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The ICOM logo features a stylized lowercase 'i' with a circle above it, followed by the letters 'COM' in a bold, sans-serif font.

SERVICE MANUAL

HF/50MHz ALL MODE TRANSCEIVER

IC-726

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INTRODUCTION

This service manual describes the latest service information for the **IC-726** HF/50 MHz ALL MODE TRANSCEIVER at the time of publication.

To upgrade quality, all 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 DC 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>

1110001310 IC μPC577HA IC-726 MAIN UNIT 5 pieces
8810005510 Screw PH M3×6 ZK BS IC-726 Top cover 10 pieces

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

REPAIR NOTE

1. Make sure a problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from the power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a signal generator or a sweep generator.
7. **ALWAYS** connect a 40 dB~50 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 500 kHz~30 MHz, 50 MHz~54 MHz
Transmit 160-m band 1.8~2.0 MHz 17-m band 18.068~18.168 MHz
80-m band 3.5~4.0 MHz 15-m band 21.0 ~21.45 MHz
40-m band 7.0~7.3 MHz 12-m band 24.89 ~24.99 MHz
30-m band 10.1~10.15 MHz 10-m band 28.0 ~29.7 MHz
20-m band 14.0~14.35 MHz 6-m band 50.0 ~54.0 MHz
- Modes : SSB (A3J), CW (A1), AM (A3), FM (F3)
- Number of memory channels : 26
- Antenna impedance : 50 Ω unbalanced
- Usable temperature range : -10 °C~+60 °C (+14 °F~+140 °F)
- Frequency stability : Less than ± 200 Hz up to one hour after power is turned ON.
Less than ± 30 Hz after one hour at +25 °C (+77 °F).
Less than ± 350 Hz at 0 °C~+50 °C (+32 °F~+122 °F).
- Power supply requirement : 13.8 V DC ± 15 % (negative ground)
- Current drain (at 13.8 V DC) : Receive squelched 1.3 A max. audio output 1.6 A
Transmit 20 A
- Dimensions : 241 (W) \times 94 (H) \times 239 (D) mm 9.5 (W) \times 3.7 (H) \times 9.4 (D) in
(Projections not included)
- Weight : 4.8 kg (10.6 lb)

■ TRANSMITTER

- Output power : SSB, CW, FM (HF) 100 W max., (50 MHz) 10 W max.
AM (HF) 40 W max., (50 MHz) 4W max.
- Spurious emissions : 1.8~30 MHz Less than -50 dB
50~54 MHz Less than -60 dB
- Carrier suppression : Less than -40 dB
- Unwanted sideband : Less than -50 dB with 1000 Hz modulation
- Microphone impedance : 600 Ω

■ RECEIVER

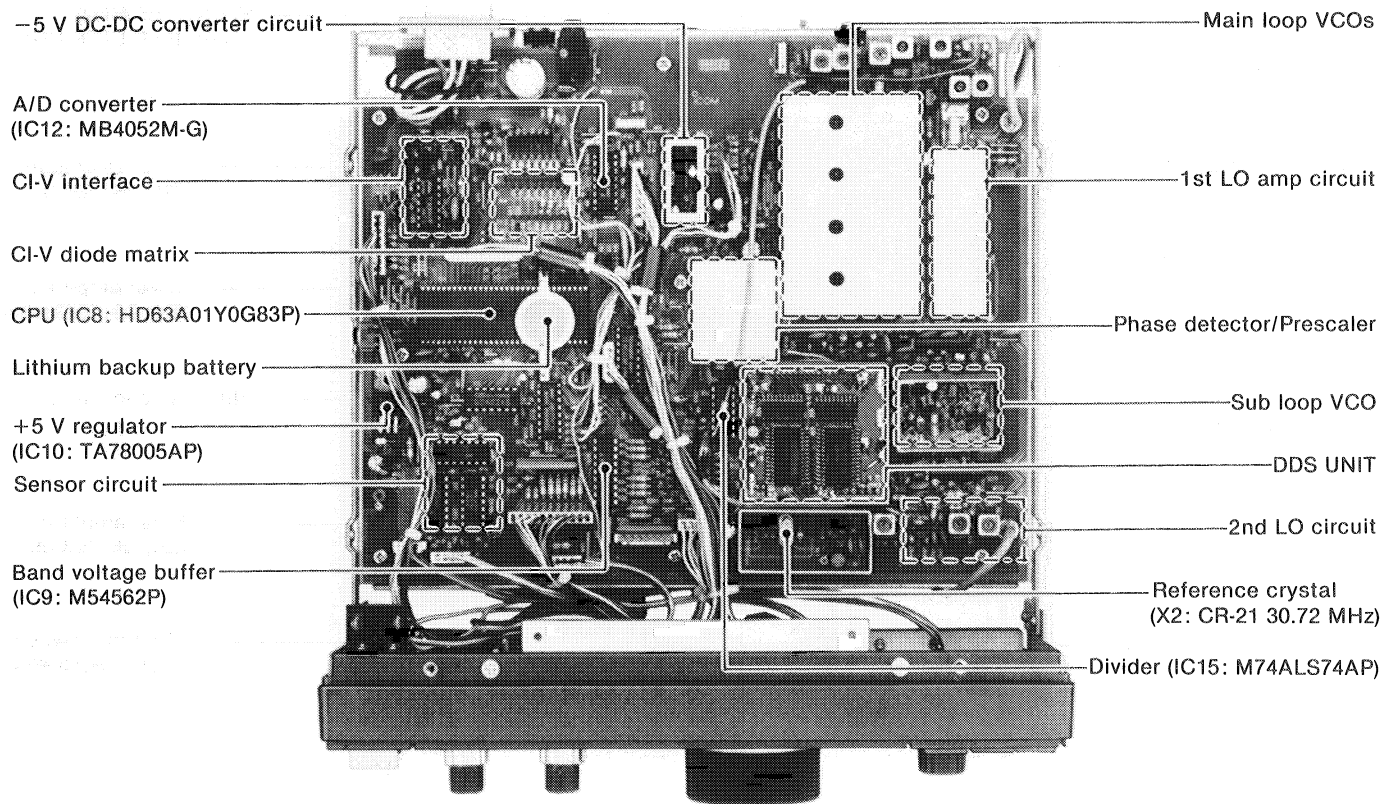
- Receive system : SSB, CW, AM Double-conversion superheterodyne
FM Triple-conversion superheterodyne
- Intermediate frequencies : 1st SSB 70.4515 MHz
CW 70.4506 MHz
AM, FM 75.4500 MHz
2nd SSB 9.0115 MHz
CW 9.0106 MHz
AM, FM 9.0100 MHz
3rd FM 455 kHz
- Sensitivity (preamplifier ON) : (1.8~30 MHz) SSB, CW Less than 0.16 μ V for 10 dB S/N
AM Less than 2.0 μ V for 10 dB S/N
(28~30 MHz) FM Less than 0.5 μ V for 12 dB SINAD
(50~54 MHz) SSB, CW Less than 0.13 μ V for 10 dB S/N
AM Less than 2.0 μ V for 10 dB S/N
FM Less than 0.3 μ V for 12 dB SINAD
- FM squelch sensitivity : Less than 0.3 μ V (preamplifier ON)
- Selectivity : SSB, CW More than 2.3 kHz/-6 dB Less than 4.0 kHz/-60 dB
AM More than 6.0 kHz/-6 dB Less than 20.0 kHz/-40 dB
FM More than 15 kHz/-6 dB Less than 30 kHz/-50 dB
- Spurious response rejection : More than 70 dB
- Audio output impedance : 8 Ω
- Audio output power : More than 2.6 W at 10 % distortion with an 8 Ω load
- RIT variable range : More than ± 1.2 kHz

