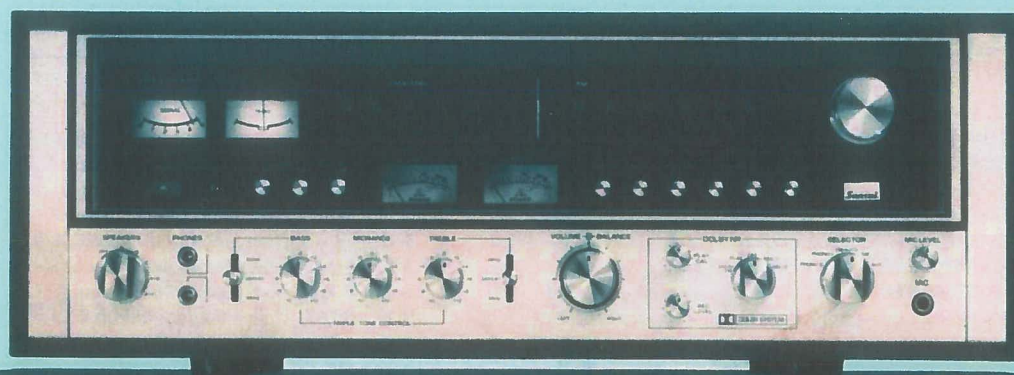


# SERVICE MANUAL

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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# 1. SPECIFICATIONS

## AUDIO SECTION

### POWER OUTPUT

#### MODEL 8080DB/890DB

Min. RMS, both channels driven, from 20 to 20,000Hz, with no more than 0.1% total harmonic distortion

85 watts per channel into 8 ohms

Min. RMS, both channels driven, at 1,000Hz, with no more than 0.1% total harmonic distortion

95 watts per channel into 8 ohms

#### MODEL 9090DB/990DB

Min. RMS, both channels driven, from 20 to 20,000Hz, with no more than 0.1% total harmonic distortion

125 watts per channel into 8 ohms

Min. RMS, both channels driven, at 1,000Hz, with no more than 0.1% total harmonic distortion

135 watts per channel into 8 ohms

#### MODEL 8080DB/890DB, 9090DB/990DB

LOAD IMPEDANCE ..... 8 ohms

POWER BANDWIDTH..... 20 to 20,000Hz at or below rated min. RMS power output and total harmonic distortion

### TOTAL HARMONIC DISTORTION

..... less than 0.1% at or below rated min. RMS power output

### INTERMODULATION DISTORTION

(70Hz:7kHz=4:1 SMPTE method)

..... less than 0.1%

### FREQUENCY RESPONSE (at 1 watt)

..... 10 to 30,000Hz  $\pm$  1dB

### RIAA CURVE DEVIATION (PHONO)

..... +0.3dB, -0.3dB (30Hz to 15kHz)

DAMPING FACTOR..... approximately 30 at 8 ohm load

### INPUT SENSITIVITY AND IMPEDANCE

(1 kHz, for rated power output)

PHONO-1, 2 ..... 2.5mV/50 kilohms (Max. input capability: 180mV at 1kHz, less than 0.2% total harmonic distortion.)

MIC ..... 4mV/10 kilohms

TAPE-1, 2 PLAY, AUX ..... 150mV/50 kilohms

MAIN IN..... 775mV/100 kilohms

### OUTPUT LEVEL (1,000Hz)

TAPE-1, 2 REC (pin jacks) ..... 150mV

TAPE-2 REC/PLAY (DIN socket)..... 30mV

PRE OUT..... 775mV

### CHANNEL SEPARATION (at rated output 1,000Hz)

PHONO-1, 2 ..... better than 50dB

TAPE-1, 2 PLAY, AUX ..... better than 50dB

### HUM AND NOISE

PHONO-1, 2 ..... better than 70dB

TAPE-1, 2 PLAY, AUX ..... better than 80dB

\*Dolby Noise Reduction effect.. 10dB (above 5kHz)

## CONTROLS

#### MODEL 8080DB/890DB

BASS.....  $\pm$  10dB (50Hz)

MIDRANGE.....  $\pm$  5dB (1.5kHz)

TREBLE.....  $\pm$  10dB (10kHz)

LOUDNESS ..... +8dB (50Hz)

..... +6dB (10kHz)

LOW FILTER ..... -10dB (50Hz)

HIGH FILTER ..... -10dB (10kHz)

AUDIO MUTING ..... -20dB

#### MODEL 9090DB/990DB

BASS.....  $\pm$  10dB (50Hz)

Tone selector (turnover frequency)

..... 150, 300Hz

MIDRANGE .....  $\pm$  5dB (1.5kHz)

TREBLE.....  $\pm$  10dB (10kHz)

Tone selector (turnover frequency)

..... 1.5, 3kHz

LOUDNESS ..... +8dB (50Hz)

..... +6dB (10kHz)

LOW FILTER..... -10dB (50Hz)

HIGH FILTER ..... -10dB (10kHz)

AUDIO MUTING ..... -20dB

## FM SECTION

#### MODEL 8080DB/890DB, 9090DB/990DB

TUNING RANGE ..... 88 to 108MHz

### SENSITIVITY

(IHF)..... 9.8dBf (1.7 $\mu$ V)

(DIN) ..... 0.9 $\mu$ V

### 50dB QUIETING SENSITIVITY

STEREO (IHF)..... 36.3dBf (36 $\mu$ V)

MONO (IHF) ..... 14.7dBf (3 $\mu$ V)

### TOTAL HARMONIC DISTORTION

STEREO ..... less than 0.3%

MONO ..... less than 0.2%

### SIGNAL TO NOISE RATIO (mono)

..... better than 70dB

SELECTIVITY ..... better than 85dB

CAPTURE RATIO ..... less than 1.5dB

AM SUPPRESSION ..... better than 55dB

IMAGE RESPONSE RATIO (IHF)..... better than 70dB (98MHz)

IF RESPONSE RATIO (IHF) ..... better than 95dB (98MHz)

### SPURIOUS RESPONSE RATIO (IHF)

..... better than 85dB (98MHz)

SPURIOUS RADIATION ..... less than 34dB

STEREO SEPARATION ..... better than 40dB (1 kHz)

FREQUENCY RESPONSE ..... 30 to 15,000Hz  $\pm$  0.5dB

ANTENNA INPUT IMPEDANCE .. 75 $\Omega$  unbalanced  
300 $\Omega$  balance

## AM SECTION

TUNING RANGE ..... 535 to 1,605kHz

SENSITIVITY (Bar antenna)..... 50dB/m (1,000kHz)

SELECTIVITY ..... better than 50dB (1,000kHz)

IMAGE RESPONSE RATIO (IHF)..... better than 30dB (1,000kHz)

IF RESPONSE RATIO (IHF) ..... better than 30dB (1,000kHz)

## OTHERS

#### MODEL 8080DB/890DB

### POWER REQUIREMENTS

POWER VOLTAGE ..... 100, 120, 220, 240V 50/60Hz  
120V (Usable 110-130V)  
60Hz (for U.S.A. & Canada only)

### POWER CONSUMPTION

Maximum consumption .... 420 watts

Rated consumption ..... 265 watts (350VA)

DEMENSIONS ..... 540mm (21-5/16") W

182mm (7-3/16") H

397mm (15-11/16") D

WEIGHT ..... 20.7kg (45.6 lbs) net

23.1kg (50.9 lbs) packed

#### MODEL 9090DB/990DB

### POWER REQUIREMENTS

POWER VOLTAGE..... 100, 120, 220, 240V 50/60Hz  
120V (Usable 110-130V)  
60Hz (for U.S.A. & Canada only)

### POWER CONSUMPTION

Maximum consumption .... 650 watts

Rate consumption..... 435 watts (530VA)

DEMENSIONS ..... 540mm (21-5/16") W

182mm (7-3/16") H

397mm (15-11/16") D

WEIGHT ..... 23.6kg (52.0 lbs) net

26.0kg (57.3 lbs) packed

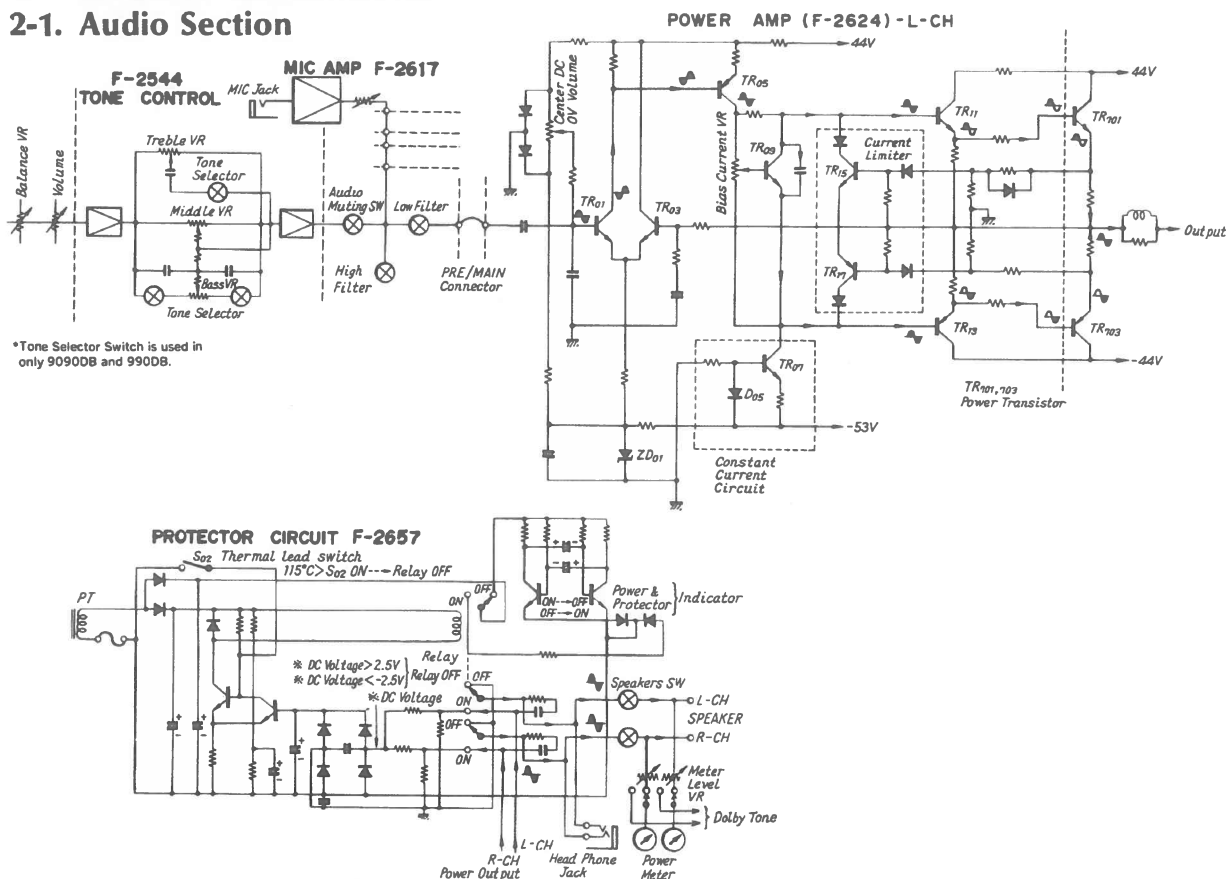
\*The word "Dolby" and the Double-D symbol are a trademark of Dolby Laboratories Inc.

oNoise reduction circuit made under license from Dolby Laboratories Inc.

