

Service Manual

Radio
RF-B600/©

FM-LW-MW-SW 4-BAND PORTABLE RADIO



■ SPECIFICATIONS

FM

Frequency Range: 87.5~108 MHz
 IF: 10.7 MHz
 Sensitivity: 2.5 μ V/75 Ω (-3dB, Limit Sens)
 2.5 μ V/75 Ω (S/N 26dB)

Image Interference Ratio: 30dB (at 98 MHz)
 Two Signal Selectivity: 70dB (\pm 400kHz)

LW

Frequency Range: 150~420kHz
 IF: 450kHz
 Sensitivity: S/N 6dB; 70 μ V/m (at 280kHz)
 S/N 26dB; 600 μ V/m (at 280kHz)
 Selectivity: WIDE; \pm 3.5kHz (-6dB)
 \pm 7kHz (-60dB)
 NARROW; \pm 1.5kHz (-6dB)
 \pm 4kHz (-60dB)

Image Interference Ratio: 35dB (at 280kHz)

MW

Frequency Range: 520~1610kHz
 IF: 450kHz
 Sensitivity: S/N 6dB; 35 μ V/m (at 1,000kHz)
 S/N 26dB; 400 μ V (at 1,000kHz)
 Selectivity: WIDE; \pm 3.5kHz (-6dB)
 \pm 7kHz (-60dB)
 NARROW; \pm 1.5kHz (-6dB)
 \pm 4kHz (-60dB)

Image Interference Ratio: 40dB (at 1,000kHz)

SW

Type: Double Superheterodyne
 with PLL Synthesizer
 Frequency Range: 1.6110~29.9999 MHz
 IF: 1st; 39.9~40.0 MHz
 2nd; 450 kHz
 Sensitivity (400Hz, 30%
 Modulation 50mW): S/N 6dB; 1.2 μ V (50 Ω) (at 6MHz)
 S/N 26dB; 10 μ V (50 Ω) (at 6MHz)

Selectivity: WIDE; \pm 3.5kHz (-6dB)
 \pm 7kHz (-60dB)
 NARROW; \pm 1.5kHz (-6dB)
 \pm 4kHz (-60dB)

Image Interference Ratio: 50dB (at 6MHz)
 Frequency Stability: Within 50Hz during any 60 minutes
 after warm-up time

General

Speaker: 9cm (3 $\frac{1}{2}$ ") PM dynamic speaker
 Power Source: AC; 110~115/115~127/200~220/
 230~250V, 50/60Hz
 Battery: 12V (eight "D", UM-1 size
 batteries...for radio)
 4.5V (three "AA", UM-3
 size batteries...for
 memory back-up)
 Car battery; use only car
 adaptor RP-952

Power consumption; 16W
 Jacks: DC IN
 AC IN
 STAND BY ϕ 3.5
 REC OUT ϕ 3.5, 2.5k Ω
 EP/EXT SP ϕ 3.5, 8 Ω
 PHONES ϕ 6, 8 Ω
 EXT. ANT: LW/MW/SW ANT (M-Type Connector)
 (50~75 Ω)

FM ANT (75 Ω)
 SW ANT (HIGH IMP)
 LW/MW/SW ANT (LOW IMP)
 376mm(W) \times 122mm(H) \times 291mm(D)
 (14 $\frac{13}{16}$ " \times 4 $\frac{13}{16}$ " \times 11 $\frac{1}{2}$ ")
 Weight: 4.6kg (10 lbs 2.3 oz) without
 batteries

Specifications are subject to change without notice.
 Weights and dimensions shown are approximate.
 (Les poids et dimensions mentionnes sont approximatifs.)

Panasonic

Matsushita Engineering and
 Service Company
 50 Meadowland Parkway,
 Secaucus, New Jersey 07094

Panasonic Hawaii Inc.
 91-238 Kauhū St. Ewa Beach
 P.O. Box 774
 Honolulu, Hawaii 96808-0774

Matsushita Electric
 of Canada Limited
 5770 Ambler Drive, Mississauga,
 Ontario, L4W 2T3

Panasonic Sales Company,
 Division of Matsushita Electric
 of Puerto Rico, Inc.
 Ave. 65 De Infanteria, KM 9.7
 Victoria Industrial Park
 Carolina, Puerto Rico 00630

SAFETY PRECAUTIONS (For U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

INSULATION RESISTANCE TEST (For U.S.A.)

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads, antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between $3M\Omega$ and $5.2M\Omega$ to all exposed parts*. (Fig. 1) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. 2)

*Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.

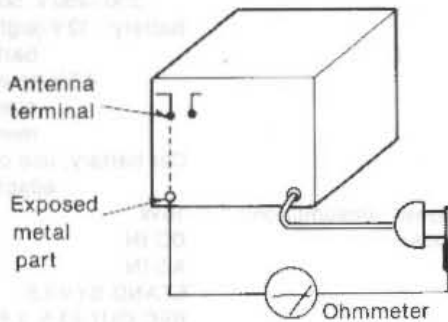


Fig. 1

Resistance = $3M\Omega$ — $5.2M\Omega$

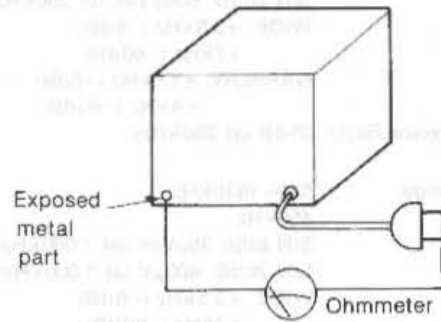


Fig. 2

Resistance = Approx ∞

4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

LOCATION OF CONTROLS AND COMPONENTS

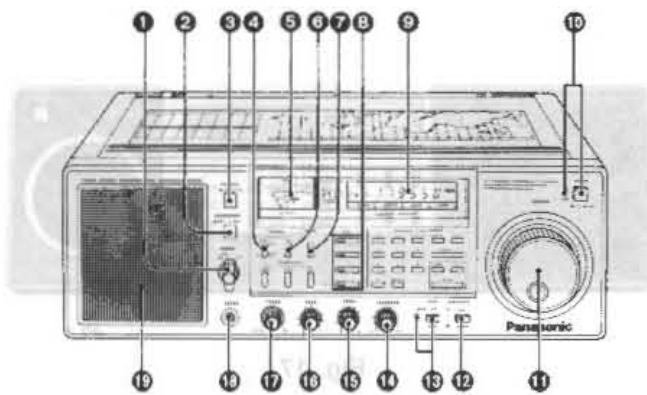


Fig. 3

1 AM Mode Selector (AM MODE)

This is used for selecting between the LSB/CW, USB/CW, and AM modes.

2 AM Band Width Selector (BAND WIDTH)

This function is used when receiving AM (LW, MW, SW) broadcasts, and normally is set in the "WIDE" position. When frequencies are very close together and signal mixing occurs, set to the "NARROW" position. When receiving LSB/CW or USB/CW broadcast, it is automatically set to the "NARROW" position.

3 AM ANL (Automatic Noise Limiter) Switch (AM ANL)

When receiving AM (LW, MW, SW) broadcasts, this switch is used to eliminate unwanted noise caused by automobile ignitions, etc.

4 Indicator Selector (SELECTOR)

This is used to select between the battery check, tuning, and signal strength indicator functions.

BATT: In this position, the meter indicates the battery consumption level for radio operation.

TUNING/SIGNAL: In this position, the meter indicates the frequency tuning accuracy and the signal strength.

5 Battery Check/Tuning/Signal Indicator (INDICATOR)

This indicates battery consumption level, tuning accuracy, and signal strength.

6 Indicator Light Switch (LIGHT)

When depressed to the "ON" position, meter illumination is turned on. Use this function at night when the meters are hard to read. When not in use, depress it to the "OFF" position.

7 Display Switch (DISPLAY)

When depressed to the "ON" position, the digital frequency display will appear. Depress it to "OFF" position to save the battery life.

8 Band Select Keys/Indicators (BAND)

These keys are used for selecting the desired band. When each key is pressed, its corresponding indicator will light.

9 Digital Frequency Display (DIGITAL FREQUENCY DISPLAY)

This display shows the frequency and the number of the memory channel.

10 Power Switch/Indicator (POWER)

When depressed to the "ON" position, the indicator lights, and power is supplied to the unit.

Always set the switch to the "OFF" position after use.

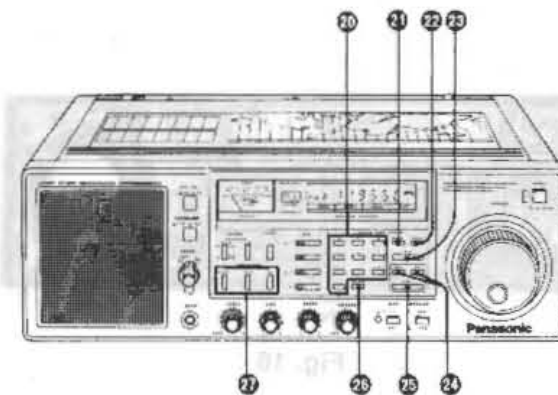


Fig. 4

11 Tuning Control (TUNING)

This control dial is used for Manual Tuning.

12 Fast/Slow Tuning Speed Selector (TUNING SPEED)

This is used in the following way to select the tuning steps or increments:

| Band | FM | LW/MW | SW |
|----------|---------|--------|--------|
| Position | | | |
| FAST | 100 kHz | 10 kHz | 1 kHz |
| SLOW | 50 kHz | 1 kHz | 100 Hz |

(This function does not operate during SW Zone Auto Tuning)

13 Tuning Lock Switch/Indicator (LOCK)

Usually set this switch to the "OFF" position. When set to the "ON" position, the indicator lights, the frequency presently being received will be locked and can not be drifted accidentally.

14 AM RF Gain Control (AM RF GAIN)

Normally, it is set in the "DX" position. When signals are weak and accompanied by distortion, or when signal mixing occurs, turn the control toward the "LOCAL" direction, and adjust to the position for optimum listening.

15 Treble Control (TREBLE)

16 Bass Control (BASS)

17 Volume Control (VOLUME)

18 Headphone Jack (PHONES)

Avoid listening to sound at high levels for prolonged periods. This may injure your ears.

19 Built-in Speaker

9cm (3 1/2"), 8Ω

20 Key (Number 1-9 are used for memory

and 0 for frequencies)

These keys are pressed to enter the frequency of a desired station, or to enter the memory channels.

21 Memory Key (MEMORY)

This key is pressed first when entering the frequency number of a desired station into the memory channel.

22 Direct Key (DIRECT)

This key is pressed before pressing in the frequency number of your desired station. Also, if you make a mistake when pressing the Number Keys, this key can be pressed to cancel the mistaken selections.

23 Enter Key (ENTER)

After entering the frequency number of your desired station, this key is pressed to begin receiving the broadcast of the station.

24 Tuning Keys (DOWN, UP)

These keys are pressed when performing SW Zone Auto Tuning.

25 Stop Key (STOP)

This key is pressed to stop the Memory Scan Tuning, Seek Tuning or Memory Scan Tuning.

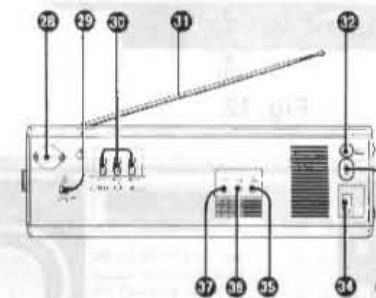


Fig. 5

26 SW Zone Auto Tuning Selector (SW ZONE AUTO TUNING)

When receiving short-wave broadcasts, these keys are used to tune up or down in 5 kHz increments within a ±150 kHz zone around a selected central frequency.

"MANUAL": This allows you to perform tuning at every 5 kHz within the zone by one touch of the Tuning Keys.

"SCAN": When one of the Tuning Keys is pressed once, the unit will scan for signals within the selected zone if any, playing each station for about 3 seconds before moving automatically to the next station in the zone. To stop this operation, press the Stop Key.

"SEEK": When one of the Tuning Keys is pressed once, the unit will receive signals within the selected zone if any, and stop the Auto Tuning Function.

To Stop the operation before receiving the signals, press the Stop Key.

27 AM Low Impedance External Antenna Terminal (LW/MW/SW ANT 50-75Ω)

This is used for switching between the short-wave built-in and outdoor antennas, and for selecting HIGH or LOW impedance. When set to "LOW IMP", the telescopic antenna connection will be disconnected.

28 External Antenna Terminals (LW/MW/SW ANT · SW ANT · FM ANT)

When reception is difficult with the built-in antenna alone, an optional outdoor antenna can be connected to these terminals.

29 Telescopic Antenna

30 DC Input Jack (DC IN 13.2 V)

This jack is used when connecting a car adaptor (use only RP-952) for use with an automobile battery (DC 12 V).

31 AC Socket (AC IN ~)

The accessory AC power cord is connected here when using the unit with household (AC 120 V) current.

32 Decimal Point/Memory Scan Key (·/M-SCAN)

This key is pressed for entering the decimal fraction portion of a frequency number and for playing back the memory channels.

When this key is pressed, the stations previously memorized in the memory channels will be played back for about 3 seconds each, moving in order from one channel frequency to the next (1CH → 2CH... 9CH → 1CH → 2CH...). To cancel this operation, press either the Stop Key or one of the Memory Channel Keys.

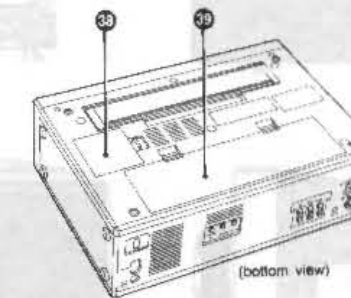


Fig. 6

33 Voltage Selector (VOLTAGE SELECTOR)

34 External Speaker/Earphone Jack φ3.5

{ > } IMP 8Ω ONLY

When an optional external speaker or earphone is connected here, the built-in speaker is disconnected, allowing you to listen from the external speaker or earphone.

When connecting the Headphones, the earphone connected to this jack is automatically disconnected.

Adjust the volume to lower level when using an earphone.

35 Recording Output Jack (REC OUT) 2.5kΩ φ3.5

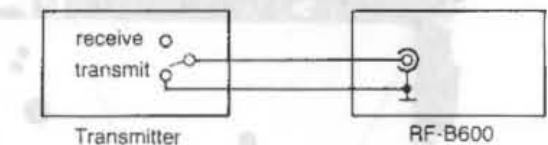
If a tape recorder is connected to this jack, you can record radio broadcasts while listening to them at the same time. Depending on the kind of input jack on your tape recorder, the connection cord required may differ.

Note:

The output level during recording is fixed regardless of the position of this unit's Volume Control.

36 Stand-by Jack (STAND BY) φ3.5

When using the unit as a receiver of an amateur station by connecting the stand by jack of a transmitter to this jack, radio operation is automatically muted during reception.



37 Battery Case (For Memory Back-up)

3 "AA" size batteries are inserted here.

38 Battery Compartment (For Radio Power)

8 "D" size (Panasonic UM-1 or equivalent) batteries are inserted here.

39 Carrying Handle

40 Stand

For easy operation, set the unit on the table by the stand.