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

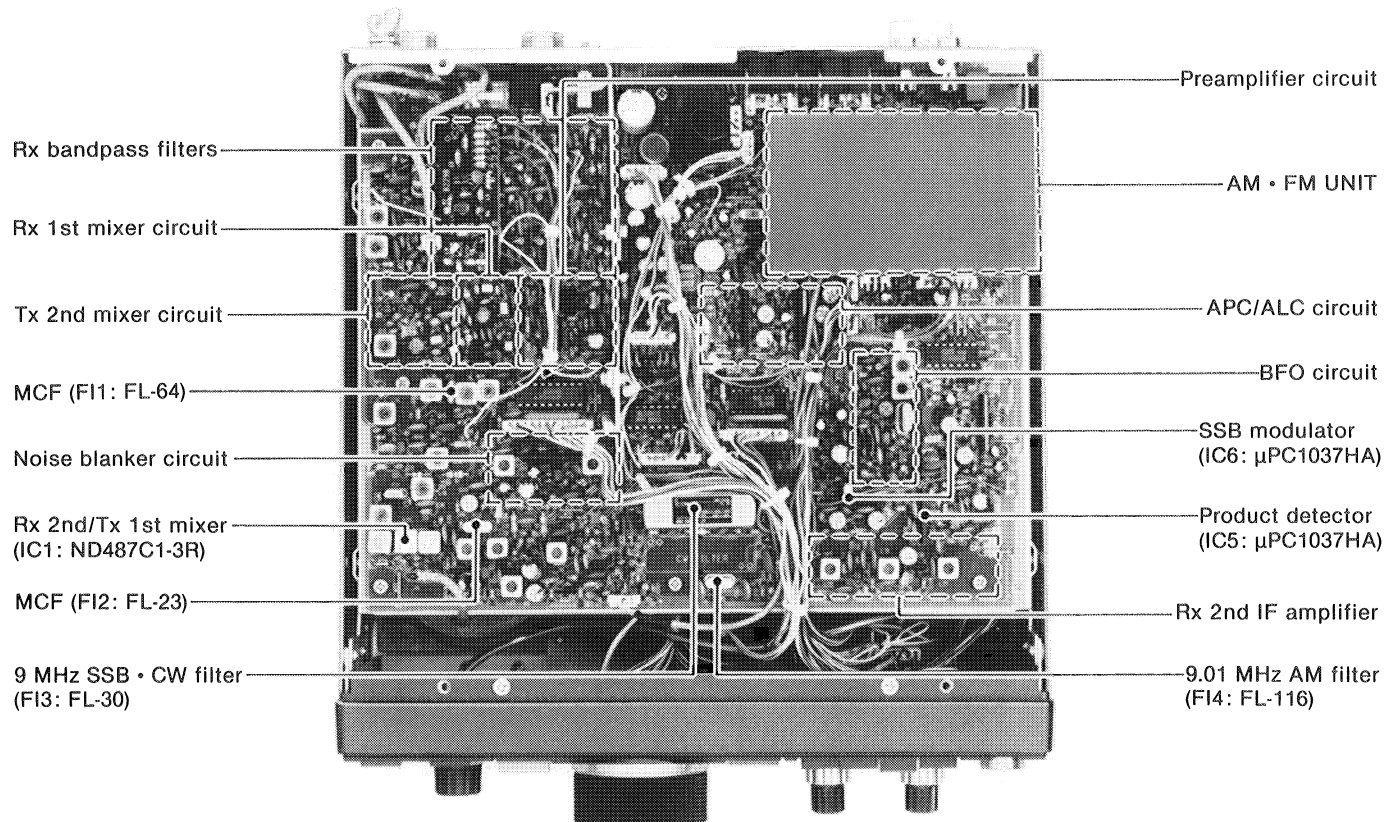
SECTION 2 INSIDE VIEWS

2-1 PLL AND MAIN UNITS

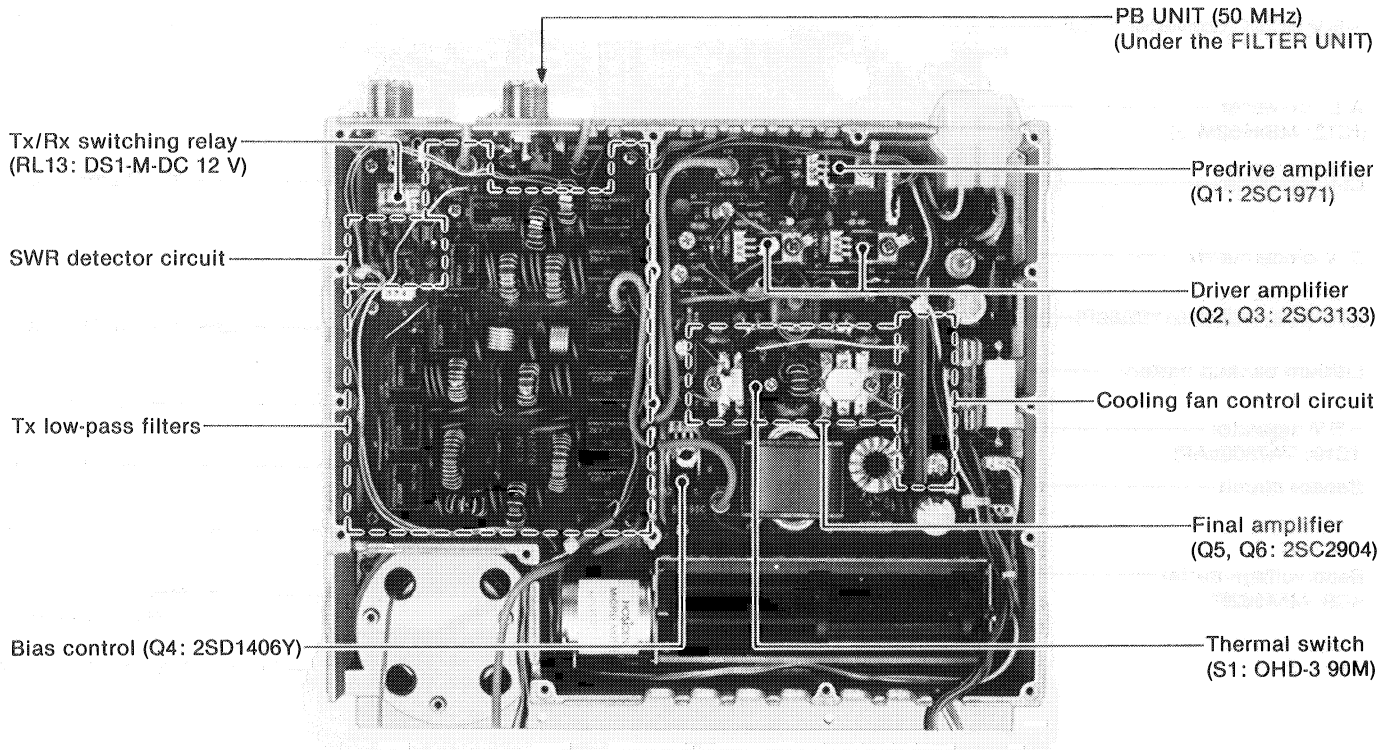
• PLL UNIT



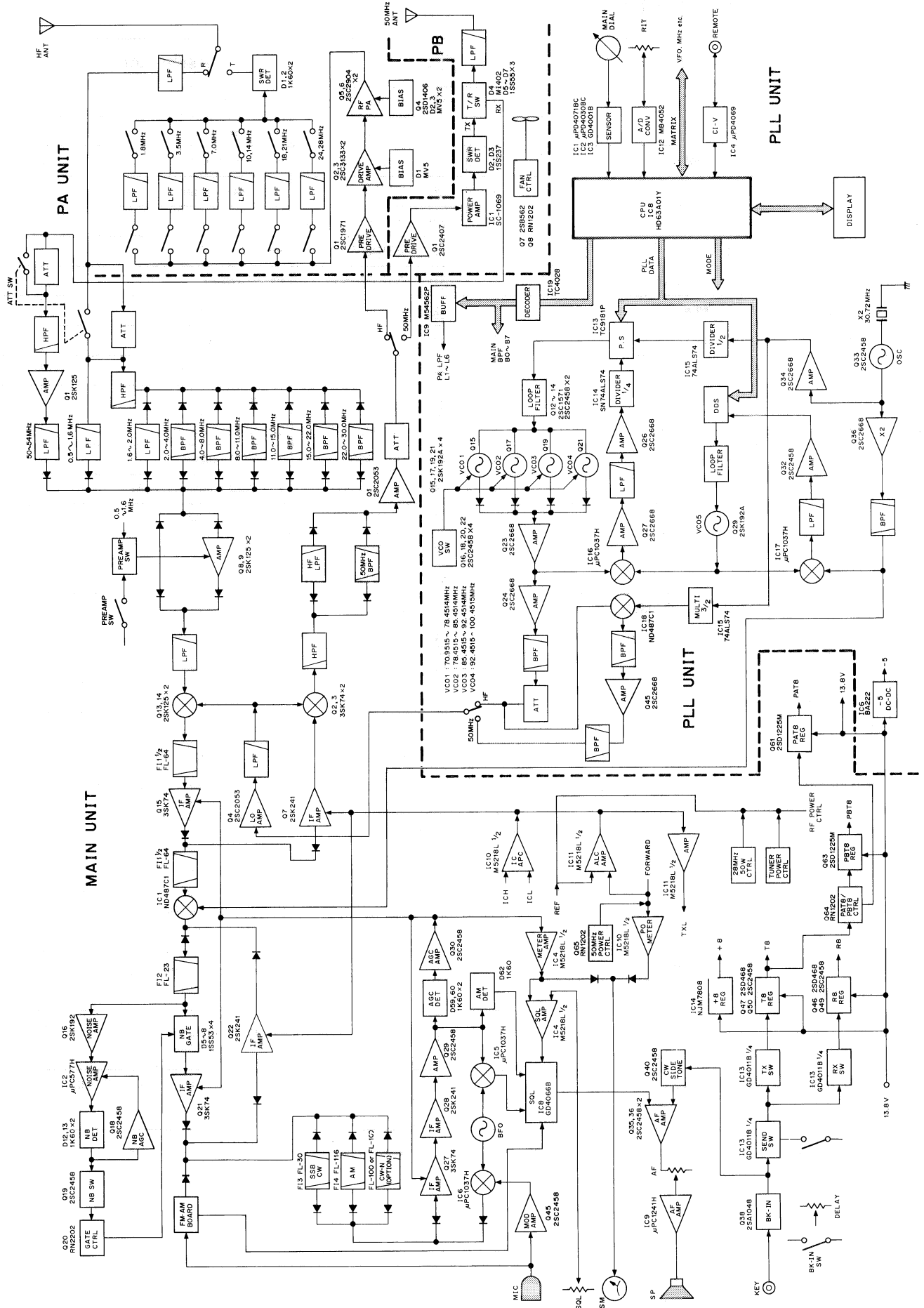
• MAIN UNIT



2-2 PA, PB AND FILTER UNITS



SECTION 3 BLOCK DIAGRAM

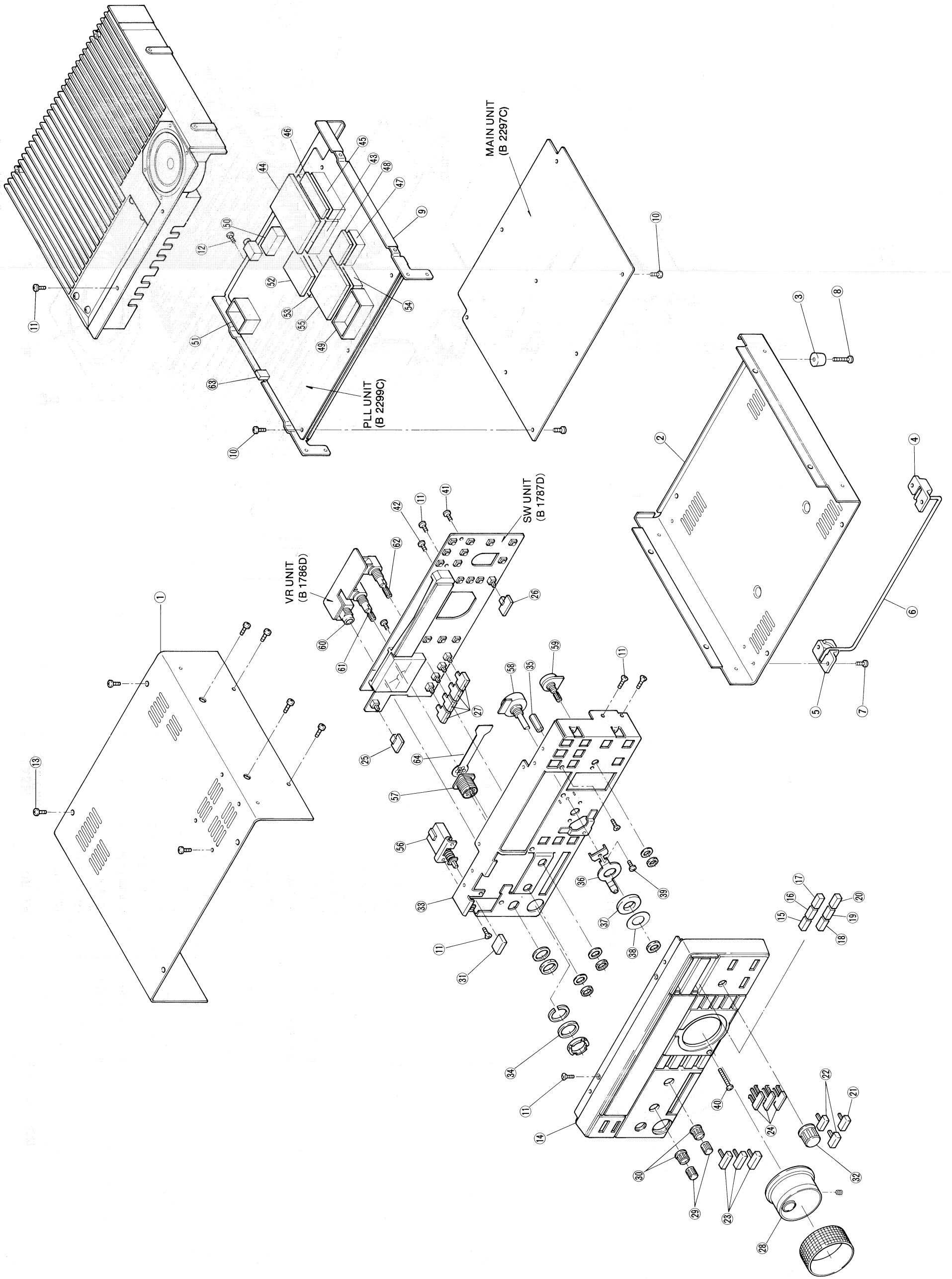


SECTION 4 MECHANICAL PARTS AND DISASSEMBLY

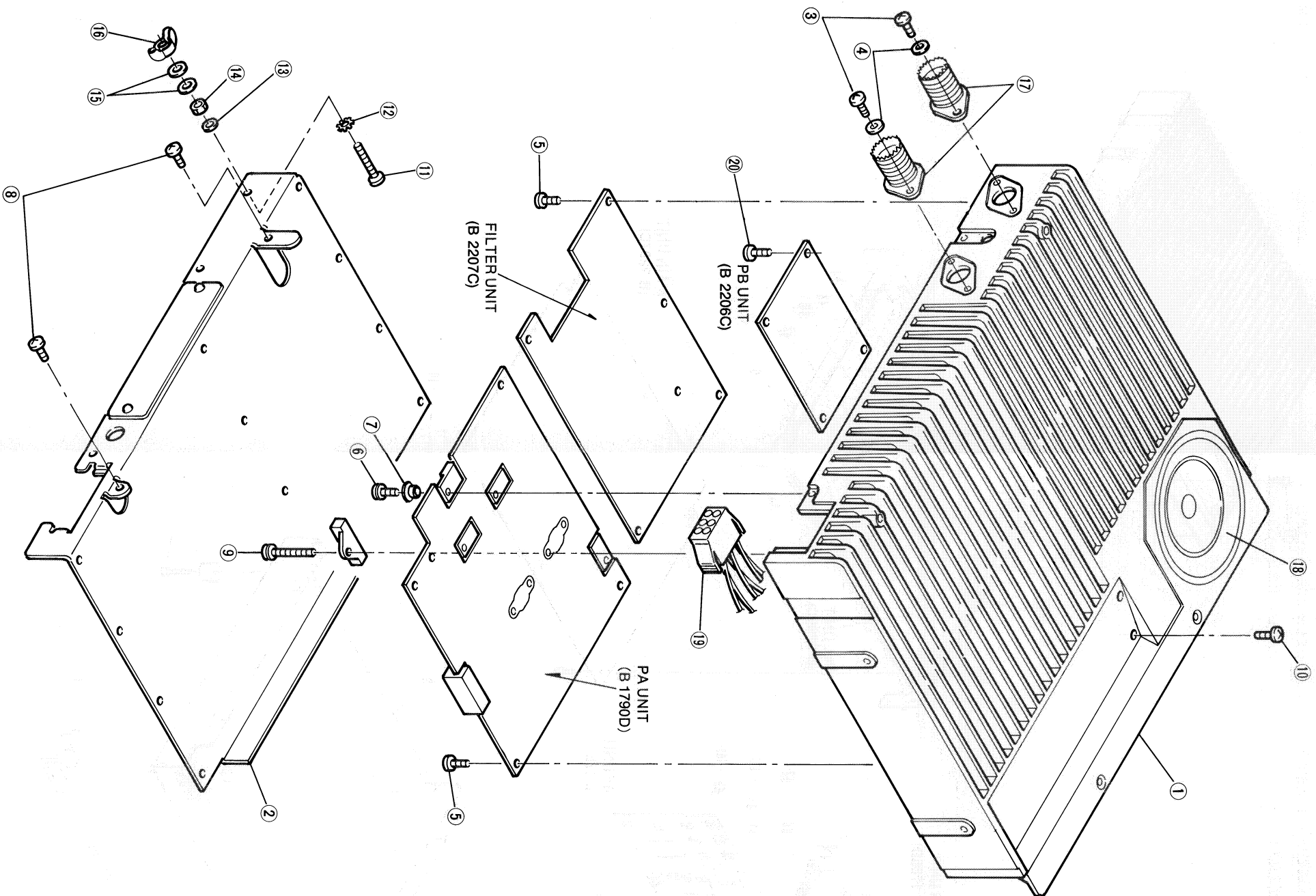
4-1 FRAME DISASSEMBLY

| LABEL NUMBER | ORDER NO. | DESCRIPTION | QTY. | LABEL NUMBER | ORDER NO. | DESCRIPTION | QTY. |
|--------------|------------|--|------|--------------|------------|---|------|
| ① | 8110003270 | Top cover | 1 | ③⑤ | 8930000720 | Thread spacer (V) | 4 |
| ② | 8110003280 | Bottom cover | 1 | ③⑥ | 8930013990 | 610 Brake plate | 1 |
| ③ | 8930002900 | Rubber foot (A) | 2 | ③⑦ | 8930014030 | 610 Brake pad | 1 |
| ④ | 8930005790 | Foot (A) | 1 | ③⑧ | 8930013940 | 610 Brake sheet | 1 |
| ⑤ | 8930005800 | Foot (B) | 1 | ③⑨ | 8810001110 | PH B0 M3×6 | 1 |
| ⑥ | 8010001520 | Stand (C) | 1 | ④⑩ | 8810005470 | PH M2.6×14 ZK | 1 |
| ⑦ | 8810005520 | PH B1 M3×8 ZK | 4 | ④① | 8810001650 | PH FT M3×6 | 9 |
