
INTRODUCTION

This service manual describes the latest information for the IC-820H at the time of publication.

MODEL	VERSION NO.	VERSION	SYMBOL
IC-820H	#12	Europe	EUR
	#14	Australia	AUS
	#15	Sweden	SWE
	#16	U.S.A.	USA

Please NOTE "OCR" software can make mistakes!
Edited as best as I could tl.

DANGER

NEVER connect the transceiver to an AC outlet or to a DC power supply that uses more than 16 V. Such a connection could cause a fire hazard and/or electric shock.

DO NOT expose the transceiver to rain, snow or any liquids.

DO NOT apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front end.



ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit order numbers
2. Component part number and name
3. Equipment model name and unit name
4. Quantity required

<SAMPLE ORDER>

1110000960 S.I.C NJM4558M/T1) IC-820H MAIN UNIT 1 piece
8810005510 Screw OH M3 x 6 IC-820H Top cover 6 pieces

Addresses are provided on the inside back cover for your convenience.

REPAIR NOTES

1. Make sure a problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a signal generator or a sweep generator.
7. **ALWAYS** connect a 40 dB to 50 dB attenuator between the transceiver and a deviation meter or spectrum analyser when using such test equipment.
8. **READ** the instructions of test equipment thoroughly before connecting equipment to the transceiver.

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To upgrade quality, all electrical or mechanical parts and internal circuits are subject to change without notice or obligation.

Sec. 1 SPECIFICATION

■ GENERAL

- Frequency coverage :

Version	144 MHz band	440 MHz band
U.S.A.	Rx: 136.0–174.0 MHz* Tx: 144.0–148.0 MHz	430.0–450.0 MHz
Europe	144.0–146.0 MHz	430.0–440.0 MHz
Australia	144.0–148.0 MHz	430.0–450.0 MHz
Sweden	144.0–146.0 MHz	432.0–438.0 MHz

* Guaranteed range is 144.0–146.0 MHz.

- Mode : SSB (A3J), CW (A1), FM(F3)
- Number of memory : 116
channels (50 regular, 1 call, 2 scan edges for each band and 10 satellite memories)
- Antenna impedance : 50 Ω unbalanced
- Usable temperature : -10°C to +60°C; +14°F to +140°F range
- Frequency stability : ±3 ppm (-10°C to +60°C)
- Power supply requirement : 13.8 V DC ±15%
- Current drain : Transmit High 16.0 A
Low 7.0 A
Receive Max audio 2.5 A
Stand-by 2.0 A
- Dimensions : 241(W) x 94(H) x 239(D) mm
9.5(W) x 3.7(H) x 9.4(D) in
(projections not included)
- Weight : 5.0 kg; 11.0 lb

■ TRANSMITTER

- Output power :

BAND	MODE	HIGH	LOW
144 MHz	FM, CW	45 W	6 W
	SSB	35 W	6 W
430 MHz	FM, CW	40 W	6 W
	SSB	30 W	6 W

- Spurious emissions : Less than -60 dB
- Carrier suppression : More than 40 dB
- Unwanted sideband : More than 40 dB
- Microphone impedance : 600 Ω

■ RECEIVER

- Receive system

144 MHz band	SSB, CW	Single conversion superheterodyne
FM		Double conversion superheterodyne
430 MHz band	SSB, CW	Double conversion superheterodyne
FM		Triple conversion superheterodyne

- Intermediate frequencies: (Unit: MHz)

	MODE	MAIN BAND			SUB BAND		
		1st	2nd	3rd	1st	2st	3rd
VHF	SSB	10.8500	—	—	10.9500	—	—
	CW	10.8491	—	—	10.9491	—	—
	FM	10.8500	0.455	—	10.9500	0.455	—
UHF	SSB	71.2500	10.8500	—	71.3500	10.9500	—
	CW	71.2491	10.8491	—	71.3491	10.9491	—
	FM	71.2500	10.8500	0.455	71.3500	10.9500	0.455

- Sensitivity (both VHF and UHF bands)

FM	0.18 μV for 12 dB SINAD
SSB, CW	0.11 μV for 10 dB S/N
- Squelch sensitivity (both VHF and UHF bands)

FM	Threshold Less than 0.1 μV
	Tight Less than 0.5 μV
SSB, CW	Threshold Less than 1.0 μV
	Tight Less than 3.2 mV
- Selectivity :

SSB, CW	More than 2.3 kHz/–6 dB
	Less than 4.2 kHz/–60 dB
CW narrow	More than 0.5 kHz/–6 dB
(optional)	Less than 1.34 kHz/–60 dB
FM	More than 15.0 kHz/–6 dB
	Less than 30.0 kHz/–60 dB
- Spurious and image rejection ratio : More than 60 dB
- Audio output power : More than 2.0 W at 10% distortion with an 8 Ω load
- RIT variable range : SSB, CW ±2 kHz (max.)
FM ±10 kHz (max.)

SECTION 2 DISASSEMBLY INSTRUCTIONS

● Opening the top and bottom covers

- ① Remove 8 screws (M3 x 6) from the transceiver's top and 4 screws (M3 x 6) from the sides, then lift up the top cover.
- ② Turn the transceiver upside down.
- ③ Remove 4 screws (M3 x 6) from the bottom cover, then lift up the bottom cover.

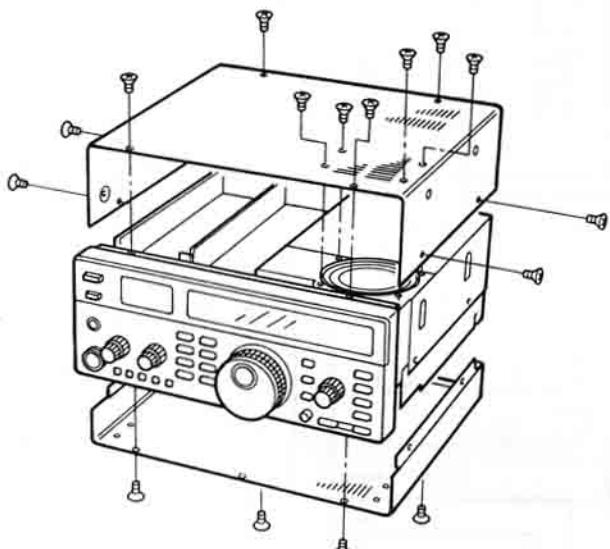


Fig. 1

● Opening the inside chassis

- ① Remove the top and bottom covers as shown Fig. 1.
- ② Loosen the gutter screw on each side of the front panel's rear side.
- ③ Remove 1 screw (M3 x 4) from each side of the front panel's rear side.
- ④ Pull the front panel forward as shown by the arrow at right.
- ⑤ Loosen 1 (M3 x 4) flat head screw from each side of the MAIN unit chassis.
- ⑥ Remove the 2 silver screws (Icom screw "A") from the rear panel.
- ⑦ Lift up the MAIN unit chassis to see the PLL unit.
- ⑧ Tighten the screws (labelled ⑤) to fix the MAIN unit chassis in a vertical position.

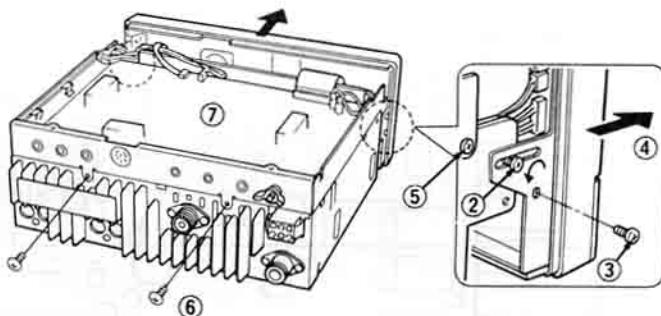


Fig. 2

● Removing the MAIN unit

- ① Remove the top and bottom covers as shown Fig. 1.
- ② Remove 14 screws (3 x 6) from the MAIN unit as shown below.
- ③ Slide the MAIN unit forward slightly to free the ACC socket from the rear panel.
- ④ Lift up the MAIN unit from the rear panel side.

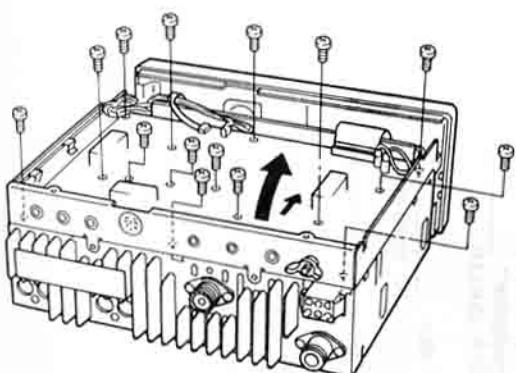


Fig. 3

● To see the PA-B unit

- ① Open the top and bottom covers as shown Fig. 1.
- ② Remove 8 screws (3 x 6) from the internal shield cover, then lift up the cover.

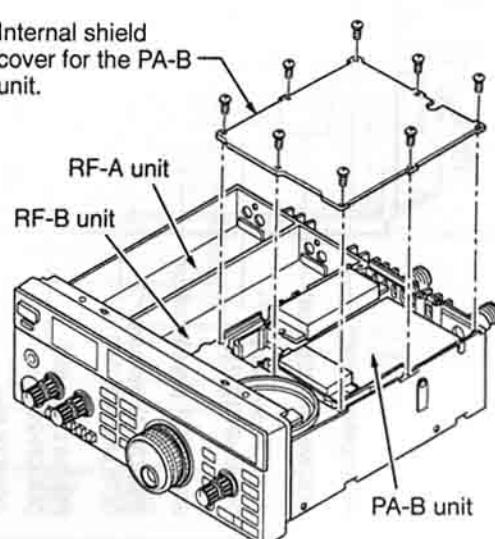


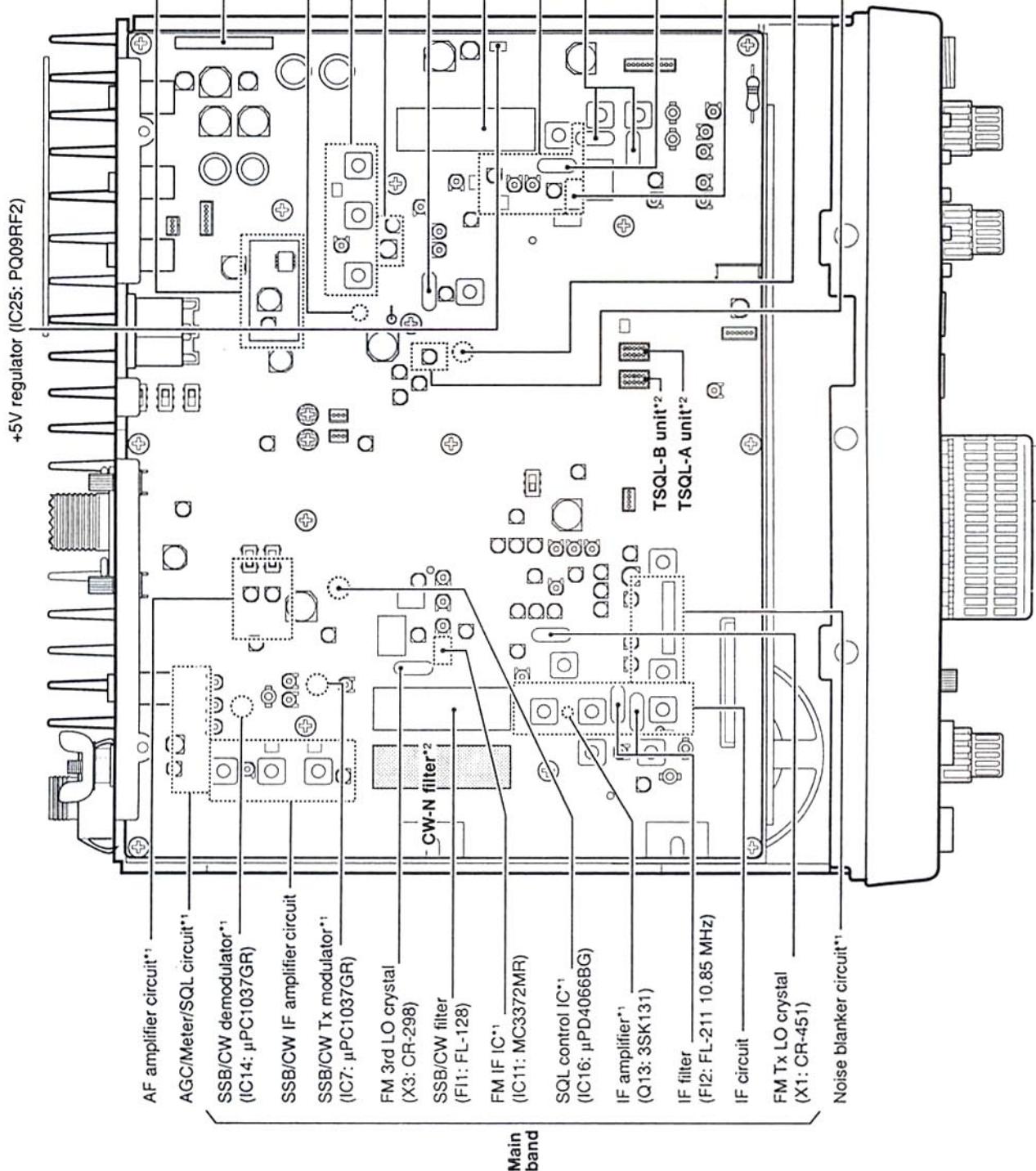
Fig. 4

MAIN UNIT

*¹ : Located underside of this point.

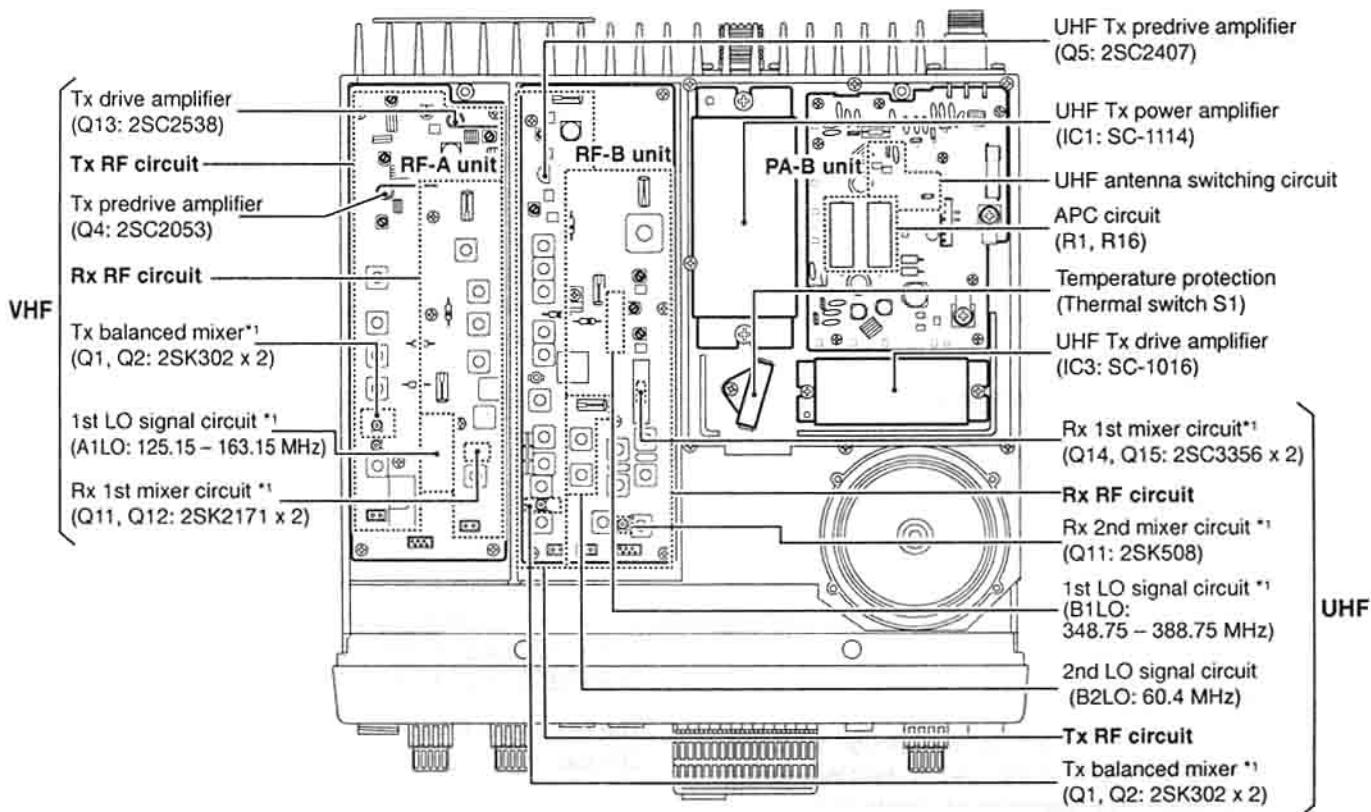
*² : Optional unit

INSIDE VIEWS



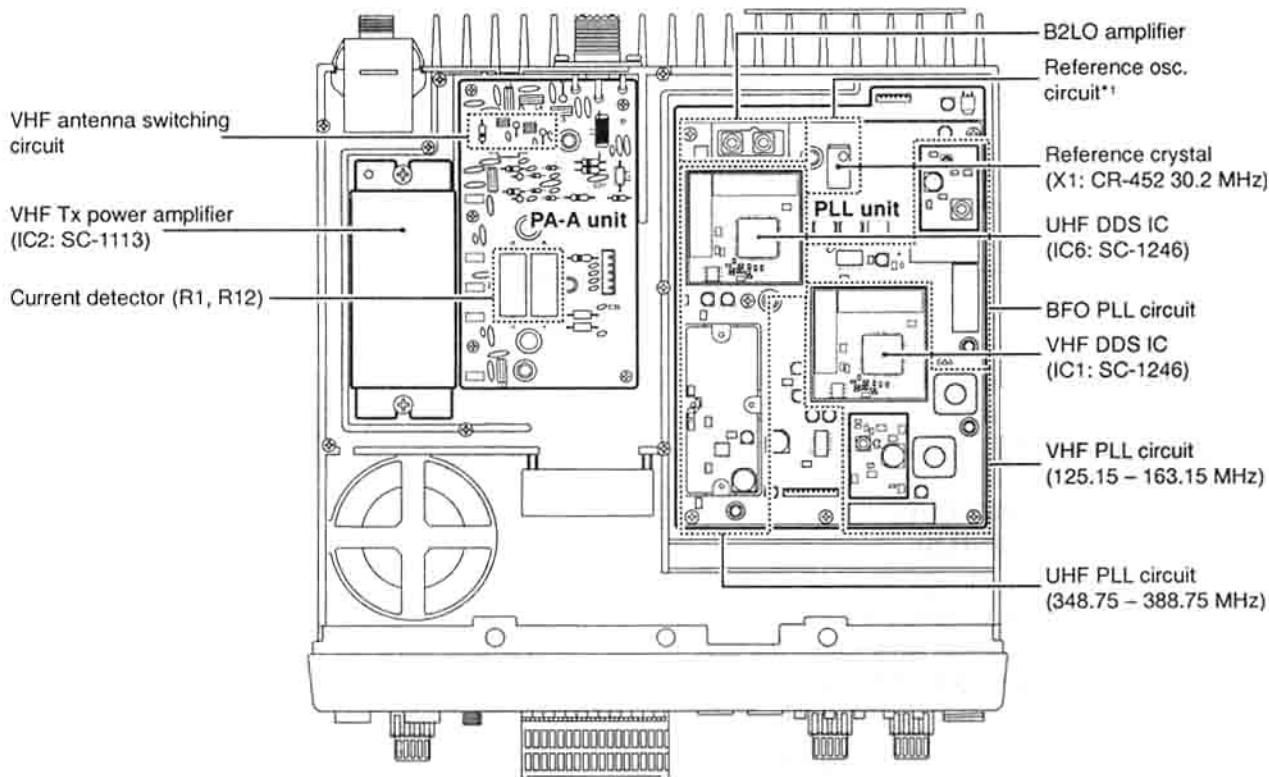
• RF-A, RF-B AND PA-B UNITS

* : Located underside of this point.



• PA-A AND PLL UNITS (The both unit appear when the MAIN unit is removed.)

* : Located underside of this point.



SECTION 4 CIRCUIT DESCRIPTION

4-1 RECEIVER CIRCUITS

Note: [main] = Main band [sub] = Sub band

4-1-1 VHF RF SWITCHING CIRCUIT (PA-A AND RF-A UNITS)

The RF switching circuit leads receive signals to bandpass filters from an antenna connector while receiving. While transmitting, this circuit leads the signals from the RF power amplifier to the antenna connector. This circuit includes a 20 dB RF attenuator circuit to prevent distortion from very strong signals.

RF signals from an antenna connector, pass through the low-pass filter (L3-L5, C5-C9), and are then applied to the antenna switching circuit (L6, C10, D2, L7, C11, D3, C12) on the PA-A unit. The signals from the PA-A unit are applied at the 20 dB attenuator (D15) on the RF-A unit. The attenuator prevents distortion caused by strong signals. The signals are then applied to the RF amplifier circuit (Q7).

4-1-2 VHF RF CIRCUIT (RF-A UNIT)

The amplified signals at Q7 are passed through the bandpass filter (L13-L15, D10-D12, C47, C49-C55, C109, C123) to suppress any undesired band signals.

D10-D13 employ varactor diodes that track the bandpass filters and are controlled by the PLL lock voltage. These diodes tune the center frequency of an RF passband for wide bandwidth receiving and good image response rejection.

4-1-3 VHF 1st MIXER CIRCUIT (RF-A UNIT)

The 1st mixer circuit mixes the receive signals with the 1st LO signal to convert the receive signal frequencies to a 10.85 MHz 1st IF for the main band (a 10.95 MHz 1st IF for the sub band). The signals from the RF circuit are mixed at Q11 and Q12 with a 1st LO signal (A1 LO: 125.15 MHz-163.15 MHz). The 1st LO signal from the PLL unit is amplified at IC2 and is passed through the low-pass filter (L19, L20, C83-C85) to suppress harmonic components. The signal is applied both to the TX (Q1, Q2) and RX (Q11, Q12) mixer circuits.

After passing through the matching circuit (L21), the 1st IF signal is applied to the main band or the sub band IF circuit via the M/S switching circuit (D8, D9, Q5, Q6).

4-1-4 UHF RF SWITCHING CIRCUIT (PA-B AND RF-B UNITS)

Received UHF signals enter the antenna connector and pass through a low-pass filter (L3-L5, C5-C10). When receiving, the antenna switching circuit (D1-D3) turns OFF. The signals pass through a low-pass filter (L6, C12, C60, L7, C14). The filtered signals are applied to the RF-B unit via J4. The signals from the PA-B unit are either bypassed or passed through the 15 dB attenuator (D16). The attenuator prevents distortion caused by strong signals. The signals are applied to a bandpass filter.

4-1-5 UHF RF CIRCUIT (RF-B UNIT)

A bandpass filter passes only the desired band signals and suppresses any undesired signals.

The filtered RF signals are applied to the RF amplifier (Q16) and are then amplified.

D11-D14 employ varactor diodes that track the bandpass filters and are controlled by the PLL lock voltage. These diodes tune the center frequency of an RF passband for wide bandwidth receiving and good image response rejection.

4-1-6 UHF 1st MIXER CIRCUIT (RF-B UNIT)

The filtered RF signals from Q16 are mixed at L30, Q14, Q15 and L29 with a 1st LO signal (1311-0: 348.75 MHz-388.75 MHz) and are then converted to a 71.25 MHz 1st IF for the main band (71.35 MHz for the sub band).

After passing through the matching circuit (L29), the 1st IF signal is passed through each of a crystal filter (F11 [main]/F12 [sub]) in order to pass only the desired signals (main band: 71.25 MHz/sub band: 71.35 MHz).

The filtered 1st IF signal is applied to the 2nd mixer circuit Q11 passing through D9.

4-1-7 UHF 2nd MIXER CIRCUIT (RF-B UNIT)

The 2nd mixer circuit (Q11) mixes the 1st IF signals and 2nd LO signal (B2LO: 60.4 MHz) to convert the 1st IF to a 2nd IF.

The 1st IF signals from F11 [main]/F12 [sub] are converted to 10.85 MHz [main]/10.95 MHz [sub] 2nd IF signals at the 2nd mixer (Q11).

The 2nd IF signals are applied to the MAIN unit passing through D5 and D1 when the main band is selected, or D5 and D4 when the sub band is selected.

4-1-8 10 MHz IF CIRCUIT (MAIN UNIT)

The IF and AF circuits on the MAIN unit are commonly used for the UHF and VHF bands.

The 10 MHz IF circuit filters and amplifies the 10 MHz IF signals. The 10 MHz IF signals from the VHF 1st or UHF 2nd mixer circuit are applied to MCF (Monolithic Crystal Filter; F12 [main]/F16 [sub]) to suppress out-of-band signals.

The filtered signals are amplified at the IF amplifiers Q13 [main]/Q98 [sub]. These amplifiers have 20 dB gain.

When the SSB or CW mode is selected, the amplified signals are passed through 10 MHz IF filters (F11 [main]/F15 [sub]) or the optional CW narrow filter (main band only). The passed signals are amplified at IF amplifiers (Q60-Q62 [main]/Q77, Q100, Q101 [sub]) and then applied to the demodulator circuit (IC1 4 [main]/IC22 [sub]).

When the FM mode is selected the amplified signals from Q13 [main] or Q98 [sub] are applied to the FM IF ICs (IC11 [main]/IC13 [sub]). The entered signal is converted to a 455 kHz IF signal and detected to AF signals.

4-1-9 NOISE BLANKER CIRCUIT

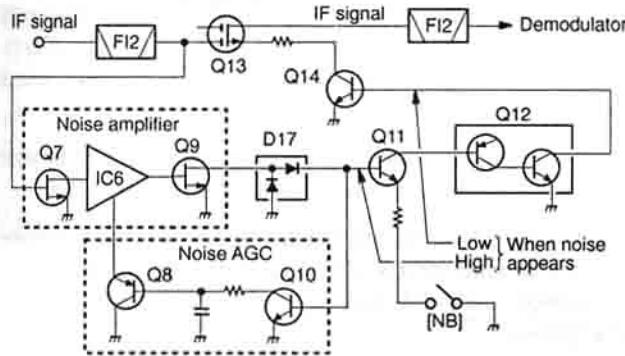
The noise blanker circuit detects pulse-type noise, then stops the IF amplifier operation. This circuit is designed for the main band only.

A portion of the signals from FI2 are amplified at the noise blanker amplifiers (Q7, IC6, Q9) and are detected at D17.

When pulse type noise appears and the [NB] switch is turned ON, the noise blanker switch (Q11, Q12) is turned ON, then the source of the IF amplifier (Q13) is open via Q14, to stop the Q13 function.

Q8 and Q10 function as an AGC circuit to reduce averaged noise. Therefore, the noise blanker function shuts off pulse-type noise only.

• Noise blanker circuit

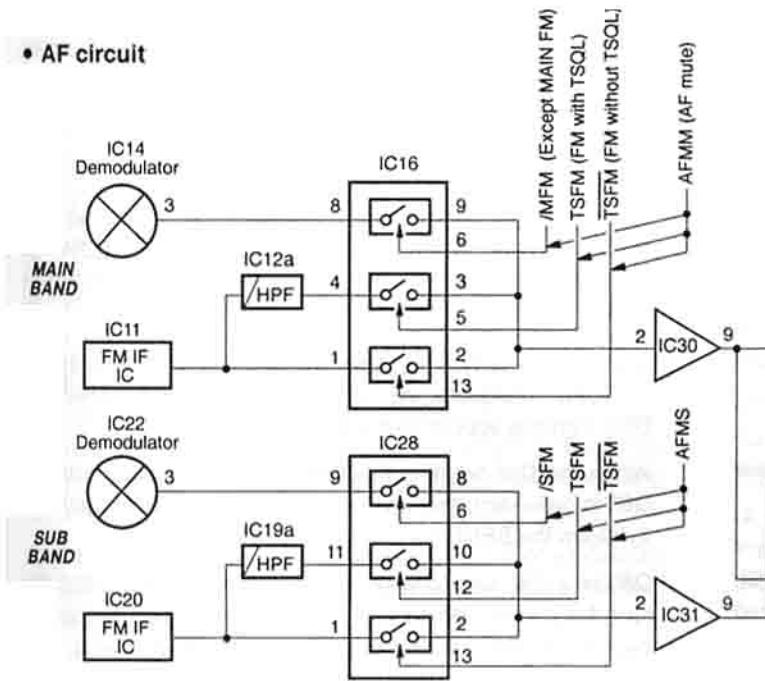


4-1-10 DEMODULATOR CIRCUIT (MAIN UNIT)

(1) FM mode

The 10 MHz IF signals are converted into 455 kHz IF signals in the FM IF IC (IC11 [main]/IC20 [sub]). The 455 kHz IF signals pass through the IF filter (FI13 [main]/FI14 [sub]) and are then converted into AF signals. The AF signals output from pin 9 are passed through or bypassed the high-pass filter (IC12a [main]/IC19a [sub]) and are then applied to the AF input mode selector switch (IC16c [main]/IC28b [sub]).

• AF circuit



(2) SSB/CW modes

The 10 MHz IF signals from Q62 [main] or Q100 [sub] are demodulated into AF signals at the balanced mixer (IC14 [main]/IC22 [sub]). BFO signals are used for demodulation which are produced in the PLL unit for the main band and the crystal oscillator (Q79, X6) for the sub band.

BFO frequencies

MODE	for MAIN band	for SUB band
USB	10.8485 MHz	10.9485 MHz
LSB	10.8515 MHz	10.9515 MHz
CW	10.8483 MHz	10.9483 MHz

4-1-11 AF INPUT MODE SELECTOR SWITCH (MAIN UNIT)

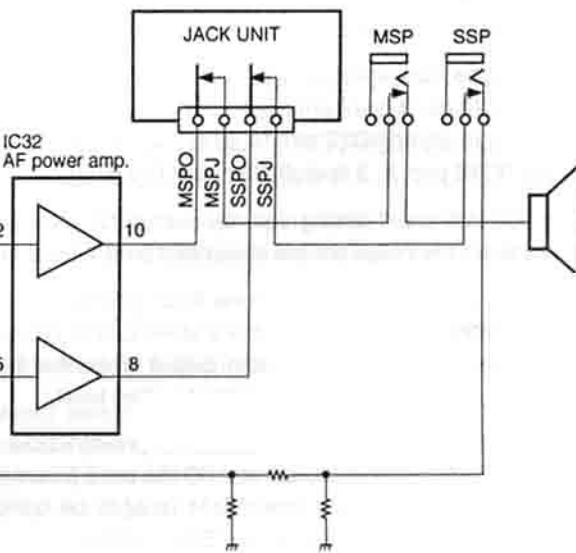
The AF signals from the demodulator circuit are applied to the AF input mode selector switch (IC16 [main], IC28 [sub]). IC16 (IC28) consists of 4 analog switches which are selected with a mode signal and the squelch control signal. The AF signal is output from IC16 (pins 2, 3, 9) for the main band and IC28 (pins 2, 8, 10) for the sub band; then applied to the AF circuit.

4-1-12 AF CIRCUIT (MAIN UNIT)

AF signals from the AF input mode selector switch (IC16 [main], IC28 [sub]) are amplified at the pre-amplifier (IC30 [main], IC31 [sub]). These main and sub bands audio are power-amplified at the stereo amplifier IC (IC32).

The amplified audio signals pass through the JACK unit, [MSP] jack, and are then applied to the speaker.

The sub band audio signals are fed back to the main band channel of the stereo amplifier IC (IC32) via an attenuator to mix both the main and sub bands audio.

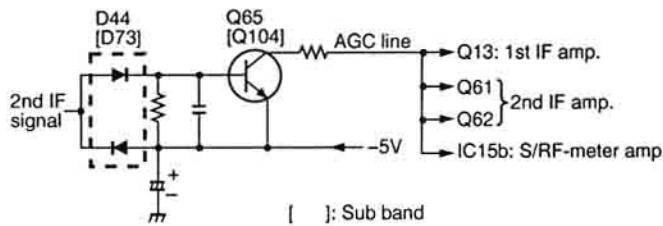


4-1-13 AGC CIRCUIT (MAIN UNIT)

The AGC (Automatic Gain Control) circuit reduces IF amplifier gain to keep the audio output at a constant level.

The 2nd IF signal from the IF amplifier (Q62 [main]/Q101 [sub]) is detected at the AGC detector (D44 [main]/D73 [sub]) and is then applied to the DC amplifier (Q65 [main]/Q104 [sub]).

When receiving strong signals, the detected voltage increases and the AGC voltage decreases via the DC amplifier (Q65 [main]/Q104 [sub]). As the AGC voltage is used for the bias voltage of the IF amplifiers (Q13, Q61, Q62 [main]/Q98, Q100, Q101 [sub]), the IF amplifier gain is decreased.



4-1-14 S-METER CIRCUIT (MAIN UNIT)

The S-meter circuit indicates the relative received signal strength while receiving by utilizing the AGC voltage which is changed depending on the received signal strength.

The AGC bias voltage is applied to a differential amplifier (IC15 pin 6 [main]/IC23 pin 2 [sub]) where the difference between AGC and reference voltages is detected.

The resulting S-meter signal is applied to the DISPLAY unit via the "MSM" line [main] or "SSM" line [SUB]. The full scale position is set by R253 [main]/R207 [sub].

The S-meter signal is also applied to the squelch circuit (IC15a pin 2).

4-1-15 SQUELCH CIRCUIT (MAIN UNIT)

(1) FM mode

A squelch circuit cuts out AF signals when no RF signal is received. By detecting noise components in the AF signals, the squelch circuit switches the AF mute switches.

Some noise components in the AF signal from IC11 pin 9 [main]/IC20 pin 9 [sub] are applied to an active filter section (IC4 pin 10 [main]/IC20 pin 10 [sub]) via the noise control circuit (IC13 pins 7, 9 [main]/IC21 pins 7, 9 [sub]).

The squelch level setting volume control (R1) on the VR unit adjusts the noise control circuit (IC13 · IC21/pin 7) input level.

(2) SSB/CW modes

The squelch circuit mutes audio output when the S-meter signal is lower than the [SQL] control setting level.

The S-meter signal from (IC15b pin 7 [main]/IC23a pin 1 [sub]) is applied to the comparator (IC15a pin 2 [main]/IC23b pin 6 [sub]) through D42 [main]/D71 [sub] to be compared with the threshold level set by the [SQL] control.

4-2 TRANSMITTER CIRCUITS

4-2-1 MICROPHONE AMPLIFIER CIRCUIT (DISPLAY UNIT AND MAIN UNIT)

The microphone amplifier circuit amplifies the microphone input signals and outputs the amplified signal to the FM modulation circuit or SSB modulation circuit.

The microphone amplifier circuit is commonly used for both FM (VHF/UHF) mode and SSB (VHF/UHF) mode.

Audio signals from the [MICROPHONE] connector are amplified at IC3. The amplified signals are then adjusted at the [MIC] control (R31) and amplified again at IC2a (MAIN unit).

(1) While in FM mode

The amplified signals from IC2a are applied to IC1b (pin 6) and pass through the microphone gain adjustment (R41). IC1b includes a low level amplifier with pre-emphasis and a limiter amplifier.

The output signals from IC1b (pin 7) pass through a splatter filter circuit (IC1a) and are adjusted for deviation at R29.

A subaudible tone encoder signal is amplified at the high-impedance input circuit (Q4) and is directly applied to the modulation circuit (X1, Q17, D22) without audio modulation interference.

(2) While in SSB mode

The amplified signals at IC2a are applied to the balanced modulator (IC7).

The balanced modulator converts the AF signal from the microphone amplifier to an IF signal with a BFO (Beat Frequency Oscillator) signal. The IF signal is shown in the table below.

MODE	Transmit IF signal
USB	10.8485 MHz
LSB	10.8515 MHz
CW	10.8491 MHz

IC7 is a double balanced mixer IC and outputs a double side band (DSB) signal with -60 dB carrier suppression. R156 and R158 adjust the balanced level of IC7 for maximum carrier suppression.

4-2-2 CW KEYING CIRCUIT

When keying is closed, the CW keying circuit (Q84) outputs "HIGH." This "HIGH" signal is converted to "LOW" at Q20–Q22 and is then applied to the PLL unit for BFO circuit control.

DC voltages (CW 9 V) upset the balance of the modulator IC (IC7). Therefore, the carrier signal is created when the BFO signal is applied to the modulator.

When the CW break-in function is activated, the emitter of Q83 is grounded, the keying signal from Q84 turns Q83 ON to inform the SEND control signal to the CPU.

Q80 is a CW side tone oscillator for generating an 800 Hz tone frequency. When CW key is closed, C307 is disconnected from the collector of Q80, so that Q80 activates.

4-2-3 TRANSMIT IF AMPLIFIER (MAIN UNIT)

In SSB or CW mode, the transmitter IF signals (USB: 10.8485 MHz, LSB: 10.8515 MHz, CW: 10.8491 MHz) pass through F11 to suppress the unwanted sideband signals, then the signals are applied to the transmit IF amplifier (Q1). In FM mode, the transmit IF signals bypass F11 and are then applied to the transmit IF amplifier (Q1).

The optional CW narrow filter is not used in transmitting.

(1) When selecting the VHF band (RF-A UNIT)

The amplified signal from Q1 (MAIN unit) is applied to the RF-A unit via J1 and then mixed with the 1st LO signal (125.15 MHz-163.15 MHz) to be converted to the displayed frequency at the balanced mixer (Q1, Q2). The sub band is not transmitted.

(2) When selecting the UHF band (RF-B UNIT)

The amplified signal from Q1 (MAIN unit) is applied to the RF-B unit via J2 and then mixed with the 2st LO signal (60.4 MHz) to be converted to a 2nd transmit IF signal at Q1/Q2.

MODE	2nd Transmit IF signals
USB	71.2485 MHz
LSB	71.2515 MHz
CW	71.2491 MHz

The 2nd transmit IF signal is amplified at Q3 and is then converted to the displayed frequency at the double balanced mixer (IC3) with the 1st LO signal (348.75 MHz-388.75 MHz).

4-2-4 RF CIRCUIT (RF-A AND RF-B UNITS)

The RF circuit amplifies the displayed frequency signal for 45 W* of RF output power.

30 - 45W depends on band and mode.

(1) RF circuit for the VHF band (RF-A unit)

The displayed frequency signal converted at the balanced mixer (RF-A unit 01, Q2) is applied to the bandpass filter (L3, C120, D3, C13-C15, L4, D4, C121, C16-C18, L5, D5, C19, C122) where unwanted frequencies are reduced in the VHF bands.

The filtered signal is then amplified at IC1 and Q4. The amplified signal is amplified to 800 mW at Q13 through the LO trap circuit (C36, L10, L11, C37) and is then applied to the PA-A unit.

(2) Power amplifier circuit for the VHF band (PA-A unit) The signal from Q13 is amplified at the power amplifier (IC2) to obtain a stable 45 W of RF output power and then applied to the 144 MHz antenna connector via the low-pass filter.

(3) RF circuit for the UHF band (RF-B unit)

The displayed frequency signal converted at the double balanced mixer (RF-B unit IC3) is amplified at IC1 through the spurious filter (L36) where unwanted frequencies are reduced in the UHF bands.

The amplified signal is amplified to 200 mW at Q4/Q5 through the spurious filter (L37) and is then applied to the PA-B unit.

(4) Power amplifier circuit for the UHF band (PA-B unit) The signal from Q5 is amplified to 4 or 5 W at the drive amplifier (IC3) through the low-pass filter circuit (RF-B unit L14, C38, C39) and attenuator (PA-B unit R13-R15).

The signal from IC3 is amplified at the power amplifier (IC1) to obtain a stable 40 W of RF output power.

4-2-5 ALC CIRCUIT

(PA-A, PA-B AND MAIN UNITS)

The ALC (Automatic Level Control) circuit controls the gain of IF amplifiers in order for the transceiver to output a constant RF power set by the [PWR/COMP] switch even when the supplied voltage shifts, etc.

The RF power signal level is detected at D4-D7 (PA-A unit for VHF) or D4, D5 (PA-B unit for UHF) and applied to the MAIN unit as the "FORA" or "FORB" signals.

The "FORA (FORB)" voltage from the PA-A (PA-B) unit is applied to IC3a (pin 2). The "POLO" voltage is applied to IC3a (pin 3) as the reference voltage.

When the "FORA (FORB)" voltage exceeds the "POCO" voltage, ALC bias voltage from IC3a (pin 1) controls the IF amplifier (Q1). This adjusts the output power to the determined level by the [PWR/COMP] switch until the "FORA (FORB)" and "POLO" voltages are equalized.

The "FORA (FORB)" voltage is also applied to IC5a to obtain an RF meter signal. It passes through the meter switching circuit (IC4b DISPLAY unit) and is then applied to the S/RF meter.

The ALC voltage for data communication is directly applied to Q1 from the ALC socket (pin 8) through R289.

4-2-6 APC CIRCUIT (PA-A/B UNITS)

The APC (Automatic Power Control) circuit protects the power amplifiers on the PA-A/PA-B units from excessive current.

For the current APC, the power module current is obtained by differential voltages (AIC2: VHF/BIC2: UHF) which appear at both terminals of a 0.15 S2 resistor, R1/R12 (VHF) on the PA-A unit or R1/R16 on the PA-B unit.

The differential voltage is applied to the differential amplifier (IC4b pin 5: VHF/IC4b pin 3: UHF on the MAIN unit).

The amplified APC voltages are applied to the transmit IF amplifier Q1 and the ALC amplifier IC3b on the MAIN unit. They control the output power at the power module.

4-2-7 TEMPERATURE PROTECTION CIRCUIT (DISPLAY AND PA-A/B UNITS)

Cooling fans (MR) are activated during transmitting or if the temperature of the power modules exceeds the preset value.

While transmitting, Q26 and Q27 on the DISPLAY unit are turned ON, and provide a voltage "FANV" to MR. The MR rotates at medium speed in this case.

A thermal switch (S1) is thermally-connected to the power module IC1 on the PA-B unit. When the power module temperature exceeds 90°C (194°F), S1 turns ON and provides a voltage for high speed rotation to MR via Q25 on the DISPLAY unit.

When the power module radiator on the PA-B unit temperature exceeds 40°C (104°F), S1 keeps turning Q24 and Q25 (DISPLAY unit) ON to rotate the cooling fans even when receiving.

4-3 PLL CIRCUITS (PLL UNIT)

The PLL unit contains 3 PLL circuits and 1 local oscillator. The VHF PLL and UHF PLL adopt Icom's new "I-loop PLL" to obtain very fast lock up times.

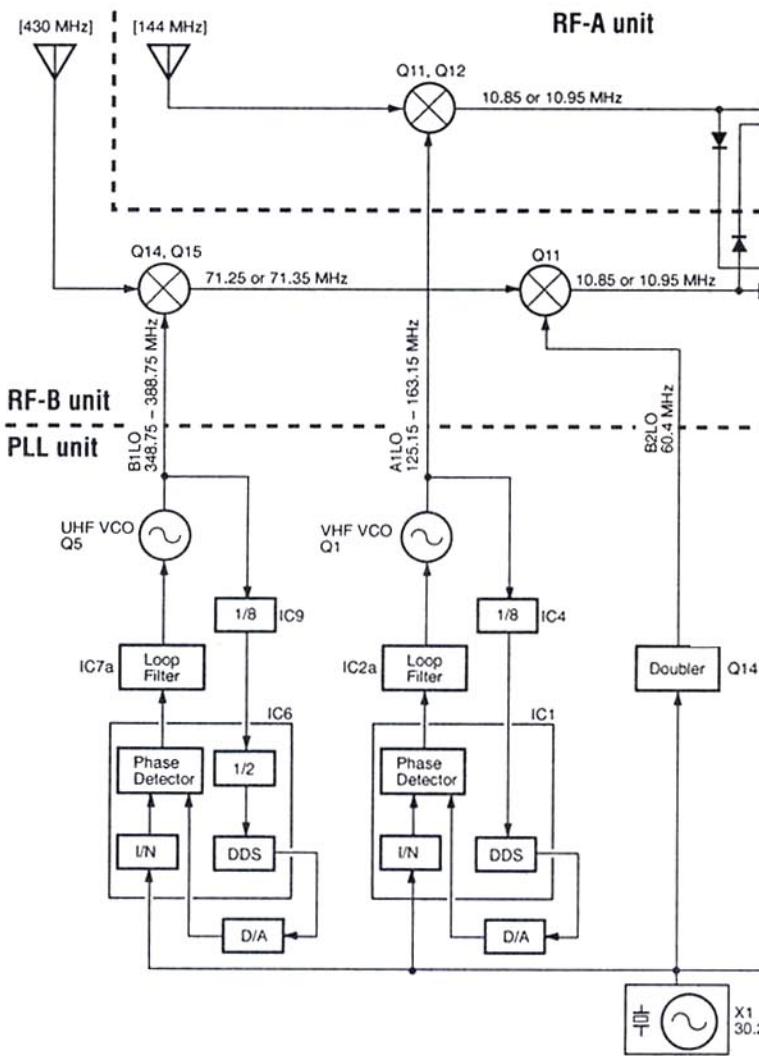
4-3-1 VHF PLL CIRCUITS

The oscillated signal at the VHF VCO circuit (Q1, D1–D3, D8) is buffer-amplified at Q2 and IC5. The amplified signal is divided by 8 at the prescaler (IC4) and is then applied to the DDS IC (IC1 pin 88).

The DDS IC generates digital signals using the entered signal, then compares its phase with the reference frequency and outputs off phase components as pulse signals via pins 52, 53.

The output pulses are converted to DC voltages at the loop filter (IC2a) and are then applied to varactor diodes in the VCO circuit (D1–D3, D8).

• Frequency construction



The D/A converter (R15–R38), low-pass filter (C4–C10, L2–L4) and buffer amplifier (IC14) are connected to the DDS IC to convert the digitally oscillated signals into smooth analog signals.

4-3-2 UHF PLL CIRCUITS

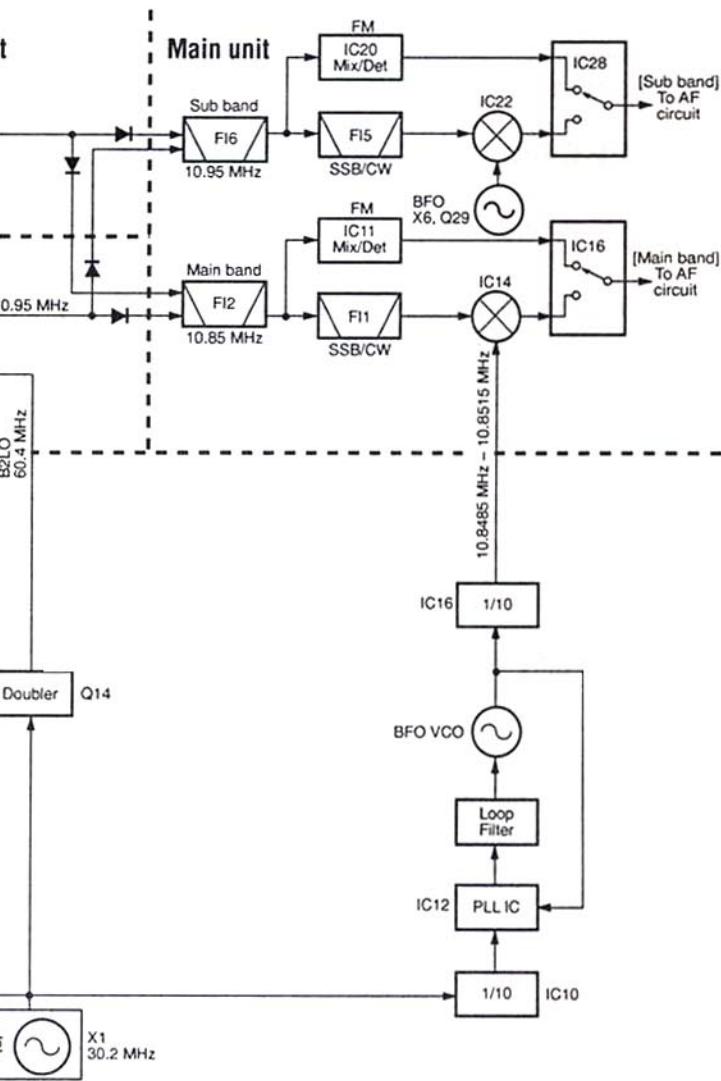
The oscillated signal at the UHF VCO circuit (Q5, D4, D10) is buffer-amplified at Q6 and Q9. The amplified signal is divided by 8 at the prescaler (IC9) and is then applied to the DDS IC (IC6 pin 88).

The DDS IC generates digital signals using the entered signal, then compares its phase with the reference frequency and outputs off phase components as pulse signals via pins 52, 53.

The output pulses are converted to DC voltages at the loop filter (IC2a) and are then applied to varactor diodes in the VCO circuit (D4, D10).

4-3-3 BFO PLL CIRCUITS

The oscillated signal at the BFO VCO circuit (Q12, D5) is buffer-amplified at Q13 and Q16. The amplified signal is applied to PLL IC (IC12 pin 19) to detect on phase signals using the reference frequency.



The oscillated signal at the reference oscillator (X1) is divided by 10 at IC10 and is then applied to IC12 (pin 16) as a reference frequency.

The VCO oscillated signal is divided by 10 at the divider (IC16), buffer-amplified at Q20 and is then applied to the MAIN unit as the BFO frequency.

4-3-4 LOCAL OSCILLATOR CIRCUIT (REFERENCE OSCILLATOR)

The output of the reference oscillator (X1, 30.2 MHz) is used for: (1) the reference frequency of the VHF/UHF PLL circuits, (2) the reference frequency of BFO PLL circuits after being divided by 10, (3) the local frequency for the UHF receiver/transmitter circuits after being multiplied 2 times.

4-4 PORT ALLOCATIONS

4-4-1 CPU (DISPLAY UNIT)

Port name	Pin #	Description
ADCDAT	1	Input port for the FM deviation indicator. When this port receives below 1.3 V or above 1.7 V, the CPU detects the received signal as off center. The "CCTL" port (pin 24) outputs 300 msec. pulses to flash the RX indicator while the squelch is open.
RESET	9	Input port for the CPU reset signal. When receiving "LOW", CPU is reset.
BACKUP	11	Input port for the CPU backup signal. The CPU stores the selected data in RAM while receiving "LOW" pulses.
Mck	12	Outputs clock data to data expander ICs (DISPLAY unit IC11, MAIN unit IC8, IC10, IC24) and optional tone squelch units.
FSTB	13	Outputs a strobe signal to the data expander IC (DISPLAY unit IC11).
Mdat	14	Outputs serial data to data expander ICs (DISPLAY unit IC11, MAIN unit IC8, IC10, IC24) and optional tone squelch units.
OE	15	Outputs an enable signal to data expander ICs (MAIN unit IC8, IC10, IC24) and optional tone squelch units.
CIVR	16	Input port for a "UART" signal for CI-V control.
CIVT	17	Output port for a "UART" signal for CI-V control.
CIVB	18	Input port for a "bus busy" signal for CI-V control.
MCST	19	Outputs a strobe signal to the data expander IC (MAIN unit IC10).
Dlck	20	Input port for the dial clock signal.
DIUP	21	Input port for the dial up signal.
DIDN	22	Input port for the dial down signal.
DITS	23	Input port for the auto tuning step signal.
CCTL	24	Outputs the control signal of the main band RX indicator for squelch open and off-center receiving.
BEEP	25	Outputs beep tone signals.
STVO	26	Outputs a strobe signal to an optional voice synthesizer unit.
MSST	32	Outputs a strobe signal to the data expander IC (MAIN unit IC24).
MMST	33	Outputs a strobe signal to the data

		expander IC (MAIN unit IC8).
KS1-KS7	36-42	Output ports of strobe signals for key matrix.
STBR	43	Outputs a strobe signal to the data expander IC (PLL unit IC13).
KR1-KR4	44-47	Input ports for key return signals.
OPTA	48	Input port for the tone decoder matched signal from an optional tone squelch unit.
OPTB	49	Input port for the tone decoder matched signal from an optional tone squelch unit.
SQSI	51	Input port for the sub band squelch signal. "LOW" : squelch open.
STTA	52	Outputs a strobe signal to an optional tone squelch unit.
STTB	53	Outputs a strobe signal to an optional tone squelch unit.
MT9A	54	Outputs a T9V control signal for the RF-A unit. "HIGH" : while transmitting on the 144 MHz band.
MR9A	55	Outputs a R9V control signal for the RF-A unit. "HIGH" : when 144 MHz band receiving is selected on the main band.
SR9A	56	Outputs a R9V control signal for the RF-A unit. "HIGH" : when 144 MHz band receiving is selected on the sub band.
MT9B	57	Outputs a T9V control signal for the RF-B unit. "HIGH" : while transmitting on the 430 MHz band.
MR9B	58	Outputs a R9V control signal for the RF-B unit. "HIGH" : when 430 MHz band receiving is selected on the main band.
SR9B	59	Outputs a R9V control signal for the RF-B unit. "HIGH" : when 430 MHz band receiving is selected on the sub band.
LCTF	60	Input port for the BFO PLL unlock signal. "LOW" : when the PLL is unlocked.
LCTA	61	Input port for the VHF PLL unlock signal. "LOW" : when the PLL is unlocked.
LCTB	62	Input port for the UHF PLL unlock signal. "LOW" : when the PLL is unlocked.
STBF	63	Outputs a strobe signal to the PLL IC of the BFO PLL (PLL unit IC12).
STBA	64	Outputs a strobe signal to the DDS IC of the VHF PLL (PLL unit IC1).

Port name	Pin #	Description
STBB	65	Outputs a strobe signal to the DDS IC of the UHF PLL (PLL unit IC6).
ck	66	Outputs clock signals to DDS ICs and PLL IC (PLL unit IC1, IC6, IC12).
data	67	Outputs data to DDS ICs and PLL IC (PLL unit IC1, IC6, IC12).
SBTN	90	Outputs a tone signal for the subaudible tone encoder or 1750 Hz tone burst.
SEND	94	Input port for the transmit control signal. "LOW" : while transmitting.
BUSY	95	Input port for an optional voice synthesizer active signal to reduce audio level while talking.
ADTSQ	96	Input port for detecting signals for the optional tone squelch unit installation condition. 2.18 - 2.72 : when both A/B are installed. 2.72 - 3.31: when only B is installed. 3.31 -3.78: when only A is installed. Other voltages : no unit is installed.
ADU/D	97	Input port for the microphone up/down signal. DN:0-0.8V; UP: 1.2-1.6V
ADSFT	98	Input port for the position data of the [SHIFT] control.
ADRIT	99	Input port for the position data of the [RIT] control.
ADSSM	100	Input port for the S-meter signal for the sub band meter.

4-4-2 DATA EXPANDER IC (MAIN UNIT)

Port name	Pin #	Description
MCWN	4	Outputs CW narrow filter selection signal. "HIGH" : when CW narrow mode is selected.
MCW	5	Outputs CW 8V control signal. "HIGH" : when CW or CW-narrow mode is selected on the main band.
MUSB MLSB	6,7	Output SSB selection signal for the output power control. "HIGH" : when USB or LSB mode is selected on the main band.
MFM	14	Outputs an FM 8V control signal. "HIGH" : when FM mode is selected on the main band.
/MFM	13	Outputs 8V control signal except FM mode. "HIGH" : when SSB or CW mode is selected on the main band.
TSFM	12	Outputs 8V control signal for FM with tone squelch. "HIGH" : when FM mode with optional tone squelch is selected on the main band.
BKIN	11	Outputs full break-in control signal.

"HIGH" : when the full break-in
function is turned ON.

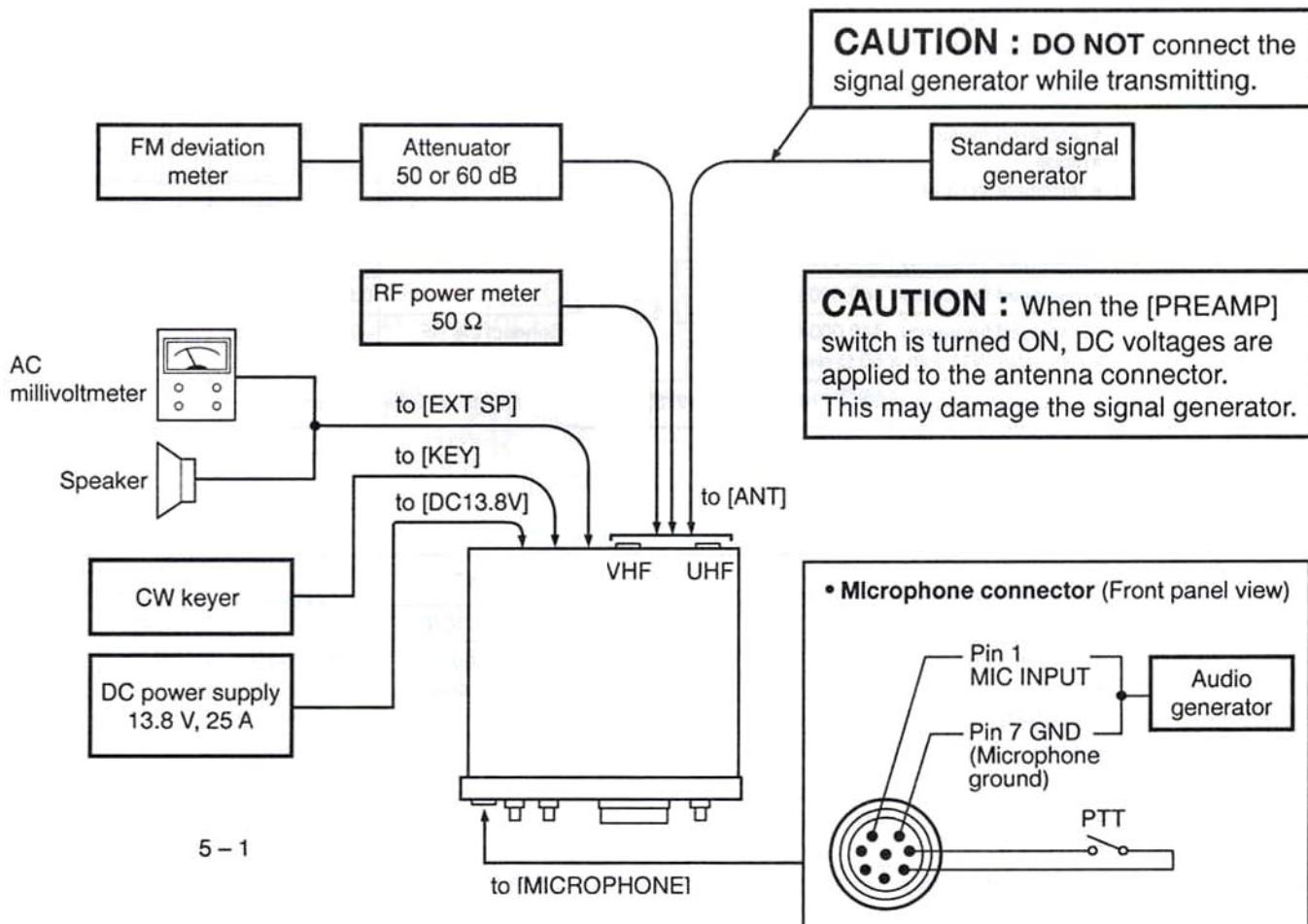
•	IC10	
Port name	Pin #	Description
AFMM	4	Outputs an AF mute signal for the main band. "HIGH" : during mute.
AFMS	5	Outputs an AF mute signal for the sub band. "HIGH" : during mute.
MONM	6	Outputs a squelch open signal for the main band for the monitor function. "HIGH" : while monitor function activates.
MONS	7	Outputs a squelch open signal for the sub band for the monitor function. "HIGH" : while monitor function activates.
SCAM	14	Outputs a scan control signal to control the AGC time constant characteristics. "HIGH" : during scan.
AT8	13	Outputs a T9V control signal for the PA-A unit. "HIGH" : when transmitting on the 144 MHz band.
R8	12	Outputs a R8V control signal. "HIGH" : when receiving.
BT8	11	Outputs a T9V control signal for the PA-B unit. "HIGH" : when transmitting on the 430 MHz band.

•	IC24	
Port name	Pin #	Description
SUSB	4	Outputs USB control signal for BFO oscillator. "HIGH" : when USB mode is selected on the sub band.
SLSB	5	Outputs LSB control signal for BFO oscillator. "HIGH" : when LSB mode is selected on the sub band.
SFM	6	Outputs an FM 8V control signal. "HIGH" : when FM mode is selected on the sub band.
/SFM	7	Outputs 8V control signal except FM mode. "HIGH" : when SSB or CW mode is selected on the sub band.
MSC	13	Outputs main/sub switching signal for voice synthesizer and beep tone. "HIGH" : when emitting the signal from the main band.

