-CH	Speaker Terminal L-CH AC Volt Meter	20V (50W)	VR01 F-2657	Meter Posi- tion 50W
R-CH	Speaker Terminal R-CH AC Volt Meter	Same as above	VR02 F-2657	

Fig. 4-4

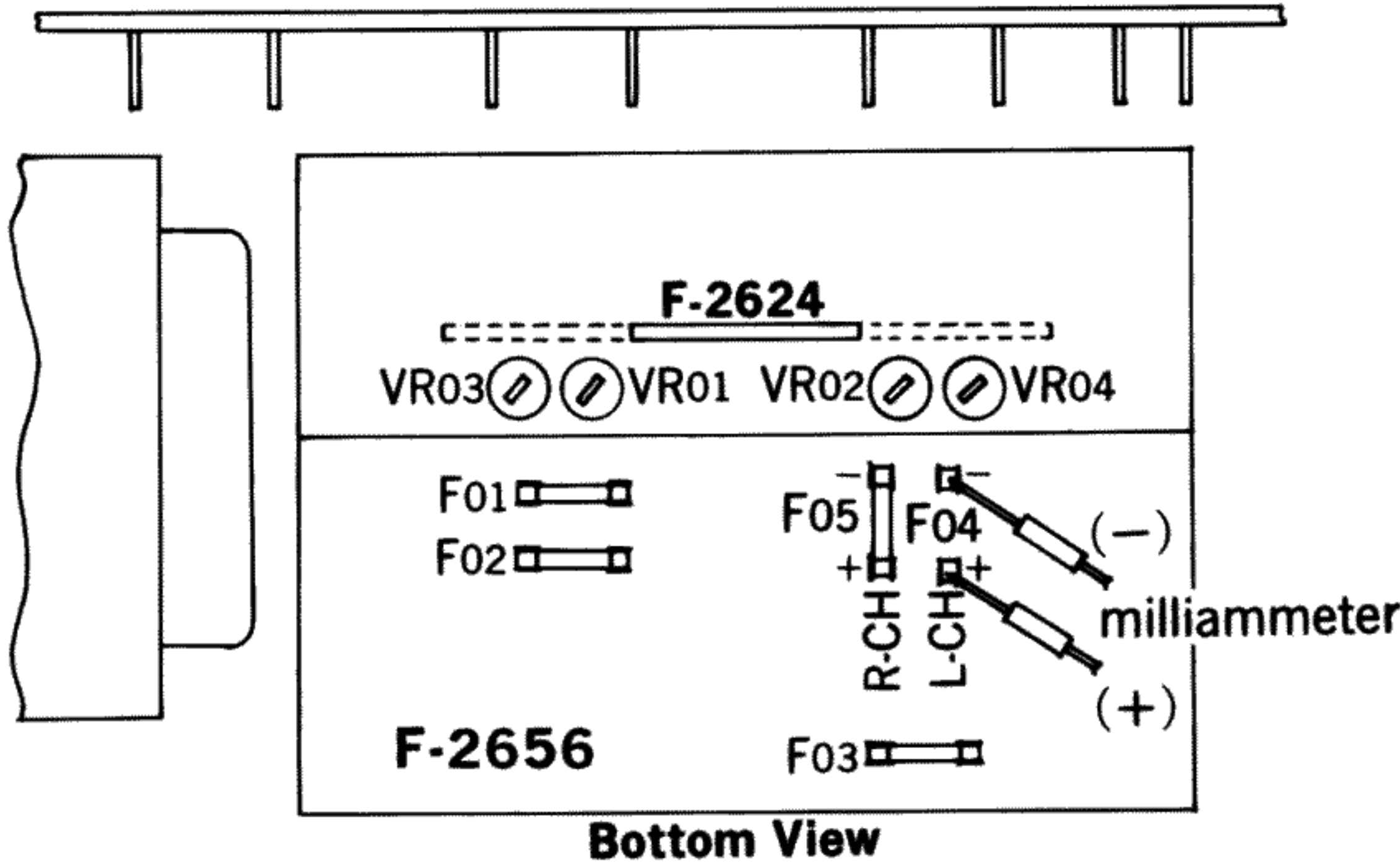


4-2-2. Driver Circuit Board Adjustment (See Fig 4-5, 4-6 page 8)

Note: 1. Master Volume.....Minimum
2. Before adjustment, run the unit for more than 4 minutes, then check and readjust necessary.

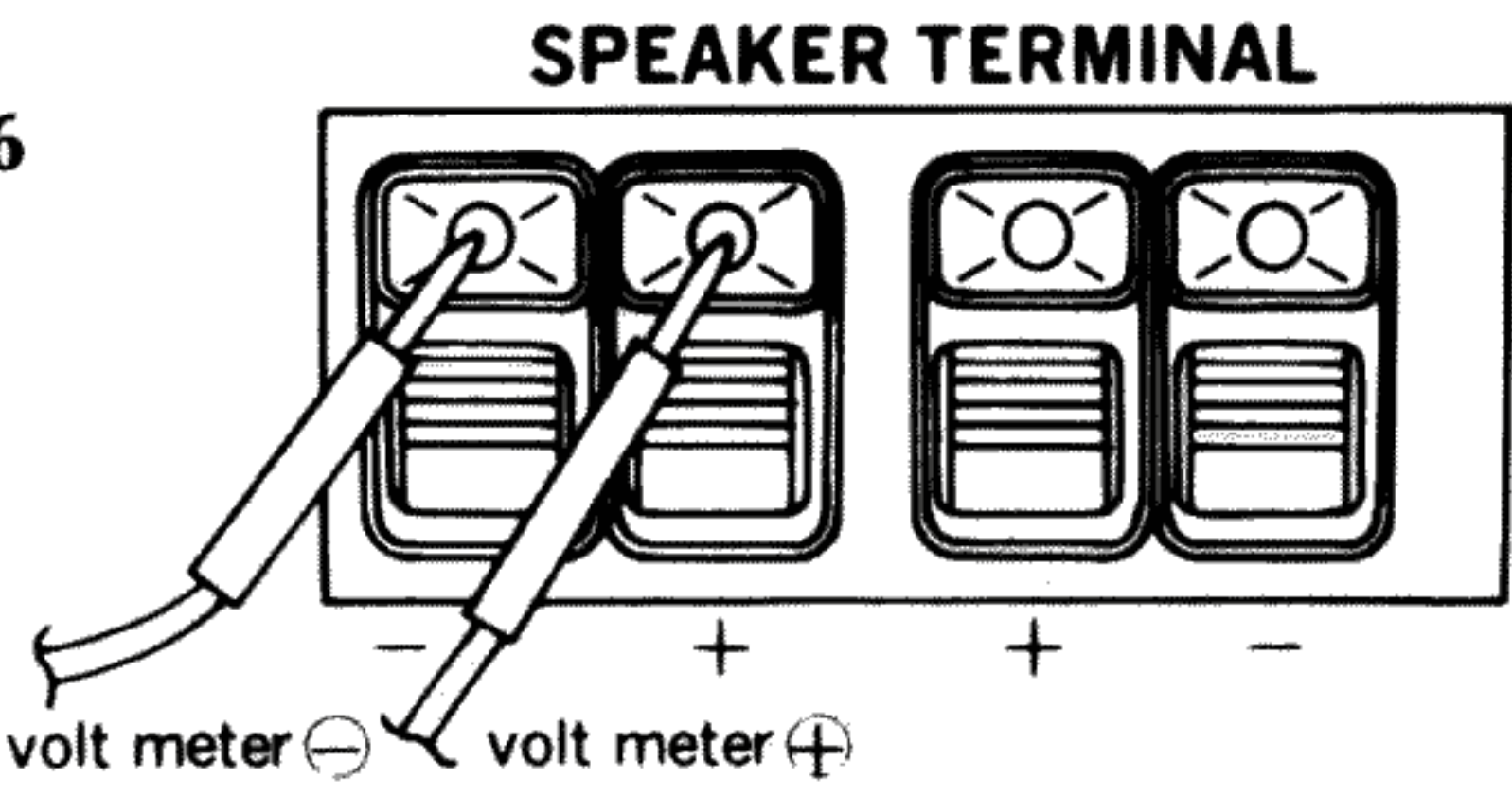
STEP	SUBJECT	EQUIPMENT	MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
1.	DC 0V L-CH	DC volt Meter	Speaker Terminal L-CH	VR01 F-2624	0V ±10mV	◦ Step down meter range accordingly. ◦ Change leads polarity if meter swings backward.
2.	DC 0V R-CH	Same as above	Speaker Terminal R-CH	VR02 F-2624	Same as above	Same as above
3.	Bias Current L-CH	DC Milliammeter	F04 F-2656	VR03 F-2624	30mA ±1mA	◦ Step down meter range accordingly
4.	Bias Current R-CH	Same as above	F05 F-2656	VR04 F-2624	Same as above	◦ Same as above

Fig. 4-5



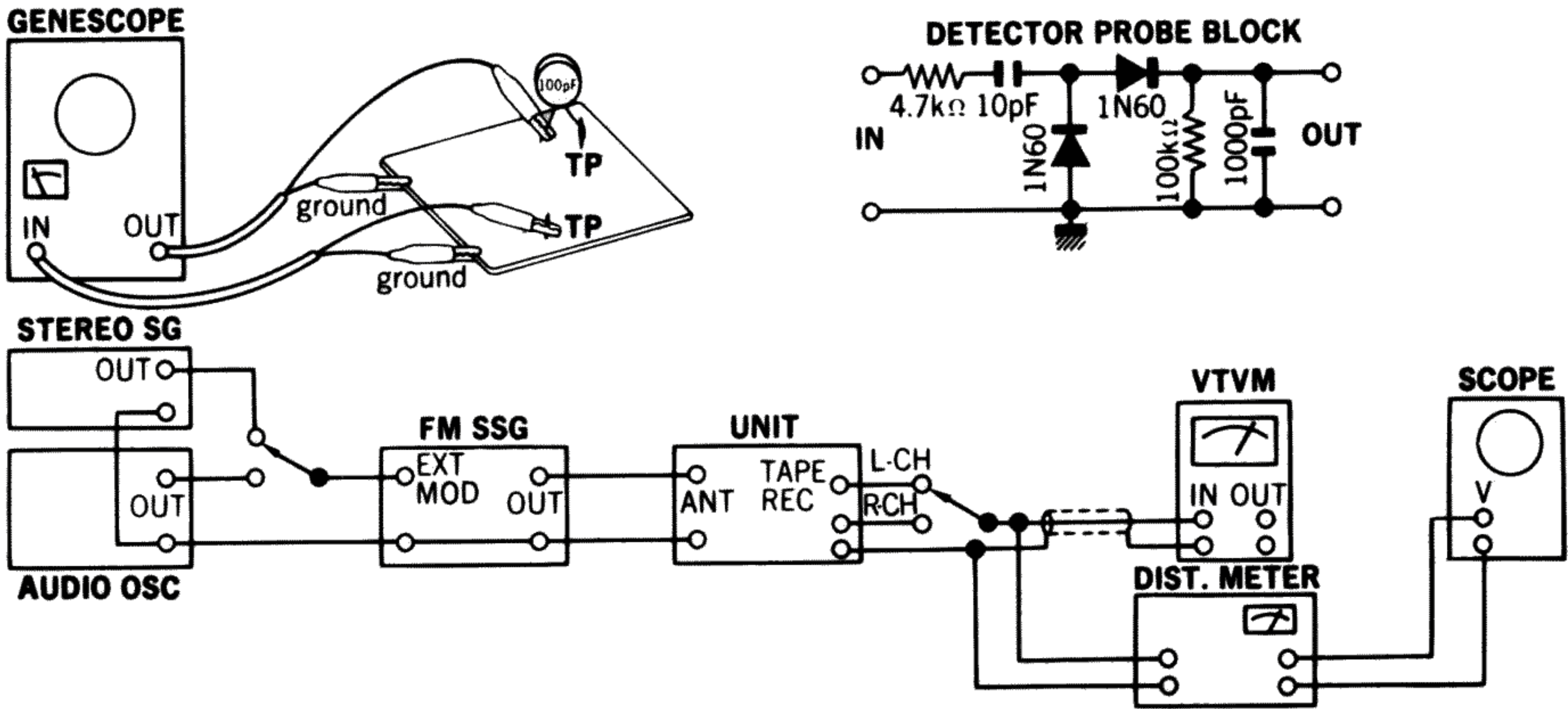
Note: In adjustment above, there are two model numbers as model ① and ②. Regarding name of model ① and ②, please refer to "Note" indicated on page 1.

Fig. 4-6

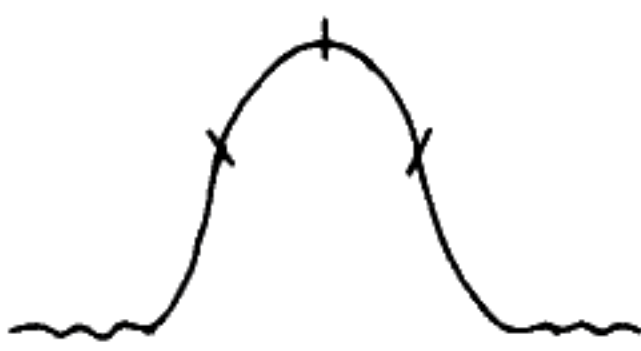
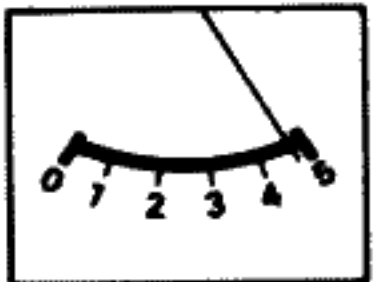
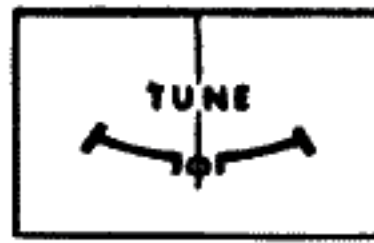


4-3. Adjustment of Tuner Section
4-3-1. FM Adjustment & Alignment

Note: 1. Selector.....FM AUTO 2. FM MUTING SwitchOFF
Connection.....Connect the output of genescope to TP through 100pF ceramic capacitor
3. { Output level of genescope.....After attenuator
Sweep width1.5~2cm/150kHz
Frequency band9.5~11.5MHz



1) FM IF Adjustment & Tracking (See Fig. 4-7, 4-8, 4-9 on Page 9)

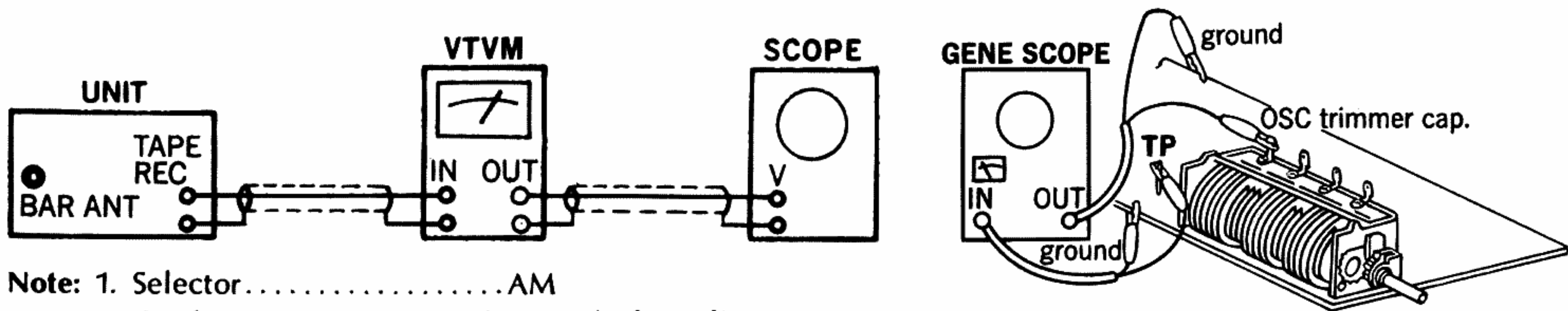
STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
		FROM	TO				
1.	IF coil	Output 90dB Genescope	TP01 FM, AM Pack F-1519	Terminal 01 of F-2549. Use Detector Probe	L05 F-1519	Max. IF waveform	
		Output 50dB Genescope	Same as above	TP01 F-2549	T01 F-2549	Same as above	
2.	Muting Coil	Output 50dB Genescope	Same as above	TP04 F-2549	T04 F-2549	Same as above	
3.	Discriminator Coil	Output 50dB Genescope	Same as above	TP03 F-2549	T02 T03 F-2549	Max. linearity of S Curve	
4.	90MHz Dial Calibration	90MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	ANT Terminal 300Ω	REC OUT L or R-CH VTVM & Scope	L06 F-1519	Max. Output	
	106MHz Dial Calibration	106MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Same as above	TC04 F-1519	Same as above	
5.	90MHz RF Adj.	90MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Same as above	L01, L02, L03 F-1519	Same as above	
	106MHz RF Adj.	106MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Same as above	TC01 TC02 TC03 F-1519	Same as above	
6.	Signal Meter Volume	98MHz ANT Input 100dB 400Hz (100% MOD) FM SSG	Same as above	Signal Meter	VR02 F-2549	4.7 on meter	
7.	Distortion	98MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	REC OUT L or R-CH Dist meter & Scope	T02 T03 T01 F-2549	Max. Output Min. Distortion	T01..Slightly adjust
8.	Tune Meter Volume	98MHz ANT Input 60dB 400Hz (100% MOD) FM SSG	Same as above	Tune meter	VR01 F-2549	Center on meter	

Abbreviations	Equipment	Distortion Meter	Dist. Meter
	AM FM Generator Oscilloscope Genescope AM Standard Signal Generator..... AM SSG FM Standard Signal Generator..... FM SSG FM Stereo Generator Stereo SG Oscilloscope Scope Audio Oscillator..... Audio Osc.	Others ClockwiseCW. CounterclockwiseCCW. AntennaANT. ModulationMOD.	