| ⑧ | 8810005540 | PH B1 M4×10 | 2 | ④② | 8810001320 | PH B1 M2.6×6 Ni | 4 |
| ⑨ | 8010007851 | 610 Chassis-1 | 1 | ④③ | 8510001330 | 79 shield case | 1 |
| ⑩ | 8810001350 | PH B1 M3×6 | 16 | ④④ | 8510001340 | 79 shield case cover | 1 |
| ⑪ | 8810002160 | FH M3×5 | 16 | ④⑤ | 8510001060 | Shield case | 1 |
| ⑫ | 8810003670 | ICOM screw A 6 | 2 | ④⑥ | 8510001740 | Shield case cover | 1 |
| ⑬ | 8810005510 | FH M3×6 ZK BS | 16 | ④⑦ | 8510000881 | 194 VCO case-1 | 1 |
| ⑭ | 8210004670 | 610 Front panel (B) | 1 | ④⑧ | 8510003460 | 194 VCO case cover (A) | 1 |
| ⑮ | 8610004640 | Button K119 [VFO] | 1 | ④⑨ | 8510000230 | 220 shield case | 1 |
| ⑯ | 8610004650 | Button K119 (A) [SPLIT] | 1 | ⑤⑩ | 8510002200 | VCO case | 1 |
| ⑰ | 8610004660 | Button K119 (B) [UP] | 1 | ⑤① | 8510000881 | 194 VCO case-1 | 1 |
| ⑱ | 8610004670 | Button K119 (C) [MEMO] | 1 | ⑤② | 8510002690 | PA shield case (B) | 1 |
| ⑲ | 8610004680 | Button K119 (D) [MW] | 1 | ⑤③ | 8510004360 | PA shield case (B) cover (A) | 1 |
| ⑳ | 8610004690 | Button K119 (E) [DOWN] | 1 | ⑤④ | 8510005310 | DDS shield case | 1 |
| ㉑ | 8610004700 | Button K119 (F) [FUNC] | 1 | ⑤⑤ | 8510005320 | DDS shield case cover | 1 |