DISASSEMBLY INSTRUCTIONS

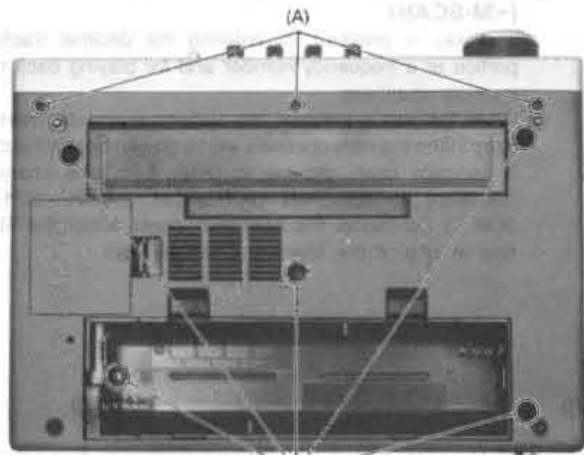


Fig. 8

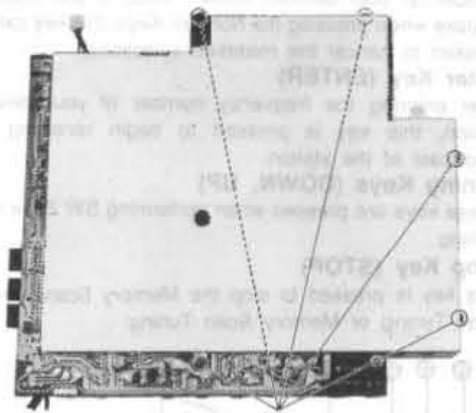


Fig. 12

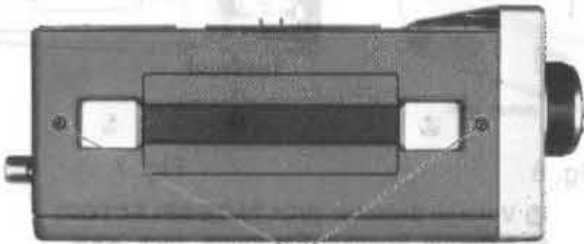


Fig. 9



Fig. 13

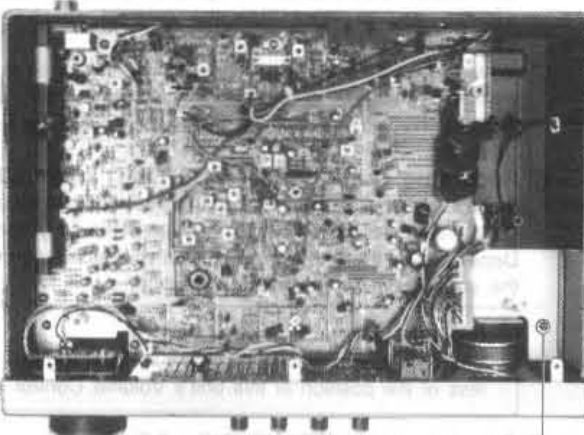


Fig. 10

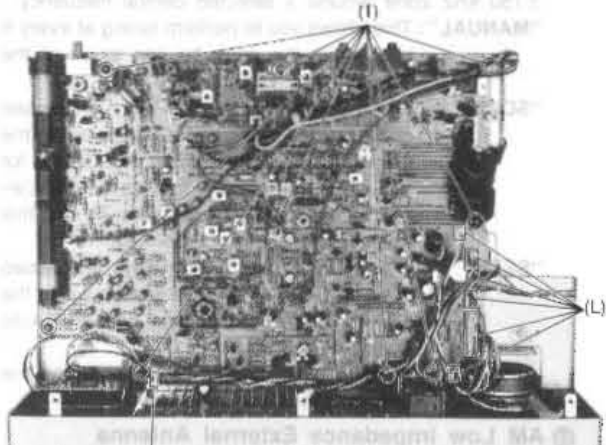


Fig. 14

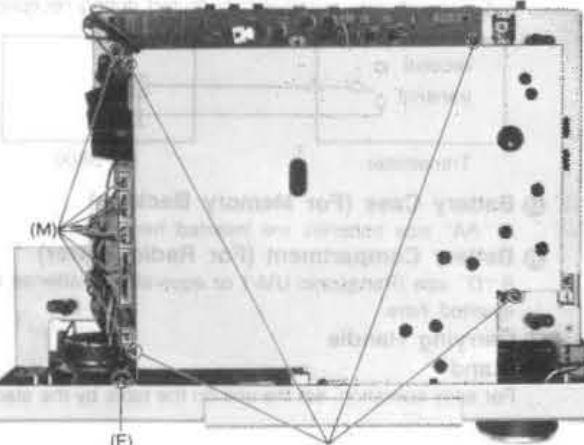


Fig. 11

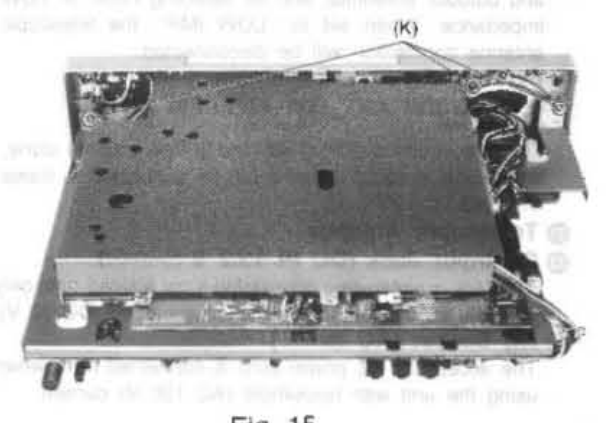


Fig. 15

5

6

LOCATION OF CONTROLS AND COMPONENTS

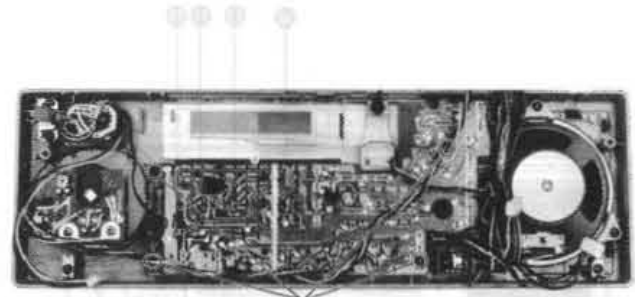


Fig. 16



Fig. 17

| Ref. No. | Procedure | Shown in Fig. — | To remove — | Remove — |
|----------|--------------------|-----------------|-----------------------|------------------------------|
| 1 | 1, 2 | 8 | Bottom Cabinet | Screw (3×10) (A)×3 |
| 2 | | 8 | | Screw (3×60) (B)×5 |
| 3 | 1~4 | 9 | Upper Cabinet | Screw (3×10) (C)×2 |
| 4 | | 10 | | Red screw (3×10) (D)×1 |
| 5 | 1~7 | 11 | Digital Circuit Board | Screw (3×10) (E)×1 |
| 6 | | 11 | | Screw (3×8) (F)×4 |
| 7 | | 12 | | Screw (3×6) (G)×5 |
| 8 | 1~4, 8~10 | 13 | Tuner Circuit Board | Knob (H)×1 |
| 9 | | 14 | | Screw (3×8) (I)×9 |
| 10 | | 14 | | Socket (J)×1 |
| 11 | 1~4, 11~14 | 13 | Front Panel | Knob (H)×1 |
| 12 | | 15 | | Screw (3×10) (K)×3 |
| 13 | | 14 | | Socket (J)×1, (L)×6 |
| 14 | 1~4, 11~15 | 11 | Switch Circuit Board | Socket (M)×6 |
| 15 | | 16 | | Screw (3×10) (N)×4 |
| 16 | 1~4, 11~14, 16, 17 | 13 | Tuning Block | Knob (O)×1 |
| 17 | | 17 | | Nut (φ9) (P)×1 |

PLL IC (IC308, 307): EACH TERMINAL FUNCTION & WAVEFORM

1) IC308 (MN6147) terminal view 2) Block diagram (IC308 MN6147)

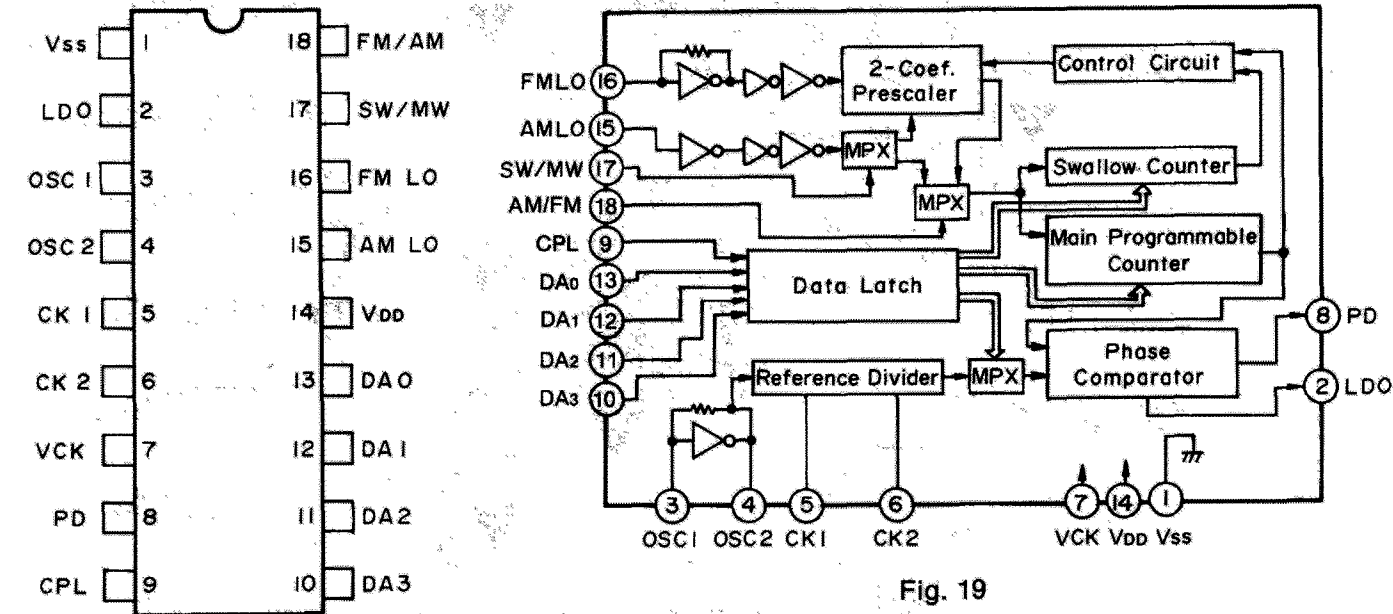


Fig. 19

Fig. 18

3) Explanation of each terminal (IC308 MN6147)

| Pin No. | Symbol | Description | Pin No. | Symbol | Description |
|---------|------------|---|---------|--------------------|--|
| 1 | VSS | Grounding terminal. | 10~13 | DA3, DA2, DA1, DA0 | Selected frequency data input terminals. Data is delivered from IC307 (pin 33—pin 36) according to the receiving frequency. (FM Position T = 5msec) |
| 3, 4 | OSC1, OSC2 | Crystal oscillator connection terminals. A 4.5MHz crystal oscillator is connected. | 14 | VDD | + 5V power supply connection terminal. |
| 7 | VCK | Clock battery backup connection terminal. A + 5V power supply is connected. | 16 | FM LO | FM local oscillation signal input terminal. |
| 8 | PD | Phase detector output terminal. At FM/SW setting, signal is delivered from this terminal to the active L.P.F. When the divided oscillation frequency is higher than the reference frequency, an "H" level signal is delivered and when it is lower than the reference frequency, an "L" level signal is delivered. When the frequency coincides with the reference frequency, it goes floating. (FM Position T = 20μsec) | 17, 18 | SW/MW/FM/AM | Band switching signal input terminals. Both pin 17 and pin 18 are connect to "H" level on RF-B600. |
| 9 | CPL | Data latch clock signal input terminal. When the FM receiving frequency is altered, the latch signal is delivered from pin 40 of IC307. (FM Position T = 5msec) | | | |

4) Digits and segment output voltage of IC307 (PLL controller)

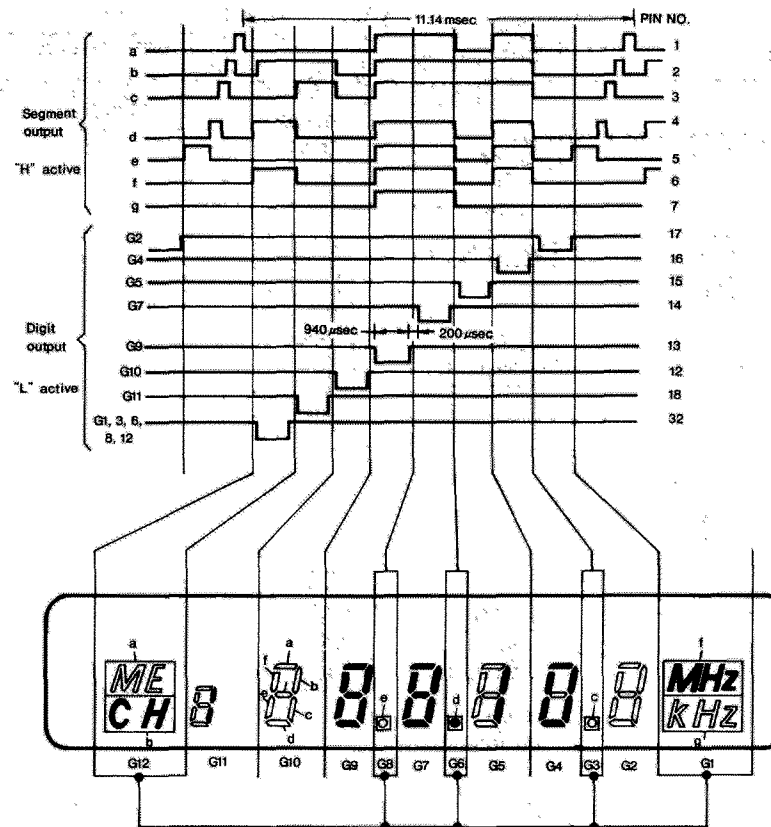


Fig. 20

5) IC307 (RVID1704C538) terminal view

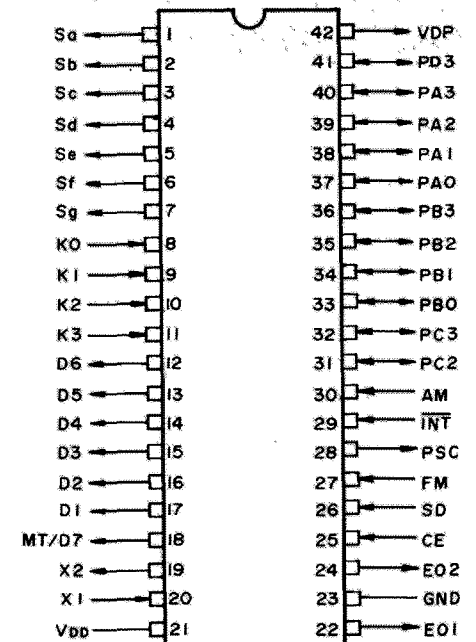


Fig. 21

6) Block diagram (IC307 RVID1704C538)

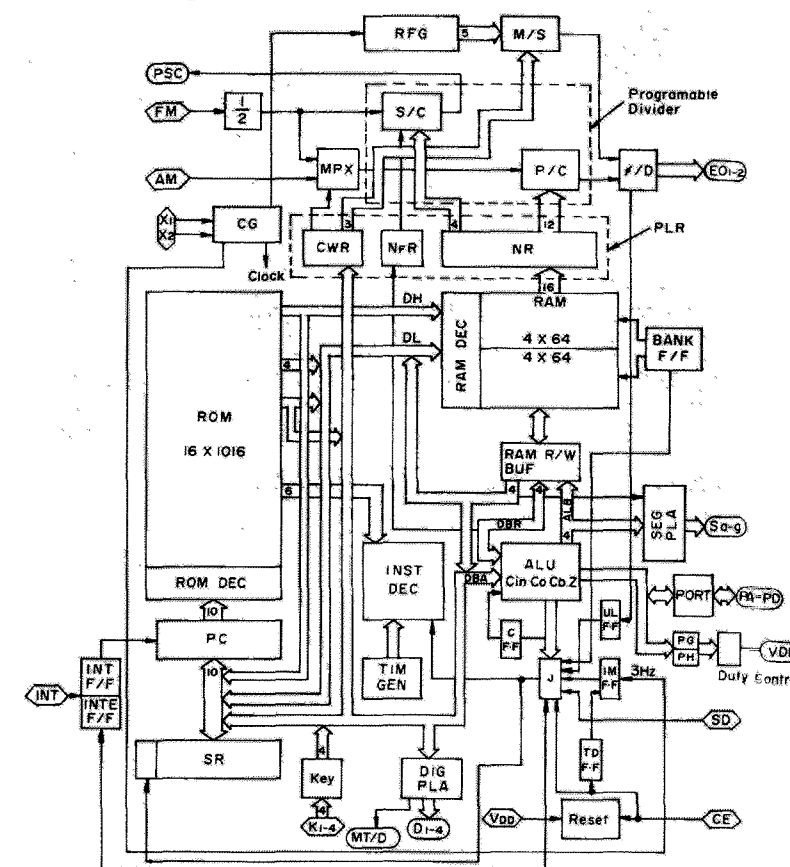


Fig. 22

7) Explanation of each terminal (IC307 RVID1704C538)

| Pin No. | Symbol | Description | Pin No. | Symbol | Description |
|---------|-------------------------------|--|-----------|-------------------------|--|
| 1~7 | Sa, Sb, Sc, Sd, Se, Sf, Sg | Terminals to output segment signals for digital display and to output key return signals in key matrix system. Refer to the fig. 20 for operation. | 29 | INT | Interrupt request signal input terminal. Tuning lock ON/OFF is controlled by "H" or "L" level signal applied to this terminal. When the tuning lock switch (S301-2) is turned on, switching of Q348 and Q302 is activated and an "H" level signal is applied to pin 29 (INT) to lock the tuning. |
| 8~11 | K0, K1, K2, K3 | Terminals to input key return signals from an external key matrix. The outputs of segment terminals (Sa~Sg) are used for the key return signal source. (T = 2msec) | 30 | AM | AM local oscillation input terminal. |
| 12~18 | D6, D5, D4, D3, D2, D1, MT/D7 | Terminals to output digit signals in a digital display (Digit output). Refer to the fig. 20 for operation. | 31 | PC2 | Tuning dial gate pulse output terminal. (T = 5msec) |
| 19, 20 | X2, X1 | Crystal oscillator connection terminals. A 4.5MHz crystal oscillator is connected. | 32 | PC3 | Segment signal output terminal. (T = 5msec) |
| 21 | VDD | Power supply connection terminal. A + 5V power supply is connected. | 33~36, 40 | PB0, PB1, PB2, PB3, PA3 | 4-bit input and output terminals. Used to output the data for PLL dividing ratio of IC307 (MN6147) and reference frequency designation. (When frequency is changed from 89.95MHz to 90.00MHz) |
| 22, 24 | E01, E02 | Phase comparator output terminal. The signal for MW/LW is delivered from pin 22 (E01) to the active L.P.F (Q343 and 342), and the signal for SW is delivered from pin 24 (E02) to the active L.P.F (Q334, 335, 336 and 337). When the divided oscillation frequency is higher than the reference frequency, an "H" level signal is delivered and when it is lower than the reference frequency, an "L" level signal is delivered. When the frequency coincides with the reference frequency, it goes floating. | 23 | GND | Grounding terminal. |
| 25 | CE | Device operation selection signal input terminal. Select "H" level to make the device operative and select "L" level to make it inoperative. The memory is held. | 26 | SD | Auto-tuning stop signal input terminal (SW only). When a station is tuned, detection voltage makes switching of Q303 and IC302 and sends an "H" level (+ 5V) signal to the pin 26 (SD). When a station is not tuned, it goes to "L" level (0V). |
| 37~39 | PA0, PA1, PA2 | Band setting input terminals. The following signals are input to the terminals when setting the receiving bands (LW/MW/FM/SW). | 41 | PD3 | Muting output terminal. This terminal delivers an "H" level signal when switching bands or selecting the station directly. |

