# OICOM

# SERVICE MANUAL

HE MARINE TRANSCEIVER  IC-M800	

Icom Inc.

### INTRODUCTION

This service manual describes the latest service information for the **IC-M800** HF MARINE TRANSCEIVER at the time of going to press.

If you require assistance or further information regarding the operation and capabilities of the **IC-M800**, contact your nearest authorized Icom Dealer or Icom Service Center.

### DANGER

**NEVER** connect the transceiver to an AC outlet or to a DC power supply that uses more than 16 V. This will ruin the transceiver.

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

**DO NOT** reverse the polarities of the power supply when connecting the transceiver.

**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
- Component part number and name
- 3. Equipment model name and unit name
- 4. Quantity required

### <SAMPLE ORDER>

1110000540 IC NJM4558D IC-M800 MAIN UNIT 5 pieces 8810000230 Screw PH M3 × 6 IC-M800 Back panel 10 pieces

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

### REPAIR NOTE

- Make sure a problem is internal before disassembling the transceiver.
- DO NOT open the transceiver until the transceiver is disconnected from a power source.
- DO NOT force any of the variable components. Turn them slowly and smoothly.
- DO NOT short any circuits or electronic parts.
   An insulated tuning tool MUST be used for all adjustments.
- DO NOT keep power ON for a long time when the transceiver is defective.
- DO NOT transmit power into a signal generator or a sweep generator.
- 7 ALWAYS connect a 30 dB~40 dB attenuator between the transceiver and a deviation meter or spectrum analyzer when using such test equipment.
- READ the instructions of test equipment thoroughly before connecting equipment to the transceiver.

### **TABLE OF CONTENTS**

SECTION	1	SPECIFICATIONS	1 — 1
SECTION	<b>2</b> 2 · 1 2 · 2	REMOTE CONTROLLER	2 — 1
SECTION	3 - 1 3 - 2 3 - 3 3 - 4 3 - 5 3 - 6	CIRCUIT DESCRIPTION 3  GENERAL.  RECEIVER CIRCUITS  TRANSMITTER CIRCUITS  PLL CIRCUITS  LOGIC CIRCUITS  GATE ARRAY PORT ALLOCATIONS	3 - 1 $3 - 1$ $3 - 3$ $3 - 4$ $3 - 6$
SECTION	<b>4</b> 4 - 1 4 - 2 4 - 3	MECHANICAL PARTS AND DISASSEMBLY. 4 - REMOTE CONTROLLER AND ACCESSORIES. TRANSCEIVER AND REAR PANEL REMOTE CONTROLLER AND TRANSCEIVER CONNECTOR ASSEMBLY	4 — 1 4 — 3
SECTION	5 5 - 1 5 - 2 5 - 3 5 - 4	ADJUSTMENT PROCEDURES 5 - PREPARATION BEFORE SERVICING PLL ADJUSTMENT RECEIVER ADJUSTMENT TRANSMITTER ADJUSTMENT	5 — 1 5 — 2 5 — 4
SECTION	6 - 1 6 - 2 6 - 3 6 - 4 6 - 5	BOARD LAYOUTS 6 REMOTE CONTROLLER TRANSCEIVER (1) TRANSCEIVER (2) TRANSCEIVER (3) TRANSCEIVER (4)	6 - 1 $6 - 3$ $6 - 5$ $6 - 7$
SECTION	7	PARTS LIST 7 —	- 1 ~ 19
SECTION	8	BLOCK DIAGRAMS	8 — 1
SECTION	<b>9</b> 9 - 1 9 - 2	EX-804 EXPANDER UNIT	<b>9 — 1</b> 9 — 1 9 — 1
SECTION		VOLTAGE DIAGRAMS	10 — 1
	10 - 3	REMOTE CONTROLLER (IF, JACK, SENSOR AND SW UNITS)	10 — 3

### SECTION 1 SPECIFICATIONS

### **■ GENERAL**

• Frequency coverage : Receive : 0.5~30.0 MHz continuously

Transmit : 2.0000~2.9999 MHz

4.0000~4.9999 MHz 6.0000~6.9999 MHz 8.0000~8.9999 MHz 12.0000~13.999 MHz 16.0000~16.999 MHz

22.0000~22.999 MHz

• Mode : J3E (USB, LSB), H3E, R3E, A3E (receive only), A1A, J2B

Antenna impedance : 50 Ω (unbalanced)

• Power supply requirement : 13.6 V±15 % DC (negative ground)

• Current drain : Receive : 2 A at max. audio output

Transmit : 30 A at max. RF output power

• Usable temperature range :  $-30 \,^{\circ}\text{C} \sim +60 \,^{\circ}\text{C} (-22 \,^{\circ}\text{F} \sim +140 \,^{\circ}\text{F})^*$ 

• Frequency stability : ±15 Hz for 0.5~23 MHz (-30 °C~+60 °C; -22 °F~+140 °F)

• Dimensions : Transceiver : 287 (W) × 112 (H) × 325 (D) mm

11.3 (W)  $\times$  4.4 (H)  $\times$  12.8 (D) in

Remote controller: 287 (W) × 112 (H) × 62 (D) mm

11.3 (W) × 4.4 (H) × 2.4 (D) in (Projections not included)

• Weight : Transceiver : 6.5 kg (14.3 lb)

Remote controller: 1.0 kg (2.2 lb)

### **TRANSMITTER**

• Output power : 150 W

Spurious emissions
 Carrier suppression (SSB)
 65 dB below peak output power
 50 dB below peak output power

• Unwanted sideband suppression : 55 dB below peak output power (with 1000 Hz AF input)

• Microphone impedance :  $600 \Omega$ 

### RECEIVER

Sensitivity (for 12 dB SINAD)
 SSB, CW, FSK
 0.5~1.8 MHz
 6.3 μV (−91 dBm)

 $1.8\sim30.0 \text{ MHz} \quad 0.5 \,\mu\text{V} \,(-113 \,\text{dBm})$ 

AM :  $0.5\sim1.8 \text{ MHz}$  30  $\mu\text{V}$  (-77 dBm)

1.8~30.0 MHz 3.16 μV (-97 dBm)

Spurious response rejection : −70 dB

• Audio output power : 5.0 W with a 4  $\Omega$  load

Audio output impedance : 4~8 Ω

Clarity variable range : ±150 Hz in 10 Hz steps

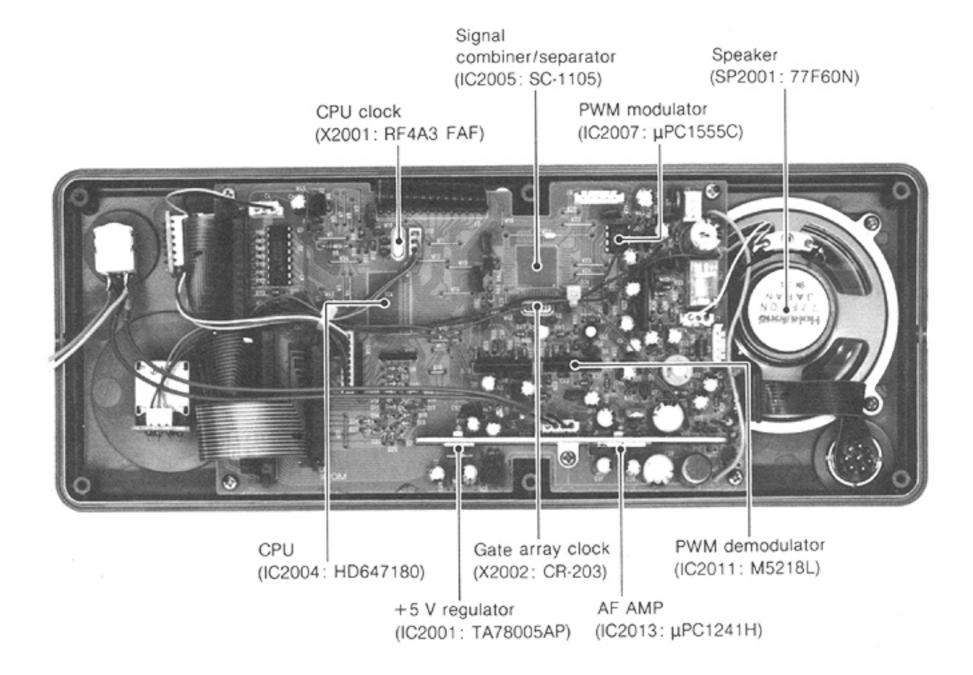
\* The function display on the remote controller may not indicate characters clearly under extremely low temperatures around -30 °C (-22 °F) due to LCD characteristics. However, transmitting and receiving with the IC-M800 function normally around this temperature.

All stated specifications are subject to change without notice or obligation.

# SECTION 2 INSIDE VIEWS

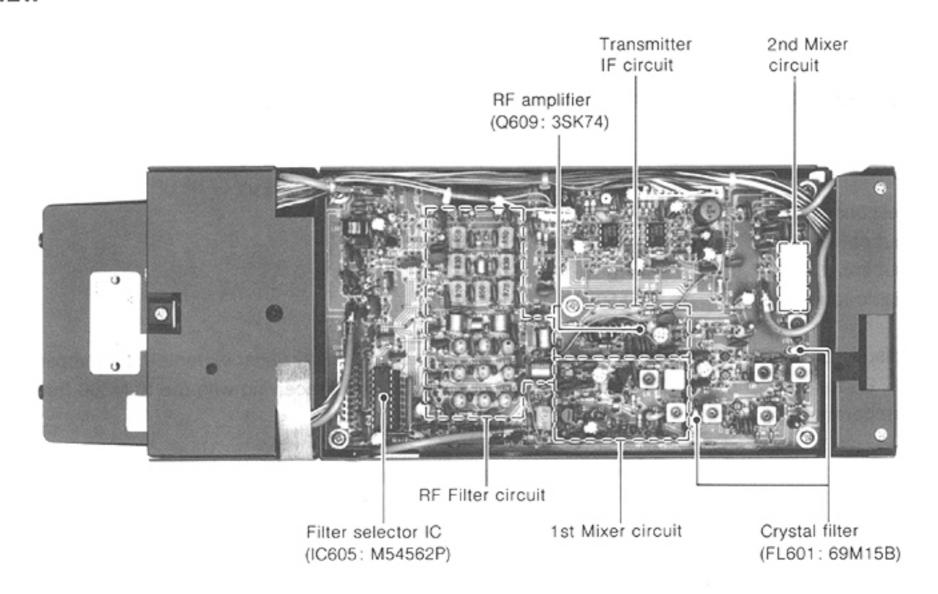
# 2-1 REMOTE CONTROLLER

• IF UNIT

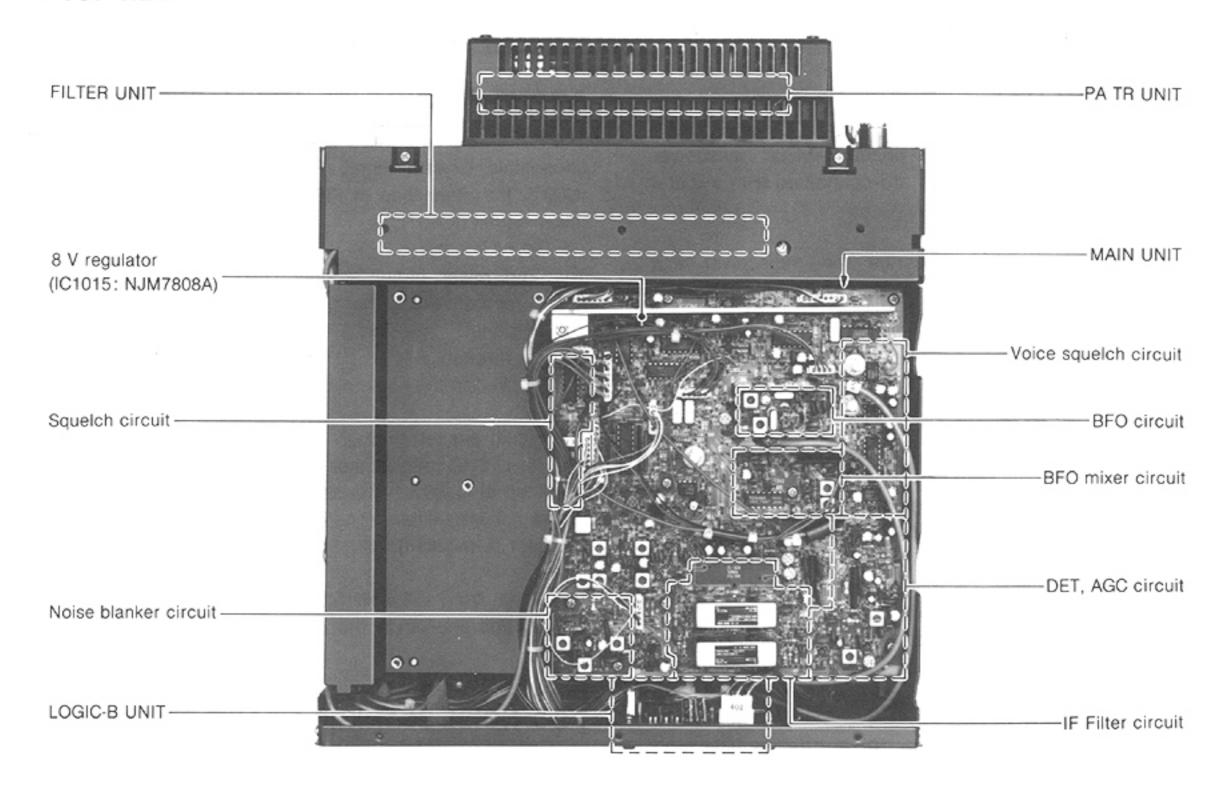


# 2-2 TRANSCEIVER

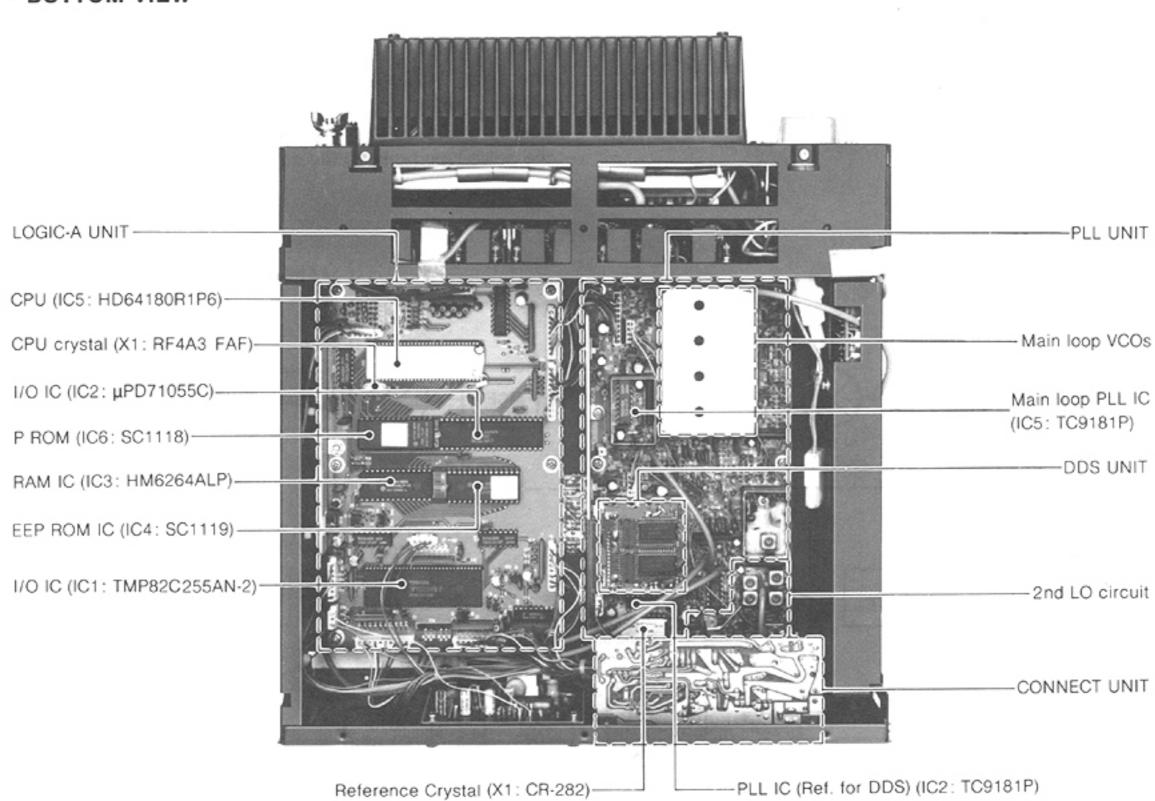
SIDE VIEW



### TOP VIEW



# BOTTOM VIEW



### SECTION 3 CIRCUIT DESCRIPTION

### 3-1 GENERAL

The IC-M800 mainly consists of the IC-M800 transceiver and remote controller, which are connected with a state-of-the-art optical fiber cable.

The following sections describe the transceiver and remote controller.

### 3-2 RECEIVER CIRCUITS

### 3-2-1 RF CIRCUITS (RF UNIT)

Incoming signals pass through the FILTER and ANT SW UNITS and then enter the RF UNIT via J604. The incoming signals are applied to the 1.6 MHz cut-off high-pass filter and the signals below 1.6 MHz are attenuated at 20 dB by L678 and R624. The RF UNIT has 8 RF high-pass filters for signals above 2 MHz and 1 low-pass filter for signals below 2 MHz. The incoming signals pass through one of the high-pass filters or low-pass filter.

These filters are selected with "B0" $\sim$ "B8" signals from the CPU via the voltage buffer (IC605).

The filtered signals are applied to the 30 MHz cut-off low-pass filter to suppress the image signals. The signals then enter the 1st mixer circuit (Q602, Q603) to be converted to a 69.0115 MHz 1st IF signal. The 1st mixer circuit employs a balanced mixer using low-noise junction FETs ( $25K125 \times 2$ ) to expand the dynamic range.

### 3-2-2 IF CIRCUITS (RF AND MAIN UNITS)

The 1st IF signal passes through one of a pair of MCF (Monolithic Crystal Filter; Fl601), the 1st IF amplifier (Q601), the other side of Fl601 and then enters the 2nd mixer circuit (IC601).

The 2nd mixer circuit adopts DBM (Double Balanced Mixer) for converting the 1st IF signal to a 9.0115 MHz 2nd IF signal. The 2nd IF signal enters the MAIN UNIT, passes through D1007 (D1008 for transmitting) and is then applied to the noise blanker circuits.

The signal passes through the double resonance circuit (L1005, L1006), the blanker gate (D1009~D1012), and is amplified at Q1007. The signal is then applied to one of the two 9 MHz filters (one of 3 filters when an optional CW filter is installed).

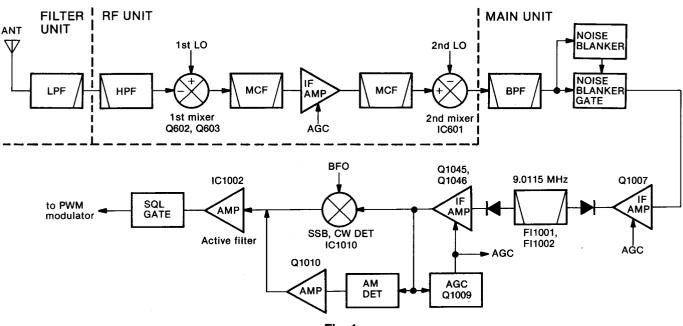
The signal from a 9 MHz filter is amplified at Q1045 and Q1046, and applied to the demodulator circuit and AGC circuit.

### 3-2-3 NOISE BLANKER CIRCUIT (MAIN UNIT)

The IC-M800 uses the noise trigger noise blanker circuit. A portion of the signal from L1005 is amplified at the noise amplifier (Q1001~Q1003), detected at the noise detector (D1001, D1002), and is then separately applied to the noise AGC circuit (Q1004) and the noise gate control.

The noise AGC circuit does not operate for pulse-type noise. The noise AGC circuit reduces the gain of the noise amplifier with only normal signal strength by applying the pulse-type noise to the noise gate control.

### **RECEIVER CIRCUITS**



The noise gate control consists of a pulse amplifier (Q1005) and gate drive (Q1006). When the detected voltage exceeds a threshold level, Q1006 outputs a blanking signal to activate the noise blanker gate (D1009~D1012).

### 3-2-4 AF CIRCUITS (MAIN UNIT)

The 2nd IF signal from the 9 MHz filter is applied to the product detector (IC1010) while in SSB, CW or FSK mode or to the diode detector (D1006) while in AM mode. The detected AF signal is applied to the active low-pass filter (IC1002b) where 3 kHz signals and above are attenuated. The AF signal enters the LOGIC B UNIT via the squelch gate (IC1008a).

The squelch gate is controlled by the voice squelch control circuit in AM and SSB modes, or the S-meter squelch circuit in CW and FSK modes.

# 3-2-5 OPTICAL INTERFACE CIRCUIT (LOGIC B UNIT)

The AF signal from the MAIN UNIT is modulated into a PWM (Pulse Width Modulation) signal at IC402, IC404, Q401 and Q402. A PWM modulation trigger signal, generated at IC401, is applied to IC402 pin 2. The resulting PWM signal is re-applied to IC401 to be combined with the serial data from the transceiver CPU (LOGIC A UNIT, IC305).

IC401 is a gate array IC and contains a PWM signal/serial data separator and mixer, PWM modulation trigger signal generator, clock generator, etc.

#### 3-2-6 AF AMPLIFIER (IF UNIT)

The combined signal (PWM signal and serial data) from IC401 on the LOGIC B UNIT is converted into an optical signal at IC503 in the CONNECTOR UNIT to apply the signal to the IC-M800 remote controller. The optical signal is re-converted to the combined signal in the remote controller and is then separated to the PWM signal and serial data at the gate array IC (IC2005).

The PWM signal is demodulated at the active low-pass filters (IC2011a, IC2012b, IC2012a). The demodulated signal passes through the mute switch (Q2010) and the volume control (R2091) and is then power-amplified at IC2013 to drive the speaker.

### 3-2-7 BFO OSCILLATOR (MAIN UNIT)

The BFO oscillator circuit consists of Q1038, X1001, X1002. The BFO-oscillated frequency is a 5.26 MHz band signal (5.260~5.263) and is mixed with a 3.75 MHz frequency to obtain a 9.01 MHz BFO frequency. The 3.75 MHz frequency is obtained by dividing the 7.5 MHz signal from the PLL UNIT by 2.

This BFO frequency is used for the product detector (IC1010) and balanced modulator (IC1007). The oscillated frequency is shifted by the mode voltages using Q1040  $\sim$ Q1043.

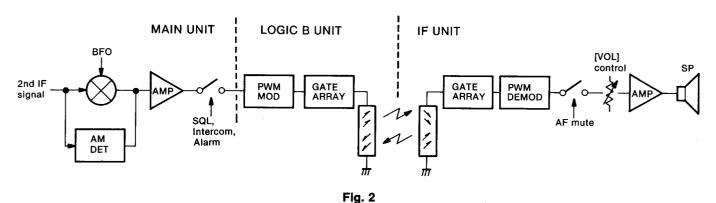
### 3-2-8 VOICE SQUELCH CIRCUIT (MAIN UNIT)

This circuit detects the audio signal during AM or SSB mode receiving, and squelches inconvenient signals such as signals with no modulation, beat signals and noise component signals.

A portion of the AF signal from the active filter (IC1002b) is limiter-amplified at IC1002a and triggers the one-shot multivibrator (IC1004). IC1004 functions as an F-V converter and outputs a voltage corresponding to pulse numbers.

The output from IC1004 is applied to the 3 Hz cut-off low-pass filter (IC1003a) to detect audio signals. The resulting signal is applied to the comparator (IC1003b). IC1003b outputs a "HIGH" signal when an audio signal is detected.

#### **AF CIRCUITS**



### 3-3 TRANSMITTER CIRCUITS

### 3-3-1 MIC AMPLIFIER (IF UNIT)

Audio signals from the [MIC] connector are amplified at the mic amplifier (IC2010b) in the remote controller and applied to the active low-pass filter (IC2010a) where the 3 kHz signals and above are attenuated. Microphone gain is controlled by the mic AGC circuit (D2005, D2006, Q2007).

The resulting signals are modulated into a PWM signal at IC2007, IC2011a, Q2008 and Q2009, and applied to the gate array IC (IC2005) to be combined with the serial data from the remote controller CPU (IC2004). The combined signal is applied to IC2015 to be converted to optical signals. The optical signal is then applied to the IC-M800 transceiver and then enters the gate array IC (IC401) after converting to an electric signal. IC401 separates the PWM signal and serial data in the signal.

The PWM signal is demodulated at the active low-pass filters (IC403b, IC403a, IC404b) and is then applied to the MAIN UNIT.

### 3-3-2 BALANCED MODULATOR (MAIN UNIT)

The signal passes through the modulation gate (IC1009a), and is applied to the balanced modulator circuit (IC1007) to be converted to a 9.01 MHz IF signal.

R1136 and R1138 adjust the balance level of IC1007 for maximum carrier suppression. In CW or while tuning the antenna, a mode voltage (CW or TUNE) upsets the balance to create a carrier signal.

IC1007 outputs a double sideband signal and passes through a 9.01 MHz filter to create an SSB signal. The signal is amplified at the IF amplifiers (Q1013 $\sim$ Q1015) and is then applied to the RF UNIT via P1001 (RF UNIT, J601).

In H3E (AM) or R3E (USB) mode, the 9.01 MHz BFO signal amplified at Q1016, is applied to the IF amplifier (Q1014) as a carrier signal. In R3E, Q1044 is turned ON, and the gain of Q1016 is reduced to obtain an appropriate carrier level.

In CW mode, a keying control signal from IC1005 is applied to the IF amplifiers (Q1014, Q1015) and intermits the IF signal to obtain a CW signal.

### 3-3-3 IF CIRCUITS (RF UNIT)

The 9.01 MHz IF signal enters the RF UNIT, passes through a 10 MHz cut-off low-pass filter, and is then converted to a 69.0115 MHz IF signal at IC601. IC601 is also used in receiving.

The IF signal passes through the MCF (FI601) and is then converted to the displayed frequency (RF signal) at the balanced mixer (Q607, Q608).

# 3-3-4 RF CIRCUITS (RF, PA TR AND PA UNITS)

The RF signal from Q607 and Q608 is amplified at Q609. The 1st and 2nd gate bias voltages of Q609 are controlled by the transmit gain control and APC circuits respectively. The amplified signal passes through one of the 7 high-pass filters (2.0~22.999 MHz HF marine bands), is amplified at the predrive amplifier (Q618), and is then applied to the PA TR UNIT. Output level from the RF UNIT is approx. +6 dBm.

The entering signal from the RF UNIT is amplified at the 1st drive amplifier (Q801), the 2nd drive amplifier (Q802, Q803) and the power amplifier (Q804, Q805) to obtain stable 150 W RF output power. The 1st drive amplifier consists of a class A amplifier, and both the 2nd drive amplifier and the power amplifier consist of a class AB push-pull amplifier.

### TRANSMITTER CIRCUITS

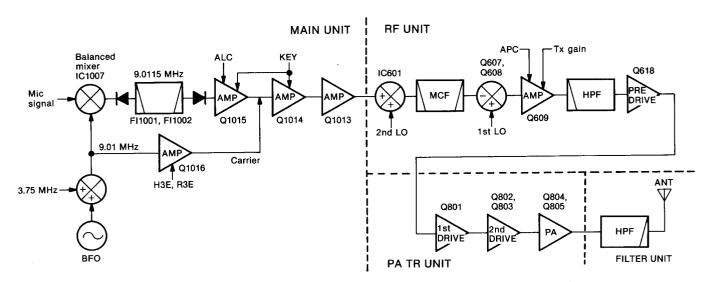


Fig. 3

The resulting signal is applied to the ANT SW UNIT, FILTER UNIT and then to the antenna connector.

A 0.012  $\Omega$  resistor (PA UNIT, R871), inserted in the HV line, is provided for the Ic APC circuit. A voltage generated at both terminals of R871 is applied to the RF UNIT via the "IC+" and "IC-" signal line.

Thermal switches S801 and S802 detect the temperature of the power amplifier (Q804, Q805), and control the cooling fan speed.

TEMPERAT	URE °C (°F)	Below 50 (122)	50~90 (122~194)	Above 90 (194)
THERMAL	S801	OFF	OFF	ON
SWITCH	S802	OFF	ON	ON
COOLING	RECEIVE	STOP	LOW	MID LOW
FAN SPEED	TRANSMIT	STOP	MID HIGH	HIGH

Table 1

# 3-3-5 ANTENNA SWITCHING CIRCUIT (ANT SW UNIT)

The RF signal from the PA TR UNIT passes through a diode switch (D921) and the FILTER UNIT, and is then applied to the antenna connector through this unit again. Approx. 200 mA bias current is supplied from Q922 and Q924 to D921 to prevent rectification of the RF signal. A surge absorber (R933) protects the transceiver from a lightning surge voltage.

### 3-3-6 FILTER UNIT

The FILTER UNIT has 8 low-pass filters. The signal from the PA TR UNIT, applied to one of the low-pass filters depending on the transmit frequency range, suppresses high harmonic components.

The filtered signal passes through the SWR detector circuit (L1521) and is then applied to the ANT SW UNIT. The forward signal from L1521 is detected at D1509 and applied to the IF UNIT as the "FOR" voltage. The reflection signal from L1521 is detected at D1508 and applied to the IF UNIT as the "REF" voltage.

### **SWR DETECTOR CIRCUIT**

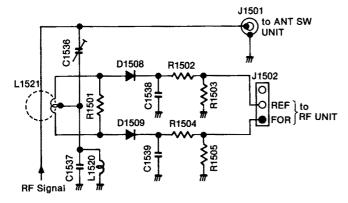


Fig. 4

### 3-3-7 ALC CIRCUIT (MAIN UNIT)

A portion of the IF signal from the IF amplifier (Q1013) is detected at D1044 and D1045, amplified at IC1006a, and is applied to IC1006b pin 2. The reference voltage, determined by R1187, is applied to IC1006b pin 3. The output voltage from IC1006b pin 1 is applied to the 1st gate of Q1015.

The output voltage from IC1006a (pin 7) is applied to the RF UNIT as a reference voltage for the transmit gain control circuit via J1002 ("FORA" line).

An external ALC input from the [ACC] sockets is applied to Q1020. ALC operation is identical to that of the internal ALC.

# 3-3-8 TRANSMIT GAIN CONTROL CIRCUIT (RF UNIT)

The "FOR" voltage from the FILTER UNIT is applied to IC603 pin 3. To control the RF output power in some versions, the "POL" or "LOW2" signal is also applied to IC603 pin 2 as the reference voltage.

IC603 pin 1 outputs RF meter voltage, and is applied to both the transmit gain control circuit (IC603 pin 6) and meter switching IC (MAIN UNIT, IC1016). The "FORA" voltage from the MAIN UNIT is also applied to IC603 pin 5 as the reference voltage.

When the "FOR" voltage exceeds the reference voltage, IC603 controls the RF amplifier (Q609) to reduce the output power until the "FOR" and reference voltages are equalized.

### 3-3-9 APC CIRCUITS (RF UNIT)

The APC circuits protect the final transistors from high SWR and excessive current. The "REF" voltage from the FILTER UNIT is applied to Q613. The amplified signal is applied to IC604 pin 2. The reference voltage, determined by R661 and R662, is applied to IC604 pin 3. The output voltage from IC604 pin 1 is applied to the 2nd gate of Q609 via D631 to reduce the output power.

The output voltage of the Ic APC amplifier (IC604 pin 7) is also applied to IC604 pin 2 to prevent the excessive current.

### 3-4 PLL CIRCUITS

### 3-4-1 GENERAL DESCRIPTION

The IC-M800 uses a dual loop PLL system. A main loop PLL uses 4 VCO circuits for all HF marine frequency coverage within 500 kHz steps. A sub loop PLL uses DDS (Direct Digital Synthesizer) System for 500 kHz coverage within 10 Hz steps. The DDS System provides a rapid lockup time and high quality frequency oscillation.

# 3-4-2 REFERENCE OSCILLATOR CIRCUIT (PLL UNIT)

The IC-M800 uses a constant temperature oven-type crystal unit (CR-282) which oscillates 30 MHz with 0.5 ppm stabilization ( $-30~^{\circ}\text{C} \sim +60~^{\circ}\text{C}$ ;  $-22~^{\circ}\text{F} \sim +140~^{\circ}\text{F}$ ). The CR-282 generates the reference frequency for the PLL UNIT and MAIN UNIT BFO circuit (through P1001).

# 3-4-3 2nd LOCAL OSCILLATOR CIRCUITS (PLL UNIT)

A 2nd local oscillator frequency is used for the 2nd mixer circuit in the RF UNIT. Q2 is a multiplier circuit that multiplies the 30 MHz reference frequency by 2 to 60 MHz. The resulting 60 MHz signal is applied to the RF UNIT.

### 3-4-4 MAIN LOOP (PLL UNIT)

The main loop generates the  $69.5115\sim99.0115$  MHz 1st LO frequency for the RF UNIT.

An oscillated signal at one of the 4 VCOs (Q16 $\sim$ Q19; see Section 3-4-5 for details) is amplified at Q24, and Q28, and is then mixed with f<sub>LO</sub> (Sub loop output) to obtain a frequency of 3 $\sim$ 33 MHz. The converted signal, passed through D17 or D18, is applied to an appropriate bandpass filter, amplified at Q14 and Q15 and is applied to the prescaler (IC6).

The signal, divided by 4 at the prescaler, is applied to the PLL IC (IC5). IC5 includes a phase detector, programmable divider and swallow counter in the IC chip. The phase detected signal from IC5 is converted to the lock voltage at the loop filter (Q12, Q13), and is then applied to a VCO.

The oscillated signal is obtained by the following calculation:

 $f_V = f_{LO} + 4 \times N_T \times f_{REF}$ 

f<sub>V</sub>: Main loop output f<sub>LO</sub>: Sub loop output

 $N_T$ : N-data from the LOGIC A UNIT (6~66)

f<sub>REF</sub>: Reference frequency (125 kHz)

### 3-4-5 VCO CIRCUIT (PLL UNIT)

The transceiver's C/N ratio is determined by the VCO and the loop filter. 4 VCO circuits keep the low noise and reduce spurious emissions. Q20~Q23 are VCO switches which select the operating VCO with "VCO1"~"VCO4" lines. The "VCO1"~"VCO4" lines are also used for the bandpass filter in the PLL circuits.

### PLL CIRCUITS

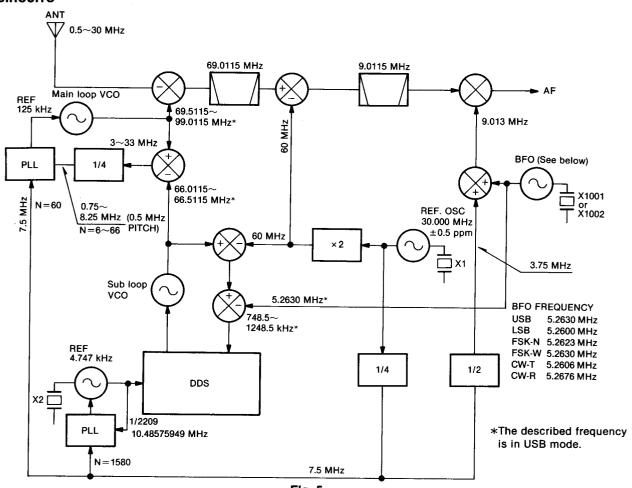


Fig. 5

### 3-4-6 SUB LOOP (PLL UNIT)

The sub loop uses the DDS (Direct Digital Synthesizer) System to generate a 66.0115~66.5115 MHz signal in 10 Hz steps. The BFO shift signal is mixed in the sub loop for compensating for the center frequency.

The generated signal at the VCO (Q9) is amplified at Q6 and is mixed with the 60 MHz signal (reference oscillator multiplied by 2) to be converted into a 6.0115  $\sim$ 6.5115 MHz signal at IC4.

The converted signal passes through a bandpass filter and is then mixed with the BFO oscillator signal to obtain a 748.5~1248.5 kHz signal. The signal is then applied to the DDS UNIT to be converted to the lock voltage using N-data from the LOGIC A UNIT. The BFO oscillator signal, "5.3M" line, is 5.2630 MHz ±mode shift frequency.

# 3-4-7 DDS REFERENCE OSCILLATOR (PLL UNIT)

X2 oscillates a 10.48575949 MHz signal as a DDS reference frequency. The PLL circuit provides frequency control and consists of the PLL IC (IC2), loop filter (R34, C48) and varactor diode (D2). The PLL reference frequency (7.5 MHz) is obtained from dividing the 30 MHz signal by 4 at IC1.

### 3-5 LOGIC CIRCUITS

# 3-5-1 TRANSCEIVER LOGIC CIRCUIT (LOGIC A UNIT)

IC311 resets the CPU (IC305) when the power is turned ON. The CPU starts working after reading a program from the PROM (IC306). The RAM (IC303) provides a CPU working area.

IC304 is an EEPROM (Electrically Erasable and Program-mable ROM) which stores memory information with no backup power source.

IC308 is an A/D converter and converts an S/RF indicator signal into 8-bit serial data. The serial data are applied to the gate array IC (LOGIC B UNIT, IC401) and then to the remote controller.

# 3-5-2 REMOTE CONTROLLER LOGIC CIRCUIT (IF UNIT)

IC2006 resets the CPU (IC2004) when the power is turned ON. The CPU starts working after reading an inside program.

The CPU receives the control signals from the front panel switches and controls. The signals are converted into serial data to send to the IC-M800 transceiver.

The CPU also receives serial data from the IC-M800 transceiver and outputs signals such as an S/RF indicator signal or AF mute signal.

### 3-5-3 ALARM CIRCUIT (LOGIC B UNIT)

IC407 is an IC chip for generating alarm signals (1300 Hz and 2200 Hz). The frequency is changed in 250 msec. cycles and is generated for 50 sec. "ALM" and "ALH" signals are applied to IC407 for controlling.

# 3-6 GATE ARRAY PORT ALLOCATIONS

(LOGIC B UNIT IC401 AND IF UNIT IC2005)

#### INPUT PORT

	DIAL			
PORT NAME	PIN NUMBER	DESCRIPTION		
OPT IN	1	Inputs a signal from the photocoupler.		
XT1, XT2	4, 5	Connects a crystal for generating a gate array clock signal.		
RST	18	Inputs a reset signal for initializing the gate array.		
AFS	24	Inputs a sampling signal for transferring the PWM signals.		
DATA IN	34	Inputs serial data from the transceiver or remote controller CPU.		
PWMA, PWMB	40, 41	Inputs a PWM signal received or a microphone signal.		

#### OUTPUT PORT

PORT NAME PIN NUMBER		DESCRIPTION				
MIC	29	Outputs a PWM signal separated from the photocoupler signal.				
DATA OUT	38	Outputs separated serial data from the transceiver or remote controller CPU.				
Q14B	47	Outputs a trigger signal to the PWM modulator.				
OPT OUT 48		Outputs serial data combined with a PWM signal to the photocoupler.				

#### SECTION 4 **MECHANICAL PARTS AND DISASSEMBLY**

### 4-1 REMOTE CONTROLLER AND ACCESSORIES

### • REMOTE CONTROLLER

LABEL NUMBER			QTY.	LABEL Number	ORDER NO.	DESCRIPTION	QTY.
①	8810000610	PH M3×12 SUS	2	17)	8930015270	LCD cover	1
2	8930016950	Interface plate	1	18	8810001000	PH B0 M2×6	4
3	8810000600	PH M3×10 SUS	2	19	8810001100	PH B0 M3×5	4
4	8930015240	Connector plate	1	20	8930015220	Speaker plate	1
(5)	8810005940	PH A0 M3 × 30 SUS	6	21)	8930017110	MIC connector plate	1
6	8850000690	Flat washer M3 (3×7×0.5) SUS	6	22	8830000050	VR nut (B)	2
7	8810002170 FH M3×6		2	23	8830000040	VR nut (A)	1
8	8010008740	Controller rear panel	1	24)	8210004760	Controller front panel	1
9	8930015230	Lock plate	2	25	8610005760	Knob N149 [CLARITY, PWR/VOL]	2
10	8930015250	Panel rubber seal	1	26	8610005770	knob N148 [MAIN]	1
11)	8930015210	JACK P.C. Board plate	1	27	8210004741	611 Membrane switch-1	1
(12)	8810003360	Set screw (C) M3×6	2	28	2510000440	Speaker 77F60N	1
13	8930002970 Rubber seal (B)		1	29	2210000590	Switch SRRS1S017A	1
14	4) 8930004220 Rubber seal plate (B)		1	30	7210000330	Variable resistor RK1241212005A	1
15	8810001110 PH B0 M3×6		4	31)	2250000020	Rotary encoder SRB18100 25KC	1
16	8850000110	Flat washer M2 Ni BS	4	32	9061100120	Flat cable UL2468	1

Screw abbreviations PH: Pan head

LABEL

NUMBER

1

(10)

 $\bigcirc$ 

12

13

6450000450

6510002050

5210000090

5210000060

FH: Flat head

A0, B0: Self-tapping screw

QTY.

1

ZK: Black Ni: Nickel

**DESCRIPTION** 

DIN plug 8-pin (TCP0587-01-0401)

4-pin connector (1190T L)

Spare fuse FGB 30A

Spare fuse FGB 5A

### Accessories for the transceiver

**ORDER** 

NO. 8010001810

#### 2 1 Optional product DC power cable (OPC-077) 3 8820000170 Mounting knobs (A) $M5 \times 10$ SUS 4 **(4)** 8830000260 Nut M6 SUS 8 **(5)** 8850000180 Flat washer M5 SUS 4 Spring washer M6 SUS **6** 8850000510 4 (7) 8850000200 Flat washer M6 (6 × 20 × 1.5) SUS 4 8 8810001500 PH A M6 × 30 SUS 4 Hex bolt M6 × 50 SUS 4 (9) 8810003500 6450000440 DIN plug 7-pin (TCP0577-01-0201) 1

Mounting bracket

### Accessories for the remote controller

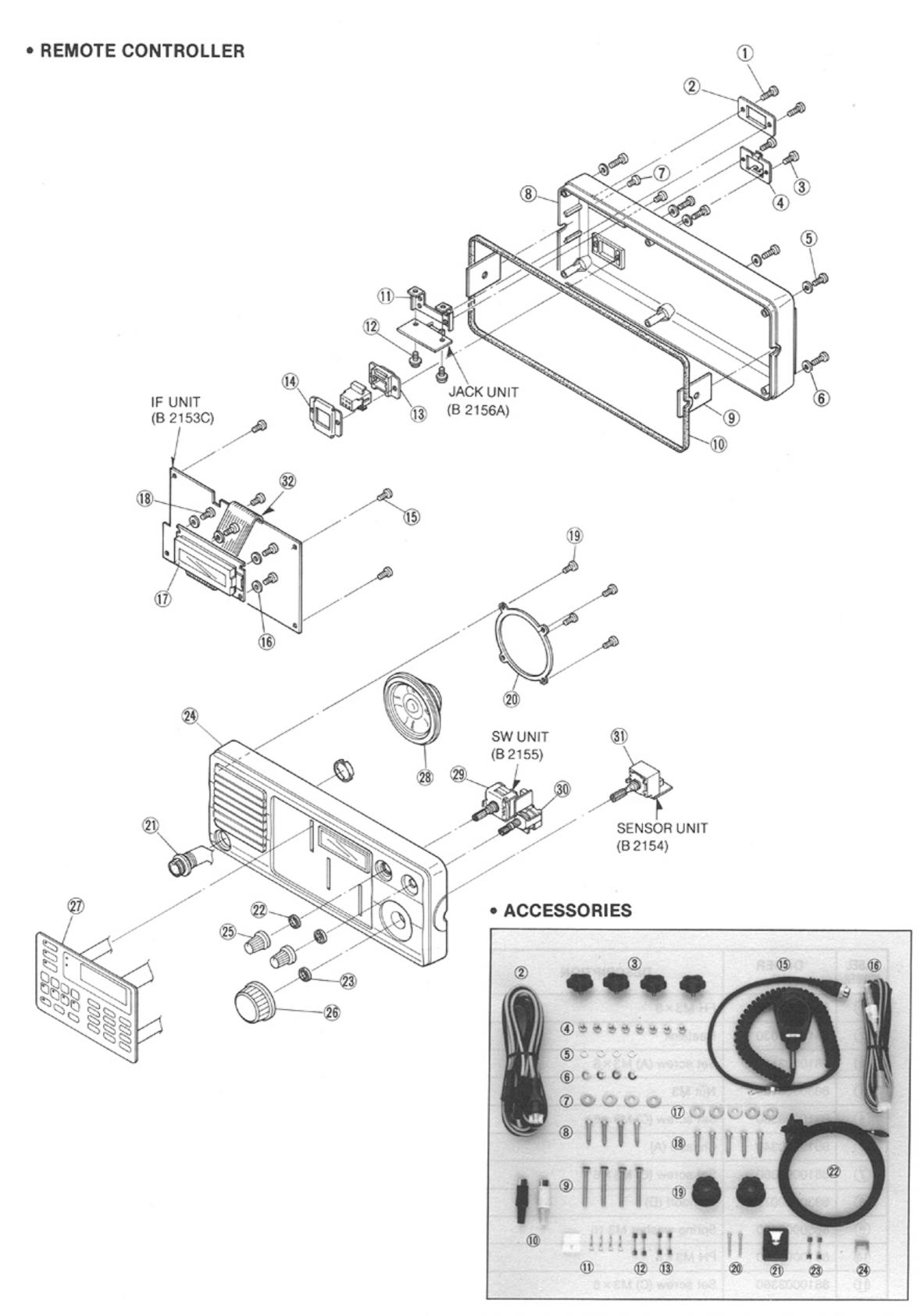
LABEL NUMBER	ORDER NO.	DESCRIPTION	QTY.
14)	8010008730	Mounting bracket	1
15	Optional product	Microphone EM-48	1
16	Optional product	DC power cable (OPC-089A)	1
17)	8850000200	Flat washer M6 (6 × 20 × 1.5) SUS	5
18	8810001500	PH A0 M6 × 30 SUS	5
19	8820000570	Mounting knobs G1-5-15	2
20	8810001470	PH A0 M3.5 × 30 SUS	2
21)	8930009120	Microphone hanger	1
22	8900001841	Optical fiber cable (OPC-172A) (GP-1C205B)	1
23	5210000050	Spare fuse FGB 3A	2
24	8930010820	Cable stopper	1
25	8930016940	Cable clamp	1
		- " "	

1

4

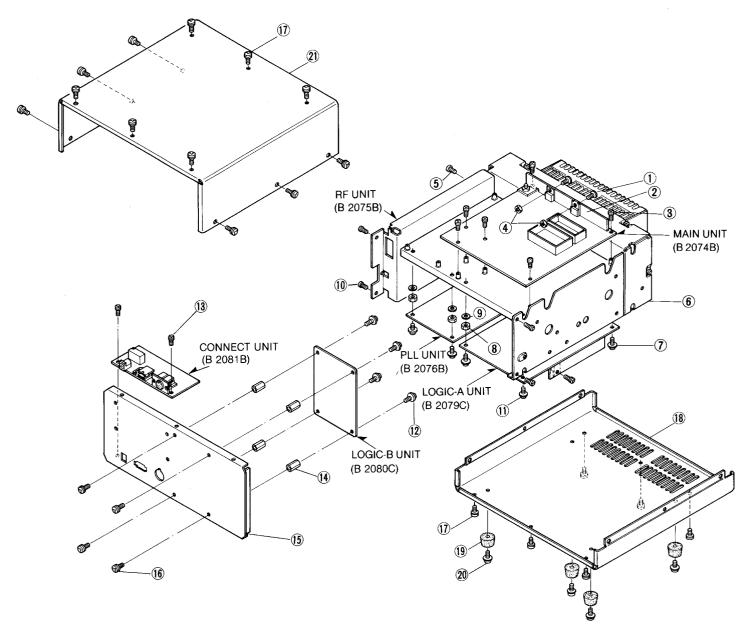
2

2



Mounting brackets for the transceiver ① and remote controller and the cable clamp ② are not shown in the picture above.

