

 ICOM

SERVICE MANUAL

HF MARINE TRANSCEIVER

IC-M710

Icom Inc.

INTRODUCTION

This service manual describes the latest service information for the **IC-M710 HF MARINE TRANSCEIVER** at the time of publication.

5 versions of the **IC-M710** have been designed. This service manual covers each version.

VERSION NO.	VERSION
#01	US General
#02	US Marine
#03	US GMDSS
#11	Eur Marine
#12	Eur GMDSS

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

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

<SAMPLE ORDER>

1110003140 IC LA1150N IC-M710 MAIN UNIT 5 pieces
8810008560 Screw PH M3 x 8 SUS ZKIC-M710 Rear panel 10 pieces

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

REPAIR NOTES

1. Make sure a problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a signal generator or a sweep generator.
7. **ALWAYS** connect a 50 dB to 60 dB attenuator between the transceiver and a deviation meter or spectrum analyzer when using such test equipment.
8. **READ** the instructions of test equipment thoroughly before connecting equipment to the transceiver.

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SECTION 1 SPECIFICATIONS

■ GENERAL

- Frequency coverage : Receive 0.5000–29.9999 MHz
Transmit 1.6000–2.9999 MHz 4.0000–4.9999 MHz
6.0000–6.9999 MHz 8.0000–8.9999 MHz
12.0000–13.9999 MHz 16.0000–17.9999 MHz
18.0000–19.9999 MHz 22.0000–22.9999 MHz
25.0000–27.5000 MHz
- Mode : J3E (USB), H3E, J2B (AFSK), F1B (FSK), R3E, A1A (CW)
(Available models differ depending on versions.)
- Number of channels : 1136 channels (max.)
[160 (user programmable), 242 (ITU SSB duplex), 72 (ITU SSB simplex),
662 (ITU FSK duplex)]
- Antenna impedance : 50 Ω (nominal)
- Usable temperature range : –30°C to +60°C (–22°F to +140°F)
- Frequency stability : ±10 Hz (–30°C to +60°C; –22°F to +140°F)
(±20 Hz above 15 MHz for General and Marine versions)
- Power supply requirement : 13.6 V DC ±15% Negative ground (U.S.A. versions)
13.6 V DC ±15% Floating ground (Europe versions)
- Current drain : Transmit (max. output power) 30 A
Receive (max. audio output) 2.5 A (U.S.A. versions)
3 A (Europe versions)
- Dimensions : 291.4 (W) × 315 (D) × 116.4 (H) mm
[11.3 (W) × 12.8 (D) × 4.4 (H) in.]
- Weight : 7.9 kg [17.4 lb.] (U.S.A. versions)
8.1 kg [17.9 lb.] (Europe versions)

■ TRANSMITTER

- Output power (selectable) : U.S.A. versions 150, 60, 20 W PEP (60, 20 W only for 25 MHz band)
Europe versions 150, 60 W PEP (60 W only for 250 MHz band)
- Spurious emissions : –65 dB (U.S.A. versions)
–60 dB (Europe versions)
- Carrier suppression : 40 dB
- Unwanted sideband suppression : 55 dB
- Microphone impedance : 600 Ω

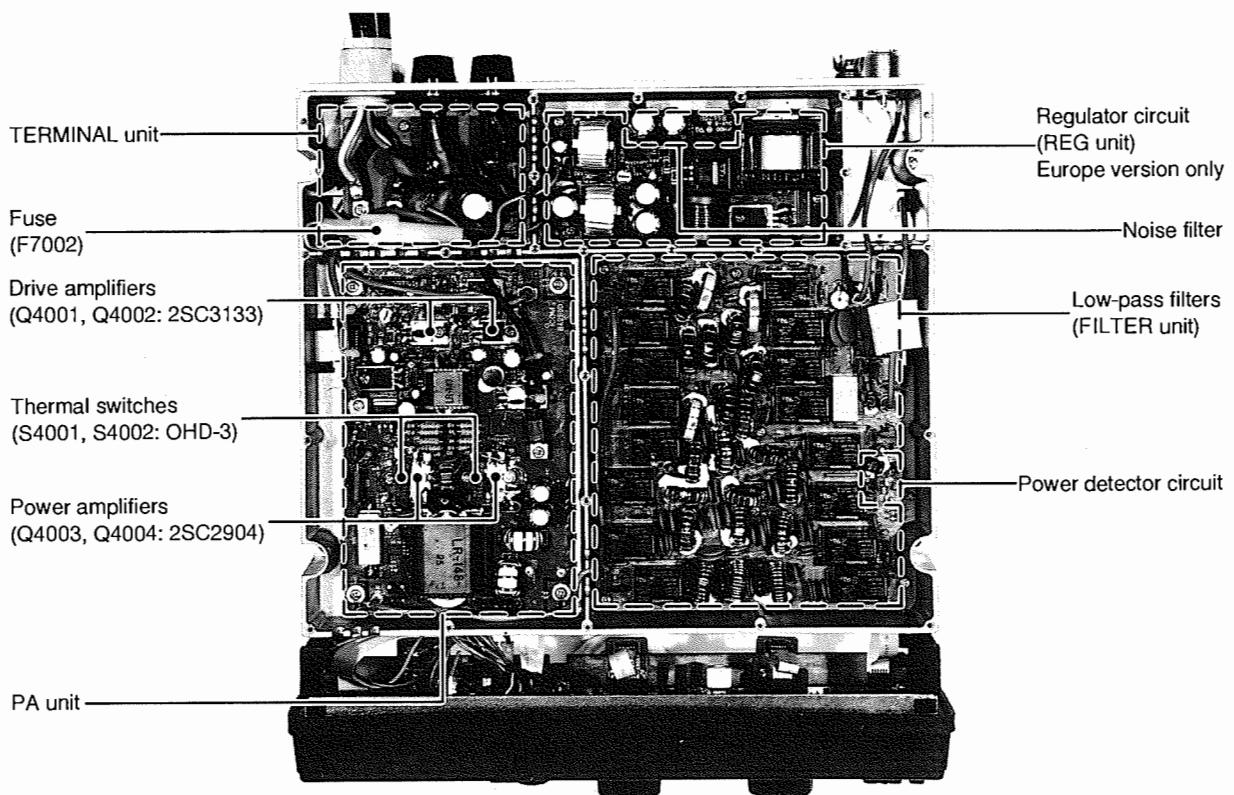
■ RECEIVER

- Sensitivity : J3E, R3E, J2B, F1B, A1A (for 12 dB SINAD):
0.5 μV (1.8000–29.9999 MHz)
1.0 μV (1.6000–1.7999 MHz)
6.3 μV (0.5000–1.5999 MHz)
H3E (for 10 dB S/N): 3.2 μV (1.8000–29.9999 MHz)
6.3 μV (1.6000–1.7999 MHz)
32 μV (0.5000–1.5999 MHz)
- Spurious response rejection : 70 dB (1.60000–29.9999 MHz)
- Audio output power : 4.5 W (at 10% distortion with a 4 Ω load)
- Audio impedance : 4 to 8 Ω
- Clarity variable range : ±150 Hz

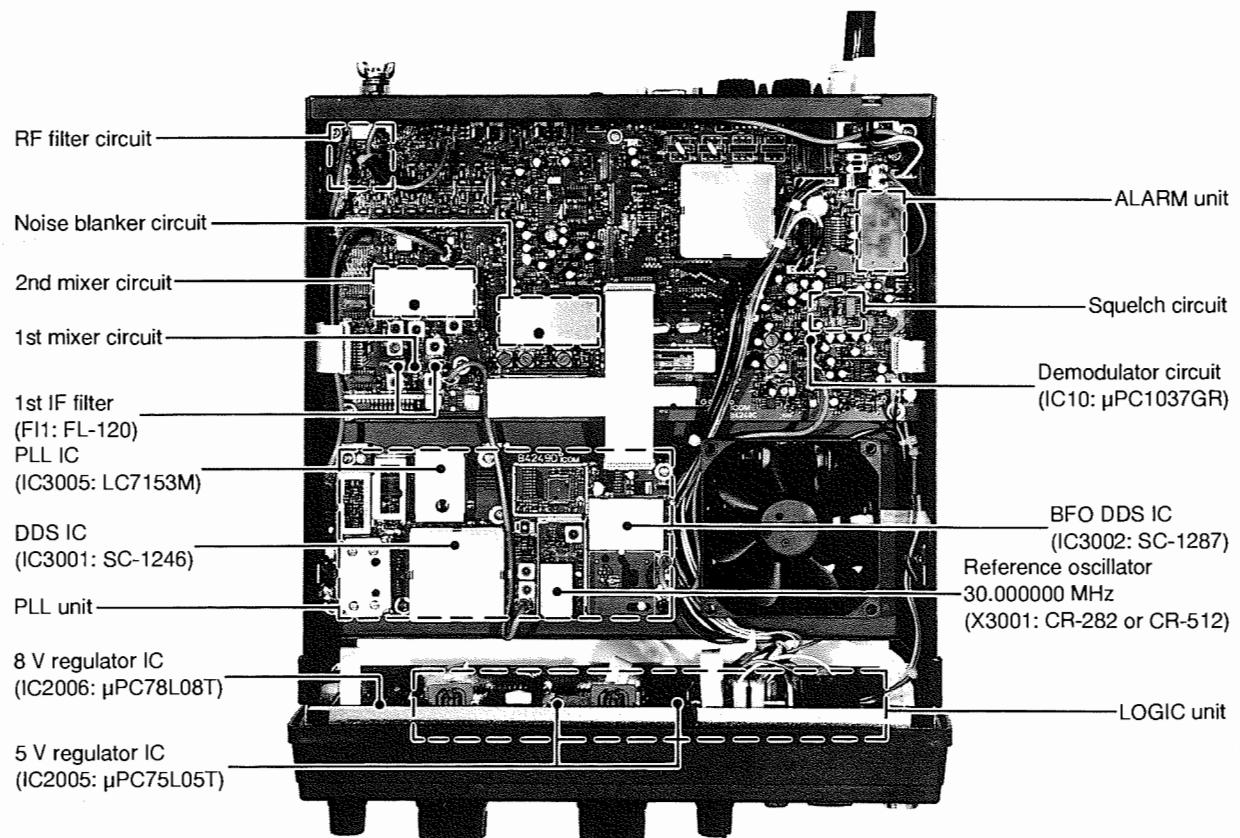
All stated specifications are subject to change without notice or obligation.

SECTION 2 INSIDE VIEWS

• PA, FILTER AND TERMINAL UNITS



• MAIN, PLL AND LOGIC UNITS



SECTION 3 CIRCUIT DESCRIPTION

3-1 RECEIVER CIRCUITS

3-1-1 RF FILTER UNIT (MAIN UNIT)

Received signals from the antenna connector pass through the transmit/receive switching relay (FILTER unit RL4317) and are then applied to the MAIN unit (via J2).

The signals pass through the protection relay (RL2), 1.6 MHz cut-off high-pass filter (C4–C8, L2–L4) and are then applied to one of nine bandpass filters (incl. one low-pass filter for below 2.0 MHz). These filters are selected by the filter control signals (B0–B8) as described in the table below.

The filtered signals pass through the 30 MHz cut-off low-pass filter (L71, L72, C130–134) and are then applied to the 1st mixer circuit (Q6, Q7).

- RF FILTERS USED

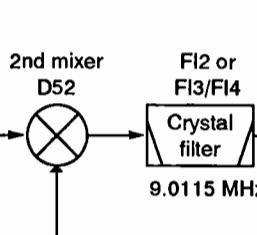
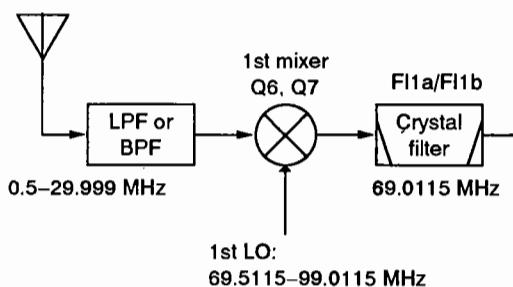
Frequency (MHz)	Control signal	Entrance coil	Frequency (MHz)	Control signal	Entrance coil
0.5–1.999	B0	L49	10–13.999	B5	L28
2–2.999	B1	L8	14–17.999	B6	L33
3–4.999	B2	L13	18–19.999	B7	L38
5–6.999	B3	L18	20–21.999		
			22–23.999	B8	L43
7–9.999	B4	L23	24–29.999		

3-1-2 1ST MIXER AND IF CIRCUITS (MAIN UNIT)

The 1st mixer circuit converts the received signal into a fixed frequency, 69.0115 MHz 1st IF signal using the PLL output frequency. By changing the PLL frequency, only the desired frequency will be picked up at the pair of crystal filters (Fl1a, Fl1b) at the next stage.

The IF amplifier (Q8) and resonator circuits are designed between the filter pair. The PLL output signal (1LO) enters the MAIN unit via J3 and is amplified at Q5 and then applied to the 1st mixer (Q7, Q8).

- RECEIVER FREQUENCY CONSTRUCTION



3-1-3 2ND MIXER AND IF CIRCUITS (MAIN UNIT)

The 1st IF signal from the crystal filter (Fl1b) is converted again into a 9.0115 MHz 2nd IF signal at the 2nd mixer circuit (D52, L66, L67). The 60 MHz 2nd local signal (2LO) enters the MAIN unit from the PLL unit via J4 to be applied to the 2nd mixer.

The 2nd IF signal is passed through the noise blunker gate (D15, D16) and amplified at the 2nd IF amplifier (Q16) and then applied to one of the 9 MHz IF filters as described below. The passed signal is amplified at the two stage 2nd IF amplifiers (Q32, Q33) and is applied to a demodulator circuit (D39 for H3E or IC10 for J3E and others).

- 2ND IF FILTERS USED

Mode	Used filter	Control signal
J3E, R3E, A1A, FSK	Fl2	SEL8; low; H3E8: low
H3E	Fl3/Fl4	SEL8: low; H3E8 high
FSK narrow, A1A narrow	Optional narrow filter*	SEL8: high; H3E8: low

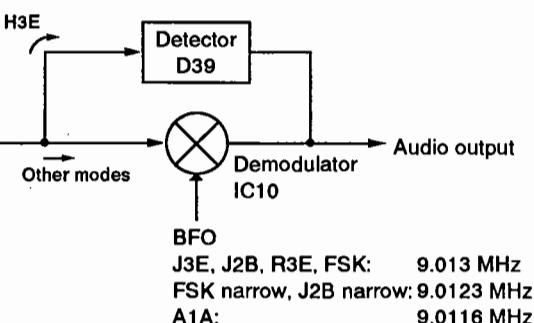
*Built-in to the GMDSS versions

3-1-4 NOISE BLANKER CIRCUIT (MAIN UNIT)

The noise blunker circuit cuts off the IF circuit line at the moment of receiving a pulse-type noise.

A portion of the 2nd IF signal between resonator circuits (L83, L84 after stage of the 2nd mixer, D52) is amplified at the noise amplifiers (Q9, IC8, Q11). The signal is then detected at the noise detector (D17) to convert the noise components to DC voltages.

The signals are then applied to the noise blunker switch (Q13, Q14). At the moment the detected voltage exceeds the Q13's threshold level, Q14 outputs a blanking signal to close the noise blunker gate (D15, D16) by applying reverse-biased voltage. Q15 turns the noise blunker circuit ON and OFF.



The detected voltage is also applied to the noise blanker AGC circuit (Q12, Q10) and is then fed back to the noise amplifier (IC8) as a bias voltage. The noise AGC circuit prevents closure of the noise blanker gate for long periods by non-pulse-type noise. The time constant of the noise blanker AGC circuit is determined by R58 and C114.

3-1-5 DEMODULATOR CIRCUIT (MAIN UNIT)

This circuit mixes the 2nd IF and BFO signals to pick up the AF components (except H3E mode). The 2nd IF signal from Q33 is applied to the balanced mixer (IC10 pin 6). The 9.0106–9.013 MHz BFO signal from the PLL unit is also applied to IC10 (pin 8). AF signals are output from pin 3 and are then applied to the AF circuits.

3-1-6 H3E DETECTOR CIRCUIT (MAIN UNIT)

The 2nd IF signal from Q33 is applied to the AM detector circuit (D39) to be demodulated into AF signals. The detected signals are amplified at Q45 and are then applied to the AF circuits.

3-1-7 AGC CIRCUIT (MAIN UNIT)

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

A portion of the IF signals from the 2nd IF amplifier (Q33) is detected at the AGC detector circuit (D31) and is then applied to the AGC amplifier (Q41) to control the AGC time constant line. The reference voltage of the AGC line is controlled by the "RFG" line which comes from the CPU for the RF gain settings.

When receiving a strong signal, the detected voltage increases and the voltage of the AGC line is decreased by Q41 via the -5 V voltage line. The AGC line is used for the bias voltage of the IF amplifiers (Q8, Q16, Q32, Q33), so that these amplifiers reduce gain.

When the strong signal disappears, the AGC line voltage is released by C245/R268 and C670/R813.

The AGC switch (Q42, D38) turns the AGC circuit OFF when the AGC OFF function activates. The AGC-fast switch (Q131) sets the AGC line as fast-release during scanning, A1A mode selection, and DSC operation.

3-1-8 S-METER CIRCUIT (MAIN UNIT)

The S-meter indicates the AGC level on the display, since the AGC level varies with the received signal strength.

The AGC bias voltage (AGC time constant line) from Q41 is inverted and amplified at IC19b. The amplified signal is applied to the CPU via the "RSM" line.

3-1-9 AF AMPLIFIER CIRCUITS (MAIN AND LOGIC UNITS)

AF signals from the demodulator or H3E detector circuit pass through the active low-pass filter (IC20b) and squelch gate (IC12a), and are then applied to the electronic volume control (IC36). The CPU (pin 37) outputs the volume control signal (1 to 5 V) according to the [VOLUME] control setting.

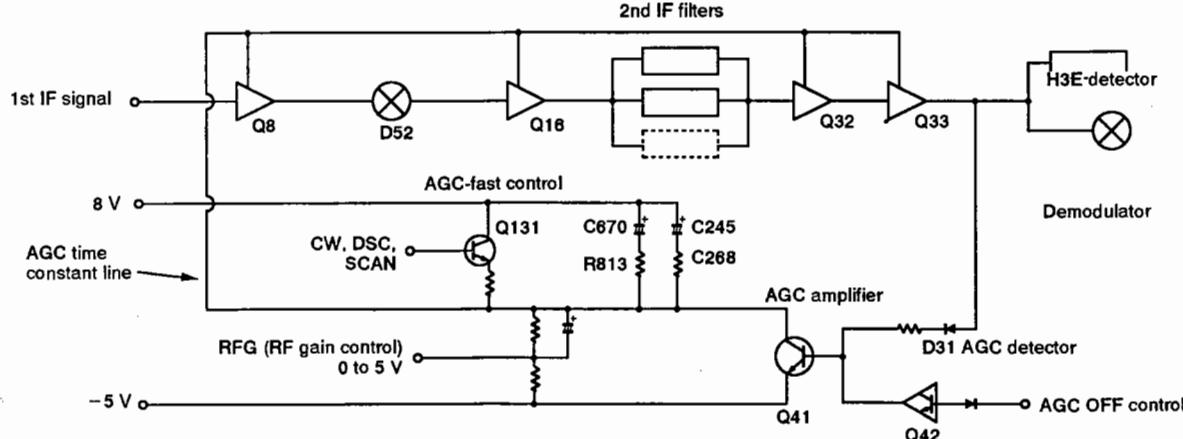
The AF output signals from IC36 (pin 9) are applied to the LOGIC unit via J23. The signals are amplified at the AF power amplifier (IC2007) and then applied to the internal speaker via the microphone connector (pins 3 and 4) and external [SP] jack via the MAIN unit.

The speaker switch relay (RL2001) is connected to the \ominus terminal of the internal speaker for the [SPEAKER] switch function.

3-1-10 SQUELCH CIRCUIT (MAIN UNIT)

The transceiver has two squelch circuits, voice activated squelch for J3E/H3E and S-meter squelch for A1A/FSK.

• AGC CIRCUIT



(1) AF ACTIVATED SQUELCH

A portion of the AF signal from the active low-pass filter (IC20b) is amplified at the limiter amplifier (IC20a) and is then applied to the one-shot multi-vibrator (IC22c, IC22d). The one-shot multi-vibrator functions as an F-V converter which generates a signal only when audio signals are received.

The output signals pass through the NOR gate (IC22b) and then the 3 Hz low-pass filter (IC21a) to remove the remaining noise components. The filtered signal is applied to the window comparator (IC21b). The NOR gate (IC22b) deactivates the audio activated squelch during A1A/FSK/J2B mode operation.

The comparator outputs "High" when the integrated signals exceed the reference voltage. C269, R310 and R780 are used as a time constant circuit. The resulting signal output from IC22a is inverted at Q46 and is then applied to the CPU as the "SQL S" signal. The CPU controls the squelch gate (IC12a) when the "SQL S" signal is received.

(2) S-METER SQUELCH

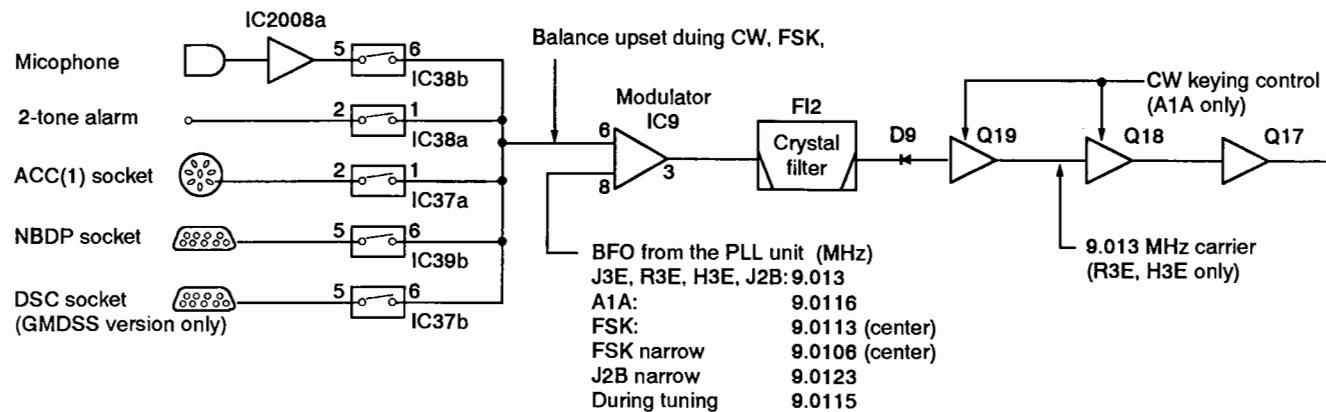
The S-meter signal from IC19b is applied to the squelch comparator (IC19a) to close or open the squelch circuit. The reference voltage is adjusted by R257 and then applied to the \ominus terminal of the comparator (IC19a). When the S-meter signal exceeds the reference voltage, the comparator outputs "High" to the CPU via IC22a and Q46 in the same manner as the voice activated squelch circuit.

3-2 TRANSMITTER CIRCUITS

3-2-1 MICROPHONE AMPLIFIER CIRCUIT (LOGIC UNIT)

The AF signals from the [MICROPHONE] connector are amplified at the AF amplifier (IC2008a) and are applied to the balanced modulator (MAIN unit IC9) via the AF switch (IC38b). The microphone AGC circuit (D2008, D2009, Q2009) controls the amplifier gain to prevent signal distortion.

• MODULATOR CIRCUIT



External modulation inputs from the ACC, NBDP, DSC sockets or a 2-tone emergency signal from the CPU are applied to the balanced modulator directly via AF switches (IC37–IC39).

3-2-2 MODULATION CIRCUIT (MAIN UNIT)

(1) J3E AND J2B MODES

The balanced modulator is used for J3E and J2B modes to add the audio signal to the BFO frequency and outputs the IF signal while suppressing the BFO signal.

The AF signals from the microphone amplifier or external audio from the modulation terminals are applied to the balanced modulator (IC9 pin 6). The BFO signal from the PLL unit is applied to IC9 (pin 8) as a carrier signal. A double sideband signal is output from IC9 (pin 3) and is then applied to the 9 MHz filter (F12) to create an SSB signal.

R238 and R239 adjust the balanced level of IC9 for maximum carrier suppression. In J2B mode, the BFO frequency is shifted 1.7 kHz to set the transmit frequency the same as the displayed frequency.

The SSB signal from F12 is amplified at the 9 MHz amplifiers (Q17–Q19) and is then applied to the mixer circuit (D52). The switching diode (D19) is turned ON when R8 voltage disappears.

(2) H3E AND R3E MODES

An SSB signal is applied to the IF amplifier (Q18) in the same manner as with J3E/J2B mode. The BFO signal from the PLL unit is amplified at Q30 and is then applied to the IF amplifier (Q18) as a carrier signal to be added to an SSB signal. R211 and R212 adjust the carrier levels in H3E and R3E modes, respectively.

(3) A1A AND FSK MODES

The CW8 or FSK8 voltages are applied to the balanced modulator (IC9 pin 6) to upset the balance and create a carrier signal.

In A1A mode, the CW keying circuit (IC18a) controls the bias voltage of the IF amplifiers (Q18, Q19) and T/R switching diode (D19) to switch the carrier transmission.

In FSK mode, BFO frequency is shifted in the PLL unit to create the mark and space frequencies.

3-2-3 1ST MIXER CIRCUIT (MAIN UNIT)

The amplified signal from the IF amplifier (Q17) is mixed with a 60 MHz LO signal at the 1st mixer circuit (D52) to produce a 69.0115 MHz IF signal. The mixer is commonly used with the receiver 2nd mixer.

The 69.0115 MHz IF signal passes through the filter (F1b) and is then applied to the 2nd mixer circuit.

3-2-4 2ND MIXER CIRCUIT (MAIN UNIT)

The filtered signal is mixed with a PLL output frequency (1LO; 69.5155–99.0155 MHz) at the 2nd mixer circuit (Q3, Q4) to produce an RF signal which is the same frequency as the displayed one.

3-2-5 RF FILTER CIRCUIT (MAIN UNIT)

The RF signal passes through the low-pass filter (L55, L56, C89–C93) and is then amplified at the RF amplifier (Q2).

The amplified signal is applied to one of nine RF filters. These RF filters are commonly used with the receiver circuit which consists of eight high-pass filters and one low-pass filter. The filtered signal is amplified at Q1 and is then applied to the PA unit via J1.

3-2-6 POWER AMPLIFIER CIRCUIT (PA AND FILTER UNITS)

This circuit provides a stable 150 W (at 13.6 V DC) of output power. The RF signal from the MAIN unit is amplified at the pre-driver (Q4008), drivers (Q4001, Q4002) and power amplifier (Q4003, Q4004).

The driver and power amplifiers form class AB push-pull circuits. Bias voltage to these transistors is produced by diodes (D4001–D4003) which have temperature junctions with the transistors.

The amplified signal is then applied to one of eight low-pass filters to suppress high harmonic components. The filtered signal passes through the power detector circuit (L4341) and transmit/receive switching relay (RL4317) and is then applied to the antenna connector.

• LOW-PASS FILTERS USED

Frequency (MHz)	Control signal	Entrance relay	Frequency (MHz)	Control signal	Entrance relay
0.5–1.999	L0	RL4301	10–13.999	L5	RL4311
2–2.999	L1	RL4303	14–17.999		
3–4.999	L2	RL4305	18–19.999	L6	RL4313
5–6.999	L3	RL4307	20–21.999		
7–9.999	L4	RL4309	22–23.999	L7	RL4315
			24–29.999		

3-2-7 ALC CIRCUIT

The transceiver has two ALC (Auto Level Control) loops for constant output power over all marine bands and for high power setting.

(1) IF ALC CIRCUIT (MAIN UNIT)

A portion of the IF signals from Q17 is applied to the IF ALC circuit. The signal is amplified at Q126 and then detected at the ALC detector (D46). The detected signal is amplified at the ALC amplifier (IC17b) and is then applied to the comparator (IC17a).

The reference voltage for the comparator is set by R184. The antenna tuning control voltage (TUN8) and low power set signal (POC1) are also affected by the reference voltage to decrease the IF signal level.

The comparator output controls the gate bias of the IF amplifier (Q19), so that the IF signal level is determined by the reference voltage of the comparator (IC17a).

(2) RF ALC CIRCUIT (FILTER AND MAIN UNITS)

The RF output power level is detected at D4309 of the power detector circuit (L4341, D4309, D4310) in the FILTER unit. The detected signal ("FOR" signal) is applied to the RF ALC amplifier (IC16a) in the MAIN unit.

The amplified signal enters the transmit gain controller (IC16b) which functions as an inversion amplifier. The gain controller decrease the gain of the IF amplifier (Q2) to constant output power from different amplifier gains which are occurred by their frequency characteristics.

The bias voltage of the RF ALC amplifier (IC16a) is controlled by the low power control signal (POC1 for 20 W, POC2 for 60 W) and APC signal.

3-2-8 APC CIRCUIT

The APC (Auto Power Control) circuit protects the power amplifiers on the PA unit from high SWR and excessive current.

(1) SWR APC (FILTER AND MAIN UNITS)

The reflected wave signal appears and increases on the antenna connector. When the antenna is mismatched, D4310 of the power detector circuit (D4309, D4310, L4341) in the FILTER unit detects the signal and applies it at the APC amplifier (Q23) in the MAIN unit. The output signal decreases the bias voltage of the RF ALC amplifier to reduce the output power.

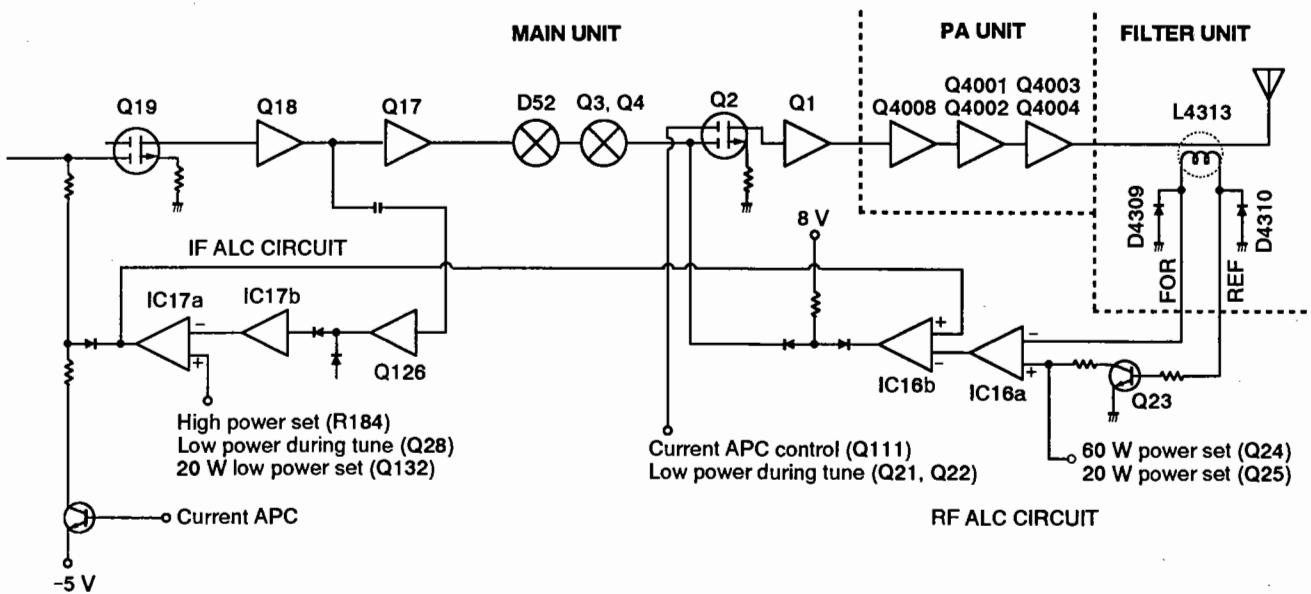
(2) CURRENT APC (PA AND MAIN UNITS)

The power transistor current is detected from the different voltages between both terminals of a $0.012\ \Omega$ resistor (R4026) on the PA unit. The detected voltage is applied to the differential amplifier (IC4002b). When the current of the final transistors is more than 30 A, the detected voltage is applied to the IC APC amplifier (Q111) in the MAIN unit to reduce the gate-2 voltage of the IF amplifier (Q2) and thus reduce the output power.

3-2-9 TEMPERATURE PROTECTION (PA UNIT)

Thermal switches (S4001, S4002) protect the final transistors from excessive temperatures. When the temperature exceeds 50°C , S4002 is turned ON to start the cooling fan. When the temperature exceeds 110°C , S4001 is turned ON to control the "POC2" line and sets the power to 60 W.

• ALC CIRCUIT



3-2-10 RF METER CIRCUIT (MAIN UNIT)

The output of the ALC amplifier (IC16a) is applied to the CPU (pin 31) to indicate the transmit power level on the display.

For antenna current meter indication, the "ANTC" signal from an optional AT-130E is applied to the CPU (pin 32).

3-3 PLL CIRCUIT

3-3-1 GENERAL

The PLL unit generates a 1st LO frequency (69.5155–99.0115 MHz), 2nd LO frequency (60 MHz) and a BFO frequency (9.01–9.013 MHz) for the MAIN unit. The 1st LO PLL adopts a mixerless dual loop system. The BFO uses a DDS and a 2nd LO as a fixed frequency double that the crystal oscillator.

3-3-2 1ST LO PLL (PLL UNIT)

The 1st LO PLL contains a main loop and reference loop as a dual loop system. The reference loop generates a 10.65 to 10.75 MHz frequency using a DDS circuit, and the main loop generates a 69.5115 to 99.0115 MHz frequency using the reference loop frequency.

(1) REFERENCE LOOP PLL

The oscillated signal at the reference VCO (Q3005, D3003) is amplified at the buffer amplifiers (Q3006, Q3011) and is then applied to the DDS IC (IC3001, pin 46). The signal is then divided and detected on phase with the DDS generated frequency.