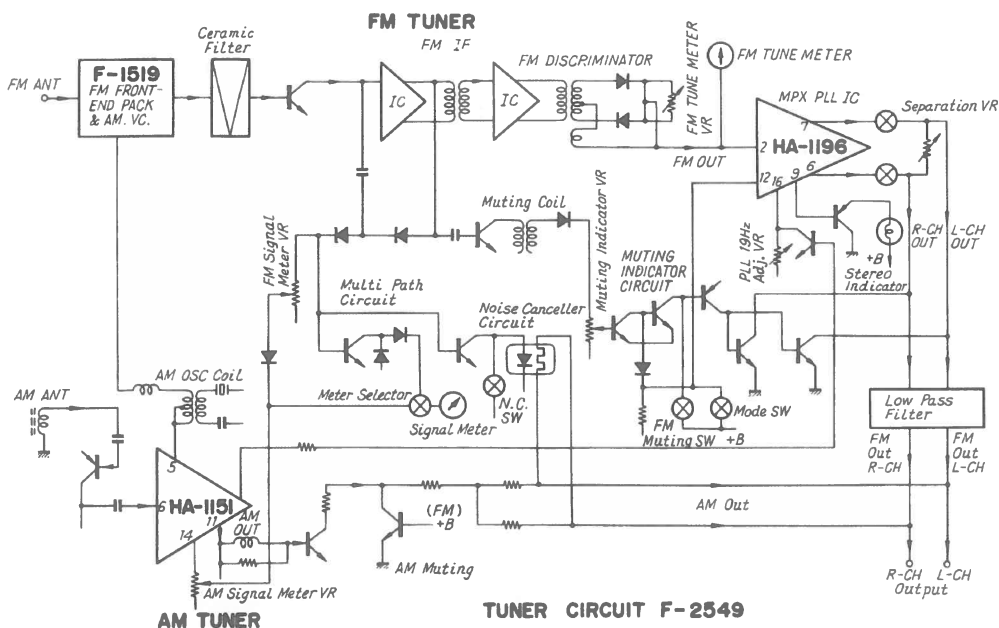
\*Design and specifications subject to change without notice for improvements.

## 2. BLOCK DIAGRAM

### 2-1. Audio Section



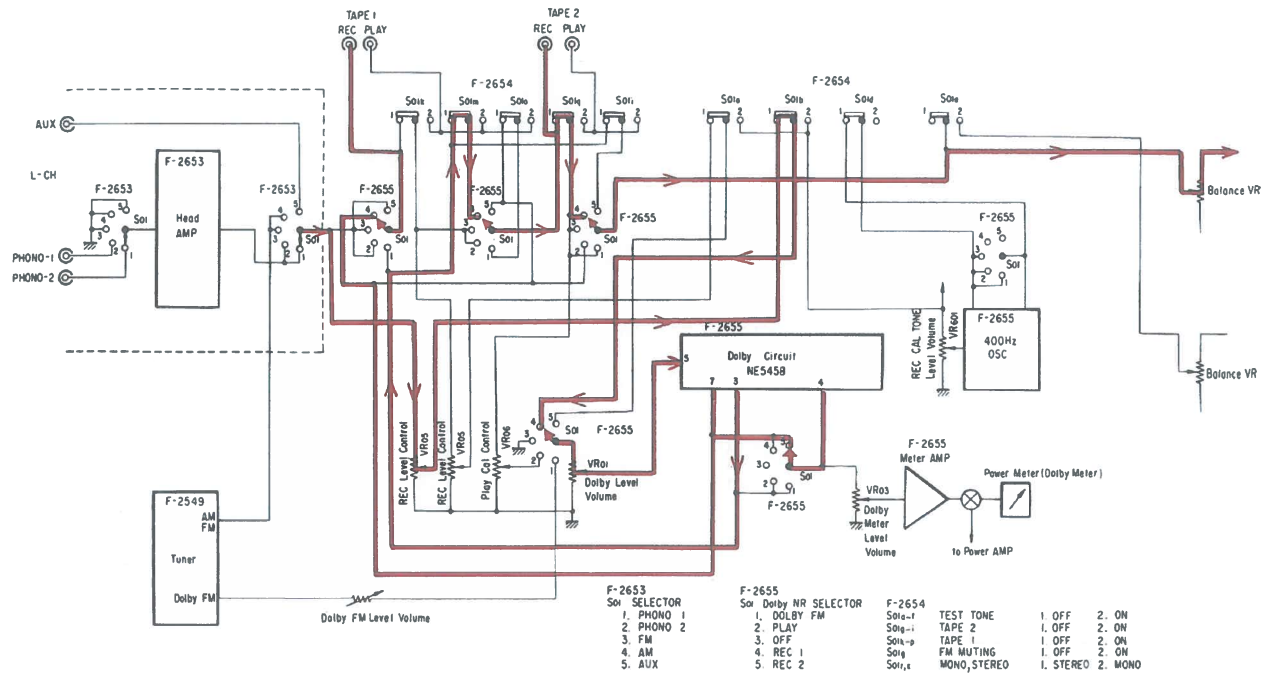
### 2-2. Tuner Section



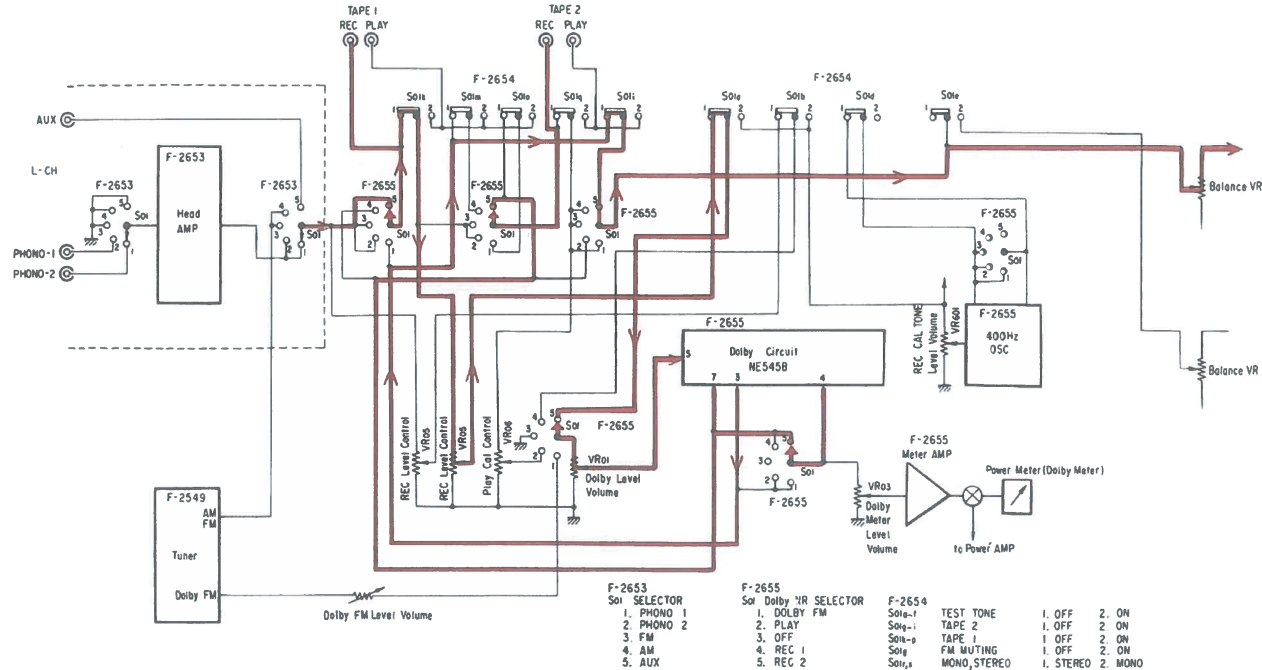




### 2-3-3. Rec (1) (Dolby NR Selector)



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



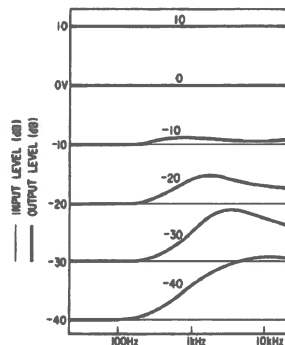
### 3. OPERATION OF DOLBY FM SYSTEM

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

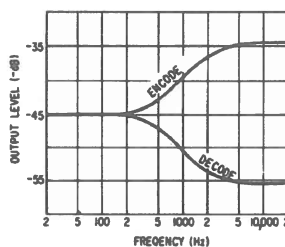
FM broadcasting system is originally able to produce a very high quality audio performance; however, FM stereophonic broadcasting system incurs a 20dB Signal-Noise ratio decrease. When Dolby B Type Noise Reduction system is used for a FM stereo, Signal-Noise ratio (S/N) is conspicuously improved and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

Fig. 3-1



Whole range output Frequency Response characteristics against input level.

Fig. 3-2



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 Volume .....Minimam  
3. Balance Volume.....Center  
4. Selector .....AUX  
5. Accessory Switch .....OFF  
6. REC Level Volume .....MAX  
7. Dolby Selector Switch .....REC 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

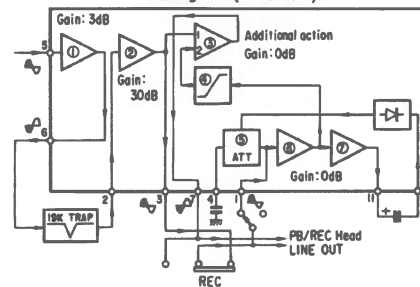
The S/N of the FM becomes worse when the frequency is high and the level is low. Because of this reason, the middle and high range of the low level signal is expanded by a FM station. Then the signal will be compressed proportionally along the expanded level by a receiving side. (See Fig. 1, 2)

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

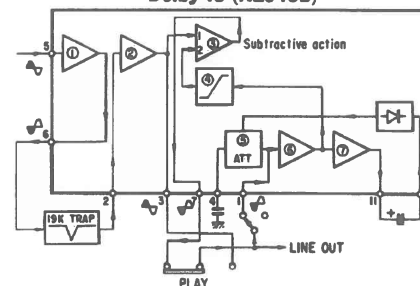
#### Complementary items

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

Fig. 3-3 REC Dolby IC (NE545B)



PLAY Dolby IC (NE545B)



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

- Note:** 1. Speaker Selector .....A  
2. Master Volume .....Minimum  
3. Balance Volume .....Center  
4. Accessory Switch .....OFF  
5. Dolby Selector Switch .....REC 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

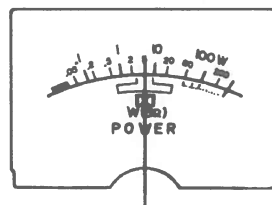
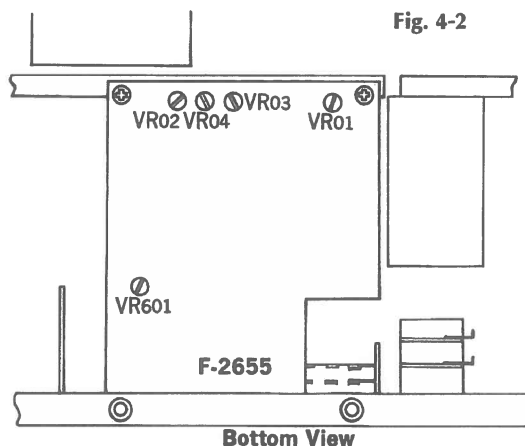


Fig. 4-2

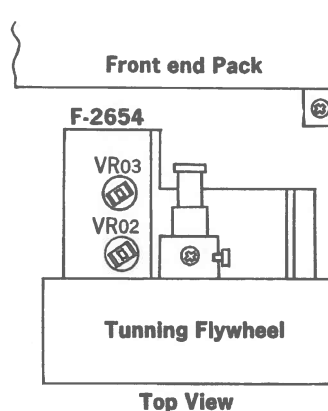


## 4-1-3. Dolby FM Volume Adjustment (See Fig. 4-3)

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

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

Fig. 4-3



## 4-2. Adjustment of Audio Section

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

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


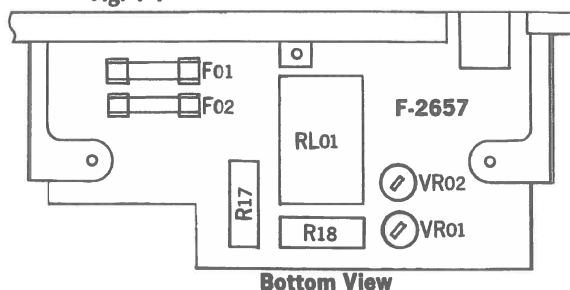
| STEP | MEASURE OUTPUT                            | LEVEL OUTPUT     | ADJUST         | ADJUST FOR  |
|------|---|------------------|----------------|---|
| L-CH | Speaker<br>Terminal L-CH<br>AC Volt Meter | 20V (50W)        | VR01<br>F-2657 | Meter Position 50W  |
| R-CH | Speaker<br>Terminal R-CH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

Fig. 4-4





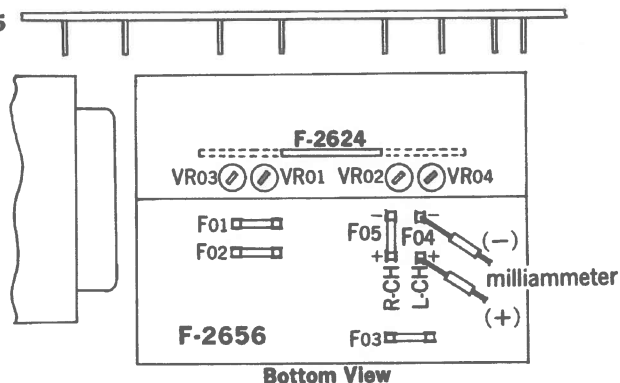
## 4-2-2. Driver Circuit Board Adjustment (See Fig 4-5, 4-6 page 8)