### **4-2 TRANSCEIVER AND REAR PANEL**



### • TRANSCEIVER

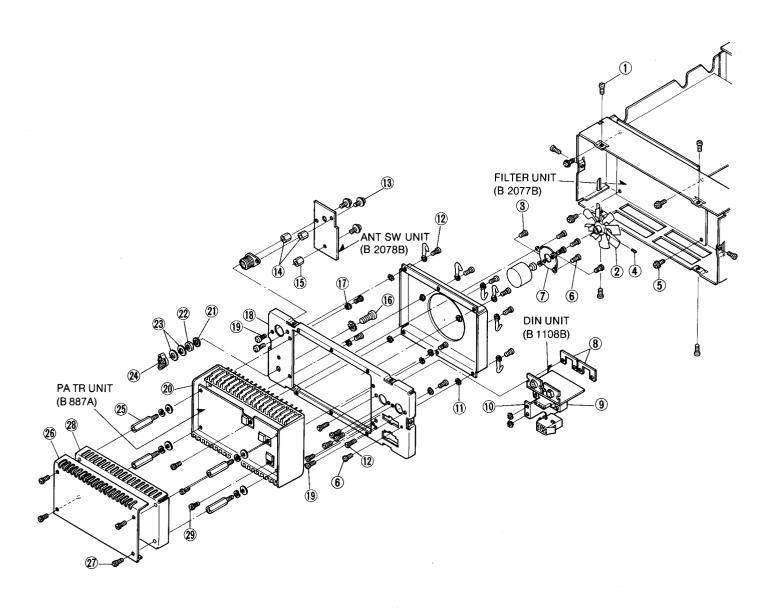
LABEL Number	ORDER NO.	DESCRIPTION	QTY.	LABEL NUMBER	ORDER NO.	DESCRIPTION	QTY.	
1	8810002180	FH M3×8	2	(2)	8810004140	Set screw (F) M3×7 ZK SUS	4	
2	8410001030	Heatsink	1	13	8810003160	Set screw (A) M3×6	2	
3	8810003160	Set screw (A) M3×6	10	14	8930000540	Thread spacer (D)	4	
4	8830000100	Nut M3	2	15	8010008720	Blind panel	1	
<u>(5)</u>	8810003360 Set screw (C) M3×6		5	16	8810003350	Set screw (C) M3×5	4	
6	8010000340	Chassis (A)	1	17)	8810004140	Set screw (F) M3×7 ZK SUS	18	
1	8810003360	Set screw (C) M3×6	6	18	8110003400	Bottom cover (Incl 19, 20)	13	
8	8930000070	Standoff (D)	12	19	8930002900	Rubber foot (A) SK1912A	4	
9	8850000420 Spring washer M3 Ni		12	20	8810001550	PH B1 M4×10 SUS	4	
10	8810000220	310000220 PH M3×5 4 21		8110003380	Top cover	1		
11	8810003360	Set screw (C) M3×6	6					

Screw abbreviations PH: Pan head

FH: Flat head

B0: Self-tapping screw

ZK: Black Ni: Nickel



### • REAR PANEL

LABEL NUMBER	ORDER NO.	DESCRIPTION	QTY.	LABEL NUMBER	ORDER NO.	DESCRIPTION	QTY.
1	8810000230	PH M3×6	6	16	8810000690	PH M5×16 SUS	1
2	8010002470	Propeller (A)	1	17)	8850000590	Star washer M5	1
3	8810001810	Motor screw (A) M2 × 2.3	2	18	8010008670	Rear panel (A)	1
4	8810003520	HS M3×3 ZK	1	19	8810002950	BiH M3×6 SUS	4
(5)	8810003360	Set screw (C) M3×6	4	20	8410000411	263 Heatsink-2	1
6	8810000140	PH M2.6×5	6	21)	8850000500	Spring washer M5 SUS	1
1	8010002070	Motor plate	1	22	8830000210	Nut M5 Ni BS	1
8	8930008230	DIN plate	2	23	8850000150	Flat washer M5 Ni BS	2
9	8930004150	Connector plate	1	24	8830000360	Wing nut M5 Ni	1
10	8310004880	C plate	1	25)	8930000140	Standoff (J)	4
0)	8850000570	Star washer M3	12	26	8510001660	PA cover	1
12	8810000240	PH M3×8	10	27)	8810004140	Set screw (F) M3×7 ZK SUS	4
(13)	8810003360	Set screw (C) M3×6	3	28	8510001590	PA shield plate	1
<b>(4)</b>	8930000660	Thread spacer (P)	2	29	8810003160	Set screw (A) M3×6	4
(15)	8930000540	Thread spacer (D)	1				

Screw abbreviations PH: Pan head

BiH: Binding head

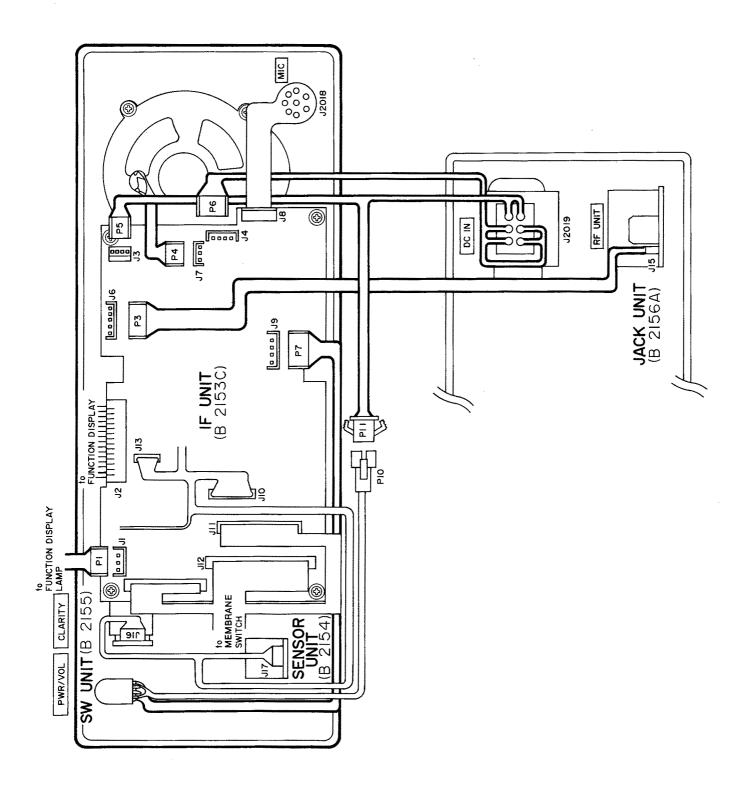
HS: Hex socket

B0: Self-tapping screw

ZK: Black Ni: Nickel

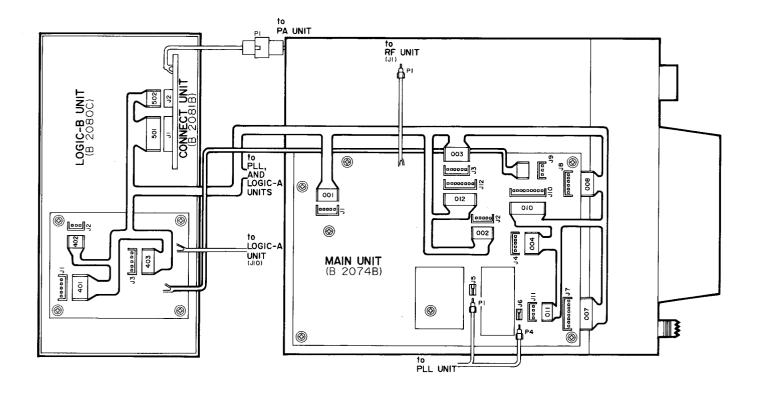
### 4-3 REMOTE CONTROLLER AND TRANSCEIVER CONNECTOR ASSEMBLY

### • REMOTE CONTROLLER

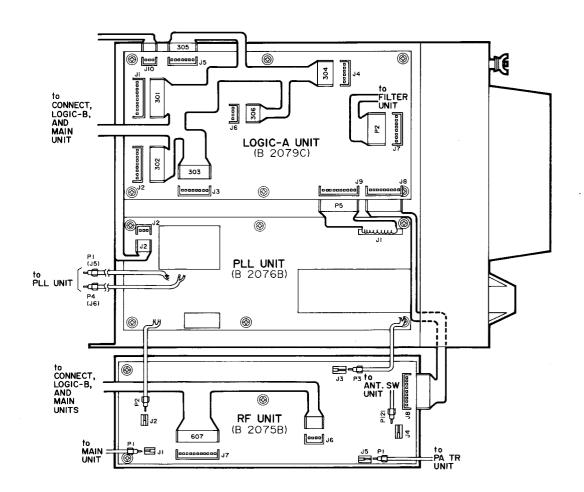


### • TRANSCEIVER

TOP



### **BOTTOM**



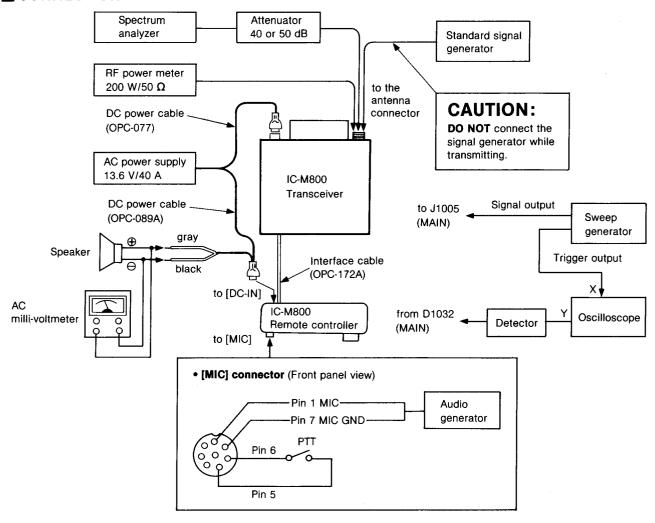
## SECTION 5 ADJUSTMENT PROCEDURES

### 5-1 PREPARATION BEFORE SERVICING

### **■ REQUIRED TEST EQUIPMENT**

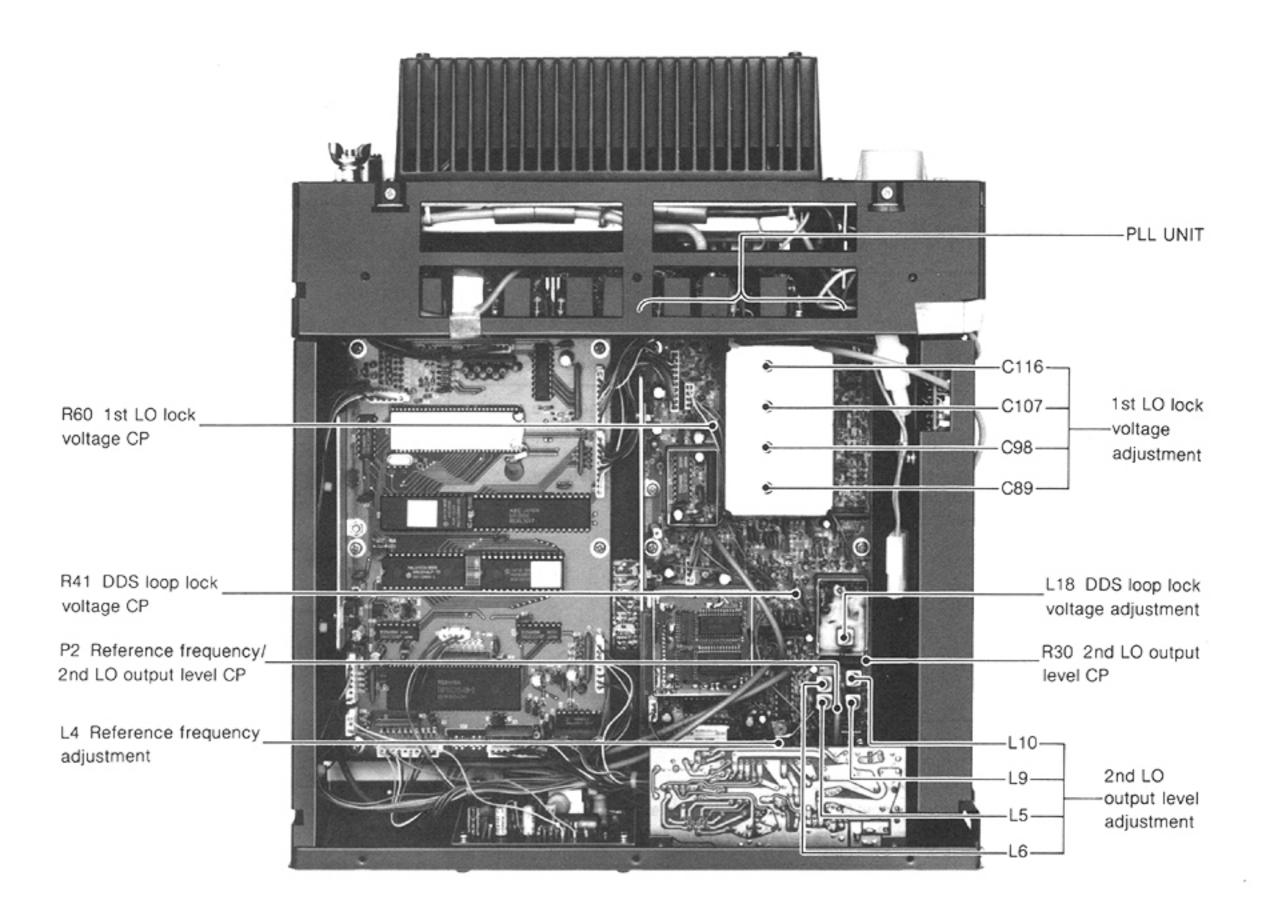
EQUIPMENT	GRADE AND RANGE	EQUIPMENT	GRADE AND RANGE
AC power supply	Output voltage : 13.6 V DO	- I	Impedance : 4 Ω
	Current capacity : 40 A or n	nore Ammeter	Measurement capability: 1 A
Frequency range   1.8~30 MHz   Impedance   50 Ω   SWR   Less than 1.2 : 1		i Augio generator	Frequency range : 300~3000 Hz Output level : 1~500 mV
			Power attenuation : 40 or 50 dB Capacity : 150 W or more
Frequency counter	Frequency range : 0.1~100 Frequency accuracy: ±1 ppm Sensitivity : 100 mV o	or better Spectrum analyzer	Frequency minimum: At least 30 MHz Spectrum bandwidth: ±100 kHz or more
RF voltmeter	Frequency range : 0.1~100 Measuring range : 0.01~10		Frequency range : 0.1~100 MHz Sweep bandwidth : At least 10 MHz
Oscilloscope	Frequency range : DC~20 M Measuring range : 0.01~10		Output impedance : 50 Ω  0.001 μF 1K60
Standard signal generator (SSG)	Frequency range : 0.1~30 M Output level : -127~- (0.1 µV~:	-17 dBm	INPUT 1K60 OUTPUT
DC voltmeter	Input impedance : 50 kΩ/DC	or better	0.001 μF
AC milli-voltmeter	Measuring range : 10 mV∼1	0 V	

### CONNECTION



### **5-2 PLL ADJUSTMENT**

AD MOTES		AD HICTHERT CONDITIONS	N	MEASUREMENT	VALUE		STMENT DINT
ADJUSTME	:N I	ADJUSTMENT CONDITIONS	UNIT	LOCATION	VALUE	UNIT	ADJUST
REFERENCE FREQUENCY	1	Displayed frequency: 2182.0 kHz     Mode : USB (J3E)     Unplug P2 from J602 (RF UNIT).     Receiving	PLL	Terminate P2 to ground with a 50 $\Omega$ resistor. Connect the frequency counter to P2.	60.000020 MHz	PLL	L4
2ND LO OUTPUT LEVEL	1	Displayed frequency: 2182.0 kHz     Mode : USB (J3E)     Unplug P2 from J602 (RF UNIT).     Receiving	PLL	Terminate P2 to ground with a 50 Ω resistor. Connect the RF voltmeter to P2.	Adjust for maximum output. (+2~+5 dBm)	PLL	L5, L6
	2			Connect the RF voltmeter to R30.	Maximum level		L9, L10
	3	After adjustment, remove the resistor	and re-plu	ug P2.			
DDS LOOP LOCK VOLTAGE	1	Displayed frequency: 7000.0 kHz     Mode : USB (J3E)     [CLARITY] control : Center     Receiving	PLL	L18			
	2	Displayed frequency: 6999.9 kHz			Approx. 3.0 V DC		Verify
1ST LO LOCK VOLTAGE	1	Displayed frequency: 6999.9 kHz     Mode : USB (J3E)     Receiving	PLL	Connect the oscilloscope to R60.	6.5 V DC	PLL	C89
	2	Displayed frequency: 13999.9 kHz			6.5 V DC		C98
	3	Displayed frequency: 21999.9 kHz	frequency: 21999.9 kHz 6.5 V DC	C107			
	4	Displayed frequency: 30000.0 kHz			6.5 V DC		C116
	5	Displayed frequencies:     500.0 kHz, 7000.0 kHz,     14000.0 kHz and 22000.0 kHz			More than 1.0 V DC (PLL is locked.)		Verify



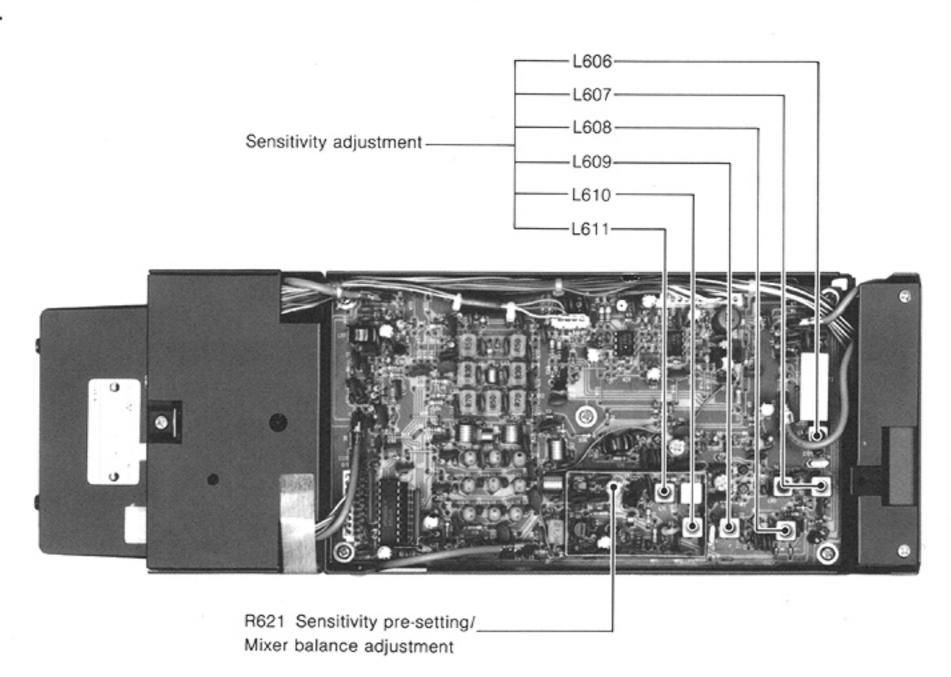
## **5-3 RECEIVER ADJUSTMENT**

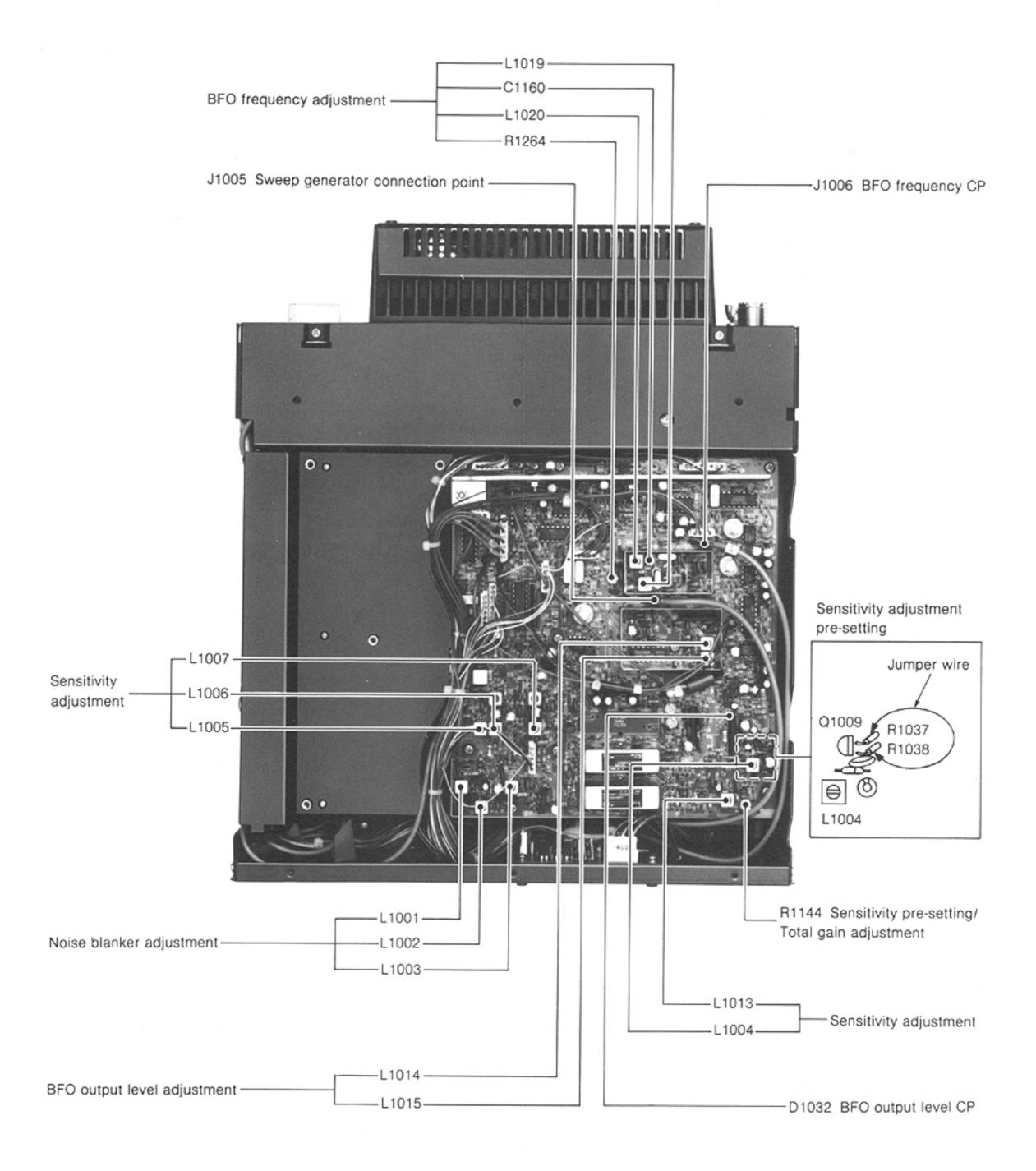
ADIIICTME	NT	AD HISTMENT COM	DITIONS	N	IEASUREMENT	VALUE	ADJUSTME POINT	
ADJUSTMENT BFO 1		ADJUSTMENT CONDITIONS		UNIT LOCATION		VALUE	UNIT	ADJUST
BFO FREQUENCY	1		500.0 kHz N (J2B)	MAIN	Connect the frequency counter to J1006.	Pre-set to center.	MAIN	C1160
	2	Receiving			31006.	5.26230 MHz	***************************************	L1019
	3	• Mode : USE	B (J3E)			5.26300 MHz		R1264
	4	• Mode : LSB	3			5.26000 MHz	Advantage and the second	L1020
	5	• Mode : CW	(A1A)			5.26160 MHz	to agreement to the control of the c	C1160
	6	Repeat step 2~5 a couple	e of times.					
	7	Mode : CW     Transmitting	(A1A)	MAIN	Connect the frequency counter to J1006.	5.26060 MHz		Verify
BFO OUTPUT LEVEL	1	Displayed frequency: 1250     Mode : USE     Apply an RF sweep signal Sweep level: 0.22 V (Conter frequency: 7.5 Sweep bandwidth: 1 Mereceiving	3 (J3E) al to J1005. 0 dBm) 5 MHz	MAIN	Connect the oscilloscope to the cathode of D1032 via the detector.	Adjust as follows:  Min.  Max.  f <sub>0</sub> Symmetrical waves f <sub>0</sub> =9.01 MHz	MAIN	L1014, L1015
	2	• Mode : AM	(H3E)			No output		Verify
SENSITIVITY	1		3 (J3E)	Remote controller	Connect the AC millivoltmeter to the AF	Pre-set to center	RF	R621
	2	• [NB] switch : OFF • [SQL] switch : OFF • Set the signal generator;		rear panel	output cables with a 4 Ω load.	Pre-set to max. CW.	MAIN	R1144
	3	Level : 0.5 µ (-1° Modulation : OFF Connect a jumper wire b R1037 and R1038.  •[SP OFF] switch : ON • Receiving	13 dBm)		·	Maximum audio output level adjusting several times	RF	Adjust in sequence L611, L610, L609, L608, L607, L606
	4					Maximum audio output level adjusting several times	MAIN	Adjust in sequence £1005, £1006, £1007, £1013, £1004
	5	After adjustment, remove t	the jumper w	ire from F	11037 and R1038.			

# RECEIVER ADJUSTMENT (CONTINUED)

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION	VALUE	UNIT	ADJUST
MIXER BALANCE	1	Displayed frequency: 500.0 kHz     Mode : USB (J3E)     Set the signal generator;     Level : OFF     Receiving	Remote controller rear panel	Connect the AC milli- voltmeter to the AF output cables with a 4 Ω load.	Minimum level	RF	R621
TOTAL GAIN	1	Displayed frequency: 8200.0 kHz     Mode : USB (J3E)     Set the signal generator;     Level : 0.32 mV	Remote controller rear panel	Connect the AC millivoltmeter to the AF output cables with a 4 Ω load.	0 dB	Remote controller front panel	[VOL] control
	2	Set the signal generator;     Level : OFF			-30 dB	MAIN	R1144
		When above adjustment cannot obtain	-30 dB,	set R1144 for maximun	n. (-35 dB or more)		
NOISE BLANKER	1	<ul> <li>Displayed frequency: 8200.0 kHz</li> <li>Mode : USB (J3E)</li> <li>[NB] switch : ON</li> <li>Apply an RF signal including the following pulse noise to the antenna connector.</li> <li>RF signal level : 3.2 μV (-97 dBm)</li> </ul>		Connect the oscilloscope to the AF output cables with a 4 Ω load.	Adjust for minimum waveform on the oscilloscope.	MAIN	L1001, L1002, L1003
		100 msec. 4 msec.					

# **RF UNIT**

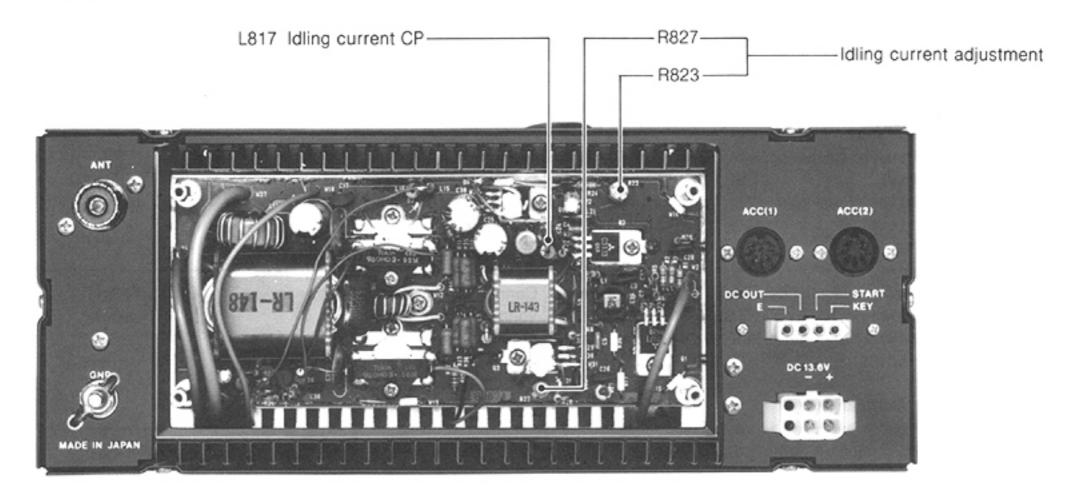




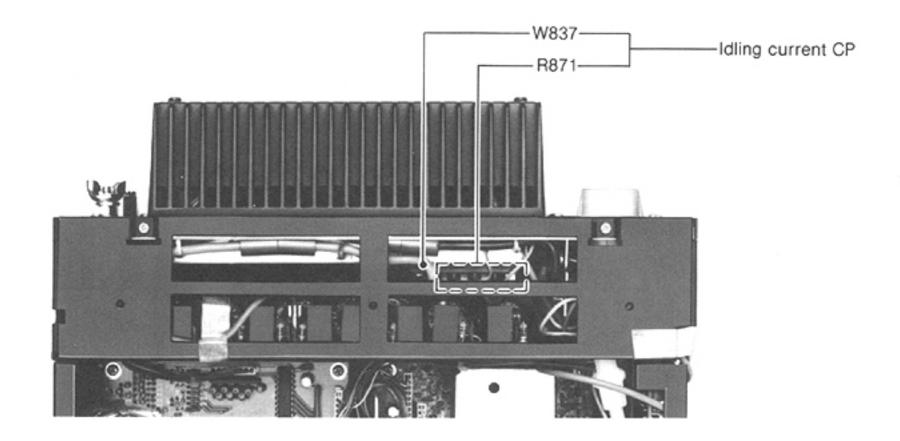
### **5-4 TRANSMITTER ADJUSTMENT**

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION	VALUE	UNIT	ADJUST
IDLING CURRENT  For drive transistors	1	Displayed frequency: 12500.0 kHz  Mode: USB (J3E)  Apply no AF signal to the [MIC] connector.  Transmitting	PA TR	Unsolder L817 and connect the ammeter to the unsoldering points.	100 mA	PA TR	R827
				ammeter  ammeter  Q6 side			
® For final transistors	2		PA	Unsolder W837 and connect the ammeter between R871 and W837.	600 mA		R823
				ammeter 0 0 0 R871 to PA TR UNIT			
		After adjustment, re-solder L817 and W	/837.				`,
SWR DETECTOR	1	Displayed frequency: 2000.0 kHz     Mode : AM (A3E)     Transmitting	RF	Connect the DC voltmeter to R659.	Minimum	FILTER	C1536
TX RF FILTER	1	• Mode : USB (J3E)	ceiver por	Connect the RF	Pre-set to max. CCW.	RF	<b>R</b> 657
	2			power meter to the antenna connector.	Pre-set to center.	IF	R2022
						RF	R681
						MAIN	R1187
	3				Pre-set to 2/3 CW rotation.	RF	R688
	4				Pre-set to max. CW.	MAIN	R1290
	5				Maximum level	MAIN	L1011, L1010
		NOTE: Adjust the AG output level so the	at the RF	output power does not b	pecome 100 W or more.	RF	L665

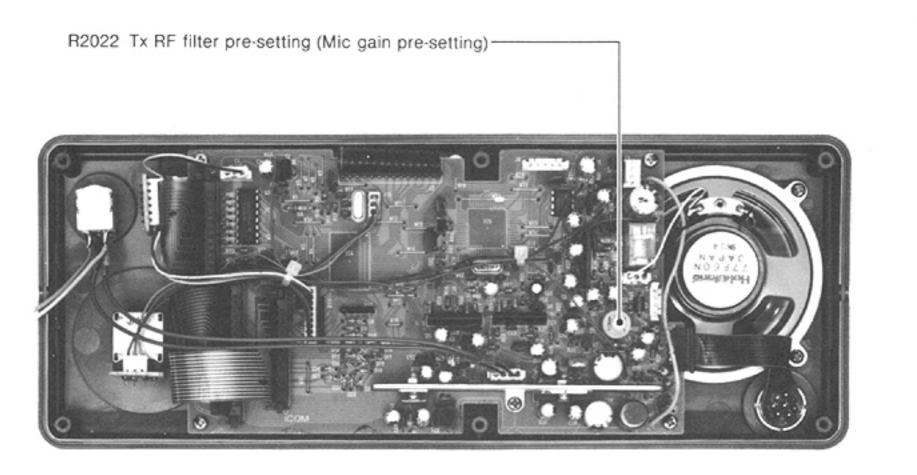
# PA TR UNIT



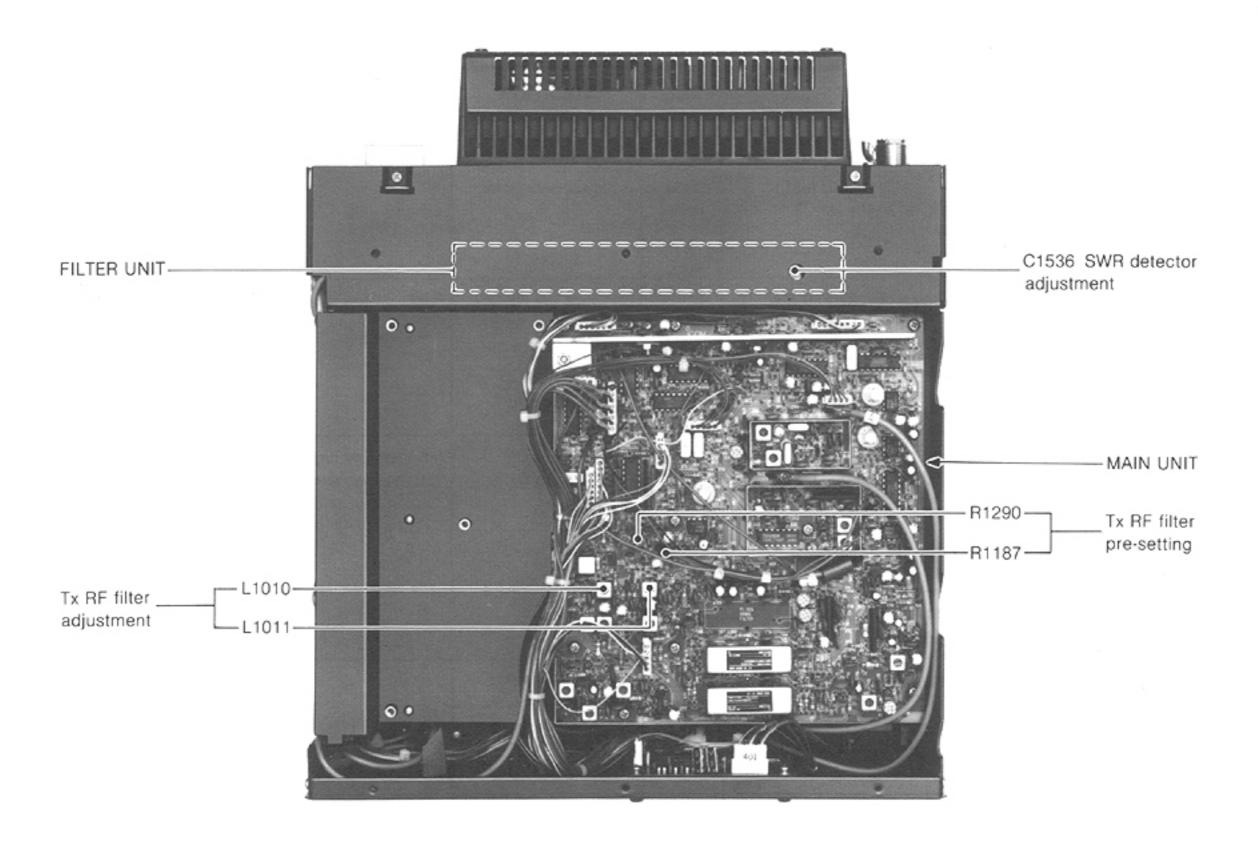
# **PA UNIT**



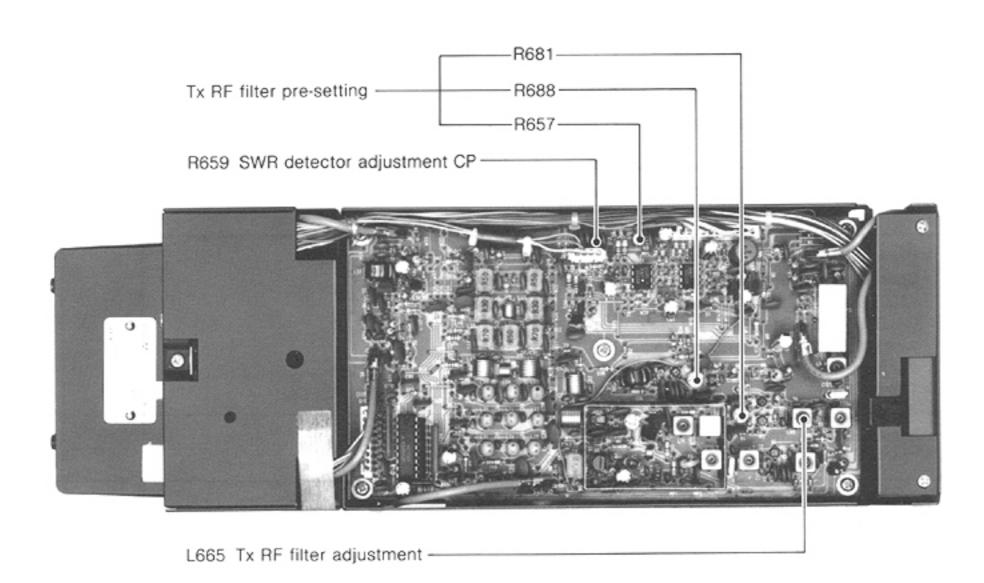
# IF UNIT



# **FILTER AND MAIN UNITS**



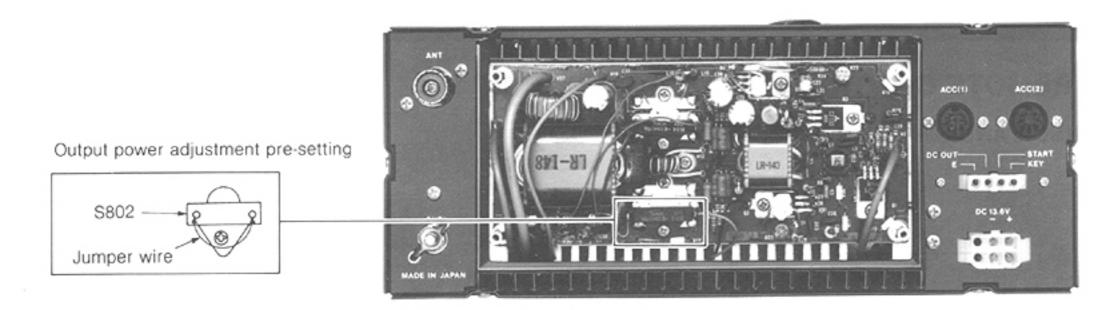
# **RF UNIT**



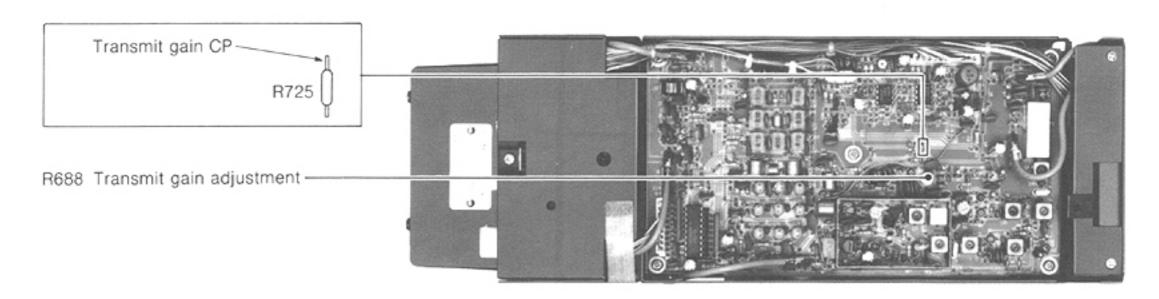
### TRANSMITTER ADJUSTMENT (CONTINUED)

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION	VALUE	UNIT	ADJUST
CARRIER SUPPRESSION PRE- ADJUSTMENT	1	Displayed frequency: 12500.0 kHz     Mode : FSN (J2B) or USB (J3E)     Apply no signal to the [MIC] connector.     Transmitting	Trans- ceiver rear panel	Connect the RF power meter to the antenna connector.	Minimum level	MAIN	R1136, R1138
TRANSMIT GAIN	1	Displayed frequency: 8200.0 kHz  Mode: USB (J3E) Apply an AF signal to the [MIC] connector. Level: 0.1 mV/1 kHz Transmitting	Trans- ceiver rear panel	Connect the RF power meter to the antenna connector.	5 W	Audio generator	Output level
	2	Displayed frequencies:     2000.0 kHz and 22000.0 kHz	RF	Connect the DC voltmeter to R725.	0.5 V on the higher voltage frequency	RF	R688
		NOTE: Adjust above adjustment a cou	7.				
OUTPUT POWER	1	Displayed frequency: 8200.0 kHz  Mode: CW (A1A)  Connect a key to the [ACC (1)] socket pin 1 and 2, and keep the key down.  Transmitting	Trans- ceiver rear panel	Connect the RF power meter to the antenna connector.	140 W	MAIN	R1187
	2	Mode : AM (H3E)     Apply no AF signal to the [MIC] connector.			55 W		R1290
	3	• Mode : A3A (R3E)			5 W		R1291
	4	Mode : CW (A1A)     Connect a jumper wire to both terminals of S802.     Connect a key to the [ACC (1)] socket pins 1 and 2, and keep the key down.			60 W		Verify
	5	After adjustment, remove the jumper wire from S802.					
	6	Unplug J1012 (MAIN UNIT) Connect a jumper wire between L1025 and J1012 pin 3. CAUTION: Be careful the jumper wire (13.6 V line) does not touch the heatsink. Transmitting	Trans- ceiver rear panel	Connect the RF power meter to the antenna connector.	10 W		R1190
	7	After adjustment, remove the jumper w	L				
CARRIER SUPPRESSION	1	Displayed frequency: 12500.0 kHz  Mode: USB and LSB  Apply no signal to the [MIC] connector.  Transmitting	Trans- ceiver rear panel	Connect the spectrum analyzer to the antenna connector via the attenuator.	Minimum carrier level (Less than -50 dB)	MAIN	R1136, R1138 (Alternately adjust)

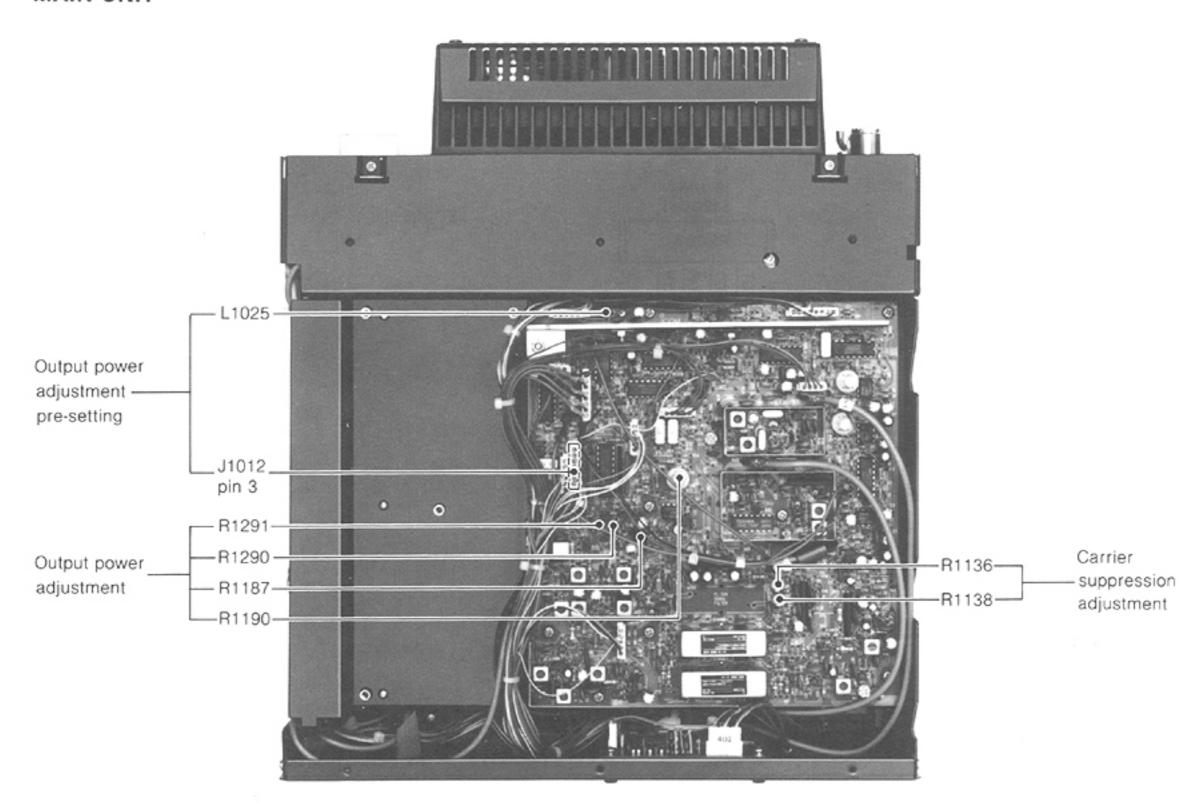
# PA TR UNIT



# **RF UNIT**



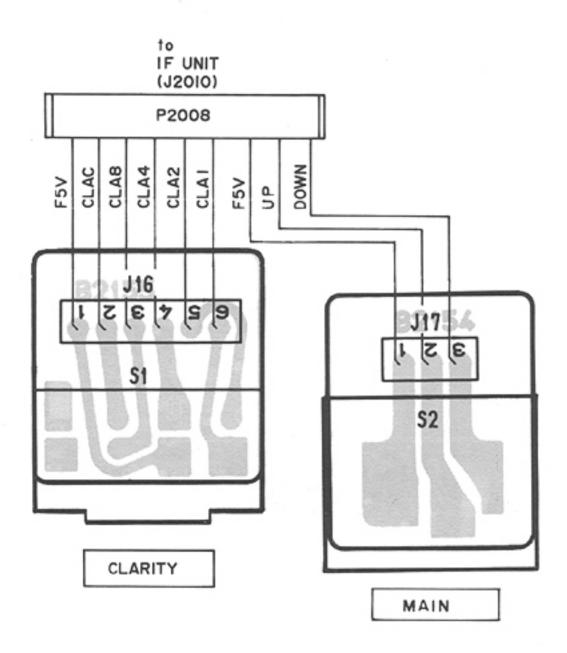
# MAIN UNIT



# SECTION 6 BOARD LAYOUTS

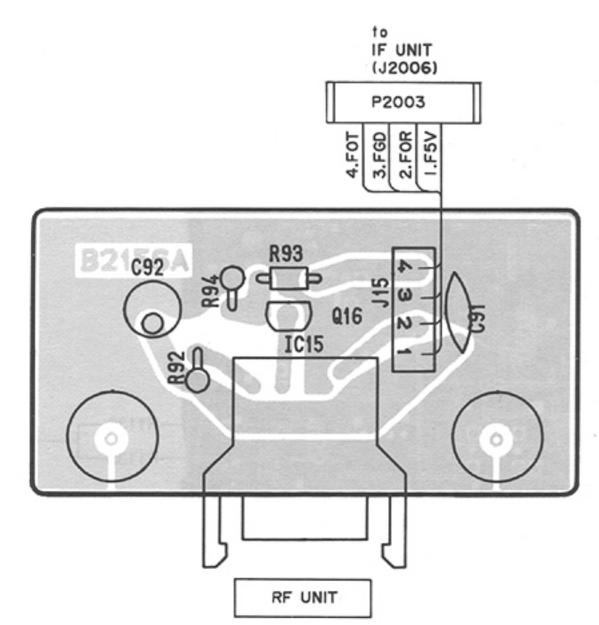
# **6-1 REMOTE CONTROLLER**

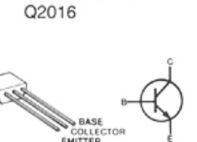
### • SENSOR AND SW UNITS



NOTE: Add "2000" to the indicated number on the unit for actual part number respectively.

# JACK UNITS

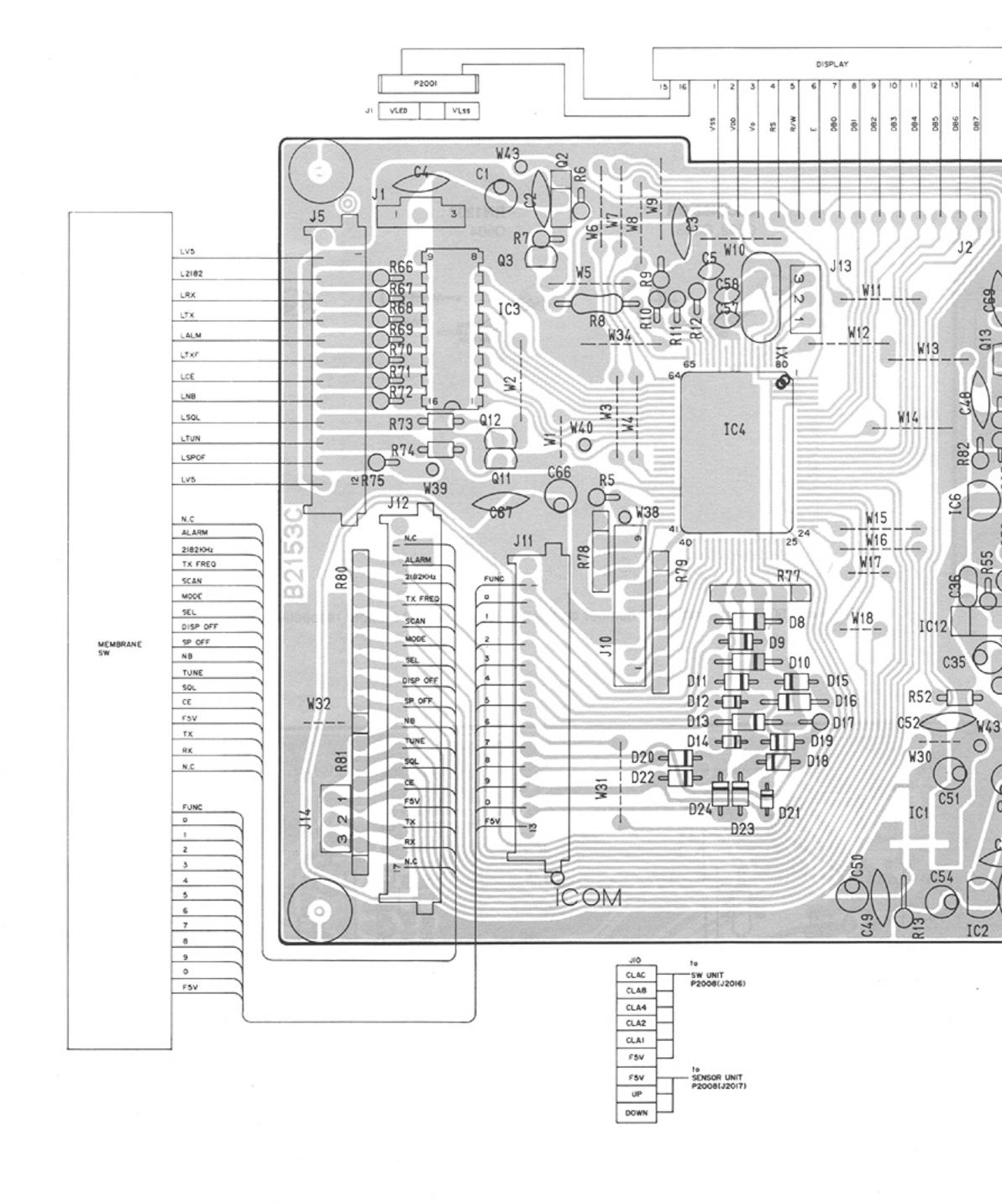


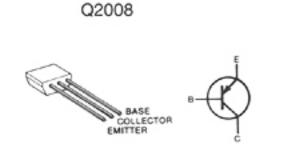


2SC2458-GR

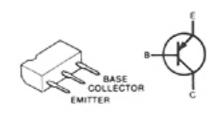
NOTE: Add "2000" to the indicated number on the unit for actual part number respectively.