The detected signal output from IC3001 (pin 56) is converted into a DC voltage (lock voltage) at the loop filter (R3018, R3019, C3044) and then fed back to the varactor diode (D3003) in the VCO circuit.

(2) MAIN LOOP PLL

The oscillated signal at the main loop VCO (Q3003, D3004) is amplified at the buffer amplifiers (Q3004, Q3008) and is then applied to the PLL IC (IC3005, pin 14). The signal is then divided and detected on phase with the reference loop output frequency.

The detected signal output from IC3005 (pins 9, 10) is converted into a DC voltage (lock voltage) at the loop filter and then fed back to the varactor diode (D3004) in the VCO circuit.

The oscillated signal is amplified at the buffer amplifiers (Q3004, Q3021, Q3024) and then applied to the MAIN unit as a 1st LO signal.

3-3-3 2ND LO AND REFERENCE OSCILLATOR CIRCUITS

The reference oscillator (X3001, Q3001) generates 30.0 MHz frequency used for the both DDS ICs as a system clock and for the LO output. The oscillated signal is doubled by 2 at Q3002 and picked up the 60 MHz frequency at the resonator circuit (L3004, L3005). The 60 MHz signal is applied to the MAIN unit as a 2nd LO signal.

3-3-4 BFO

The DDS IC (IC3002) generates a 10-bit digital signal using the 30 MHz system clock. The digital signal is converted to an analog wave signal at the D/A converter (R3120–R3139). The analog wave is passed through the low-pass filter (L3037, L3038, C3154–C3158) and is then applied to the MAIN unit as the BFO signal.

3-4 DC-DC CONVERTER CIRCUIT (REG UNIT; Europe version only)

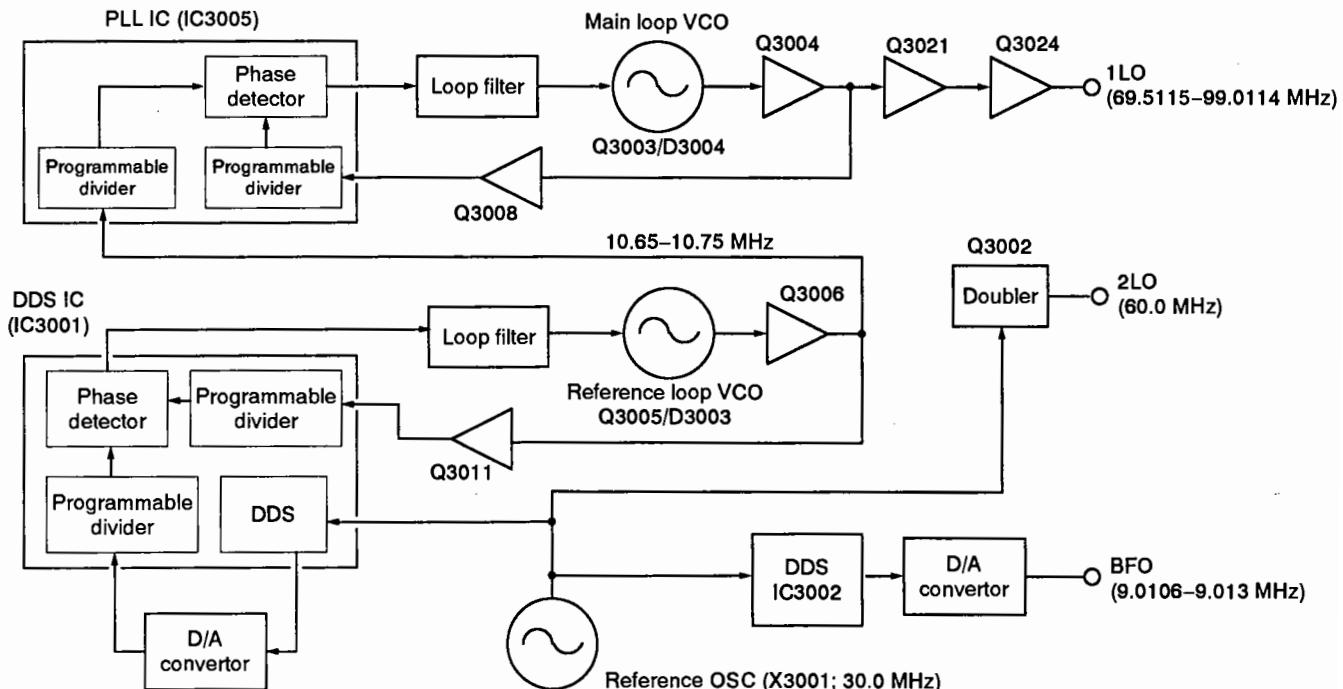
The IC-M710 Europe version employs a floating grounding system which is not connected between the transceiver's ground and \ominus terminal of the power supply. The PA unit has separate grounding from the other units to obtain floating.

The 13.6 V DC from the the DC power connector passes through the noise filter (L8001, C8001–C8005) and is then applied to the switching transformer (T8001). The MOS FET (Q8001) is turned ON and OFF by D8003 and Q8003 respectively.

IC8001 is a switching control IC which contains a 5 V reference voltage regulator (pin 12, 14), two error amplifiers (pins 1, 2, 3, 15, 16), a saw tooth oscillator (pins 4, 5, 6) and a comparator. The switching frequency is determined by R8008 and C8007 and is set at 36 kHz.

AC voltages appear on the secondary terminals of T8001 and are rectified by D8002. The rectified DC voltages are passed through the noise filter (L8003, C8009, C8010) and are then applied to the MAIN unit as a 13.6 V DC voltage line.

• PLL CIRCUIT



3-5 CPU PORT ALLOCATIONS

- MAIN UNIT IC132

Pin No.	PORT NAME	DESCRIPTION	Pin No.	PORT NAME	DESCRIPTION
1	RES	Input port for the CPU reset signal. When receiving a "LOW" pulse, the CPU is reset.	36	RFG	Outputs RF gain control signal to the AGC circuit.
10	RXDO	Data input port from the sub CPU in the FRONT unit.	37	AFG	Outputs AF gain control signal to the electronic volume control (IC36).
11	TXDO	Data output port to the sub CPU in the FRONT unit.	39	STAT	Outputs the "tuner start" pulse to an optional AT-130E.
16	NSEN	Input port for the NBDP equipment.	40	BEEP	Outputs a beep signal (1 kHz or 500 Hz).
17	POC2	Outputs low power control signal for 60 W power.	41	STB1	Outputs a strobe signal to the main loop PLL IC (IC3005).
18	POC1	Outputs low power control signal for 20 W power.	42	STB2	Outputs a strobe signal to the reference loop DDS IC (IC3001).
20	CWIN	CW keying input. High: when key is closed.	48	STB3	Outputs a strobe signal to the BFO PLL IC (IC3002).
21	ASEN	Outputs a "SEND" control signal for the ACC (1) and (2) sockets.	49	DATA	Outputs data to PLL and DDS ICs.
22	CSEN	Outputs a "SEND" control signal for T8 and R8 voltage line control. Low: for transmit.	50	CK	Outputs a clock signal to PLL and DDS ICs.
23	ALMS	Outputs an alarm control signal to activate the 2-tone emergency alarm encoder. High: alarm ON.	51	SQL C	Outputs an AF mute signal for squelch function. "High" for squelch closed.
24	ALMC	Outputs a tone switching signal for the 2-tone emergency alarm encoder. High: high tone.	52	NBS	Outputs a "noise blanker" signal. "High" for noise blanker ON
25	SCL	Outputs a clock signal to the EEPROM (IC134).	53	AGCS	Outputs an AGC-OFF signal. "High" for AGC deactivate
26	SDA	Data bus line for the EEPROM (IC134).	54	NMS	Outputs an external NBDP equipment control signal. "Low" during NBDP data output.
27	SCL	Outputs a clock signal to the EEPROM (IC135).	55	P20	Outputs a strobe signal for an initial matrix.
28	SDA	Data bus line for the EEPROM (IC135).	57-60	P17-P14	Input ports for an initial matrix.
30	RSM	Input port for the S-meter indication.	61-64	PD-PA	Output band signals for RF LPF and BPF selection.
31	MFOR	Input port for the RF-meter indication for U.S.A. version.	65-67	J2B, R3E, H3E	Output mode signals.
32	ANTC	Input port for the antenna current meter indication for Europe version. The ANTC signal can be received when an optional AT-130E is connected.	68	KEY	Input port for an optional AT-130/E. During tuning: "Low".
33	SQLS	Input port for the squelch detected signal. High: when squelch opens.	69	CW	Outputs a mode signal.
34	TRC	Input port for the transmit/receive switching signal.	70	TUNE	Outputs an antenna tuner tuning control signal for transceiver's power/mode control.
35	SCAS	Input port for scan control signal from the ACC(1) socket.	71	FSEL	Outputs a narrow filter selection signal. "Low" for an optional narrow filter selection.
			72	PROG	Outputs a program scan control signal for "AGC fast" and "audio squelch" deactivation.

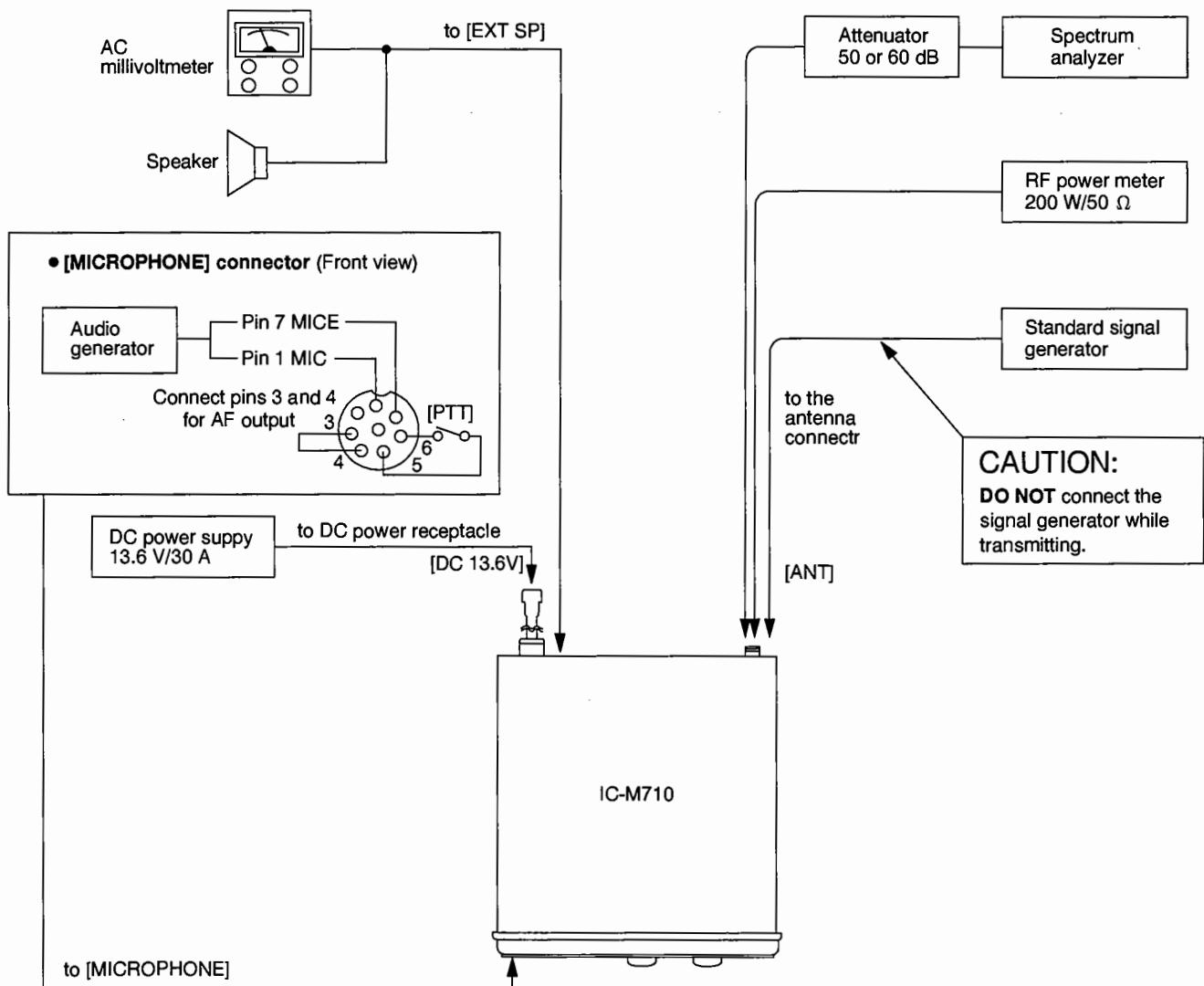
SECTION 4 ADJUSTMENT PROCEDURES

4-1 PREPARATION BEFORE SERVICING

■ REQUIRED TEST EQUIPMENT

EQUIPMENT	GRADE AND RANGE	EQUIPMENT	GRADE AND RANGE
DC power supply	Output voltage : 13.6 V DC Current capacity : 30 A or more	DC voltmeter	Input impedance : 50 kΩ/DC or better
		AC millivoltmeter	Measuring range : 10 mV-10 V
RF power meter (terminated type)	Measuring range : 10-200 W Frequency : 1.8-30 MHz Impedance : 50 Ω SWR : Less than 1.2 : 1	External speaker	Impedance : 4 Ω
		DC ammeter	Measurement capability : 1 A / 3 A / 50 A
Frequency counter	Frequency range : 0.1-100 MHz Frequency accuracy : ±1 ppm or better Sensitivity : 100 mV or better	Audio generator	Frequency range : 300-3000 Hz Output level : 1-500 mV
		Attenuator	Power attenuation : 40 or 50 dB Capacity : 150 W or more
		Spectrum analyzer	Frequency minimum : At least 90 MHz Spectrum bandwidth : ±100 kHz or more
RF voltmeter	Frequency range : 0.1-100 MHz Measuring range : 0.01-10 V		
Oscilloscope	Frequency range : DC-100 MHz Measuring range : 0.01-10 V		
Standard signal generator (SSG)	Frequency range : 0.1-30 MHz Output level : -127 to -17 dBm : (0.1 μV-32 mV)		

■ CONNECTION



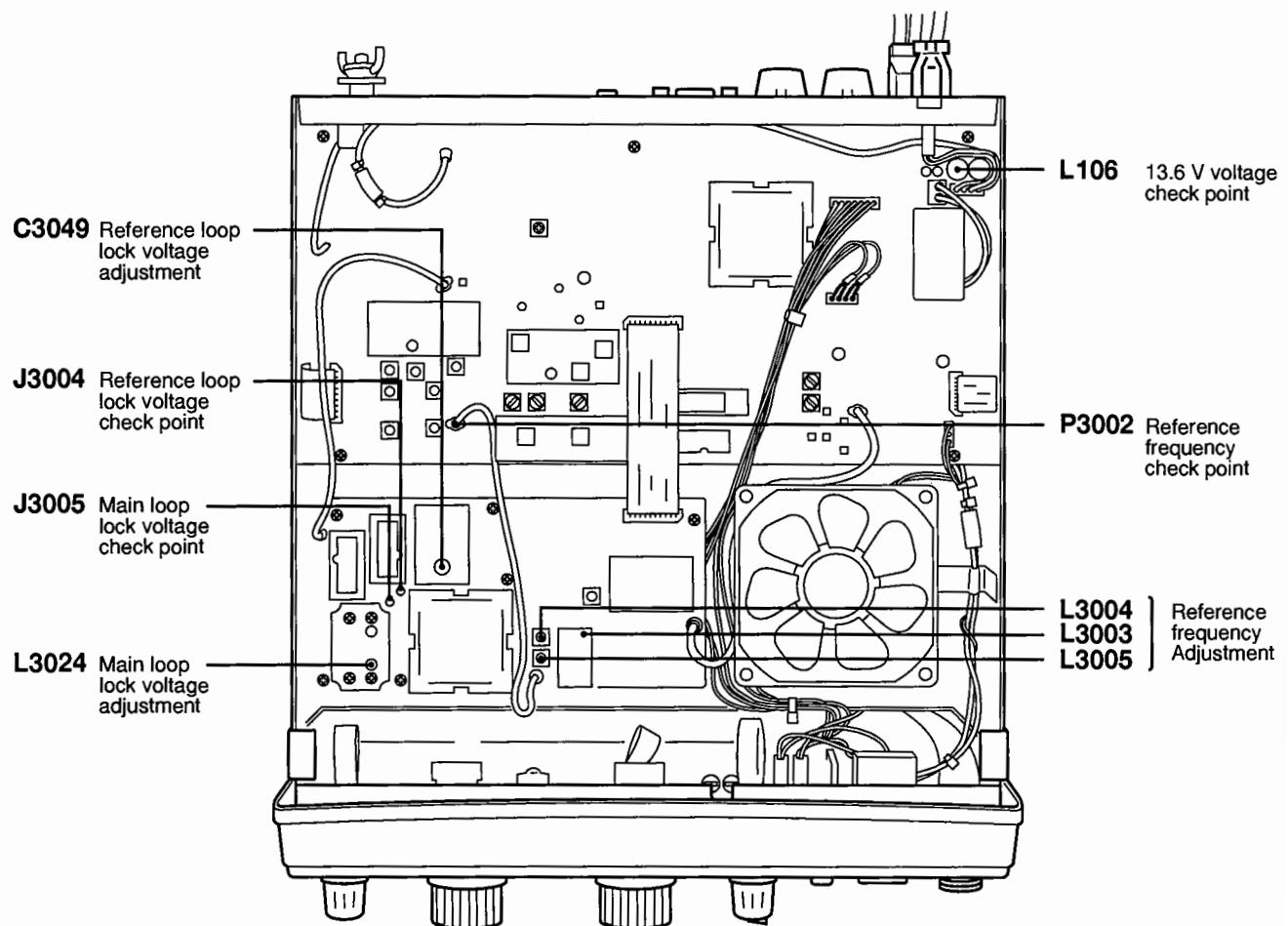
4-2 PLL ADJUSTMENT

ADJUSTMENT		ADJUSTMENT CONDITIONS		MEASUREMENT		VALUE	ADJUSTMENT POINT	
				UNIT	LOCATION		UNIT	ADJUST
REFERENCE LOOP LOCK VOLTAGE	1	<ul style="list-style-type: none"> • Displayed frequency: 7.9999 MHz • Mode : J3E • Receiving 	PLL	Connect a digital multimeter or oscilloscope to J3004.	3.2 V	PLL	C3049	Verify
	2							
MAIN LOOP LOCK VOLTAGE	1	<ul style="list-style-type: none"> • Displayed frequency: 0.5000 MHz • Receiving 	PLL	Connect a digital multimeter or oscilloscope to J3005.	4.0 V	PLL	L3024	Verify
	2							
REFERENCE FREQUENCY	1	<ul style="list-style-type: none"> • Receiving • Wait for 5 min. after power ON. 	PLL	<p>Terminate P3002 to ground with a 50 Ω resistor. Connect an RF voltmeter to P3002.</p>	Maximum level (More than +2 dBm)	PLL	L3004, L3005	L3003
(Gen, Marine only)	2							

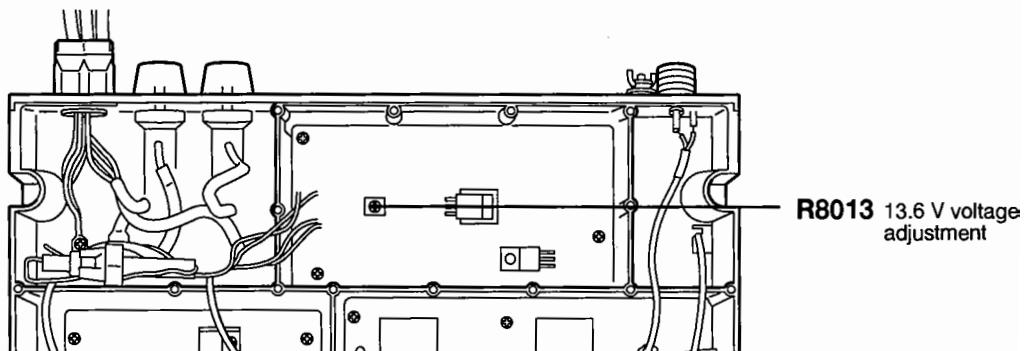
4-3 POWER VOLTAGE ADJUSTMENT

ADJUSTMENT		ADJUSTMENT CONDITIONS		MEASUREMENT		VALUE	ADJUSTMENT POINT	
				UNIT	LOCATION		UNIT	ADJUST
13.6 V VOLTAGE (Europe version only)	1	<ul style="list-style-type: none"> • Turn power ON. 	MAIN	Connect a DC voltmeter to L106.	13.6 V	REG	R8013	

• MAIN AND PLL UNITS



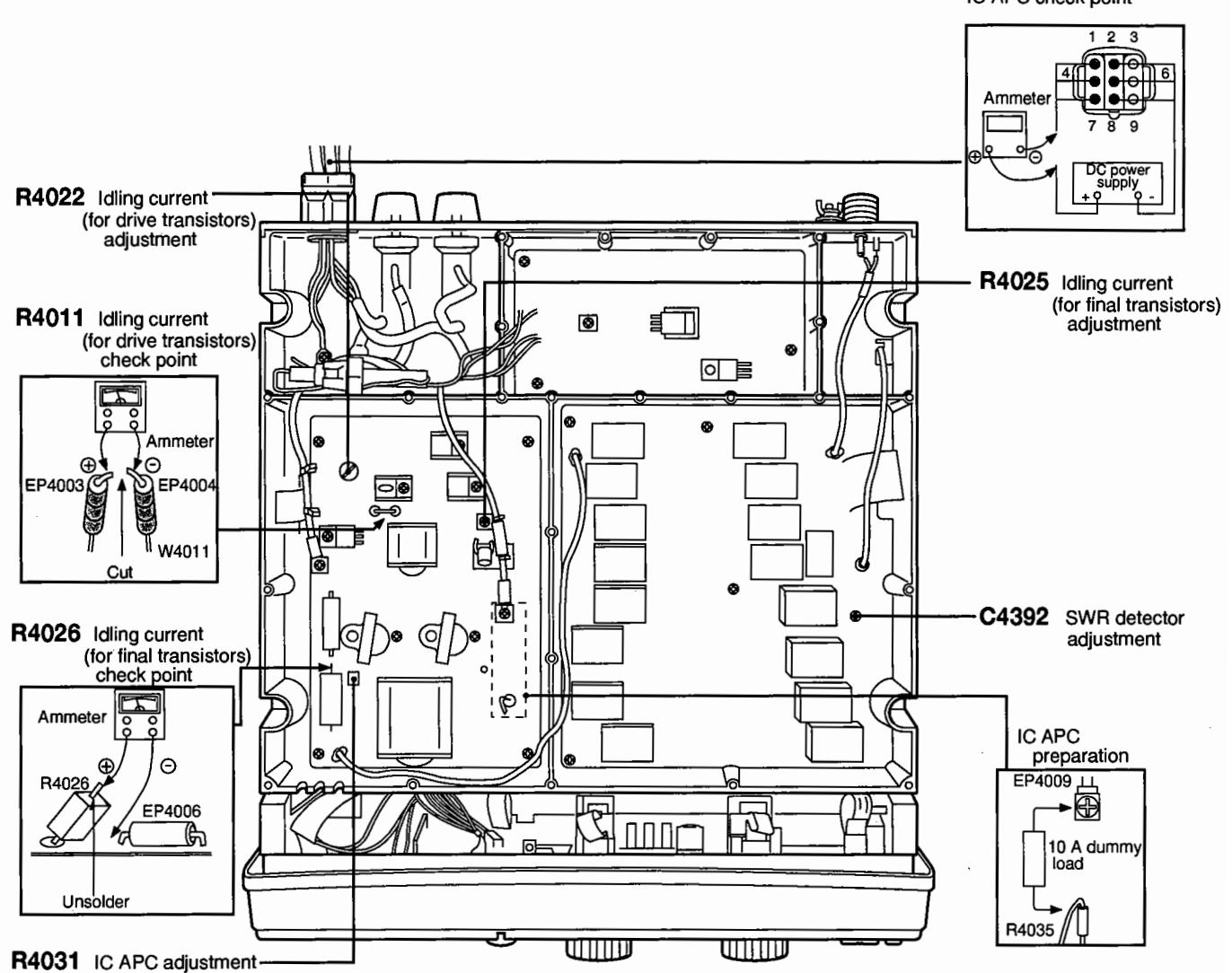
• REG UNIT (Europe version only)



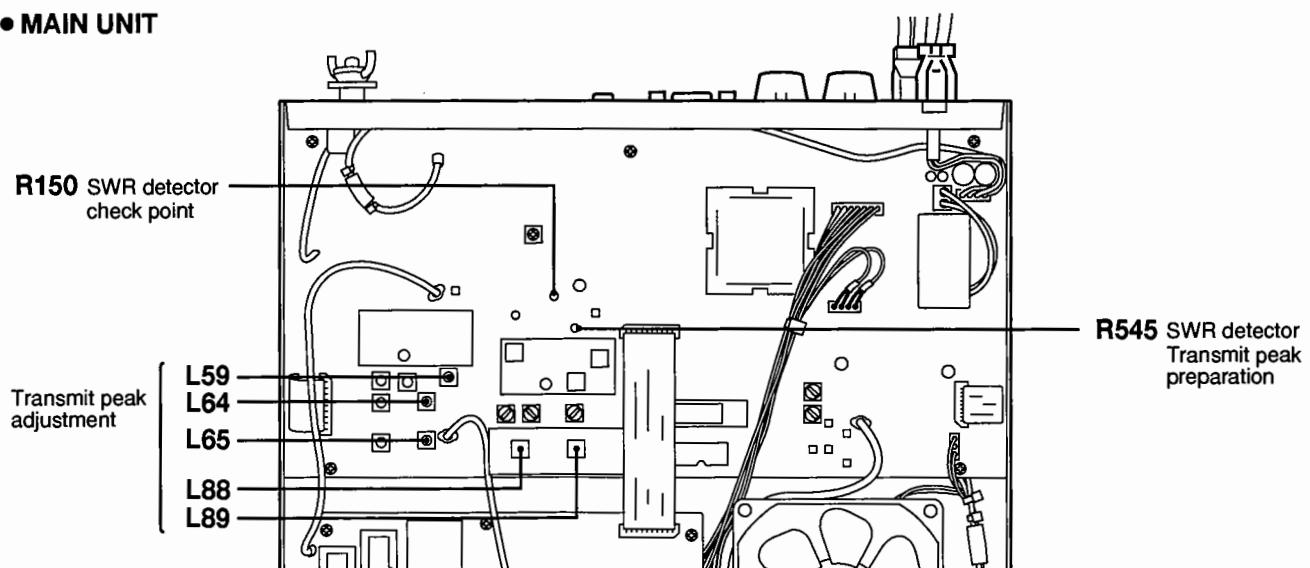
4-4 TRANSMITTER ADJUSTMENT

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION		UNIT	ADJUST
IDLING CURRENT (For drive transistors)	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : J3E • Apply no signal to the [MICROPHONE] connector. • Transmitting 	PA	Cut the lead wire (W4011) and connect a DC ammeter to the cut points.	100 mA	PA	R4022
		After adjustment, re-solder the lead wire (W4011).					
(For final transistors)	2	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : J3E • Apply no signal to the [MICROPHONE] connector. • Transmitting 	PA	Unsolder R4026 and connect the DC ammeter to the unsoldered points.	500 mA	PA	R4025
		After adjustment, re-solder R4026.					
IC APC	1	<ul style="list-style-type: none"> • Displayed frequency: 22.0000 MHz • Mode : J3E • Preset R4031 on the PA unit to the maximum counterclockwise position. • Connect a dummy load (10 A) between the lead of R4035 (power line) and EP4009 (power ground) on the PA unit. • Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz Level : 100 mV rms • Connect an RF power meter to the [ANT] connector. • Transmitting 	Rear panel	Connect a DC ammeter between the DC power supply and DC power receptacle (DC input +).	30 A	PA	R4031
		After adjustment, remove the dummy load.					
SWR DETECTOR	1	<ul style="list-style-type: none"> • Displayed frequency: 22.0000 MHz • Mode : J3E • Ground the lead of R545 on the MAIN unit with a wire. 	Rear panel	Connect an RF power meter to the [ANT] connector.	140 W	Audio generator	Output level
		<ul style="list-style-type: none"> • Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz • Transmitting 		MAIN			
After adjustment, remove the wire from R545.							
TRANSMIT PEAK	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : J3E • Ground the lead of R545 on the MAIN unit with a wire. • Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz Level : 3 mV • Transmitting 	Rear panel	Connect an RF power meter to the [ANT] connector.	Maximum output	MAIN	Adjust in sequence L89, L88, L65, L64, L59
		After adjustment, remove the wire from R545.					

• PA AND FILTER UNITS



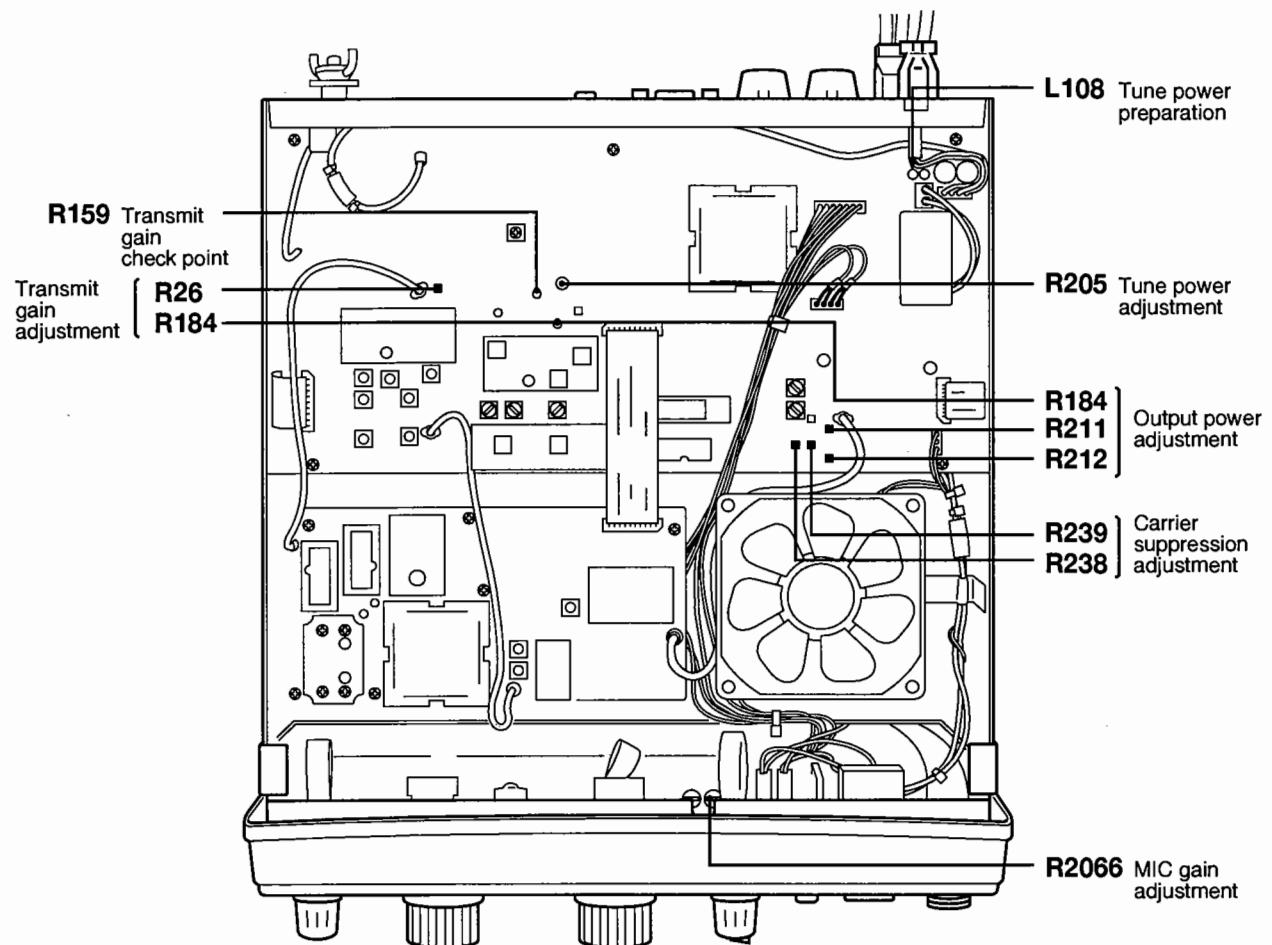
• MAIN UNIT



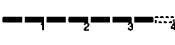
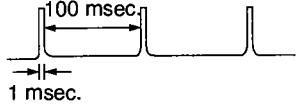
TRANSMITTER ADJUSTMENT (CONTINUED)

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION		UNIT	ADJUST
TRANSMIT GAIN	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : A1A • Transmitting 	Rear panel	Connect an RF power meter to the [ANT] connector.	140 W	MAIN	R184
	2	<ul style="list-style-type: none"> • Displayed frequency: 16.3650 MHz 	MAIN	Connect a digital multimeter to R159.	0.5 V		R26
OUTPUT POWER	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : H3E • Apply no signal to the [MICROPHONE] connector. • Transmitting 	Rear panel	Connect an RF power meter to the [ANT] connector.	50 W	MAIN	R211
	2	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : R3E 			2.0 W		R212
	3	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : A1A 			140 W		R184
CARRIER SUPPRESSION	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : J3E • Apply no signal to the [MICROPHONE] connector. • Transmitting 	Rear panel	Connect a spectrum analyzer or RF voltmeter to the [ANT] connector via an attenuator.	Minimum carrier level (Less than -40 dB)	MAIN	Adjust alternately R238, R239
TUNE POWER	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Ground L108 (KEY line). 	Rear panel	Connect an RF power meter to the [ANT] connector.	10 W	MAIN	R205
POWER METER	1	<ul style="list-style-type: none"> • While pushing the [SQL] and [TX] switches, turn power ON. • Displayed frequency: 12.2300 MHz • Mode : J3E • Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz Level : 100 mV 	Rear panel	Connect an RF power meter to the [ANT] connector.	U.S.A. versions: 17 W Europe versions: 120 W	Audio generator	Output level
	2	<ul style="list-style-type: none"> • Set the transmit power: U.S.A. versions : 1 (20 W PEP) Europe versions : 3 (150 W PEP) • Transmitting 					
MIC GAIN	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : J3E • Connect an audio generator to the [MICROPHONE] connector and set as: Frequency : 1.5 kHz Level : 10 mV • Transmitting 	Rear panel	Connect an RF power meter to the [ANT] connector.	100 W	LOGIC	R2066