| ㉒ | 8610004710 | Button K119 (G) [RIT, TUNER] | 2 | ⑤⑥ | 2230000120 | Switch [POWER] SDDSA3159A | 1 |
| ㉓ | 8610004720 | Button K120 [SSB, CW/N, AM/FM] | 3 | ⑤⑦ | 6510000190 | Connector [MIC] FM214-8SS (P) | 1 |
| ㉔ | 8610004730 | Button K121 [kHz, MHz, BAND] | 3 | ⑤⑧ | 7600000100 | Rotary encoder EC24B50B0013A | 1 |
| ㉕ | 8610003850 | Button K98 [TRANSMIT] | 1 | ⑤⑨ | 7210000570 | Variable resistor [RIT] | 1 |
| ㉖ | 8610004741 | Button K122-1 [LOCK] | 1 | ⑥⑩ | 6450000810 | Connector [PHONES] HLJ4306-01-3070 | 1 |
| ㉗ | 8610004751 | Button K123-1 [NB, ATT, PRE, AGC] | 4 | | | | |
| ㉘ | 8610004760 | Dial N104 (A) (incl. rubber ring and screw) | 1 | ⑥① | 7210001320 | Variable resistor [AF/SQL] RK124221002DA | 1 |
| ㉙ | 8610004770 | Knob N45C [AF, MIC] | 2 | ⑥② | 7210001550 | Variable resistor [MIC/RF PWR] RK1242210032A | 1 |
| ⑳ | 8610000500 | Knob N69 [SQL, RF PWR] | 2 | | | | |
| ㉑ | 8610001560 | Button K42 [POWER] | 1 | ⑥③ | 7210001530 | Variable resistor [RIT] RK09K1110AEGA | 1 |
| ㉒ | 8610004780 | Knob N87 (B) [RIT] | 1 | | | | |
| ㉓ | 8010007860 | 610 Sub chassis | 1 | ⑥④ | 0910006330 | Flexible cable P.C. Board B 792 | 1 |
| ㉔ | 8930003200 | Spacer (P) | 1 | | | | |