2) MPX Adjustment (See Fig. 4-8, 4-9 on page 9)

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
		FROM	TO				
1.	PLL VCO Adj.	98MHz ANT Input 60dB FM SSG Pilot 19kHz (10% MOD) L-CH 1kHz (45% MOD) R-CH (0% MOD) STEREO SG	ANT Terminal 300Ω	Stereo Indicator	VR04 F-2549	Light Indicator	Adjust the VR within center of lighting level.
	PLL VCO Adj. In case of using Freq Counter		Make short between TP03 of F-2549 and chassis	TP02 F-2549 Use Freq. Counter	VR04 F-2549	76kHz (±200Hz)	
2.	Separation	98MHz ANT Input 60dB FM SSG Pilot 19kHz (10% MOD) L-CH (0% MOD) R-CH 1kHz (45% MOD) STEREO SG	ANT Terminal 300Ω	REC OUT L-CH VTVM & Scope	VR05 F-2549	Min. Output — 35dB	
3.	Distortion	Same as above	Same as above	REC OUT L-CH Dist. meter & Scope	L05 1 Side 2 Side AM, FM Pack F-1519	Min. Distortion	If less than 0.3%, adjust L05 slightly.
4.	Separation	98MHz ANT Input 60dB FM SSG Pilot 19kHz (10% MOD) L-CH 1kHz (45% MOD) R-CH (0% MOD) STEREO SG	Same as above	REC OUT R-CH VTVM & Scope	VR05 F-2549	Min. Output — 30dB	
5.	Muting level & Indicator level	98MHz ANT Input 23dB FM SSG Pilot 19kHz(10%MOD) L-CH 1kHz (45% MOD) R-CH (0% MOD) STEREO SG	Same as above	Stereo Indicator	VR03 F-2549	Muting level 23dB Indicator lighting level 23dB	

4-3-2. AM IF Adjustment & Tracking (See Fig. 4-8, 4-9 on page 9)



- Note: 1. Selector.....AM
2. Confirm start point of dial pinter before alignment.

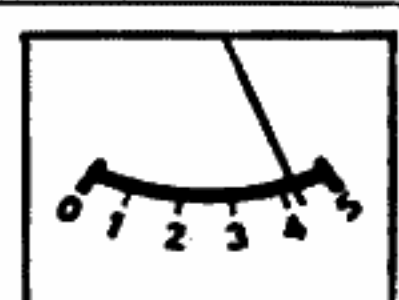
STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	CONDITION
		FROM	TO				
1.	IF Coil	Genescope Output 70dB	TC05 FM, AM Pack F-1519	TP06 F-2549	CF04 F-2549	Max. Output	
2.	600kHz Dial Calibration	600kHz ANT Input 60dB 400Hz (MOD 30%) AM SSG	AM ANT Terminal	REC OCT L or R-CH VTVM & Scope	T05 F-2549	Same as above	
	1400kHz Dial Calibration	1400kHz ANT Input 60dB 400Hz (MOD 30%) AM SSG	Same as above	Same as above	TC05 FM, AM Pack F-1519	Same as above	
3.	600kHz RF Adj.	600kHz ANT Input 50dB 400Hz (MOD 30%) AM SSG	Same as above	Same as above	Bar Antenna T702	Same as above	
	1400kHz RF Adj.	1400kHz ANT Input 50dB 400Hz (MOD 30%) AM SSG	Same as above	Same as above	TC06 FM, AM Pack F-1519	Same as above	
4.	Signal Meter	1000kHz ANT Input 80dB	Same as above	Signal Meter	VR06 F-2549	4.3 on meter	

Fig. 4-7

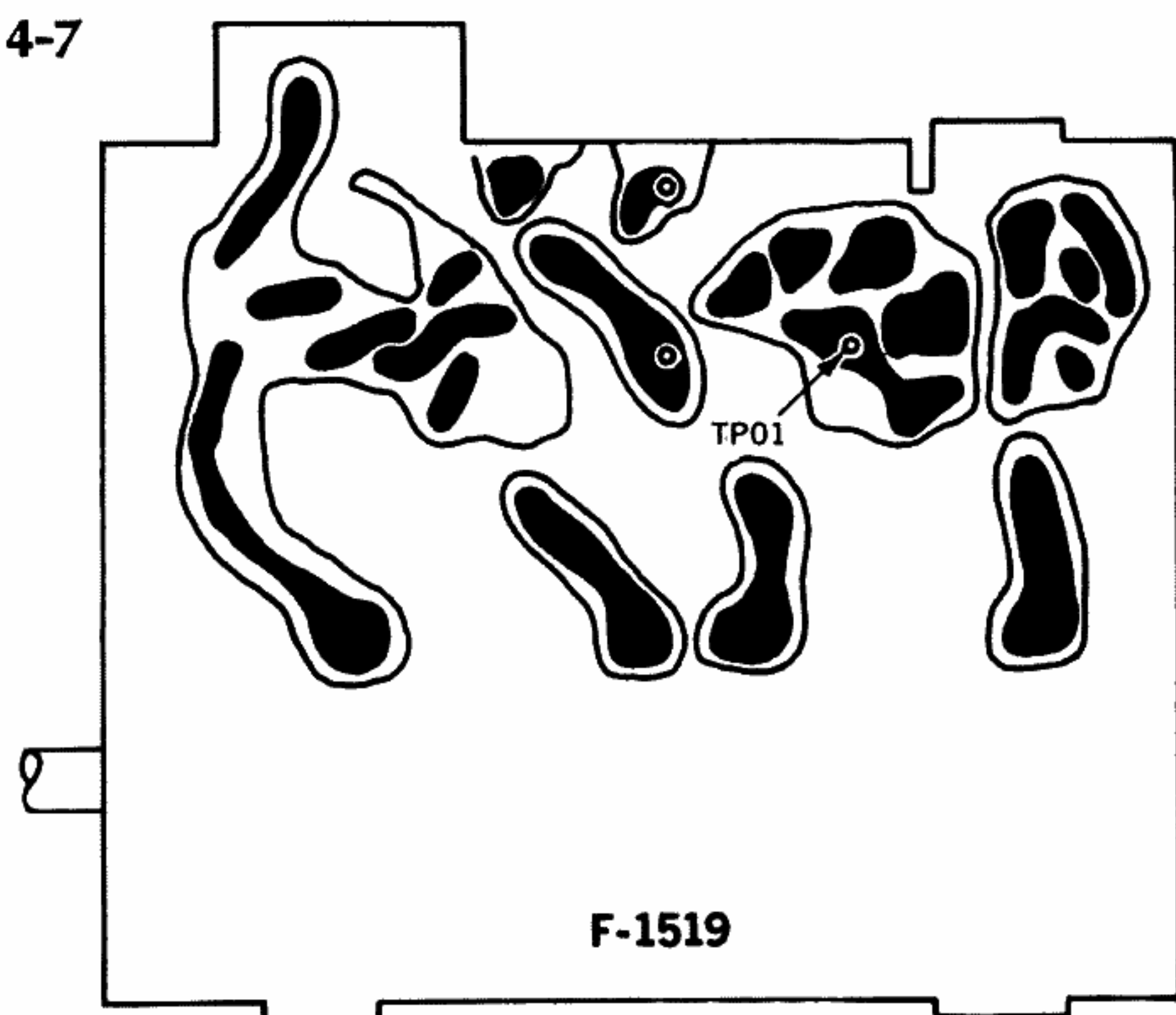


Fig. 4-8

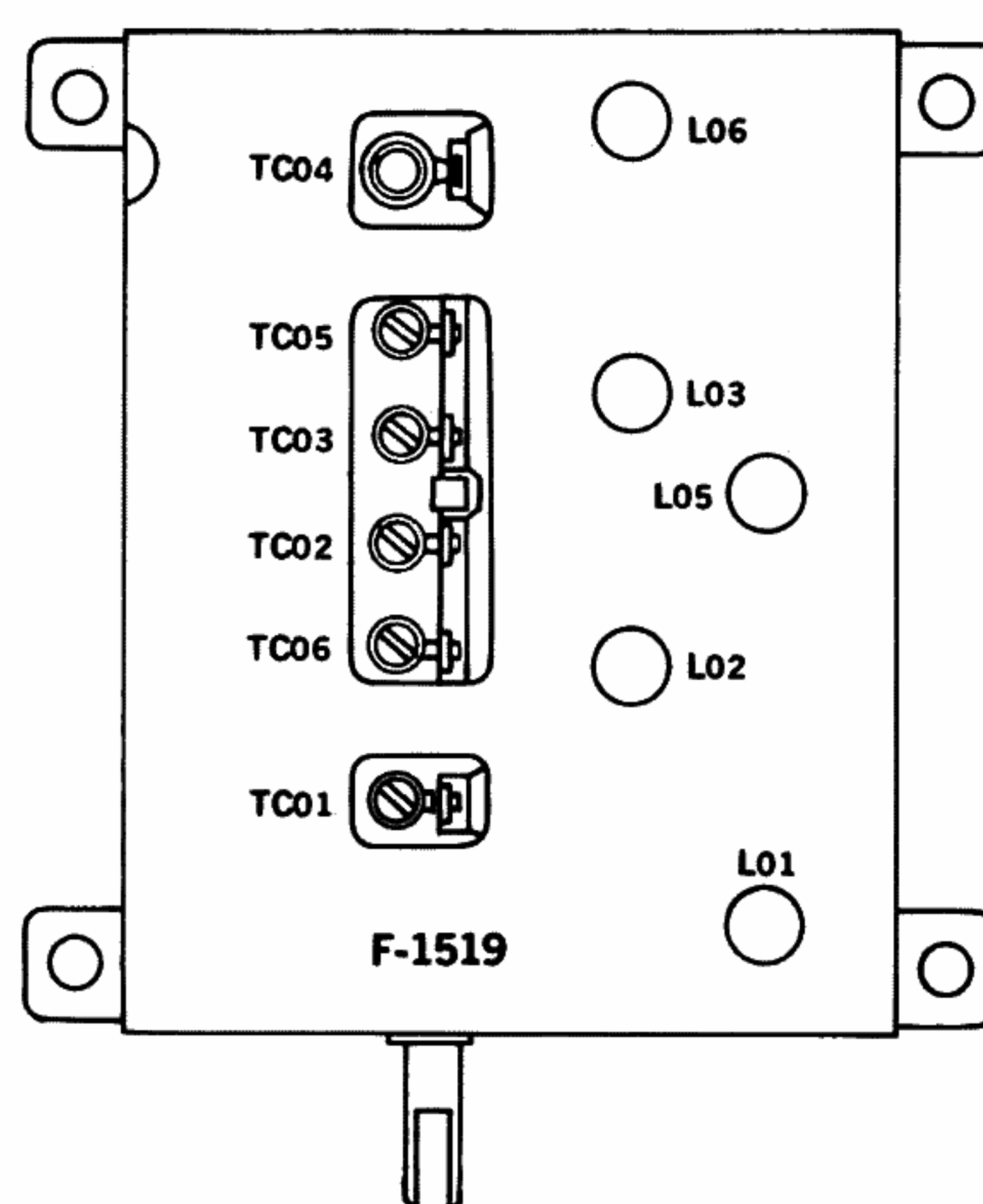
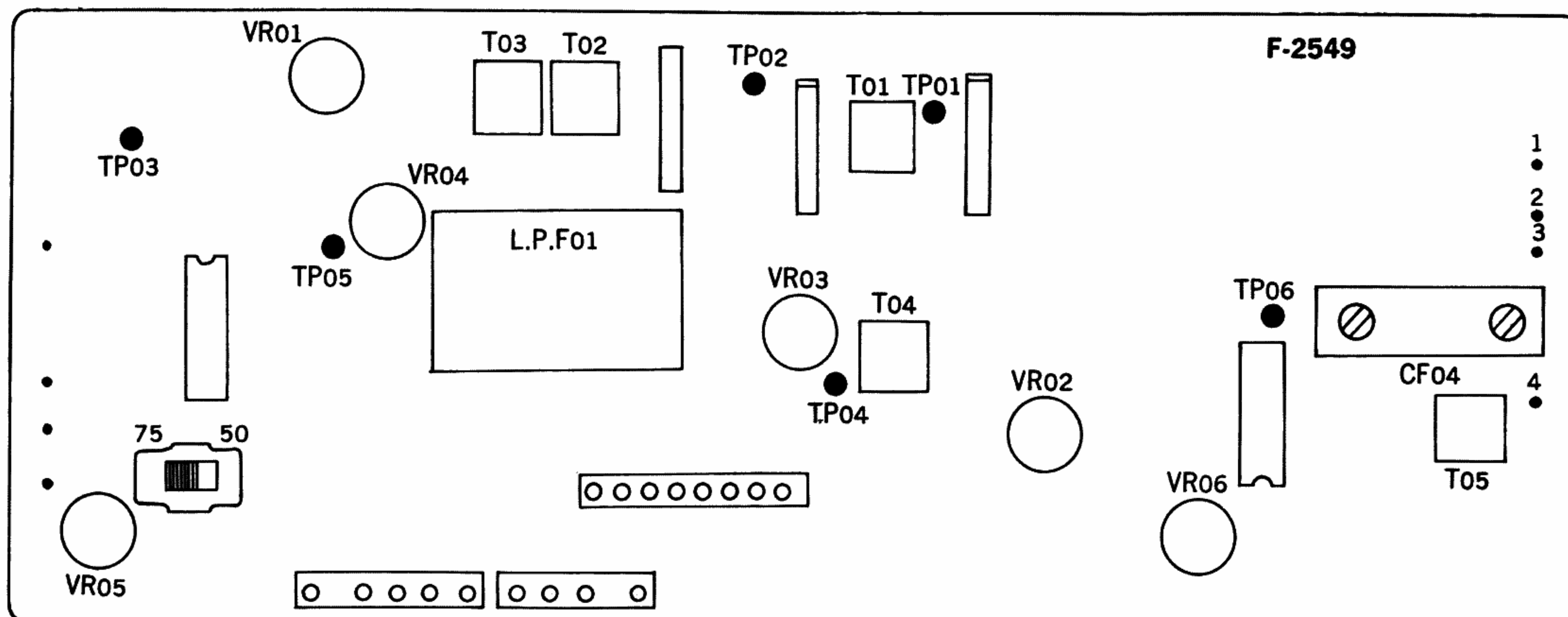