• MAIN AND LOGIC UNITS

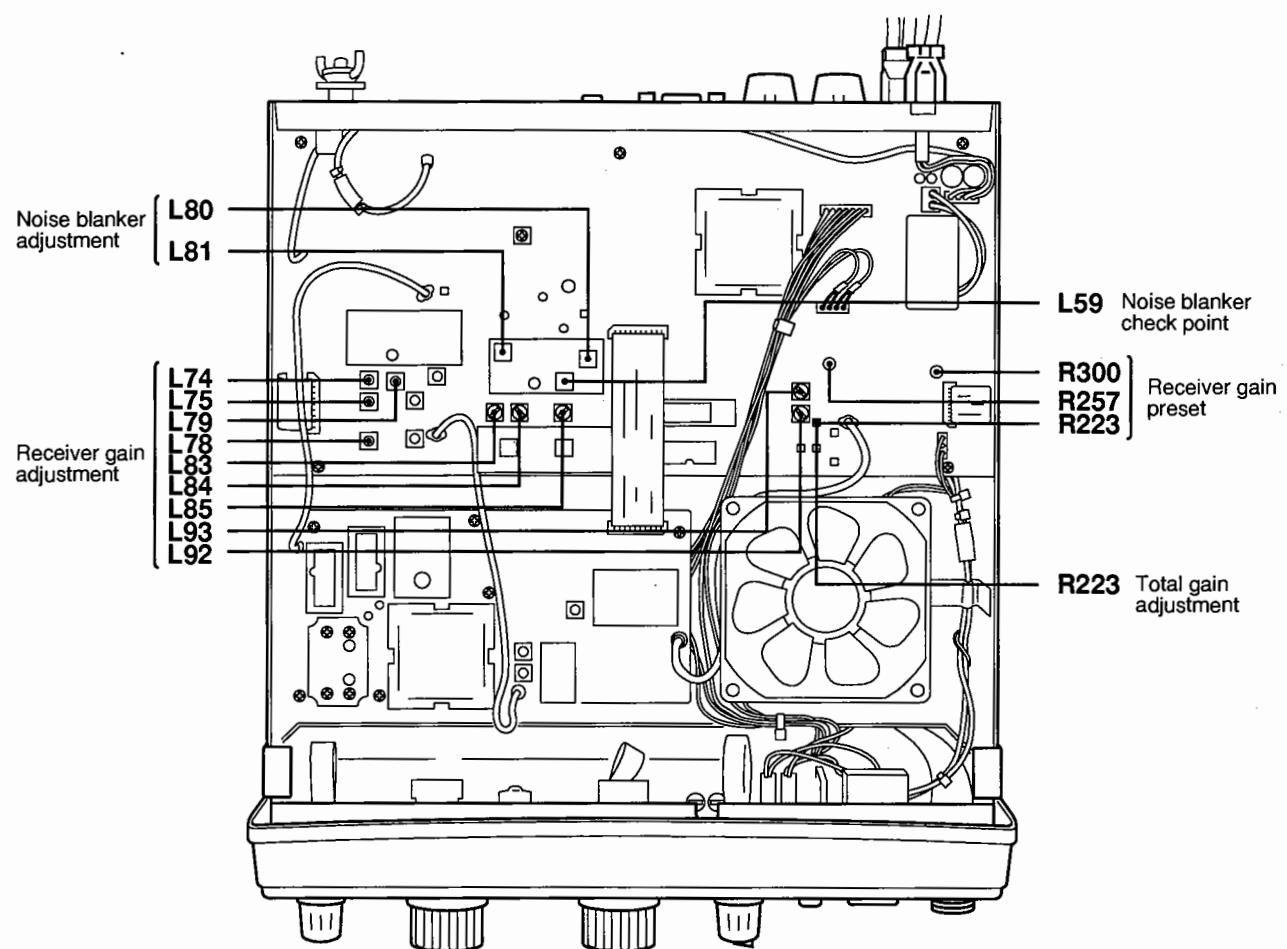


4-5 RECEIVER ADJUSTMENT

ADJUSTMENT		ADJUSTMENT CONDITIONS	MEASUREMENT		VALUE	ADJUSTMENT POINT	
			UNIT	LOCATION		UNIT	ADJUST
RECEIVER GAIN	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : J3E • Noise blanker : OFF • Squelch : OFF • Speaker : OFF • AGC : ON • RF gain : 9 • R223 (MAIN unit): Max. clockwise • R257 (MAIN unit): Max. counterclockwise • R300 (MAIN unit): Center • Connect a standard signal generator to the [ANT] connector and set as: <ul style="list-style-type: none"> Frequency : 12.2315 MHz Level : 0.5 μV * (-113 dBm) Modulation: OFF • Receiving 	Rear panel	Connect an AC millivoltmeter to the [EXT SP] jack with a 4 Ω dummy load.	Maximum output level	MAIN	Adjust in sequence L74, L75, L78, L79, L83, L84, L85, L92, L93
CLARITY	1	<ul style="list-style-type: none"> • While pushing the [SQL] and [CE] switches, turn power ON. 	Set the [CLARITY] control to the center position and push the [DIMMER] switch.			Front panel	[CLARITY]
TOTAL GAIN	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : J3E • Connect a standard signal generator to the [ANT] connector and set as: <ul style="list-style-type: none"> Frequency : 12.2315 MHz Level : 0.32 mV * (-57 dBm) Modulation: OFF • Receiving 	Rear panel	Connect an AC millivoltmeter to the [EXT SP] jack with a 4 Ω dummy load.	1.0 V	Front panel	[VOLUME]
	2	<ul style="list-style-type: none"> • Set the signal generator to OFF (no output). 			-30 dB (32 mV)	MAIN	R223
S-METER	1	<ul style="list-style-type: none"> • While pushing the [SQL] and [RX] switches, turn power ON. • Displayed frequency: 12.2300 MHz • Mode : J3E 	Function display	S/RF meter	Push the [DIMMER] switch.	Front panel	[DIMMER]
	2	<ul style="list-style-type: none"> • Connect a standard signal generator to the [ANT] connector and set as: <ul style="list-style-type: none"> Frequency : 12.2315 MHz Level : 1 mV * (-47 dBm) 			7th dot just appears while pushing the [DIMMER]. 		Verify
NOISE BLANKER	1	<ul style="list-style-type: none"> • Displayed frequency: 12.2300 MHz • Mode : J3E • Connect a standard signal generator to the [ANT] connector and set as: <ul style="list-style-type: none"> Frequency : 12.2315 MHz Level : 3.2 μV * (-97 dBm) Add the following signal into the signal generator output. <p style="text-align: center;"></p>	MAIN	Connect an oscilloscope to R59.	Adjust the maximum noise wave displayed on the oscilloscope.	MAIN	L80, L81

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

• MAIN UNIT



SECTION 5 PARTS LIST

[FRONT PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	
W2807	8900005880	CABLE	OPC-522
W2808	8900005880	CABLE	OPC-522
W2809	8900005870	CABLE	OPC-524
W2810	8900005880	CABLE	OPC-522
W2811	8900005880	CABLE	OPC-522
S2801	2260002270	SWITCH	JPZ2120-0101(TV-3)
SP2801	2510000870	SPEAKER	77F80N
WS1	8600034320	CABLE	SX1632 P2801FR
WS2	8600034330	CABLE	SX1632 P2802FR

[LOGIC UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R2001	7030006810	S.RESISTOR	RK73K2AJ 22 kΩ
R2002	7030006810	S.RESISTOR	RK73K2AJ 22 kΩ
R2003	7030006780	S.RESISTOR	RK73K2AJ 10 kΩ
R2004	7030006660	S.RESISTOR	RK73K2AJ 220 Ω
R2005	7030006660	S.RESISTOR	RK73K2AJ 220 Ω
R2006	7030006890	S.RESISTOR	RK73K2AJ 1 kΩ
R2007	7030006890	S.RESISTOR	RK73K2AJ 1 kΩ
R2009	7030006830	S.RESISTOR	RK73K2AJ 47 kΩ
R2011	7030006830	S.RESISTOR	RK73K2AJ 47 kΩ
R2012	7030006890	S.RESISTOR	RK73K2AJ 1M Ω
R2013	7030006830	S.RESISTOR	RK73K2AJ 47 kΩ
R2014	7030006830	S.RESISTOR	RK73K2AJ 47 kΩ
R2015	7030006690	S.RESISTOR	RK73K2AJ 1 kΩ
R2016	7030006690	S.RESISTOR	RK73K2AJ 1 kΩ
R2017	7030006880	S.RESISTOR	RK73K2AJ 100 kΩ
R2018	7030006690	S.RESISTOR	RK73K2AJ 1 kΩ
R2019	7030006880	S.RESISTOR	RK73K2AJ 470 kΩ
R2020	7030006870	S.RESISTOR	RK73K2AJ 220 kΩ
R2021	7030006870	S.RESISTOR	RK73K2AJ 220 kΩ
R2022	7030006880	S.RESISTOR	RK73K2AJ 100 kΩ
R2039	7030006830	S.RESISTOR	RK73K2AJ 47 kΩ
R2040	7030006820	S.RESISTOR	RK73K2AJ 33 kΩ
R2041	7030006750	S.RESISTOR	RK73K2AJ 4.7 kΩ
R2042	7030006830	S.RESISTOR	RK73K2AJ 47 kΩ
R2043	7030006790	S.RESISTOR	RK73K2AJ 15 kΩ
R2044	7030006780	S.RESISTOR	RK73K2AJ 10 kΩ
R2045	7030006780	S.RESISTOR	RK73K2AJ 10 kΩ
R2046	7030006780	S.RESISTOR	RK73K2AJ 10 kΩ
R2047	7030007030	S.RESISTOR	RK73K2A 5.6 kΩ
R2048	7030006690	S.RESISTOR	RK73K2AJ 1 kΩ
R2049	7030006830	S.RESISTOR	RK73K2AJ 47 kΩ
R2054	7010006680	RESISTOR	RD16X J 47 Ω
R2055	7030006780	S.RESISTOR	RK73K2AJ 10 kΩ
R2056	7010006840	S.RESISTOR	RK73M2AJ 1 Ω
R2057	7030006690	S.RESISTOR	RK73K2AJ 1 kΩ
R2058	7010006870	RESISTOR	RD16X J 3.3 Ω
R2059	7030006750	S.RESISTOR	RK73K2AJ 4.7 kΩ
R2060	7030006640	S.RESISTOR	RK73K2AJ 100 Ω
R2061	7030006640	S.RESISTOR	RK73K2AJ 100 Ω
R2062	7030006730	S.RESISTOR	RK73K2AJ 3.3 kΩ
R2063	7030006680	S.RESISTOR	RK73K2AJ 220 Ω
R2064	7030006850	S.RESISTOR	RK73K2AJ 82 kΩ
R2065	7030006860	S.RESISTOR	RK73K2AJ 100 kΩ
R2066	7310004240	TRIMMER	KVSF839A 10 kΩ
R2067	7030006810	S.RESISTOR	RK73K2AJ 22 kΩ
R2068	7030006840	S.RESISTOR	RK73K2AJ 68 kΩ
R2069	7030006690	S.RESISTOR	RK73K2AJ 1 kΩ
R2070	7310004230	TRIMMER	KVSF839A 100 kΩ
R2071	7030006750	S.RESISTOR	RK73K2AJ 4.7 kΩ
R2072	7030006680	S.RESISTOR	RK73K2AJ 680 Ω
R2073	7030006670	S.RESISTOR	RK73K2AJ 470 Ω
R2074	7030006630	S.RESISTOR	RK73K2AJ 47 Ω
R2077	7030006800	S.RESISTOR	RK73K2AJ 18 kΩ
R2078	7030006780	S.RESISTOR	RK73K2AJ 10 kΩ
R2079	7030006800	S.RESISTOR	RK73K2AJ 18 kΩ
R2080	7030006780	S.RESISTOR	RK73K2AJ 10 kΩ
R2081	7030006800	S.RESISTOR	RK73K2AJ 18 kΩ
R2082	7030006780	S.RESISTOR	RK73K2AJ 10 kΩ
R2083	7030006800	S.RESISTOR	RK73K2AJ 18 kΩ
R2084	7030006800	S.RESISTOR	RK73K2AJ 18 kΩ
R2085	7010006870	RESISTOR	RD16S J 47 kΩ
C2001	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C2002	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2003	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2004	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2005	4030011490	S.CERAMIC	GRM40 CH 120J 50PT
C2006	4030011490	S.CERAMIC	GRM40 CH 120J 50PT
C2007	4030011430	S.CERAMIC	GRM40 B 103K 50PT

S.=Surface mount

[LOGIC UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C2008	4510008460	ELECTROLITIC	QYX1H224J TP
C2009	4030011430	S.CERAMIC	GRM40 B 103K 50PT
C2012	4510008480	ELECTROLITIC	UVX1E4R7M DA
C2013	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2014	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2015	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2018	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2017	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2018	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2019	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2020	4510008570	ELECTROLITIC	UVR1C102M PA
C2021	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2022	4510008630	ELECTROLITIC	UPF1C471M PH
C2023	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C2024	4510008530	ELECTROLITIC	UVX1C470M DA
C2025	4510008540	ELECTROLITIC	UVR1C101M DA
C2026	4510008530	ELECTROLITIC	UVX1C470M DA
C2027	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2028	4510008520	ELECTROLITIC	UVX1E220M DA
C2029	4510008520	ELECTROLITIC	UVX1E220M DA
C2030	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2031	4510008470	ELECTROLITIC	UVX1H2R2M DA
C2032	4510008490	ELECTROLITIC	UVX1H010M DA
C2033	4510008490	ELECTROLITIC	UVX1H010M DA
C2034	4510008480	ELECTROLITIC	UVX1E4R7M DA
C2035	4510008480	ELECTROLITIC	UVX1E4R7M DA
C2036	4510008530	ELECTROLITIC	UVX1C470M DA
C2037	4510008480	ELECTROLITIC	UVX1E4R7M DA
C2038	4510008500	ELECTROLITIC	UVX1C100M DA
C2039	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2040	4510008530	ELECTROLITIC	UVX1C470M DA
C2041	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2042	4510008530	ELECTROLITIC	UVX1C470M DA
C2043	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2044	4510008500	ELECTROLITIC	UVX1C100M DA
C2046	4510008540	ELECTROLITIC	UVR1C101M DA
C2047	4510008550	ELECTROLITIC	UVR1C471M PA
C2048	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C2049	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C2050	4030011450	S.CERAMIC	GRM40 B 104K 50PT
RL2001	6330001260	RELAY	AG 201344 (DS1E-B-DC12V)
W2012	7030007010	S.JUMPER	MCR10EZHZ JPW
W2013	7030007010	S.JUMPER	MCR10EZHZ JPW
DS2001	5080000360	LAMP	HRT-3290A-F 933 09677
DS2002	5080000360	LAMP	HRT-3290A-F F24
DS2003	5080000360	LAMP	HRT-3290A-F
DS2004	5010000180	LCD	DLC-7978P
S2003	2280002260	SWITCH	SW-158 (SKHHPM)
S2004	2280002260	SWITCH	SW-158 (SKHHPM)
S2005	2280002260	SWITCH	SW-158 (SKHHPM)
S2006	2280002260	SWITCH	SW-158 (SKHHPM)
S2007	2280002260	SWITCH	SW-158 (SKHHPM)
S2008	2280002260	SWITCH	SW-158 (SKHHPM)
S2009	2280002260	SWITCH	SW-158 (SKHHPM)
S2010	2280002260	SWITCH	SW-158 (SKHHPM)
S2011	2280002260	SWITCH	SW-158 (SKHHPM)
S2012	2280002260	SWITCH	SW-158 (SKHHPM)
S2013	2280002260	SWITCH	SW-158 (SKHHPM)
S2014	2280002260	SWITCH	SW-158 (SKHHPM)
S2015	2280002260	SWITCH	SW-158 (SKHHPM)
S2016	2280002260	SWITCH	SW-158 (SKHHPM)
S2017	2280002260	SWITCH	SW-158 (SKHHPM)
S2018	2280002260	SWITCH	SW-158 (SKHHPM)
S2019	2280002260	SWITCH	SW-158 (SKHHPM)
S2020	2280002260	SWITCH	SW-158 (SKHHPM)
S2021	2280002260	SWITCH	SW-158 (SKHHPM)
S2022	2280002260	SWITCH	SW-158 (SKHHPM)
S2023	2280002260	SWITCH	SW-158 (SKHHPM)

[LOGIC UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
S2024	2280002280	SWITCH	SW-158 (SKHHPM)
S2025	2280002280	SWITCH	SW-158 (SKHHPM)
S2026	2280002280	SWITCH	SW-158 (SKHHPM)
S2027	2280002280	SWITCH	SW-158 (SKHHPM)
J2007	6510018870	CONNECTOR	B03B-EH-S
J2008	6510018730	CONNECTOR	10FE-BT
J2009	6510018720	CONNECTOR	06FE-BT
J2010	6510018720	CONNECTOR	06FE-BT
J2011	6510018720	CONNECTOR	06FE-BT
J2012	6510018720	CONNECTOR	06FE-BT
J2013	6510018710	CONNECTOR	RTB-1.5-2F
J2014	6510018710	CONNECTOR	RTB-1.5-2F
WS1	8600034340	CABLE	P2002*J2002LO
WS2	8600034350	CABLE	P2003*J2003LO
EP2001	0910045063	PCB	B 4252C

[SENSOR1 UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
S2601	2250000280	ENCODER	SRB18100 25KC
J2601	6510018720	CONNECTOR	06FE-BT
EP2601	0910044811	PCB	B 4366A

[SENSOR2 UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
S2701	2250000280	ENCODER	SRB18100 25KC
J2701	6510018720	CONNECTOR	06FE-BT
EP2701	0910044811	PCB	B 4366A

[MIC UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
J2301	6510009210	CONNECTOR	14RS-8H-MI-AU(F)
J2302	6510018730	CONNECTOR	10FE-BT
EP2301	0910044821	PCB	B 4503A

[VR1 UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R2401	7210002750	VARIABLE	TP96N937-15F-10KB-1540
J2401	6510018720	CONNECTOR	06FE-BT
EP2401	0910044832	PCB	B 4367B

[VR2 UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R2501	7210002760	VARIABLE	TP96N944-15F-10KB-1632
J2501	6510018720	CONNECTOR	06FE-BT
EP2501	0910044842	PCB	B 4508B

S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
IC4	1160000130	S.IC	TD82783AF (TP1)
IC5	1160000130	S.IC	TD82783AF (TP1)
IC6	1160000130	S.IC	TD82783AF (TP1)
IC8	1110003140	IC	LA1150N
IC9	1110003350	S.IC	μPC1037GR-E1(MS)
IC10	1110003350	S.IC	μPC1037GR-E1(MS)
IC11	1130001910	S.IC	μPD4011BG-T1
IC12	1140003830	S.IC	TC4W66F(TE12L)
IC16	1110000980	S.IC	NJM4558M(T1)
IC17	1110000980	S.IC	NJM4558M(T1)
IC18	1110000980	S.IC	NJM4558M(T1)
IC19	1110000980	S.IC	NJM4558M(T1)
IC20	1110000980	S.IC	NJM4558M(T1)
IC21	1110000980	S.IC	NJM4558M(T1)
IC22	1130001230	S.IC	μPD4001BG-T1
IC23	1110001400	S.IC	μPC1555G2-T1
IC24	1180001250	S.IC	TA7808F(TE16L)
IC27	1170000280	S.IC	TLP121 (GB)
IC31	1130002370	S.IC	μPD4028BG-T1
IC32	1130003760	S.IC	TC4S81F (TE85R)
IC33	1130003760	S.IC	TC4S81F (TE85R)
IC34	1130001880	S.IC	μPD4069UBG-T1
IC35	1130001920	S.IC	μPD4071BG-T1
IC36	1110003300	S.IC	M5282FP 70CD
IC37 ⑨	1140003830	S.IC	TC4W66F(TE12L)
IC38	1140003830	S.IC	TC4W66F(TE12L)
IC39	1140003830	S.IC	TC4W66F(TE12L)
IC131	1180000420	S.IC	TA78L05F (TE12R)
IC132	1140005470	S.IC	HD6433378A52F
IC133	1110001550	S.IC	S-8054ALB-LM-T1
IC134	1140004620	S.IC	X24C16S8-2.7
IC135	1140004620	S.IC	X24C16S8-2.7
Q1	1530003150	S.TRANSISTOR	2SC4673D-TD
Q2	1580000620	S.FET	3SK131-T2 MAS
Q3	1580000620	S.FET	3SK131-T2 MAS
Q4	1580000620	S.FET	3SK131-T2 MAS
Q5	1530003150	S.TRANSISTOR	2SC4673D-TD
Q6	1580000720	S.FET	2SK2171-4-TD
Q7	1580000720	S.FET	2SK2171-4-TD
Q8	1580000620	S.FET	3SK131-T2 MAS
Q9	1560000330	S.FET	2SK210-GR (TE85R)
Q10	1510000770	S.TRANSISTOR	2SA1586-GR (TE85R)
Q11	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q12	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q13	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q14	1590001330	S.TRANSISTOR	DTA114EU T107
Q15	1590000680	S.TRANSISTOR	DTC114EU T107
Q16	1580000620	S.FET	3SK131-T2 MAS
Q17	1540000440	S.TRANSISTOR	2SD1619-T-TD
Q18	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q19	1580000620	S.FET	3SK131-T2 MAS
Q20	1590000680	S.TRANSISTOR	DTC114EU T107
Q21	1590000680	S.TRANSISTOR	DTC114EU T107
Q22	1590000680	S.TRANSISTOR	DTC114EU T107
Q23	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q24	1590000680	S.TRANSISTOR	DTC114EU T107
Q25	1590000680	S.TRANSISTOR	DTC114EU T107
Q26	1510000770	S.TRANSISTOR	2SA1586-GR (TE85R)
Q27	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q28	1590000680	S.TRANSISTOR	DTC114EU T107
Q30	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q31	1530003090	S.TRANSISTOR	2SC4213-B (TE85R)
Q32	1580000620	S.FET	3SK131-T2 MAS
Q33	1580000620	S.FET	3SK131-T2 MAS
Q34	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q35	1590000680	S.TRANSISTOR	DTC114EU T107
Q36	1590001330	S.TRANSISTOR	DTA114EU T107
Q40	1590000680	S.TRANSISTOR	DTC114EU T107
Q41	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q42	1590000680	S.TRANSISTOR	DTC114EU T107
Q43	1590000680	S.TRANSISTOR	DTC114EU T107
Q44	1590001330	S.TRANSISTOR	DTA114EU T107
Q45	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q46	1590000680	S.TRANSISTOR	DTC114EU T107

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
Q52	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q54	1540000440	S.TRANSISTOR	2SD1619-T-TD
Q55	1590000880	S.TRANSISTOR	DTC114EU T107
Q56	1590000880	S.TRANSISTOR	DTC114EU T107
Q57	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q58	1530003300	S.TRANSISTOR	2SC3647S-TD
Q59	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q60	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q61	1540000440	S.TRANSISTOR	2SD1619-T-TD
Q62	1540000440	S.TRANSISTOR	2SD1619-T-TD
Q64	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q65	1590000680	S.TRANSISTOR	DTC114EU T107
Q69	1590000680	S.TRANSISTOR	DTC114EU T107
Q70	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q71	1590001330	S.TRANSISTOR	DTA114EU T107
Q72	1590000680	S.TRANSISTOR	DTC114EU T107
Q74	1590001330	S.TRANSISTOR	DTA114EU T107
Q78	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q79	1590000680	S.TRANSISTOR	DTC114EU T107
Q80	1590000680	S.TRANSISTOR	DTC114EU T107
Q82	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q83	1590000680	S.TRANSISTOR	DTC114EU T107
Q84	1590000680	S.TRANSISTOR	DTC114EU T107
Q101	1510000770	S.TRANSISTOR	2SA1586-GR (TE85R)
Q102	1590000680	S.TRANSISTOR	DTC114EU T107
Q103	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q104	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q106	1510000770	S.TRANSISTOR	2SA1586-GR (TE85R)
Q111	1510000770	S.TRANSISTOR	2SA1586-GR (TE85R)
Q112 ⑨	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q113	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q114	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q115	1590000680	S.TRANSISTOR	DTC114EU T107
Q118 ⑨	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q119	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q121	1590000680	S.TRANSISTOR	DTC114EU T107
Q122	1590000680	S.TRANSISTOR	DTC114EU T107
Q123	1590000680	S.TRANSISTOR	DTC114EU T107
Q124	1590000680	S.TRANSISTOR	DTC114EU T107
Q125	1590000680	S.TRANSISTOR	DTC114EU T107
Q126	1560000330	S.FET	2SK210-GR (TE85R)
Q128	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q129	1590000680	S.TRANSISTOR	DTC114EU T107
Q130	1590001330	S.TRANSISTOR	DTA114EU T107
Q131	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
Q132	1590000680	S.TRANSISTOR	DTC114EU T107
D1	1790000450	S.DIODE	MA862(TX)
D2	1790000450	S.DIODE	MA862(TX)
D3	1790000620	S.DIODE	MA77(TW)
D4	1790000620	S.DIODE	MA77(TW)
D5	1790000450	S.DIODE	MA862(TX)
D6	1790000450	S.DIODE	MA862(TX)
D7	1790000450	S.DIODE	MA862(TX)
D8	1790000450	S.DIODE	MA862(TX)
D9	1790000450	S.DIODE	MA862(TX)
D10	1790000450	S.DIODE	MA862(TX)
D11	1790000450	S.DIODE	MA862(TX)
D12	1790000450	S.DIODE	MA862(TX)
D13	1790000450	S.DIODE	MA862(TX)
D14	1790000450	S.DIODE	MA862(TX)
D15	1790000450	S.DIODE	MA862(TX)
D16	1790000450	S.DIODE	MA862(TX)
D17	1790000690	S.DIODE	HSM88ASR-TR
D18	1790000620	S.DIODE	MA77(TW)
D19	1710000270	DIODE	MI204
D20	1750000270	S.DIODE	1SS301 (TE85R)
D21	1790000450	S.DIODE	MA862(TX)
D22	1790000450	S.DIODE	MA862(TX)
D23	1790000450	S.DIODE	MA862(TX)
D24	1790000450	S.DIODE	MA862(TX)
D25	1790000450	S.DIODE	MA862(TX)
D26	1790000450	S.DIODE	MA862(TX)

⑨: GMDSS version only S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
D27	1750000270	S.DIODE	1SS301 (TE85R)
D28	1750000270	S.DIODE	1SS301 (TE85R)
D30	1790000450	S.DIODE	MA862(TX)
D31	1790000690	S.DIODE	HSM88ASR-TR
D32	1750000270	S.DIODE	1SS301 (TE85R)
D33	1790000450	S.DIODE	MA862(TX)
D34	1750000270	S.DIODE	1SS301 (TE85R)
D35	1750000270	S.DIODE	1SS301 (TE85R)
D36	1750000270	S.DIODE	1SS301 (TE85R)
D37	1750000270	S.DIODE	1SS301 (TE85R)
D38	1730000120	ZENER	RD6.2E B2
D39	1790000690	S.DIODE	HSM88ASR-TR
D40	1750000300	S.DIODE	1SS302 (TE85R)
D41	1750000270	S.DIODE	1SS301 (TE85R)
D42	1750000270	S.DIODE	1SS301 (TE85R)
D43	1750000270	S.DIODE	1SS301 (TE85R)
D45	1750000270	S.DIODE	1SS301 (TE85R)
D46	1790000690	S.DIODE	HSM88ASR-TR
D47	1750000270	S.DIODE	1SS301 (TE85R)
D48	1750000270	S.DIODE	1SS301 (TE85R)
D49	1790000450	S.DIODE	MA862(TX)
D50	1750000270	S.DIODE	1SS301 (TE85R)
D51	1790000450	S.DIODE	MA862(TX)
D52	1790000890	S.DIODE	ND433G
D53	1750000270	S.DIODE	1SS301 (TE85R)
D59	1750000270	S.DIODE	1SS301 (TE85R)
D60	1750000270	S.DIODE	1SS301 (TE85R)
D61	1750000270	S.DIODE	1SS301 (TE85R)
D62	1750000270	S.DIODE	1SS301 (TE85R)
D63	1750000270	S.DIODE	1SS301 (TE85R)
D65	1750000270	S.DIODE	1SS301 (TE85R)
D66	1750000270	S.DIODE	1SS301 (TE85R)
D68	1750000270	S.DIODE	1SS301 (TE85R)
D69	1750000300	S.DIODE	1SS302 (TE85R)
D70	1750000300	S.DIODE	1SS302 (TE85R)
D73	1730000210	ZENER	RD9.1E B3
D74	1730000100	ZENER	RD5.1E B2
D75	1750000300	S.DIODE	1SS302 (TE85R)
D76	1750000300	S.DIODE	1SS302 (TE85R)
D79	1750000270	S.DIODE	1SS301 (TE85R)
D88	1790000690	S.DIODE	HSM88ASR-TR
D89	1750000270	S.DIODE	1SS301 (TE85R)
D90	1750000270	S.DIODE	1SS301 (TE85R)
D97	1750000270	S.DIODE	1SS301 (TE85R)
D98	1750000270	S.DIODE	1SS301 (TE85R)
D99	1790000450	S.DIODE	MA862(TX)
D100	1750000300	S.DIODE	1SS302 (TE85R)
D101	1750000300	S.DIODE	1SS302 (TE85R)
D102	1750000270	S.DIODE	1SS301 (TE85R)
D103	1750000270	S.DIODE	1SS301 (TE85R)
D201	1710000160	DIODE	1SS133
D202	1710000160	DIODE	1SS133
D203	1710000160	DIODE	1SS133
D204	1710000160	DIODE	1SS133 [except Gen]
D205	1710000160	DIODE	1SS133
D206 ⑨	1710000160	DIODE	1SS133
D207	1710000160	DIODE	1SS133 [except Gen]
D209	1750000270	S.DIODE	1SS301 (TE85R)
D210	1750000270	S.DIODE	1SS301 (TE85R)
D211	1750000270	S.DIODE	1SS301 (TE85R)
D212	1750000270	S.DIODE	1SS301 (TE85R)
D213	1750000300	S.DIODE	1SS302 (TE85R)
D214	1750000300	S.DIODE	1SS302 (TE85R)
D215	1750000300	S.DIODE	1SS302 (TE85R)
D216 ⑨	1750000270	S.DIODE	1SS301 (TE85R)
D217	1750000270	S.DIODE	1SS301 (TE85R)
D218	1750000300	S.DIODE	1SS302 (TE85R)
D220	1730000250	ZENER	RD12E B2
D222	1750000270	S.DIODE	1SS301 (TE85R)
D223	1750000270	S.DIODE	1SS301 (TE85R)
D224	1730000500	ZENER	RD13E B2
D225	1750000270	S.DIODE	1SS301 (TE85R)
D226	1750000270	S.DIODE	1SS301 (TE85R)
D227	1750000270	S.DIODE	1SS301 (TE85R)
D228	1750000270	S.DIODE	1SS301 (TE85R) [except Gen]