BLOCK DIAGRAM

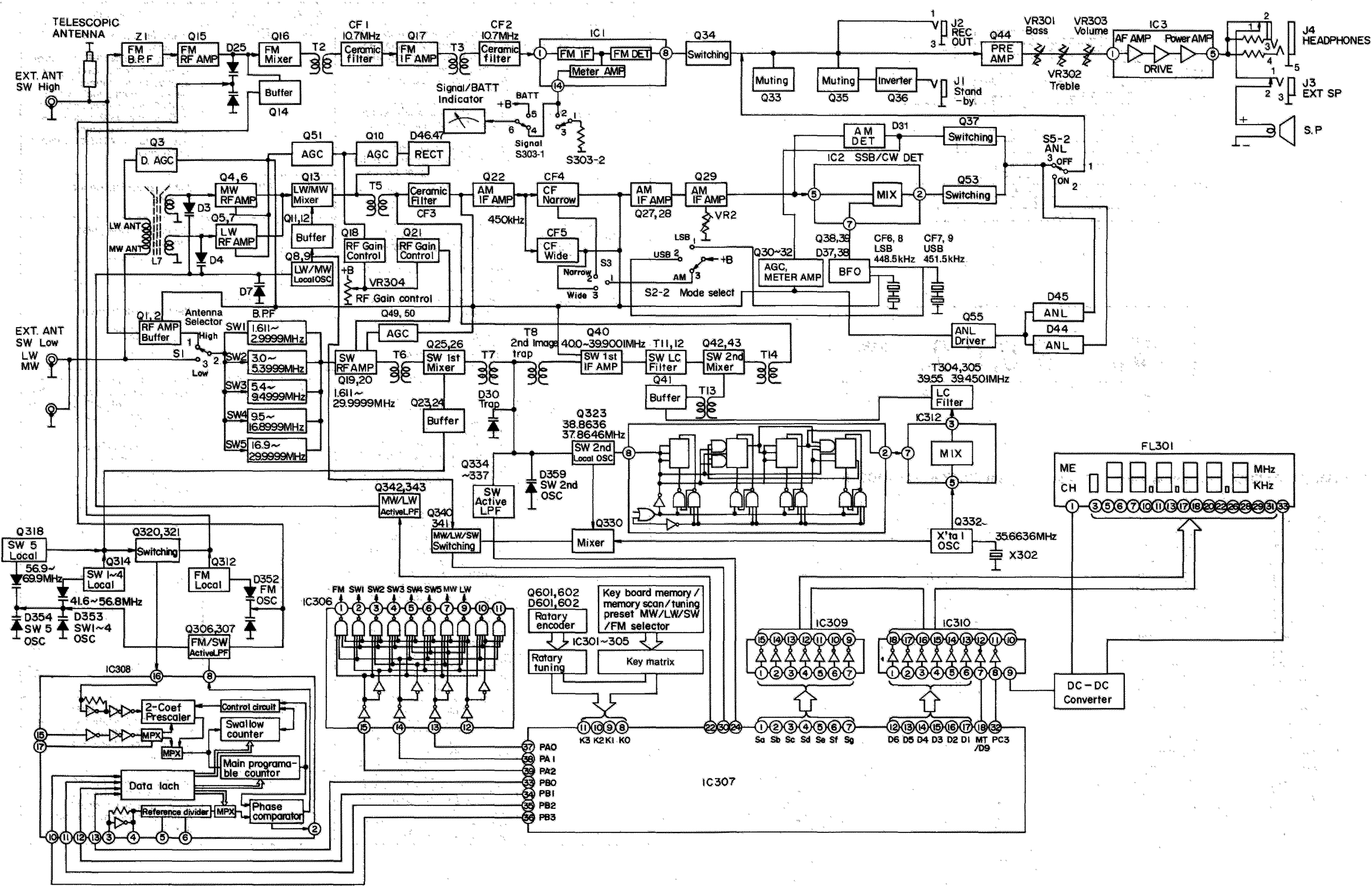


Fig. 23

ALIGNMENT POINT

* Please refer to Circuit Board and Wiring Connection Diagram which is located test point.

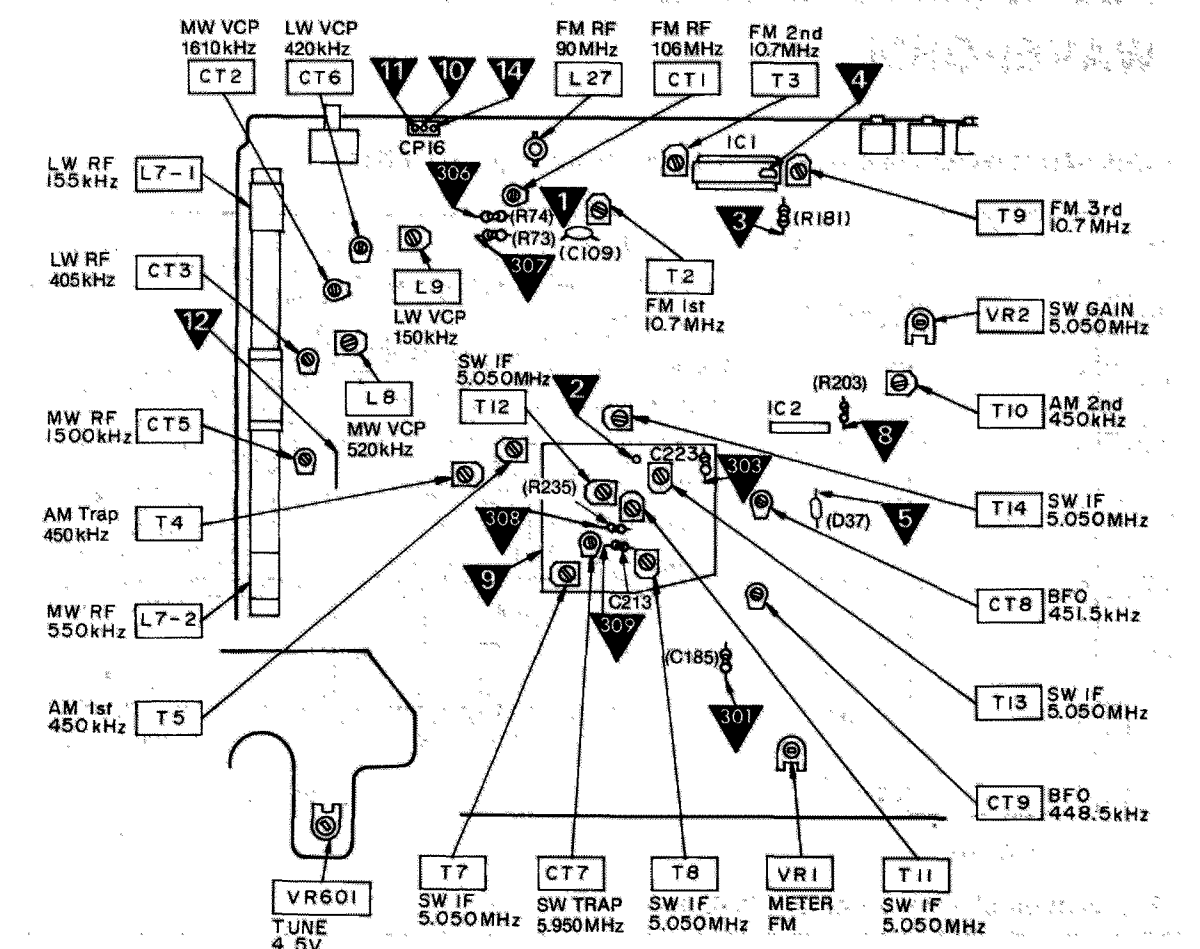


Fig. 24

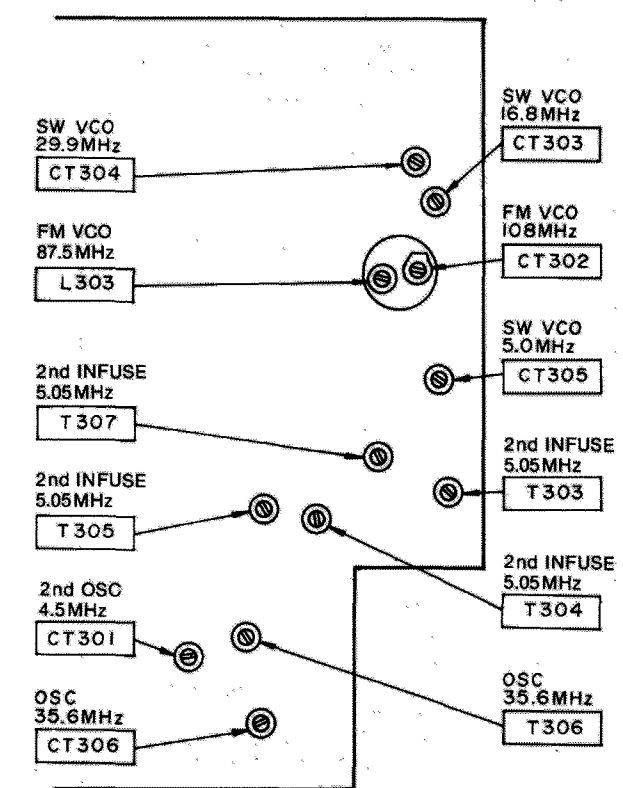


Fig. 25

Make sure that the bottom of diodes or transistors comes level to the printed circuit board.

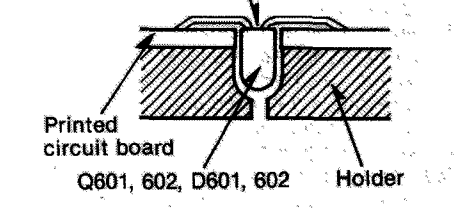


Fig. 25-1

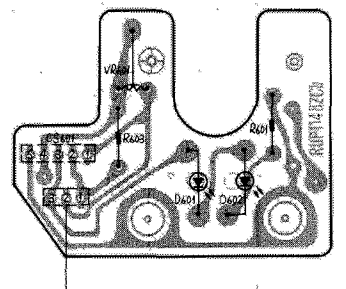


Fig. 25-2

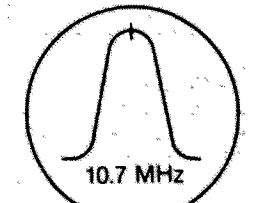


Fig. 26

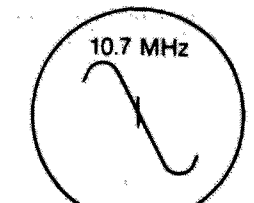


Fig. 27

MEASUREMENTS AND ADJUSTMENTS

ALIGNMENT INSTRUCTION

| CONTROL SETTING & PREPARATION | |
|--|--|
| Notes: 1. Set power switch to ON. 2. Set SW ANT switch to LOW IMP. 3. Set AM RF gain control to DX. 4. Set volume control to MAX. 5. Set bass and treble control to "0". 6. Set AM ANL switch to OFF. 7. Set band width switch to WIDE. 8. Set indicator switch to TUNING/SIGNAL. | 9. Set display switch to ON. 10. Set tuning lock switch to OFF. 11. Set SW zone auto tuning selector to MANUAL. 12. Memorize the following frequency. Ch1.....5.050MHz Ch6.....550kHz Ch2.....150kHz Ch7.....1500kHz Ch3.....420kHz Ch8.....90.0MHz Ch4.....155kHz Ch9.....106.0MHz Ch5.....405kHz |
| EQUIPMENT REQUIRED | |
| 1. Frequency counter. 2. Oscilloscope (Dual dimension). 3. RF voltmeter. | 4. DC digital voltmeter. 5. Ampere meter. 6. Signal generator. |

TUNING BLOCK ALIGNMENT Note: When inserting the diodes (D601, 602) or transistors (Q601, 602), refer to fig. 25-1.

| OSCILLOSCOPE | | ADJUSTMENT | REMARKS |
|---|-------------------------------------|------------|---|
| CH1 | CH2 | | |
| (1) CS24 ①(+) ④, ⑤(-) | CS24 ②(+) ④, ⑤(-) | D601, Q601 | (1) Set Oscilloscope to CH2. (2) Input DC 5V and adjust the oscilloscope for 5V. (3) Turn the tuning shaft and read the highest and lowest voltage. (4) If voltage can not be set to the following value, adjust the space between D601 and Q601. VH (highest voltage).....More than 4.0V VL (lowest voltage)Less than 0.9V When VH can not be set...Shorten the space between D601 and Q601. When VL can not be set...Lengthen the space between D601 and Q601. |
| (2) | | VR601 | (1) Set oscilloscope to CH1. (2) Input DC 5V and adjust the oscilloscope for 5V. (3) Turn the tuning shaft and adjust for highest voltage. (4) Adjust VR601 for 4.5V reading on oscilloscope. |
| (3) | | | (1) Turn the tuning shaft and read the point where CH1 and CH2 are same level (highest & lowest). (2) If voltage can not be set to the following value, readjust step "1". VH.....More than 3.6V VLLess than 1.4V |

FM IF AND AM IF ALIGNMENT

| BAND | IF SWEEP SCOPE | | ADJUSTMENT | REMARKS |
|-----------------|---|---------|------------|---|
| | OUTPUT | INPUT | | |
| FM-IF ALIGNMENT | | | | |
| FM | ▼...(+) | ▼...(+) | T2, 3 | Adjust for maximum amplitude. (Refer to fig. 26). |
| | | ▼...(-) | T9 | Adjust for maximum amplitude. (Refer to fig. 27). |
| AM-IF ALIGNMENT | | | | |
| MW | Fashion loop of several turns of wire and radiate signal into loop of receiver. | ▼...(+) | T5, 10 | Adjust for maximum output. |
| | | ▼...(-) | T4 | Adjust for minimum output. |

Note: Confirm that center frequency do not drift too much when band width switch is changed.

BFO ALIGNMENT

| BAND | FREQUENCY COUNTER | ADJUSTMENT | REMARKS |
|------|-------------------|------------|---|
| SW | ▼...(+) | CT8 | (1) Set AM mode switch to USB. (2) Adjust CT8 for 451.5±0.3kHz reading on frequency counter. |
| | ▼...(-) | CT9 | (1) Set AM mode switch to LSB. (2) Adjust CT9 for 448.5±0.3kHz reading on frequency counter. |

4.5MHz, 35.6636MHz OSC, 2nd INFUSE, SW VCO AND FM VCO ALIGNMENT

| BAND | DISPLAY SETTING | DC DIGITAL VOLTMETER | RF VOLTMETER | FREQUENCY COUNTER | ADJUSTMENT | REMARKS |
|---|-----------------|----------------------|--------------------|--------------------|---------------|--|
| 4.5MHz OSCILLATOR ALIGNMENT | | | | | | |
| SW | 5.000MHz | — | — | ▼...(+) ▼...(-) | CT301 | Adjust CT301 for 4.5000MHz±20Hz reading on frequency counter. |
| 35.6636MHz OSCILLATOR LEVEL ADJUSTMENT | | | | | | |
| SW | 2.000MHz | — | ▼...(+) ▼...(-) | — | T306 | Adjust T306 to a point which is 0.5dB below the value at which the peak value was shown on the RF voltmeter. |
| 2nd INFUSE ALIGNMENT | | | | | | |
| SW | 5.05MHz | — | ▼...(+) ▼...(-) | — | T303~305, 307 | Adjust T305, 304, 303, 307 for maximum reading on RF voltmeter. |
| 35.6636MHz OSCILLATOR FREQUENCY ALIGNMENT | | | | | | |
| SW | 5.000MHz | — | — | ▼...(+) ▼...(-) | CT306 | Adjust CT306 for 39.550MHz±300Hz reading on frequency counter. |
| SW VCO ALIGNMENT | | | | | | |
| SW | 29.9MHz | ▼...(+) ▼...(-) | — | — | CT304 | Adjust CT304 for 8.0V±0.2V reading on DC digital voltmeter. |
| | 16.8MHz | — | — | — | CT303 | Adjust CT303 for 8.2V±0.2V reading on DC digital voltmeter. |
| | 5.0MHz | ▼...(+) ▼...(-) | — | — | CT305 | Adjust CT305 for 9.0V±0.2V reading on DC digital voltmeter. |
| FM VCO ALIGNMENT | | | | | | |
| FM | 87.5MHz | ▼...(+) ▼...(-) | — | — | L303 | Adjust L303 for 1.0V±0.1V reading on DC digital voltmeter. |
| | 108MHz | — | — | — | CT302 | Adjust CT302 for 8.0V±0.2V reading on DC digital voltmeter. |