Fig. 4-9



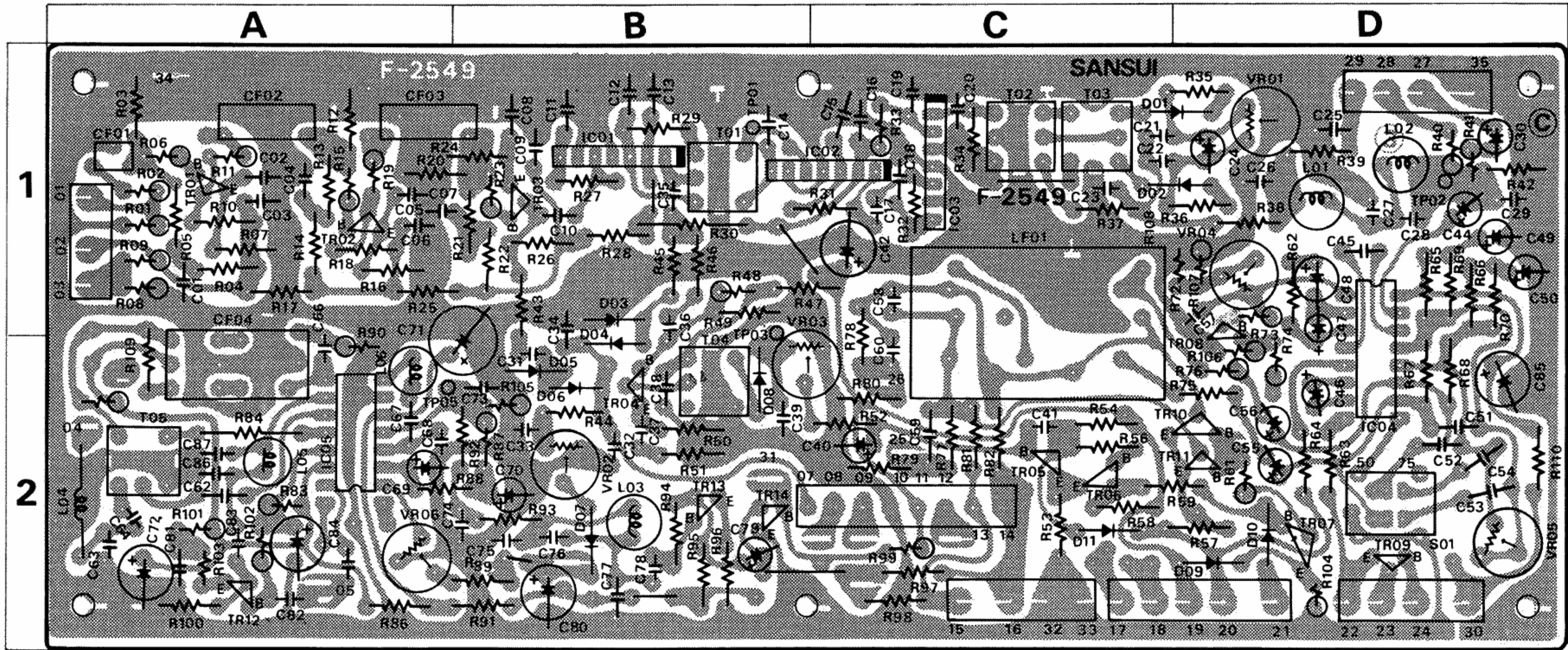
5. PARTS LOCATION AND PARTS LIST

5-1. F-2549 AM, FM Tuner Circuit Board

(Stock No. 7521401 MODEL 8080DB/8090DB) (Stock No. 7521391 MODEL 9090DB/990DB)

Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the common parts list for capacitors & resistors which was appended previously to each Service Manual.

Conductor Side



Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
TR01	0306113	3SC738 (D)	1 A	D08	0310330, 1	1N60	2 B	T01	4235860		1 B
TR02	0306113	2SC738 (D)	1 A	D09	{0311160 0311180	1S2473D 1S1588	2 D	T02	4235750		1 C
TR03	0306112, 3	2SC738 (C, D)	1 B	D10	{0311160 0311180	1S2473D 1S1588	2 D	T03	4235760	FM IF Coil	1 C
TR04	0306112, 3	2SC738 (C, D)	2 B	D11	{0311160 0311180	1S2473D 1S1588	2 C	T04	4235940		2 B
TR05	0305731, 2	2SC711 (E, F)	2 C					T05	4220550		2 A
TR06	0305731, 2	2SC711 (E, F)	2 C					CF01	0910150		1 A
TR07	0300281, 2	2SA628 (D, E)	2 D					CF02	0910330	Ceramic Filter	1 A
TR08	0305731, 2	2SC711 (E, F)	1 D					CF03	0910330		1 A
TR09	0300220, 1	2SA562 (O, Y)	2 D					CF04	0910310		2 A
TR10, 11	0306390, 1	2SC1636-1, 2	2 D	C26	0620181	180pF	1 D	LF01	0910360	Low Pass Filter	1, 2 C
TR12	0300281	2SA628 (D)	2 A	C27	0620331	330pF	1 D	VR01	1035150	22kΩ (B)	1 D
TR13	0306091	2SC1312R (G)	2 B	C28	0620101	100pF	1 D	VR02	1035170	47kΩ (B)	2 B
TR14	0306390, 1	2SC1636-1, 2	2 B	C29	0620151	150pF	1 D	VR03	1035170	47kΩ (B)	2 B, C
IC01	0360120	μPC555H	2 B	C44	0573688	0.68μF	35V T.C.	VR04	1034250	4.7kΩ (B)	1 D
IC02	0360120	μPC555H	1 B, C	C53, 54	0620511	510pF	50V P.C.	VR05	1035210	220kΩ (B)	2 D
IC03	0360120	μPC555H	1 C	C57	0629005	360pF	1 D	VR06	1035110	4.7kΩ (B)	1 A
IC04	0360320	HA1196	1, 2 D	C63	0669400	15pF	2 A	S01	1110270	Slide Switch	
IC05	0360150	HA1151	2 A	C64	0620361	360pF	50V C.C.		0990010	Ceramic Filter	
D01	0311060	1N60-P	1 C, D	C86	0661150	15pF	2 A		2410570	5P Pin Ass'y Type D	
D02	0311060	1N60-P	1 C, D	C87	0661150	15pF	2 A		2410580	3P Pin Ass'y Type D	
D03	0310330, 1	1N60	1 B	L01	4900250		1 D		2410590	4P Pin Ass'y Type D	
D04	0310330, 1	1N60	2 B	L02	4900240	Inductor	1 D				
D05	0310330, 1	1N60	2 B	L03	4900220		2 B				
D06	0310330, 1	1N60	2 B	L04	4290011		2 A				
D07	0310330, 1	1N60	2 B	L05	4900110	Inductor	2 A				
				L06	4900110		2 A				

5-2. F-2627 Illumination Circuit Board (Stock No. 7594211 MODEL 8080DB/890DB) (Stock No. 7594301 MODEL 9090DB/990DB)

Conductor Side

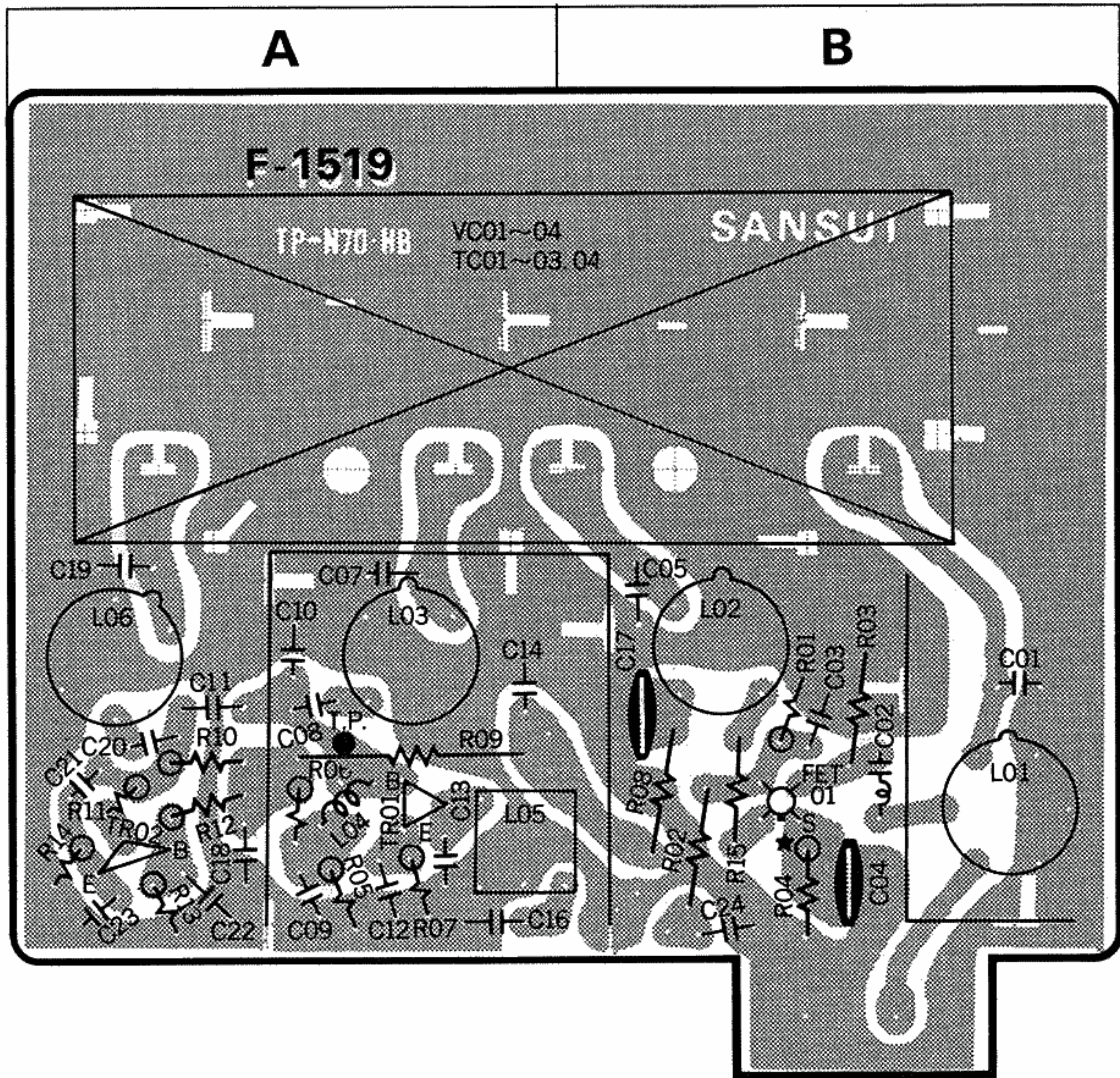


Parts List

Parts No.	Stock No.	Description
R01	0191180	18Ω ¼W Fuse R
PL01-04	0420040	7V 320MA Pilot Lamp

5-3. F-1519 Front-end Pack (Stock No. 7510631)

Conductor Side



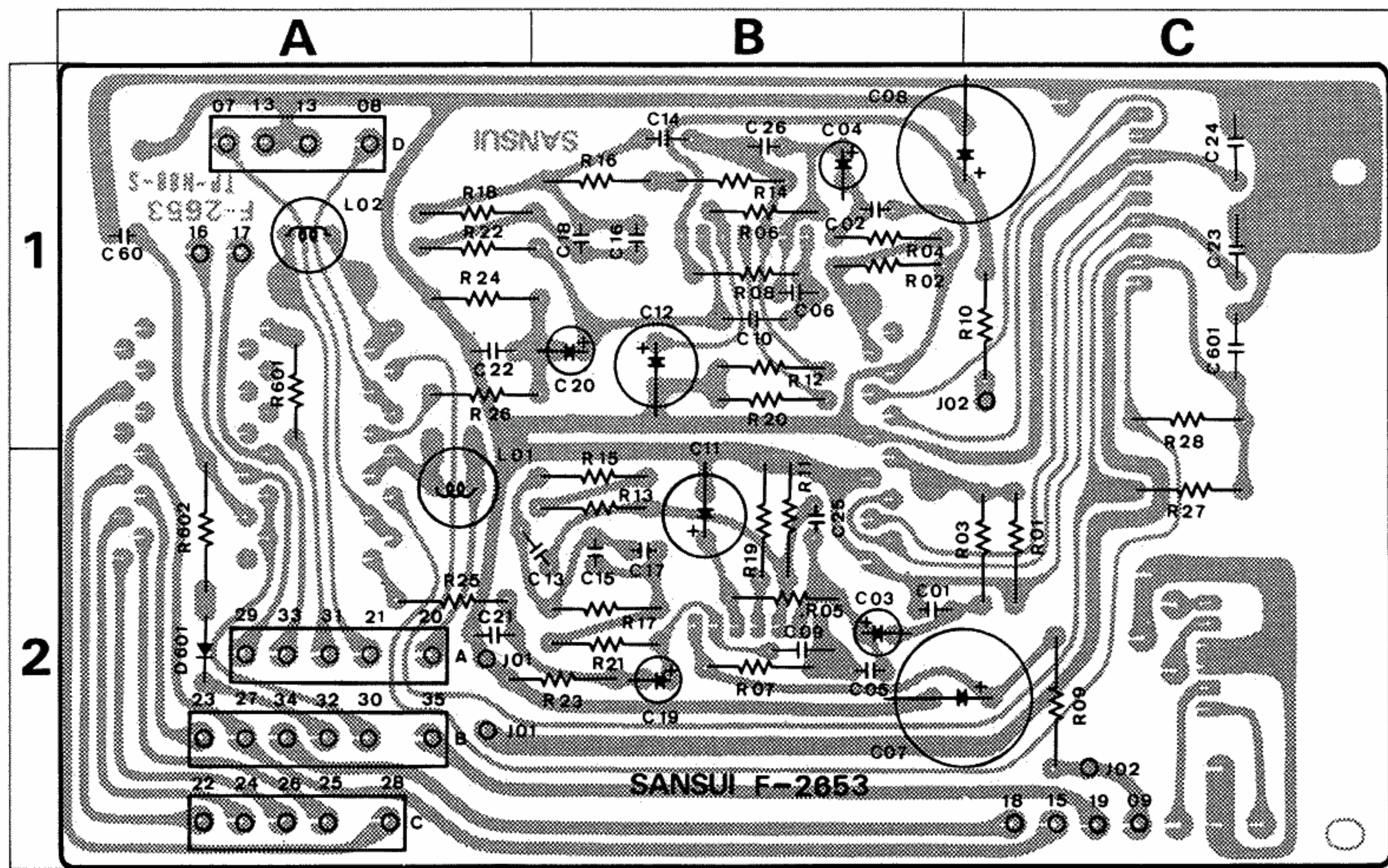
Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
TR01	0305800, 1	2SC1047 (A, B)	A	L04	4290110	Choke Coil	A
TR02	0305790, 1	2SC930 (C, D)		L05	4235910	IF Coil	A, B
FET01	0370131, 2	3SK41 (K, L) FET	B	L06	4220430	OSC Coil	A
L01	4200640	Antenna Coil	B	VC01~04	1220130	FM, AM Variable Capacitor	A, B
L02	4210330	RF Coil (1)	B	TC01~03			A, B
L03	4210220	RF Coil (2)	A	TC04	1230090	FM OSC Trimmer	A, B

Parts No.	Stock No.	Description	Position
C01	0669342	5.6pF	50V C.C. B
C02	0657102	1000pF	
C03	0657223	0.022μF	
C04	0659015	2200pF	
C05	0669345	10pF	
C06	0679023	0.39pF 500V Gimmick Capacitor	
C07	0669345	10pF	A
C08	0669210	10pF	A
C09	0657102	1000pF	A
C10	0661220	22pF	A
C11	0669202	2.2pF	A
C12	0657223	0.022μF	50V C.C. A
C13	0660121	120pF	
C14	0657223	0.022μF	
C16	0660331	330pF	
C17	0659015	2200pF	
C18	0657223	0.022μF	
C19	0669375	15pF	A
C20	0657102	1000pF	A
C21	0669209	8.2pF	A
C22	0657223	0.022μF	50V C.C. A
C23	{0661220 0669221}	22pF	
C24	0657223	0.022μF	B
R01	0106105	1MΩ ¼W C.R.(E.L.R.)	B
R02	0113104	100kΩ ¼W S.R.	B
R03	0113104	100kΩ ¼W S.R.	B
R04	{0106101 0106680}	100Ω (3SK41(1)K) 68Ω (3SK41(1)L)	B
R05	0106682	6.8kΩ ¼W C.R.(E.L.R.)	A
R06	0106123	12kΩ ¼W C.R.(E.L.R.)	A
R07	0106392	3.9kΩ ¼W C.R.(E.L.R.)	A
R08	0113121	120Ω ¼W S.R.	B
R09	0113271	270Ω ¼W S.R.	A
R10	0106392	3.9kΩ ¼W C.R.(E.L.R.)	A
R11	0106121	120Ω ¼W C.R.(E.L.R.)	A
R12	0106682	6.8kΩ ¼W C.R.(E.L.R.)	A
R13	0106222	2.2kΩ ¼W C.R.(E.L.R.)	A
R14	0106182	1.8kΩ ¼W C.R.(E.L.R.)	A
R15	0113680	68Ω ¼W S.R.	B
	2260010	Test Pin	