# • IF UNIT



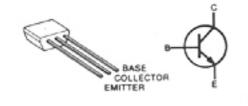


2SA1048-GR



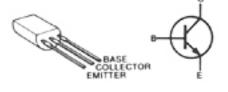
2SB909M Q

Q2002



2SC2458-Y

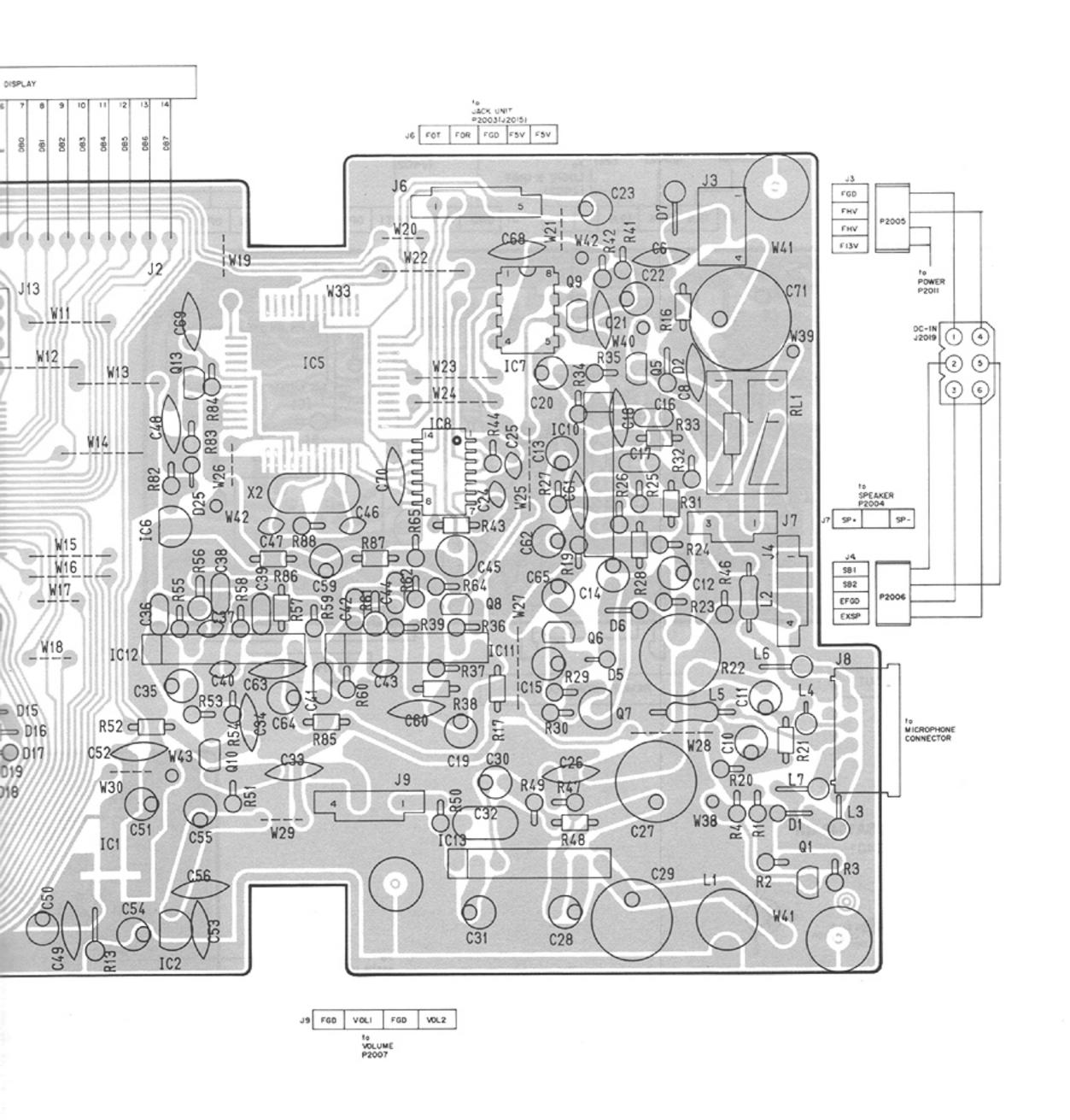
Q2001



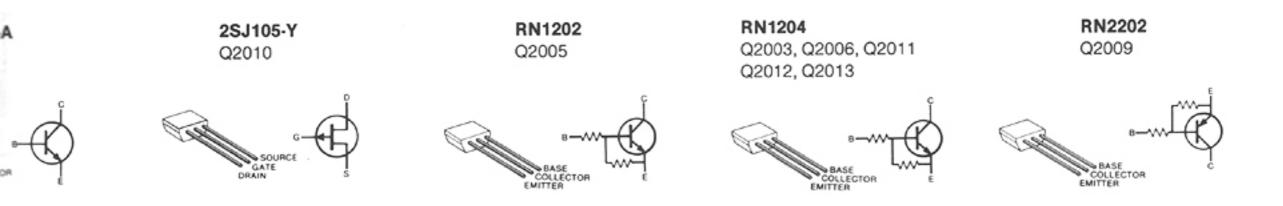
2SC2878-A

Q2007



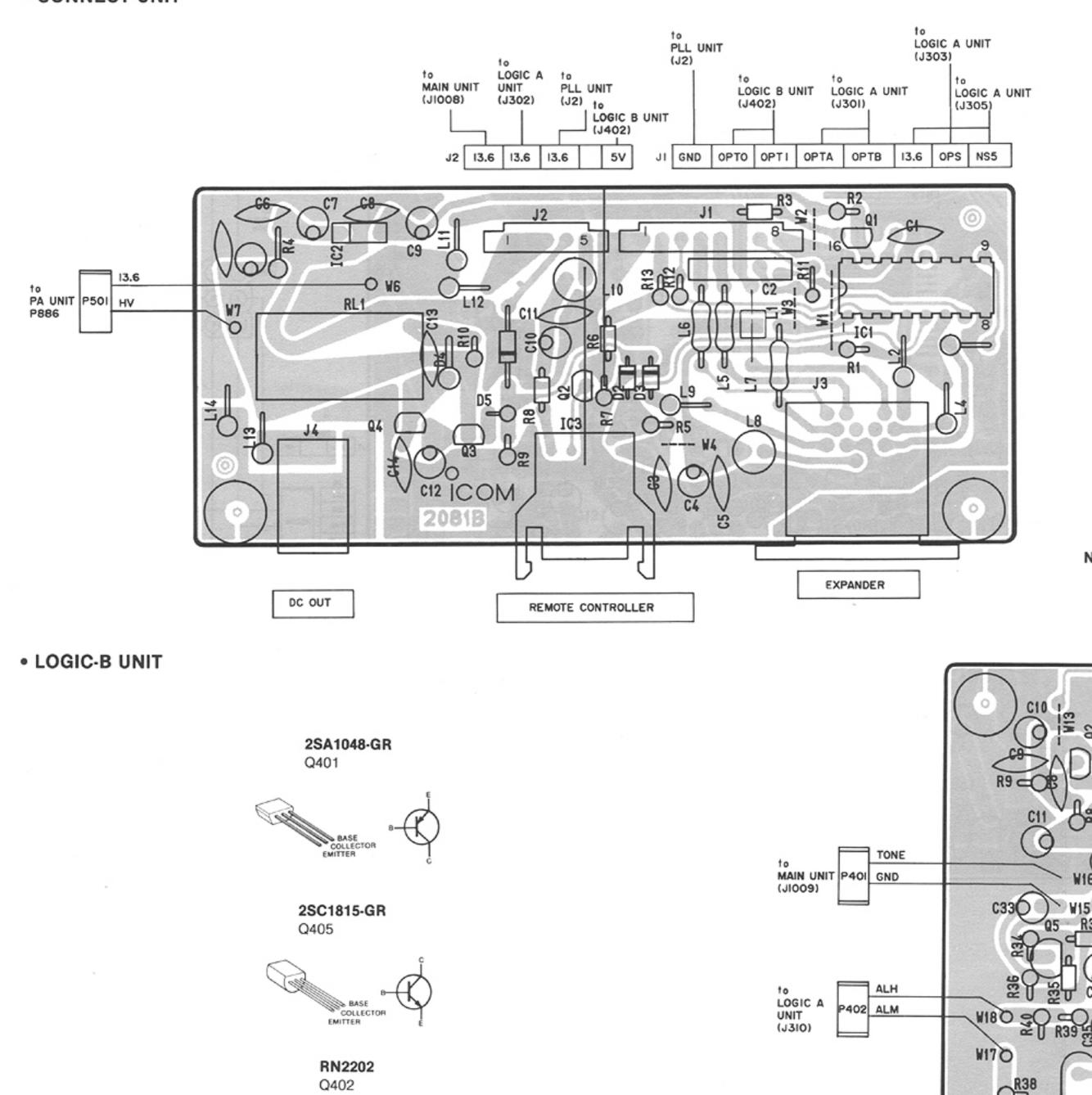


NOTE: Add "2000" to the indicated number on the unit for actual part number respectively.

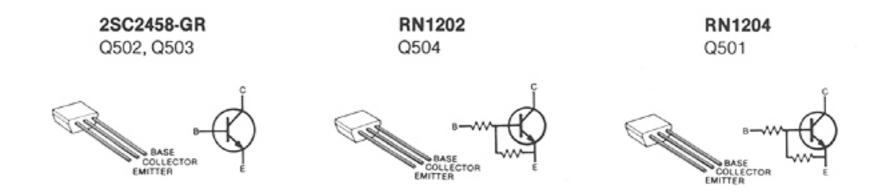


# 6-2 TRANSCEIVER (1)

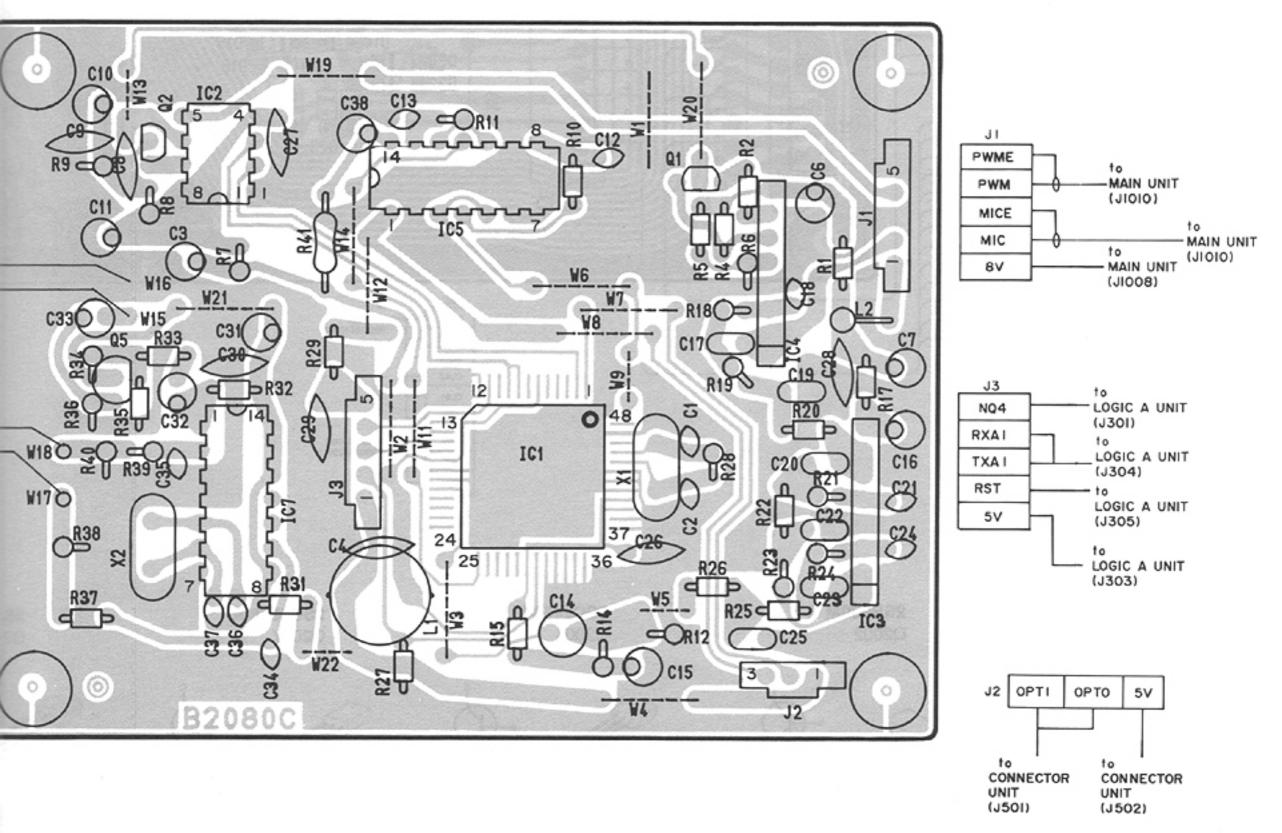
### CONNECT UNIT



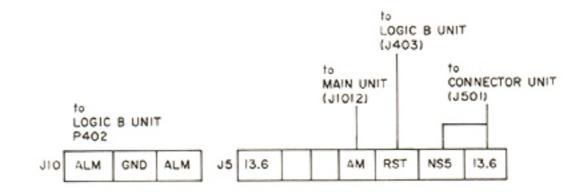


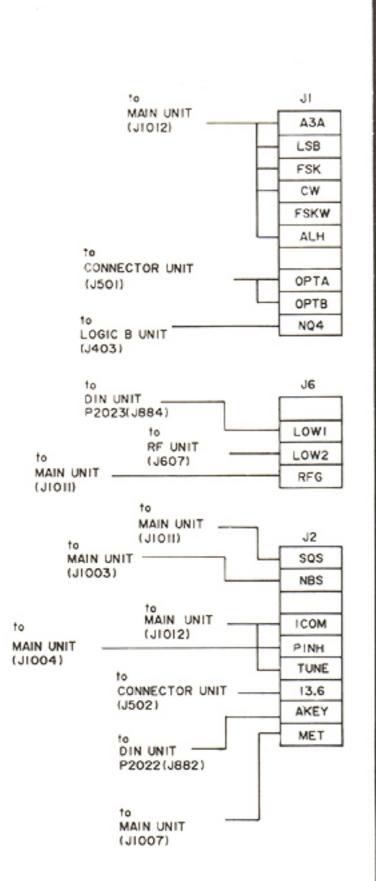


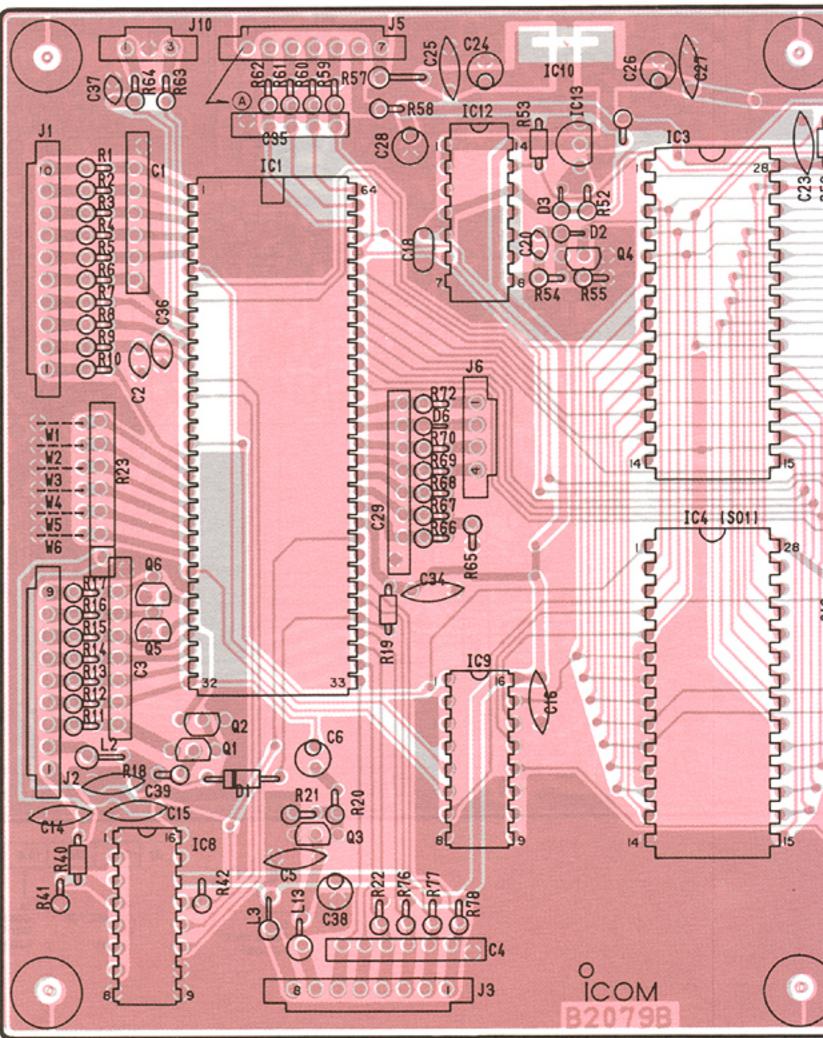
NOTE: Add "500" to the indicated number on the unit for actual part number respectively.

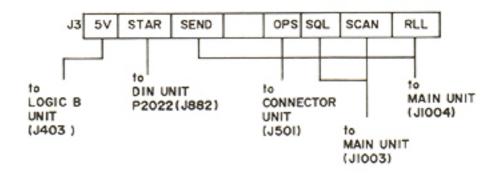


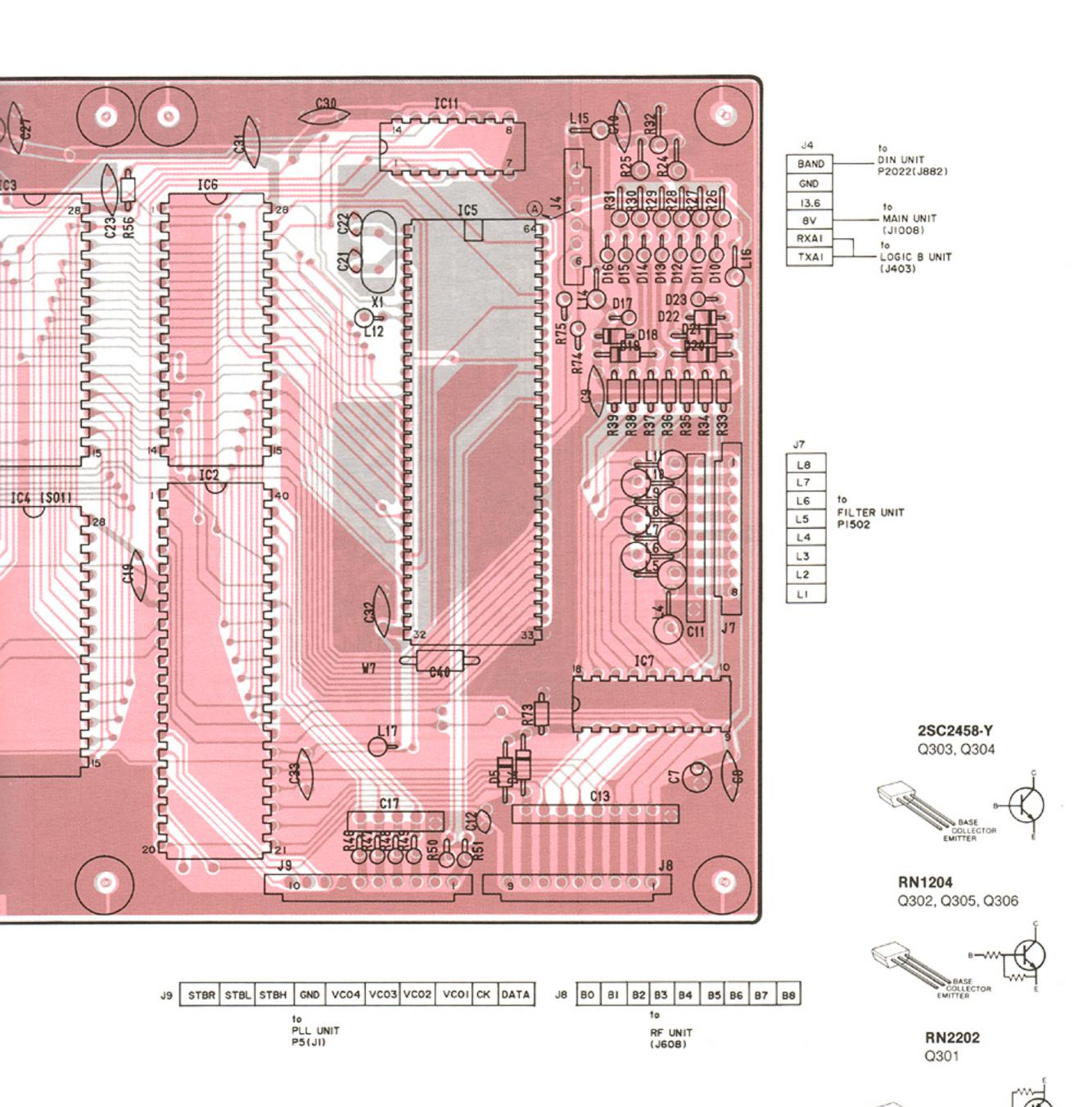
### LOGIC-A UNIT





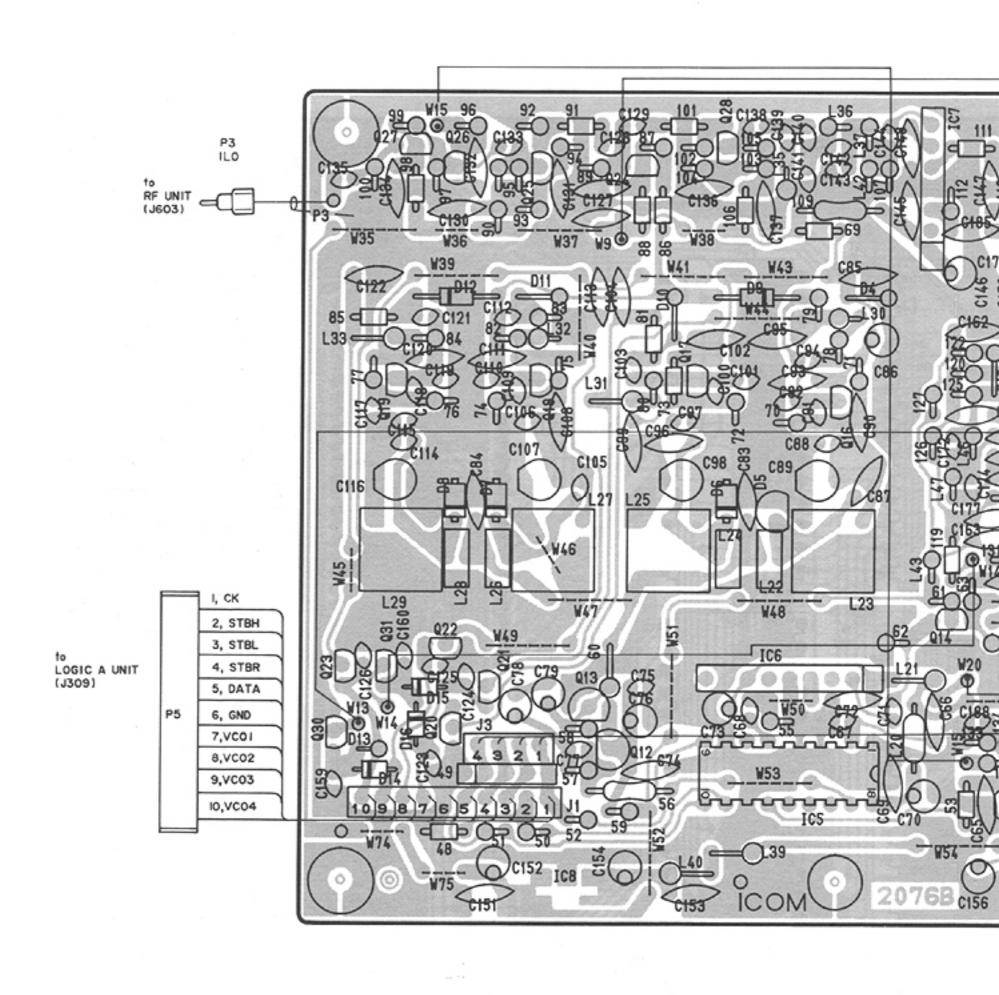






# 6-3 TRANSCEIVER (2)

### • PLL UNIT

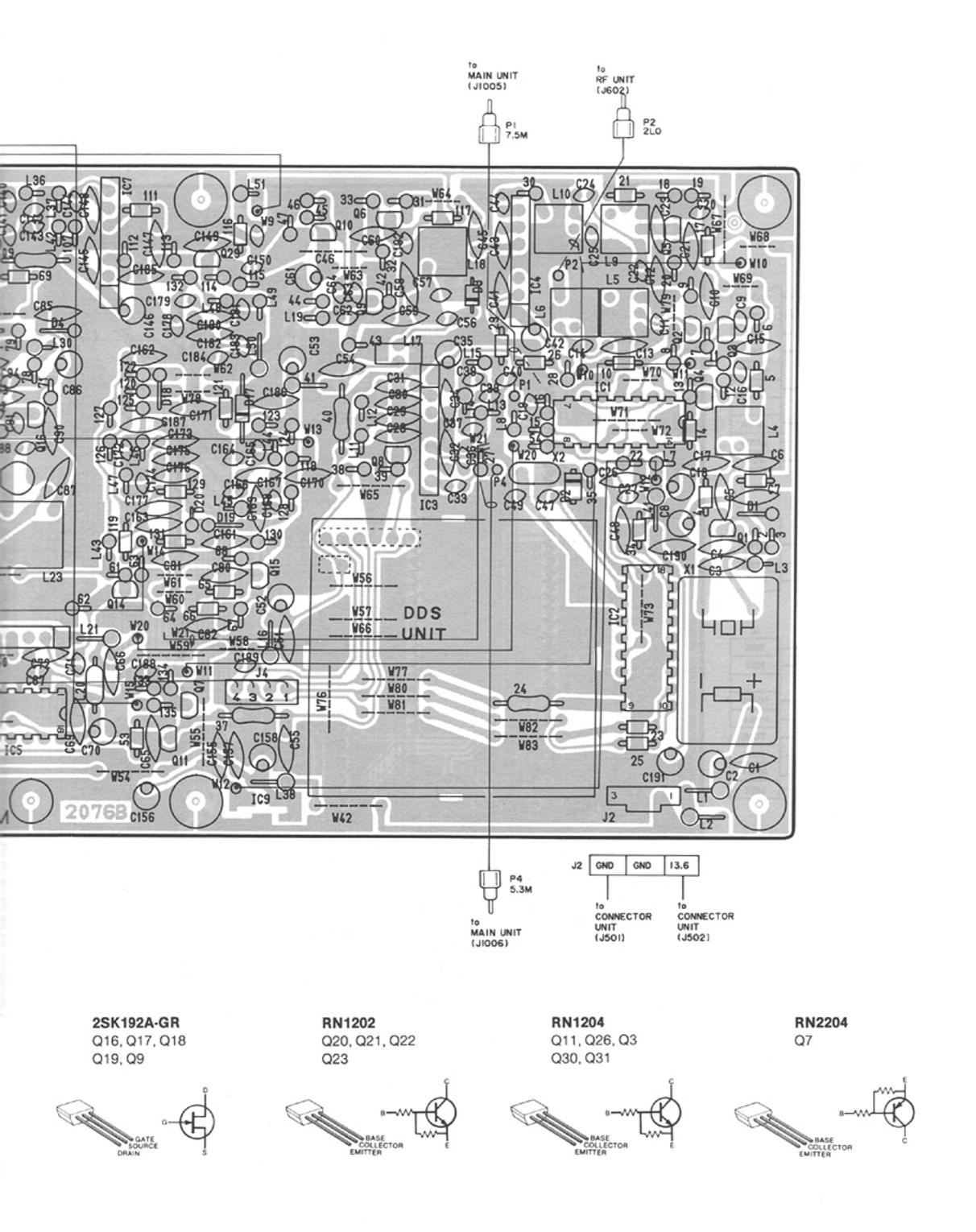




2SK192A-0

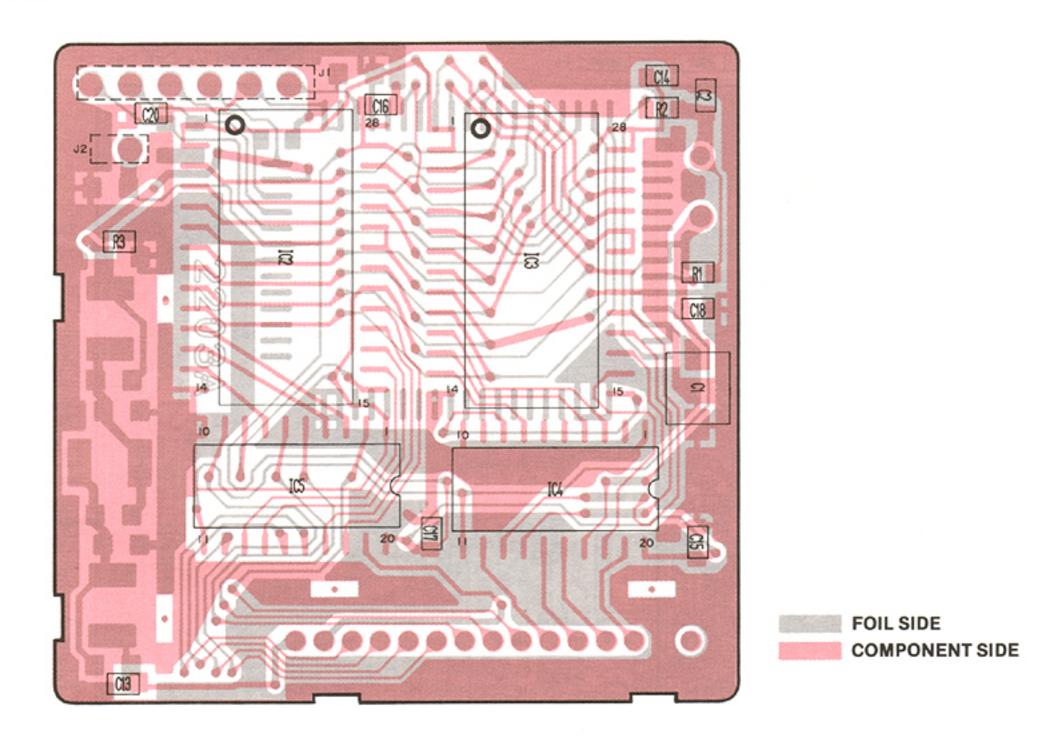
Q16, Q17,

Q19, Q9

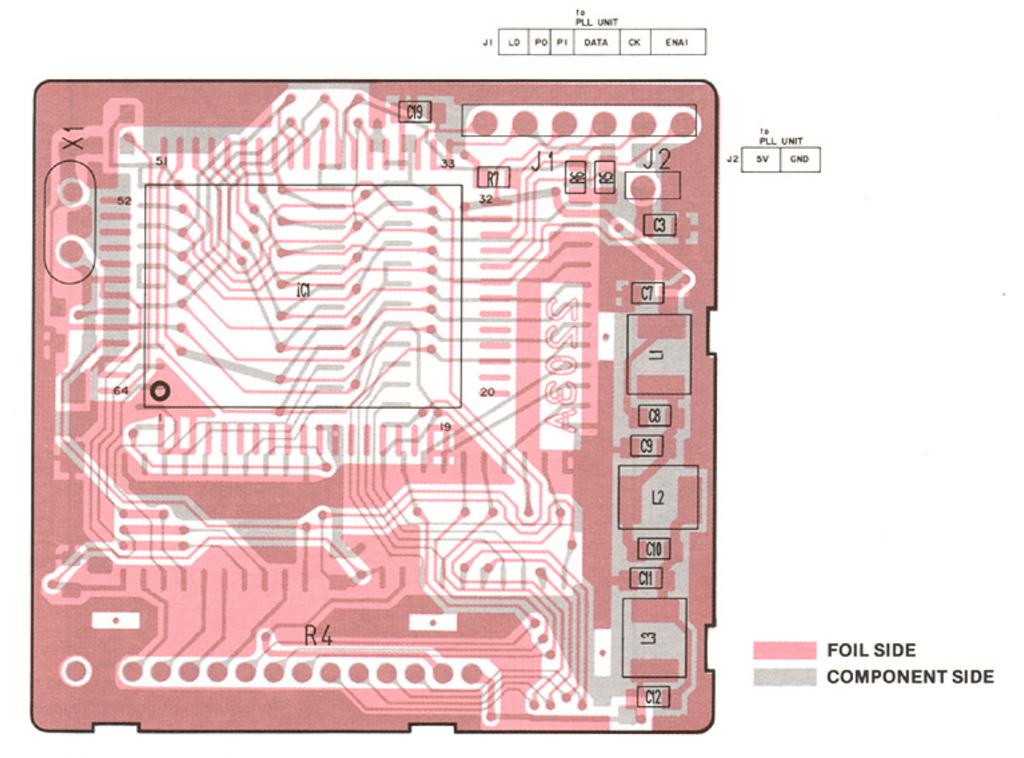


### DDS UNIT

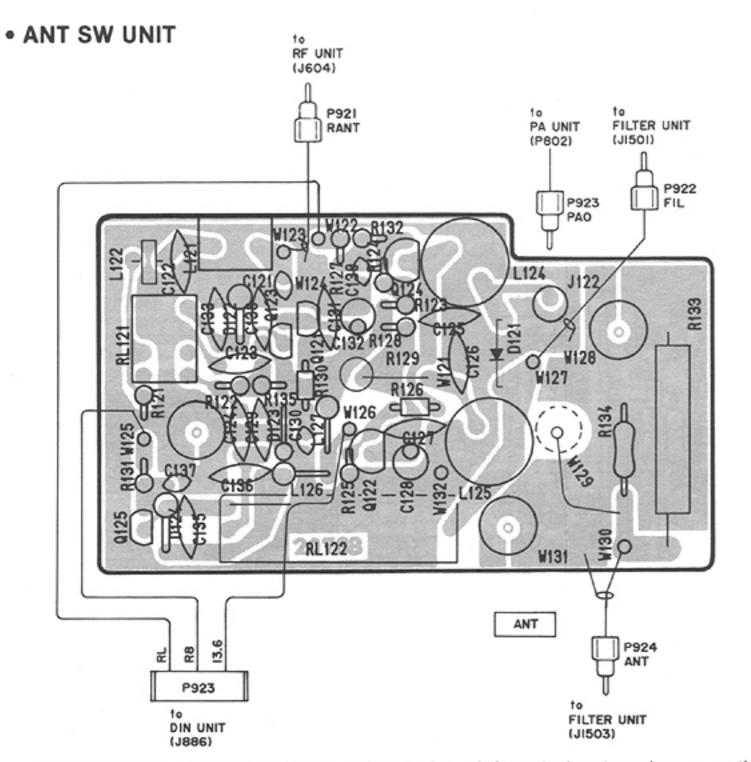
### COMPONENT SIDE



### **FOIL SIDE**



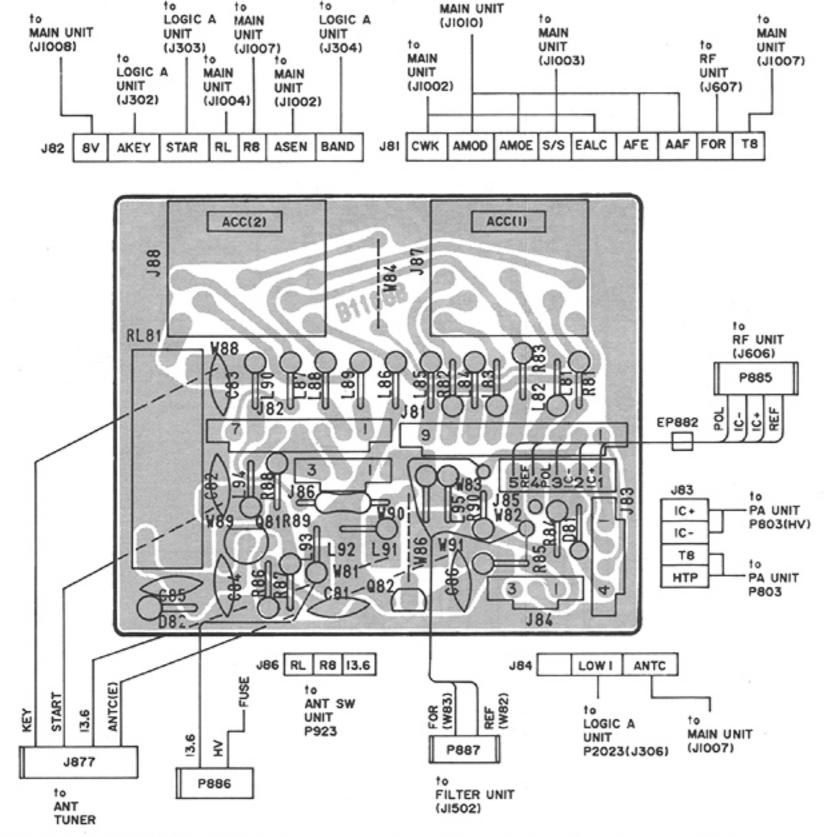
NOTE: Add "200" to the indicated number on the unit for actual part number respectively.



NOTE: Add "800" to the indicated number on the unit for actual part number respectively.

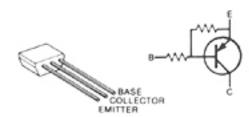
to

### • DIN UNIT



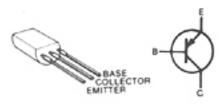
NOTE: Add "800" to the indicated number on the unit for actual part number respectively.

#### **2SA1345** Q923



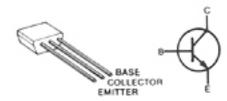
2SB562C





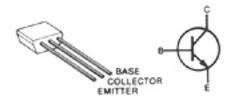
2SC2458-GR

Q921



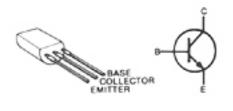
2SC3402

Q925



2SD468C

Q922

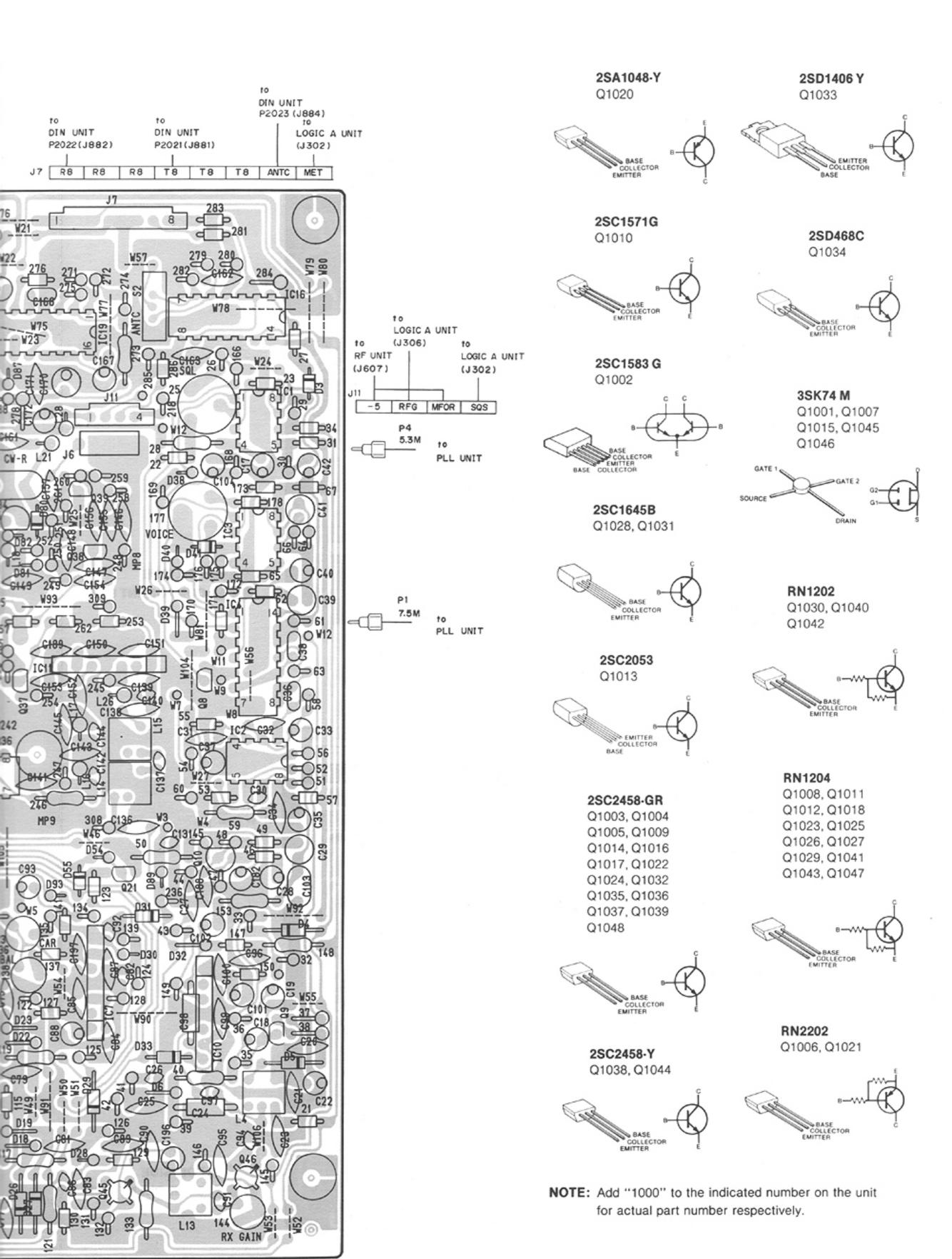


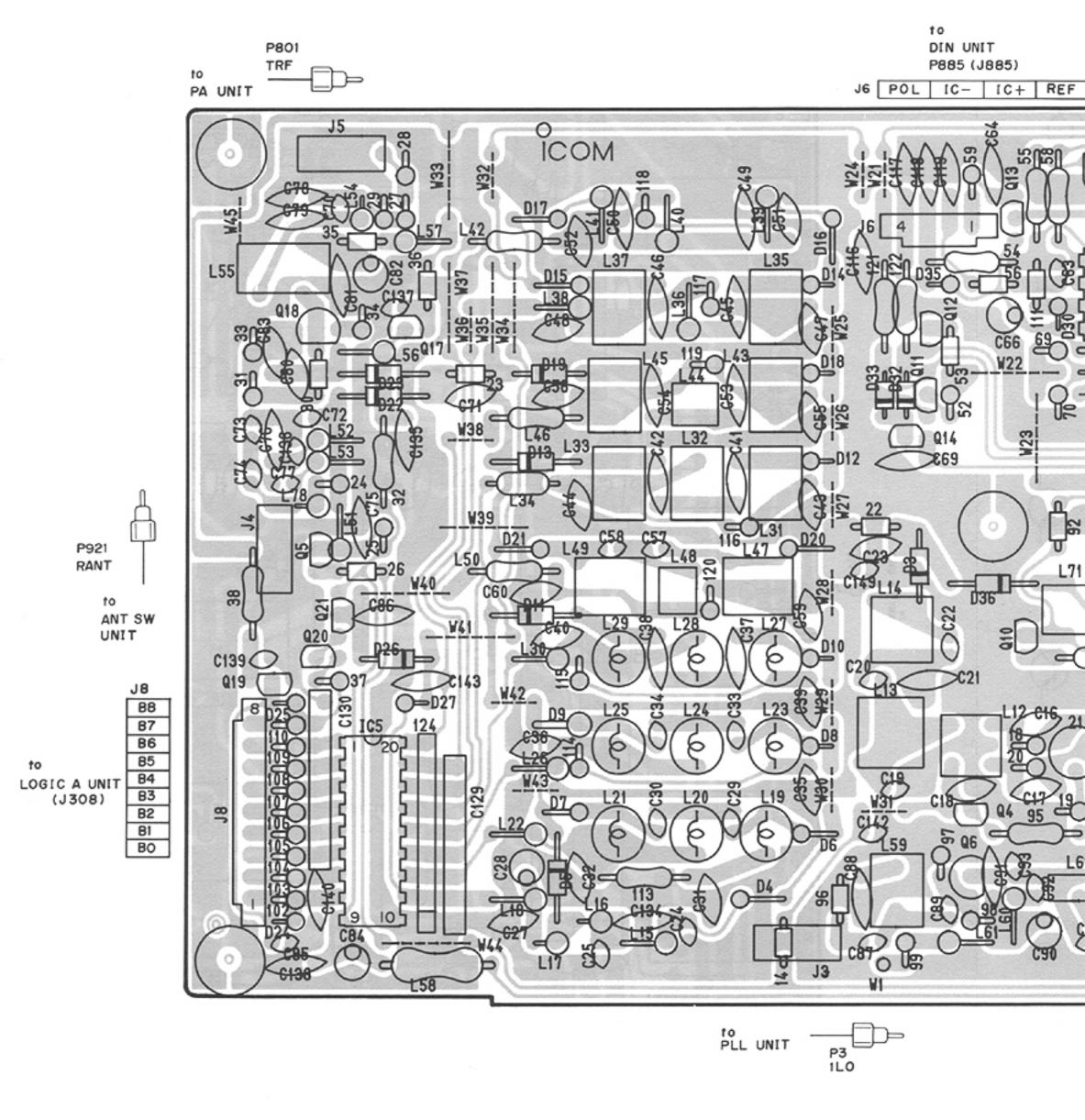
2SA1015-Y

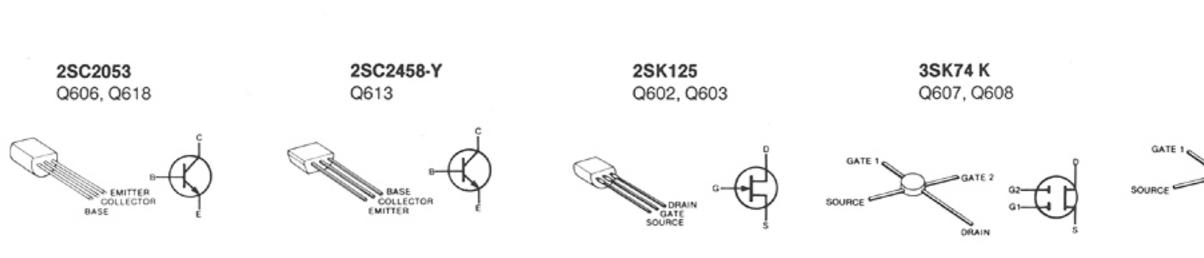
Q881

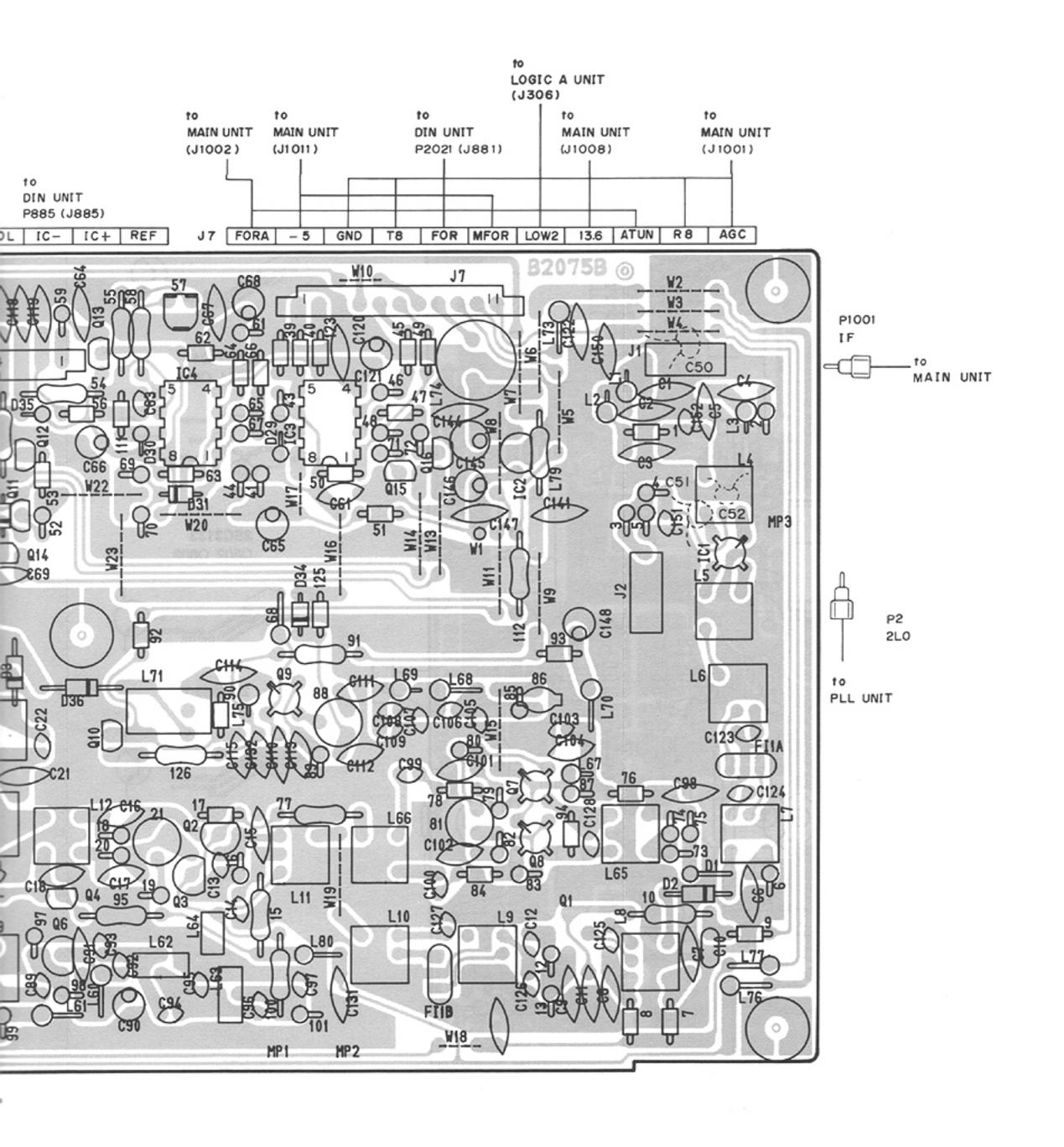


#### 6-4 TRANSCEIVER (3) LOGIC B UNIT CONNECTOR UNIT to to (J40I) (J502) MAIN UNIT LOGIC A LOGIC A DIN UNIT LOGIC A UNIT P2022(J882) UNIT UNIT DIN UNIT RF UNIT (J304) DIN UNI (J302) (J882) (J303) (J607) P2022(J J8 8V 8V 8V R8 13.6 13.6 J4 PINH SEND RLL GND W76 W108 IC15 C178 O IC9 LOGIC B UNIT MP1 P401 J9 TONE GND GND J10 to DIN UNIT AMOD P2021 (J881) AMOE to LOGIC B UNIT MIC (J401) MICE to LOGIC B UNIT Q30 PWM (J401) PWME to DIN UNIT AAF P2021 (J881) AAFE C159 CW-R to DIN UNIT ASEN P2022(J882) ATUN to DIN\_UNIT P2021(J881) CWK EALC to RF UNIT FORA (J607) J12 10 ALH LOGIC A MODI UNIT (J301) **□** D56 LSB FSK to CW LOGIC A TUNE UNIT (J302) A3A AM LOGIC A UNIT (J305) 1⇒295 181 to LOGIC A UNIT . SQL (J303)SCAN to DIN UNIT S/S R8 to LOGIC A UNIT (J302) NBS T8 B2074B P1 ΙF to RF UNIT (J601) FL-32A 500Hz FILTER L5 L6 OC48 W85/ RF UNIT GND (J607) T8 8٧ AGC R8 S 53 2

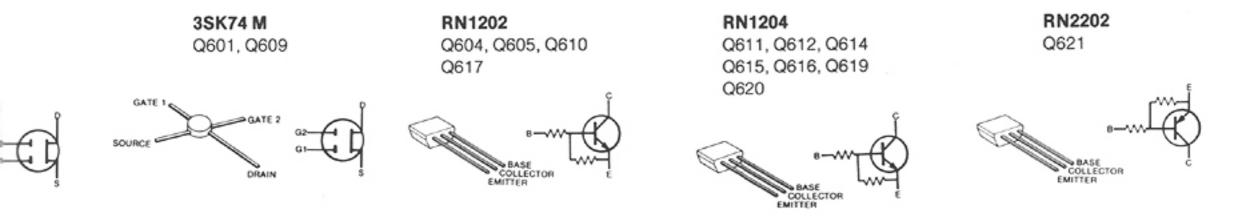






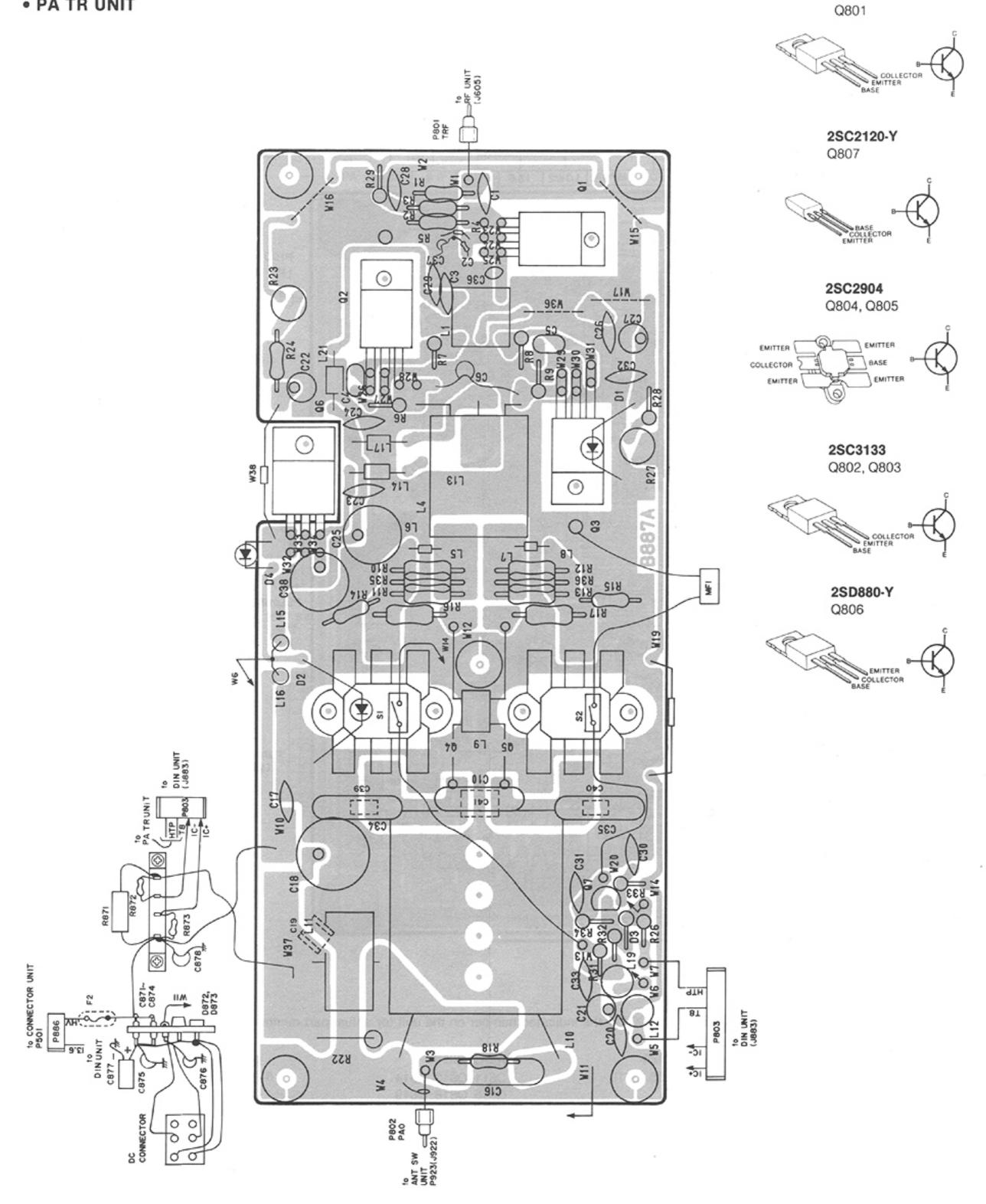


NOTE: Add "600" to the indicated number on the unit for actual part number respectively.