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
FI1	2010001010	FILTER	89M15B (FL-120)
FI2	2010000320	FILTER	9M22D2 (FL-30) [Gen, Mrine]
	2010000800	FILTER	9M26F (FL-80) [GMDSS]
FI3	2010000950	FILTER	9M 6A1 (FL-116)
FI4	2010000950	FILTER	9M 6A1 (FL-116)
FI5 ⑨	2010001860	FILTER	FL-232 (9.010800MHz)
X2	6050008160	S.XTAL	CR-410 (9.8304MHz)
T1 ⑨	5920000570	TRANSFOMER	12T01
T2 ⑨	5920000570	TRANSFOMER	12T01
T3 ⑨	5920000570	TRANSFOMER	12T01
T4 ⑨	5920000570	TRANSFOMER	12T01
L1	6140000060	COIL	LR-18
L2	6180002480	COIL	LAL 03NA 820K
L3	6200002960	S.COIL	NL 322522T-4R7J-3
L4	6200003100	S.COIL	NL 322522T-3R9J-3
L7	6200003260	S.COIL	NL 322522T-101J
L8	6200002980	S.COIL	NL 322522T-4R7J-3
L9	6200003320	S.COIL	NL 322522T-3R3J-3
L10	6200003100	S.COIL	NL 322522T-3R9J-3
L11	6200001850	S.COIL	NL 322522T-5R6J
L12	6200003280	S.COIL	NL 322522T-101J
L13	6200002990	S.COIL	NL 322522T-2R2J-3
L14	6200002990	S.COIL	NL 322522T-2R2J-3
L15	6200002990	S.COIL	NL 322522T-2R2J-3
L16	6200003080	S.COIL	NL 322522T-1R8J-3
L17	6200003280	S.COIL	NL 322522T-101J
L18	6200003070	S.COIL	NL 322522T-1R5J-3
L19	6200003070	S.COIL	NL 322522T-1R5J-3
L20	6200003080	S.COIL	NL 322522T-1R8J-3
L21	6200003080	S.COIL	NL 322522T-1R2J-3
L22	6200003280	S.COIL	NL 322522T-101J
L23	6200001720	S.COIL	NL 322522T-1R0J
L24	6200001720	S.COIL	NL 322522T-1R0J
L25	6200001720	S.COIL	NL 322522T-1R0J
L26	6200003050	S.COIL	NL 322522T-R82J-3
L27	6200003280	S.COIL	NL 322522T-101J
L28	6200002980	S.COIL	NL 322522T-R56J-3
L29	6200002980	S.COIL	NL 322522T-R56J-3
L30	6200003040	S.COIL	NL 322522T-R88J-3
L31	6200003040	S.COIL	NL 322522T-R68J-3
L32	6200003280	S.COIL	NL 322522T-101J
L33	6200003020	S.COIL	NL 322522T-R33J-3
L34	6200003030	S.COIL	NL 322522T-R47J-3
L35	6200003030	S.COIL	NL 322522T-R47J-3
L36	6200003030	S.COIL	NL 322522T-R47J-3
L37	6200003260	S.COIL	NL 322522T-101J
L38	6200003010	S.COIL	NL 322522T-R27J-3
L39	6200003250	S.COIL	NL 322522T-R39J-3
L40	6200003250	S.COIL	NL 322522T-R39J-3
L41	6200002980	S.COIL	NL 322522T-R56J-3
L42	6200003280	S.COIL	NL 322522T-101J
L43	6200003020	S.COIL	NL 322522T-R33J-3
L44	6200003010	S.COIL	NL 322522T-R27J-3
L45	6200003010	S.COIL	NL 322522T-R27J-3
L48	6200003020	S.COIL	NL 322522T-R33J-3
L49	6200001850	S.COIL	NL 322522T-5R6J
L50	6200002980	S.COIL	NL 322522T-4R7J-3
L51	6180001710	COIL	LAL 03NA 581K
L52	6140002080	COIL	LR-225 (RIB3X8.5X3 3A6)
L53	6180001710	COIL	LAL 03NA 581K
L54	6200003280	S.COIL	NL 322522T-101J
L55	6200001720	S.COIL	NL 322522T-1R0J
L58	6200003040	S.COIL	NL 322522T-R68J-3
L57	6200003280	S.COIL	NL 322522T-101J
L58	6140002220	COIL	LR-270 (TR8X3X2 3A9)
L59	6150004270	COIL	LS-483A (C-14924)
L80	6140000930	COIL	LR-116
L81	6200001830	S.COIL	NL 322522T-100J

⑨: GMDSS version only S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION
L62	6200003020	S.COIL NL 322522T-R33J-3
L63	6200003000	S.COIL NL 322522T-R22J-3
L64	6150004280	COIL LS-484B (C-14927)
L65	6150004280	COIL LS-484B (C-14927)
L66	6140002080	COIL LR-225 (RIB3X6.5X3 3A6)
L67	6140002080	COIL LR-225 (RIB3X6.5X3 3A6)
L69	6200003080	S.COIL NL 322522T-1R2J-3
L70	6200003080	S.COIL NL 322522T-1R2J-3
L71	6200003000	S.COIL NL 322522T-R22J-3
L72	6200003010	S.COIL NL 322522T-R27J-3
L73	6140000930	COIL LR-118
L74	6150004270	COIL LS-483A (C-14924)
L75	6150002430	COIL LS-254
L78	6110001820	COIL LA-245
L77	6200001830	S.COIL NL 322522T-100J
L78	6150004280	COIL LS-484B (C-14927)
L79	6150004250	COIL LS-471A (C-14922)
L80	6150004050	COIL LS-466
L81	6150004050	COIL LS-468
L82	6200003280	S.COIL NL 322522T-101J
L83	6150004310	COIL LS-487A (C-14930)
L84	6150004290	COIL LS-485A (C-14928)
L85	6150004290	COIL LS-485A (C-14928)
L86	6200001830	S.COIL NL 322522T-100J
L87	6140001800	COIL LR-178
L88	6150001590	COIL LS-175
L89	6150001590	COIL LS-175
L90	6200003140	S.COIL NL 322522T-150J
L91	6200003140	S.COIL NL 322522T-150J
L92	6150004430	COIL LS-501 (C-14872)
L93	6150004300	COIL LS-486A (C-14929)
L94	2040000490	COIL EXC-ELDR25C
L95	6180000980	COIL LAL 03NA 102K
L96	6180000980	COIL LAL 03NA 102K
L100	6200003090	S.COIL NL 322522T-2R7J-3
L101	2040000490	COIL EXC-ELDR25C
L102	2040000490	COIL EXC-ELDR25C
L103	2040000490	COIL EXC-ELDR25C
L104	2040000490	COIL EXC-ELDR25C
L105	89100003570	COIL 2943-686663
L106	89100003570	COIL 2943-686663
L107	6180001710	COIL LAL 03NA 581K
L108	6180001710	COIL LAL 03NA 581K
L115	6200003280	S.COIL NL 322522T-101J
L116	6200003280	S.COIL NL 322522T-101J
L117	6180001710	COIL LAL 03NA 581K
L118	6180001710	COIL LAL 03NA 581K
L119	6180001710	COIL LAL 03NA 581K
L120	6180001710	COIL LAL 03NA 581K
L121	6180001710	COIL LAL 03NA 581K
L122	6180001710	COIL LAL 03NA 581K
L123	6200003020	S.COIL NL 322522T-R33J-3
L124	6200003000	S.COIL NL 322522T-R22J-3
L125	6200003280	S.COIL NL 322522T-101J
L126	6180000990	COIL LAL 04NA 101K
L127	6200003280	S.COIL NL 322522T-101J
L129	6180000900	COIL LAL 03NA 101K
L130	6180000900	COIL LAL 03NA 101K
L131	6180000900	COIL LAL 03NA 101K
L132	6200003280	S.COIL NL 322522T-101J
L133	2040000490	COIL EXC-ELDR25C
L134	2040000490	COIL EXC-ELDR25C
L135	2040000490	COIL EXC-ELDR25C
L136	2040000490	COIL EXC-ELDR25C
L137	6200001720	S.COIL NL 322522T-1R0J
L138	2040000490	COIL EXC-ELDR25C
L139	6200001830	S.COIL NL 322522T-100J
L140	6200003280	S.COIL NL 322522T-101J
L141	2040000490	COIL EXC-ELDR25C
L142	6180000900	COIL LAL 03NA 101K
L143	2040000490	COIL EXC-ELDR25C
R1	7030003380	S.RESISTOR ERJ3GEYJ 331 V (330 Ω)
R2	7010003180	RESISTOR ELR20J 15 Ω
R3	7030003380	S.RESISTOR ERJ3GEYJ 331 V (330 Ω)

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION
R4	7010003200	RESISTOR ELR20J 22 Ω
R5	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R6	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R7	7010003390	RESISTOR ELR20J 820 Ω
R8	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R9	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R10	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R11	7030003380	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R12	7030003380	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R13	7030003380	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R14	7030003380	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R15	7030003380	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R16	7030003380	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R17	7030003380	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R18	7030003380	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R19	7030003380	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R20	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R21	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R22	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R23	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R24	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R25	7030003580	S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)
R26	7310002870	S.TRIMMER RV-143 (RH03A3AS2) 471
R27	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R28	7010003350	RESISTOR ELR20J 390 Ω
R29	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)
R32	7030003380	S.RESISTOR ERJ3GEYJ 331 V (330 Ω)
R33	7010003180	RESISTOR ELR20J 15 Ω
R34	7030003380	S.RESISTOR ERJ3GEYJ 331 V (330 Ω)
R35	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)
R36	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R37	7010003400	RESISTOR ELR20J 1 kΩ
R38	7010003400	RESISTOR ELR20J 1 kΩ
R39	7010003180	RESISTOR ELR20J 15 Ω
R41	7010003240	RESISTOR ELR20J 47 Ω
R43	7030003530	S.RESISTOR ERJ3GEYJ 582 V (5.6 kΩ)
R44	7030003280	S.RESISTOR ERJ3GEYJ 470 V (47 Ω)
R45	7030003480	S.RESISTOR ERJ3GEYJ 152 V (1.5 kΩ)
R46	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R47	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R48	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R49	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R50	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R51	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R52	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R53	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R54	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R55	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R56	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R57	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R58	7030003560	S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)
R59	7010004450	RESISTOR R20J 100 kΩ
R60	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R61	7030003540	S.RESISTOR ERJ3GEYJ 682 V (6.8 kΩ)
R62	7030003380	S.RESISTOR ERJ3GEYJ 331 V (330 Ω)
R63	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R64	7030006520	S.RESISTOR RR0818P-581-D (580 Ω)
R65	7030003280	S.RESISTOR ERJ3GEYJ 470 V (47 Ω)
R66	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R67	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)
R68	7030003280	S.RESISTOR ERJ3GEYJ 470 V (47 Ω)
R69	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R70	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R71	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R72	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R73	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R74	7030003280	S.RESISTOR ERJ3GEYJ 470 V (47 Ω)
R75	7010003200	RESISTOR ELR20J 22 Ω
R76	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R77	7030003560	S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)
R79	7030003800	S.RESISTOR ERJ3GEYJ 105 V (1 MΩ)
R80	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R81	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R82	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)
R83	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)
R84	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)

S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R85	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R86	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R87	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R88	7030003630	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
R89	7030003780	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R90	7510000290	THERMISTOR	ERT-D2ZGL 301S
R91	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R92	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R94	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R95	7010003170	RESISTOR	ELR20J 12 Ω
R96	7010003170	RESISTOR	ELR20J 12 Ω
R97	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R98	7010003200	RESISTOR	ELR20J 22 Ω
R99	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R100	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 kΩ)
R101	7010003200	RESISTOR	ELR20J 22 Ω
R102	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R103	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R104	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R105	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R106	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R107	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R108	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R109	7030003480	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R110	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R111	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R112	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R113	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R114	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R118	7030003480	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R117	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R118	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R119	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R120	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R121	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R122	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R123	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R124	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R125	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R126	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R127	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R128	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R129	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R130	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R131	7010003380	RESISTOR	ELR20J 680 Ω
R132	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R133	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R134	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R135	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R136	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R138	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R139	7030003680	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R140	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R143	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R149	7030003200	S.RESISTOR	ERJ3GEYJ 100 V (10 Ω)
R150	7010004270	RESISTOR	R20J 4.7 kΩ
R157	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R158	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R159	7010004340	RESISTOR	R20J 15 kΩ
R161	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R162	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R163	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R164	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R165	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R166	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R167	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R168	7030003780	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R169	7030003780	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R170	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R171	7010003550	RESISTOR	ELR20J 15 kΩ
R172	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R173	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R174	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R175	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R178	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R177	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R183	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R184	7310002740	S.TRIMMER	RV-150 (RH03A3A14X0FC)103
R185	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R186	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R187	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R188	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R189	7030003760	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R190	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R191	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R192	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R193	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R194	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R196	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R197	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R198	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R199	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R200	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R201	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R202	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 kΩ)
R204	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R205	7310000750	TRIMMER	RH0651C14J2WA (103)
R207	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R208	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R209	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R210	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ω)
R211	7310002670	S.TRIMMER	RV-143 (RH03A3AS2) 471
R212	7310002630	S.TRIMMER	RV-139 (RH03A3A12) 101
R213	7510000240	THERMISTOR	ERT-D2ZGL 332S
R214	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R215	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R216	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R217	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R218	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R219	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R220	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R221	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R222	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R223	7310002720	S.TRIMMER	RV-148 (RH03A3AS3X0DA)472
R224	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R225	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R226	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R227	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R228	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R229	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R230	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R231	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R232	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R233	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R234	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R235	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ) [Gen, Marine]
	7030003420	S.RESISTOR	ERJ3GEYJ 881 V (680 Ω) [GMDSS]
R236	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R237	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R238	7310002740	S.TRIMMER	RV-150 (RH03A3A14X0FC)103
R239	7310002740	S.TRIMMER	RV-150 (RH03A3A14X0FC)103
R240	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R241	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R242	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R243	7010004190	RESISTOR	R20J 1 kΩ
R244	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R245	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R246	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R247	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R254	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R255	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R258	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R257	7310000750	TRIMMER	RH0651C14J2WA (103)
R256	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R259	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R261	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)

S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R282	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R283	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R284	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R285	7030003710	S.RESISTOR	ERJ3GEYJ 184 V (180 kΩ)
R286	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R287	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R288	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R289	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R270	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R271	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R272	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R273	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R274	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R275	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R276	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R277	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R278	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R279	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R280	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R281	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R282	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R283	7030003480	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R284	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R285	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R286	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R287	7030003650	S.RESISTOR	ERJ3GEYJ 563 V (58 kΩ)
R288	7010003300	RESISTOR	ELR20J 150 Ω
R290	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R291	7030006520	S.RESISTOR	RR0818P-581-D (580 Ω)
R292	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R293	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R294	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R295	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R296	7030003880	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R297	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R298	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R299	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R300	7310000750	TRIMMER	RH0651C14J2WA (103)
R301	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R302	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R303	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R304	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R305	7030003840	S.RESISTOR	ERJ3GEYJ 225 V (2.2 MΩ)
R306	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R307	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R308	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R310	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R324	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R325	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R328	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R329	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R333	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R334	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R335	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R336	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R337	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R338	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R339	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R340	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R342	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R344	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R345	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R346	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R348	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R349	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R350	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R352	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R353	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R354	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R382	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R363	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R364	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R365	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R369	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R370	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R371	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R372	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R373	7030003780	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R374	7030003780	S.RESISTOR	ERJ3GEYJ 474 V (470 kΩ)
R375	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R378	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R377	701000090	RESISTOR	ELR25J 4.7 Ω
R378	7010004190	RESISTOR	R20J 1 kΩ
R379	701000090	RESISTOR	ELR25J 4.7 Ω
R380	7010004190	RESISTOR	R20J 1 kΩ
R381	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R382	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R385	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R386	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 kΩ)
R387	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 kΩ)
R388	7030003530	S.RESISTOR	ERJ3GEYJ 562 V (5.6 kΩ)
R389	7030003590	S.RESISTOR	ERJ3GEYJ 183 V (18 kΩ)
R390	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R391	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R392	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R393	7010004690	RESISTOR	R50XJ 47 Ω
R394	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R395	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R396	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R403	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R404	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R411	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R412	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R413	7010003280	RESISTOR	ELR20J 100 Ω
R414	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R415	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R418	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R448	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R449	7010003180	RESISTOR	ELR20J 15 Ω
R450	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R465	7010003200	RESISTOR	ELR20J 22 Ω
R488	7010003200	RESISTOR	ELR20J 22 Ω
R487	7010003200	RESISTOR	ELR20J 22 Ω
R488	7010003200	RESISTOR	ELR20J 22 Ω
R489	7030003640	S.RESISTOR	ELR20J 22 Ω
R494	7030003640	S.RESISTOR	ELR20J 22 Ω
R501	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R502	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R503	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R504	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R505	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R506	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R510	7030003540	S.RESISTOR	ERJ3GEYJ 682 V (6.8 kΩ)
R514	7010000290	RESISTOR	ELR25J 220 Ω
R515	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R517	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R518	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R519	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R520	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R521	7010003180	RESISTOR	ELR20J 15 Ω
R522	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R523	7010004690	RESISTOR	R50XJ 47 Ω
R525	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R526	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R527	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R528	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R529	7070000280	RESISTOR	CRH100X R-02J 2.2 Ω (2R2)
R533	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R534	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R535	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R536	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R537	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R538	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R539	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R540	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R541	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)

S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION
R542	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R543	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R544	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R545	7010004450	RESISTOR R20J 100 kΩ
R601	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R602	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)
R603	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R604	7030003760	S.RESISTOR ERJ3GEYJ 474 V (470 kΩ)
R605	7030003720	S.RESISTOR ERJ3GEYJ 224 V (220 kΩ)
R606	7030003720	S.RESISTOR ERJ3GEYJ 224 V (220 kΩ)
R607	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R608	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R609	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R610	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R611	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R612	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R633	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R634	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R635	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R636	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R637	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R638	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R639	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R640	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R641	7030003500	S.RESISTOR ERJ3GEYJ 332 V (3.3 kΩ)
R642	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R646	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R647	7030003580	S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)
R648	7030003580	S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)
R650	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R651	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R652	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R653	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R654	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R655	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R657	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R658	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R659	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R663	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R664	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R670	7030003620	S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)
R671	7030003540	S.RESISTOR ERJ3GEYJ 682 V (6.8 kΩ)
R672	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R673	7030003590	S.RESISTOR ERJ3GEYJ 183 V (18 kΩ)
R674	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R675	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R676	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R677	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R678	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R679	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R680	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R681	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R682	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R683	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R684	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R690	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R691	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R692	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R693	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R694	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R695	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R696	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R697	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R698	7010003380	RESISTOR ELR20J 680 Ω
R699	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R700	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R701	7010003830	RESISTOR R20J 1 Ω
R702	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R703	7030003580	S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)
R704	7030003500	S.RESISTOR ERJ3GEYJ 332 V (3.3 kΩ)
R705	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R706	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R707	7030003360	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R708	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R709	7030003620	S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)
R714	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION
R715 ⑧	7030003620	S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)
R716 ⑨	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R717 ⑩	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R718 ⑪	7030003580	S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)
R719	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R720	7030003620	S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)
R721	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R722	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R723	7030003580	S.RESISTOR ERJ3GEYJ 153 V (15 kΩ)
R724	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R725	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R726	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R728 ⑫	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R729	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R730	7010003170	RESISTOR ELR20J 12 Ω
R731	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R732	7030003640	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R733	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R734	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R735	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R736	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R738	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R739	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R740	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R741	7030003620	S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)
R742	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R743	7010004230	RESISTOR R20J 2.2 kΩ
R744 ⑬	7030006520	S.RESISTOR RR0816P-561-D (560 Ω)
R745 ⑭	7030006520	S.RESISTOR RR0816P-561-D (560 Ω)
R746 ⑮	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R747 ⑯	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R748 ⑰	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R749 ⑱	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R750 ⑲	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R751 ⑳	7030006520	S.RESISTOR RR0816P-561-D (560 Ω)
R752	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R753	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R754	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R755	7030003640	S.RESISTOR ERJ3GEYJ 473 V (47 kΩ)
R756	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R757	7030006520	S.RESISTOR RR0816P-561-D (560 Ω)
R760 ⑲	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R761 ⑳	7030003580	S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)
R763 ⑳	7030003400	S.RESISTOR ERJ3GEYJ 471 V (470 Ω)
R764	7030003620	S.RESISTOR ERJ3GEYJ 333 V (33 kΩ)
R765	7030003380	S.RESISTOR ERJ3GEYJ 331 V (330 Ω)
R766	7030003200	S.RESISTOR ERJ3GEYJ 100 V (10 Ω)
R771	7030003480	S.RESISTOR ERJ3GEYJ 222 V (2.2 kΩ)
R772	7030003530	S.RESISTOR ERJ3GEYJ 562 V (5.6 kΩ)
R773	7030003530	S.RESISTOR ERJ3GEYJ 562 V (5.6 kΩ)
R774	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R777	7030003780	S.RESISTOR ERJ3GEYJ 474 V (470 kΩ)
R778	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R779	7030003720	S.RESISTOR ERJ3GEYJ 224 V (220 kΩ)
R780	7030003720	S.RESISTOR ERJ3GEYJ 224 V (220 kΩ)
R781	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R782	7030003520	S.RESISTOR ERJ3GEYJ 472 V (4.7 kΩ)
R783	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R784	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R785	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R786	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R787	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R788	7010004320	RESISTOR R20J 10 kΩ
R789	7030003340	S.RESISTOR ERJ3GEYJ 151 V (150 Ω)
R790	7030003380	S.RESISTOR ERJ3GEYJ 331 V (330 Ω)
R791	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R792	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R793	7030003580	S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)
R794	7030003360	S.RESISTOR ERJ3GEYJ 221 V (220 Ω)
R796	7030003320	S.RESISTOR ERJ3GEYJ 101 V (100 Ω)
R797	7030003580	S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)
R798	7030003440	S.RESISTOR ERJ3GEYJ 102 V (1 kΩ)
R799	7030003580	S.RESISTOR ERJ3GEYJ 103 V (10 kΩ)
R800	7030003600	S.RESISTOR ERJ3GEYJ 223 V (22 kΩ)
R801	7030003680	S.RESISTOR ERJ3GEYJ 104 V (100 kΩ)
R802	7010004320	RESISTOR R20J 10 kΩ

⑨: GMDSS version only S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R803	7510000540	THERMISTOR	ERT-D2ZGL 171S
R804	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R805	7030003670	S.RESISTOR	ERJ3GEYJ 823 V (82 kΩ)
R806	7030003720	S.RESISTOR	ERJ3GEYJ 224 V (220 kΩ)
R807	7510000300	THERMISTOR	ERT-D2ZGL 601S
R808	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R809	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R810	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R811	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R812	7010004450	RESISTOR	R20J 100 kΩ
R813	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R820	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R821	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
C2	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C3	4030008880	S.CERAMIC	C1608 JB 1H 472K-T-A
C4	4030008670	S.CERAMIC	C1608 JB 1H 222K-T-A
C5	4030008690	S.CERAMIC	C1608 JB 1E 103K-T-A
C6	4030010020	S.CERAMIC	C1608 JB 1H 122K-T-A
C7	4030008660	S.CERAMIC	C1608 JB 1C 153K-T-A
C8	4030008670	S.CERAMIC	C1608 JB 1H 222K-T-A
C9	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C10	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C11	4030008670	S.CERAMIC	C1608 JB 1H 222K-T-A
C12	4030008610	S.CERAMIC	C1608 SL 1H 271J-T-A
C13	4030009970	S.CERAMIC	C1608 JB 1H 182K-T-A
C14	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C15	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C16	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C17	4030009980	S.CERAMIC	C1608 JB 1H 152K-T-A
C18	4030010750	S.CERAMIC	C1608 CH 1H 201J-T-A
C19	4030009980	S.CERAMIC	C1608 JB 1H 152K-T-A
C20	4030008470	S.CERAMIC	C1608 JB 1H 272K-T-A
C21	4030008850	S.CERAMIC	C1608 JB 1C 123K-T-A
C22	4030009980	S.CERAMIC	C1608 JB 1H 152K-T-A
C23	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C24	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C25	4030010040	S.CERAMIC	C1608 JB 1H 561K-T-A
C26	4030007140	S.CERAMIC	C1608 CH 1H 121J-T-A
C27	4030010040	S.CERAMIC	C1608 JB 1H 561K-T-A
C28	4030009980	S.CERAMIC	C1608 JB 1H 152K-T-A
C29	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C30	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C31	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C32	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C33	4030010040	S.CERAMIC	C1608 JB 1H 561K-T-A
C34	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C35	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C36	4030010040	S.CERAMIC	C1608 JB 1H 561K-T-A
C37	4030009970	S.CERAMIC	C1608 JB 1H 182K-T-A
C38	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C39	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C40	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C41	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C42	4030007100	S.CERAMIC	C1608 CH 1H 560J-T-A
C43	4030006830	S.CERAMIC	C1608 SL 1H 331J-T-A
C44	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C45	4030006870	S.CERAMIC	C1608 JB 1H 222K-T-A
C46	4030006830	S.CERAMIC	C1608 SL 1H 331J-T-A
C47	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C48	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C49	4030006830	S.CERAMIC	C1608 SL 1H 331J-T-A
C50	4030007080	S.CERAMIC	C1608 CH 1H 390J-T-A
C51	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C52	4030006810	S.CERAMIC	C1608 SL 1H 271J-T-A
C53	4030006870	S.CERAMIC	C1608 JB 1H 222K-T-A
C54	4030007170	S.CERAMIC	C1608 CH 1H 221J-T-A
C55	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C56	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C57	4030011280	S.CERAMIC	C1608 CH 1H 271J-T-A
C58	4030007080	S.CERAMIC	C1608 CH 1H 390J-T-A
C59	4030007140	S.CERAMIC	C1608 CH 1H 121J-T-A
C60	4030006810	S.CERAMIC	C1608 SL 1H 271J-T-A
C61	4030009980	S.CERAMIC	C1608 JB 1H 152K-T-A
C62	4030007160	S.CERAMIC	C1608 CH 1H 181J-T-A

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C63	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C64	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C65	4030007160	S.CERAMIC	C1608 CH 1H 181J-T-A
C66	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C67	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C68	4030007160	S.CERAMIC	C1608 CH 1H 181J-T-A
C69	4030009980	S.CERAMIC	C1608 JB 1H 152K-T-A
C70	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C71	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C72	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C73	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C74	4030007040	S.CERAMIC	C1608 CH 1H 180J-T-A
C75	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C76	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C77	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C78	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C79	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C80	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C81	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C82	4030006860	S.CERAMIC	C1608 JB 1H 472K-T-A
C83	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C84	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C85	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C86	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C87	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C88	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C89	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C90	4030006860	S.CERAMIC	C1608 CH 1H 050C-T-A
C91	4030007080	S.CERAMIC	C1608 CH 1H 390J-T-A
C92	4030007040	S.CERAMIC	C1608 CH 1H 180J-T-A
C93	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C94	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C95	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C96	4030006860	S.CERAMIC	C1608 CH 1H 050C-T-A
C98	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C99	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C100	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C101	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C102	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C103	4030007170	S.CERAMIC	C1608 CH 1H 221J-T-A
C104	4030008930	S.CERAMIC	C1608 CH 1H 020C-T-A
C106	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C107	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C108	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C109	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C110	4510005260	ELECTROLITIC	25 MV 10 HW
C111	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C112	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C113	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C114	4510005260	ELECTROLITIC	25 MV 10 HW
C115	4030007140	S.CERAMIC	C1608 CH 1H 121J-T-A
C116	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C117	4510003910	ELECTROLITIC	16 MV 47 HW
C118	4510005260	ELECTROLITIC	25 MV 10 HW
C119	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C120	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C121	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C122	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C123	4030007040	S.CERAMIC	C1608 CH 1H 180J-T-A
C125	4030006810	S.CERAMIC	C1608 SL 1H 271J-T-A
C126	4030007100	S.CERAMIC	C1608 CH 1H 560J-T-A
C127	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C128	4030006830	S.CERAMIC	C1608 SL 1H 331J-T-A
C129	4030006830	S.CERAMIC	C1608 SL 1H 331J-T-A
C130	4030007120	S.CERAMIC	C1608 CH 1H 820J-T-A
C131	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C132	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C133	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C134	4030007120	S.CERAMIC	C1608 CH 1H 820J-T-A
C135	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C136	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C137	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C138	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C139	4030007000	S.CERAMIC	C1608 CH 1H 090D-T-A
C140	4030006820	S.CERAMIC	C1608 JB 1C 473K-T-A
C141	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A

S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C142	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C143	4030006980	S.CERAMIC	C1608 CH 1H 050C-T-A
C144	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C145	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C146	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C147	4030006680	S.CERAMIC	C1608 JB 1H 472K-T-A
C148	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C149	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C150	4030006990	S.CERAMIC	C1608 CH 1H 080D-T-A
C151	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C152	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C153	4030006930	S.CERAMIC	C1608 CH 1H 020C-T-A
C154	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C155	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C156	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C157	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C158	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C159	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C160	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C161	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C162	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C163	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C164	4510004490	ELECTROLITIC	25 MV 22 HW
C165	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C166	4510004490	ELECTROLITIC	25 MV 22 HW
C167	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C168	4510003970	ELECTROLITIC	50 MV 2R2 HW
C169	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C170	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C171	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C172	4030008930	S.CERAMIC	C2012 JB 1C 583K-T-A
C173	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C174	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C175	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C176	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C177	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C178	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C179	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C180	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C181	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C182	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C183	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C184	4030006990	S.CERAMIC	C1608 CH 1H 080D-T-A
C185	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C186	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C187	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C188	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C189	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C190	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C191	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C192	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C193	4510005260	ELECTROLITIC	25 MV 10 HW
C194	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C195	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C196	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C197	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C198	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C199	4510003910	ELECTROLITIC	16 MV 47 HW
C200	4030006830	S.CERAMIC	C1608 SL 1H 331J-T-A
C201	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C202	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C203	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C204	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C205	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C206	4510003910	ELECTROLITIC	18 MV 47 HW
C207	4510003950	ELECTROLITIC	50 MV R47 HW
C208	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C209	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C210	4510003910	ELECTROLITIC	18 MV 47 HW
C211	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C212	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C213	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C214	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C215	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C216	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C217	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C218	4510004490	ELECTROLITIC	25 MV 22 HW
C222	4030007170	S.CERAMIC	C1608 CH 1H 221J-T-A
C225	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C226	4510004490	ELECTROLITIC	25 MV 22 HW
C228	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C229	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C230	4510005260	ELECTROLITIC	25 MV 10 HW
C231	4510005260	ELECTROLITIC	25 MV 10 HW
C232	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C234	4510005260	ELECTROLITIC	25 MV 10 HW
C235	4510005260	ELECTROLITIC	25 MV 10 HW
C238	4510005260	ELECTROLITIC	25 MV 10 HW
C237	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C238	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C239	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C240	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C241	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C242	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C243	4510004490	ELECTROLITIC	25 MV 22 HW
C244	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C245	4510003970	ELECTROLITIC	50 MV 2R2 HW
C246	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C247	4030006830	S.CERAMIC	C1608 SL 1H 331J-T-A
C248	4030008860	S.CERAMIC	C1608 JB 1H 102K-T-A
C249	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C250	4510003910	ELECTROLITIC	16 MV 47 HW
C251	4510004490	ELECTROLITIC	25 MV 22 HW
C252	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C253	4030008930	S.CERAMIC	C2012 JB 1C 563K-T-A
C254	4510004950	ELECTROLITIC	50 MV R47 SWNP
C256	4030009980	S.CERAMIC	C1608 JB 1H 152K-T-A
C257	4310000610	MYLAR	50 F2D 47J
C258	4510003940	ELECTROLITIC	25 MV 4R7 HW
C259	4030007170	S.CERAMIC	C1608 CH 1H 221J-T-A
C260	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C261	4510003910	ELECTROLITIC	16 MV 47 HW
C262	4310000360	MYLAR	50 F2D 103J
C263	4510004990	ELECTROLITIC	16 MV 100 HC
C264	4310000360	MYLAR	50 F2D 103J
C265	4510004910	ELECTROLITIC	16 MV 10 SWNP
C266	4510003940	ELECTROLITIC	25 MV 4R7 HW
C267	4510003950	ELECTROLITIC	50 MV R47 HW
C268	4510003910	ELECTROLITIC	16 MV 47 HW
C269	4510003970	ELECTROLITIC	50 MV 2R2 HW
C270	4510003940	ELECTROLITIC	25 MV 4R7 HW
C271	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C275	4510003910	ELECTROLITIC	16 MV 47 HW
C276	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C277	4510003940	ELECTROLITIC	25 MV 4R7 HW
C278	4510005250	ELECTROLITIC	50 MV 2R2 SWNP
C279	4510005250	ELECTROLITIC	50 MV 2R2 SWNP
C280	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C281	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C282	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C283	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A
C284	4030006890	S.CERAMIC	C1608 JB 1E 103K-T-A
C285	4510003950	ELECTROLITIC	50 MV R47 HW
C286	4510003950	ELECTROLITIC	50 MV R47 HW
C287	4510005260	ELECTROLITIC	25 MV 10 HW
C288	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C289	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C290	4510005260	ELECTROLITIC	25 MV 10 HW
C293	4510005260	ELECTROLITIC	25 MV 10 HW
C294	4310000380	MYLAR	50 F2D 153J
C295	4310000380	MYLAR	50 F2D 153J
C296	4310000380	MYLAR	50 F2D 153J
C297	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C298	4510005260	ELECTROLITIC	25 MV 10 HW
C299	4510003790	ELECTROLITIC	16 MV 10 SW
C300	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C301	4510003790	ELECTROLITIC	16 MV 10 SW
C302	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C303	4510003850	ELECTROLITIC	50 MV 2R2 SW
C304	4510003840	ELECTROLITIC	50 MV 1 SW
C305	4550000340	TANTALUM	DN 1C 100M
C306	4030006900	S.CERAMIC	C1608 JB 1E 103K-T-A