5-4. F-2653 Equalizer Circuit Board (Stock No. 7550971 MODEL 8080DB/890DB)
(Stock No. 7551001 MODEL 9090DB/990DB)

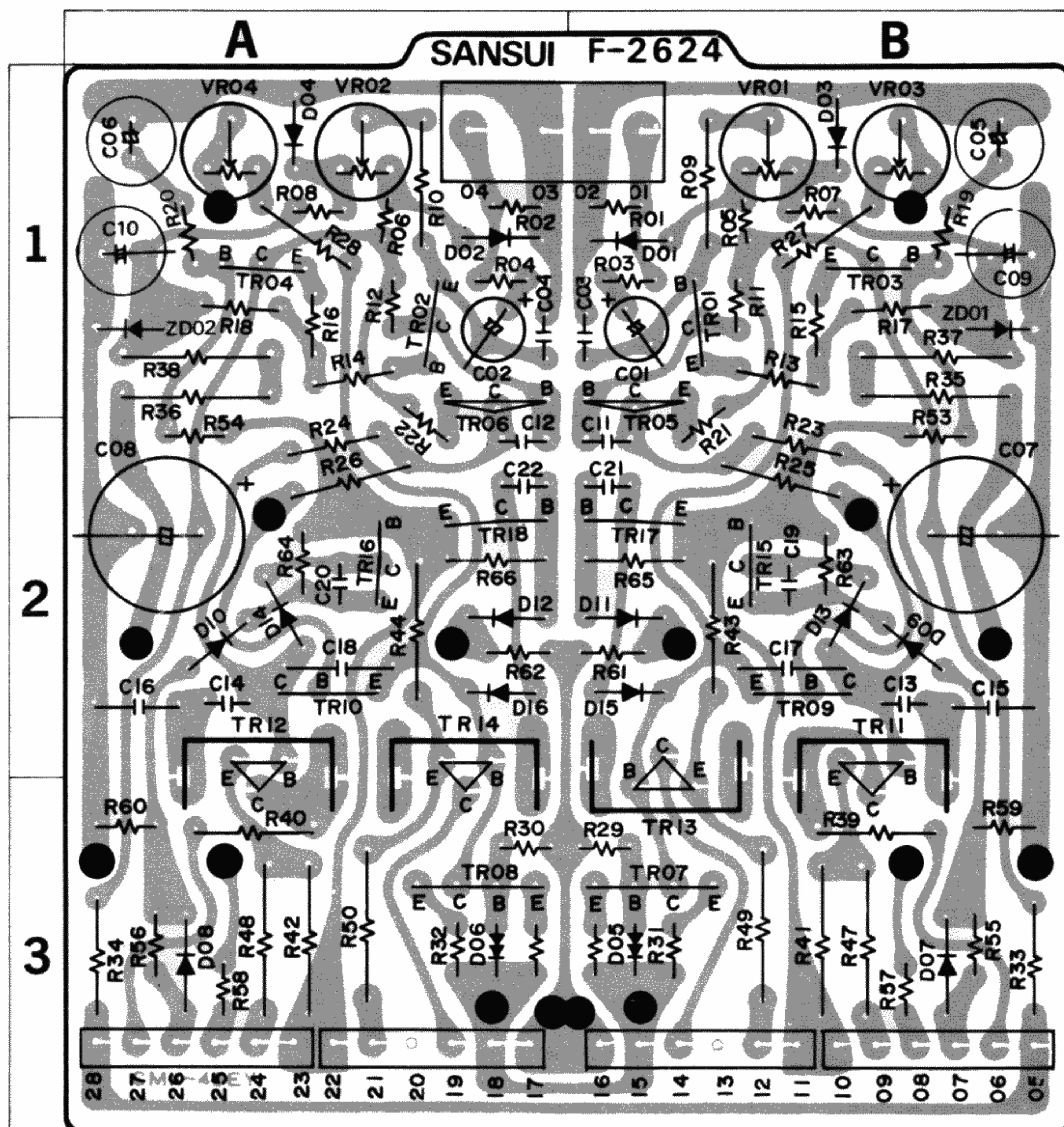
Conductor Side



Parts List

Parts No.	Stock No.	Description	Position
IC01, 02	0360190	BA312 IC	
D601	{0311160 0311180}	1S2473D 1S1588 Diode	2A
C03, 04	0573339	3.3μF 35V T.C.	2B, 1B
C13, 14	0625472	4700pF	2B, 1B
C15, 16	0625102	1000pF 50V P.C.	2B, 1B
C17, 18	0620361	360pF	2B, 1B
R13, 14	0231564	560kΩ ½W M.R.	2B, 1B
R17, 18	0231563	56kΩ ½W M.R.	2B, 1B
L01, 02	4900090	Inductor	2A, 1A
S01	1104350	Rotary Switch	
	2410570	5P Pin Ass'y Type D	
	2410590	4P Pin Ass'y Type D	
	2410600	6P Pin Ass'y Type D	

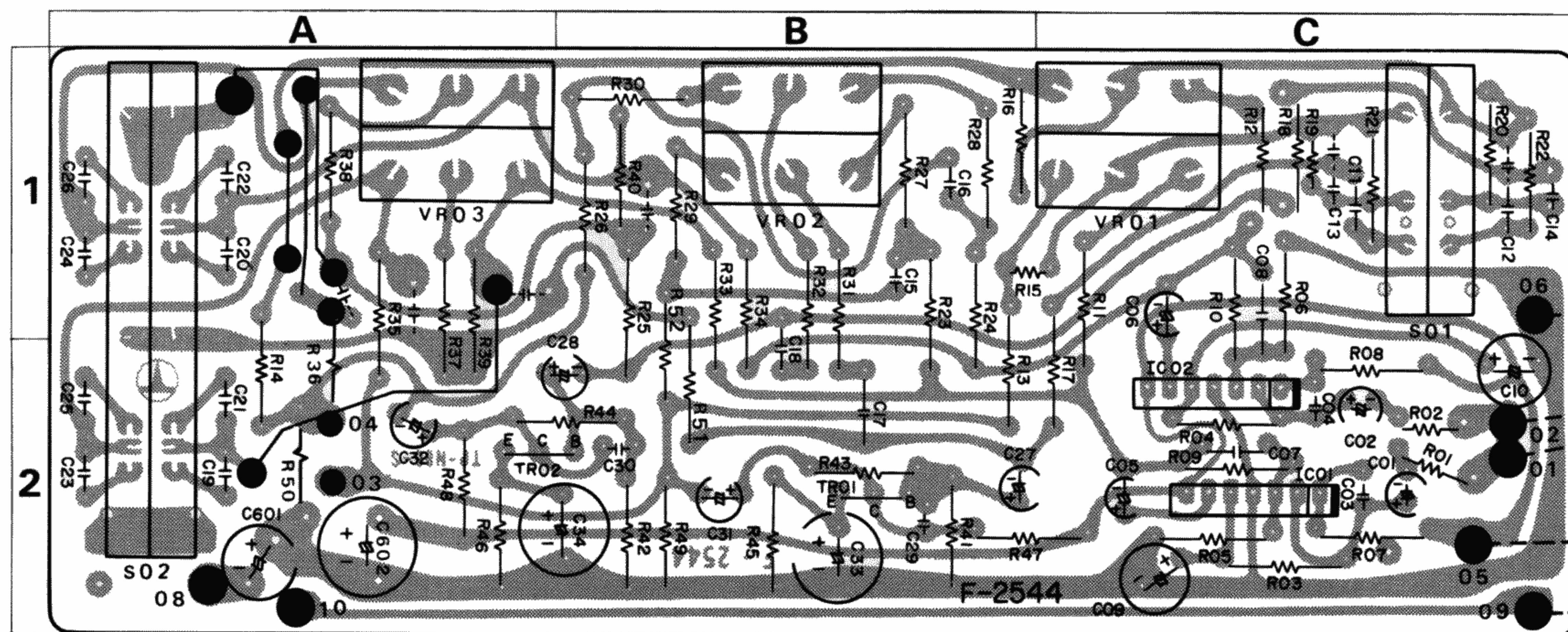
Conductor Side



Parts List

Parts No.	Stock No.	Description	Position
TR01	0306290, 1	2SC1400 (E, U)	1 B
TR03	0306290, 1	2SC1400 (E, U)	1 B
TR05, 06	0300791, 2	2SA899 (B, V)	1 B, 1 A
TR07, 08	0306401, 2	2SC1904 (B, V)	3 B, 3 A
TR09, 10	0305871, 2	2SC984 (B, C)	2 B, 2 A
TR15, 16	0305951, 2	2SC945 (Q, P)	2 B, 2 A
TR17, 18	0300510, 1	2SA733 (P, Q)	2 B, 2 A
D01, 02	{ 0311160 0311180	{ 1S2473D 1S1588	{ Diode 1 B, 1 A
D03, 04	{ 0311160 0311180	{ 1S2473D 1S1588	{ Diode 1 B, 1 A
D05, 06	0340120	VD1212	Varistor 3 B, 3 A
D07, 08	{ 0311160 0311180	{ 1S2473D 1S1588	{ Diode 3 B, 3 A
D09, 10	{ 0311160 0311180	{ 1S2473D 1S1588	{ Diode 2 B, 2 A
D11, 12	{ 0311160 0311180	{ 1S2473D 1S1588	{ Diode 2 B, 2 A
D13, 14	{ 0311160 0311180	{ 1S2473D 1S1588	{ Diode 2 B, 2 A
D15, 16	{ 0311160 0311180	{ 1S2473D 1S1588	{ Diode 2 B, 2 A
ZD01, 02	0316070	EQA01-24R	Zener Diode 1 B, 1 A
R33, 34	0191181	180 Ω	$\frac{1}{4}$ W Fuse R. 3 B, 3 A
R35, 36	0191479	4.7 Ω	$\frac{1}{2}$ W Fuse R. 1 B, 1 A
R37, 38	0210392	3.9k Ω	M.R. 1 B, 1 A
R39, 40	0192100	10 Ω	3 B, 3 A
R41, 42	0192151	150 Ω	3 B, 3 A
R43, 44	0192151	150 Ω	$\frac{1}{2}$ W Fuse R. 2 B, 2 A
R47, 48	0192479	4.7 Ω	3 B, 3 A
R49, 50	0192479	4.7 Ω	3 B, 3 A
VR01, 02	1035350	4.7k Ω (B)	Volume 1 B, 1 A
VR03, 04	1035310	1k Ω (B)	Volume 1 B, 1 A
	2410930	4P Pin Ass'y Type E	
	2420520	6P Connector Ass'y Type A	
MODEL 8080DB/890DB Only			
TR11, 12	0308431, 2	2SD381 M, L	Transistor 2 B, 1 A
TR13, 14	0303260, 1	2SB536 N, M	Transistor 2 B, 1 A
MODEL 9090DB/990DB Only			
TR11, 12	0308531, 2	2SD381 (2) M, L	Transistor 2 B, 1 A
TR13, 14	0303371, 2	2SB536 (2) M, L	Transistor 2 B, 1 A

Conductor Side



Parts List

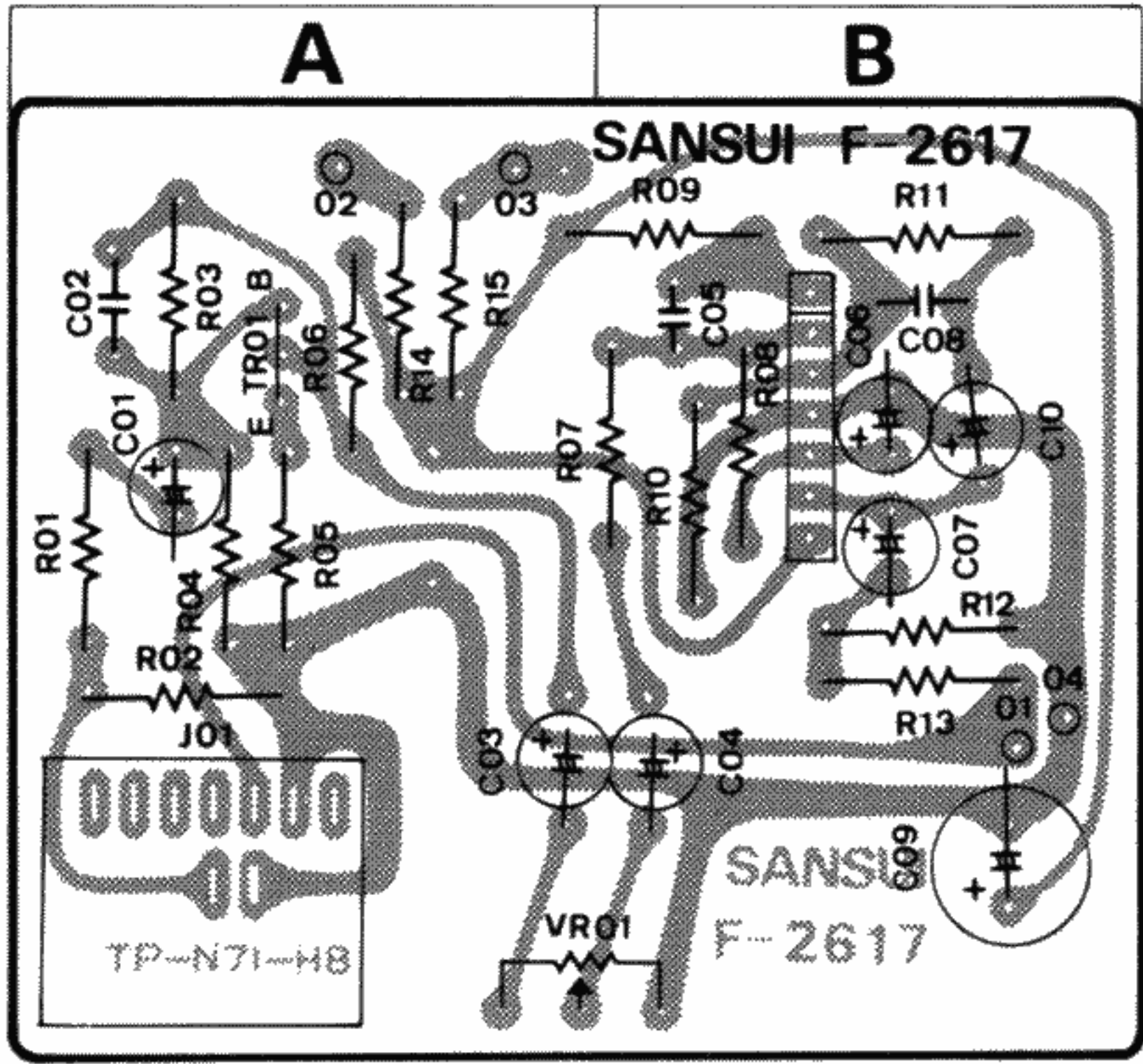
Parts No.	Stock No.	Description	Position
TR01, 02	0306070-2	2SC1313 (F, G, H) Transistor	2 C. 2 A
IC01, 02	0360190	BA312 IC	2 C
C01, 02	0573109	1.0 μ F	2 C
C27, 28	0573229	2.2 μ F	2 B
		35V T.C.	