Note: 1. Master Volume.....Minimum

2. Before adjustment, run the unit for more than 4 minutes, then check and readjust necessary.

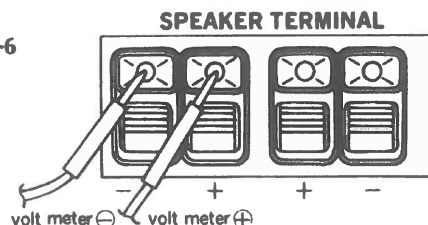
| STEP | SUBJECT                 | EQUIPMENT       | MEASURE OUTPUT              | ADJUST         | ADJUST FOR     | CONDITION   |
|------|-------------------------|-----------------|-----------------------------|----------------|----------------|---|
| 1.   | DC 0V<br>L-CH           | DC volt Meter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

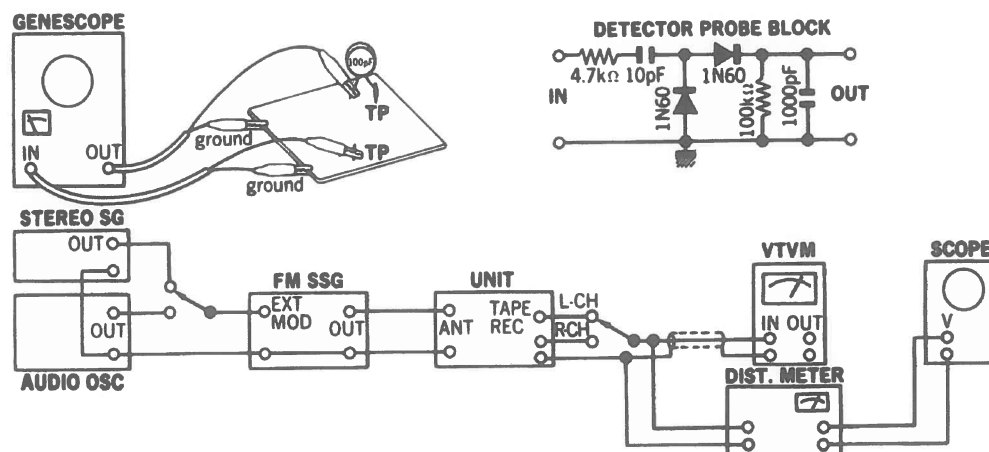
2. FM MUTING Switch .....OFF

Connection.....Connect the output of genescope to TP through 100pF ceramic capacitor

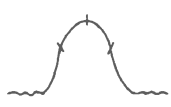



Output level of genescope.....After attenuator

3. Sweep width .....1.5~2cm/150kHz

Frequency band .....9.5~11.5MHz



## 1) FM IF Adjustment &amp; 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<br>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

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.

Distortion Meter .....Dist. Meter

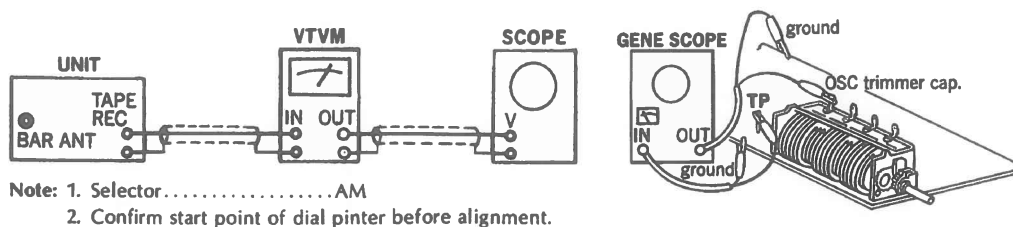
## Others

Clockwise .....CW.  
 Counterclockwise .....CCW.  
 Antenna .....ANT.  
 Modulation .....MOD.

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

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





| 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

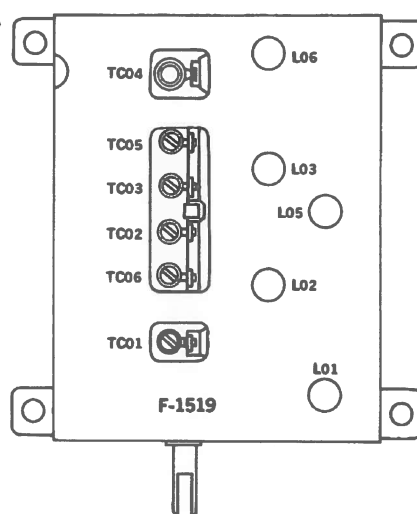
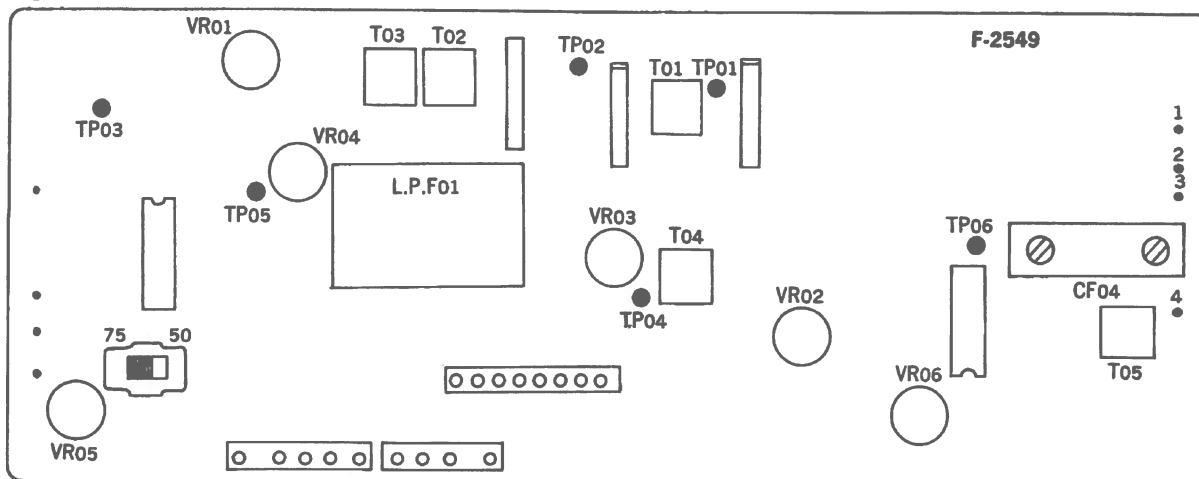


Fig. 4-9



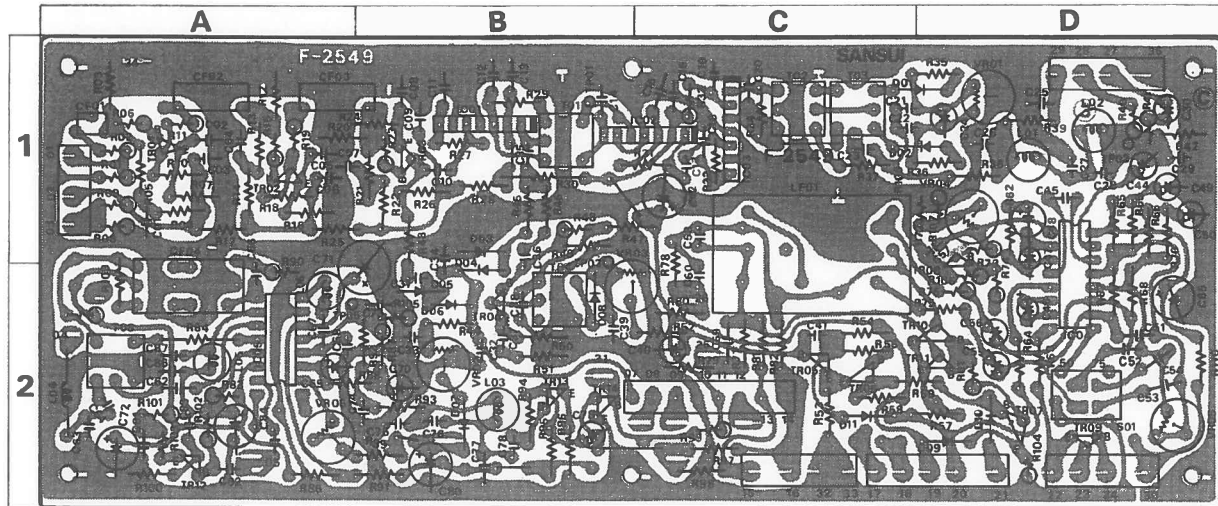
## 5. PARTS LOCATION AND PARTS LIST

### 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   | 35C738 (D)    | 1 A      | D08       | 0310330.1 | 1N60        | 2 B      | T01       | 4235860   |                     | 1 B      |
| TR02      | 0306113   | 25C738 (D)    | 1 A      | D09       | 0311160   | 152473D     | 2 D      | Te2       | 4235750   |                     | 1 C      |
| TR03      | 0306112.3 | 25C738 (C, D) | 1 B      |           | 0311180   | 151588      |          | T03       | 4235760   | FM IF Coil          | 1 C      |
| TR04      | 0306112.3 | 25C738 (C, D) | 2 B      | D10       | 0311160   | 152473D     | 2 D      | T04       | 4235940   |                     | 2 B      |
| TR05      | 0305731.2 | 25C711 (E, F) | 2 C      |           | 0311180   | 151588      |          | T05       | 4220550   |                     | 2 A      |
| TR06      | 0305731.2 | 25C711 (E, F) | 2 C      | D11       | 0311160   | 152473D     | 2 C      | CF01      | 0910150   |                     | 1 A      |
| TR07      | 0300281.2 | 25A628 (D, E) | 2 D      |           | 0311180   | 151588      |          | CF02      | 0910330   | Ceramic Filter      | 1 A      |
| TR08      | 0305731.2 | 25C711 (E, F) | 1 D      | C26       | 0620181   | 180pF       | 1 D      | CF03      | 0910330   |                     | 1 A      |
| TR09      | 0300220.1 | 25A562 (O, Y) | 2 D      | C27       | 0620331   | 330pF       | 1 D      | CF04      | 0910310   |                     | 2 A      |
| TR10, 11  | 0306390.1 | 25C1636-1, 2  | 2 D      | C28       | 0620101   | 100pF       | 1 D      | LF01      | 0910360   | Low Pass Filter     | 1, 2 C   |
| TR12      | 0300281   | 25A628 (D)    | 2 A      | C29       | 0620151   | 150pF       | 1 D      | VR01      | 1035150   | 22kΩ (B)            | 1 D      |
| TR13      | 0306091   | 25C1312R (G)  | 2 B      | C44       | 0573688   | 0.68μF      | 35V T.C. | VR02      | 1035170   | 47kΩ (B)            | 2 B      |
| TR14      | 0306390.1 | 25C1636-1, 2  | 2 B      | C45, 54   | 0620511   | 510pF       | 50V P.C. | VR03      | 1035170   | 47kΩ (B)            | 2 B, C   |
| IC01      | 0360120   | μPC555H       | 2 B      | C57       | 0629005   | 360pF       | 50V P.C. | VR04      | 1034250   | 4.7kΩ (B)           | 1 D      |
| IC02      | 0360120   | μPC555H       | 1 B, C   | C63       | 0669400   | 15pF        | 2 A      | VR05      | 1035210   | 220kΩ (B)           | 2 D      |
| IC03      | 0360120   | μPC555H       | 1 C      | C64       | 0620361   | 360pF       | 50V C.C. | VR06      | 1035110   | 4.7kΩ (B)           | 1 A      |
| IC04      | 0360320   | HA1196        | 1, 2 D   | C66       | 0661150   | 15pF        | 2 A      | S01       | 1110270   | Slide Switch        |          |
| IC05      | 0360150   | HA1151        | 2 A      | C67       | 0661150   | 15pF        | 2 A      | 0990010   |           | Ceramic Filter      |          |
| D01       | 0311060   | 1N60-P        | 1 C, D   | L01       | 4900250   |             | 1 D      | 2410570   |           | 5P Pin Ass'y Type D |          |
| D02       | 0311060   | 1N60-P        | 1 C, D   | L02       | 4900240   | Inductor    | 1 D      | 2410580   |           | 3P Pin Ass'y Type D |          |
| D03       | 0310330.1 | 1N60          | 1 B      | L03       | 4900220   |             | 2 B      | 2410590   |           | 4P Pin Ass'y Type D |          |
| D04       | 0310330.1 | 1N60          | 2 B      | L04       | 4290011   |             | 2 A      |           |           |                     |          |
| D05       | 0310330.1 | 1N60          | 2 B      | L05       | 4900110   | Inductor    | 2 A      |           |           |                     |          |
| D06       | 0310330.1 | 1N60          | 2 B      | L06       | 4900110   |             | 2 A      |           |           |                     |          |
| D07       | 0310330.1 | 1N60          | 2 B      |           |           |             |          |           |           |                     |          |