S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C307	4030006880	S.CERAMIC	C1808 JB 1H 102K-T-A
C317	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C319	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C320	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C321	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C322	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C323	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C324	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C325	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C326	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C343	4510003940	ELECTROLITIC	25 MV 4R7 HW
C361	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C362	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C363	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C364	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C374	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C387	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C397	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C398	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C401	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C403	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C408	4030007130	S.CERAMIC	C1808 CH 1H 101J-T-A
C409	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C410	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C411	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C412	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C413	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C414	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C416	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C417	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C418	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C419	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C420	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C421	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C434	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C435	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C436	4510003970	ELECTROLITIC	50 MV 2R2 HW
C437	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C438	4030007030	S.CERAMIC	C1808 CH 1H 150J-T-A
C439	4030007010	S.CERAMIC	C1808 CH 1H 100D-T-A
C444	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C446	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C449	4510003940	ELECTROLITIC	25 MV 4R7 HW
C450	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C451	4510003940	ELECTROLITIC	25 MV 4R7 HW
C452	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C454	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C455	4510004590	ELECTROLITIC	16 MV 470 HC
C456	4030007010	S.CERAMIC	C1808 CH 1H 100D-T-A
C457	4030008920	S.CERAMIC	C1808 CH 1H 010C-T-A
C458	4030007010	S.CERAMIC	C1808 CH 1H 100D-T-A
C459	4030008970	S.CERAMIC	C1808 CH 1H 080D-T-A
C460	4030008920	S.CERAMIC	C1808 CH 1H 010C-T-A
C461	4030006880	S.CERAMIC	C1808 JB 1H 102K-T-A
C462	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C463	4030006880	S.CERAMIC	C1808 JB 1H 102K-T-A
C464	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C501	4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C502	4510004470	ELECTROLITIC	FYLOH 473Z
C503	4510005280	ELECTROLITIC	25 MV 10 HW
C504	4510003820	ELECTROLITIC	50 MV R22 SW
C507	4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C508	4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C509	4030007020	S.CERAMIC	C1808 CH 1H 120J-T-A
C510	4030007020	S.CERAMIC	C1808 CH 1H 120J-T-A
C511	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C512	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C513	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C514	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C515	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C518	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C517	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C518	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C519	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C520	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C521	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C522	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C523	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C524	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C525	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C526	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C527	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C528	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C531	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C532	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C533	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C534	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C535	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C538	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C539	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C542	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C543	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C544	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C546	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C547	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C548	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C550	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C551	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C555	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C558	4510003910	ELECTROLITIC	18 MV 47 HW
C559	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C560	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C561	4030007130	S.CERAMIC	C1808 CH 1H 101J-T-A
C562	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C564	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C565	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C568	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C569	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C571	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C572	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C573	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C574	4030007130	S.CERAMIC	C1808 CH 1H 101J-T-A
C579	4030008920	S.CERAMIC	C1808 JB 1C 473K-T-A
C581	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C582	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C583	4030006880	S.CERAMIC	C1808 JB 1H 102K-T-A
C584	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C585	4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C593	4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C594	4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C595	4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C597	4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C598	4510003950	ELECTROLITIC	50 MV R47 HW
C599	4510005000	ELECTROLITIC	18 MV 220 HC
C600	4510004910	ELECTROLITIC	18 MV 10 SWNP
C601	4510004910	ELECTROLITIC	18 MV 10 SWNP
C602	④ 4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C603	④ 4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C604	④ 4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C605	④ 4510004490	ELECTROLITIC	25 MV 22 HW
C606	④ 4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C607	④ 4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C608	4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C609	4510004490	ELECTROLITIC	25 MV 22 HW
C610	4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C611	④ 4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C613	④ 4030010070	S.CERAMIC	C1808 X7S 1C 104K-T-A
C614	4510003980	ELECTROLITIC	50 MV 1 HW
C616	④ 4030006880	S.CERAMIC	C1808 JB 1H 472K-T-A
C618	4030007030	S.CERAMIC	C1808 CH 1H 150J-T-A
C620	4030006920	S.CERAMIC	C1808 CH 1H 010C-T-A
C622	4030006850	S.CERAMIC	C1808 JB 1H 471K-T-A
C623	4030009980	S.CERAMIC	C1808 JB 1H 152K-T-A
C624	4030007140	S.CERAMIC	C1808 CH 1H 121J-T-A
C625	4030006870	S.CERAMIC	C1808 JB 1H 222K-T-A
C626	4030007130	S.CERAMIC	C1808 CH 1H 101J-T-A
C627	4030006810	S.CERAMIC	C1808 SL 1H 271J-T-A
C628	4030007030	S.CERAMIC	C1808 CH 1H 150J-T-A
C629	4030006850	S.CERAMIC	C1808 JB 1C 123K-T-A
C631	4510003940	ELECTROLITIC	25 MV 4R7 HW
C632	4510005280	ELECTROLITIC	25 MV 10 HW
C633	4030006920	S.CERAMIC	C1808 JB 1C 473K-T-A

④: GMDSS version only

S.=Surface mount

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C834	4030008920	S.CERAMIC	C1608 JB 1C 473K-T-A
C835	4510004140	ELECTROLITIC	50 MV 10 HW
C837	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C839	4030009980	S.CERAMIC	C1608 JB 1H 152K-T-A
C840	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C841	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C842	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C843	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C844	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C845	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C846	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C847	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
C848	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C849	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C850	4040000690	BARRIERLAYER	UAT 08X 473K
C851	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C852	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C853	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C854	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C855	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C856	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C857	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C858	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C859	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C860	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C861	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C862	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C863	4030007050	S.CERAMIC	C1608 CH 1H 220J-T-A
C864	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C865	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C866	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C867	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C868	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C869	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C870	4510004140	ELECTROLITIC	50 MV 10 HW
C871	4510004990	ELECTROLITIC	16 MV 100 HC
C872	4510004990	ELECTROLITIC	16 MV 100 HC
C873	4510004990	ELECTROLITIC	16 MV 100 HC
C874	4510003840	ELECTROLITIC	50 MV 1 SW
C875	④ 4010006900	CERAMIC	HE80SJ YB 472K 50V
C876	④ 4010006900	CERAMIC	HE80SJ YB 472K 50V
C877	④ 4010006900	CERAMIC	HE80SJ YB 472K 50V
C878	④ 4010006900	CERAMIC	HE80SJ YB 472K 50V
C879	④ 4010006900	CERAMIC	HE80SJ YB 472K 50V
C880	④ 4010006900	CERAMIC	HE80SJ YB 472K 50V
C881	④ 4010006900	CERAMIC	HE80SJ YB 472K 50V
RL2	6330000110	RELAY	FBR22D12-P
W1	7120000020	JUMPER	JPW 02H
W5	7030003860	S.JUMPER	ERJ3GE JPW V
W6	7030003860	S.JUMPER	ERJ3GE JPW V
W7	7030003860	S.JUMPER	ERJ3GE JPW V
W8	7030003860	S.JUMPER	ERJ3GE JPW V
W9	7030003860	S.JUMPER	ERJ3GE JPW V
W10	7030003860	S.JUMPER	ERJ3GE JPW V [USA only]
W11	7120000010	JUMPER	JPW 02A [Gen, Marine only]
W11	7120000010	JUMPER	JPW 02A [Gen, Marine only]
W12	7030003860	S.JUMPER	ERJ3GE JPW V [Gen, Marine only]
W13	7120000010	JUMPER	JPW 02A [Gen, Marine only]
W14	7030003860	S.JUMPER	ERJ3GE JPW V [Gen, Marine only]
W17	7030003860	S.JUMPER	ERJ3GE JPW V
W18	7030003860	S.JUMPER	ERJ3GE JPW V
W23	7030003860	S.JUMPER	ERJ3GE JPW V
W24	7030003860	S.JUMPER	ERJ3GE JPW V
S9	2220000520	SWITCH	ESD-11V120
S11	2220000520	SWITCH	ESD-11V120

④: Europe version only

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
J1	6510017150	CONNECTOR	TMP-S01X-C1
J2	6510017150	CONNECTOR	TMP-S01X-C1
J3	6510007020	CONNECTOR	TMP-J01X-V6
J4	6510007020	CONNECTOR	TMP-J01X-V6
J5	6510007020	CONNECTOR	TMP-J01X-V6
J6	6450001240	CONNECTOR	HLJ4306-01-3000
J7	6450001440	CONNECTOR	HSJ1403-01-010
J9	6510017680	CONNECTOR	52045-1845
J11	6510017990	CONNECTOR	DELCA9SAF-20L9
J12	6450001580	CONNECTOR	TCS5073-28-4151
J13	6450001590	CONNECTOR	TCS5073-17-4151
J15	6510003400	CONNECTOR	B04B-EH-S
J16	6510003430	CONNECTOR	B07B-EH-S
J19	6510017680	CONNECTOR	52045-1845
J20	6510003390	CONNECTOR	B03B-EH-S
J22	6510017650	CONNECTOR	52045-1045
J23	6510003400	CONNECTOR	B04B-EH-S
J29	6510018150	S.CONNECTOR	4-175638-0
J30	6510017950	S.CONNECTOR	4-175638-4
J31 ④	6510017990	CONNECTOR	DELCA9SAF-20L9
J32	6510010020	CONNECTOR	RTB-1.5-2F
J33	6450001580	CONNECTOR	PD-72
			[Gen, Marine only]
EP1	0910043963	PCB	B 4248C

[PLL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
IC3001	1140003641	S.IC	SC-1248
IC3002	1140004550	S.IC	SC1287
IC3003	1180001070	S.IC	TA7805F(TE16L)
IC3004	1130004830	S.IC	TC7SU04F (TE85R)
IC3005	1130007680	S.IC	LC7153M-TLM
IC3006	1130004830	S.IC	TC7SU04F (TE85R)
IC3008	1130004830	S.IC	TC7SU04F (TE85R)
Q3001	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q3002	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q3003	1560000720	S.FET	2SK2171-4-TD
Q3004	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q3005	1560000330	S.FET	2SK210-GR (TE85R)
Q3006	1530002690	S.TRANSISTOR	2SC4118-GR (TE85R)
Q3007	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q3008	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q3009	1530002690	S.TRANSISTOR	2SC4118-GR (TE85R)
Q3010	1530002690	S.TRANSISTOR	2SC4118-GR (TE85R)
Q3011	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q3021	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q3022	1580001330	S.TRANSISTOR	DTA114EU T107
Q3024	1530002600	S.TRANSISTOR	2SC4215-O (TE85R)
Q3025	1530002690	S.TRANSISTOR	2SC4118-GR (TE85R)
D3001	1750000270	S.DIODE	1SS301 (TE85R)
D3002	1750000270	S.DIODE	1SS301 (TE85R)
D3003	1790000540	S.VARICAP	MA338(TX)
D3004	1720000540	S.VARICAP	HVM17-01TR
D3005	1750000070	S.DIODE	1SS228 (TE85R)
D3006	1790000620	S.DIODE	MA77(TW)
D3015	1790000490	S.DIODE	HSM88AS-TR
D3018	1790000490	S.DIODE	HSM88AS-TR
FI3001	2020001140	S.CERAMIC	SFECA10.7MA-5-A
X3001	6050005770	XTAL	CR-282 [Gen, Marine]
	6050009380	XTAL	CR-512 POCO (30.000MHz) [GMDSS]

④: GMDSS version only S.=Surface mount

[PLL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
L3001	6200001830	S.COIL	NL 322522T-100J
L3002	6170000230	COIL	LW-25 92413962
L3003	6150004370	COIL	LS-472C (C-15045)
L3004	6150004250	COIL	LS-471A (C-14922)
L3005	6150004250	COIL	LS-471A (C-14922)
L3007	6200003280	S.COIL	NL 322522T-101J
L3008	6180001220	COIL	LAL 04NA 100K
L3009	6200003280	S.COIL	NL 322522T-101J
L3010	6200003100	S.COIL	NL 322522T-3R0J-3
L3011	6200003280	S.COIL	NL 322522T-101J
L3012	6200003280	S.COIL	NL 322522T-101J
L3013	6130001850	COIL	LB-185
L3015	6200001830	S.COIL	NL 322522T-100J
L3018	6200003280	S.COIL	NL 322522T-101J
L3017	6200001830	S.COIL	NL 322522T-100J
L3019	6200001830	S.COIL	NL 322522T-100J
L3020	6170000180	COIL	LW-19
L3021	6170000230	COIL	LW-25
L3022	6200003280	S.COIL	NL 322522T-101J
L3023	6200003280	S.COIL	NL 322522T-101J
L3024	6190001090	COIL	MC138-E544EN-110164
L3028	6200003280	S.COIL	NL 322522T-101J
L3028	6200003280	S.COIL	NL 322522T-101J
L3035	6200003430	S.COIL	NL 322522T-R10J
L3038	6200003430	S.COIL	NL 322522T-R10J
L3037	6200003120	S.COIL	NL 322522T-8R2J
L3038	6200001830	S.COIL	NL 322522T-100J
L3040	6200003320	S.COIL	NL 322522T-3R3J-3
L3041	2040000490	COIL	EXC-ELDR25C
L3042	2040000490	COIL	EXC-ELDR25C
L3043	6200003420	S.COIL	NL 322522T-R15J-3
L3044	6200003430	S.COIL	NL 322522T-R10J
L3045	6180000880	COIL	LAL 03NA 100K
L3048	6200001830	S.COIL	NL 322522T-100J
L3047	6200001830	S.COIL	NL 322522T-100J
R3001	7030003580	S.RESISTOR	ERJ3GEYJ 153 V (15 kΩ)
R3002	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R3003	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R3005	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R3008	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3007	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R3008	7030003580	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3009	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3010	7080001250	RESISTOR	CRH100X R-02J 22 (220 Ω)
R3011	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3012	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3014	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R3017	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3018	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
R3019	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3020	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3021	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3022	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3023	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3024	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3025	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3028	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3027	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3028	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3029	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3030	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3031	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3032	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3033	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3034	7030005380	S.RESISTOR	RR0816P-102-B (1 kΩ)
R3035	7030005370	S.RESISTOR	RR0816P-202-B (2 kΩ)
R3036	7030005380	S.RESISTOR	RR0816P-102-B (1 kΩ)
R3037	7030005370	S.RESISTOR	RR0816P-202-B (2 kΩ)
R3038	7030005380	S.RESISTOR	RR0816P-102-B (1 kΩ)
R3039	7030005370	S.RESISTOR	RR0816P-202-B (2 kΩ)
R3040	7030005380	S.RESISTOR	RR0816P-102-B (1 kΩ)
R3041	7030005370	S.RESISTOR	RR0816P-202-B (2 kΩ)
R3042	7030005380	S.RESISTOR	RR0816P-102-B (1 kΩ)
R3043	7030005370	S.RESISTOR	RR0816P-202-B (2 kΩ)

[PLL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R3044	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R3045	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R3046	7030003570	S.RESISTOR	ERJ3GEYJ 123 V (12 kΩ)
R3048	7030003380	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3050	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3052	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ω)
R3053	7030003270	S.RESISTOR	ERJ3GEYJ 390 V (38 Ω)
R3054	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ω)
R3055	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3056	7030003850	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R3057	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3060	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3061	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R3062	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R3063	7030003340	S.RESISTOR	ERJ3GEYJ 151 V (150 Ω)
R3064	7030003880	S.RESISTOR	ERJ3GEYJ 124 V (120 kΩ)
R3065	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3068	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R3069	7030003480	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3070	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R3071	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3072	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3073	7030003500	S.RESISTOR	ERJ3GEYJ 332 V (3.3 kΩ)
R3074	7030003600	S.RESISTOR	ERJ3GEYJ 223 V (22 kΩ)
R3077	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
R3079	7030003800	S.RESISTOR	ERJ3GEYJ 105 V (1 MΩ)
R3080	7030003850	S.RESISTOR	ERJ3GEYJ 563 V (56 kΩ)
R3081	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R3082	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R3083	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R3084	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R3085	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3086	7030003560	S.RESISTOR	ERJ3GEYJ 103 V (10 kΩ)
R3087	7030003240	S.RESISTOR	ERJ3GEYJ 220 V (22 Ω)
R3089	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3090	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R3091	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3092	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3093	7030003630	S.RESISTOR	ERJ3GEYJ 393 V (39 kΩ)
R3094	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R3095	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R3096	7030003480	S.RESISTOR	ERJ3GEYJ 222 V (2.2 kΩ)
R3097	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3098	7030003840	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3099	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3100	7030003350	S.RESISTOR	ERJ3GEYJ 181 V (180 Ω)
R3103	7030003280	S.RESISTOR	ERJ3GEYJ 470 V (47 Ω)
R3104	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R3105	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
R3120	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3121	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3122	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3123	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3124	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3125	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3126	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3127	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3128	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3129	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3130	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3131	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3132	7030005390	S.RESISTOR	RR0816P-102-D (1 kΩ)
R3133	7030005400	S.RESISTOR	RR0816P-202-D (2 kΩ)
R3134	7030005380	S.RESISTOR	RR0816P-102-B (1 kΩ)
R3135	7030005370	S.RESISTOR	RR0816P-202-B (2 kΩ)
R3136	7030005380	S.RESISTOR	RR0816P-102-B (1 kΩ)
R3137	7030005370	S.RESISTOR	RR0816P-202-B (2 kΩ)
R3138	7030005380	S.RESISTOR	RR0816P-102-B (1 kΩ)
R3139	7030005370	S.RESISTOR	RR0816P-202-B (2 kΩ)
R3140	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3141	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3142	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3143	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3144	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)

S.=Surface mount

[PLL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R3145	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3146	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3147	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3148	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3168	7030003520	S.RESISTOR	ERJ3GEYJ 472 V (4.7 kΩ)
R3173	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3174	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R3176	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3177	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3178	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3179	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3180	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3181	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3183	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3184	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3186	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R3187	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R3188	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3189	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3190	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3191	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R3193	7030003430	S.RESISTOR	ERJ3GEYJ 821 V (820 Ω)
R3194	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
R3195	7030003380	S.RESISTOR	ERJ3GEYJ 331 V (330 Ω)
R3196	7030003400	S.RESISTOR	ERJ3GEYJ 471 V (470 Ω)
R3197	7030003490	S.RESISTOR	ERJ3GEYJ 272 V (2.7 kΩ)
R3198	7030003320	S.RESISTOR	ERJ3GEYJ 101 V (100 Ω)
R3199	7030003360	S.RESISTOR	ERJ3GEYJ 221 V (220 Ω)
R3200	7030003460	S.RESISTOR	ERJ3GEYJ 152 V (1.5 kΩ)
C3001	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C3002	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3003	4030007850	S.CERAMIC	C1608 SH 1H 820J-T-A
C3004	4030007870	S.CERAMIC	C1608 SH 1H 121J-T-A
C3005	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3006	4510005600	S.ELECTROLITIC	ECEV1CS100SR
C3007	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C3008	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3009	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C3010	40300068910	S.CERAMIC	C1608 CH 1H 0R5C-T-A
C3011	4030007030	S.CERAMIC	C1608 CH 1H 150J-T-A
C3012	4510004830	S.ELECTROLITIC	ECEV1CA100SR
C3013	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3014	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C3015	4510005600	S.ELECTROLITIC	ECEV1CS100SR
C3018	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3017	4510004830	S.ELECTROLITIC	ECEV1CA100SR
C3018	4510004840	S.ELECTROLITIC	ECEV1CA470SP
C3019	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3020	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3021	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3023	4510004840	S.ELECTROLITIC	ECEV1CA470SP
C3024	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3025	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3026	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3027	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3030	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3031	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C3032	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C3033	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3034	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3035	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3036	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3037	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3038	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3039	4030010000	S.CERAMIC	C1608 CH 1H 510J-T-A
C3040	4030006860	S.CERAMIC	C1608 CH 1H 050C-T-A
C3041	4030010000	S.CERAMIC	C1608 CH 1H 510J-T-A
C3042	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3043	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C3044	4550000730	S.TANTALUM	TESVA OJ 225M1-8L
C3045	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C3046	4030007080	S.CERAMIC	C1608 CH 1H 390J-T-A
C3047	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3048	4030011570	S.CERAMIC	CM105 CH 101G 50AT

[PLL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C3049	4610001270	S.TRIMMER	ECR-JA010 A12W
C3050	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C3052	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3053	4510005600	S.ELECTROLITIC	ECEV1CS100SR
C3054	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C3055	4030007150	S.CERAMIC	C1608 CH 1H 151J-T-A
C3056	4030007010	S.CERAMIC	C1608 CH 1H 100D-T-A
C3059	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3060	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3061	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3062	4510005600	S.ELECTROLITIC	ECEV1CS100SR
C3063	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3064	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3065	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3066	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3067	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3068	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3069	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3070	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3071	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C3072	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3073	4510005600	S.ELECTROLITIC	ECEV1CS100SR
C3077	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3083	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3084	4550003250	S.TANTALUM	TEMSVA 1V 474M-8L
C3085	4550006050	S.TANTALUM	TEMSVA OJ 106M8L
C3086	4340000100	S.MYLAR	ECHU 1C 473JB5
C3087	4510005600	S.ELECTROLITIC	ECEV1CS100SR
C3088	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C3089	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3090	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3091	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C3092	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3093	4510004590	ELECTROLITIC	16 MV 470 HC
C3094	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3095	4030010070	S.CERAMIC	C1608 X7S 1C 104K-T-A
C3096	4510004590	ELECTROLITIC	16 MV 470 HC
C3097	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3098	4030006920	S.CERAMIC	C1608 CH 1H 010C-T-A
C3099	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3100	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3101	4030006930	S.CERAMIC	C1608 CH 1H 020C-T-A
C3102	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3105	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3106	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3107	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3108	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3109	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3110	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3111	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3114	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3124	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C3125	4030006860	S.CERAMIC	C1608 JB 1H 102K-T-A
C3129	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3130	4030007110	S.CERAMIC	C1608 CH 1H 680J-T-A
C3132	4030006960	S.CERAMIC	C1608 CH 1H 050C-T-A
C3133	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3135	4030007060	S.CERAMIC	C1608 CH 1H 270J-T-A
C3136	4030007020	S.CERAMIC	C1608 CH 1H 120J-T-A
C3137	4030007060	S.CERAMIC	C1608 CH 1H 270J-T-A
C3138	4030006980	S.CERAMIC	C1608 CH 1H 070D-T-A
C3139	4030007040	S.CERAMIC	C1608 CH 1H 180J-T-A
C3141	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3142	4030006860	S.CERAMIC	C1608 JB 1H 472K-T-A
C3143	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3144	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3145	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3154	4030007040	S.CERAMIC	C1608 CH 1H 180J-T-A
C3155	4030007000	S.CERAMIC	C1608 CH 1H 080D-T-A
C3156	4030007060	S.CERAMIC	C1608 CH 1H 270J-T-A
C3157	4030006960	S.CERAMIC	C1608 CH 1H 050C-T-A
C3158	4030008560	S.CERAMIC	C1608 CH 1H 300J-T-A
C3161	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3164	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3165	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3170	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A

S.=Surface mount

[PLL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C3171	4030011280	S.CERAMIC	C1608 CH 1H 271J-T-A
C3173	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3174	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3175	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3177	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3178	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3179	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3180	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3181	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3182	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C3183	4030007130	S.CERAMIC	C1608 CH 1H 101J-T-A
C3184	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C3185	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
W3007	7030003860	S.JUMPER	ERJ3GE JPW V
W3008	7030003860	S.JUMPER	ERJ3GE JPW V
J3001 ⑨	6510007900	CONNECTOR	TBP-P01X-A1 [Eur only]
J3002 ⑨	6510007900	CONNECTOR	TBP-P01X-A1 [Eur only]
J3003 ⑨	6510007900	CONNECTOR	TBP-P01X-A1 [Eur only]
J3004	6510003080	CONNECTOR	RT01T-1.0B
J3005	6510003080	CONNECTOR	RT01T-1.0B
J3006	6910003140	CONNECTOR	IMSA-9202B-1-02T
J3007	6510017660	CONNECTOR	52045-1645
P3001 ⑨	6510003240	CONNECTOR	TMP-P01X-A1 [Eur only]
P3002 ⑨	6510003240	CONNECTOR	TMP-P01X-A1 [Eur only]
P3003 ⑨	6510003240	CONNECTOR	TMP-P01X-A1 [Eur only]
P3004	6910003120	CONNECTOR	IMSA-9206H-T [Gen. Marine only]
P3004	6910003120	CONNECTOR	IMSA-9206H-T [Gen. Marine only]
P3004	6910003120	CONNECTOR	IMSA-9206H-T [Gen. Marine only]
WS1	8970022070	CABLE	SX1632 1.5D (3)/PL
EP3001	0910044664	PCB	B 4249D

[PA UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
L4003	6140002780	COIL	LR-315 (SK-8MD-10Y 130)
L4004	6140002980	COIL	LR-143
L4005	2040000900	COIL	EXC-ELDR25C
L4006	6140002220	COIL	LR-270 (TR6X3X2 3A9)
L4007	2040000900	COIL	EXC-ELDR25C
L4008	6140002970	COIL	LR-83
L4010	6140002990	COIL	LR-148
L4011	2040000900	COIL	EXC-ELDR25C
L4012	6170000140	COIL	LW-15
L4013	6140002780	COIL	LR-315 (SK-8MD-10Y 130)
L4014	6200004840	S.COIL	NL 322522T-101J
L4018	6180003060	COIL	LAL 04NA 100K
L4018	2040000900	COIL	EXC-ELDR25C
L4020	6200004840	S.COIL	NL 322522T-101J
L4021	6200004840	S.COIL	NL 322522T-101J
L4022	6200004840	S.COIL	NL 322522T-101J
L4023	6180003060	COIL	LAL 04NA 100K
R4004	7010008830	RESISTOR	RD25XJ 47 Ω
R4005	7010008830	RESISTOR	RD25XJ 47 Ω
R4008	7030008990	S.RESISTOR	RK73K3AJ 88 Ω
R4007	7030008990	S.RESISTOR	RK73K3AJ 88 Ω
R4008	7070000800	RESISTOR	RSSX1 J 3.3 Ω
R4009	7070000800	RESISTOR	RSSX1 J 3.3 Ω
R4010	7070000800	RESISTOR	RSSX1 J 3.3 Ω
R4011	7070000800	RESISTOR	RSSX1 J 3.3 Ω
R4012	7070000800	RESISTOR	RSSX1 J 3.3 Ω
R4013	7070000800	RESISTOR	RSSX1 J 3.3 Ω
R4014	7010008820	RESISTOR	RD50SS J 10 Ω
R4015	7010008820	RESISTOR	RD50SS J 10 Ω
R4018	7070000790	RESISTOR	RSSX1 J 2.2 Ω
R4017	7070000790	RESISTOR	RSSX1 J 2.2 Ω
R4018	7030008750	S.RESISTOR	RK73K2AJ 4.7 kΩ
R4019	7030008750	S.RESISTOR	RK73K2AJ 4.7 kΩ
R4020	7010008810	RESISTOR	RD50SS J 150 Ω
R4022	7310004210	TRIMMER	KVSF887A 100 Ω
R4023	7070000810	RESISTOR	RSS1 J 10 Ω
R4024	7030008650	S.RESISTOR	RK73K2AJ 180 Ω
R4025	7310004220	TRIMMER	KVSF837A 470 Ω
R4028	7100008640	RESISTOR	5 SI 0.012 Ω (J)
R4027	7030008840	S.RESISTOR	RK73K2AJ 88 kΩ
R4028	7030008840	S.RESISTOR	RK73K2AJ 88 kΩ
R4029	7030008820	S.RESISTOR	RK73K2AJ 33 kΩ
R4030	7030008820	S.RESISTOR	RK73K2AJ 33 kΩ
R4031	7310004200	TRIMMER	KVSF837A 4.7 kΩ
R4032	7030008890	S.RESISTOR	RK73K2AJ 1M Ω
R4033	7030008780	S.RESISTOR	RK73K2AJ 10 kΩ
R4034	7010008600	RESISTOR	RD25XJ 270 Ω
R4035	7070000780	RESISTOR	RSSX2 J 4.7 Ω
R4036	7010008790	RESISTOR	RD25XJ 470 Ω
R4039	7010008780	RESISTOR	RD25XJ 4.7 Ω
R4040	7030007000	S.RESISTOR	RK73K3AJ 100 Ω
R4044	7010008790	RESISTOR	RD25XJ 470 Ω
R4045	7030007020	S.RESISTOR	RK73M2AJ 10 Ω
R4046	7030008650	S.RESISTOR	RK73K2AJ 180 Ω
R4047	7010008770	RESISTOR	RD25XJ 2.2 Ω
R4048	7010008780	RESISTOR	RD25XJ 2.7 Ω
R4049	7010008850	RESISTOR	RD25XJ 180 Ω
R4050	7010008750	RESISTOR	RD25XJ 2.2 kΩ
R4051	7030008870	S.RESISTOR	RK73K2AJ 470 Ω
R4052	7030007040	S.RESISTOR	RK73M2AJ 12 Ω
R4053	7030008870	S.RESISTOR	RK73K2AJ 470 Ω
C4003	4010007940	CERAMIC	HM11SJ SL 301J 500V
C4004	4010007940	CERAMIC	HM11SJ SL 301J 500V
C4008	4310000950	MYLAR	QYX1H103J TP
C4007	4310000950	MYLAR	QYX1H103J TP
C4008	4030011390	S.CERAMIC	GRM40 CH 331J 50PT
C4009	4030011460	S.CERAMIC	GR111 CH 102K 50PB
C4010	4030011470	S.CERAMIC	GR44 CH 682K
C4011	4030011470	S.CERAMIC	GR44 CH 682K
C4012	4010007970	CERAMIC	HM13SJ SL 471J 500V
C4013	4030011460	S.CERAMIC	GR111 CH 102K 50PB
C4014	4030011460	S.CERAMIC	GR111 CH 102K 50PB

S.=Surface mount

[PA UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C4015	4030011470	S.CERAMIC	GR44 CH 682K
C4016	4030011470	S.CERAMIC	GR44 CH 682K
C4018	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4019	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4020	4510006530	ELECTROLITIC	UVX1C470M DA
C4021	4510006540	ELECTROLITIC	UVR1C101M DA
C4022	4030011440	S.CERAMIC	GRM40 B 473K 50PT
C4023	4510006580	ELECTROLITIC	UVR1E471M PA
C4024	4030011440	S.CERAMIC	GRM40 B 473K 50PT
C4026	4510006510	ELECTROLITIC	UVX1E100M DA
C4027	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4028	4510006570	ELECTROLITIC	UVR1C102M PA
C4029	4030011440	S.CERAMIC	GRM40 B 473K 50PT
C4030	4030011440	S.CERAMIC	GRM40 B 473K 50PT
C4031	4030011440	S.CERAMIC	GRM40 B 473K 50PT
C4032	4030011370	S.CERAMIC	GRM40 CH 101J 50PT
C4033	4030011480	S.CERAMIC	GR44 Y5V 684Z
C4034	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4035	4510006580	ELECTROLITIC	UVR1E102M PA
C4036	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4038	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4041	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4042	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4043	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4044	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4045	4320001020	DIP MICA	KD20C 472J5
C4046	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4047	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4048	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4050	4510006580	ELECTROLITIC	UVR1E102M PA
C4051	4510006550	ELECTROLITIC	UVR1C471M PA
C4052	4510006510	ELECTROLITIC	UVX1E100M DA
C4053	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4054	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4055	4030011480	S.CERAMIC	GR111 CH 102K 50PB
C4056	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4057	4320001040	DIP MICA	KD20C 681J5
C4059	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4063	4510006550	ELECTROLITIC	UVR1C471M PA
C4064	4030011380	S.CERAMIC	GRM40 CH 221J 50PT
C4065	4040000710	BARRIERLAYR	UAT 08X 473K
C4066	4040000710	BARRIERLAYR	UAT 08X 473K
C4067	4040000710	BARRIERLAYR	UAT 08X 473K
C4068	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C4069	4030011440	S.CERAMIC	GRM40 B 473K 50PT
C4070	4030011500	S.CERAMIC	GRM40 B 102K 50PT
C4071	4030011360	S.CERAMIC	GRM40 CH 330J 50PT
C4072	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4073	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4074	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4075	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4076	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4077	4030011500	S.CERAMIC	GRM40 B 102K 50PT
C4078	4030011450	S.CERAMIC	GRM40 B 104K 50PT
C4079	4030011370	S.CERAMIC	GRM40 CH 101J 50PT
W4001	6910009340	JUMPER	JPW-02A
W4002	6910009340	JUMPER	JPW-02A
W4003	6910009340	JUMPER	JPW-02A
W4004	6910009340	JUMPER	JPW-02A
S4001	6910009320	THERMAL	OHD-3 110M
S4002	6910009310	THERMAL	OHD-3 50M
J4002	6510018780	CONNECTOR	TMP-J01X-V6
J4003	6510018730	CONNECTOR	10FE-BT
J4004	6510018700	CONNECTOR	RT01T-1.0B
J4005	6510018700	CONNECTOR	RT01T-1.0B
WS1	8970021930	CABLE	SX1632 J lead set (1)/PA150
WS2	8970021940	CABLE	SX1632 1.5D(1)/PA150

[PA UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
EP4001	0910045044	PCB	B 4250D
EP4003	6910009350	BEAD	FSOH050RN01
EP4004	6910009350	BEAD	FSOH050RN01
EP4006	6910009360	BEAD	FSOH070RN
EP4008	6510018840	TERMINAL	F4053A
EP4009	6510018840	TERMINAL	F4053A

[FILTER UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
Q4301	1590002240	TRANSISTOR	DTC114ES TP
D4301	1710000820	DIODE	1SS133 T77
D4302	1710000820	DIODE	1SS133 T77
D4303	1710000820	DIODE	1SS133 T77
D4304	1710000820	DIODE	1SS133 T77
D4305	1710000820	DIODE	1SS133 T77
D4306	1710000820	DIODE	1SS133 T77
D4307	1710000820	DIODE	1SS133 T77
D4308	1710000820	DIODE	1SS133 T77
D4309	1790001380	DIODE	1SS237
D4310	1790001380	DIODE	1SS237
D4311	1710000820	DIODE	1SS133 T77
L4301	6180003050	COIL	LAL 03NA 101K
L4302	6140002950	COIL	LR-226
L4303	6140002960	COIL	LR-227
L4304	6180003050	COIL	LAL 03NA 101K
L4305	6180003050	COIL	LAL 03NA 101K
L4306	6140002900	COIL	LR-263
L4307	6140002820	COIL	LR-235
L4308	6140002830	COIL	LR-236
L4309	6180003050	COIL	LAL 03NA 101K
L4310	6180003050	COIL	LAL 03NA 101K
L4311	6140002850	COIL	LR-238
L4312	6140002820	COIL	LR-235
L4313	6140002820	COIL	LR-235
L4314	6180003050	COIL	LAL 03NA 101K
L4315	6180003050	COIL	LAL 03NA 101K
L4316	6140002840	COIL	LR-237
L4317	6140002900	COIL	LR-263
L4318	6140002900	COIL	LR-263
L4319	6180003050	COIL	LAL 03NA 101K
L4320	6180003050	COIL	LAL 03NA 101K
L4321	6140002860	COIL	LR-241
L4322	6140002840	COIL	LR-237
L4323	6140002840	COIL	LR-237
L4324	6180003050	COIL	LAL 03NA 101K
L4325	6180003050	COIL	LAL 03NA 101K
L4327	6140002880	COIL	LR-243
L4328	6140002870	COIL	LR-242
L4329	6140002870	COIL	LR-242
L4330	6180003050	COIL	LAL 03NA 101K
L4331	6180003050	COIL	LAL 03NA 101K
L4332	6140002670	COIL	LR-242
L4333	6140002870	COIL	LR-242
L4334	6180003050	COIL	LAL 03NA 101K
L4335	6180003050	COIL	LAL 03NA 101K
L4336	6140002890	COIL	LR-262
L4337	6140002890	COIL	LR-262
L4338	6180003050	COIL	LAL 03NA 101K
L4339	6180003050	COIL	LAL 03NA 101K
L4340	6180003050	COIL	LAL 03NA 101K
L4341	6140002530	COIL	LR-291 (TR10X5X5 3A6)
L4342	6140001460	COIL	LR-170
L4343	6180003050	COIL	LAL 03NA 101K
L4344	6180003050	COIL	LAL 03NA 101K
L4345	6140002830	COIL	LR-236