SW IF, IMAGE TRAP AND GAIN ALIGNMENT

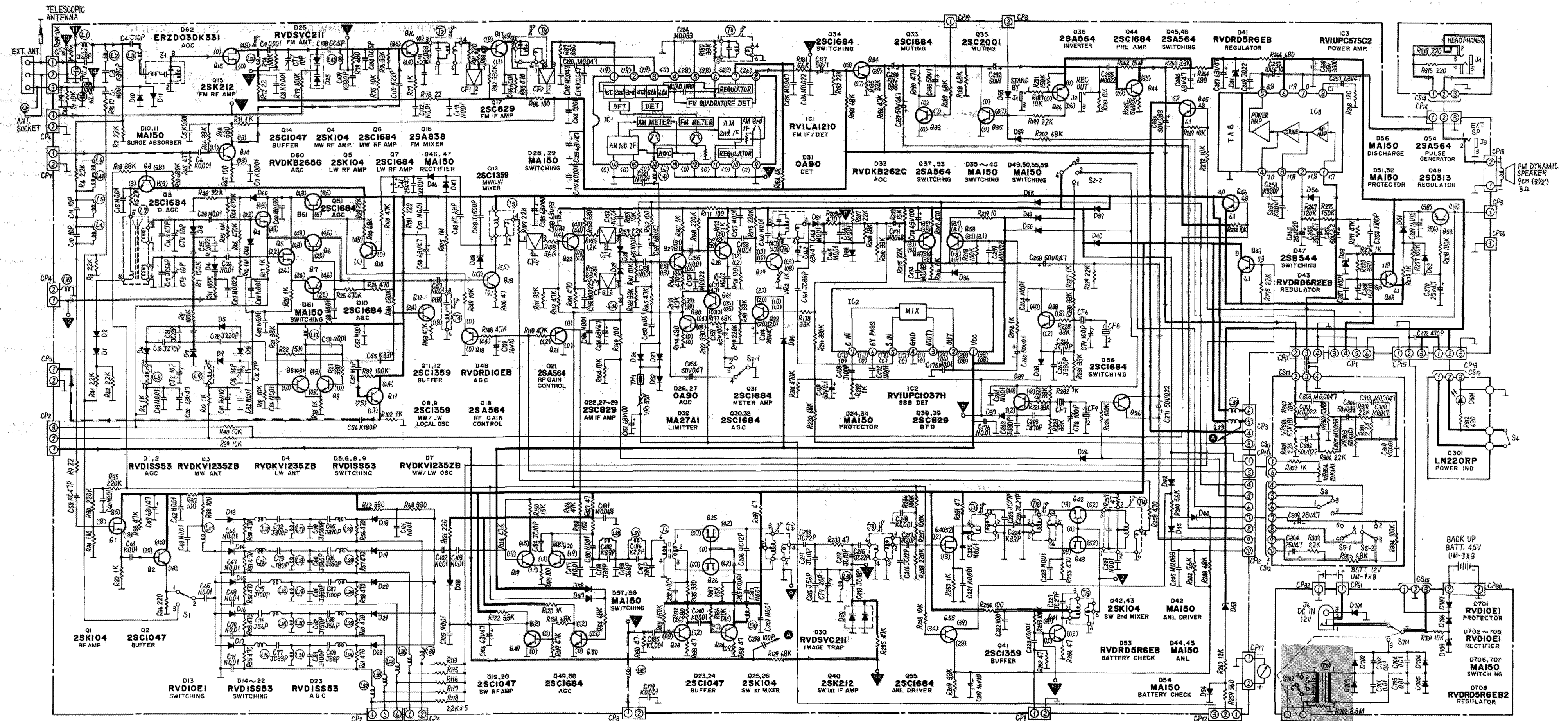
| BAND | SIGNAL GENERATOR | | DISPLAY SETTING | ADJUSTMENT | REMARKS |
|-------------------------|--------------------|-----------------|-----------------|--------------|--|
| | CONNECTION | FREQUENCY | | | |
| SW IF ALIGNMENT | | | | | |
| SW | ▼...(+) ▼...(-) | 5.050MHz (Ch1) | 5.050MHz (Ch1) | T7, 8, 11~14 | Adjust T7, 8, 11~14 for maximum output. |
| SW IMAGE TRAP ALIGNMENT | | | | | |
| SW | | 5.950MHz | 5.050MHz (CH1) | CT7 | Adjust CT7 for minimum output. |
| SW GAIN ALIGNMENT | | | | | |
| SW | | 5.050MHz (18dB) | 5.050MHz (Ch1) | VR2 | Adjust VR2 so that the signal meter indicates "9". |

VCP VOLTAGE, LW/MW RF, FM RF AND METER ALIGNMENT

| BAND | SIGNAL GENERATOR | | DC DIGITAL VOLTMETER | ADJUSTMENT | REMARKS | |
|-----------------------|---|---------------|----------------------|--------------------|---------|--|
| | CONNECTION | FREQUENCY | | | | |
| VCP VOLTAGE ALIGNMENT | | | | | | |
| LW | — | — | 150kHz (Ch2) | ▼...(+) ▼...(-) | L9 | Adjust L9 for 1.1±0.05V reading on DC digital voltmeter. |
| | — | — | 420kHz (Ch3) | — | CT6 | Adjust CT6 for 7±0.2V reading on DC digital voltmeter. |
| MW | — | — | 520kHz | — | L8 | Adjust L8 for 1±0.05V reading on DC digital voltmeter. |
| | — | — | 1610kHz | — | CT2 | Adjust CT2 for 8.2±0.2V reading on DC digital voltmeter. |
| LW/MW RF ALIGNMENT | | | | | | |
| LW | Fashion loop of several turns of wire and radiate signal into loop of receiver. | 155kHz | 155kHz (Ch4) | — | L7-1 | Adjust L7-1 for maximum output. |
| | | | 405kHz | 405kHz (Ch5) | — | CT3 |
| MW | | 550kHz | 550kHz (Ch6) | — | L7-2 | Adjust L7-2 for maximum output. |
| | | 1,500kHz | 1500kHz (Ch7) | — | CT5 | Adjust CT5 for maximum output. |
| FM RF ALIGNMENT | | | | | | |
| FM | ▼...(+) ▼...(-) (Through FM dummy antenna 75Ω) | 90MHz | 90MHz (Ch8) | — | L27 | Adjust L27 for maximum output. |
| | | 106MHz | 106MHz (Ch9) | — | CT1 | Adjust CT1 for maximum output. |
| METER ALIGNMENT | | | | | | |
| FM | | 90MHz (100dB) | 90MHz (Ch8) | — | VR1 | Adjust VR1 so that the tuning meter indicates more than "8". |

SCHEMATIC DIAGRAM (TUNER) MODEL RF-B600

- AM OSC. Signal
- LW, MW, Vcap Signal
- FM Vcap Signal
- + Voltage Line
- FM Signal
- AM Signal
- FM VCO Signal
- SW Vcap Signal
- SW1~5 OSC Signal

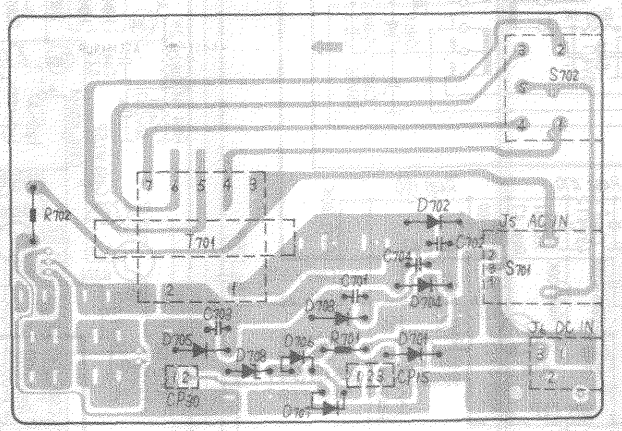


BACK UP BATT. 45V UM-3X3
 BATT 12V UM-1X8
 J5 AC IN
 110-115/115-127/200-220
 230-250V 50/60Hz

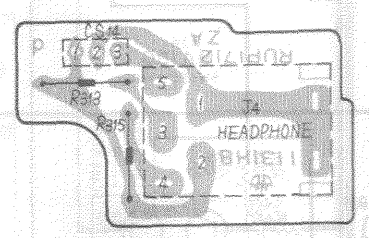
CIRCUIT BOARD (TUNER) MODEL RF-B600/©

- Notes:**
- S1: SW antenna switch in "HIGH IMP" position.
(1...HIGH IMP, 3...LOW IMP)
 - S2-1, S2-2: AM mode switch in "AM" position.
S2-1 (4...AM, 3...USB, 2...LSB)
S2-2 (3...AM, 2...USB, 1...LSB)
 - S3: Band width switch in "WIDE" position.
(3...WIDE, 2...NARROW)
 - S4: Power switch in "OFF" position.
 - S5: AM ANL switch in "OFF" position.
 - S701: AC/DC switch in "DC" position.
 - S702: Voltage selector
 - VR1: Meter adjustment VR
VR2: SW gain adjustment VR
 - DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
< >...FM ()...LW/MW []...SW
 - Battery current No signal 200mA (MW)
Maximum output 680mA (SW)
 - Important safety notice**
The shaded area on this schematic diagram incorporates special features important for protection from fire and electrical shock hazards.
When servicing it is essential that only manufacturer's specified parts be used for the critical components in the shaded areas of the schematic.
 - Please replace three diodes (D3, D4, D7) at the same time, when replacing diode (D3, D4 or D7).

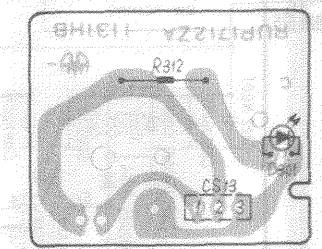
POWER SOURCE CIRCUIT BOARD



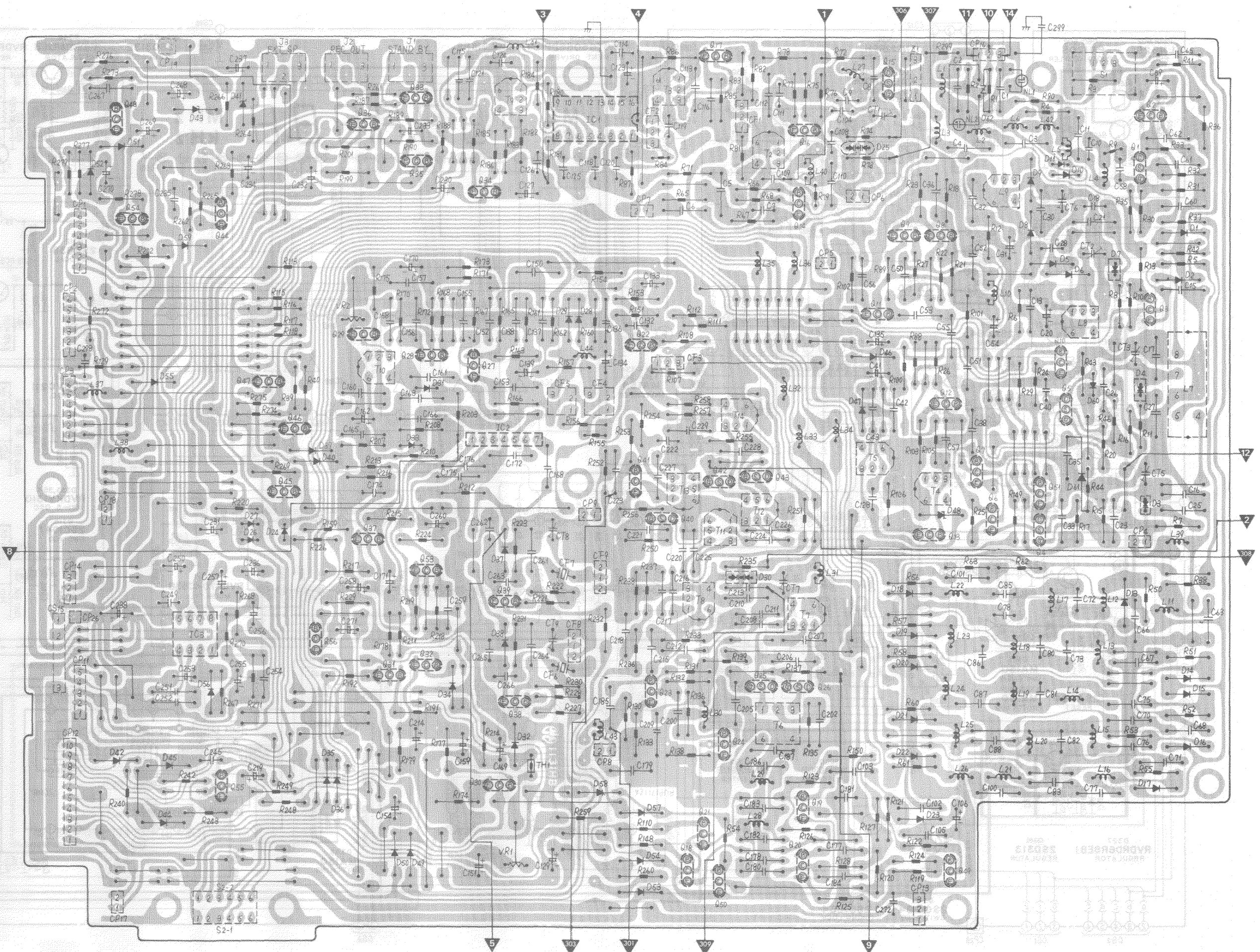
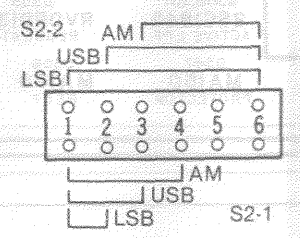
JACK CIRCUIT BOARD



LED CIRCUIT BOARD

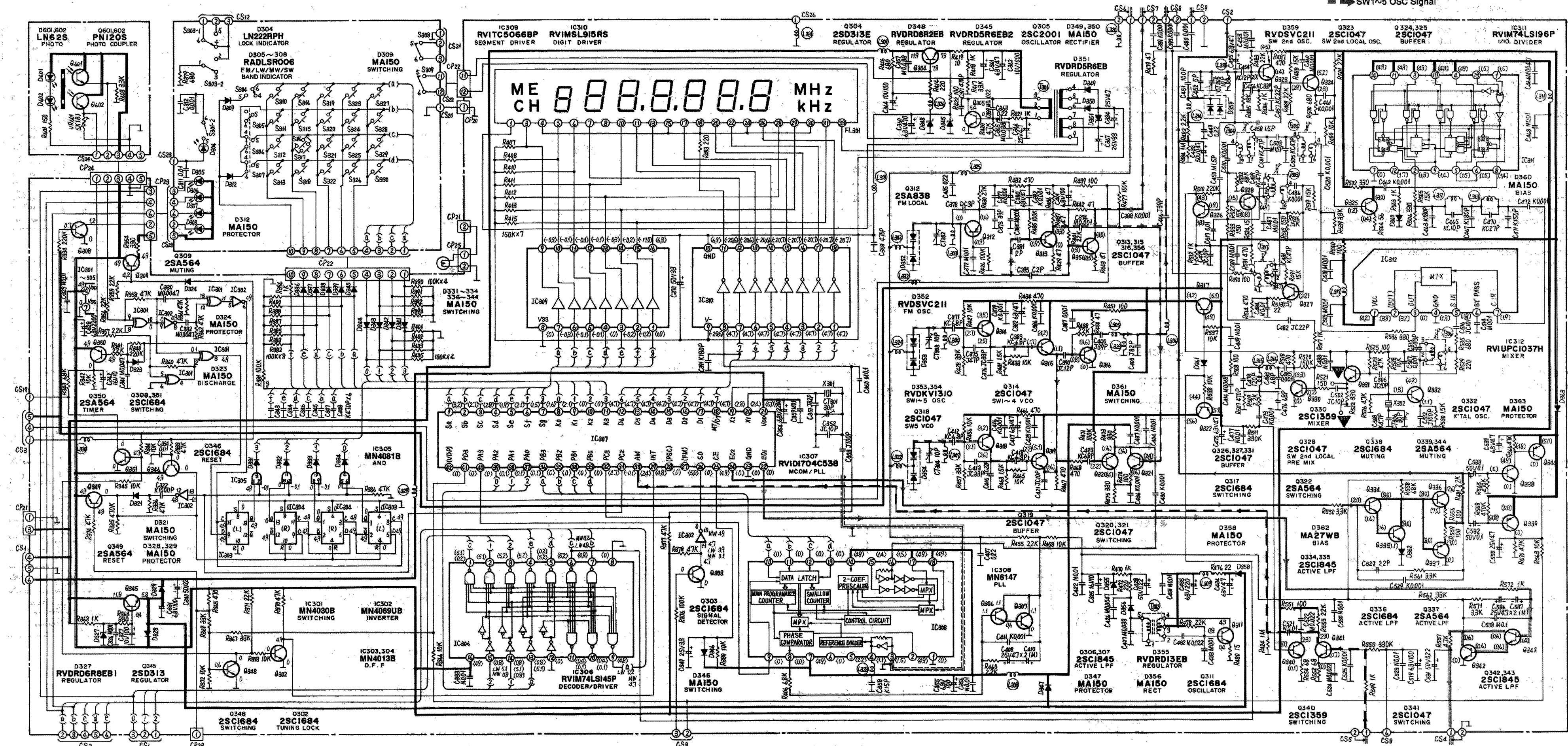


| | | | |
|--|--|--|--|
| | | | |
| | | | |
| | | | |
| | | | |



SCHEMATIC DIAGRAM (DIGITAL) MODEL RF-B600/1

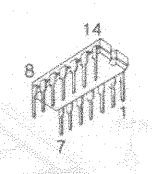
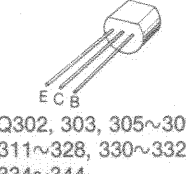
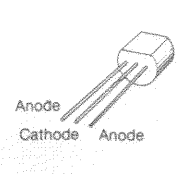
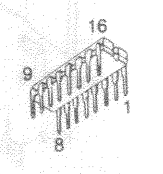
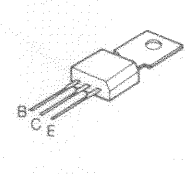
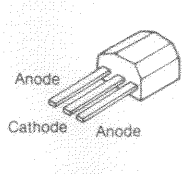
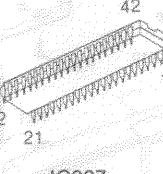
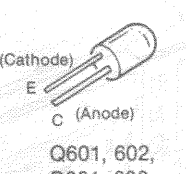
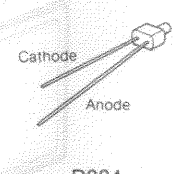
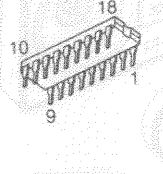
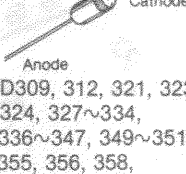
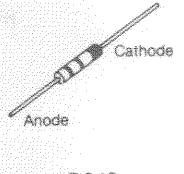
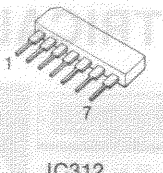
- ➡ AM OSC Signal, ➡ LW, MW, Vcap Signal,
- ➡ FM/SW Vcap Signal, ➡ + Voltage Line,
- ➡ AM Signal, ➡ FM/SW VCO Signal
- ➡ FM VCO Signal, ➡ SW Vcap Signal
- ➡ SW1~5 OSC Signal