Parts No.	Stock No.	Description	Position
VR01	1010930. 1	100k Ω (B) } Volume	1 C
VR02	1010930. 1	100k Ω (B) }	1 B
MODEL 9090DB/990DB Only			
S01	1171240	Lever Switch	1 C
S02	1171220	Lever Switch	1. 2 A

5-7. F2617 Mic AMP. Circuit Board

(Stock No. 7610111 MODEL 8080DB/890DB)
(Stock No. 7610121 MODEL 9090DB/990DB)

Conductor Side



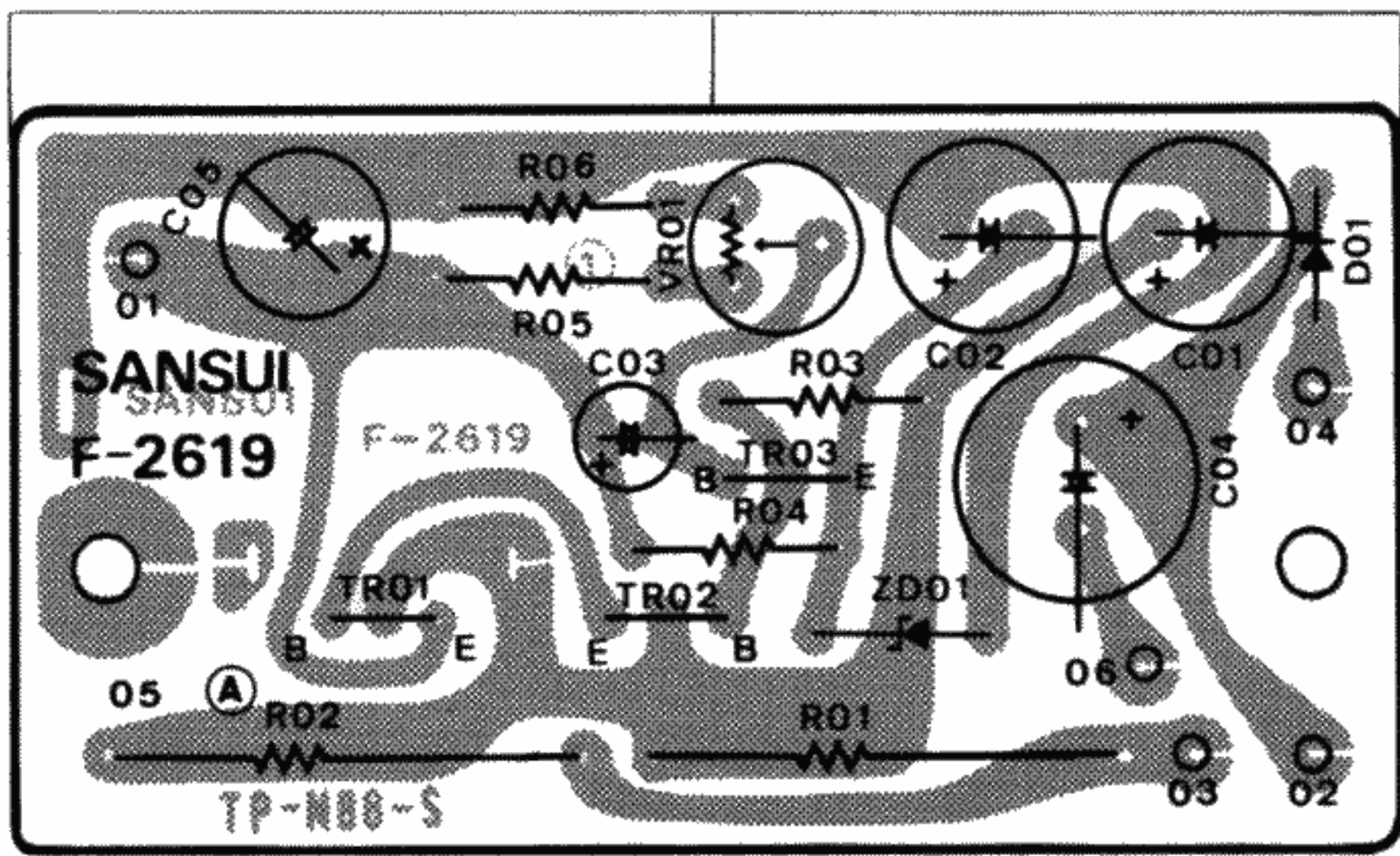
Parts List

Parts No.	Stock No.	Description	Position
TR01	0306070-2	2SC1313 (F, G, H) Transistor	A
IC01	0360190	BA312 IC	
C01	0573687	0.068 μ F 25V T.C.	A
VR01	1005290, 1	20k Ω Volume	A, B
J01	2430240	Mic Jack	A
MODEL 9090DB/990DB Only			
C08	0620561	560pF 50V P.C.	B

5-8. F-2619 Power Supply Circuit Board of RF Section

(Stock No. 7501921 MODEL 8080DB/890DB)
(Stock No. 7501991 MODEL 9090DB/990DB)

Conductor Side



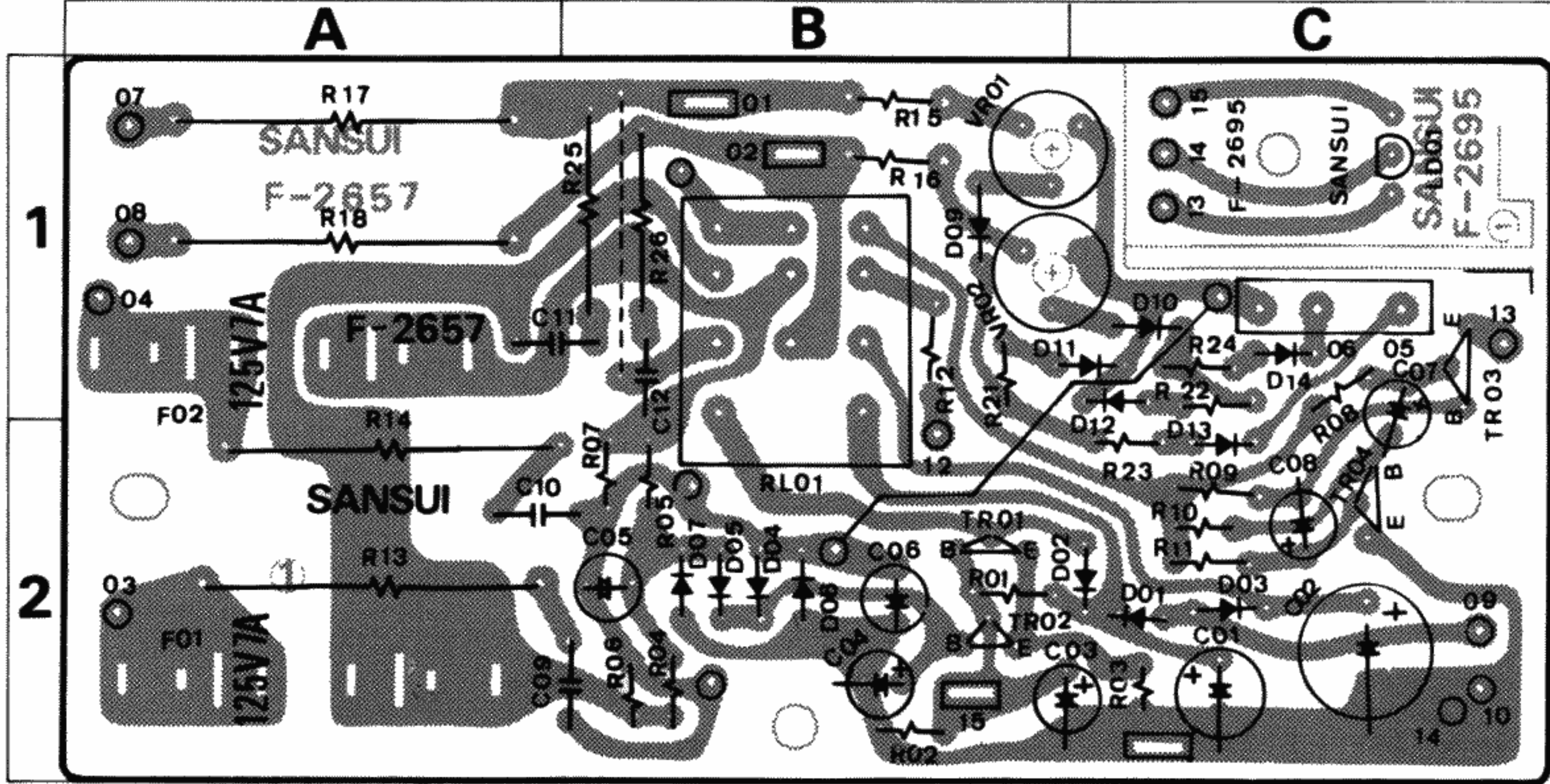
Parts List

Parts No.	Stock No.	Description	Position
TR01	0308391-3	2SD313 (D, E, F) Transistor	A
TR02	0305930, 1	2SC1211 (C, D) Transistor	A
TR03	0306131, 2	2SC1364 (6, 7) Transistor	B
D01	0310340	10D1 Diode	B
ZD01	0315760	EQA01-06R Zener Diode	B
R01	0133330	33 Ω 3 W Ce.R.	B
R02	0133330	33 Ω 3 W Ce.R.	A
VR01	1035130	10k Ω (B) Volume	B

5-9. F-2657 Power Relay Circuit Board

(Stock No. 7501901 MODEL 8080DB/890DB)
(Stock No. 7501971 MODEL 9090DB/990DB)

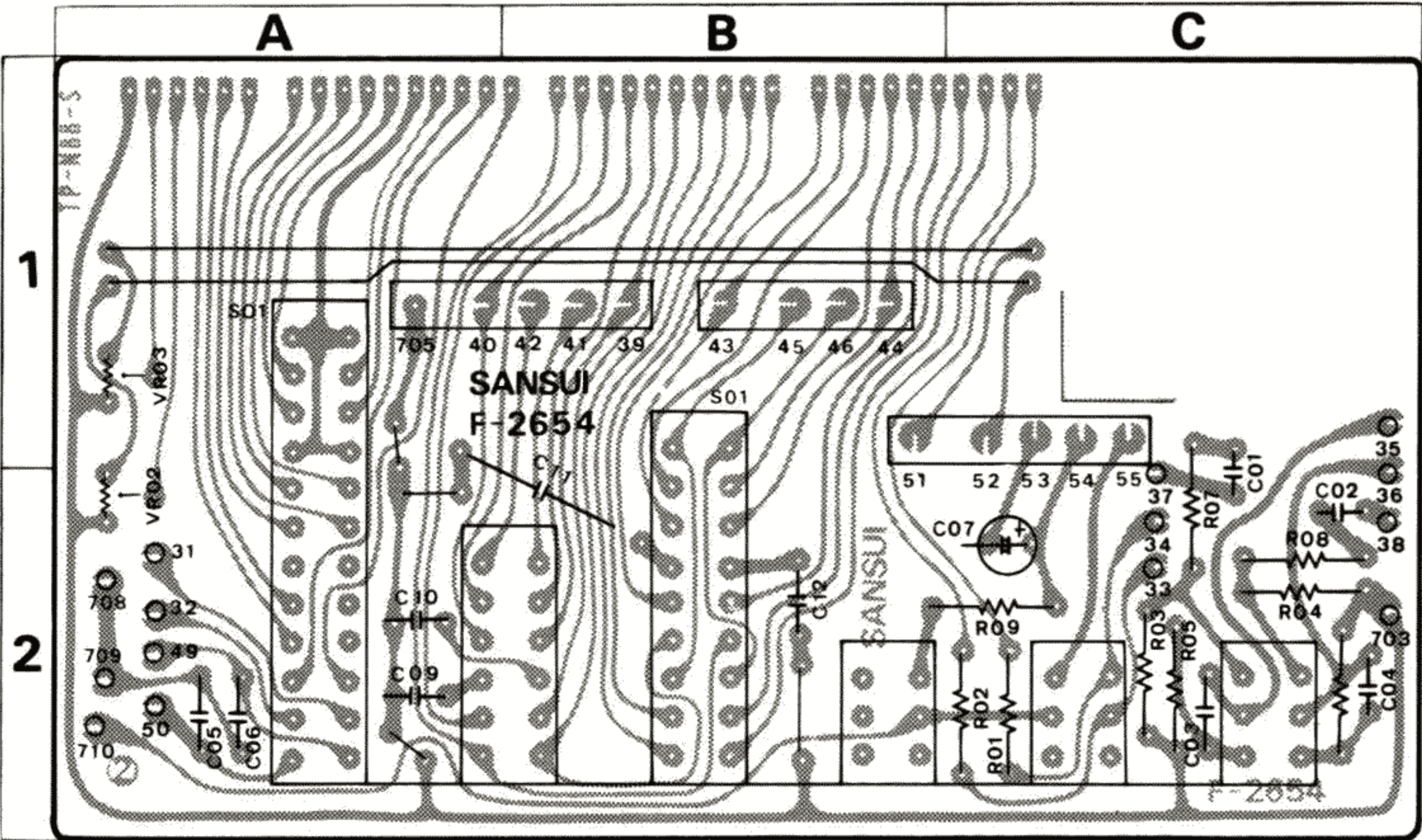
Conductor Side



5-16. F-2654 Push Switch Circuit Board

(Stock No. 7594181 MODEL 8080DB/890DB)
(Stock No. 7594271 MODEL 9090DB/990DB)

Conductor Side



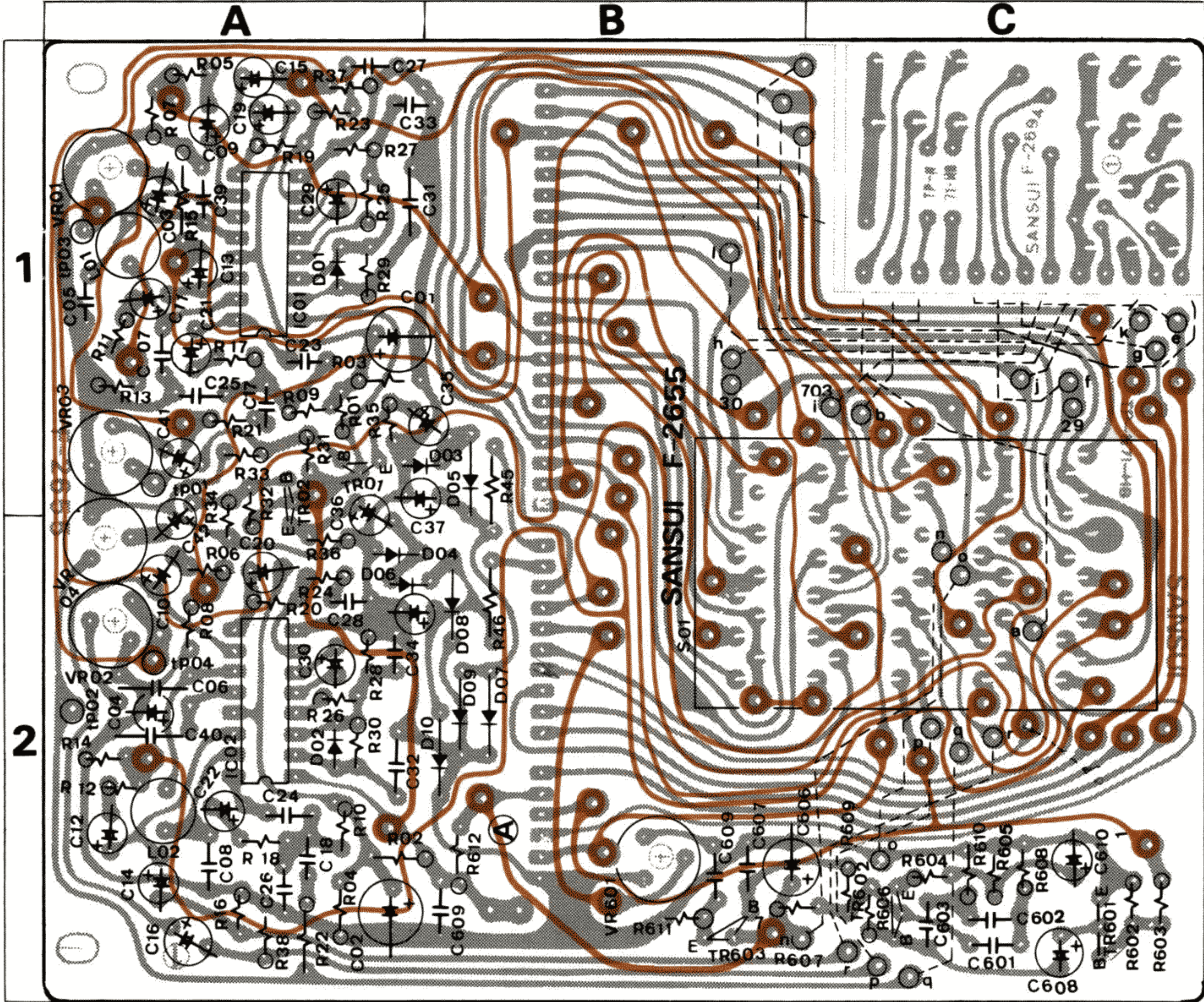
Parts List

Parts No.	Stock No.	Description
C01, 02	0620331	330pF 50V P.C.
S01	1131380	Push Switch
	2410570	5P Pin Ass'y Type D
	2410590	4P Pin Ass'y Type D
	2410690	5P Pin Ass'y Type F

5-17. F-2655 Dolby NR Circuit Board

(Stock No. 7660041 MODEL 8080DB/890DB)
(Stock No. 7660051 MODEL 9090DB/990DB)