Screw abbreviations PH: Pan head FH: Flat head B0, B1, FT: Self-tapping screw ZK: Black Ni: Nickel
BS: Brass



4-2 PA UNIT AND ACCESSORIES



• PA UNIT

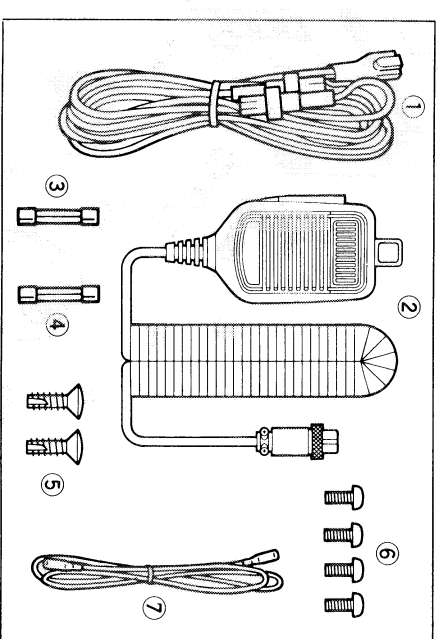
| LABEL NUMBER | ORDER NO. | DESCRIPTION | QTY. |
|--------------|------------|--------------------------|------|
| 1 | 8410000781 | 401 Heatsink-1 | 1 |
| 2 | 8510005462 | PA cover-2 | 1 |
| 3 | 8810001910 | PH M3 x 6 Ni BS | 4 |
| 4 | 8850000420 | Spring washer M3 Ni | 4 |
| 5 | 8810001350 | PH B1 M3 x 6 | 24 |
| 6 | 8810003170 | Set screw A M3 x 8 | 7 |
| 7 | 6910000310 | Bushing B312D | 1 |
| 8 | 8810003670 | ICOM screw A6 | 2 |
| 9 | 8810003210 | Set screw A M3 x 15 | 1 |
| 10 | 8810000220 | PH M3 x 5 | 4 |
| 11 | 8810001980 | PH M5 x 16 Ni BS | 1 |
| 12 | 8850000590 | Star washer M5 | 1 |
| 13 | 8850000440 | Spring washer M5 Ni | 1 |
| 14 | 8830000210 | Nut M5 Ni BS | 1 |
| 15 | 8850000150 | Flat washer M5 Ni BS | 2 |
| 16 | 8830000360 | Wing nut M5 Ni | 1 |
| 17 | 6510004880 | ANT connector MR-DS-E 01 | 2 |
| 18 | 2510000040 | Speaker C065K1210810 | 1 |
| 19 | 6510003780 | DC power socket LLR-6 | 1 |
| 20 | 8810001350 | PH B1 M3 x 6 | 4 |