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

(Stock No. 7594301 MODEL 9090DB/990DB)

Conductor Side

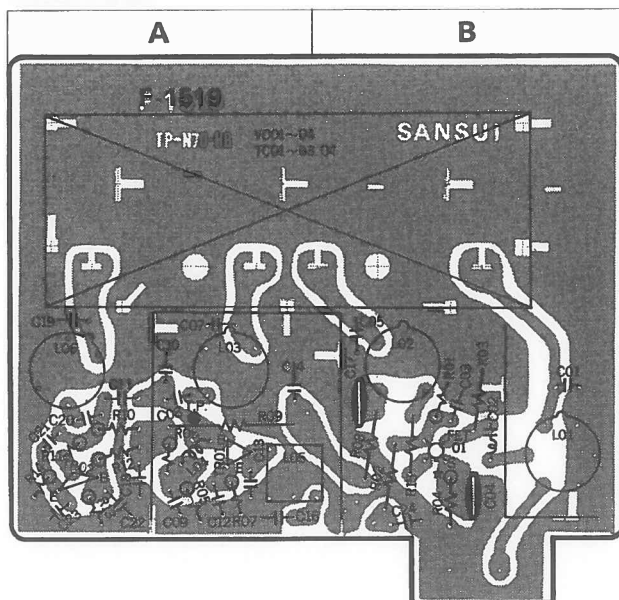


#### Parts List

| Parts No. | Stock No. | Description         |
|-----------|-----------|---------------------|
| R01       | 0191180   | 18Ω 1/4W Fuse R     |
| PL01-04   | 0420040   | 7V 320MA Pilot Lamp |

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

Conductor Side



#### Parts List

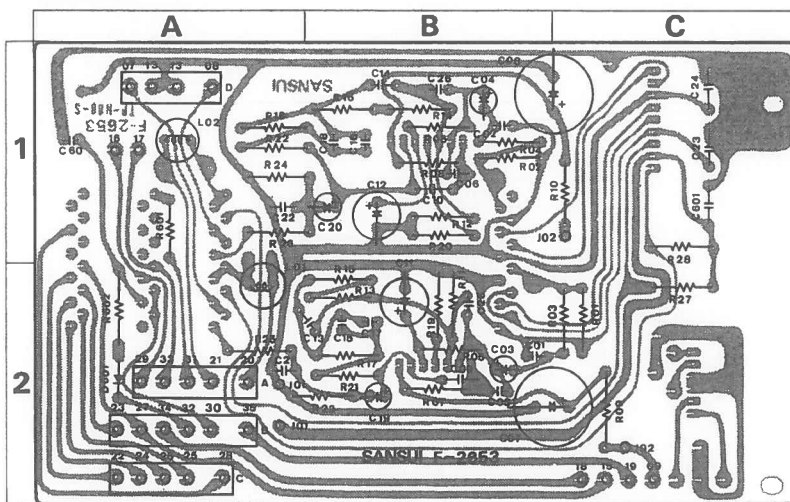
| Parts No. | Stock No. | Description    | Position   |
|-----------|-----------|----------------|------------|
| TR01      | 0305800.1 | 2SC1047 (A, B) | Transistor |
| TR02      | 0305790.1 | 2SC930 (C, D)  |            |
| FET01     | 0370131.2 | 3SK41 (K, L)   | FET        |
| L01       | 4200640   | Antenna Coil   | B          |
| L02       | 4210330   | RF Coil (1)    | B          |
| L03       | 4210220   | RF Coil (2)    | A          |

| Parts No. | Stock No. | Description               | Position |
|-----------|-----------|---------------------------|----------|
| L04       | 4290110   | Choke Coil                | A        |
| L05       | 4235910   | IF Coil                   | A, B     |
| L06       | 4220430   | OSC Coil                  | A        |
| VC01-04   | 1220130   | FM, AM Variable Capacitor | A, B     |
| TC01-03   |           |                           | A, B     |
| TC04      | 1230090   | FM OSC Trimmer            | A, B     |

| Parts No. | Stock No. | Description                   | Position |
|-----------|-----------|-------------------------------|----------|
| C01       | 0669342   | 5.6pF                         | 60V C.C. |
| 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                       | 60V C.C. |
| 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                       | 60V C.C. |
| C23       | 0661220   | 22pF                          |          |
| C24       | 0657223   | 0.022μF                       |          |
| R01       | 0106105   | 1MΩ 1/4W C.R.(E.I.R.)         | B        |
| R02       | 0113104   | 100kΩ 1/4W S.R.               | B        |
| R03       | 0113104   | 100kΩ                         | B        |
| R04       | 0106101   | 100Ω (3SK41(1)K)              | B        |
| R05       | 0106680   | 68Ω (3SK41(1)L)               | B        |
| R06       | 0106682   | 6.8kΩ 1/4W C.R.(E.I.R.)       | A        |
| R07       | 0106123   | 12kΩ                          | A        |
| R08       | 0106392   | 3.9kΩ                         | A        |
| R09       | 0113121   | 120Ω                          | B        |
| R10       | 0113271   | 270Ω 1/4W S.R.                | A        |
| R11       | 0106392   | 3.9kΩ                         | A        |
| R12       | 0106121   | 120Ω                          | A        |
| R13       | 0106682   | 6.8kΩ 1/4W C.R.               | A        |
| R14       | 0106222   | 2.2kΩ                         | A        |
| R15       | 0106182   | 1.8kΩ                         | A        |
|           | 0113680   | 68Ω 1/4W 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

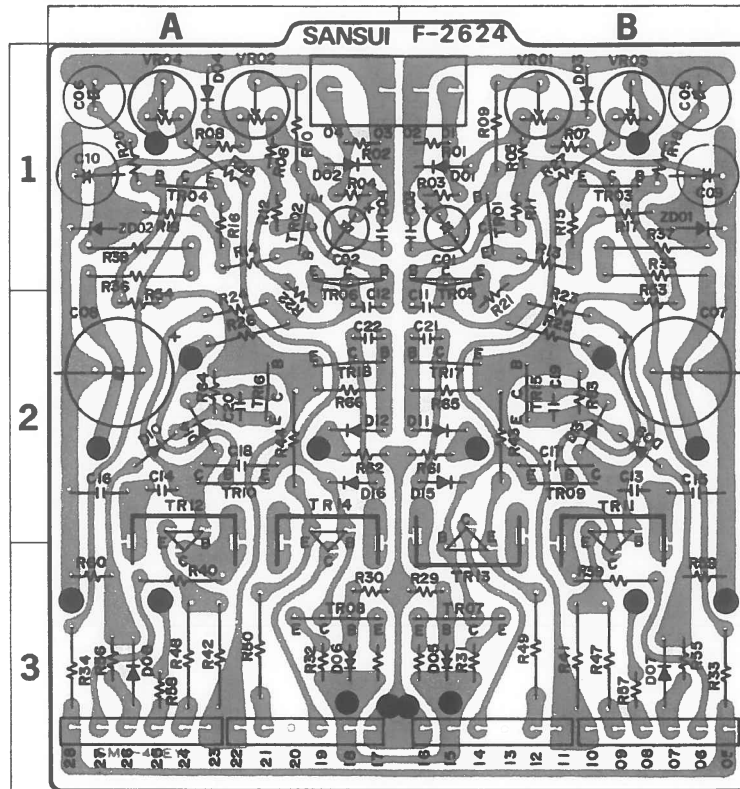
| Parts No. | Stock No.            | Description               | Position |
|-----------|----------------------|---------------------------|----------|
| IC01, 02  | 0360190              | BA312 IC                  |          |
| D001      | {0311160<br>0311180} | {1S2473D<br>1S1588} Diode | 2A       |
| C03, 04   | 0573339              | 3.3pF 35V T.C.            |          |
| 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 1/2W M.R.           | 2B, 1B   |
| R17, 18   | 0231563              | 56kΩ                      | 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       |          |



# 5-5. F-2624 Driver Circuit Board (Stock No. 7571431 MODEL 8080DB/890DB) (Stock No. 7571461 MODEL 9090DB/990DB)

Conductor Side

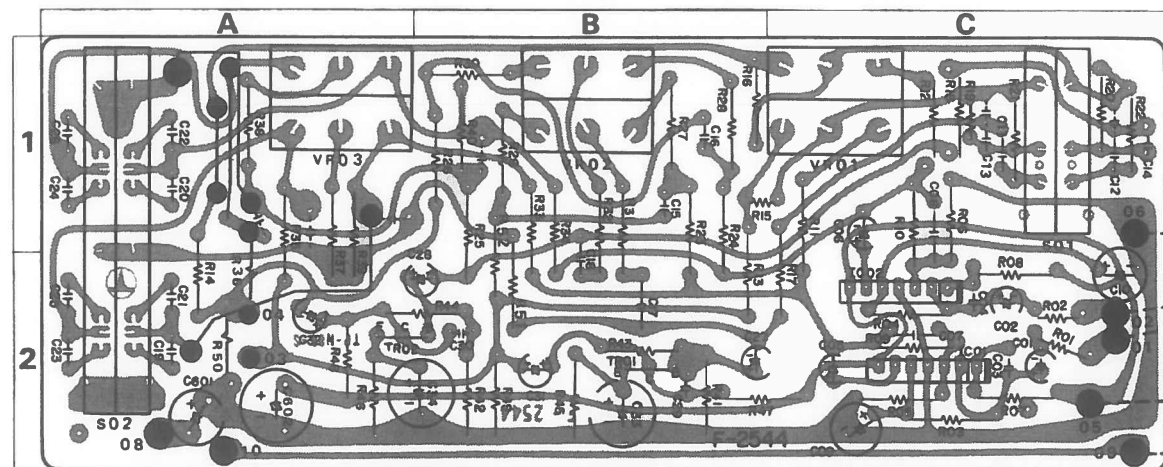
Parts List



| Parts No.                      | Stock No.  | Description               | Position |
|--------------------------------|------------|---------------------------|----------|
| TR01                           | 0304290, 1 | 2SC1400 (E, U)            | 1 B      |
| TR03                           | 0304290, 1 | 2SC1400 (E, U)            | 1 B      |
| TR05, 06                       | 0300791, 2 | 2SA899 (B, V)             | 1 B, 1 A |
| TR07, 08                       | 0304401, 2 | 2SC1904 (B, V)            | 3 B, 3 A |
| TR09, 10                       | 0305871, 2 | 2SC984 (B, C)             | 2 B, 2 A |
| TR15, 16                       | 0306951, 2 | 2SC945 (Q, P)             | 2 B, 2 A |
| TR17, 18                       | 0300510, 1 | 2SA733 (P, Q)             | 2 B, 2 A |
| D01, 02                        | 0311160    | 1S2473D                   | 1 B, 1 A |
| D03, 04                        | 0311180    | 1S1588                    | 1 B, 1 A |
| D05, 06                        | 0311160    | 1S2473D                   | 1 B, 1 A |
| D07, 08                        | 0311180    | 1S1588                    | 1 B, 1 A |
| D09, 10                        | 0311160    | 1S2473D                   | 2 B, 2 A |
| D11, 12                        | 0311180    | 1S1588                    | 2 B, 2 A |
| D13, 14                        | 0311160    | 1S2473D                   | 2 B, 2 A |
| D15, 16                        | 0311180    | 1S1588                    | 2 B, 2 A |
| ZD01, 02                       | 0316070    | EQA01-24R Zener Diode     | 1 B, 1 A |
| R35, 36                        | 0191181    | 180Ω 1/4W Fuse R.         | 3 B, 3 A |
| R37, 38                        | 0191479    | 4.7Ω 1/2W M.R.            | 1 B, 1 A |
| R39, 40                        | 0210392    | 3.9kΩ 1/2W M.R.           | 1 B, 1 A |
| R41, 42                        | 0192100    | 10Ω 1/2W M.R.             | 3 B, 3 A |
| R43, 44                        | 0192151    | 150Ω 1/2W Fuse R.         | 3 B, 3 A |
| R45, 46                        | 0192151    | 150Ω 1/2W Fuse R.         | 2 B, 2 A |
| R47, 48                        | 0192479    | 4.7Ω 1/2W Fuse R.         | 3 B, 3 A |
| R49, 50                        | 0192479    | 4.7Ω 1/2W Fuse R.         | 3 B, 3 A |
| VR01, 02                       | 1035350    | 4.7kΩ (B) Volume          | 1 B, 1 A |
| VR03, 04                       | 1035310    | 1kΩ (B) Volume            | 1 B, 1 A |
| 2410930                        |            | 4P Pin Ass'y Type E       |          |
| 2420520                        |            | 6P Connector Ass'y Type A |          |
| <b>MODEL 8080DB/890DB Only</b> |            |                           |          |
| TR11, 12                       | 0308431, 2 | 2SD381 M.L                | 2 B, 1 A |
| TR13, 14                       | 0303260, 1 | 2SB536 N.M                | 2 B, 1 A |
| <b>MODEL 9090DB/990DB Only</b> |            |                           |          |
| TR11, 12                       | 0308531, 2 | 2SD381 (2) M.L            | 2 B, 1 A |
| TR13, 14                       | 0303371, 2 | 2SB536 (2) M.L            | 2 B, 1 A |