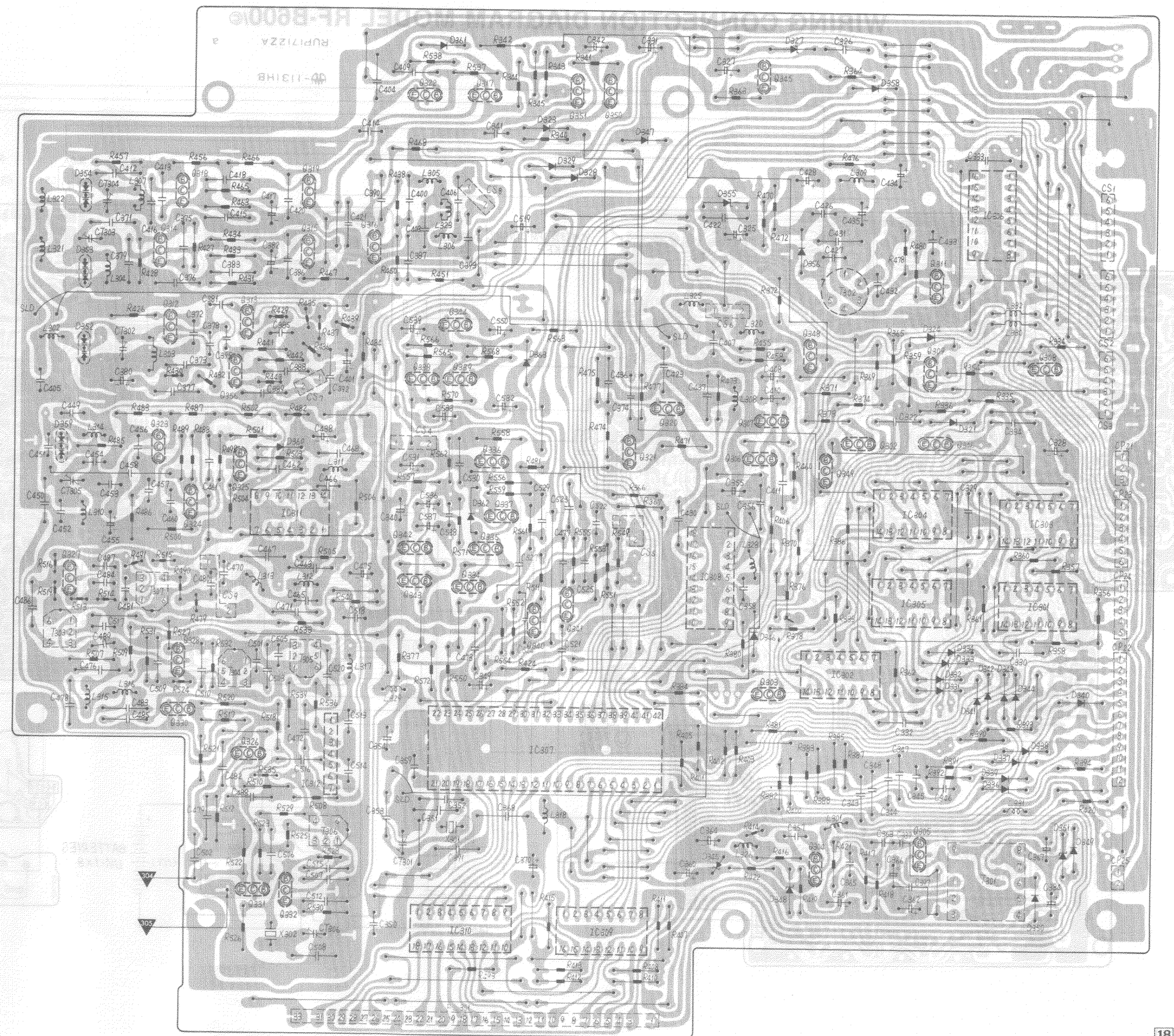
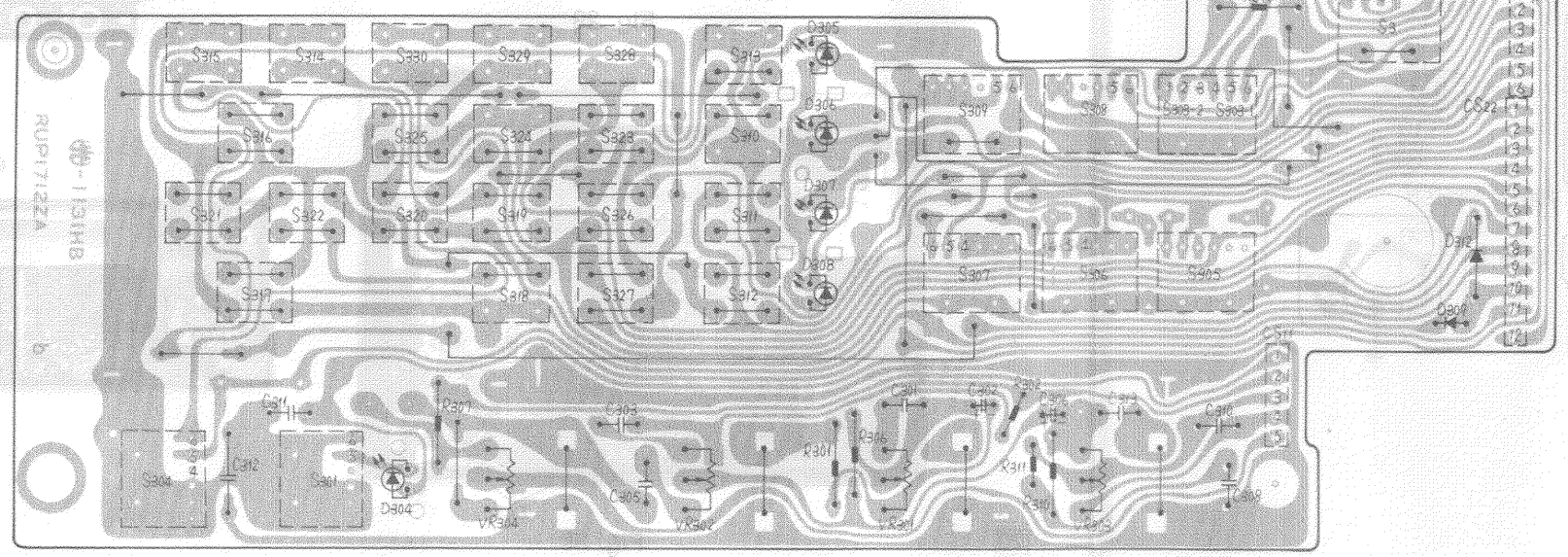
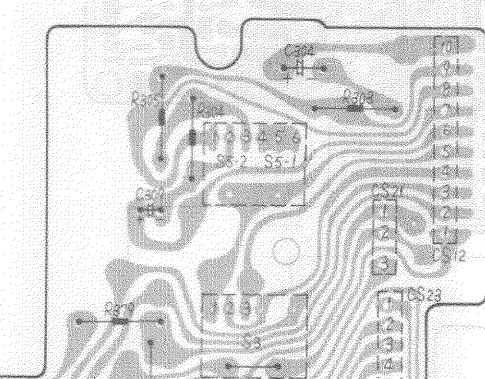
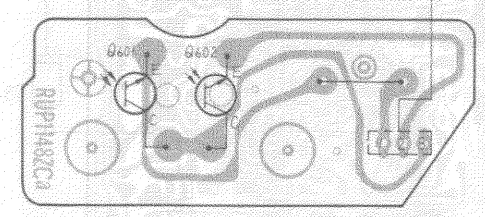
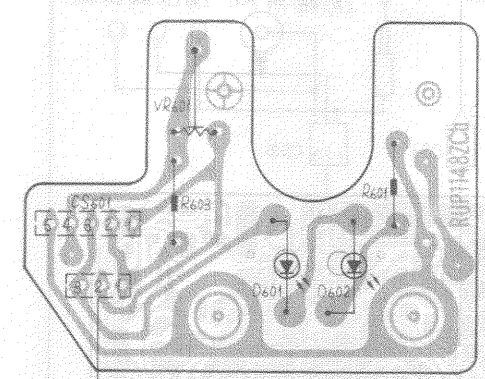


CABINET PARTS LOCATION

CIRCUIT BOARD (DIGITAL) MODEL RF-B600/©

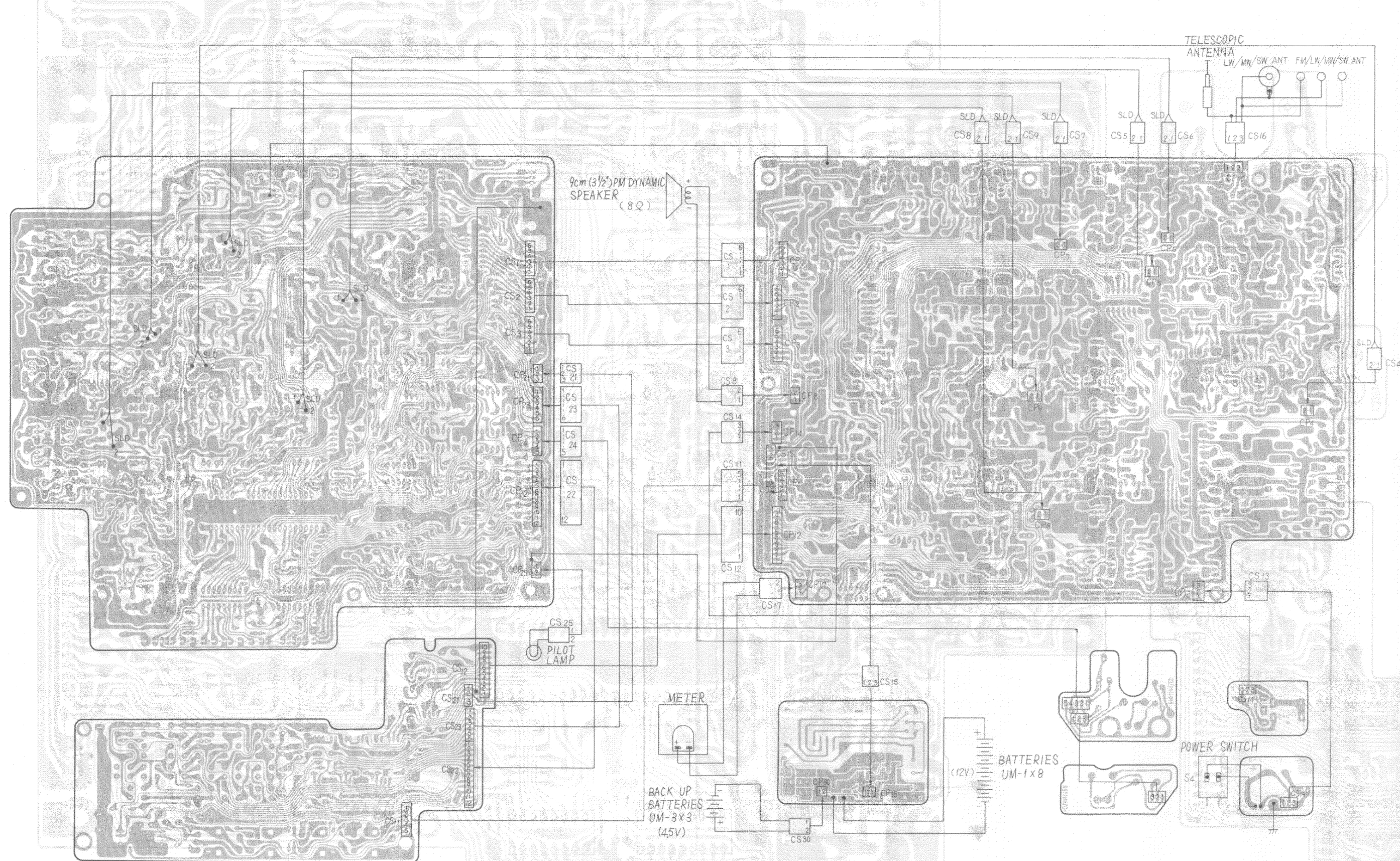
- Notes:**
- S301: Tuning lock switch in "OFF" position. (5...ON, 6...OFF)
 - S303-1, S303-2: Indicator switch in "TUNING/SIGNAL" position. (4, 3...TUNING/SIGNAL, 5, 2...BATT)
 - S304: Tuning speed switch in "SLOW" position. (4...SLOW, 5...FAST)
 - S305~S307: SW zone auto tuning switch in "MANUAL" position. (S305...MANUAL, S306...SCAN, S307...SEEK)
 - S308: Light switch in "OFF" position.
 - S309: Display switch in "OFF" position.
 - S310: LW switch.
 - S311: MW switch.
 - S312: SW switch.
 - S313: FM switch.
 - S314: Memory switch.
 - S315: Direct (access) switch.
 - S316: Enter switch.
 - S317: Stop switch.
 - S318: Memory scan switch.
 - S319: Direct access switch. (8)
 - S320: Direct access switch. (9)
 - S321: Up switch.
 - S322: Down switch.
 - S323: Direct access switch. (4)
 - S324: Direct access switch. (5)
 - S325: Direct access switch. (6)
 - S326: Direct access switch. (7)
 - S327: Direct access switch. (0)
 - S328: Direct access switch. (1)
 - S329: Direct access switch. (2)
 - S330: Direct access switch. (3)
 - VR301, 302: Bass & Treble control VR.
 - VR303: Volume control VR.
 - VR304: RF gain adjustment VR.
 - VR601: Tuning block adjustment VR.
 - DC voltage measurements are taken with electronics voltmeter from negative terminal of battery.
 - < >...FM, ()...LW/MW, []...SW
 - Display Setting
 - FM...88.1MHz, LW...330kHz, MW...1000kHz, SW...10MHz

| | | |
|---|---|---|
|  IC301~305, 311 |  Q302, 303, 305~309, 311~328, 330~332, 334~344, 346, 348~351, 356 |  D352~354 |
|  IC306, 309 |  Q304, 305 |  D359 |
|  IC307 |  Q601, 602, D601, 602 |  D304 |
|  IC308, 310 |  D309, 312, 321, 323, 324, 327~334, 336~347, 349~351, 355, 356, 358, 360~363 |  D348 |
|  IC312 | | |