REQUIRED TEST EQUIPMENT

EQUIPMENT	GRADE AND RANGE		EQUIPMENT	GRADE AND RANGE	
DC power supply	Output voltage : 13.8 V DC	Current capacity : 25 A or more	Oscilloscope	Frequency range : DC-20 MHz	Measuring range : 0.01-10 V
RF power meter (terminated type)	Measuring range : 1-60 W	Frequency range : 120-460 MHz	AC millivoltmeter	Measuring range : 10 mV-10 V	
	Impedance : 50 Ω	SWR : Less than 1.2 : 1	DC voltmeter	Input impedance : 50 kΩ/V DC or better	
			Ammeter	Measurement capability : 25 A	
Frequency counter	Frequency range : 0.1-460 MHz	Frequency accuracy : ±1 ppm or better	Audio generator	Frequency range : 300-3000 Hz	Output level : 1-500 mV
	Sensitivity : 100 mV or better		Attenuator	Power attenuation : 40 or 50 dB	Capacity : 60 W or more
			FM deviation meter	Frequency range : 120-460 MHz	Measuring range : 0 to ±5 kHz
RF voltmeter	Frequency range : 0.1-460 MHz	Measuring range : 0.01-10 V	External speaker	Impedance : 8 Ω	
Digital multimeter	Input impedance : 10 MΩ/DC or better			Max. input power : 5 W	
Standard signal generator (SSG)	Frequency range : 120-460 MHz	Output level : 0.1 μV-32 mV (-127 to -17 dBm)			
Sweep generator	Frequency range : 120-460 MHz	Sweep bandwidth : At least 50 MHz			
	Output impedance : 50 Ω				

CONNECTIONS



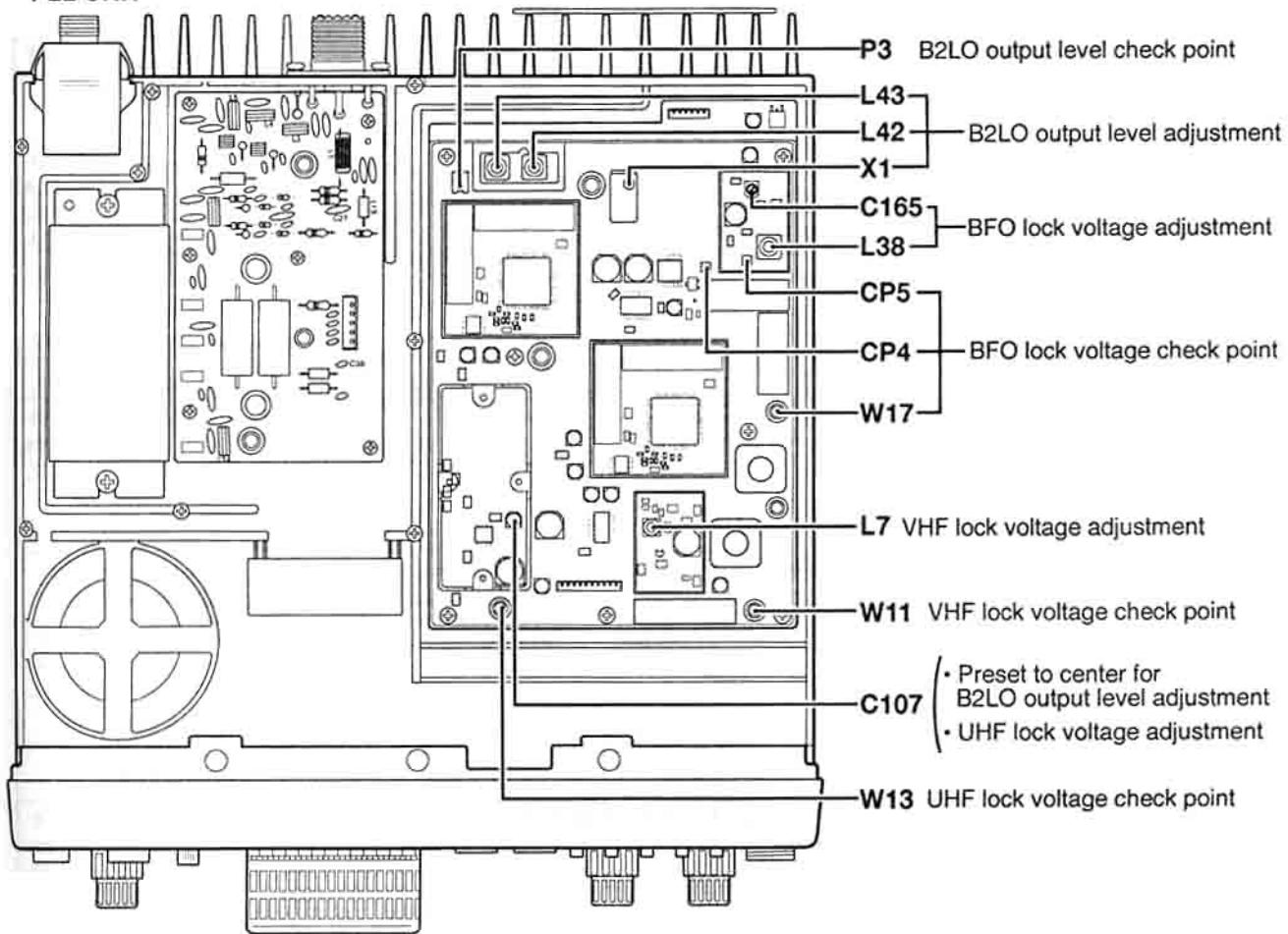
5-2 PLL ADJUSTMENT

ADJUSTMENT		ADJUSTMENT CONDITIONS		MEASUREMENT		VALUE	ADJUSTMENT POINT	
				UNIT	LOCATION		UNIT	ADJUST
REFERENCE FREQUENCY (B2LO LEVEL)	1	<ul style="list-style-type: none"> ● Displayed frequency : 145.000 MHz ● Mode : FM ● Terminate P3 with a 50 Ω resistor. ● Receiving ● Perform this adjustment 5 min or more after power ON. 	PLL	Connect the RF voltmeter to P3.	Preset to center as shown below. 	Preset to center as shown below. 	PLL	C107
	2				Maximum level (-19 dBm ±3 dBm)			L42, L43
	3			Connect the frequency counter to P3.	60.400 MHz			X1
After adjustment, remove the resistor from P3, then replace it to its previous position.								
BFO LOCK VOLTAGE	1	<ul style="list-style-type: none"> ● Displayed frequency : 145.000 MHz ● Mode : USB ● Terminate W17 with a 50 Ω resistor. ● Receiving 	PLL	Connect the digital multimeter to CP4.	2.0 V DC	PLL	C165	
	2			Connect the RF voltmeter to CP5.	Maximum level (more than 0.35 Vrms)		L38	
	3			Connect the RF voltmeter to W17.	-11 dBm ±3 dBm		Verify	
	4	After confirmation, remove the resistor from W17, then replace it to its previous position.						
VHF LOCK VOLTAGE	1	<ul style="list-style-type: none"> ● Displayed frequency : 145.000 MHz ● Mode : FM ● Terminate W11 with a 50 Ω resistor. ● Receiving 	PLL	Connect the digital multimeter to W13.	3.0 V DC	PLL	L7	
	2				2.2 V ±0.5 V DC		Verify	
	3	● Displayed frequency : 174.000 MHz			6.2 V ±0.5 V DC			
	4	<ul style="list-style-type: none"> ● Displayed frequency : 145.000 MHz ● Terminate W11 with a 50 Ω resistor. 		Connect the RF voltmeter to W11.	-10 dBm ±3 dBm			
	5			After confirmation, remove the resistor from W11, then replace it to its previous position.				
UHF LOCK VOLTAGE	1	<ul style="list-style-type: none"> ● Displayed frequency : 440.000 MHz ● Mode : FM ● Terminate W13 with a 50 Ω resistor. ● Receiving 	PLL	Connect the digital multimeter to W13.	4.0 V DC	PLL	C107	
	2				1.6 V ±0.5 V DC		Verify	
	3	● Displayed frequency : 460.000 MHz			6.5 V ±0.5 V DC			
	4	<ul style="list-style-type: none"> ● Displayed frequency : 440.000 MHz ● Terminate W11 with a 50 Ω resistor. 		Connect the RF voltmeter to W13.	-9 dBm ±3 dBm ±150 Hz			
	5			After confirmation, remove the resistor from W13, then replace it to its previous position.				

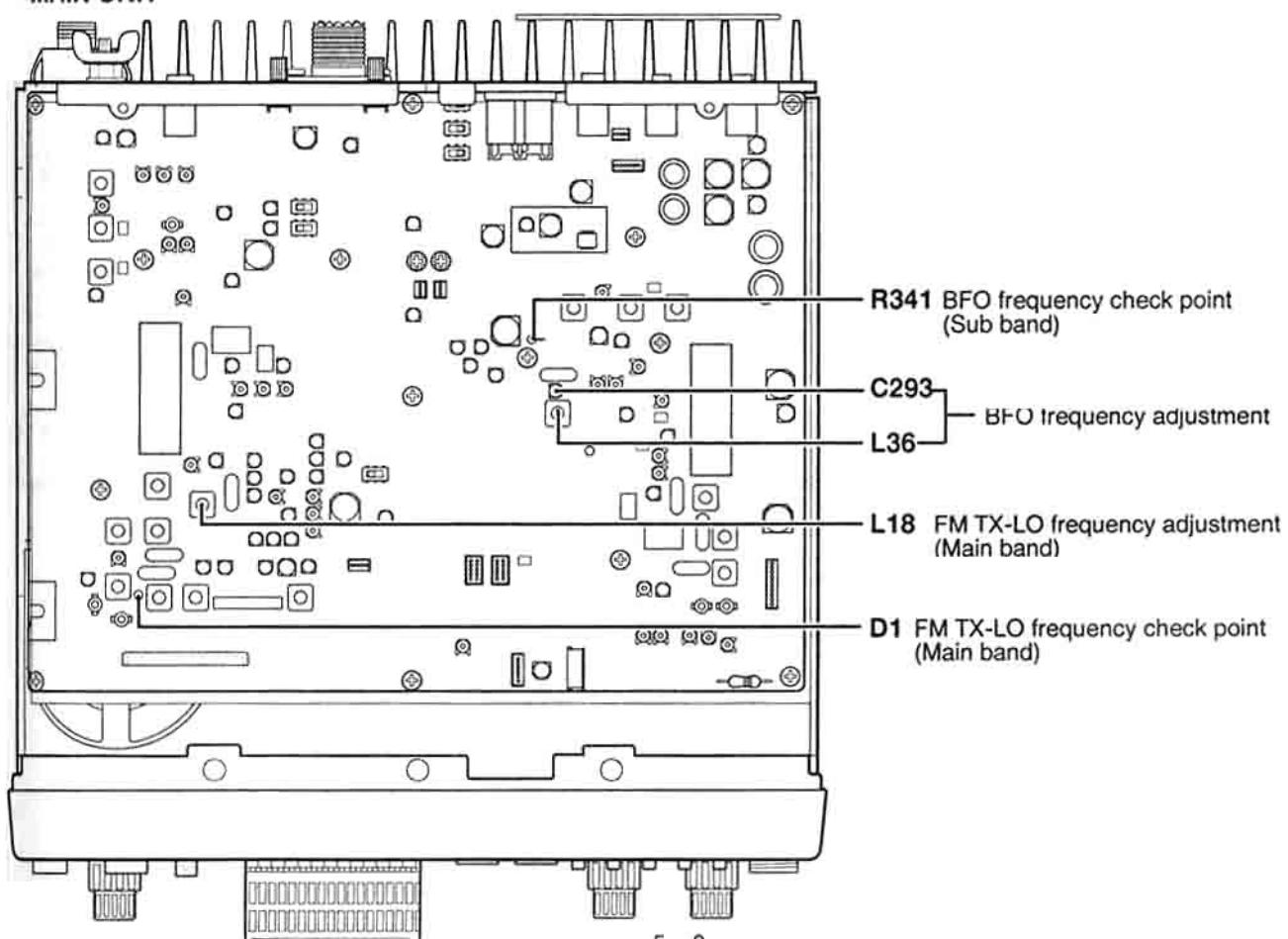
5-3 FREQUENCY ADJUSTMENT

ADJUSTMENT		ADJUSTMENT CONDITIONS		MEASUREMENT		VALUE	ADJUSTMENT POINT	
				UNIT	LOCATION		UNIT	ADJUST
BFO FREQUENCY (SUB BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency : 145.000 MHz ● Mode : LSB ● Receiving 	MAIN	Connect the frequency counter to R341.	10.9515 MHz	MAIN	C293	
	2				10.9485 MHz		L36	
	3				10.9483 MHz ±150 Hz		Verify	
FM TX-LO FREQUENCY (MAIN BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency : 145.000 MHz ● Mode : FM ● Transmitting 	MAIN	Connect the frequency counter to D1.	10.850 MHz	MAIN	L18	

PLL UNIT



MAIN UNIT

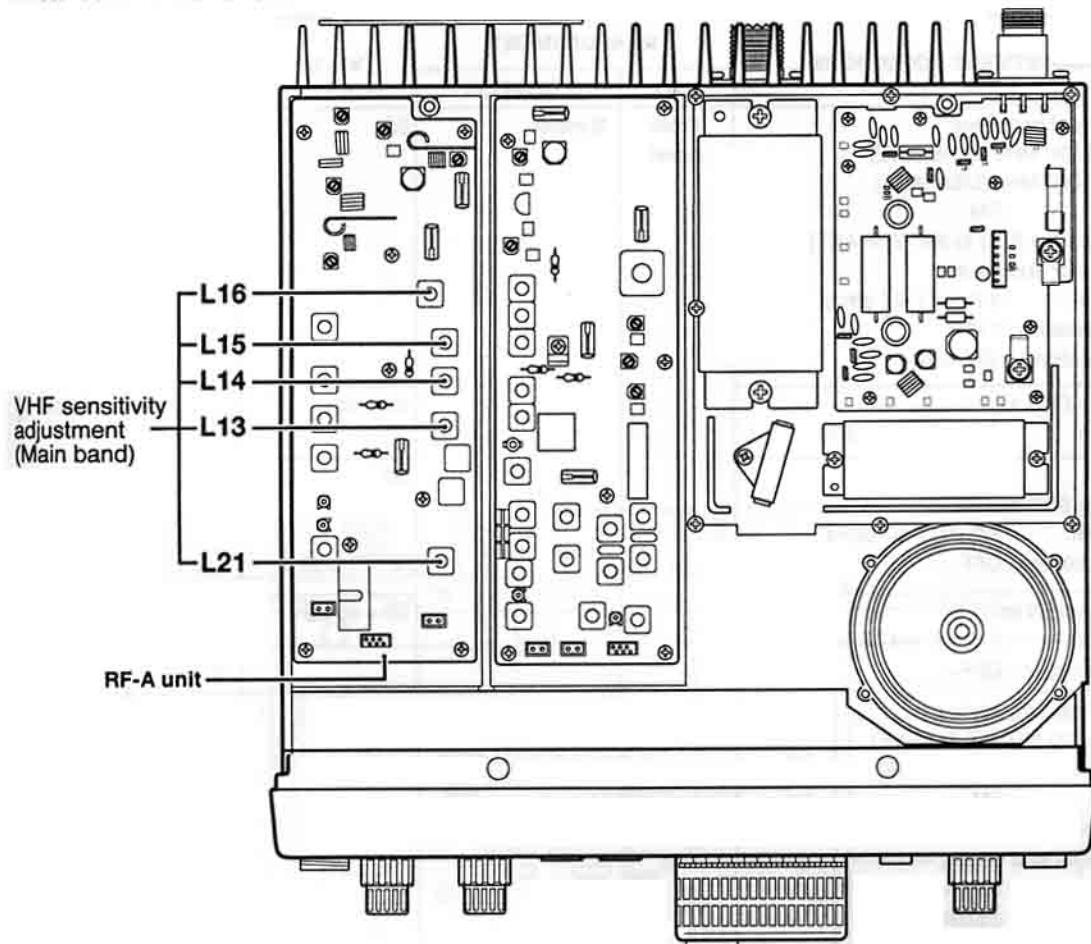


5-4 RECEIVER ADJUSTMENT

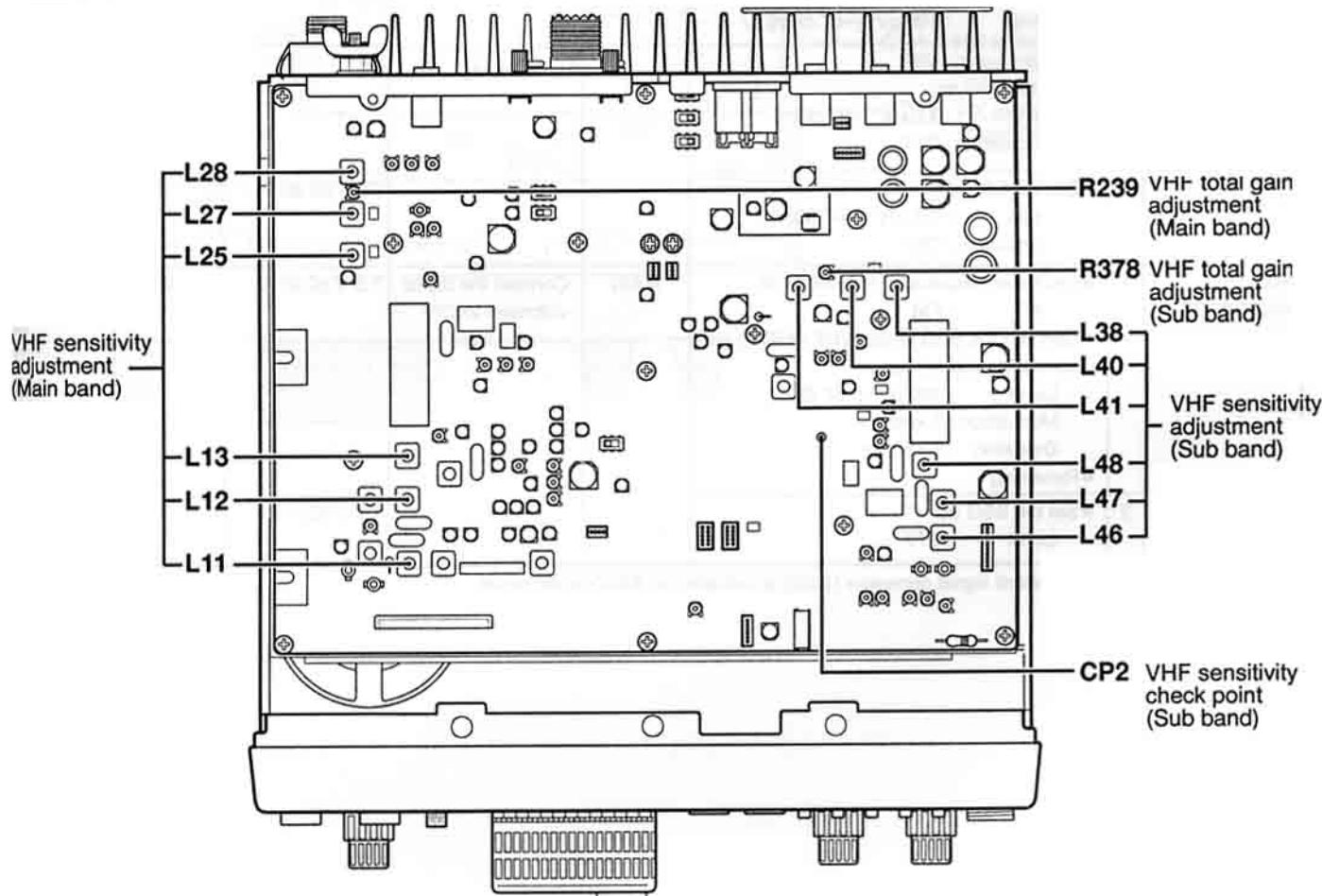
ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION		UNIT	ADJUST
VHF SENSITIVITY (MAIN BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency : 144.000 MHz ● Mode : FM ● [ATT] : OFF [NB] : OFF ● [AGC] : ON (fast) [RIT] : OFF ● [SQL (MAIN)] : Max. CCW ● Connect the SSG to the [VHF ANT] connector and set as: <ul style="list-style-type: none"> Modulation : 1 kHz Deviation : ±5 kHz ● Receiving 	FRONT panel	S meter	S3	Connected SSG	Output level
	2	<ul style="list-style-type: none"> ● Mode : USB ● Connect the SSG to the [VHF ANT] connector and set as: <ul style="list-style-type: none"> Level : 0.1 µV* (-127 dBm) Modulation : OFF 			Maximum level	RF-A	Adjust in sequence L16, L15, L14, L13, L21
VHF SENSITIVITY (SUB BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency : 144.000 MHz ● [SQL (SUB)] : Max. CCW ● Mode : FM ● Connect the SSG to the [VHF ANT] connector and set as: <ul style="list-style-type: none"> Modulation : 1 kHz Deviation : ±5 kHz ● Receiving 	MAIN	Connect the digital voltmeter or oscilloscope to CP2.	approx. 2 V	Connected SSG	Output level
	2	<ul style="list-style-type: none"> ● Mode : USB ● Connect the SSG to the [VHF ANT] connector and set as: <ul style="list-style-type: none"> Level : 0.1 µV* (-127 dBm) Modulation : OFF 			Maximum voltage	MAIN	Adjust in sequence L46, L47, L48
VHF TOTAL GAIN (MAIN BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency : 144.000 MHz ● Mode : USB ● Connect the SSG to the [VHF ANT] connector and set as: <ul style="list-style-type: none"> Level : 0.1 µV* (-127 dBm) Modulation : OFF 	Rear panel	Connect the AC millivoltmeter to the [EXT SP] juck with an 8 Ω load.	approx. 1.5 kHz	Connected SSG	Output frequency
	2	<ul style="list-style-type: none"> ● Set the as: <ul style="list-style-type: none"> Level : OFF 			1.0 V (0 dB)	Front panel	[AF] control
TOTAL GAIN (SUB BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency : 144.000 MHz ● Mode : USB ● Connect the SSG to the [VHF ANT] connector and set as: <ul style="list-style-type: none"> Level : 1 mV* (-47 dBm) Modulation : OFF 	Rear panel	Connect the AC millivoltmeter to the [EXT SP] juck with an 8 Ω load.	approx. 1.5 kHz	Connected SSG	Output frequency
	2	<ul style="list-style-type: none"> ● Set the SSG as: <ul style="list-style-type: none"> Level : OFF 			1.0 V (0 dB)	Front panel	[AF] control
					100 mV (-20 dB)	MAIN	R239
					100 mV (-20 dB)	MAIN	R378

* This output level of the standard signal generator (SSG) is indicated as SSG's open circuit.

• RF-A AND RF-B UNITS



MAIN UNIT

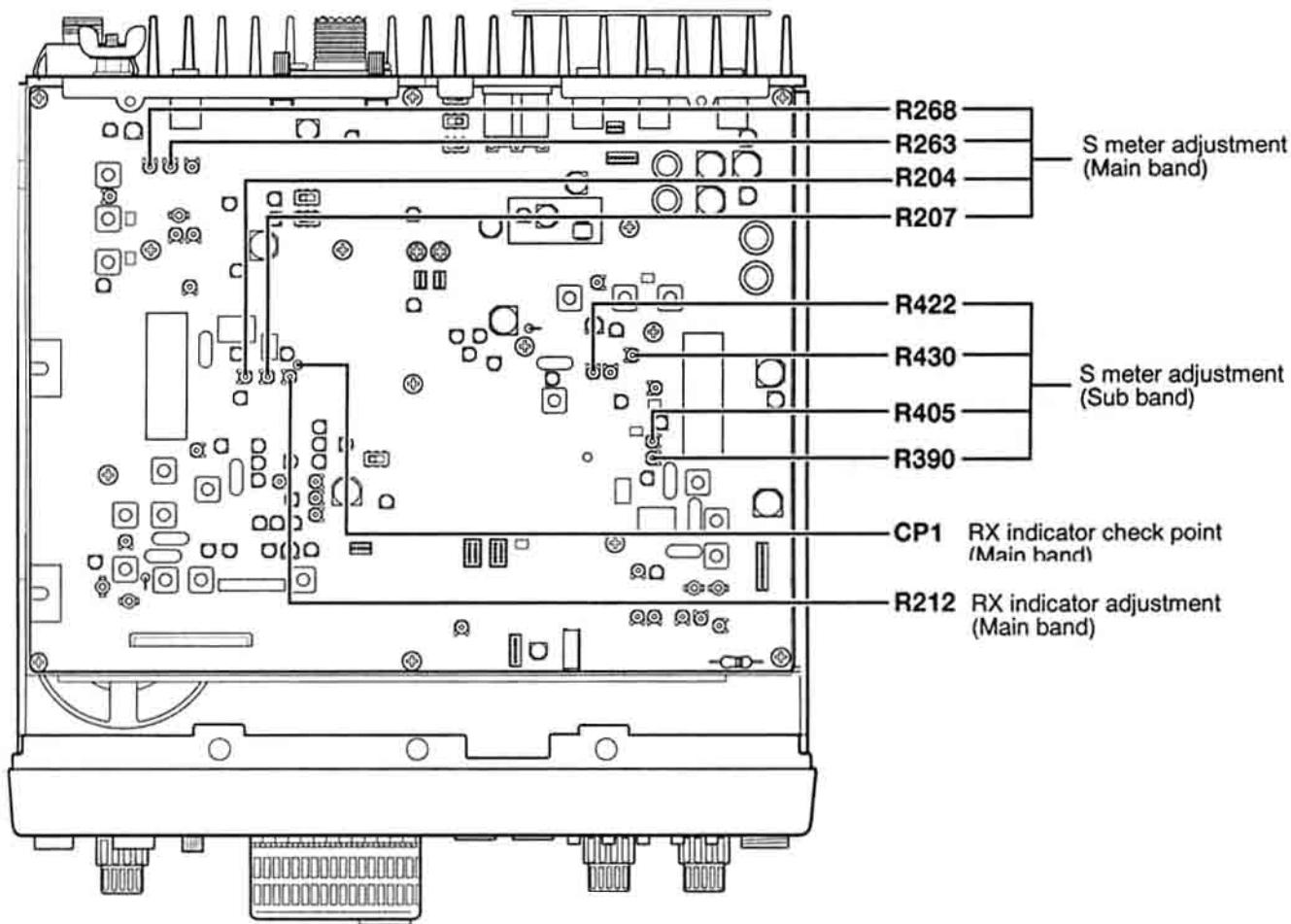


RECEIVER ADJUSTMENT (CONTINUED)

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION		UNIT	ADJUST
S-METER (MAIN BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency: 145.000 MHz (EUR, SWE) 146.000 MHz (USA, AUS) ● Mode : FM ● Connect the SSG to the [VHF ANT] connector and set as: Level : 3.2 μV* (-97 dBm) Modulation : 1 kHz Deviation : \pm3.5 kHz 	Front panel	S meter	S9	MAIN	R204
	2	<ul style="list-style-type: none"> ● Set the SSG as: Level : 100 μV* (-67 dBm) 			S9 + 60 dB		R207
	3	<ul style="list-style-type: none"> ● Mode : USB ● Set the SSG as: Level : 3.2 μV* (-97 dBm) Modulation : OFF 			S9		R268
	4	<ul style="list-style-type: none"> ● Set the SSG as: Level : 1.0 mV* (-47 dBm) Modulation : OFF 			S9 + 60 dB		R263
S-METER (SUB BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency: 145.000 MHz (EUR, SWE) 146.000 MHz (USA, AUS) ● Mode : FM ● Connect the SSG to the [VHF ANT] connector and set as: Level : 3.2 μV* (-97 dBm) Modulation : 1 kHz Deviation : \pm3.5 kHz 	Front panel	S meter	S9	MAIN	R390
	2	<ul style="list-style-type: none"> ● Set the SSG as: Level : 100 μV* (-67 dBm) 			S9 + 60 dB		R405
	3	<ul style="list-style-type: none"> ● Mode : USB ● Set the SSG as: Level : 3.2 μV* (-97 dBm) Modulation : OFF 			S9		R430
	4	<ul style="list-style-type: none"> ● Set the SSG as: Level : 1.0 mV* (-47 dBm) Modulation : OFF 			S9 + 60 dB		R422
RX INDICATOR (MAIN BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency : 146.000 MHz ● Mode : FM ● Connect the SSG to the [VHF ANT] connector and set as: Level : 100 μV* (-67 dBm) Modulation : 1 kHz Deviation : \pm3.5 kHz ● Receiving 	MAIN	Connect the digital voltmeter to CP1.	1.5 V \pm 0.01 V	MAIN	R212
	2	<ul style="list-style-type: none"> ● Set the SSG as: Level : OFF 			1.5 V \pm 0.1 V		Verify

* This output level of the standard signal generator (SSG) is indicated as SSG's open circuit.

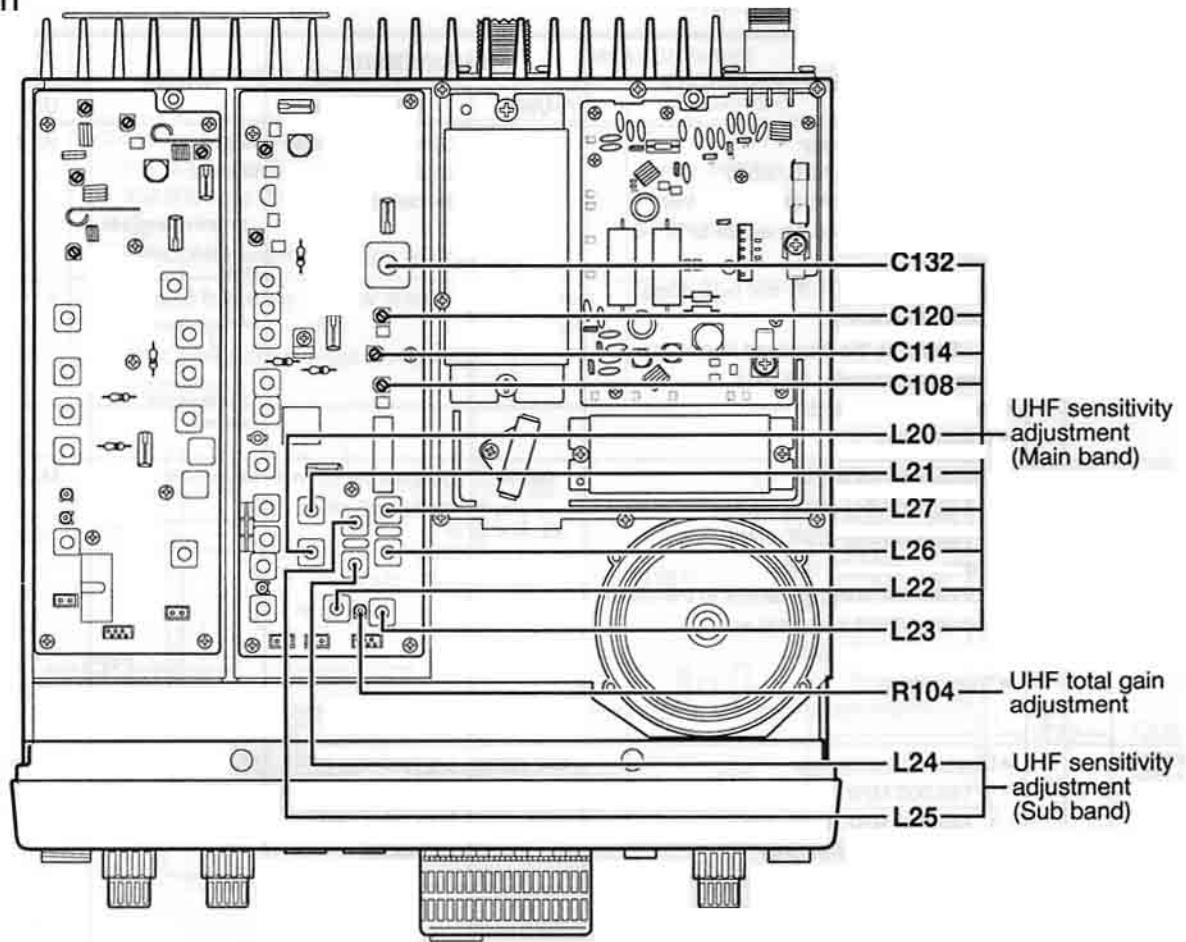
• MAIN UNIT



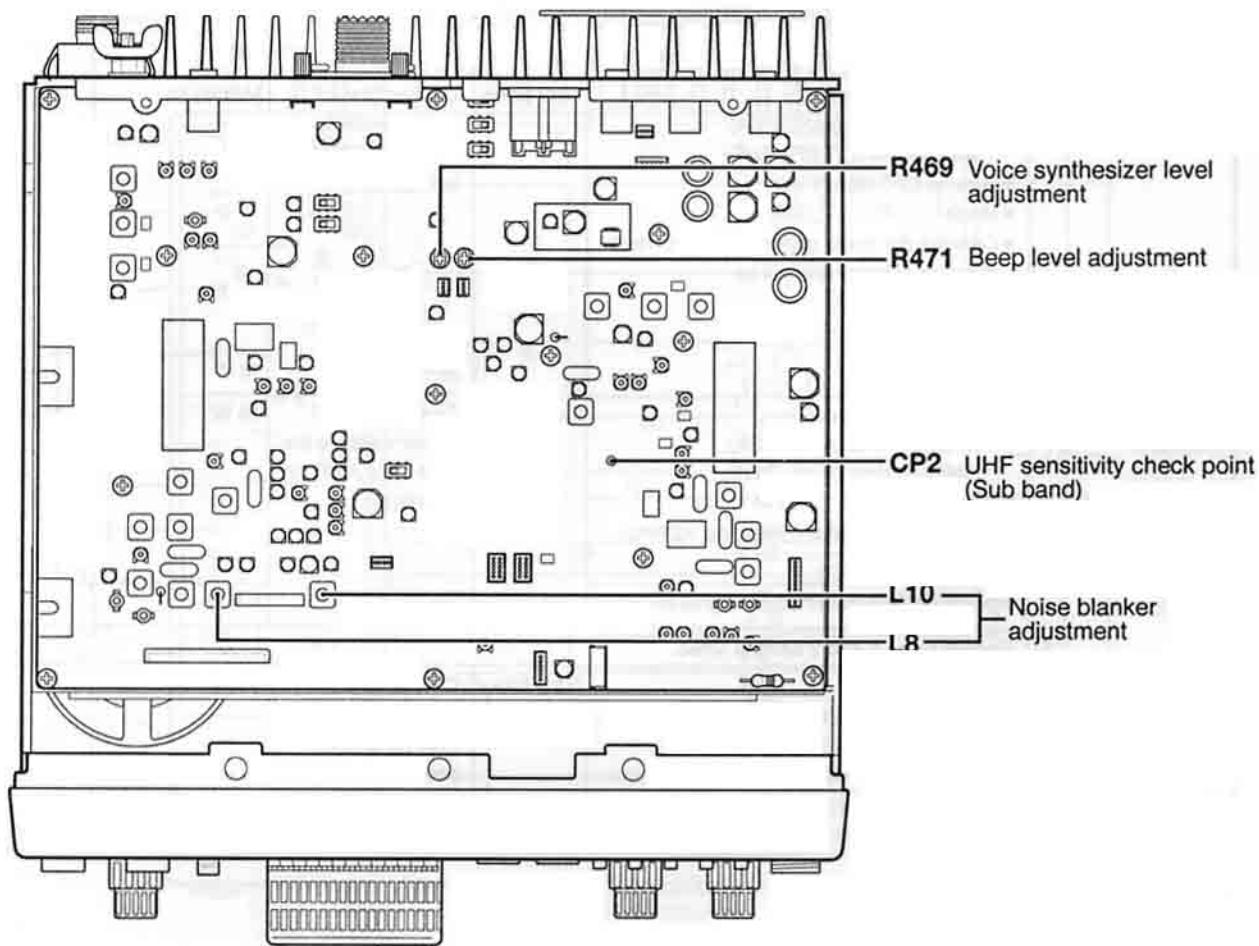
RECEIVER ADJUSTMENT (CONTINUED)

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION		UNIT	ADJUST
UHF SENSITIVITY (MAIN BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency: 430.000 MHz (AUS, EUR, USA) 432.000 MHz (SWE) ● Mode : FM ● [ATT] : OFF [NB] : OFF [AGC] : ON (fast) [RIT] : OFF [SQL (MAIN)] : Max. CCW ● Connect the SSG to the [UHF ANT] connector and set as: Modulation : 1 kHz Deviation : ±5 kHz ● Receiving 	Front panel	S meter	S3	Connected SSG	Output level
					Maximum level	RF-B	Adjust in sequence C132, C120, C114, C108, L27, L23, L26, L21, L20, L22
UHF SENSITIVITY (SUB BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency: 430.000 MHz (AUS, EUR, USA) 432.000 MHz (SWE) ● Mode : FM ● [ATT] : OFF [AGC] : ON (fast) [SQL (SUB)] : Max. CCW ● Connect the SSG to the [UHF ANT] connector and set as: Modulation : 1 kHz Deviation : ±5 kHz ● Receiving 	MAIN	Connect the digital voltmeter to CP2.	approx. 2 V	Connected SSG	Output level
					Maximum voltage	RF-B	Adjust in sequence L25, L24
UHF TOTAL GAIN (MAIN BAND)	1	<ul style="list-style-type: none"> ● Displayed frequency: 435.000 MHz (EUR, SWE) 440.000 MHz (AUS, USA) ● Mode : FM ● Connect the SSG to the [UHF ANT] connector and set as: Level : 3.2 µV* (-97 dBm) Modulation : 1 kHz Deviation : ±3.5 kHz 	FRONT panel	S meter	S9	RF-B	R104
NOISE BLANKER	1	<ul style="list-style-type: none"> ● Displayed frequency : 144.000 MHz ● Mode : USB ● [NB] switch : ON ● Receiving ● Connect the SSG to the [VHF ANT] connector and apply the pulse-type noise signals to the SSG's output. 	Top cover	Speaker	Minimum pulse-type noise level.	MAIN	L8, L10
BEEP/VOICE SYNTHESIZER (option) LEVEL	1	<ul style="list-style-type: none"> ● Main band ● Receiving ● [AF] control : Center 	Top cover	Speaker	Desired beep level. (default setting is at center position)	MAIN	R471 (Beep) R469 (voice synthesizer)

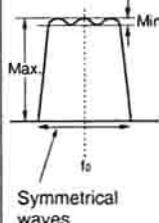
RF-B UNIT



MAIN UNIT



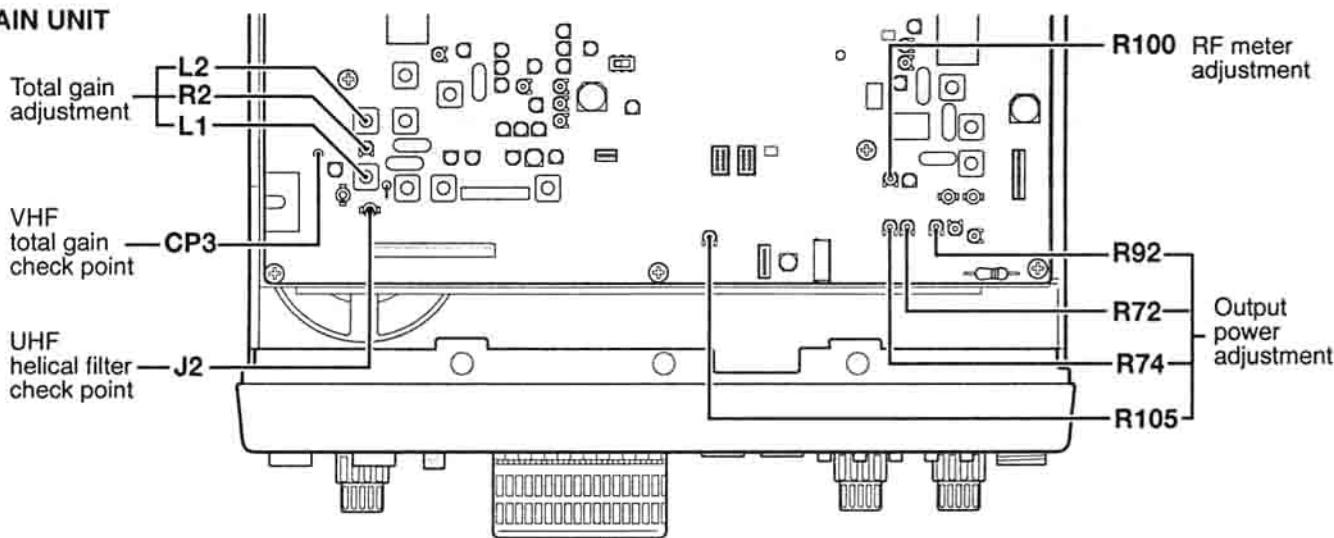
5-5 TRANSMITTER ADJUSTMENT

ADJUSTMENT		ADJUSTMENT CONDITIONS		MEASUREMENT		VALUE	ADJUSTMENT POINT	
				UNIT	LOCATION		UNIT	ADJUST
UHF HELICAL FILTER	1	<ul style="list-style-type: none"> ● Displayed frequency: 445.000 MHz (AUS, USA) 435.000 MHz (All other versions) ● Connect the sweep generator to RF-B unit J7 Sweep level : 71 mV (-10 dBm) Center frequency : Same as the displayed frequency Sweep bandwidth : 50 MHz ● Unplug MAIN unit J2 ● Transmitting 	RF-B	Connect the oscilloscope to J3 through the detector.	Adjust as follows: 	RF-B	L36, L37, C32, C37	
TOTAL GAIN	1	<ul style="list-style-type: none"> ● Displayed frequency: 146.000 MHz (AUS, USA) 145.000 MHz (EUR, SWE) ● Mode : USB ● Connect the audio generator to the microphone connector and set as: 2 mV/1.5 kHz ● Transmitting 	RF-A	Connect the RF voltmeter to J1 pin 1.	Maximum	MAIN	L1, L2	
	2				18 mV (-22 dBm)			R2
VHF TOTAL GAIN	1	<ul style="list-style-type: none"> ● Displayed frequency: 146.000 MHz (AUS, USA) 145.000 MHz (EUR, SWE) ● Ground CP3 (MAIN unit) ● Mode : USB ● [MIC] control : Center ● Connect the audio generator to the microphone connector and set as: 2 mV/1.5 kHz ● Transmitting 	Rear panel	Connect the RF power meter to the [144 MHz ANT] connector.	Maximum	RF-A	L1—L5, C27, C35, C101, C103	
	2				18 W			R3
UHF TOTAL GAIN	1	<ul style="list-style-type: none"> ● Displayed frequency: 440.000 MHz (AUS, USA) 435.000 MHz (EUR, SWE) ● Ground CP3 (MAIN unit) ● Mode : USB ● Connect the audio generator to the microphone connector and set as: 2 mV/1.5 kHz ● Transmitting 	Rear panel	Connect the RF power meter to the [430 MHz ANT] connector.	Maximum	RF-B	L1—L5	
	2				16 W			R3
OUTPUT POWER	1	<ul style="list-style-type: none"> ● Displayed frequency: 148.000 MHz (AUS, USA) 146.000 MHz (EUR, SWE) ● Mode : FM ● [PWR/COMP] switch : High (no lighting) ● Transmitting 	Rear panel	Connect the RF power meter to the [144 MHz ANT] connector.	45 W	MAIN	R72	
	2	● [PWR/COMP] switch : Low (lights in red)			5.5 W			R74
	3	Repeat steps 1 and 2 several times.						
	4	<ul style="list-style-type: none"> ● Mode : USB ● [PWR/COMP] switch : High (no lighting) ● [MIC] control : Center ● Connect the audio generator to the microphone connector and set as: 20 mV/1.5 kHz 	Rear panel	Connect the RF power meter to the [144 MHz ANT] connector.	35 W			R105
Continuue on the next page ↗								

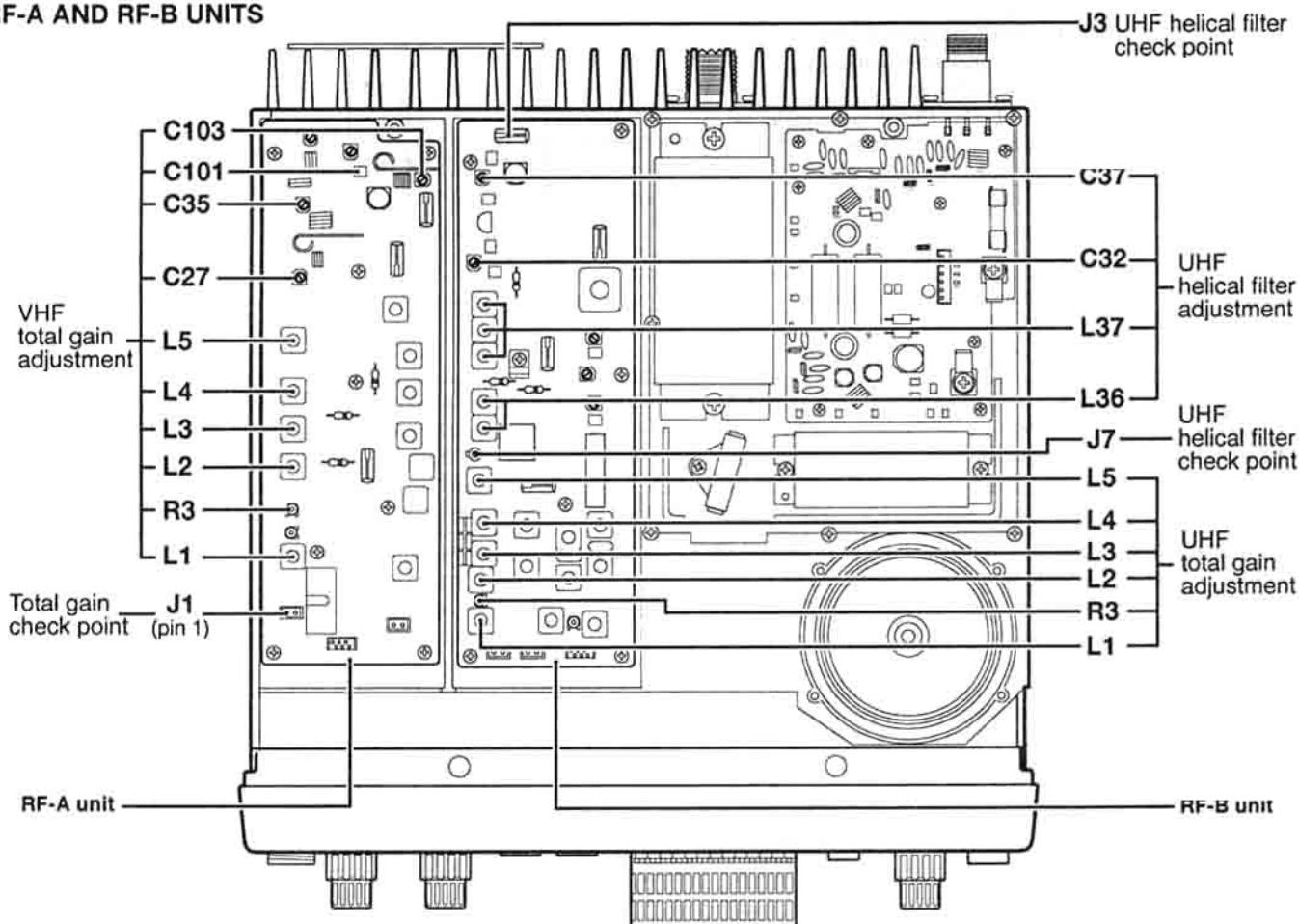
TRANSMITTER ADJUSTMENT (CONTINUED)

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
UNIT	LOCATION		UNIT	ADJUST		UNIT	ADJUST
OUTPUT POWER	5	<ul style="list-style-type: none"> • Displayed frequency: 430.000 MHz (AUS, EUR, USA) 432.000 MHz (SWE) • Mode : FM • [PWR/COMP] switch : High (no lighting) 		Connect the RF power meter to the [430 MHz ANT] connector.	40 W		R92
RF METER	1	<ul style="list-style-type: none"> • Displayed frequency : Center of each band • Mode : FM • [PWR/COMP] switch : High (no lighting) • Transmitting 	Front panel	RF meter	S + 40 dB (90%)	MAIN	R100

• MAIN UNIT



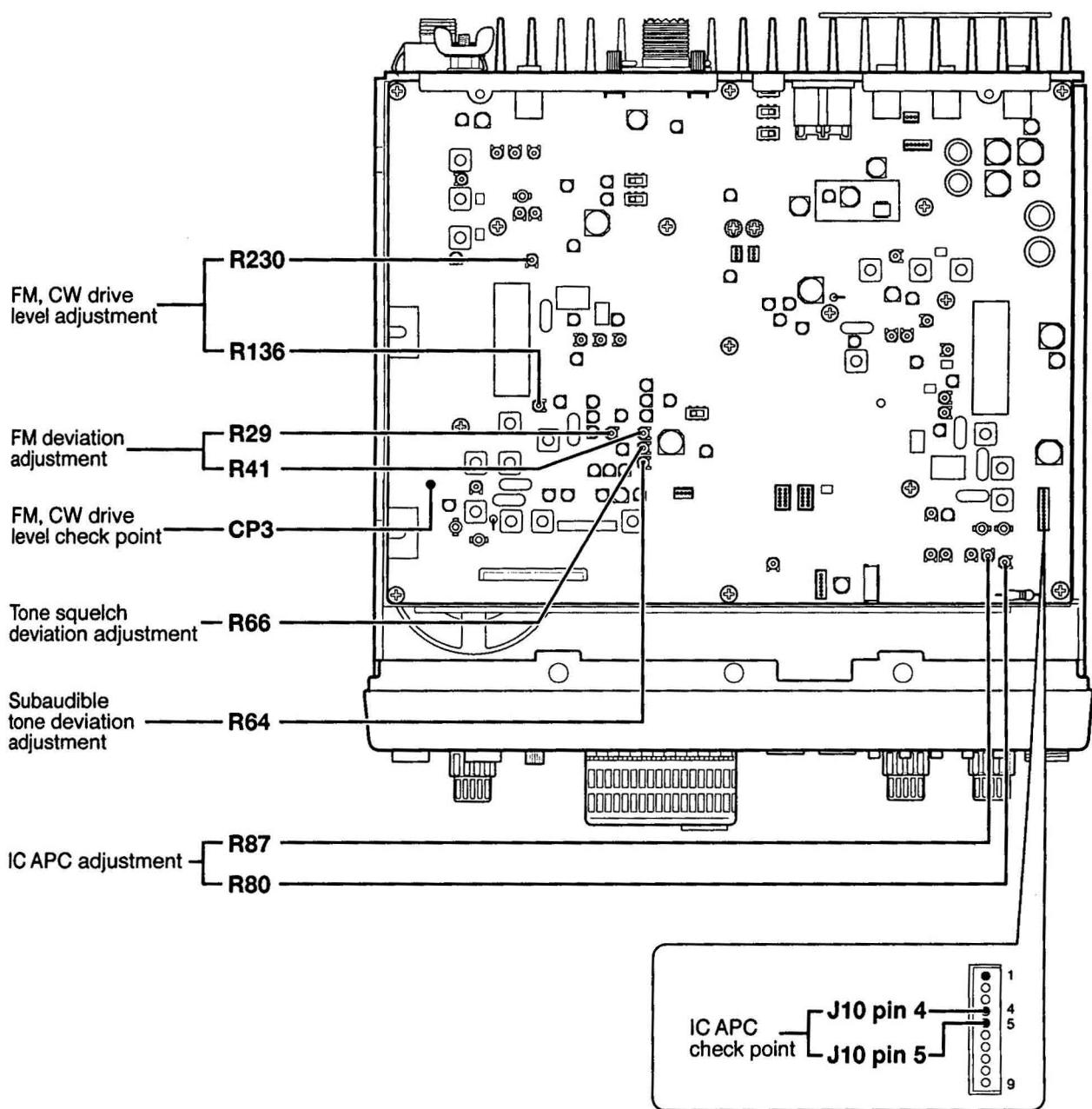
• RF-A AND RF-B UNITS



TRANSMITTER ADJUSTMENT (CONTINUED)

ADJUSTMENT		ADJUSTMENT CONDITIONS		MEASUREMENT		VALUE	ADJUSTMENT POINT	
				UNIT	LOCATION		UNIT	ADJUST
FM, CW DRIVE LEVEL	1	<ul style="list-style-type: none"> ● Displayed frequency : 146.000 MHz (AUS, USA) 145.000 MHz (EUR, SWE) ● Mode : USB ● Connect the audio generator to the microphone connector and set as: 20 mV/1.5 kHz ● Transmitting 		MAIN	Connect the digital multi-meter to CP3.			Check the voltage
	2	<ul style="list-style-type: none"> ● Mode: FM ● Transmitting 			Same value as step 1.	MAIN	R136	
	3	<ul style="list-style-type: none"> ● Mode: CW ● Connect a keyer to the [KEY] jack and key down. 			Same value as step 1.		R230	
IC APC	1	<ul style="list-style-type: none"> ● Displayed frequency : 144.000 MHz ● Mode : USB ● [MIC] control : Max. clockwise ● Ground J10 pin 4 (MAIN unit) ● Connect the audio generator to the microphone connector and set as: 20 mV/1.5 kHz ● Transmitting 		Rear panel	Connect the RF power meter to the [144 MHz ANT] connector.	55 W	MAIN	R80
	2	<ul style="list-style-type: none"> ● Displayed frequency : 430.000 MHz ● Ground J10 pin 5 (MAIN unit) 			Connect the ammeter between the DC power supply and IC-820H.	16 A	MAIN	R87
	3	After adjustment, replace J3 and EP-1.						
FM DEVIATION	1	<ul style="list-style-type: none"> ● Displayed frequency : 144.000 MHz ● Mode : FM ● [PWR/COMP] : High (no lighting) ● [MIC] control : Center ● Connect the audio generator to the microphone connector and set as: 1 kHz/20 mV ● Connect the FM deviation meter as: HPF 50 Hz LPF 20 kHz De-emphasis : OFF Detector : (P-P)/2 ● Transmitting 		Rear panel	Connect the FM deviation meter to the [144 MHz ANT] connector via the attenuator.	±4.8 kHz	MAIN	R29
	2	<ul style="list-style-type: none"> ● Set as the audio generator as: 1 kHz/2 mV 			±3.5 kHz	R41		
	3	Repeat steps 1 and 2 several times.						
TONE SQUELCH DEVIATION (option)	1	<ul style="list-style-type: none"> ● Displayed frequency : 145.000 MHz ● Mode : FM ● Tone squelch : ON ● Tone frequency : 67 Hz 		Rear panel	Connect the FM deviation meter to the [144 MHz ANT] connector via the attenuator.	±0.6 kHz	MAIN	R66
SUBAUDIBLE TONE DEVIATION (AUS, USA versions only)	1	<ul style="list-style-type: none"> ● Displayed frequency : 146.000 MHz ● Mode : FM ● Subaudible tone encoder: ON ● Tone frequency : 67 Hz ● Transmitting 		Rear panel	Connect the FM deviation meter to the [144 MHz ANT] connector via the attenuator.	±0.6 kHz	MAIN	R64
1750 Hz TONE BURST (EUR, SWE versions only)	1	<ul style="list-style-type: none"> ● Displayed frequency : 145.000 MHz ● Mode : FM ● Push and hold [TONE] 		Rear panel	Connect the FM deviation meter to the [144 MHz ANT] connector via the attenuator.	±3.5 kHz	MAIN	R64

• MAIN UNIT



[FRONT UNIT] SECTION 6 PARTS LIST

REF.#	ORDER#	D	DESCRIPTION
ME1	5510000420	METER	ME-34 SX1425
W9	7120000010	JUMPER	JPW 02A
11	6510000290	CONNECTOR	8S-S-E
S1	2260001580	SWITCH	JPZ2120-0101 (TV-3)
S2	2250000130	ENCODER	SW-152 (EC24B50B0013B)
EP1	0910041880	FPC	B 4178

[DISP UNIT]

REF.#	ORDER#	DESCRIPTION
IC1	1180001110	S.IC PQ20VZ51
IC2	1140002190	SIC HD66100FH
IC3	1110003300	SIC M5282FP 70CD
IC4	1140003830	S.1C TC4W66F(TE12L)
IC5	1180001070	S.1C TA7805F(TE16L)
IC6	1110001550	S.IC S-8054ALB-LM-T1
IC7	1130005720	SIC TC7WO4F (TE12L)
IC8	1140004430	S.1C HD6433875A02H
IC9	1130006800	SIC TC7WO8F (TE12L)
IC10	1180001110	S.IC PQ20VZ51
IC11	1130007700	S.1C BU4094BCF-T1
Q1	1590001330	&TRANSISTOR DTA114EU T107
Q2	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q3	1590001330	&TRANSISTOR DTA114EU T107
Q4	1590000430	&TRANSISTOR DTC144EU T107
Q5	1520000560	&TRANSISTOR 2SB1123T-TD
Q6	1590000430	&TRANSISTOR DTC144EU T107
Q7	1520000560	S.TRANSISTOR 2SB1123T-TD
Q8	1590090430	&TRANSISTOR DTC144EU T107
Q9	1590000430	&TRANSISTOR DTC144EU T107
Q10	1590000430	&TRANSISTOR DTC144EU T107
Q11	1590000430	S.TRANSISTOR DTC144EU T107
Q12	1590001000	&TRANSISTOR RN2427 (TE85R)
Q13	1590000430	&TRANSISTOR DTC144EU T107
Q14	1590001000	&TRANSISTOR RN2427 (TE85R)
Q15	1590000430	&TRANSISTOR DTC144EU T107
Q16	1590001000	&TRANSISTOR RN2427 (TE85R)
Q17	1590000430	&TRANSISTOR DTC144EU T107
Q18	1590001000	&TRANSISTOR RN2427 (TE85R)
Q19	1590000430	&TRANSISTOR DTC144EU T107
Q20	1590001000	&TRANSISTOR RN2427 (TE85R)
Q21	1590000430	&TRANSISTOR DTC144EU T107
Q22	1590001000	&TRANSISTOR RN2427 (TE85R)
Q23	1530003090	&TRANSISTOR 2SC4213-B (TE85R)
Q24	1530002980	&TRANSISTOR 2SC3650-TD
Q25	1590001000	&TRANSISTOR RN2427 (TE85R)
Q26	1590001000	&TRANSISTOR RN2427 (TE85R)
Q27	1590000430	&TRANSISTOR DTC144EU T107
Q29	1590000430	&TRANSISTOR DTC144EU T107
Q30	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q31	1510000770	&TRANSISTOR 2SA1586-GR (TE85R)
Q32	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q33	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q34	1590000680	&TRANSISTOR DTC114EU T107
Q35	1590000680	&TRANSISTOR DTC114EU T107
Q36	1590000430	&TRANSISTOR DTC144EU T107
Q37	1590000880	&TRANSISTOR DTC114EU T107
Q38	1590000680	&TRANSISTOR DTC114EU T107
Q39	1590000680	&TRANSISTOR DTC114EU T107
Q40	1590001330	&TRANSISTOR DTA114EU T107

Q41	1590000430	&TRANSISTOR DTC144EU T107
Q42	1590000430	&TRANSISTOR DTC144EU T107
Q43	1590000680	&TRANSISTOR DTC1 14EU T107
D1	1750000390	S.DIODE 1SS353 TE-17
D3	1750000290	S.DIODE 1SS300 (TE85R)
D4	1750000290	S. DIODE 1SS300 (TE85R)
D5	1750000290	S.DIODE 1SS300 (TE85R)
D6	1750000270	S.DIODE 1SS301 (TE85R)
D7	1750000270	S.DIODE 1SS301 (TE85R)
D8	1750000270	S.DIODE 1SS301 (TE85R)
D9	1750000270	S.DIODE 1SS301 (TE85R)
D10	1750000270	S.DIODE 1SS301 (TE85R)
D11	1750000290	S.DIODE 1SS300 (TE85R)
D12	1750000390	S.DIODE 1SS353 TE-17
D13	1750000390	S.DIODE 1SS353 TE-17
D14	1750000390	S.DIODE 1SS353 TE-17
D15	1750000390	S.DIODE 1SS353 TE-17
D16	1750000390	S.DIODE 1SS353 TE-17
D17	1750000390	S.DIODE 1SS353 TE-17
D18	1750000270	S.DIODE 1SS301 (TE85R)
D19	1750000390	S.DIODE 1SS353 TE-17
D20	1750000390	S.DIODE 1SS353 TE-17
D21	1750000390	S.DIODE 1SS353 TE-17
D22	1750000390	S.DIODE 1SS353 TE-17 [EUR], [AUS] only
D23	1750000390	S.DIODE 1SS353 TE-17 [USA], (AUS) only
D24	1750000390	S.DIODE 1SS353 TE-17 [SWE] only
D25	1750000390	S.DIODE 1SS353 TE-17
D26	1750000390	S.DIODE 1SS353 TE-17
D27	1750000390	S.DIODE 1SS353 TE-17
D28	1750000390	S.DIODE 1SS353 TE-17
D29	1790000450	S.DIODE MA882(TX)
D30	1750000270	S.DIODE 1SS301 (TE85R)
D31	1750000270	S.DIODE 1SS301 (TE85R)
D32	1750000270	S.DIODE 1SS301 (TE85R)
X1	6050008160	S,XTAL CR-410 (9.8304MHz)
L1	6200003950	S.COIL HF50ACC 322513-T
L2	6200003950	S.COIL HF50ACC 322513-T
R1	7030000270	&RESISTOR MCR10EZHJ 120 ohm (121)
R2	7030003440	&RESISTOR ERJ3GEYJ 102 V (1 k)
R3	7030003680	&RESISTOR ERJ3GEYJ 104 V (100 k)
R4	7030003890	&RESISTOR ERJ3GEYJ 124 V (120 k)
R5	7030000360	&RESISTOR MCR10EZHJ 680 ohm (681)
R6	7030000360	&RESISTOR MCR10EZHJ 880 ohm (681)
R7	7030003680	&RESISTOR ERJ3GEYJ 104 V (100 k)
R8	7030003890	&RESISTOR ERJ3GEYJ 124 V (120 k)
R9	7030003700	&RESISTOR ERJ3GEYJ 154 V (150 k)
RIO	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R11	7030003550	&RESISTOR ERJ3GEYJ 822 V (8.2 k)
R12	7030003420	S.RESISTOR ERJ3GEYJ 681 V (680 ohm)
R13	7030003750	&RESISTOR ERJ3GEYJ 394 V (390 k)
R14	7030003750	&RESISTOR ERJ3GEYJ 394 V (390 k)
R15	7030003730	&RESISTOR ERJ3GEYJ 274 V (270 k)
R16	7030003700	&RESISTOR ERJ3GEYJ 154 V (150 k)
R17	7030003440	&RESISTOR ERJ3GEYJ 102 V (1 k) [USA], [EUR], [AUS]
	7030004050	&RESISTOR ERJ3GEYJ 1RO V (1 ohm) [SWE] S.=Surface mount