Conductor Side

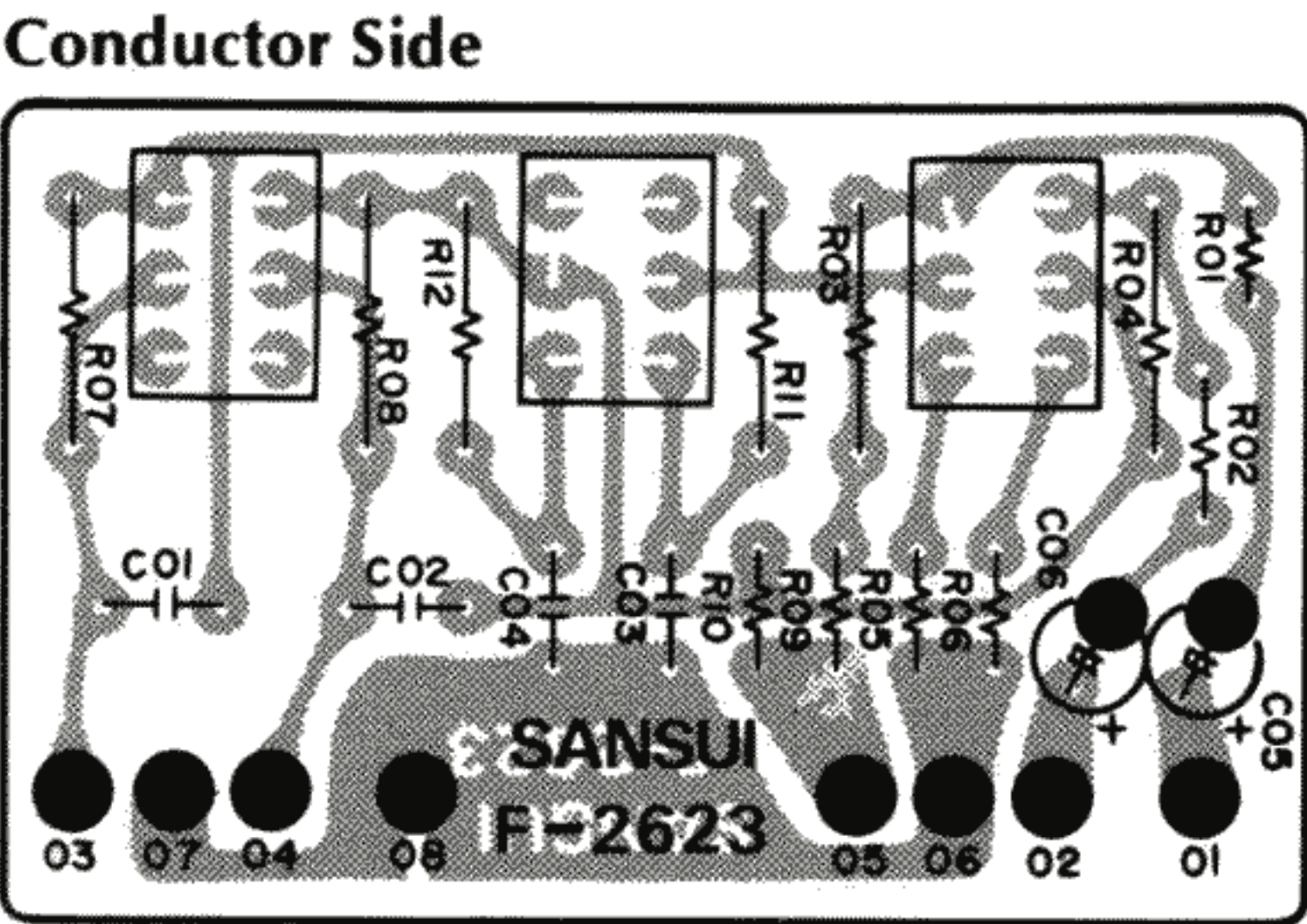


Parts List

Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position	Parts No.	Stock No.	Description	Position
TR01, 02	0305951, 2	2SC945 (Q, P)	1 A	D05	{0310970 0311060	1N60P	1 B	VR01, 02	1035190	100kΩ (B)	1 A, 2 A
TR601	0305951, 2	2SC945 (Q, P)	2 C					VR03, 04	1035170	47kΩ (B)	1 A, 2 A
TR602	0305951, 2	2SC945 (Q, P)	2 C	D07, 08	{0310970 3011060	1N60P	2 B	VR05	1065051	47kΩ (B)	
TR603	0305951, 2	2SC945 (Q, P)	2 B					VR06	1015221	47kΩ (B)	
IC01, 02	0360340	NE545B IC	1 A, 2 A	D09, 10	{0310970 0311060	1N60P	2 B	VR601	1035170	47kΩ (B)	2 B
D01, 02	0310403	1N34A	1 A, 2 A					S01	1105220	Rotary Switch	2 C
D03	{0310970 0311060	1N60P	1 A, B	C03, 04	0573109	1μF 35V T.C.	1 A, 2 A				
				L01, 02	4900260	Inductor	1 A, 2 A				

5-18. F-2623 Filter Circuit Board

(Stock No. 7594201 MODEL 8080DB/890DB)
(Stock No. 7594291 MODEL 9090DB/990DB)

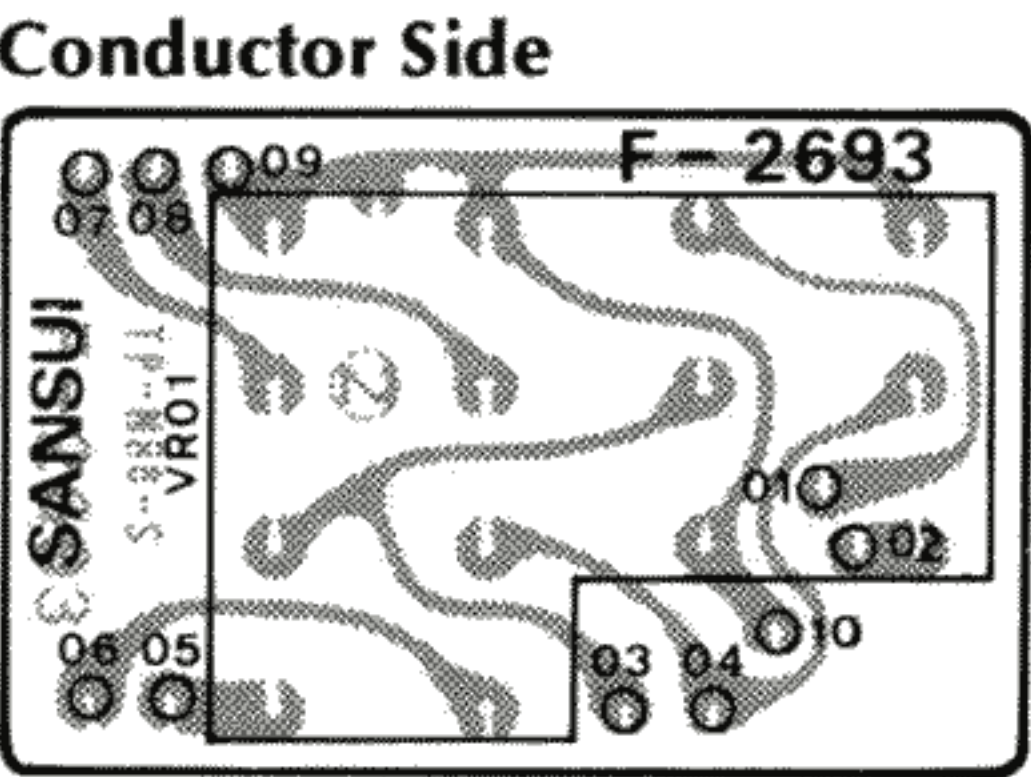


Parts List

Parts No.	Stock No.	Description
S01	1131170 2410590	Push Switch 4P Pin Ass'y Type D

5-19. F-2693 Push Switch Circuit Board

(Stock No. 7594841 MODEL 8080DB/890DB)
(Stock No. 7594831 MODEL 9090DB/990DB)

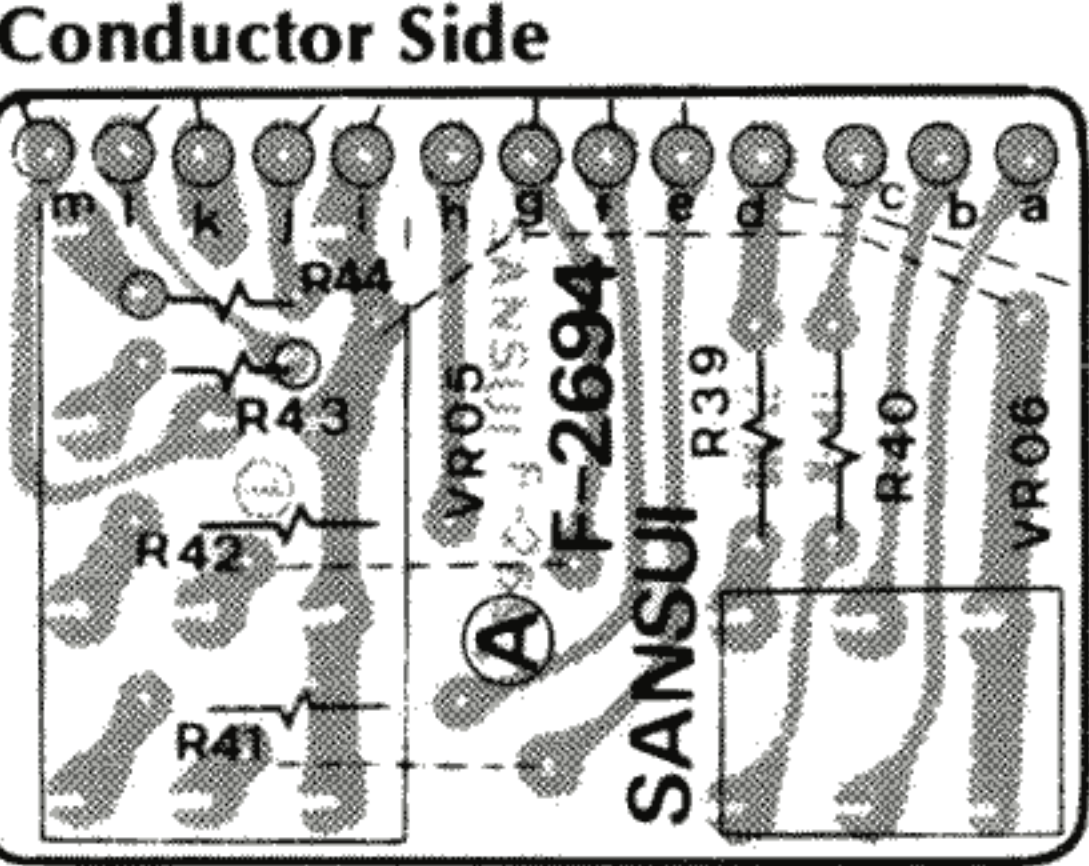


Parts List

Parts No.	Stock No.	Description
VR01	1060320, 1	250kΩ M.N (B) × 2 Volume

5-20. F-2694 Dolby Volume Circuit Board

(Stock No. 7594861 MODEL 8080DB/890DB)
(Stock No. 7594851 MODEL 9090DB/990DB)



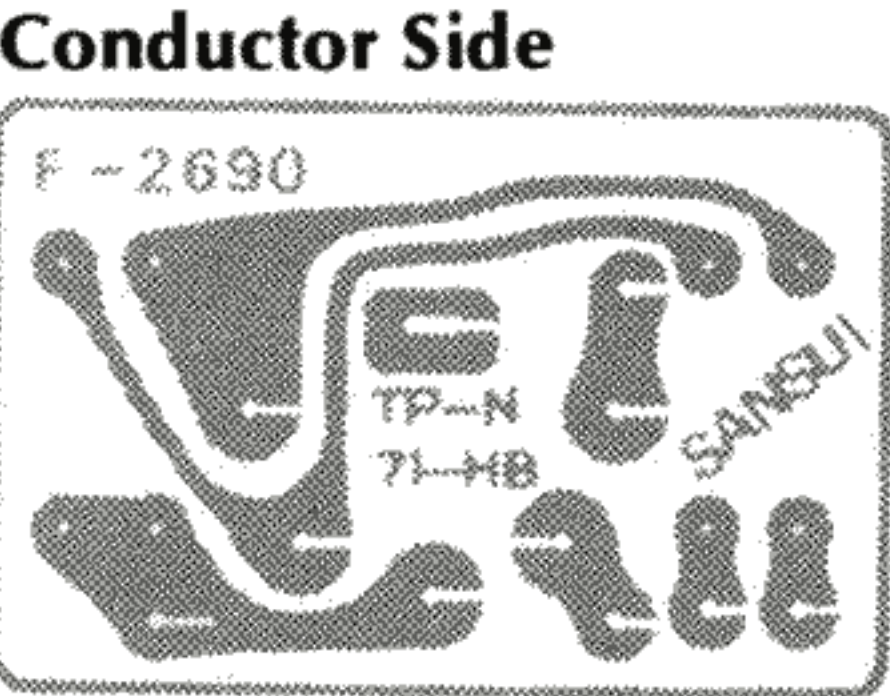
Parts List

Parts No.	Stock No.	Description
VR05	1065060	500kΩ (B) × 4
VR06	1015220	500kΩ (B) × 2

Volume

5-21. F-2690 DIN Terminal Circuit Board

(Stock No. 7594191 MODEL 8080DB/890DB)
(Stock No. 7594281 MODEL 9090DB/990DB)



Parts List

Parts No.	Stock No.	Description
J01	2090030	5P Connector Socket

5-22. Figures

Connectors & Pin Ass'y

Connectors

Type A (3~10 pins)	Type B (2~6 pins)	Stock No.
		2 Pins 2420450
		3 Pins 2420460
		3 Pins (RED) 2420650
		4 Pins 2420470
		5 Pins 2420480
		6 Pins 2420490

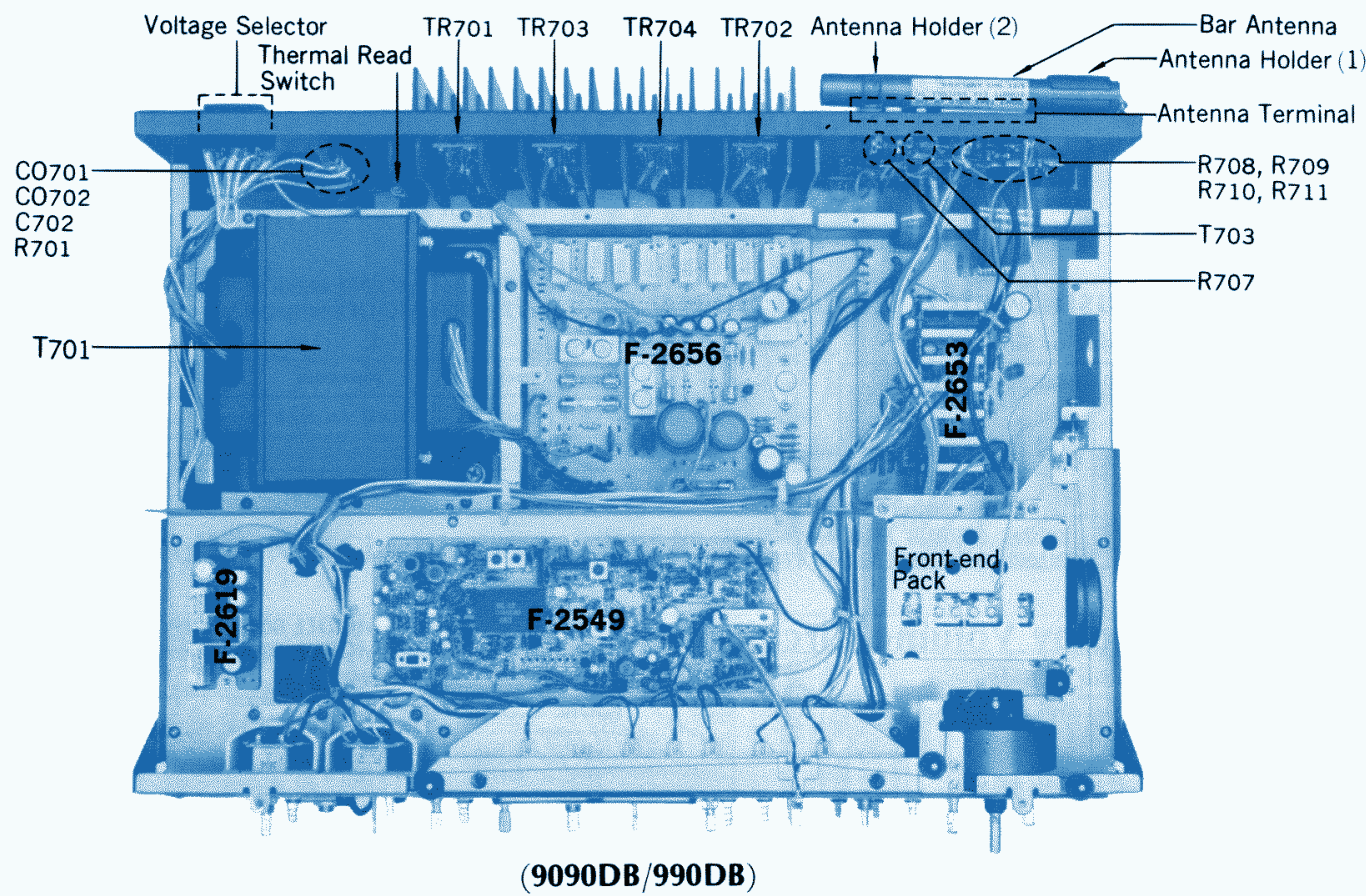
NOTE: Since stock number of female connectors (type B) with wires are not shown in each parts list of Complete circuit board, please refer to the above parts list when ordering the connector.