# 5-6. F-2544 Tone Control Circuit Board (Stock No. 7561511 MODEL 8080DB/890DB) (Stock No. 7561551 MODEL 9090DB/990DB)

Conductor Side

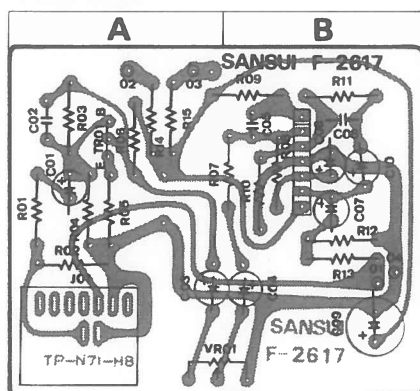


Parts List

| Parts No.                      | Stock No.  | Description                  | Position |
|--------------------------------|------------|------------------------------|----------|
| TR01, 02                       | 0304070-2  | 2SC1313 (F, G, H) Transistor | 2 C, 2 A |
| IC01, 02                       | 0360190    | 8A312 IC                     | 2 C      |
| C01, 02                        | 0573109    | 1.0μF 35V T.C.               | 2 C      |
| C7, 28                         | 0573229    | 2.2μF                        | 2 B      |
| VR01                           | 1010930, 1 | 100kΩ (B) Volume             | 1 C      |
| VR02                           | 1010930, 1 | 100kΩ (B) Volume             | 1 B      |
| <b>MODEL 9090DB/990DB Only</b> |            |                              |          |
| 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

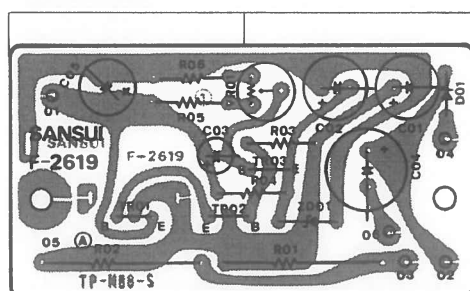


## Parts List

| Parts No.               | Stock No.  | Description                  | Position |
|-------------------------|------------|------------------------------|----------|
| TR01                    | 0306070-2  | 2SC1313 (F, G, H) Transistor | A        |
| IC01                    | 0360190    | 8A312 IC                     |          |
| C01                     | 0573687    | 0.048 $\mu$ F 25V T.C.       | A        |
| VR01                    | 1005290, 1 | 20k $\Omega$ Volume          | A, B     |
| J01                     | 2430240    | Mic Jack                     | A        |
| MODEL 9090DB/990DB Only |            |                              |          |
| C05                     | 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

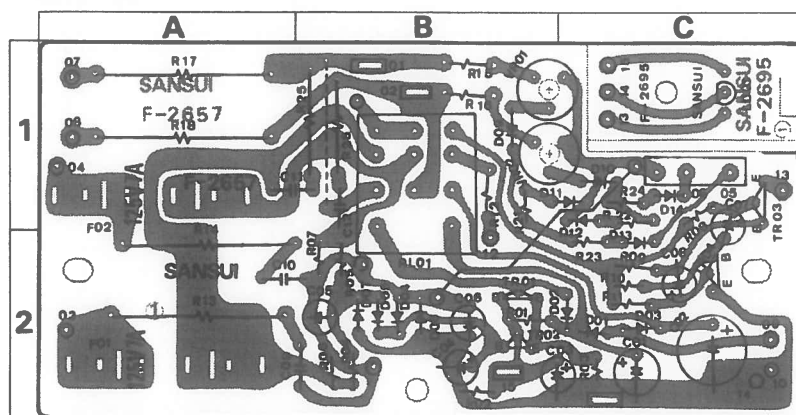


## Parts List

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



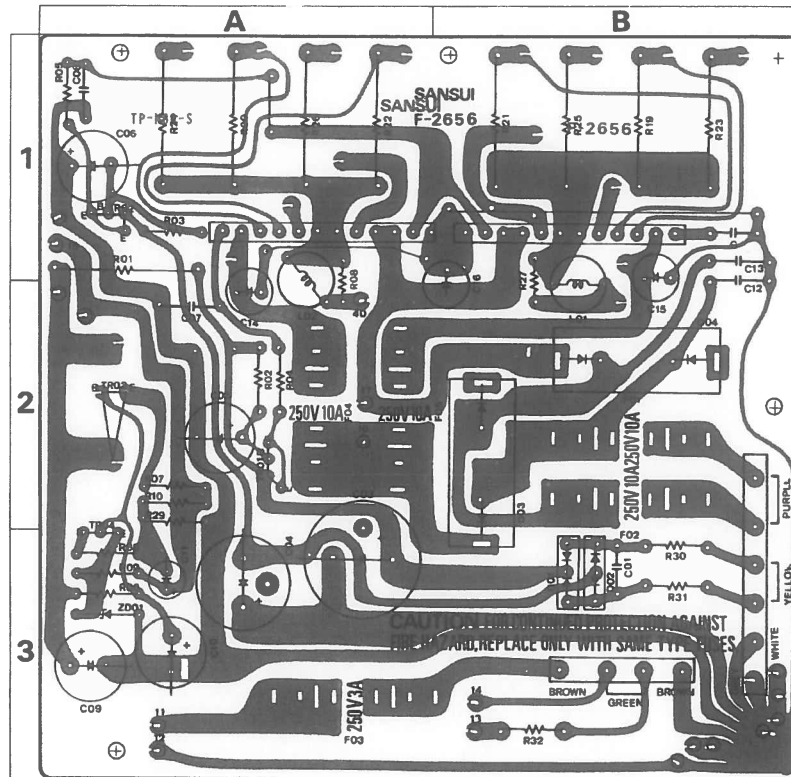
## Parts List

| Parts No. | Stock No.  | Description                          | Position |
|-----------|------------|--------------------------------------|----------|
| TR01      | 0305953    | 2SC945 (K) Transistor                | 2B       |
| TR02      | 0305951-3  | 2SC945 (Q, P, K)                     | 2B       |
| TR03, 04  | 0305952, 3 | 2SC945 (P, K)                        | 1C, 2C   |
| D01       | 0310340    | 10D1 Diode                           | 2C       |
| D02       | 0310340    | 10D1                                 | 2C       |
| D03       | 0310340    | 10D1                                 | 2C       |
| D04       | 0310330, 1 | 1N60                                 | 2B       |
| D05       | 0310330, 1 | 1N60                                 | 2B       |
| D06       | 0310330, 1 | 1N60                                 | 2B       |
| D07       | 0310330, 1 | 1N60                                 | 2B       |
| D09, 10   | 0310970    | 1N40P                                | 1B, 1C   |
|           | 0311060    | 1N60-P                               |          |
| D11, 12   | 0311160    | 1S2473D                              | 1C, 2C   |
|           | 0311180    | 1S1588                               |          |
| D13, 14   | 0310970    | 1N60P                                | 2C, 1C   |
|           | 0311060    | 1N60-P                               |          |
| R13, 14   | 0192479    | 4.7 $\Omega$ $\frac{1}{2}$ W Fuse R. | 2A       |
| R16, 16   | 0201101    | 100 $\Omega$ 1W M.R.                 | 1B       |
| R17, 18   | 0135221    | 220 $\Omega$ 5W Co.R.                | 1A       |
| R25, 26   | 0203100    | 10 $\Omega$ 3W M.R.                  | 1B       |
| RL01      | 1150390    | Relay                                | 1B       |
| VR01, 02  | 1035350    | 4.7k $\Omega$ (B) Volume             | 1B       |
| F01, 02   | 0432500    | 7A 125V Speaker Fuse                 | 2A, 1A   |

**5-10. F-2656 Power Supply Circuit Board** (Stock No. 7501911 MODEL/890DB)  
(Stock No. 7501981 MODEL/990DB)

Conductor Side

## Parts List



| Parts No. | Stock No.  | Description   | Position   |
|-----------|--|---|------------|
| TR01      | { 0306171. 2<br>0308320. 1<br>0300591. 2<br>0303340. 1 | 25C1509 (Q. R)<br>25D438 (D. E)<br>25A777 (Q. R)<br>25B560 (D. E) | 2 A<br>1 A |
| TR02      | { 0306351. 2<br>0308551. 2                             | 25C1024 (D. E)<br>25D315V10 (D. E)                                | 3 A        |
| TR03      | 0305930. 1   | 25C1211 (C. D)  | 3 B        |
| TR04      | 0310800  | 100C2   | 3 B        |
| D01       | 0310801  | 100C2R  | 3 B        |
| D02       | 0311310  | SS-5  | 2 B        |
| D03       | 0311320  | SS-5R   | 2 B        |
| D04       | 0315970  | EQA01-13R Zener Diode   | 3 A        |
| ZD01      | 0655103  | 10000 pF 500V C.C.  | 3 B        |
| C01       | 0549302  | 1000 pF 80V E.R.  | 3 A        |
| C02       | 0549301  | 470 pF  | 3 A        |
| C03       | 0655103  | 10000 pF 500V C.C.  | 2 A, 1 A   |
| C04       | 0655103  | 10000 pF  | 1 B        |
| C05       | 0135560  | 56Ω   | 1 A        |
| C06       | 0135338  | 0.33Ω 5 W Co.R.   | 1 B, 1 A   |
| C07       | 0135338  | 0.33Ω   | 1 B, 1 A   |
| C08       | 0103479  | 4.7Ω 1/2 W C.R.   | 1 B, 1 A   |
| C09       | 0192109  | 1.0Ω  | 3 B        |
| C10       | 0192109  | 1.0Ω  | 3 B        |
| C11       | 4290210  | Filter Coil   | 1, 2 A B   |
| C12       | 0432260  | 3A 250V AC Fuse   | 3 A        |
| F01       | 2410730  | 6P Pin Ass'y Type A   |            |
| F02       | 2410950  | 6P Pin Ass'y Type E   |            |
| F03       | 2420510  | 4P Connector Ass'y Type A   |            |

MODEL 8080DB/890DB Only

|         |         |                   |  |
|---------|---------|-------------------|--|
| F01, 02 | 0432500 | 7A 125V AC Fuse   |  |
| F04, 05 | 0432500 | 7A 125V Q.A. Fuse |  |

MODEL 9090DB/990DB Only

|         |         |                    |          |
|---------|---------|--------------------|----------|
| R23, 24 | 0135338 | 0.33Ω              | 1 B, 1 A |
| R25, 26 | 0135338 | 0.33Ω 5 W Co.R.    | 1 B, 1 A |
| F01, 02 | 0431320 | 10A 250V AC Fuse   |          |
| F04, 05 | 0431320 | 10A 250V Q.A. Fuse |          |

**5-11. F-2684 Connector Circuit Board (C)**

(Stock No. 7594491 MODEL 8080DB/890DB) (Stock No. 7594441 MODEL 9090DB/990DB)

## Parts List

| Parts No. | Stock No. | Description       |
|-----------|-----------|-------------------|
| 2411030   |           | 6P Mini Pin Ass'y |
| 2411150   |           | 6P Mini Pin Ass'y |

**5-12. F-2682 Connector Circuit Board (A)**

(Stock No. 7594471 MODEL 8080DB/890DB) (Stock No. 7594451 MODEL 9090DB/990DB)