CIRCUIT BOARD (DIGITAL) MODEL RF-B600/©

WIRING CONNECTION DIAGRAM MODEL RF-B600/©



CABINET PARTS LOCATION

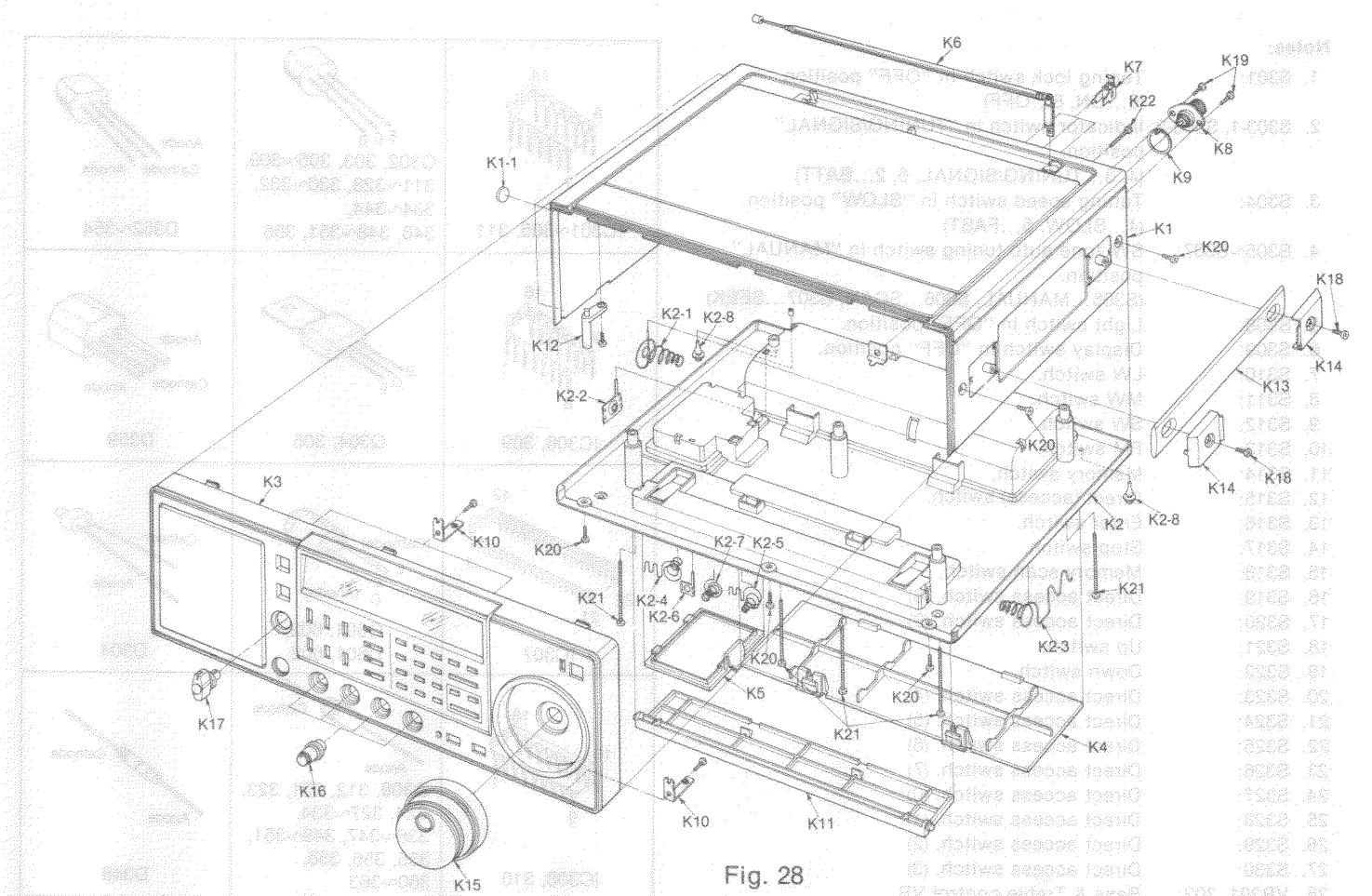


Fig. 28

ELECTRICAL PARTS LOCATION

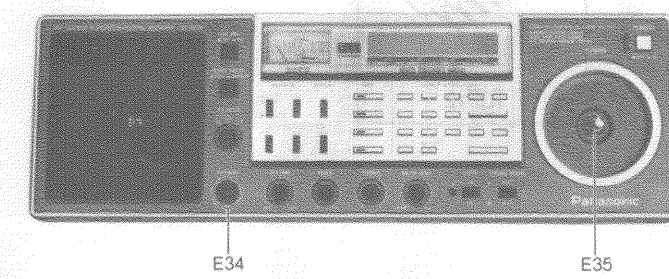


Fig. 29

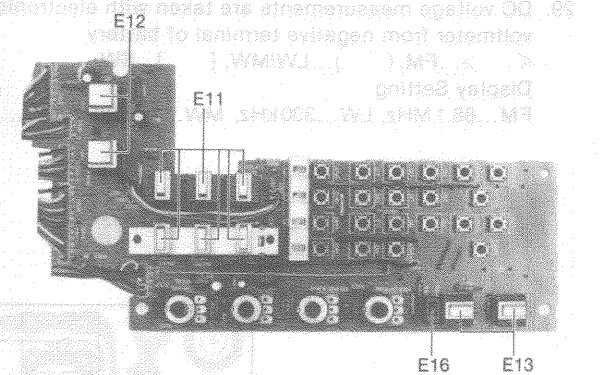


Fig. 31

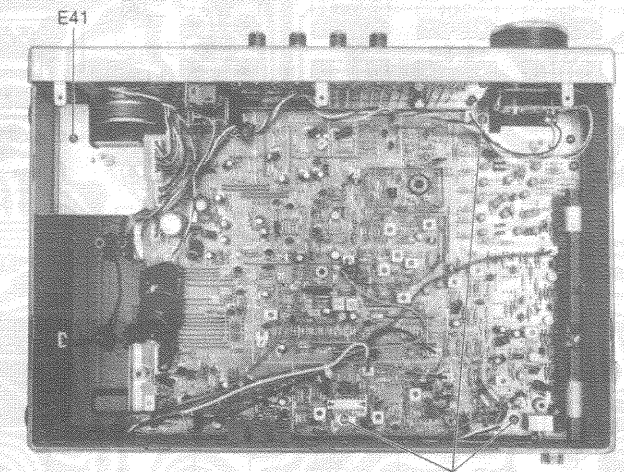


Fig. 30

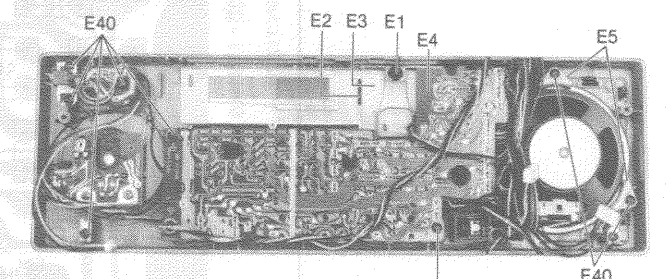


Fig. 32

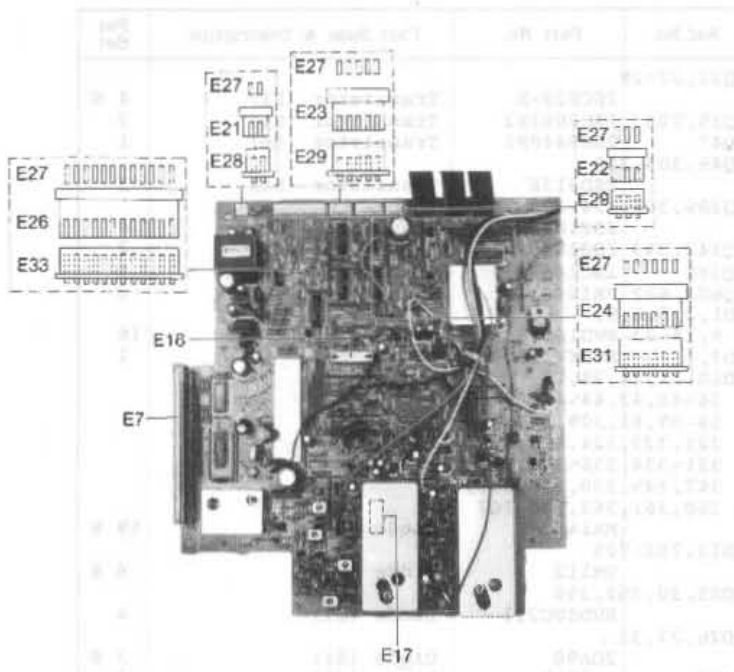


Fig. 33

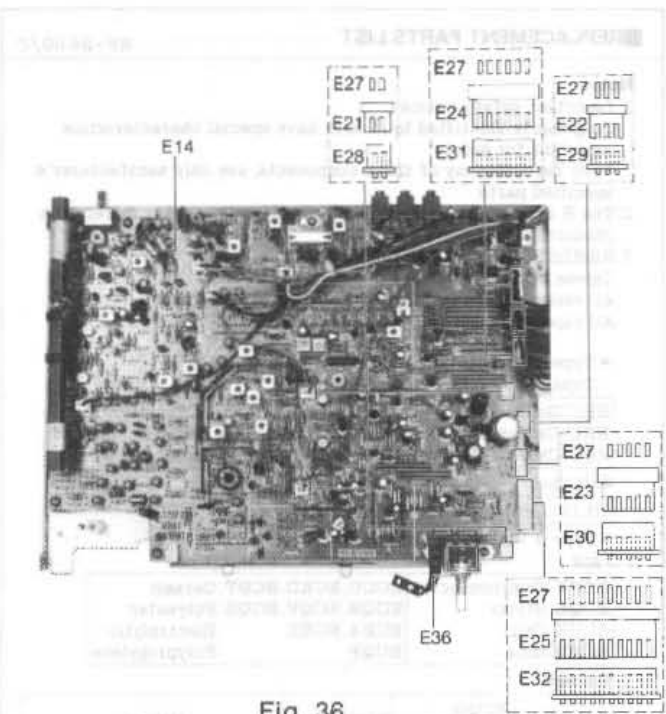


Fig. 36

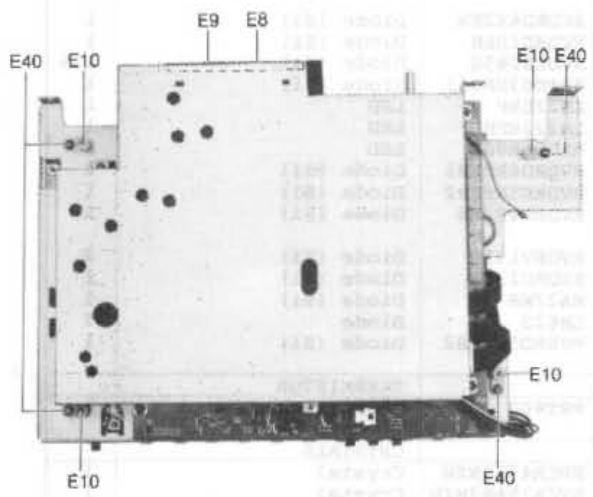


Fig. 34

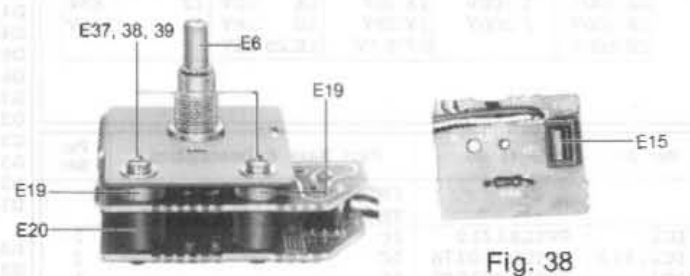


Fig. 37

Fig. 38

ACCESSORY AND PACKING MATERIALS

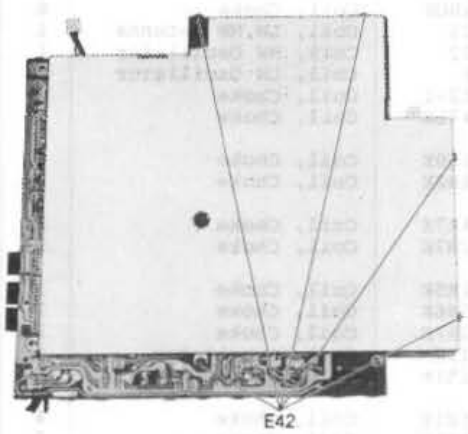


Fig. 35

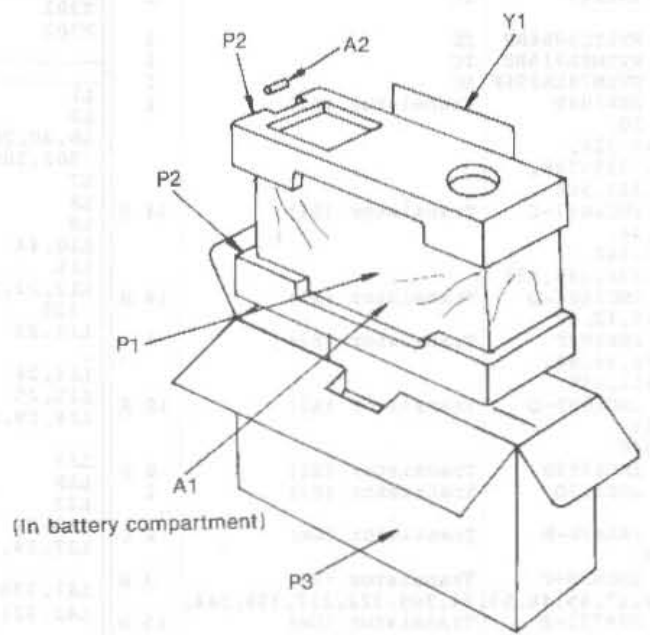


Fig. 39

REPLACEMENT PARTS LIST..... RF-B600/C

Notes:

1. Important safety notice.
Components identified by Δ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
2. The S mark indicates service standard parts and may differ from production parts.
3. RESISTORS & CAPACITORS
Unless otherwise specified.
All resistors are in OHMS (Ω) K=1000 Ω , M=1000k Ω
All capacitors are in MICRO FARADS (μ F) P= μ F

*Type & Wattage of Resistor
Type

| | | |
|-------------|------------------|-------------------------|
| ERC: Solid | ERX: Metal Film | ERW: Wirewound Resistor |
| ERD: Carbon | ERG: Metal Oxide | ERS: Fusible Resistor |
| RRD: Chip | ERO: Metal Film | ERF: Cement Resistor |

Wattage

| | | | | | |
|------------|------------|---------|------|------|------|
| 10,16:1/8W | 14,25:1/4W | 12:1/2W | 1:1W | 2:2W | 3:3W |
|------------|------------|---------|------|------|------|

*Type & Voltage of Capacitor
Type

| | |
|----------------------|-----------------------------|
| ECFW: Semi-conductor | ECOD, ECKD, ECBT: Ceramic |
| ECQS: Styrol | ECQM, ECQV, ECQG: Polyester |
| ECUX: Chip | ECEA, ECSZ : Electrolytic |
| ECMS: Mica | ECQP : Polypropylene |

Voltage

| ECQ Type | ECQG, ECQV, Type | ECSZ Type | Others |
|----------|------------------|-----------|-------------|
| 1H: 50V | 0.5: 50V | 0F: 3.15V | 0J : 8.3V |
| 2A: 100V | 1: 100V | 1A: 10V | 1A : 10V |
| 2E: 500V | 2: 200V | 1V: 35V | 1C : 16V |
| 2H: 500V | | 0J: 6.5V | 1E, 25: 25V |

| Ref.No. | Part No. | Part Name & Description | Per Set |
|---|--------------|-------------------------|---------|
| Q22, 27~29 | 2SC829-B | Transistor (Si) | 4 S |
| Q35, 305 | 2SC2001K2 | Transistor (Si) | 2 |
| Q47 | 2SB544PF1 | Transistor (Ge) | 1 |
| Q48, 304, 345 | 2SD313E | Transistor (Si) | 3 |
| Q306, 307, 334, 335 | 2SC1845E | Transistor (Si) | 4 |
| Q342, 343 | 2SC1845F | Transistor (Si) | 2 |
| Q348 | 2SC1684S | Transistor (Si) | 1 |
| Q601, 602 | PN120S | Transistor | 2 |
| D1, 2, 5, 6, 8, 9, 14~23 | RVD18S53 | Diode (Si) | 16 |
| D3, 4, 7 | RVDKV1235ZB | Diode (Si) | 1 |
| D10, 11, 24, 28, 29, 34~40, 42, 44~47, 49~52, 54~59, 61, 309, 312, 321, 323, 324, 328, 239, 331~334, 336~344, 346, 347, 349, 350, 356, 358, 360, 361, 363, 706, 707 | MA161 | Diode (Si) | 59 S |
| D13, 701~705 | SM112 | Diode (Si) | 6 S |
| D25, 30, 35 | 2, 359 | Diode (Si) | 4 |
| D26, 27, 31 | RVDSVC211 | Diode (Si) | 3 S |
| D32 | 20A90 | Diode (Si) | 1 |
| D33 | MA27A1 | Diode (Si) | 1 S |
| D41, 53, 351 | RVDKB262C | Diode (Si) | 3 |
| D43 | RVDRD5R6EB | Diode (Si) | 1 |
| D48 | RVDRD6R2EB | Diode (Si) | 1 |
| D60 | RVDRD10EB | Diode (Si) | 1 S |
| D62 | RVDKB265G | Diode (Si) | 1 |
| D301 | ER2D03DK331 | Diode (Si) | 1 |
| D304 | LN220RP | LED | 1 |
| D305~308 | LN222RPH | LED | 1 |
| D327 | D305~308 | LED | 1 |
| D345 | RADLSR006 | LED | 1 |
| D348 | RVDRD6R8EB1 | Diode (Si) | 1 |
| D353, 354 | RVDRD5R6EB2 | Diode (Si) | 2 |
| D355 | RVDRD8R2EB | Diode (Si) | 1 |
| D362 | RVDRD13EB | Diode (Si) | 1 |
| D601, 602 | MA27WB | Diode (Si) | 2 |
| D708 | LN62S | Diode (Si) | 1 |
| | RVDRD5R6EB2 | Diode (Si) | 1 |
| | | TH1 | 1 |
| | RRT800 | Thermistor | 1 |
| | | CRYSTALS | |
| X301 | RVCA4500NZN | Crystal | 1 |
| X302 | RVCA35663NZN | Crystal | 1 |
| | | COILS AND TRANSFORMERS | |
| L1 | RLQZB331K | Coil, Choke | 1 |
| L2 | RLQZB181K | Coil, Choke | 1 |
| L6, 20, 28, 29, 302, 308 | RLQZB1R0K | Coil, Choke | 6 |
| L7 | RLF6F25 | Coil, LW, MW Antenna | 1 |
| L8 | RLO2M22 | Coil, MW Oscillator | 1 |
| L9 | RLO1M6 | Coil, LW Oscillator | 1 |
| L10, 44 | RLQ2102-1 | Coil, Choke | 2 |
| L11 | RLQ2B471K | Coil, Choke | 1 |
| L12, 22, 315, 325 | RLQ2B150K | Coil, Choke | 4 |
| L13, 23 | RLQ2B8R2K | Coil, Choke | 2 |
| L14, 24 | RLQ2B4R7K | Coil, Choke | 2 |
| L15, 25 | RLQ2B2R7K | Coil, Choke | 2 |
| L16, 19, 26 | RLQ2B1R5K | Coil, Choke | 3 |
| L17 | RLQ2B5R6K | Coil, Choke | 1 |
| L18 | RLQ2B2R7K | Coil, Choke | 1 |
| L27 | RLQ4N110 | Coil, Oscillator | 1 |
| L32~36 | RLQ2B151K | Coil, Choke | 5 |
| L37~39, 317 | RLQ2B101K | Coil, Choke | 4 |
| L41, 330 | RLQ2A101K | Coil, Choke | 2 |
| L42, 321 | RLQ2B3R3K | Coil, Choke | 2 |

| Ref. No. | Part No. | Part Name & Description | Per Set |
|---|--------------|---|---------|
| | | INTEGRATED CIRCUITS, TRANSISTORS AND DIODES | |
| IC1 | RV1A1210 | IC | 1 |
| IC2, 312 | RVIUPC1037H | IC | 2 |
| IC3 | RVIUPC575C2 | IC | 1 |
| IC301 | MN4030B | IC | 1 |
| IC302 | MN4069UB | IC | 1 |
| IC303, 304 | MN4013B | IC | 2 |
| IC305 | MN4081B | IC | 1 |
| IC306 | RVIM74LS145P | IC | 1 |
| IC307 | RVID1704C538 | IC | 1 |
| IC308 | MN6147 | IC | 1 |
| IC309 | RVITC5066BP | IC | 1 |
| IC310 | RVIMSL915RS | IC | 1 |
| IC311 | RVIM74LS196P | IC | 1 |
| Q1 | 2SK104E | Transistor (Si) | 1 |
| Q2, 14, 19, 20, 23, 24, 313~316, 318~321, 323~328, 331, 332, 341, 356 | 2SC1047-C | Transistor (Si) | 24 S |
| Q3, 10, 31, 34, 49~51, 55, 302, 303, 317, 336, 346, 351 | 2SC1684-Q | Transistor (Si) | 14 S |
| Q4, 5, 25, 26, 42, 43 | 2SK104F | Transistor (Si) | 6 |
| Q6, 7, 30, 32, 33, 44, 56, 308, 311, 338 | 2SC1685-Q | Transistor (Si) | 10 S |
| Q8, 9, 11~13, 41, 330, 340 | 2SC1359B | Transistor (Si) | 8 S |
| Q15, 40 | 2SK212D | Transistor (Si) | 2 |
| Q16, 312 | 2SA838-B | Transistor (Ge) | 2 S |
| Q17, 38, 39 | 2SC829-C | Transistor (Si) | 3 S |
| Q18, 21, 36, 37, 45, 46, 53, 349, 350 | 2SA722-S | Transistor (Ge) | 15 S |