Pin Ass'y

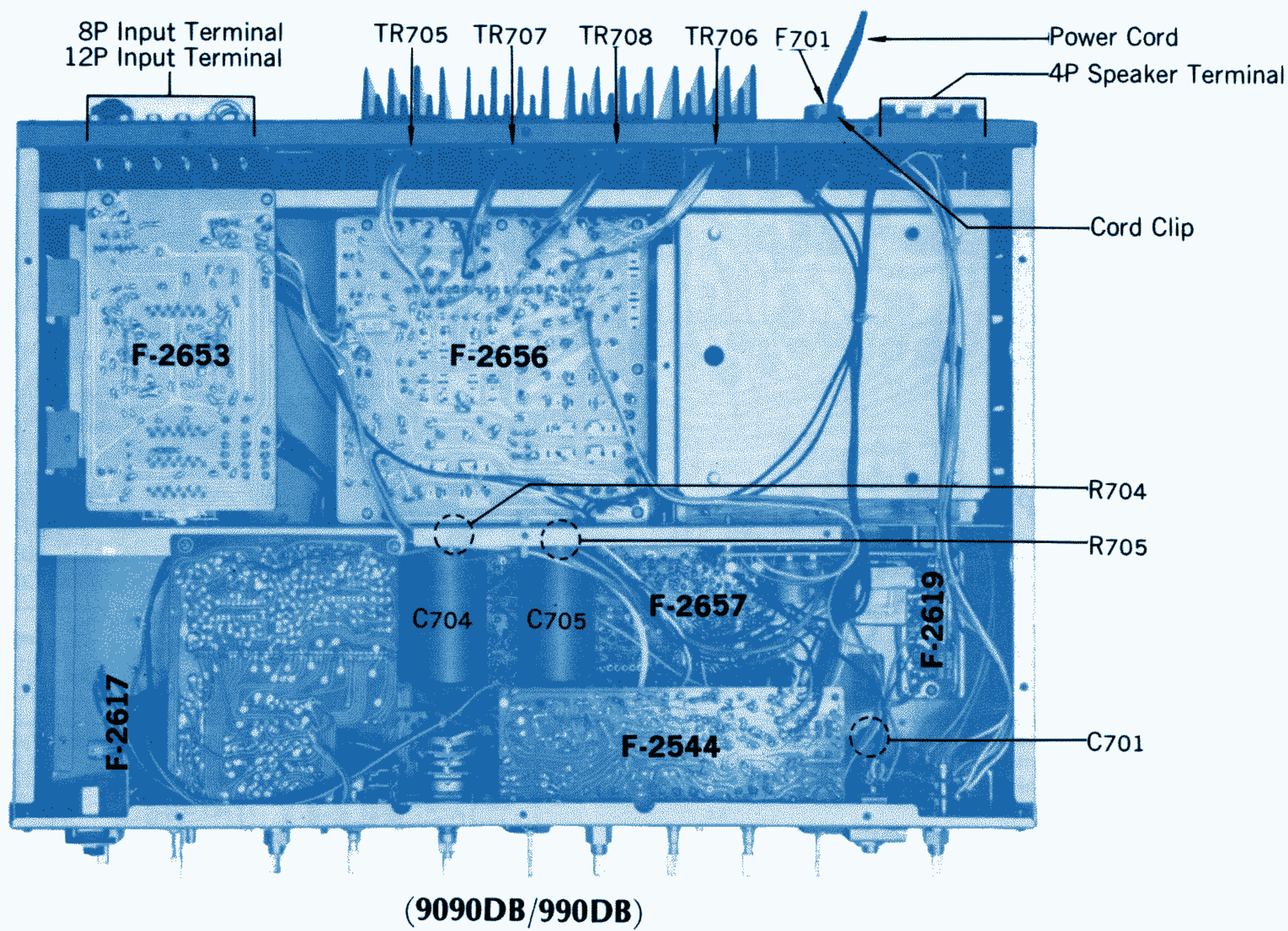
Type A (3~10 pins)	Type B (3~10 pins)	Type C (3~10 pins)
Type D (2~6 pins)	Type E (2~6 pins)	Type F (2~6 pins)

6. OTHER PARTS

6-1. Top Side



6-2. Bottom Side



Parts List (Top Side & Bottom Side)

Parts No.	Stock No.	Description	Position
C701	0605337	0.033 μ F 250V M.C.	
C702	0659802	0.0047 μ F 150V C.C.	
R701	0114335	3.3M Ω 1/2W S.R.	
R704, 705	0104472	4.7k Ω 1W C.R.	
R707	0103122	1.2k Ω 1/2W C.R.	
T702	4200760	Bar Antenna	
T703	4290021	75 Ω /300 Ω Balun	
S703	1900020	Thermal Reed Switch	
	2300060	Power Fuse Holder	
CO701, 702	2450060	AC Outlet	
	2200450	8P Input Terminal	
	2200490	12P Input Terminal	
	2210310	Antenna Terminal	
	2230150	Ground Terminal	
	2290160	4P Speaker Terminal	
	2410091	Voltage Selector, plug	
	2410830	Voltage Selector, socket	
	3800010	Power Cord	
	3910490	Cord Clip, power cord	
	5286450	Antenna Holder (1)	
	5286480	Antenna Holder (2)	
	3910510	Cord Clip, antenna	

8080DB/890DBOnly

TR701, 702	{ 0305840	2SC1116 (R)	} Transistor
	or	or	
TR703, 704	{ 0305841	2SC1116 (O)	
	or	or	
TR703, 704	{ 0300520	2SA747 (R)	} Transistor
	or	or	
TR703, 704	{ 0300521	2SA747 (O)	
	or	or	
C703, 704	0559518	12000 μ F 63V E.C.	
T701	4002540	Power Transformer	
F701	{ 0432280	4A, 125V (AC 220~240V)	
	{ 0432500	7A, 125V (AC 100~120V)	

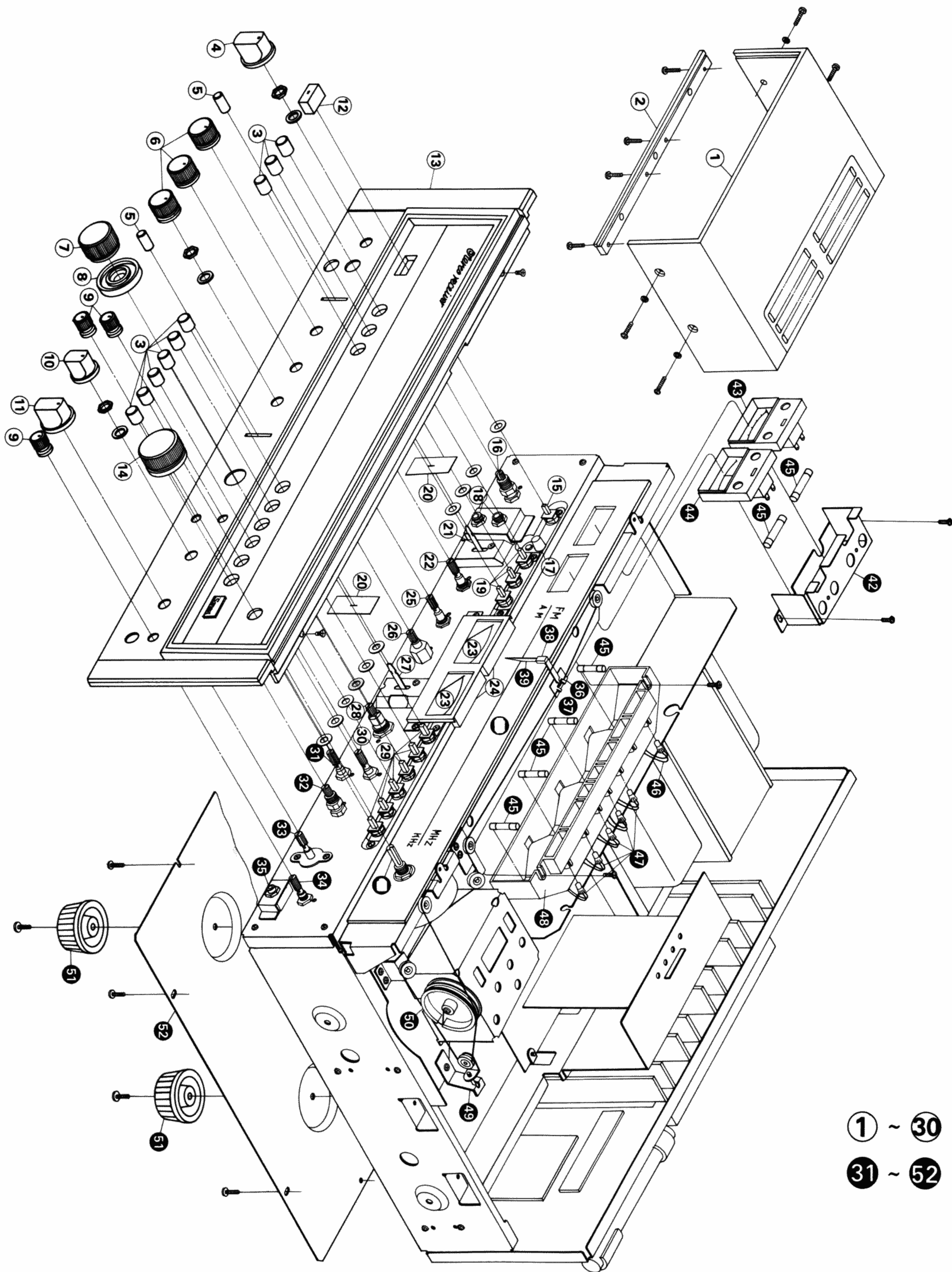
9090DB/990DBOnly

TR701, 702	{ 0308470	2SD424 (R)	} Transistor
	or	or	
TR703, 704	{ 0308471	2SD424 (O)	
	or	or	
TR703, 704	{ 0303300	2SB554 (R)	} Transistor
	or	or	
TR705, 706	{ 0303301	2SB554 (O)	
	or	or	
TR705, 706	{ 0308470	2SD424 (R)	} Transistor
	or	or	
TR707, 708	{ 0308471	2SD424 (O)	
	or	or	
TR707, 708	{ 0303300	2SB554 (R)	} Transistor
	or	or	
TR707, 708	{ 0303301	2SB554 (O)	
	or	or	
C703, 704	0559844	12000 μ F 80V E.C.	
T701	4002530	Power Transformer	
F701	{ 0432500	7A, 125V (AC 220~240V)	
	{ 0434060	10A, 250V (AC 100~120V)	

Parts List (Exploded View)

Parts No.	Stock No.	Description
1	5726923	Bonnet (8080DB/890DB)
	5726933	Bonnet (9090DB/990DB)
2	5996104	Panel Sash (8080DB)
	5996098	Panel Sash (9090DB)
	5996104	Panel Sash (890DB)
	5996093	Panel Sash (990DB)
3	5326560	Push Knob (890DB/990DB)
	5326550	Push knob (8080DB/9090DB)
4	5318380	Speakers Knob, M-7 Type (8080DB/890DB)
	5318400	Speakers Knob, E-2 Type (9090DB/990DB)
5	7106130	Lever Switch Knob, C-2 Type (9090DB/990DB)
6	5318410	S-10 Type Knob
7	5318440	Volume Knob, WI-6 Type
8	5318431	Balance Volume Knob, WO-8 Type
9	5318340	N-6 Type Knob
10	5318410	S-10 Type Knob (8080DB/890DB)
	5318390	E-1 Type Knob (9090DB/990DB)
11	5318380	M-7 Type Knob (8080DB/890DB)
	5318400	E-2 Type Knob (9090DB/990DB)
12	5326570	Push Botton
13	7007450	Front Panel Ass'y (8080DB)
	7007430	Front Panel Ass'y (890DB)
	7007420	Front Panel Ass'y (990DB)
	7007440	Front Panel Ass'y (9090DB)
	{ 5309840	Panel Window } 8080DB/890DB
	{ 5336500	Sansui Mark } 9090DB/990DB
	5446330	Smoked Plate (8080DB)
	5446310	Smoked Plate (9090DB)
	5446340	Smoked Plate (890DB)
	5446320	Smoked Plate (990DB)
14	5318420	Tuning Knob, T-12 Type (8080DB/9090DB)
	5318450	Tuning Knob, T-13 Type (890DB/990DB)
15	1131190	Power Switch
16	1104360, 1	Speakers Switch
17	0319040	Power Indicator, LED
18	2430190	Head Phone Jack
19	1131270	Push Switch
20	5047470	Masking, Lever Switch (9090DB/990DB)
21	1171220	Bass Selector (9090DB/990DB)
22	1010930, 1	Bass Volume, 100k Ω B
23	4301010	Power Meter
24	7726180	Power Meter Circuit Board
25	1010930, 1	Midrange Volume, 100k Ω B
26	1010930, 1	Treble Volume, 100k Ω B
27	1171240	Treble Selector (9090DB/990DB)
28	1060320, 1	Master & Balance Volume
29	1131380	Push Switch
30	1015220, 1	PLAY CAL Control Volume, 50k Ω $\times$ 2
31	1065051	REC LEVEL Control, 500k Ω B $\times$ 4
32	1105220	Dolby NR Switch
34	1005290, 1	MIC Volume, 20k Ω
35	2430240	MIC Jack
36	5416350	Holder Dial Pointer
37	5516030	Teflon Sheet
38	0400450	Dial Pointer Lamp
39	5416050	Dial Pointer
40	5408120	Dial Glass
41	7036453	Tuning Unit
42	5288390	Meter Holder
43	4300740	Signal Meter
44	4300750	Tune Meter
45	0420040	Meter Lamp
46	0400420	FM Stereo Indicator
47	0400540	Indicator Lamp
48	5066211	Illumination Box
49	7136082	Tension Unit
50	6146670	Dial pulley, D-44
51	5517050	Leg
52	5058512	Bottom Plate (8080DB/9090DB)
	505811	Bottom Plate (890DB/990DB)

6-3. Exploded View



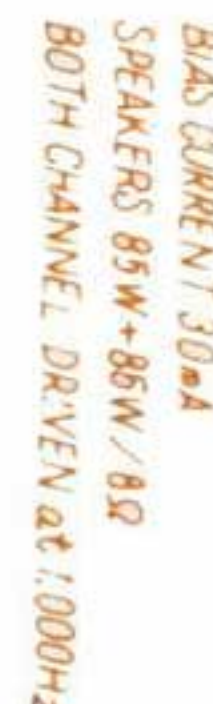
7. SCHEMATIC DIAGRAM

7-1. Tuner Section (8080DB/9090DB,890DB/990DB)

- * La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
- * Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.
- * Design and specifications subject to change without notice for improvements.