## Parts List

| Parts No. | Stock No. | Description       |
|-----------|-----------|-------------------|
| 2411180   |           | 9P Mini Pin Ass'y |

**5-13. F-2683 Connector Circuit Board (B)**

(Stock No. 7594481 MODEL 8080DB/890DB) (Stock No. 7594461 MODEL 9090DB/990DB)

## Parts List

| Parts No. | Stock No. | Description                         |
|-----------|-----------|-------------------------------------|
| 2411150   |           | 6P Mini Pin Ass'y MODEL 8080DB only |

**5-14. F-2692 Connector Circuit Board**

(Stock No. 7594881 MODEL 8080DB/890DB) (Stock No. 7594871 MODEL 9090DB/990DB)

**5-15. F-2695 LED Ass'y Circuit Board**

(Stock No. 7594621 MODEL 8080DB/890DB) (Stock No. 7594611 MODEL 9090DB/990DB)

## Parts List

| Parts No. | Stock No. | Description  |
|-----------|-----------|--------------|
| LD01      | 0319040   | GL-40RGS LED |

**Abbreviations**

C.R. : Carbon Resistor  
S.R. : Solid Resistor  
Co.R. : Cement Resistor  
M.R. : Metallized Film Resistor  
F.R. : Fusing Resistor

N.I.R. : Non-Inflammable Resistor  
M.C. : Mylar Capacitor  
E.C. : Electrolytic Capacitor  
BP.E.C. : Bi-Polar Electrolytic Capacitor

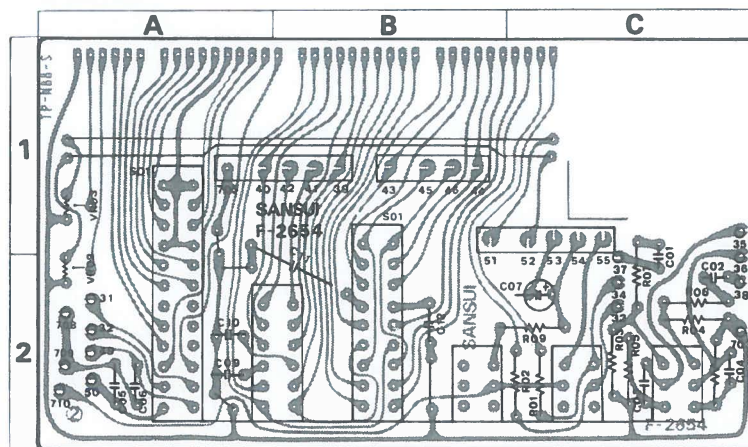
C.C. : Ceramic Capacitor  
M.I.C. : Mica Capacitor  
O.C. : Oil Capacitor  
P.C. : Polystyrene Capacitor  
T.C. : Tantalum Capacitor

## 5-16. F-2654 Push Switch Circuit Board

(Stock No. 7594181 MODEL 8080DB/890DB)

(Stock No. 7594271 MODEL 9090DB/990DB)

Conductor Side



Parts List

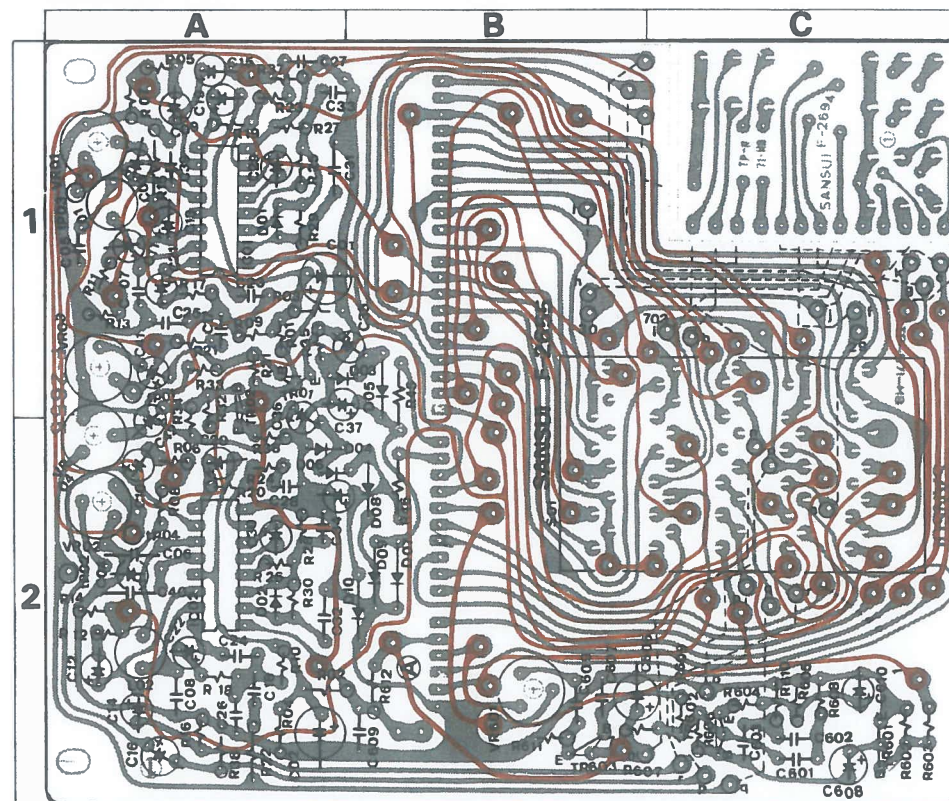
| Parts No. | Stock No. | Description         |
|-----------|-----------|---------------------|
| C01, 02   | 0620331   | 330pF 50V P.C.      |
| S01       | 1131380   | Push Switch         |
|           | 2410570   | 5P Pin Ass'y Type D |
|           | 2410590   | 4P Pin Ass'y Type D |
|           |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



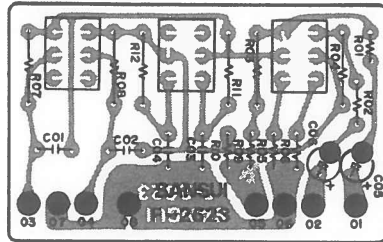
Parts List

| Parts No. | Stock No.  | Description   | Position | Parts No. | Stock No. | Description  | Position | Parts No. | Stock No. | Description   | Position |
|-----------|------------|---------------|----------|-----------|-----------|--------------|----------|-----------|-----------|---------------|----------|
| TR01, 02  | 0305951, 2 | 25C945 (Q, P) | 1 A      | D05       | 0310970   | 1N60P        | 1 B      | VR01, 02  | 1035190   | 100kΩ (B)     | 1 A, 2 A |
| TR01      | 0305951, 2 | 25C945 (Q, P) | 2 C      | D07, 08   | 0311060   | 1N60-P       | 2 B      | VR03, 04  | 1035170   | 47kΩ (B)      | 1 A, 2 A |
| TR02      | 0305951, 2 | 25C945 (Q, P) | 2 C      | D09, 10   | 0310970   | 1N60P        | 2 B      | VR05      | 1065051   | 47kΩ (B)      | 2 B      |
| TR03      | 0305951, 2 | 25C945 (Q, P) | 2 B      |           | 0311060   | 1N60-P       |          | VR06      | 1015221   | 47kΩ (B)      | 2 B      |
| IC01, 02  | 0360340    | NE545B IC     | 1 A, 2 A |           | 0310970   | 1N60P        |          | VR01      | 1035170   | 47kΩ (B)      | 2 B      |
| D01, 02   | 0310403    | 1N34A         | 1 A, 2 A | C03, 04   | 0573109   | 1μF 35V T.C. | 1 A, 2 A | S01       | 1105220   | Rotary Switch | 2 C      |
| D03       | 0310970    | 1N60P         | 1 A, 8   | L01, 02   | 4900260   | Inductor     | 1 A, 2 A |           |           |               |          |
|           | 0311060    | 1N60-P        |          |           |           |              |          |           |           |               |          |



## 5-18. F-2623 Filter Circuit Board (Stock No. 7594201 MODEL 8080DB/890DB) (Stock No. 7594291 MODEL 9090DB/990DB)

Conductor Side

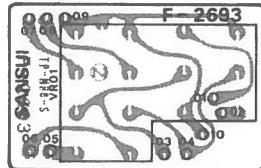


Parts List

| Parts No. | Stock No. | Description         |
|-----------|-----------|---------------------|
| S01       | 1131170   | Push Switch         |
|           | 2410590   | 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)

Conductor Side

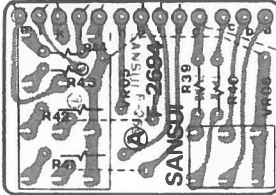


Parts List

| Parts No. | Stock No.  | Description                             |
|-----------|------------|---|
| VR01      | 1060320, 1 | 250k $\Omega$ M.N (8) $\times$ 2 Volume |

## 5-20. F-2694 Dolby Volume Circuit Board (Stock No. 7594861 MODEL 8080DB/890DB) (Stock No. 7594851 MODEL 9090DB/990DB)

Conductor Side

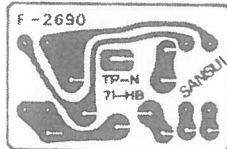


Parts List

| Parts No. | Stock No. | Description                         |
|-----------|-----------|-------------------------------------|
| VR05      | 1065040   | 500k $\Omega$ (8) $\times$ 4        |
| VR06      | 1016220   | 500k $\Omega$ (8) $\times$ 2 Volume |

## 5-21. F-2690 DIN Terminal Circuit Board (Stock No. 7594191 MODEL 8080DB/890DB) (Stock No. 7594281 MODEL 9090DB/990DB)

Conductor Side



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       |

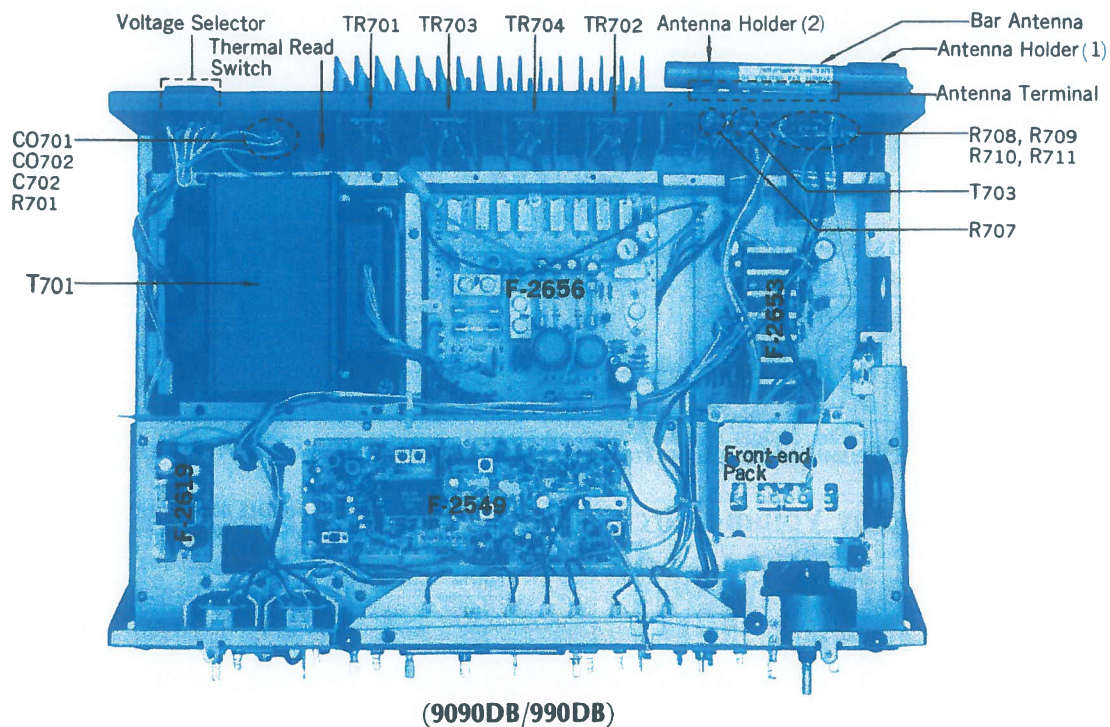
NOTE: Since stock number of female connectors (type B) with wires are not shown in each parts list of Complete circuit board, please refer to the above parts list when ordering the connector.