Screw abbreviations PH: Pan head B1: Self-tapping screw Ni: Nickel BS: Brass

• ACCESSORIES

| LABEL NUMBER | ORDER NO. | DESCRIPTION | QTY. |
|--------------|------------|---|------|
| 1 | | Optional product DC power cable OPC-025 A | 1 |
| 2 | | Optional product Hand microphone HM-12 | 1 |
| 3 | 5210000080 | Spare fuse FGB 20A | 1 |
| 4 | 5210000130 | Spare fuse FGB 4A | 1 |
| 5 | 8810005500 | FH B1 M4 x 12 CR | 2 |
| 6 | 8810001600 | PH ST M3 x 6 | 4 |
| 7 | 8970016530 | Jumper wire #795-AC | 1 |

Screw abbreviations PH: Pan head FH: Flat head
B1, ST: Self-tapping screw



SECTION 5 PARTS LIST

[FRONT UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------------|--|
| IC1 | 1130000790 | IC | μPD7225G |
| Q1 | 1520000230 | Transistor | 2SB909M Q |
| Q2 | 1530000110 | Transistor | 2SC2458-GR |
| Q3 | 1530000110 | Transistor | 2SC2458-GR |
| Q4 | 1530000110 | Transistor | 2SC2458-GR |
| Q5 | 1590000350 | Transistor | RN1204 |
| Q6 | 1530000110 | Transistor | 2SC2458-GR |
| D1 | 1730000180 | Zener | RD8.2E B2 |
| D2 | 1710000160 | Diode | 1SS133 |
| D3 | 1710000160 | Diode | 1SS133 |
| D4 | 1710000160 | Diode | 1SS133 |
| D5 | 1710000160 | Diode | 1SS133 |
| D6 | 1710000160 | Diode | 1SS133 |
| D7 | 1710000160 | Diode | 1SS133 |
| D8 | 1710000160 | Diode | 1SS133 |
| D9 | 1710000160 | Diode | 1SS133 |
| D10 | 1710000160 | Diode | 1SS133 |
| D11 | 1710000160 | Diode | 1SS133 |
| D12 | 1710000160 | Diode | 1SS133 |
| D13 | 1710000160 | Diode | 1SS133 |
| D14 | 1710000160 | Diode | 1SS133 |
| D15 | 1710000160 | Diode | 1SS133 |
| D16 | 1710000160 | Diode | 1SS133 |
| D17 | 1710000160 | Diode | 1SS133 |
| D18 | 1710000160 | Diode | 1SS133 |
| D19 | 1710000160 | Diode | 1SS133 |
| L1 | 6180000900 | Coil | LAL 03NA 101K |
| L2 | 6180000900 | Coil | LAL 03NA 101K |
| L3 | 6180000900 | Coil | LAL 03NA 101K |
| L4 | 6180000900 | Coil | LAL 03NA 101K |
| L5 | 6180000900 | Coil | LAL 03NA 101K |
| L6 | 6180000900 | Coil | LAL 03NA 101K |
| L7 | 6180000900 | Coil | LAL 03NA 101K |
| L8 | 6180000900 | Coil | LAL 03NA 101K |
| R1 | 7210001320 | Variable Resistor | RK124221002DA (AF/SQL) |
| R2 | 7210001550 | Variable Resistor | RK1242210032A 10KB · 10KB (MIC/RF PWR) |
| R3 | 7010004030 | Resistor | R20J 47 Ω |
| R4 | 7010004190 | Resistor | R20J 1 kΩ |
| R5 | 7010003280 | Resistor | ELR20J 100 Ω |
| R6 | 7010003280 | Resistor | ELR20J 100 Ω |
| R7 | 7010004720 | Resistor | R50XJ 100 Ω |
| R8 | 7010004720 | Resistor | R50XJ 100 Ω |
| R9 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R10 | 7010003520 | Resistor | ELR20J 8.2 kΩ |
| R11 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R12 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R13 | 7010004250 | Resistor | R20J 3.3 kΩ |
| R14 | 7010004320 | Resistor | R20J 10 kΩ |
| R15 | 7010004320 | Resistor | R20J 10 kΩ |
| R16 | 7010004480 | Resistor | R20J 180 kΩ |
| R17 | 7010004410 | Resistor | R20J 47 kΩ |
| R18 | 7010004320 | Resistor | R20J 10 kΩ |
| R19 | 7010004320 | Resistor | R20J 10 kΩ |
| R20 | 7010004170 | Resistor | R20J 680 Ω |
| R21 | 7010004320 | Resistor | R20J 10 kΩ |
| R22 | 7010004320 | Resistor | R20J 10 kΩ |
| R23 | 7210000570 | Variable Resistor | RK1631110D5FA (RIT) |
| R24 | 7010004320 | Resistor | R20J 10 kΩ |
| R25 | 7010001400 | Resistor | R25J 100 kΩ |
| R26 | 7010004450 | Resistor | R20J 100 kΩ |