[DISP UNIT]

REF.	ORDER	DESCRIPTION	
NO.	NO.		
R18	7030003440	&RESISTOR usa [EUR], [AUS] only	ERJ3GEYJ 102 V (1 k)
R20	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R21	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R22	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R23	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 Q)
R24	7030003520	&RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R25	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R26	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R27	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R28	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R29	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R30	7030003650	&RESISTOR	ERJ3GEYJ 563 V (56 k)
R31	7210002510	TRIMMER EVU-FLAEC2 C14 (10KC)	
R32	7030003510	&RESISTOR	ERJ3GEYJ 392 V (3.9 k)
R33	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R34	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R35	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R36	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R37	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R40	7030003520	&RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R41	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R42	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R43	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R44	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R45	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R46	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R48	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R54	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R55	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R56	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R57	7030003760	&RESISTOR	ERJ3GEYJ 474 V (470 k)
R58	7030003720	&RESISTOR	ERJ3GEYJ 224 V (220 k)
R59	7030003720	S .RESISTOR	ERJ3GEYJ 224 V (220 k)
R60	7030003800	&RESISTOR	ERJ3GEYJ 105 V (1 Mohm)
R61	7030003540	&RESISTOR	ERJ3GEYJ 682 V (6.8 k)
R62	7030003620	&RESISTOR	ERJ3GEYJ 333 V (33 k)
R63	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R64	7030003590	&RESISTOR	ERJ3GEYJ 183 V (18 k)
R65	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R66	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R67	7030003840	S .RESISTOR	ERJ3GEYJ 225 V (2.2 Mohm)
R68	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R69	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R70	7030004050	&RESISTOR	ERJ3GEYJ 1 RO V (1 ohm)
R71	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R72	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R73	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R74	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k2)
R75	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 10)
R76	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R77	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R78	7030003840	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R79	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R80	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
		[USA], [EUR], [AUS]	
	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
	[SWE]		

R81	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 IC)
R82	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R83	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R84	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R85	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R86	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R87	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k))
R88	7510000870	S.THERMISTOR	NTCCF2012 3FH 332KC-T
R90	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R91	7030003840	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R92	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R93	7030003840	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R94	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R95	7030003840	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R96	7030003840	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R97	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R98	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R99	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R100	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 9)
R101	7310003700	TRIMMER	EVN-D2AA03 B23 (202)
R102	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R103	7030000220	&RESISTOR	MCRIOEZHJ 47 ohm(470)
R104	7030000220	&RESISTOR	MCRIOEZHJ 47 ohm(470)
R105	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R106	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R107	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R108	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R112	7030000380	&RESISTOR	MCRIOEZIJ 1 k (102)
R113	7030000380	&RESISTOR	MCR10EZHJ 1 k (102)
R114	7030000380	S.RESISTOR	MCRIOEZHJ 1 It (102)
R115	7030000380	&RESISTOR	MCR10EZHJ 1 1Q (102)
R116	7030000210	S.RESISTOR	MCRIOEZHJ 39 ohm(390)
R117	7030000210	&RESISTOR	MCRIOEZHJ 39 ohm(390)
R118	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
C1	4030009090	&CERAMIC	C3216 JB 1C 334K-T-A
C2	4510004440	S.ELECTROLITIC	ECEVIHAO10SR
C3	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C4	4030006880	&CERAMIC	C1608 JB 1H 472K-T-A
C5	4030006900	&CERAMIC	C1608 JB 1 E 103K-T-A
C6	4030006880	S.CERAMIC	C1608 JS 1 H 472K-T-A
C7	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C8	4030006880	&CERAMIC	C1608 JB 1FI 472K-T-A
C9	4030006880	S.CERAMIC	C1608 JB IH 472K-T-A
C10	4030008880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C11	4030006880	S.CERAMIC	C1606 JB 1 H 472K-T-A
C12	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C13	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C14	4510005370	S.ELECTROLITIC	ECEV1AA221P
C15	4510005310	S.ELECTROLITIC	ECEV1CA220SR
C16	4030009110	&CERAMIC	C3216 JB 1C 474K-T-A
C17	4030008860	&CERAMIC	C1608 JB 1H 102K-T-A
C18	4030006880	&CERAMIC	C1808 JB 1H 102K-T-A
C19	4510005820	S.ELECTROLITIC	ECEV1CA101P
C20	4030006900	&CERAMIC	C1608 JB 1E 103K-T-A
C21	4030009110	S.CERAMIC	C3216 JB 1C 474K-T-A
C22	4030009110	S.CERAMIC	C3216 JB 1 C 474K-T-A
C23	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C24	4030010210	&CERAMIC	C3216 JB 1C 105M-T-A
C25	4030008900	S.CERAMIC	C1608 JB 1E 103K-T-A
C26	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A

C27	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C28	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C29	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C30	4030006880	&CERAMIC	C1608 JB 1H 102K-T-A
C31	4030006880	&CERAMIC	C1608 JB 1 H 102K-T-A
C32	4030006880	&CERAMIC	C1608 JB 1 H 102K-T-A
C33	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C34	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C35	4030008880	&CERAMIC	C1608 JB 1 H 472K-T-A
C36	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C37	4510004830	S.ELECTROLITIC	ECEV1CALOOSR
C38	4030008880	&CERAMIC	C1608 JB 1H 472K-T-A
C39	4510004540	S.ELECTROLITIC	ECEVOJA470SR
C40	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C41	4510004540	S.ELECTROLITIC	ECEVOJA470SR
C42	4030009000	S.CERAMIC	C2012 JB 1C 224K-T-A
C43	4030007020	S.CERAMIC	C1608 CH 1H 120J-T-A
C44	4030007020	S.CERAMIC	C1608 CH IH 120J-T-A
C45	4030006900	&CERAMIC	C1608 JB 1E 103K-T-A
C46	4030009110	&CERAMIC	C3216 JB 1C 474K-T-A
C47	4030008900	&CERAMIC	C1608 JB 1E 103K-T-A
C48	4030006900	&CERAMIC	01808 JB IE 103K-T-A
C49	4030006900	&CERAMIC	C1808 JB 1E 103K-T-A
C50	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C51	4030006880	&CERAMIC	C1608 JB 1H 472K-T-A
C52	4030006880	&CERAMIC	C1608 JB 1H 472K-T-A
C53	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C54	4030008880	&CERAMIC	C1608 JB 1 H 472K-T-A
C55	4030006880	&CERAMIC	C1808 JB 1 H 472K-T-A
C56	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C57	4030006900	S.CERAMIC	C1608 JB IE 103K-T-A
C58	4030006900	S.CERAMIC	C1608 JB IE 103K-T-A

[DISP UNIT]

REF.#	ORDER#	DESCRIPTION
C59	4030010210	&CERAMIC C3216 JB 1C 105M-T-A
C60	4510004630	S.ELECTROLITIC ECEV1CA100SR
C61	4030006900	&CERAMIC C1608 JB 1E 103K-T-A
C62	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A
C63	4030008960	&CERAMIC C2012 JB 1C 104K-T-A
C64	4030006880	&CERAMIC C1608 JB 1H 472K-T-A
C65	4030006900	&CERAMIC C1608 JB 1E 103K-T-A
C66	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A
C67	4030006880	&CERAMIC C1608 JB 1 H 472K-T-A
C68	4030006880	&CERAMIC C1808 JB 1 H 472K-T-A
C69	4030006860	&CERAMIC C1 608JB 1H 102K-T-A
C70	4030006860	&CERAMIC C1608JB 1H 102K-T-A
C71	4510004630	S.ELECTROLITIC ECEV1CA100SR
C72	4030006860	&CERAMIC C1608 JB 1H 102K-T-A
BT1	3020000110	LITHIUM CR2032
DS1	5080000330	LAMP HRS-7219A-RE
DS2	5080000330	LAMP HRS-7219A-RE
DS3	5080000330	LAMP HRS-7219A-RE
DS4	5080000330	LAMP HRS-7219A-RE
DS5	5040001830	LED VRBG3349S
DS6	5040001820	LED BG3889S
DS7	5030001000	LCD FTD-12525AAH
W1	7120000380	JUMPER JPW 01 R-01
W2	7120000380	JUMPER JPW 01 R-01
W3	7030003860	S.JUMPER ERJ3GE JPW V
W4	8900004830	CABLE OPC-469
W5	8900004810	CABLE OPC-467
W6	8900004840	CABLE OPC-470
W7	8900004850	CABLE OPC-471
W8	8900004850	CABLE OPC-471
W9	8900004850	CABLE OPC-471
W10	8900004820	CABLE OPC-468
11	6510007170	CONNECTOR P128A-03M
J2	6510007170	CONNECTOR P128A-03M
J3	6510016810	&CONNECTOR IMSA-9611S-05Y900
J4	6510016810	&CONNECTOR IMSA-9611S-05Y900
J5	6510016810	&CONNECTOR IMSA-9611S-05Y900
J7	6510018520	&CONNECTOR 00 6208 515 210 000
J8	6510016870	&CONNECTOR 08FPZ-SM-TF
J9	6510007170	CONNECTOR PI28A-03M
J10	6510007110	CONNECTOR P128A-10M
J13	6510018500	&CONNECTOR 00 6208 507 110 000
J14	6510003390	CONNECTOR B03B-EH-S
J15	6510015560	&CONNECTOR 4-175638-6
J18	6510018510	&CONNECTOR 00 6208 512 210 000
J17	6510008370	CONNECTOR BBH-1
S1	2230000930	SWITCH ESB-64805
S2	2230000930	SWITCH ESB-64805
S3	2230000930	SWITCH ESB-64805
S4	2230000930	SWITCH ESB-64805
S5	2230000930	SWITCH ESB-64805
S6	2230000920	SWITCH ESB-64544
S9	2260000680	SWITCH SKHHBV011A
810	2260000880	SWITCH SKHHBV011A
S11	2260000680	SWITCH SKHHBV011A
S12	2280000840	SWITCH SKHHAN185A
S13	2260000840	SWITCH SKHHAN165A
EP1	0910040275	PCB B 3996E
EP2	8930031220	LCD CONTACT SRCN-1424 SSW

[SW-A UNIT]

REF.#	ORDER#	DESCRIPTION
D1	1750000290	S.DIODE 1SS300 (TE85R)
D2	1750000290	S.DIODE 1SS300 (TE85R)
D3	1750000290	S.DIODE 1SS300 (TE85R)
D4	1750000290	S.DIODE 1SS300 (TE85R)
R1	7030003410	&RESISTOR ERJ3GEYJ 561 V (560 Q)
R2	7030003410	&RESISTOR ERJ3GEYJ 561 V (560 Q)
R3	7030003410	&RESISTOR ERJ3GEYJ 561 V (560 0)
R4	7030003410	&RESISTOR ERJ3GEYJ 561 V (560 Q)
R5	7030003370	&RESISTOR ERJ3GEYJ 271 V (270 Q)
R6	7030003410	&RESISTOR ERJ3GEYJ 561 V (560 Q)
DS1	5040001780	S.LED SEC 1601C
DS2	5040001780	S.LED SEC 1601C
DS3	5040001780	S.LED SEC 1601C
DS4	5040001780	S.LED SEC 1601C
DS5	5040001870	S.LED SEC 2462C
J1	8510016860	&CONNECTOR 7-175643-6
S1	2260002100	&SWITCH HKW0629-01-031
S2	2260002100	&SWITCH HKW0629-01-031
S3	2280002100	&SWITCH HKW0629-01-031
S4	2260002100	&SWITCH HKW0629-01-031
S5	2260002100	&SWITCH HKW0629-01-031
S6	2260002100	&SWITCH HKW0629-01-031
S7	2260002100	&SWITCH HKW0629-01-031
S8	2260002100	&SWITCH HKW0629-01-031
EP1	0910040282	PCB B 3997B

[SW-B UNIT]

REF.#	ORDER#	Description
IC1	1130007040	S.IC TC7W32F(TE12L)
IC2	1130002660	S.IC LiPD4030BG-T1
IC3	1130003710	S.IC TC4S71F (TE85R)
IC4	1130007390	S.IC TC7WO2F(TE12L)
IC5	1130007390	S.IC TC7WO2F(TE12L)
D1	1750000290	S.DIODE 1SS300 (TE85R)
D2	1750000290	S.DIODE 1SS300(TE85R)
R1	7030003680	&RESISTOR ERJ3GEYJ 104 V (100 k)
R2	7030003720	&RESISTOR ERJ3GEYJ 224 V (220 k)
R3	7030003680	&RESISTOR ERJ3GEYJ 104 V (100 k)
R4	7030003800	&RESISTOR ERJ3GEYJ 105 V (1 Mohm)
R5	7030003580	&RESISTOR ERJ3GEYJ 153 V (15 k)
R6	7030003600	&RESISTOR ERJ3GEYJ 223 V (22 k)
R7	7030003680	&RESISTOR ERJ3GEYJ 104 V (100 k)
R8	7030003720	&RESISTOR ERJ3GEYJ 224 V (220 k)
R9	7030003680	&RESISTOR ERJ3GEYJ 104 V (100 k)
R10	7030003800	&RESISTOR ERJ3GEYJ 105 V (1 Mohm)
R11	7030003580	&RESISTOR ERJ3GEYJ 153 V (15 k)
C1	4030006860	&CERAMIC C1608 JB 1H 102K-T-A
C2	4030006860	&CERAMIC C1608 JB 1 H 102K-T-A
C3	4030006860	&CERAMIC C1608 JB 1H 102K-T-A
C4	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C5	4030006860	&CERAMIC C1608 JB 1H 102K-T-A
C6	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A
C7	4030006900	&CERAMIC C1608 JB 1 E 103K-T-A
C8	4030006900	&CERAMIC C1608 JB 1E 103K-T-A
C9	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A

S.=Surface mount

[SW-B UNIT]

REF.#	ORDER#	DESCRIPTION		
C10	4030006900	S.CERAMIC	C1608	JB 1E 103K-T-A
11	6510016880	S.CONNECTOR		12FPZ-SM-TF
S1	2260002100	S.SWITCH	HKWO629-01-031	
S2	2280002100	S.SWITCH	HKWO629-01-031	
S3	2280002100	S.SWITCH	HKWO629-01-031	
S4	2260002100	S.SWITCH	HKWO629-01-031	
EP1	0910040292	PCB	B	3998B

[VR UNIT]

REF.#	ORDER#	DESCRIPTION		
R1	7210002410	VARIABLE	RV-285	
		(RK0972210)	10KBX2	
R2	7030003440	&RESISTOR	ERJ3GEYJ	102 V (1 KΩ)
J1	6510016810	&CONNECTOR	IMSA-9611S-05Y900	
EP1	0910040303	PCB	B	3999C

[RIT UNIT]

REF.	ORDER	DESCRIPTION		
R1	7210002420	VARIABLE	RV-286	
		(RK0972210)	10KBX2	
R2	7030004050	&RESISTOR	ERJ3GEYJ	IRO V (1Ω)
J1	6510016810	&CONNECTOR	IMSA-9611S-05Y900	
EP1	0910042460	PCB	B	4244

[JACK UNIT]

REF.#	ORDER#	DESCRIPTION		
NO.	NO.			
R1	7030000300	&RESISTOR	MCR1OEZHJ	220Ω (221)
R2	7030000300	&RESISTOR	MCR1OEZHJ	220Ω (221)
R3	7030000300	&RESISTOR	MCR1OEZHJ	220Ω (221)
R4	7030000300	S.RESISTOR	MCR1OEZHJ	220Ω (221)
11	6450000951	CONNECTOR	HLJ4815-01-020	
EP1	0910040321	PCB	B	4001A

[PLL UNIT]

REF.	ORDER	DESCRIPTION		
ICI	1140003641	SIC	SC-1246	
IC2	1110001900	S.1C	gPC4570G2-T1	
IC4	1110003270	SIC	MB511	PF-G-BND
IC5	1110003310	SIC	.PC1688G-T1	
IC6	1140003641	SIC	SC-1246	
IC7	1110001900	S.1C	iPC4570G2-T1	
IC9	1110003270	SIC	MB511	PF-G-BND
IC10	1120002450	SIC	HD74LS90FP-TL	

[PLL UNIT]

REF.	ORDER	DESCRIPTION		
IC11	1180001070	S.IC	TA7805F(TE16L)	
IC12	1130007610	S.IC	IPD3140GS-E1	(DS8)
IC13	1130007700	S.IC	BU4094BCF-T1	
IC14	1130003830	S.IC	TC7SO4F(TE85R)	
IC15	1130003830	S.IC	TC7SO4F(TE85R)	
IC16	1110003400	IC	M54460L	
Q1	1560000650	S.FET	2SK1577-2-T7	
Q2	1530002920	&TRANSISTOR	2SC4226-T2	R25

Q3	1590001330	&TRANSISTOR	DTA114EU T107
04	1530002600	&TRANSISTOR	2SC4215-0 (TE85R)
05	1560000850	S.FET 2SK1577-2-T7	
06	1530002920	&TRANSISTOR	2SC4226-T2 R25
07	1590001330	&TRANSISTOR	DTA114EU T107
08	1530002800	&TRANSISTOR	2SC4215-0 (TE85R)
09	1560000650	S.FET 2SK1577-2-T7	
010	1530002600	&TRANSISTOR	2SC4215-0 (TE85R)
all	1530002600	&TRANSISTOR	2SC4215-0 (TE85R)
012	1560000330	S.FET 2SK210-GR	(TE85R)
013	1530002600	&TRANSISTOR	2SC4215-0 (TE85R)
014	1530002600	&TRANSISTOR	2SC4215-0 (TE85R)
015	1590000430	&TRANSISTOR	DTC144EU T107
Q16	1530002600	&TRANSISTOR	2SC4215-0 (TE85R)
017	1590001330	&TRANSISTOR	DTA114EU T107
018	1590001330	&TRANSISTOR	DTA1 14EU T107
019	1530002600	&TRANSISTOR	2SC4215-0 (TE85R)
Q20	1530002800	&TRANSISTOR	2SC4215-0 (TE85R)
021	1530002690	&TRANSISTOR	2SC4116-GR (TE85R)
022	1560000400	S.FET 2SK536-TA	
Q23	1530002050	&TRANSISTOR	2SC3661-TA
D1	1720000220	S.VARICAP	1SV166-T2B
D2	1720000220	S.VARICAP	1SV166-T2B
D3	1720000220	S.VARICAP	1SV166-T2B
D4	1790000540	S.VARICAP	MA338 (TX)
D5	1790000540	S.VARICAP	MA338 (TX)
DO	1750000270	S.DIODE	ISS301 (TE85R)
D8	1720000220	S.VARICAP	1SV166-T2B
D9	1790000620	S.DIODE	MA77 (TW)
D10	1790000540	S.VARICAP	MA338 (TX)
D11	1750000210	S.DIODE	1SV237 (TE85R)
D12	1750000020	S.DIODE	ISS184 (TE85R)
X1	8050008710	XTAL CR-452	TCXO 30.200MHz
L1	6200003330	S.COIL	NL 322522T-1 ROJ-3
L2	6200003150	S.COIL	NL 322522T-180J
L3	6200001710	S.COIL	NL 322522T-220J
L4	6200003160	S.COIL	NL 322522T-270J
L5	6200001830	S.COIL	NL 322522T-100J
L6	6200003260	S.COIL	NL 322522T-101J
L7	6130002820	COIL LB-319	
L8	6200002980	S.COIL	NL 322522T-R56J-3
L9	6200003260	S.COIL	NL 322522T-101J
L10	6200003000	S.COIL	NL 322522T-R22J-3
L11	6200003330	S.COIL	NL 322522T-1ROJ-3
L12	6200004030	S.COIL	NL 322522T-047J
L13	6180002980	S.COIL	NL 322522T-056J
L14	8180002980	S.COIL	NL 322522T-056J
L15	6200003330	S.COIL	NL 322522T-1 ROJ-3
L16	6200003330	S.COIL	NL 322522T-1ROJ-3
L17	6200003330	S.COIL	NL 322522T-1 ROJ-3
L18	6200003150	S.COIL	NL 322522T-180J
L19	6200001710	S.COIL	NL 322522T-220J
L20	6200003160	S.COIL	NL 322522T-270J
L21	8200003330	S.COIL	NL 322522T-1 ROJ-3
L22	6200003330	S.COIL	NL 322522T-1 ROJ-3
L23	6200003330	S.COIL	NL 322522T-1 ROJ-3
L24	6200003330	S.COIL	NL 322522T-1 ROJ-3

L25	6200004010	S.COIL	NL 322522T-033J
L26	6200004000	S.COIL	NL 322522T-022K
L27	6200004000	S.COIL	NL 322522T-022K

S.=Surface mount

[PLL UNIT]

REF.#	ORDER#	DESCRIPTION
L28	6200003330	S.COIL NL 322522T-1 ROJ-3
L29	6200001030	S.COIL NL 322522T-012K
L30	8200001030	S.COIL NL 322522T-012K
L31	6200001830	S.COIL NL 322522T-100J
L32	6200003030	S.COIL NL 322522T-R47J-3
L33	8200001830	S.COIL NL 322522T-100J
L34	6200001830	S.COIL NIL 322522T-100J
L35	6200002830	S.COIL LON 1A 84NJ04
L36	6200003320	S.COIL NL 322522T-3R3J-3
L37	6200003330	S.COIL N L 322522T-1 ROJ-3
L38	6150000970	COIL LS-112
L39	6200001830	S.COIL NL 322522T-100J
L40	6200003040	S.COIL NL 322522T-R68J-3
L41	6200003050	S.COIL NL 322522T-R82J-3
L42	6150000990	COIL LS-114
L43	6150000990	COIL LS-114
L44	6200001830	S.COIL NIL 322522T-100J
L45	8200001830	S.COIL NL 322522T-100J
L46	6200001830	S.COIL NL 322522T-100J
L47	6200003330	S.COIL NL322522T-1ROJ-3
L48	6200001830	S.COIL NIL 322522T-100J
L49	6200001830	S.COIL NL 322522T-100J
L50	6200001830	S.COIL NL 322522T-100J
L51	6200001830	S.COIL NL 322522T-100J
L52	6200003260	S.COIL NL322522T-101J
L53	6200001230	S.COIL MLF2012A 1ROM-T
L54	6200000900	S.COIL LQN 2A R22K
L55	6200002190	S.COIL MLF2012A 4R7K-T
L56	6200000780	S.COIL LQH 3N 100K
L57	6200004020	S.COIL NL 322522T-039J
L58	6200003260	S.COIL NL 322522T-101J
L59	6200001830	S.COIL NL 322522T-100J
L60	6200003330	S.COIL NL 322522T-1 ROJ-3
R1	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R2	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R3	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R4	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R5	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R6	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R7	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R8	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 k)
R9	7030003560	S.RESISTOR ERJ3GEYJ 103 V (10 k)
RIO	7030003560	S.RESISTOR ERJ3GEYJ 103 V (10 k)
R11	7030003280	S.RESISTOR ERJ3GEYJ 470 V (47 Ohm)
R12	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ohm)
R13	7030003630	S.RESISTOR ERJ3GEYJ 393 V (39 k)
R14	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ohm)
R15	7030005390	S.RESISTOR RR0816P-102-D (1 k)
R16	7030005390	S.RESISTOR RR0816P-102-D (1 k)
R17	7030005390	S.RESISTOR RR0816P-102-D (1 k)
R18	7030005390	S.RESISTOR RR0816P-102-D (1 k)
R19	7030005390	S.RESISTOR RR0816P-102-D (1 10)
R20	7030005390	S.RESISTOR RR0816P-102-D (1 k)
R21	7030005380	S.RESISTOR RR0816P-102-B (1 k)
R22	7030005380	S.RESISTOR RR0816P-102-B (1 k)
R23	7030005380	S.RESISTOR RR0816P-102-B (1 k)
R24	7030005380	S.RESISTOR RR081OP-102-B (1 k)
R25	7030005380	S.RESISTOR RR0816P-102-B (1 k)
R26	7030005400	S.RESISTOR RR0816P-202-D (2 k)

R27	7030005400	S.RESISTOR	RR0816P-202-D (2 k)
R28	7030005400	S.RESISTOR	RR0816P-202-D (2 k)
R29	7030005400	S.RESISTOR	RRO81OP-202-D (2 k)
R30	7030005400	S.RESISTOR	RRO81OP-202-D (2 k)
R31	7030005400	S.RESISTOR	RRO816P-202-D (2 k)
R32	7030005400	S.RESISTOR	RR0818P-202-D (2 k)
R33	7030005400	S.RESISTOR	RRO816P-202-D (2 k)
R34	7030005370	S.RESISTOR	RR0816P-202-B (2 k)
R35	7030005370	S.RESISTOR	RR0816P-202-B (2 k)
R36	7030005370	S.RESISTOR	RRO816P-202-B (2 k)
R37	7030005370	S.RESISTOR	RRO816P-202-B (2 k)
R38	7030005370	S.RESISTOR	RR081OP-202-B (2 k)
R39	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R40	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R41	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R42	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R43	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ohm)
R44	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ohm)
R45	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k2)
R46	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R48	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MOhm)
R49	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ohm)
R50	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ohm)
R51	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R52	7030003550	S.RESISTOR	ERJ3GEYJ 822 V (8.2 k)
R53	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k4)
R54	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ohm)
R55	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R56	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R57	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R58	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ohm)
R59	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R60	7030003270	S.RESISTOR	ERJ3GEYJ 390 V (39 Ohm)
R61	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R63	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ohm)
R64	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ohm)
R65	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 k)
R68	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ohm)
R69	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R70	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R71	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R72	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R73	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R74	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R75	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R76	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R77	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R78	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R79	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R80	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R81	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R90	7030005390	S.RESISTOR	RRO816P-102-D (1 k)
R91	7030005390	S.RESISTOR	RRO816P-102-D (1 k)
R92	7030005390	S.RESISTOR	RRO818P-102-D (1 k)
R93	7030005390	S.RESISTOR	RRO816P-102-D (1 k)
R94	7030005390	S.RESISTOR	RRO816P-102-D (1 k)
R95	7030005390	S.RESISTOR	RRO816P-102-D (1 k)
R96	7030005380	S.RESISTOR	RRO81OP-102-B (1 k)
R97	7030005380	S.RESISTOR	RRO816P-102-B (1 k)
R98	7030005380	S.RESISTOR	RR081OP-102-B (1 k)

R99	7030005380	S.RESISTOR	RRO816P-102-B (1 k)
R100	7030005380	S.RESISTOR	RR0816P-102-B (1 k)
R101	7030005400	S.RESISTOR	RR0818P-202-D (2 k)
R102	7030005400	S.RESISTOR	RR081OP-202-D (2 k)
R103	7030005400	S.RESISTOR	RRO818P-202-D (2 k)
R104	7030005400	S.RESISTOR	RRO816P-202-D (2 k)
R105	7030005400	S.RESISTOR	RRO81OP-202-D (2 k)
R106	7030005400	S.RESISTOR	RRO816P-202-D (2 k)
R107	7030005400	S.RESISTOR	RR0816P-202-D (2 k)
R108	7030005400	S.RESISTOR	RRO816P-202-D (2 k)
R109	7030005370	S.RESISTOR	RRO81OP-202-B (2 k)
R110	7030005370	S.RESISTOR	RRO81OP-202-B (2 k)
R111	7030005370	S.RESISTOR	RRO816P-2o2-B (2 k)
R112	7030005370	S.RESISTOR	RRO816P-202-B (2 k)
R113	7030005370	S.RESISTOR	RR0816P-202-B (2 16))
R114	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R115	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R716	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 k)
R117	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 k)
R120	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R121	7030003480	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R122	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 0Ω)
R123	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R125	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 0Ω)
R126	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 0Ω)
R127	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 0Ω)
R128	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R129	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 k)
R130	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 0Ω)
R131	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 0Ω)
R132	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 0Ω)

S.=Surface mount

[PLL UNIT]

REF.#	ORDER#	DESCRIPTION	
R133	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R134	7030003300	S.RESISTOR	ERJ3GEYJ 680 V (68 Ohm)
R135	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R136	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R137	7030003420	S.RESISTOR	ERJ3GEYJ 681 V (680 Ohm)
R138	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ohm)
R139	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ohm)
R140	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ohm)
R141	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R142	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R143	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 k)
R144	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ohm)
R146	7030003660	S.RESISTOR	ERJ3GEYJ 683 V (68 k)
R147	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R148	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R149	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ohm)
R150	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R151	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ohm)
R152	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ohm)
R153	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ohm)
R154	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R155	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R156	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R157	7030003390	S.RESISTOR	ERJ3GEYJ 391 V (390 Ohm)
R158	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ohm)
R160	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 k)
R161	7030003450	S.RESISTOR	ERJ3GEYJ 122 V (1.2 k)
R162	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R163	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R165	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R166	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R167	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ohm)
R188	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R169	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R170	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 k)
R171	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R172	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R173	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R174	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R176	7030003270	S.RESISTOR	ERJ3GEYJ 390 V (39 Ohm)
R177	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R178	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R179	7030001060	S.RESISTOR	MCR50JZHJ 27 Ohm(270)
R180	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R181	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R182	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 k)
R183	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R184	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R185	7030003290	S.RESISTOR	ERJ3GEYJ 560 V (560)
R186	7030003390	S.RESISTOR	ERJ3GEYJ 391 V (390 Ohm)
R187	7030003290	S.RESISTOR	ERJ3GEYJ 560 V (58 Ohm)
R188	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R189	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R190	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 1Q2)
R191	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ohm)
R192	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ohm)
R193	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 k)
R194	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R195	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm)

R196	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 0hm
R197	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R198	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R199	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 0hm
R200	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 0hm
R201	7030001060	S.RESISTOR	MCR50JZHJ 27 0hm270)
R202	7030001060	S.RESISTOR	MCR50JZHJ 27 0hm270)
R203	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MQ)
R204	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MQ)
R205	7030003270	S.RESISTOR	ERJ3GEYJ 390 V (39 0hm
R206	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 ohm
R207	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R210	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm
R211	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm
R213	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R214	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R216	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R217	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R218	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R219	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R220	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R221	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm
R222	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R223	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R224	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R225	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R226	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 0hm
R227	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R228	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k
R229	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R230	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R231	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 0)
R232	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 0hm
R233	7030003450	S.RESISTOR	ERJ3GEYJ 122 V (1.2 k)
R234	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 0hm
C1	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C2	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C3	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C4	4030007080	S.CERAMIC	C1608 CH 1 H 390J-T-A
C5	4030007050	S.CERAMIC	C1 608 CH 1 H 220J-T-A
C6	4030007100	S.CERAMIC	C1608 CH 1H 560J-T-A
C7	4030007020	S.CERAMIC	C1608 CH 1H 120J-T-A
C8	4030007110	S.CERAMIC	C1608 CH 1 H 680J-T-A
C9	4030006950	S.CERAMIC	C1608 CH 1 H 040C-T-A
C10	4030007100	S.CERAMIC	C1808 CH 1H 560J-T-A
C11	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C12	4030008920	S.CERAMIC	C1608 JS 1C 473K-T-A
C13	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C14	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C15	4030008920	S.CERAMIC	01608 JB 1C 473K-T-A
C18	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C17	4030008920	S.CERAMIC	01608 JB 1C 473K-T-A
C18	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C19	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C20	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C21	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C23	4550006150	S.TANTALUM	ECST1CY105R
C24	4550006170	S.TANTALUM	ECST1AY225R
C25	4550006170	S.TANTALUM	ECSTIAY225R
C26	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A

C27	4030006860	S.CERAMIC	C1608 JB IH 102K-T-A
C28	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C29	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C31	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C32	4030007070	S.CERAMIC	C1608 CH 1H 330J-T-A
C33	4030009500	S.CERAMIC	C1608 CH 1 H OR5B-T-A
C34	4510005820	S.ELECTROLITIC	ECEV1CA101P
C35	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C36	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C37	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C38	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C39	4030007090	S.CERAMIC	C1608 CH 1 H 470J-T-A
C40	4030007010	S.CERAMIC	C1608 CH 1H IOOD-T-A
C42	4510004440	S.ELECTROLITIC	ECEV1HAO1OSR
C43	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C44	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C45	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C46	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C47	4030006980	S.CERAMIC	C1608 CH 1H 070D-T-A
C48	4030007060	S.CERAMIC	C1608 CH 1H 270J-T-A
C49	4030006950	S.CERAMIC	C1608 CH 1H 040C-T-A
C50	4030007040	S.CERAMIC	C1608 CH 1H 180J-T-A
C51	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C52	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C53	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C54	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C55	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C57	4030006880	S.CERAMIC	C1608 JB 1 H 102K-T-A
C58	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C59	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
080	4030006860	S.CERAMIC	C1808 JB 1 H 102K-T-A

S.=Surface mount

[PLL UNIT]

REF. NO.

C61	4030006960	S.CERAMIC	C1608 CH 1 H 050C-T-A
C62	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C63	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C64	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C65	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C88	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C67	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C88	4030007080	S.CERAMIC	C1808 CH 1 H 390J-T-A
C69	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C70	4030007100	S.CERAMIC	C1608 CH 1H 560J-T-A
C71	4030007020	S.CERAMIC	C1608 CH 1H 120J-T-A
C72	4030007110	S.CERAMIC	C1608 CH 1 H 680J-T-A
C73	4030008950	S.CERAMIC	C1608 CH 1 H 040C-T-A
C74	4030007100	S.CERAMIC	C1608 CH 1H 560J-T-A
C75	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C76	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C77	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C78	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C79	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C80	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C81	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C82	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C83	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C84	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C85	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C87	4510004830	S.ELECTROLITIC	ECEVICA100SR
C88	4030006850	S.CERAMIC	C 1608 JB 1 H 471 K-T-A
C89	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C93	4550006130	S.TANTALUM	ECSTLVY224R
C94	4550006430	S.TANTALUM	ECSTLVY474R
C95	4550006430	S.TANTALUM	ECSTLVY474R
C96	4030008920	S.CERAMIC	C1808 JB IC 473K-T-A
C97	4030006880	S.CERAMIC	C1608 JB 1 H 102K-T-A
C98	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C99	4030006860	S.CERAMIC	C1008 JB 1H 102K-T-A
C100	4510005820	S.ELECTROLITIC	ECEV1CA101P
C101	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C102	4030008310	S.CERAMIC	C1608 UJ 1 H 390J-T-A
C103	4030008180	S.CERAMIC	C1608 UJ 1H 030C-T-A
C104	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C105	4510005820	S.ELECTROLITIC	ECEV1CA101P
C106	4030006850	S.CERAMIC	C1608 JO 1 H 471 K-T-A
C107	4610001900	S.TRIMMER	CTZ3E-05A-W1
C108	4030006950	S.CERAMIC	C1608 CH 1 H 040C-T-A
C109	4030006950	S.CERAMIC	C1608 CH 1 H 040C-T-A
C110	4030006920	S.CERAMIC	C1608 CH 1H 010C-T-A
C111	4030006850	S.CERAMIC	C 1608 JB I H 471 K-T-A
C112	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C113	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C114	4030006860	S.CERAMIC	C1 808JB 1H 102K-T-A
C115	4030006980	S.CERAMIC	C1608 CH 1H 050C-T-A
C116	4030006980	S.CERAMIC	C1608 CH 1H 070D-T-A
C117	4030006930	S.CERAMIC	C1608 CH 1 H 020C-T-A
C118	4030006980	S.CERAMIC	C1608 CH 1H 070D-T-A
C119	4030007020	S.CERAMIC	C1008 CH 1H 120J-T-A
C120	4510004440	S.ELECTROLITIC	ECEV1HAO10SR
C121	4030006850	S.CERAMIC	C1 608JB1H471K-T-A
C122	4030006860	S.CERAMIC	C1808 JB 1H 102K-T-A
C124	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A

C125	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C126	4030009470	S.CERAMIC	C1608 CH 1H R75C-T-A
C127	4030007040	S.CERAMIC	C1608 CH 1H 180J-T-A
C128	4030009470	S.CERAMIC	C1608 CH 1H R75C-T-A
C129	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C130	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C131	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C132	4030006880	S.CERAMIC	C1608 JB 1 H 102K-T-A
C133	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C134	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C135	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C136	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C137	4030008850	S.CERAMIC	C1608JB1H471K-T-A
C138	4030008860	S.CERAMIC	C1808 JB 1H 102K-T-A
C139	4030006860	S.CERAMIC	C1808 JB 1H 102K-T-A
C140	4030006880	S.CERAMIC	C1608 JB 1 H 102K-T-A
C141	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C142	4030006850	S.CERAMIC	C1608 J B 1 H 471 K-T-A
C143	4030007010	S.CERAMIC	C1608 CH iH 100D-T-A
C144	4030006860	S.CERAMIC	C1808 JB 1H 102K-T-A
C145	4030006860	S.CERAMIC	C1808 JB 1 H 102K-T-A
C146	4030006860	S.CERAMIC	C1608 JB iH 102K-T-A
C147	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C148	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C149	4510005820	S.ELECTROLITIC	ECEV1CA101P
C150	4030006860	S.CERAMIC	C1808 JB 1H 102K-T-A
C151	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C152	4030006860	S.CERAMIC	C1808 JB 1 H 102K-T-A
C153	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C154	4030006860	S.CERAMIC	C1808 JB 1 H 102K-T-A
C155	4030007130	S.CERAMIC	C1608 CH 1H 10IJ-T-A
C156	4030006880	S.CERAMIC	C1808 JB 1H 102K-T-A
C157	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C158	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C159	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C163	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C164	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C165	4810001900	S.TRIMMER	CTZ3 E-05A-W 1
C188	4030008210	S.CERAMIC	C1608 UJ 1 H 060D-T-A
C167	4030007070	S.CERAMIC	C1608 CH 1 H 330J-T-A
C168	4030006970	S.CERAMIC	C1608 CH 1 H 060D-T-A
C169	4030006940	S.CERAMIC	C1608 CH 1 H 030C-T-A
C170	4030006870	S.CERAMIC	C1608 JB 1 H 222K-T-A
C171	4510004640	S.ELECTROLITIC	ECEV1CA470SP
C172	4030006860	S.CERAMIC	C1808 JB 1H 102K-T-A
C173	4030006920	S.CERAMIC	C1608 CH 1 H 01OC-T-A
C174	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C175	4030006970	S.CERAMIC	C1608 CH 1H 060D-T-A
C178	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C177	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C178	4030006950	S.CERAMIC	C1608 CH 1 H 040C-T-A
C179	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C180	4030006860	S.CERAMIC	C1808 JB 1H 102K-T-A
C181	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C182	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C183	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C184	4030006840	S.CERAMIC	C1608 SL 1H 391J-T-A
C185	4030007120	S.CERAMIC	C1608 CH 1H 820J-T-A
C186	4030010040	S.CERAMIC	C1608 JB 1 H 561 K-T-A
C187	4030007070	S.CERAMIC	C1608 CH 1H 330J-T-A

C188	4030006840	S.CERAMIC	C1008 SL 1H 391J-T-A
C189	4030008920	S.CERAMIC	C1608 JB iC 473K-T-A
C190	4510004630	S.ELECTROLITIC	ECEVICA100SR
C191	4510004630	S.ELECTROLITIC	ECEVICA100SR
C192	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C193	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C194	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C195	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C196	4030006860	S.CERAMIC	C1808 JB 1H 102K-T-A
C197	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C198	4030007030	S.CERAMIC	C1608 C H 1H 150J-T-A
C199	4030006920	S.CERAMIC	C1808 CH 1 H 01OC-T-A
C200	4030007030	S.CERAMIC	C1808 CH 1H 150J-T-A
C202	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C203	4030008920	S.CERAMIC	C1008 JB 1C 473K-T-A
C204	4510004440	S.ELECTROLITIC	ECEV1HAO10SR
C205	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C206	4030006860	S.CERAMIC	C1808 JB 1H 102K-T-A
C207	4030006850	S.CERAMIC	C1808 JB 1 H 471 K-T-A
C208	4030006880	S.CERAMIC	C1808 JB 1 H 102K-T-A
C209	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C210	4030008960	S.CERAMIC	C1608 CH 1H 050C-T-A
C211	4030008900	S.CERAMIC	C1608 JB 1E 103K-T-A
C212	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C213	4030006880	S.CERAMIC	C1608 JB IH 472K-T-A
C214	4030008880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C215	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C216	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C217	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C218	4030006880	S.CERAMIC	C1608 JB IH 472K-T-A
C219	4030008880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C220	4510004830	S.ELECTROLITIC	ECEV1CA100SR
C221	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A

S.=Surface Mount

[PLL UNIT]

REF.#	ORDER#	DESCRIPTION	
C223	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C224	4030006860	S.CERAMIC	C1808 JB 1 H 102K-T-A
C225	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C226	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C227	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C228	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C229	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C230	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A
C232	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C233	4510005820	S.ELECTROLITIC	ECEV1CA101P
C234	4030006830	S.CERAMIC	C1608 SL 1H 331J-T-A
C235	4030007170	S.CERAMIC	C1808 CH 1H 221J-T-A
C236	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C237	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C238	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C239	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C240	4030006860	S.CERAMIC	C1808 JB 1 H 102K-T-A
C243	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C244	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C245	4030008860	S.CERAMIC	C1808 JB 1 H 102K-T-A
C246	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C247	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C248	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C249	4030006940	S.CERAMIC	C1608 CH 1H 030C-T-A
C252	4550006320	S.TANTALUM	ECSTOJY475R
C253	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C254	4030006880	S.CERAMIC	C1608 JB 1 H 102K-T-A
C255	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C256	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C257	4030007040	S.CERAMIC	C1608 CH 1H 180J-T-A
C258	4030006980	S.CERAMIC	C1608 CH 1H 070D-T-A
C259	4030007040	S.CERAMIC	C1608 CH 1H 180J-T-A
C260	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C261	4030008880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C262	4030008960	S.CERAMIC	C2012 J13 1C 104K-T-A
C263	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C264	4510004650	S.ELECTROLITIC	ECEVIEA4R7SR
C265	4510004650	S.ELECTROLITIC	ECEVIEA4R7SR
C266	4510005820	S.ELECTROLITIC	ECEV1CA101P
C267	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C268	4550006430	S.TANTALUM	ECST1VY474R
C269	4550006430	S.TANTALUM	ECST1VY474R
C270	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C271	4030007070	S.CERAMIC	C1608 CH 1 H 330J-T-A
C272	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C273	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C275	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C276	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C277	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C278	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C279	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C280	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C281	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C283	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C284	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C285	4030006960	S.CERAMIC	C1608 CH 1 H 050C-T-A
C286	4550006130	S.TANTALUM	ECST1VY224R
C287	4550006200	S.TANTALUM	ECSTOJY108R
C288	4030006850	S.CERAMIC	C1608JB1H471K-T-A

W11	8900004441	CABLE	OPC-451-1
W13	8900004450	CABLE	OPC-451 A
W17	8900004470	CABLE	OPC-451 C
W19	8900004500	CABLE	OPC-452
W21	8900004510	CABLE	OPC-452 A
W29	7030003860	S.JUMPER	ERJ3GE JPW V
W30	7030003860	S.JUMPER	ERJ3GE JPW V
W31	7030003860	S.JUMPER	ERJ3GE JPW V
W32	7030003860	S.JUMPER	ERJ3GE JPW V
W40	7030003860	S.JUMPER	ERJ3GE JPW V
W41	7030003860	SJUMPER	ERJ3GE JPW V
W42	7030003860	S.JUMPER	ERJ3GE JPW V
W46	7030003860	SJUMPER	ERJ3GE JPW V
EPI	0910040335	PCB	B 4002E

[MAIN UNIT]

REF.	ORDER	DESCRIPTION
IC1	1110000960	S.IC NJM4558M(T1)
IC2	1110000960	S.IC NJM4558M(T1)
IC3	1110002490	S.IC M5218FP-73A
IC4	1110002490	S.IC M5218FP-73A
IC5	1110002490	S.IC M5218FP-73A
Ice	1110003140	IC LA1150N
IC7	1110003350	S.IC .PC1037GR-E1 (MS)
Ice	1130007700	S.IC BU4094BCF-T1
IC9	1130001880	S.IC iPD4069UBG-T1
IC10	1130007700	S.IC BU4094BCF-T1
IC11	1110002200	S.IC MC3372MR
IC12	1110000960	S.IC NJM4558M(T1)
IC13	1110003300	S.IC M5282FP 70CD
IC14	1110003350	S.IC iPC1037GR-E1(MS)
IC15	1110002490	S.IC M5218FP-73A
IC16	1130001250	S.IC iPD4066BG-T1
IC17	1130004200	S.IC TC4S66F(TE85R)
IC18	1130004200	S.IC TC4S66F(TE85R)
IC19	1110000960	S.IC NJM4558M(f1)
IC20	1110002200	S.IC MC3372MR
IC21	1110003300	SIC M5282FP 70CD
IC22	1110003350	S.IC iPC1037GR-E1 (MS)
IC23	1110002490	S.IC M5218FP-73A
IC24	1130007700	S.IC BU4094BCF-T1
IC25	1180001100	IC POO9RF2
IC26	1110001400	S.IC iPC1555G2-T1
IC27	1180001070	S.IC TA7805F(TE16L)
IC28	1130001250	S.IC p-PD4066BG-T1
IC29	1130001250	S. IC uPD4066BG-T1
IC30	1110003300	S.IC M5282FP 70CD
IC31	1110003300	S.IC M5282FP 70CD
IC32	1110002540	IC LA4445
IC33	1130001250	S.IC tPD406613G-T1
01	1580000540	S.FET 3SK131-T2-LA
02	1590001330	&TRANSISTOR DTA1 14EU T107
03	1590001330	&TRANSISTOR DTA114EU T107
04	1530002690	&TRANSISTOR 2SC4118-GR (TE85R)
05	1590001330	&TRANSISTOR DTA114EU T107
Q8	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
07	1560000560	S.FET 2SK882-GR (TE85L)
08	1510000770	&TRANSISTOR 2SA1586-GR (TE85R)
Q9	1560000560	S.FET 2SK882-GR (TE85L)
010	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
011	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)

012	1590001600	&TRANSISTOR	UMD3 TL
Q13	1580000540	S.FET	3SK131-T2-LA
014	1530002690	&TRANSISTOR	2SC4116-GR (TE85R)
Q15	1590000670	&TRANSISTOR	FMW1 T148
016	1530002690	&TRANSISTOR	2SC4118-GR (TE85R)
017	1530002690	&TRANSISTOR	2SC4116-GR (TE85R)
Q18	1590000430	&TRANSISTOR	DTC144EU T107
Q19	1530003090	&TRANSISTOR	2SC4213-B (TE85R)
020	1590000430	&TRANSISTOR	DTC144EU T107
021	1590000430	&TRANSISTOR	DTC144EU T107
022	1590000430	&TRANSISTOR	DTC144EU T107
023	1590001000	&TRANSISTOR	RN2427 (TE85R)
024	1590001000	&TRANSISTOR	RN2427 (TE85R)
025	1590000430	&TRANSISTOR	DTC144EU T107
026	1590000430	&TRANSISTOR	DTC144EU T107
Q27	1590000430	&TRANSISTOR	DTC144EU T107
028	1590000430	&TRANSISTOR	DTC144EU T107
029	1590000430	&TRANSISTOR	DTC144EU T107
030	1590000430	&TRANSISTOR	DTC144EU T107
034	1590001330	&TRANSISTOR	DTA1 14EU T107
037	1590001000	&TRANSISTOR	RN2427 (TE85R)
038	1590001000	&TRANSISTOR	RN2427 (TE85R)
039	1530002690	&TRANSISTOR	2SC4116-GR (TE85R)
040	1530002980	&TRANSISTOR	2SC3650-TD
041	1590000680	&TRANSISTOR	DTC114EU T107
042	1590002030	&TRANSISTOR	RN2425 (TE85R)
043	1590002030	&TRANSISTOR	RN2425 (TE85R)
044	1590000430	&TRANSISTOR	DTC144EU T107
045	1590000430	&TRANSISTOR	DTC144EU T107
049	1590000430	&TRANSISTOR	DTC144EU T107

S.=Surface mount

[MAIN UNIT]

REF.#	ORDER#	DESCRIPTION
053	1590000720	&TRANSISTOR DTA144EU T107
Q54	1510000770	&TRANSISTOR 2SA1586-GR (TE85R)
055	1590000430	&TRANSISTOR DTC144EU T107
Q56	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q57	1590001330	&TRANSISTOR DTA114EU T107
059	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
080	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
061	1580000540	S.FET 3SK131-T2-LA
Q62	1580000540	S.FET 3SK131-T2-LA
Q63	1590000430	&TRANSISTOR DTC144EU T107
Q64	1590000430	&TRANSISTOR DTC144EU T107
Q65	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q66	1510000770	S.TRANSISTOR 2SA1586-GR (TE85R)
Q67	1510000770	&TRANSISTOR 2SA1586-GR (FE85R)
Q68	1590000430	&TRANSISTOR DTC144EU T107
069	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q70	1590001330	&TRANSISTOR DTA114EU T107
071	1590000430	&TRANSISTOR DTC144EU T107
072	1530002890	&TRANSISTOR 2SC4116-GR (TE85R)
073	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
074	1590000430	&TRANSISTOR DTC144EU T107
Q75	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q76	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q77	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q78	1530002690	&TRANSISTOR 2SC4118-GR (TE85R)
Q79	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q80	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q81	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
082	1510000770	&TRANSISTOR 2SA1586-GR (TE85R)
083	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q84	1510000770	&TRANSISTOR 2SA1588-GR (TE85R)
085	1590001330	&TRANSISTOR DTA114EU T107
Q86	1590001330	&TRANSISTOR DTA114EU T107
Q87	1590001000	&TRANSISTOR RN2427 (TE85R)
Q88	1590001000	&TRANSISTOR RN2427 (TE85R)
089	1590001330	&TRANSISTOR DTA114EU T107
090	1590001330	&TRANSISTOR DTA114EU T107
091	1590000430	&TRANSISTOR DTC144EU T107
092	1590000430	&TRANSISTOR DTC144EU T107
093	1590000430	&TRANSISTOR DTC144EU T107
094	1590000430	&TRANSISTOR DTC144EU T107
Q95	1590000430	&TRANSISTOR DTC144EU T107
Q96	1590000430	&TRANSISTOR DTC144EU T107
097	1590000430	&TRANSISTOR DTC144EU T107
Q98	1580000540	S.FET 3SK131-T2-LA
Q99	1530002890	&TRANSISTOR 2SC4116-GR (TE85R)
0100	1580000540	S.FET 3SK131-T2-LA
0101	1580000540	S.FET 3SK131-T2-LA
Q102	1590000430	&TRANSISTOR DTC144EU T107
Q103	1590000430	&TRANSISTOR DTC144EU T107
0104	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
0105	1510000770	&TRANSISTOR 2SA1586-GR (TE85R)
0107	1590000430	&TRANSISTOR DTC144EU T107
Q108	1590001330	&TRANSISTOR DTA114EU T107
0109	1530002890	&TRANSISTOR 2SC4118-GR (TE85R)
0110	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
0111	1590000430	&TRANSISTOR DTC144EU T107
Q112	1530002690	&TRANSISTOR 2SC4116-GR (TE85R)
Q114	1590000430	&TRANSISTOR DTC144EU T107

0115	1530002690	&TRANSISTOR	2SC4116-GR (TE85R)
0116	1590001450	S.FET	2SJ144-GR (fE85R)
0117	1590001450	S.FET	2SJ144-GR (TE85R)
0118	1590000430	&TRANSISTOR	DTC144EU T107
0119	1530002690	&TRANSISTOR	2SC4116-GR (TE85R)
Q120	1530002690	&TRANSISTOR	2SC4116-GR (TE85R)
Q122	1530002690	&TRANSISTOR	2SC4116-GR (TE85R)
Q123	1590000680	&TRANSISTOR	DTC114EU T107
D1	1710000050	DIODE	1SS53
D2	1790000620	S.DIODE	MA77(TW)
D3	1790000620	S.DIODE	MA77(TW)
D4	1790000620	S.DIODE	MA77(TW)
D5	1790000620	S.DIODE	MA77(TW)
D6	1790000620	S.DIODE	MA77(TW)
D7	1790000620	S.DIODE	MA77(TW)
D8	1790000620	S.DIODE	MA77(TW)
D9	1790000620	S.DIODE	MA77(TW)
D10	1790000620	S.DIODE	MA77(TW)
D11	1750000390	S.DIODE	1SS353TE-17
D12	1790000450	S.DIODE	MA862(TX)
D13	1720000360	S.DIODE	HSU88TRF
D14	1750000110	S.DIODE	1SS272 (TE85R)
D15	1750000390	S.DIODE	1SS353 TE-17
D16	1750000110	S.DIODE	1SS272 (TE85R)
D17	1790000490	S.DIODE	HSM88AS-TR
D18	1790000450	S.DIODE	MA862(TX)
D19	1790000620	S.DIODE	MA77(TW)
D20	1790000620	S.DIODE	MA77(TW)
D21	1790000620	S.DIODE	MA77(TW)
D22	1720000270	S.VARICAP	1SV217 (TPH2)
D23	1790000820	S.DIODE	MA77(TW)
D24	1790000450	S.DIODE	MA862(TX)
D25	1750000390	S.DIODE	1SS353TE-17
D26	1750000110	S.DIODE	1SS272 (TE85R)
D27	1750000390	S.DIODE	1SS353 TE-17
D28	1750000110	S.DIODE	1SS272 (TE85R)
D29	1750000110	S.DIODE	1SS272 (TE85R)
D30	1750000110	S.DIODE	1SS272 (TE85R)
D31	1750000110	S.DIODE	1SS272 (TE85R)
D32	1750000390	S.DIODE	1SS353 TE-17
D33	1750000110	S.DIODE	1SS272 (TE85R)
D34	1730000730	S.ZENER	RD6.2M-T2B2
D35	1790000490	S.DIODE	HSM88AS-TR
D38	1790000620	S.DIODE	MA77(TW)
D37	1790000820	S.DIODE	MA77(TW)
D38	1790000620	S.DIODE	MA77(TW)
D39	1750000390	S.DIODE	1SS353TE-17
D40	1750000390	S.DIODE	1SS353 TE-17
D41	1750000390	S.DIODE	1SS353 TE-17
D42	1750000390	S.DIODE	1SS353 TE-17
D43	1750000390	S.DIODE	1SS353 TE-17
D44	1790000490	S.DIODE	HSM88AS-TR
D45	1750000390	S.DIODE	1SS353TE-17
D46	1750000390	S.DIODE	1SS353TE-17
D47	1750000390	S.DIODE	1SS353TE-17
D48	1750000390	S.DIODE	1SS353TE-17
D49	1750000390	S.DIODE	1SS353TE-17
D50	1750000390	S.DIODE	1SS353 TE-17
D51	1750000390	S.DIODE	1SS353 TE-17
D53	1790000490	S.DIODE	HSM88AS-TR

D54	1730000730	S.ZENER	RD6.2M-T2B2
D55	1790000490	S.DIODE	HSM88AS-TR
D56	1790000450	S.DIODE	MA862(TX)
D57	1790000450	S.DIODE	MA862(TX)
D59	1790000620	S.DIODE	MA77(TW)
D60	1790000450	S.DIODE	MA862(TX)
D61	1750000390	S.DIODE	1SS353 TE-17
D62	1750000390	S.DIODE	1SS353 TE-17
D63	1750000110	S.DIODE	1SS272 (TE85R)
D64	1730000410	S.ZENER	RD5.1M-T2B2
D65	1750000110	S.DIODE	1SS272 (TE85R)
D67	1790000450	S.DIODE	MA862(TX)
D68	1750000390	S.DIODE	1SS353TE-17
D69	1750000390	S.DIODE	1SS353 TE-17
D70	1750000390	S.DIODE	1SS353 TE-17
D71	1750000390	S.DIODE	1SS353 TE-17
D72	1750000390	S.DIODE	1SS353 TE-17
D73	1790000490	S.DIODE	HSM88AS-TR
D74	1750000110	S.DIODE	1SS272 (TE85R)
D75	1750000110	S.DIODE	1SS272 (TE85R)
D76	1750000390	S.DIODE	1SS353 TE-17
D77	1750000110	S.DIODE	1SS272 (TE85R)
D78	1750000390	S.DIODE	1SS353TE-17
D79	1750000390	S.DIODE	1SS353TE-17
D80	1750000390	S.DIODE	1SS353TE-17
D82	1750000390	S.DIODE	1SS353TE-17
D83	1750000390	S.DIODE	1SS353TE-17
D84	1750000390	S.DIODE	1SS353TE-17
D85	1750000390	S.DIODE	1SS353 TE-17
D86	1730000620	S.ZENER	RD3.6M-T2B2
D88	1730000850	S.ZENER	RD9.1 M-T2B3

S.=Surface mount

[MAIN UNIT]

REF.#	ORDER#	DESCRIPTION
D89	1750000390	S.DIODE 1SS353 TE-17
D90	1750000390	S.DIODE 1SS353 TE-17
D91	1750000390	S.DIODE 1SS353 TE-17
D92	1730001060	S.ZENER RD20M-T282
Fit	2010001080	FILTER FL-128
F12	2010001730	FILTER FL-211 (10.850MHz)
F13	2020001020	CERAMIC SFH455E
F14	2020000120	CERAMIC CFW455E
F15	2010001090	FILTER FL-129
F16	2010001740	FILTER FL-212 (10.950MHz)
X1	6050008700	XTAL CR-451 (10.8550MHz)
X2	6070000090	DISCRIMINATOR CDB455C16
X3	6050008450	XTAL CR-298
X4	6070000090	DISCRIMINATOR CDB455C16
X5	6050006470	XTAL CR-301
X6	6050006460	XTAL CR-299
L1	6150004200	COIL LS-479
L2	6150004170	COIL LS-476
L3	6200003260	S.COIL NL 322522T-101J
L4	6200003950	S.COIL HF50ACC 322513-T
L5	6200003260	S.COIL NL 322522T-101J
L8	6200001830	S.COIL NL 322522T-100J
L7	6200003590	S.COIL EXCCL3225U
L8	6150000950	COIL LS-110A
L9	8200003260	S.COIL NL 322522T-101J
L10	8150004170	COIL LS-476
L11	6150004210	COIL LS-480
L12	6150004210	COIL LS-480
L13	6150004170	COIL LS-476
L14	6200001830	S.COIL NL 322522T-100J
L15	6200003260	S.COIL NL 322522T-101J
L16	6200001830	S.COIL NL 322522T-100J
L17	6200003130	S.COIL NL 322522T-120J
L18	6150002040	COIL LS-258
L19	6200003260	S.COIL NL 322522T-101J
L20	6200003260	S.COIL NL 322522T-101J
L21	6200003260	S.COIL NL 322522T-101J
L22	6200001830	S.COIL NL 322522T-100J
L23	6200003260	S.COIL Ni- 322522T-101J
L24	6200003260	S.COIL NL 322522T-b01J
L25	6150004200	COIL LS-479
L26	6200003260	S.COIL NL 322522T-101J
L27	6150004210	COIL LS-480
L28	6150004170	COIL LS-476
L29	6200003260	S.COIL Ni- 322522T-101J
L30	6200003260	S.COIL NL 322522T-101J
L31	6200003950	S.COIL HF50ACC 322513-T
L32	6200003950	S.COIL HF50ACC 322513-T
L33	6200003950	S.COIL HF50ACC 322513-T
L34	6200003260	S.COIL NIL 322522T-101J
L35	6200003260	S.COIL NL 322522T-101J
L36	6150004190	COIL LS-478
L37	6200001470	S.COIL NL 322522T-R12J-3
L38	6150004200	COIL LS-479
L39	6200003260	S.COIL NIL 322522T-101J
L40	6150004210	COIL LS-480
L41	6150004170	COIL LS-478
L42	6200003260	S.COIL NL 322522T-101J
L43	6200003260	S.COIL NL 322522T-101J