# 6-5 TRANSCEIVER (4)

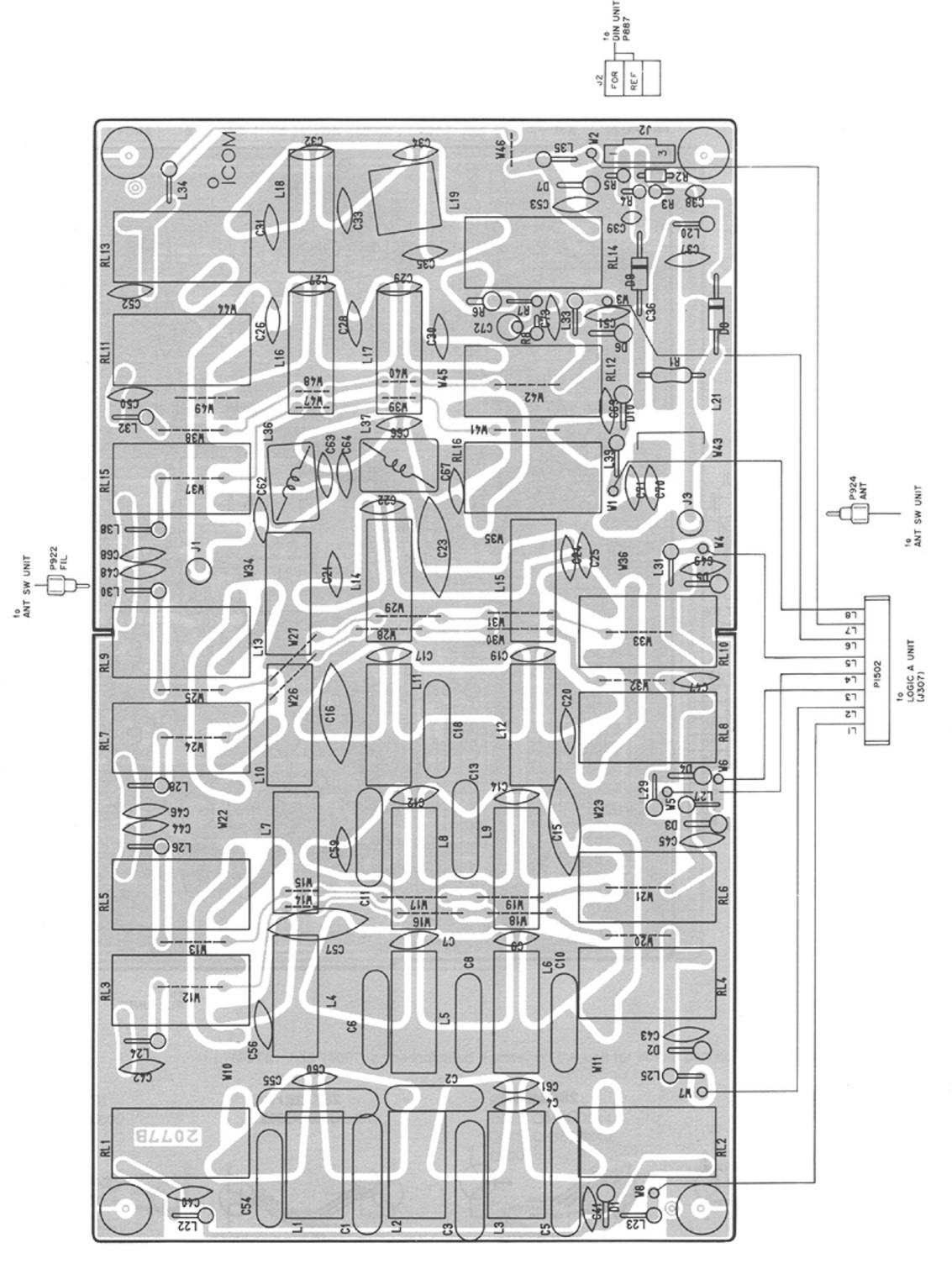
### • PA TR UNIT



2SC1971

NOTE: Add "800" to the indicated number on the unit for actual part number respectively.

### • FILTER UNIT



NOTE: Add "1500" to the indicated number on the unit for actual part number respectively.

# SECTION 7 PARTS LIST

#### [SENSOR UNIT]

REF. NO.	ORDER NO.	DESCRIPTION		
S2002	2250000020	Switch	SRB18100 25KC	
EP2002	0910022670	P.C. Board	B 2154	

#### [JACK UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
IC2015	1170000110	IC	GP-1F01D
Q2016	1530000110	Transistor	2SC2458-GR
R2092 R2093 R2094	7010003320 7010004320 7010003530	Resistor Resistor Resistor	ELR20J 220 Ω R20J 10 kΩ ELR20J 10 kΩ
C2091 C2092	4010000520 4510003040	Ceramic Electrolytic	
EP2005	0910022661	P.C. Board	B 2156A

#### [SW UNIT]

REF. NO.	ORDER NO.	DESCRIPTION		
S2001	2210000590	Switch	SRRS1S017A	
EP2003	0910022640	P.C. Board	B 2155	

#### [IF UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
IC2001	1180000340	IC	TA78005AP
IC2002	1180000030	l IC	TA78L008AP
IC2003	1120000240	IC	M54519P
IC2004	1140001150	IC	HD647180
IC2005	1140001050	IC	SC1105
IC2006	1110001680	IC	S-8054ALB
IC2007	1110001460	IC	μPC1555C
IC2008	1130004520	IC	TC4030BF
IC2010	1110000330	IC	M5218L
IC2011	1110000330	IC	M5218L
IC2012	1110000330	IC	M5218L
IC2013	1110000890	IC	μPC1241H
			-

#### [IF UNIT]

REF.	ORDER NO.		DESCRIPTION
Q2001	1530000100	Transistor	2SC2458-Y
Q2002	1520000230	Transistor	2SB909M Q
Q2003	1590000350	Transistor	RN1204
Q2005	1590000340	Transistor	RN1202
Q2006	1590000350	Transistor	RN1204
Q2007	1530000170	Transistor	2SC2878-A
Q2008	1510000080	Transistor	2SA1048-GR
Q2009	1590000360	Transistor	RN2202
Q2010	1590000280	FET	2SJ105-Y
Q2011	1590000350	Transistor	RN1204
Q2012	1590000350	Transistor	RN1204
Q2013	1590000350	Transistor	RN1204
D2001	1710000050	Diode	1SS53
D2002	1710000350	Diode	1N4002
D2005	1710000160	Diode	1SS133
D2006	1710000160	Diode	1SS133
D2007	1710000530	Diode	S3V-10
D2008	1710000160	Diode	1SS133
D2009	1710000160	Diode	1SS133
D2010	1710000160	Diode	1SS133
D2011	1710000160	Diode	1SS133
D2012	1710000160	Diode	155133
D2013	1710000160	Diode	198133
D2014 D2015	1710000160 1710000160	Diode Diode	1SS133 1SS133
D2015	1710000160	Diode	1SS133
D2016 D2017	1710000160	Diode	1SS133
D2017	1710000160	Diode	1SS133
D2018	1710000160	Diode	1SS133
D2019	1710000160	Diode	1SS133
D2020 D2021	1710000160	Diode	188133
D2021	1710000160	Diode	188133
D2022	1710000160	Diode	1SS133
D2023	1710000160	Diode	1SS133
D2024 D2025	1710000160	Diode	1SS133
DEVES	11 10000 100	Diode	100100
X2001	6050003350	Crystal	RF-4A3 FAF NKD
			(9.270800M)
X2002	6050003660	Crystal	CR-203
L2001	6170000140	Coil	LW-15
L2002	6910000670	Coil	BT01RN1-A61-001
L2003	6180000900	Coil	LAL 03NA 101K
L2004	6180000900	Coil	LAL 03NA 101K
L2005	6180000900	Coil	LAL 03NA 101K
L2006	6910000670	Coil	BT01RN1-A61-001
L2007	6910000670	Coil	BT01RN1-A61-001
D2004	7010003400	Decistor.	ELDONI AZ MO
R2001 R2002	7010003480	Resistor Resistor	ELR20J 4.7 kΩ
R2002 R2003	7010003620		ELR20J 47 kΩ
	7010003550	Resistor	ELR20J 15 kΩ ELR20J 33 kΩ
R2004 R2005	7010003600 7010003620	Resistor Resistor	ELR20J 47 kΩ
R2006	7010003620		ELR20J 47 kΩ
R2006	7010003620	Resistor Resistor	ELR20J 47 kΩ
R2007	7010003400	Resistor	R25J 100 kΩ
R2009	7010001400	Resistor	ELR20J 820 Ω
R2010	7010003390	Resistor	ELR20J 5.6 kΩ
R2010	7010003490	Resistor	ELR200 3.6 kΩ ELR20J 12 kΩ
R2012	7010003540	Resistor	ELR20J 22 kΩ
R2013	7010003380	Resistor	R50XJ 4.7 Ω
R2016	7010004030	Resistor	R20J 47 Ω
R2017	7010004030	Resistor	R20J 220 Ω
R2019	7010003320	Resistor	ELR20J 220 Ω
R2020	7010003280	Resistor	ELR20J 100 Ω
1			

#### [IF UNIT]

ir oldi j			
REF. NO.	ORDER NO.	C	DESCRIPTION
R2021	7010004250	Resistor	R20J 3.3 kΩ
R2022	7310000870	Trimmer	RH1051D14J0PA (103)
R2023	7010003580	Resistor	ELR20J 22 kΩ
R2024 R2025	7010003650 7010003660	Resistor Resistor	ELR20J 82 kΩ ELR20J 100 kΩ
R2026	7010003720	Resistor	ELR20J 330 kΩ
R2027	7010003400	Resistor	ELR20J 1 kΩ
R2028	7010004150	Resistor	R20J 470 Ω
R2029 R2030	7010003710 7010003640	Resistor Resistor	ELR20J 270 kΩ ELR20J 68 kΩ
R2031	7010003040	Resistor	R20J 10 kΩ
R2032	7010003540	Resistor	ELR20J 12 kΩ
R2033	7010004330	Resistor	R20J 12 kΩ
R2034 R2035	7010003520 7010003380	Resistor Resistor	ELR20J 8.2 kΩ ELR20J 680 Ω
R2036	7010003380	Resistor	ELR20J 1 kΩ
R2037	7010003630	Resistor	ELR20J 56 kΩ
R2038	7010004230	Resistor	R20J 2.2 kΩ
R2039 R2041	7010003490 7010003440	Resistor Resistor	ELR20J 5.6 kΩ ELR20J 2.2 kΩ
R2042	7010003440	Resistor	ELR20J 2.2 kΩ
R2043	7010004390	Resistor	R20J 33 kΩ
R2044	7010003600	Resistor	ELR20J 33 kΩ
R2046 R2047	7010003530 7010003040	Resistor Resistor	ELR20J 10 kΩ ELR20J 1 Ω
R2048	7010003040	Resistor	R20J 1 kΩ
R2049	7010003100	Resistor	ELR20J 3.3 Ω
R2050	7010003280	Resistor	ELR20J 100 Ω
R2051 R2052	7010003740 7010004450	Resistor Resistor	ELR20J 470 kΩ R20J 100 kΩ
R2052	7010004450	Resistor	ELR20J 1 kΩ
R2054	7010003740	Resistor	ELR20J 470 kΩ
R2055	7010003630	Resistor	ELR20J 56 kΩ
R2056 R2057	7010003630 7010004420	Resistor Resistor	ELR20J 56 kΩ R20J 56 kΩ
R2058	7010003630	Resistor	ELR20J 56 kΩ
R2059	7010003630	Resistor	ELR20J 56 kΩ
R2060	7010003630	Resistor	ELR20J 56 kΩ ELR20J 56 kΩ
R2061 R2062	7010003630 7010003630	Resistor Resistor	ELR20J 56 kΩ
R2064	7010003630	Resistor	ELR20J 56 kΩ
R2065	7010003740	Resistor	ELR20J 470 kΩ
R2066 R2067	7010003340 7010003340	Resistor Resistor	ELR20J 330 Ω ELR20J 330 Ω
R2068	7010003340	Resistor	ELR20J 330 Ω
R2069	7010003340	Resistor	ELR20J 330 Ω
R2070 R2071	7010003340 7010003340	Resistor Resistor	ELR20J 330 Ω ELR20J 330 Ω
R2072	7010003340	Resistor	ELR20J 330 Ω
R2073	7010004130	Resistor	R20J 330 Ω
R2074	7010004130	Resistor	R20J 330 Ω
R2075 R2077	7010003340 7410000080	Resistor Resistor Array	ELR20J 330 Ω RMX- 4 473K
R2078	7410000290	Resistor Array	RMX- 3 473K
R2079	7410000150	Resistor Array	RMX- 6 473K
R2080	7410000220 7410000150	Resistor Array Resistor Array	RMX- 8 473K RMX- 6 473K
R2081 R2082	7010003550	Resistor	ELR20J 15 kΩ
R2083	7010003660	Resistor	ELR20J 100 kΩ
R2084	7010003620	Resistor	ELR20J 47 kΩ
R2085 R2086	7010004110 7010004310	Resistor Resistor	R20J 220 Ω R20J 8.2 kΩ
R2087	7010004310	Resistor	R20J 1 kΩ
R2088	7010003660	Resistor	ELR20J 100 kΩ
C2001	4510002790	Electrolytic	16 SS 22 μF
C2002	4040000250	Barrier Layer	UAT 08X 473M UAT 08X 473M
C2003 C2005	4040000250 4010000500	Barrier Layer Ceramic	DD104 B 102K 50V
C2006	4010000520	Ceramic	DD108 B 472K 50V
C2008	4010000520	Ceramic	DD108 B 472K 50V
C2010 C2011	4510002790 4510002950	Electrolytic Electrolytic	16 SS 22 μF 50 SS 2R2 μF
C2012	4510002940	Electrolytic	50 SS 1 μF
L	<u> </u>	L	

REF. NO.	ORDER NO.	DESCRIPTION		
C2013	4510002940	Electrolytic	50 SS 1 μF	
C2014	4510002640	Electrolytic	25 SS 47 μF	
C2015 C2016	4510002840 4310000090	Electrolytic Mylar	25 SS 10 μF F2D 50V 333K	
C2010	4310000030	Mylar	F2D 50V 103K	
C2018	4010000430	Ceramic	DD109 SL 471J 50V	
C2019	4510002790	Electrolytic	16 SS 22 μF	
C2020	4510002840	Electrolytic	25 SS 10 μF	
C2021	4040000440	Barrier Layer	RAU 06SA 561K	
C2022 C2023	4510002840 4510003040	Electrolytic Electrolytic	25 SS 10 μF 16 SS 100 μF	
C2024	4010000260	Ceramic	DD104 SL 470J 50V	
C2025	4010000260	Ceramic	DD104 SL 470J 50V	
C2026	4310000030	Mylar	F2D 50V 104K	
C2027	4510002380	Electrolytic	16 SS 470 μF (10X12.5)	
C2028 C2029	4510002810 4510002380	Electrolytic Electrolytic	16 SS 47 μF 16 SS 470 μF (10X12.5)	
C2030	4510002300	Electrolytic	16 SS 100 µF	
C2031	4510002810	Electrolytic	16 SS 47 µF	
C2032	4310000120	Mylar	F2D 50V 473K	
C2033	4310000030	Mylar	F2D 50V 104K	
C2034	4040000260 4510002940	Barrier Layer	UZE 08X 104M 50 SS 1 μF	
C2035 C2036	4310002940	Electrolytic Mylar	50 35 1 μP F2D 50V 682K	
C2037	4010000320	Ceramic	DD104 SL 820J 50V	
C2038	4310000690	Mylar	F2D 50V 152K	
C2039	4310000170	Mylar	F2D 50V 682K	
C2040	4010000320	Ceramic	DD104 SL 820J 50V	
C2041	4310000690 4310000170	Mylar Mylar	F2D 50V 152K F2D 50V 682K	
C2042 C2043	4010000170	Ceramic	DD104 SL 820J 50V	
C2044	4310000690	Mylar	F2D 50V 152K	
C2045	4510001740	Electrolytic	50 RBP 1 μF	
C2046	4010000180	Ceramic	DD104 SL 220J 50V	
C2047	4010000180	Ceramic	DD104 SL 220J 50V UZE 08X 104M	
C2048 C2049	4040000260 4010000520	Barrier Layer Ceramic	DD108 B 472K 50V	
C2050	4510002810	Electrolytic	16 SS 47 μF	
C2051	4510002810	Electrolytic	16 SS 47 μF	
C2052	4040000250	Barrier Layer	UAT 08X 473M	
C2053	4010000520	Ceramic	DD108 B 472K 50V	
C2054 C2055	4510002810 4510002790	Electrolytic Electrolytic	16 SS 47 μF 16 SS 22 μF	
C2056	4040000250	Barrier Layer	UAT 08X 473M	
C2057	4010000150	Ceramic	DD104 SL 150J 50V	
C2058	4010000150	Ceramic	DD104 SL 150J 50V	
C2059	4510002790	Electrolytic	16 SS 22 μF DD108 B 472K 50V	
C2060 C2061	4010000520 4010000520	Ceramic Ceramic	DD108 B 472K 50V	
C2062	4510002790	Electrolytic	16 SS 22 μF	
C2063	4010000520	Ceramic	DD108 B 472K 50V	
C2064	4510002790	Electrolytic	16 SS 22 μF	
C2065	4510002830	Electrolytic	25 SS 4R7 μF 16 SS 22 μF	
C2066 C2067	4510002790 4010000520	Electrolytic Ceramic	DD108 B 472K 50V	
C2068	4010000520	Ceramic	DD108 B 472K 50V	
C2069	4010000520	Ceramic	DD108 B 472K 50V	
C2070	4040000250	Barrier Layer		
C2071	4510002820	Electrolytic	16 SS 1000 μF	
RL2001	6330000720	Relay	DS1-M-DC12V (AG2013)	
EP2001	0910022493	P.C. Board	B 2153C	

#### [FRONT UNIT]

REF. NO.	ORDER NO.	D	ESCRIPTION
R2091	7210000330	Variable Resistor	RK1241212005A [PWR/VOL]
DS2001	5030000450	LCD	LM-16X21A
SP2001	2510000440	Speaker	77F60N
EP2004 EP2006	0910022270 8210004741	P.C. Board Membrane Switch	

#### [CONNECT UNIT]

REF. NO.	ORDER NO.	DESCRIPTION		
C507	4510002640	Electrolytic	25 SS 47 μF	
C508	4040000250	Barrier Layer	UAT 08X 473M	
C509	4510002780	Electrolytic	16 SS 10 μF	
C510	4510002730	Electrolytic	10 SS 100 μF	
C511	4010000520	Ceramic	DD108 B 472K 50V	
C512	4510002810	Electrolytic	16 SS 47 μF	
C513	4010000520	Ceramic	DD108 B 472K 50V	
C514	4010000520	Ceramic	DD108 B 472K 50V	
RL501	6330000820	Relay	AJK 3341	
EP501	0910022652	P.C. Board	B 2081B	

#### [CONNECT UNIT]

-	REF. ORDER				
NO.	NO.	· ·	DESCRIPTION		
IC501	1130004400	IC	TC74HC157AP		
IC502	1180000440	IC	LVC550C		
IC503	1170000110	IC	GP-1F01D		
Q501	1590000350	Transistor	RN1204		
Q502 Q503	1530000110	Transistor	2SC2458-GR		
Q504	1530000110	Transistor	2SC2458-GR		
Q504	1590000340	Transistor	RN1202		
D502	1710000160	Diode	15S133		
D503	1710000160	Diode	188133		
D504	1710000350	Diode	1N4002		
D505	1710000160	Diode	1SS133		
		]	100100		
L501	6180000880	Coil	LAL 03NA 100K		
L502	6180000850	Coil	LAL 03NA 4R7K		
L504	6180000850	Coil	LAL 03NA 4R7K		
L505	6180000880	Coil	LAL 03NA 100K		
L506	6180000880	Coil	LAL 03NA 100K		
L507	6910000670	Coil	BT01RN1-A61-001		
L508	6180001520	Coil	FL 5H 100K		
L509	6180000880	Coil	LAL 03NA 100K		
L510	6180001520	Coil	FL 5H 100K		
L511	6910000670	Coil	BT01RN1-A61-001		
L512	6910000670	Coil	BT01RN1-A61-001		
L513	6910000670	Coil	BT01RN1-A61-001		
L514	6910000670	Coil	BT01RN1-A61-001		
D504	7040000000	Barrier .	51 500 1 10 10		
R501 R502	7010003530 7010003530	Resistor	ELR20J 10 kΩ		
R503	7010003530	Resistor	ELR20J 10 kΩ R20J 4.7 kΩ		
R504	7010004270	Resistor Resistor			
R505	7010004660	Resistor	R50XJ 15 Ω		
R506	7010003460	Resistor	ELR20J 4.7 kΩ		
R507	7010004320	Resistor	R20J 10 kΩ ELR20J 10 kΩ		
R508	7010003330	Resistor	R20J 220 Ω		
R509	7010003110	Resistor	ELR20J 47 kΩ		
R510	7010003020	Resistor	ELR20J 47 KΩ		
R511	7010003240	Resistor	ELR20J 47 Ω		
R512	7010003360	Resistor	ELR20J 470 Ω ELR20J 470 Ω		
R513	7010003360	Resistor	ELR20J 470 Ω ELR20J 470 Ω		
NO13	7010003300	nesistor	ELR203 470 12		
C501	4040000250	Barrier Layer	UAT 08X 473M		
C502	4530000030	Capacitor Array			
C503	4040000260	Barrier Layer	UZE 08X 104M		
C504	4510002720	Electrolytic	10 SS 47 μF		
C505	4010000520	Ceramic	DD108 B 472K 50V		
C506	4010000520	Ceramic	DD108 B 472K 50V		

#### [LOGIC-B UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
IC401	1140001050	IC	LC92018B-286/SC1105
IC402	1110001460	IC	μPC1555C
IC403	1110000330	IC	M5218L
IC404	1110000330	IC	M5218L
IC405	1130000080	IC	TC4030BP
IC407	1130000950	IC	S7116A
Q401	1510000080	Transistor	2SA1048-GR
Q402	1590000360	Transistor	RN2202
Q405	1530000050	Transistor	2SC1815-GR
V404	000000000	On rate (	OB 000
X401	6050003660	Crystal	CR-203
X402	6060000060	Crystal	CSA3.58MG18
L401	6170000110	Coil	LW-12A
L402	6180000900	Coil	LAL 03NA 101K
1 2402	010000000	0011	ENE OOM TO IN
R401	7010004110	Resistor	R20J 220 Ω
R402	7010004190	Resistor	R20J 1 kΩ
R404	7010004430	Resistor	R20J 68 kΩ
R405	7010004230	Resistor	R20J 2.2 kΩ
R406	7010003490	Resistor	ELR20J 5.6 kΩ
R407	7010003280	Resistor	ELR20J 100 Ω
R408	7010003440	Resistor	ELR20J 2.2 kΩ
R409	7010003440	Resistor	ELR20J 2.2 kΩ
R410	7010004390	Resistor	R20J 33 kΩ
R411	7010003600	Resistor	ELR20J 33 kΩ
R412	7010003660	Resistor	ELR20J 100 kΩ
R414	7010003400	Resistor	ELR20J 1 kΩ
R415	7010004320	Resistor	R20J 10 kΩ
R417	7010004110	Resistor	R20J 220 Ω
R418	7010003630	Resistor	ELR20J 56 kΩ
R419	7010003630	Resistor	ELR20J 56 kΩ
R420	7010004420	Resistor	R20J 56 kΩ
R421	7010003630	Resistor	ELR20J 56 kΩ
R422	7010004420	Resistor	R20J 56 kΩ
R423	7010003630	Resistor	ELR20J 56 kΩ
R424	7010003630	Resistor	ELR20J 56 kΩ
R425	7010004420	Resistor	R20J 56 kΩ
R426	7010004420	Resistor	R20J 56 kΩ
R427 R428	7010004530	Resistor	R20J 470 kΩ
R428	7010003660 7010004320	Resistor Resistor	ELR20J 100 kΩ R20J 10 kΩ
R429	7010004320	Resistor	R20J 47 Ω
R432	7010004030	Resistor	R20J 47 tΩ R20J 47 kΩ
R433	7010004410	Resistor	R20J 1 kΩ
R434	7010004190	Resistor	ELR20J 100 kΩ
11707	.01000000	0010101	FFIROU IOU USE

#### [LOGIC-B UNIT]

### [LOGIC-A UNIT]

1200.0	-B ONII]		
REF. NO.	ORDER NO.		DESCRIPTION
R435	7010004480	Resistor	R20J 180 kΩ
R436	7010003400	Resistor	ELR20J 1 kΩ
R437	7010004190	Resistor	R20J 1 kΩ
R438	7010003620	Resistor	ELR20J 47 kΩ
R439	7010003400	Resistor	ELR20J 1 kΩ
R440	7010003620	Resistor	ELR20J 47 kΩ
R441	7010004150	Resistor	R20J 470 Ω
C401	4010000150	Ceramic	DD104 SL 150J 50V
C402	4010000150	Ceramic	DD104 SL 150J 50V
C403	4510002740	Electrolytic	10 SS 220 μF
C404	4010000520	Ceramic	DD108 B 472K 50V
C406	4510002790	Electrolytic	16 SS 22 μF
C407	4510002790	Electrolytic	16 SS 22 μF
C408	4040000440	Barrier Layer	RAU 06SA 561K
C409	4010000520	Ceramic	DD108 B 472K 50V
C410	4510002840	Electrolytic	25 SS 10 μF
C411	4510002740	Electrolytic	10 SS 220 μF
C412	4010000260	Ceramic	DD104 SL 470J 50V
C413	4010000260	Ceramic	DD104 SL 470J 50V
C414	4510001740	Electrolytic	50 RBP 1 μF
C415	4510002780	Electrolytic	16 SS 10 μF
C416	4510002790	Electrolytic	16 SS 22 μF
C417	4310000170	Mylar	F2D 50V 682K
C418	4010000320	Ceramic	DD104 SL 820J 50V
C419	4310000690	Mylar	F2D 50V 152K
C420	4310000170	Mylar	F2D 50V 682K
C421	4010000320	Ceramic	DD104 SL 820J 50V
C422	4310000690	Mylar	F2D 50V 152K
C423	4310000170	Mylar	F2D 50V 682K
C424	4010000320	Ceramic	DD104 SL 820J 50V
C425	4310000690	Mylar	F2D 50V 152K
C426 C427	4010000520 4010000520	Ceramic Ceramic	DD108 B 472K 50V DD108 B 472K 50V
C427 C429	4010000520	Ceramic	DD108 B 472K 50V DD112 B 103K 50V
C429 C430	4010000530	Ceramic	DD108 B 472K 50V
C430	4510000320	Electrolytic	16 SS 10 μF
C431	4510002780		50 SS R47 μF
C432	4510002930	Electrolytic Electrolytic	50 SS 1 μF
C433	4010002940	Ceramic	DD104 B 471K 50V
C434	4010000460	Ceramic	DD104 B 47 IK 50V
C436	4010000300	Ceramic	DD104 B 102K 50V
C437	4010000120	Ceramic	DD104 SL 100D 50V
C438	4510002720	Electrolytic	10 SS 47 μF
EP401	0910022503	P.C. Board	B 2080C

Color	REF. NO.	ORDER NO.		DESCRIPTION
Q304			Transistor	2SC2458-Y
Case		1		
D301		1		
D302	Q306	1590000350	Transistor	RN1204
D302				
D302	D301	1710000050	Diode	1SS53
D304		l	1	
D305	D303	1710000160	Diode	188133
D310		1	l	
D311			l .	
D312		i i	ŀ	
D314				
D315	D313	1710000160	Diode	
D316			t e e e e e e e e e e e e e e e e e e e	
D317				
D318				
D320				
D321	D319	1710000160	Diode	155133
D322		· ·		
D323				
X301				
L301	0020	11 10000 100	Diode	100100
L301 6910000670 Coil BT01RN1-A61-001 L302 6910000670 Coil BT01RN1-A61-001 L303 6910000670 Coil BT01RN1-A61-001 L304 6180000990 Coil LAL 04NA 101K L305 6180000990 Coil LAL 04NA 101K L306 6180000990 Coil LAL 04NA 101K L307 6180000990 Coil LAL 04NA 101K L308 6180000990 Coil LAL 04NA 101K L309 6180000990 Coil LAL 04NA 101K L309 6180000990 Coil LAL 04NA 101K L310 6180000990 Coil LAL 04NA 101K L311 6180000990 Coil LAL 04NA 101K L312 6910000670 Coil BT01RN1-A61-001 L313 6180000900 Coil LAL 04NA 101K L314 6180000900 Coil LAL 03NA 101K L315 6180000900 Coil LAL 03NA 101K L316 691000670 Coil BT01RN1-A61-001 L317 691000670 Coil BT01RN1-A61-001 L317 6910000670 Coil BT01RN1-A61-001 L317 6910000670 Coil BT01RN1-A61-001 R301 7010003280 Resistor ELR20J 100 Ω R302 7010003280 Resistor ELR20J 100 Ω R303 7010003280 Resistor ELR20J 100 Ω R306 7010003280 Resistor ELR20J 100 Ω R307 7010003280 Resistor ELR20J 100 Ω R308 7010003280 Resistor ELR20J 100 Ω R309 7010003280 Resistor ELR20J 100 Ω R308 7010003280 Resistor ELR20J 100 Ω R309 7010003280 Resistor ELR20J 100 Ω R309 7010003280 Resistor ELR20J 100 Ω R308 7010003280 Resistor ELR20J 100 Ω R309 7010003280 Resistor ELR20J 100 Ω R301 7010003280 Resistor ELR20J 100 Ω R308 7010003280 Resistor ELR20J 100 Ω R309 7010003280 Resistor ELR20J 100 Ω R311 701000360 Resistor ELR20J 10 Ω R311 701000360 Resistor ELR20J 10 Ω R313 7010003360 Resistor ELR20J 470 Ω R314 7010003360 Resistor ELR20J 470 Ω R315 7010003360 Resistor ELR20J 470 Ω R315 7010003360 Resistor ELR20J 470 Ω R316 R5150 FELR20J 470 Ω R317 F010003360 Resistor ELR20J 470 Ω R318 7010003360 Resistor ELR20J 470 Ω R315 7010003360 Resistor ELR20J 470 Ω	X301	6050003350	Crystal	RF-4A3 FAF NKD
L302         6910000670         Coil         BT01RN1-A61-001           L303         6910000670         Coil         BT01RN1-A61-001           L304         6180000990         Coil         LAL 04NA 101K           L305         6180000990         Coil         LAL 04NA 101K           L306         6180000990         Coil         LAL 04NA 101K           L307         6180000990         Coil         LAL 04NA 101K           L308         6180000990         Coil         LAL 04NA 101K           L310         6180000990         Coil         LAL 04NA 101K           L311         6180000990         Coil         LAL 04NA 101K           L312         6910000670         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resi				(9.270800M)
L302         6910000670         Coil         BT01RN1-A61-001           L303         6910000670         Coil         BT01RN1-A61-001           L304         6180000990         Coil         LAL 04NA 101K           L305         6180000990         Coil         LAL 04NA 101K           L306         6180000990         Coil         LAL 04NA 101K           L307         6180000990         Coil         LAL 04NA 101K           L308         6180000990         Coil         LAL 04NA 101K           L310         6180000990         Coil         LAL 04NA 101K           L311         6180000990         Coil         LAL 04NA 101K           L312         6910000670         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resi				
L303         6910000670         Coil         BT01RN1-A61-001           L304         6180000990         Coil         LAL 04NA 101K           L305         6180000990         Coil         LAL 04NA 101K           L307         6180000990         Coil         LAL 04NA 101K           L308         6180000990         Coil         LAL 04NA 101K           L309         6180000990         Coil         LAL 04NA 101K           L310         6180000990         Coil         LAL 04NA 101K           L311         6180000990         Coil         LAL 04NA 101K           L312         6910000670         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L314         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Res				
L304         6180000990         Coil         LAL 04NA 101K           L305         6180000990         Coil         LAL 04NA 101K           L306         6180000990         Coil         LAL 04NA 101K           L307         6180000990         Coil         LAL 04NA 101K           L308         6180000990         Coil         LAL 04NA 101K           L309         6180000990         Coil         LAL 04NA 101K           L310         6180000990         Coil         LAL 04NA 101K           L311         6180000990         Coil         LAL 04NA 101K           L312         6910000670         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resis				
L305         6180000990         Coil         LAL 04NA 101K           L306         6180000990         Coil         LAL 04NA 101K           L307         6180000990         Coil         LAL 04NA 101K           L308         6180000990         Coil         LAL 04NA 101K           L309         6180000990         Coil         LAL 04NA 101K           L310         6180000990         Coil         LAL 04NA 101K           L311         6180000990         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L314         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Re				
L307         6180000990         Coil         LAL 04NA 101K           L308         6180000990         Coil         LAL 04NA 101K           L309         6180000990         Coil         LAL 04NA 101K           L310         6180000990         Coil         LAL 04NA 101K           L311         6180000990         Coil         LAL 04NA 101K           L312         6910000670         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         BT01RN1-A61-001           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         <		6180000990	Coil	LAL 04NA 101K
L308         6180000990         Coil         LAL 04NA 101K           L309         6180000990         Coil         LAL 04NA 101K           L310         6180000990         Coil         LAL 04NA 101K           L311         6180000990         Coil         LAL 04NA 101K           L312         6910000670         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L315         618000900         Coil         LAL 03NA 101K           L315         618000900         Coil         BT01RN1-A61-001           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R310         7010003280				
L309         6180000990         Coil         LAL 04NA 101K           L310         6180000990         Coil         LAL 04NA 101K           L311         6180000990         Coil         LAL 04NA 101K           L312         6910000670         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R310         701000360				
L310         6180000990         Coil         LAL 04NA 101K           L311         6180000990         Coil         LAL 04NA 101K           L312         6910000670         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 10 Ω           R311         7010003160	1			
L312         6910000670         Coil         BT01RN1-A61-001           L313         6180000900         Coil         LAL 03NA 101K           L314         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 10 Ω           R310         7010003160         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360	í			
L313         6180000900         Coil         LAL 03NA 101K           L314         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           L317         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 10 Ω           R310         701000360         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R314         7010003360	L311	6180000990	Coil	LAL 04NA 101K
L314         6180000900         Coil         LAL 03NA 101K           L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           Coil         BT01RN1-A61-001         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 100 Ω           R310         701000360         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R313         7010003360         Resistor         ELR20J 470 Ω           R314         7010003360				
L315         6180000900         Coil         LAL 03NA 101K           L316         6910000670         Coil         BT01RN1-A61-001           Coil         BT01RN1-A61-001         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R310         7010003280         Resistor         ELR20J 100 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 10 Ω           R313         7010003360         Resistor         ELR20J 220 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω	1			
L316         6910000670         Coil         BT01RN1-A61-001           R301         7010003280         Resistor         ELR20J 100 Ω           R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R310         7010003280         Resistor         ELR20J 100 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R311         7010003360         Resistor         ELR20J 10 Ω           R313         7010003360         Resistor         ELR20J 220 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω		1		
R301				
R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 100 Ω           R310         7010003160         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R313         7010003360         Resistor         ELR20J 470 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω	L317	6910000670	Coil	BT01RN1-A61-001
R302         7010003280         Resistor         ELR20J 100 Ω           R303         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 100 Ω           R310         7010003160         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R313         7010003360         Resistor         ELR20J 470 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω	<b>D</b> 000	70100000	Parature:	E: 000 1 400 0
R303         7010003280         Resistor         ELR20J 100 Ω           R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 100 Ω           R310         7010003160         Resistor         ELR20J 10 Ω           R311         7010003360         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R313         7010003360         Resistor         ELR20J 470 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω		1		
R304         7010003280         Resistor         ELR20J 100 Ω           R305         7010003280         Resistor         ELR20J 100 Ω           R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 100 Ω           R310         7010003160         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R313         7010003320         Resistor         ELR20J 220 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω		1		
R306         7010003280         Resistor         ELR20J 100 Ω           R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003160         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R313         7010003320         Resistor         ELR20J 220 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω           Resistor         ELR20J 470 Ω         Resistor				
R307         7010003280         Resistor         ELR20J 100 Ω           R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 100 Ω           R310         7010003160         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R313         7010003320         Resistor         ELR20J 220 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω				
R308         7010003280         Resistor         ELR20J 100 Ω           R309         7010003280         Resistor         ELR20J 100 Ω           R310         7010003160         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R313         7010003320         Resistor         ELR20J 220 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω	3			
R309         7010003280         Resistor         ELR20J         100 Ω           R310         7010003160         Resistor         ELR20J         10 Ω           R311         7010003160         Resistor         ELR20J         10 Ω           R312         7010003360         Resistor         ELR20J         470 Ω           R313         7010003320         Resistor         ELR20J         220 Ω           R314         7010003360         Resistor         ELR20J         470 Ω           R315         7010003360         Resistor         ELR20J         470 Ω		1		
R310         7010003160         Resistor         ELR20J 10 Ω           R311         7010003160         Resistor         ELR20J 10 Ω           R312         7010003360         Resistor         ELR20J 470 Ω           R313         7010003320         Resistor         ELR20J 220 Ω           R314         7010003360         Resistor         ELR20J 470 Ω           R315         7010003360         Resistor         ELR20J 470 Ω				
R312       7010003360       Resistor       ELR20J 470 Ω         R313       7010003320       Resistor       ELR20J 220 Ω         R314       7010003360       Resistor       ELR20J 470 Ω         R315       7010003360       Resistor       ELR20J 470 Ω         Resistor       ELR20J 470 Ω				1
R313       7010003320       Resistor       ELR20J 220 Ω         R314       7010003360       Resistor       ELR20J 470 Ω         R315       7010003360       Resistor       ELR20J 470 Ω				· · · · · · · · · · · · · · · · · · ·
R314 7010003360 Resistor ELR20J 470 Ω R315 7010003360 Resistor ELR20J 470 Ω	1			
R315 7010003360 Resistor ELR20J 470 Ω				
	. 1			
R317 7010003360 Resistor ELR20J 470 Ω		1		
R318 7010003400 Resistor ELR20J 1 kΩ				
R319   7010004270   Resistor R20J 4.7 kΩ R320   7010003530   Resistor ELR20J 10 kΩ				
R321 7010003530 Resistor ELR20J 47 kΩ				
R322 7010003620 Resistor ELR20J 47 kΩ	- 1	1		
R323 7410000150 Resistor Array RMX- 6 473K		1		
R324   7080001150   Resistor   CRB25FX 2.2 kΩ   R325   7080000220   Resistor   CRB25FX 1 kΩ				
TIME TOURDER THESISTED ORDERS THE	1020	. 300000220	1.0010101	COLUMN I MA

#### [LOGIC-A UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
IC301	1140000940	IC	TMP82C255AN-2-Z
IC302	1130002640	IC	μPD71055C
IC303	1130003770	IC	HM6264ALP15LL
IC304	1140001160	IC	SC1119
IC305	1140001220	IC	HD64180R1P6
IC306	1130004550	IC	SC1118
IC307	1120000970	IC .	M54562P
IC308	1130003860	IC	MB4052M-G
1C309	1130004460	IC	TC74HC42AP
IC310	1180000340	1C	TA78005AP
IC311	1130002551	IC	TC74HC32AP
IC312	1130004270	IC	TC74HC00AP
IC313	1110001680	IC	S-8054ALB
Q301	1590000360	Transistor	RN2202
Q302	1590000350	Transistor	RN1204

#### [LOGIC-A UNIT]

REF.	ORDER NO.		DESCRIPTION
R326	7080001160	Resistor	CRB25FX 12 kΩ
R327	7080000750	Resistor	CRB25FX 8.2 kΩ
R328	7080000260	Resistor	CRB25FX 4.7 kΩ
R329 R330	7080000250	Resistor Resistor	CRB25FX 3.3 kΩ CRB25FX 1.5 kΩ
R331	7080001140	Resistor	CRB25FX 330 Ω
R332	7080000260	Resistor	CRB25FX 4.7 kΩ
R333	7010004190	Resistor	R20J 1 kΩ
R334 R335	7010004190	Resistor Resistor	R20J 1 kΩ R20J 1 kΩ
R336	7010004190	Resistor	R20J 1 kΩ
R337	7010004190	Resistor	R20J 1 kΩ
R338	7010004190	Resistor	R20J 1 kΩ
R339 R340	7010004190	Resistor Resistor	R20J 1 kΩ R20J 1 kΩ
R341	7010003740	Resistor	ELR20J 470 kΩ
R342	7010003530	Resistor	ELR20J 10 kΩ
R346 R347	7010003400	Resistor	ELR20J 1 kΩ
R348	7010003400	Resistor Resistor	ELR20J 1 kΩ ELR20J 1 kΩ
R349	7010003400	Resistor	ELR20J 1 kΩ
R350	7010003360	Resistor	ELR20J 470 Ω
R351	7010003360	Resistor	ELR20J 470 Ω
R352 R353	7010003620 7010004320	Resistor Resistor	ELR20J 47 kΩ R20J 10 kΩ
R354	7010004320	Resistor	R20J 10 kΩ
R355	7010003480	Resistor	ELR20J 4.7 kΩ
R356	7010004210	Resistor	R20J 1.5 kΩ
R357 R358	7010004830	Resistor Resistor	R50XJ 4.7 Ω ELR20J 10 Ω
R359	7010003160	Resistor	ELR20J 10 Ω
R360	7010003280	Resistor	ELR20J 100 Ω
R361	7010003280	Resistor	ELR20J 100 Ω
R362 R363	7010003280	Resistor Resistor	ELR20J 100 Ω ELR20J 220 Ω
R364	7010003320	Resistor	ELR20J 220 Ω
R373	7010004320	Resistor	R20J 10 kΩ
R374 R375	7010003360	Resistor Resistor	ELR20J 470 Ω ELR20J 470 Ω
R376	7010003500	Resistor	ELR20J 47 kΩ
R377	7010003480	Resistor	ELR20J 4.7 kΩ
R378	7010003480	Resistor	ELR20J 4.7 kΩ
C301	4530000190	Capacitor Array	B7ZC0716-32N
C302 C303	4010000500 4530000270	Ceramic Capacitor Array	DD104 B 102K 50V B8XC0114-32N
C304	4530000270	Capacitor Array	B7ZC0716-32N
C305	4010000520	Ceramic	DD108 B 472K 50V
C306	4510002810	Electrolytic	16 SS 47 μF
C307 C308	4510002870 4010000520	Electrolytic Ceramic	25 SS 100 μF DD108 B 472K 50V
C309	4010000520	Ceramic	DD108 B 472K 50V
C310	4010000520	Ceramic	DD108 B 472K 50V
C311 C312	4530000390 4010000500	Capacitor Array Ceramic	B9HC0117-33N DD104 B 102K 50V
C312	4530000390	Ceramic Capacitor Array	B9HC0117-33N
C314	4010000520	Ceramic	DD108 B 472K 50V
C315	4010000520	Ceramic	DD108 B 472K 50V
C316 C317	4010000520 4530000040	Ceramic Capacitor Array	DD108 B 472K 50V B5RC0125-32N
C318	4310000060	Mylar	F2D 50V 223K
C319	4010000520	Ceramic	DD108 B 472K 50V
C320	4010000260	Ceramic	DD104 SL 470J 50V
C321 C322	4010000150 4010000150	Ceramic Ceramic	DD104 SL 150J 50V DD104 SL 150J 50V
C323	4010000520	Ceramic	DD104 BE 1300 30V
C324	4510002640	Electrolytic	25 SS 47 μF
C325 C326	4010000520 4510002730	Ceramic Electrolytic	DD108 B 472K 50V 10 SS 100 μF
C327	4010000520	Ceramic	DD108 B 472K 50V
C328	4510002810	Electrolytic	16 SS 47 μF
C329	4530000270	Capacitor Array	B8XC0114-32N
C330 C331	4040000250 4040000250	Barrier Layer Barrier Layer	UAT 08X 473M UAT 08X 473M

#### [LOGIC-A UNIT]

REF. NO.	ORDER NO.	D	ESCRIPTION
C332	4040000260	Barrier Layer	UZE 08X 104M
C333	4010000520	Ceramic	DD108 B 472K 50V
C334	4010000520	Ceramic	DD108 B 472K 50V
C335	4530000030	Capacitor Array	B5RC0124-32N
C336	4010000500	Ceramic	DD104 B 102K 50V
C337	4010000500	Ceramic	DD104 B 102K 50V
C338	4510002810	Electrolytic	16 SS 47 μF
C339	4010000520	Ceramic	DD108 B 472K 50V
C340	4020000250	Cylinder	UP125 X 472M
SO301	2610000200	Socket	ICC05-028 360T
EP301	0910021513	P.C. Board	B 2079C
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#### [PLL UNIT]

REF.	OPDER	T		
NO.	ORDER NO.		DESCRIPTION	
IC1	1120001620	IC	M74ALS74AP	
IC2	1130002960	IC	TC9181P	
IC3	1110001320	IC	μPC1037HA	
IC4	1110001320	IC	μPC1037HA	
IC5	1130002960	IC .	TC9181P	
IC6	1130004120	IC	TD6102P	
IC7	1110001320	IC	μPC1037HA	
IC8	1180000090	IC	NJM78M08A	
IC9	1180000270	IC	NJM78M05A	
Q1	1530000150	Transistor	2SC2668-O	
Q2	1530000150	Transistor	2SC2668-O	
Q3	1590000350	Transistor	RN1204	
Q4	1530000150	Transistor	2SC2668-O	
Q5	1530000110	Transistor	2SC2458-GR	
Q6	1530000150	Transistor	2SC2668-O	
Q7	1590000370	Transistor	RN2204	
Q8	1530000150	Transistor	2SC2668-O	
Q9	1560000090	FFT	2SK192A-GR	
Q10	1530000150	Transistor	2SC2668-O	
Q11	1590000350	Transistor	RN1204	
Q12	1530000940	Transistor	2SC1571G	
Q13	1530000940	Transistor	2SC1571G	
Q14	1530000150	Transistor	2SC2668-O	
Q15	1530000150	Transistor	2SC2668-O	
Q16	1560000090	FET	2SK192A-GR	
Q17	1560000090	FET	2SK192A-GR	
Q18	1560000090	FET	2SK192A-GR	
Q19	1560000090	FET	2SK192A-GR	
Q20	1590000340	Transistor	RN1202	
Q21	1590000340	Transistor	RN1202	ı
Q22	1590000340	Transistor	RN1202	1
Q23	1590000340	Transistor	RN1202	1
Q24	1530000150	Transistor	2SC2668-O	
Q25	1530000150	Transistor	2SC2668-O	
Q26	1590000350	Transistor	RN1204	1
Q27	1530000150	Transistor	2SC2668-O	ı
Q28	1530000150	Transistor	2SC2668-O	
Q29	1530000150	Transistor	2SC2668-O	
Q30	1590000350	Transistor	RN1204	
Q31	1590000350	Transistor	RN1204	
D1	1730000100	Zener	RD5.1E B2	
D1 D2	1720000100	Varicap	1SV50E	
D2 D3	1720000050	Varicap Varicap	1SV50E	
D3	1730000000	Zener	RD5.1E B2	-
D5	1720000100	Varicap	FC52M	١
D6	1720000120	•	1SV50E	ı
שט	1720000000	Varicap	IOVOUE	- 1