| Ref. No. | Part No. | Part Name & Description | Per Set | Ref. No. | Part No. | Part Name & Description | Per Set |
|--------------------------|--------------|--------------------------------------|---------|----------|-------------|------------------------------------|---------|
| L44 | RLQ2102 | Coil, Choke | 1 | J4 | RJJ1E9Z | Jack, Headphone | 1 |
| L301,326 | RLQX1014 | Coil, Choke | 2 | J5,6 | RJJ1F1Z | Jack, AC/DC | 1 Δ |
| L303 | RLO4N141 | Coil, Choke | 1 | | | | |
| L309,318 | RLQ21021 | Coil, Choke | 2 | | | CABINET PARTS | |
| L312 | RLQZB180K | Coil, Choke | 1 | K1 | RYMFB600M7 | Upper Cabinet Ass'y | 1 |
| L314,329,331 | RLQZB100K | Coil, Choke | 3 | K1-1 | RHG341Z | Rubber Cushion, Cabinet | 4 |
| L315,316 | RLQZB120K | Coil, Choke | 2 | K2 | RYFFB600M7 | Bottom Cabinet, For U.S.A. | 1 |
| L320 | RLQZB2R2K | Coil, Choke | 1 | K2 | RYFFB600C7 | Bottom Cabinet, For Canada | 1 |
| L322 | RLQZB1R8K | Coil, Choke | 1 | K2-1 | RJC505Z | Spring, Battery (UM-1) - Side | 1 |
| L332 | RLQZALR0K | Coil, Choke | 1 | K2-2 | RJC111A | Terminal, Battery (UM-1) + Side | 1 |
| T2,3,9 | RLI4M101 | FM IFT | 3 S | K2-3 | RJC936Z | Terminal, Battery (UM-1) +, - Side | 1 |
| T4 | RLI2M222 | AM IFT | 1 | K2-4 | RJC975Z | Terminal, Battery (UM-3) +, - Side | 1 |
| T5 | RLI2M214 | AM IFT | 1 S | K2-5 | RJC974Z | Terminal, Battery (UM-3) + - Side | 1 |
| T6 | RLA3Z10 | SW IFT | 1 | K2-6 | RJC914A | Terminal, Battery (UM-3) + Side | 1 |
| T7,8 | RLI9M11 | SW IFT | 2 | K2-7 | RJC322A | Terminal, Battery (UM-3) +, - Side | 1 |
| T10 | RLI2M402 | AM IFT | 1 S | K2-8 | RHG335Z | Rubber Cushion, Cabinet | 2 |
| T11~13 | RLI9M10 | SW IFT | 3 | K3 | RYPFB600M | Front Panel Ass'y | 1 |
| T14 | RLI2M901 | SW IFT | 1 | K4 | RYN1FB600N7 | Battery Compartment Cover, UM-1 | 1 |
| T301 | RLT9F4A | DC/DC Converter | 1 | K5 | RYN2FB600N7 | Battery Compartment Cover, UM-3 | 1 |
| T302 | RLO9Z1 | DC/DC Converter | 1 | K6 | XEARR225EAY | Telescopic Antenna | 1 |
| T303~305,307 | RLI9M8 | SW 2nd VCO Filter | 4 | K7 | RJF1065Y | Terminal, EXT Antenna, Earth | 3 |
| T306 | RLA7M72 | 35.6636 MHz Oscillator | 1 | K8 | RJS258Y | Socket, LW/MW/SW Antenna | 1 |
| T701 | RLT5K4Z1A | Power Transformer | 1 Δ | K9 | RJT212A | Terminal, Antenna Socket | 1 |
| | | VARIABLE RESISTORS | | K10 | RUE51Z | Bracket, Front Panel | 3 |
| VR1 | EVNM4AA00B52 | Variable Resistor, Pre set, 500Ω (B) | 1 S | K11 | RKL24Z | Stand, Cabinet | 1 |
| VR2 | EVNM4AA00B13 | Variable Resistor, Pre set, 1kΩ (B) | 1 S | K12 | RHR1023V | Shaft, Cabinet | 2 |
| VR301,302 | EVJF8AF20B54 | Variable Resistor, 50kΩ (B) | 2 | K13 | RKH5086Z | Handle, Cabinet | 1 |
| VR303 | EVJF8AF20D54 | Variable Resistor, 50kΩ (D) | 1 | K14 | RKT133Y | Bracket, Handle | 1 |
| VR304 | EVJF8AF20A14 | Variable Resistor, 10kΩ (A) | 1 | K15 | RYTFB600N | Knob Ass'y Tuning | 1 |
| VR601 | EVNM4AA00B53 | Variable Resistor, Pre set, 5kΩ (B) | 1 S | K16 | RBN631Z | Knob, Volume, Base etc. | 4 |
| | | VARIABLE CAPACITORS | | K17 | RBS209Z | Knob, AM Mode | 1 |
| CT1~3,5,302~305 | RCVTZ11F | Trimmer Capacitor | 8 | K18 | XTB3+10CFN | Screw, Handle M'tg | 2 |
| CT7 | RCVTZ20F | Trimmer Capacitor | 1 | K19 | XTB3+10FFN | Screw, Antenna Socket M'tg | 2 |
| CT8,9 | RCVCTZ51J | Trimmer Capacitor | 2 | K20 | XTB3+10FFZ | Screw, Cabinet M'tg | 5 |
| CT6,301,306 | RCVTZ30F | Trimmer Capacitor | 3 | K21 | XTB3-60C | Screw, Cabinet M'tg | 5 |
| | | CERAMIC FILTERS | | K22 | XSB3+16BN | Screw, Telescopic Antenna M'tg | 1 S |
| CF1,2 | RVF107MTNAR | Ceramic Filter | 2 | | | ELECTRICAL PARTS | |
| CF3 | RVFCFM2450D | Ceramic Filter | 1 | E1 | XAMR82R150A | Pilot Lamp | 1 |
| CF4 | RVFSFP450K | Ceramic Filter | 1 | E2 | RUV703Z | Cover, Meter | 1 |
| CF5 | RVFSFP450H10 | Ceramic Filter | 1 | E3 | RSM2629Z | Meter | 1 |
| CF6 | RVBCSB448R5 | Ceramic OSC Element | 1 | E4 | RUS536Z | Spring | 1 |
| CF7 | RVBCSB451R5 | Ceramic OSC Element | 1 | E5 | RMS12B | Bracket, Speaker | 3 |
| CF8,9 | RVFCSC101K | Ceramic Filter | 2 | E6 | RDT9138Z | Shaft, Tuning | 1 |
| | | COMPONENT COMBINATION | | E7 | RAD9BT04ZS | Display | 1 |
| Z1 | RXABPWP5W | Component Combination | 1 | E8 | RGP866Z | Panel, Display | 1 |
| | | SPEAKER | | E9 | RHG2034Z | Rubber Cushion, Display | 1 |
| | RAS9P14Z | Speaker, 9 cm(3 1/2"), 8Ω | 1 | E10 | RHR1216Z | Shaft, Chassis | 5 |
| | | SWITCHES | | E11 | RBC445Z | Button, Indicator, Display etc. | 6 |
| S1 | RSS2A06X | Switch, SW Antenna | 1 | E12 | RBC446Z | Button, Power, AM ANL etc. | 3 |
| S2 | RSR3B05Z | Switch, AM Mode | 1 | E13 | RBC447Z | Button, Lock, Tuning Speed | 2 |
| S3,5,301,303,304,308,309 | RSH2B22Z | Switch, Band Width, AM ANL etc. | 7 | E14 | XANR2T20 | Neon Lamp | 2 |
| S4 | RSH1A10X | Switch, Power | 1 | E15 | RMP162Z | Holder, LED (D301) | 1 |
| S305~307 | RSHX052Z | Switch, Manual, Scan, Seek | 1 | E16 | RMP206Z | Holder, LED (D304) | 1 |
| S310~330 | RSH1A28Z | Switch, Band, Direct-Access Tuning | 21 | E17 | RMCL17Y | Shield Cover, IC311 | 1 |
| S701 | Refer to J5 | Jack, AC/DC | | E18 | RMC607Z | Shield Cover, IC308 | 1 |
| S702 | RSR4A07Z | Switch, Voltage Selector | 1 Δ | E19 | RUE38Z | Shaft, Tuning Circuit Board | 2 |
| | | JACKS | | | | | |
| J1~3 | QJA0172A | Jack, Stand By, Rec Out, EXT SP | 3 | | | | |

| Ref. No. | Part No. | Part Name & Description | Per Set | Ref. No. | Part No. | Value | Ref. No. | Part No. | Value |
|-------------------|-------------|-------------------------------------|---------|----------|------------|--------|----------|------------|--------|
| E20 | RMP207Z | Holder, Q601, 602 D601, 602 | 1 | R55 | ERD25FJ471 | 470 S | R161 | ERD25FJ103 | 10K S |
| E21 | RJS2L3Z | Socket, 2 Pin | 10 | R56 | ERD25FJ471 | 470 S | R162 | ERD25FJ101 | 100 S |
| E22 | RJS3L3Z | Socket, 3 Pin | 5 | R57 | ERD25FJ471 | 470 S | R163 | ERD25FJ333 | 33K S |
| E23 | RJS5L3Z | Socket, 5 Pin | 2 | R58 | ERD25FJ471 | 470 S | R165 | ERD25FJ473 | 47K S |
| E24 | RJS6L3Z | Socket, 6 Pin | 4 | R60 | ERD25FJ471 | 470 S | R166 | ERD25FJ471 | 470 S |
| E25 | RJS10L3Z | Socket, 10 Pin | 1 | R61 | ERD25FJ471 | 470 S | R167 | ERD25FJ102 | 1K S |
| E26 | RJS12L3Z | Socket, 12 Pin | 1 | R62 | ERD25FJ331 | 330 S | R168 | ERD25TJ224 | 220K S |
| E27 | RJT707Z | Terminal, Socket | 91 | R63 | ERD25FJ331 | 330 S | R170 | ERD25FJ101 | 100 S |
| E28 | RJP2G4Y | Plug, 2 Pin (CP4~9, 17, 18, 25, 30) | 10 | R65 | ERD25FJ470 | 47 S | R171 | ERD25FJ101 | 100 S |
| E29 | RJP3G4Y | Plug, 3 Pin (CP13~16, 21) | 5 | R66 | ERD25FJ333 | 33K S | R172 | ERD25FJ102 | 1K S |
| E30 | RJP5G4Y | Plug, 5 Pin (CP11, 24) | 2 | R67 | ERD25FJ101 | 100 S | R173 | ERD25FJ472 | 4.7K S |
| E31 | RJP6G4Y | Plug, 6 Pin (CP1~3, 23) | 4 | R68 | ERD25FJ331 | 330 S | R174 | ERD25FJ681 | 680 S |
| E32 | RJP10G4Y | Plug, 10P (CP12) | 1 | R71 | ERD25FJ102 | 1K S | R175 | ERD25TJ224 | 220K S |
| E33 | RJP12G4Y | Plug, 12 Pin (CP22) | 1 | R72 | ERD25FJ220 | 22 S | R177 | ERD25TJ683 | 68K S |
| E34 | XNS12D | Nut, Headphone Jack M'tg | 1 | R73 | ERD25TJ104 | 100K S | R178 | ERD25FJ333 | 33K S |
| E35 | XNS9 | Nut, Tuning Shaft M'tg | 1 S | R74 | ERD25TJ104 | 100K S | R179 | ERD25TJ224 | 220K S |
| E36 | XNS8D | Nut, AM Mode Switch M'tg | 1 S | R75 | ERD25FJ103 | 10K S | R180 | ERD25FJ332 | 3.3K S |
| E37 | XSN3+6S | Screw, Tuning Circuit Board M'tg | 4 S | R76 | ERD25FJ333 | 33K S | R181 | ERD25FJ562 | 5.6K S |
| E38 | XWA3B | Washer | 4 S | R77 | ERD25FJ102 | 1K S | R182 | ERD25FJ223 | 22K S |
| E39 | XWG3 | Washer | 4 S | R78 | ERD25FJ220 | 22 S | R183 | ERD25TJ683 | 68K S |
| E40 | XTV3+10G | Screw, Speaker Bracket etc. M'tg | 22 | R79 | ERD25FJ681 | 680 S | R184 | ERD25FJ680 | 68 S |
| E41 | XTV3+10GR | Red Screw, Chassis M'tg | 1 | R81 | ERD25FJ221 | 220 S | R185 | ERD25FJ222 | 2.2K S |
| E42 | XTV3+6F | Screw, Circuit Board M'tg | 8 | R82 | ERD25TJ334 | 330K S | R186 | ERD25FJ472 | 4.7K S |
| E43 | XTV3+8BFN | Screw, Circuit Board M'tg | 18 S | R83 | ERD25FJ101 | 100 S | R187 | ERD25FJ103 | 10K S |
| ACCESSORIES | | | | R85 | ERD25FJ471 | 470 S | R188 | ERD25TJ683 | 68K S |
| A1 | RJA22Y | Power Cord, AC | 1 Δ | R86 | ERD25FJ101 | 100 S | R189 | ERD25FJ682 | 6.8K S |
| A2 | RJP97Z | Antenna Connector | 1 | R87 | ERD25FJ331 | 330 S | R190 | ERD25FJ471 | 470 S |
| PACKING MATERIALS | | | | R88 | ERD25TJ684 | 680K S | R191 | ERD25FJ333 | 33K S |
| P1 | XZB60x50A01 | Polyethylene Cover | 1 S | R89 | ERD25TJ104 | 100K S | R192 | ERD25FJ331 | 330 S |
| P2 | RPN9446Z | Pad Complete | 1 | R100 | ERD25FJ473 | 47K S | R199 | ERD25FJ222 | 2.2K S |
| P3 | RPK1681Z | Gift Box, For U.S.A. | 1 | R101 | ERD25FJ221 | 220 S | R201 | ERD25TJ154 | 150K S |
| P3 | RPK1682Z | Gift Box, For Canada | 1 | R102 | ERD25FJ102 | 1K S | R202 | ERD25TJ683 | 68K S |
| PRINTED MATERIALS | | | | R103 | ERD25FJ472 | 4.7K S | R203 | ERD25FJ471 | 470 S |
| Y1 | RQX4200Z | Instruction Book, For U.S.A. | 1 | R105 | ERD25TJ105 | 1M S | R207 | ERD25FJ223 | 22K S |
| Y1 | RQX4201Z | Instruction Book, For Canada | 1 | R106 | ERD25FJ470 | 47 S | R208 | ERD25FJ682 | 6.8K S |
| | | | | R107 | ERD25FJ222 | 2.2K S | R210 | ERD25FJ333 | 33K S |
| | | | | R108 | ERD25FJ562 | 5.6K S | R211 | ERD25TJ334 | 330K S |
| | | | | R110 | ERD25FJ472 | 4.7K S | R212 | ERD25FJ102 | 1K S |
| | | | | R111 | ERD25FJ333 | 33K S | R213 | ERD25FJ153 | 15K S |
| | | | | R112 | ERD25FJ473 | 47K S | R214 | ERD25TJ474 | 470K S |
| | | | | R113 | ERD25FJ222 | 2.2K S | R215 | ERD25FJ223 | 22K S |
| | | | | R115 | ERD25FJ222 | 2.2K S | R216 | ERD25FJ102 | 1K S |
| | | | | R116 | ERD25FJ222 | 2.2K S | R217 | ERD25FJ471 | 470 S |
| | | | | R117 | ERD25FJ222 | 2.2K S | R218 | ERD25TJ104 | 100K S |
| | | | | R118 | ERD25FJ222 | 2.2K S | R219 | ERD25FJ100 | 10 S |
| | | | | R119 | ERD25FJ473 | 47K S | R220 | ERD25TJ683 | 68K S |
| | | | | R120 | ERD25FJ102 | 1K S | R221 | ERD25FJ333 | 33K S |
| | | | | R121 | ERD25FJ221 | 220 S | R222 | ERD25FJ333 | 33K S |
| | | | | R122 | ERD25FJ332 | 3.3K S | R223 | ERD25FJ333 | 33K S |
| | | | | R123 | ERD25FJ473 | 47K S | R224 | ERD25FJ102 | 1K S |
| | | | | R124 | ERD25TJ683 | 68K S | R226 | ERD25TJ104 | 100K S |
| | | | | R125 | ERD25FJ101 | 100 S | R227 | ERD25FJ102 | 1K S |
| | | | | R126 | ERD25FJ473 | 47K S | R228 | ERD25FJ333 | 33K S |
| | | | | R127 | ERD25FJ470 | 47 S | R229 | ERD25FJ223 | 22K S |
| | | | | R128 | ERD25FJ151 | 150 S | R230 | ERD25FJ333 | 33K S |
| | | | | R129 | ERD25TJ683 | 68K S | R231 | ERD25FJ333 | 33K S |
| | | | | R130 | ERD25FJ470 | 47 S | R232 | ERD25FJ102 | 1K S |
| | | | | R131 | ERD25TJ154 | 150K S | R233 | ERD25FJ470 | 47 S |
| | | | | R132 | ERD25FJ681 | 680 S | R235 | ERD25FJ473 | 47K S |
| | | | | R133 | ERD25FJ470 | 47 S | R236 | ERD25TJ104 | 100K S |
| | | | | R135 | ERD25FJ331 | 330 S | R237 | ERD25TJ104 | 100K S |
| | | | | R136 | ERD25FJ103 | 10K S | R238 | ERD25TJ224 | 220K S |
| | | | | R137 | ERD25FJ152 | 1.5K S | R240 | ERD25FJ562 | 5.6K S |
| | | | | R138 | ERD25FJ470 | 47 S | R242 | ERD25FJ562 | 5.6K S |
| | | | | R139 | ERD25FJ470 | 47 S | R243 | ERD25FJ682 | 6.8K S |
| | | | | R148 | ERD25FJ472 | 4.7K S | R248 | ERD25FJ103 | 10K S |
| | | | | R149 | ERD25FJ103 | 10K S | R249 | ERD25FJ332 | 3.3K S |
| | | | | R150 | ERD25FJ152 | 1.5K S | R250 | ERD25FJ102 | 1K S |
| | | | | R151 | ERD25FJ471 | 470 S | R251 | ERD25FJ470 | 47 S |
| | | | | R153 | ERD25FJ331 | 330 S | R252 | ERD25FJ470 | 47 S |
| | | | | R154 | ERD25FJ103 | 10K S | R253 | ERD25TJ104 | 100K S |
| | | | | R155 | ERD25FJ122 | 1.2K S | R254 | ERD25FJ101 | 100 S |
| | | | | R156 | ERD25FJ332 | 3.3K S | R255 | ERD25FJ471 | 470 S |
| | | | | R157 | ERD25FJ222 | 2.2K S | R256 | ERD25FJ470 | 47 S |
| | | | | R159 | ERD25FJ103 | 10K S | R257 | ERD25FJ470 | 47 S |
| | | | | R160 | ERD25FJ101 | 100 S | R258 | ERD25FJ471 | 470 S |
| | | | | | | | R259 | ERD25FJ561 | 560 S |
| | | | | | | | R260 | ERD25FJ123 | 12K S |