L45	6200003260	S.COIL	NL 322522T-101J
L46	6150004210	COIL	LS-480
L47	6150004210	COIL	LS-480
L48	6150004170	COIL	LS-478
L49	6200003260	S.COIL	NL 322522T-101J
L50	6200003260	S.COIL	NL 322522T-101J
L51	6200003950	S.COIL	HF50ACC 322513-T
L52	6200003260	S.COIL	NL 322522T-101J
L53	6200003260	S.COIL	NL 322522T-101J
L54	6170000140	COIL	LW-15
L55	8200003260	S.COIL	NL 322522T-101J
L56	6200003590	S.COIL	EXCCL3225U
L57	6200003590	S.COIL	EXCCL3225U
L58	6200003950	S.COIL	HF50ACC 322513-T
L59	6200003590	S.COIL	EXCCL3225U
L60	6200003950	S.COIL	HF50ACC 322513-T
L61	6200003950	S.COIL	HF50ACC 322513-T
L62	8200003950	S.COIL	HF50ACC 322513-T
L63	8200003950	S.COIL	HF50ACC 322513-T
L64	6200003950	S.COIL	HF50ACC 322513-T
L65	6200003950	S.COIL	HF50ACC 322513-T
L66	6200003280	S.COIL	NL 322522T-101J
L67	6200001830	S.COIL	NL 322522T-100J
L68	6200000570	S.COIL	MLF3216C 18OM-T
L69	6200003950	S.COIL	HF50ACC 322513-T
L70	6200003950	S.COIL	HF50ACC 322513-T
R1	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k2)
R2	7310002740	S.TRIMMER	RV-150 (RH03A3A14XOFC)103
R3	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R4	7030003270	S.RESISTOR	ERJ3GEYJ 390 V (39 ohm)
R8	7510000910	S.THERMISTOR	NTCCF2012 4AH 473KC-T
R7	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 I62)
R8	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 k)
R9	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 IC)
R10	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 ohm)
A11	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R12	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 1Q2)
R13	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R14	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R15	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R16	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R17	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R18	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 ohm)
R19	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R20	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R21	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R22	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R23	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R24	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R25	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R26	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R27	7510000830	S.THERMISTOR	NTCCF2012 3EH 471 KC-T
R28	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R29	7310002720	S.TRIMMER	RV-148 (RH03A3AS3XODA)472
R30	7030003660	S.RESISTOR	ERJ3GEYJ 883 V (68 k)
R31	7030003860	S.RESISTOR	ERJ3GEYJ 683 V (68 k))
R32	7030003660	S.RESISTOR	ERJ3GEYJ 683 V (68 k)
R33	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)

R34	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R35	7030003710	S.RESISTOR	ERJ3GEYJ 184 V (180 k)
R36	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R37	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R38	7030003830	S.RESISTOR	ERJ3GEYJ 393 V (39 k)
R39	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 k)
R40	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R41	7310002740	S.TRIMMER	RV-150
			(RH03A3A14X0FC)103
R43	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R44	7030003450	S.RESISTOR	ERJ3GEYJ 122 V (1.2 k)
R45	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 ohm)
R48	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R47	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R48	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k))
R49	7030003610	S.RESISTOR	ERJ3GEYJ 273 V (27 k)
R50	7030003550	S.RESISTOR	ERJ3GEYJ 822 V (8.2 k)
R51	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R52	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R53	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 k)
R54	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 O)
R55	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R56	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R57	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 ohm)
R58	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm)

S.=Surface mount

[MAIN UNIT]

REF.	ORDER	DESCRIPTION	
NO.	NO.		
R59	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R60	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 K))
R61	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 k)
R62	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k))
R63	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R64	7310002800	S.TRIMMER	RV-110 (RH03A3AS4XOAA)473
R65	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 k)
R66	7310002760	S.TRIMMER	RV-152 (RH03A3AJ4XOHA)223
R67	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 0hm)
R68	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 0hm)
R69	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MOhm)
R70	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 k)
R71	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R72	7310002760	S.TRIMMER	RV-152 (RH03A3AJ4XOHA)223
R73	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 k)
	S.TRIMMER	RV-145	
R74	7310002690	(RH03A3A13XOCA)102	
R75	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 1k)
R76	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 k)
R77	7510000870	S.THERMISTOR	NTCCF2012 3FH 332KC-T
R78	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R79	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R80	7310002760	S.TRIMMER	RV-152 (RH03A3AJ4XOHA)223
R81	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 k)
R82	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R83	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 k)
R84	7510000870	S.THERMISTOR	NTCCF2012 3FH 332KC-T
R85	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R86	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R87	7310002780	S.TRIMMER	RV-152 (RH03A3AJ4XOHA)223
R88	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 k)
R89	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R90	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R91	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R92	7310002720	S.TRIMMER	RV-148
R93	7030003460	(RH03A3AS3XODA)472	
	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)	
R94	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R95	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MOhm)
R96	7010005220	RESISTOR	ELR20J 10 M 0hm
R97	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MOhm)
R98	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 0hm)
R99	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 k)
R100	7310002770	S.TRIMMER	RV-153 (RH03A3AN4XO2A)333
R101	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MOhm)
R102	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MOhm)
R103	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MOhm)
R104	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 k)
R105	7310002770	S.TRIMMER	RV-153 (RH03A3AN4XO2A)333
R106	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 k)
R107	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)

R108	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k0)
R109	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R110	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R111	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R112	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R113	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R114	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R115	7010004530	RESISTOR	R20J 470 k
R116	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R117	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 k)
R118	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R119	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ohm)
R120	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ohm)
R121	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R122	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R123	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R124	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R125	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R126	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ohm)
R127	7030003510	S.RESISTOR	ERJ3GEYJ 392 V (3.9 k)
R128	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R129	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 k)
R130	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R131	7510000830	S.THERMISTOR	NTCCF2012 3EH 471 KC-T
R132	7030003330	S.RESISTOR	ERJ3GEYJ 121 V (120 Ohm)
R133	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R134	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R135	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R136	7310002690	S.TRIMMER	RV-145 (RH03A3A13XOCA)102
R137	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ohm)
R138	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R139	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R140	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 k)
R141	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R142	7510000890	S.THERMISTOR	NTCCF2012 3NH 153KC-T
R143	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R144	7030003610	S.RESISTOR	ERJ3GEYJ 273 V (27 k)
R145	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R146	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 k)
R147	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R148	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R149	7030003610	S.RESISTOR	ERJ3GEYJ 273 V (27 k)
R150	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R151	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R152	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R153	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R154	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R155	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 k)
R156	7310002740	S.TRIMMER	RV-150 (RH03A3A14XOFC)103
R157	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 k)
R158	7310002740	S.TRIMMER	RV-150 (RH03A3A14XOFC)103
R159	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R165	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R166	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R167	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R168	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 K)
R169	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)

R170	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R171	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 k)
R172	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R173	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R174	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R175	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R176	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R178	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R179	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R180	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R181	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R182	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R183	7410000950	S.ARRAY EXB-V8V	102JV
R184	7410000950	S.ARRAY EXB-V8V	102JV
R187	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 k)
R188	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R189	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R190	7030003470	S.RESISTOR	ERJ3GEYJ 182 V (1.8 k)
R191	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R192	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ohm)
R193	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R194	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R195	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R196	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (56 k)
R197	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 k)
R198	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R199	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R200	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R201	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 k)
R202	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R203	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 k)
R204	7310002770	S.TRIMMER	RV-153 (RH03A3AN4XO2A)333
R205	7510000860	S.THERMISTOR	NTCCF2012 3FH 222KC-T

S.=Surface mount

[MAIN UNIT]

REF.#	ORDER#	DESCRIPTION
R206	7510000910	S.THERMISTOR NTCCF2012 4AH 473KC-T
R207	7310002590	S.TRIMMER RV-109 (RH03A3AJ3XOBA)222
R208	7030003580	&RESISTOR ERJ3GEYJ 103 V (10 kZ)
R209	7030003640	&RESISTOR ERJ3GEYJ 473 V (47 k)
R210	7030003760	&RESISTOR ERJ3GEYJ 474 V (470 k)
R211	7030003790	S.RESISTOR ERJ3GEYJ 824 V (820 k)
R212	7310002740	&TRIMMER RV-150 (RH03A3A14XOFC)103
R213	7030003560	S.RESISTOR ERJ3GEYJ 103 V (10 k)
R214	7030003560	&RESISTOR ERJ3GEYJ 103 V (10 k)
R215	7030003560	&RESISTOR ERJ3GEYJ 103 V (10 k)
R216	7030003560	S.RESISTOR ERJ3GEYJ 103 V (10 k)
R217	7030003600	&RESISTOR ERJ3GEYJ 223 V (22 k)
R218	7030003510	S.RESISTOR ERJ3GEYJ 392 V (3.9 k)
R219	7030003800	S.RESISTOR ERJ3GEYJ 105 V (1 Mohm)
R220	7030003800	&RESISTOR ERJ3GEYJ 105 V (1 Mohm)
R221	7030003560	S.RESISTOR ERJ3GEYJ 103 V (10 k)
R222	7030003440	&RESISTOR ERJ3GEYJ 102 V (1 k)
R223	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 k)
R224	7030003640	&RESISTOR ERJ3GEYJ 473 V (47 k)
R225	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R226	7030003580	&RESISTOR ERJ3GEYJ 103 V (10 k)
R227	7030003560	&RESISTOR ERJ3GEYJ 103 V (10 k)
R228	7030003480	&RESISTOR ERJ3GEYJ 222 V (2.2 k)
R229	7030003480	&RESISTOR ERJ3GEYJ 222 V (2.2 k)
R230	7310002740	S.TRIMMER RV-150 (RH03A3A14XOFC)103
R231	7030003480	&RESISTOR ERJ3GEYJ 222 V (2.2 k)
R232	7030003640	&RESISTOR ERJ3GEYJ 473 V (47 k)
R233	7030003400	&RESISTOR ERJ3GEYJ 471 V (470 ohm)
R234	7030003510	S.RESISTOR ERJ3GEYJ 392 V (3.9 k)
R235	7030003330	&RESISTOR ERJ3GEYJ 121 V (120 ohm)
R236	7030003320	&RESISTOR ERJ3GEYJ 101 V (100 ohm)
R237	7510000890	S.THERMISTOR NTCCF2012 3NH 153KC-T
R239	7310002600	S.TRIMMER RV-110 (RH03A3AS4XOAA)473
R240	7030003640	&RESISTOR ERJ3GEYJ 473 V (47 k)
R241	7030003400	&RESISTOR ERJ3GEYJ 471 V (470 ohm)
R242	7030003320	&RESISTOR ERJ3GEYJ 101 V (100 ohm)
R243	7030003330	S.RESISTOR ERJ3GEYJ 121 V (120 ohm)
R244	7030003680	&RESISTOR ERJ3GEYJ 104 V (100 k)
R245	7030003580	S.RESISTOR ERJ3GEYJ 153 V (15 k)
R246	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 ohm)
R247	7030003840	S.RESISTOR ERJ3GEYJ 473 V (47 k)
R254	7030003320	&RESISTOR ERJ3GEYJ 101 V (100 Ohm)
R255	7030003500	&RESISTOR ERJ3GEYJ 332 V (3.3 k)
R256	7030003590	&RESISTOR ERJ3GEYJ 183 V (18 k)
R257	7030003600	&RESISTOR ERJ3GEYJ 223 V (22 k)
R258	7030003560	&RESISTOR ERJ3GEYJ 103 V (10 k)
R259	7030003620	&RESISTOR ERJ3GEYJ 333 V (33 k)
R260	7310002840	S.TRIMMER RV-180 (RH03A3A16)105
R261	7030003590	S.RESISTOR ERJ3GEYJ 183 V (18 k)
R262	7030003880	&RESISTOR ERJ3GEYJ 104 V (100 k)
R263	7310002720	S.TRIMMER RV-148 (RH03A3AS3XODA)472
R264	7030003600	&RESISTOR ERJ3GEYJ 223 V (22 10)
R265	7030003840	S.RESISTOR ERJ3GEYJ 225 V (2.2 MOhm)
R266	7030003820	S.RESISTOR ERJ3GEYJ 155 V (1.5 MOhm)

R267	7030003760	&RESISTOR	ERJ3GEYJ 474 V (470 k)
R268	7310002740	S.TRIMMER	RV-150
		(RH03A3A14XOFC)	103
R269	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R270	7030003840	&RESISTOR	ERJ3GEYJ 225 V (2.2 MOhm)
R271	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R272	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R273	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R274	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R275	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MOhm)
R276	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R277	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R279	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R280	7030003800	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R281	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R282	7030003800	&RESISTOR	ERJ3GEYJ 223 V (22 10)
R283	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R284	7030003840	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R285	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R286	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R287	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R288	7030003580	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R289	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R290	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R291	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R292	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R293	7030003880	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R294	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 k)
R295	7030003530	S.RESISTOR	ERJ3GEYJ 582 V (5.6 k)
R296	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R297	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R300	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 O)
R301	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R302	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R303	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R304	7030003520	&RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R305	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 Mohm)
R306	7030003800	&RESISTOR	ERJ3GEYJ 105 V (1 Mohm)
R307	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R308	7310002770	S.TRIMMER	RV-153 (RH03A3AN4XO2A) 333
R309	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R310	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R311	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R312	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R313	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R314	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 ohm)
R315	7030003480	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R316	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R317	7030003470	S.RESISTOR	ERJ3GEYJ 182 V (1.8 k)
R318	7030003560	S.RESISTOR	ERJ3CEYJ 103 V (10 k)
R319	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R320	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R321	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R322	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R323	7030003850	&RESISTOR	ERJ3GEYJ 563 V (58 k)
R324	7030003840	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R325	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R326	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R327	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)

R328	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R329	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R330	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R331	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R332	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R333	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R334	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R335	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R336	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R337	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R338	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R339	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R340	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R341	7010004230	RESISTOR	R20J 2.2 k
R342	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R343	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R344	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R345	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R346	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R347	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R348	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R349	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R350	7030003800	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R351	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R352	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R353	7030003520	&RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R354	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R355	7030003380	&RESISTOR	ERJ3GEYJ 331 V (330 k)
R356	7030003610	&RESISTOR	ERJ3GEYJ 273 V (27 k)
R357	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R358	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 ohm)
R359	7030003550	S.RESISTOR	ERJ3GEYJ 822 V (8.2 k)
R360	7030003550	&RESISTOR	ERJ3GEYJ 822 V (8.2 k)

S.=Surface mount

[MAIN UNIT]

REF.#	ORDER#	DESCRIPTION	
R361	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R362	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R363	7210002460	TRIMMER EVU-ELOEC7B13	
R364	7030003590	&RESISTOR	ERJ3GEYJ 183 V (18 k)
R365	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R366	7030003800	&RESISTOR	ERJ3GEYJ 105 V (1 Mohm)
R367	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R368	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 k)
R369	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 k)
R370	7210002470	TRIMMER EVU-ELOEC7B161MB	
R371	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R372	7030003510	&RESISTOR	ERJ3GEYJ 392 V (3.9 k)
R373	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ohm)
R374	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R375	7030003330	&RESISTOR	ERJ3GEYJ 121 V (120 Ohm)
R376	7510000890	S.THERMISTOR NTCCF2012 3NH 153KC-T	
R378	7310002600	&TRIMMER	RV-110
	(RH03A3AS4XOAA)473		
R379	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R380	7030003400	&RESISTOR	ERJ3GEYJ 471 V (470 ohm)
R381	7030003330	&RESISTOR	ERJ3GEYJ 121 V (120 ohm)
R382	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R383	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R384	7030003580	&RESISTOR	ERJ3GEYJ 153 V (15 k)
R386	7030003760	&RESISTOR	ERJ3GEYJ 474 V (470 k)
R387	7030003780	S.RESISTOR	ERJ3GEYJ 474 V (470 k)
R388	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R389	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 k)
R390	7310002600	S.TRIMMER	RV-110
	(RH03A3AS4XOAA)473		
R391	7030003650	&RESISTOR	ERJ3GEYJ 583 V (56 k)
R392	7030003500	&RESISTOR	ERJ3GEYJ 332 V (3.3 k)
R393	7030003590	&RESISTOR	ERJ3GEYJ 183 V (18 k)
R394	7030003800	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R395	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R396	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 k)
R397	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R398	7030003220	&RESISTOR	ERJ3GEYJ 150 V (15 ohm)
R399	7030003500	&RESISTOR	ERJ3GEYJ 332 V (3.3 k)
R400	7030001090	&RESISTOR	MCR50JZHJ 47 0 (470)
R401	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 Ohm)
R402	7510000920	S.THERMISTOR NTCCF2012 4CH 104KC-T	
R403	7030003620	&RESISTOR	ERJ3GEYJ 333 V (33 k)
R405	7310002600	&TRIMMER	RV-110
R407	7030003640	(RH03A3AS4XOAA)473	
	&RESISTOR	ERJ3GEYJ 473 V (47 10)	
R408	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R409	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R410	7030003240	&RESISTOR	ERJ3GEYJ 220 V (22 Ohm)
R411	7030003500	&RESISTOR	ERJ3GEYJ 332 V (3.3 k)
R412	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R413	7510000830	S.THERMISTOR NTCCF2012 3EH 471 KC-T	
R414	7030003330	&RESISTOR	ERJ3GEYJ 121 V (120 Ohm)
R415	7030003760	&RESISTOR	ERJ3GEYJ 474 V (470 k)
R416	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R417	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R418	7030003620	&RESISTOR	ERJ3GEYJ 333 V (33 k)
R419	7310002840	&TRIMMER	RV-160 (RH03A3A16)105
R420	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 k)

R421	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R422	7310002580	&TRIMMER (RH03A3A15X05A)104	RV-108
R423	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R424	7010005190	RESISTOR	R20J 8.8M 0
R425	7030003820	&RESISTOR	ERJ3GEYJ 155 V (1.5 Mohm)
R426	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R427	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 Mohm)
R428	7030003760	&RESISTOR	ERJ3GEYJ 474 V (470 k)
R429	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R430	7310002740	&TRIMMER (RH03A3A14XOFC)103	RV-150
R431	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R432	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R433	7510000920	S.THERMISTOR	NTCCF2012 4CH 104KC-T
R434	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R435	7030003670	&RESISTOR	ERJ3GEYJ 823 V (82 k)
R436	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R437	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R438	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 kohm)
R439	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kohm)
R440	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R441	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R442	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R443	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 k)
R444	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R445	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 k)
R449	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R450	7030003720	&RESISTOR	ERJ3GEYJ 224 V (220 k)
R451	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 ohm)
R452	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R453	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R454	7030003530	&RESISTOR	ERJ3GEYJ 562 V (5.6 k)
R455	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R456	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R457	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R458	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R459	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R460	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 k)
R461	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k2)
R462	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R463	7030003520	&RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R464	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R465	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R466	7030003580	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R467	7030003520	&RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R468	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 k)
R469	7310000780	TRIMMER	RHO651CS4J25A (473)
R470	7030003890	&RESISTOR	ERJ3GEYJ 124 V (120 k)
R471	7310000780	TRIMMER	RHO651CS4J25A (473)
R472	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R473	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R474	7030003540	&RESISTOR	ERJ3GEYJ 682 V (6.8 k)
R475	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 ohm)
R476	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R477	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R478	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 k)
R479	7030003760	&RESISTOR	ERJ3GEYJ 474 V (470 k)
R480	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 k)
R481	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)

R482	7030003700	S.RESISTOR	ERJ3GEYJ 154 V (150 k)
R483	7510000900	S.THERMISTOR	NTCCF2012 3SH 223KC-T
R484	7030003380	&RESISTOR	ERJ3GEYJ 221 V (220 0hm)
R485	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 0hm)
R486	7030003200	&RESISTOR	ERJ3GEYJ 100 V (10 0hm)
R487	7030003200	&RESISTOR	ERJ3GEYJ 100 V (10 ohm)
R488	7030003570	&RESISTOR	ERJ3GEYJ 123 V (12 k)
R489	7030003740	S.RESISTOR	ERJ3GEYJ 334 V (330 k)
R490	7030003580	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R491	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R495	7030003460	&RESISTOR	ERJ3GEYJ 152 V (1.5 k2)
R496	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R497	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R498	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R499	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k2)
R500	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R501	7030001090	S.RESISTOR	MCR50JZHJ 47 ohm (470)
R502	7030001090	&RESISTOR	MCR50JZHJ 47 ohm (470)
R503	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R504	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R505	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R506	7030003510	&RESISTOR	ERJ3GEYJ 392 V (3.9 k)
R507	7030003510	&RESISTOR	ERJ3GEYJ 392 V (3.9 k)
R508	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R509	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R510	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R511	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R512	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R513	7030003020	S.RESISTOR	ERJ3GEYJ 333 V (33 k)
R514	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R515	7030003580	S.RESISTOR	ERJ3GEYJ 1E3 V (15 k)
R516	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 K)
R517	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)

S.=Surface mount

[MAIN UNIT

REF.#	ORDER#	DESCRIPTION	
R518	7030003550	&RESISTOR	ERJ3GEYJ 822 V (8.2 k)
R519	7030003600	&RESISTOR	ERJ3GEYJ 223 V (22 k)
R520	7030003410	&RESISTOR	ERJ3GEYJ 561 V (560 ohm)
R522	7030003580	&RESISTOR	ERJ3GEYJ 153 V (15 k)
R523	7030003580	&RESISTOR	ERJ3GEYJ 153 V (15 k)
R524	7030003500	&RESISTOR	ERJ3GEYJ 332 V (3.3 k)
R525	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R526	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R527	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R528	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R529	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R530	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R531	7030003590	&RESISTOR	ERJ3GEYJ 183 V (18 k)
R532	7030003590	S .RESISTOR	ERJ3GEYJ 183 V (18 k)
R533	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R534	7030003380	&RESISTOR	ERJ3GEYJ 331 V (330 ohm)
R535	7030003410	&RESISTOR	ERJ3GEYJ 561 V (580 ohm)
R536	7030003410	S .RESISTOR	ERJ3GEYJ 561 V (560 ohm)
R537	7510000880	S .THERMISTOR	NTCCF2012 3JH 472KC-T
R538	7030003570	&RESISTOR	ERJ3GEYJ 123 V (12 k)
R539	7030003560	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R540	7030003490	&RESISTOR	ERJ3GEYJ 272 V (2.7 k)
R541	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R542	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R543	7030003440	S .RESISTOR	ERJ3GEYJ 102 V (1 k)
R544	7510000930	S .THERMISTOR	NTCCF2012 3NH 103KC-T
R545	7030003520	&RESISTOR	ERJ3GEYJ 472 V (4.7 k)
R546	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R547	7030003640	S .RESISTOR	ERJ3GEYJ 473 V (47 k)
R548	7030003630	&RESISTOR	ERJ3GEYJ 393 V (39 k)
R549	7070000540	RESISTOR	CRH200 R-02J 27 ohm (270)
R550	7030004050	&RESISTOR	ERJ3GEYJ IRO V (1 ohm)
C1	4030006880	S .CERAMIC	C1608 JB 1 H 472K-T-A
C2	4030008880	S .CERAMIC	C1608 JB 1 H 472K-T-A
C3	4030006880	S .CERAMIC	C1808 JB 1 H 472K-T-A
C4	4030006880	S .CERAMIC	C1608 JB 1H 472K-T-A
C5	4030006880	S .CERAMIC	C1608 JB 1H 472K-T-A
C8	4510005870	S .ELECTROLITIC	ECEVIHA3R3SR
C7	4030006880	S .CERAMIC	C1608 JB 1 H 472K-T-A
C8	4030008880	S .CERAMIC	C1608 JB 1 H 472K-T-A
C9	4030009000	S .CERAMIC	C2012 JB 1C 224K-T-A
C10	4030006880	S .CERAMIC	C1608 JB 1H 472K-T-A
C11	4030007050	S .CERAMIC	C1608 CH 1H 220J-T-A
C12	4030006880	S .CERAMIC	C1608 JB 1 H 472K-T-A
C13	4030006880	S .CERAMIC	C1608 JB 1 H 472K-T-A
C14	4030006880	S .CERAMIC	C1608 JB 1 H 472K-T-A
C15	4030006880	S .CERAMIC	C1608 JB 1 H 472K-T-A
C16	4030008880	S .CERAMIC	C1608 JB 1 H 472K-T-A
C17	4030006880	S .CERAMIC	C1608 JB 1H 472K-T-A
C18	4030006880	&CERAMIC	C1608 JB 1H 472K-T-A
C19	4510005860	S .ELECTROLITIC	ECEVIHA2R2SR
C20	4030007140	S .CERAMIC	C1608 CH 1H 121J-T-A
C21	4030008650	S .CERAMIC	C1608 JB 1H 332K-T-A
C22	4030009490	&CERAMIC	C1608JB1H821K-T-A
C23	4510004630	S .ELECTROLITIC	ECEVICA100SR
C24	4510004630	S .ELECTROLITIC	ECEV1CA100SR
C25	4510004630	S .ELECTROLITIC	ECEVICA100SR
C26	4030006870	S .CERAMIC	C1608 JB 1H 222K-T-A
C27	4030009110	S .CERAMIC	C3216 JB 1C 474K-T-A

C28	4510004650	S.ELECTROLITIC ECEVIEA4R7SR
C29	4510004630	S.ELECTROLITIC ECEV1CA100SR
C30	4510004650	S.ELECTROLITIC ECEVIEA4R7SR
C31	4030008960	S.CERAMIC C2012 JB 1C 104K-T-A
C32	4510005370	S.ELECTROLITIC ECEVIAA221P
C33	4030009110	S.CERAMIC C3216 JB 1 C 474K-T-A
C34	4510004630	S.ELECTROLITIC ECEV1CA100SR
C35	4030006880	S.CERAMIC C1808 JB 1 H 472K-T-A
C36	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C37	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C38	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C39	4510004630	S.ELECTROLITIC ECEV1CA100SR
C40	4030010210	S.CERAMIC C3216 JB 1C 105M-T-A
C41	4510004630	S.ELECTROLITIC ECEV1CA100SR
C42	4510004630	S.ELECTROLITIC ECEV1CA100SR
C43	4510004630	S.ELECTROLITIC ECEVICA100SR
C44	4030009110	S.CERAMIC C3216 JB 1C 474K-T-A
C45	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C47	4030008960	S.CERAMIC C2012 JB 1 C 104K-T-A
C48	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C49	4030006860	S.CERAMIC C1 608JB 1H 102K-T-A
C50	4030006860	S.CERAMIC C1 608JB 1H 102K-T-A
C51	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C52	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C53	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C54	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C55	4030006880	S.CERAMIC C1608 JB I H 472K-T-A
C56	4030008860	S.CERAMIC C1608 JB 1H 102K-T-A
C57	4510004650	S.ELECTROLITIC ECEVIEA4R7SR
C58	4030006860	S.CERAMIC C1608 JB 1 H 102K-T-A
C59	4030006930	S.CERAMIC C1608 CH 1 H 020C-T-A
C60	4030008900	S.CERAMIC C1608 JB 1E 103K-T-A
C61	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A
C62	4030006880	S.CERAMIC C1608 JB 1H 472K-T-A
C63	4550002980	&TANTALUM TEMSVA 1C 225M-8L
C64	4030006880	S.CERAMIC C1608 JB 1H 472K-T-A
C65	4030006900	S.CERAMIC C1608 JB 1 E 103K-T-A
C66	4510004630	S.ELECTROLITIC ECEVICA100SR
C67	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C68	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C69	4030006880	S.CERAMIC C1608 JB 1H 472K-T-A
C70	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A
C71	4030007140	S.CERAMIC C1608 CH 1H 121J-T-A
C72	4030006850	S.CERAMIC C1608 JB 1 H 471 K-T-A
C73	4030006900	S.CERAMIC C1608 JB 1E 103K-T-A
C74	4510004650	S.ELECTROLITIC ECEVIEA4R7SR
C75	4030008880	S.CERAMIC C1608 JB 1 H 472K-T-A
C76	4030008880	S.CERAMIC C1608 JB IH 472K-T-A
C77	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C78	4510004630	S.ELECTROLITIC ECEVICA100SR
C79	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C80	4030006950	S.CERAMIC C1608 CH 1 H 040C-T-A
C81	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C82	4030006880	S.CERAMIC C1608 JB 1H 472K-T-A
C83	4030008960	S.CERAMIC C2012 JB 1C 104 K-T-A
C84	4030008920	S.CERAMIC C1608 JB 1C 473K-T-A
C85	4030007130	S.CERAMIC C1608 CH 1H 101J-T-A
C86	4030006880	S.CERAMIC C1608 JB IH 472K-T-A
C87	4030006880	S.CERAMIC C1608 JB 1H 472K-T-A
C88	4510005860	S.ELECTROLITIC ECEVIHA2R2SR

C89	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C90	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C91	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C92	4030006830	S.CERAMIC	C1608 SL 1H 331J-T-A
C93	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C94	4030007160	S.CERAMIC	C1608 CH 1H 181J-T-A
C95	4030008290	S.CERAMIC	C1608 UJ 1 H 270J-T-A
C96	4030010220	S.CERAMIC	C2012 CH 1 H 102J-T-A
C97	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C98	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C99	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C100	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C101	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
0102	4030008920	&CERAMIC	C1608 JB 1C 473K-T-A
C103	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C104	4030007060	S.CERAMIC	C1608 CH 1 H 270J-T-A
0105	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C106	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C107	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C113	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C116	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A
C117	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C118	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A
C120	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C121	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C122	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C123	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C126	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C141	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C142	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C143	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A

S.=Surface mount

[MAIN UNIT]

REF.#	ORDER#	DESCRIPTION	
C144	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C145	4030008980	S.CERAMIC	C2012 JS 1C 104K-T-A
C147	4030007170	S.CERAMIC	C1608 CH 1H 221J-T-A
C148	4030007120	S.CERAMIC	C1608 CH 1H 820J-T-A
C149	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C150	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C151	4030010240	S.CERAMIC	C1608 JB 1 H 391 K-T-A
C152	4030007070	S.CERAMIC	C1608 CH 1H 330J-T-A
C153	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C154	4550006340	S.TANTALUM	ECST1AY335R
C155	4030008320	S.CERAMIC	C1608 UJ 1H 470J-T-A
C156	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C157	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C158	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C159	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C162	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C163	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C164	4030008900	S.CERAMIC	C1608 JB 1C 333K-T-A
C165	4030008900	S.CERAMIC	C1608 JB 1C 333K-T-A
C166	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C167	4030008900	S.CERAMIC	C1608 JB 1E 103K-T-A
C168	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C169	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C170	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C171	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C172	4030008900	S.CERAMIC	C1608 JB 1E 103K-T-A
C173	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C174	4030008880	S.CERAMIC	C1608 JO 1 H 472K-T-A
C175	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A
C176	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C177	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C179	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C180	4340000050	S.MYLAR ECH-U	1C472JB5
C181	4030008880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C182	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C184	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C185	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C188	4340000050	S.MYLAR ECH-U	1C472JB5
C189	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C191	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C192	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C193	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C194	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C196	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C197	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C198	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C200	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C201	4030006870	S.CERAMIC	C1608 JB 1 H 222K-T-A
C202	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C203	4030006900	S.CERAMIC	C1608 JB 1 E 103K-T-A
C204	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C205	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C206	4030009000	S.CERAMIC	C2012 JB 1C 224K-T-A
C207	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C208	4510004540	S.ELECTROLITIC	ECEVOJA470SR
C209	4030007140	S.CERAMIC	C1608 CH 1H 121J-T-A
C210	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C211	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A
C212	4030009000	S.CERAMIC	C2012 JB 1C 224K-T-A

C213	4030008880	S.CERAMIC	C1608 JS 1H 472K-T-A
C214	4510005310	S.ELECTROLITIC	ECEV1CA220SR
C215	4510004630	S.ELECTROLITIC	ECEVICA100SR
C216	4510004630	S.ELECTROLITIC	ECEVICA100SR
C217	4030009110	S.CERAMIC	C3218 JB 1 C 474K-T-A
C218	4030008860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C219	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C220	4030008880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C221	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C222	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C223	4030008900	S.CERAMIC	C1808 JB 1 E 103K-T-A
C224	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C230	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C231	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C232	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C233	4030008860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C234	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C235	4030006860	S.CERAMIC	C1 608JB 1H 102K-T-A
C236	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C237	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C238	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C239	4030006880	S.CERAMIC	C1608 JB 1 H 102K-T-A
C240	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C241	4510004640	S.ELECTROLITIC	ECEV1CA470SP
C242	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C243	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C248	4030006900	S.CERAMIC	C1608 JB 1 E 103K-T-A
C249	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C250	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C251	4030008900	S.CERAMIC	C1608JB 1E 103K-T-A
C252	4030006900	S.CERAMIC	C1608JB 1E 103K-T-A
C253	4030008980	S.CERAMIC	C2012 JB 1C 104K-T-A
C254	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C255	4550006440	&TANTALUM	ECST1AX106R
C256	4030008980	S.CERAMIC	C2012 JB 1C 104K-T-A
C257	4030008960	S.CERAMIC	C2012 JB 1 C 104K-T-A
C258	4030006900	S.CERAMIC	C1608 JB 1 E 103K-T-A
C259	4030008980	S.CERAMIC	C2012 JB 1 C 104K-T-A
C260	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C261	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C262	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C263	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C265	4030007170	S.CERAMIC	C1608 CH 1H 221J-T-A
C266	4030007120	S.CERAMIC	C1608 CH IH 820J-T-A
C267	4030010240	S.CERAMIC	C1608 JB 1H 391K-T-A
C268	4030007070	S.CERAMIC	C 1608 CH 1H 330J-T-A
C269	4030008900	S.CERAMIC	C1608 JB 1E 103K-T-A
C270	4550006340	S.TANTALUM	ECST1AY335R
C271	4030008320	S.CERAMIC	C1608 UJ 1H 470J-T-A
C272	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C273	4030006930	S.CERAMIC	C1608 CH 1H 020C-T-A
C275	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C276	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C277	4030008900	S.CERAMIC	C1608 JB 1 C 333K-T-A
C278	4030008900	S.CERAMIC	C1608 JB 1 C 333K-T-A
C279	4030008900	S.CERAMIC	C1608 JB 1 E 103K-T-A
C280	4030006850	&CERAMIC	C1608 JB 1 H 471 K-T-A
C281	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C282	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C283	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A

C284	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C285	4030006970	S.CERAMIC	C1608 CH IH 060D-T-A
C286	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C287	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C288	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C289	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C290	4030006940	S.CERAMIC	C1608 CH 1 H 030C-T-A
C291	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C292	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C293	4610001980	S.TRIMMER	CTZ3E-30C-W1
C294	4030007070	S.CERAMIC	C1608 CH 1H 330J-T-A
C295	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C296	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C297	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C298	4340000010	S.MYLAR	ECWU 1C 223JB5
C299	4340000010	S.MYLAR	ECWU 1C 223JB5
C300	4340000010	S.MYLAR	ECWU iC 223JB5
C301	4510004640	S.ELECTROLITIC	ECEV1CA470SP
C302	4550006440	&TANTALUM	ECST1AX106R
C303	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C304	4030008900	S.CERAMIC	C1608 JB 1 C 333K-T-A
C305	4030008900	S.CERAMIC	C1608 JB 1 E 103K-T-A
C306	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C307	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A
C308	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A
C309	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C320	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C321	4340000050	S.MYLAR	ECH-U 1C472JB5
C322	4030008880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C323	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C324	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C325	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C326	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A

S =Surfnra mount

[MAIN UNIT]

REF.#	ORDER#	DESCRIPTION	
C328	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C329	4340000050	S.MYLAR	ECH-U 1C472JB5
C330	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C332	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C333	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C334	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C335	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C336	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C338	4030007070	S.CERAMIC	C1608 CH 1 H 330J-T-A
C340	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C341	4030006900	S.CERAMIC	C1608 JB 1 E 103K-T-A
C342	4030006870	S.CERAMIC	C1608 JB 1H 222K-T-A
C343	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C344	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C345	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C346	4510004630	S.ELECTROLITIC	ECEVICA100SR
C347	4510005820	S.ELECTROLITIC	ECEV1CA101P
C349	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C350	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A
C351	4510005820	S.ELECTROLITIC	ECEV1CA101P
C352	4030008980	S.CERAMIC	C2012 JB 1 C 104K-T-A
C353	4510004640	S.ELECTROLITIC	ECEVICA470SP
C354	4030010210	S.CERAMIC	C3216 JB 1C 105M-T-A
C355	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C356	4550006460	S.TANTALUM	ECSTLVX225R
C357	4550006440	S.TANTALUM	ECSTLAX106R
C358	4510004630	S.ELECTROLITIC	ECEVICA100SR
C359	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C360	4030008900	S.CERAMIC	C1608 JB 1E 103K-T-A
C361	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C362	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C365	4510004630	S.ELECTROLITIC	ECEVICA100SR
C368	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C369	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C370	4030009110	S.CERAMIC	C321 6 JB 1 C 474K-T-A
C371	4030006940	S.CERAMIC	C1608 CH 1H 030C-T-A
C373	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C374	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C375	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C376	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C378	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C379	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C380	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C381	4030009000	S.CERAMIC	C2012 JB 1C 224K-T-A
C382	4510004540	S.ELECTROLITIC	ECEVOJA470SR
C383	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C384	4030007140	S.CERAMIC	C1608 CH 1H 121J-T-A
C385	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C386	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C387	4030009000	S.CERAMIC	C2012 JB 1C 224K-T-A
C388	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C389	4510004830	S.ELECTROLITIC	ECEV1CA100SR
C394	4030008900	S.CERAMIC	C1608 JB IE 103K-T-A
C397	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C398	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C399	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C400	4510005370	S.ELECTROLITIC	ECEV1AA221P
C401	4030009110	S.CERAMIC	C3216 JB 1C 474K-T-A
C402	4510004630	S.ELECTROLITIC	ECEVICA100SR

C403	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C404	4510004650	S.ELECTROLITIC	ECEV1EA4R7SR
C405	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C406	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C407	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C409	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C410	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C411	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C412	4510004830	S.ELECTROLITIC	ECEV1CA100SR
C413	4030006880	S.CERAMIC	C1608 JB 1 H 102K-T-A
C414	4510004650	S.ELECTROLITIC	ECEV1EA4R7SR
C415	4510004650	S.ELECTROLITIC	ECEV1EA4R7SR
C416	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C417	4510005370	S.ELECTROLITIC	ECEV1AA221P
C418	4030009110	S.CERAMIC	C3216 JB 1 C 474K-T-A
C420	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C421	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C422	4510004600	ELECTROLITIC	16 MV 1000 HC
C423	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C424	4510004540	S.ELECTROLITIC	ECEVOJA470SR
C425	4510005820	S.ELECTROLITIC	ECEVICA101P
C426	4510004540	S.ELECTROLITIC	ECEVOJA470SR
C427	4510005820	S.ELECTROLITIC	ECEV1CA101P
C428	4510004590	ELECTROLITIC	16 MV 470 HC
C429	4510005820	S.ELECTROLITIC	ECEVICA101P
C430	4510004590	ELECTROLITIC	16 MV 470 HC
C431	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C432	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C433	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C434	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C435	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C436	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C437	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C438	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C439	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C440	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C441	4030008860	S.CERAMIC	C1 608JB 1H 102K-T-A
C442	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C443	4030008880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C444	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C445	4510005320	S.ELECTROLITIC	ECEVOJAI0ISP
C446	4510004640	S.ELECTROLITIC	ECEV1CA470SP
C447	4030006900	S.CERAMIC	C1608 JB 1 E 103K-T-A
C448	4030008960	S.CERAMIC	C2012 JB 1 C 104K-T-A
C449	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C450	4030008960	S.CERAMIC	C2012 JB 1 C 104K-T-A
C451	4510005890	S.ELECTROLITIC	ECEV1AAN100R
C452	4030009090	S.CERAMIC	C3216 JB 1C 334K-T-A
C453	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C454	4030007080	S.CERAMIC	C1608 CH 1 H 390J-T-A
C455	4030008960	S.CERAMIC	C2012 JB 1C 104K-T-A
C456	4030008960	S.CERAMIC	C2012 JB IC 104K-T-A
C457	4030006880	S.CERAMIC	C1608JB 1H 102K-T-A
C458	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C459	4030006870	S.CERAMIC	C1608 JB 1 H 222K-T-A
C460	4030006870	S.CERAMIC	C1608 JB 1H 222K-T-A
C461	4030006900	S.CERAMIC	C1608 JB 1 E 103K-T-A
C463	4030007110	S.CERAMIC	C1608 CH 1 H 680J-T-A
C464	4030007030	S.CERAMIC	C1608 CH 1 H 150J-T-A
C465	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A

C466	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
Wi	7030003860	S.JUMPER	ERJ3GE JPW V
W2	7030003860	S.JUMPER	ERJ3GE JPW V
W3	7030003860	S.JUMPER	ERJ3GE JPW V
W4	7030003860	S.JUMPER	ERJ3GE JPW V
W5	7030003880	S.JUMPER	ERJ3GE JPW V
W8	7030003860	S.JUMPER	ERJ3GE JPW V
W10	7030003880	S.JUMPER	ERJ3GE JPW V
W11	7030003860	S.JUMPER	ERJ3GEJPWV
J1	6510007020	CONNECTOR	TMP-J01X-V6
J2	6510007020	CONNECTOR	TMP-J01X-V6
J3	8510016340	S.CONNECTOR	52207-0790
J4	8510007020	CONNECTOR	TMP-JOIX-V6
J5	6510007020	CONNECTOR	TMP-J01X-V8
J6	6510007020	CONNECTOR	TMP-J01X-V6
J7	8510007090	CONNECTOR	PI28A-04M
J9	6510007100	CONNECTOR	PI28A-06M
J10	6510010910	CONNECTOR	PI28A-09M
J11	6510016310	CONNECTOR	52030-3010
J12	8450000140	CONNECTOR	HSJO807-01-010
J13	6450000170	CONNECTOR	TCS4480-01-1111
J15	6510007170	CONNECTOR	PI28A-03M
J16	6450000140	CONNECTOR	HSJO807-01-010
J17	6450000140	CONNECTOR	HSJ0807-01-010
J18	6510007170	CONNECTOR	PI28A-03M
J19	6450000140	CONNECTOR	HSJO807-01-010
J20	8510008940	CONNECTOR	53073-1010
J21	6510008940	CONNECTOR	53073-1010
J22	6510007100	CONNECTOR	PI28A-06M

S.=Surface mount

[MAIN UNIT]

REF.#	ORDER#	DESCRIPTION
J23	6910001040	CONNECTOR IPS-1136
S1	2220000330	&SWITCH HSW0880-01-210
S2	2220000330	S.SWITCH HSW0880-01-210
S3	2220000330	S.SWITCH HSW0880-01-210
S4	2220000330	&SWITCH HSW0880-01-210
S5	2220000330	S.SWITCH HSW0880-01-210
Se	2220000330	S.SWITCH HSW0880-01-210
EP1	0910040347	PCB B 4004G

[RF-A UNIT]

REF.#	ORDER#	DESCRIPTION
IC1	1110003320	S.IC IiPC271OT-E3
IC2	1110003320	S.IC IiPC271OT-E3
Q1	1560000270	S.FET 2SK302-Y (TE85R)
Q2	1560000270	S.FET 2SK302-Y (TE85R)
O3	1590001600	&TRANSISTOR UMD3 TL
Q4	1530000810	TRANSISTOR 2SC2053
Q5	1590000430	&TRANSISTOR DTC144EU T107
Q6	1590000430	&TRANSISTOR DTC144EU T107
Q7	1580000630	S.FET 3SK228XR-TL
Q8	1590000430	&TRANSISTOR DTC144EU T107
Q9	1590001330	&TRANSISTOR DTA114EU T107
Q10	1590000430	&TRANSISTOR DTC144EU T107
Q11	1560000720	S.FET 2SK2171-4-TD
Q12	1560000720	S.FET 2SK2171-4-TD
Q13	1530000850	TRANSISTOR 2SC2538
D1	1790000450	S.DIODE MA862(TX)
D2	1720000470	S.VARICAP 1SV239(TPH3)
D3	1790000640	S.VARICAP MA363B(TX)
D4	1790000640	S.VARICAP MA363B(TX)
D5	1790000640	S.VARICAP MA363B(TX)
D6	1750000120	S.DIODE DWA010-TE
D7	1790000620	S.DIODE MA77(TW)
D8	1790000450	S.DIODE MA862(TX)
D9	1750000270	S.DIODE 1SS301 (TE85R)
D10	1790000640	S.VARICAP MA363B(TX)
D11	1720000270	S.VARICAP 1SV217 (TPH2)
D12	1720000270	S.VARICAP 1SV217 (TPH2)
D13	1790000640	S.VARICAP MA363B(TX)
D14	1790000490	S.DIODE HSM88AS-TR
D15	1750000210	S.DIODE 1SV237 (TE85R)
D16	1790000450	S.DIODE MA862(TX)
D17	1750000120	S.DIODE DWA010-TE
L1	6150001480	COIL LS-164
L2	6150001310	COIL LS-145
L3	6150001310	COIL LS-145
L4	6150001310	COIL LS-145
L5	6150001310	COIL LS-145
L8	6200003450	S.COIL NL 322522T-082J
L7	8200002990	S.COIL NL 322522T-2R2J-3
L8	6110001550	COIL LA-235
L9	8110001680	COIL LA-254
L10	8110001660	COIL LA-252
L11	6110001670	COIL LA-253
L12	6180000810	COIL LAL 03NA 2R2M
L13	6150001310	COIL LS-145
L14	6150002880	COIL LS-302
L15	6150002880	COIL LS-302
L16	6150001310	COIL LS-145

L17	6180000810	COIL	LAL 03NA 2142M
L18	6200001980	S.COIL	NL 252018T-1ROJ
L19	6200002590	S.COIL	NL 252018T-039J
L20	6200002590	S.COIL	NL 252018T-039J
L21	6150002200	COIL	LS-228
L22	6200003380	S.COIL	B4F-617PT-1028=P3
L23	8200003330	S.COIL	NL 322522T-1 ROJ-3
L24	8110001560	COIL	LA-236
L25	6200003370	S.COIL	33CS-855LY-02M=P3
L26	6200001830	S.COIL	NL 322522T-IOOJ
L28	6110001650	COIL	LA-248
R1	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R2	7030003460	&RESISTOR	ERJ3GEYJ 152 V (1.5 10)
R3	7310002720	S.TRIMMER	RV-148 (RH03A3AS3XODA) 472
R4	7310002670	S.TRIMMER	RV-143 (RH03A3AS2) 471
R5	7030003580	&RESISTOR	ERJ3GEYJ 103 V (10 k)
R8	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R7	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 k)
R8	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R9	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
RIO	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
All	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R12	7030003370	&RESISTOR	ERJ3GEYJ 271 V (270 ohm)
R13	7030003230	&RESISTOR	ERJ3GEYJ 180 V (18 ohm)
R14	7030003370	&RESISTOR	ERJ3GEYJ 271 V (270 ohm)
R15	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R18	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R17	7030003280	&RESISTOR	ERJ3GEYJ 470 V (47 ohm)
R18	7030000110	&RESISTOR	MCR1OEZHJ 5.6 ohm (5R6)
R19	7030001070	&RESISTOR	MCR50JZHJ 33 ohm (330)
R20	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R21	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R22	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R23	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R24	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R25	7030003250	&RESISTOR	ERJ3GEYJ 270 V (27 ohm)
R26	7030003300	&RESISTOR	ERJ3GEYJ 680 V (68 ohm)
R27	7030003670	&RESISTOR	ERJ3GEYJ 823 V (82 k)
R28	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R29	7030003680	&RESISTOR	ERJ3GEYJ 104 V (100 k)
R30	7030003530	&RESISTOR	ERJ3GEYJ 562 V (5.6 k)
R31	7030003360	&RESISTOR	ERJ3GEYJ 221 V (220 ohm)
R32	7010000790	RESISTOR	R25XJ 1 ohm
R33	7030003640	&RESISTOR	ERJ3GEYJ 473 V (47 k)
R34	7030003440	&RESISTOR	ERJ3GEYJ 102 V (1 k)
R35	7030003410	&RESISTOR	ERJ3GEYJ 561 V (560 ohm)
R36	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R37	7030003340	&RESISTOR	ERJ3GEYJ 151 V (150 ohm)
R38	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R39	7030003460	&RESISTOR	ERJ3GEYJ 152 V (1.5 k)
R40	7030003480	&RESISTOR	ERJ3GEYJ 222 V (2.2 k)
R41	7030003280	&RESISTOR	ERJ3GEYJ 470 V (47 ohm)
R43	7030003400	&RESISTOR	ERJ3GEYJ 471 V (470 ohm)
R44	7030003400	&RESISTOR	ERJ3GEYJ 471 V (470 ohm)
R45	7030003400	&RESISTOR	ERJ3GEYJ 471 V (470 ohm)
R47	7030000160	&RESISTOR	MCR1OEZHJ 15 ohm (150)
R48	7030000250	&RESISTOR	MCR1OEZHJ 82 ohm (820)
R49	7030000160	&RESISTOR	MCR1OEZHJ 15 ohm (150)
R50	7030001010	&RESISTOR	MCR50JZHJ 10 ohm (100)
R51	7030003370	&RESISTOR	ERJ3GEYJ 271 V (270 ohm)

R52	7030003280	&RESISTOR	ERJ3GEYJ 470 V (47 ohm)
R54	7030000070	&RESISTOR	MCRIOEZHJ 2.7 ohm (2R7)
R55	7030003510	&RESISTOR	ERJ3GEYJ 392 V (3.9 k)
R56	7030003450	&RESISTOR	ERJ3GEYJ 122 V (1.2 k)
R57	7030003370	&RESISTOR	ERJ3GEYJ 271 V (270 ohm)
R58	7030003370	S.RESISTOR	ERJ3GEYJ 271 V (270 ohm)
R59	7030003320	&RESISTOR	ERJ3GEYJ 101 V (100 ohm)
R60	7030003420	&RESISTOR	ERJ3GEYJ 881 V (680 ohm)
R61	7510000830	S.THERMISTOR	NTCCF2012 3EH 471 KC-T
R62	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 ohm)
R63	7030003240	&RESISTOR	ERJ3GEYJ 220 V (22 ohm)

S.=Surface mount

[RF-A UNIT]

REF.#	ORDER#	DESCRIPTION	
C1	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C2	4030006880	&CERAMIC	C1008 JB 1 H 472K-T-A
C3	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C4	4030007070	S.CERAMIC	C1608 CH 1H 330J-T-A
C5	4030007070	&CERAMIC	C1608 CH 1H 330J-T-A
C8	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C7	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C8	4030006940	&CERAMIC	C1608 CH 1H 030C-T-A
C9	4030008860	&CERAMIC	C1608 JB 1 H 102K-T-A
C10	4030006880	&CERAMIC	C1608JB 1H 102K-T-A
C11	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C12	4030006970	&CERAMIC	C1608 CH 1H 060D-T-A
C13	4030008250	&CERAMIC	C1608 UJ 1H 120J-T-A
C14	4030009570	&CERAMIC	C1608 CH 1H OR3B-T-A
C15	4030009570	&CERAMIC	C1608 CH 1H OR3B-T-A
C16	4030008250	&CERAMIC	C1608 UJ IH 120J-T-A
C17	4030009570	S.CERAMIC	C1608 CH 1H OR3B-T-A
C18	4030009570	S.CERAMIC	C1608 CH IH OR3B-T-A
C19	4030008250	&CERAMIC	C1608 UJ 1H 120J-T-A
C20	4030006880	&CERAMIC	C1808 JB 1H 102K-T-A
C21	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C22	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C23	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C24	4030006960	&CERAMIC	C1608 CH 1H 050C-T-A
C25	4030006850	&CERAMIC	C1608JB1H471K-T-A
C26	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C27	4610001890	&TRIMMER	CTZ3E-20C-W1
C28	4030007010	&CERAMIC	C1608 CH 1H 100D-T-A
C29	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C30	4030006880	&CERAMIC	C1608 JB 1H 102K-T-A
C31	4030006880	&CERAMIC	C1608 JB 1H 102K-T-A
C32	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C33	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C34	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C35	4610001890	&TRIMMER	CTZ3E-20C-W1
C36	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C37	4610001910	S.TRIMMER	CTZ3E-IOA-W1
C38	4030007020	&CERAMIC	C1608 CH 1H 120J-T-A
C39	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C40	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C41	4030006860	&CERAMIC	C1608JB 1H 102K-T-A
C43	4030006860	&CERAMIC	C1608 JB IH 102K-T-A
C44	4030008860	&CERAMIC	C1608 JB 1H 102K-T-A
C47	4030008250	&CERAMIC	C1608 UJ 1H 120J-T-A
C49	4030009500	&CERAMIC	C1608 CH 1H OR5B-T-A
C50	4030007040	&CERAMIC	C1808 CH 1H 180J-T-A
C51	4030006950	&CERAMIC	C1608 CH 1H 040C-T-A
C52	4030009560	&CERAMIC	C1608 CH 1H R75B-T-A
C53	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C54	4030008270	S.CERAMIC	C1608 UJ 1H 180J-T-A
C55	4030006940	&CERAMIC	C1608 CH 1 H 030C-T-A
C56	4030006880	&CERAMIC	C1 608JB 1H 102K-T-A
C57	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C58	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C59	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C80	4030008230	&CERAMIC	C1608 UJ 1 H 080D-T-A
C61	4030007120	&CERAMIC	C1608 CH 1H 820J-T-A
C62	4030006860	&CERAMIC	C1608 JO 1 H 102K-T-A
C63	4030007060	&CERAMIC	C1608 CH 1H 270J-T-A

C64	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C85	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C88	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C87	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C68	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C69	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C70	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C71	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C72	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C73	4030006860	&CERAMIC	C1608JB 1H 102K-T-A
C74	4030006860	&CERAMIC	C1 608 JB 1 H 102K-T-A
C75	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C78	4030008860	&CERAMIC	C1608 JB 1H 102K-T-A
C77	4030008860	&CERAMIC	C1608 JB 1 H 102K-T-A
C78	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C79	4030006860	S.CERAMIC	C1 608JB 1H 102K-T-A
C80	4030007050	&CERAMIC	C1608 CH 1H 220J-T-A
C81	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C82	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C83	4030009990	&CERAMIC	C1608 CH 1H 200J-T-A
C84	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C85	4030007020	&CERAMIC	C1608 CH 1H 120J-T-A
C86	4030008880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C87	4030006880	&CERAMIC	C1608 JB 1H 472K-T-A
C88	4030006880	S.CERAMIC	C1 608JB 1H 102K-T-A
C89	4030008880	&CERAMIC	C1608 JB 1H 472K-T-A
C90	4030008370	&CERAMIC	C1608 UJ 1H 121J-T-A
C91	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C92	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C93	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C94	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C95	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C96	4030008960	&CERAMIC	C2012 JB 1C 104K-T-A
C97	4510004640	S.ELECTROLITIC	ECEV1CA470SP
C98	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C100	4030007080	&CERAMIC	C1608 CH 1H 390J-T-A
Cio1	4810001980	S.TRIMMER	CTZ3E-30C-W1
C102	4030009990	&CERAMIC	C1608 CH IH 200J-T-A
C103	4610001980	S.TRIMMER	CTZ3E-30C-W1
C104	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C105	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C106	4030006880	&CERAMIC	C1608 JB 1H 102K-T-A
C107	4030008880	&CERAMIC	C1808 JB 1 H 472K-T-A
C108	4030007020	S.CERAMIC	C1608 CH 1H 120J-T-A
C109	4030007010	&CERAMIC	C1608 CH 1H 100D-T-A
C110	4030007040	&CERAMIC	C1608 CH 1H 180J-T-A
C111	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C112	4030007090	S.CERAMIC	C1608 CH 1 H 470J-T-A
C113	4030007090	&CERAMIC	C1608 CH 1H 470J-T-A
C114	4030007090	&CERAMIC	C1608 CH 1 H 470J-T-A
C115	4030007090	&CERAMIC	C1608 CH 1H 470J-T-A
C116	4030007090	&CERAMIC	C1608 CH 1H 470J-T-A
C117	4030007090	S.CERAMIC	C1608 CH 1 H 470J-T-A
C118	4030007090	&CERAMIC	C1608 CH 1H 470J-T-A
C119	4030007090	&CERAMIC	C1608 CH 1 H 470J-T-A
C120	4030009500	&CERAMIC	C1608 CH 1H ORSB-T-A
C121	4030009500	S.CERAMIC	C1608 CH 1H OR5B-T-A
C122	4030006920	&CERAMIC	C1608 CH 1H 010C-T-A
C123	4030009500	&CERAMIC	C1608 CH 1H OR5B-T-A
C124	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A

J3	6510006360	CONNECTOR	TMP-J02X-A1
J4	6510016320	CONNECTOR	52030-0710
J6	6510003250	CONNECTOR	TMP-J01X-A2
J7	6510003250	CONNECTOR	TMP-J01X-A2
EP1	0910040352	PCB	B 4015E

[RF-B UNIT]

REF.#	ORDER#	DESCRIPTION	
ICI	1110003320	S.IC	IPC271OT-E3
IC2	1110003320	S.IC	VPC271OT-E3
IC3	6910007940	S.IC	CB501M1
IC4	1110003320	S.IC	VPC2710T-E3
Q1	1560000270	S.FET	2SK302-Y (TE85R)
Q2	1560000270	S.FET	2SK302-Y (TE85R)
Q3	1530002360	&TRANSISTOR	2SC2714-Y (TE85R)
Q4	1530002680	&TRANSISTOR	2SC3357-T2
Q5	1530000640	TRANSISTOR	2SC2407(A)
Q6	1590001600	&TRANSISTOR	UMD3 TL
Q8	1590000430	&TRANSISTOR	DTC144EU T107
Q9	1590000430	&TRANSISTOR	DTC144EU T107
Q11	1560000490	S.FET	2SK508 K52 T213

[RF-B UNIT]

REF.#	ORDER#	DESCRIPTION
014	1530000372	S.TRANSISTOR 2SC3356 R24-T2B
Q15	1530000372	S.TRANSISTOR 2SC3356 R24-T2B
Q16	1580000630	S.FET 3SK228XR-TL
D1	1790000450	S.DIODE MA862(TX)
D2	1750000120	S.DIODE DWA010-TE
D4	1790000620	S.DIODE MA77(TW)
D5	1790000450	S.DIODE MA862(TX)
D8	1790000450	S.DIODE MA862(TX)
D7	1750000270	S.DIODE 1SS301 (TE85R)
D8	1790000620	S.DIODE MA77(TW)
D9	1790000450	S.DIODE MA862(TX)
D10	1790000450	S.DIODE MA862(TX)
D11	1790000640	S.VARICAP MA363B(TX)
D12	1790000640	S.VARICAP MA363B(TX)
D13	1790000640	S.VARICAP MA363B(TX)
D14	1790000640	S.VARICAP MA363B(TX)
D16	1750000210	S.DIODE 1SV237 (TE85R)
D17	1790000620	S.DIODE MA77(TW)
D18	1750000270	S.DIODE 1SS301 (TE85R)
FI1	2010001110	FILTER FL-131
F12	2010001100	FILTER FL-130
L1	6150001480	COIL LS-164
L2	6150001310	COIL LS-145
L3	6150001710	COIL LS-192
L4	6150001710	COIL LS-192
L5	6150001310	COIL LS-145
L6	6200002990	S.COIL NL 322522T-2R2J-3
L7	6200003330	S.COIL N L 322522T-1 ROJ-3
L8	6180000770	COIL LAL03NA1ROM
L9	8180000770	COIL LAL03NA1ROM
L10	6200003450	S.COIL NL 322522T-082J
L11	6200003370	S.COIL 33CS-655LY-02M=P3
L12	6200003370	S.COIL 33CS-855LY-02M=P3
L13	6200003360	S.COIL 33CS-655LY-04K=P3
L14	6200003370	S.COIL 33CS-655LY-02M=P3
L15	6180000770	COIL LAL03NA 1ROM
L16	6180000770	COIL LAL03NA 1ROM
L17	6200004000	S.COIL NL 322522T-022K
L18	6200002100	S.COIL LON 1A 17NJ04
L19	6200001030	S.COIL NL 322522T-012K
L20	6150002550	COIL LS-284
L21	6150002550	COIL LS-284
L22	8150004210	COIL LS-480
L23	8150004180	COIL LS-477
L24	6150002430	COIL LS-254
L25	6150002430	COIL LS-254
L26	6150002430	COIL LS-254
L27	6150002430	COIL LS-254
L28	6200003330	S.COIL NL 322522T-1 ROJ-3
L29	6200003380	S.COIL B4F-817PT-1028=P3
L30	8140002550	S.COIL B4F-817DB-1010=P3
L31	6200003370	S.COIL 33CS-855LY-02M=P3
L32	6200002330	S.COIL LON 1A 15NJ04
L33	6200003370	S.COIL 33CS-655LY-02M=P3
L34	6200003330	S.COIL NL 322522T-1 ROJ-3
L35	6110001810	COIL LA-152
L36	6190000970	COIL 7HW-252MXPR-2983A
L37	6190000980	COIL 7HT-302MXPR-1638D
L38	6200002990	S.COIL NL 322522T-2R2J-3