#### [PLL UNIT]

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REF. NO.	ORDER NO.	C	PESCRIPTION		REF. NO.	ORDER NO.	C	ESCRIPTION
D7	1720000050	Varicap	1SV50E		R4	7010004150	Resistor	R20J 470 Ω
D8	1720000050	Varicap	1SV50E	1	R5	7010004030	Resistor	R20J 47 Ω
D9	1710000050	Diode	18853		R6	7010003200	Resistor	ELR20J 22 Ω
D10	1710000050	Diode	18853	1	R7	7010003530	Resistor	ELR20J 10 kΩ
D11	1710000050	Diode	1SS53	l	R8	7010003580	Resistor	ELR20J 22 kΩ
D12	1710000050	Diode	1SS53	1	R9	7010003320	Resistor	ELR20J 220 Ω
D13	1710000160	Diode	15S133	1	R10	7010004070	Resistor	R20J 100 Ω
D14	1710000160	Diode	188133	1	R11	7010003530	Resistor	ELR20J 10 kΩ
D15	1710000160	Diode	188133	1	R12	7010003240	Resistor	ELR20J 47 Ω
D16	1710000160	Diode	1SS133		R13	7010003550	Resistor	ELR20J 15 kΩ
D17	1710000050	Diode	1SS53		R14	7010004190	Resistor	R20J 1 kΩ
D18	1710000050	Diode	1SS53		R15	7010003400	Resistor	ELR20J 1 kΩ
D19	1710000050	Diode	18853	l	R16	7010003390	Resistor	ELR20J 820 Ω
D20	1710000050	Diode	18853	l	R17	7010003990	Resistor	R20J 22 Ω
				l	R18	7010003580	Resistor	ELR20J 22 kΩ
				l	R19	7010003530	Resistor	ELR20J 10 kΩ
X1	6050005770	Crystal	CR-282		R20	7010003320	Resistor	ELR20J 220 Ω
X2	6050003230	Crystal	CR-180	l	R21	7010004070	Resistor	R20J 100 Ω
				l	R22	7010003420	Resistor	ELR20J 1.5 kΩ
١				l	R23	7010004190	Resistor	R20J 1 kΩ
L1	6910000670	Coil	BT01RN1-A61-001	Ī	R24	7010001150	Resistor	R25J 1 kΩ
L2	6910000670	Coil	BT01RN1-A61-001	1	R25	7010004190	Resistor	R20J 1 kΩ
L3	6170000230	Coil	LW-25	1	R26	7010004090	Resistor	R20J 150 Ω
L4	6150000760	Coil	LS-94	1	R27	7010003400	Resistor	ELR20J 1 kΩ
L5	6150000990	Coil	LS-114	l	R28	7010003320	Resistor	ELR20J 220 Ω
L6	6150000990	Coil	LS-114		R29	7010004090	Resistor	R20J 150 Ω ELR20J 100 Ω
L7	6180000900	Coil	LAL 03NA 101K	l	R30	7010003280	Resistor	1
L8	6180000830	Coil	LAL 03NA 3R3K		R31	7010003400	Resistor	ELR20J 1 kΩ
L9	6150000990	Coil	LS-114	1	R32	7010003580	Resistor	ELR20J 22 kΩ
L10	6150000990	Coil	LS-114	1	R33	7010003580	Resistor	ELR20J 22 kΩ
L11	6180001500	Coil	LAL 03NA 390K	1	R34	7010004370	Resistor	R20J 22 kΩ ELR20J 10 kΩ
L12	6180001500	Coil	LAL OSNA 390K		R35	7010003530	Resistor	R25J 10 kΩ
L13	6180001480	Coil	LAL 03NA 120K		R37	7010001280	Resistor	ELR20J 2.2 kΩ
L14	6180001480	Coil	LAL 03NA 120K		R38	7010003440	Resistor	ELR20J 47 kΩ
L15	6180001480	Coil	LAL 03NA 120K		R39 R40	7010003620 7010001230	Resistor Resistor	R25J 4.7 kΩ
L16	6180000990 6140000580	Coil Coil	LAL 04NA 101K LR-79	1	R41	7010001230	Resistor	R25J 82 Ω
L17 L18	6150001820	Coil	LS-204		R42	7010001020	Resistor	ELR20J 100 kΩ
L19	6180000850	Coil	LAL 03NA 4R7K	l	R43	7010003660	Resistor	ELR20J 100 kΩ
L20	6180000900	Coil	LAL OSNA 101K		R44	7010003300	Resistor	ELR20J 150 Ω
L21	6180000900	Coil	LAL OSNA 101K		R45	7010003580	Resistor	ELR20J 22 kΩ
L22	6140000580	Coll	LR-79		R46	7010003580	Resistor	ELR20J 22 kΩ
L23	6130000990	Coil	LB-135		R47	7010003400	Resistor	ELR20J 1 kΩ
L24	6140000580	Coil	LR-79		R48	7010004410	Resistor	R20J 47 kΩ
L25	6130000990	Coil	LB-135		R49	7410000080	Resistor Array	RMX- 4 473K
L26	6140000580	Coil	LR-79		R50	7010003400	Resistor	ELR20J 1 kΩ
L27	6130000990	Coil	LB-135		R51	7010003400	Resistor	ELR20J 1 kΩ
L28	6140000580	Coil	LR-79		R52	7010003400	Resistor	ELR20J 1 kΩ
L29	6130000990	Coil	LB-135		R53	7010004320	Resistor	R20J 10 kΩ
L30	6170000230	Coil	LW-25		R54	7010003440	Resistor	ELR20J 2.2 kΩ
L31	6170000230	Coil	LW-25		R55	7010003440	Resistor	ELR20J 2.2 kΩ
L32	6170000230	Coil	LW-25		R56	7010001210	Resistor	R25J 3.3 kΩ
L33	6170000230	Coil	LW-25		R57	7010003410	Resistor	ELR20J 1.2 kΩ
L35	6180000740	Coil	LAL 03NA R56M		R58	7010003400	Resistor	ELR20J 1 kΩ
L36	6180000700	Coil	LAL 03NA R27M		R59	7010003400	Resistor	ELR20J 1 kΩ
L37	6180000710	Coil	LAL 03NA R33M		R60	7010001190	Resistor	R25J 2.2 kΩ
L38	6910000670	Coil	BT01RN1-A61-001		R61	7010003320	Resistor	ELR20J 220 Ω
L39	6910000670	Coil	BT01RN1-A61-001		R62	7010003400	Resistor	ELR20J 1 kΩ
L40	6910000670	Coil	BT01RN1-A61-001		R63	7010003530	Resistor	ELR20J 10 kΩ
L41	6180000900	Coil	LAL 03NA 101K		R64	7010003480	Resistor	ELR20J 4.7 kΩ
L42	6180000690	Coil	LAL 03NA R22M		R65	7010004200	Resistor	R20J 1.2 kΩ
L43	6180000900	Coil	LAL 03NA 101K		R66	7010004370	Resistor	R20J 22 kΩ
L44	6180000690	Coil	LAL 03NA R22M		R67	7010003490	Resistor	ELR20J 5.6 kΩ
L45	6180000750	Coil	LAL 03NA R68M		R68	7010003320	Resistor	ELR20J 220 Ω
L46	6180000730	Coil	LAL 03NA R47M		R69	7010004100	Resistor	R20J 180 Ω
L47	6180000720	Coil	LAL OSNA RS9M		R70	7010003660	Resistor	ELR20J 100 kΩ
L48	6180000690	Coil	LAL O3NA R22M		R71	7010003680	Resistor	ELR20J 150 kΩ
L49	6180000710	Coil	LAL OSNA RSSM		R72	7010003660	Resistor	ELR20J 100 kΩ
L50	6180000710	Coil	LAL O3NA R33M		R73	7010004470	Resistor	R20J 150 kΩ
L51	6180000880	Coil	LAL 03NA 100K		R74	7010003660	Resistor	ELR20J 100 kΩ
					R75	7010003680	Resistor	ELR20J 150 kΩ
ь.	7040004440	Deniste-	D20 L 220 O		R76	7010003660	Resistor	ELR20J 100 kΩ
R1	7010004110	Resistor	R20J 220 Ω		R77	7010003680	Resistor	ELR20J 150 kΩ ELR20J 150 Ω
R2 R3	7010003530 7010003480	Resistor	ELR20J 10 kΩ	ll	R78 R79	7010003300 7010003460	Resistor Resistor	ELR20J 150 Ω ELR20J 3.3 kΩ
เาง	7010003400	Resistor	ELR20J 4.7 kΩ		1719	7010003400	resistoi	FF11500 3.0 L71
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#### [PLL UNIT]

PLL U	MALL 1				[PLL (	,,,,,,	
REF. NO.	ORDER NO.		DESCRIPTION		REF. NO.	ORDER NO.	
R80	7010003300	Resistor	ELR20J 150 Ω		C20	4010000500	Cerar
R81	7010004250	Resistor	R20J 3.3 kΩ	- 1	C21	4010000520	Cerar
R82	7010003300	Resistor	ELR20J 150 Ω	- 1	C22	4010000150	Ceran
R83	7010003460	Resistor	ELR20J 3.3 kΩ	ı	C23 C24	4010000520 4010000010	Ceran
R84 R85	7010003300 7010004250	Resistor Resistor	ELR20J 150 Ω R20J 3.3 kΩ	ı	C25	4010000010	Ceran
R86	7010004230	Resistor	R20J 33 Ω		C26	4010000520	Cerar
R87	7010003480	Resistor	ELR20J 4.7 kΩ		C27	4010000280	Cerar
R88	7010004110	Resistor	R20J 220 Ω		C28	4010000410	Cerar
R89	7010003340	Resistor	ELR20J 330 Ω		C29	4010000430	Cerar
R90	7010003280	Resistor	ELR20J 100 Ω		C30	4010000410	Cerar
R91	7010003990	Resistor	R20J 22 Ω		C31	4040000250	Barrie
R92 R93	7010003320 7010003580	Resistor Resistor	ELR20J 220 Ω ELR20J 22 kΩ	İ	C32 C33	4040000250 4040000350	Barrie
R94	7010003580	Resistor	ELR20J 10 kΩ		C34	4010000520	Cerar
R95	7010003360	Resistor	ELR20J 470 Ω		C35	4510001100	Elect
R96	7010003530	Resistor	ELR20J 10 kΩ		C36	4010000280	Cerar
R97	7010003530	Resistor	ELR20J 10 kΩ		C37	4010000280	Cerar
R98	7010004070	Resistor	R20J 100 Ω		C38	4010000330	Cerar
R99	7010003530	Resistor	ELR20J 10 kΩ		C39	4010000340	Ceran
R100	7010003320	Resistor	ELR20J 220 Ω		C40	4010000330	Cerar
R101 R102	7010004030 7010003320	Resistor Resistor	R20J 47 Ω ELR20J 220 Ω		C41 C42	4010000520 4510001100	Elect
7102	7010003520	Resistor	ELR20J 22 kΩ	1	C43	4010000520	Cerar
R104	7010003530	Resistor	ELR20J 10 kΩ		C44	4010000500	Cerar
₹105	7010003360	Resistor	ELR20J 470 Ω		C45	4010000520	Cerar
R106	7010004070	Resistor	R20J 100 Ω		C46	4020000250	Cyline
7107	7010003400	Resistor	ELR20J 1 kΩ		C47	4010000260	Cerar
R109	7010001030	Resistor	R25J 100 Ω		C48	4010000520	Cerar
2111	7010004110	Resistor	R20J 220 Ω		C49	4010000200	Cerar Cerar
R112 R113	7010003440 7010003400	Resistor Resistor	ELR20J 2.2 kΩ ELR20J 1 kΩ		C51 C52	4010000520 4510003700	Electi
1113 1114	7010003400	Resistor	ELR20J 22 kΩ		C53	4550000390	Tanta
R115	7010003580	Resistor	ELR20J 22 kΩ		C54	4010000520	Ceran
R116	7010004070	Resistor	R20J 100 Ω		C55	4040000390	Barrie
R117	7010004070	Resistor	R20J 100 Ω		C56	4010000770	Ceran
R118	7010003280	Resistor	ELR20J 100 Ω		C57	4010000640	Ceran
R119	7010004070	Resistor	R20J 100 Ω		C58	4010000900	Cerar
R120 R121	7010003530 7010004320	Resistor Resistor	ELR20J 10 kΩ R20J 10 kΩ		C59 C60	4010000870 4010000520	Ceran
R122	7010004320	Resistor	ELR20J 2.2 kΩ		C61	4510002840	Electr
1123	7010003440	Resistor	ELR20J 2.2 kΩ		C62	4010000720	Ceran
7124	7010003320	Resistor	ELR20J 220 Ω		C63	4010000780	Ceran
R125	7010003440	Resistor	ELR20J 2.2 kΩ		C64	4010000600	Ceran
R126	7010003320	Resistor	ELR20J 220 Ω		C65	4010000520	Ceran
7127	7010003320	Resistor	ELR20J 220 Ω		C66	4010000520	Ceran
R128 R129	7010003440 7010004230	Resistor Resistor	ELR20J 2.2 kΩ R20J 2.2 kΩ		C67 C68	4010000260 4010000260	Ceran Ceran
R130	7010004230	Resistor	ELR20J 22 Ω		C69	4010000200	Ceran
1131	7010004230	Resistor	R20J 2.2 kΩ		C70	4510001910	Electr
1132	7010003200	Resistor	ELR20J 22 Ω		C71	4040000350	Barrie
₹133	7010003620	Resistor	ELR20J 47 kΩ		C72	4010000520	Ceran
3134	7010003400	Resistor	ELR20J 1 kΩ		C73	4510001910	Electi
135	7010003400	Resistor	ELR20J 1 kΩ		C74	4040000250	Barrie
					C75 C76	4010000500 4510001110	Ceran Electi
21	4010000520	Ceramic	DD108 B 472K 50V		C77	4010000500	Ceran
2	4510001910	Electrolytic	25 MS7 10 μF		C78	4550002310	Tanta
23	4010000860	Ceramic	DD106 CH 470J 50V		C79	4550002310	Tanta
34	4010003100	Ceramic	DD106 TH 820J 50V		C80	4040000250	Barrie
C5	4010000520	Ceramic	DD108 B 472K 50V		C81	4040000250	Barrie
C6	4010003100	Ceramic	DD106 TH 820J 50V		C82	4040000250	Barrie
C7 C8	4010000520 4510003730	Ceramic Electrolytic	DD108 B 472K 50V 10 MS7 22 µF		C83 C84	4040000250 4040000250	Barrie Barrie
C9	4010000500	Ceramic	DD104 B 102K 50V		C85	4010000520	Ceran
C10	4010000520	Ceramic	DD108 B 472K 50V		C86	4510003730	Electr
C11	4010000150	Ceramic	DD104 SL 150J 50V		C87	4010000880	Ceran
C12	4010000520	Ceramic	DD108 B 472K 50V		C88	4010000790	Ceran
C13	4010003770	Ceramic	DD06 SL 0R5C 500V		C89	4610001130	Trimn
214	4010000120	Ceramic	DD104 SL 100D 50V		C90 C91	4010000880 4010000720	Ceran Ceran
C15 C16	4010000520 4010000260	Ceramic Ceramic	DD108 B 472K 50V DD104 SL 470J 50V		C91	4010000720	Ceran
217	4010000520	Ceramic	DD104 3E 4706 30V DD108 B 472K 50V		C93	4010000520	Ceran
18	4510001100	Electrolytic	16 MS7 10 μF		C94	4010000020	Ceran
J 10					C95	4010000520	Ceran

REF. NO.	ORDER NO.		DESCRIPTION
C20	4010000500	Ceramic	DD104 B 102K 50V
C21	4010000520	Ceramic	DD108 B 472K 50V
C22	4010000150	Ceramic	DD104 SL 150J 50V
C23	4010000520	Ceramic	DD108 B 472K 50V
C24	4010000010	Ceramic	DD104 SL 0R5C 50V
C25 C26	4010000120 4010000520	Ceramic Ceramic	DD104 SL 100D 50V DD108 B 472K 50V
C26	4010000520	Ceramic	DD108 B 472K 50V DD104 SL 560J 50V
C28	4010000200	Ceramic	DD107 SL 331J 50V
C29	4010000430	Ceramic	DD109 SL 471J 50V
C30	4010000410	Ceramic	DD107 SL 331J 50V
C31	4040000250	Barrier Layer	UAT 08X 473M
C32	4040000250	Barrier Layer	UAT 08X 473M UAT 05V 472K
C33 C34	4040000350 4010000520	Barrier Layer Ceramic	DD108 B 472K 50V
C35	4510001100	Electrolytic	16 MS7 10 μF
C36	4010000280	Ceramic	DD104 SL 560J 50V
C37	4010000280	Ceramic	DD104 SL 560J 50V
C38	4010000330	Ceramic	DD105 SL 101J 50V
C39	4010000340	Ceramic	DD105 SL 121J 50V
C40	4010000330	Ceramic	DD105 SL 101J 50V DD108 B 472K 50V
C41 C42	4010000520 4510001100	Ceramic Electrolytic	16 MS7 10 μF
C42	4010001100	Ceramic	DD108 B 472K 50V
C44	4010000500	Ceramic	DD104 B 102K 50V
C45	4010000520	Ceramic	DD108 B 472K 50V
C46	4020000250	Cylinder	UP125 X 472M
C47	4010000260	Ceramic	DD104 SL 470J 50V
C48	4010000520	Ceramic	DD108 B 472K 50V DD104 SL 270J 50V
C49 C51	4010000200 4010000520	Ceramic Ceramic	DD104 SL 2703 50V DD108 B 472K 50V
C52	4510003700	Electrolytic	25 MS7 22 μF
C53	4550000390	Tantalum	DN 1V R22M
C54	4010000520	Ceramic	DD108 B 472K 50V
C55	4040000390	Barrier Layer	UAT 06V 103K
C56	4010000770	Ceramic	DD104 CH 200J 50V
C57	4010000640	Ceramic	DD104 CH 040C 50V DD107 CH 680J 50V
C58 C59	4010000900 4010000870	Ceramic Ceramic	DD107 CH 6803 50V DD106 CH 510J 50V
C60	4010000520	Ceramic	DD108 B 472K 50V
C61	4510002840	Electrolytic	25 SS 10 μF
C62	4010000720	Ceramic	DD104 CH 120J 50V
C63	4010000780	Ceramic	DD104 CH 220J 50V
C64 C65	4010000600 4010000520	Ceramic Ceramic	DD104 CK 010C 50V DD108 B 472K 50V
C66	4010000520	Ceramic	DD108 B 472K 50V
C67	4010000320	Ceramic	DD104 SL 470J 50V
C68	4010000260	Ceramic	DD104 SL 470J 50V
C69	4010000520	Ceramic	DD108 B 472K 50V
C70	4510001910	Electrolytic	25 MS7 10 μF
C71	4040000350	Barrier Layer	UAT 05V 472K DD108 B 472K 50V
C72 C73	4010000520 4510001910	Ceramic Electrolytic	25 MS7 10 μF
C74	4040000250	Barrier Layer	UAT 08X 473M
C75	4010000500	Ceramic	DD104 B 102K 50V
C76	4510001110	Electrolytic	16 MS7 47 μF
C77	4010000500	Ceramic	DD104 B 102K 50V
C78	4550002310	Tantalum	DN 1E 1R5M
C79 C80	4550002310 4040000250	Tantalum Barrier Layer	DN 1E 1R5M UAT 08X 473M
C81	4040000250	Barrier Layer	UAT 08X 473M
C82	4040000250	Barrier Layer	UAT 08X 473M
C83	4040000250	Barrier Layer	UAT 08X 473M
C84	4040000250	Barrier Layer	UAT 08X 473M
C85	4010000520	Ceramic	DD108 B 472K 50V
C86	4510003730	Electrolytic	10 MS7 22 μF DD106 CH 560J 50V
C87 C88	4010000880 4010000790	Ceramic Ceramic	DD106 CH 3603 50V DD104 CH 240J 50V
C89	4610000790	Trimmer	CVSSA1001
C90	4010000880	Ceramic	DD106 CH 560J 50V
C91	4010000720	Ceramic	DD104 CH 120J 50V
C92	4010000720	Ceramic	DD104 CH 120J 50V
C93	4010000520	Ceramic	DD108 B 472K 50V DD104 SL 010C 50V
C94 C95	4010000020 4010000520	Ceramic Ceramic	DD104 SL 010C 50V DD108 B 472K 50V
U00	-1010000020	Joranno	20100 D 7/210 OVY

#### [PLL UNIT]

#### **ORDER** REF. **DESCRIPTION** NO. NO. DD106 CH 560J 50V 4010000880 C96 Ceramic C97 4010000740 Ceramic DD104 CH 150J 50V 4610001130 C98 Trimmer CVSSA1001 C99 4010000860 Ceramic DD106 CH 470J 50V 4010000720 DD104 CH 120J 50V C100 Ceramic C101 4010000720 Ceramic DD104 CH 120J 50V C102 4010000520 Ceramic DD108 B 472K 50V C103 4010000020 DD104 SL 010C 50V Ceramic C104 4010000520 DD108 B 472K 50V Ceramic C105 4010000860 Ceramic DD106 CH 470J 50V C106 4010000700 Ceramic DD104 CH 100D 50V C107 4610001000 Trimmer CVSSA0701 C108 4010000860 Ceramic DD106 CH 470J 50V C109 4010000720 Ceramic DD104 CH 120J 50V C110 4010000720 Ceramic DD104 CH 120J 50V C111 4010000520 Ceramic DD108 B 472K 50V C112 DD104 SL 010C 50V 4010000020 Ceramic 4010000520 C113 Ceramic DD108 B 472K 50V C114 4010000840 Ceramic DD105 CH 390J 50V 4010000670 DD104 CH 070D 50V C115 Ceramic C116 4610001000 Trimmer CVSSA0701 DD105 CH 330J 50V C117 4010000820 Ceramic C118 4010000720 Ceramic DD104 CH 120J 50V C119 4010000650 Ceramic DD104 CH 050C 50V C120 4010000520 Ceramic DD108 B 472K 50V DD104 SL 010C 50V C121 4010000020 Ceramic 4010000520 DD108 B 472K 50V C122 Ceramic C123 4010000500 Ceramic DD104 B 102K 50V C124 4010000500 Ceramic DD104 B 102K 50V C125 4010000500 Ceramic DD104 B 102K 50V 4010000500 DD104 B 102K 50V C126 Ceramic C127 4010000520 Ceramic DD108 B 472K 50V C128 4010000500 Ceramic DD104 B 102K 50V C129 4010000500 Ceramic DD104 B 102K 50V C130 4010000520 Ceramic DD108 B 472K 50V 4010000520 DD108 B 472K 50V Ceramic C131 4010000520 C132 Ceramic DD108 B 472K 50V C133 4010000260 Ceramic DD104 SL 470J 50V C134 4010000520 Ceramic DD108 B 472K 50V C135 4010000500 Ceramic DD104 B 102K 50V 4010000520 Ceramic DD108 B 472K 50V C136 4010000520 DD108 B 472K 50V C137 Ceramic C138 4010000200 Ceramic DD104 SL 270J 50V C139 4010000260 Ceramic DD104 SL 470J 50V DD104 SL 080D 50V C140 4010000100 Ceramic C141 4010000070 Ceramic DD104 SL 050C 50V 4010000050 DD104 SL 030C 50V C142 Ceramic C143 4010000140 Ceramic DD104 SL 120J 50V C144 4010000500 Ceramic DD104 B 102K 50V C145 4010000520 DD108 B 472K 50V Ceramic C146 4510001100 Electrolytic 16 MS7 10 μF DD108 B 472K 50V C147 4010000520 Ceramic C148 4040000250 **Barrier Laver UAT 08X 473M** C149 4010000520 Ceramic DD108 B 472K 50V C150 4010000500 DD104 B 102K 50V Ceramic C151 4010000520 Ceramic DD108 B 472K 50V C152 Electrolytic 16 MS7 47 µF 4510001110 C153 4010000520 Ceramic DD108 B 472K 50V C154 4510001910 Electrolytic 25 MS7 10 μF C155 4010000520 DD108 B 472K 50V Ceramic C156 4510002640 Electrolytic 25 SS 47 μF C157 4010000520 Ceramic DD108 B 472K 50V Electrolytic 4510001910 25 MS7 10 μF C158 C159 4010000500 Ceramic DD104 B 102K 50V C160 4010000500 DD104 B 102K 50V Ceramic C161 4040000250 **Barrier Layer UAT 08X 473M** C162 4040000250 **UAT 08X 473M Barrier Laver** C163 4040000250 **Barrier Laver** UAT 08X 473M C164 4010000340 Ceramic DD105 SL 121J 50V C165 4010000170 Ceramic DD104 SL 200J 50V C166 4010000340 Ceramic DD105 SL 121J 50V C167 4010000360 Ceramic DD106 SL 181J 50V C168 4010000500 DD104 B 102K 50V Ceramic 4010000360 C169 Ceramic DD106 SL 181J 50V C170 4010000520 Ceramic DD108 B 472K 50V

#### [PLL UNIT]

REF.	ORDER NO.		DESCRIPTION
NO. C171 C172 C173 C174 C175 C176 C177 C178 C179 C180 C181 C182 C183 C184 C185 C186 C187 C188	NO.  4010000390 4010000180 4010000420 4010000380 4040000250 4040000250 4010000180 4010000380 4010000140 4010000380 4010000380 4010000380 4010000520 4040000250 4010000520 4040000250 4010000500	Ceramic Ceramic Ceramic Ceramic Ceramic Barrier Layer Barrier Layer Ceramic Barrier Layer Ceramic Barrier Layer Ceramic	DD107 SL 271J 50V DD104 SL 220J 50V DD108 SL 391J 50V DD104 SL 680J 50V DD107 SL 221J 50V UAT 08X 473M UAT 08X 473M DD104 SL 820J 50V DD106 SL 151J 50V DD106 SL 151J 50V DD106 SL 181J 50V DD106 SL 181J 50V DD106 SL 181J 50V DD106 SL 101J 50V UAT 08X 473M DD108 B 472K 50V UAT 08X 473M DD108 B 472K 50V
C189 C190 C191 C192 C193	4010000460 4010000520 4510001910 4010000500 4010000500	Ceramic Ceramic Electrolytic Ceramic Ceramic P.C. Board	DD104 B 471K 50V DD108 B 472K 50V 25 MS7 10 µF DD104 B 102K 50V DD104 B 102K 50V

#### [DDS UNIT]

REF.	ORDER	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
NO.	NO.	[	DESCRIPTION
IC201	1140000500	ıc	SC1051
IC202	1130002600	IC .	SC1052
IC203	1130002610	IC	SC1053
IC204	1130002461	IC	TC74HCT374AF
IC205	1130002461	IC	TC74HCT374AF
L201	6200000040	Coil	LQN 5N 331K
L202	6200000040	Coil	LQN 5N 331K
L203	6200000040	Coil	LQN 5N 331K
R203	7030000420	Resistor	MCR10EZHJ 2.2 kΩ (222)
R204	7410000320	Resistor Array	
R205	7030000500	Resistor	MCR10EZHJ 10 kΩ (103)
R206	7030000500	Resistor	MCR10EZHJ 10 kΩ (103)
R207	7030000500	Resistor	MCR10EZHJ 10 kΩ (103)
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		(
C203	4030001150	Ceramic	GRM40 F 104Z 25PT
C207	4030000720	Ceramic	GRM40 SL 680J 50PT
C208	4030000560	Ceramic	GRM40 SL 020C 50PT
C209	4030000750	Ceramic	GRM40 SL 121J 50PT
C210	4030000610	Ceramic	GRM40 SL 070D 50PT
C211	4030000750	Ceramic	GRM40 SL 121J 50PT
C212	4030000640	Ceramic	GRM40 SL 120J 50PT
C213	4030000720	Ceramic	GRM40 SL 680J 50PT
C214	4030001150	Ceramic	GRM40 F 104Z 25PT
C215	4030001150	Ceramic	GRM40 F 104Z 25PT
C216	4030001150	Ceramic	GRM40 F 104Z 25PT
C217	4030001150	Ceramic	GRM40 F 104Z 25PT
C219	4030001100	Ceramic	GRM40 B 102K 50PT
C220	4030001100	Ceramic	GRM40 B 102K 50PT
EP201	0910022511	P.C. Board	B 2203A

#### [ANT SW UNIT]

	[ANI 3	SW UNIT]		
	REF. NO.	ORDER NO.		DESCRIPTION
	Q921	1530000110	Transistor	2SC2458-GR
	Q922	1540000070	Transistor	2SD468C
	Q923	1510000220	Transistor	2SA1345
	Q924	1520000060	Transistor	2SB562C
	Q925	1530000970	Transistor	2SC3402
	D921	1710000590	Diode	GM-3B
	D922	1710000350	Diode	1N4002
	D923	1710000330	Diode	1K60
	D924	1710000350	Diode	1N4002
	L921	6180000070	Coil	LB4-R36J
	L922	6140001260	Coil	LR-151
	L924	6180001190	Coil	FL 9H 102J
	L925	6180001190	Coil	FL 9H 102J
	L926 L927	6180000900	Coil Coil	LAL 03NA 101K LAL 04NA 101K
	L921	6100000990	Con	LAL DANA TOTA
	R921	7010003530	Resistor	ELR20J 10 kΩ
-	R922	7010003530	Resistor	ELR20J 10 kΩ
	R923	7010003120	Resistor	ELR20J 4.7 Ω
	R924 R925	7010003400	Resistor Resistor	ELR20J 1 kΩ ELR20J 2.2 kΩ
	R925	7010003440	Resistor	ELH20J 2.2 KΩ R20J 2.2 kΩ
	R927	7010004230	Resistor	ELR20J 100 Ω
-	R928	7010003380	Resistor	ELR20J 680 Ω
-	R929	7100000230	Resistor	SRW5P 56 Ω (560)
	R930	7010004370	Resistor	R20J 22 kΩ
ı	R931	7010003580	Resistor	ELR20J 22 kΩ
-	R932	7010003400	Resistor	ELR20J 1 kΩ
	R933	7540000010	Absorber	DSA-301LA
	R934	7010001360	Resistor	R25J 47 kΩ
	R935	7010003400	Resistor	ELR20J 1 kΩ
1	C921	4010000330	Ceramic	DD105 SL 101J 50V
	C922	4010000360	Ceramic	DD106 SL 181J 50V
ı	C923	4010000520	Ceramic	DD108 B 472K 50V
	C924	4040000260	Barrier Layer	UZE 08X 104M
ļ	C925	4040000250	Barrier Layer	UAT 08X 473M
1	C926	4040000250	Barrier Layer	UAT 08X 473M
1	C927	4040000250	Barrier Layer	UAT 08X 473M
Ì	C928	4510002840	Electrolytic	25 SS 10 μF
ı	C929 C930	4010003860 4010000220	Ceramic Ceramic	DD06 SL 100D 500V DD104 SL 330J 50V
1	C931	4040000250	Barrier Layer	UAT 08X 473M
1	C932	4510002950	Electrolytic	50 SS 2R2 μF
	C933	4010000520	Ceramic	DD108 B 472K 50V
	C935	4010000520	Ceramic	DD108 B 472K 50V
J	C936	4040000250	Barrier Layer	UAT 08X 473M
	C937	4010000500	Ceramic	DD104 B 102K 50V
I	C938	4040000250	Barrier Layer	
	C939	4010000500	Ceramic	DD104 B 102K 50V
	RL921	6330000110	Relay	FBR22D12-P
-	RL922	6330000530	Relay	UPM-12912Y
I	EP802	0910022472	P.C. Board	B 2078B
	~1 UUZ	0010022412	T.O. Dodiu	2 20100
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#### [DIN UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
Q881	1510000050	Transistor	2SA1015-Y
D881	1710000050	Diode	18853
D882	1710000350	Diode	1N4002
L881	6910000670	Coil	BT01RN1-A61-001
L884	6910000670	Coil	BT01RN1-A61-001
L885	6910000670	Coil	BT01RN1-A61-001
L886	6910000670	Coil	BT01RN1-A61-001
L887	6910000670	Coil	BT01RN1-A61-001
L888	6910000670	Coil	BT01RN1-A61-001
L889	6910000670	Coil	BT01RN1-A61-001
L890	6910000670	Coil	BT01RN1-A61-001
L891	6910000670	Coil	BT01RN1-A61-001
L892	6910000600	Ferrite Bead	FSOH050RN
L893	6910000670	Coil	BT01RN1-A61-001
L894	6910000670	Coil	BT01RN1-A61-001
R881	7010000370	Resistor	ELR25J 1 kΩ
R882	7010000370	Resistor	ELR25J 1 kΩ
R883	7010000370	Resistor	ELR25J 1 kΩ
R884	7010000290	Resistor	ELR25J 220 Ω
R885	7010000290	Resistor	ELR25J 220 Ω
R886	7010000290	Resistor	ELR25J 220 Ω
R887	7010000450	Resistor	ELR25J 4.7 kΩ
R888	7010000450	Resistor	ELR25J 4.7 kΩ
R891	7010000290	Resistor	ELR25J 220 Ω
C881	4010000520	Ceramic	DD108 B 472K 50V
C882	4010000520	Ceramic	DD108 B 472K 50V
C883	4010000520	Ceramic	DD108 B 472K 50V
C884	4010000520	Ceramic	DD108 B 472K 50V
C885	4010000520	Ceramic	DD108 B 472K 50V
RL881	6330000540	Relay	OMR-109F
EP803	0910012312	P.C. Board	B 1108B

REF. NO.	ORDER NO.		DESCRIPTION
IC1001	1110000540	IC	NJM4558D
IC1002	1110000540	IC	NJM4558D
IC1003	1110000540	IC	NJM4558D
IC1004	1130000600	IC	μPD4001BC
IC1005	1110000330	IC	M5218L
IC1006	1110000540	IC	NJM4558D
IC1007	1110001320	IC	μPC1037HA
IC1008	1130001000	IC	μPD4066BC
IC1009	1130001000	IC	μPD4066BC
IC1010	1110001320	IC	μPC1037HA
IC1011	1110001320	IC	μPC1037HA
IC1012	1130000600	IC	μPD4001BC
IC1013	1130000620	IC	μPD4011BC
IC1014	1130004480	IC	TC74HC74AP
IC1015	1180000470	IC	NJM7808A
IC1016	1130001000	IC	μPD4066BC
IC1017	1120000970	IC	M54562P
IC1019	1110001950	IC	μPC494C
Q1001	1580000110	FET	3SK74 M
Q1002	1530000340	Transistor	2SC1583 G

REF. NO.	ORDER NO.		DESCRIPTION
Q1003	1530000110	Transistor	2SC2458-GR
Q1004	1530000110	Transistor	2SC2458-GR
Q1005	1530000110	Transistor	2SC2458-GR
Q1006	1590000360	Transistor	RN2202
Q1007	1580000110	FET	3SK74 M
Q1008	1590000350	Transistor	RN1204
Q1009	1530000110	Transistor	2SC2458-GR
Q1010	1530000940	Transistor	2SC1571G
Q1011	1590000350	Transistor	RN1204
Q1012	1590000350	Transistor	RN1204
Q1013	1530000810	Transistor	2SC2053
Q1014 Q1015	1530000110 1580000110	Transistor FET	2SC2458-GR 3SK74 M
Q1016	1530000110	Transistor	2SC2458-GR
Q1017	1530000110	Transistor	2SC2458-GR
Q1018	1590000350	Transistor	RN1204
Q1020	1510000070	Transistor	2SA1048-Y
Q1021	1590000360	Transistor	RN2202
Q1022	1530000110	Transistor	2SC2458-GR
Q1023	1590000350	Transistor	RN1204
Q1024	1530000110	Transistor	2SC2458-GR
Q1025	1590000350	Transistor	RN1204
Q1026	1590000350	Transistor	RN1204
Q1027	1590000350	Transistor	RN1204
Q1028	1530000660	Transistor	2SC1645B
Q1029	1590000350	Transistor	RN1204
Q1030	1590000340	Transistor	RN1202
Q1031	1530000660	Transistor	2SC1645B
Q1032	1530000110	Transistor	2SC2458-GR
Q1033	1540000200	Transistor	2SD1406 Y
Q1034	1540000070	Transistor	2SD468C
Q1035	1530000110	Transistor	2SC2458-GR 2SC2458-GR
Q1036	1530000110 1530000110	Transistor Transistor	2SC2456-GR 2SC2458-GR
Q1037 Q1038	1530000110	Transistor	2SC2456-Y
Q1039	1530000100	Transistor	2SC2458-GR
Q1039	1590000340	Transistor	RN1202
Q1040 Q1041	1590000350	Transistor	RN1204
Q1042	1590000340	Transistor	RN1202
Q1043	1590000350	Transistor	RN1204
Q1044	1530000100	Transistor	2SC2458-Y
Q1045	1580000110	FET	3SK74 M
Q1046	1580000110	FET	3SK74 M
Q1047	1590000350	Transistor	RN1204
Q1048	1530000110	Transistor	2SC2458-GR
D1001	1710000330	Diode	1K60
D1002	1710000330	Diode	1K60
D1003	1710000160	Diode	1SS133
D1004	1710000160	Diode	1SS133
D1005	1710000330	Diode	1K60
D1006	1710000330	Diode	1K60
D1007	1710000050	Diode	1SS53 1SS53
D1008 D1009	1710000050 1710000050	Diode Diode	18853 18853
D1009	1710000050	Diode	1SS53
D1010	1710000050	Diode	1SS53
D1012	1710000050	Diode	1SS53
D1013	1710000050	Diode	1SS53
D1014	1710000160	Diode	1SS133
D1015	1710000270	Diode	MI204
D1016	1710000050	Diode	1SS53
D1017	1710000050	Diode	18853
D1018	1710000050	Diode	1SS53
D1019	1710000050	Diode	1SS53
D1020	1710000050	Diode	1SS53
D1021	1710000050	Diode	1SS53
m		Diode	1SS53
D1022	1710000050	D1	
D1023	1710000050	Diode	1SS53
D1023 D1024	1710000050 1710000050	Diode	18853
D1023 D1024 D1025	1710000050 1710000050 1710000050	Diode Diode	1SS53 1SS53
D1023 D1024 D1025 D1026	1710000050 1710000050 1710000050 1710000050	Diode Diode Diode	1SS53 1SS53 1SS53
D1023 D1024 D1025	1710000050 1710000050 1710000050	Diode Diode	1SS53 1SS53

REF.	ORDER NO.		DESCRIPTION
D1029	1710000050	Diode	1SS53
D1030	1710000160	Diode	1SS133
D1031	1710000050	Diode	1SS53
D1032	1710000050	Diode	18853
D1033	1710000160	Diode	1SS133 1SS133
D1034 D1035	1710000160 1710000160	Diode Diode	188133
D1035	1710000160	Diode	1SS133
D1037	1710000160	Diode	155133
D1038	1710000160	Diode	1SS133
D1039	1710000050	Diode	1SS53
D1040 D1041	1710000160 1710000160	Diode Diode	1SS133 1SS133
D1041	1710000160	Diode	188133
D1043	1710000160	Diode	188133
D1044	1710000330	Diode	1K60
D1045	1710000330	Diode	1K60
D1046	1710000050 1710000050	Diode Diode	1SS53 1SS53
D1047 D1048	1710000050	Diode	1SS53
D1040	1710000160	Diode	155133
D1050	1710000160	Diode	188133
D1051	1710000160	Diode	188133
D1052	1710000160	Diode	188133
D1053	1710000160	Diode	1SS133 1SS133
D1054 D1055	1710000160 1710000160	Diode Diode	1SS133
D1056	1710000160	Diode	1SS133
D1057	1710000160	Diode	15S133
D1058	1710000160	Diode	188133
D1059	1710000160	Diode	1SS133
D1060	1710000160	Diode	1SS133 1SS133
D1061 D1062	1710000160 1710000160	Diode Diode	1SS133
D1063	1710000160	Diode	155133
D1064	1710000160	Diode	15S133
D1065	1710000160	Diode	188133
D1066	1710000160	Diode	188133
D1067	1710000160	Diode	1SS133 1SS133
D1068 D1069	1710000160 1710000160	Diode Diode	1SS133
D1000	1710000160	Diode	188133
D1071	1710000160	Diode	188133
D1072	1710000160	Diode	155133
D1073	1710000160	Diode	1SS133
D1074 D1075	1730000070 1710000050	Zener Diode	RD3.9E B2 1SS53
D1075	1710000050	Diode	18853
D1077	1710000160	Diode	188133
D1078	1710000160	Diode	188133
D1079	1730000070	Zener	RD3.9E B2
D1080	1790000250	Diode	1SS97
D1081 D1082	1730000050 1710000050	Zener Diode	RD3.0E B2 1SS53
D1082	1720000110	Varicap	FC51M
D1084	1720000110	Varicap	FC51M
D1085	1710000160	Diode	188133
D1086	1710000160	Diode	1SS133
D1087 D1088	1710000040 1710000040	Diode Diode	1S953 1S953
D1088 D1089	1710000040	Diode Diode	1SS53
D1090	1710000050	Diode	1SS53
D1091	1710000050	Diode	18853
D1092	1710000160	Diode	1SS133
D1093	1710000160	Diode	1SS133
FI1001	2010000320	Filter	9M22D2 (FL-30)
FI1002	2010000810	Filter	9M 6C1 (FL-33)
X1001	6050005810	Crystal	CR-283
X1002	6050005820	Crystal	CR-284

	ONIT		
REF. NO.	ORDER NO.		DESCRIPTION
L1001	6150001590	Coil	LS-175
L1002	6150001590	Coil	LS-175
L1003	6150001590	Coil	LS-175
L1004	6150001250	Coil Coil	LS-137 LS-163
L1005 L1006	6150001470 6150000700	Coil	LS-103 LS-90A
L1007	6150000700	Coil	LS-90A
L1008	6180000900	Coil	LAL 03NA 101K
L1009	6140001600	Coil	LR-178
L1010	6150001590	Coil	LS-175
L1011 L1012	6150001590 6180000900	Coil Coil	LS-175 LAL 03NA 101K
L1012	6150001590	Coil	LS-175
L1014	6150000700	Coil	LS-90A
L1015	6150001470	Coil	LS-163
L1016	6180000890	Coil	LAL 03NA 180K
L1017	6180000930	Coil	LAL 03NA 220K
L1018	6180001710 6150002490	Coil Coil	LAL 03NA 561K LS-267
L1019 L1020	6150002490	Coil	LS-267
L1020	6180001710	Coil	LAL 03NA 561K
L1022	6180000990	Coil	LAL 04NA 101K
L1023	6180000900	Coil	LAL 03NA 101K
L1024	6910000670	Coil	BT01RN1-A61-001
L1025	6910000670	Coil	BT01RN1-A61-001
L1026	6180000760 6180002470	Coil Coil	LAL 03NA R82M LAL 03NA 471K
L1027 L1028	6180002470	Coil	LAL 03NA 101K
L1020	0100000	0011	EAE OONA TOTA
R1001	7010003780	Resistor	ELR20J 1 MΩ
R1002	7010003660	Resistor	ELR20J 100 kΩ
R1003	7010003340	Resistor	ELR20J 330 Ω
R1004	7010004070	Resistor	R20J 100 Ω
R1005	7010001320	Resistor	R25J 22 kΩ
R1006 R1007	7010004190 7010004070	Resistor Resistor	R20J 1 kΩ R20J 100 Ω
R1007	7010004070	Resistor	R25J 150 kΩ
R1009	7010003660	Resistor	ELR20J 100 kΩ
R1010	7010003400	Resistor	ELR20J 1 kΩ
R1011	7010004070	Resistor	R20J 100 Ω
R1012	7010001260	Resistor	R25J 6.8 kΩ
R1013	7010004410 7010004430	Resistor Resistor	R20J 47 kΩ R20J 68 kΩ
R1014 R1015	7010004430	Resistor	R25J 330 Ω
R1016	7010001280	Resistor	R25J 10 kΩ
R1017	7010003580	Resistor	ELR20J 22 kΩ
R1018	7010004450	Resistor	R20J 100 kΩ
R1019	7010001030	Resistor	R25J 100 Ω
R1020 R1021	7010003240 7010004070	Resistor Resistor	ELR20J 47 Ω R20J 100 Ω
R1021	7010004070	Resistor	R20J 1 kΩ
R1023	7010004270	Resistor	R20J 4.7 kΩ
R1025	7310000870	Trimmer	RH1051D14J0PA (103)
R1026	7010003440	Resistor	ELR20J 2.2 kΩ
R1027 R1028	7010004400 7010001070	Resistor Resistor	R20J 39 kΩ R25J 220 Ω
R1020	7010001070	Resistor	ELR20J 2.2 MΩ
R1030	7010003790	Resistor	ELR20J 1.2 MΩ
R1031	7010004600	Resistor	R20J 2.2 MΩ
R1032	7010003530	Resistor	ELR20J 10 kΩ
R1033	7010003530	Resistor	ELR20J 10 kΩ
R1034 R1035	7010004570 7010003820	Resistor Resistor	R20J 1 MΩ ELR20J 3.3 MΩ
R1035	7010003820	Resistor	ELR20J 3.3 MΩ ELR20J 1.8 kΩ
R1037	7010001070	Resistor	R25J 220 Ω
R1038	7010001280	Resistor	R25J 10 kΩ
R1039	7010003480	Resistor	ELR20J 4.7 kΩ
R1040	7010001400	Resistor	R25J 100 kΩ
R1041 R1042	7010003480 7010003620	Resistor Resistor	ELR20J 4.7 kΩ ELR20J 47 kΩ
R1042 R1043	7010003620	Resistor	ELR20J 47 KΩ ELR20J 100 kΩ
R1043	7010003610	Resistor	ELR20J 39 kΩ
R1045	7010003660	Resistor	ELR20J 100 kΩ
R1046	7010004070	Resistor	R20J 100 Ω