[FRONT UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|----------------|---------------------------|
| C1 | 4510000970 | Electrolytic | 10 MS9 100 μF |
| C2 | 4510001150 | Electrolytic | 50 MS7 R47 μF |
| C3 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C4 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C5 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C6 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C7 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C8 | 4020000250 | Cylinder | UP125 X 472M |
| C9 | 4020000250 | Cylinder | UP125 X 472M |
| C10 | 4010000520 | Ceramic | DD108 B 472K 50V |
| DS1 | 5030000380 | LCD | HLC9599-01-3210 |
| DS2 | 5040001290 | LED | SLP153B |
| DS3 | 5040001300 | LED | SLP253B |
| DS4 | 5080000170 | LED | HRS7219A-Y2-30 |
| DS5 | 5080000170 | LED | HRS7219A-Y2-30 |
| DS7 | 5080000170 | LED | HRS7219A-Y2-30 |
| ME1 | 5510000300 | Meter | KL-218U-43 (M610) |
| S1 | 2230000120 | Switch | SDDSA3159A [POWER] |
| S2 | 2230000550 | Switch | SPPH23079A [ATT] |
| S3 | 2230000550 | Switch | SPPH23079A [PRE] |
| S4 | 2230000550 | Switch | SPPH23079A [NB] |
| S5 | 2230000550 | Switch | SPPH23079A [AGC] |
| S6 | 2230000550 | Switch | SPPH23079A [LOCK] |
| S7 | 2230000550 | Switch | SPPH23079A [TRANSMIT] |
| S8 | 2260000070 | Switch | SKHHA013A [M-CH UP] |
| S9 | 2260000070 | Switch | SKHHA013A [M-CH DOWN] |
| S10 | 2260000070 | Switch | SKHHA013A [VFO] |
| S11 | 2260000070 | Switch | SKHHA013A [MEMO] |
| S12 | 2260000070 | Switch | SKHHA013A [RIT] |
| S13 | 2260000070 | Switch | SKHHA013A [MW] |
| S14 | 2260000070 | Switch | SKHHA013A [FUNC] |
| S15 | 2260000070 | Switch | SKHHA013A [SPLIT] |
| S16 | 2260000070 | Switch | SKHHA013A [TUNER] |
| S17 | 2260000060 | Switch | SKHHAJ025A [BAND] |
| S18 | 2260000060 | Switch | SKHHAJ025A [MHz] |
| S19 | 2260000060 | Switch | SKHHAJ025A [kHz] |
| S20 | 2260000070 | Switch | SKHHA013A [AM/FM] |
| S21 | 2260000070 | Switch | SKHHA013A [CW/N] |
| S22 | 2260000070 | Switch | SKHHA013A [SSB] |
| S23 | 7600000100 | Switch | EC24B50B0013A [MAIN DIAL] |
| EP1 | 0910019544 | P.C. Board | B 1786D (VR) |
| EP2 | 0910019524 | P.C. Board | B 1787D (SW) |
| EP3 | 0910019550 | P.C. Board | B 1868 (SPEC) |
| EP4 | 0910006330 | Flexible Cable | B 792 |
| EP5 | 0910019931 | P.C. Board | B 1932A (LED) |
| EP9 | 6910000630 | Ferrite Bead | FSOH070RN |
| EP10 | 6910000630 | Ferrite Bead | FSOH070RN |
| EP11 | 6910000630 | Ferrite Bead | FSOH070RN |

[MAIN UNIT]

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|------------|
| IC1 | 1790000050 | IC | ND487C1-3R |
| IC2 | 1110001310 | IC | μPC577HA |
| IC4 | 1110000330 | IC | M5218L |
| IC5 | 1110001320 | IC | μPC1037HA |
| IC6 | 1110001320 | IC | μPC1037HA |
| IC8 | 1130003900 | IC | GD4066B |
| IC9 | 1110000890 | IC | μPC1241H |
| IC10 | 1110000330 | IC | M5218L |
| IC11 | 1110000330 | IC | M5218L |
| IC13 | 1130003880 | IC | GD4011B |
| IC14 | 1180000470 | IC | NJM7808A |
| IC15 | 1110000290 | IC | BA618 |
| IC16 | 1120000970 | IC | M54562P |
| Q1 | 1530000810 | Transistor | 2SC2053 |
| Q2 | 1580000100 | FET | 3SK74 K |
| Q3 | 1580000100 | FET | 3SK74 K |
| Q4 | 1530000810 | Transistor | 2SC2053 |
| Q5 | 1520000230 | Transistor | 2SB909M Q |
| Q6 | 1590000340 | Transistor | RN1202 |
| Q7 | 1560000100 | FET | 2SK241-Y |
| Q8 | 1560000130 | FET | 2SK125 |
| Q9 | 1560000130 | FET | 2SK125 |
| Q10 | 1590000360 | Transistor | RN2202 |
| Q11 | 1530000110 | Transistor | 2SC2458-GR |
| Q12 | 1590000340 | Transistor | RN1202 |
| Q13 | 1560000130 | FET | 2SK125 |
| Q14 | 1560000130 | FET | 2SK125 |
| Q15 | 1580000110 | FET | 3SK74 M |
| Q16 | 1560000080 | FET | 2SK192A-Y |
| Q17 | 1510000080 | Transistor | 2SA1048-GR |
| Q18 | 1530000110 | Transistor | 2SC2458-GR |
| Q19 | 1530000110 | Transistor | 2SC2458-GR |
| Q20 | 1590000360 | Transistor | RN2202 |
| Q21 | 1580000110 | FET | 3SK74 M |
| Q22 | 1560000100 | FET | 2SK241-Y |
| Q23 | 1590000340 | Transistor | RN1202 |
| Q24 | 1590000360 | Transistor | RN2202 |
| Q25 | 1590000360 | Transistor | RN2202 |
| Q26 | 1530000110 | Transistor | 2SC2458-GR |
| Q27 | 1580000110 | FET | 3SK74 M |
| Q28 | 1560000100 | FET | 2SK241-Y |
| Q29 | 1530000110 | Transistor | 2SC2458-GR |
| Q30 | 1530000110 | Transistor | 2SC2458-GR |
| Q31 | 1530000110 | Transistor | 2SC2458-GR |
| Q32 | 1590000340 | Transistor | RN1202 |
| Q33 | 1590000350 | Transistor | RN1204 |
| Q34 | 1590000340 | Transistor | RN1202 |
| Q35 | 1530000110 | Transistor | 2SC2458-GR |
| Q36 | 1530000110 | Transistor | 2SC2458-GR |
| Q37 | 1530000110 | Transistor | 2SC2458-GR |
| Q38 | 1510000080 | Transistor | 2SA1048-GR |
| Q39 | 1590000350 | Transistor | RN1204 |
| Q40 | 1530000110 | Transistor | 2SC2458-GR |
| Q41 | 1590000360 | Transistor | RN2202 |
| Q42 | 1530000110 | Transistor | 2SC2458-GR |
| Q44 | 1530000110 | Transistor | 2SC2458-GR |
| Q45 | 1530000110 | Transistor | 2SC2458-GR |
| Q46 | 1540000070 | Transistor | 2SD468C |
| Q47 | 1540000070 | Transistor | 2SD468C |
| Q48 | 1540000150 | Transistor | 2SD1225M R |
| Q49 | 1530000110 | Transistor | 2SC2458-GR |
| Q50 | 1530000110 | Transistor | 2SC2458-GR |
| Q51 | 1590000340 | Transistor | RN1202 |
| Q52 | 1540000150 | Transistor | 2SD1225M R |
| Q53 | 1510000080 | Transistor | 2SA1048-GR |
| Q54 | 1590000350 | Transistor | RN1204 |
| Q55 | 1590000350 | Transistor | RN1204 |
| Q56 | 1530000110 | Transistor | 2SC2458-GR |
| Q61 | 1540000150 | Transistor | 2SD1225M R |
| Q62 | 1520000230 | Transistor | 2SB909M Q |
| Q63 | 1540000150 | Transistor | 2SD1225M R |
| Q64 | 1590000340 | Transistor | RN1202 |
| Q65 | 1590000340 | Transistor | RN1202 |