L39	6200003330	S.COIL NL 322522T-1 ROJ-3
L40	6200004020	S.COIL NL 322522T-039J
L41	8200004020	S.COIL NL 322522T-039J
R1	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 10)
R2	7030003460	S.RESISTOR ERJ3GEYJ 152 V (1.5 162)
R3	7310002740	S.TRIMMER RV-150 (RH03A3A14XOFC)103
R4	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 0)
R5	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 0)
R8	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Q)
R7	7030003470	S.RESISTOR ERJ3GEYJ 182 V (1.8 I62)
R8	7030003580	S.RESISTOR ERJ3GEYJ 103 V (10 16))
R9	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Q)
R10	7030003290	S.RESISTOR ERJ3GEYJ 560 V (58 Q)
R11	7030003340	S.RESISTOR ERJ3GEYJ 151 V (150 Q)
R12	7030003270	S.RESISTOR ERJ3GEYJ 390 V (39 Q)
R13	7030003340	S.RESISTOR ERJ3GEYJ 151 V (150 Q)
R14	7030003340	S.RESISTOR ERJ3GEYJ 151 V (150 Q)
R15	7030003300	S.RESISTOR ERJ3GEYJ 680 V (88 Q)
R18	7030003460	S.RESISTOR ERJ3GEYJ 152 V (1.5 162)
R17	7030003370	S.RESISTOR ERJ3GEYJ 271 V (270 Q)
R18	7030003230	S.RESISTOR ERJ3GEYJ 180 V (18 Q)
R19	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Q)
R20	7030003280	S.RESISTOR ERJ3GEYJ 470 V (47 Q)
R21	7030003340	S.RESISTOR ERJ3GEYJ 151 V (150 0)
R22	7030003370	S.RESISTOR ERJ3GEYJ 271 V (270 0)
R23	7030003340	S.RESISTOR ERJ3GEYJ 151 V (150 0)
R24	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 1Q)
R25	7030003530	S.RESISTOR ERJ3GEYJ 582 V (5.8 162)
R26	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 0)
R27	7030003280	S.RESISTOR ERJ3GEYJ 470 V (47 0)
R29	7030003380	S.RESISTOR ERJ3GEYJ 331 V (330 0)
R30	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 0)
R31	7030003500	S.RESISTOR ERJ3GEYJ 332 V (3.3 10)
R32	7030000060	S.RESISTOR MCR10EZHZ 2.2 0 (2R2)
R33	7030001050	S.RESISTOR MCR50JZHZ 22 0 (220)
R34	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 162)
R36	7030003430	S.RESISTOR ERJ3GEYJ 821 V (820 0)
R37	7030004030	S.RESISTOR ERJ3GEYJ 5R6 V (5.6 0)
R38	7030003430	S.RESISTOR ERJ3GEYJ 821 V (820 0)
R41	7030003310	S.RESISTOR ERJ3GEYJ 820 V (82 0)
R42	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 162)
R43	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 162)
R44	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 10)
R45	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 0)
R46	7030003310	S.RESISTOR ERJ3GEYJ 820 V (82 0)
R50	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 10)
R51	7030003460	S.RESISTOR ERJ3GEYJ 152 V (1.5 1Q)
R52	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 162)
R53	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 0)
R54	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 IQ)
R55	7030003470	S.RESISTOR ERJ3GEYJ 182 V (1.8 I62)
R58	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 162)
R81	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 162)
R62	7030003460	S.RESISTOF ERJ3GEYJ 152 V (1.5 162)
R63	7030003460	S.RESISTOR ERJ3GEYJ 152 V (1.5 IQ)
R64	7030003460	S.RESISTOR ERJ3GEYJ 152 V (1.5 162)
R65	7030003460	S.RESISTOR ERJ3GEYJ 152 V (1.5 162)
ROO	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 1Q)
R88	7030003450	S.RESISTOR ERJ3GEYJ 122 V (1.2 IQ)

R89	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 0)
R71	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 0)
R72	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 0)
R73	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kO)
R74	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 0)
R75	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 0)
R76	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 IQ)
R77	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 0)
R78	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kO)
R79	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 162)
R80	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 IQ)
R81	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 0)
R82	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 1Q)
R83	7030003670	S.RESISTOR	ERJ3GEYJ 823 V (82 162)
R85	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 16))
R87	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 16))
R88	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 0)
R89	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 0)
R91	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 0)
R92	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 0)
R93	7030003230	S.RESISTOR	ERJ3GEYJ 180 V (18 0)
R96	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 0)
R97	7030003310	S.RESISTOR	ERJ3GEYJ 820 V (82 0)
R98	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 0)
R99	7030003270	S.RESISTOR	ERJ3GEYJ 390 V (39 0)

S.=Surface mount

[RF-B UNIT]

REF.#	ORDER#	DESCRIPTION	
R100	7030003230	&RESISTOR	ERJ3GEYJ 180 V (18 Q)
R101	7030003370	&RESISTOR	ERJ3GEYJ 271 V (270 Q)
R102	7030003310	&RESISTOR	ERJ3GEYJ 820 V (82 Q)
R103	7030003310	&RESISTOR	ERJ3GEYJ 820 V (82 0)
R104	7310002830	S.TRIMMER	RV-139 (RH03A3A12)101
R105	7030003390	&RESISTOR	ERJ3GEYJ 391 V (390 O)
R107	7030003250	&RESISTOR	ERJ3GEYJ 270 V (27 0)
R109	7510000840	S.THERMISTOR	NTCCF2012 3EH 681 KC-T
R110	7510000850	S.THERMISTOR	NTCCF2012 3BH 102KC-T
R111	7030003370	&RESISTOR	ERJ3GEYJ 271 V (270 0)
R112	7030004010	S.RESISTOR	ERJ3GEYJ 2R2 V (2.2 0)
C1	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C2	4030008360	S.CERAMIC	C1608 UJ 1H 101J-T-A
C3	4030007800	&CERAMIC	C1608 SH 1H 330J-T-A
C4	4030007800	S.CERAMIC	C1608 SH 1H 330J-T-A
C6	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C7	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C8	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C9	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
010	4030006860	&CERAMIC	01608 JB 1 H 102K-T-A
Cii	4030007020	&CERAMIC	C1608 CH 1H 120J-T-A
C12	4030007750	S.CERAMIC	C1608 SH 1H 120J-T-A
C13	4030007750	&CERAMIC	C1608 SH 1H 120J-T-A
C14	4030009570	S.CERAMIC	C1608 CH 1H OR3B-T-A
C15	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
Ci6	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C17	4030006880	&CERAMIC	C1608 JB 1H 472K-T-A
C18	4030006860	S.CERAMIC	01808 JB 1H 102K-T-A
C19	4030008560	&CERAMIC	C1608 CH 1H 300J-T-A
C20	4030006960	&CERAMIC	C1608 CH 1H 050C-T-A
C21	4030006860	&CERAMIC	C1608 JB iH 102K-T-A
C23	4030006860	S.CERAMIC	01608 JB 1H 102K-T-A
C24	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C25	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C26	4030006850	&CERAMIC	C1608 JB 1 H 471 K-T-A
C27	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C28	4030006860	&CERAMIC	C1 608JB 1H 102K-T-A
C29	4030006860	S.CERAMIC	C1 608JB 1H 102K-T-A
C30	4030006850	&CERAMIC	C1608 JB 1 H 471 K-T-A
C31	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C32	4610001910	&TRIMMER	CTZ3E-1OA-W1
C33	4030006850	S.CERAMIC	C1608JB1H471K-T-A
C34	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C35	4030006850	S.CERAMIC	C1608JB1H471K-T-A
C36	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C37	4610001910	S.TRIMMER	CTZ3E-10A-W1
C38	4030006980	S.CERAMIC	C1608 CH 1 H 070D-T-A
C39	4030006980	S.CERAMIC	01608 CH 1 H 070D-T-A
C40	4030006850	&CERAMIC	C1 608JB1H471K-T-A
C41	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C42	4510004840	S.ELECTROLITIC	ECEV1CA470SP
C43	4030006880	&CERAMIC	C1 608JB 1H 102K-T-A
C44	4030006860	&CERAMIC	C1608JB 1H 102K-T-A
C45	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C46	4030006860	S.CERAMIC	C1608 JB iH 102K-T-A
C47	4030006860	&CERAMIC	01608 JB 1H 102K-T-A
C48	4030007020	&CERAMIC	C1608 CH 1H 120J-T-A
C50	4030007040	&CERAMIC	01608 CH 1 H 180J-T-A
C51	4030006940	S.CERAMIC	C1608 CH 1H 030C-T-A

C52	4030007020	S.CERAMIC	C1608 CH 1H 120J-T-A
C53	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C54	4030006880	&CERAMIC	C1608JB 1H 102K-T-A
C55	4030007000	S.CERAMIC	01608 CH 1 H 090D-T-A
C56	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C57	4030006860	S.CERAMIC	01608 JB 1H 102K-T-A
C58	4030007010	&CERAMIC	C1608 CH 1H 100D-T-A
C59	4030006920	S.CERAMIC	C1608 CH 1 H 0100-T-A
C60	4030007010	S.CERAMIC	01808 CH 1H iOOD-T-A
061	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C62	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C63	4030006880	&CERAMIC	C1608 JB 1 H 472K-T-A
C64	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C66	4030006880	&CERAMIC	01608 JB 1H 472K-T-A
C67	4030006880	S.CERAMIC	01608 JB iH 472K-T-A
C68	4030008860	S.CERAMIC	C1608 JB 1H 102K T-A
C69	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C70	4030006880	S.CERAMIC	C1608 JB 1H 102K-T A
C71	4030006860	S. CERAMIC	C1608 JB 1H 102K-T-A
C72	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C73	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C74	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C75	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C76	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C77	4030006880	S.CERAMIC	C 1608 JB 1H 472K-T-A
C78	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C79	4030007100	S.CERAMIC	C1608 CH 1H 560J-T-A
C81	4030006940	S.CERAMIC	C1608 CH 1 H 030C-T-A
C84	4030007090	S.CERAMIC	C1608 CH 1 H 470J-T-A
C85	4030006880	S.CERAMIC	C1608 JB 1 H 472K-T-A
C88	4030006980	S.CERAMIC	C1608 CH 1H 070D-T-A
C87	4030006960	&CERAMIC	C1608 CH 1 H 050C-T-A
C88	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C89	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C90	4030006980	S.CERAMIC	C1608 CH 1 H 070D-T-A
C91	4030008980	&CERAMIC	C1608 CH 1 H 050C-T-A
C92	4030006880	S.CERAMIC	C1608 JB IH 172K-T-.A
C93	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C97	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C98	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C99	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
0100	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C101	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C102	4030006860	&CERAMIC	C1 608JB 1H 102K-T-A
C103	4030006860	S.CERAMIC	C1 608JB 1H 102K-T-A
C104	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C105	4030006930	S.CERAMIC	C1608 CH 1H 020C-T-A
C106	4030007000	S.CERAMIC	C1608 CH 1 H 090D-T-A
C107	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C108	4810001880	S.TRIMMER	CTZ3E-03A-W1
0109	4030006920	S.CERAMIC	C1608 CH 1H 01OC-T-A
C111	4030009560	&CERAMIC	C1608 CH 1H R7513-T-A
C112	4030007000	S.CERAMIC	C1608 CH 1H 090D-T-A
C113	4030006860	&CERAMIC	C1 608JB 1H 102K-T-A
C114	4610001880	S.TRIMMER	CTZ3E-03A-W1
C115	4030009560	&CERAMIC	C1608 CH 1H R75B-T-A
C117	4030009560	&CERAMIC	C1608 CH 1H R75B-T-A
0118	4030007010	&CERAMIC	C1608 CH 1H 100D-T-A
C119	4030006860	&CERAMIC	C1608JB 1H 102K-T-A
C120	4610001880	S.TRIMMER	CTZ3E-03A-W1

C121	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C122	4030008860	&CERAMIC	C1608JB 1H 102K-T-A
C123	4030008850	&CERAMIC	C1608 JB 1H 471K-T-A
C124	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C125	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C126	4030006860	&CERAMIC	C1608 JB 1 H 102K-T-A
C127	4030008850	&CERAMIC	C1608 JB 1H 471K-T-A
C128	4030006860	S.CERAMIC	01608 JB 1H 102K-T-A
C130	4030006980	S.CERAMIC	C1608 CH 1 H 070D -T A
C131	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C132	4610001880	S.TRIMMER	CTZ3E-03A-W1
C133	4030006860	&CERAMIC	01608 JB 1H 102K-T-A
C134	4030006850	&CERAMIC	C1608 JB 1 H 471 K-T-A
C135	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C137	4030006970	&CERAMIC	C1608 CH 1H 060D-T-A
C138	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C139	4030008560	&CERAMIC	C1608 CH 1H 300J-T-A
C140	4030006850	S.CERAMIC	C1608JB1H471K-T-A
C141	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C142	4030007010	&CERAMIC	C1608 CH 1H 100D-T-A
C144	4030008960	&CERAMIC	C2012 JB 1C 104K-T-A
C145	4030006860	&CERAMIC	C1608 JB 1H 102K-T-A
C146	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C147	4030006860	&CERAMIC	C1 608JB 1H 102K-T-A
C149	4030008960	&CERAMIC	01808 CH 1 H 050C-T-A
C150	4030006980	S.CERAMIC	C1608 CH 1 H 050C-T-A
C151	4030007090	S.CERAMIC	C1608 CH 1 H 470J-T-A
C152	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C153	4030007040	&CERAMIC	01608 CH 1H 180J-T-A
C154	4030006980	&CERAMIC	C1608 CH 1H 070D-T-A
C155	4030007040	&CERAMIC	C1608 CH 1H 180J-T-A

S =Surface Mount

RF-B UNIT

REF.#	ORDER#	DESCRIPTION
C156	4030007090	S.CERAMIC C1608 CH 1H 470J-T-A
C157	4030007090	S.CERAMIC C1608 CH 1H 470J-T-A
C158	4030007090	S.CERAMIC C1608 CH 1H 470J-T-A
C159	4030007090	S.CERAMIC C1608 CH 1 H 470J-T-A
C160	4030007090	&CERAMIC C1608 CH 1 H 470J-T-A
C161	4030007090	S.CERAMIC C1608 CH 1 H 470J-T-A
C162	4030007090	S.CERAMIC C1608 CH 1H 470J-T-A
C163	4030006860	S.CERAMIC C1608 JB IH 102K-T-A
C164	4030009570	S.CERAMIC C1608 CH 1H OR3B-T-A
C165	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C166	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C167	4030006960	S.CERAMIC C1608 CH 1 H 050C-T-A
C168	4030008860	S.CERAMIC C1608 JB 1H 102K-T-A
C169	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C170	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
W5	7030003860	S.JUMPER ERJ3GE JPW V
W6	7030003860	S.JUMPER ERJ3GE JPW V
W7	7030003860	S.JUMPER ERJ3GE JPW V
W8	7030003860	S.JUMPER ERJ3GE JPW V
J3	6510003250	CONNECTOR TMP-J01X-A2
J4	6510003250	CONNECTOR TMPJOIX-A2
J5	6510003250	CONNECTOR TMPJ0IX-A2
J6	6510008360	CONNECTOR TMP-J02X-A1
J7	6510007020	CONNECTOR TMP-J01X-V6
J8	6510018320	CONNECTOR 52030-0710
EP1	0910040363	PCB B 4016C

[PA UNIT]

REF.#	ORDER#	DESCRIPTION
ICI	1150000840	IC SC1114
IC2	1150000830	IC SC1113
IC3	1150000140	IC SC10I6
D1	1710000010	DIODE 15CD11
SP1	2510000040	SPEAKER C065K12I0810
MF1	2710000480	FAN MF40C-12H004
11	6510004910	CONNECTOR NR-DS-E 01
J2	6510004880	CONNECTOR MR-DS-E 01
S1	6910000050	THERMAL OHD-3 50M

[PA-A UNIT]

REF.#	ORDER#	DESCRIPTION
D1	1710000310	DIODE M1407
D2	1710000290	DIODE M1308
D3	1710000290	DIODE M1308
D4	1790000070	DIODE 1SS237
D5	1790000070	DIODE 1SS237
D6	1790000070	DIODE 1SS237
D7	1790000070	DIODE 1SS237
L1	8170000070	COIL LW-9
L2	6170000230	COIL LW-25
L3	6110001670	COIL LA-253
L4	6110001740	COIL LA-263
L5	6110001740	COIL LA-263
L6	6110001550	COIL LA-235
L7	6110001550	COIL LA-235
L8	6110001740	COIL LA-263
L9	6170000180	COIL LW-19
L10	8910000870	COIL BLO1RN1-A62-001
L11	6910000670	COIL BLO1RN1-A62-001
L12	6180000880	COIL LAL 03NA 100K
L13	6910000670	COIL BLO1 RN1 -A62-001

L14	6110001670	COIL	LA-253
R1	7080000150	RESISTOR	RGB3L R15
R2	7010004310	RESISTOR	R20J 8.2 IQ
R3	7010004310	RESISTOR	R20J 8.2 IQ
R4	7010003480	RESISTOR	ELR20J 4.7 IQ
R5	7010003480	RESISTOR	ELR20J 4.7 IQ
R8	7010004740	RESISTOR	R50XJ 150 0
R9	7010004740	RESISTOR	R50XJ 150 0
R10	7010001150	RESISTOR	R25XJ 1 10
R12	7080000150	RESISTOR	RGB3L R15
R13	7010004220	RESISTOR	R20J 1.8 IQ2
C1	4010000520	CERAMIC	DD108 B 472K 50V
C2	4010000500	CERAMIC	DD104 6 102K 50V
C3	4040000690	BARRIERLAYR	UAT 08X 473K
C4	4010004120	CERAMIC	DD07 B 102K 500V
C5	4010003880	CERAMIC	DD06 SL 150K 500V
Ce	4010003940	CERAMIC	DD06 SL 300K 500V
C7	4010003940	CERAMIC	DD06 SL 300K 500V
C8	4010003880	CERAMIC	DD0B SL 150K 500V
C9	4010004120	CERAMIC	DD07 B 102K 500V
C10	4010000200	CERAMIC	DO 104 SL 270J 50V
C11	4010000090	CERAMIC	DD104 SL 070D 50V
C12	4010000330	CERAMIC	DD105 SL 101J 50V
C13	4010003880	CERAMIC	DD06 SL 150K 500V
C14	4010003900	CERAMIC	DD06 SL 200K 500V
C15	4010004120	CERAMIC	DD07 B 102K 500V
C17	4010003860	CERAMIC	DD06 SL 100D 500V
C18	4010000500	CERAMIC	DD104 B 102K 50V
C19	4010000500	CERAMIC	DD104 B 102K 50V
C20	4010000500	CERAMIC	DD104 B 102K 50V
C21	4010000500	CERAMIC	DD104 B 102K 50V
C22	4010000520	CERAMIC	DD108 B 472K 50V
C23	4010000500	CERAMIC	DD104 B 102K 50V
C24	4010000520	CERAMIC	DD108 B 472K 50V
C25	4510003890	ELECTROLITIC	16 MV 10 HW
C26	4010000500	CERAMIC	DD104 B 102K 50V
C27	4010000520	CERAMIC	DD108 B 472K 50V
C28	4510004590	ELECTROLITIC	16 MV 470 HC
C29	4010000520	CERAMIC	DD108 B 472K 50V
C30	4010000500	CERAMIC	DD104 B 102K 50V
C31	4010000520	CERAMIC	DD108 B 472K 50V
C32	4010000500	CERAMIC	DD104 B 102K 50V
C33	4510004590	ELECTROLITIC	16 MV 470 HC
C34	4010000500	CERAMIC	DD104 B 102K 50V
C35	4010000500	CERAMIC	DD104 B 102K 50V
C37	4010000500	CERAMIC	DD104 B 102K 50V
C38	4010000500	CERAMIC	DD104 B 102K 50V
C39	4010000500	CERAMIC	DD104 B 102K 50V
C40	4010000500	CERAMIC	DD 104 B 102K 50V
C41	4010003880	CERAMIC	DD06 SL 150K 500V
C42	4010003880	CERAMIC	DD06 SL 150K 500V
C43	4010003880	CERAMIC	DD06 SL 150K 500V
W18	8900004480	CABLE	OPC-451 D
W19	8900004490	CABLE	OPC-451 E
JI	6510003410	CONNECTOR	B05B-EH-S
J4	6510003100	CONNECTOR	RT01T-1.3B
J5	6510003100	CONNECTOR	RT01T-1.3B
J6	6510003100	CONNECTOR	RT01T-1.3B
EP2	0910040373	PCB	B 4017C

[PA-B UNIT]

REF.#	ORDER#	DESCRIPTION
D1	1710000310	DIODE M1407
D2	1710000730	S.DIODE M1809-T11
D3	1710000730	S.DIODE M1809-T11
D4	1790000490	S.DIODE HSM88AS-TR
D5	1790000490	S.DIODE HSM88AS-TR
L1	6110001650	COIL LA-248
L3	6110002110	COIL LA-382
L4	6110002110	COIL LA-382
L5	6110001520	COIL LA-232
L6	6110001520	COIL LA-232
L7	6110001520	COIL LA-232
L8	6110001600	COIL LA-243
L9	6110002110	COIL LA-382
L10	6110001650	COIL LA-248
L11	6200001830	S.COIL NL 322522T-100J
L12	6200001830	S.COIL NL 322522T-100J
L13	6910000670	COIL BLO1 RN1 -A62-001
L14	6910000670	COIL BLO1RN1-A62-001
L15	6110001520	COIL LA-232
L16	6110001650	COIL LA-248
L17	6110001520	COIL LA-232
L18	6110001520	COIL LA-232
R1	7080000150	RESISTOR RGB3L R15
R2	7030003550	S.RESISTOR ERJ3GEYJ 822 V (8.2 k)
R3	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R4	7030003550	S.RESISTOR ERJ3GEYJ 822 V (8.2 k)
R5	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R8	7030001150	S.RESISTOR MCR50JZHZ 150 ohm (151)
R9	7030001150	S.RESISTOR MCR50JZHZ 150 ohm (151)
R10	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
RI1	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 k)
R13	7030001140	S.RESISTOR MCR50JZHZ 120 ohm (121)
R14	7030001090	S.RESISTOR MCR50JZHZ 47 ohm (470)
R15	7030001140	S.RESISTOR MCR50JZHZ 120 ohm (121)
R16	7080000150	RESISTOR RGB3L R15
R17	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 ohm)
R18	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 k)
R19	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 k)
C1	4030006880	S.CERAMIC C1608 JB 1 H 472K-T-A
C2	4030007090	S.CERAMIC C1608 CH 1 H 470J-T-A
C3	4030006860	S.CERAMIC C1608 JB 1H 102K-T-A
C5	4010003850	CERAMIC DD06 SL 080D 500V
C6	4010003850	CERAMIC DD06 SL 080D 500V
C7	4010003850	CERAMIC DD06 SL 080D 500V
C8	4010003850	CERAMIC DD06 SL 080D 500V
C9	4010003830	CERAMIC DDO6 SL 080D 500V
C10	4010003830	CERAMIC DDO6 SL 080D 500V
C12	4030007020	S.CERAMIC C1608 CH 1H 120J-T-A
C14	4030007000	S.CERAMIC C1608 CH 1H 090D-T-A
C15	4030007030	S.CERAMIC C1608 CH 1H 150J-T-A
C16	4030007030	S.CERAMIC C1608 CH 1H 150J-T-A
C17	4030007020	S.CERAMIC C1608 CH 1H 120J-T-A
C18	4010003810	CERAMIC DD06 SL 040C 500V
C21	4010003820	CERAMIC DD06 SL 050C 500V
C22	4010003790	CERAMIC DD06 SL 020C 500V
C23	4030006850	S.CERAMIC C1608JB1H471K-T-A
C24	4030006850	S.CERAMIC C 1608 JB I H 471 K-T-A
C25	4030006860	S.CERAMIC C1608JB 1H 102K-T-A
C26	4030008850	S.CERAMIC C1608 JB 1 H 471 K-T-A

C27	4030008860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C28	4030006850	S.CERAMIC	C 1608 JB 1 H 471 K-T-A
C29	4030008860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C30	4510004630	S.ELECTROLITIC	ECEV1CA100SR
C31	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C32	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C33	4510004590	ELECTROLITIC	16 MV 470 HC
C34	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C35	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C36	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C37	4030007090	S.CERAMIC	C1608 CH 1 H 470J-T-A
C38	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C39	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C40	4510004590	ELECTROLITIC	16 MV 470 HC
C41	4030006860	S.CERAMIC	C1608JB 1H 102K-T-A
C42	4030006860	S.CERAMIC	C 1608 JB 1H 102K-T-A
C44	4030007090	S.CERAMIC	C1608 CH 1 H 470J-T-A
C45	4030006860	S.CERAMIC	C1608 JB 1 H 102K-T-A
C46	4030007090	S.CERAMIC	C1608 CH 1 H 470J-T-A
C47	4010003860	CERAMIC	DD06 SL 100D 500V
C48	4010005340	CERAMIC	DD05 SL 090D 500V
C51	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C52	4510005310	S.ELECTROLITIC	ECEV1CA220SR
C53	4510005310	S.ELECTROLITIC	ECEV1CA220SR
C54	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C55	4510005820	S.ELECTROLITIC	ECEV1CA101P
C56	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C57	4010004120	CERAMIC	DD07 B 102K 500V
C59	4010003820	CERAMIC	DD06 SL 050C 500V
C60	4030006960	S.CERAMIC	C1608 CH 1 H 050C-T-A
C61	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C62	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C63	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C64	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C65	4030006850	S.CERAMIC	C1608 JB 1 H 471 K-T-A
C66	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C67	4010003820	CERAMIC	DD06 SL 050C 500V
C68	4010003810	CERAMIC	DD06 SL 040C 500V
C69	4010003810	CERAMIC	DD06 SL 040C 500V
C70	4010003810	CERAMIC	DD06 SL 040C 500V
C71	4010003810	CERAMIC	DD06 SL 040C 500V
C72	4010003880	CERAMIC	DD06 SL 150K 500V
C73	4010003890	CERAMIC	DD06 SL 180K 500V
11	6510003420	CONNECTOR	BO6B-EH-S
F1	5210000180	FUSE	FGMB 125V 5A
F2	6510018320	HOLDER	F09P
EP1	6510018330	TERMINAL	F4053A
EP2	6510018330	TERMINAL	F4053A
EP3	0910040383	PCB	B 4018

S.=Surface mount

SECTION 7 MECHANICAL PARTS AND DISASSEMBLY

7-1 CABINET PARTS

[FRONT UNIT]

REF.#	ORDER#	DESCRIPTION	QTY.
J 1	6510000290	Connector 8S-S-E [MICI (incl. spring washer and nut)]	1
EP 1	0910041880	[MIC] jack Flexible P.C.B. B 4178	1
EP 2	6450001230	Snap plate HLJ0999-01-480	1
S 1	2260001580	Power switch JPZ2120-0101 (TV-3)	1
S 2	2250000130	Encoder SW-152(EC24B50B0013B) 1	
ME 1	5510000420	S/RF meter ME-34	1
MP 1	8210010680	1424 Front panel (C)	1
MP 2	8210011860	1424 Window plate (A)	1
MP 3	8010015280	1424 Sub chassis	1
MP 4	8610008510	Knob N45(D) [AF MAIN/SUB], [RIT]	3
MP 5	8610008500	Knob N69(A) [SQL MAIN/SUB], [SHIFT]	3
MP 6	8610009160	Knob N213 base [Main dial]	1
MP 7	8610009170	Knob N213 cover [Main dial]	1
MP 8	8610009010	Button K210 [NB, ATT, PRE, AGC, PO/CO]	5
MP 9	8610009060	Button K199 (I) [CHECK,TONE, MAIN/SUB, FUNC]	1
MP 10	8610009070	Button K199 (J) [FM, SSB/CW, SUB, LOCK]	1
MP 11	8610009080	Button K199 (K) [CALL, VFO, MEMO, MW]	1
MP 12	8610009221	Button K-200 [RIT, kHz/MHZ, SCAN]	3
MP 13	8610009090	Button K201(A) [POWER]	1
MP 14	8610008430	Button K202 [TRANSMIT]	1
MP 15	8610009100	Button K202 (A) [UP]	1
MP 16	8610009110	Button K202 (B) [DOWN]	1
MP 17	8930013940	610 Knob sheet	1
MP 18	8930014030	610 Brake pad	1
MP 19	8930013990	610 Brake plate	1
MP20	8820000770	1296 Screw	1
MP21	8930003200	Spacer (P)	1
MP23	8930030480	1424 Knob plate	1
MP24	8810000980	Screw PH BO M2 x 4	5
MP25	8810000980	Screw PH BO M2 x 4	2
MP26	8810000210	Screw PH M3 x 4	7
MP27	8810002160	Screw FH M3 x 5	2
MP 28	8810002160	Screw FH M3 x 5	4
MP29	8810000980	Screw PH BO 2x4	1
MP 30	8810000980	Screw PH BO 2 x 4	6
MP 31	8810000980	Screw PH BO 2x4	3
MP32	8930027960	1296 Pushing spring	6
MP33	8850001330	Insulate flat washer (M)	1
MP 34	8810000210	Screw PH M3 x 4	1
MP 35	8810003360	Set screw C M3 x 6	1
MP36	8930031160	1424 Sponge (B)	1
MP39	8930032370	Shaft tape (A)	3
WS 1	8600032360	Connector P01FR [POWER]	1

[DISPLAY UNIT]

REF.#	ORDER#	DESCRIPTION	QTY.
NO.	NO.		
W 7	8900004850	OPC-471 [VR unit for the main band]	1
W 8	8900004850	OPC-471 [VR unit for the sub band]	1
W 9	8900004850	OPC-471 [RIT unit]	1
DS 7	5030001000	LCD FTD-12525AAH	1
EP 2	8930031220	LCD contact SRCN-1424 SSW	1
MP 1	8210009490	1424 Reflector	1
MP 2	8930029570	1424 LCD holder	1
MP 3	8930029560	1424 LCD rubber	1

MP 4	8930030460	1424 LCD filter	1
MP 5	8930031150	1424 Sponge(A)	1
MP 6	8930032500	1424 Mask sheet	1

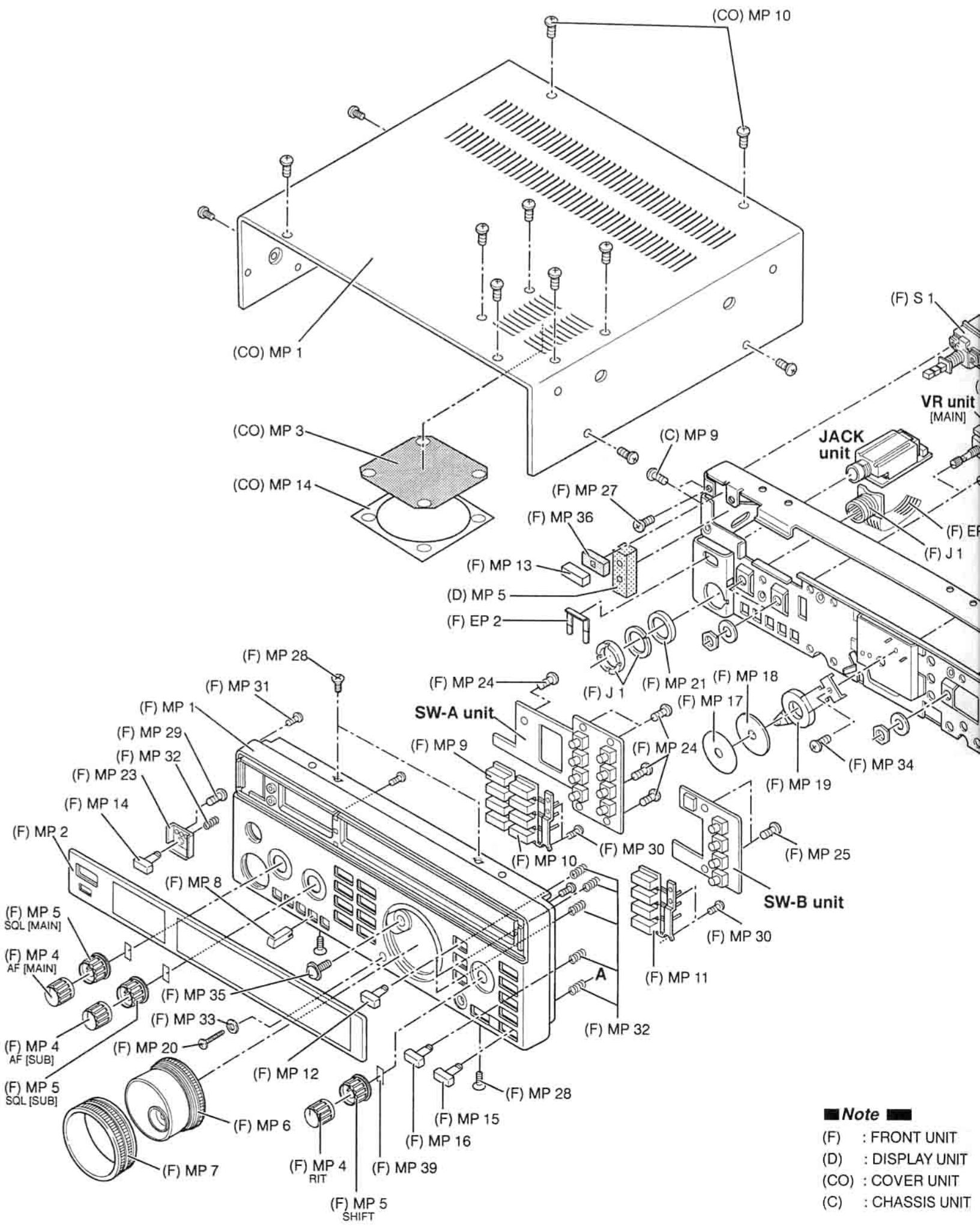
[COVER UNIT]

REF.#	ORDER#	DESCRIPTION	QTY.
MP 1	8110005150	1424 Top cover	1
MP 2	8110005220	1424 Bottom cover	1
MP 3	8930006370	Sheet 401 Salan net	1
MP 4	8010001520	Stand (C)	1
MP 5	8930005790	Stand foot (A)	1
MP 6	8930005800	Stand foot (B)	1
MP 7	8930002900	Rubber foot (A)	2
MP 8	8810005520	Screw PH B1 3x8	4
MP 9	8810005540	Screw PH B1 ZK 4x10	2
MP 10	8810005510	Screw OH BS ZK M3 x 6	16
MP 14	0803003230	Sheet 1413 A-Sheet	1

[CHASSIS UNIT]

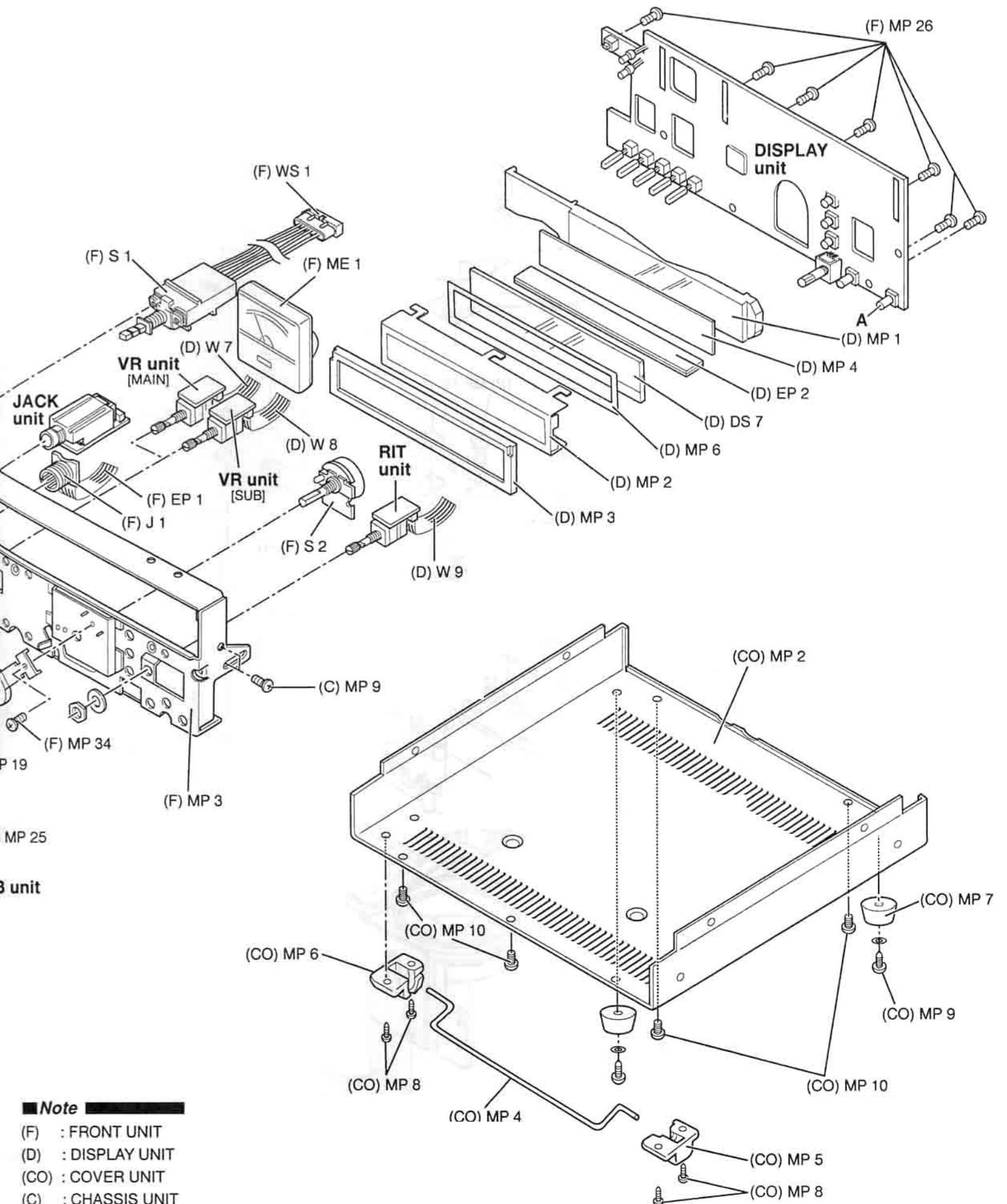
REF.	ORDER	DESCRIPTION	QTY.
NO.	NO.		
MP 9	8810000210	Screw PH M3 x 4	4

Screw abbreviations: PH: Pan head OH: Oval countersunk head FH: Flat head
 BO, B1: Self-tapping BS: Brass NI: Nickel ZK: Black



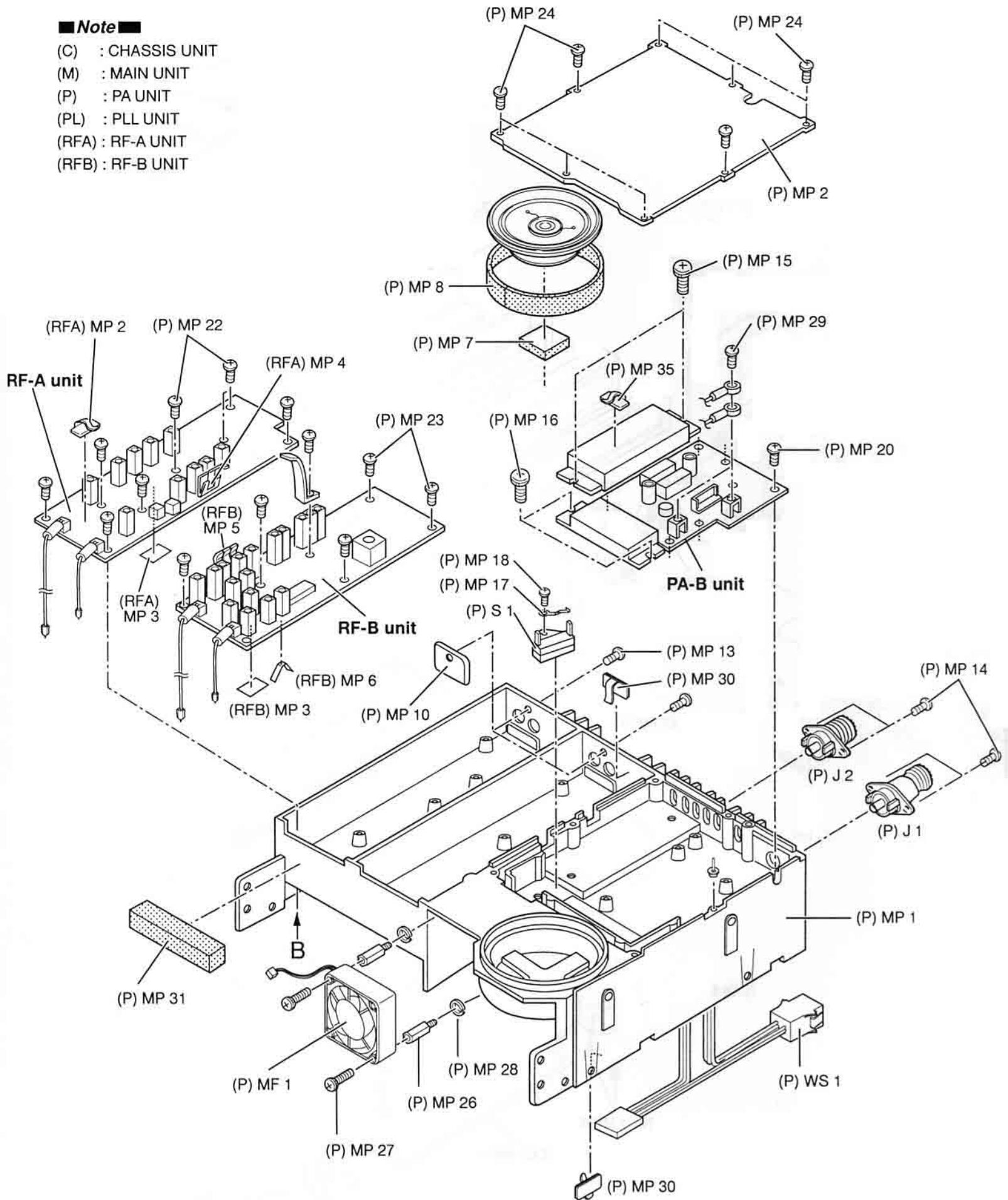
■ Note ■

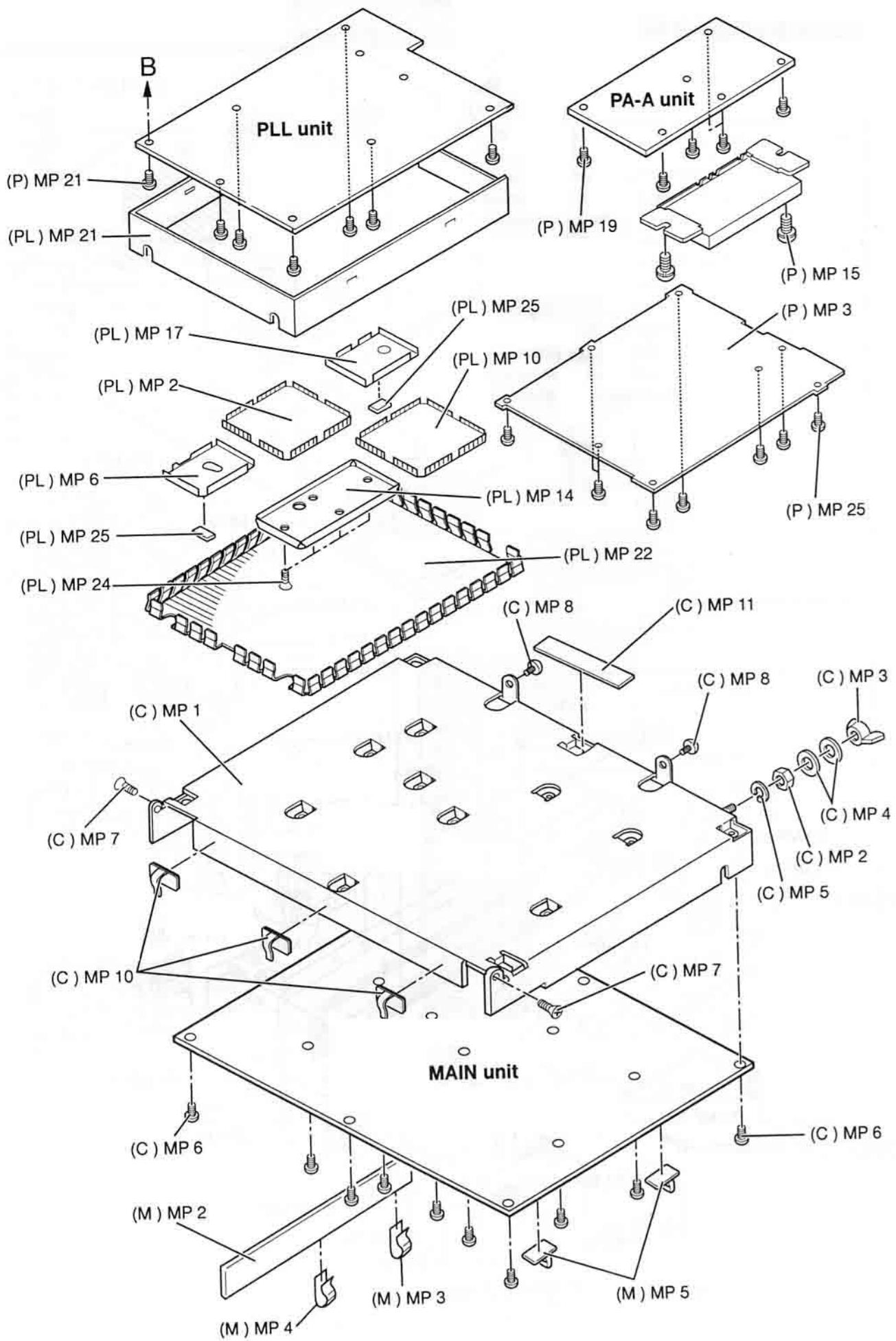
- (F) : FRONT UNIT
- (D) : DISPLAY UNIT
- (CO) : COVER UNIT
- (C) : CHASSIS UNIT



Note

(C) : CHASSIS UNIT
(M) : MAIN UNIT
(P) : PA UNIT
(PL) : PLL UNIT
(RFA) : RF-A UNIT
(RFB) : RF-B UNIT





7-2 CHASSIS PARTS

[CHASSIS UNIT]

REF.#	ORDER#	DESCRIPTION	QTY.
MP 1	8010015290	1424 Chassis	1
MP 2	8830000210	Nut M 5 NI BS	1
MP 3	8830000360	Wing nut M 5 NI	1
MP 4	8850000150	Flat washer M 5 NI BS	2
MP 5	8850000440	Spring washer M 5 NI	1
MP 6	8810008630	Screw PH BT M3 x 6 NI-ZU	14
MP 7	8810002170	Screw FH M3 x 6	2
MP 8	8810003660	ICOM screw A 5	2
MP 10	8950002460	Wire hook S-10 silver	3
MP 11	8930029070	Insulate plate CU	1

[MAIN UNIT]

MP 2	8410001500	MAIN heat sink	1
MP 3	8930020860	IC-holder	1
MP 4	8930027940	1126 TR-B clip	1
MP 5	8950002460	Wire hook S-10 silver	2

[PA UNIT]

S 1	6910000050	Thermal switch CHD-3 50M	1
J 1	6510004910	Connector NR-DS-E 01 [UHF]	1
J 2	6510004880	Connector MR-DS-E 01 [VHF]	1
MF 1	2710000480	MF40C-12H004 (FAN)	1
MP 1	8010015271	1424 Heatsink-1	1
MP 2	8510008641	PA-B Cover-1	1
MP 3	8510008651	PA-A Cover-1	1
MP 7	8930032290	Sponge (DQ) 1	
MP 8	8930007831	401 Sponge (C)-1 1	
MP 10	8930017300	TVJ hole cover 2	
MP 13	8810001910	Screw PH M3 x 6 NI BS	2
MP 14	8810006070	Set screw A M3 x 6 NI	4
MP 15	8810003860	Set screw A M4 x 8 2	
MP 16	8810007230	Set screw H M3 x 8 2	
MP 17	6910008240	Clip 59TN4772 1	
MP 18	8810003170	Set screw A M3 x 8 1	
MP 19	8810001280	Screw PH B1 M2.6 x 6	6
MP20	8810001280	Screw PH B1 M2.6 x 6	8
MP21	8810008630	Screw PH BT M3 x 6 NI-ZU	7
MP22	8810008630	Screw PH BT M3 x 6 NI-ZU	8
MP23	8810008630	Screw PH BT M3 x 6 NI-ZU	7
MP24	8810008630	Screw PH BT M3 x 6 NI-ZU	8
MP25	8810008630	Screw PH BT M3 x 6 NI-ZU	8
MP26	8930000130	Stand-off (I) 2	
MP27	8810003200	Set screw A M3 x 14 2	
MP28	8850000420	Spring washer M3 NI 2	

[PA UNIT]

MP29	8810003160	Set screw A M3 x 6	2
MP30	8950002460	Wire hook S-10 silver	2
MP31	8930020990	Sponge (CN)	1
MP35	8950002460	Wire hook S-10 silver	1
WS 1	8600032451	SX1425 P01-03PA-1 (B)(EUR, SWE)	1
WS 1	8600032970	SX1425 P01.03PA (A)(USA, AUS)	1

[PLL UNIT]

MP 2	8510008310	963 DDS Shield cover	1
MP 6	8510000200	194 VCO Shield cover (B)	1
MP 10	8510008310	963 DDS Shield cover	1
MP 14	8510003120	323 VCO Shield cover	1
MP 17	8510006510	194 VCO Shield cover (E)	1
MP21	8510002922	PLL case-4	1
MP22	8510008930	1424 PLL U-cover	1
MP24	8810002160	Screw FH M3 x 5	4
MP25	8930001510	Sponge (V)	3

[RF-A UNIT]

MP 2	8950002460	Wire hook S-10 silver	1
MP 3	8510002280	VCO shield plate (A)	1
MP 4	8930001180	Grounding holder	1

[RF-B UNIT]

MP 3	8510002280	VCO shield plate (A)	1
MP 5	8930001180	Grounding holder	1
MP 6	8930014140	Grounding spring (D)	1

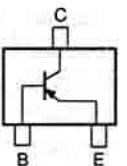
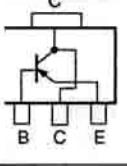
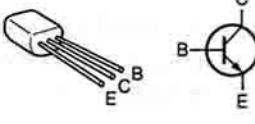
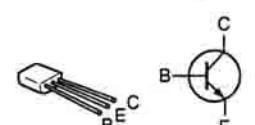
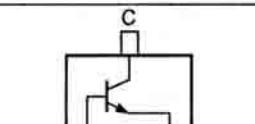
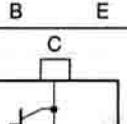
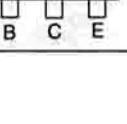
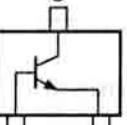
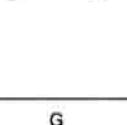
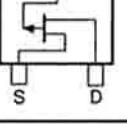
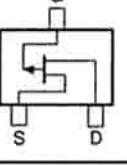
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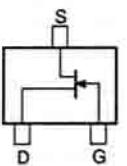
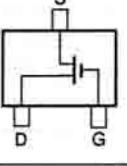
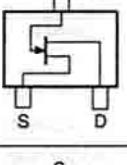
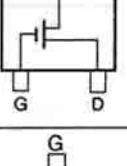
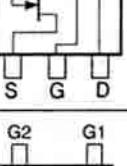
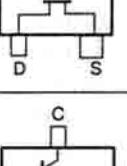
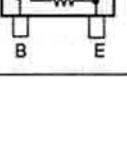
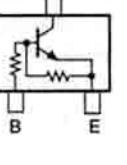
W 1	8900000220	DC power cable (OPC-025A)	1
F 1	5210000080	Fuse FGB 20 A	2
F 2	5210000180	Fuse FGMB 125 V 5 A	1
J 1	6450001280	DIN plug TCP0587-71-5401	1
MP 1	8810001650	Screws (PH FT M3 x 6, for optional MB-23)	4
MP 2	8810008430	Screws (OH ST M4 x 10 CR,for optional MB-23)	2

Screw abbreviations: PH: Pan head FH: Flat head B1:

Self-tapping BS: Brass NI: Nickel

8-1 TRANSISTORS

NAME	SYMBOL	INSIDE VIEW
2SA1586-GR	SG	
2SB1123T-TD	BF	
2SC2053	-	
2SC2538	-	
2SC2407(A)	-	
2SC2714-Y	QY	
2SC3356 R24-T2B	R24	
2SC3357-T2	RK	
2SC3650-TD	CF	
2SC3661-TA	FY	
2SC4116-GR	LG	
2SC4213-B	AB	
2SC4215-O	QO	
2SC4226-T2 R25	R25	
2SJ144-GR	VG	

NAME	SYMBOL	INSIDE VIEW
2SK210-GR	YG	
2SK882-GR	TG	
2SK302-Y	TY	
2SK508 K52 T2B	R52	
2SK1577-2-T7	P2	
2SK536-TA	BJ	
2SK2171-4-TD	KM	
3SK131-T2-LA	V12	
3SK228XR-TL	XR	
DTA114EU T107	14	
DTC114EU T107	24	
DTC144EU T107	26	

NAME	SYMBOL	INSIDE VIEW
FMW1 T148	W1	
RN2425	RE	
RN2427	RG	
UMD3 TL	D3	

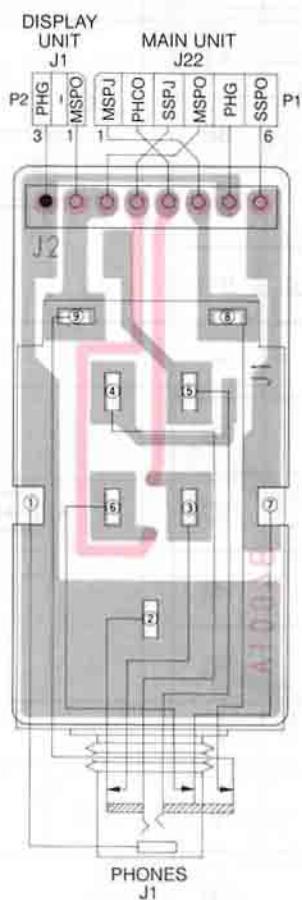
NAME	SYMBOL	INSIDE VIEW
1SS272	A1	
1SV237	BB	
DWA010-TE	W8	
MA862	D1I	
1SV166-T2B	-	
1SV217	T6	
1SV239	TC	
MA338	H9	
MA363B	6D	
1SS353	C	
HSU88TRF	9	
MA77	4B	
MI308	-	
MI407	-	
MI809-T11	-	

8-2 DIODES

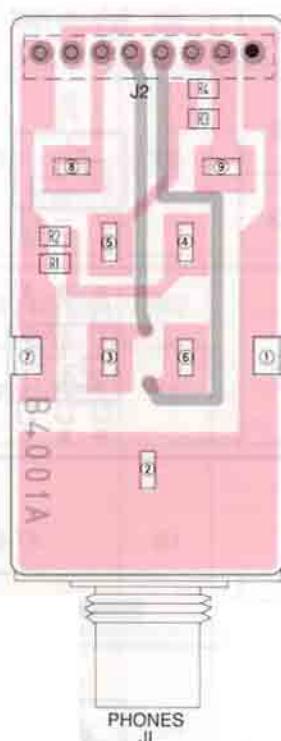
NAME	SYMBOL	INSIDE VIEW
1SS184	B3	
1SS301	B3	
1SS300	A3	
HSM88AS-TR	C1	
RD3.6M-T2B2	362	
RD5.1M-T2B2	512	
RD6.2M-T2B2	622	
RD9.1M-T2B3	913	
RD20M-T2B2	202	

9-1 FRONT UNIT

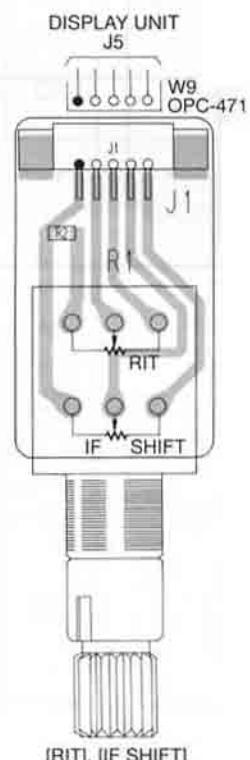
• JACK UNIT (TOP VIEW)



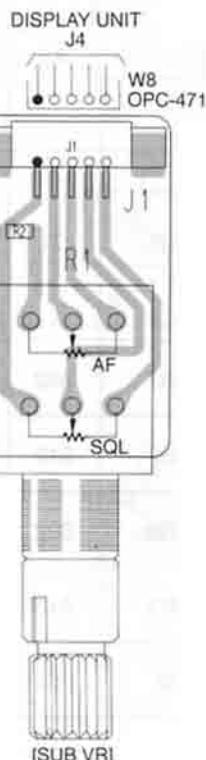
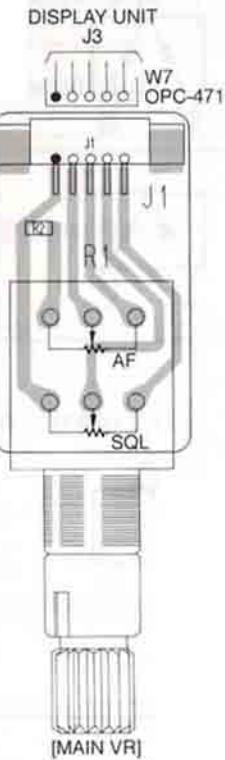
• JACK UNIT (BOTTOM VIEW)



RIT UNIT (TOP VIEW)

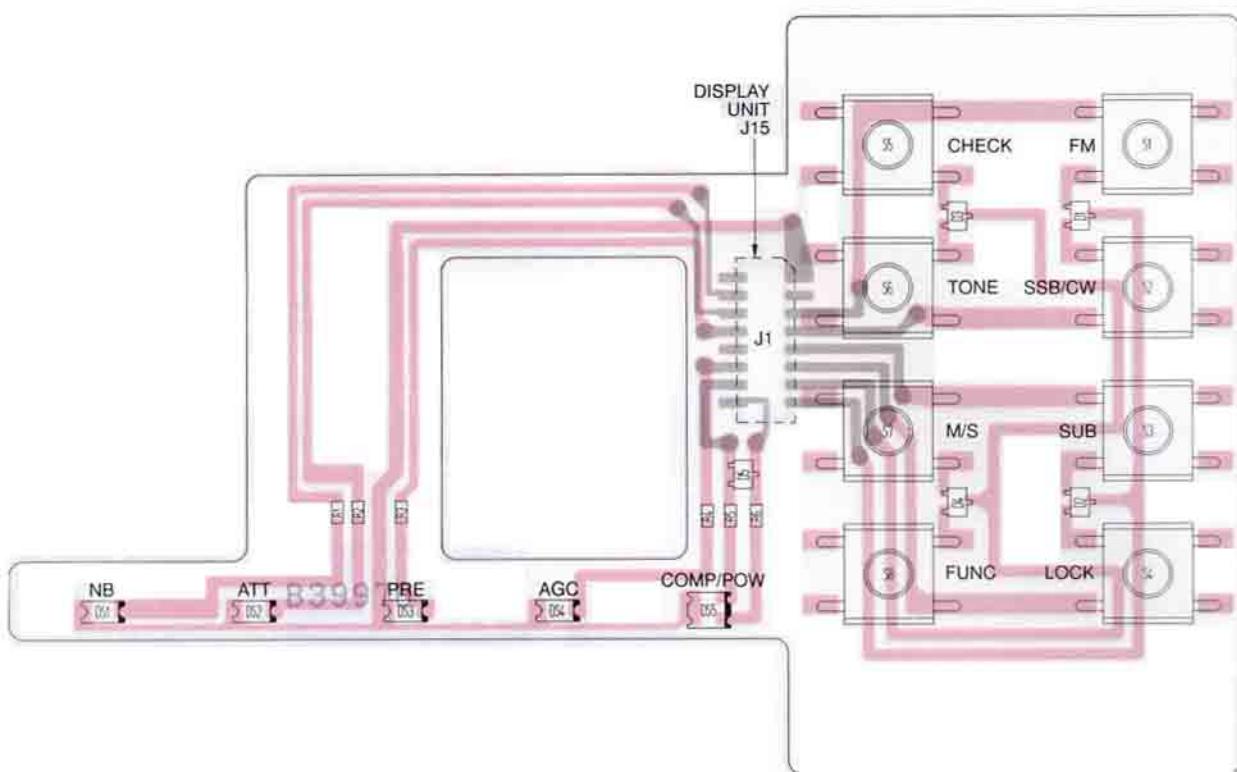


VR UNIT (TOP VIEW)

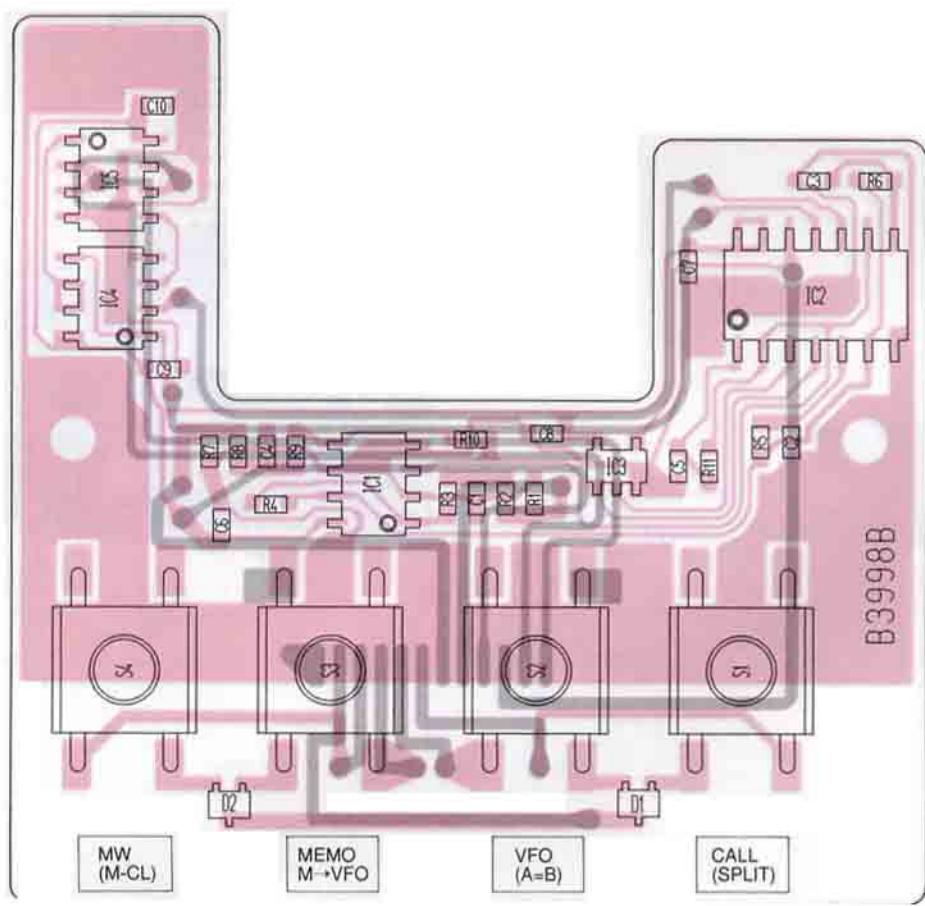


The combination of this page and the next page shows the unit layout in the same configuration as the actual P.C. Board.