REF.   ONUER   NO.   NO.	IMMIA			
Resistor   Resistor	REF. NO.	ORDER NO.		DESCRIPTION
R1049   7010004250   Resistor   R20J 3.3 kΩ   Resistor   R1051   7010003550   Resistor   R2DJ 15 kΩ   Resistor   R2DJ 15 kΩ   Resistor   R2DJ 10 kΩ   Resistor   R2DJ 15 kΩ	R1047	7010003340	Resistor	ELR20J 330 Ω
Resistor   Resistor		l .	l '	
Resistor		l	l	
Resistor			l	
Resistor   Resistor		' ' ' '	l	ELR20J 1.5 kΩ
Resistor   Resistor	R1053	l	l	
Resistor   Resistor   Resistor   Resistor   Resistor   REQU   150 Ω   Resistor   REQU   100 Ω			'''	
Resistor   R25J 470 Ω   Resistor   R25J 15 kΩ   Resistor   R20J 15 kΩ   Resistor   R20J 10 kΩ   Resistor   R20J 10 kΩ   Resistor   R20J 100 kΩ   Resistor   R20J 15 kΩ   Resistor   R20J 10 kΩ   Resistor   R20J		l	l	
R1059		l	l	
R1060   7010003370   Resistor   ELR20J 15 kΩ   Resistor   R1062   7010004320   Resistor   R20J 10 kΩ   R20J 100	R1058	l	l	
R1061   7010003550   Resistor   R20J 10 kΩ   R20   100		l	l	
R1062   7010004320   Resistor   R20J 10 kΩ   R1064   7010003650   Resistor   R20J 100 kΩ   R1065   701000450   Resistor   R20J 100 kΩ   R20   R20J 100 kΩ   R20J 100 kΩ		l	l	
R1064   7010003660   Resistor   R20J 100 kΩ   R20   R20 kΩ   R20 k		l	l	
R1065	R1063	l	Resistor	
R1066			l	
R1067   7010004070   Resistor   R20J 100 Ω   Resistor   R20J 39 Ω   R1069   7010004020   Resistor   R20J 39 Ω   R1070   7010003970   Resistor   R20J 15 Ω   R20J 17 Ω   R20J 7010003970   R20			l	
R1068			l	
Resistor   R20J 15 Ω   Resistor   R20J 47 κΩ   Resistor   R20J 5.6 κΩ   Resistor   R20J 5.2 κΩ   Resistor   R20J 2.2 κΩ   Resistor   R20J 47 κΩ   Resistor   R20J 47 κΩ   Resistor   R20J 47 κΩ   Resistor   R20J 47 κΩ   Resistor   R20J 22 κΩ   Resistor   R20J 23 κΩ   Resistor   R20J 10 κΩ   Resistor		l	l	
Resistor   Resistor			l	
Resistor   Resistor			l	
R1073   7010003200   Resistor   ELR20J 22 Ω   Resistor   Relation   Relati	1	l '		
Resistor   Resistor		7010003200	Resistor	ELR20J 22 Ω
R1076   R1077   R10003440   Resistor   R120J 2.2 kΩ   R1078   R1079   R1079   R1079   R1079   R1079   R1079   R1080   R1080   R1081   R1080   R1081   R1080   R1081   R1080   R1082   R1080   R1081   R1080   R1081   R1080   R1081   R1080   R1081   R1080   R1081   R1080   R1080		1	1	
R1077		1	ı	
R1078		1	1	
R1080		1	Resistor	
R1081   7010003620   Resistor   R25J 100 Ω   Resistor   R20J 330 Ω   Resistor   R20J 22 kΩ   R25J 100 Ω   R25			l .	
R1082   7010001030   Resistor   R25J 100 Ω				
R1083   7010003400   Resistor   ELR20J 1 kΩ   Resistor   ELR20J 330 Ω   Resistor   ELR20J 330 Ω   Resistor   ELR20J 330 Ω   Resistor   ELR20J 22 kΩ   Resistor   ELR20J 10 kΩ   Resistor   Resistor				
R1086   7010003620   Resistor   R20J 22 kΩ   R1087   7010004370   Resistor   R20J 22 kΩ   R1088   7010003530   Resistor   R20J 33 kΩ   R1090   7010003320   Resistor   R25J 100 Ω   R1091   7010001030   Resistor   R25J 100 Ω   R1092   7010003420   Resistor   R25J 100 Ω   R1093   7010003530   Resistor   R25J 100 Ω   R1094   701000470   Resistor   R20J 330 Ω   R1095   7010004130   Resistor   R20J 330 Ω   R1096   7010003660   Resistor   ELR20J 220 kΩ   R1097   7010003660   Resistor   ELR20J 100 kΩ   R1098   7010003660   Resistor   ELR20J 100 kΩ   R1099   7010003420   Resistor   ELR20J 100 kΩ   R1100   7010003420   Resistor   ELR20J 10 kΩ   R1101   7010003440   Resistor   ELR20J 2.2 kΩ   R1102   7010003530   Resistor   ELR20J 2.2 kΩ   R1103   7010003440   Resistor   ELR20J 2.2 kΩ   R1104   7010003440   Resistor   ELR20J 2.2 kΩ   R1105   7010003440   Resistor   ELR20J 2.2 kΩ   R1106   7010003440   Resistor   ELR20J 2.2 kΩ   R1106   7010003440   Resistor   ELR20J 2.2 kΩ   R1107   7010003440   Resistor   ELR20J 2.2 kΩ   R1108   7010003440   Resistor   R20J 10 kΩ   R25J 100 Ω   R1111   7010001030   Resistor   R25J 100 Ω   R1114   7010001030   Resistor   R25J 100 Ω   R1115   7010004230   Resistor   R25J 100 Ω   R1116   7010004230   Resistor   R25J 100 Ω   R25J 100	R1083	7010003400	Resistor	
R1087         7010004370         Resistor         R20J         22 kΩ           R1088         7010003530         Resistor         ELR20J         10 kΩ           R1089         7010004390         Resistor         R20J         33 kΩ           R1090         7010003320         Resistor         R2DJ         100 Ω           R1091         7010003420         Resistor         R2DJ         100 Ω           R1092         7010003530         Resistor         ELR20J         10 kΩ           R1094         701000470         Resistor         R20J         100 Ω           R1095         7010004130         Resistor         R20J         330 Ω           R1096         7010003700         Resistor         ELR20J         220 kΩ           R1097         7010003660         Resistor         ELR20J         220 kΩ           R1098         7010003420         Resistor         ELR20J         10 kΩ           R1100         7010003420         Resistor         ELR20J         10 kΩ           R1101         7010003440         Resistor         ELR20J         2.2 kΩ           R1103         7010003440         Resistor         ELR20J         2.2 kΩ           R1105         701000		1		
R1088         7010003530         Resistor         ELR20J 10 kΩ           R1090         7010003320         Resistor         R20J 33 kΩ           R1091         7010003320         Resistor         ELR20J 220 Ω           R1091         7010003420         Resistor         R25J 100 Ω           R1092         7010003420         Resistor         ELR20J 1.5 kΩ           R1093         7010003530         Resistor         ELR20J 100 Ω           R1095         701000470         Resistor         R20J 330 Ω           R1096         7010003700         Resistor         ELR20J 220 kΩ           R1097         7010003660         Resistor         ELR20J 100 kΩ           R1098         7010003420         Resistor         ELR20J 100 kΩ           R1099         7010003420         Resistor         ELR20J 10 kΩ           R1100         7010003420         Resistor         ELR20J 10 kΩ           R1101         7010003420         Resistor         ELR20J 10 kΩ           R1102         7010003440         Resistor         ELR20J 2.2 kΩ           R1103         7010003440         Resistor         ELR20J 1.5 kΩ           R1104         7010003440         Resistor         ELR20J 2.2 kΩ           R1105<		1		
R1090         7010003320         Resistor         ELR20J         220 Ω           R1091         7010001030         Resistor         R25J         100 Ω           R1092         7010003420         Resistor         ELR20J         1.5 kΩ           R1093         7010003530         Resistor         ELR20J         100 Ω           R1094         7010004130         Resistor         R20J         130 Ω           R1095         7010003700         Resistor         ELR20J         220 kΩ           R1096         7010003660         Resistor         ELR20J         100 kΩ           R1098         7010003660         Resistor         ELR20J         100 kΩ           R1099         7010003420         Resistor         ELR20J         10 kΩ           R1100         7010003420         Resistor         ELR20J         2.2 kΩ           R1101         7010003530         Resistor         ELR20J         2.2 kΩ           R1103         7010003530         Resistor         ELR20J         680 Ω           R1104         7010003440         Resistor         ELR20J         680 Ω           R1105         7010003440         Resistor         ELR20J         2.2 kΩ           R1107			i	
R1091         7010001030         Resistor         R25J 100 Ω           R1092         7010003420         Resistor         ELR20J 1.5 kΩ           R1093         7010003530         Resistor         ELR20J 10 kΩ           R1094         7010004130         Resistor         R20J 100 Ω           R1095         7010004130         Resistor         R20J 330 Ω           R1096         7010003600         Resistor         ELR20J 220 kΩ           R1097         7010003660         Resistor         ELR20J 100 kΩ           R1099         7010003420         Resistor         ELR20J 10 kΩ           R1100         7010004320         Resistor         RELR20J 10 kΩ           R1101         7010003440         Resistor         ELR20J 10 kΩ           R1102         7010003530         Resistor         ELR20J 2.2 kΩ           R1103         7010003440         Resistor         ELR20J 680 Ω           R1104         7010003440         Resistor         ELR20J 10 kΩ           R1105         7010003440         Resistor         ELR20J 2.2 kΩ           R1107         7010003440         Resistor         ELR20J 2.2 kΩ           R1108         7010003440         Resistor         RELR20J 2.2 kΩ           R11			i	
R1092         7010003420         Resistor         ELR20J         1.5 kΩ           R1093         7010003530         Resistor         ELR20J         10 kΩ           R1094         7010004070         Resistor         R20J         100 Ω           R1095         7010004130         Resistor         R20J         330 Ω           R1096         701000360         Resistor         ELR20J         220 kΩ           R1097         7010003660         Resistor         ELR20J         100 kΩ           R1098         7010003660         Resistor         ELR20J         100 kΩ           R1099         7010003420         Resistor         ELR20J         10 kΩ           R1100         7010003420         Resistor         ELR20J         10 kΩ           R1101         7010003440         Resistor         ELR20J         10 kΩ           R1102         7010003530         Resistor         ELR20J         10 kΩ           R1103         7010003440         Resistor         ELR20J         10 kΩ           R1104         7010003440         Resistor         ELR20J         1.2 kΩ           R1107         7010003440         Resistor         ELR20J         2.2 kΩ           R1108				
R1093         7010003530         Resistor         ELR20J 10 kΩ           R1094         7010004070         Resistor         R20J 100 Ω           R1095         7010004130         Resistor         R20J 330 Ω           R1096         701000360         Resistor         ELR20J 220 kΩ           R1097         701000360         Resistor         ELR20J 100 kΩ           R1098         7010003420         Resistor         ELR20J 100 kΩ           R1090         7010003420         Resistor         R20J 10 kΩ           R1101         7010003420         Resistor         R20J 10 kΩ           R1102         701000340         Resistor         ELR20J 10 kΩ           R1103         701000340         Resistor         ELR20J 2.2 kΩ           R1104         701000340         Resistor         R20J 1.5 kΩ           R1105         7010003440         Resistor         ELR20J 2.2 kΩ           R1106         7010003440         Resistor         ELR20J 2.2 kΩ           R1107         7010003440         Resistor         ELR20J 2.2 kΩ           R1109         7010003440         Resistor         ELR20J 2.2 kΩ           R1110         701000420         Resistor         R20J 10 kΩ           R1111				
R1095         7010004130         Resistor         R20J 330 Ω           R1096         7010003700         Resistor         ELR20J 220 kΩ           R1097         7010003660         Resistor         ELR20J 100 kΩ           R1098         7010003660         Resistor         ELR20J 100 kΩ           R1099         7010003420         Resistor         ELR20J 10 kΩ           R1100         7010003420         Resistor         R20J 10 kΩ           R1101         7010003530         Resistor         ELR20J 2.2 kΩ           R1103         7010003580         Resistor         ELR20J 680 Ω           R1104         7010003440         Resistor         R20J 1.5 kΩ           R1105         7010003440         Resistor         ELR20J 2.2 kΩ           R1106         7010003440         Resistor         ELR20J 2.2 kΩ           R1107         7010003440         Resistor         ELR20J 2.2 kΩ           R1109         7010003440         Resistor         ELR20J 2.2 kΩ           R1110         701000420         Resistor         R20J 10 kΩ           R1111         7010004320         Resistor         R20J 10 kΩ           R1111         7010004070         Resistor         R25J 100 Ω           R1113		7010003530	Resistor	
R1096         7010003700         Resistor         ELR20J         220 kΩ           R1097         7010003660         Resistor         ELR20J         100 kΩ           R1098         7010003660         Resistor         ELR20J         100 kΩ           R1099         7010003420         Resistor         ELR20J         1.5 kΩ           R1100         7010003420         Resistor         R20J         10 kΩ           R1101         7010003440         Resistor         ELR20J         2.2 kΩ           R1103         7010003580         Resistor         ELR20J         680 Ω           R1104         7010003440         Resistor         RELR20J         680 Ω           R1105         7010003440         Resistor         ELR20J         2.2 kΩ           R1106         7010003440         Resistor         ELR20J         2.2 kΩ           R1107         7010003440         Resistor         ELR20J         2.2 kΩ           R1109         7010003440         Resistor         ELR20J         2.2 kΩ           R1110         7010004320         Resistor         R20J         10 kΩ           R1111         7010004070         Resistor         R25J         100 Ω           R1112				
R1097         7010003660         Resistor         ELR20J         100 kΩ           R1098         7010003660         Resistor         ELR20J         100 kΩ           R1099         7010003420         Resistor         ELR20J         1.5 kΩ           R1100         7010004320         Resistor         R20J         10 kΩ           R1101         7010003400         Resistor         ELR20J         2.2 kΩ           R1102         7010003380         Resistor         ELR20J         680 Ω           R1104         7010003440         Resistor         R20J         1.5 kΩ           R1105         7010003440         Resistor         ELR20J         2.2 kΩ           R1106         7010003440         Resistor         ELR20J         2.2 kΩ           R1107         7010003440         Resistor         ELR20J         2.2 kΩ           R1108         7010003440         Resistor         ELR20J         2.2 kΩ           R11109         7010003440         Resistor         ELR20J         2.2 kΩ           R11109         7010004320         Resistor         R2DJ         10 kΩ           R1111         7010004070         Resistor         R25J         100 Ω           R1112				
R1099         7010003420         Resistor         ELR20J 1.5 kΩ           R1100         7010004320         Resistor         R20J 10 kΩ           R1101         7010003440         Resistor         ELR20J 2.2 kΩ           R1102         7010003530         Resistor         ELR20J 680 Ω           R1104         7010003440         Resistor         R20J 1.5 kΩ           R1105         7010003440         Resistor         ELR20J 2.2 kΩ           R1106         7010003440         Resistor         ELR20J 2.2 kΩ           R1107         7010003440         Resistor         ELR20J 2.2 kΩ           R1108         7010003440         Resistor         ELR20J 2.2 kΩ           R1109         7010003440         Resistor         ELR20J 2.2 kΩ           R1110         7010003440         Resistor         R20J 10 kΩ           R1111         7010003440         Resistor         R20J 10 kΩ           R1111         701000420         Resistor         R20J 10 kΩ           R1111         7010004070         Resistor         R20J 100 Ω           R1113         7010001030         Resistor         R25J 100 Ω           R1114         7010004230         Resistor         R20J 100 Ω           R1116				
R1100         7010004320         Resistor         R20J 10 kΩ           R1101         7010003440         Resistor         ELR20J 2.2 kΩ           R1102         7010003530         Resistor         ELR20J 10 kΩ           R1103         7010003380         Resistor         ELR20J 1.5 kΩ           R1104         7010003440         Resistor         R20J 1.5 kΩ           R1105         7010003440         Resistor         ELR20J 2.2 kΩ           R1107         7010003440         Resistor         ELR20J 2.2 kΩ           R1108         7010003440         Resistor         ELR20J 2.2 kΩ           R1109         7010003440         Resistor         ELR20J 2.2 kΩ           R1110         7010004320         Resistor         R20J 10 kΩ           R1111         7010004070         Resistor         R20J 100 Ω           R1112         7010001030         Resistor         R25J 100 Ω           R1114         7010004070         Resistor         R25J 100 Ω           R1115         7010004230         Resistor         R20J 2.2 kΩ           R1116         7010004230         Resistor         R20J 2.2 kΩ           R1117         7010001030         Resistor         R25J 100 Ω           R1118	R1098	7010003660	Resistor	
R1101         7010003440         Resistor         ELR20J         2.2 kΩ           R1102         7010003530         Resistor         ELR20J         10 kΩ           R1103         7010003380         Resistor         ELR20J         680 Ω           R1104         7010003440         Resistor         R20J         1.5 kΩ           R1105         7010003440         Resistor         ELR20J         2.2 kΩ           R1107         7010003440         Resistor         ELR20J         2.2 kΩ           R1108         7010003440         Resistor         ELR20J         2.2 kΩ           R1109         7010003440         Resistor         ELR20J         2.2 kΩ           R1109         7010003440         Resistor         ELR20J         2.2 kΩ           R1110         7010003440         Resistor         R20J         10 kΩ           R1110         7010004320         Resistor         R20J         10 kΩ           R1111         7010004070         Resistor         R25J         100 Ω           R1112         7010001030         Resistor         R25J         100 Ω           R1114         7010004230         Resistor         R25J         100 Ω           R1116         70				
R1102         7010003530         Resistor         ELR20J         10 kΩ           R1103         7010003380         Resistor         ELR20J         680 Ω           R1104         7010003440         Resistor         R20J         1.5 kΩ           R1105         7010003440         Resistor         ELR20J         2.2 kΩ           R1106         7010003440         Resistor         ELR20J         2.2 kΩ           R1107         7010003440         Resistor         ELR20J         2.2 kΩ           R1108         7010003440         Resistor         ELR20J         2.2 kΩ           R1109         7010003440         Resistor         ELR20J         2.2 kΩ           R1110         7010003440         Resistor         ELR20J         2.2 kΩ           R1110         7010004220         Resistor         R20J         10 kΩ           R1111         7010004070         Resistor         R25J         100 Ω           R1113         7010001030         Resistor         R25J         100 Ω           R1114         7010004070         Resistor         R20J         100 Ω           R1115         7010004230         Resistor         R20J         100 Ω           R1116         70				
R1104         7010004210         Resistor         R20J 1.5 kΩ           R1105         7010003440         Resistor         ELR20J 2.2 kΩ           R1106         7010003440         Resistor         ELR20J 2.2 kΩ           R1107         7010003440         Resistor         ELR20J 2.2 kΩ           R1108         7010003440         Resistor         ELR20J 2.2 kΩ           R1110         7010003440         Resistor         R20J 10 kΩ           R1111         7010004320         Resistor         R20J 10 kΩ           R1111         7010004070         Resistor         R20J 100 Ω           R1113         7010001030         Resistor         R25J 100 Ω           R1114         7010001030         Resistor         R25J 100 Ω           R1115         7010004270         Resistor         R20J 100 Ω           R1116         7010004230         Resistor         R20J 2.2 kΩ           R1117         7010004230         Resistor         R25J 100 Ω           R1118         7010004230         Resistor         R25J 100 Ω           R1119         7010004230         Resistor         R25J 100 Ω           R1120         7010004230         Resistor         R25J 100 Ω           R1121         7				ELR20J 10 kΩ
R1105         7010003440         Resistor         ELR20J         2.2 kΩ           R1106         7010003440         Resistor         ELR20J         2.2 kΩ           R1107         7010003440         Resistor         ELR20J         2.2 kΩ           R1108         7010003440         Resistor         ELR20J         2.2 kΩ           R1110         7010004320         Resistor         ELR20J         2.2 kΩ           R1111         7010004070         Resistor         R20J         10 kΩ           R1112         7010001030         Resistor         R25J         100 Ω           R1113         7010001030         Resistor         R25J         100 Ω           R1114         7010001030         Resistor         R25J         100 Ω           R1115         7010004070         Resistor         R20J         100 Ω           R1116         7010004230         Resistor         R20J         100 Ω           R1117         7010004230         Resistor         R25J         100 Ω           R1119         7010004230         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R25J         100 Ω           R1120         7010001030				
R1106         7010003440         Resistor         ELR20J         2.2 kΩ           R1107         7010003440         Resistor         ELR20J         2.2 kΩ           R1108         7010003440         Resistor         ELR20J         2.2 kΩ           R1109         7010003420         Resistor         ELR20J         2.2 kΩ           R1110         7010004320         Resistor         R20J         10 kΩ           R1111         7010004070         Resistor         R20J         100 Ω           R1112         7010001030         Resistor         R25J         100 Ω           R1114         7010001030         Resistor         R25J         100 Ω           R1115         7010004070         Resistor         R20J         100 Ω           R1116         7010004230         Resistor         R20J         100 Ω           R1117         7010004230         Resistor         R25J         100 Ω           R1118         7010004230         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R25J         100 Ω           R1121         7010001030 <td></td> <td></td> <td></td> <td></td>				
R1107         7010003440         Resistor         ELR20J         2.2 kΩ           R1108         7010003440         Resistor         ELR20J         2.2 kΩ           R1109         7010003440         Resistor         ELR20J         2.2 kΩ           R1110         7010004320         Resistor         R20J         10 kΩ           R1111         7010004070         Resistor         R20J         100 Ω           R1112         7010001030         Resistor         R25J         100 Ω           R1114         7010001030         Resistor         R25J         100 Ω           R1115         7010004070         Resistor         R20J         100 Ω           R1116         7010004230         Resistor         R20J         2.2 kΩ           R1117         7010004230         Resistor         R25J         100 Ω           R1118         7010004230         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R25J         100 Ω           R1121         7010001030         Resistor         R25J         100 Ω				
R1109         7010003440         Resistor         ELR20J         2.2 kΩ           R1110         7010004320         Resistor         R20J         10 kΩ           R1111         7010004070         Resistor         R20J         100 Ω           R1112         7010001030         Resistor         R25J         100 Ω           R1113         7010001030         Resistor         R25J         100 Ω           R1114         7010004070         Resistor         R25J         100 Ω           R1115         7010004230         Resistor         R20J         100 Ω           R1116         7010004230         Resistor         R20J         2.2 kΩ           R1117         7010004230         Resistor         R20J         2.2 kΩ           R1119         7010004230         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R25J         100 Ω           R1121         7010001030         Resistor         R20J         2.2 kΩ           R1121         7010001030         Resistor         R20J         2.2 kΩ				ELR20J 2.2 kΩ
R1110         7010004320         Resistor         R20J         10 kΩ           R1111         7010004070         Resistor         R20J         100 Ω           R1112         7010001030         Resistor         R25J         100 Ω           R1113         7010001030         Resistor         R25J         100 Ω           R1114         7010004070         Resistor         R25J         100 Ω           R1115         7010004070         Resistor         R20J         100 Ω           R1116         7010004230         Resistor         R20J         2.2 kΩ           R1117         7010001030         Resistor         R20J         2.2 kΩ           R1119         7010004230         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R25J         100 Ω           R1121         7010001030         Resistor         R20J         2.2 kΩ           R1121         7010001030         Resistor         R20J         2.2 kΩ				
R1111         7010004070         Resistor         R20J         100 Ω           R1112         7010001030         Resistor         R25J         100 Ω           R1113         7010001030         Resistor         R25J         100 Ω           R1114         7010001030         Resistor         R25J         100 Ω           R1115         7010004070         Resistor         R20J         100 Ω           R1116         7010004230         Resistor         R20J         2.2 kΩ           R1117         7010001030         Resistor         R20J         2.2 kΩ           R1119         7010001030         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R20J         2.2 kΩ           R1121         7010001030         Resistor         R20J         2.2 kΩ           R2121         7010001030         Resistor         R20J         2.2 kΩ		i i		
R1112         7010001030         Resistor         R25J         100 $\Omega$ R1113         7010001030         Resistor         R25J         100 $\Omega$ R1114         7010001030         Resistor         R25J         100 $\Omega$ R1115         7010004070         Resistor         R20J         100 $\Omega$ R1116         7010004230         Resistor         R20J         2.2 kΩ           R1117         7010001030         Resistor         R25J         100 $\Omega$ R1118         7010004230         Resistor         R20J         2.2 kΩ           R1120         7010004230         Resistor         R25J         100 $\Omega$ R1121         7010001030         Resistor         R20J         2.2 k $\Omega$ R1121         7010001030         Resistor         R20J         2.2 k $\Omega$ R1121         7010001030         Resistor         R25J         100 $\Omega$				
R1114         7010001030         Resistor         R25J         100 $\Omega$ R1115         7010004070         Resistor         R20J         100 $\Omega$ R1116         7010004230         Resistor         R20J         2.2 k $\Omega$ R1117         7010001030         Resistor         R25J         100 $\Omega$ R1118         7010004230         Resistor         R20J         2.2 k $\Omega$ R1119         7010001030         Resistor         R25J         100 $\Omega$ R1120         7010004230         Resistor         R20J         2.2 k $\Omega$ R1121         7010001030         Resistor         R25J         100 $\Omega$	R1112	7010001030	Resistor	
R1115         7010004070         Resistor         R20J         100 Ω           R1116         7010004230         Resistor         R20J         2.2 kΩ           R1117         7010001030         Resistor         R25J         100 Ω           R1118         7010004230         Resistor         R20J         2.2 kΩ           R1119         7010001030         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R20J         2.2 kΩ           R1121         7010001030         Resistor         R25J         100 Ω				
R1116   7010004230   Resistor   R20J 2.2 kΩ   R1117   7010001030   Resistor   R25J 100 Ω   R1118   7010004230   Resistor   R20J 2.2 kΩ   R1119   7010001030   Resistor   R25J 100 Ω   R1120   7010004230   Resistor   R20J 2.2 kΩ   R1121   7010001030   Resistor   R25J 100 Ω   R2				
R1118   7010004230   Resistor   R20J 2.2 kΩ   R1119   7010001030   Resistor   R25J 100 Ω   R1120   7010004230   Resistor   R20J 2.2 kΩ   R1121   7010001030   Resistor   R25J 100 Ω   R25J 100 Ω   R25J 100 Ω				
R1119         7010001030         Resistor         R25J         100 Ω           R1120         7010004230         Resistor         R20J         2.2 kΩ           R1121         7010001030         Resistor         R25J         100 Ω	R1117			
R1120 7010004230 Resistor R20J 2.2 kΩ R1121 7010001030 Resistor R25J 100 Ω				
R1121 7010001030 Resistor R25J 100 Ω				
R1122   7010003530   Resistor	R1121	7010001030	Resistor	R25J 100 Ω
	R1122	7010003530	Resistor	ELR20J 10 kΩ

REF. NO.	ORDER NO.		DESCRIPTION	REF. NO.	ORDER NO.		DESCRIPTION
R1123	7010004110	Resistor	R20J 220 Ω	R1200	7010003530	Resistor	ELR20J 10 kΩ
R1124	7010003110	Resistor	ELR20J 10 kΩ	R1201	7010004320	Resistor	R20J 10 kΩ
R1125	7010003400	Resistor	ELR20J 1 kΩ	R1202	7010004320	Resistor	R20J 10 kΩ
R1126	7010003480	Resistor	ELR20J 4.7 kΩ	R1203	7010001280	Resistor	R25J 10 kΩ
R1127	7010004320	Resistor	R20J 10 kΩ	R1204	7010001070	Resistor	R25J 220 Ω
R1128 R1129	7010003440 7010004320	Resistor Resistor	ELR20J 2.2 kΩ R20J 10 kΩ	R1205 R1206	7010003560 7010003320	Resistor Resistor	ELR20J 18 kΩ ELR20J 220 Ω
R1130	7010004320	Resistor	R20J 22 kΩ	R1200	7010003520	Resistor	ELR20J 15 kΩ
R1131	7010003440	Resistor	ELR20J 2.2 kΩ	R1208	7010003620	Resistor	ELR20J 47 kΩ
R1132	7010003320	Resistor	ELR20J 220 Ω	R1209	7010003480	Resistor	ELR20J 4.7 kΩ
R1133	7010001030	Resistor	R25J 100 Ω	R1210	7010003580	Resistor	ELR20J 22 kΩ
R1134	7010004390	Resistor	R20J 33 kΩ	R1211	7010004110	Resistor	R20J 220 Ω
R1135 R1136	7010003620 7310000750	Resistor Trimmer	ELR20J 47 kΩ RH0651C14J2WA (103)	R1212 R1213	7010003660 7010003660	Resistor Resistor	ELR20J 100 kΩ ELR20J 100 kΩ
R1137	7010004450	Resistor	R20J 100 kΩ	R1213	7010003660	Resistor	ELR20J 100 kΩ
R1138	7310000750	Trimmer	RH0651C14J2WA (103)	R1215	7010004190	Resistor	R20J 1 kΩ
R1139	7010003480	Resistor	ELR20J 4.7 kΩ	R1216	7010003400	Resistor	ELR20J 1 kΩ
R1140	7010000990	Resistor	R25J 47 Ω	R1217	7010003660	Resistor	ELR20J 100 kΩ
R1141	7010004190	Resistor	R20J 1 kΩ	R1218	7010003360	Resistor	ELR20J 470 Ω
R1144	7310000760	Trimmer	RH0651CJ4J01A (223)	R1219	7010003710	Resistor	ELR20J 270 kΩ
R1145	7010003580	Resistor	ELR20J 22 kΩ ELR20J 100 Ω	R1220	7010001430	Resistor Resistor	R25J 180 kΩ ELR20J 820 Ω
R1146 R1147	7010003280 7010004270	Resistor Resistor	R20J 4.7 kΩ	R1221 R1222	7010003390	Resistor	R20J 10 kΩ
R1148	7010004270	Resistor	R25J 220 Ω	R1223	7010004320	Resistor	R20J 470 Ω
R1149	7010003460	Resistor	ELR20J 3.3 kΩ	R1224	7010003480	Resistor	ELR20J 4.7 kΩ
R1150	7010004070	Resistor	R20J 100 Ω	R1225	7010003580	Resistor	ELR20J 22 kΩ
R1151	7010003660	Resistor	ELR20J 100 kΩ	R1226	7010003660	Resistor	ELR20J 100 kΩ
R1152	7010003660	Resistor	ELR20J 100 kΩ	R1227	7010003640	Resistor	ELR20J 68 kΩ
R1153	7010001210	Resistor	R25J 3.3 kΩ	R1228	7010004490	Resistor	R20J 220 kΩ
R1154	7010001230	Resistor	R25J 4.7 kΩ	R1229 R1230	7010003700 7010004320	Resistor Resistor	ELR20J 220 kΩ R20J 10 kΩ
R1155 R1156	7010001200 7010003420	Resistor Resistor	R25J 2.7 kΩ ELR20J 1.5 kΩ	R1230	7010004320	Resistor	R20J 10 kΩ
R1157	7010003420	Resistor	ELR20J 18 kΩ	R1232	7010000090	Resistor	ELR25J 4.7 Ω
R1158	7010003480	Resistor	ELR20J 4.7 kΩ	R1233	7010004780	Resistor	R50XJ 470 Ω
R1159	7010003660	Resistor	ELR20J 100 kΩ	R1234	7010000090	Resistor	ELR25J 4.7 Ω
R1160	7010001150	Resistor	R25J 1 kΩ	R1235	7010003400	Resistor	ELR20J 1 kΩ
R1161	7010004450	Resistor	R20J 100 kΩ	R1236	7010003400	Resistor	ELR20J 1 kΩ
R1162 R1163	7010001190 7010003550	Resistor	R25J 2.2 kΩ ELR20J 15 kΩ	R1237 R1238	7010003200 7010003340	Resistor Resistor	ELR20J 22 Ω ELR20J 330 Ω
R1164	7010003530	Resistor Resistor	ELR20J 15 KΩ ELR20J 8.2 kΩ	R1239	7010003540	Resistor	ELR20J 22 kΩ
R1165	7010003490	Resistor	ELR20J 5.6 kΩ	R1240	7010003620	Resistor	ELR20J 47 kΩ
R1166	7010003660	Resistor	ELR20J 100 kΩ	R1241	7010003400	Resistor	ELR20J 1 kΩ
R1167	7010004250	Resistor	R20J 3.3 kΩ	R1242	7010003690	Resistor	ELR20J 180 kΩ
R1168	7010003790	Resistor	ELR20J 1.2 MΩ	R1243	7010004190	Resistor	R20J 1 kΩ
R1169	7010003400	Resistor	ELR20J 1 kΩ	R1244 R1245	7010003320 7010003400	Resistor Resistor	ELR20J 220 Ω ELR20J 1 kΩ
R1170 R1171	7010003400 7010004520	Resistor Resistor	ELR20J 1 kΩ R20J 390 kΩ	R1245	7010003400	Resistor	R25J 3.3 kΩ
R1172	7010003640	Resistor	ELR20J 68 kΩ	R1247	7010003370	Resistor	ELR20J 560 Ω
R1173	7010004390	Resistor	R20J 33 kΩ	R1248	7010003400	Resistor	ELR20J 1 kΩ
R1174	7010003480	Resistor	ELR20J 4.7 kΩ	R1249	7010003580	Resistor	ELR20J 22 kΩ
R1175	7010003580	Resistor	ELR20J 22 kΩ	R1250	7010003580	Resistor	ELR20J 22 kΩ
R1176	7010003550	Resistor	ELR20J 15 kΩ	R1251	7010003510 7010003360	Resistor Resistor	ELR20J 6.8 kΩ ELR20J 470 Ω
R1177 R1178	7310000870 7010004230	Trimmer Resistor	RH1051D14J0PA (103) R20J 2.2 kΩ	R1252 R1253	7010003300	Resistor	R20J 47 Ω
R1179	7010004230	Resistor	R20J 22 kΩ	R1254	7010003400	Resistor	ELR20J 1 kΩ
R1180	7010004460	Resistor	R20J 120 kΩ	R1255	7010003620	Resistor	ELR20J 47 kΩ
R1181	7010001030	Resistor	R25J 100 Ω	R1256	7010003580	Resistor	ELR20J 22 kΩ
R1182	7010003400	Resistor	ELR20J 1 kΩ	R1257	7010004300	Resistor	R20J 6.8 kΩ
R1183	7010004460 7010003670	Resistor	R20J 120 kΩ	R1258 R1259	7010003440 7010003580	Resistor Resistor	ELR20J 2.2 kΩ ELR20J 22 kΩ
R1184 R1185	7010003570	Resistor Resistor	ELR20J 120 kΩ ELR20J 22 kΩ	R1260	7010003580	Resistor	ELR20J 22 kΩ
R1186	7010003550	Resistor	ELR20J 15 kΩ	R1261	7010003400	Resistor	ELR20J 1 kΩ
R1187	7310000750	Trimmer	RH0651C14J2WA (103)	R1262	7010004110	Resistor	R20J 220 Ω
R1188	7010001070	Resistor	R25J 220 Ω	R1264	7310000750	Trimmer	RH0651C14J2WA (103)
R1189	7010001400	Resistor	R25J 100 kΩ	R1265	7010003530	Resistor	ELR20J 10 kΩ
R1190	7310000870	Trimmer	RH1051D14J0PA (103)	R1266	7010001400	Resistor	R25J 100 kΩ
R1191 R1192	7010004450 7010001070	Resistor Resistor	R20J 100 kΩ R25J 220 Ω	R1267 R1268	7010003660 7010003530	Resistor Resistor	ELR20J 100 kΩ ELR20J 10 kΩ
R1192	7010001070	Resistor	ELR20J 220 kΩ	R1269	7010003330	Resistor	ELR20J 220 Ω
R1194	7010003700	Resistor	R20J 22 kΩ	R1270	7010004370	Resistor	R20J 22 kΩ
R1195	7010003440	Resistor	ELR20J 2.2 kΩ	R1271	7010003480	Resistor	ELR20J 4.7 kΩ
R1196	7010003320	Resistor	ELR20J 220 Ω	R1272	7010003480	Resistor	ELR20J 4.7 kΩ
R1197	7010003320	Resistor	ELR20J 220 Ω	R1273	7010001300	Resistor	R25J 15 kΩ
R1198 R1199	7010003440 7010003530	Resistor Resistor	ELR20J 2.2 kΩ ELR20J 10 kΩ	R1274 R1275	7010003480 7010003700	Resistor Resistor	ELR20J 4.7 kΩ ELR20J 220 kΩ
111133	7010003030	110010101	CENTOO IO MI	111273	70.000700		

REF. NO.	ORDER NO.		DESCRIPTION
R1276	7010004370	Resistor	R20J 22 kΩ
R1277	7010003120	Resistor	ELR20J 4.7 Ω
R1278	7010000990	Resistor	R25J 47 Ω
R1279 R1280	7010003660 7010003720	Resistor Resistor	ELR20J 100 kΩ ELR20J 330 kΩ
R1281	7010003720	Resistor	R20J 220 Ω
R1282	7010003660	Resistor	ELR20J 100 kΩ
R1283	7010004190	Resistor	R20J 1 kΩ
R1284	7010001340	Resistor	R25J 33 kΩ
R1285 R1286	7010003600 7010004300	Resistor Resistor	ELR20J 33 kΩ R20J 6.8 kΩ
R1287	7410000210	Resistor Array	RMX- 8 472K
R1288	7010003320	Resistor	ELR20J 220 Ω
R1289	7010003580	Resistor	ELR20J 22 kΩ
R1290 R1291	7310000640 7310001600	Trimmer Trimmer	RH0621CJ3J1GA (222)
R1292	7010003530	Resistor	RH0621C12J01A (101) ELR20J 10 kΩ
R1293	7010003530	Resistor	ELR20J 10 kΩ
R1294	7010004410	Resistor	R20J 47 kΩ
R1295	7010004610	Resistor	R20J 3.3 MΩ
R1296	7010003530	Resistor	ELR20J 10 kΩ
R1297 R1298	7010003530 7010003530	Resistor Resistor	ELR20J 10 kΩ ELR20J 10 kΩ
R1299	7010003530	Resistor	ELR20J 10 kΩ
R1300	7010003530	Resistor	ELR20J 10 kΩ
R1301	7010003530	Resistor	ELR20J 10 kΩ
R1302 R1303	7010003530 7010003530	Resistor Resistor	ELR20J 10 kΩ
R1303	7010003530	Resistor	ELR20J 10 kΩ R20J 2.2 kΩ
R1305	7010003440	Resistor	ELR20J 2.2 kΩ
R1306	7010003480	Resistor	ELR20J 4.7 kΩ
R1307	7010003820	Resistor	ELR20J 3.3 MΩ
R1308 R1309	7010003320 7010003320	Resistor Resistor	ELR20J 220 Ω ELR20J 220 Ω
R1310	7010003020	Resistor	R25J 220 Ω
R1311	7010003720	Resistor	ELR20J 330 kΩ
R1312	7010003730	Resistor	ELR20J 390 kΩ
R1313 R1314	7010004410 7010003320	Resistor Resistor	R20J 47 kΩ ELR20J 220 Ω
R1315	7010003320	Resistor	ELR20J 5.6 kΩ
R1316	7010003490	Resistor	ELR20J 5.6 kΩ
R1317	7010003560	Resistor	ELR20J 18 kΩ
R1318	7010003490	Resistor	ELR20J 5.6 kΩ
R1319 R1320	7010003400 7010003600	Resistor Resistor	ELR20J 1 kΩ ELR20J 33 kΩ
R1321	7010003340	Resistor	ELR20J 330 Ω
R1322	7010003280	Resistor	ELR20J 100 Ω
R1323	7010003530	Resistor	ELR20J 10 kΩ
C1001	4040000260	Barrier Layer	UZE 08X 104M
C1002	4010000520	Ceramic	DD108 B 472K 50V
C1003 C1004	4010000520 4510001180	Ceramic Electrolytic	DD108 B 472K 50V 50 MS7 3R3 µF
C1005	4010001100	Ceramic	DD108 B 472K 50V
C1006	4010000520	Ceramic	DD108 B 472K 50V
C1007	4510002840	Electrolytic	25 SS 10 μF
C1008 C1009	4010000520 4010000520	Ceramic Ceramic	DD108 B 472K 50V DD108 B 472K 50V
C1009	4010000520	Ceramic	DD108 B 472K 50V DD108 B 472K 50V
C1011	4020000250	Cylinder	UP125 X 472M
C1012	4040000250	Barrier Layer	UAT 08X 473M
C1018	4010000260	Ceramic	DD104 SL 470J 50V
C1014 C1015	4040000260 4010000520	Barrier Layer Ceramic	UZE 08X 104M DD108 B 472K 50V
C1015	4510000320	Electrolytic	16 SS 47 μF
C1017	4510002790	Electrolytic	16 SS 22 μF
C1018	4510001140	Electrolytic	50 MS7 R22 μF
C1019	4510001170	Electrolytic	50 MS7 2R2 μF
C1020 C1021	4010000410 4010000520	Ceramic Ceramic	DD107 SL 331J 50V DD108 B 472K 50V
C1021	4510002810	Electrolytic	16 SS 47 μF
C1023	4010000520	Ceramic	DD108 B 472K 50V
C1024	4020000250	Cylinder	UP125 X 472M
C1025	4010000410	Ceramic	DD107 SL 331J 50V

C1026
C1028
C1029
C1031
C1032         4010000380         Ceramic         DD107 SL 221J 50V           C1033         4510002830         Electrolytic         25 SS 4R7 μF           C1034         4010000520         Ceramic         DD108 B 472K 50V           C1035         4510002810         Electrolytic         16 SS 47 μF           C1036         4310000020         Mylar         F2D 50V 103K           C1038         431000020         Mylar         F2D 50V 103K           C1039         4510001770         Electrolytic         16 RBP 10 μF           C1040         4510001730         Electrolytic         50 MS7 4R7 μF           C1041         4510002810         Electrolytic         50 RBP 0.47 μF           C1043         4010000520         Ceramic         DD108 B 472K 50V           C1044         4010000520         Ceramic         DD108 B 472K 50V           C1045         4020000520         Ceramic         DD108 B 472K 50V           C1046         4010000520         Ceramic         DD108 B 472K 50V           C1047         4020000810         Cylinder         UP125 SL 121J           C1048         4010000520         Ceramic         DD108 B 472K 50V           C1050         401000520         Ceramic         DD108 B 472K 50V
C1033
C1034
C1036
C1037         4510002730         Electrolytic         10 SS 100 μF           C1038         431000020         Mylar         F2D 50V 103K           C1039         4510001770         Electrolytic         16 RBP 10 μF           C1040         4510001190         Electrolytic         50 MS7 4R7 μF           C1041         4510002810         Electrolytic         50 RBP 0.47 μF           C1042         4510002810         Electrolytic         16 SS 47 μF           C1043         401000520         Ceramic         DD108 B 472K 50V           C1044         401000520         Ceramic         DD108 B 472K 50V           C1045         402000050         Cylinder         UP125 SL 4R7K           C1046         4010000520         Ceramic         DD108 B 472K 50V           C1047         4020000810         Cylinder         UP125 SL 121J           C1048         4010000520         Ceramic         DD104 SL 020C 50V           C1049         4020000250         Cylinder         UP125 X 472M           C1050         401000520         Ceramic         DD108 B 472K 50V           C1051         4510002790         Electrolytic         16 SS 22 μF           C1052         401000520         Ceramic         DD108 B 472K 50V
C1038
C1040
C1041
C1042         4510002810         Electrolytic         16 SS 47 μF           C1043         401000520         Ceramic         DD108 B 472K 50V           C1044         401000520         Ceramic         DD108 B 472K 50V           C1045         402000050         Cylinder         UP125 SL 4R7K           C1046         4010000520         Ceramic         DD108 B 472K 50V           C1047         4020000810         Cylinder         UP125 SL 121J           C1048         401000040         Ceramic         DD104 SL 020C 50V           C1049         402000250         Cylinder         UP125 X 472M           C1050         401000520         Ceramic         DD108 B 472K 50V           C1051         4510002790         Electrolytic         16 SS 22 μF           C1052         4010000520         Ceramic         DD108 B 472K 50V           C1053         4010000520         Ceramic         DD108 B 472K 50V           C1054         4010000520         Ceramic         DD104 SL 470J 50V           C1055         4010000520         Ceramic         DD104 B 102K 50V           C1056         4010000520         Ceramic         DD108 B 472K 50V           C1059         4010000520         Ceramic         DD108 B 472K 50V
C1044         4010000520         Ceramic         DD108 B 472K 50V           C1045         402000050         Cylinder         UP125 SL 4R7K           C1046         4010000520         Ceramic         DD108 B 472K 50V           C1047         4020000810         Cylinder         UP125 SL 121J           C1048         4010000040         Ceramic         DD104 SL 020C 50V           C1049         4020000250         Cylinder         UP125 X 472M           C1050         401000520         Ceramic         DD108 B 472K 50V           C1051         4510002790         Electrolytic         16 SS 22 μF           C1052         401000520         Ceramic         DD108 B 472K 50V           C1053         401000520         Ceramic         DD108 B 472K 50V           C1054         401000520         Ceramic         DD104 SL 470J 50V           C1055         4010000520         Ceramic         DD104 B 102K 50V           C1056         4010000520         Ceramic         DD108 B 472K 50V           C1058         4010000520         Ceramic         DD108 B 472K 50V           C1059         4010000520         Ceramic         DD108 B 472K 50V           C1062         4010000520         Ceramic         DD108 B 472K 50V
C1045
C1046
C1048         401000040         Ceramic         DD104 SL 020C 50V           C1049         402000250         Cylinder         UP125 X 472M           C1050         4010000520         Ceramic         DD108 B 472K 50V           C1051         4510002790         Electrolytic         16 SS 22 μF           C1052         4010000520         Ceramic         DD108 B 472K 50V           C1053         4010000520         Ceramic         DD108 B 472K 50V           C1054         4010000520         Ceramic         DD104 SL 470J 50V           C1055         4010000520         Ceramic         DD104 B 102K 50V           C1056         4010000520         Ceramic         DD108 B 472K 50V           C1057         431000090         Mylar         F2D 50V 333K           C1058         401000520         Ceramic         DD108 B 472K 50V           C1059         4010000520         Ceramic         DD108 B 472K 50V           C1060         4010000520         Ceramic         DD108 B 472K 50V           C1063         4310000130         Mylar         F2D 50V 563K           C1065         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V </td
C1049         4020000250         Cylinder         UP125 X 472M           C1050         4010000520         Ceramic         DD108 B 472K 50V           C1051         4510002790         Electrolytic         16 SS 22 μF           C1052         4010000520         Ceramic         DD108 B 472K 50V           C1053         4010000520         Ceramic         DD108 B 472K 50V           C1054         4010000520         Ceramic         DD104 SL 470J 50V           C1055         4010000520         Ceramic         DD104 B 102K 50V           C1056         4010000520         Ceramic         DD108 B 472K 50V           C1057         431000090         Mylar         F2D 50V 333K           C1058         4010000520         Ceramic         DD108 B 472K 50V           C1059         4010000520         Ceramic         DD108 B 472K 50V           C1060         4010000520         Ceramic         DD108 B 472K 50V           C1062         4010000520         Ceramic         DD108 B 472K 50V           C1063         4310000130         Mylar         F2D 50V 563K           C1064         4010000520         Ceramic         DD104 B 102K 50V           C1065         4010000520         Ceramic         DD108 B 472K 50V
C1050         4010000520         Ceramic         DD108 B 472K 50V           C1051         4510002790         Electrolytic         16 SS 22 μF           C1052         4010000520         Ceramic         DD108 B 472K 50V           C1053         4010000520         Ceramic         DD108 B 472K 50V           C1054         4010000520         Ceramic         DD104 SL 470J 50V           C1055         4010000520         Ceramic         DD104 B 102K 50V           C1056         4010000520         Ceramic         DD108 B 472K 50V           C1057         431000090         Mylar         F2D 50V 333K           C1058         401000520         Ceramic         DD108 B 472K 50V           C1059         4010000520         Ceramic         DD108 B 472K 50V           C1060         4010000520         Ceramic         DD108 B 472K 50V           C1062         4010000520         Ceramic         DD108 B 472K 50V           C1063         4310000130         Mylar         F2D 50V 563K           C1064         4010000520         Ceramic         DD104 B 102K 50V           C1065         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V
C1051         4510002790         Electrolytic         16 SS 22 μF           C1052         4010000520         Ceramic         DD108 B 472K 50V           C1053         4010000520         Ceramic         DD108 B 472K 50V           C1054         4010000520         Ceramic         DD104 SL 470J 50V           C1055         4010000520         Ceramic         DD104 B 102K 50V           C1056         4010000520         Ceramic         DD108 B 472K 50V           C1058         4010000520         Ceramic         DD108 B 472K 50V           C1059         4010000520         Ceramic         DD108 B 472K 50V           C1060         4010000520         Ceramic         DD108 B 472K 50V           C1062         4010000520         Ceramic         DD108 B 472K 50V           C1063         4310000130         Mylar         F2D 50V 563K           C1064         4010000520         Ceramic         DD104 B 102K 50V           C1065         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V           C1067         4010000520         Ceramic         DD108 B 472K 50V
C1053         4010000520         Ceramic         DD108 B 472K 50V           C1054         4010000260         Ceramic         DD104 SL 470J 50V           C1055         4010000500         Ceramic         DD104 B 102K 50V           C1056         4010000520         Ceramic         DD108 B 472K 50V           C1057         431000090         Mylar         F2D 50V 333K           C1058         4010000520         Ceramic         DD108 B 472K 50V           C1059         4010000520         Ceramic         DD108 B 472K 50V           C1060         4010000520         Ceramic         DD108 B 472K 50V           C1062         4010000520         Ceramic         DD108 B 472K 50V           C1063         4310000130         Mylar         F2D 50V 563K           C1064         4010000520         Ceramic         DD104 B 102K 50V           C1065         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V           C1067         4010000520         Ceramic         DD108 B 472K 50V
C1054
C1055         4010000500         Ceramic         DD104 B 102K 50V           C1056         4010000520         Ceramic         DD108 B 472K 50V           C1057         431000090         Mylar         F2D 50V 333K           C1058         4010000520         Ceramic         DD108 B 472K 50V           C1059         4010000520         Ceramic         DD108 B 472K 50V           C1060         4010000520         Ceramic         DD108 B 472K 50V           C1062         4010000520         Ceramic         DD108 B 472K 50V           C1063         4310000130         Mylar         F2D 50V 563K           C1064         4010000500         Ceramic         DD104 B 102K 50V           C1065         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V           C1067         4010000520         Ceramic         DD108 B 472K 50V
C1056         4010000520         Ceramic         DD108 B 472K 50V           C1057         431000090         Mylar         F2D 50V 333K           C1058         4010000520         Ceramic         DD108 B 472K 50V           C1059         4010000520         Ceramic         DD108 B 472K 50V           C1060         4010000520         Ceramic         DD108 B 472K 50V           C1062         4010000520         Ceramic         DD108 B 472K 50V           C1063         4310000130         Mylar         F2D 50V 563K           C1064         4010000500         Ceramic         DD104 B 102K 50V           C1065         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V           C1067         4010000520         Ceramic         DD108 B 472K 50V
C1058
C1059         4010000520         Ceramic         DD108 B 472K 50V           C1060         4010000520         Ceramic         DD108 B 472K 50V           C1062         4010000520         Ceramic         DD108 B 472K 50V           C1063         4310000130         Mylar         F2D 50V 563K           C1064         4010000500         Ceramic         DD104 B 102K 50V           C1065         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V           C1067         4010000520         Ceramic         DD108 B 472K 50V
C1060         4010000520         Ceramic         DD108 B 472K 50V           C1062         4010000520         Ceramic         DD108 B 472K 50V           C1063         4310000130         Mylar         F2D 50V 563K           C1064         4010000500         Ceramic         DD104 B 102K 50V           C1065         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V           C1067         4010000520         Ceramic         DD108 B 472K 50V
C1063
C1064         4010000500         Ceramic         DD104 B 102K 50V           C1065         4010000520         Ceramic         DD108 B 472K 50V           C1066         4010000520         Ceramic         DD108 B 472K 50V           C1067         4010000520         Ceramic         DD108 B 472K 50V
C1065
C1067 4010000520 Ceramic DD108 B 472K 50V
1 1
1 C40CD 1 4040000E00 1 Caramia
C1068   4010000520   Ceramic   DD108 B 472K 50V   C1069   4010000520   Ceramic   DD108 B 472K 50V
C1070 4010000520 Ceramic DD108 B 472K 50V
C1071 4010000520 Ceramic DD108 B 472K 50V
C1072   4010000520   Ceramic
C1074 4010000520 Ceramic DD108 B 472K 50V
C1075 4010000520 Ceramic DD108 B 472K 50V
C1076   4010000520   Ceramic   DD108 B 472K 50V   C1077   4010000520   Ceramic   DD108 B 472K 50V
C1077 4010000320 Ceramic DD108 B 472K 50V
C1079 4010000520 Ceramic DD108 B 472K 50V
C1081 4010000520 Ceramic DD108 B 472K 50V
C1082
C1084 4010000520 Ceramic DD108 B 472K 50V
C1085 4010000520 Ceramic DD108 B 472K 50V
C1086
C1088 4510002810 Electrolytic 16 SS 47 µF
C1089 4010000520 Ceramic DD108 B 472K 50V
C1090
C1091 4010000500 Ceramic DD104 B 102K 50V C1092 4010000260 Ceramic DD104 SL 470J 50V
C1093 4510002950 Electrolytic 50 SS 2R2 μF
C1094 4310000020 Mylar F2D 50V 103K
C1095   4010000520   Ceramic   DD108 B 472K 50V   C1096   4010000520   Ceramic   DD108 B 472K 50V
C1097 4010000320 Ceramic DD108 B 472K 30V
C1098 4020000120 Cylinder UP125 SL 470J
C1099   4040000260   Barrier Layer   UZE 08X 104M   C1100   4010000520   Ceramic   DD108 B 472K 50V
C1100   4010000520   Ceramic   DD108 B 472K 50V   C1101   4510002810   Electrolytic   16 SS 47 μF
C1102 4510001150 Electrolytic 50 MS7 R47 μF

REF.	ORDER NO.		ESCRIPTION
C1103	4310000130	Mylar	F2D 50V 563K
C1104	4510001170	Electrolytic	50 MS7 2R2 μF
C1105	4010000460	Ceramic	DD104 B 471K 50V
C1106 C1107	4010000520 4510002840	Ceramic Electrolytic	DD108 B 472K 50V 25 SS 10 μF
C1108	4510001910	Electrolytic	25 MS7 10 μF
C1109	4010000520	Ceramic	DD108 B 472K 50V
C1110 C1111	4010000500 4010000330	Ceramic Ceramic	DD104 B 102K 50V DD105 SL 101J 50V
C1112	4010000500	Ceramic	DD104 B 102K 50V
C1113	4510002930	Electrolytic	50 SS R47 μF
C1114 C1115	4510001910 4510001910	Electrolytic Electrolytic	25 MS7 10 μF 25 MS7 10 μF
C1116	4510001910	Electrolytic	25 MS7 10 μF
C1117	4040000260	Barrier Layer	UZE 08X 104M
C1118 C1119	4510002970 4510001760	Electrolytic Electrolytic	50 SS 4R7 μF 25 RBP 4.7 μF
C1120	4040000260	Barrier Layer	UZE 08X 104M
C1121	4510001110	Electrolytic	16 MS7 47 μF
C1122 C1123	4010000520 4310000060	Ceramic Mylar	DD108 B 472K 50V F2D 50V 223K
C1123	4310000060	Mylar	F2D 50V 223K
C1125	4010000520	Ceramic	DD108 B 472K 50V
C1126 C1127	4510001910 4310000060	Electrolytic	25 MS7 10 μF F2D 50V 223K
C1127	4510000060	Mylar Electrolytic	50 SS 2R2 μF
C1129	4510001180	Electrolytic	50 MS7 3R3 μF
C1130	4010000520	Ceramic	DD108 B 472K 50V
C1131 C1132	4010000260 4010000520	Ceramic Ceramic	DD104 SL 470J 50V DD108 B 472K 50V
C1133	4010000350	Ceramic	DD106 SL 151J 50V
C1134	4010000520	Ceramic	DD108 B 472K 50V
C1135 C1136	4510002840 4010000520	Electrolytic Ceramic	25 SS 10 μF DD108 B 472K 50V
C1137	4010000320	Ceramic	DD104 SL 020C 50V
C1138	4010000400	Ceramic	DD107 SL 301J 50V
C1139 C1140	4010000400 4040000290	Ceramic Barrier Layer	DD107 SL 301J 50V UAT 04V 152K
C1141	4010000250	Ceramic	DD106 SL 151J 50V
C1142	4010000190	Ceramic	DD104 SL 240J 50V
C1143	4010000380 4010000110	Ceramic Ceramic	DD107 SL 221J 50V DD104 SL 090D 50V
C1145	4010000110	Ceramic	DD104 SL 050D 50V
C1146	4010004610	Ceramic	DD360 YL 201J 50V
C1147 C1148	4010004610 4010000900	Ceramic Ceramic	DD360 YL 201J 50V DD107 CH 680J 50V
C1149	4010000520	Ceramic	DD107 CIT 0000 30V DD108 B 472K 50V
C1150	4040000250	Barrier Layer	UAT 08X 473M
C1151 C1152	4040000250 4010000520	Barrier Layer Ceramic	UAT 08X 473M DD108 B 472K 50V
C1152	4010000520	Ceramic	DD108 B 472K 50V
C1154	4010000520	Ceramic	DD108 B 472K 50V
C1155 C1156	4010000520 4040000250	Ceramic Barrier Layer	DD108 B 472K 50V UAT 08X 473M
C1156	4040000250	Ceramic	DD108 B 472K 50V
C1158	4010000520	Ceramic	DD108 B 472K 50V
C1159 C1160	4010000520 4610000130	Ceramic Trimmer	DD108 B 472K 50V CV05E3001
C1160	4010000130	Ceramic	DD108 B 472K 50V
C1162	4010000520	Ceramic	DD108 B 472K 50V
C1163	4010000520	Ceramic	DD108 B 472K 50V
C1164 C1165	4510002850 4010000520	Electrolytic Ceramic	25 SS 22 μF DD108 B 472K 50V
C1166	4010000500	Ceramic	DD104 B 102K 50V
C1167	4510002810	Electrolytic	16 SS 47 μF
C1168 C1169	4310000010 4510002850	Mylar Electrolytic	F2D 50V 102K 25 SS 22 μF
C1170	4510002030	Electrolytic	10 SS 100 μF
C1171	4010000520	Ceramic	DD108 B 472K 50V
C1172 C1174	4510002810 4530000350	Electrolytic Capacitor Array	16 SS 47 μF B8ZC0111-32N
C1174	4530000350	Capacitor Array	
C1176	4010000350	Ceramic	DD106 SL 151J 50V
C1178 C1179	4510001110 4010000520	Electrolytic Ceramic	16 MS7 47 μF DD108 B 472K 50V
U'''	-101000020	Joranno	22100 0 41EN 00V