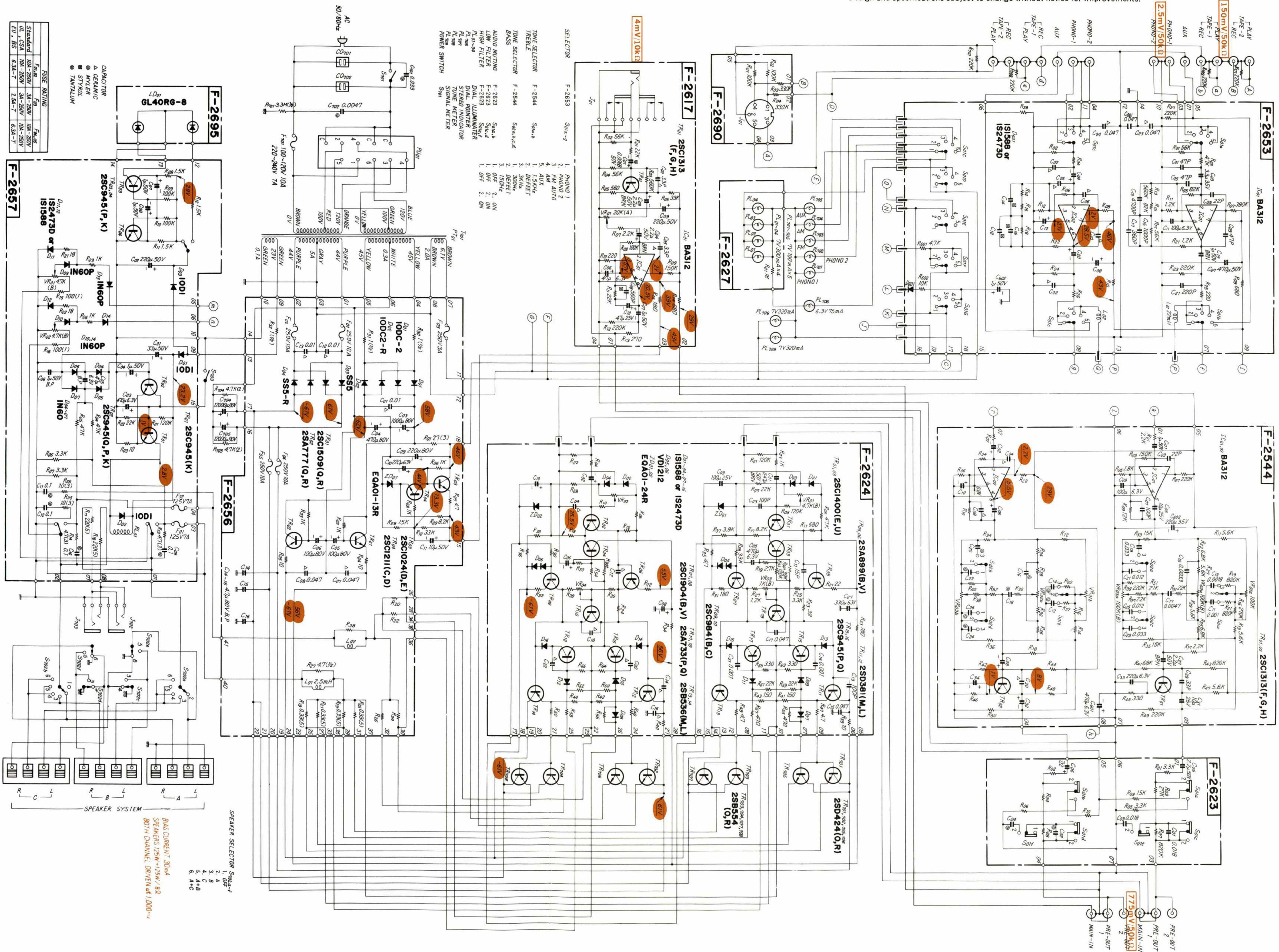


* La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles
 * Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.
 * Change and specifications subject to change without notice for improvements.

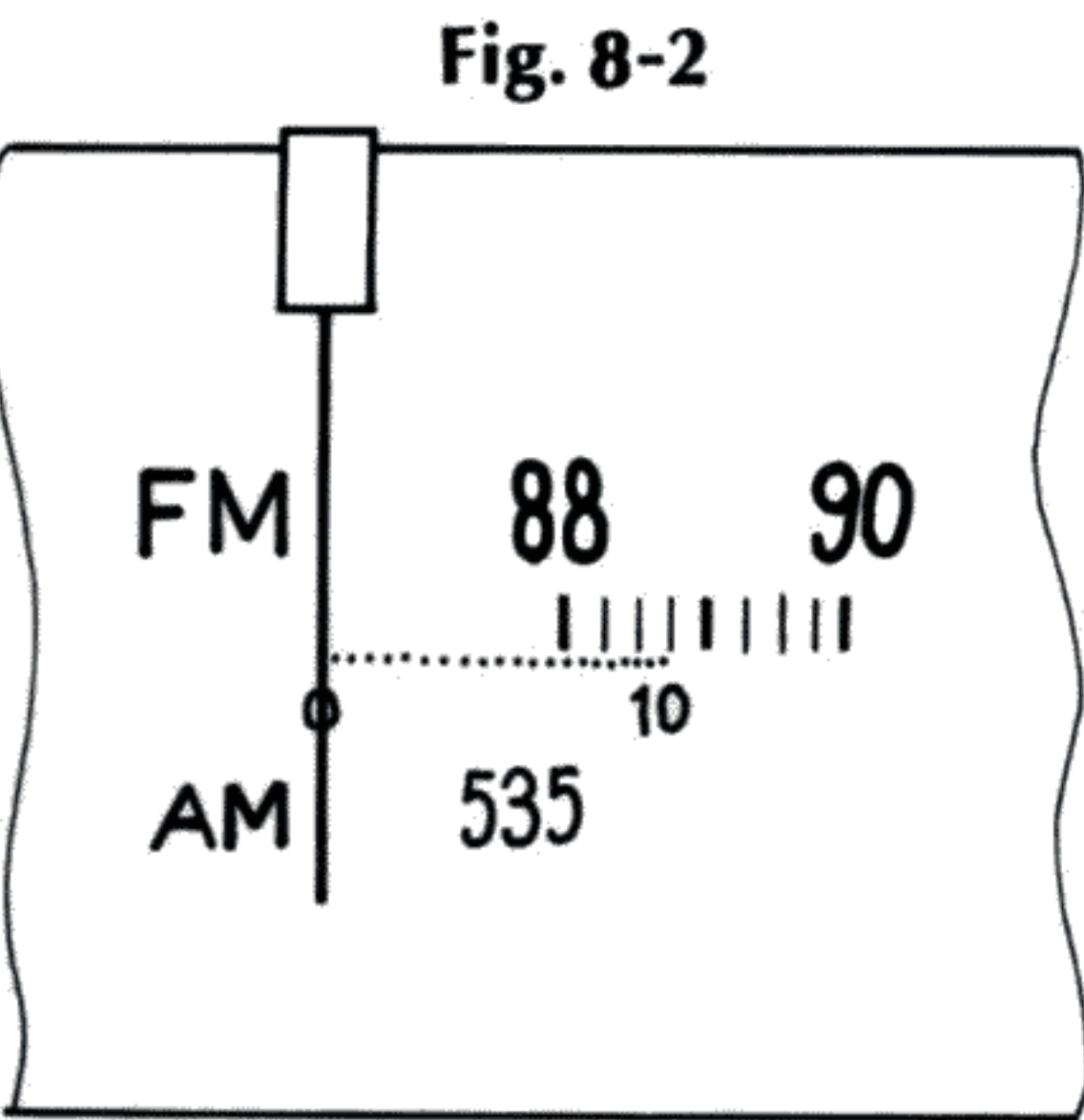
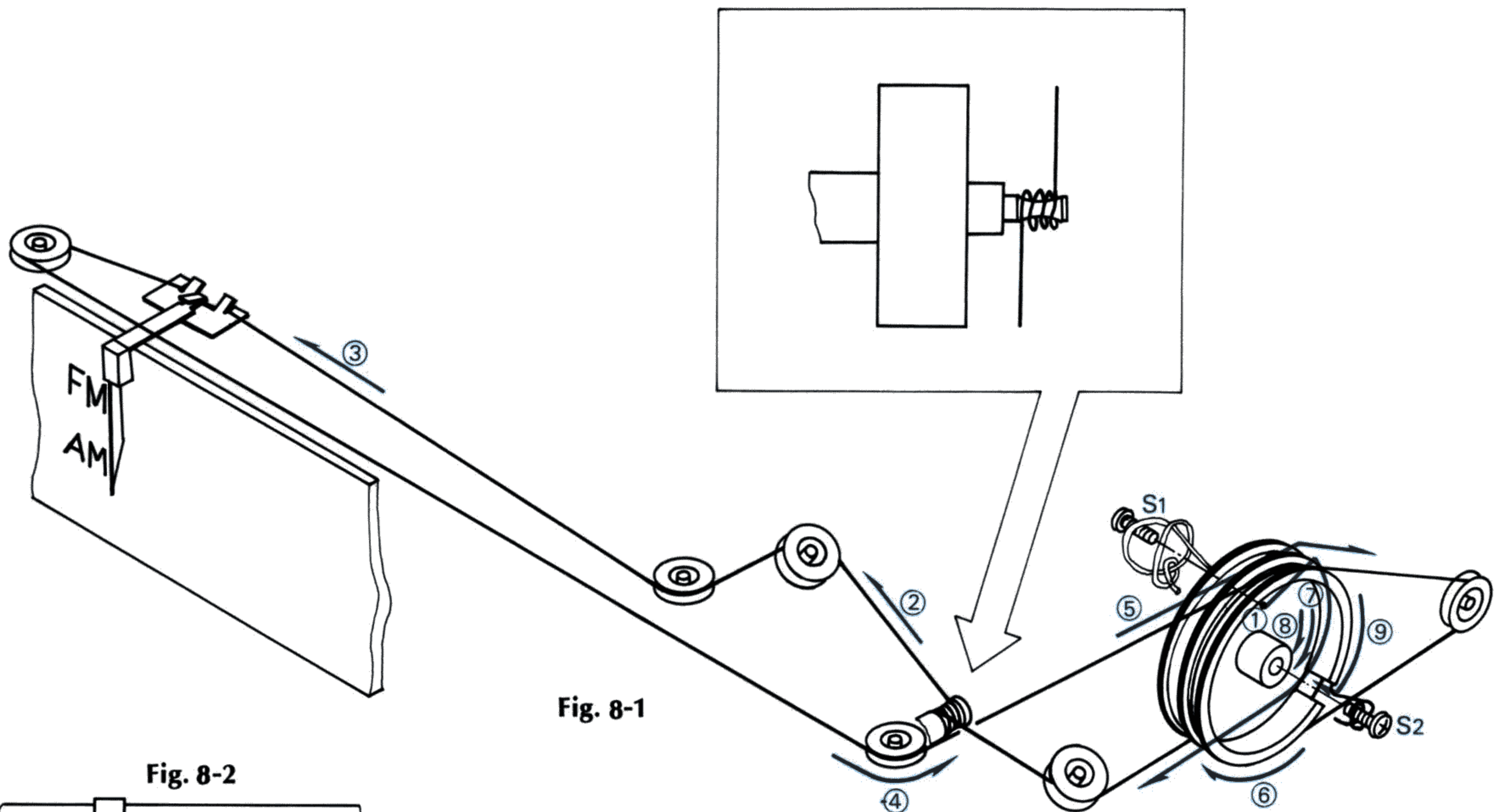


7-3. Audio Section (9090DB/990DB)

• La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
• Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.
• Design and specifications subject to change without notice for improvements.



8. THREADING OF DIAL CORD



*If a dial cord is cut off or slips, replace it by following procedures.
 As these units use 0.6mmφ cord, please replace it with the same type certainly.
 *The length of dial cord is approximately 155cm (63 inch)

8-1. Threading of Dial Cord

- Thread the dial cord in numerical order from ① to ⑨ as Fig. 8-1.
- 1) Close the variable capacitor completely (Max. capacitance).
 - 2) Tie dial cord to the screw, S1 .
 - 3) Thread cord in the direction of arrow from ① to ⑨
 - 4) After ⑨, tie the cord to the screw S2 of the dial pulley.

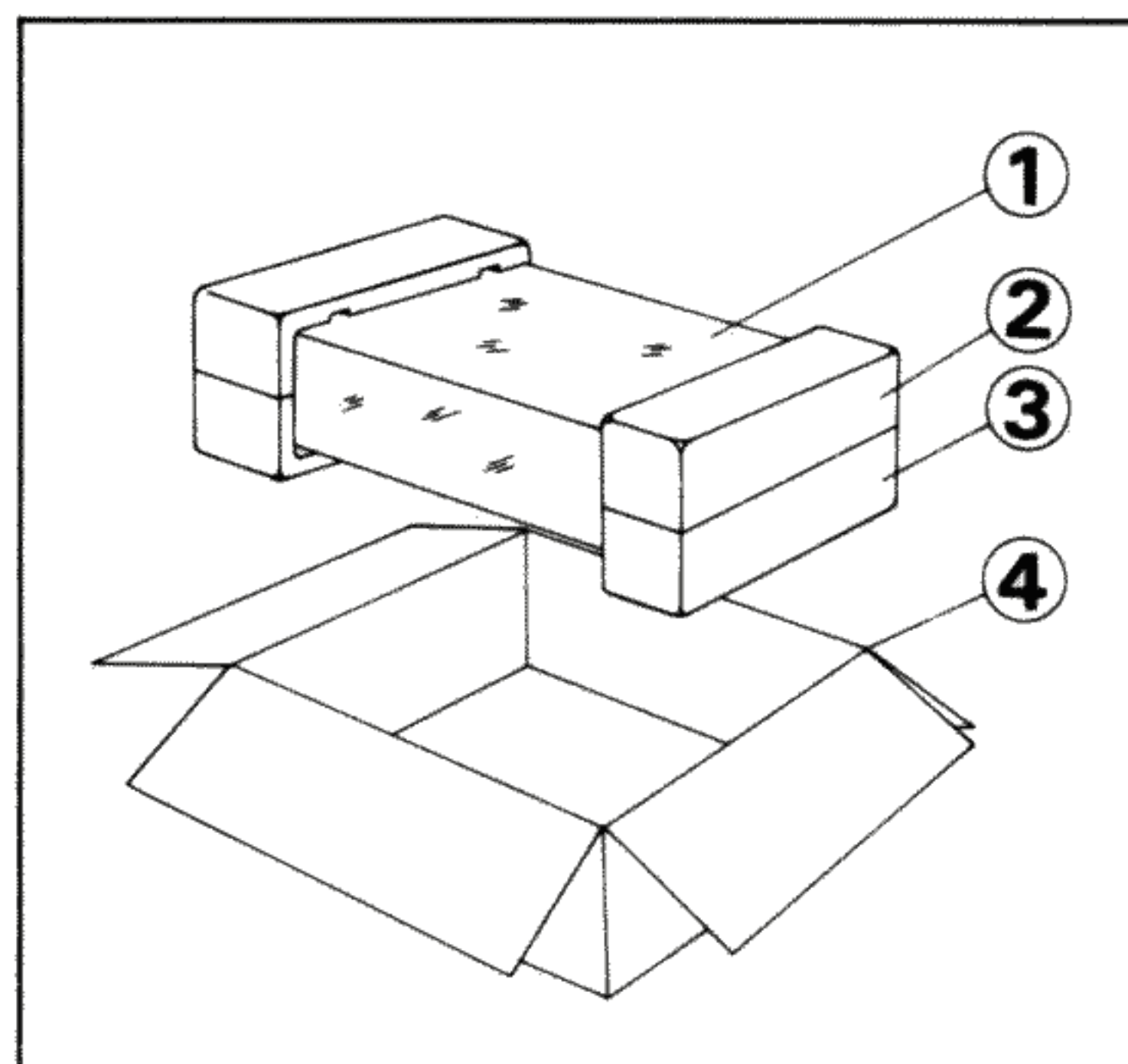
8-2. Attachment of Dial Pointer

- 1) Close the variable capacitor completely.
 - 2) Set the dial pointer to the 0 position on dial scale (Fig. 8-2).
- *Confirm that the dial pointer runs smoothly on the dial scale by turning the tuning shaft.

Stock No.	Description
6036051	Dial Cord (0.6mmφ)
6146670	D44 Type Pulley

9. PACKING LIST

Parts No.	Stock No.	Description
1	{ 9116271 9126070	Vinyl Cover Polyethylene Sheet
2	9027940	Styrofoam Packing (Upper)
3	9027930	Styrofoam Packing (Lower)
4	{ 9009260 9009270 9009380 9009370 5996080	Carton Case (8080DB) Carton Case (9090DB) Carton Case (890DB) Carton Case (990DB) Curl Stopper



10. ACCESSORY PARTS LIST

Parts No.	Stock No.	Description
	9202380	Operating Instructions (8080DB)
	9202390	Operating Instructions (9090DB)
	9209740	Operating Instruction (890DB)
	9209730	Operating Instruction (890DB)
	9237520	Schematic Diagram (890DB)
	9237530	Schematic Diagram (990DB)
	9237420	Schematic Diagram (8080DB)
	9237410	Schematic Diagram (9090DB)



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