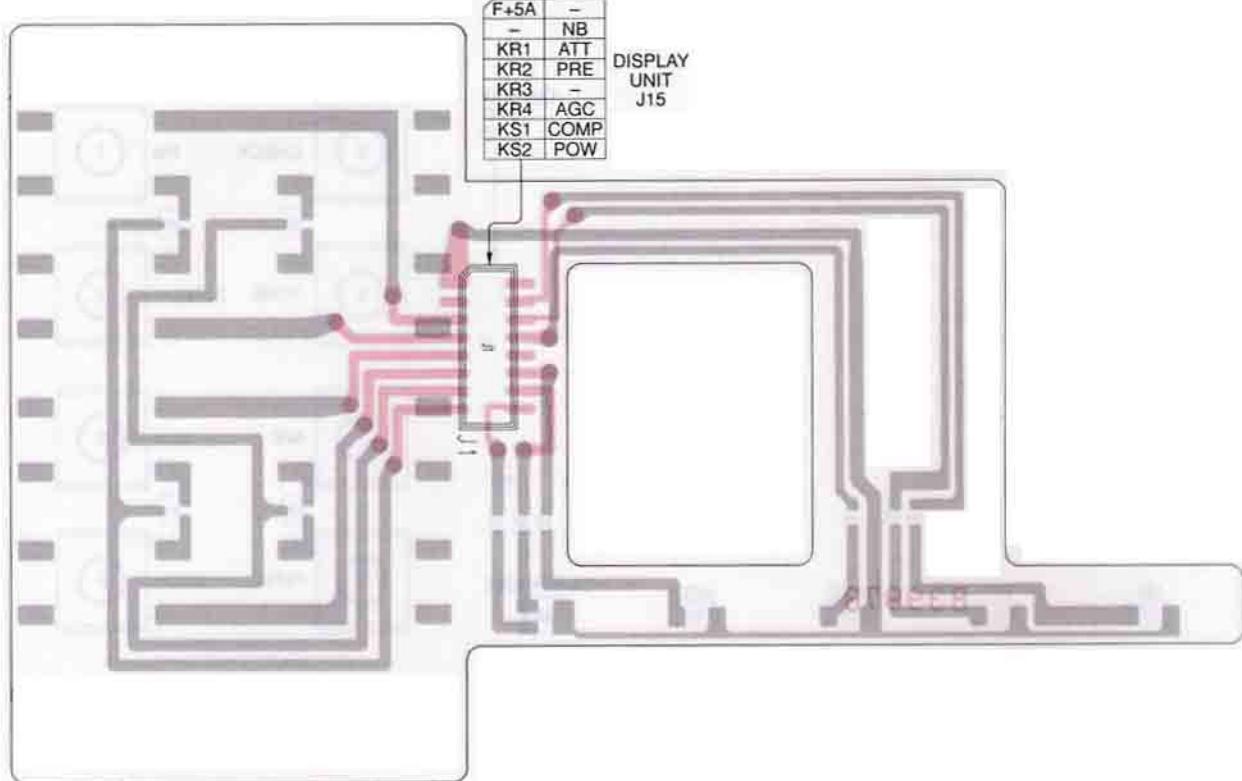
SW-A UNIT (TOP VIEW)



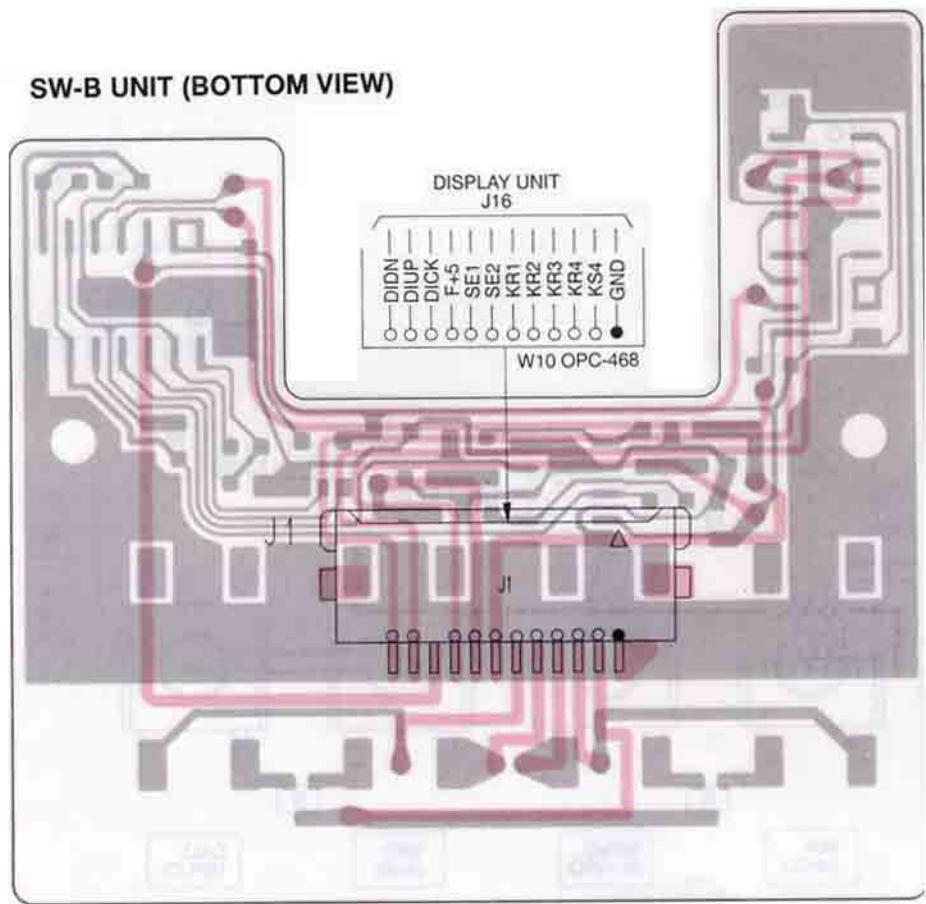
SW-B UNIT (TOP VIEW)



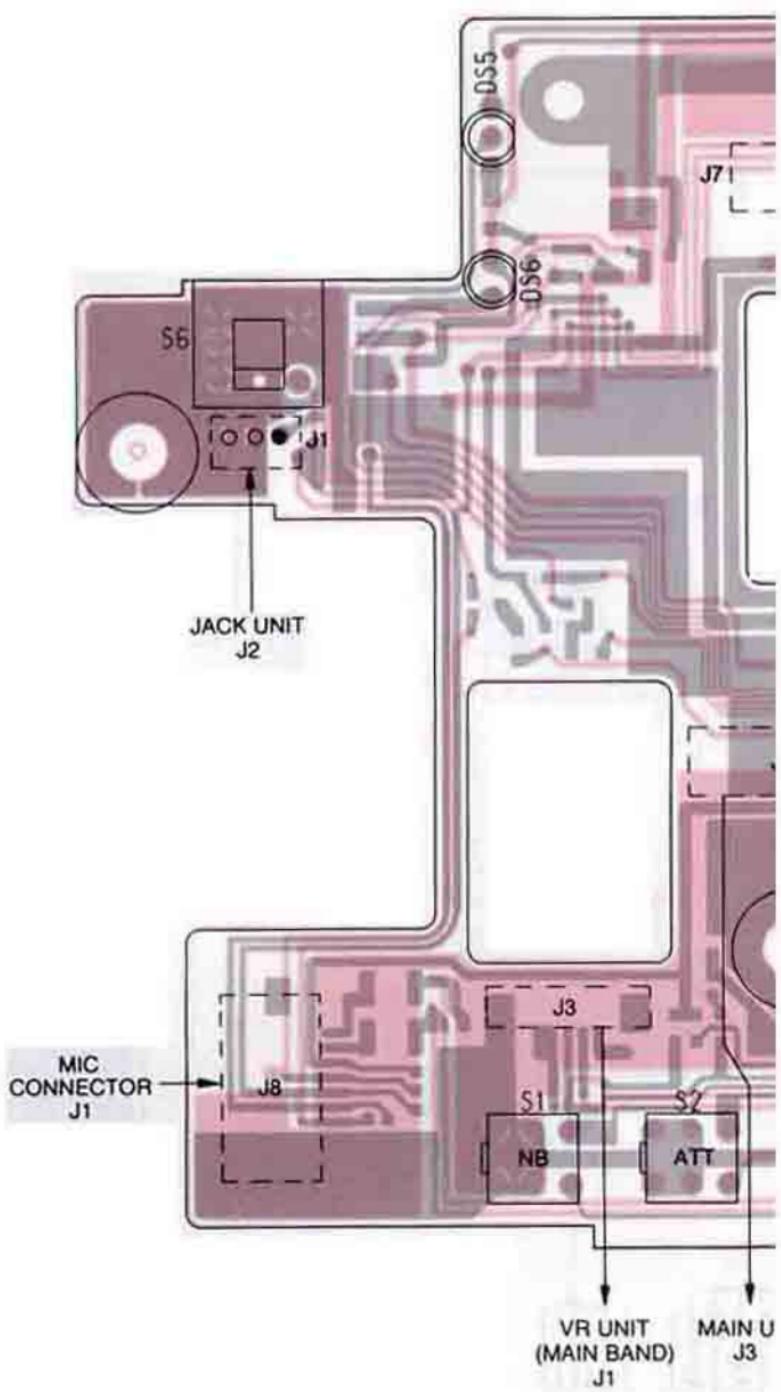
SW-A UNIT (BOTTOM VIEW)

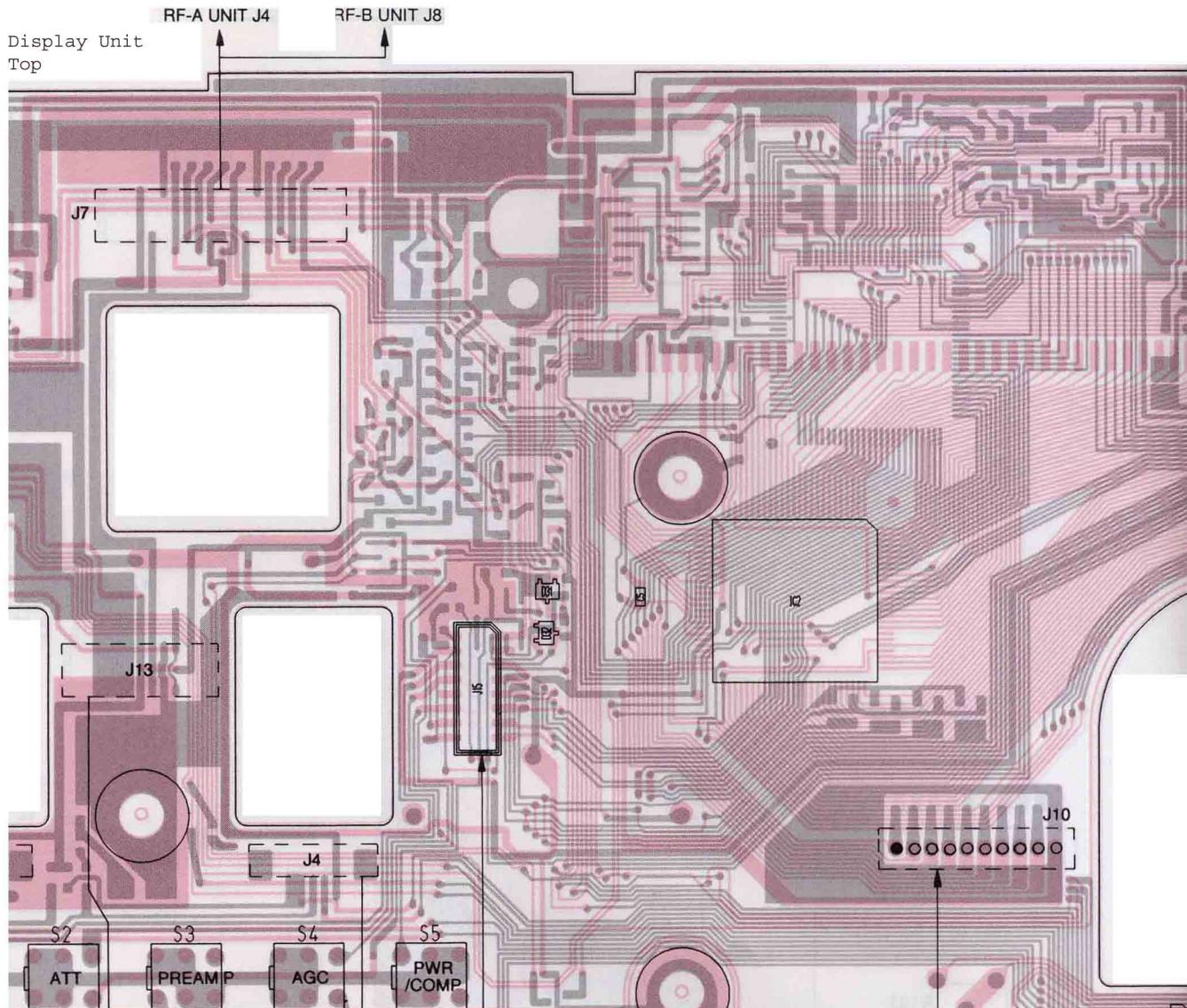


SW-B UNIT (BOTTOM VIEW)



DISPLAY UNIT (TOP VIEW)

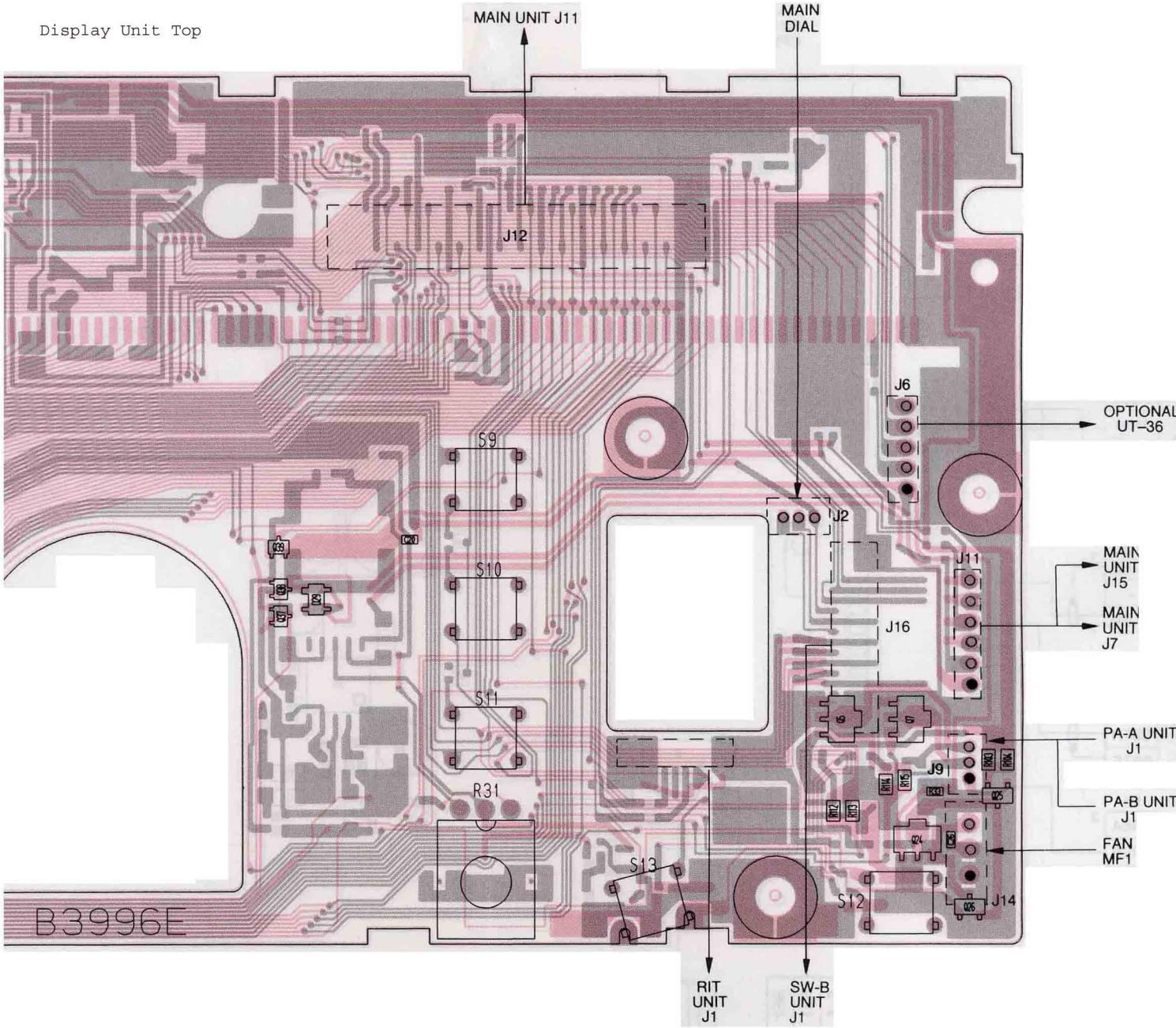




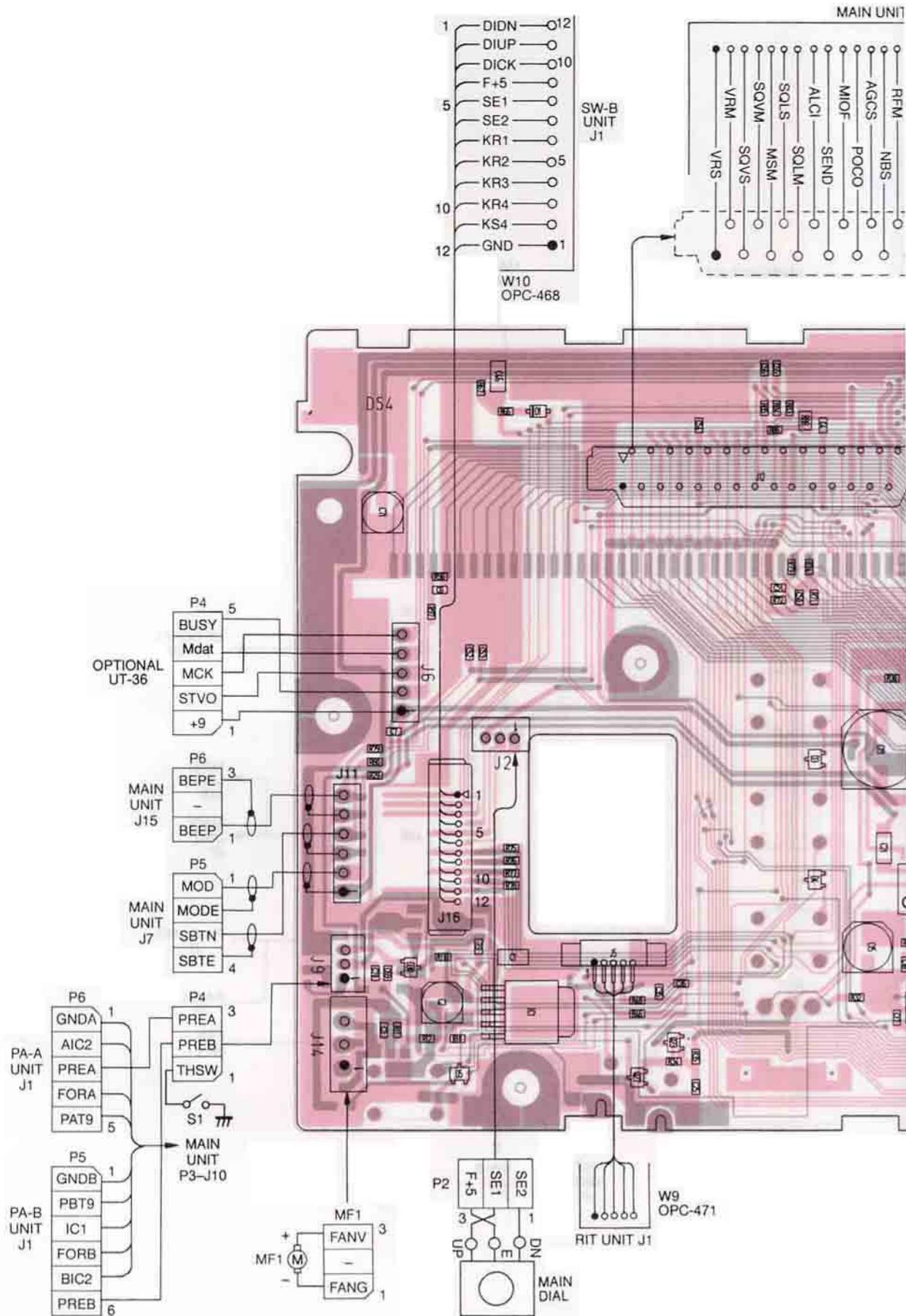
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NB	-
ATT	KR1
PRE	KR2
-	KR3
AGC	KR4
COMP	KS1
POW	KS2

SW-A
UNIT
J1

Display Unit Top

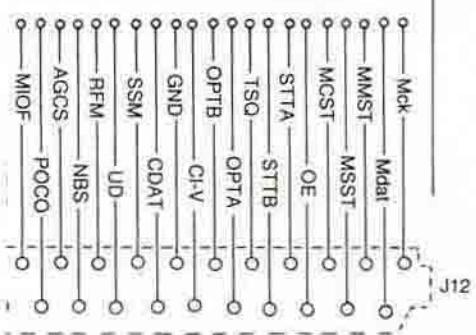


DISPLAY UNIT (BOTTOM VIEW)

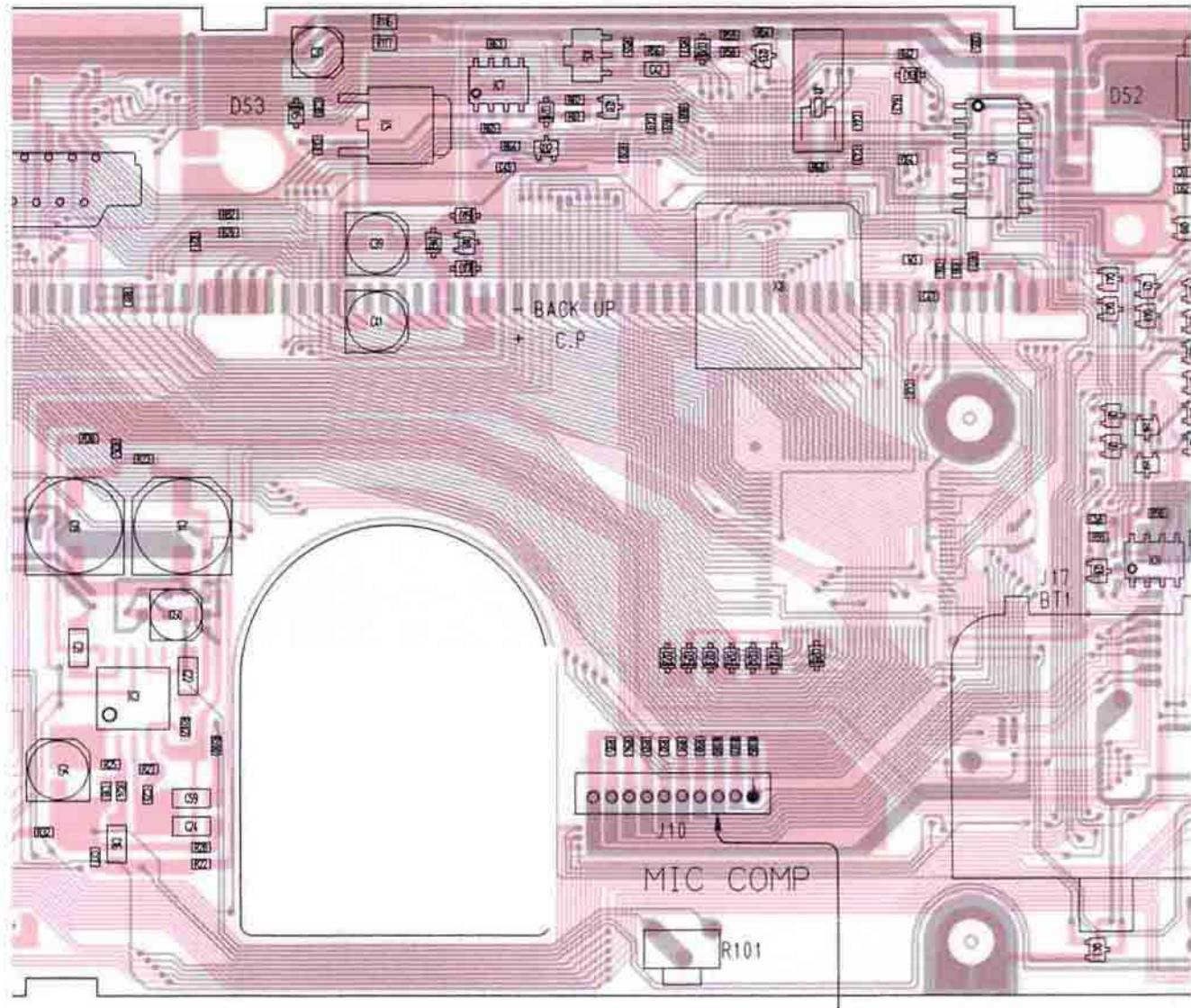
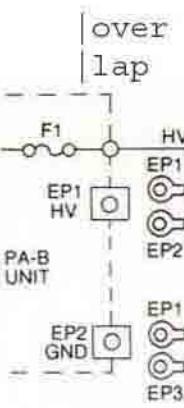


MAIN UNIT J11

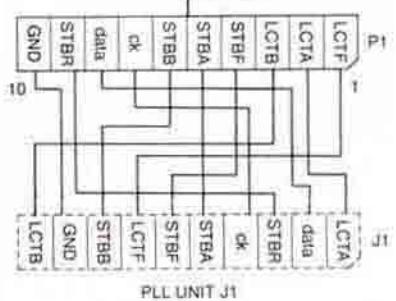
W5 OPC-467

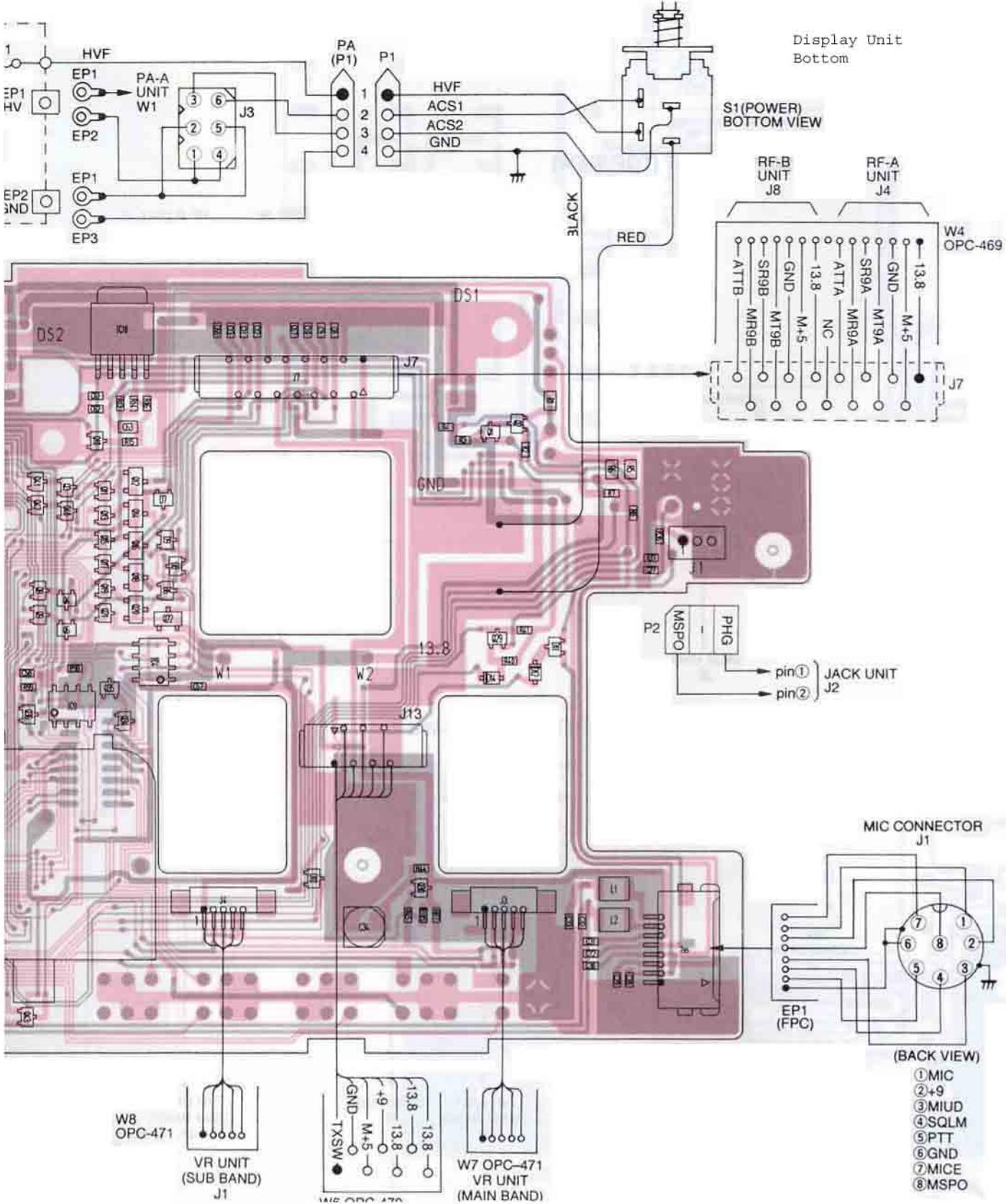


Display Unit Bottom

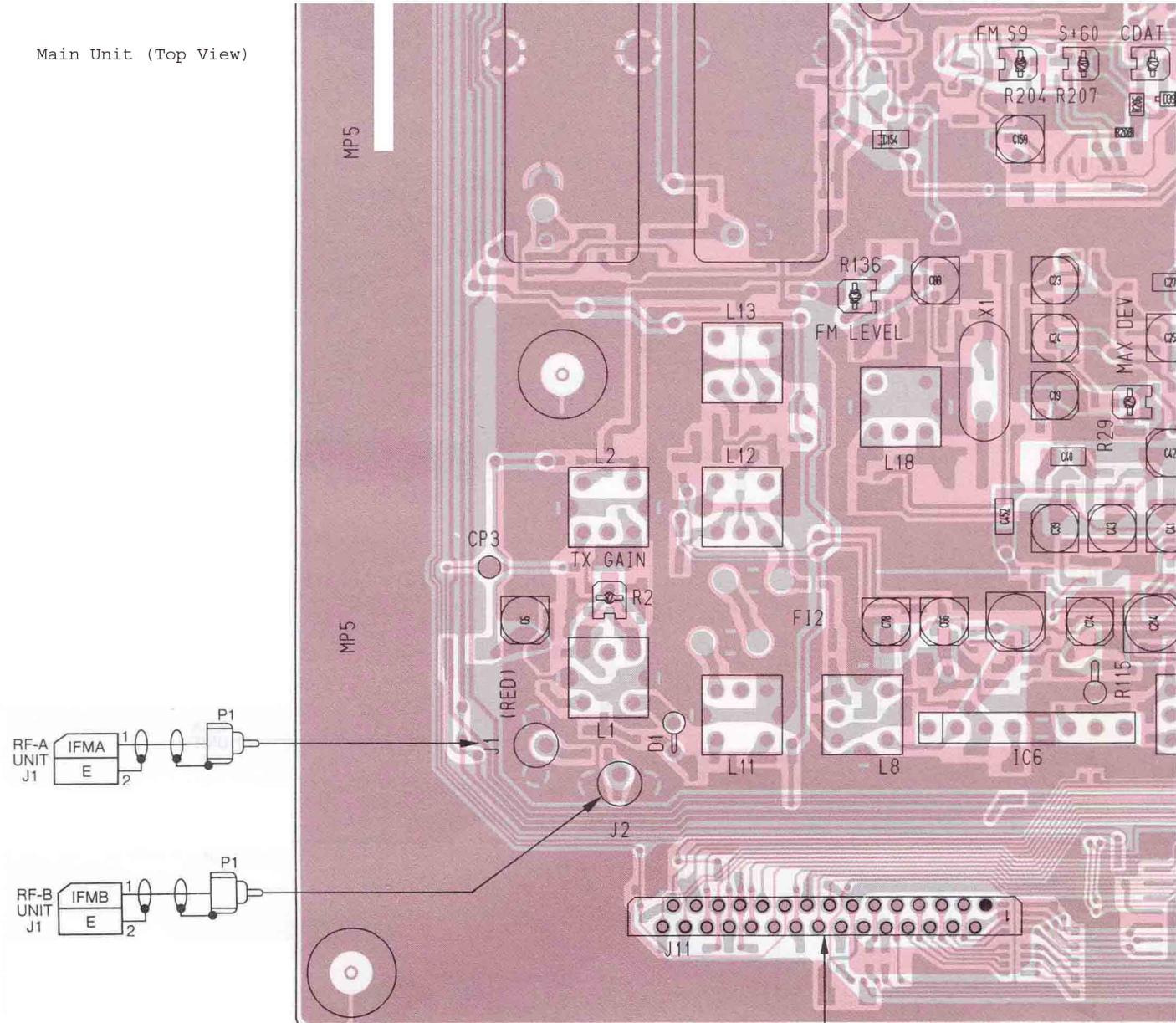


over
lap



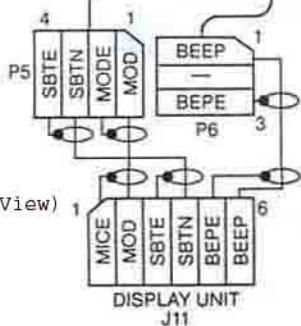
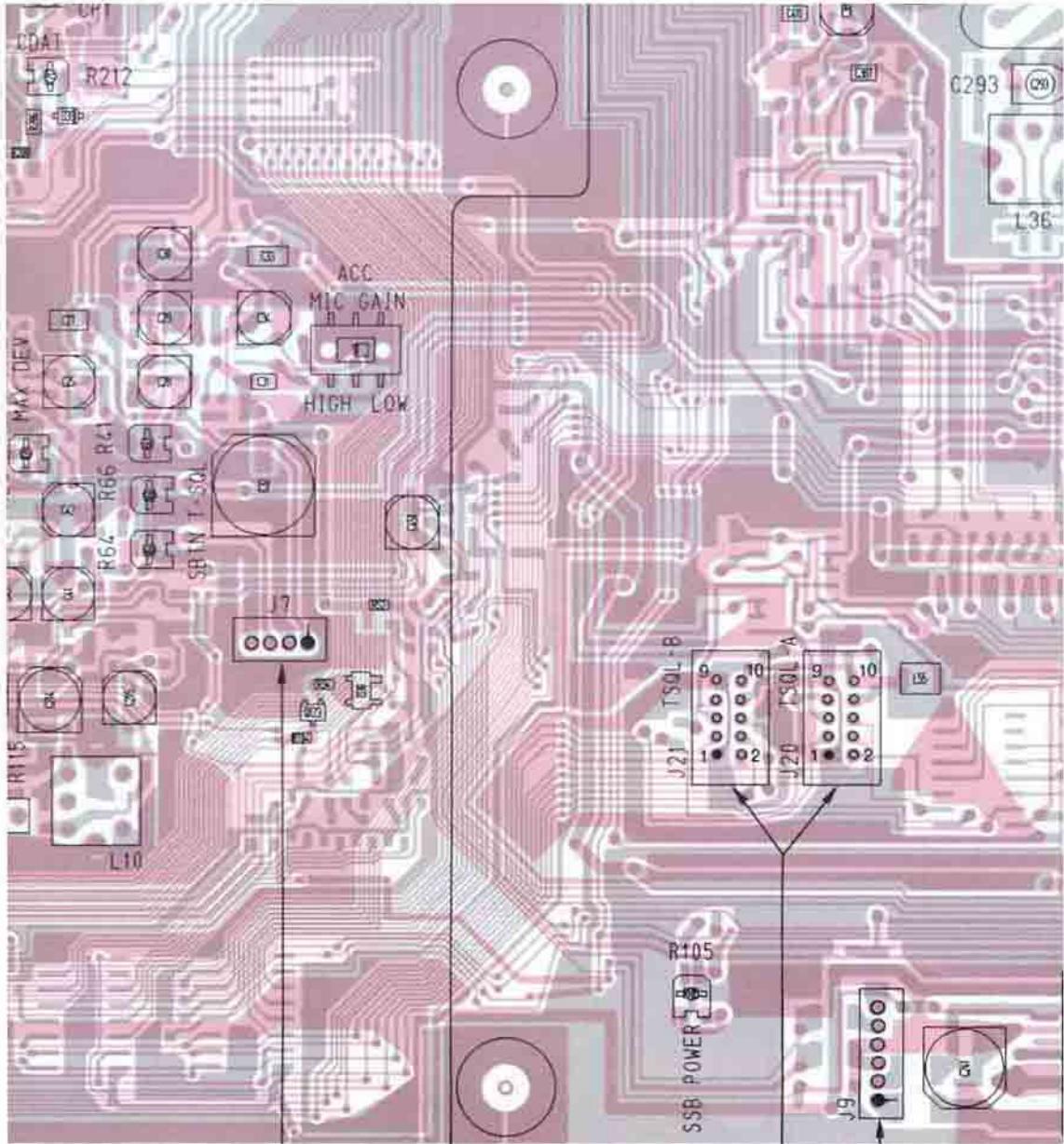


Main Unit (Top View)



W5 OPC-467	
VRS	VRM
SQVS	SQVM
MSM	SQLS
SQLM	ALCI
SEND	MIOF
POCO	AGCS
NBS	RFM
UD	SSM
CDAT	GND
CIV	OPTB
OPTA	TSQ
STTB	STTA
OE	MCST
MSST	MMST
Mdat	MCK

DISPLAY UNIT J12

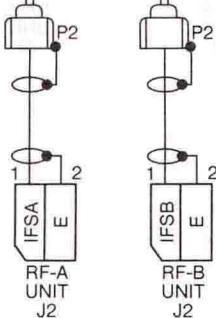
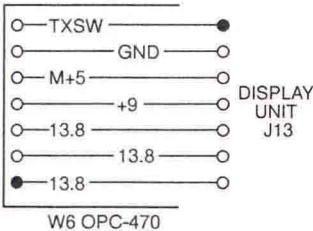
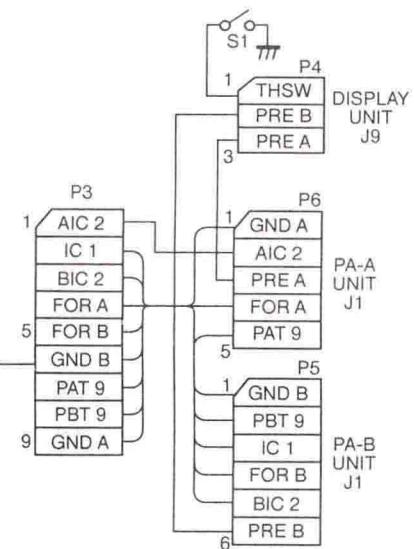
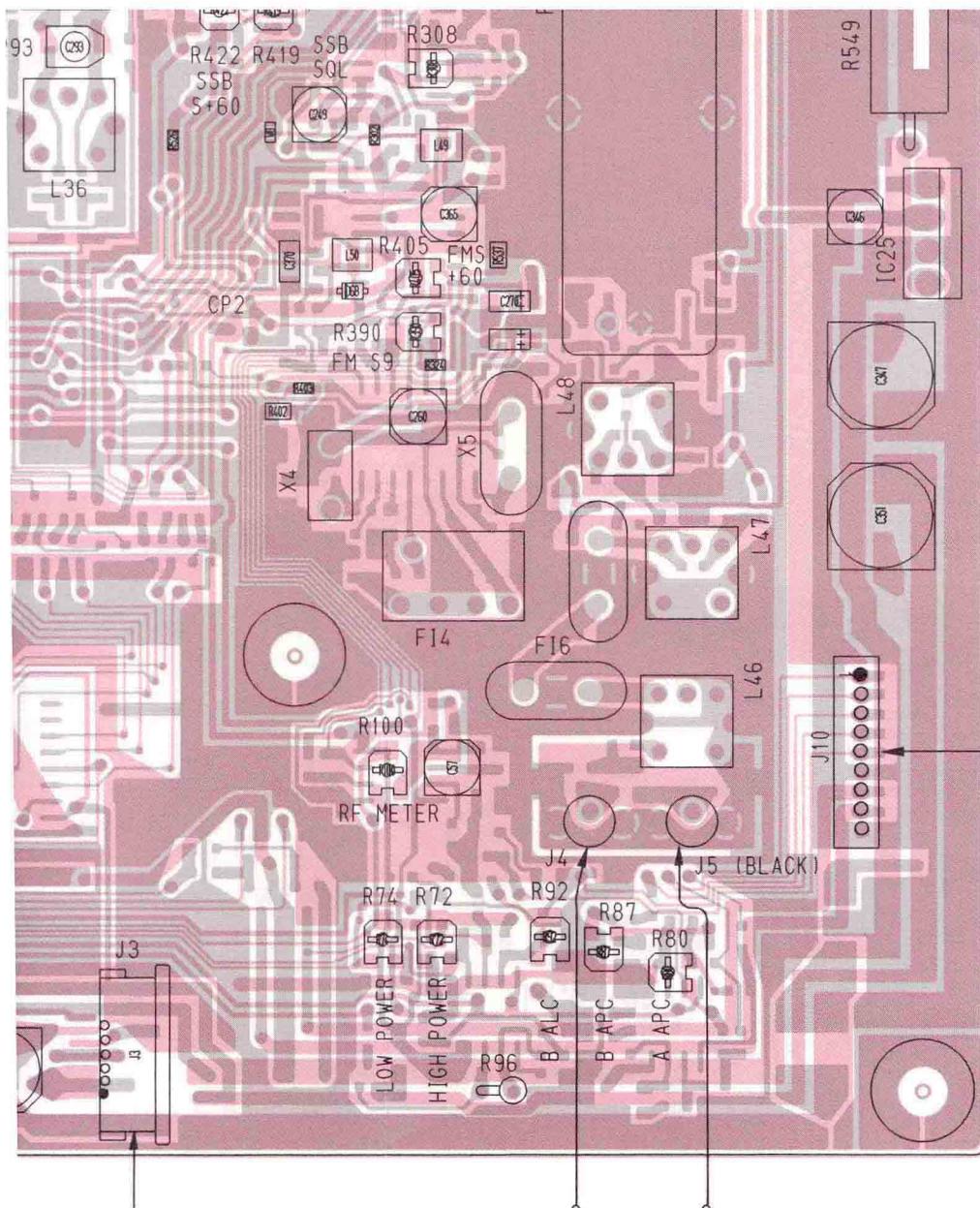


9	—	+5	10
	TSQL	TONE	
	DETO	QS	
1	OPT	IOSTB	2
	GND	SCK	
	OPTIONAL UT-50		

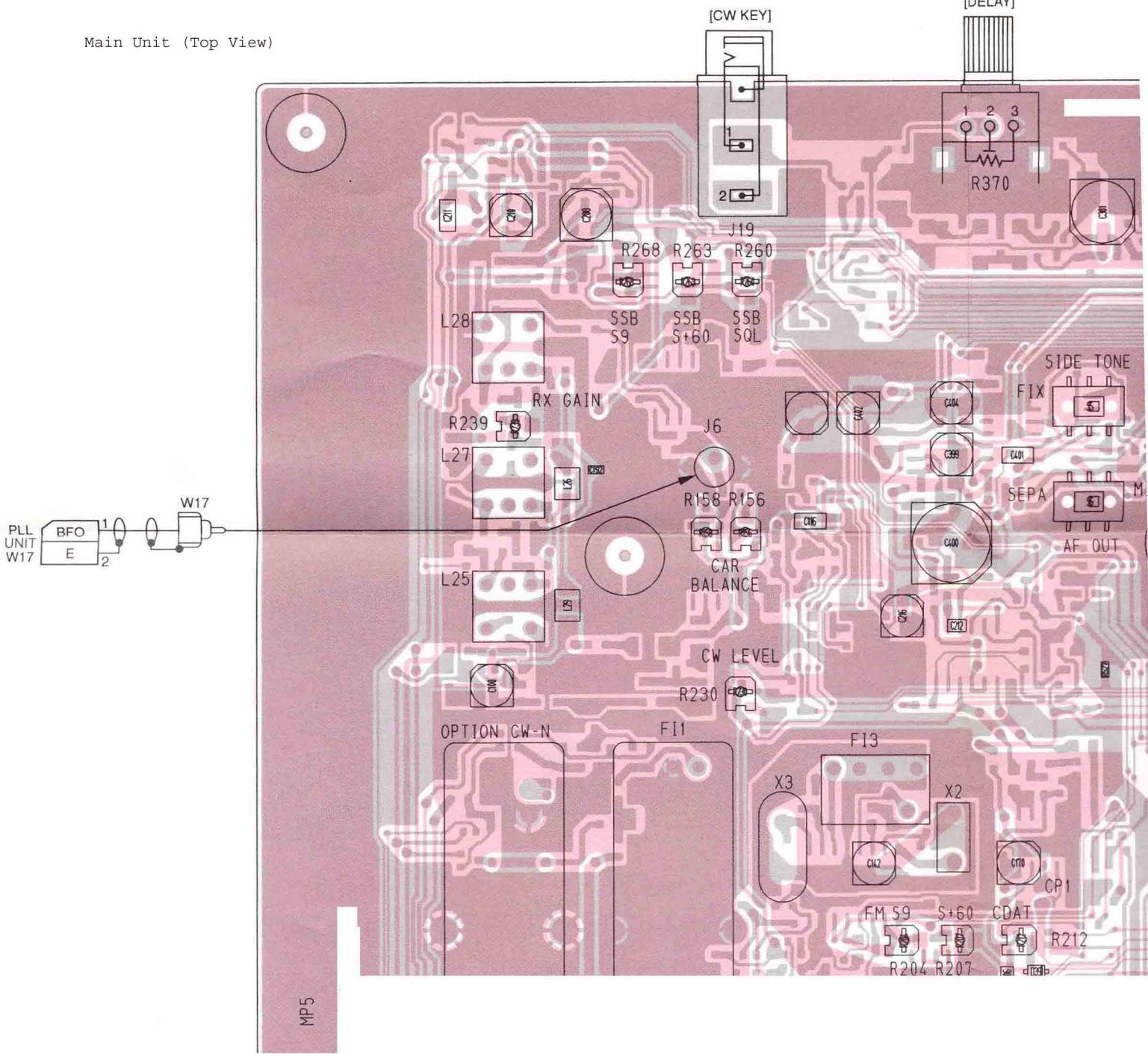
P2	-5	KEYC	6
	KEYC	GND	
		/FM9	
		+9	1
		13.8	
		PLL UNIT J2	

W6	TXS
	M+I
	13.3
	13.3
	13.3

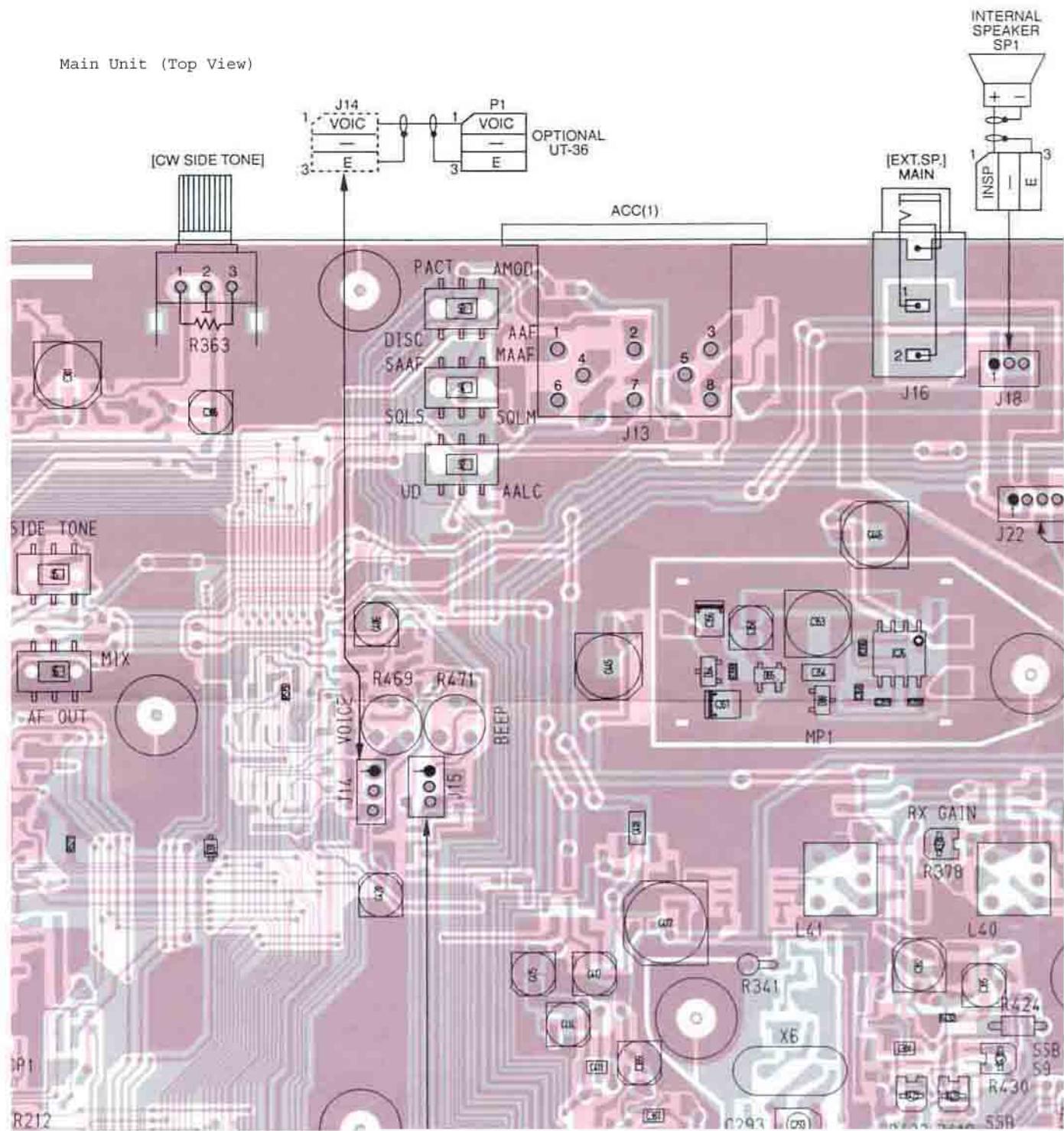
Main Unit (Top View)



Main Unit (Top View)

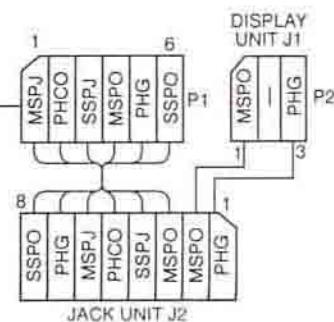
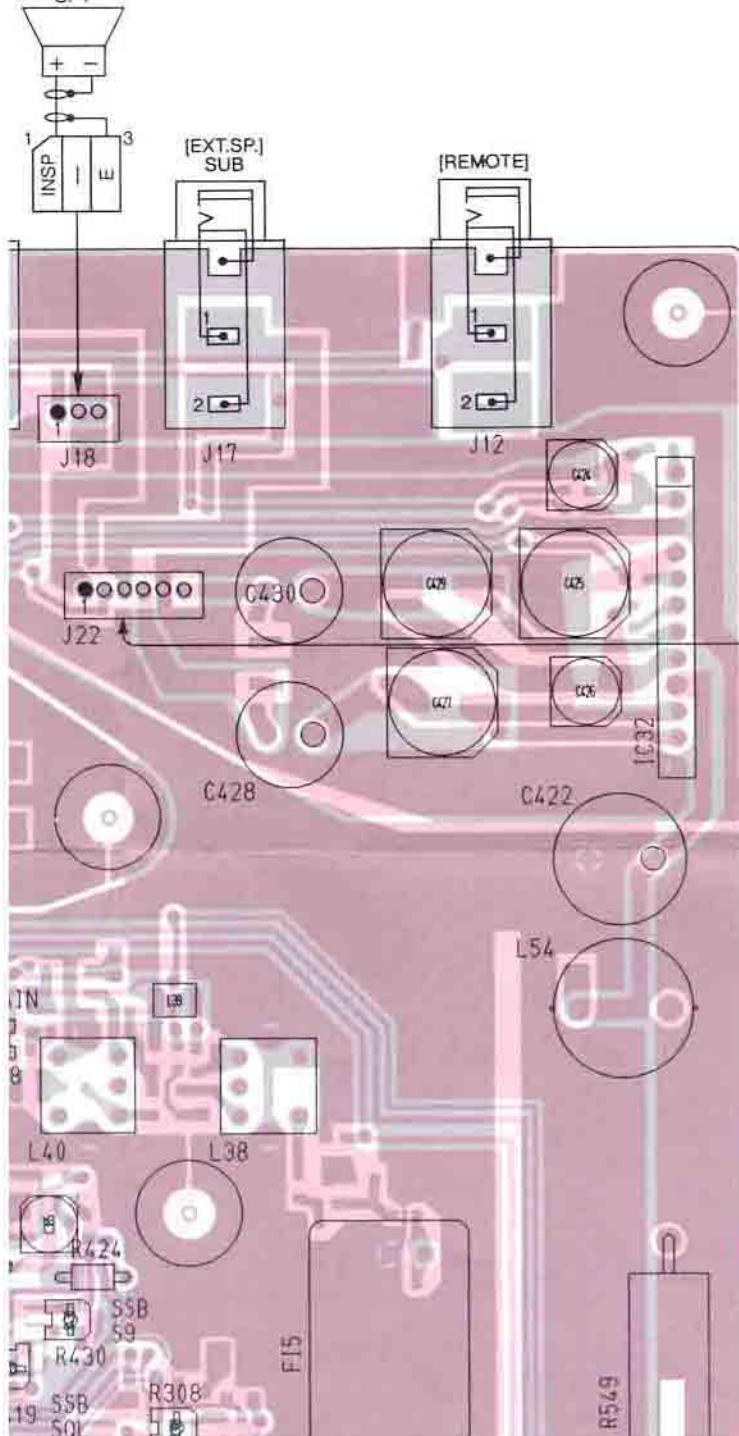


Main Unit (Top View)



INTERNAL
SPEAKER
SP1

Main Unit (Top View)