S.=Surface mount

[FILTER UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
R4301	7010006650	RESISTOR	RD18S J 22 kΩ
R4302	7010006710	RESISTOR	RD18X J 100 kΩ
R4303	7010006640	RESISTOR	RD18S J 10 kΩ
R4304	7010006710	RESISTOR	RD18X J 100 kΩ
R4305	7010006700	RESISTOR	RD18X J 22 kΩ
R4306	7010006640	RESISTOR	RD18S J 10 kΩ
R4307	7010006740	RESISTOR	RD50SS J 68 Ω
R4308	7010006730	RESISTOR	RD25S J 10 Ω
R4309	7540000110	ABSORBER	SRYH-350L
R4312	7010006630	RESISTOR	RD18S J 4.7 kΩ
R4313	7010006690	RESISTOR	RD18X J 4.7 kΩ
R4314	7010006720	RESISTOR	RD18X J 1M Ω
C4301	4040000700	BARRIERLAYR	UZE 08X 104M
C4302	4320000990	DIP MICA	KD20C 102J5
C4303	4010007970	CERAMIC	HM13SJ SL 471J 500V
C4304	4010007970	CERAMIC	HM13SJ SL 471J 500V
C4305	4320001000	DIP MICA	KD20C 222J5
C4306	4010007940	CERAMIC	HM11SJ SL 301J 500V
C4307	4010007930	CERAMIC	HM95SJ SL 271J 500V
C4308	4320001010	DIP MICA	KD20C 272J5
C4309	4010007890	CERAMIC	HM95SJ SL 181J 500V
C4310	4010007750	CERAMIC	HM60SJ CH 100D 500V
C4311	4010007980	CERAMIC	HM11SJ SL 391J 500V
C4312	4010007980	CERAMIC	HM11SJ SL 391J 500V
C4313	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4314	4010007980	CERAMIC	HM11SJ SL 391J 500V
C4315	4040000700	BARRIERLAYR	UZE 08X 104M
C4316	4040000700	BARRIERLAYR	UZE 08X 104M
C4317	4010007780	CERAMIC	HM60SJ SL 300J 500V
C4318	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4319	4010007970	CERAMIC	HM13SJ SL 471J 500V
C4320	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4321	4010007930	CERAMIC	HM95SJ SL 271J 500V
C4322	4010007930	CERAMIC	HM95SJ SL 271J 500V
C4323	4010007930	CERAMIC	HM95SJ SL 271J 500V
C4324	4010007970	CERAMIC	HM13SJ SL 471J 500V
C4325	4010007970	CERAMIC	HM13SJ SL 471J 500V
C4326	4010007970	CERAMIC	HM13SJ SL 471J 500V
C4327	4010007930	CERAMIC	HM95SJ SL 271J 500V
C4328	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4329	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4330	4010007970	CERAMIC	HM13SJ SL 471J 500V
C4331	4010007980	CERAMIC	HM11SJ SL 391J 500V
C4332	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4333	4010007870	CERAMIC	HM74SJ SL 121J 500V
C4334	4010007870	CERAMIC	HM74SJ SL 121J 500V
C4335	4010007980	CERAMIC	HM11SJ SL 391J 500V
C4336	4010007980	CERAMIC	HM11SJ SL 391J 500V
C4337	4010007820	CERAMIC	HM60SJ SL 880J 500V
C4338	4040000700	BARRIERLAYR	UZE 08X 104M
C4339	4010007880	CERAMIC	HE80SJ YB 472K 50V
C4340	4010007910	CERAMIC	HM95SJ SL 221J 500V
C4341	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4342	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4343	4010007980	CERAMIC	HM11SJ SL 391J 500V
C4344	4010007990	CERAMIC	HM74SJ SL 151J 500V
C4345	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4346	4010007970	CERAMIC	HM13SJ SL 471J 500V
C4347	4010007850	CERAMIC	HM60SJ SL 101J 500V
C4348	4010007940	CERAMIC	HM11SJ SL 301J 500V
C4349	4010007680	CERAMIC	HE80SJ YB 472K 50V
C4350	4010007680	CERAMIC	HE80SJ YB 472K 50V
C4351	4010007890	CERAMIC	HM95SJ SL 181J 500V
C4352	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4353	4010007870	CERAMIC	HM74SJ SL 121J 500V
C4354	4010007930	CERAMIC	HM95SJ SL 271J 500V
C4355	4010007940	CERAMIC	HM11SJ SL 301J 500V
C4356	4010007810	CERAMIC	HM60SJ SL 580J 500V
C4357	4010007740	CERAMIC	HM60SJ SL 050C 500V
C4358	4010007940	CERAMIC	HM11SJ SL 301J 500V
C4359	4010007660	CERAMIC	HE80SJ YB 472K 50V
C4360	4010007680	CERAMIC	HE80SJ YB 472K 50V
C4361	4010007960	CERAMIC	HM11SJ SL 391J 500V
C4362	4010007870	CERAMIC	HM74SJ SL 121J 500V

[FILTER UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C4363	4010007980	CERAMIC	HM11SJ SL 391J 500V
C4364	4010007840	CERAMIC	HM60SJ SL 820J 500V
C4365	4010007910	CERAMIC	HM95SJ SL 221J 500V
C4366	4010007880	CERAMIC	HE80SJ YB 472K 50V
C4367	4010007880	CERAMIC	HE80SJ YB 472K 50V
C4368	4010007930	CERAMIC	HM95SJ SL 271J 500V
C4369	4010007850	CERAMIC	HM60SJ SL 101J 500V
C4370	4010007950	CERAMIC	HM11SJ SL 331J 500V
C4371	4010007820	CERAMIC	HM60SJ SL 680J 500V
C4372	4010007840	CERAMIC	HM60SJ SL 820J 500V
C4373	4010007880	CERAMIC	HE80SJ YB 472K 50V
C4374	4010007880	CERAMIC	HE80SJ YB 472K 50V
C4375	4010007870	CERAMIC	HM74SJ SL 121J 500V
C4376	4010008010	CERAMIC	HM60SJ SL 330J 500V
C4377	4010007910	CERAMIC	HM95SJ SL 221J 500V
C4378	4010007800	CERAMIC	HM60SJ SL 470J 500V
C4379	4010007870	CERAMIC	HM74SJ SL 121J 500V
C4380	4010007880	CERAMIC	HE80SJ YB 472K 50V
C4381	4010007880	CERAMIC	HE80SJ YB 472K 50V
C4382	4010007990	CERAMIC	HM74SJ SL 151J 500V
C4383	4010007780	CERAMIC	HM60SJ SL 220J 500V
C4384	4010007940	CERAMIC	HM11SJ SL 301J 500V
C4385	4010007800	CERAMIC	HM60SJ SL 470J 500V
C4386	4010007990	CERAMIC	HM74SJ SL 151J 500V
C4387	4010007880	CERAMIC	HE80SJ YB 472K 50V
C4388	4010007710	CERAMIC	HE40SJ YB 471K 50V
C4389	4010007710	CERAMIC	HE40SJ YB 471K 50V
C4390	4010007700	CERAMIC	HE90SJ SL 471J 50V
C4391	4010007700	CERAMIC	HE90SJ SL 471J 50V
C4392	4610002040	TRIMMER	ECR-HA030E41
C4393	4010007690	CERAMIC	HE60SJ SL 181J 50V
C4394	4010007680	CERAMIC	HE80SJ YB 472K 50V
C4395	4010007680	CERAMIC	HE80SJ YB 472K 50V
C4396	4010007680	CERAMIC	HE80SJ YB 472K 50V
C4398	4010007730	CERAMIC	HM17SJ YB 103K 500V
C4399	4010007730	CERAMIC	HM17SJ YB 103K 500V
C4400	4010007680	CERAMIC	HE50SJ SL 101J 50V
C4401	4010007670	CERAMIC	HE40SJ SL 180J 50V
C4402	4010007680	CERAMIC	HE50SJ SL 101J 50V
C4404	4010007680	CERAMIC	HE80SJ YB 472K 50V
C4406	4040000710	BARRIERLAYR	UAT 08X 473K
C4407	4510006510	ELECTROLITIC	UVX1E100M DA
C4408	4010007800	CERAMIC	HM60SJ SL 470J 500V
C4409	4010007750	CERAMIC	HM60SJ CH 100D 500V
C4410	4010007870	CERAMIC	HM74SJ SL 121J 500V
C4411	4010007750	CERAMIC	HM60SJ CH 100D 500V
C4412	4010007840	CERAMIC	HM60SJ SL 820J 500V
C4413	4010007810	CERAMIC	HM60SJ SL 580J 500V
C4414	4010007750	CERAMIC	HM60SJ CH 100D 500V
C4415	4010007850	CERAMIC	HM60SJ SL 101J 500V
C4416	4010007680	CERAMIC	HE80SJ YB 472K 50V
C4417	4010007850	CERAMIC	HM60SJ SL 101J 500V
C4418	4010008000	CERAMIC	HM60SJ SL 040C 500V
RL4301	6330001280	RELAY	AJS1345
RL4302	6330001280	RELAY	AJS1345
RL4303	6330001280	RELAY	AJS1345
RL4304	6330001280	RELAY	AJS1345
RL4305	6330001280	RELAY	AJS1345
RL4306	6330001280	RELAY	AJS1345
RL4307	6330001280	RELAY	AJS1345
RL4308	6330001280	RELAY	AJS1345
RL4309	6330001280	RELAY	AJS1345
RL4310	6330001280	RELAY	AJS1345
RL4311	6330001280	RELAY	AJS1345
RL4312	6330001280	RELAY	AJS1345
RL4313	6330001280	RELAY	AJS1345
RL4314	6330001280	RELAY	AJS1345
RL4315	6330001280	RELAY	AJS1345
RL4316	6330001280	RELAY	AJS1345
RL4317	6330001270	RELAY	AGP 2013(DSP1-DC12V)
W4301	6910009420	JUMPER	IPS-1041-2
W4312	6910009410	JUMPER	IPS-1041-4

S.=Surface mount

[FILTER UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
W4313	6910009410	JUMPER	IPS-1041-4
W4314	6910009410	JUMPER	IPS-1041-4
W4319	6910009340	JUMPER	JPW-02A
W4320	6910009410	JUMPER	IPS-1041-4
W4321	6910009410	JUMPER	IPS-1041-4
J4303	6510018740	CONNECTOR	18FE-BT-M
J4304	6510018780	CONNECTOR	TMP-J01X-V6
WS1	8970021920	CABLE	SX1832 1.5D (2)/FI
EP4301	0910045053	PCB	B 4251C

[ALARM UNIT] (except General version)

REF. NO.	ORDER NO.	DESCRIPTION	
C5001	4550006140	S.TANTALUM	ECST1EY474R
C5002	4550006210	S.TANTALUM	ECST1CX108R
C5004	4030006880	S.CERAMIC	C1608 JB 1H 472K-T-A
C5005	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C5006	4030007090	S.CERAMIC	C1608 CH 1H 470J-T-A
C5007	4030006880	S.CERAMIC	C1608 JB 1H 102K-T-A
C5008	4030006850	S.CERAMIC	C1608 JB 1H 471K-T-A
J5001	6510018180	S.CONNECTOR	4-175643-0
J5002	6510018170	S.CONNECTOR	4-175643-4
EP5001	0910045801	PCB	B 4368A

[CHASSIS PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	
F4601	5220000280	HOLDER	FH-052S
F4602	5220000280	HOLDER	FH-052S
F4603	5210000500	FUSE	FGB 30A
F4604	5210000500	FUSE	FGB 30A
W4603	8900005900	CABLE	OPC-569
W4604	8900005880	CABLE	OPC-564
W4605	8900005890	CABLE	OPC-565
J4601	6510018780	CONNECTOR	MR-DS 01

[REG UNIT] (Europe version only)

REF. NO.	ORDER NO.	DESCRIPTION	
IC8001	1110003920	S.IC	μPC494GS
IC8002	1110003900	S.IC	μPC10937
IC8003	1170000300	S.IC	PS2701-1
Q8001	1580000880	S.FET	2SK2286
Q8003	1510000950	S.TRANSISTOR	2SA1213-Y
D8002	1790001370	DIODE	SF10SC8
D8003	1790001380	DIODE	1SS237
T8001	5920000440	TRANSFORMER	TO-25
T8002	5920000610	TRANSFORMER	TC-4
L8001	5920000450	COIL	FK-080E-1020
L8003	5920000450	COIL	FK-080E-1020
R8001	7030006720	S.RESISTOR	RK73K2AJ 2.7 kΩ
R8002	7030006750	S.RESISTOR	RK73K2AJ 4.7 kΩ
R8003	7030006770	S.RESISTOR	RK73K2AJ 8.2 kΩ
R8004	7030006700	S.RESISTOR	RK73K2AJ 1.2 kΩ
R8005	7030006750	S.RESISTOR	RK73K2AJ 4.7 kΩ
R8006	7030006750	S.RESISTOR	RK73K2AJ 4.7 kΩ
R8007	7030006780	S.RESISTOR	RK73K2AJ 8.8 kΩ
R8008	7030006730	S.RESISTOR	RK73K2AJ 3.3 kΩ
R8009	7030006940	S.RESISTOR	RK73K2HJ 47 Ω
R8010	7030006980	S.RESISTOR	RK73K2HJ 470 Ω
R8011	7030006750	S.RESISTOR	RK73K2AJ 4.7 kΩ
R8012	7030006640	S.RESISTOR	RK73K2AJ 100 Ω
R8013	7310004190	TRIMMER	KVSF637A 1 kΩ
R8014	7030006740	S.RESISTOR	RK73K2AJ 3.9 kΩ
R8015	7030006890	S.RESISTOR	RK73K2AJ 1 kΩ
R8016	7030006620	S.RESISTOR	RK73K2AJ 33 Ω
R8019	7030006670	S.RESISTOR	RK73K2AJ 470 Ω
R8020	7030006690	S.RESISTOR	RK73K2AJ 1 kΩ

[TERMINAL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	
C7001	4510006810	ELECTROLITIC	UVR1C472M HA
C7002	4010007860	CERAMIC	HE80SJ YB 472K 50V
C7003	4010007980	CERAMIC	HE80SJ YB 222K 50V
C7004	4010007980	CERAMIC	HE80SJ YB 222K 50V
C7005	4010007860	CERAMIC	HE80SJ YB 472K 50V
C7006	4010007860	CERAMIC	HE80SJ YB 472K 50V
J7001	6510018710	CONNECTOR	RTB-1.5-2F
EP7001	0910044563	PCB	B 4421C
EP7003	6510018840	TERMINAL	F4053A
EP7004	6510018840	TERMINAL	F4053A
EP7009	6910009550	BEAD	FSOH090RN

[ALARM UNIT] (except General version)

REF. NO.	ORDER NO.	DESCRIPTION	
IC5001	1130007800	S.IC	S-7116AF-TF
Q5001	1530002690	S.TRANSISTOR	2SC4116-GR (TE85R)
X5001	6060000150	S.CERAMIC	CSAC3.58MGC300CD
X5002	6060000150	S.CERAMIC	CSAC3.58MGC300CD
R5001	7030003620	S.RESISTOR	ERJ3GEYJ 333 V (33 kΩ)
R5002	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5003	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5004	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)
R5005	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5006	7030003680	S.RESISTOR	ERJ3GEYJ 104 V (100 kΩ)
R5007	7030003710	S.RESISTOR	ERJ3GEYJ 184 V (180 kΩ)
R5008	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5009	7030003440	S.RESISTOR	ERJ3GEYJ 102 V (1 kΩ)
R5010	7030003640	S.RESISTOR	ERJ3GEYJ 473 V (47 kΩ)

REF. NO.	ORDER NO.	DESCRIPTION	
C8001	4510006550	ELECTROLITIC	UVR1C471M PA
C8002	4030011440	S.CERAMIC	GRM40 B 473K 50PT
C8003	4560000140	CERAMIC	D87X5T 1E 684M51
C8004	4510006590	ELECTROLITIC	UPF1E102M RH
C8005	4510006590	ELECTROLITIC	UPF1E102M RH
C8006	4510006500	ELECTROLITIC	UVX1C100M DA
C8007	4310000950	MYLAR	QYX1H103J TP
C8008	4030011420	S.CERAMIC	GRM40 B 472K 50PT
C8009	4510006590	ELECTROLITIC	UPF1E102M RH
C8010	4510006590	ELECTROLITIC	UPF1E102M RH
C8011	4560000140	CERAMIC	D87X5T 1E 684M51
C8012	4030011410	S.CERAMIC	GRM40 B 222K 50PT
C8013	4510006800	ELECTROLITIC	UVR1C222M HA
C8014	4560000140	CERAMIC	D87X5T 1E 684M51
C8015	4560000140	CERAMIC	D87X5T 1E 684M51
EP8001	0910045072	PCB	B 4420B

S.=Surface mount

SECTION 6 MECHANICAL PARTS AND DISASSEMBLY

[MAIN UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MP1	8510000230	220 shield case	1
MP2	8510000241	220 shield case cover -1	1
MP3	8510002200	VCO case	1
MP4	8510000230	220 shield case	1
MP5	8510008300	963 DDS shield case	1
MP6	8510008310	963 DDS shield cover	1
MP8	8510001060	Shield case	1
MP9	8510001740	Shield case upper cover	1
MP10	8930011830	9M filter fitting (Gen, Marine only)	1
MP11	8510004640	220 shield plate (C)	1
MP12	8930005440	Insulation plate (E)	1
MP13	8510004640	220 shield plate (C)	1
MP14	8930005440	Insulation plate (E)	1
MP15	8510000241	220 shield case cover -1	1

[LOGIC UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MP2006	8810008890	Screw FH M3 x 6 NI	1
MP2007	8830001060	Nut M3 NI	1
MP2008	8930036570	1632 lamp rubber	3

[MIC UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J2301	6510009210	Connector 14RS-8H-MI-AU (F) [MICROPHONE] (incl. nut, washer)	1

[VR1 UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
R2401	7210002750	Variable resistor TP96N937-15F-10KB-1540 [VOLUME] (incl. nut, washer)	1

[VR2 UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
R2501	7210002760	Variable resistor TP96N944-15F-10KB-1632 [CLARITY] (incl. nut, washer)	1

[SENSOR1 UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
S2601	2250000280	Encoder SRB18100 25KC [GROUP] (incl. nut, washer)	1

[SENSOR2 UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
S2701	2250000280 915-05184	Encoder SRB18100 25KC [CHANNEL] (incl. nut, washer)	1

[FRONT PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
S2801	2260002270	Switch JPZ2120-0101 (TV-3) [POWER]	1
W2807	8900005860	Flat cable OPC-522 (N: 6, L: 100)	1
W2808	8900005860	Flat cable OPC-522 (N: 6, L: 100)	1
W2809	8900005870	Flat cable OPC-524 (N: 10, L: 150)	1
W2810	8900005860	Flat cable OPC-522 (N: 6, L: 100)	1
W2811	8900005860	Flat cable OPC-522 (N: 6, L: 100)	1
MP2801	8210012190	1632 front panel (GMDSS)	1
MP2802	8210012340	1632 front panel (A) (Gen, Marine)	1
MP2803	8310035580	1632 window plate	1
MP2803	8930035591	1632 3-key -1	1
MP2804	8930035600	1632 4-key	1
MP2805	8930035610	1632 14-key	1
MP2806	8930035640	1632 power key	1
MP2807	8930035650	1632 1-key	1
MP2808	8930035660	1632 2-key	1
MP2809	8610009750	Knob N232	2
MP2810	8610009760	Knob N233	2
MP2811	8210012200	1632 mask plate (Gen only)	1
MP2812	8930035580	1632 sensor seal	2
MP2813	8930035570	1632 knob plate	1

[LOGIC UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
DS2004	5010000180	LCD DLC-7978P (HTN transparent)	1
MP2001	8410002000	1632 heat sink plate	1
MP2002	8930035620	1632 LCD holder	1
MP2003	8930036280	1632 LCD lower filter	1
MP2004	8930036310	1632 LCD upper filter	1

[FRONT PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MP2814	8930035671	1632 SP net -1	1
MP2815	8930035560	1632 dust sheet	1
MP2816	8930035630	1632 front seal	1
MP2817	8930034950	O-ring SO-008-17	2
MP2818	8010016022	1632 sub chassis -2	1
MP2819	8810008900	Screw PH M3 x 6 NI	4
MP2820	8810008720	Screw PH BT M3 x 6 NI	7
MP2821	8930036350	1632 T-key	1
MP2822	8930036320	1632 key spacer	1
MP2823	8810008890	Screw FH M3 X 6 NI	2
MP2824	8610009240	Knob spring No. 7800P	2
MP2825	8930032370	Shaft tape (A)	2
SP2801	2510000870	Speaker 77F60N	1

[PA PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MP4601	8810008720	Screw PH BT M3 x 6 NI	4
MP4602	8810008720	Screw PH BT M3 x 6 NI (Eur only)	3
MP4603	8810008720	Screw PH BT M3 x 6 NI	4
MP4604	8810008720	Screw PH BT M3 x 6 NI	8
MP4605	8810008560	Screw PH M3 x 8 SUS ZK	2
MP4608	8410002010	1632 heat sink	1
MP4609	8110005391	1632 PA cover -1	1
MP4610	8930035790	1632 ANT plate	1
MP4611	8810008720	Screw PH BT M3 x 6 NI	25
MP4612	8810008900	Screw PH M3 x 6 NI	1
MP4613	8810008900	Screw PH M3 x 6 NI	1
MP4614	8810008900	Screw PH M3 x 6 NI	1
MP4615	8810008900	Screw PH M3 x 6 NI	1
MP4616	8810008900	Screw PH M3 x 6 NI	1
MP4617	8810008880	Setscrew H 2.6 x 16 NI	1
MP4618	8810008870	Setscrew H 2.6 x 10 NI	1
MP4619	8810008870	Setscrew H 2.6 x 10 NI	1
MP4620	8810008880	Setscrew H 2.6 x 16 NI	1
MP4623	8810008900	Screw PH M3 x 6 NI (Eur only)	1
MP4628	8850001460	1632 washer	4
MP4629	8930034300	1542 ANT seal (GMDSS only)	1
MP4630	8930035770	Seal (GMDSS only)	1
MP4631	8810008900	Screw PH M3 x 6 NI	2
MP4632	8810008900	Screw PH M3 x 6 NI	2
MP4633	8930036290	1632 FH-A seal (GMDSS only)	2
MP4634	8930036300	1632 FH-B seal	2
MP4635	8930015750	Sheet (S)	1
MP4636	8930037870	1632 PA-A sheet	4
MP4637	8930037880	1632 PA-B sheet T	4

[PLL UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MP3001	8510009220	1386 shield case	1
MP3002	8510009860	1632 shield cover	1
MP3003	8510008300	963 DDS shield case	1
MP3004	8510008310	963 DDS shield cover	1
MP3005	8510000230	220 shield case	1
MP3006	8510000881	194 VCO case -1	1
MP3007	8510006510	194 VCO case cover (E)	1
MP3008	8510005330	Coil case	1
MP3010	8810008860	Setscrew A 2.6 x 5	4
MP3011	8510002200	VCO case	1
MP3012	8510006941	DTMF shield case -1	1
MP3013	8510002200	VCO case	1
MP3014	8510000210	194 shield plate	1
MP3015	8930005570	Insulation plate (U)	1

[PA UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MP4001	8860000110	Ground lug B 3 (M4) AG BS	1
MP4002	8860000110	Ground lug B 3 (M4) AG BS	1

[FILTER UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MP4301	8930014140	Ground spring (D)	1

[PA PARTS]

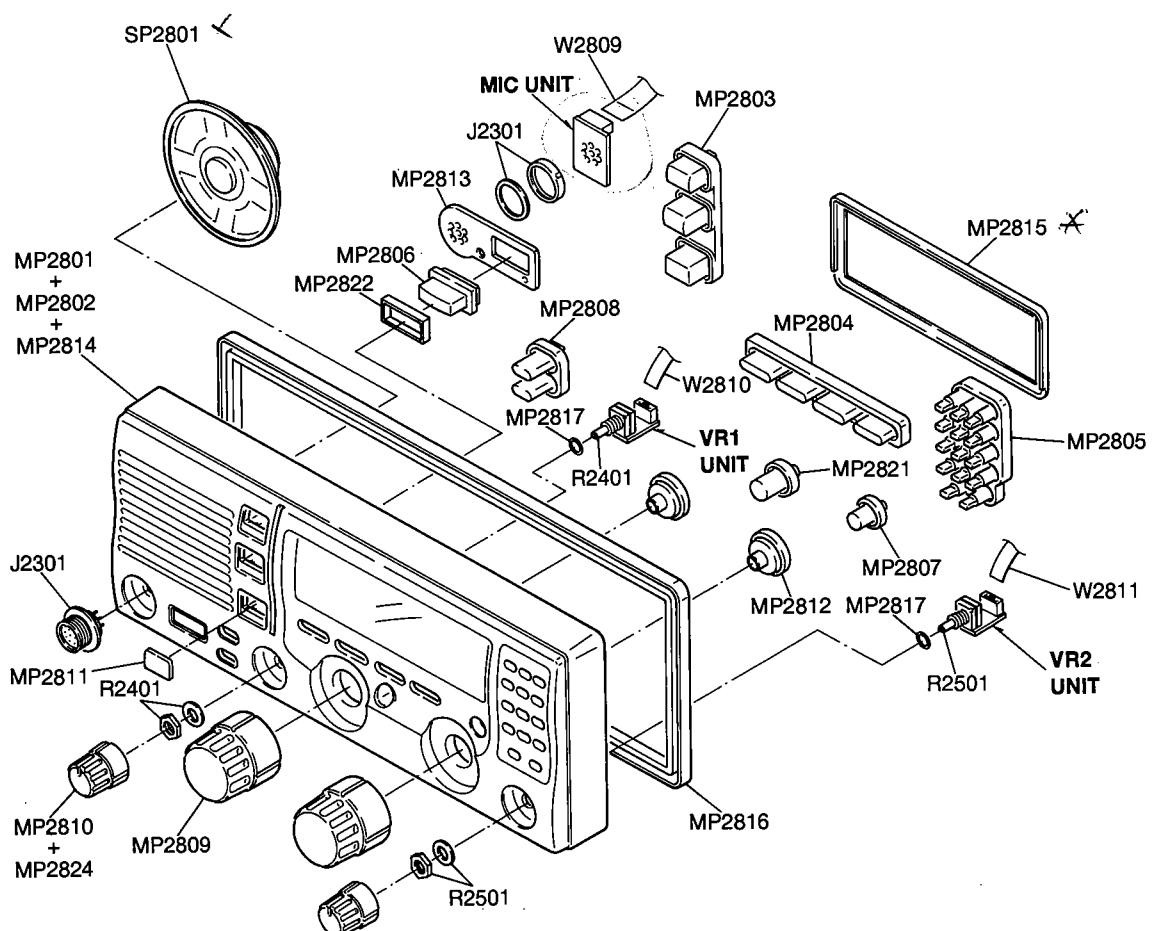
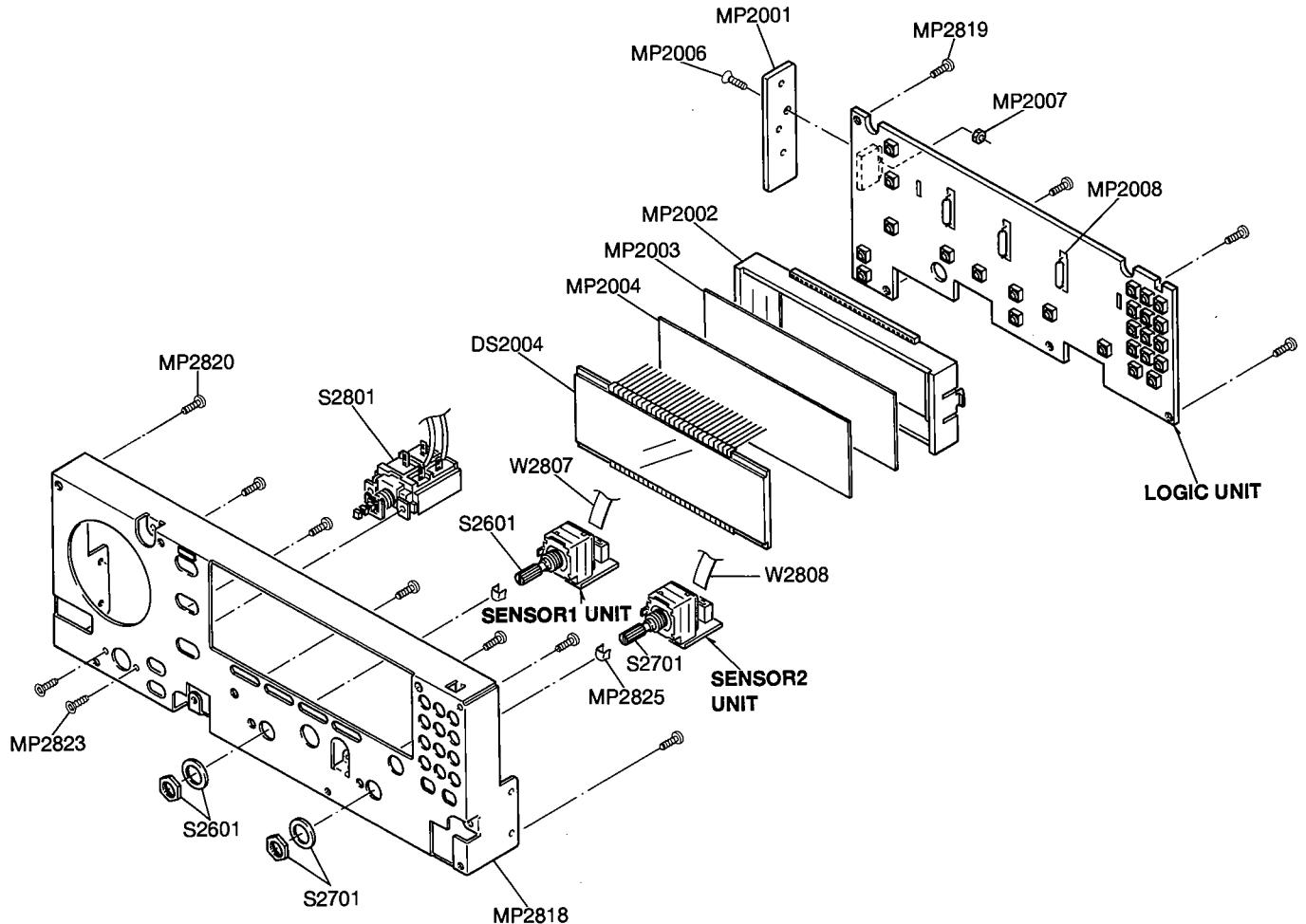
REF. NO.	ORDER NO.	DESCRIPTION	QTY.
F4601	5220000280	Fuse holder FH-052S (incl. nut, washer)	1
F4602	5220000280	Fuse holder FH-052S (incl. nut, washer)	1
F4603	5210000500	Fuse FGB 30 A	1
F4604	5210000500	Fuse FGB 30 A	1
J4601	6510018780	Connector MR-DS 01 [ANTENNA]	1
W4603	8900005900	Cable OPC-569 [DC POWER]	1
W4604	8900005880	Flat cable OPC-564 (N: 16, L: 220)	1
W4605	8900005890	Flat cable OPC-565 (N: 10, L: 220)	1
EP4603	6910009370	P101 KD insulation sheet (Eur only)	1
EP4604	6910009370	P101 KD insulation sheet (Eur only))	1
EP4605	6910009370	P101 KD insulation sheet	1
EP4607	6910009380	B312D insulation bushing (Eur only))	1
EP4608	6910009380	B312D insulation bushing (Eur only))	1
EP4609	6910009380	B312D insulation bushing	1
EP4611	8930024970	1241 insulation sheet (Eur Marine only)	1
EP4611	8930037020	Insulation sheet (Eur GMDSS only)	1
EP4612	8930024970	1241 insulation sheet (Eur Marine only)	1
EP4612	8930037020	Insulation sheet (Eur GMDSS only)	1