#### Pin Ass'y

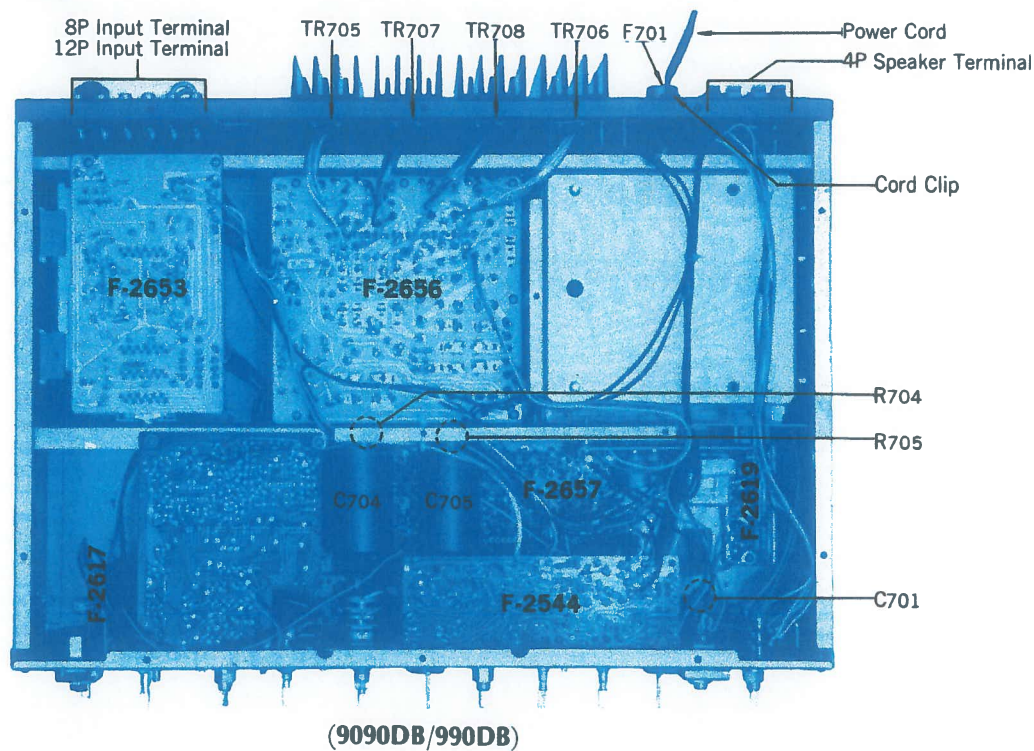
| Type A (3~10 pins) | Type B (3~10 pins) | Type C (3~10 pins) |
|--------------------|--------------------|--------------------|
|                    |                    |                    |
| Type D (2~6 pins)  | Type E (2~6 pins)  | Type F (2~6 pins)  |
|                    |                  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

## 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 $\mu$ F 250V M.C.         |          |
| C702       | 0659802   | 0.0047 $\mu$ F 150V C.C.        |          |
| R701       | 0114335   | 3.3M $\Omega$ 1/2W S.R.         |          |
| R704, 705  | 0104472   | 4.7k $\Omega$ 1W C.R.           |          |
| R707       | 0103122   | 1.2k $\Omega$ 1/2W C.R.         |          |
| T702       | 4200760   | Bar Antenna                     |          |
| T703       | 4290021   | 75 $\Omega$ /300 $\Omega$ 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)            |            |
|            | 0300520 | 2SA747 (R)             |            |
|            | or      | or                     |            |
|            | 0300521 | 2SA747 (O)             |            |
| C703, 704  | 0559518 | 12000 $\mu$ F 63V E.C. |            |
| T701       | 4002540 | Power Transformer      |            |
| F701       | 0432280 | 4A, 125V (AC 220~240V) |            |
|            | 0432500 | 7A, 125V (AC 100~120V) |            |

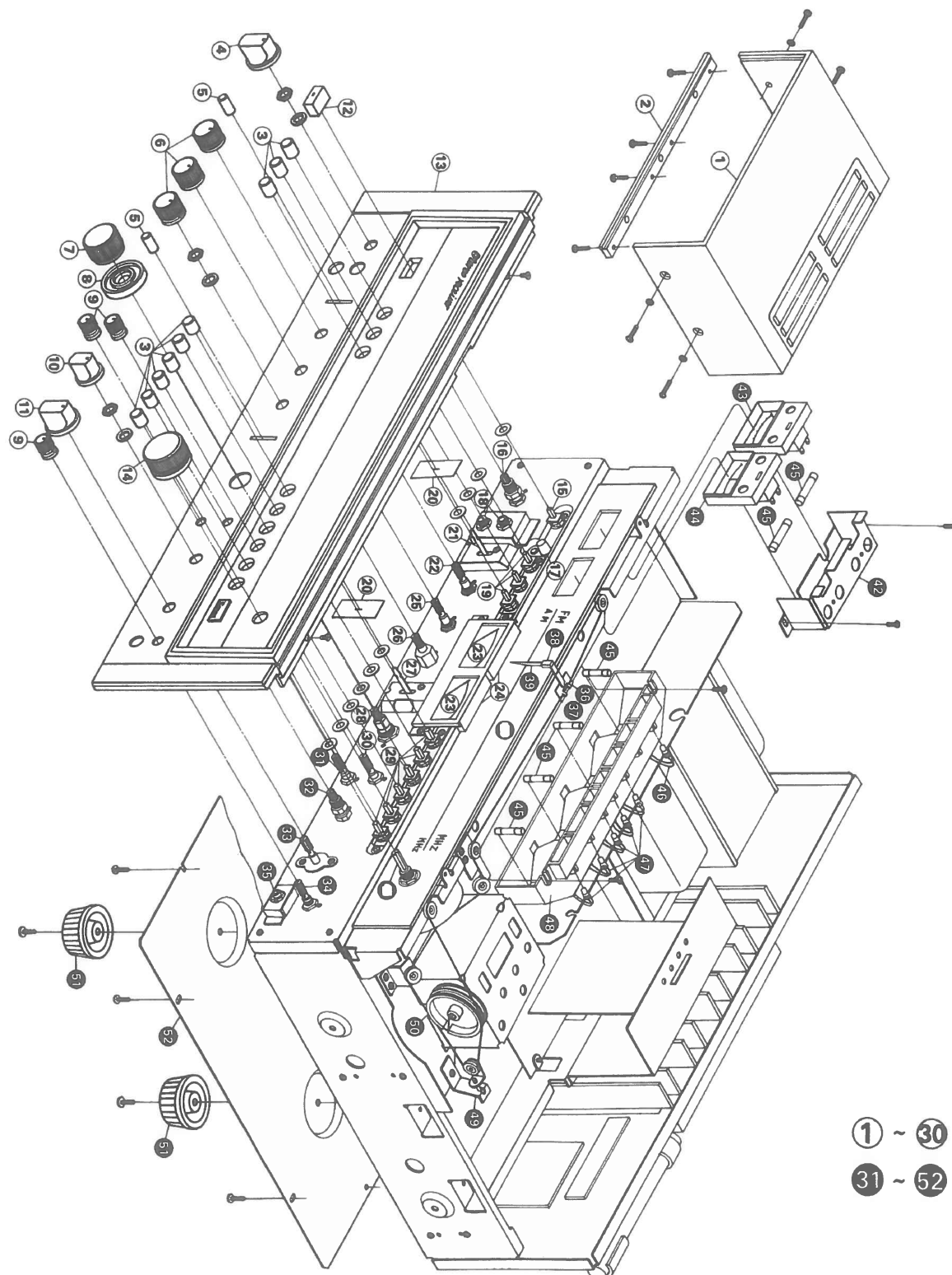
### 9090DB/990DBOnly

|            |         |                         |            |
|------------|---------|-------------------------|------------|
| TR701, 702 | 0308470 | 2SD424 (R)              | Transistor |
|            | or      | or                      |            |
| TR703, 704 | 0308471 | 2SD424 (O)              |            |
|            | 0303300 | 2SB554 (R)              |            |
|            | or      | or                      |            |
|            | 0303301 | 2SB554 (O)              |            |
| TR705, 706 | 0308470 | 2SD424 (R)              | Transistor |
|            | or      | or                      |            |
| TR707, 708 | 0308471 | 2SD424 (O)              |            |
|            | 0303300 | 2SB554 (R)              |            |
|            | or      | or                      |            |
|            | 0303301 | 2SB554 (O)              |            |
| C703, 704  | 0559844 | 12000 $\mu$ 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)

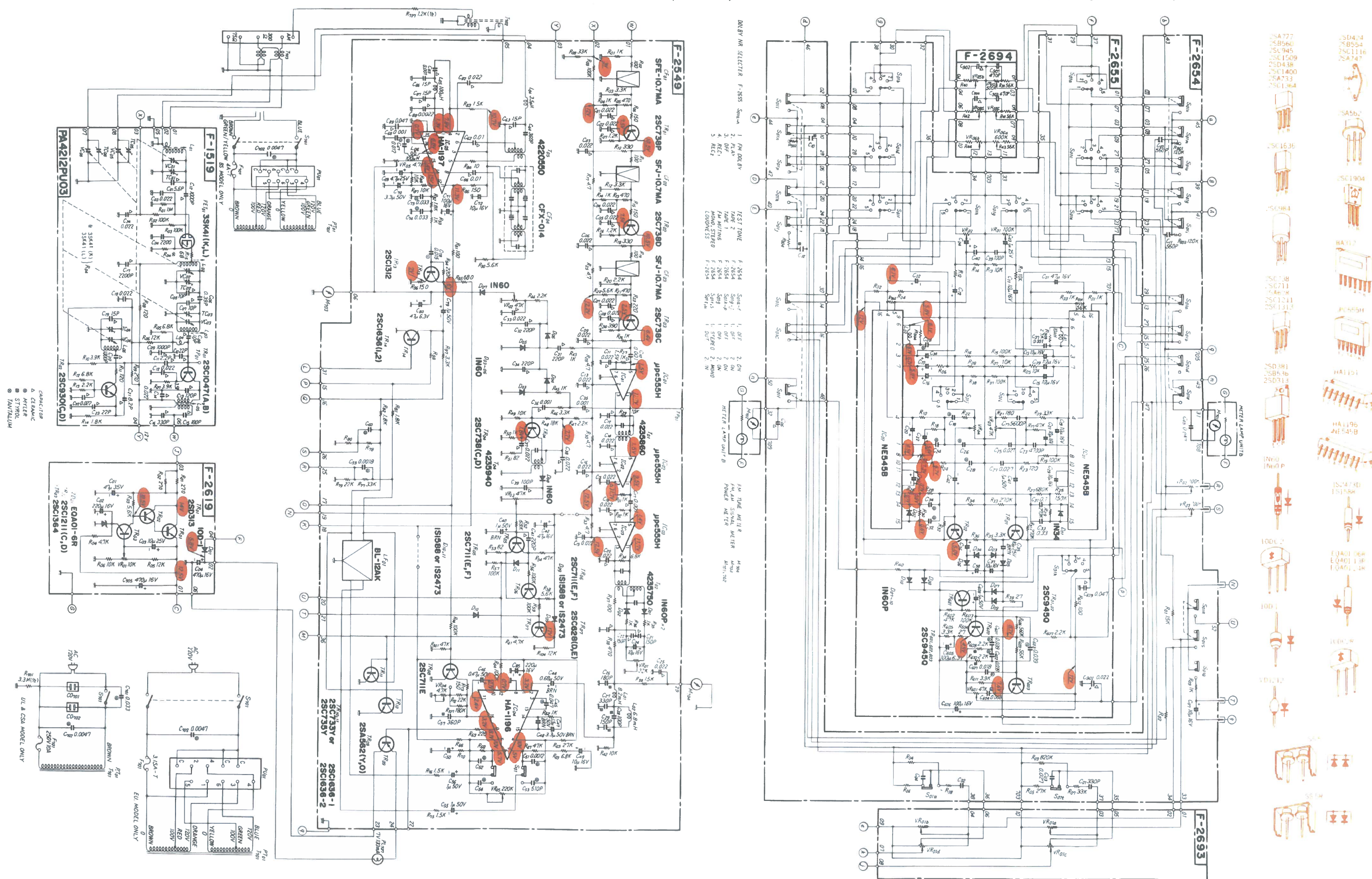
| Parts No. | Stock No.  | Description                                      |
|-----------|------------|--|
| 1         | 5726923    | Bonnet (8080DB/890DB)                            |
|           | 5726933    | Bonnet (9090DB/990DB)                            |
| 2         | 5996104    | Panel Sash (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, W1-6 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 $\Omega$ B                     |
| 23        | 4301010    | Power Meter                                      |
| 24        | 7726180    | Power Meter Circuit Board                        |
| 25        | 1010930, 1 | Midrange Volume, 100k $\Omega$ B                 |
| 26        | 1010930, 1 | Treble Volume, 100k $\Omega$ 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 $\Omega$ $\times$ 2 |
| 31        | 1065051    | REC LEVEL Control, 500k $\Omega$ B $\times$ 4    |
| 32        | 1105220    | Dolby NR Switch                                  |
| 34        | 1005290, 1 | MIC Volume, 20k $\Omega$                         |
| 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