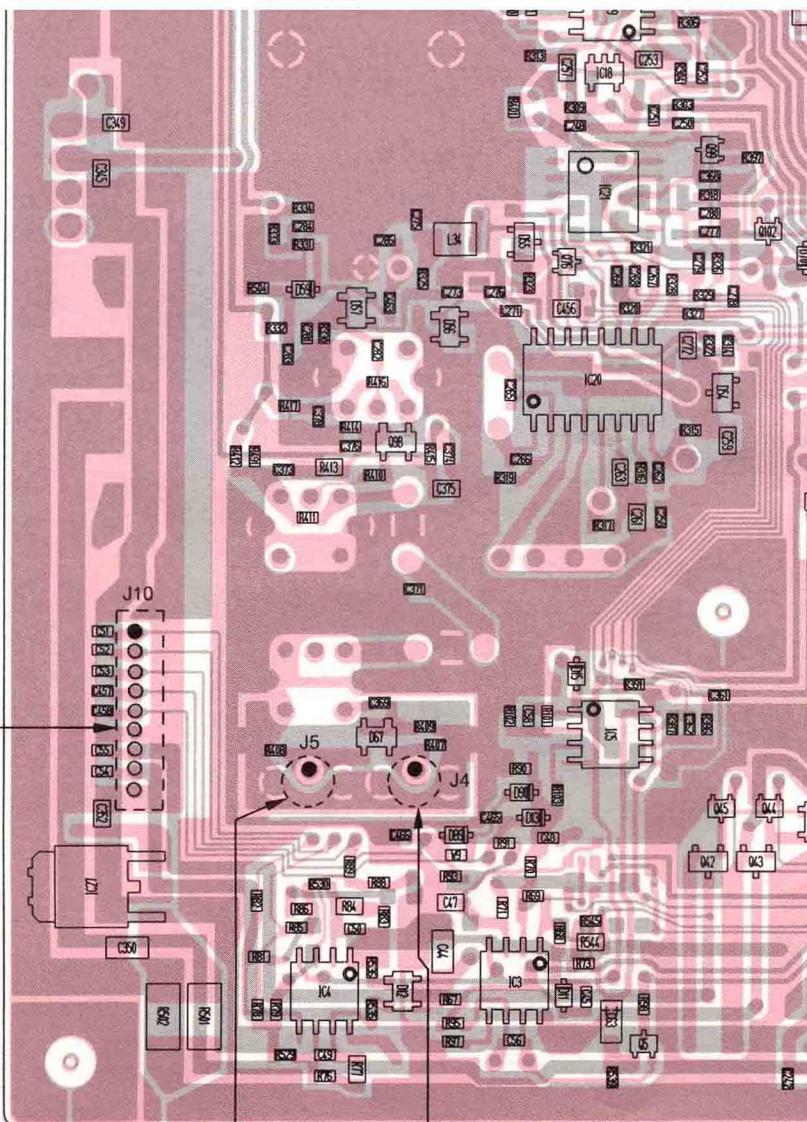
Main Unit
Bottom

PA-A
UNIT J1

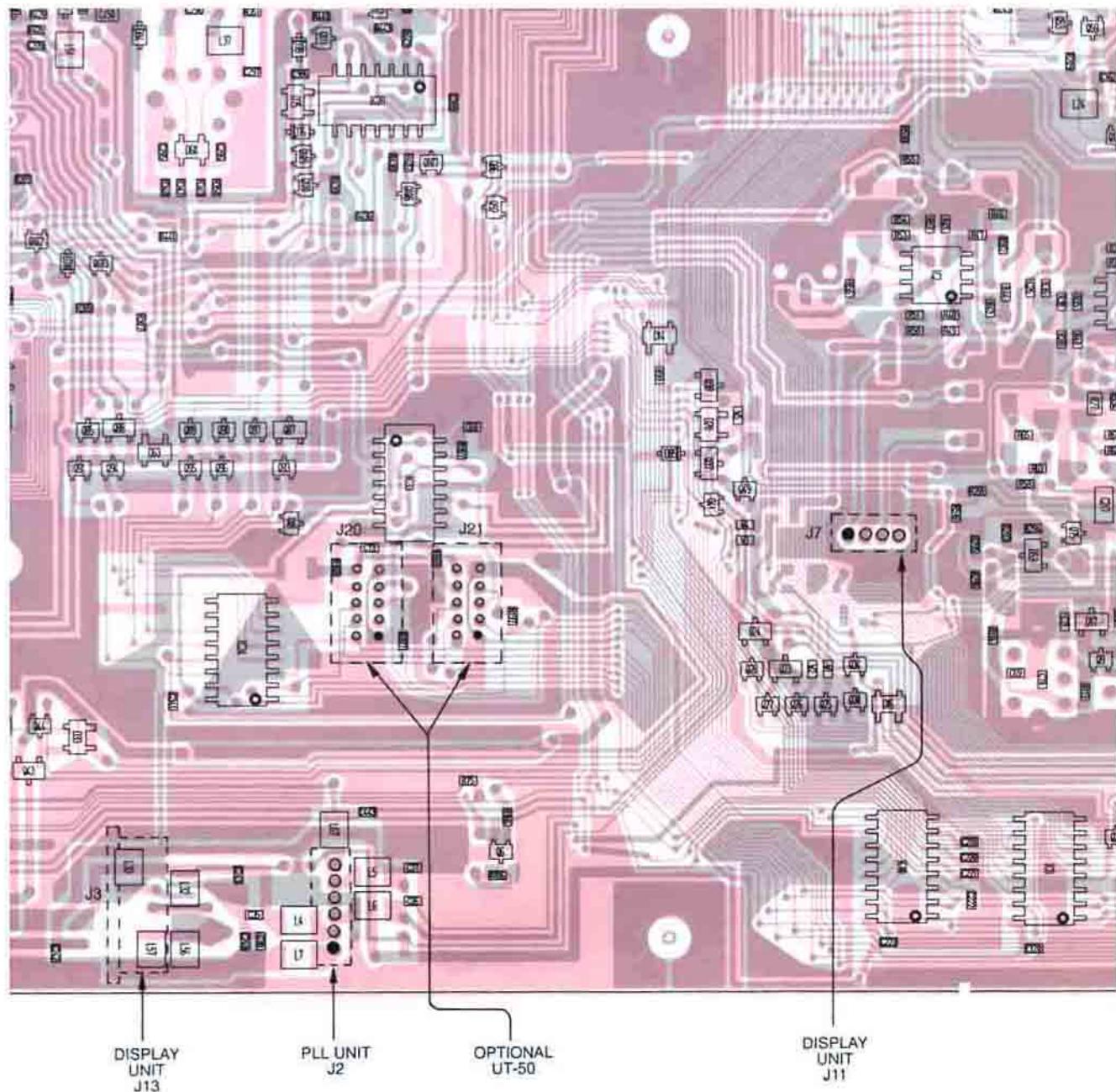
PA-B
UNIT J1

RF-B
UNIT
J2

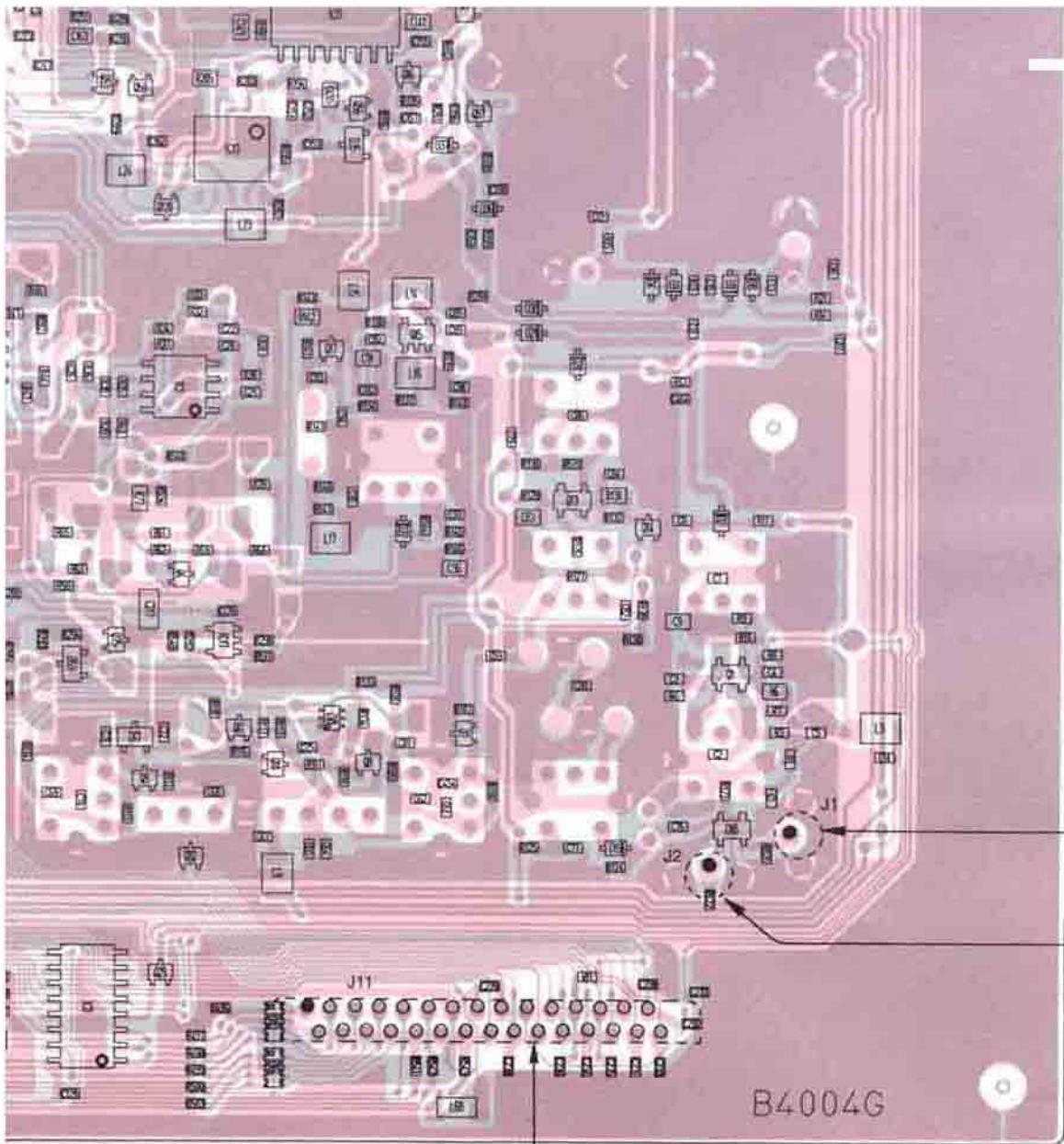
RF-A
UNIT
J2



Main Unit Bottom



Main Unit Bottom



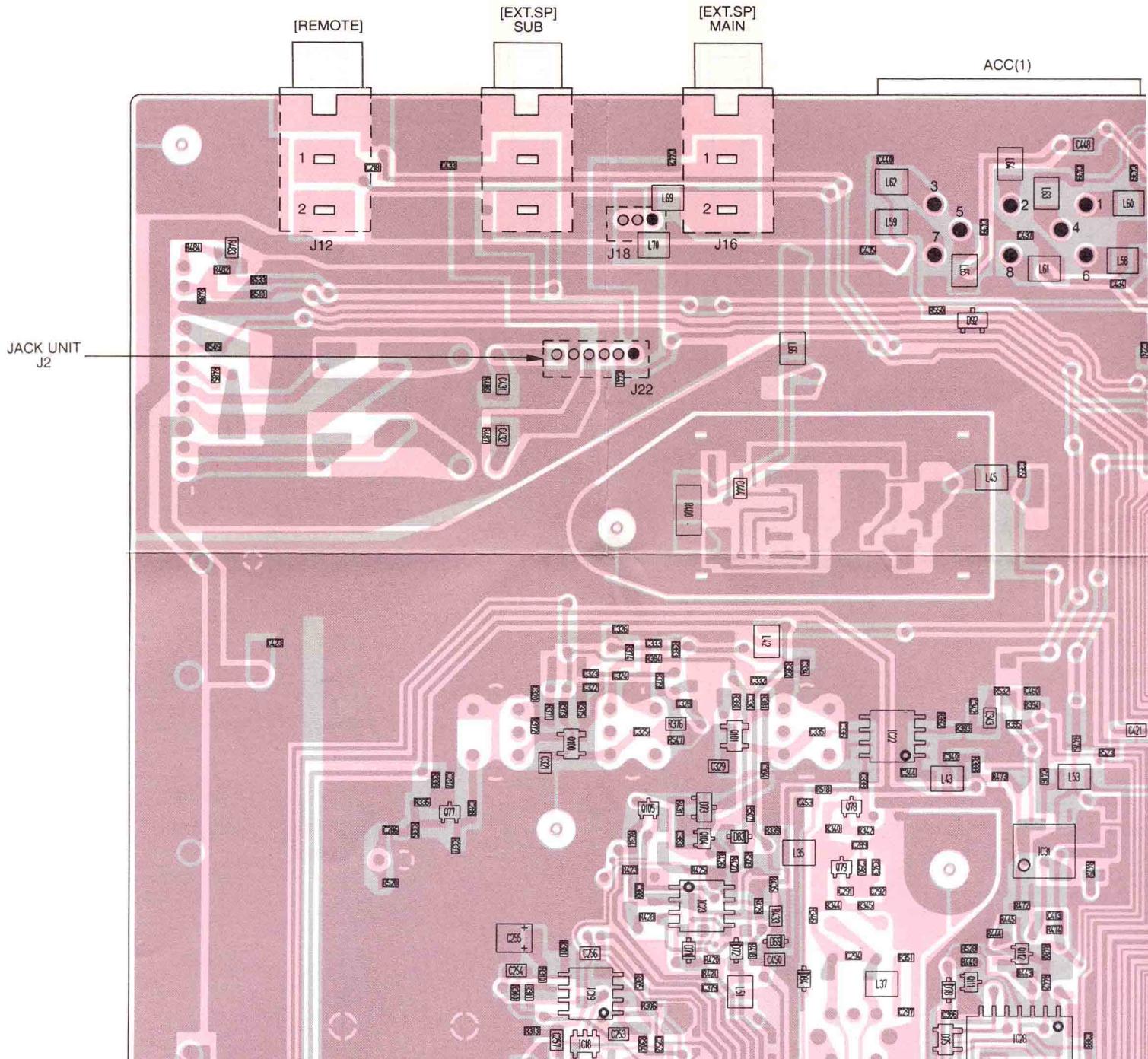
RF-A
UNIT
J1

RF-B
UNIT
J1

B4004G

DISPLAY UNIT
J12

MAIN UNIT (BOTTOM VIEW)

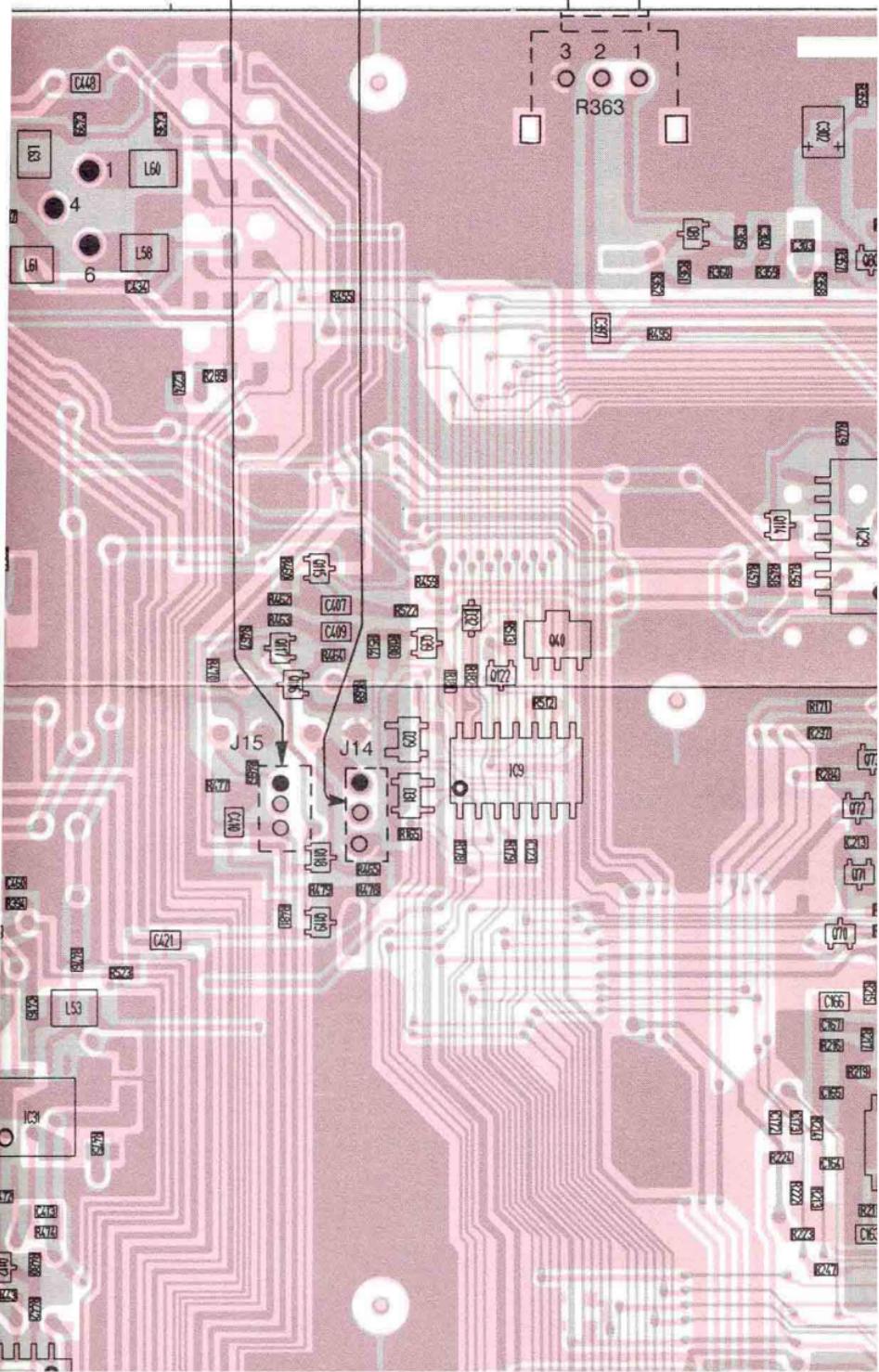


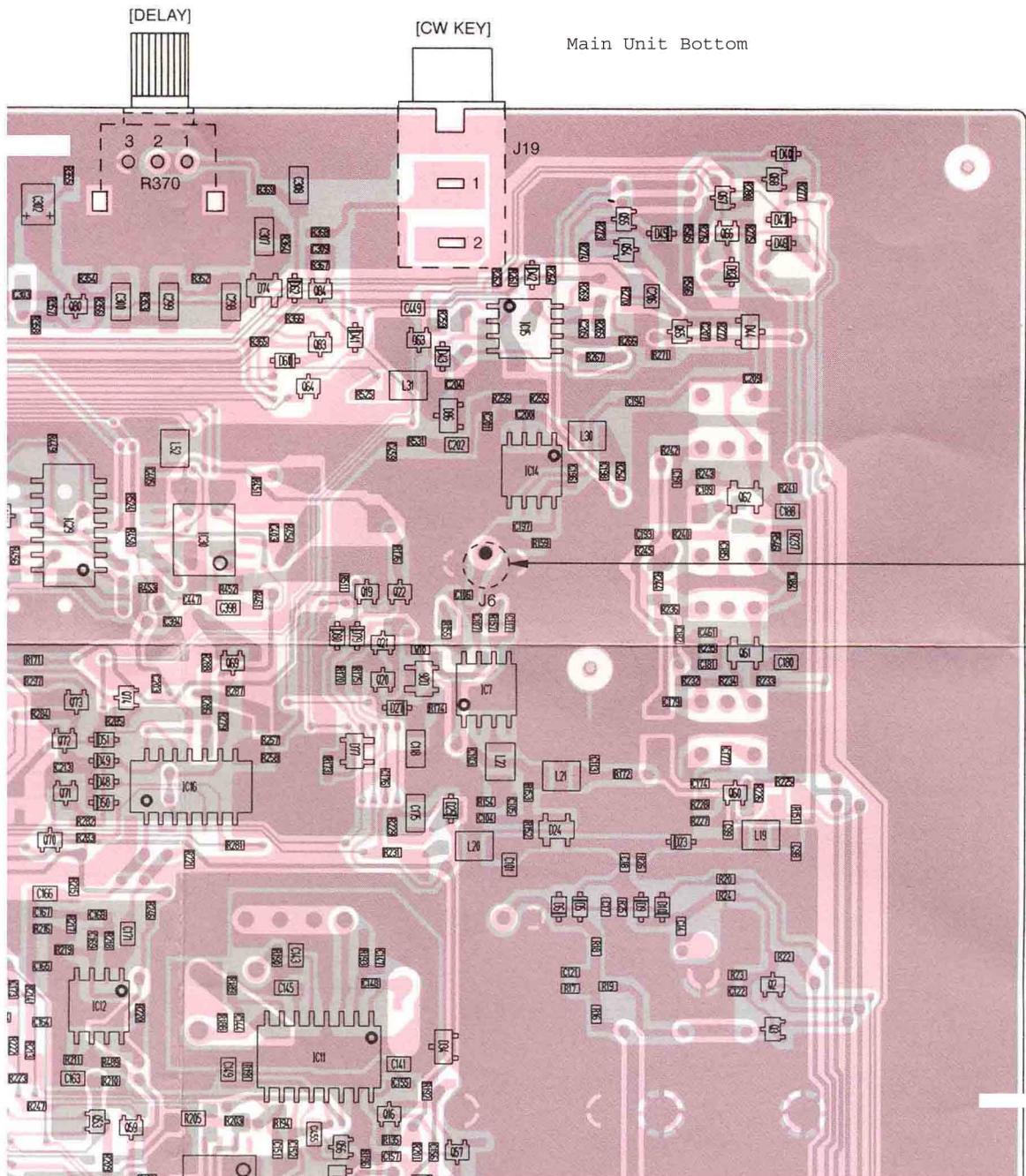
DISPLAY
UNIT
J11

OPTIONAL
UT-36

[CW SIDE TONE]

Main Unit
Bottom

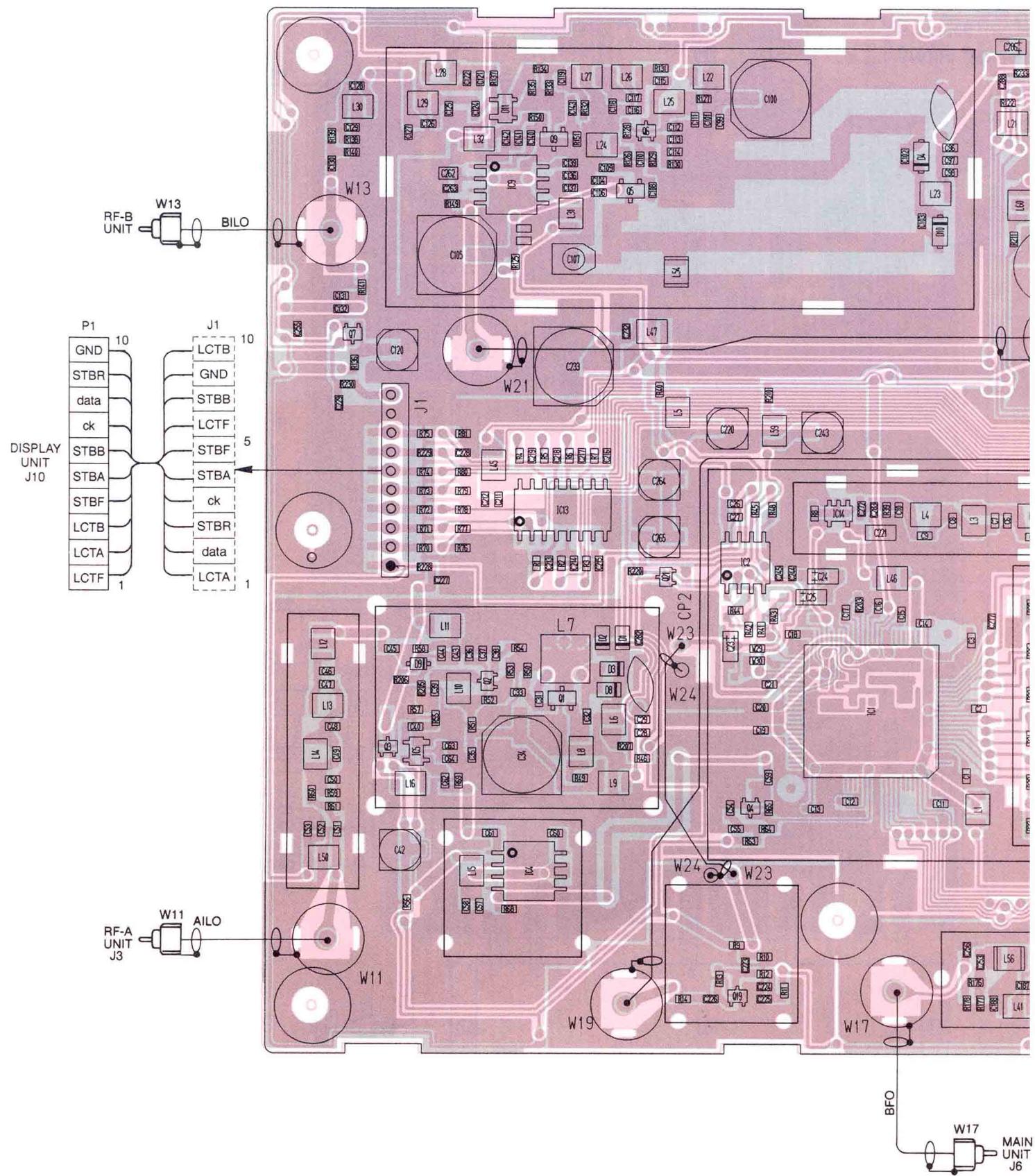




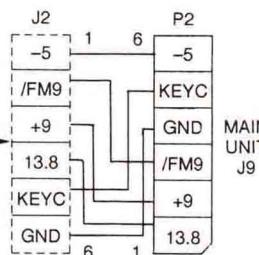
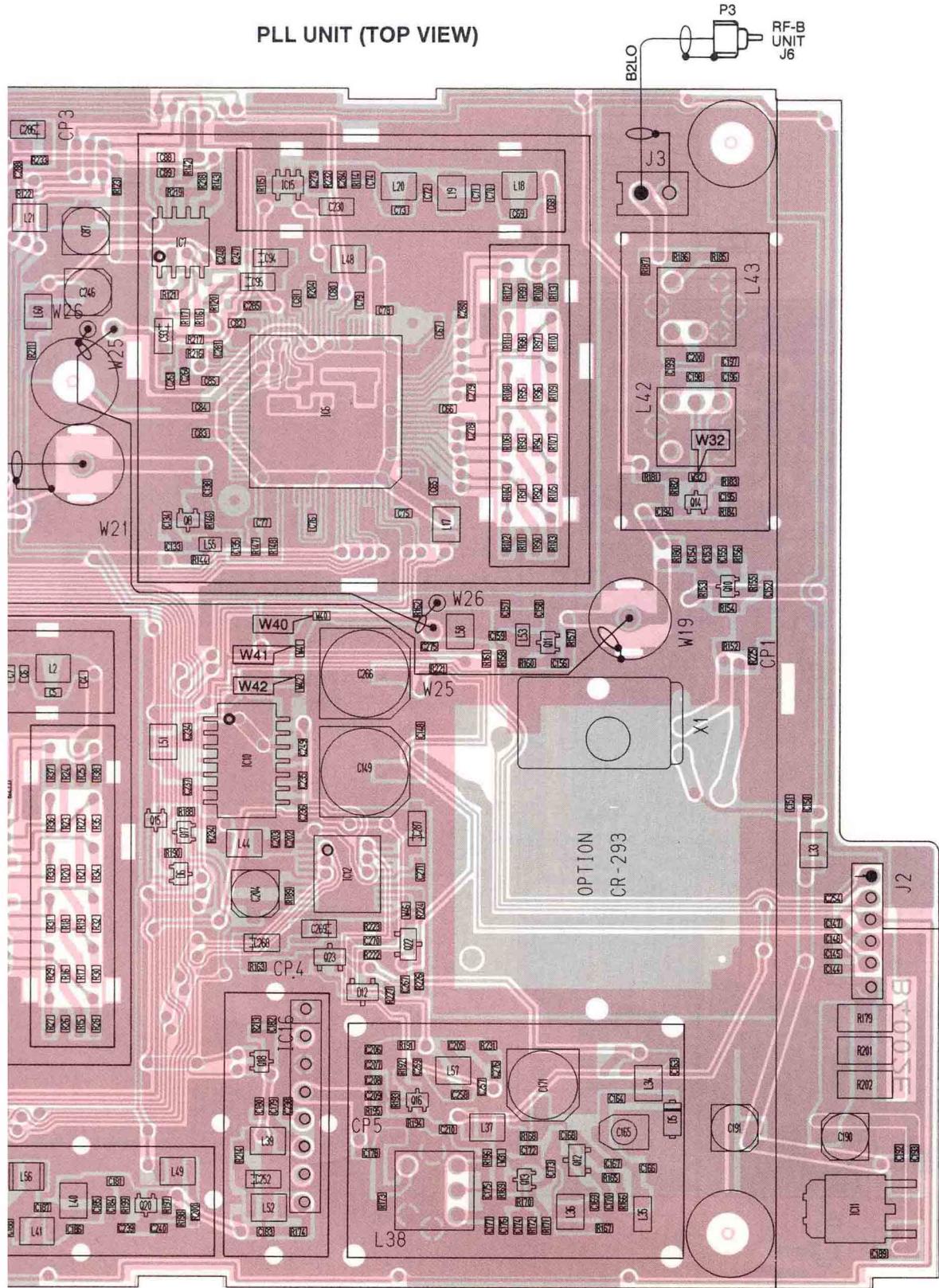
Main Unit Bottom

9-3 PLL UNIT

PLL UNIT (TOP VIEW)

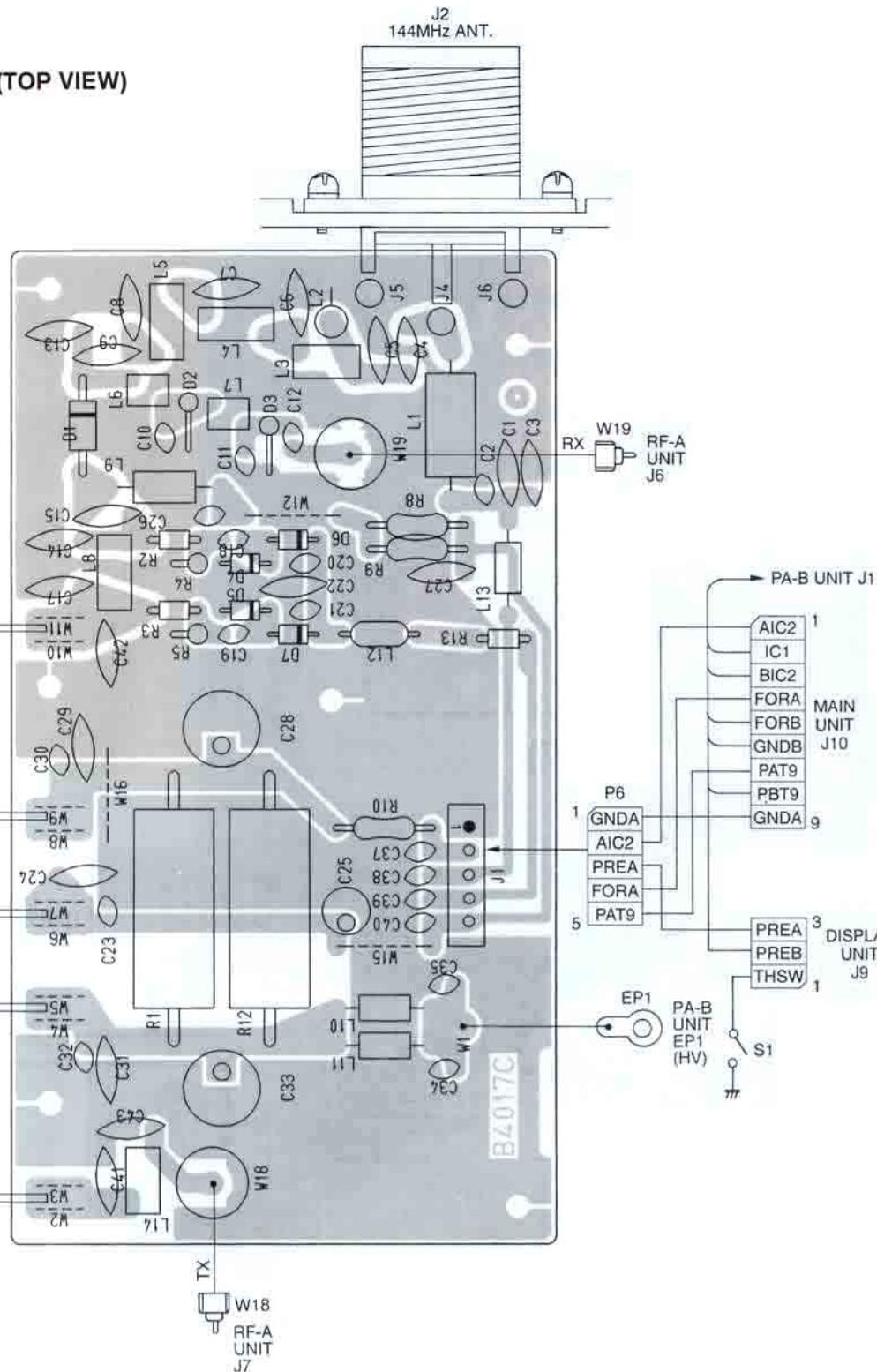


PLL UNIT (TOP VIEW)

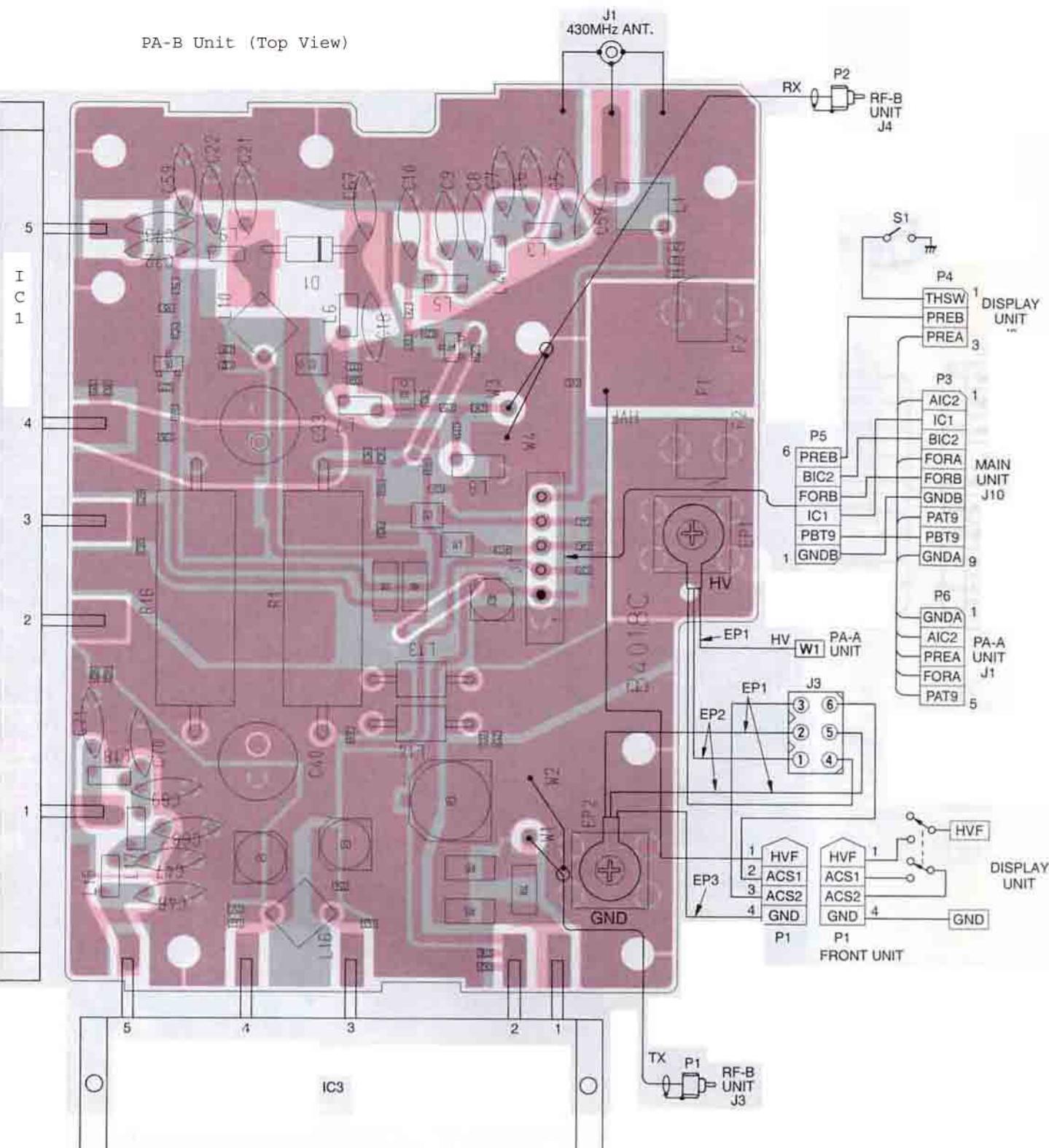


9-4 PA-A AND PA-B UNITS

PA-A UNIT (TOP VIEW)

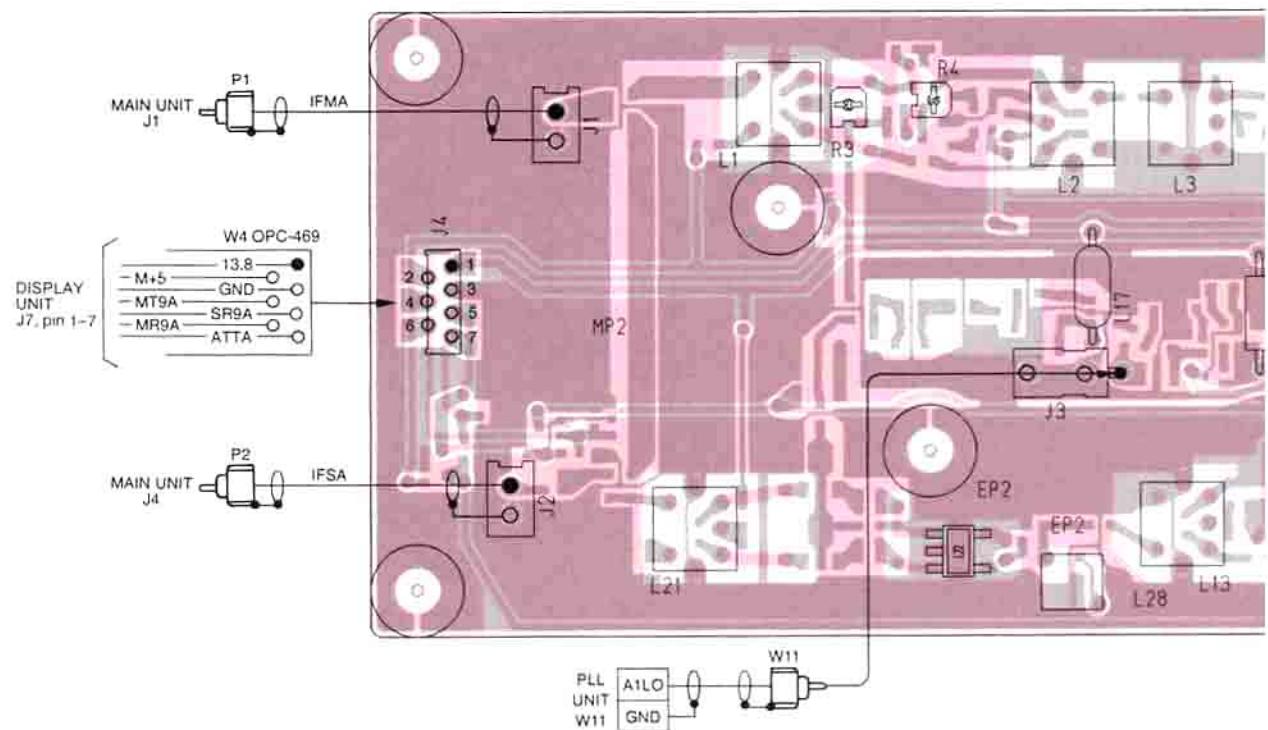


PA-B Unit (Top View)

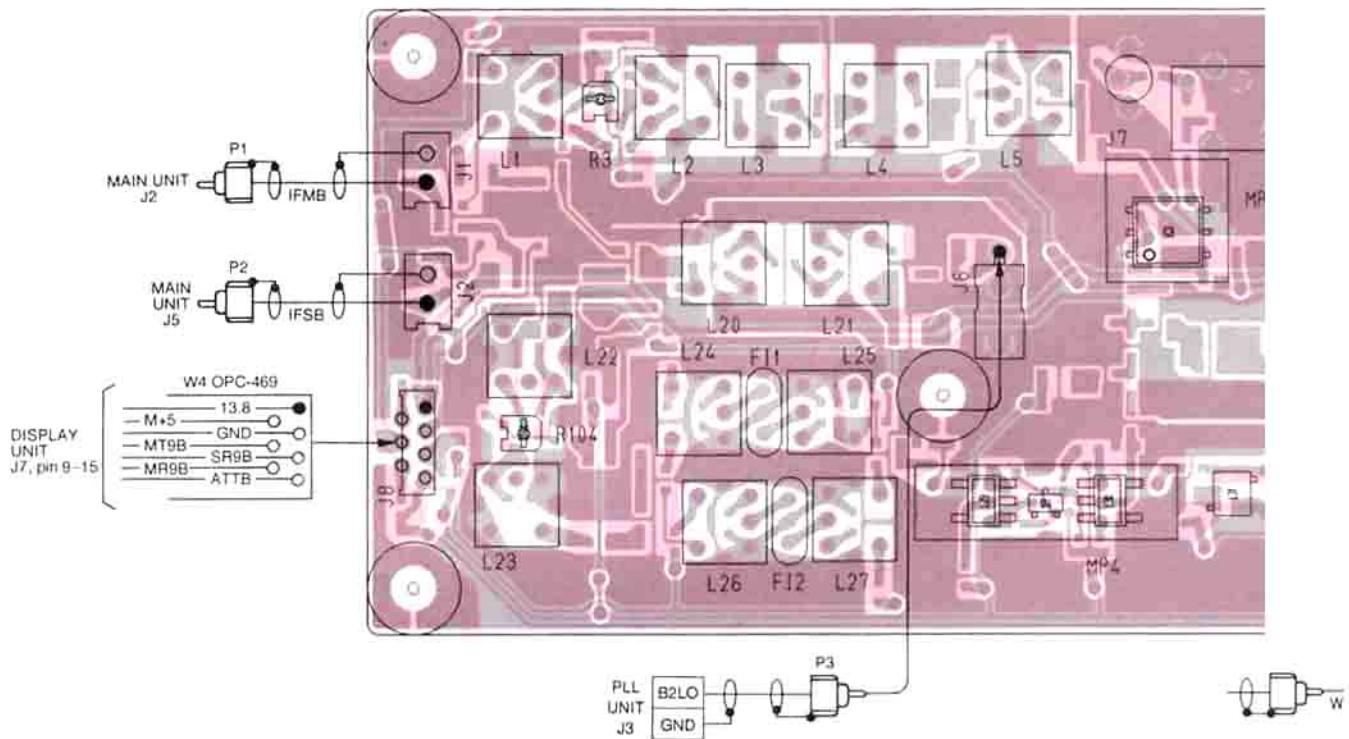


9-5 RF-A AND RF-B UNITS

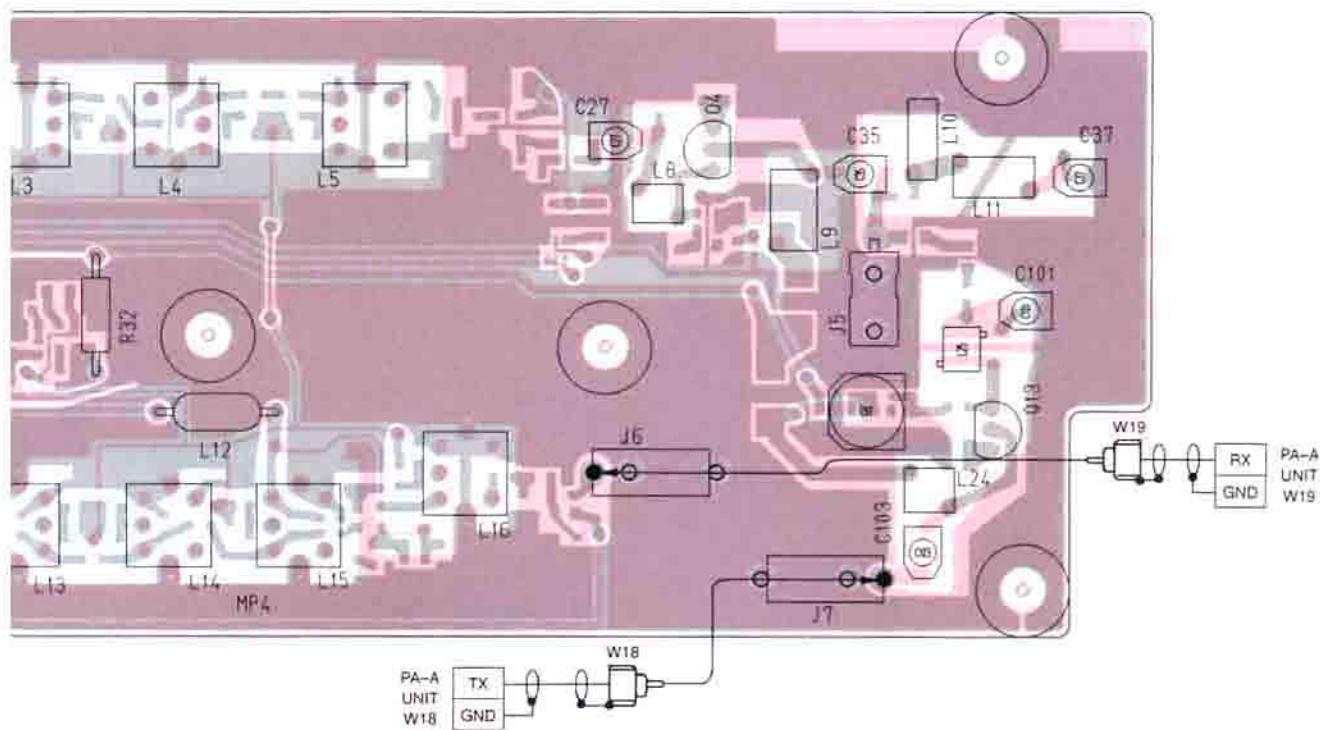
• RF-A UNIT (TOP VIEW)



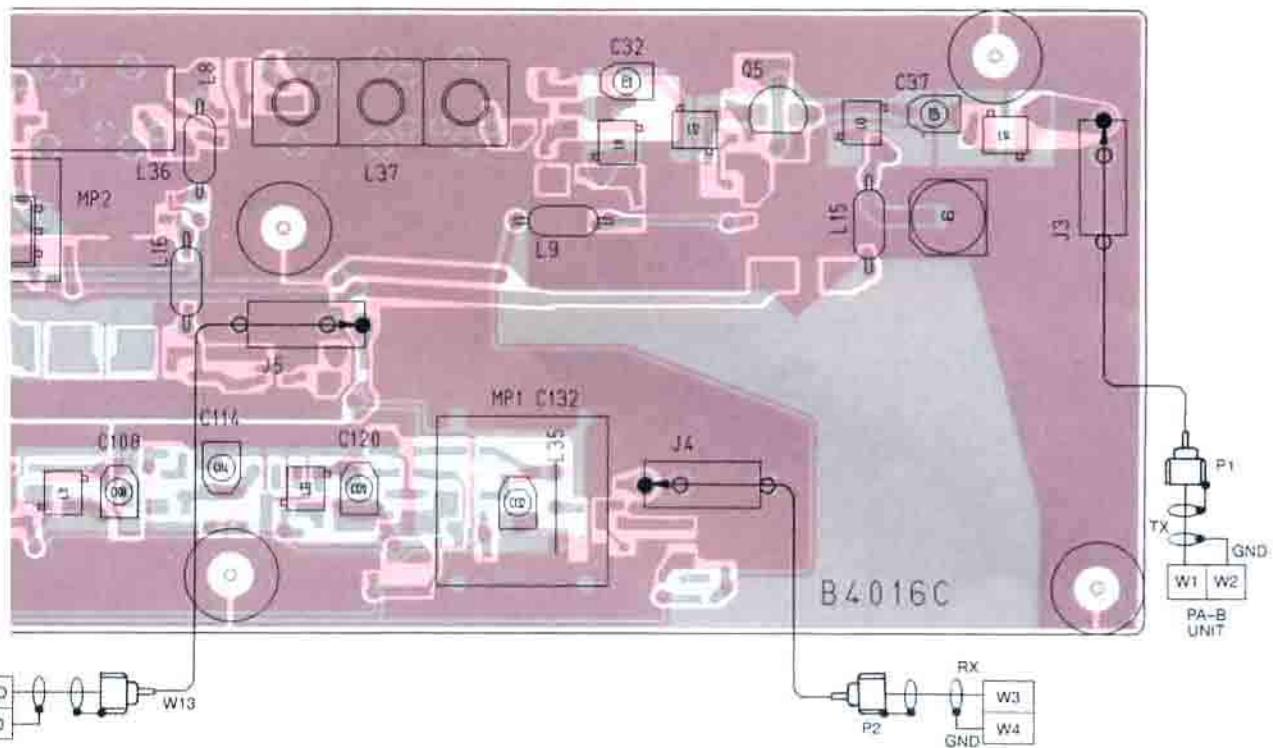
• RF-B UNIT (TOP VIEW)



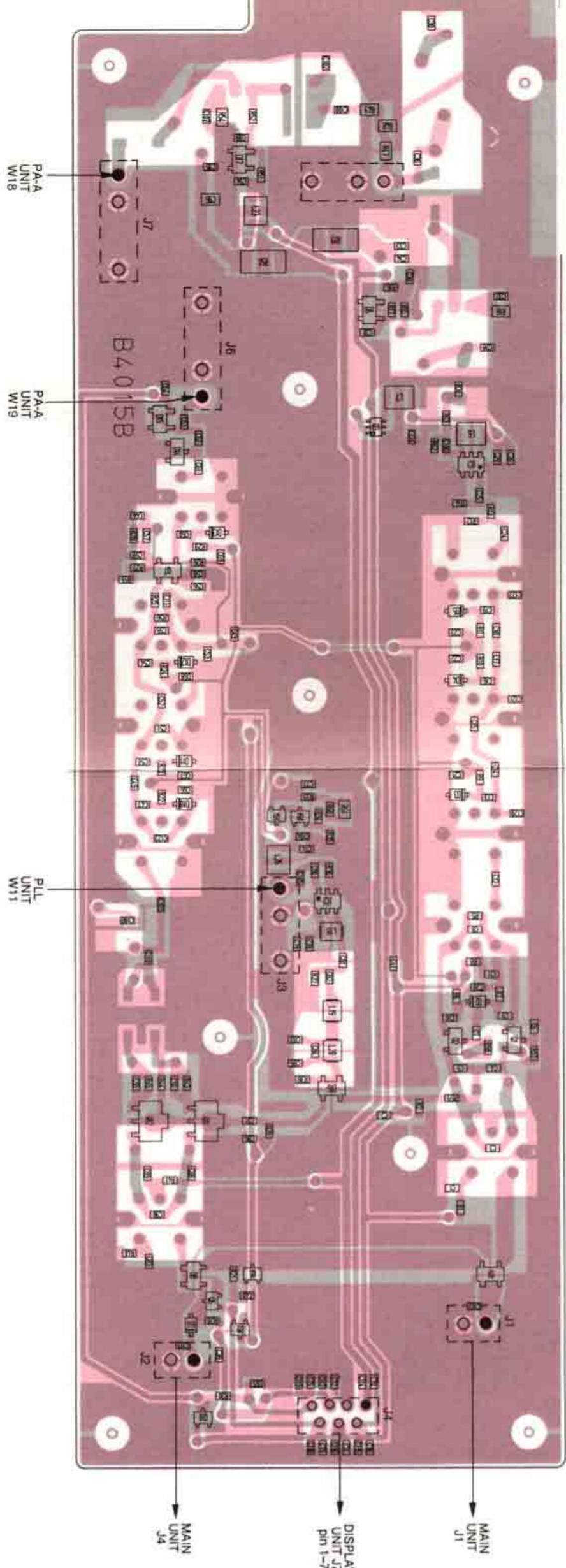
RF-A UNIT TOP



RF-B UNIT TOP



RF-A UNIT (BOTTOM VIEW)



RF-B UNIT (BOTTOM VIEW)