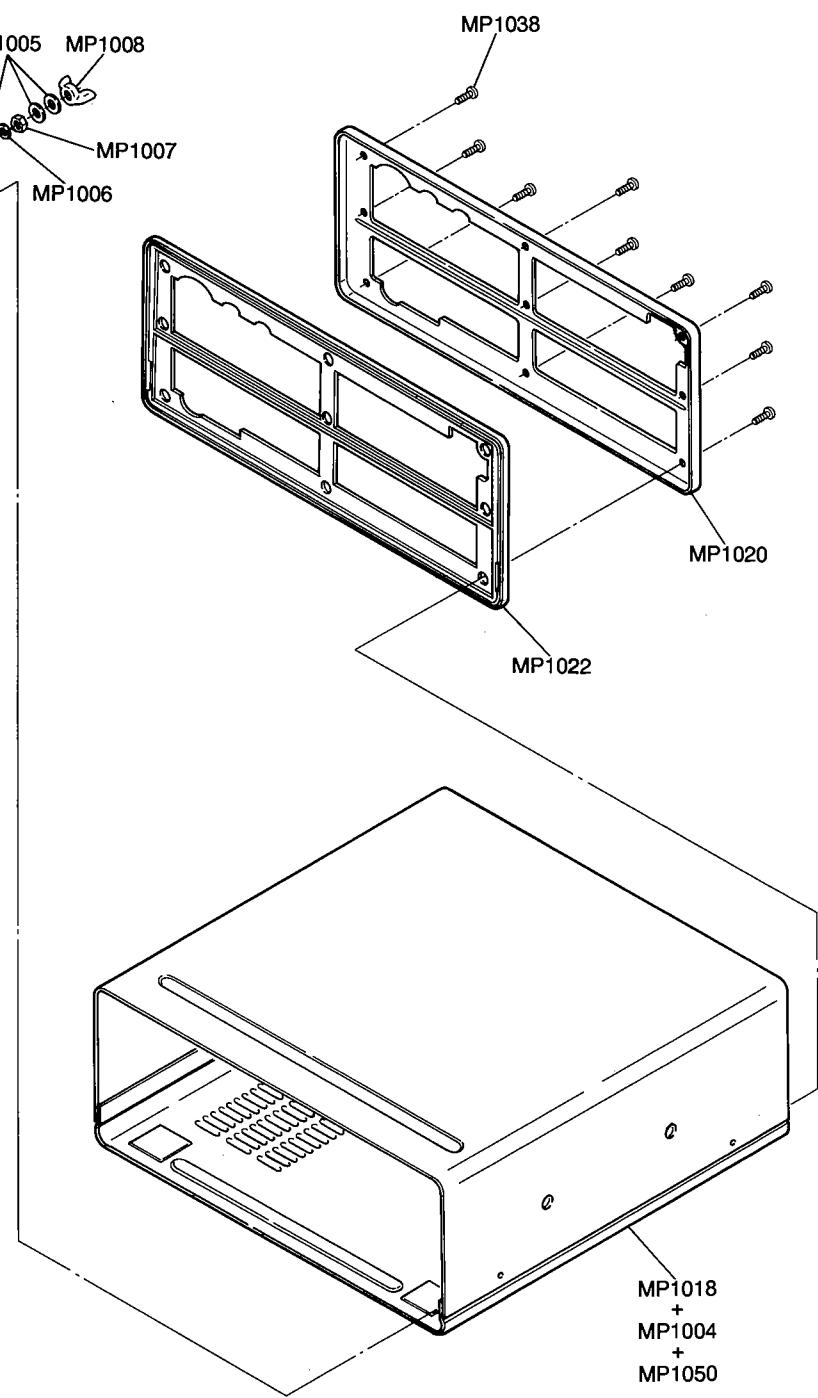
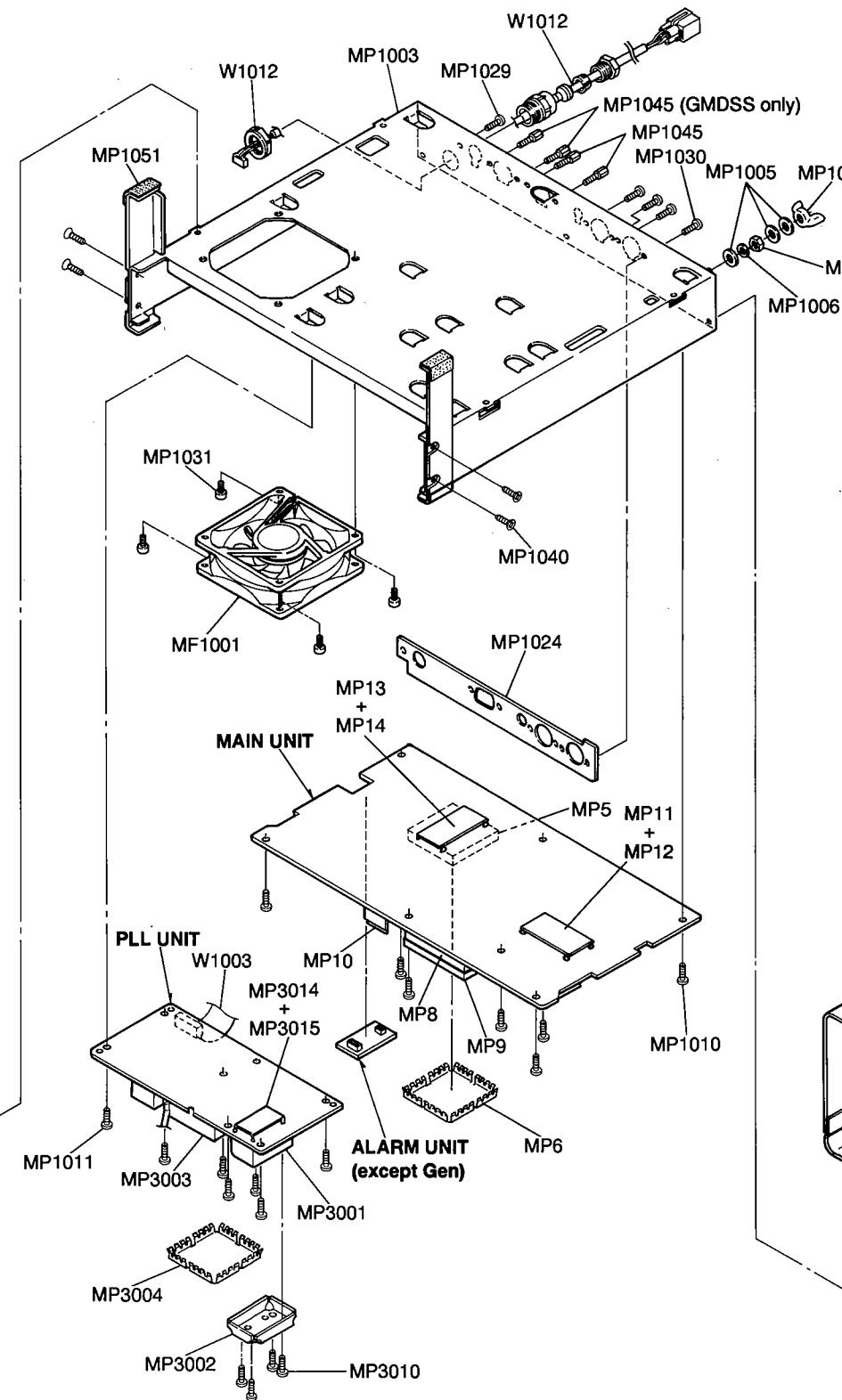
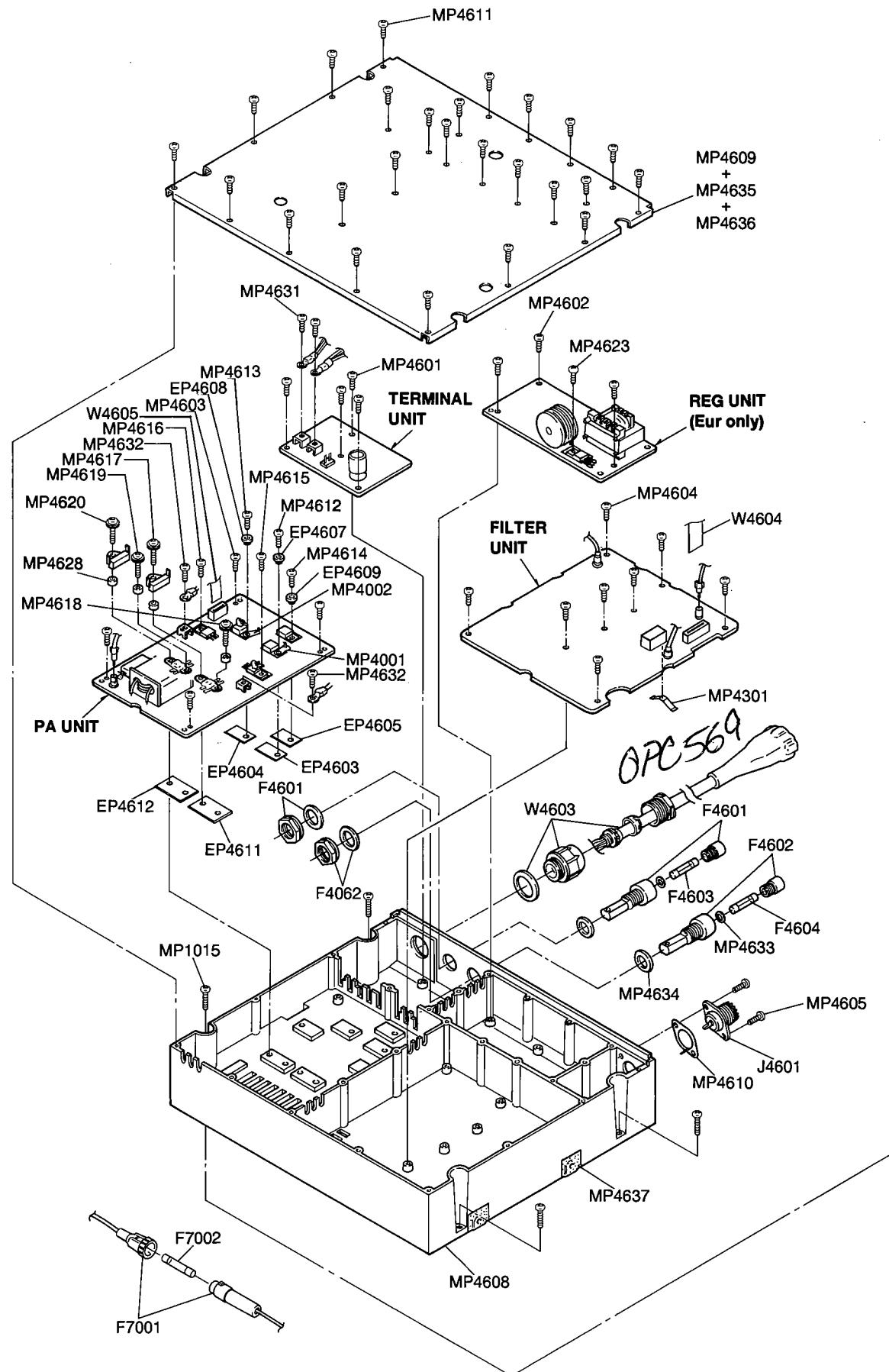
REF. NO.	ORDER NO.	DESCRIPTION	QTY.
F7001	5220000290	Fuse holder TFH-S30r	1
F7002	5210000490	Fuse FGB 5 A	1

[UNPACKING]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
F1201	5210000090	Spare fuse FGB 30 A	2
F1202	5210000060	Spare fuse FGB 5 A	2
J1201	6450001270	DIN connector TCP0577-71-5201	1
J1202	6450001280	DIN connector TCP0587-71-5401	1
J1203	5610000040	Speaker plug AP321	1
P1201	5610000150	Tuner connector CL07A04M	1
P1202	5610000160	Pin for tuner connector 215001-2M	4
W1201	8900005690	DC power cable OPC-568	1
EP1202	6910009540	Insulation sheet WS07MF-0A	4
EP1204	6910009390	DIN connector cover TCP9426-01-010 (GMDSS only)	2
MC1201	7700001980	Microphone EM-101	1
MP1203	8850001410	Flat washer M5 SUS	4
MP1207	8830001070	Nut M6 SUS	8
MP1208	8850001490	Spring washer M6 SUS	4
MP1211	8010016140	1632 mounting bracket	1
MP1212	8810008920	Screw PH A0 M6 x 30 SUS	1
MP1214	8810008510	Screw PH A M3.5 x 30 SUS	2
MP1215	8850001500	Flat washer M6 (7 x 19 x 1.0) SUS	8
MP1216	8820000170	Bracket knob (A) M5 x 10 SUS	4
MP1217	8930036560	1632 cushion rubber	4
MP1218	8950004140	1632 MIC hanger	1
MP1219	8810008840	Allen bolt M6 x 50 SUS	4

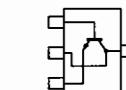
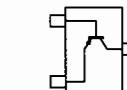
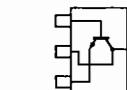
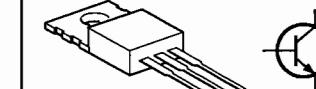
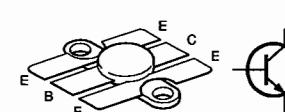
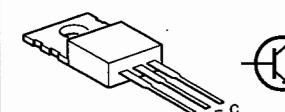
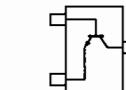
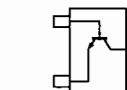
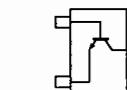
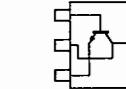
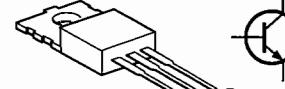
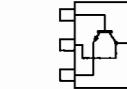
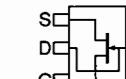
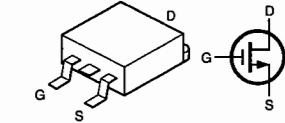
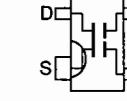
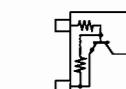
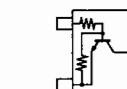
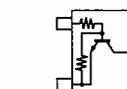
Screw abbreviations BT, A0, A: Self-tapping
 PH: Pan head FH: Flat head
 NI: Nickel SUS: Stainless
 ZK: Black





SECTION 7 SEMI-CONDUCTOR INFORMATION

• TRANSISTOR AND FET'S

2SA1037K R (Symbol: FR)	2SA1213Y (Symbol: NY)	2SA1586 GR (Symbol: SG)	2SB789 DL (Symbol: DL)
			
2SC1623 (Symbol: No Symbol)	2SC1971 (Symbol: 43F)	2SC2904	2SC3133
			
2SC3647S (Symbol: CC)	2SC4116 GR (Symbol: LG)	2SC4213 B (Symbol: AB)	2SC4215 O (Symbol: QO)
			
2SC4673D (Symbol: CO)	2SD1448 Z (Symbol: 46)	2SD1585K	2SD1619 T (Symbol: DB)
			
2SK210 GR (Symbol: YG)	2SK2171 4 (Symbol: No Symbol)	2SK2286	3SK131 MAS (Symbol: VIT)
			
DTA114EU (Symbol: 14)	DTC114EK (Symbol: 24)	DTC114ES (Symbol: E.SK)	DTC114EU (Symbol: 24)
			

• DIODES

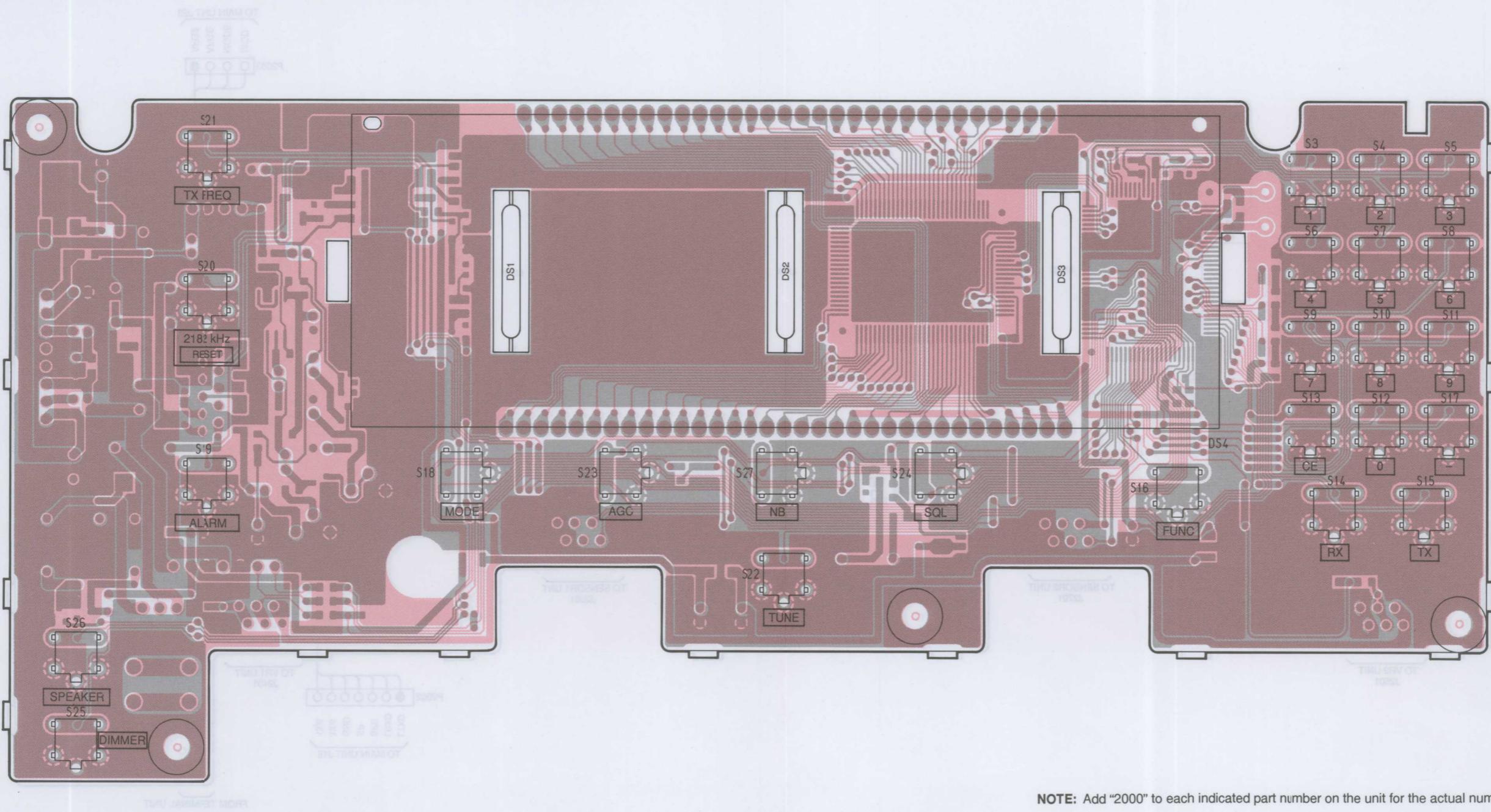
1SS184 (Symbol: B3)	1SS226 (Symbol: C3)	1SS301 (Symbol: B3)	1SS302 (Symbol: C3)
			
HSM88AS (Symbol: C1)	HSM88ASR (Symbol: C3)	HVM17 01TR (Symbol: TE)	MA29B (Symbol: Y)
			
MA862 (Symbol: M1I)	ND433G (Symbol: 433)	RD11M T2B1 (Symbol: L1T)	SF10SC6
			

SECTION 8 BOARD LAYOUTS

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

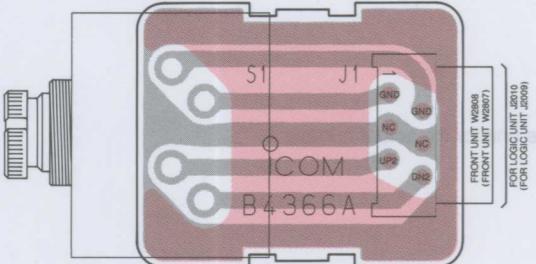
8-1 LOGIC UNIT

- LOGIC UNIT



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

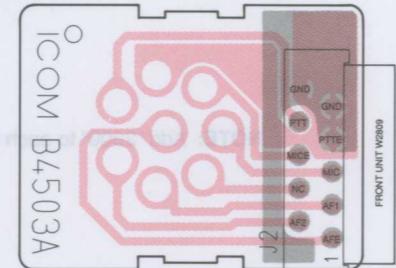
- SENSOR 1/2 UNITS



NOTE: Add "2600" to each indicated part number on the SENSOR1 unit for the actual number.

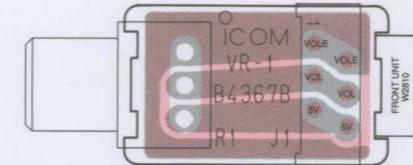
NOTE: Add "2700" to each indicated part number on the SENSOR2 unit for the actual number.

- MIC UNIT



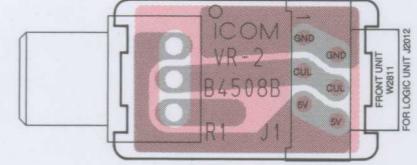
NOTE: Add "2300" to each indicated part number on the unit for the actual number.

- VR1 UNIT



NOTE: Add "2400" to each indicated part number on the unit for the actual number.

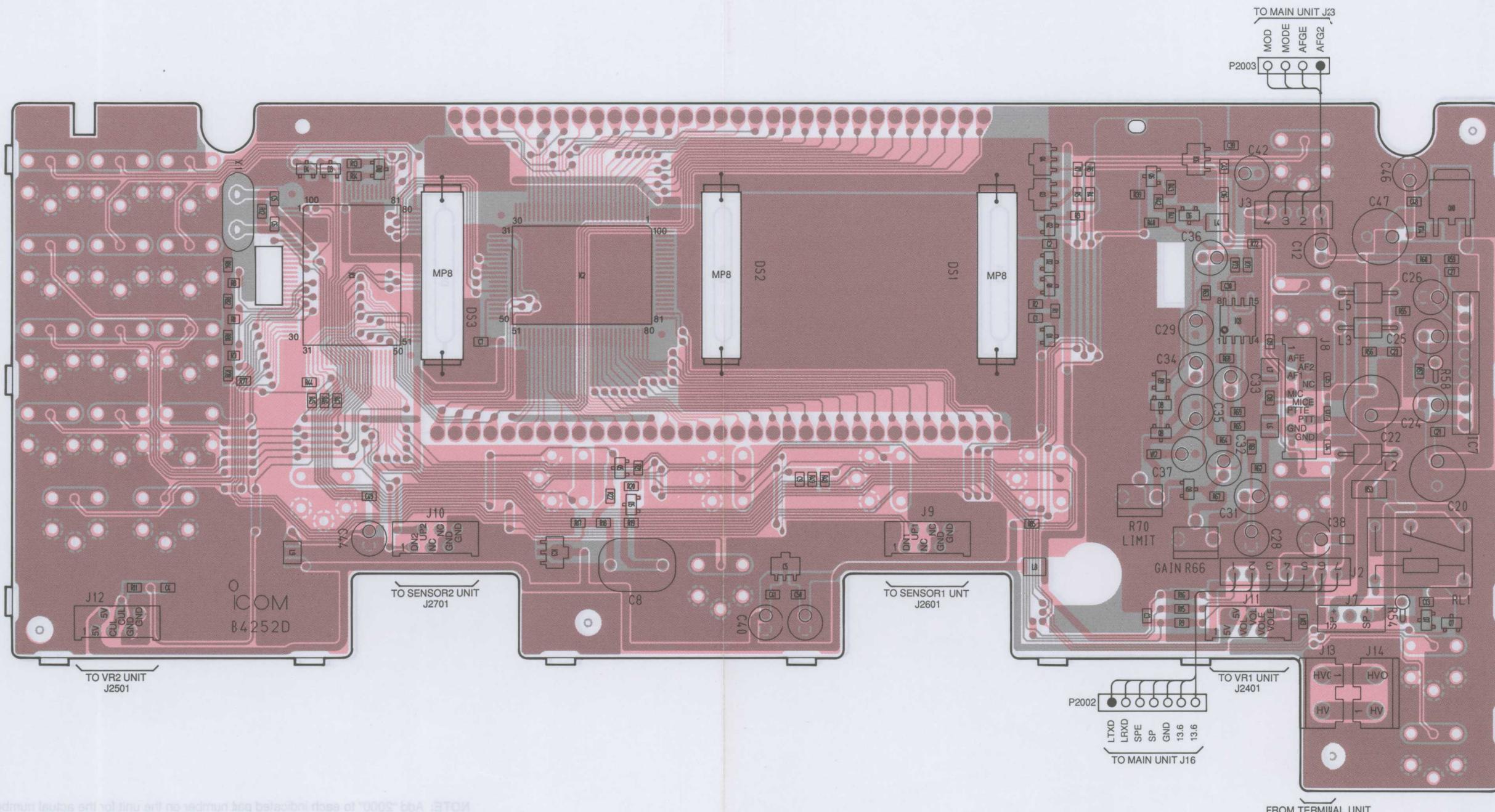
- VR2 UNIT



NOTE: Add "2500" to each indicated part number on the unit for the actual number.

• LOGIC UNIT

NOTE: Add "2000" to each indicated part number on the unit for the actual number.
on the logic unit layout in the same configuration as the logic board.

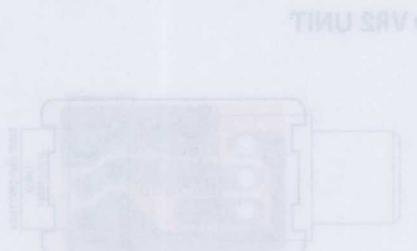


SECTION 8 BOARD LAYOUTS

8-1 LOGIC UNIT

• LOGIC UNIT

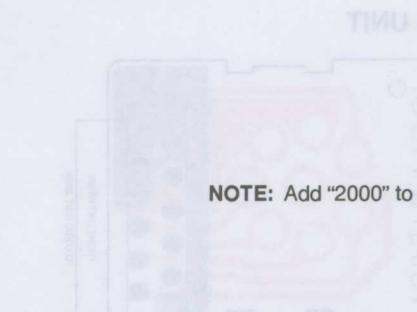
NOTE: Add "2000" to each indicated part number on the unit for the actual number.



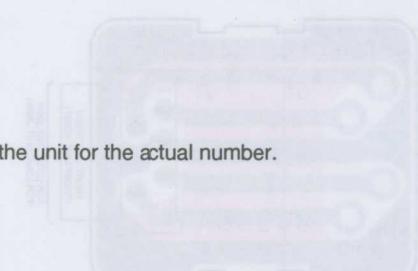
NOTE: Add "2000" to each indicated part number on the unit for the actual number.



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



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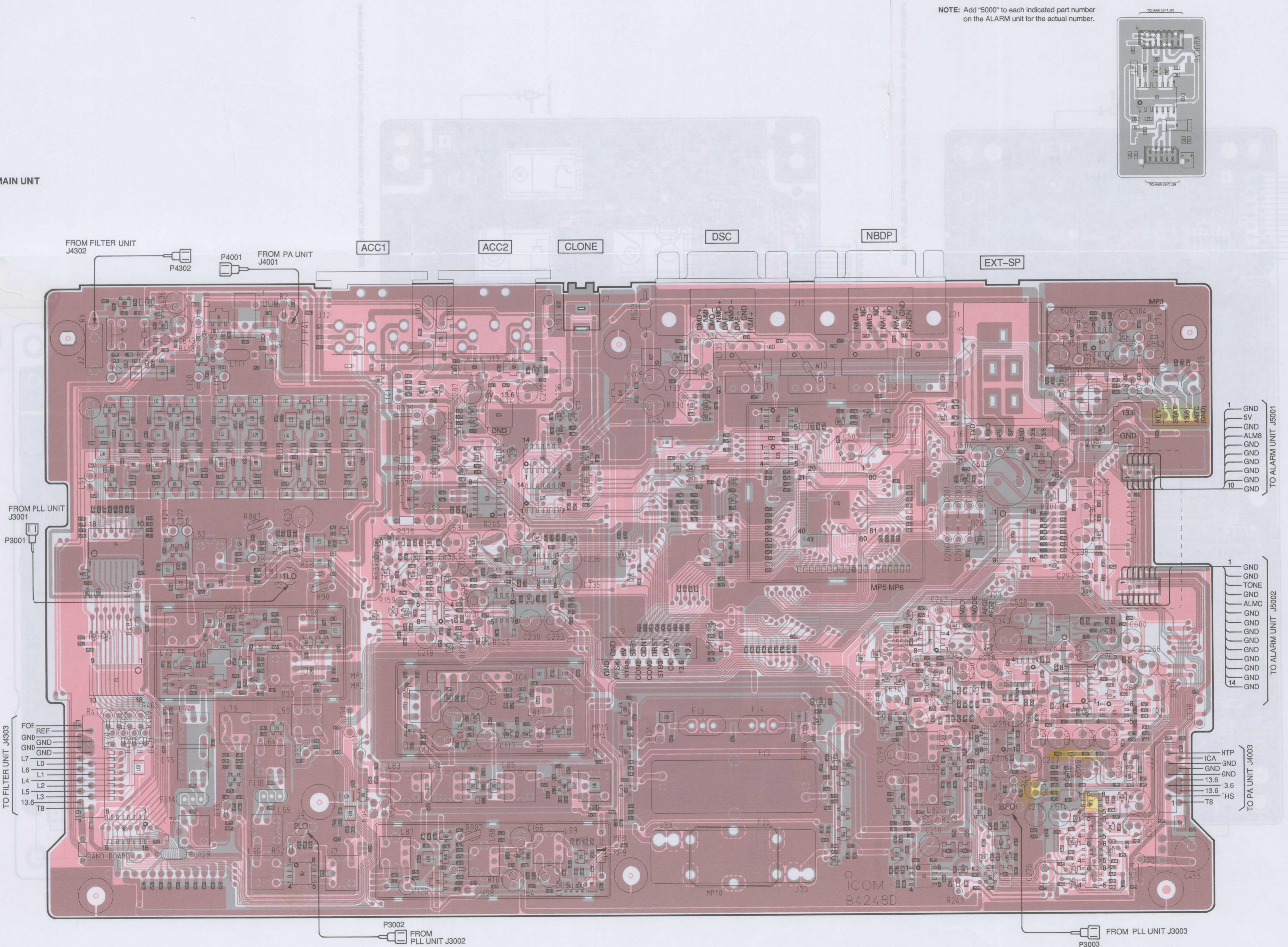