| Ref. No. | Part No. | Value | Ref. No. | Part No. | Value |
|-----------|------------|--------|----------|------------|--------|
| RESISTORS | | | | | |
| R1 | ERD50FJ103 | 10K S | R26 | ERD25FJ471 | 470 S |
| R2 | ERD25FJ222 | 2.2K S | R27 | ERD25FJ331 | 330 S |
| R3 | ERD25FJ222 | 2.2K S | R29 | ERD25FJ223 | 22K S |
| R4 | ERD25FJ222 | 2.2K S | R30 | ERD25TJ224 | 220K S |
| R5 | ERD25FJ272 | 2.7K S | R31 | ERD25TJ105 | 1M S |
| R6 | ERD25FJ102 | 1K S | R32 | ERD25FJ102 | 1K S |
| R7 | ERD25TJ104 | 100K S | R33 | ERD25FJ473 | 47K S |
| R8 | ERD25TJ104 | 100K S | R35 | ERD25TJ224 | 220K S |
| R9 | ERD25FJ220 | 22 S | R36 | ERD25FJ221 | 220 S |
| R10 | ERD25TJ684 | 680K S | R37 | ERD25FJ101 | 100 S |
| R11 | ERD25TJ104 | 100K S | R38 | ERD25FJ101 | 100 S |
| R12 | ERD25FJ102 | 1K S | R39 | ERD25FJ103 | 10K S |
| R13 | ERD25FJ333 | 33K S | R40 | ERD25FJ103 | 10K S |
| R15 | ERD25TJ105 | 1M S | R41 | ERD25FJ222 | 2.2K S |
| R16 | ERD25TJ105 | 1M S | R42 | ERD25FJ222 | 2.2K S |
| R17 | ERD25FJ102 | 1K S | R43 | ERD25FJ223 | 22K S |
| R18 | ERD25FJ103 | 10K S | R44 | ERD25TJ474 | 470K S |
| R20 | ERD25FJ102 | 1K S | R46 | ERD25TJ474 | 470K S |
| R21 | ERD25FJ333 | 33K S | R50 | ERD25FJ471 | 470 S |
| R22 | ERD25FJ153 | 15K S | R51 | ERD25FJ471 | 470 S |
| R23 | ERD25FJ102 | 1K S | R52 | ERD25FJ471 | 470 S |
| R24 | ERD25FJ682 | 6.8K S | R53 | ERD25FJ471 | 470 S |
| R25 | ERD25TJ474 | 470K S | R54 | ERD25TJ683 | 68K S |

| Ref. No. | Part No. | Value | Ref. No. | Part No. | Value | Ref. No. | Part No. | Value | Ref. No. | Part No. | Value |
|----------|--------------|--------|----------|-------------|--------|----------|-------------|--------|----------|-------------|--------|
| C121 | ECBS1C103NY | 0.01 | C228 | ECBS1C103NY | 0.01 | C356 | ECBS1C103NY | 0.01 | C453 | ECKDLH102MD | 0.001 |
| C123 | ECEALAS470 | 47 S | C229 | ECBS1C103NY | 0.01 | C357 | ECFTLE333MD | 0.033 | C454 | ECCDLH120KC | 12P |
| C124 | ECFTLE333MD | 0.033 | C230 | ECEALHSR33 | 0.33 | C358 | ECCDLH150KC | 15P | C455 | ECEALAS470 | 47 S |
| C125 | ECFTLE473MD | 0.047 | C231 | ECEA50ZR47 | 0.47 S | C359 | ECFTLC104MD | 0.1 | C456 | ECCDLH330KC | 33P |
| C126 | ECFTLE223MD | 0.022 | C232 | ECEA50Z1 | 1 S | C360 | ECEA0JS471 | 470 S | C457 | ECCDLH220KC | 22P |
| C127 | ECEA50Z1 | 1 S | C233 | ECEA50Z1 | 1 S | C361 | ECEALAS470 | 47 S | C458 | ECCDLH1R5C | 1.5P |
| C128 | ECQP2A152JZ | 1500P | C234 | ECEALAS470 | 47 S | C362 | ECEALAU102 | 1000 | C460 | ECKDLH102MD | 0.001 |
| C129 | ECEALHS100 | 10 S | C235 | ECFTLE223MD | 0.022 | C363 | ECQG05224JZ | 0.22 | C461 | ECBS1H102KB | 0.001 |
| C132 | ECFTLE223MD | 0.022 | C236 | ECEALHSR33 | 0.33 | C364 | ECEALAU101 | 100 | C462 | ECBS1H102KB | 0.001 |
| C133 | ECEALCS330 | 33 S | C237 | ECEALAS470 | 47 S | C365 | ECFTLE333MD | 0.033 | C463 | ECBS1H181KB | 180P |
| C134 | ECEALAS470 | 47 S | C238 | ECEALAU332 | 3300 | C366 | ECEA25Z4R7 | 4.7 S | C465 | ECCDLH100KC | 10P |
| C135 | ECEA0JU101 | 100 | C245 | ECFTLE333MD | 0.033 | C367 | ECEALAU330 | 33 | C466 | ECFTLE473MD | 0.047 |
| C136 | ECBS1C103NY | 0.01 | C249 | ECQG05224JZ | 0.22 | C368 | ECKDLH471KB | 470P | C467 | ECBS1H181KB | 180P |
| C137 | ECBS1C103NY | 0.01 | C250 | ECEALAU471 | 470 | C370 | ECEALJS330 | 33 S | C468 | ECBS1C103NY | 0.01 |
| C138 | ECBS1C103NY | 0.01 | C251 | ECBS1H331KB | 330P | C371 | ECBS1H6R8KC | 6.8P | C470 | ECCDLH270KC | 27P |
| C139 | ECEALAS470 | 47 S | C252 | ECBS1H102KB | 0.001 | C372 | ECKDLH103MD | 0.01 | C471 | ECBS1H151KB | 150P |
| C150 | ECBS1C103NY | 0.01 | C253 | ECEALAU221 | 220 | C373 | ECBS1H390JL | 39P | C472 | ECBS1H102KB | 0.001 |
| C151 | ECEA0JU101 | 100 | C254 | ECBS1H101JL | 100P | C374 | ECBS1H102KB | 0.001 | C473 | ECBS1H102KB | 0.001 |
| C152 | ECBS1C103NY | 0.01 | C255 | ECEA25Z4R7 | 4.7 S | C375 | ECBS1H470JL | 47P | C475 | ECEALAS470 | 47 S |
| C153 | ECBTLIC223MY | 0.022 | C256 | ECEA50Z2R2 | 2.2 S | C376 | ECBS1H330JC | 33P | C476 | ECBS1H680JL | 68P |
| C154 | ECEA50ZR47 | 0.47 S | C257 | ECEALAS470 | 47 S | C377 | ECBS1H102KB | 0.001 | C477 | ECBS1C103NY | 0.01 |
| C155 | ECBS1C103NY | 0.01 | C258 | ECEA50ZR47 | 0.47 S | C378 | ECCDLH030C | 3P | C478 | ECBS1H121KB | 120P |
| C156 | ECBTLIC223MY | 0.022 | C259 | ECBS1E222MX | 0.0022 | C379 | ECBS1H102KB | 0.001 | C479 | ECBS1H100JC | 10P |
| C157 | ECBS1C103NY | 0.01 | C260 | ECEALHS0R1 | 0.1 | C380 | ECEALAS470 | 47 S | C480 | ECKDLH102ZF | 0.001 |
| C158 | ECBS1C103NY | 0.01 | C261 | ECBS1C103NY | 0.01 | C381 | ECCDLH020C | 2P | C481 | ECCDLH470KC | 47P |
| C159 | ECEA0JU101 | 100 | C262 | ECQP2A331JZ | 330P | C382 | ECEALAS470 | 47 S | C482 | ECBS1H220JC | 22P |
| C160 | ECBS1C103NY | 0.01 | C263 | ECQP2A471JZ | 470P | C383 | ECBS1H6R8KC | 6.8P | C483 | ECBS1H680JL | 68P |
| C161 | ECBS1H330JC | 33P | C264 | ECBS1C103NY | 0.01 | C384 | ECEA25Z4R7 | 4.7 S | C484 | ECFTLE103MD | 0.01 |
| C162 | ECEALAS470 | 47 S | C265 | ECQP2A331JZ | 330P | C385 | ECKDLH102MD | 0.001 | C485 | ECBS1H102KB | 0.001 |
| C163 | ECBS1C103MY | 0.01 | C266 | ECQP2A471JZ | 470P | C386 | ECBS1H102KB | 0.001 | C486 | ECBS1H102KB | 0.001 |
| C165 | ECBS1C103NY | 0.01 | C267 | ECBS1C103NY | 0.01 | C387 | ECBS1H102KB | 0.001 | C487 | ECFTLE103MD | 0.01 |
| C166 | ECBS1C103MY | 0.01 | C268 | ECEALHS100 | 10 S | C388 | ECBS1H102KB | 0.001 | C488 | ECBS1C103NY | 0.01 |
| C168 | ECBS1H101JL | 100P | C269 | ECEALHS100 | 10 S | C389 | ECBS1H102KB | 0.001 | C489 | ECCDLH470KC | 47P |
| C169 | ECEALHS0R1 | 0.1 | C270 | ECEA25Z4R7 | 4.7 S | C390 | ECBS1H20JL | 12P | C501 | ECCDLH470KC | 47P |
| C170 | ECEA0JU101 | 100 | C271 | ECEALHSR22 | 0.22 | C391 | ECBS1H181KB | 180P | C502 | ECBS1H100JC | 10P |
| C171 | ECFTLC683MD | 0.068 | C298 | ECCDLH101K | 100P | C392 | ECBS1H102KB | 0.001 | C503 | ECBS1H1R5ML | 1.5P |
| C172 | ECBS1C103NY | 0.01 | C299 | ECCDLH101K | 100P | C393 | ECBS1H102KB | 0.001 | C505 | ECCDLH470KC | 47P |
| C173 | ECCDLH270KC | 27P | C301 | ECFTLE223MD | 0.022 | C394 | ECBS1H102KB | 0.001 | C506 | ECBS1H100JC | 10P |
| C174 | ECFTLE333MD | 0.033 | C302 | ECEALHSR22 | 0.22 | C395 | ECCDLH020C | 2P | C507 | ECBS1H102KB | 0.001 |
| C175 | ECBS1C103MY | 0.01 | C303 | ECKDLH472MD | 0.0047 | C397 | ECKDLH471K | 470P | C508 | ECBS1H477KL | 4.7P |
| C176 | ECBS1C103NY | 0.01 | C304 | ECEA25Z4R7 | 4.7 S | C400 | ECBS1H390JL | 39P | C509 | ECBS1C103NY | 0.01 |
| C177 | ECBS1C103NY | 0.01 | C305 | ECFTLE333MD | 0.033 | C401 | ECEA0JU101 | 100 | C510 | ECBS1H102KB | 0.001 |
| C178 | ECBS1H390JL | 39P | C306 | ECEALHSR33 | 0.33 | C403 | ECBS1H820JL | 82P | C512 | ECBS1H101JL | 100P |
| C179 | ECBS1H102KB | 0.001 | C308 | ECFTLE473MD | 0.047 | C404 | ECBS1C103NY | 0.01 | C513 | ECKDLH103MD | 0.01 |
| C180 | ECBS1C103NY | 0.01 | C309 | ECEA25Z4R7 | 4.7 S | C405 | ECQG05224JZ | 0.22 | C514 | ECKDLH103MD | 0.01 |
| C181 | ECFTLC683MD | 0.068 | C310 | ECKDLH102MD | 0.001 | C406 | ECBS1H390JL | 39P | C515 | ECBS1H330JC | 33P |
| C182 | ECBS1H3R3KL | 3.3P | C311 | ECKDLH103MD | 0.01 | C407 | ECQG05224JZ | 0.22 | C516 | ECBS1H100JC | 10P |
| C183 | ECBS1H680JL | 68P | C312 | ECBS1H102KB | 0.001 | C408 | ECEA25M4R7 | 4.7 | C517 | ECKDLH103ZF | 0.01 |
| C184 | ECBS1H100JC | 10P | C313 | ECKDLH472MD | 0.0047 | C409 | ECBS1C103NY | 0.01 | C518 | ECKDLH103MD | 0.01 |
| C185 | ECBS1H102KB | 0.001 | C322 | ECBS1H102KB | 0.001 | C410 | ECEA25M4R7 | 4.7 | C519 | ECEA0JU101 | 100 |
| C186 | ECBS1H2R2KL | 2.2P | C325 | ECEALHS100 | 10 S | C411 | ECBS1H102KB | 0.001 | C520 | ECBS1H102KB | 0.001 |
| C187 | ECBS1H390JL | 39P | C326 | ECBS1C103NY | 0.01 | C412 | ECBS1H6R8KC | 6.8P | C521 | ECBS1C103NY | 0.01 |
| C200 | ECBS1H102KB | 0.001 | C327 | ECEALAU101 | 100 | C413 | ECBS1H330JC | 33P | C522 | ECFTLE223MD | 0.022 |
| C202 | ECBS1C103NY | 0.01 | C328 | ECEA0JU222 | 2200 | C414 | ECFTLC683MD | 0.068 | C523 | ECBS1C103NY | 0.01 |
| C205 | ECBS1H102KB | 0.001 | C329 | ECBS1C103NY | 0.01 | C415 | ECBS1H220JC | 22P | C524 | ECKDLH222MD | 0.0022 |
| C206 | ECBS1H120JC | 12P | C330 | ECBS1E472MX | 0.0047 | C416 | ECBS1H102KB | 0.001 | C525 | ECBS1H102KB | 0.001 |
| C207 | ECBS1C103NY | 0.01 | C331 | ECEA0JU101 | 100 | C417 | ECEALAS470 | 47 S | C527 | ECQE1225KN | 2.2 |
| C208 | ECBS1H220JC | 22P | C332 | ECBS1E472MX | 0.0047 | C418 | ECBS1H6R8KC | 6.8P | C529 | ECBS1H102KB | 0.001 |
| C209 | ECBS1C103NY | 0.01 | C333 | ECBS1C103NY | 0.01 | C420 | ECBS1H102KB | 0.001 | C530 | ECBS1C103NY | 0.01 |
| C210 | ECBS1H560JL | 56P | C334 | ECBS1C103NY | 0.01 | C421 | ECBS1H100JC | 10P | C531 | ECEALHSR22 | 0.22 |
| C211 | ECBS1H100JC | 10P | C339 | ECFTLE223MD | 0.022 | C422 | ECBS1C103NY | 0.01 | C532 | ECEALHS0R1 | 0.1 |
| C212 | ECBS1H100JC | 10P | C340 | ECEA50Z2R2 | 2.2 S | C423 | ECBS1H6R8KC | 6.8P | C533 | ECEALHS0R1 | 0.1 |
| C213 | ECBS1H180JC | 18P | C341 | ECFTLE473MD | 0.047 | C426 | ECFTLE473MD | 0.047 | C536 | ECEA25M4R7 | 4.7 |
| C214 | ECEA25Z4R7 | 4.7 S | C342 | ECEALHS100 | 10 S | C427 | ECQG1H333MD | 0.033 | C537 | ECEA25M4R7 | 4.7 |
| C215 | ECBS1H220JC | 22P | C343 | ECBS1H471KB | 470P | C428 | ECEALHSR22 | 0.22 | C538 | ECFTLC104MD | 0.1 |
| C216 | ECBS1H120JC | 12P | C344 | ECBS1H471KB | 470P | C430 | ECBS1H102KB | 0.001 | C539 | ECEALAS470 | 47 S |
| C217 | ECBS1H100JC | 12P | C345 | ECKDLH471KB | 470P | C431 | ECBS1C103NY | 0.01 | C550 | ECEA25Z4R7 | 4.7 S |
| C218 | ECBS1H102KB | 0.001 | C346 | ECKDLH471KB | 470P | C432 | ECFTLE223MD | 0.022 | C701 | ECKDLH103ZF | 0.01 |
| C219 | ECEALHS100 | 10 S | C347 | ECBS1H471KB | 470P | C433 | ECFTLE103MD | 0.01 | C702 | ECKDLH103ZF | 0.01 |
| C220 | ECBS1C103NY | 0.01 | C348 | ECBS1H471KB | 470P | C434 | ECEALAS470 | 47 S | C703 | ECKDLH103ZF | 0.01 |
| C221 | ECBS1H102KB | 0.001 | C349 | ECEA50Z3R3 | 3.3 S | C435 | ECEA0JU221 | 220 | C704 | ECKDLH103ZF | 0.01 |
| C222 | ECFTLE103MD | 0.01 | C350 | ECFTLC104MD | 0.1 | C436 | ECBS1H102KB | 0.001 | | | |
| C223 | ECBS1H102KB | 0.001 | C351 | ECBS1H820JL | 82P | C437 | ECBS1H102KB | 0.001 | | | |
| C224 | ECBS1H3R9KL | 3.9P | C352 | ECBS1H100JC | 10P | C438 | ECEA50ZR47 | 0.47 S | | | |
| C225 | ECBS1H270JC | 27P | C353 | ECBS1H101JL | 100P | C449 | ECQG05224JZ | 0.22 | | | |
| C226 | ECBS1H270JC | 27P | C354 | ECEA0JU222 | 2200 | C450 | ECBS1H1R5ML | 1.5P | | | |
| C227 | ECBS1H270JC | 27P | C355 | ECEA0JU101 | 100 | C451 | ECCDLH101K | 100P | | | |
| | | | | | | C452 | ECCDLH050C | 5P | | | |