PA-B
UNIT
W1, W2

PA-B
UNIT
W3, W4

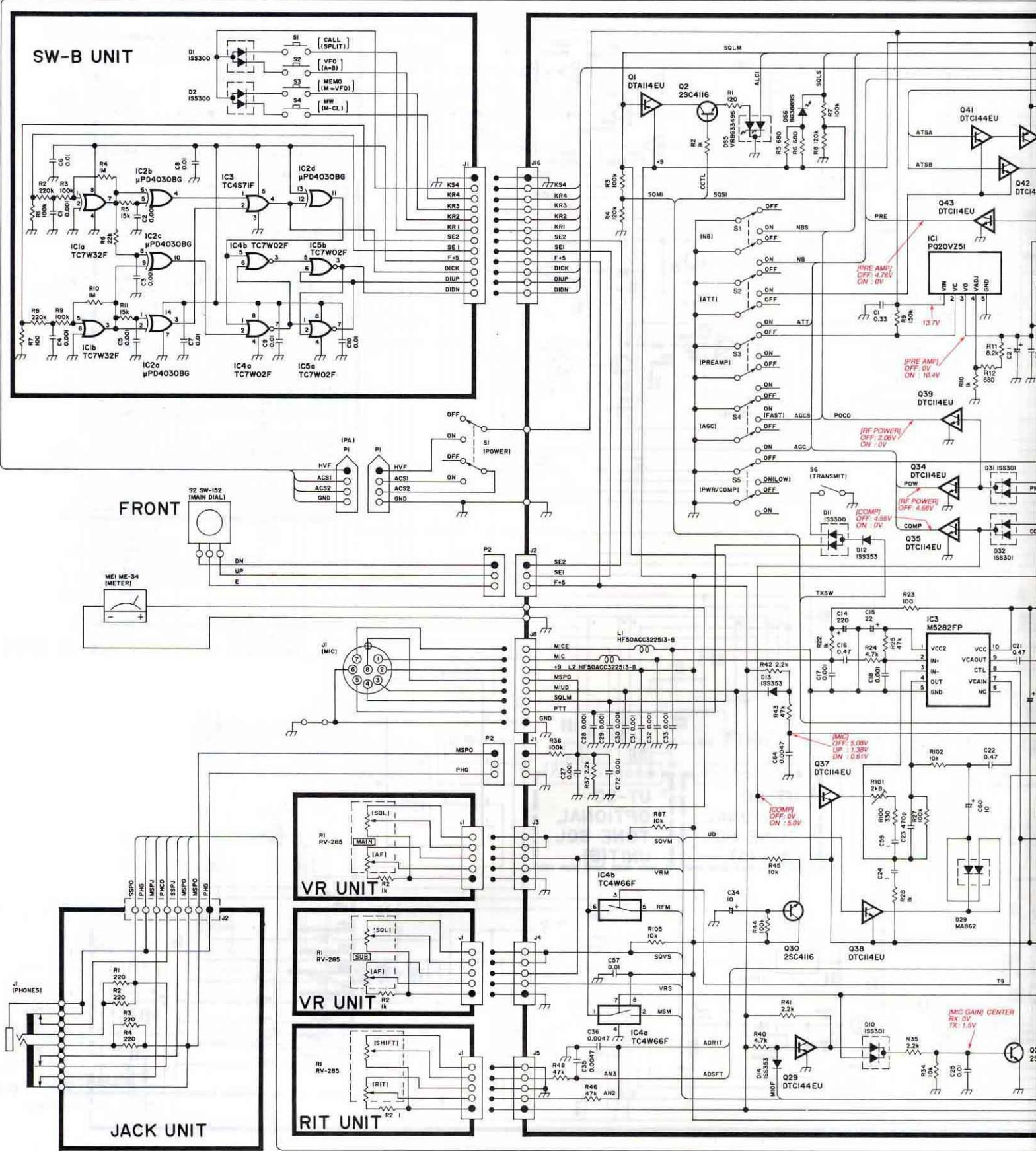
PLL
UNIT
J3

PLL
UNIT
J3

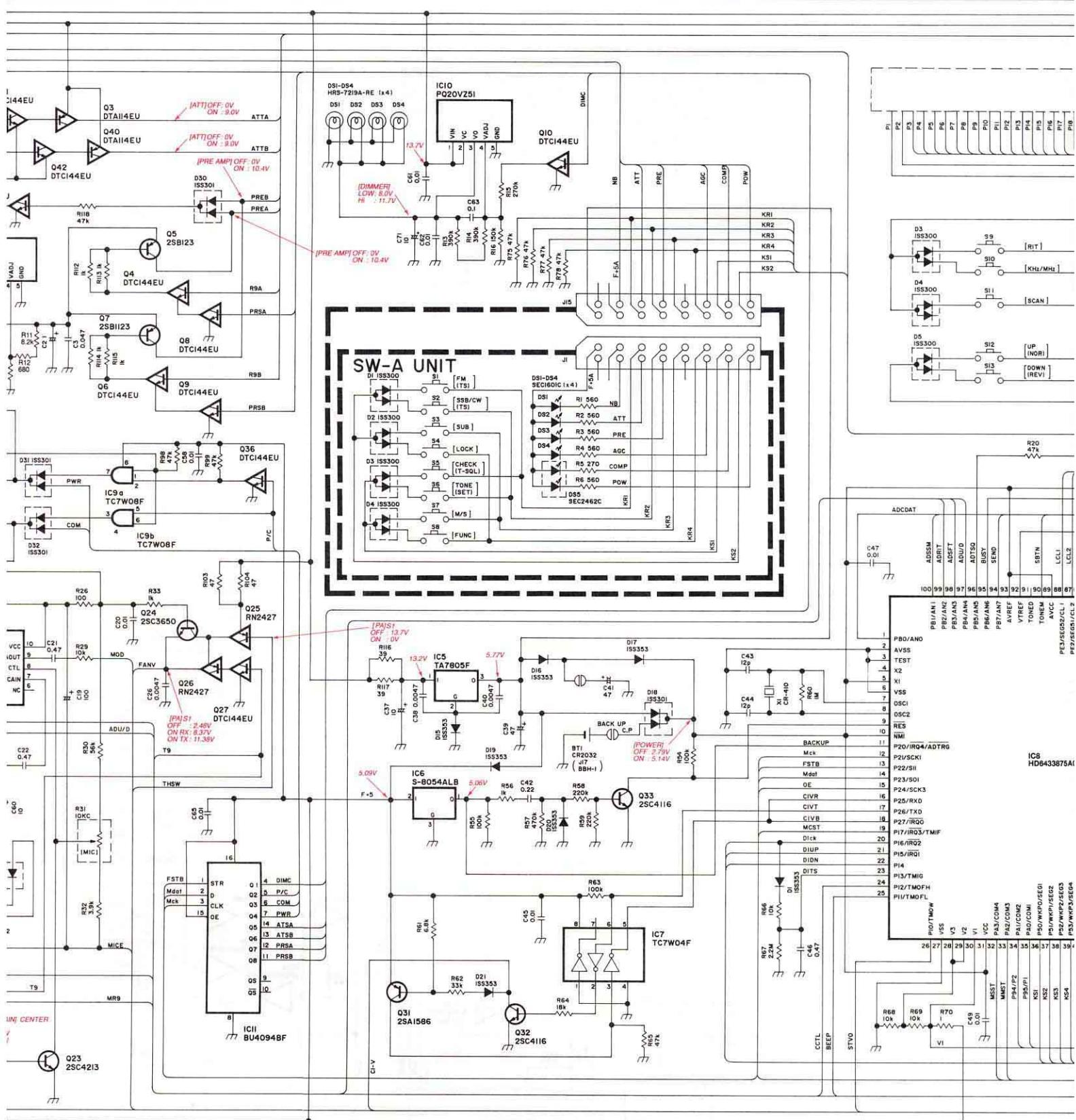
MAIN
UNIT
J5 J2

DISPLAY
UNIT
J7, pin 9-15

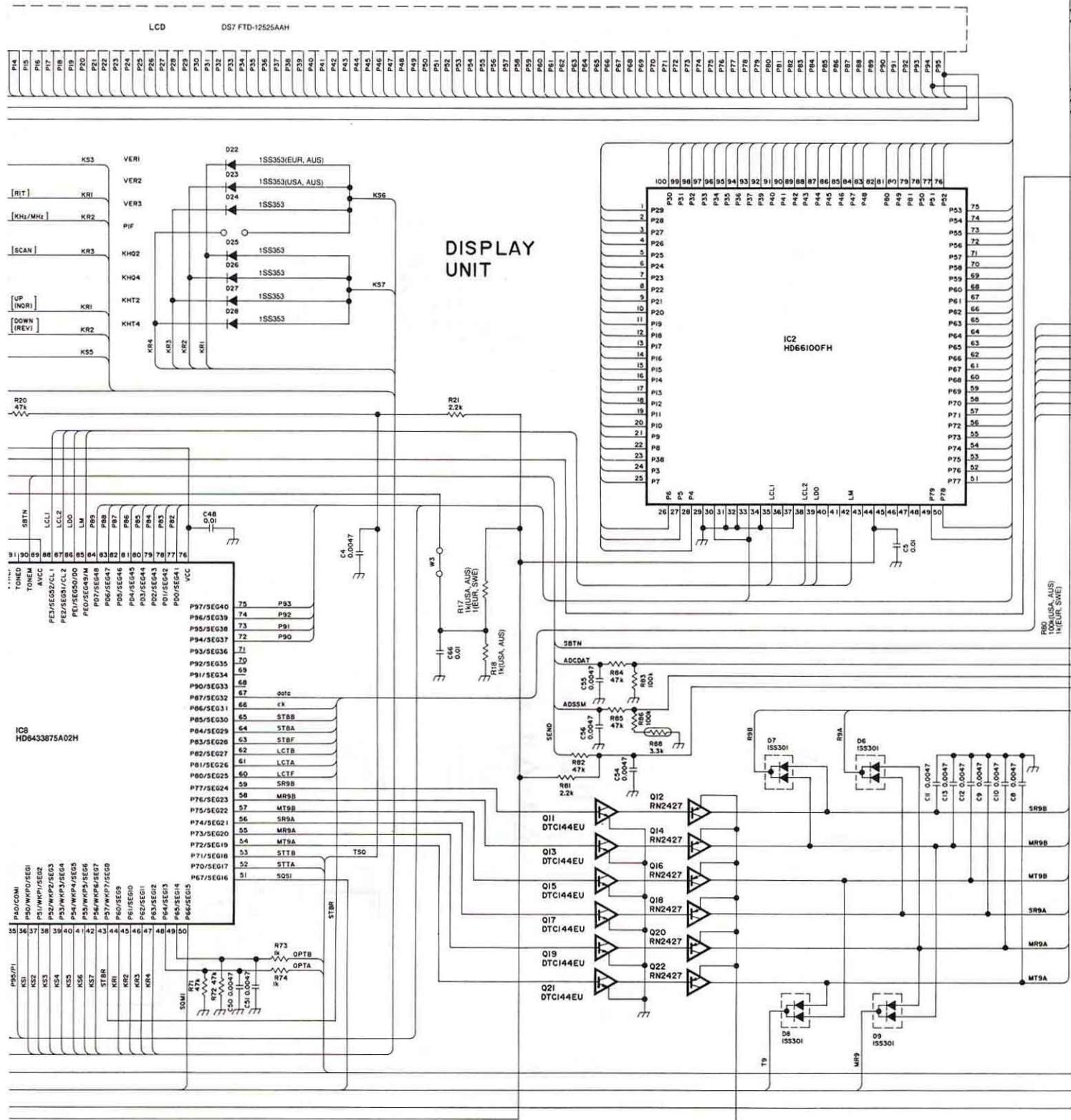
Sec. 10 Voltage Diagram



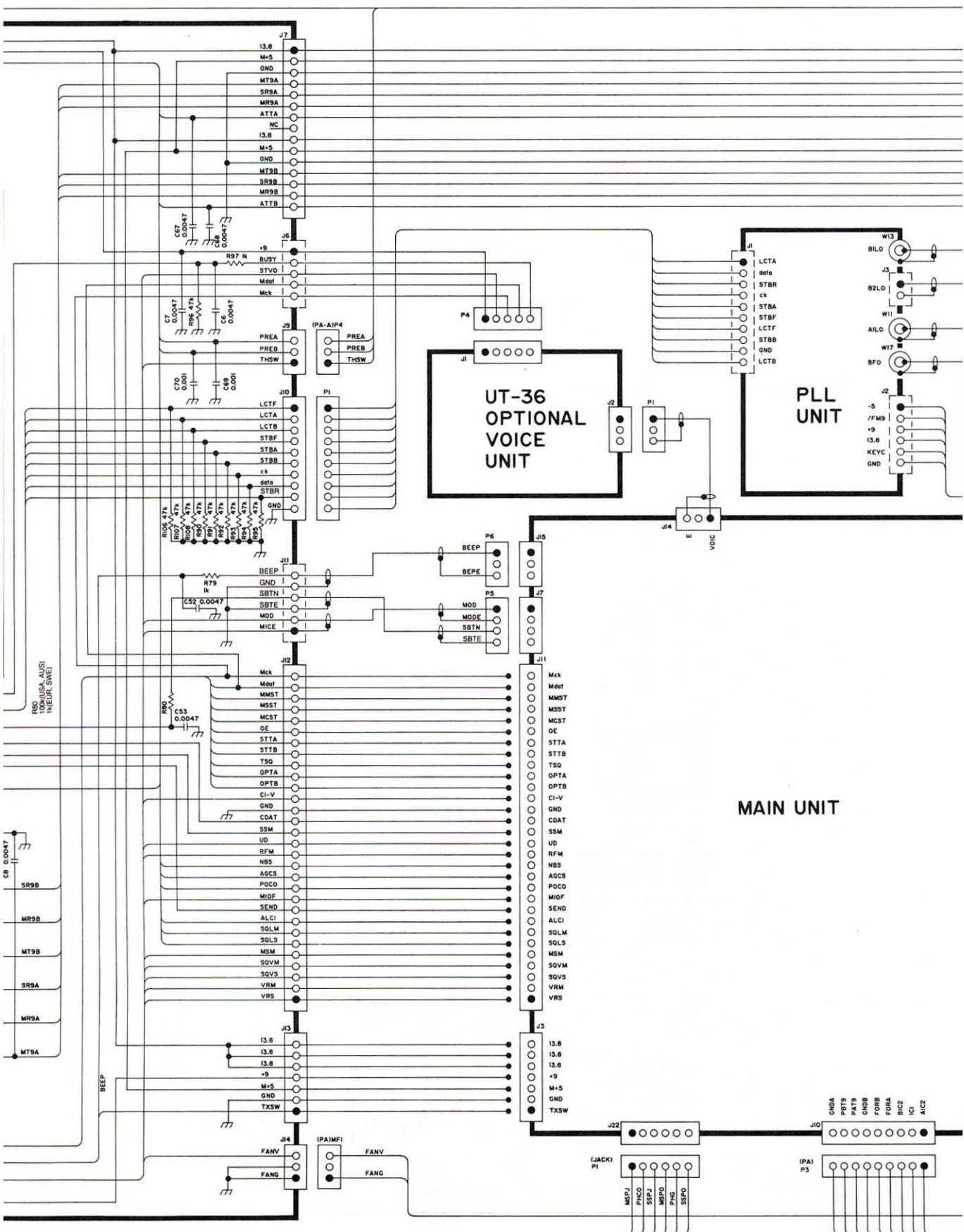
Sec. 10 Voltage Diagram



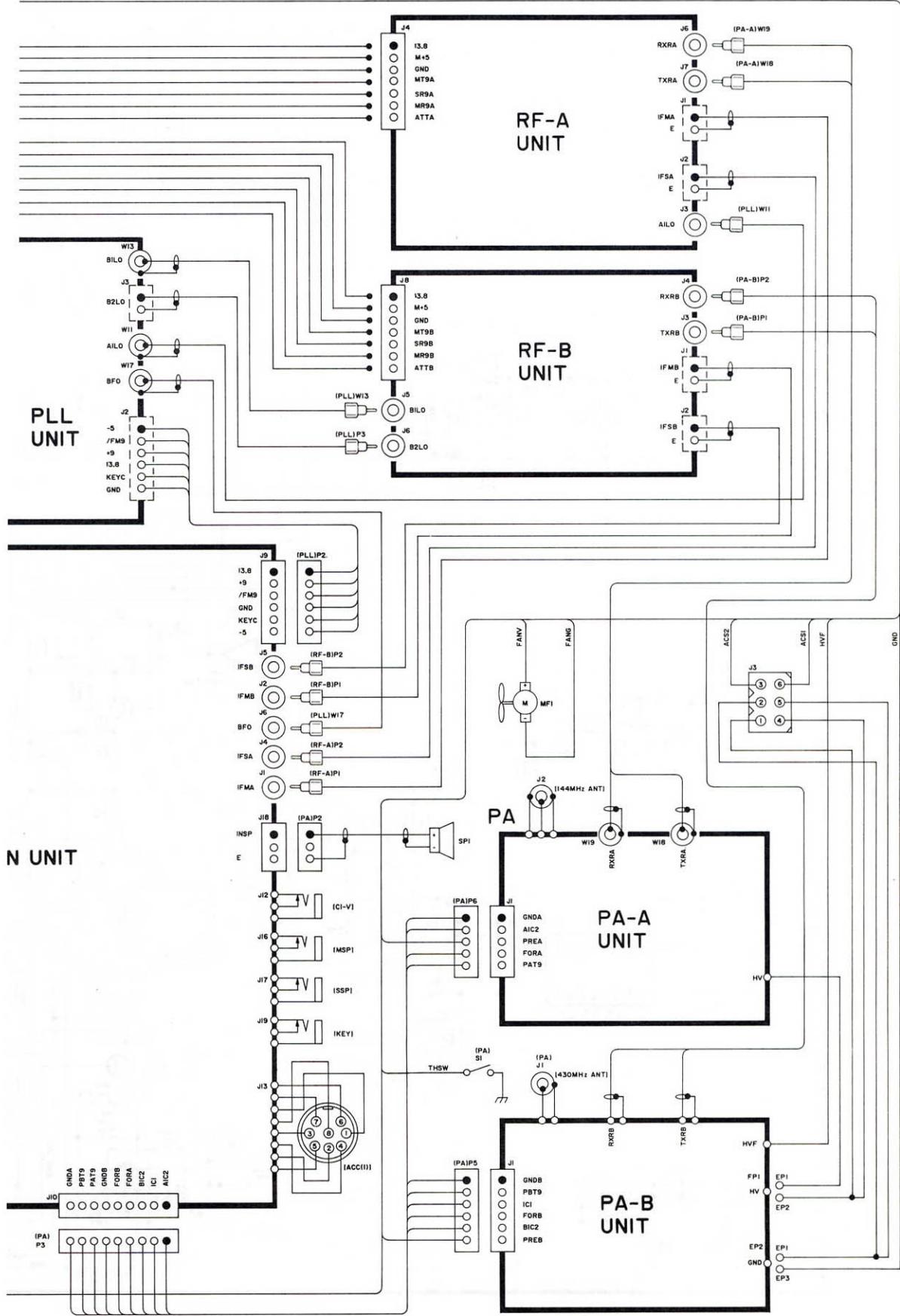
Sec. 10 Voltage Diagram



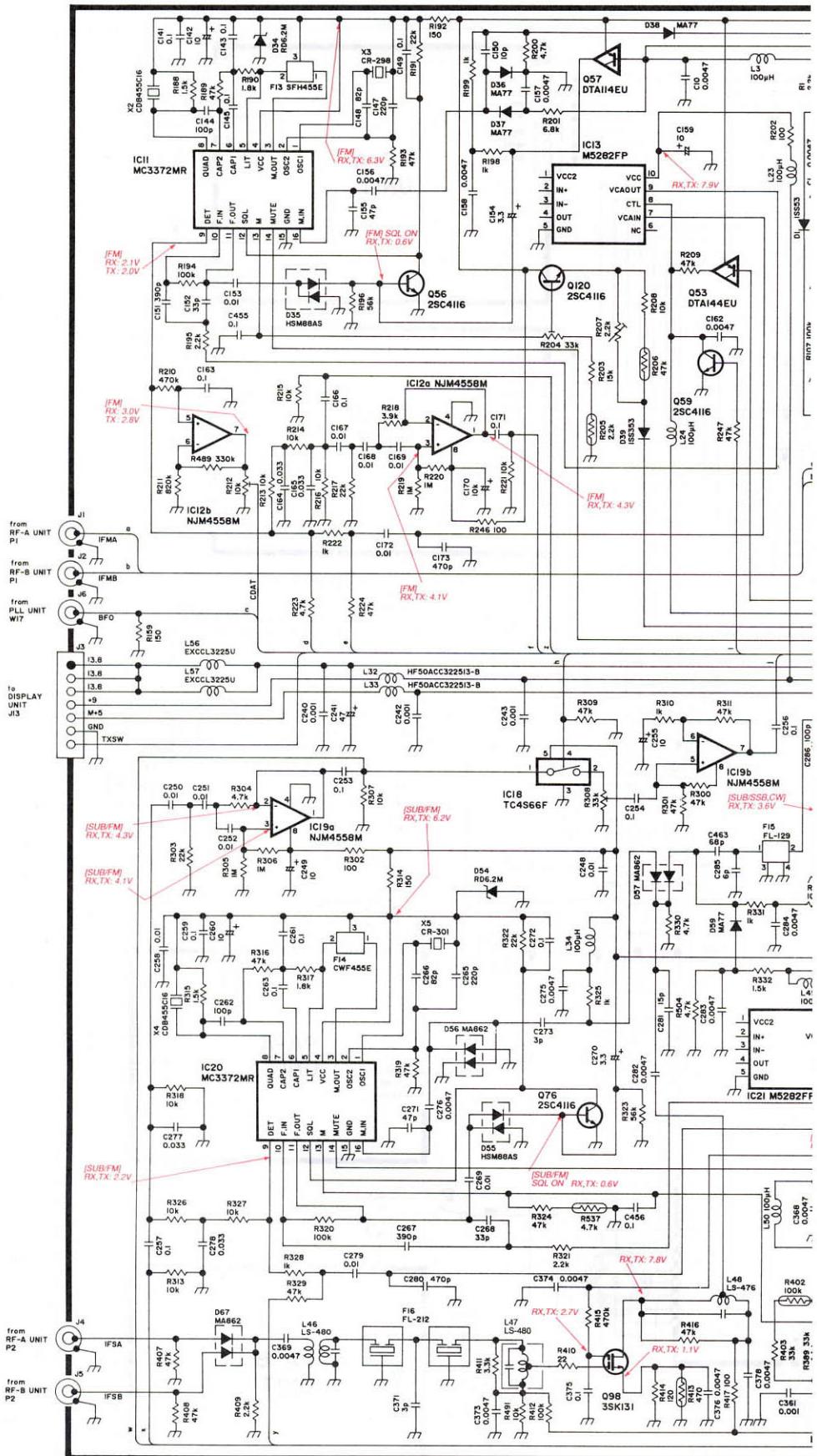
Sec. 10 Voltage Diagram



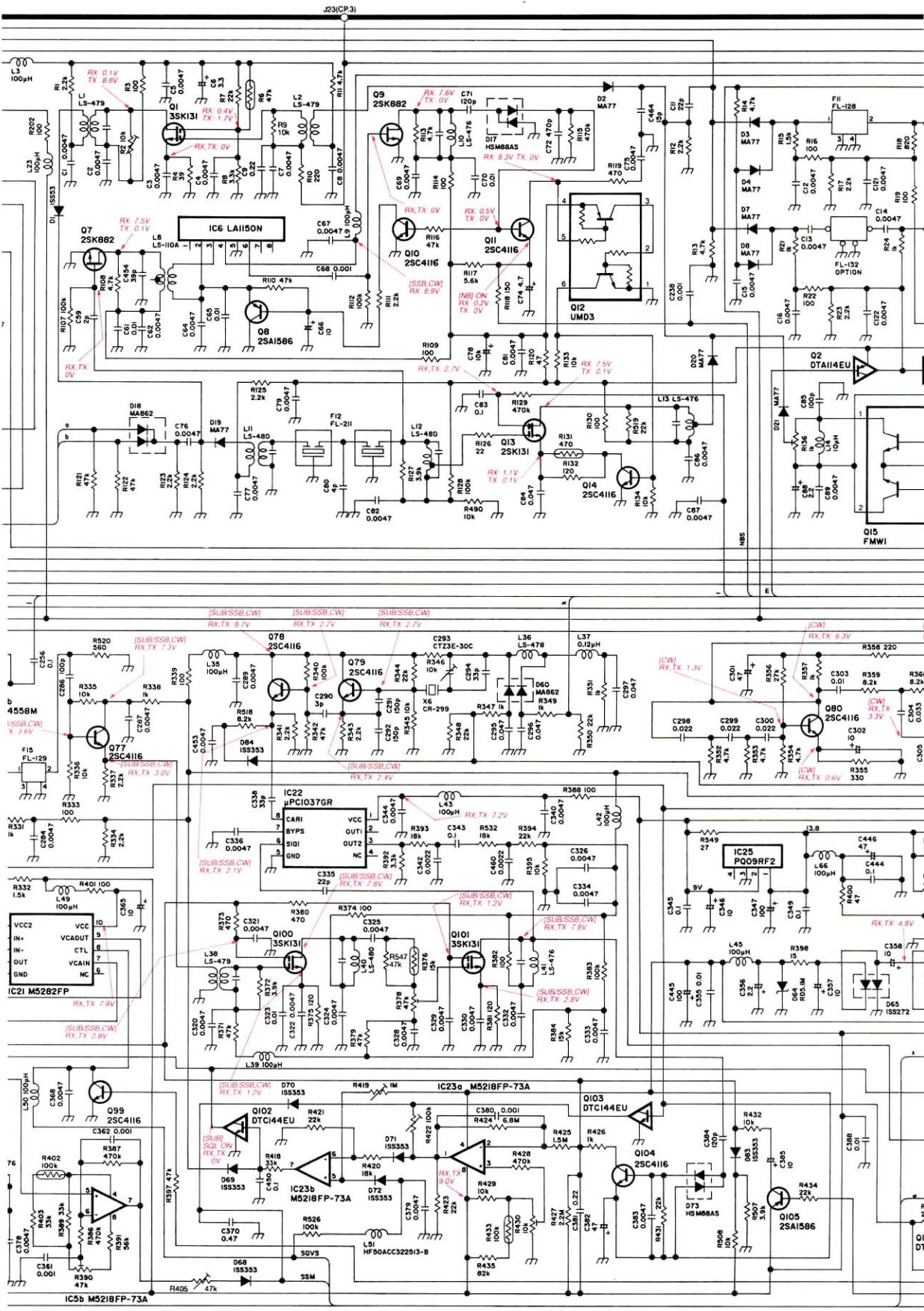
Sec. 10 Voltage Diagram



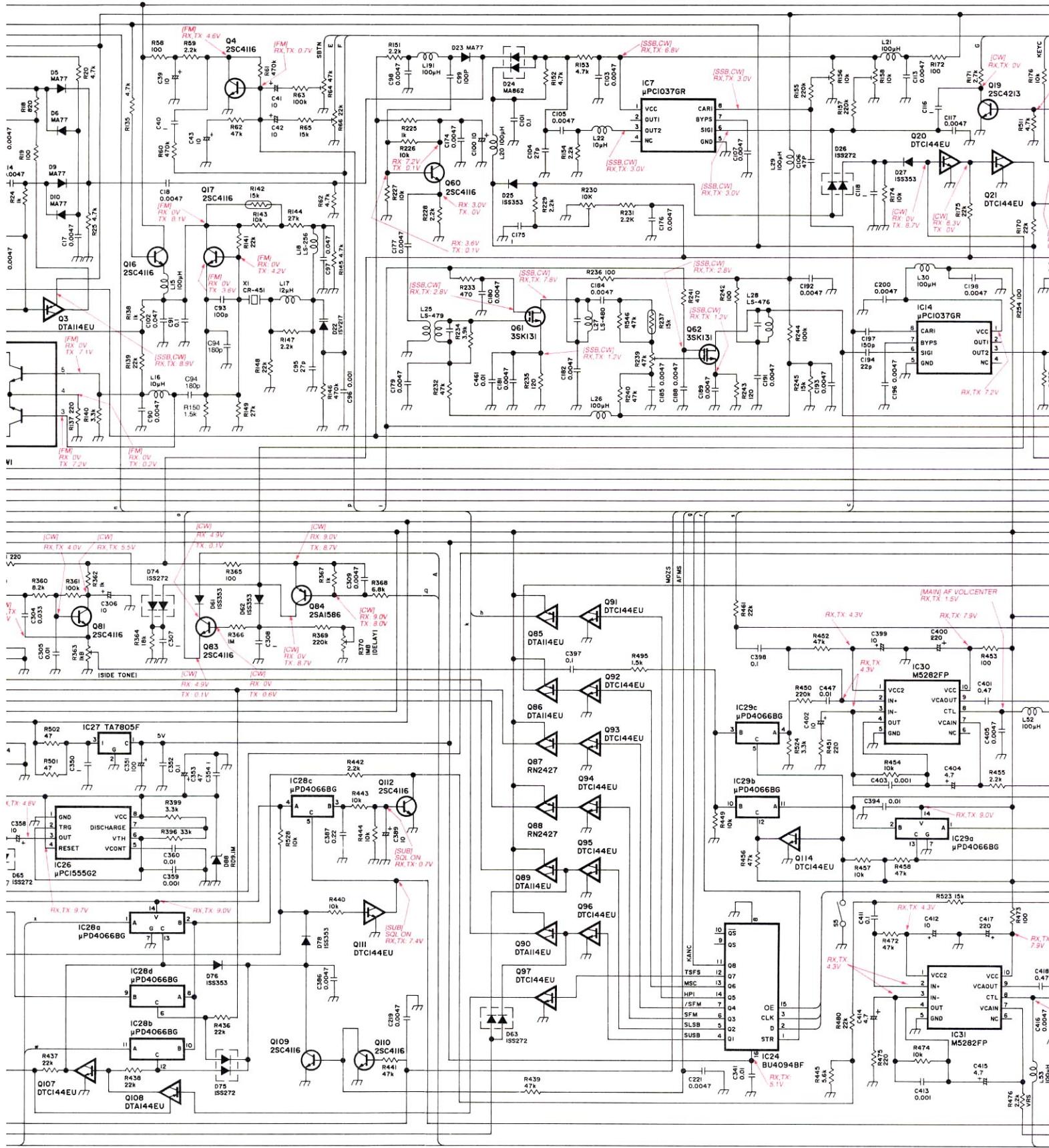
Sec. 10-2 Voltage Diagram



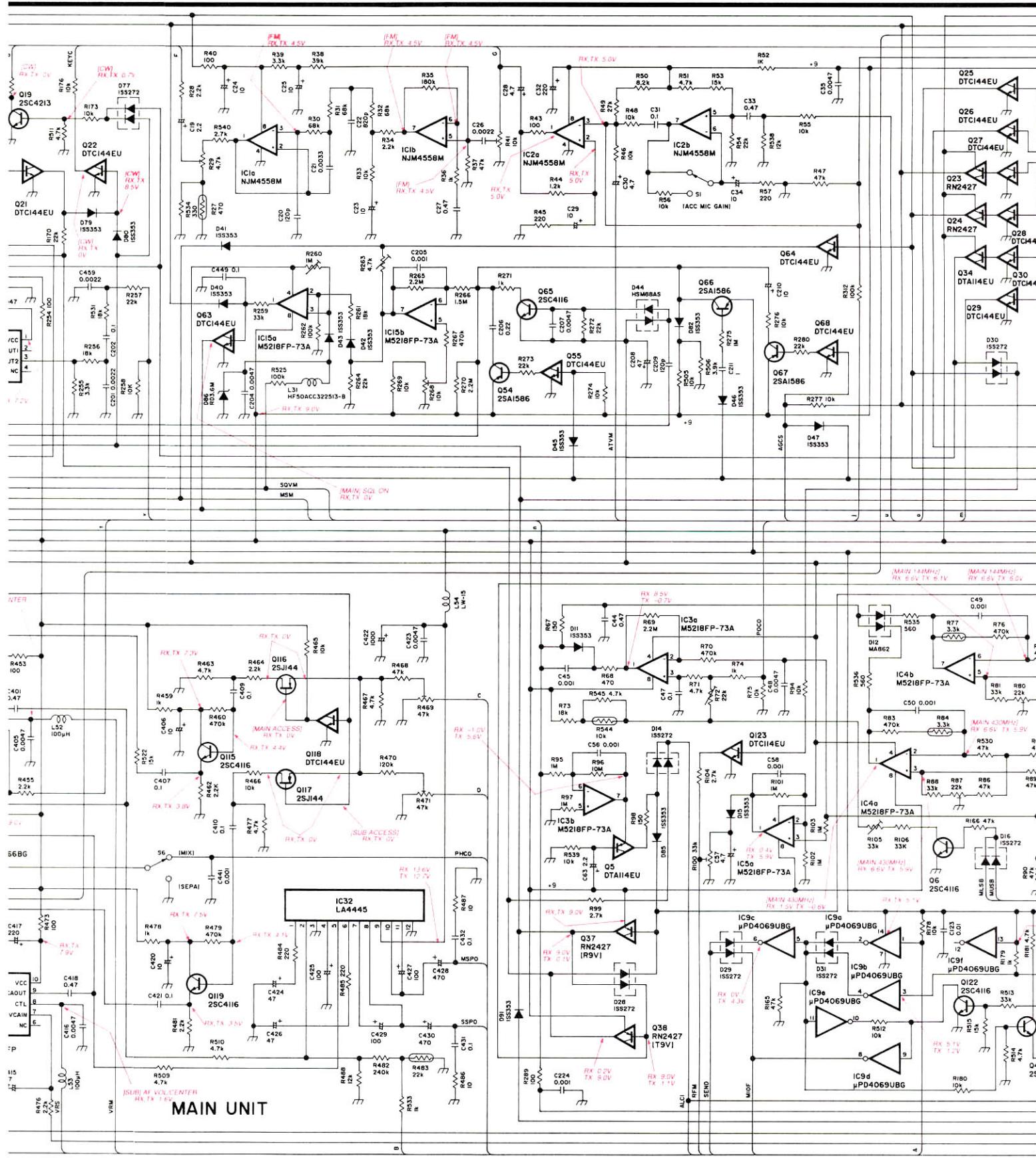
Sec. 10-2 Voltage Diagram



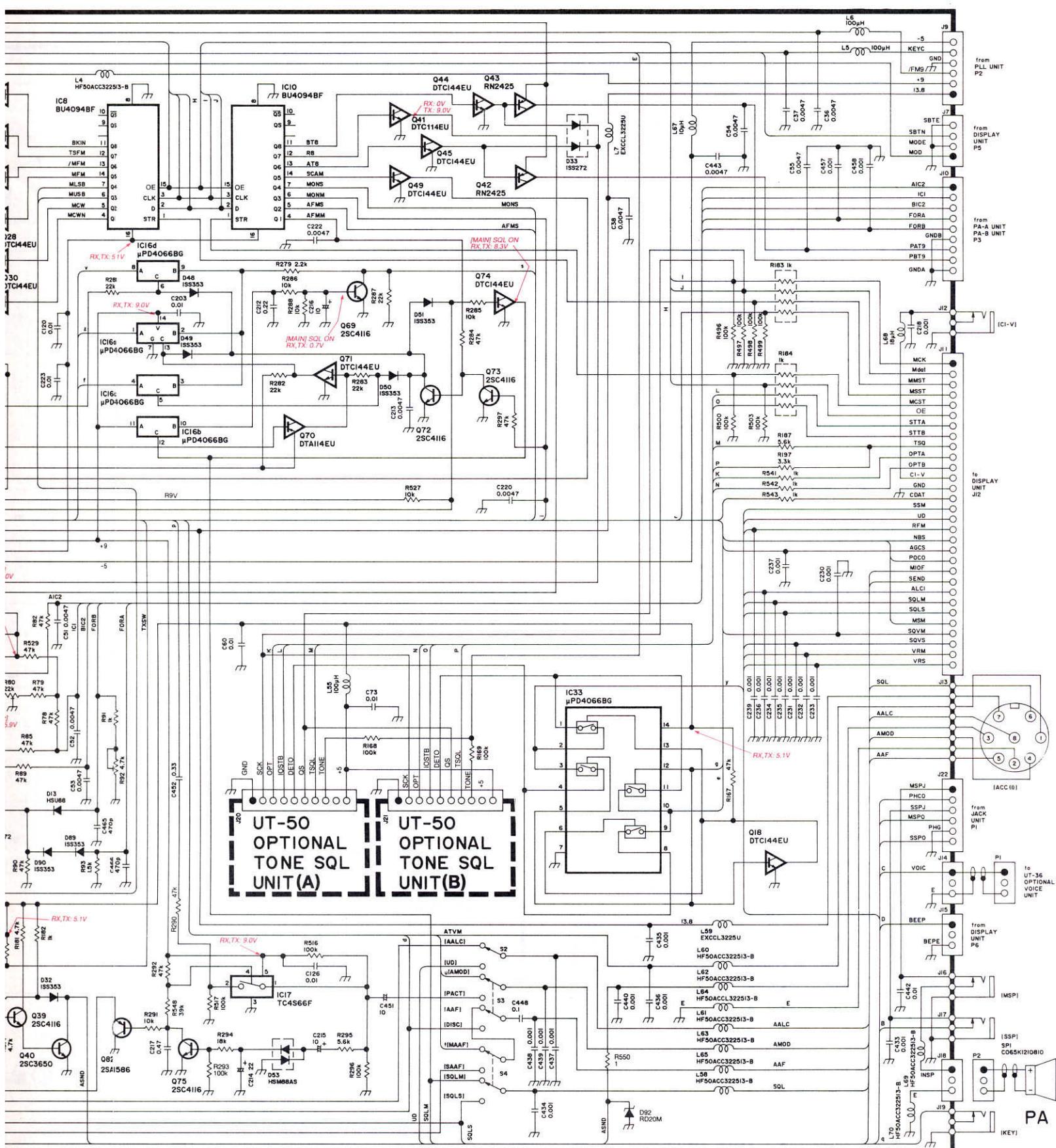
Sec. 10-2 Voltage Diagram



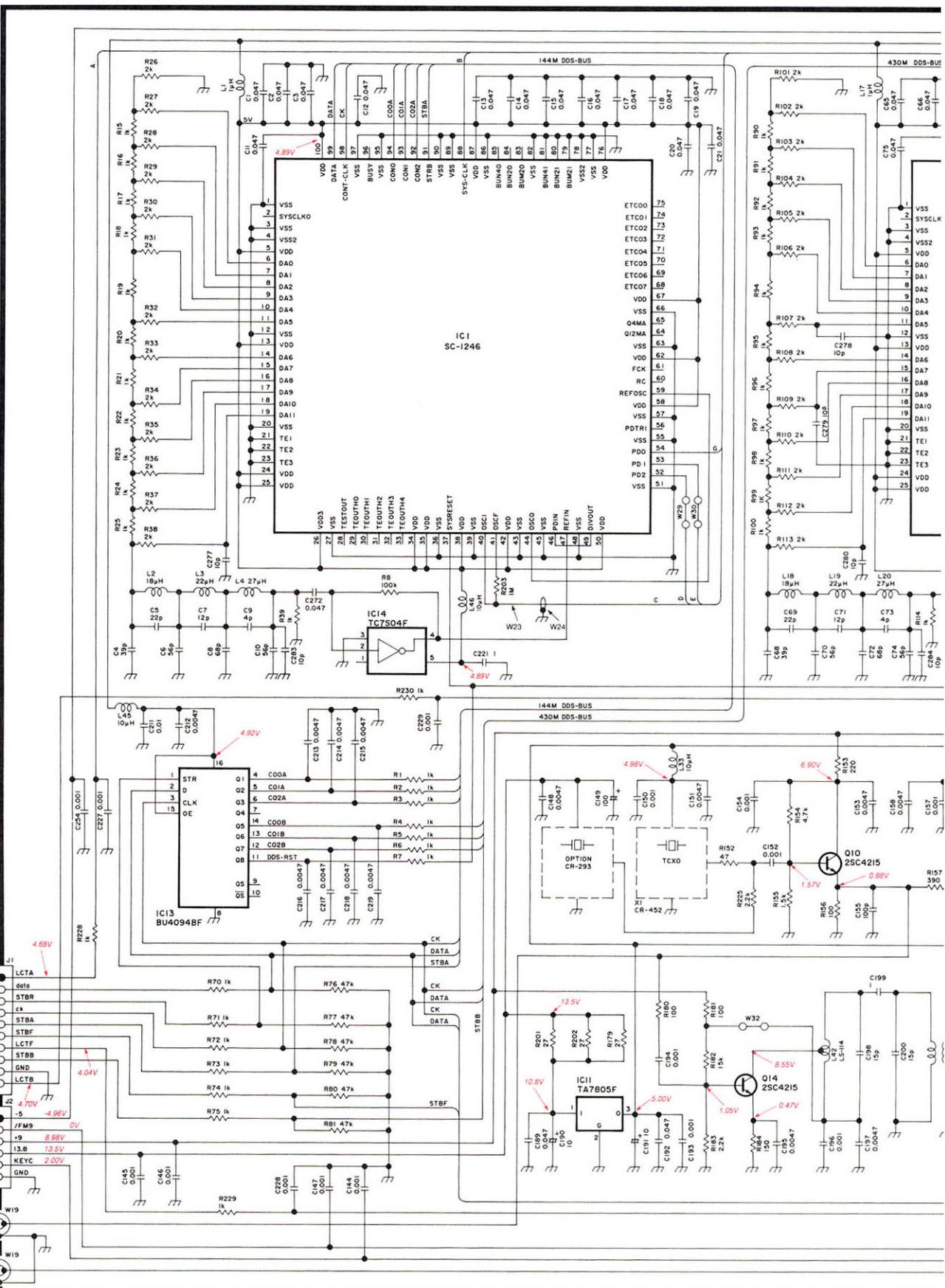
Sec. 10-2 Voltage Diagram



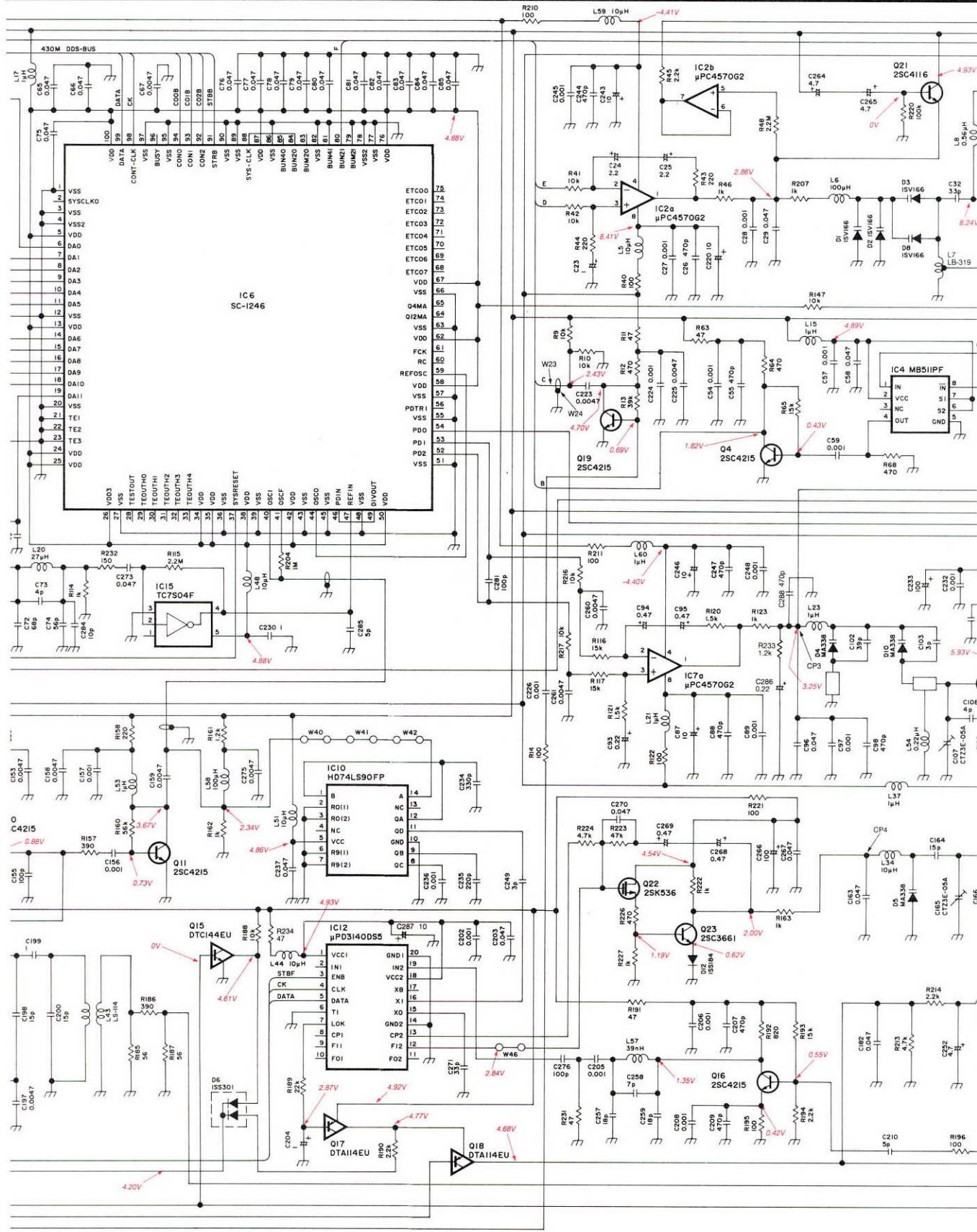
Sec 10-2 Voltage Diagram



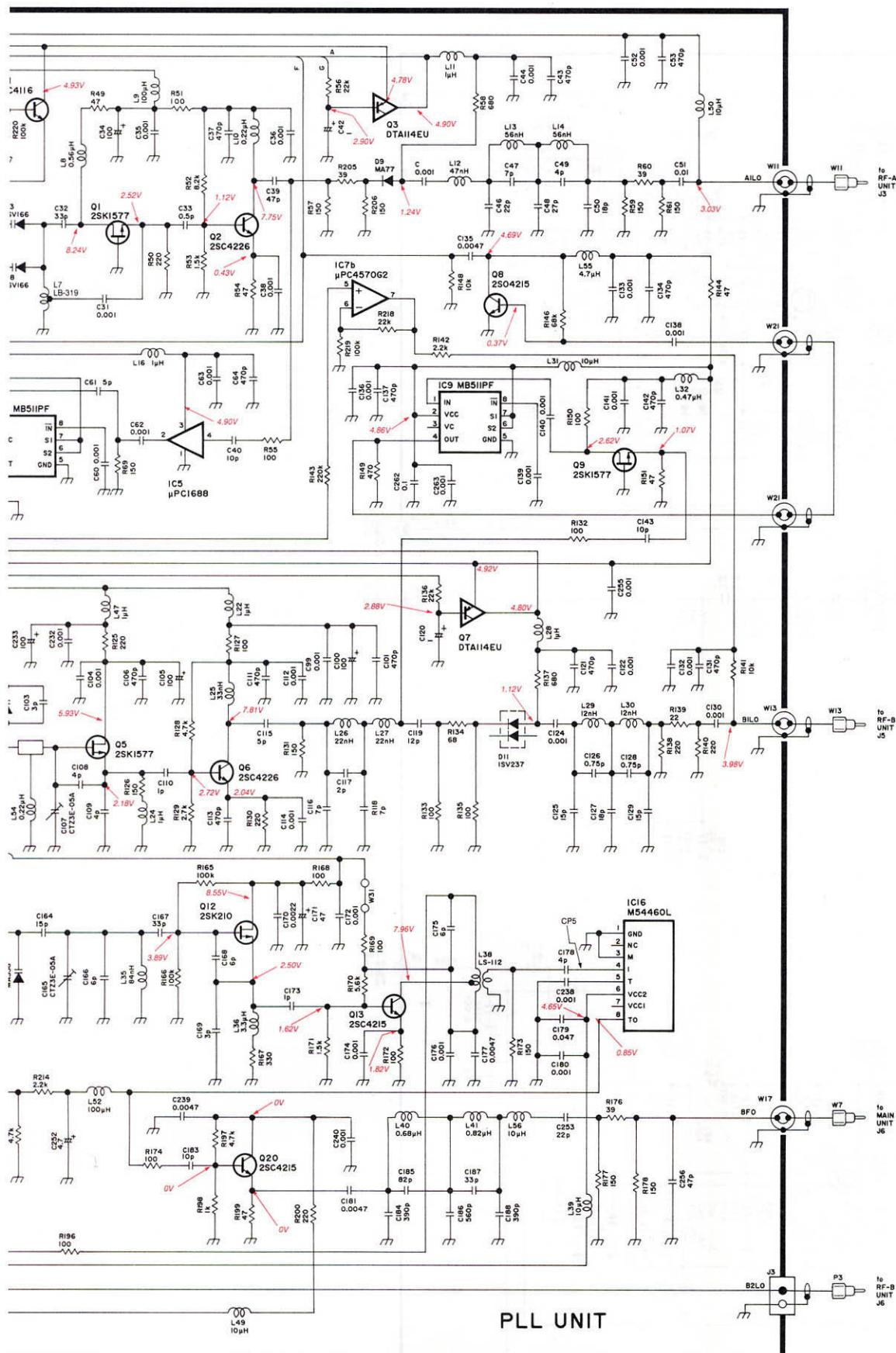
Sec. 10-3 Voltage Diagram



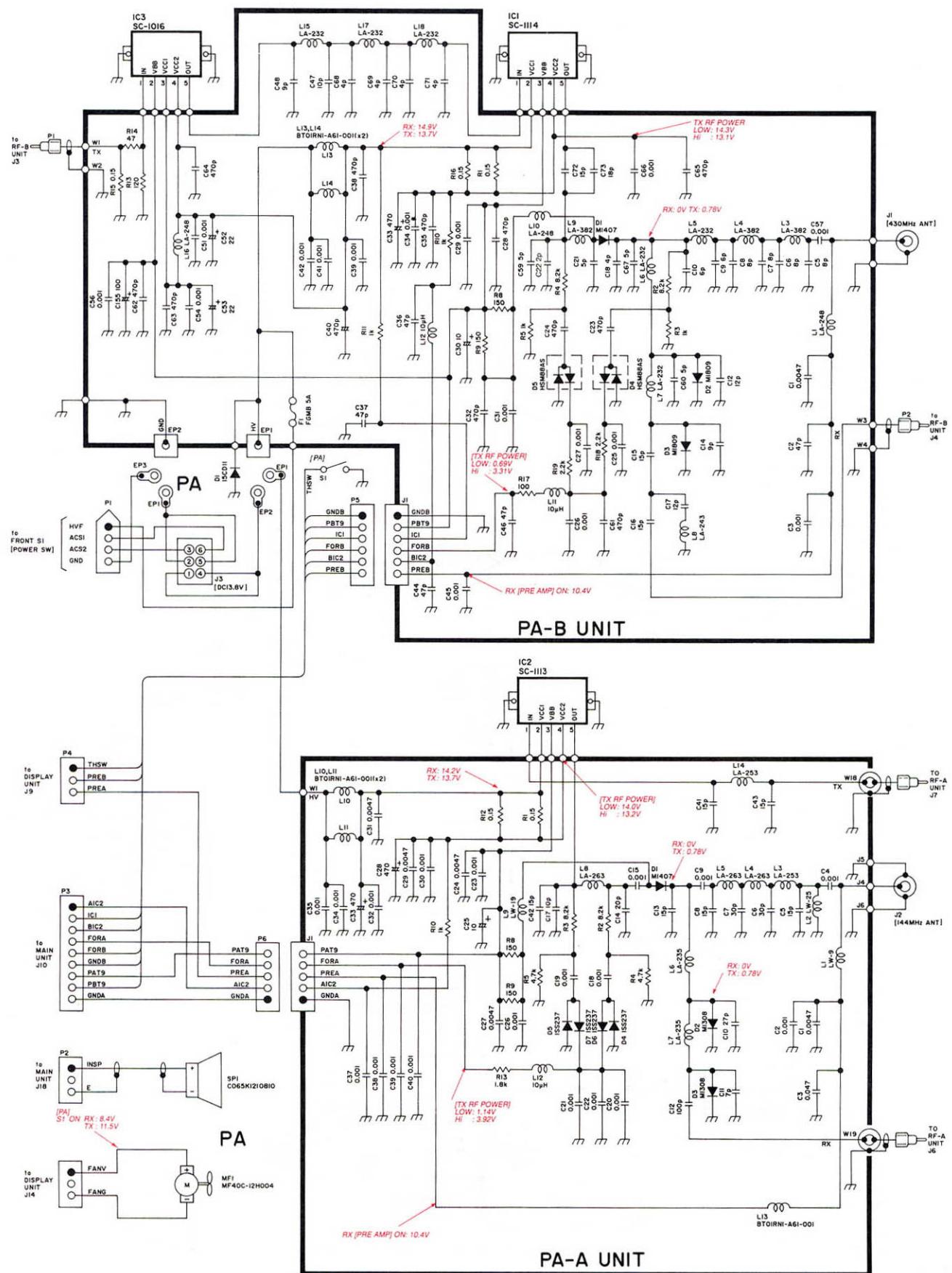
Sec.10-3 Voltage Diagram



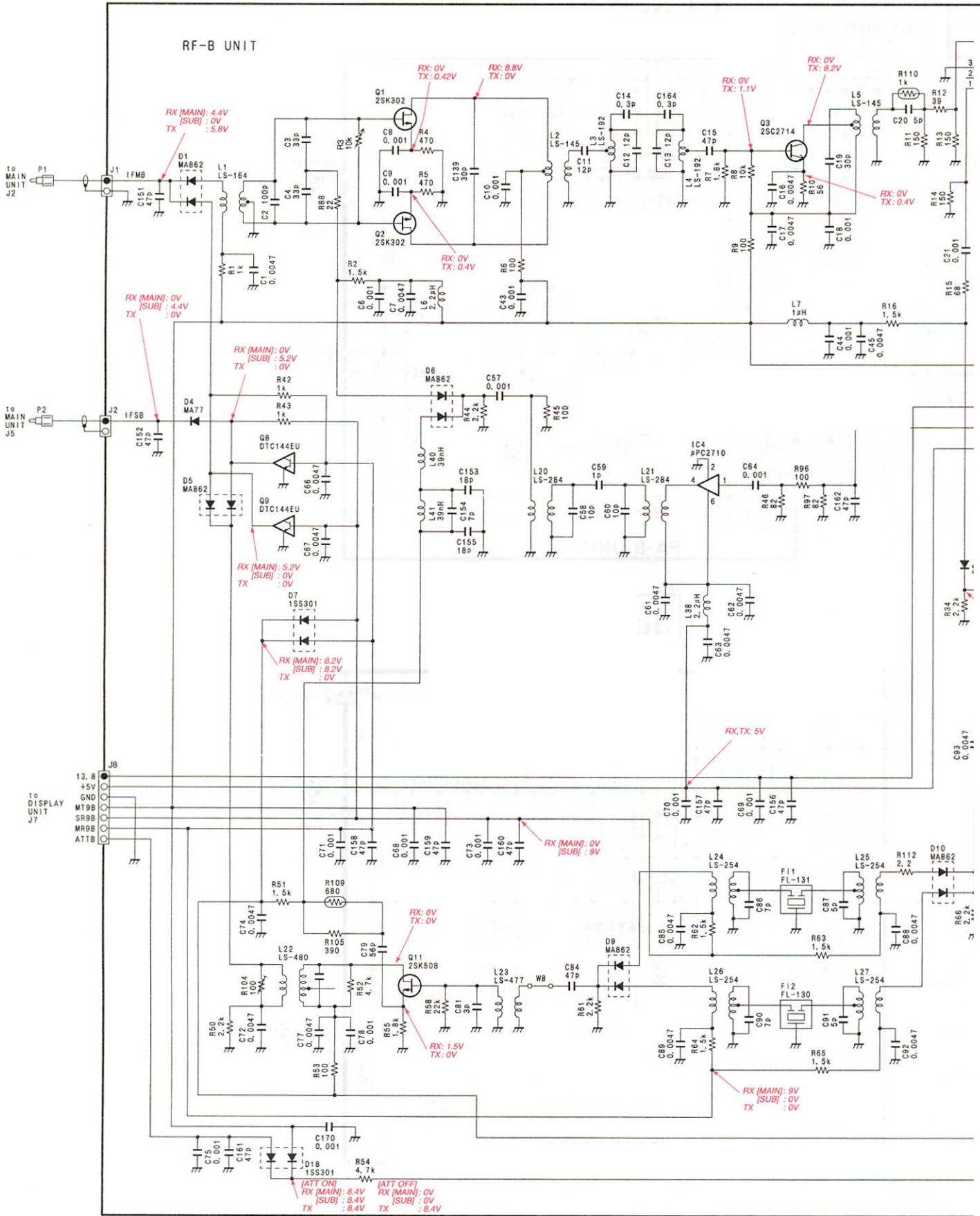
Sec. 10-3 Voltage Diagram



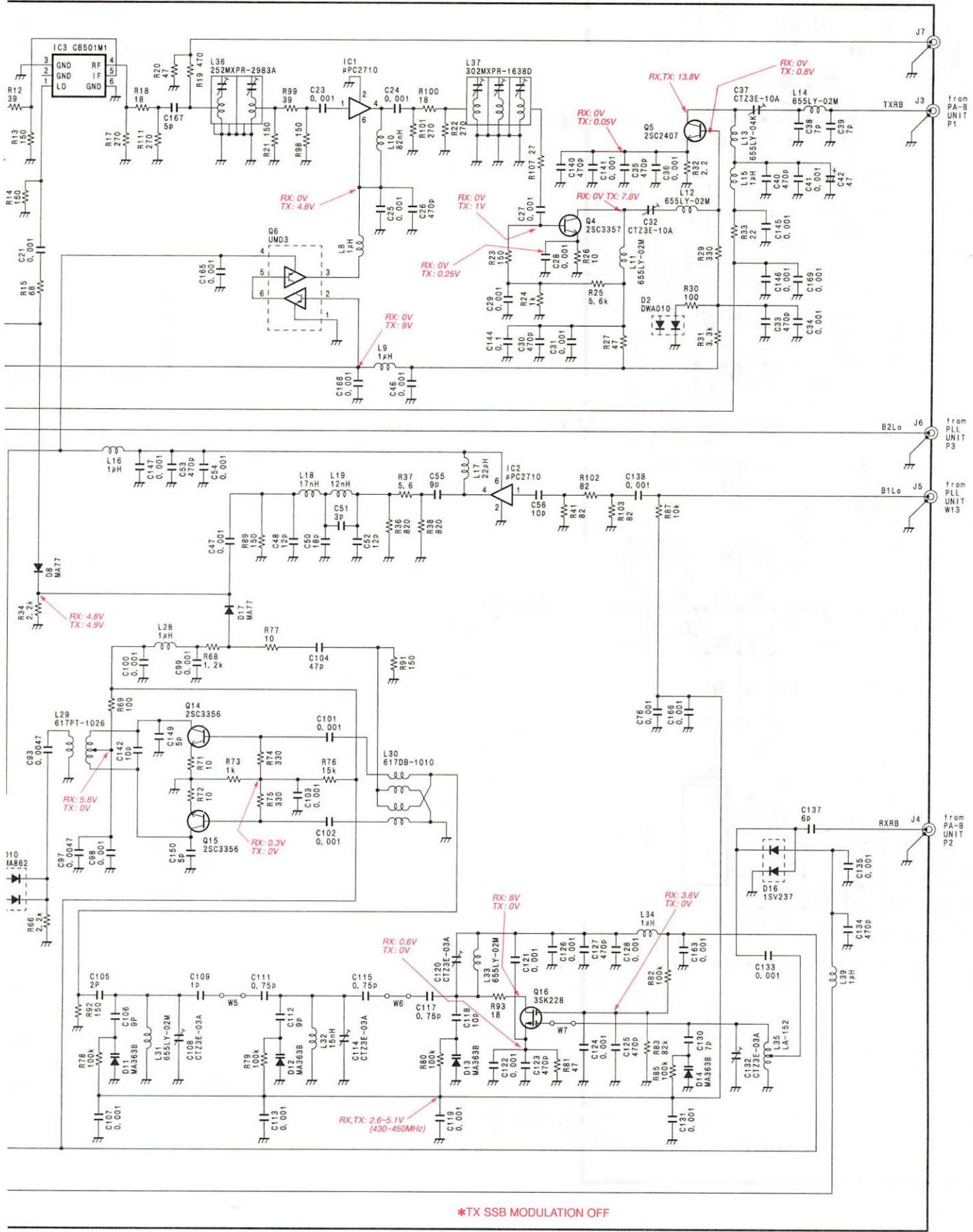
Sec. 10-3 Voltage Diagram



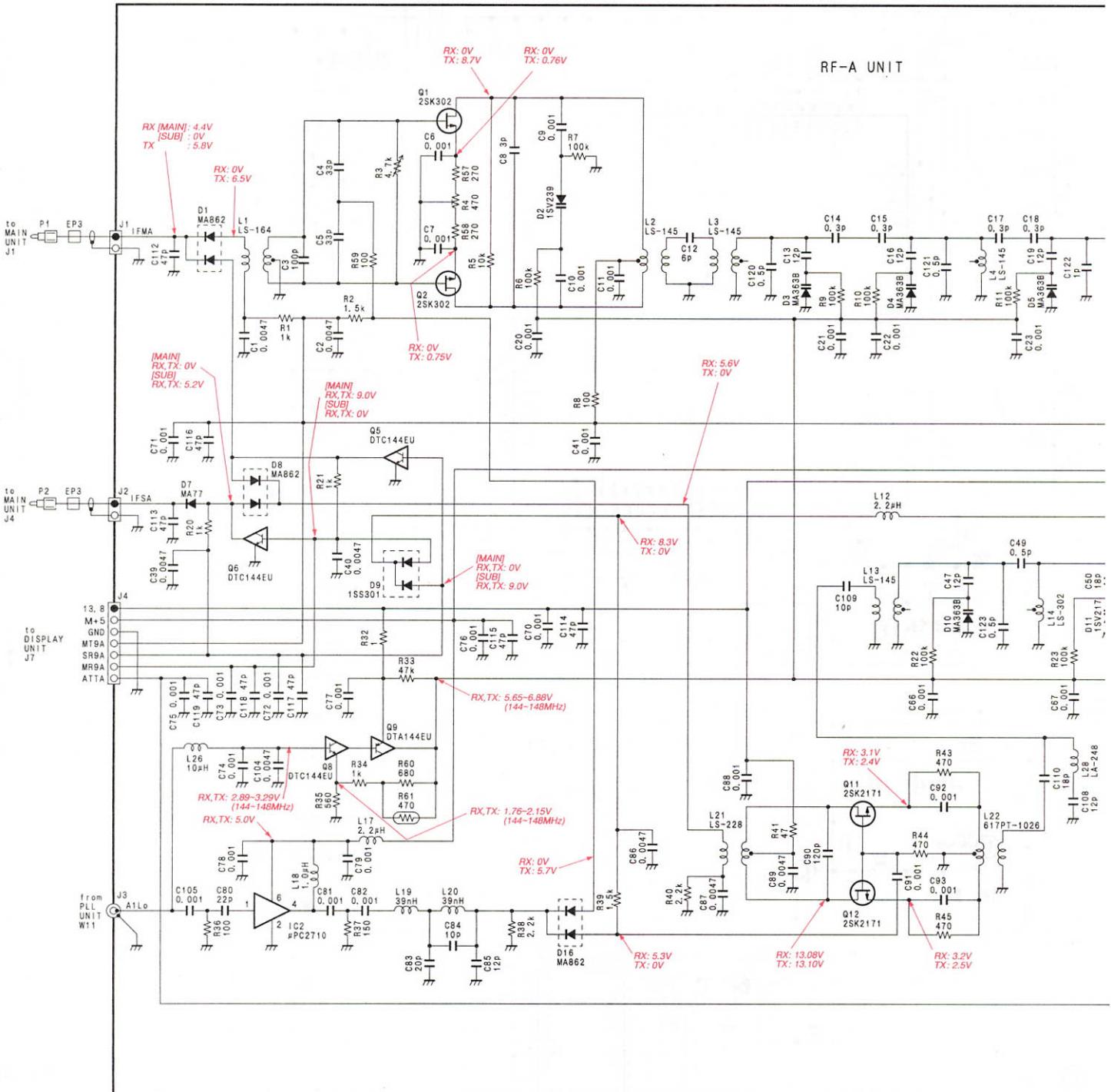
Sec. 10-4 Voltage Diagram



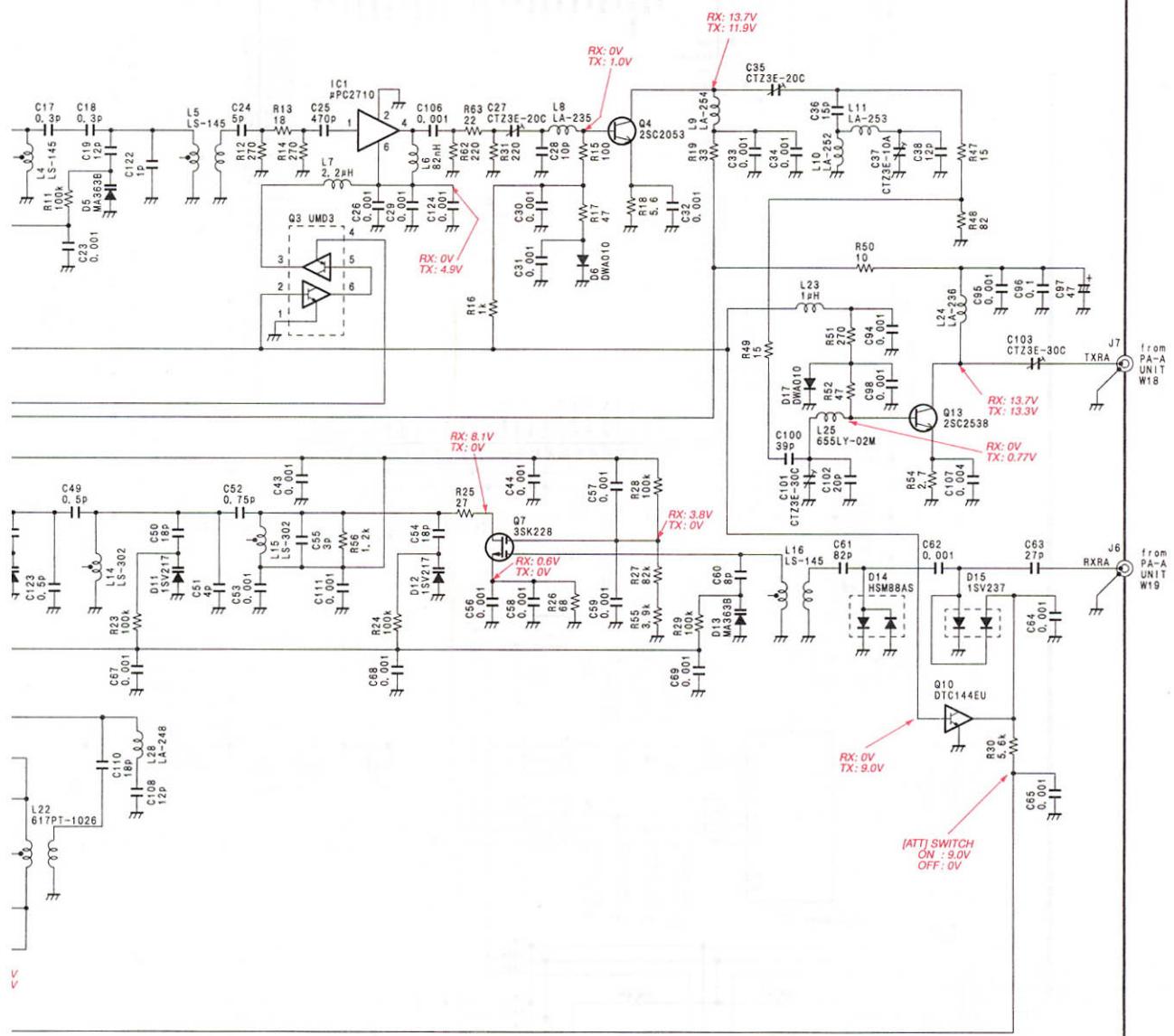
Sec. 10-4 Voltage Diagram



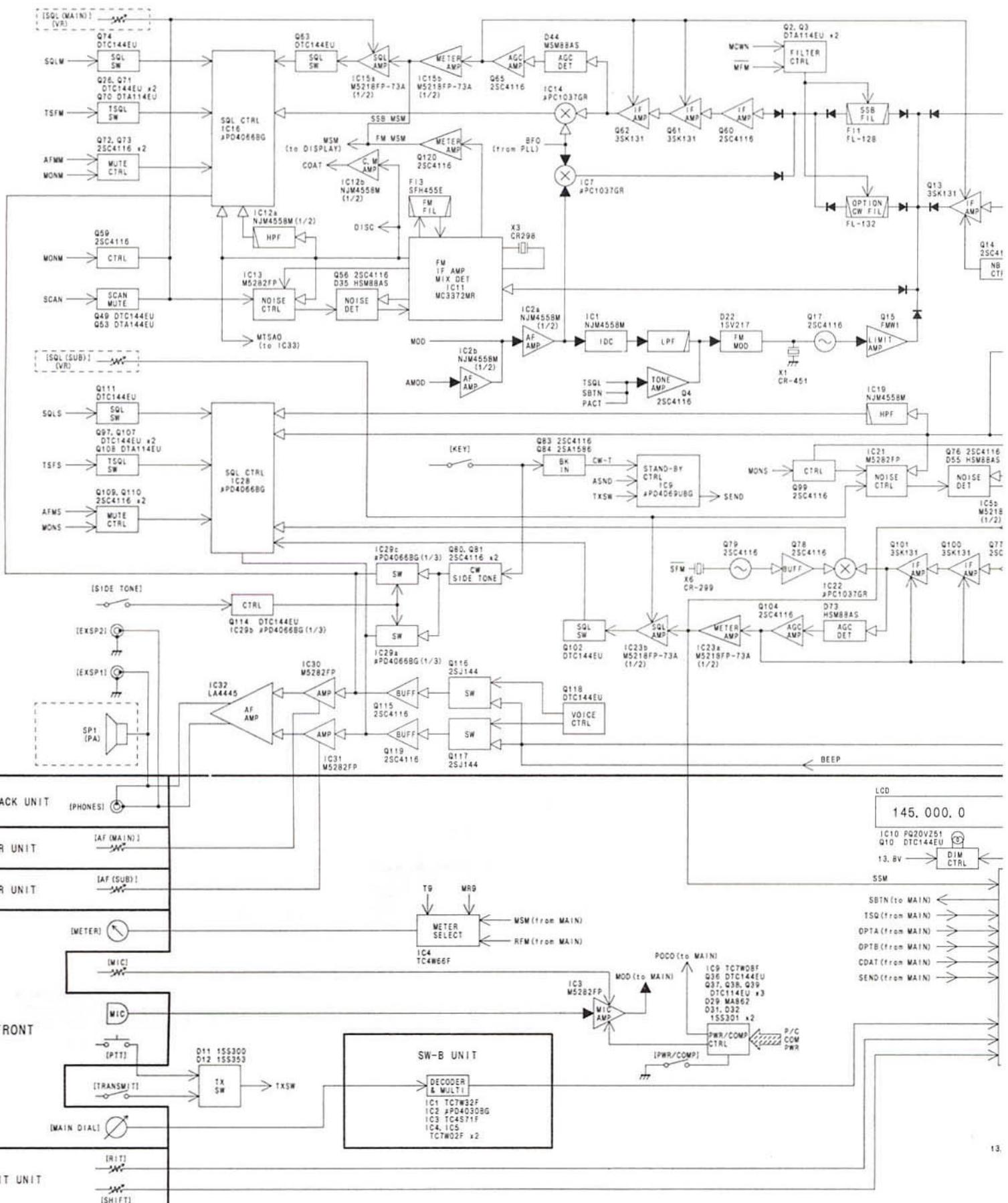
Sec. 10-4 Voltage Diagram



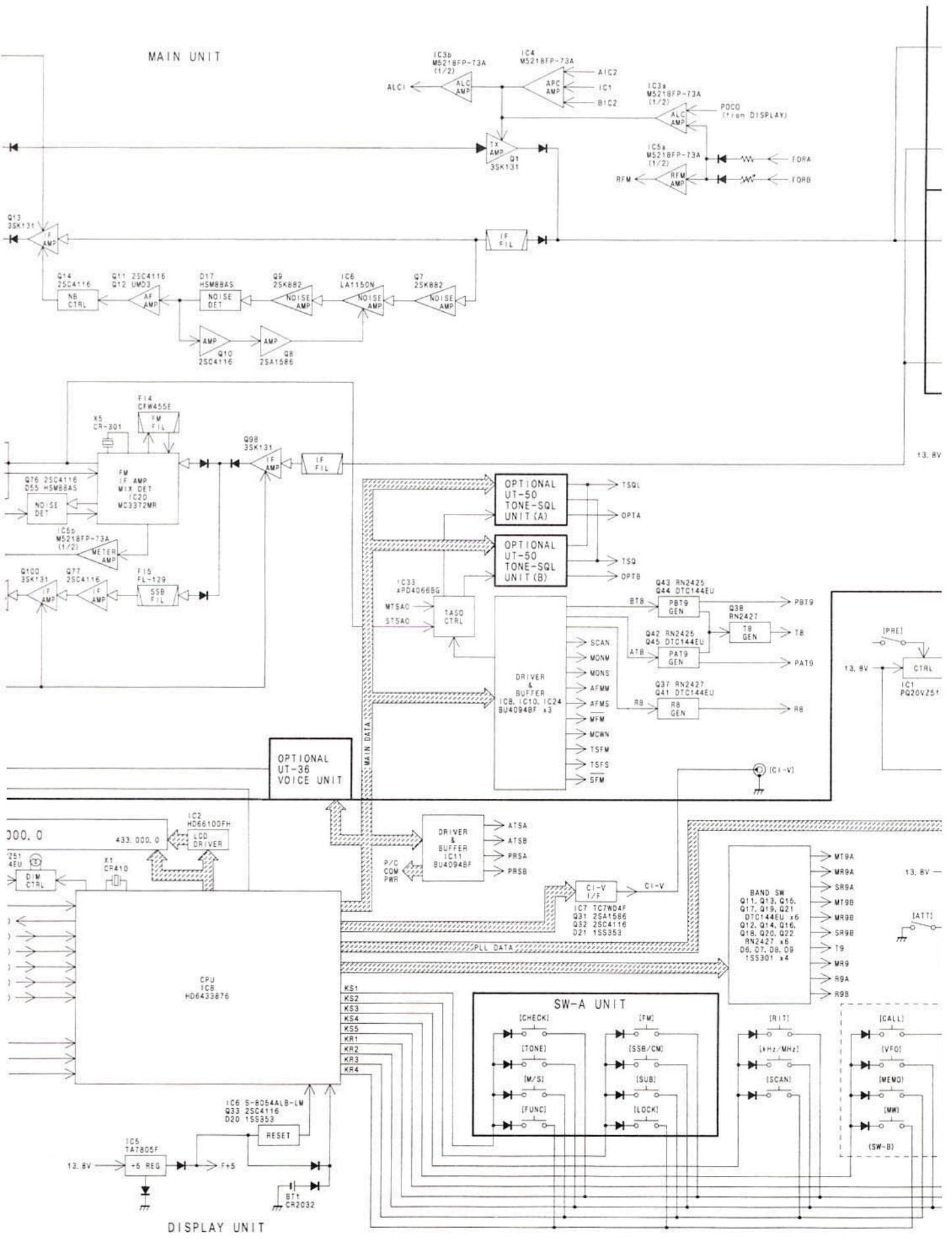
Sec. 10-4 Voltage Diagram



Sec. 11 Block Diagram



Sec. 11 a Block Diagram



Sec. 11 b Block Diagram