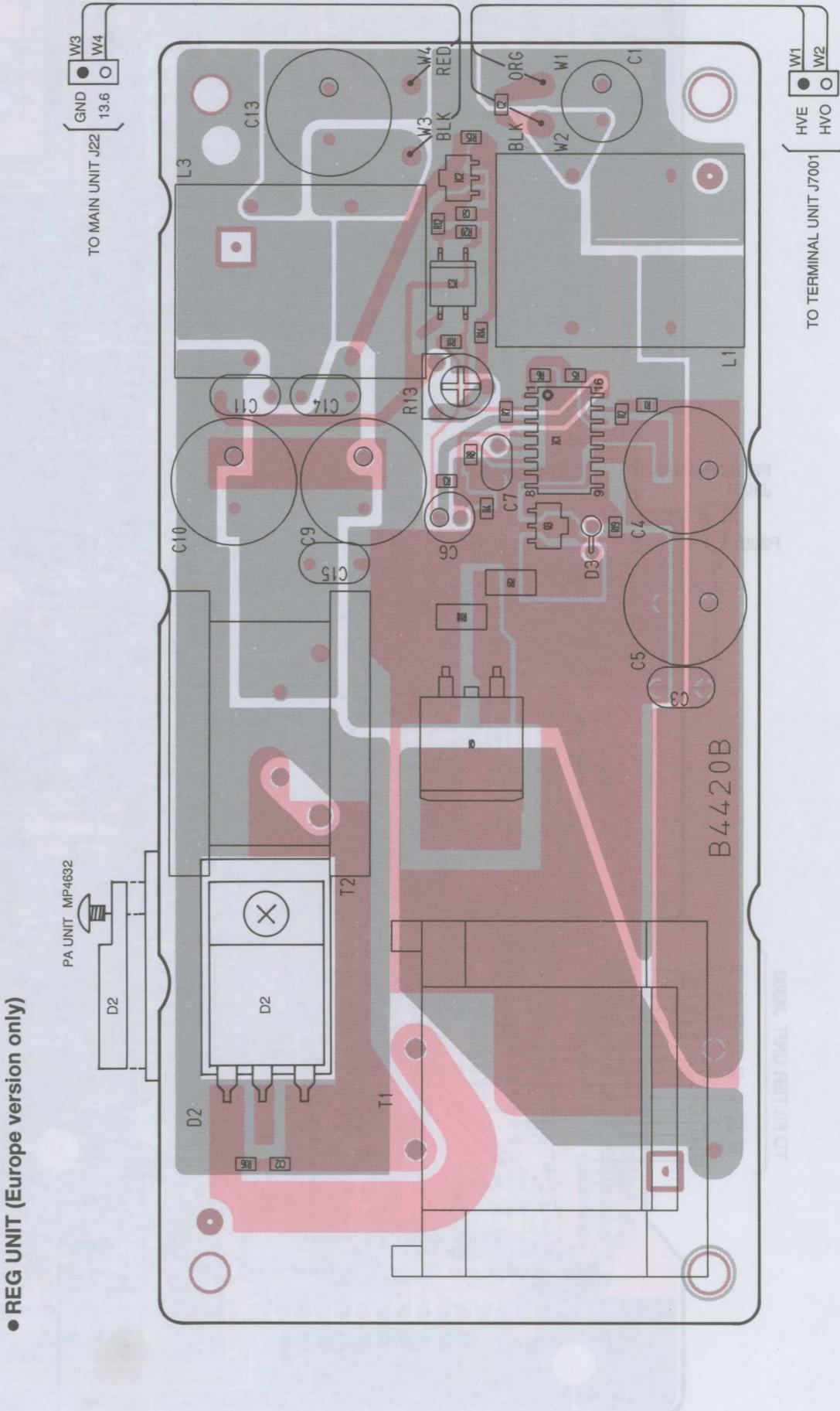
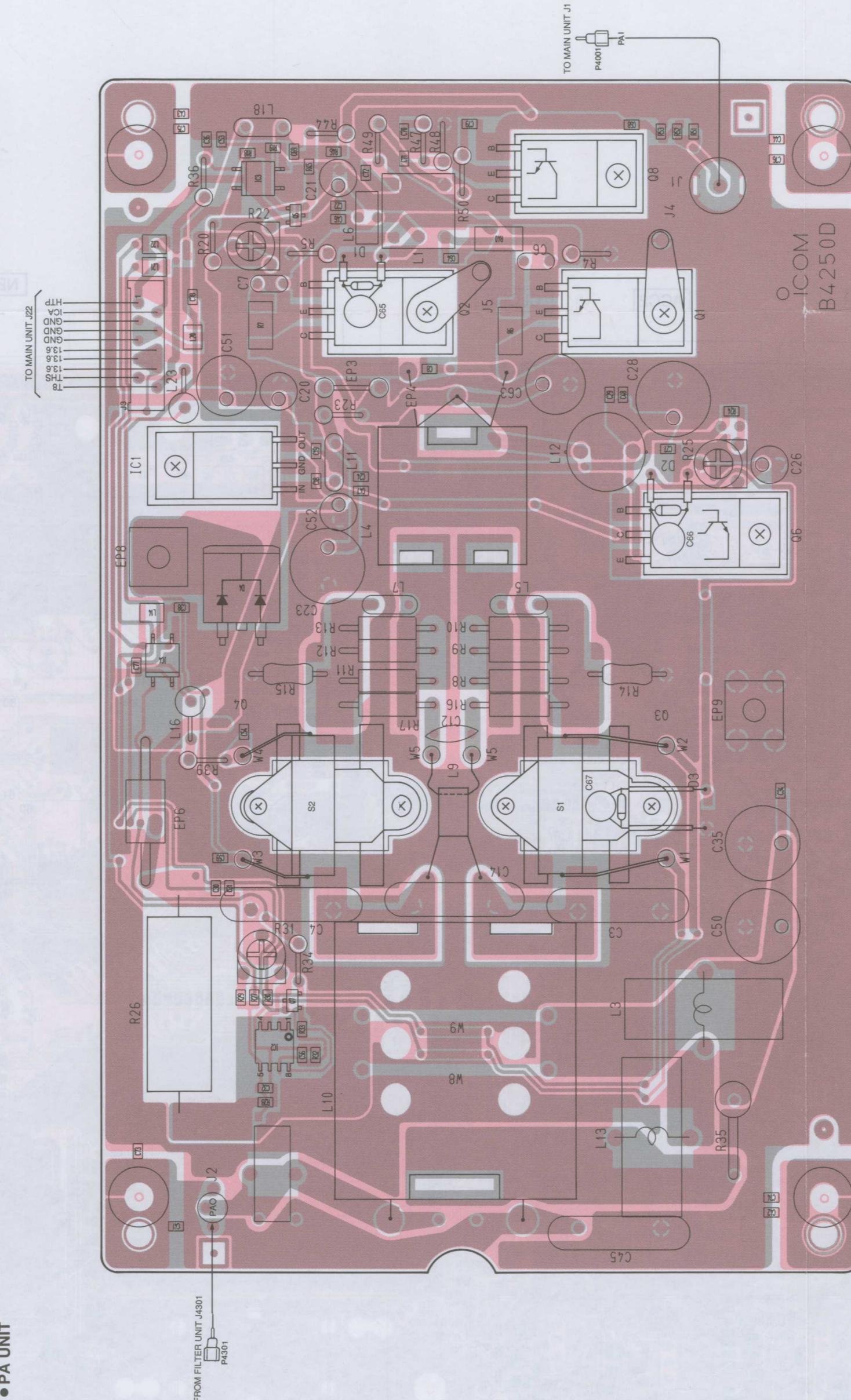
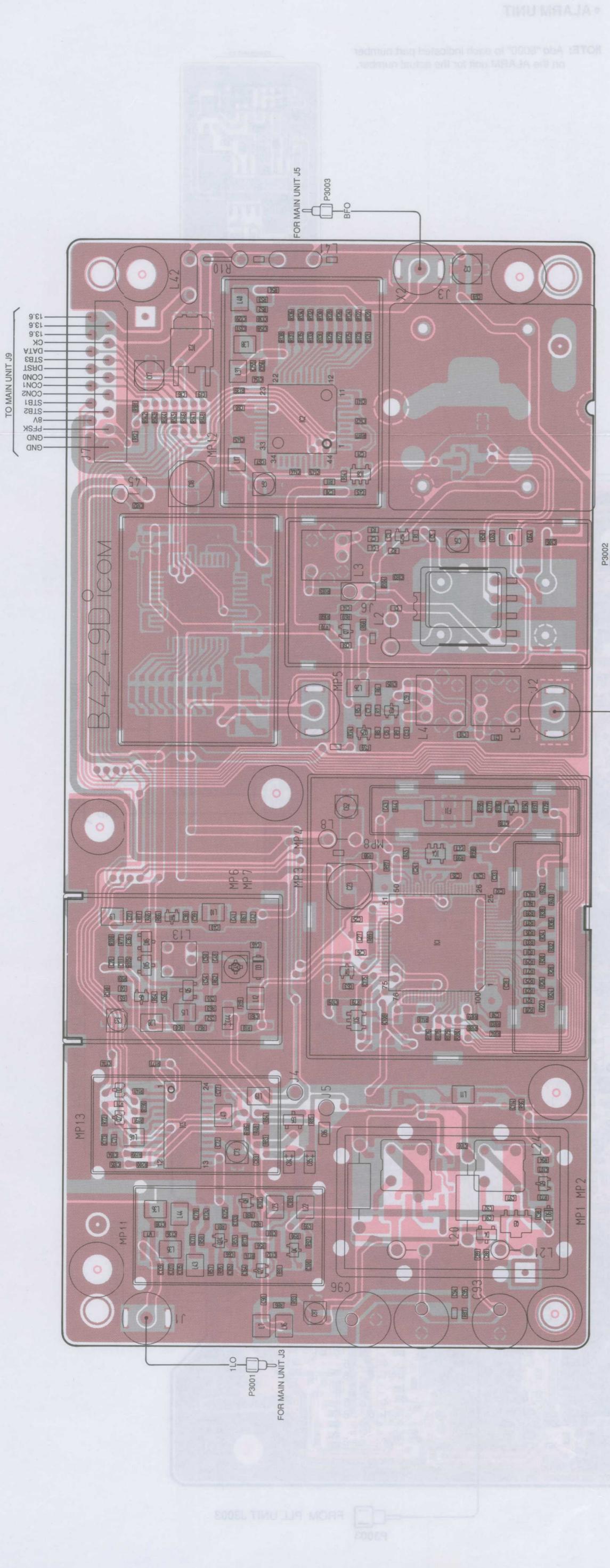
NOTE: Add "2000" to each indicated part number on the unit for the actual number.

8-2 MAIN UNIT

NOTE: Add "5000" to each indicated part number on the ALARM unit for the actual number.

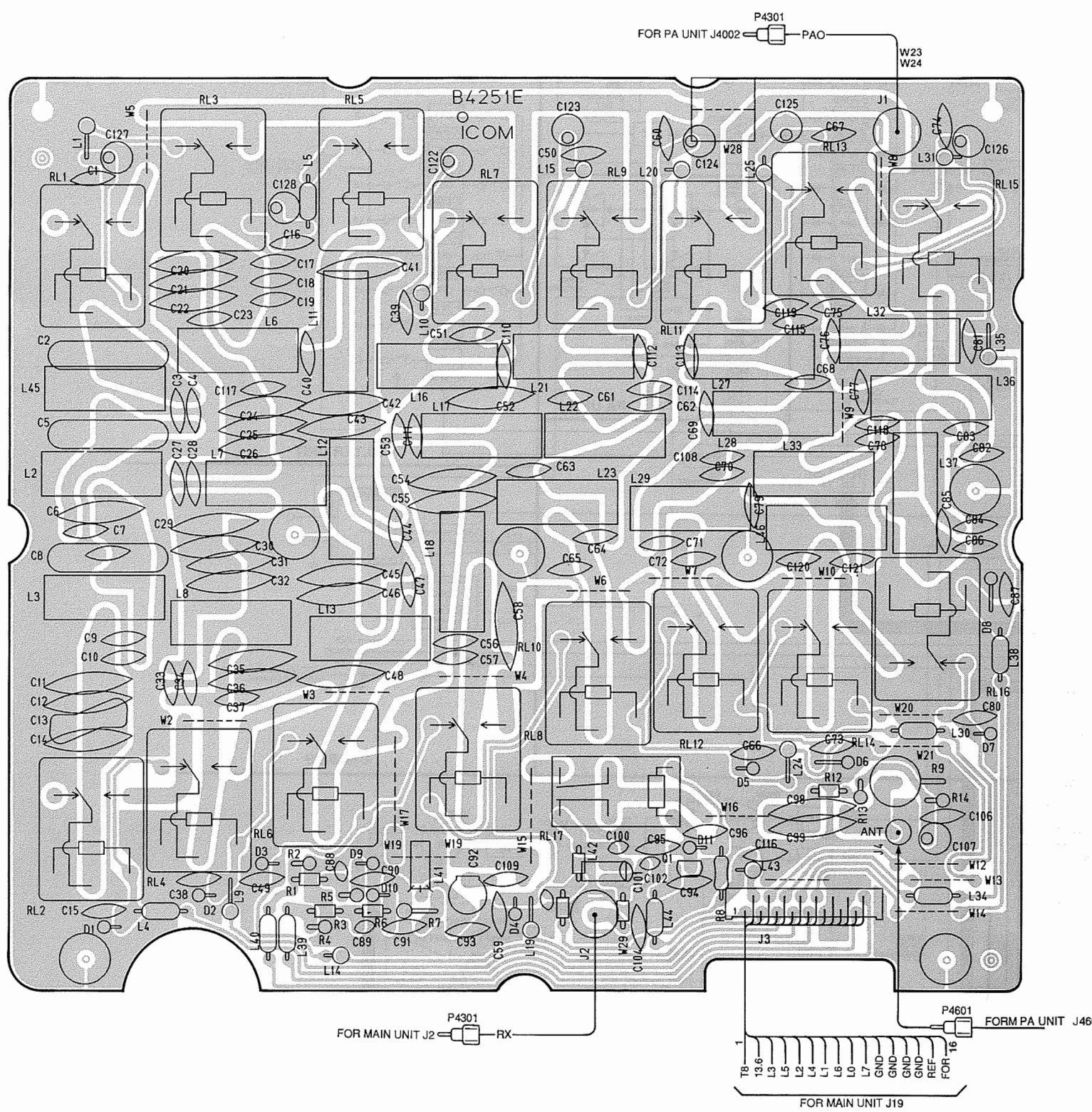
MAIN UNIT



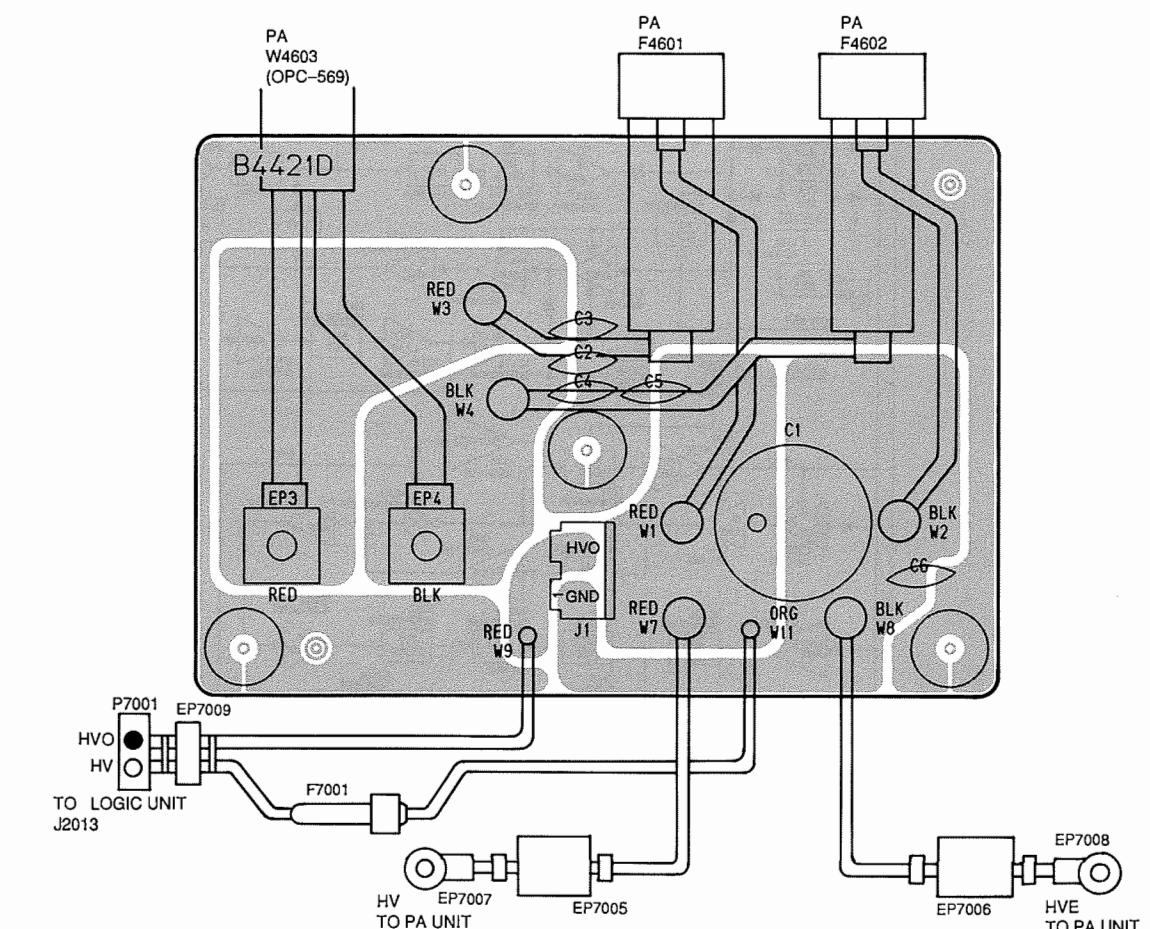


8-4 FILTER AND TERMINAL UNITS

• FILTER UNIT



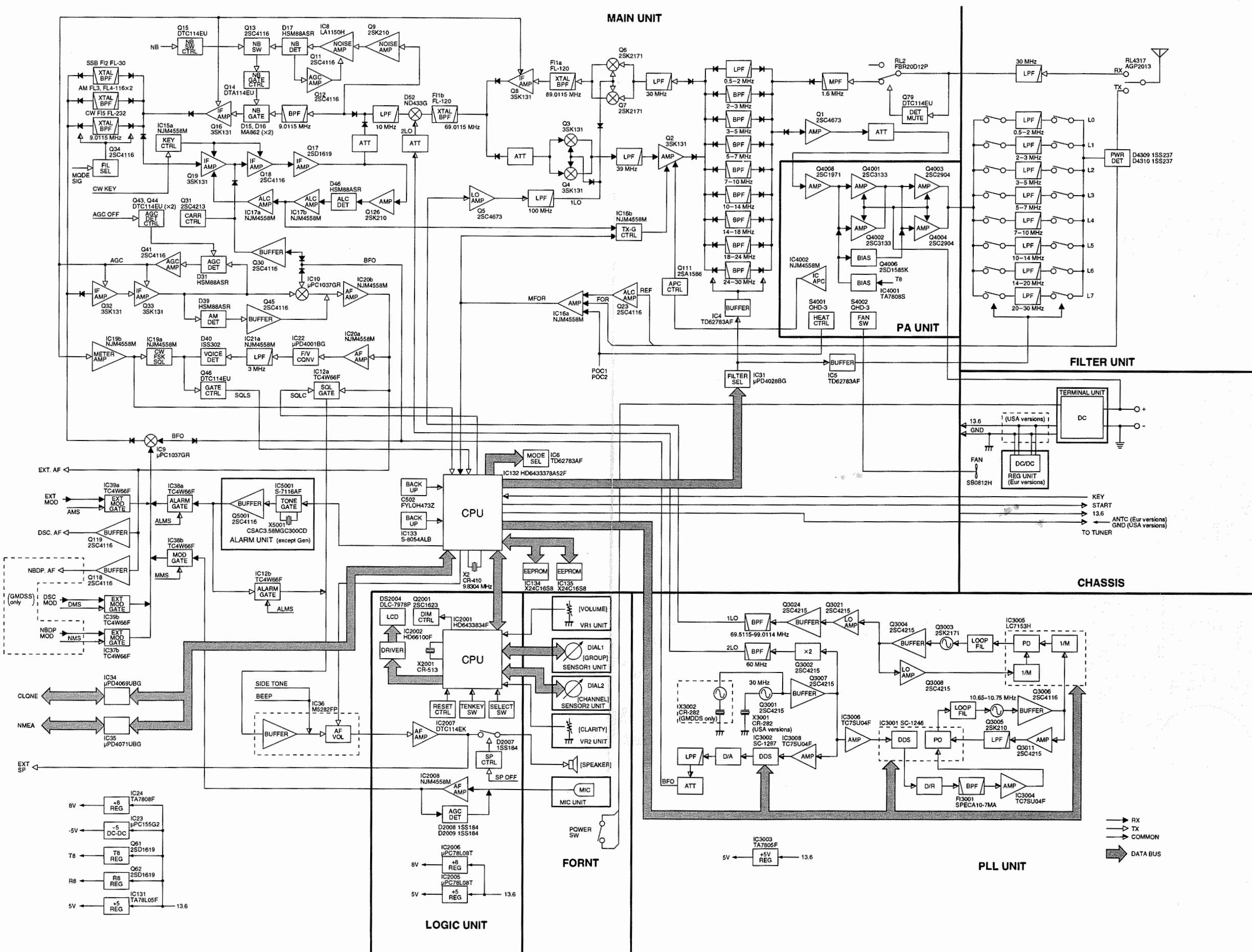
• TERMINAL UNIT



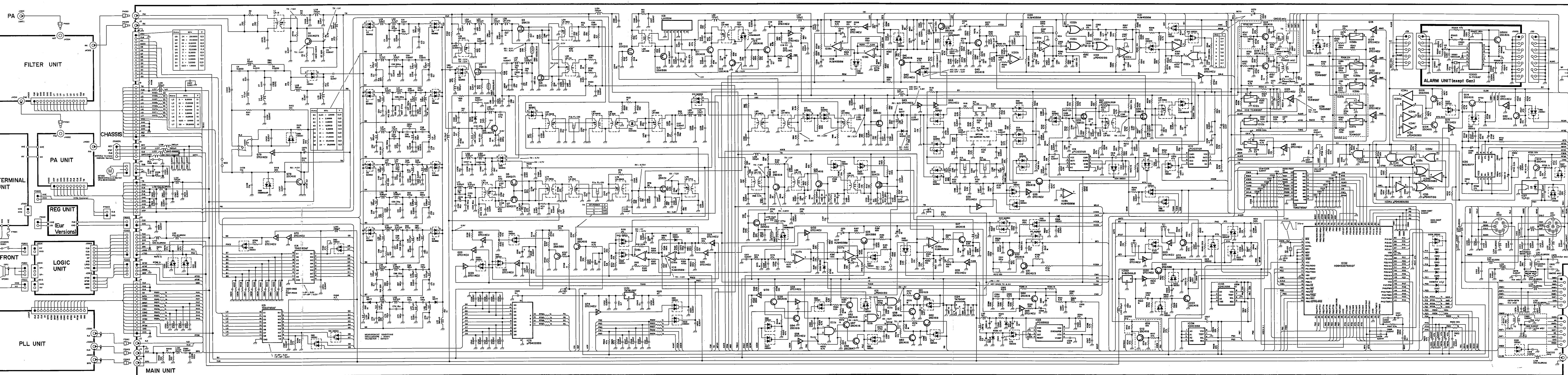
NOTE: Add "7000" to each indicated part number on the unit for the actual number.

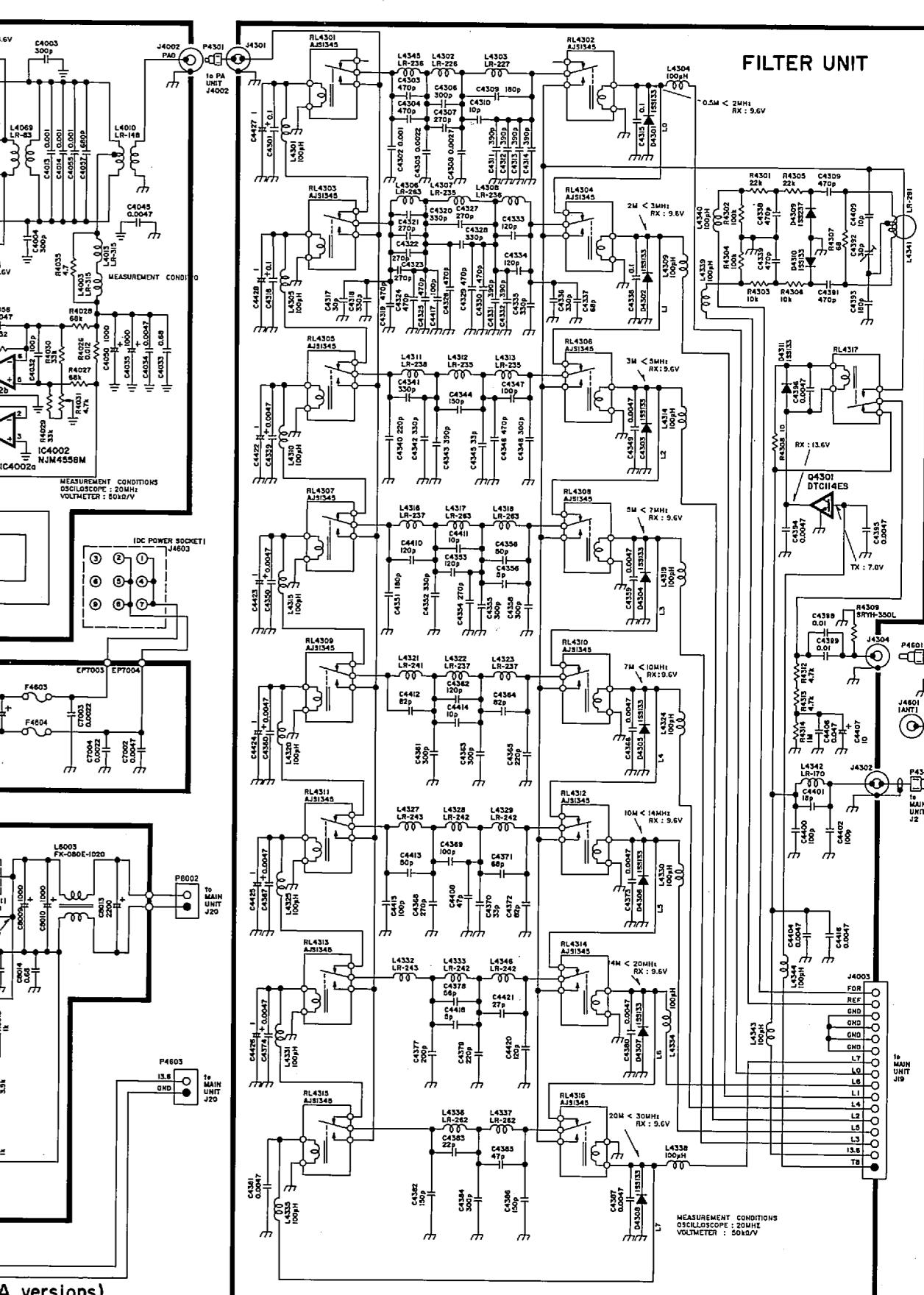
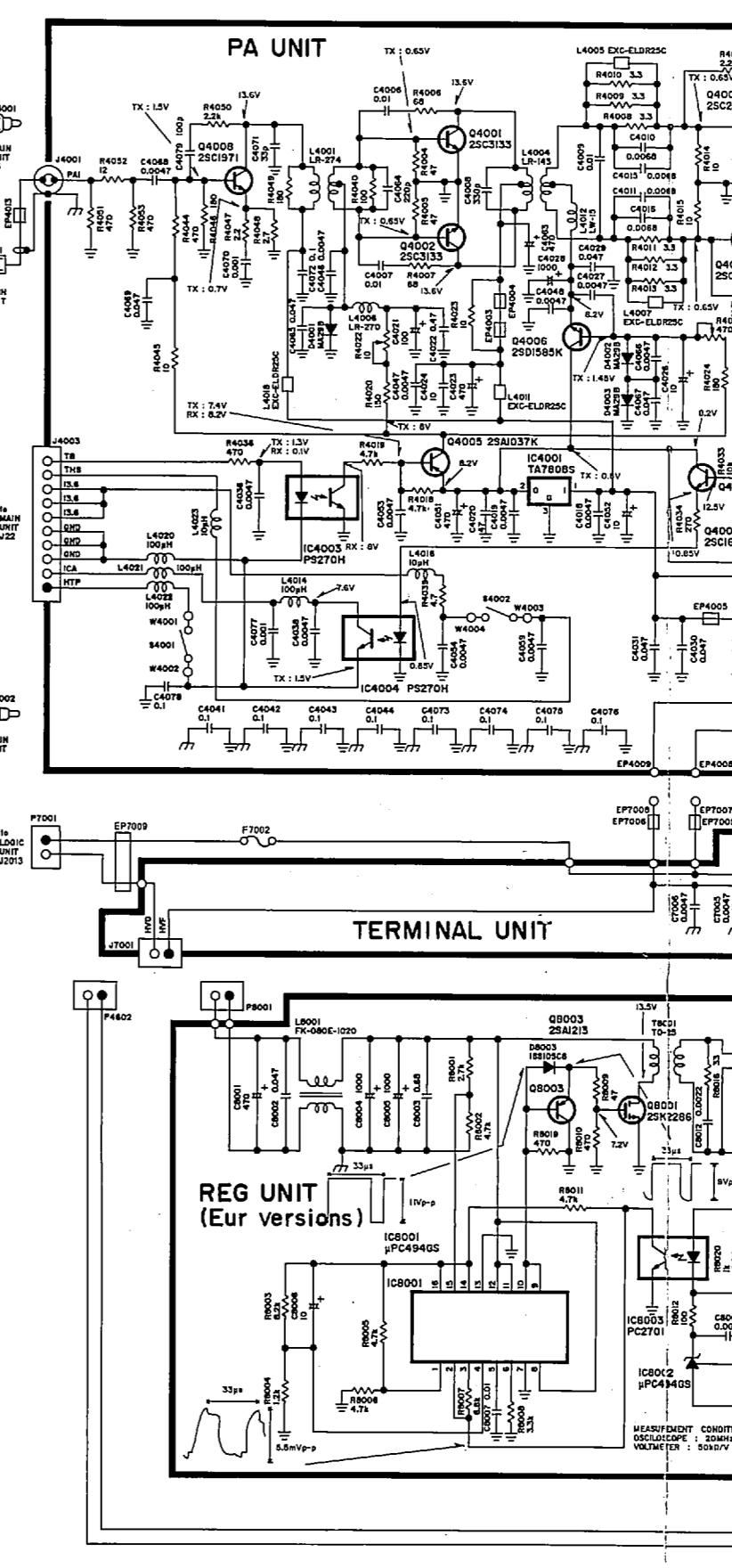
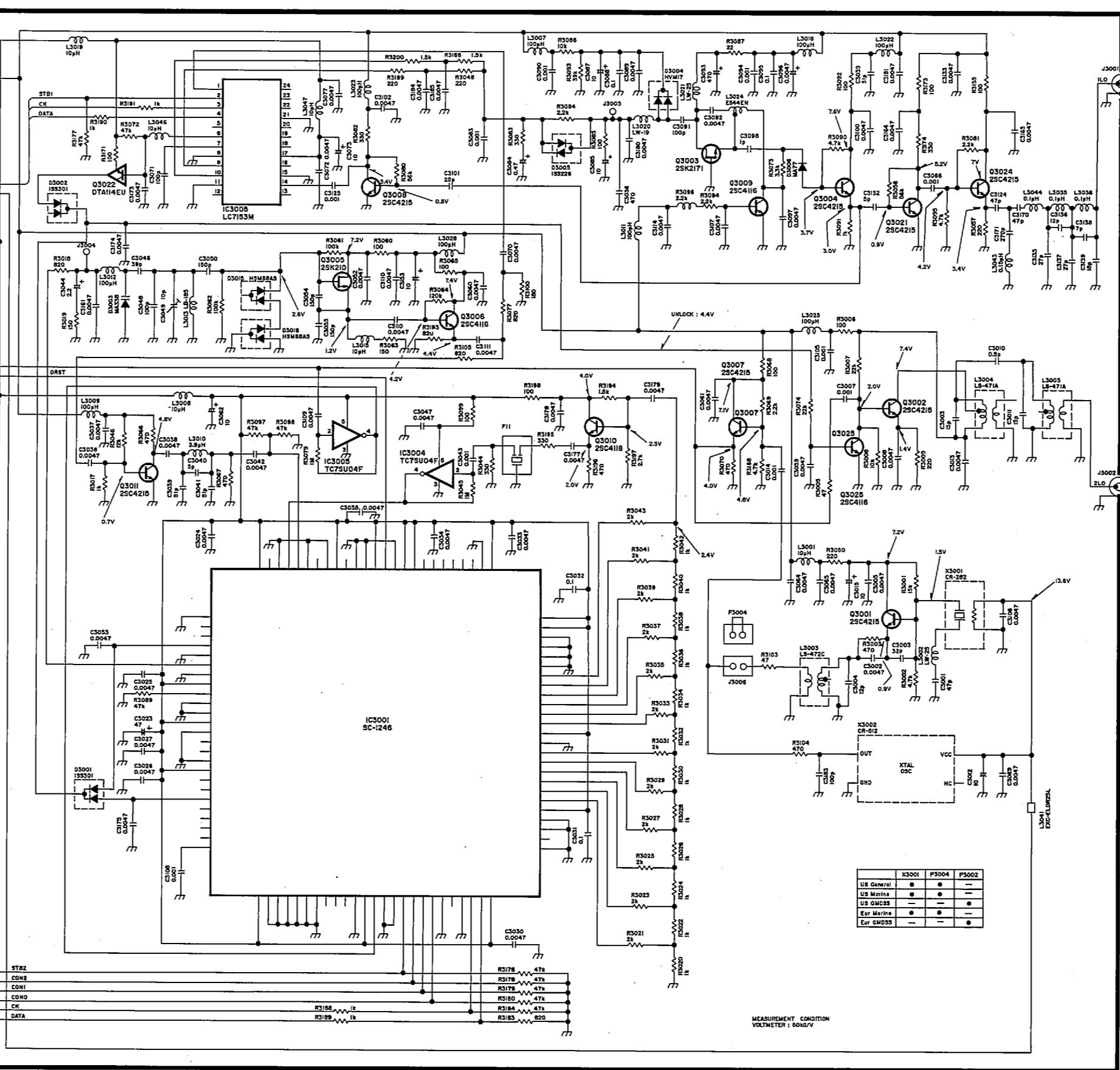
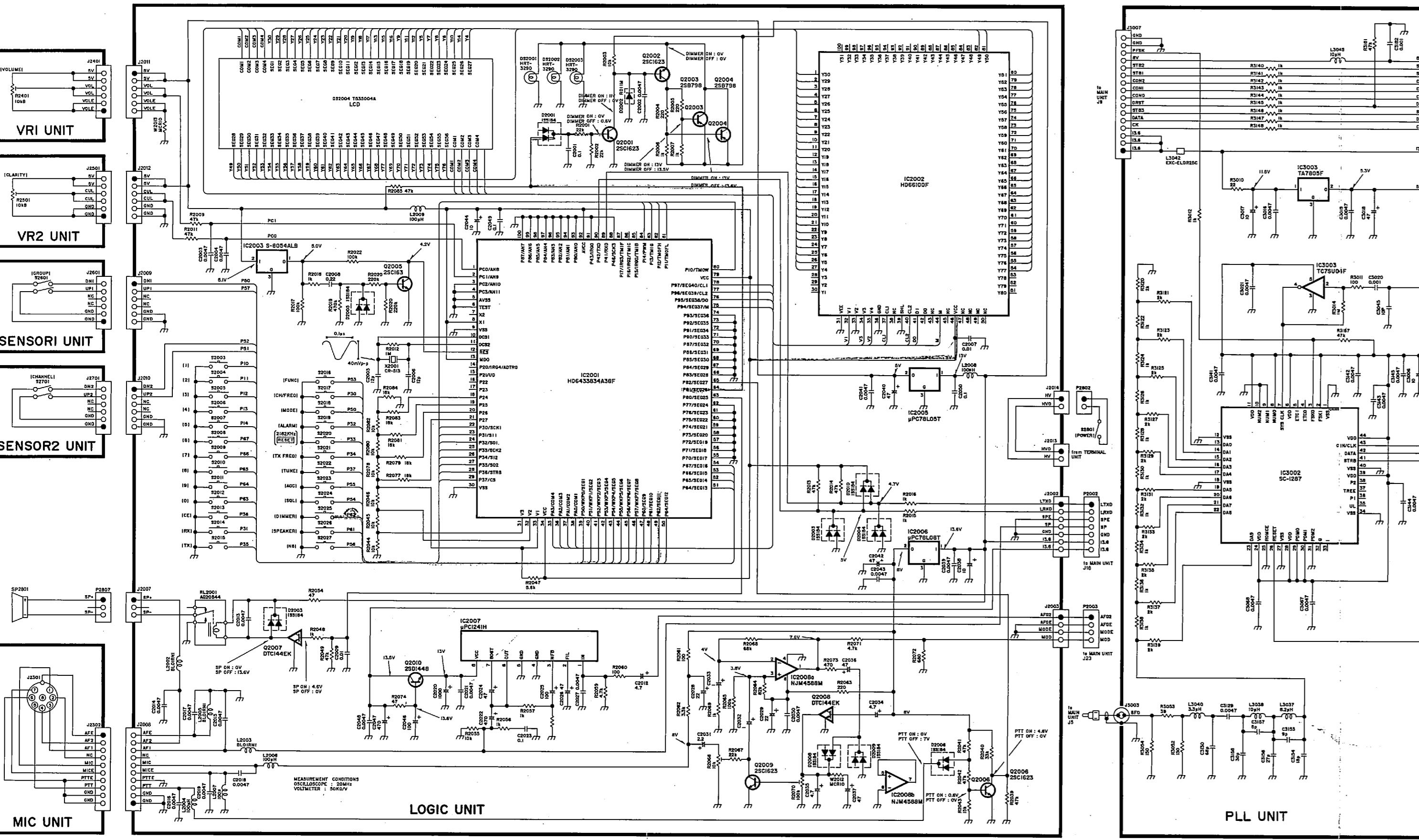
NOTE: Add "4300" to each indicated part number on the unit for the actual number.

SECTION 9 BLOCK DIAGRAM



SECTION 10 VOLTAGE DIAGRAM





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