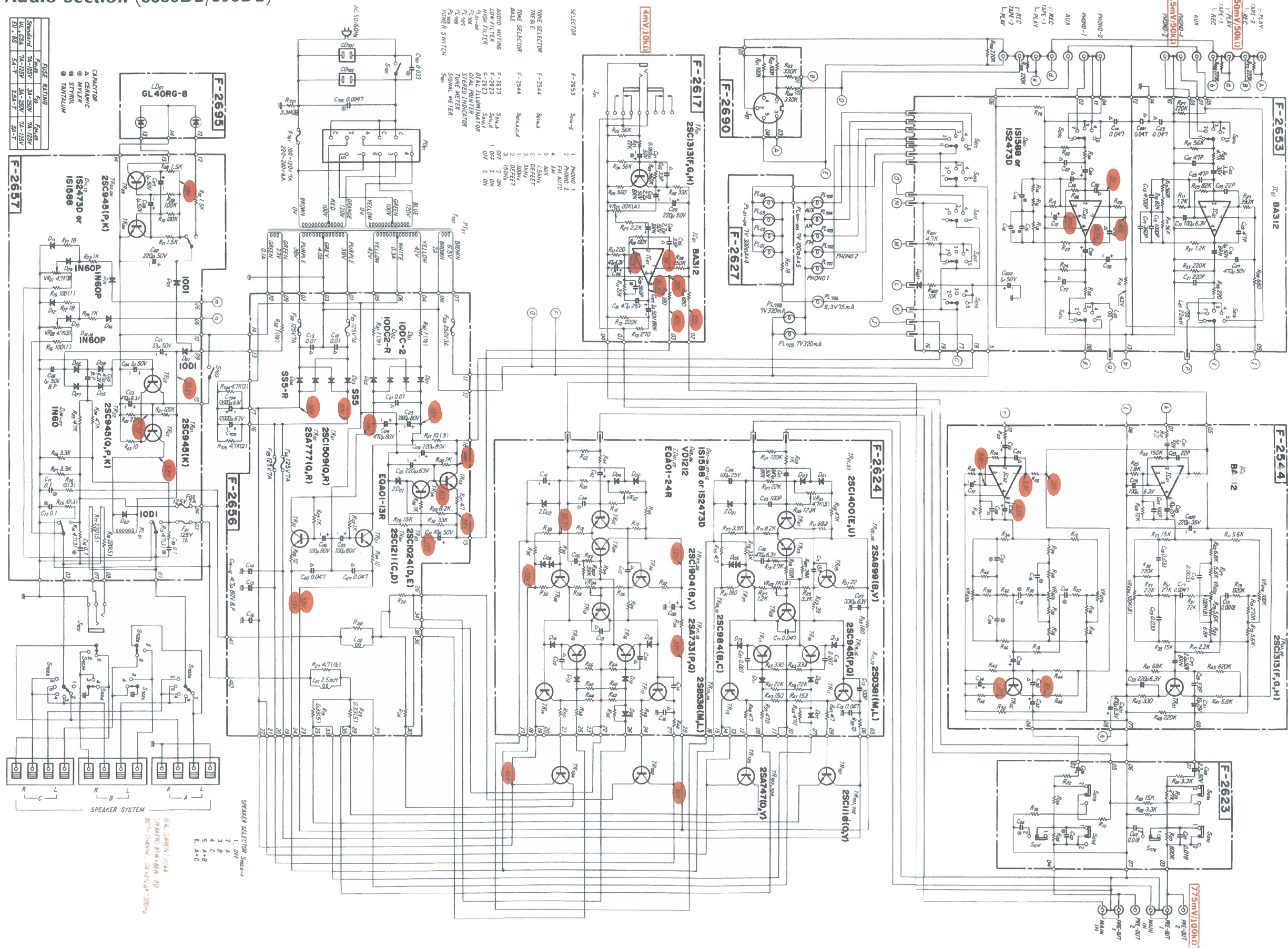
\* La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.  
 \* Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.  
 \* Design and specifications subject to change without notice for improvements.





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 \* Design and specifications subject to change without notice for improvements.

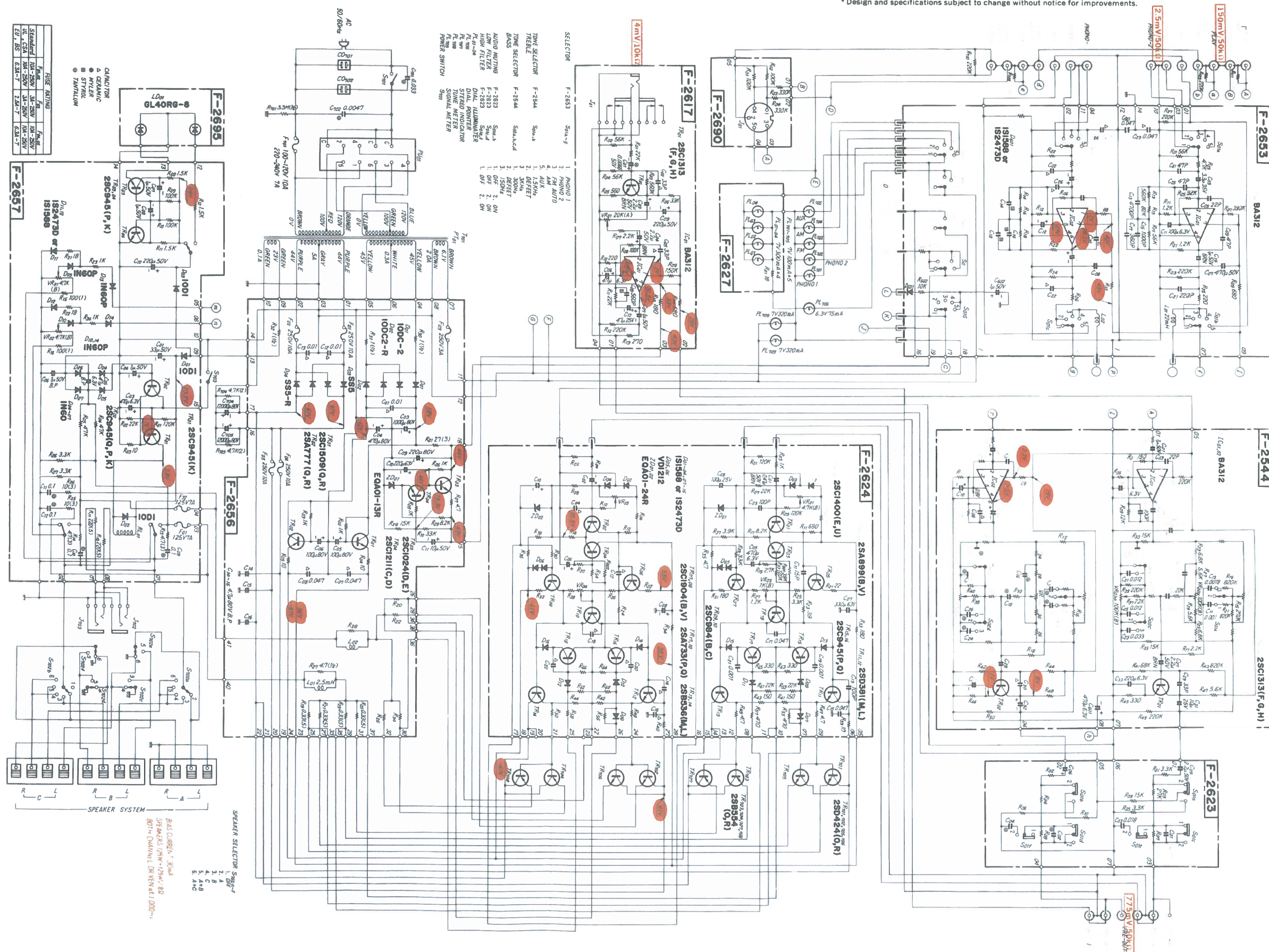
## 7-2. Audio Section (8080DB/890DB)





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

\* La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.  
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 \* Design and specifications subject to change without notice for improvements.



## 8. THREADING OF DIAL CORD

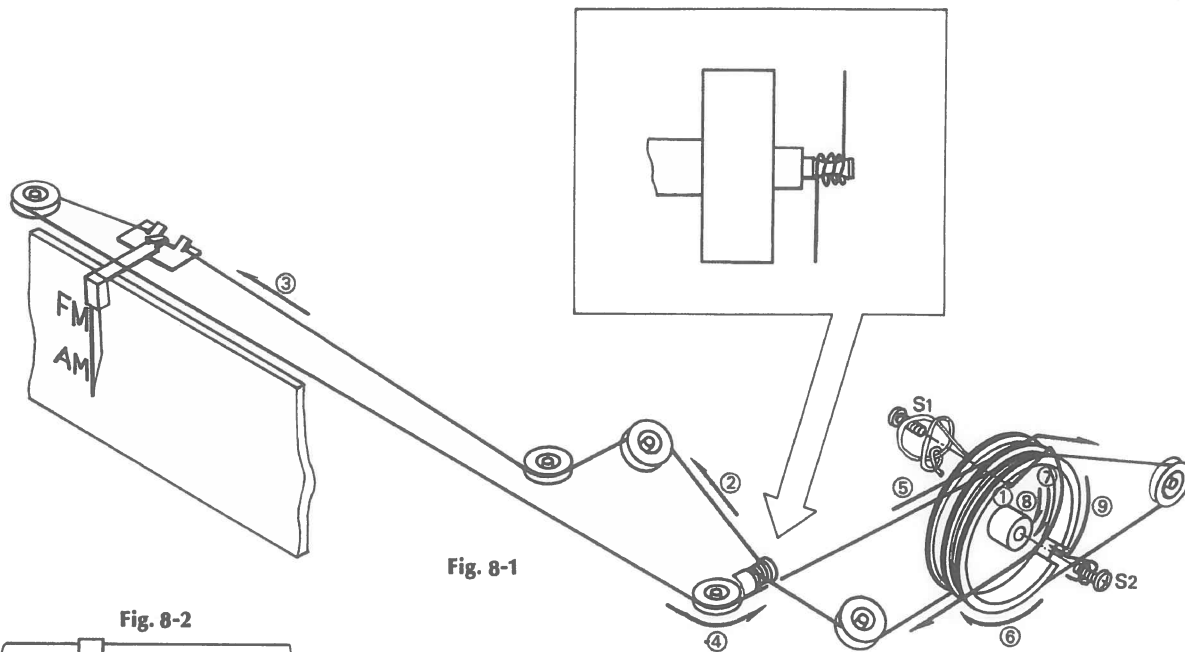
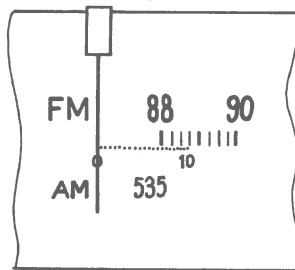


Fig. 8-1

Fig. 8-2



\*If a dial cord is cut off or slips, replace it by following procedures.  
As these units use 0.6mm $\phi$  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 (0.6mm $\phi$ ) |
| 6146670   | D44 Type Pulley           |

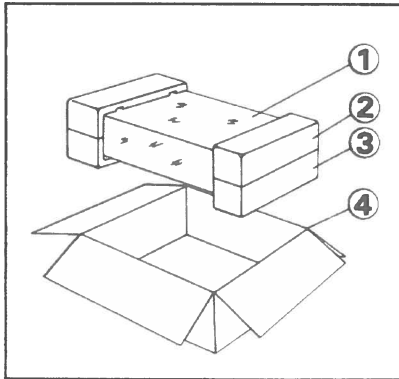


## 9. PACKING LIST

| Parts No. | Stock No. | Description               |
|-----------|-----------|---------------------------|
| 1         | 9116271   | Vinyl Cover               |
|           | 9126070   | Poryethylene Sheet        |
| 2         | 9027940   | Stylofoam Packing (Upper) |
| 3         | 9027930   | Stylofoam Packing (Lower) |
| 4         | 9009260   | Carton Case ( 8080DB)     |
|           | 9009270   | Carton Case ( 9090DB)     |
|           | 9009380   | Carton Case (890DB)       |
|           | 9009370   | Carton Case (990DB)       |
|           | 5996080   | 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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