#### [MAIN UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
C1180	4510002850	Electrolytic	25 SS 22 μF
C1181	4510002950	Electrolytic	50 SS 2R2 μF
C1182	4510002810	Electrolytic	16 SS 47 μF
C1185	4510002850	Electrolytic	25 SS 22 μF
C1187	4510002850	Electrolytic	25 SS 22 μF
C1188	4040000250	Barrier Layer	UAT 08X 473M
C1189	4010000520	Ceramic	DD108 B 472K 50V
C1190	4550000340	Tantalum	DN 1C 100M
C1191	4310000200	Mylar	F2D 50V 153K
C1192	4310000200	Mylar	F2D 50V 153K
C1193	4310000200	Mylar	F2D 50V 153K
C1194	4550000340	Tantalum	DN 1C 100M
C1195	4040000260	Barrier Layer	UZE 08X 104M
C1196	4510001100	Electrolytic	16 MS7 10 μF
C1197	4040000260	Barrier Layer	UZE 08X 104M
C1198	4040000250	Barrier Layer	UAT 08X 473M
C1199	4010000500	Ceramic	DD104 B 102K 50V
C1200	4010000520	Ceramic	DD108 B 472K 50V
S1001	2220000400	Switch	SW-108 (SSSS91685A)
S1002	2220000400	Switch	SW-108 (SSSS91685A)
S1003	2220000400	Switch	SW-108 (SSSS91685A)
S1004	2220000400	Switch	SW-108 (SSSS91685A)
EP1001	0910022482	P.C. Board	B 2074B
EP1002	6910000630	Ferrite Bead	FSOH070RN

#### [RF UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
IC601	1790000050	IC	ND487C1-3R
IC602	1180000070	IC	NJM78L08A
IC603	1110000540	IC	NJM4558D
IC604	1110000540	IC	NJM4558D
IC605	1120000970	IC	M54562P
Q601	1580000110	FET	3SK74 M
Q602	1560000130	FET	2SK125
Q603	1560000130	FET	2SK125
Q604	1590000340	Transistor	RN1202
Q605	1590000340	Transistor	RN1202
Q606	1530000810	Transistor	2SC2053
Q607	1580000100	FET	3SK74 K
Q608	1580000100	FET	3SK74 K
Q609	1580000110	FET	3SK74 M
Q610	1590000340	Transistor	RN1202
Q611	1590000350	Transistor	RN1204
Q612	1590000350	Transistor	RN1204
Q613	1530000100	Transistor	2SC2458-Y
Q614	1590000350	Transistor	RN1204
Q615	1590000350	Transistor	RN1204
Q616	1590000350	Transistor	RN1204
Q617	1590000340	Transistor	RN1202
Q618	1530000810	Transistor	2SC2053
Q619	1590000350	Transistor	RN1204
Q620	1590000350	Transistor	RN1204
Q621	1590000360	Transistor	RN2202
,			
D601	1710000050	Diode	18853
D602	1710000050	Diode	1SS53
D603	1710000050	Diode	18853
D604	1710000050	Diode	18853
D605	1710000050	Diode	1SS53
D606	1710000050	Diode	1SS53
D607	1710000050	Diode	18853

#### [RF UNIT]

INF O	14111				נאר ט			
REF. NO.	ORDER NO.	142	DESCRIPTION		REF. NO.	ORDER NO.		DESCRIPTION
D608	1710000050	Diode	1SS53		L643	6180000050	Coil	LB4-R30J
D609	1710000050	Diode	18853		L644	6110001650	Coil	LA-248
D610	1710000050	Diode	1SS53		L645	6180000050	Coil	LB4-R30J
D611	1710000050	Diode	1SS53	- 1	L646	6180000900	Coil	LAL 03NA 101K
D612	1710000050	Diode	1SS53		L647	6110001780	Coil	LA-267
D613	1710000050	Diode	1SS53		L648	6110001640	Coil	LA-247
D614	1710000050	Diode	1SS53		L649	6110001780	Coil	LA-267
D615	1710000050	Diode	1SS53		L650	6180000900	Coil	LAL 03NA 101K
D616	1710000050	Diode	1SS53		L651	6180001710	Coil	LAL 03NA 561K
D617	1710000050	Diode	1SS53	- 1	L652	6180000850	Coil	LAL 03NA 4R7K
D618	1710000050	Diode	1SS53		L653	6180000860	Coil	LAL 03NA 5R6K
D619	1710000050	Diode	18853	- 1	L654	6180000690	Coil	LAL 03NA R22M
D620	1710000050	Diode	1SS53		L655	6140000060	Coil	LR-18
D621	1710000050	Diode	18853		L656	6180001710	Coil	LAL 03NA 561K
D622	1710000050	Diode	1SS53		L657	6180002510	Coil	LAL 04NA 471K
D623	1710000050	Diode	18853	- 1	L658	6180000990	Coil	LAL 04NA 101K
D624	1710000160	Diode	1SS133		L659	6180000030	Coil	LB4-R15J
D625	1710000160	Diode	1SS133		L660	6180000880	Coil	LAL 03NA 100K
D626	1710000160	Diode	1SS133		L661	6180000880	Coil	LAL 03NA 100K
D627	1710000160	Diode	188133	1	L662	6140001260	Coil	LR-151
D629	1710000160	Diode	1SS133		L663	6140001460	Coil	LR-170
D630	1710000160	Diode	1SS133		L664	6110001610	Coil	LA-244
D631 D632	1710000160	Diode	188133		L665	6150001770	Coil	LS-198
1	1710000160	Diode	1SS133	ı	L666	6140001600	Coll	LR-178
D633 D634	1710000160 1710000160	Diode Diode	1SS133 1SS133	ı	L667 L668	6180000960 6180000820	Coll	LAL 03NA 102K LAL 03NA 2R7M
D635	1710000160	Diode	1SS133	1	L669	6180000820	Coil Coil	LAL 03NA 1R8M
D636	1710000100	Diode	1SS53	- 1	L670	6180000900	Coil	LAL 03NA 101K
D030	1710000050	Diode	19900	ŀ		6140000060	Coil	LR-18
				ŀ	L671 L673	6180002470	Coil	LAL 03NA 471K
F1601	2010001010	Filter	69M15B (FL-120)		L674	6180001180	Coil	FL 9H 471K
1 1001	2010001010	7 11101	03W13D (12-120)	- 1	L675	6180002470	Coil	LAL 03NA 471K
					L676	6910000670	Coil	BT01RN1-A61-001
L601	6180000780	Coil	LAL 03NA 1R2M	- 1	L677	6910000670	Coil	BT01RN1-A61-001
L602	6180000780	Coil	LAL 03NA 1R2M	- 1	L678	6180000910	Coil	LAL 03NA 121K
L603	6180000700	Coil	LAL 03NA R27M	- 1	L679	6180000900	Coil	LAL 03NA 101K
L604	6140000930	Coil	LR-116	ŀ	L680	6180000990	Coil	LAL 04NA 101K
L605	6140000930	Coil	LR-116			0.0000000	30	
L606	6150002430	Coil	LS-254					
L607	6150002430	Coil	LS-254		R601	7010004270	Resistor	R20J 4.7 kΩ
L608	6150000990	Coil	LS-114		R602	7010003240	Resistor	ELR20J 47 Ω
L609	6150002430	Coil	LS-254		R603	7010003150	Resistor	ELR20J 8.2 Ω
L610	6150002430	Coil	LS-254		R604	7010003150	Resistor	ELR20J 8.2 Ω
L611	6150001770	Coil	LS-198		R605	7010003300	Resistor	ELR20J 150 Ω
L612	6140000930	Coil	LR-116		R606	7010003480	Resistor	ELR20J 4.7 kΩ
L613	6110001790	Coil	LA-268	1	R607	7010004230	Resistor	R20J 2.2 kΩ
L614	6110001720	Coil	LA-258	- 1	R608	7010004070	Resistor	R20J 100 Ω
L615	6180000850	Coil	LAL 03NA 4R7K	- 1	R609	7010004570	Resistor	R20J 1 MΩ
L616	6180000860	Coil	LAL 03NA 5R6K	- 1	R610	7010001280	Resistor	R25J 10 kΩ
L617	6180001000	Coll	LAL 04NA 102K	- 1	R612	7010003470	Resistor	ELR20J 3.9 kΩ
L618	6180001710	Coil	LAL 03NA 561K		R613	7010003280	Resistor	ELR20J 100 Ω
L619	6180002050	Coll	EL0606SKI-2R7K		R614	7010004320	Resistor	R20J 10 kΩ
L620	6180002020	Coil	EL0606SKI-1R5K		R615	7010000990	Resistor	R25J 47 Ω
L621	6180002050	Coil	EL0606SKI-2R7K		R616	7010003530	Resistor	ELR20J 10 kΩ
L622 L623	6180002470	Coil	LAL 03NA 471K	1	R617	7010004110	Resistor	R20J 220 Ω ELR20J 560 Ω
L623	6180002030	Coil	EL0606SKI-1R8K	- 1	R618	7010003370	Resistor	
L625	6180002010 6180002030	Coil Coil	EL0606SKI-1R2K	1	R619	7010003280	Resistor	ELR20J 100 Ω
L626	6180002030	Coil	EL0606SKI-1R8K	l	R620	7010003370	Resistor	ELR20J 560 Ω RH0651CS3J2KA (472)
L627	6180002000	Coil	LAL 03NA 101K EL0606SKI-1R0K		R621 R622	7310000740 7010004170	Trimmer Resistor	R20J 680 Ω
L628	6180002490	Coil	EL0606SKI-R82K		R623	7010004170	Resistor	R20J 560 Ω
L629	6180002010	Coil	EL0606SKI-1R2K		R624	7010003100	Resistor	ELR20J 820 Ω
L630	6180000900	Coil	LAL 03NA 101K		R625	7010003580	Resistor	ELR20J 22 kΩ
L631	6180000130	Coil	LB4-R70J		R626	7010003300	Resistor	R20J 4.7 kΩ
L632	6180000100	Coil	LB4-R50J	1	R627	7010004270	Resistor	ELR20J 12 Ω
L633	6180000130	Coil	LB4-R70J	l	R628	7010003170	Resistor	ELR20J 390 Ω
L634	6180000900	Coil	LAL 03NA 101K	1	R629	7010003350	Resistor	ELR20J 390 Ω
L635	6180000100	Coil	LB4-R50J	ı	R630	7010003330	Resistor	R20J 680 Ω
L636	6180000710	Coil	LAL 03NA R33M	- 1	R631	7010003490	Resistor	ELR20J 5.6 kΩ
L637	6180000100	Coil	LB4-R50J	- 1	R632	7010001320	Resistor	R25J 22 kΩ
L638	6180000880	Coil	LAL 03NA 100K	- 1	R633	7010003400	Resistor	ELR20J 1 kΩ
L639	6180000720	Coil	LAL 03NA R39M		R634	7010003150	Resistor	ELR20J 8.2 Ω
L640	6180000700	Coil	LAL 03NA R27M	1	R635	7010003990	Resistor	R20J 22 Ω
L641	6180000720	Coil	LAL 03NA R39M	1	R636	7010004270	Resistor	R20J 4.7 kΩ
L642	6180000900	Coil	LAL 03NA 101K	1	R637	7010003580	Resistor	ELR20J 22 kΩ

#### [RF UNIT]

REF. NO.	ORDER NO.	DESCRIPTION			REF. NO.	ORDER NO.	E	DESCRIPTION
R638	7010001340	Resistor	R25J 33 kΩ		R715	7010003320	Resistor	ELR20J 220 Ω
R639	7010004610	Resistor	R20J 3.3 MΩ		R716	7010003320	Resistor	ELR20J 220 Ω
R640	7010004490	Resistor	R20J 220 kΩ	1	R717	7010003320	Resistor	ELR20J 220 Ω
R641	7010003610	Resistor	ELR20J 39 kΩ	1	R718	7010003320	Resistor	ELR20J 220 Ω
R643	7010003820	Resistor	ELR20J 3.3 MΩ		R719	7010003320	Resistor	ELR20J 220 Ω
R644	7010003540	Resistor	ELR20J 12 kΩ		R720	7010003320	Resistor	ELR20J 220 Ω
R645	7010004110	Resistor	R20J 220 Ω		R721	7010001280	Resistor	R25J 10 kΩ R25J 10 kΩ
R646 R647	7010003740 7010004530	Resistor Resistor	ELR20J 470 kΩ R20J 470 kΩ		R722 R723	7010001280 7010004070	Resistor Resistor	R20J 10 KΩ
R648	7010004530	Resistor	ELR20J 27 kΩ		R724	7410000180	Resistor Array	RMX- 8 103K
R649	7010004110	Resistor	R20J 220 Ω		R725	7010004370	Resistor	R20J 22 kΩ
R650	7010004490	Resistor	R20J 220 kΩ	1	R726	7010001280	Resistor	R25J 10 kΩ
R651	7010004070	Resistor	R20J 100 Ω	l				
R652	7010003510	Resistor	ELR20J 6.8 kΩ					
R653	7010004310	Resistor	R20J 8.2 kΩ	ı	C601	4010000410	Ceramic	DD107 SL 331J 50V
R654	7080000350	Resistor	CRB25FX 68 kΩ		C602	4010000430	Ceramic	DD109 SL 471J 50V
R655	7080000330	Resistor	CRB25FX 39 kΩ		C603	4010000520	Ceramic	DD108 B 472K 50V
R656	7080000350	Resistor	CRB25FX 68 kΩ	1	C604	4010000390	Ceramic	DD107 SL 271J 50V
R657	7310001840	Trimmer	RH0421CS3J08A (472)		C605	4010000420	Ceramic	DD108 SL 391J 50V
R658	7080000330	Resistor	CRB25FX 39 kΩ		C606	4010000520	Ceramic	DD108 B 472K 50V
R659	7010001400	Resistor	R25J 100 kΩ		C607	4010000520	Ceramic	DD108 B 472K 50V
R661	7010003480	Resistor	ELR20J 4.7 kΩ		C608	4010000520	Ceramic	DD108 B 472K 50V
R662 R663	7010004340 7010004510	Resistor	R20J 15 kΩ R20J 330 kΩ	1	C609 C610	4010000520 4310000020	Ceramic Mylar	DD108 B 472K 50V F2D 50V 103K
,	1	Resistor	R20J 330 KΩ R20J 47 kΩ		1	ł	, -	
R664 R665	7010004410 7010003720	Resistor Resistor	H20J 47 KΩ ELR20J 330 kΩ		C611 C612	4010000520 4010000500	Ceramic Ceramic	DD108 B 472K 50V DD104 B 102K 50V
R666	7010003720	Resistor	R20J 12 kΩ	1	C612	4010000500	Ceramic	DD104 B 102K 50V DD104 SL 040C 50V
R667	7010003600	Resistor	ELR20J 33 kΩ	1	C614	4010000500	Ceramic	DD104 B 102K 50V
R668	7010001280	Resistor	R25J 10 kΩ		C615	4040000260	Barrier Layer	UZE 08X 104M
R669	7010003530	Resistor	ELR20J 10 kΩ	ı	C616	4040000260	Barrier Layer	UZE 08X 104M
R670	7010003530	Resistor	ELR20J 10 kΩ	ı	C617	4040000260	Barrier Layer	UZE 08X 104M
R671	7010003620	Resistor	ELR20J 47 kΩ		C618	4040000260	Barrier Layer	UZE 08X 104M
R672	7010003550	Resistor	ELR20J 15 kΩ	l	C619	4010000320	Ceramic	DD104 SL 820J 50V
R673	7010003170	Resistor	ELR20J 12 Ω	1	C620	4010000120	Ceramic	DD104 SL 100D 50V
R674	7010003350	Resistor	ELR20J 390 Ω		C621	4010000350	Ceramic	DD106 SL 151J 50V
R675	7010003350	Resistor	ELR20J 390 Ω		C622	4010000210	Ceramic	DD104 SL 300J 50V
R676	7010004230	Resistor	R20J 2.2 kΩ	İ	C623	4040000260	Barrier Layer	UZE 08X 104M
R677	7010000970	Resistor	R25J 33 Ω		C624	4040000300	Barrier Layer	UAT 04V 182K
R678	7010004050	Resistor	R20J 68 Ω	1	C625	4040000310	Barrier Layer	UAT 04V 222K
R679 R680	7010003660 7010003280	Resistor	ELR20J 100 kΩ ELR20J 100 Ω		C627 C628	4010000520	Ceramic	DD108 B 472K 50V 25 SS 10 μF
R681	7310003280	Resistor Trimmer	RH0651C12J04A (101)	1	C629	4510002840 4040000310	Electrolytic Barrier Layer	UAT 04V 222K
R682	7010003280	Resistor	ELR20J 100 Ω	1	C630	4040000310	Barrier Layer	UAT 04V 152K
R683	7010003260	Resistor	ELR20J 100 kΩ		C631	4040000250	Barrier Layer	UAT 08X 473M
R684	7010004050	Resistor	R20J 68 Ω	ĺ	C632	4040000250	Barrier Layer	UAT 08X 473M
R685	7010003350	Resistor	ELR20J 390 Ω		C633	4040000270	Barrier Layer	UAT 04V 102K
R686	7510000160	Thermistor	ERT-D2FGL301S	ļ	C634	4040000270	Barrier Layer	UAT 04V 102K
R687	7010003350	Resistor	ELR20J 390 Ω	1	C635	4040000250	Barrier Layer	UAT 08X 473M
R688	7310000700	Trimmer	RH0651CS2J1HA (471)	l	C636	4040000250	Barrier Layer	UAT 08X 473M
R689	7010003320	Resistor	ELR20J 220 Ω		C637	4040000440	Barrier Layer	RAU 06SA 561K
R690	7010004150	Resistor	R20J 470 Ω	I	C638	4010000430	Ceramic	DD109 SL 471J 50V
R691	7010001030	Resistor	R25J 100 Ω	l	C639	4040000250	Barrier Layer	UAT 08X 473M
R692 R693	7010004370	Resistor	R20J 22 kΩ	l	C640	4040000250	Barrier Layer	UAT 08X 473M
R694	7010004070 7010004320	Resistor Resistor	R20J 100 Ω R20J 10 kΩ		C641 C642	4010000430 4010000410	Ceramic Ceramic	DD109 SL 471J 50V DD107 SL 331J 50V
R695	7010004320	Resistor	R25J 22 kΩ		C642	4040000250	Barrier Layer	UAT 08X 473M
R696	7010001320	Resistor	R20J 10 kΩ		C644	4040000250	Barrier Layer	UAT 08X 473M
R697	7010003380	Resistor	ELR20J 680 Ω		C645	4010000390	Ceramic	DD107 SL 271J 50V
R698	7010003480	Resistor	ELR20J 4.7 kΩ		C646	4010000390	Ceramic	DD107 SL 271J 50V
R699	7010003240	Resistor	ELR20J 47 Ω	1	C647	4040000250	Barrier Layer	UAT 08X 473M
R700	7010000970	Resistor	R25J 33 Ω	1	C648	4040000250	Barrier Layer	UAT 08X 473M
R701	7010003400	Resistor	ELR20J 1 kΩ		C649	4010000370	Ceramic	DD106 SL 201J 50V
R702	7010003530	Resistor	ELR20J 10 kΩ		C650	4010000370	Ceramic	DD106 SL 201J 50V
R703	7010003530	Resistor	ELR20J 10 kΩ	1	C651	4040000250	Barrier Layer	UAT 08X 473M
R704	7010003530	Resistor	ELR20J 10 kΩ	1	C652	4040000250	Barrier Layer	UAT 08X 473M
R705	7010003530	Resistor	ELR20J 10 kΩ	1	C653	4010000360	Ceramic	DD106 SL 181J 50V
R706	7010003530	Resistor	ELR20J 10 kΩ	1	C654	4010000360	Ceramic	DD106 SL 181J 50V
R707 R708	7010003530 7010003530	Resistor	ELR20J 10 kΩ		C655	4040000250	Barrier Layer	UAT 08X 473M
R708	7010003530	Resistor Resistor	ELR20J 10 kΩ ELR20J 10 kΩ		C656 C657	4040000250 4010000340	Barrier Layer Ceramic	UAT 08X 473M DD105 SL 121J 50V
R710	7010003530	Resistor	ELR20J 10 kΩ		C658	4010000340	Ceramic	DD105 SL 121J 50V
R711	7010003530	Resistor	R20J 1 MΩ		C659	4040000250	Barrier Layer	UAT 08X 473M
R712	7010001360	Resistor	R25J 47 kΩ		C660	4040000250	Barrier Layer	UAT 08X 473M
R713	7010001070	Resistor	R25J 220 Ω		C661	4010000520	Ceramic	DD108 B 472K 50V
R714	7010003320	Resistor	ELR20J 220 Ω		C663	4010000330	Ceramic	DD105 SL 101J 50V
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#### [RF UNIT]

REF.	ORDER NO.	DESCRIPTION			
C664	4010000380	Ceramic	DD107 SL 221J 50V		
C665	4510002850	Electrolytic	25 SS 22 μF		
C666 C667	4510002970 4010000520	Electrolytic Ceramic	50 SS 4R7 μF		
C668	4510000320	Electrolytic	DD108 B 472K 50V 25 SS 10 µF		
C669	4010000520	Ceramic	DD108 B 472K 50V		
C670	4010000180 4040000260	Ceramic	DD104 SL 220J 50V		
C671 C672	4040000260	Barrier Layer Barrier Layer	UZE 08X 104M UAT 04V 152K		
C673	4040000270	Barrier Layer	UAT 04V 102K		
C674	4040000300	Barrier Layer	UAT 04V 182K		
C675 C676	4040000260	Barrier Layer Barrier Layer	UZE 08X 104M UAT 06V 103K		
C677	4040000350	Barrier Layer	UAT 05V 472K		
C678	4010000350	Ceramic	DD106 SL 151J 50V		
C679 C680	4010000350 4040000250	Ceramic Barrier Layer	DD106 SL 151J 50V UAT 08X 473M		
C681	4010000520	Ceramic	DD108 B 472K 50V		
C682	4510002940	Electrolytic	50 SS 1 μF		
C683 C684	4040000250 4510002840	Barrier Layer Electrolytic	UAT 08X 473M 25 SS 10 μF		
C685	4010002840	Ceramic	DD104 B 102K 50V		
C686	4010000520	Ceramic	DD108 B 472K 50V		
C687	4010000240	Ceramic Ceramic	DD104 SL 390J 50V		
C688 C689	4010000380 4010000240	Ceramic	DD107 SL 221J 50V DD104 SL 390J 50V		
C690	4510002980	Electrolytic	50 SS 10 μF		
C691	4010000520	Ceramic	DD108 B 472K 50V		
C692 C693	4010000500	Ceramic Ceramic	DD104 B 102K 50V DD104 SL 080D 50V		
C694	4010000070	Ceramic	DD104 SL 050C 50V		
C695	4010000150	Ceramic	DD104 SL 150J 50V		
C696 C697	4010000020 4010000120	Ceramic Ceramic	DD104 SL 010C 50V DD104 SL 100D 50V		
C698	4010000120	Ceramic	DD104 SE 1005 S0V		
C699	4010000500	Ceramic	DD104 B 102K 50V		
C700 C701	4010000500 4040000250	Ceramic Barrier Layer	DD104 B 102K 50V UAT 08X 473M		
C702	4040000250	Barrier Layer	UAT 08X 473M		
C703	4010000500	Ceramic	DD104 B 102K 50V		
C704 C705	4040000250 4010000100	Barrier Layer Ceramic	UAT 08X 473M DD104 SL 080D 50V		
C706	4010000100	Ceramic	DD104 SL 020C 50V		
C707	4010000170	Ceramic	DD104 SL 200J 50V		
C708 C709	4010000090 4010000070	Ceramic Ceramic	DD104 SL 070D 50V DD104 SL 050C 50V		
C710	4010000570	Ceramic	DD104 SL 030C 50V DD108 B 472K 50V		
C711	4040000250	Barrier Layer	UAT 08X 473M		
C712 C713	4040000250 4040000250	Barrier Layer Barrier Layer	UAT 08X 473M UAT 08X 473M		
C714	4040000250	Barrier Layer	UAT 08X 473M		
C715	4040000250	Barrier Layer	UAT 08X 473M		
C716 C717	4010000520 4010000520	Ceramic	DD108 B 472K 50V DD108 B 472K 50V		
C717	4010000520	Ceramic Ceramic	DD108 B 472K 50V DD108 B 472K 50V		
C719	4010000520	Ceramic	DD108 B 472K 50V		
C720 C721	4010000520	Ceramic	DD108 B 472K 50V		
C721	4510002850 4010000520	Electrolytic Ceramic	25 SS 22 μF DD108 B 472K 50V		
C723	4010000100	Ceramic	DD104 SL 080D 50V		
C724	4010000100	Ceramic	DD104 SL 080D 50V		
C725 C726	4010000100 4010000050	Ceramic Ceramic	DD104 SL 080D 50V DD104 SL 030C 50V		
C727	4010000100	Ceramic	DD104 SL 080D 50V		
C728	4010000070	Ceramic	DD104 SL 050C 50V		
C729 C730	4530000350 4530000350	Capacitor Array Capacitor Array	B8ZC0111-32N B8ZC0111-32N		
C731	4010000520	Ceramic	DD108 B 472K 50V		
C732	4040000250	Barrier Layer	UAT 08X 473M		
C734 C735	4010000390 4010000520	Ceramic Ceramic	DD107 SL 271J 50V DD108 B 472K 50V		
C736	4040000330	Barrier Layer	UAT 05V 332K		
C737	4010000500	Ceramic	DD104 B 102K 50V		
C738 C739	4010000520 4010000500	Ceramic Ceramic	DD108 B 472K 50V DD104 B 102K 50V		
U. 33	,0.1000000		22107 D 1021( 00V		

#### [RF UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C740	4010000520	Ceramic	DD108 B 472K 50V
C741	4010000520	Ceramic	DD108 B 472K 50V
C742	4010000500	Ceramic	DD104 B 102K 50V
C743	4010000520	Ceramic	DD108 B 472K 50V
C744	4010000520	Ceramic	DD108 B 472K 50V
C745	4510001100	Electrolytic	16 MS7 10 μF
C746	4510002850	Electrolytic	25 SS 22 μF
C747	4010000520	Ceramic	DD108 B 472K 50V
C748	4510002860	Electrolytic	25 SS 33 μF
C749	4010000320	Ceramic	DD104 SL 820J 50V
C750	4010000520	Ceramic	DD108 B 472K 50V
C751	4010000160	Ceramic	DD104 SL 180J 50V
C752	4010000280	Ceramic	DD104 SL 560J 50V
EP601	0910022312	P.C. Board	B 2075B

#### [PA TR UNIT]

REI NO			DESCRIPTION	
Q801	1530000790	Transistor	2SC1971	
Q802	1530000190	Transistor	2SC3133	
Q803	1530000190	Transistor	2SC3133	
Q804	1530000200	Transistor	2SC2904	
Q805	1530000200	Transistor	2SC2904	
Q806	1540000060	Transistor	2SD880-Y	
Q807	1530000070	Transistor	2SC2120-Y	
D801	1790000010	Diode	MV5	
D802	1790000010	Diode	MV5	
D803		Diode	1N4002	
D804		Diode	MV5	
L801	6140001170	Coil	LR-142	
L804	1	Coil	LR-143	
L805	6910000670	Coil	BT01RN1-A61-001	
L806		Coil	BT01RN1-A61-001	
L807	6910000670	Coil	BT01RN1-A61-001	
L808	6910000670	Coil	BT01RN1-A61-001	
L809	6140000610	Coil	LR-83	
L810	6140001230	Coil	LR-148	
L811	6140001210	Coil	LR-146	
L812	6180001100	Coil	FL 4H 100K	
L813	6910000670	Coil	BT01RN1-A61-001	
L814	6170000110	Coil	LW-12A	
L815	6910000670	Coil	BT01RN1-A61-001	
L816	6910000600	Ferrite Bead	FSOH050RN	
L817	6910000600	Ferrite Bead	FSOH050RN	
L819	6180001120	Coil	FL 5H 101K	
L821	6910000670	Coil	BT01RN1-A61-001	
R801	7010001020	Resistor	R25J 82 Ω	
R802	7010001060	Resistor	R25J 180 Ω	
R803	7010001110	Resistor	R25J 470 Ω	
R804	1	Resistor	R25J 3.3 Ω	
R805	7010000100	Resistor	ELR25J 5.6 Ω	
R806	•	Resistor	R50XJ 100 Ω	
R807	7010000210	Resistor	ELR25J 47 Ω	
R808		Resistor	ELR25J 47 Ω	
R809		Resistor	R50XJ 100 Ω	
R810	7080000650	Resistor	RSS1P 3R3 Ω	
R811	7080000650	Resistor	RSS1P 3R3 Ω	
R812	7080000650	Resistor	RSS1P 3R3 Ω	
R813	7080000650	Resistor	RSS1P 3R3 Ω	
R814	7010004650	Resistor	R50XJ 10 Ω	
R815	7010004650	Resistor	R50XJ 10 Ω	
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#### [PA TR UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
R816	7080000010	Resistor	RSS1P 2R2 Ω
R817	7080000010	Resistor	RSS1P 2R2 Ω
R818	7010001340	Resistor	R25J 33 kΩ
R822	7070000250	Resistor	CRH200 R-02J 4.7 Ω (4R7)
R823	7310000710	Trimmer	RH0651C13J1YA (102)
R824	7010001050	Resistor	R25J 150 Ω
R826 R827	7010000500 7310003140	Resistor Trimmer	ELR25J 10 kΩ RH0621CN2J (331)
R828	7010003140	Resistor	R50XJ 68 Ω
R829	7010000130	Resistor	ELR25J 10 Ω
R831	7010000170	Resistor	ELR25J 22 Ω
R832	7010004720	Resistor	R50XJ 100 Ω
R833	7010000410	Resistor	ELR25J 2.2 kΩ
R834	7010004730	Resistor	R50XJ 120 Ω
R835	7080000650	Resistor	RSS1P 3R3 Ω
R836 R837	7080000650 7010001060	Resistor Resistor	RSS1P 3R3 Ω R25J 180 Ω
1007	7010001000	ricolotoi	11230 100 12
C801	4010000520	Ceramic	DD108 B 472K 50V
C803	4040000260	Barrier Layer	UZE 08X 104M
C804	4310000020	Mylar	F2D 50V 103K
C805	4310000020	Mylar	F2D 50V 103K
C806	4010000410	Ceramic	DD107 SL 331J 50V
C808	4030001370	Ceramic	GR44 CH 682K
C809	4030001370	Ceramic	GR44 CH 682K DM20C 102J5
C810 C811	4320000270 4030001330	Dip Mica Ceramic	GR43 CH 471K
C812	4030001330	Ceramic	GR43 CH 471K
C813	4030001340	Ceramic	GR44 CH 102K
C814	4320000290	Dip Mica	DM20C 152J5
C816	4320000340	Dip Mica	DM20C 472J5
C817	4040000250	Barrier Layer	UAT 08X 473M
C818	4510002820	Electrolytic	16 SS 1000 μF
C819	4030001420	Ceramic	GR44 Y5V 684Z UAT 08X 473M
C820 C821	4040000250 4510002640	Barrier Layer Electrolytic	25 SS 47 μF
C822	4510002840	Electrolytic	25 SS 10 μF
C823	4040000250	Barrier Layer	UAT 08X 473M
C824	4040000250	Barrier Layer	UAT 08X 473M
C825	4510002900	Electrolytic	25 SS 470 μF
C826	4040000250	Barrier Layer	UAT 08X 473M
C827	4510002840	Electrolytic	25 SS 10 μF
C828	4040000250	Barrier Layer Ceramic	UAT 08X 473M DD108 B 472K 50V
C829 C830	4010000520 4040000250	Barrier Layer	UAT 08X 473M
C831	4040000260	Barrier Layer	UZE 08X 104M
C832	4040000250	Barrier Layer	UAT 08X 473M
C833	4040000250	Barrier Layer	UAT 08X 473M
C834	4010004100	Ceramic	DD14 SL 331K 500V
C835	4010004100	Ceramic	DD14 SL 331K 500V
C836	4010000820	Ceramic	DD105 CH 330J 50V
C837 C838	4040000110 4510002820	Barrier Layer Electrolytic	UAT 04X 222K 16 SS 1000 μF
C839	4030001330	Ceramic	GR43 CH 471K
C840	4030001330	Ceramic	GR43 CH 471K
C841	4030001340	Ceramic	GR44 CH 102K
C842	4010000460	Ceramic	DD104 B 471K 50V
	0040000000	TL	0110 0 0014
S801 S802	6910000060 6910000050	Thermostat Thermostat	OHD-3 90M OHD-3 50M
	071000050		MADD 4 0 1 100
MF801	2710000050	Fan Motor	M6B12U22
EP801	0910007051	P.C. Board	B 887A
EP804	6510003080	RT Pin	RT01T-1.0B
EP805	6510003080	RT Pin	RT01T-1.0B
EP807	6910000970	Ferrite Bead	DL 2OP 2.6-3-1.2H
EP871 EP872	6910000640 6910000640	Ferrite Bead Ferrite Bead	FSOH090RN FSOH090RN
EP881	6910000630	Ferrite Bead	FSOH070RN

#### [PA PARTS]

REF. NO.	ORDER NO.		DESCRIPTION
D872 D873	1710000010 1710000010	Diode Diode	15CD11 15CD11
R871 R872 R873	7100000510 7010001150 7010001150	Resistor Resistor Resistor	CP-5AJ 0.012 Ω R25J 1 kΩ R25J 1 kΩ
C871 C872 C873 C874 C875 C876 C877	4050000140 4050000140 4050000140 4050000140 4040000250 4040000250 4510003650 4040000250	Feed through Feed through Feed through Barrier Layer Barrier Layer Electrolytic Barrier Layer	TF318-450E102GMV TF318-450E102GMV TF318-450E102GMV TF318-450E102GMV UAT 08X 473M UAT 08X 473M 25 SS 2200 μF UAT 08X 473M
F872	5210000060	Fuse	FGB 5A
EP873 6910000640 EP874 6510000430		Ferrite Bead Terminal	FSOH090RN ML-3182 4P
		·	

#### [FILTER UNIT]

REF. NO.	ORDER NO.		DESCRIPTION
D1501	1710000350	Diode	1N4002
D1502	1710000350	Diode	1N4002
D1503	1710000350	Diode	1N4002
D1504	1710000350	Diode	1N4002
D1505	1710000350	Diode	1N4002
D1506	1710000350	Diode	1N4002
D1507	1710000350	Diode	1N4002
D1508	1710000330	Diode	1K60
D1509	1710000330	Diode	1K60
D1510	1710000350	Diode	1N4002
L1501	6140000310	Coil	LR-51
L1502	6140000300	Coil	LR-50
L1503	6140000290	Coil	LR-49
L1504	6140001160	Coil	LR-141
L1505	6140001130	Coil	LR-138
L1506	6140001130	Coil	LR-138
L1507	6140001150	Coil	LR-140
L1508	6140001240	Coil	LR-149
L1509	6140001240	Coil	LR-149
L1510	6140000330	Coil	LR-53
L1511	6140001150	Coil	LR-140
L1512	6140001150	Coil	LR-140
L1513	6140000340	Coil	LR-54
L1514	6140000690	Coil	LR-91
L1515	6140000690	Coil	LR-91
L1516	6140000350	Coil	LR-55
L1517	6140000360	Coil	LR-56
L1518	6140000360	Coil	LR-56
L1519	6110001280	Coil	LA-168
L1520	6180000450	Coil	RFC L6 222K
L1521	6140000100	Coil	LR-22A
L1522	6180000990	Coil	LAL 04NA 101K
L1523	6180000990	Coil	LAL 04NA 101K
L1524	6180000990	Coil	LAL 04NA 101K
L1525	6180000990	Coil	LAL 04NA 101K
L1526	6180000990	Coil	LAL 04NA 101K
L1527	6180000990	Coil	LAL 04NA 101K
L1528	6180000990	Coil	LAL 04NA 101K
L1529	6180000990	Coil	LAL 04NA 101K

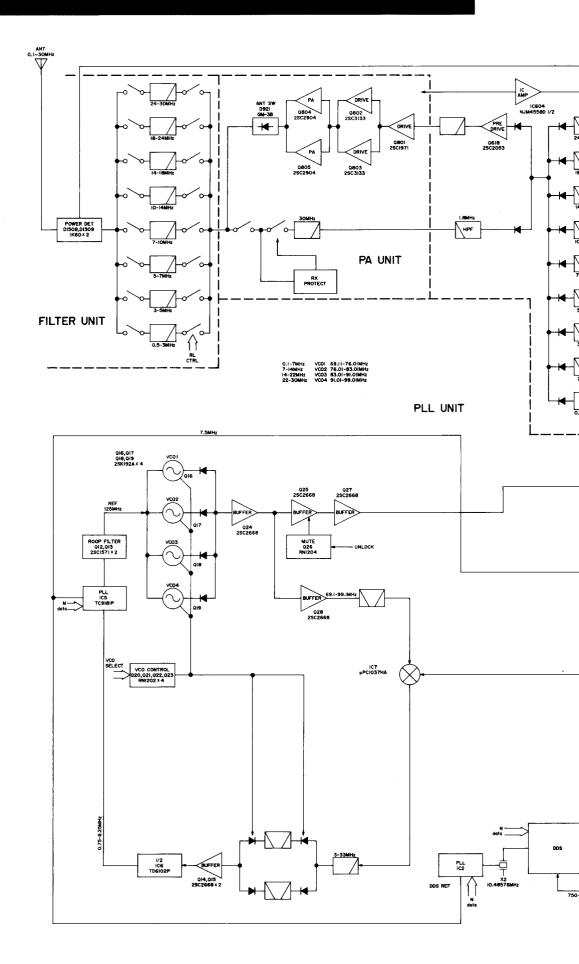
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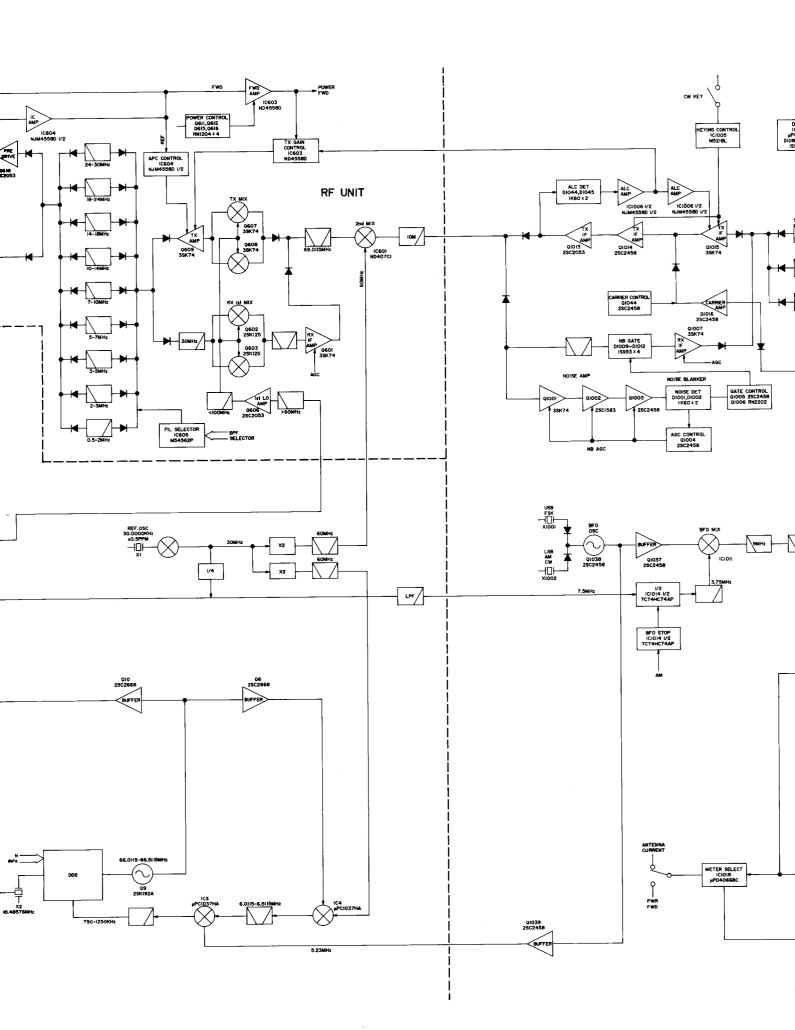
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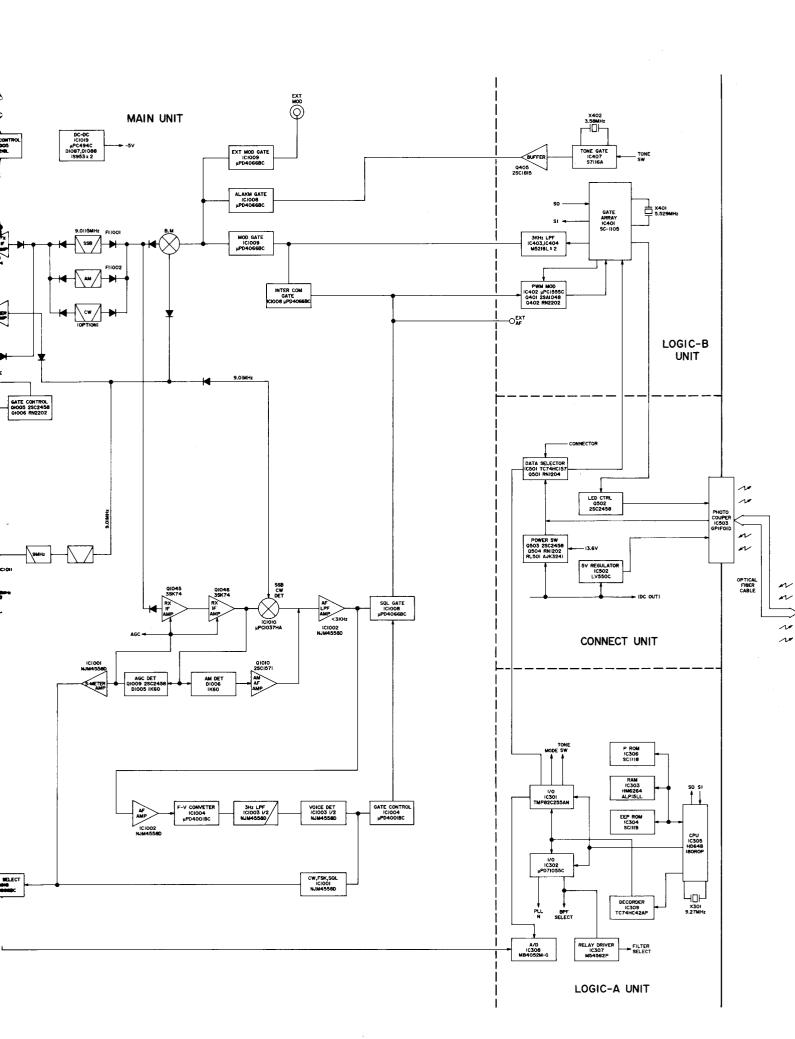
[FILTER ONIT]							
REF. NO.	ORDER NO.	DESCRIPTION		REF. NO.	ORDER NO.		DESCRIPTION
L1530	6180001220	Coil	LAL 04NA 100K	C1554	4320000450	Dip Mica	DM19C 821J5
L1531	6180001220	Coil	LAL 04NA 100K	C1555	4320000270	Dip Mica	DM20C 102J5
L1532	6180001220	Coil	LAL 04NA 100K	C1556	4010004080	Ceramic	DD12 SL 271K 500V
L1533	6180001220	Coil	LAL 04NA 100K	C1557	4320000190	Dip Mica	DM19C 391J5
L1534	6180001220	Coil	LAL 04NA 100K	C1559	4010003980	Ceramic	DD09 SL 560K 500V
L1535	6180001220	Coil	LAL 04NA 100K	C1560	4010004040	Ceramic	DD10 SL 151K 500V
L1536	6110001490	Coil	LA-196	C1561	4010004010	Ceramic	DD09 SL 101K 500V
L1537	6110001500	Coil	LA-197	C1562	4010003990	Ceramic	DD09 SL 680K 500V
L1538	6180001220	Coil	LAL 04NA 100K	C1563	4010003960	Ceramic	DD06 SL 390K 500V
L1539	6180001220	Coil	LAL 04NA 100K	C1564	4010004040	Ceramic	DD10 SL 151K 500V
İ				C1566	4010003870	Ceramic	DD06 SL 120K 500V
				C1567	4010004000	Ceramic	DD09 SL 820K 500V
R1501	7010004700	Resistor	R50XJ 68 Ω	C1568	4010000520	Ceramic	DD108 B 472K 50V
R1502	7010004370	Resistor	R20J 22 kΩ	C1569	4010000520	Ceramic	DD108 B 472K 50V
R1503	7010003660	Resistor	ELR20J 100 kΩ	C1570	4010000590	Ceramic	DD110 F 473Z 50V
R1504	7010003580	Resistor	ELR20J 22 kΩ	C1571	4010000590	Ceramic	DD110 F 473Z 50V
R1505	7010003620	Resistor	ELR20J 47 kΩ	C1572	4510002840	Electrolytic	25 SS 10 μF
R1506	7010005000	Resistor	R50XJ 4.7 kΩ	C1573	4040000250	Barrier Layer	UAT 08X 473M
R1507	7010005000	Resistor	R50XJ 4.7 kΩ			'	
R1508	7010003780	Resistor	ELR20J 1 MΩ				
				RL150	6330000820	Relay	AJK 3341
				RL150		Relay	AJK 3341
C1501	4320000290	Dip Mica	DM20C 152J5	RL150	i i	Relay	AJK 3341
C1502	4320000210	Dip Mica	DM19C 561J5	RL150	I	Relay	AJK 3341
C1503	4320000290	Dip Mica	DM20C 152J5	RL150	I	Relay	AJK 3341
C1504	4010004050	Ceramic	DD12 SL 181K 500V	RL150	I	Relay	AJK 3341
C1505	4320000280	Dip Mica	DM20C 122J5	RL150	1	Relay	AJK 3341
C1506	4320000220	Dip Mica	DM19C 681J5	RL150	1	Relay	AJK 3341
C1507	4010004050	Ceramic	DD12 SL 181K 500V	RL150		Relay	AJK 3341
C1508	4320000450	Dip Mica	DM19C 821J5	RL151		Relay	AJK 3341
C1509	4010004030	Ceramic	DD10 SL 121K 500V	RL151	6330000820	Relay	AJK 3341
C1510	4320000200	Dip Mica	DM19C 471J5	RL151	6330000820	Relay	AJK 3341
C1511	4320000200	Dip Mica	DM19C 471J5	RL151	6330000820	Relay	AJK 3341
C1512	4010004030	Ceramic	DD10 SL 121K 500V	RL151	6330000820	Relay	AJK 3341
C1513	4320000210	Dip Mica	DM19C 561J5	RL151	6330000820	Relay	AJK 3341
C1514	4010003990	Ceramic	DD09 SL 680K 500V	RL151	6330000820	Relay	AJK 3341
C1515	4010004090	Ceramic	DD14 SL 301K 500V	1 1			
C1516	4010004100	Ceramic	DD14 SL 331K 500V	[			
C1517	4010004020	Ceramic	DD09 SL 111K 500V	EP150	0910022542	P.C. Board	B 2077B
C1518	4320000190	Dip Mica	DM19C 391J5	1 1			
C1519	4010003980	Ceramic	DD09 SL 560K 500V	1 1			
C1520	4010004070	Ceramic	DD12 SL 221K 500V	1 1			
C1521	4010004080	Ceramic	DD12 SL 271K 500V				
C1522	4010003980	Ceramic	DD09 SL 560K 500V				
C1523 C1524	4010004100 4010003950	Ceramic	DD14 SL 331K 500V				
C1525	4010003950	Ceramic Ceramic	DD06 SL 330K 500V DD12 SL 181K 500V				
C1526	4010004040	Ceramic	DD12 SL 151K 500V				
C1527	4010003910	Ceramic	DD06 SL 220K 500V				
C1528	4010004080	Ceramic	DD12 SL 271K 500V		İ		
C1529	4010003980	Ceramic	DD09 SL 560K 500V	] [			
C1530	4010003300	Ceramic	DD09 SL 101K 500V	1			
C1531	4010004010	Ceramic	DD09 SL 101K 500V				l
C1532	4010003860	Ceramic	DD06 SL 100D 500V				1
C1533	4010004060	Ceramic	DD12 SL 201K 500V				
C1534	4010003970	Ceramic	DD07 SL 470K 500V				
C1535	4010004010	Ceramic	DD09 SL 101K 500V				
C1536	4610000240	Trimmer	ECV1ZW 20X40				
C1537	4010000380	Ceramic	DD107 SL 221J 50V	1 1			
C1538	4010000330	Ceramic	DD105 SL 101J 50V	ļ			
C1539	4010000330	Ceramic	DD105 SL 101J 50V	1 1			
C1540	4040000250	Barrier Layer	UAT 08X 473M				
C1541	4040000250	Barrier Layer	UAT 08X 473M	i i			
C1542	4040000250	Barrier Layer	UAT 08X 473M	l I			
C1543	4040000250	Barrier Layer	UAT 08X 473M				
C1544	4040000250	Barrier Layer	UAT 08X 473M				
C1545	4040000250	Barrier Layer	UAT 08X 473M				
C1546	4040000250	Barrier Layer	UAT 08X 473M				
C1547	4040000250	Barrier Layer	UAT 08X 473M	l I			
C1548	4010000520	Ceramic	DD108 B 472K 50V				ľ
C1549 C1550	4010000520 4010000520	Ceramic	DD108 B 472K 50V				
C1550	4010000520	Ceramic Ceramic	DD108 B 472K 50V DD108 B 472K 50V				
C1552	4010000520	Ceramic	DD108 B 472K 50V				
C1553	4010000520	Ceramic	DD108 B 472K 50V				
				<u> </u>			

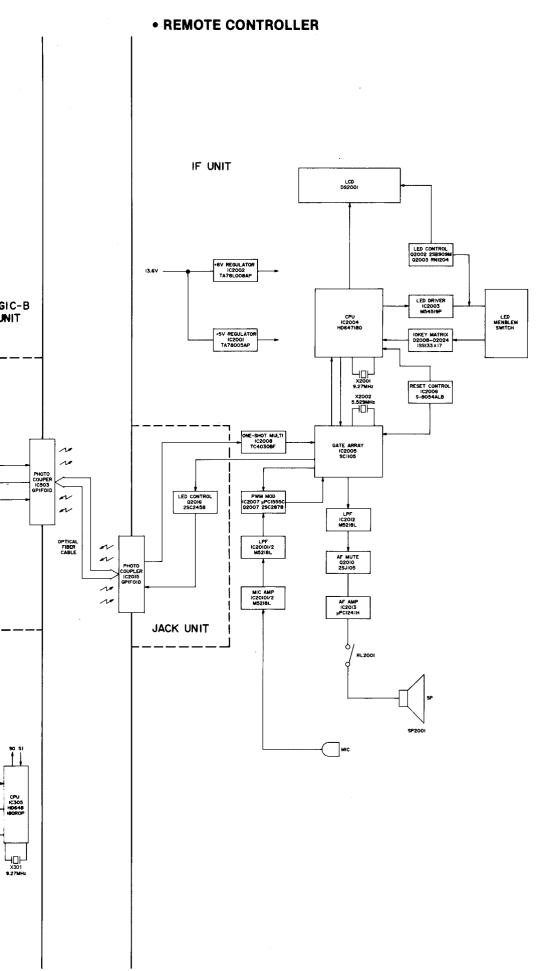
### SECTION 8 BLOCK DIAGRAMS

#### • TRANSCEIVER





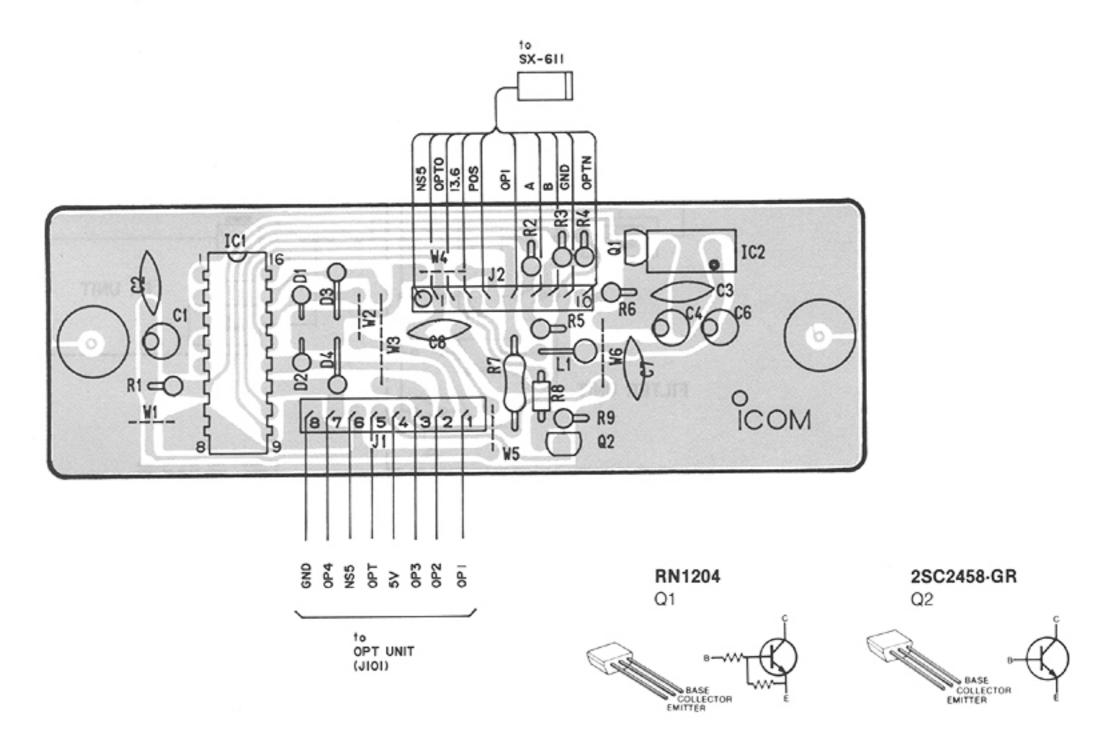




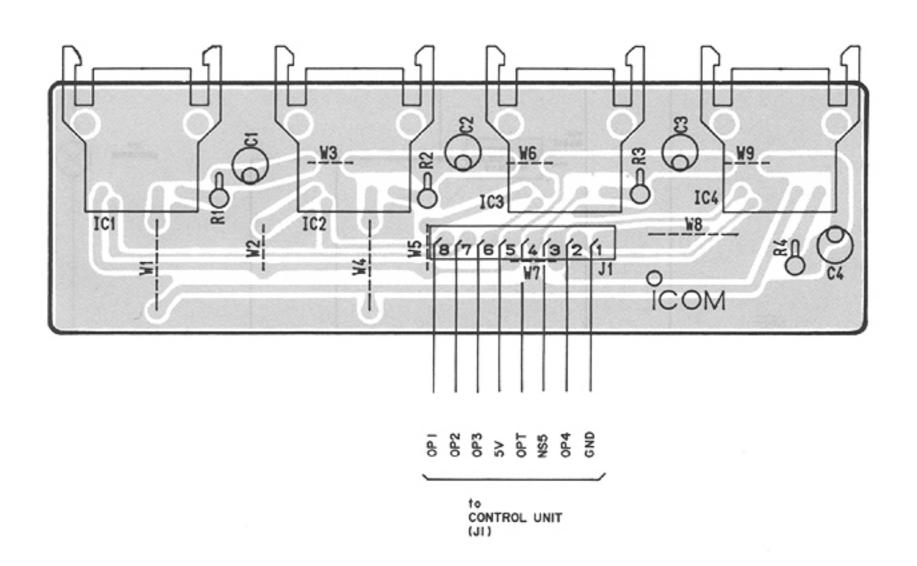
# SECTION 9 EX-804 EXPANDER UNIT

## 9-1 BOARD LAYOUTS

### CONTROL UNIT

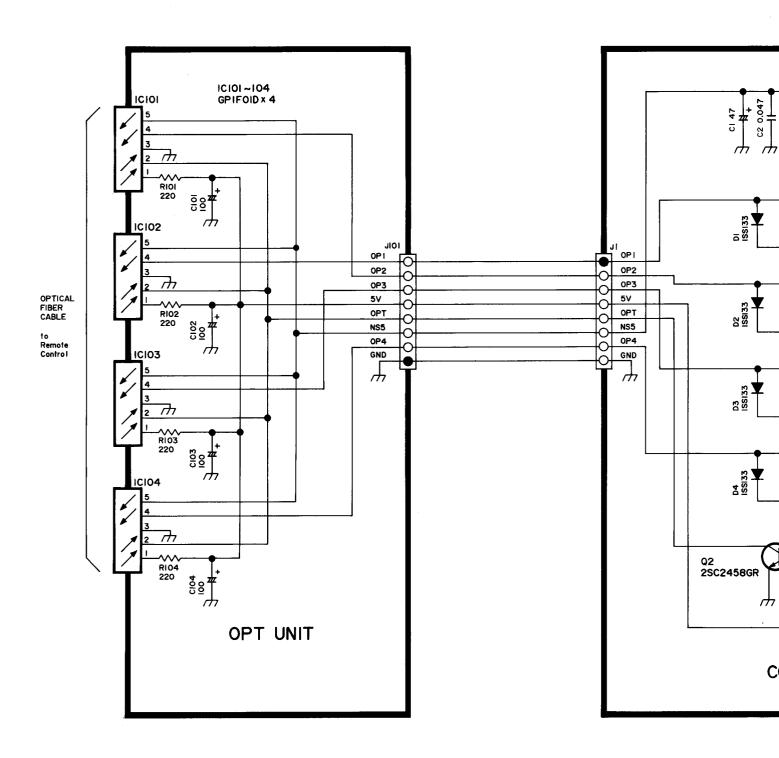


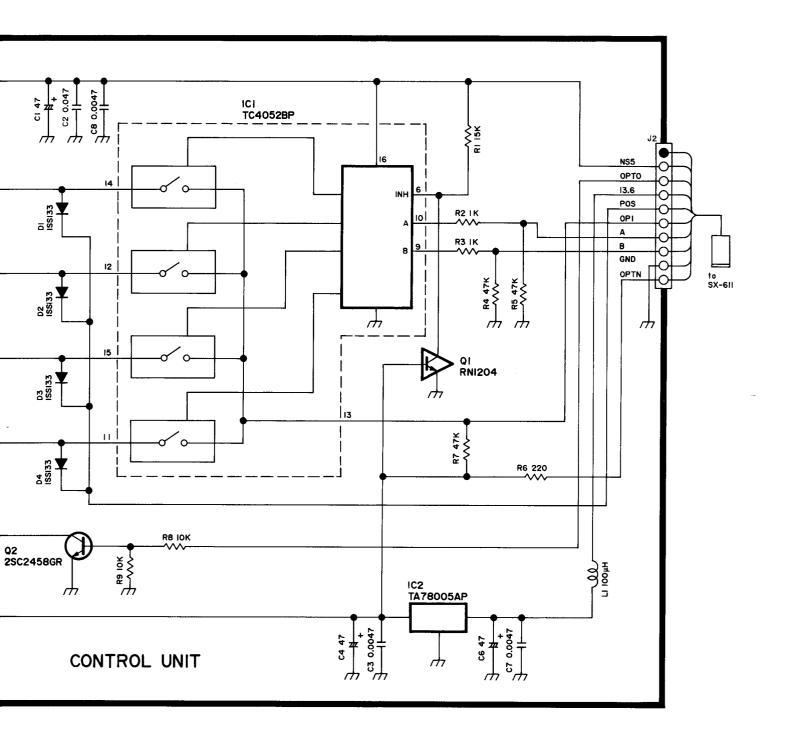
### OPT UNIT



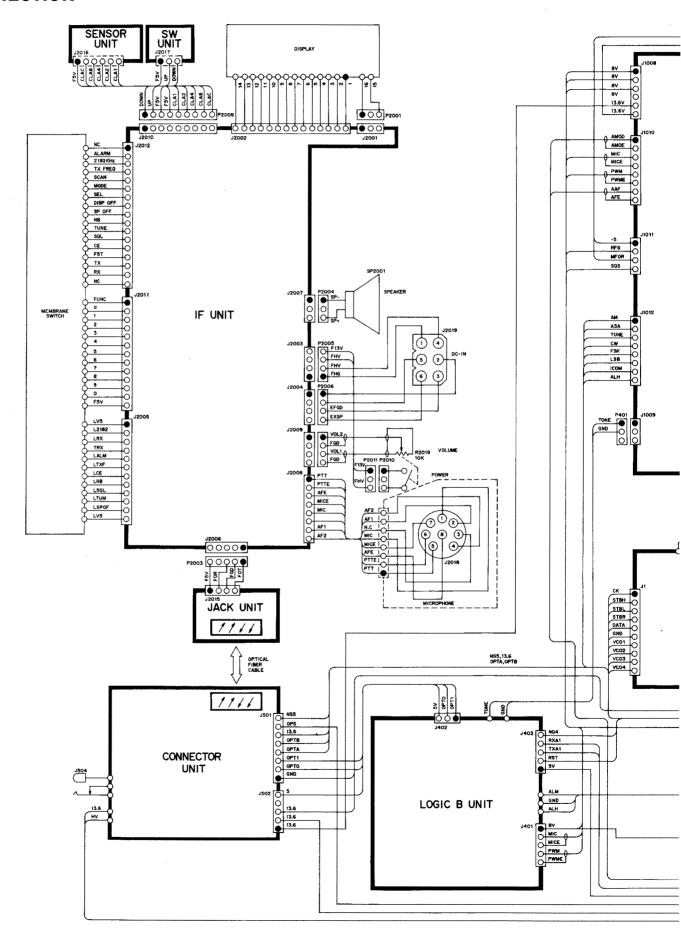
NOTE: Add "100" to the indicated number on the unit for actual part number respectively.

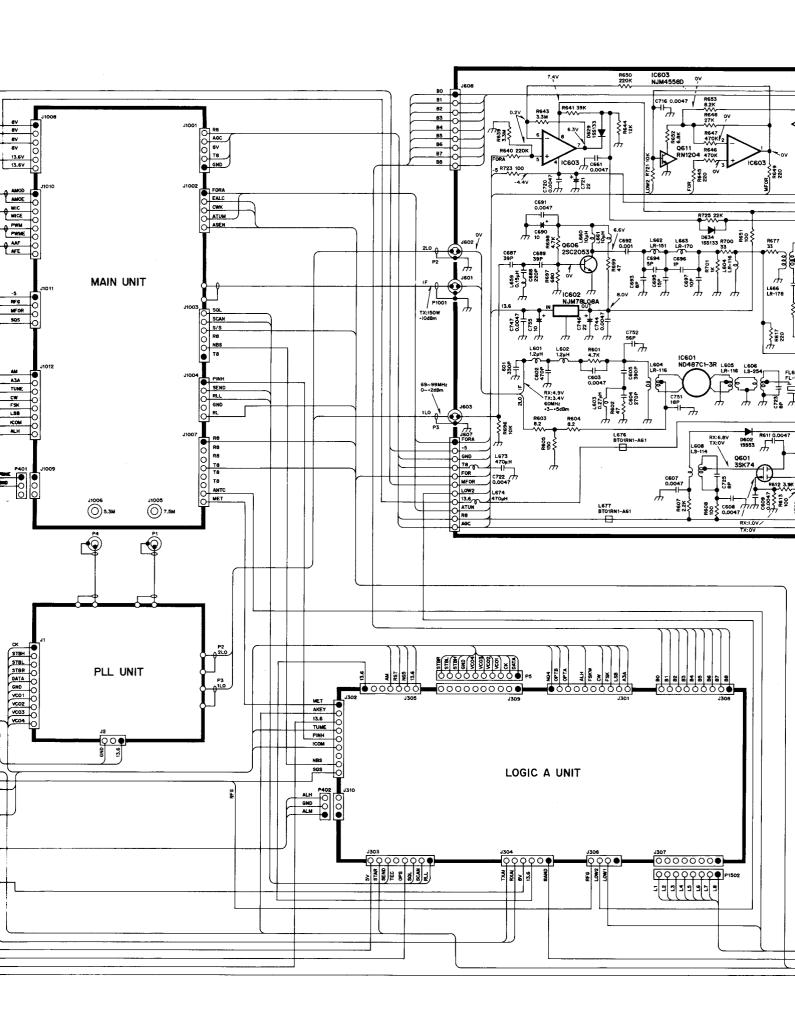
#### 9-2 SCHEMATIC DIAGRAM

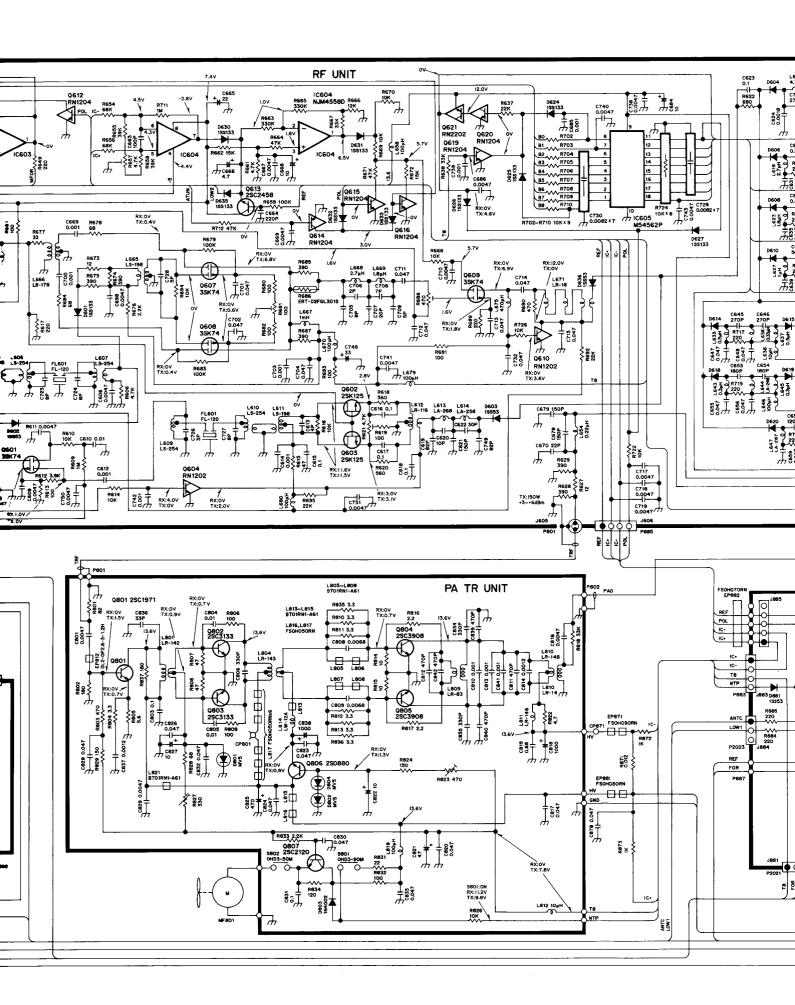


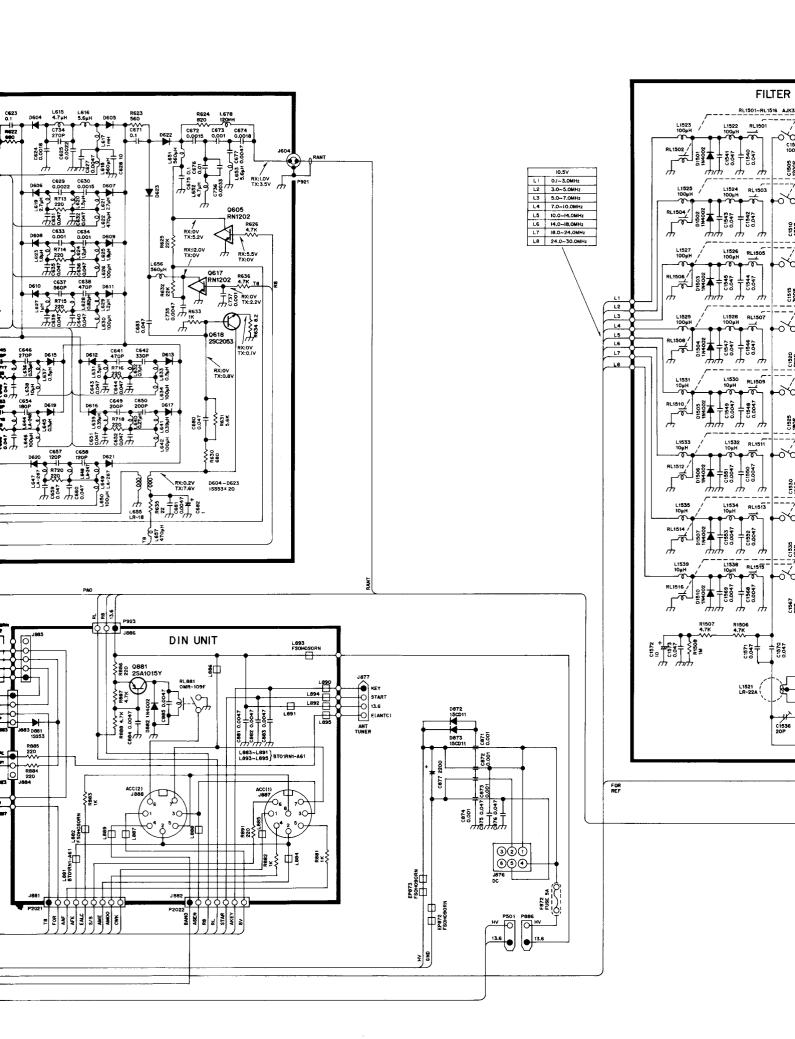


### 10-1 CONNECTION

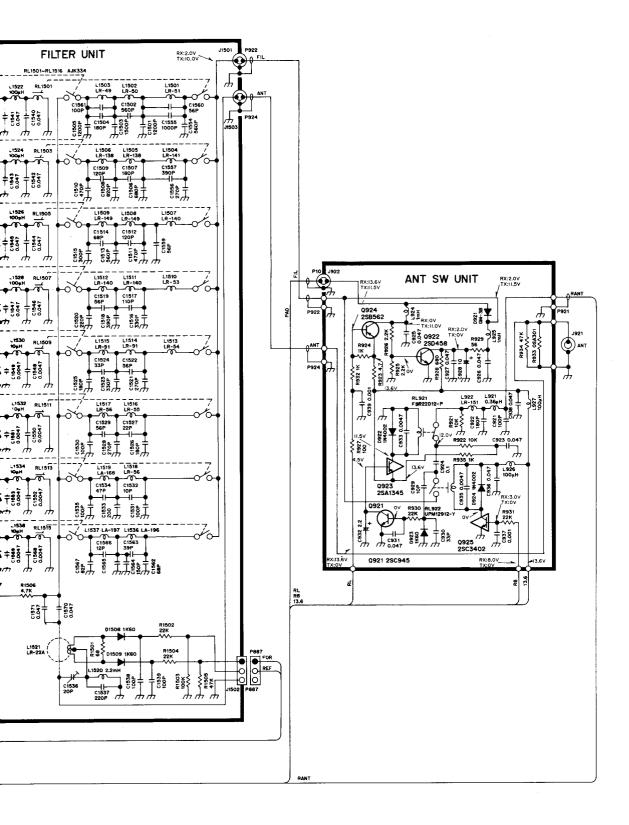




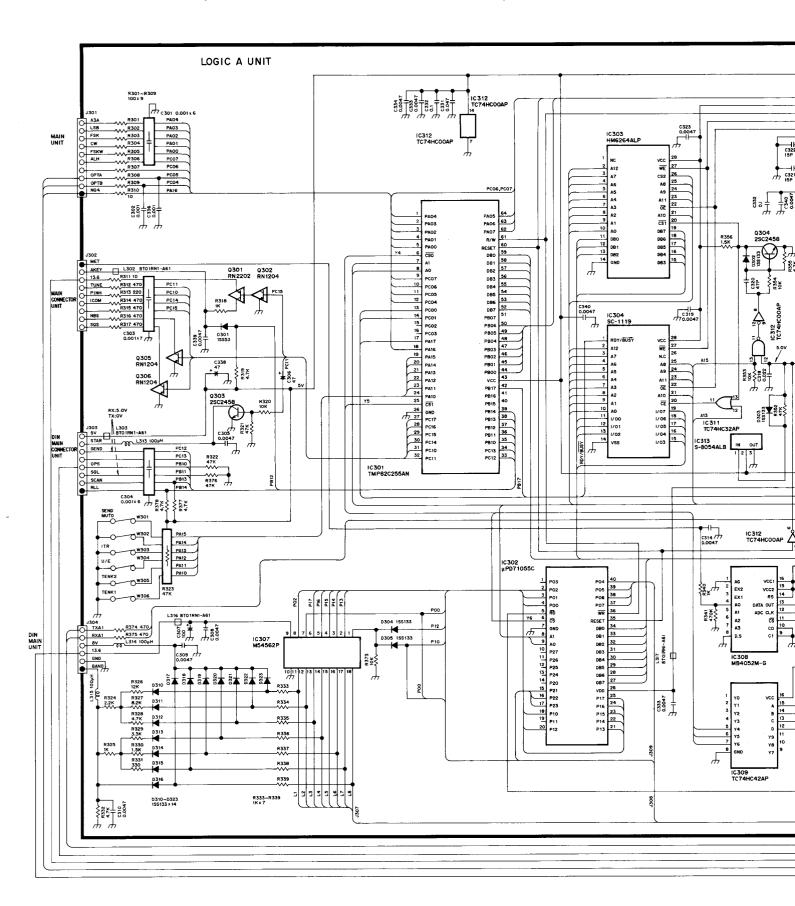




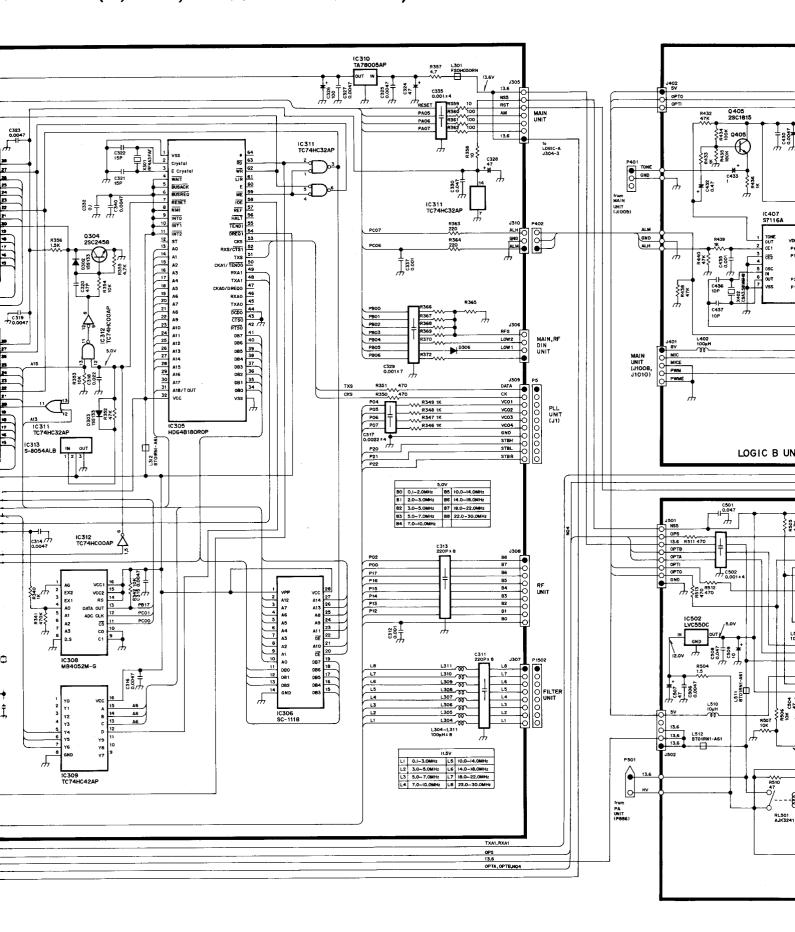
# **10-1 CONNECTION**

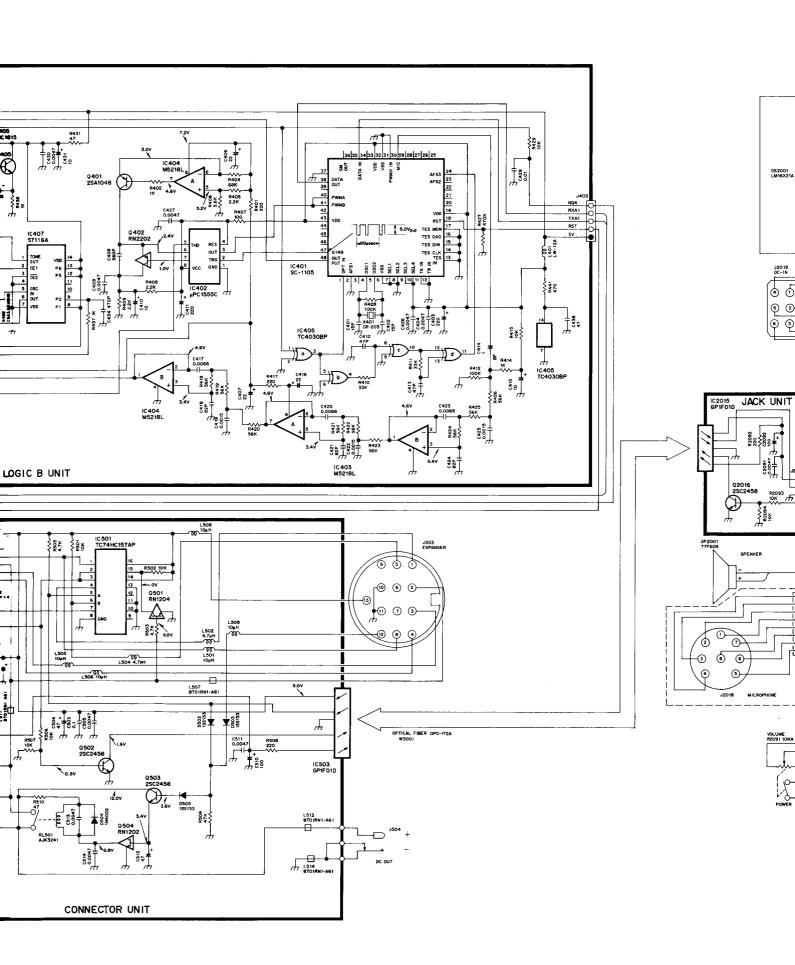


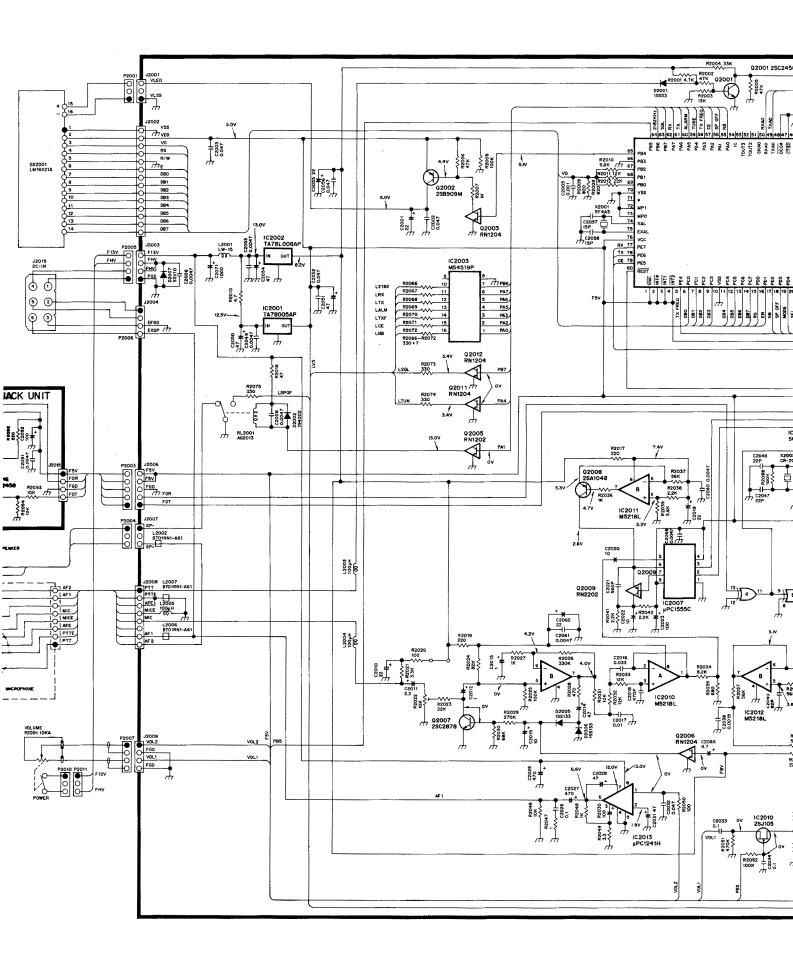
# 10-2 TRANSCEIVER (LOGIC A, B AND CONNECT UNITS) AND REMOTE CONTROLLER (IF,



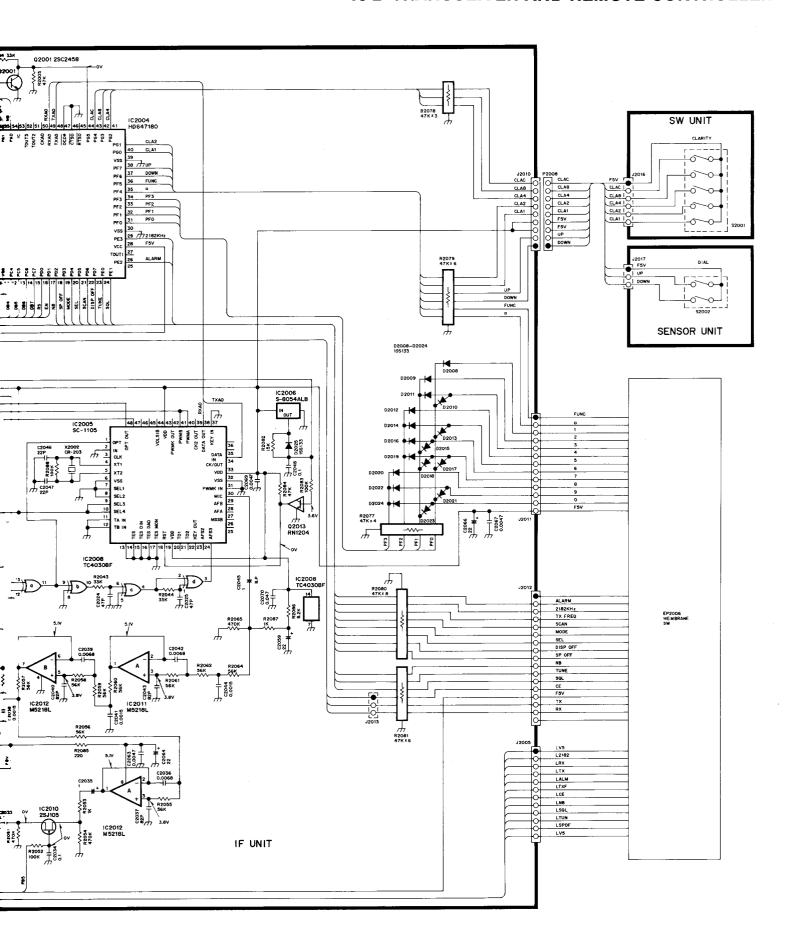
# NTROLLER (IF, JACK, SENSOR AND SW UNITS)



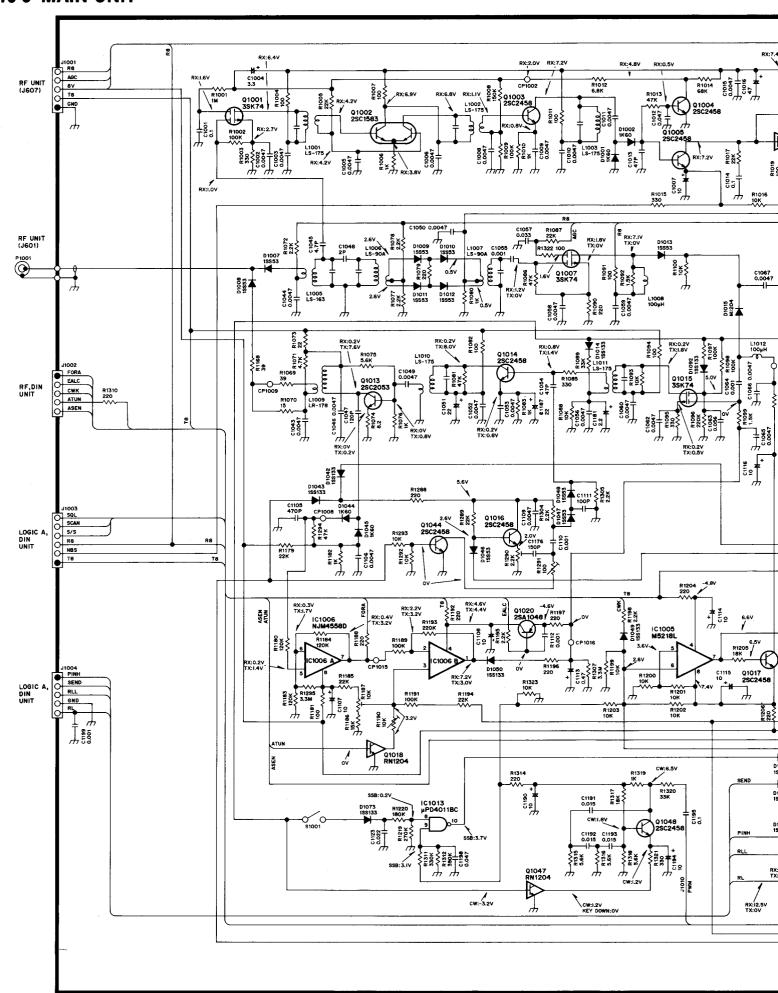


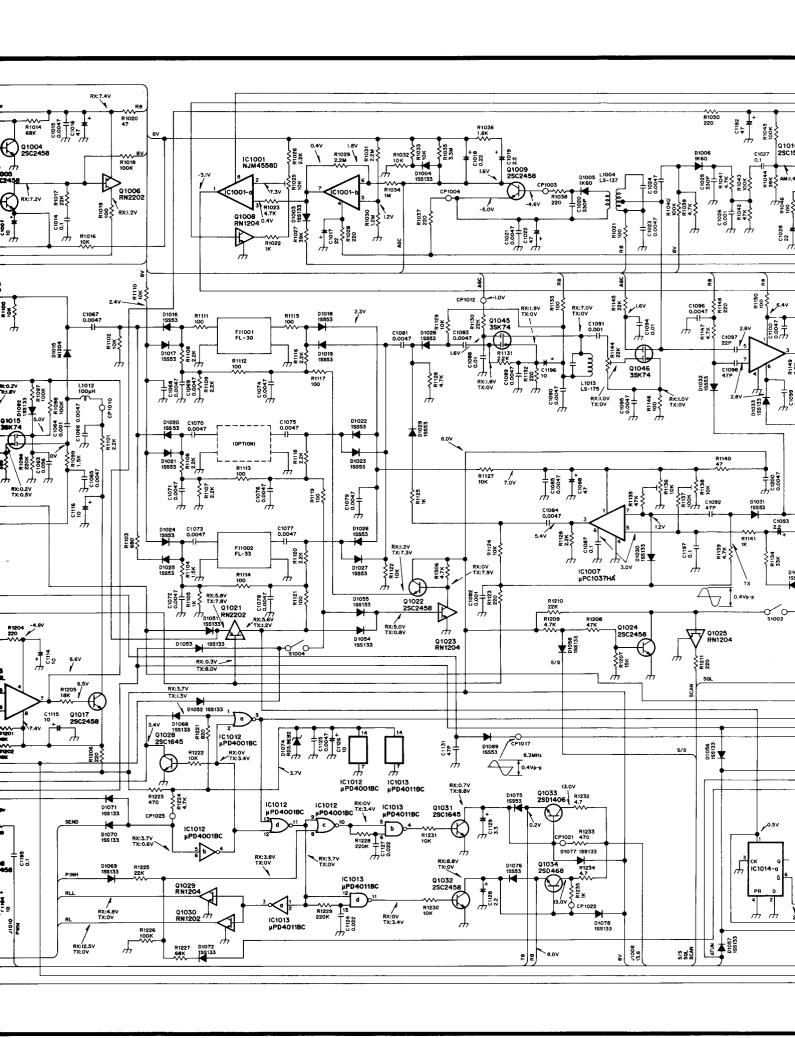


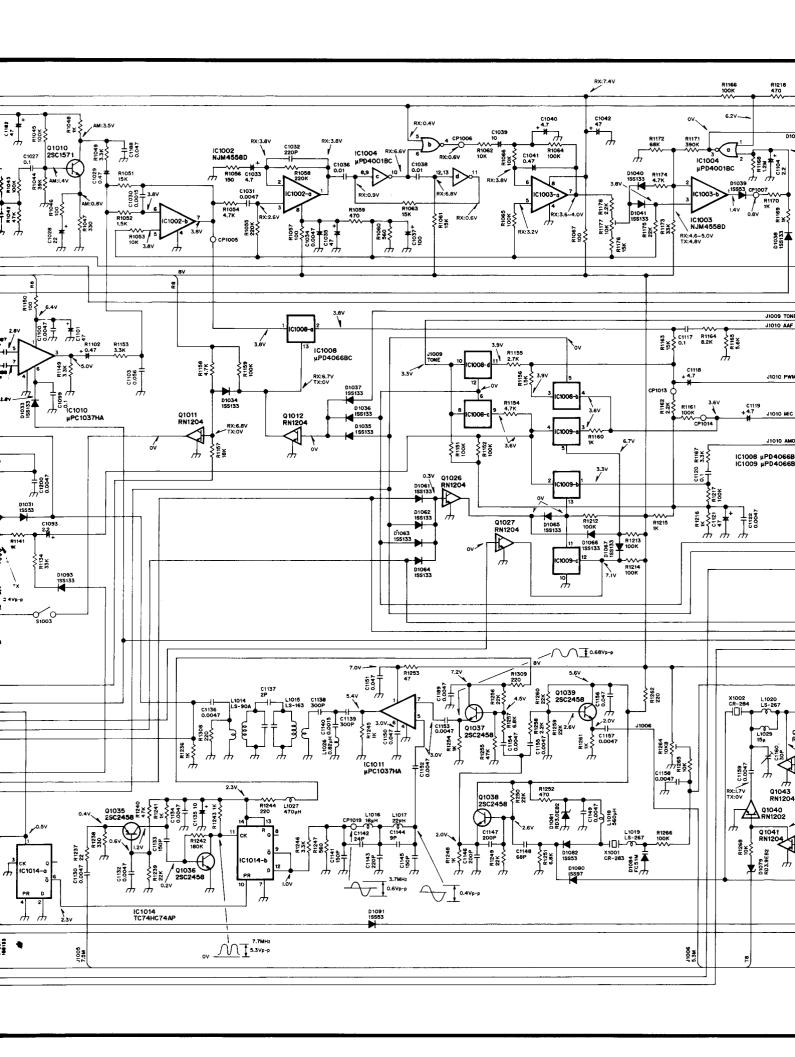
# **10-2 TRANSCEIVER AND REMOTE CONTROLLER**



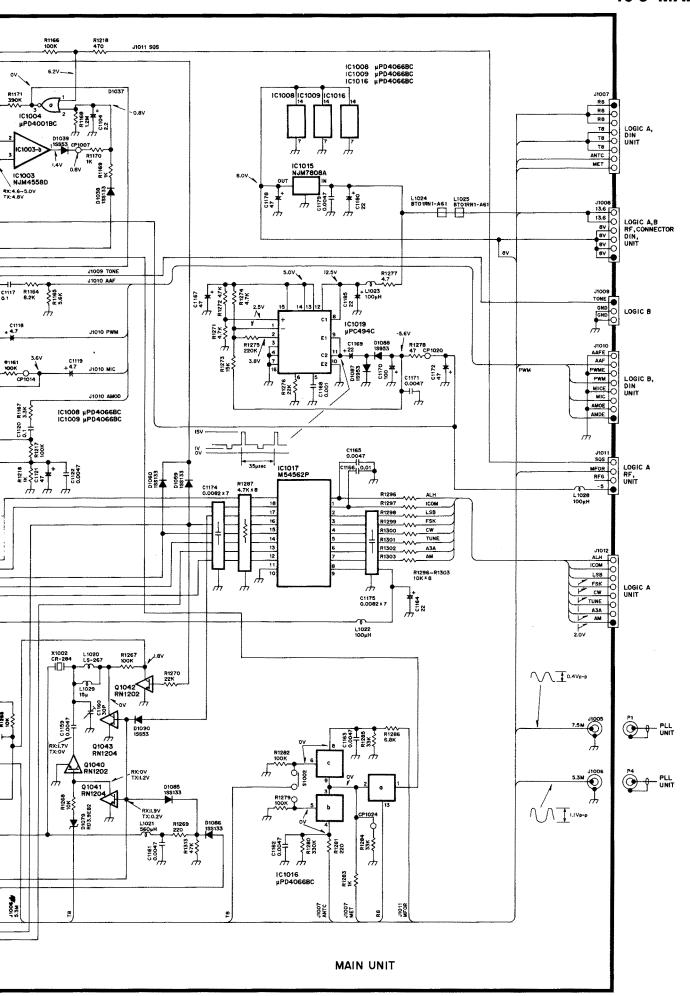
# 10-3 MAIN UNIT

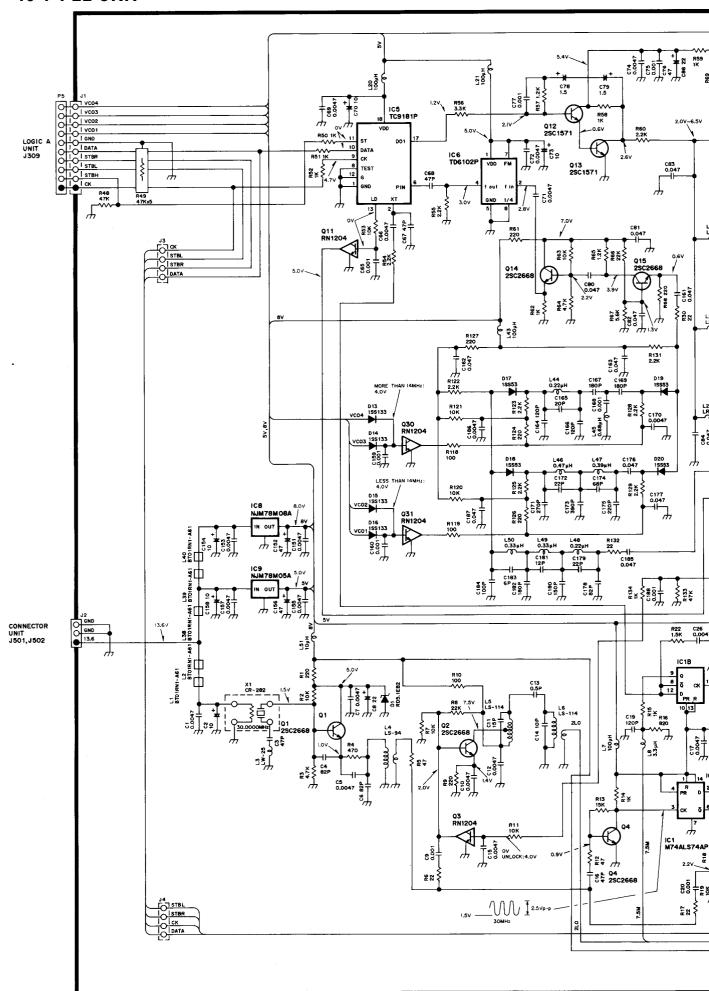


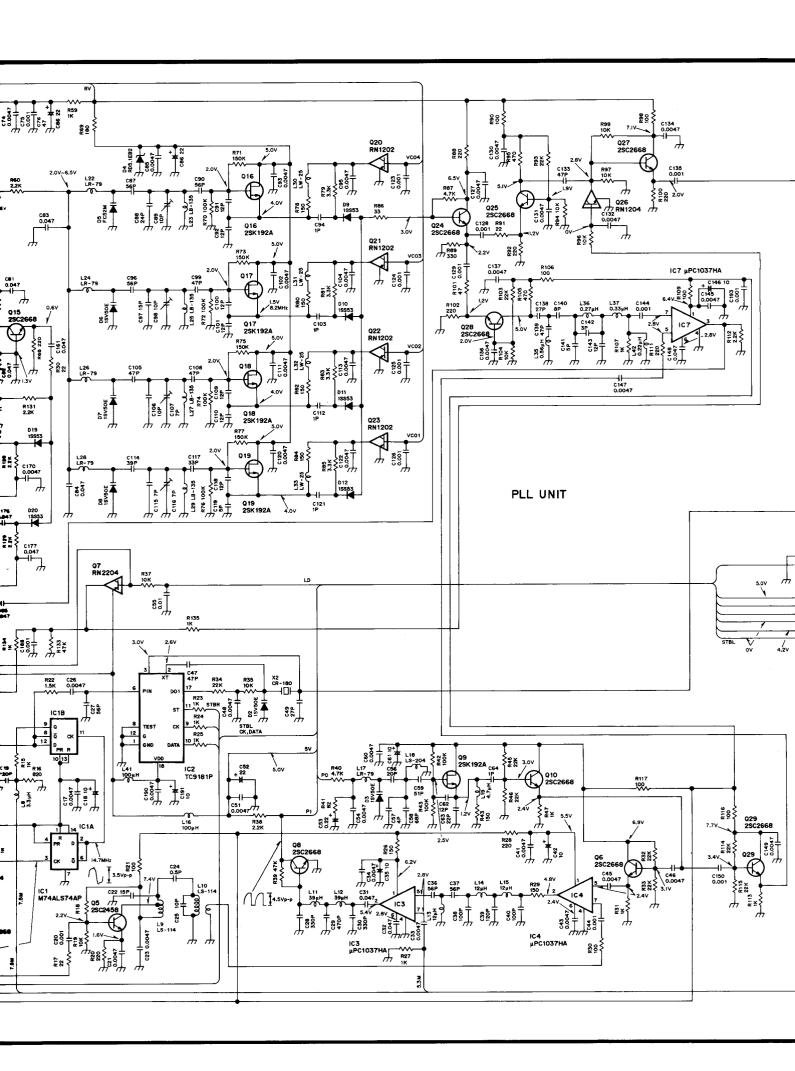


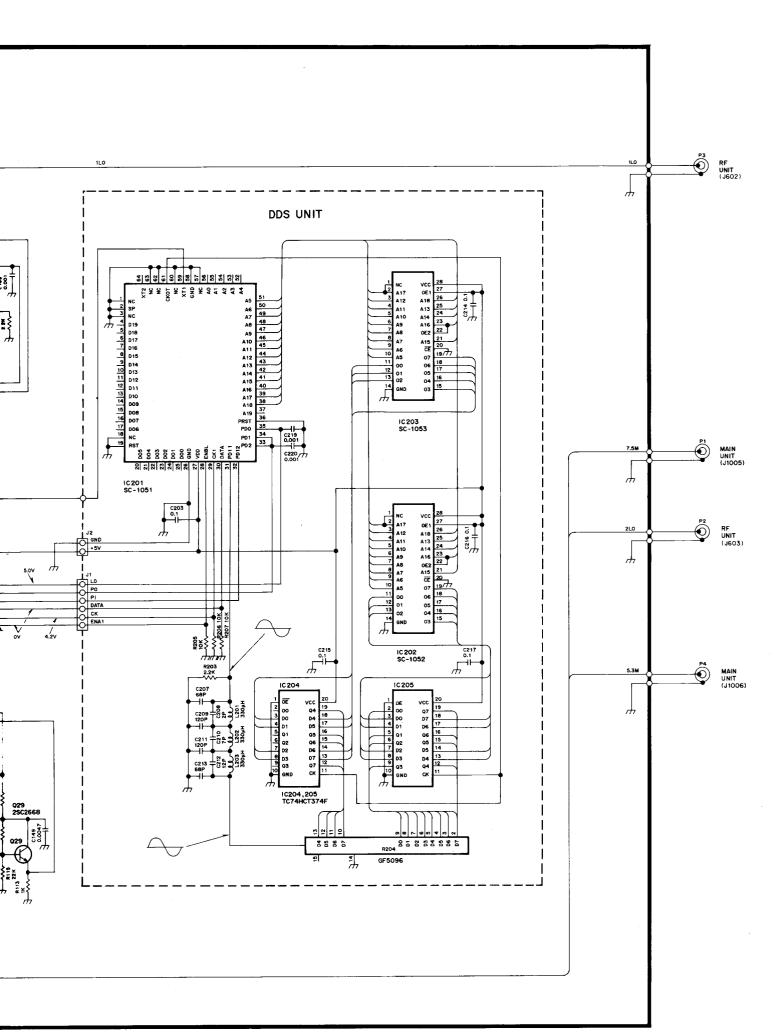


# 10-3 MAIN UNIT









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