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|--------|
| Q66 | 1590000340 | Transistor | RN1202 |
| Q67 | 1590000360 | Transistor | RN2202 |
| D1 | 1710000050 | Diode | 1SS53 |
| D2 | 1710000050 | Diode | 1SS53 |
| D3 | 1710000050 | Diode | 1SS53 |
| D4 | 1710000050 | Diode | 1SS53 |
| D5 | 1710000050 | Diode | 1SS53 |
| D6 | 1710000050 | Diode | 1SS53 |
| D7 | 1710000050 | Diode | 1SS53 |
| D8 | 1710000050 | Diode | 1SS53 |
| D9 | 1710000050 | Diode | 1SS53 |
| D10 | 1710000160 | Diode | 1SS133 |
| D11 | 1710000160 | Diode | 1SS133 |
| D12 | 1710000330 | Diode | 1K60 |
| D13 | 1710000330 | Diode | 1K60 |
| D14 | 1710000160 | Diode | 1SS133 |
| D15 | 1710000050 | Diode | 1SS53 |
| D16 | 1710000050 | Diode | 1SS53 |
| D17 | 1710000160 | Diode | 1SS133 |
| D18 | 1710000050 | Diode | 1SS53 |
| D19 | 1710000050 | Diode | 1SS53 |
| D20 | 1710000050 | Diode | 1SS53 |
| D21 | 1710000050 | Diode | 1SS53 |
| D22 | 1710000160 | Diode | 1SS133 |
| D23 | 1710000050 | Diode | 1SS53 |
| D24 | 1710000050 | Diode | 1SS53 |
| D25 | 1710000050 | Diode | 1SS53 |
| D26 | 1710000050 | Diode | 1SS53 |
| D27 | 1710000160 | Diode | 1SS133 |
| D28 | 1710000050 | Diode | 1SS53 |
| D29 | 1710000050 | Diode | 1SS53 |
| D30 | 1710000050 | Diode | 1SS53 |
| D31 | 1710000050 | Diode | 1SS53 |
| D32 | 1710000050 | Diode | 1SS53 |
| D33 | 1710000050 | Diode | 1SS53 |
| D34 | 1710000160 | Diode | 1SS133 |
| D35 | 1710000050 | Diode | 1SS53 |
| D36 | 1710000050 | Diode | 1SS53 |
| D37 | 1710000050 | Diode | 1SS53 |
| D38 | 1710000050 | Diode | 1SS53 |
| D39 | 1710000050 | Diode | 1SS53 |
| D40 | 1710000050 | Diode | 1SS53 |
| D41 | 1710000050 | Diode | 1SS53 |
| D42 | 1710000050 | Diode | 1SS53 |
| D43 | 1710000050 | Diode | 1SS53 |
| D44 | 1710000050 | Diode | 1SS53 |
| D45 | 1710000050 | Diode | 1SS53 |
| D46 | 1710000050 | Diode | 1SS53 |
| D47 | 1710000050 | Diode | 1SS53 |
| D48 | 1710000050 | Diode | 1SS53 |
| D49 | 1710000050 | Diode | 1SS53 |
| D50 | 1710000050 | Diode | 1SS53 |
| D51 | 1710000050 | Diode | 1SS53 |
| D52 | 1710000050 | Diode | 1SS53 |
| D55 | 1710000160 | Diode | 1SS133 |
| D56 | 1710000330 | Diode | 1K60 |
| D57 | 1710000160 | Diode | 1SS133 |
| D58 | 1710000160 | Diode | 1SS133 |
| D59 | 1710000330 | Diode | 1K60 |
| D60 | 1710000330 | Diode | 1K60 |
| D61 | 1710000160 | Diode | 1SS133 |
| D62 | 1710000330 | Diode | 1K60 |
| D63 | 1710000050 | Diode | 1SS53 |
| D64 | 1710000160 | Diode | 1SS133 |
| D65 | 1710000160 | Diode | 1SS133 |
| D66 | 1710000160 | Diode | 1SS133 |
| D67 | 1710000050 | Diode | 1SS53 |
| D68 | 1710000050 | Diode | 1SS53 |
| D69 | 1710000050 | Diode | 1SS53 |
| D70 | 1710000050 | Diode | 1SS53 |
| D71 | 1710000050 | Diode | 1SS53 |
| D72 | 1710000160 | Diode | 1SS133 |
| D73 | 1710000160 | Diode | 1SS133 |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|----------------|
| D75 | 1710000160 | Diode | 1SS133 |
| D76 | 1710000160 | Diode | 1SS133 |
| D77 | 1710000160 | Diode | 1SS133 |
| D78 | 1710000160 | Diode | 1SS133 |
| D79 | 1710000160 | Diode | 1SS133 |
| D80 | 1730000070 | Zener | RD3.9E B2 |
| D81 | 1710000160 | Diode | 1SS133 |
| D82 | 1710000160 | Diode | 1SS133 |
| D83 | 1710000160 | Diode | 1SS133 |
| D84 | 1710000160 | Diode | 1SS133 |
| D85 | 1710000160 | Diode | 1SS133 |
| D86 | 1710000160 | Diode | 1SS133 |
| D87 | 1710000160 | Diode | 1SS133 |
| D88 | 1710000160 | Diode | 1SS133 |
| D89 | 1710000160 | Diode | 1SS133 |
| D90 | 1710000160 | Diode | 1SS133 |
| D91 | 1710000160 | Diode | 1SS133 |
| D92 | 1710000160 | Diode | 1SS133 |
| D93 | 1710000160 | Diode | 1SS133 |
| D94 | 1710000160 | Diode | 1SS133 |
| D95 | 1710000160 | Diode | 1SS133 |
| D96 | 1710000160 | Diode | 1SS133 |
| D97 | 1710000030 | Diode | 1S1555 |
| D98 | 1710000160 | Diode | 1SS133 |
| D99 | 1710000160 | Diode | 1SS133 |
| D101 | 1710000050 | Diode | 1SS53 |
| D102 | 1710000050 | Diode | 1SS53 |
| D103 | 1710000050 | Diode | 1SS53 |
| D104 | 1710000050 | Diode | 1SS53 |
| D105 | 1710000050 | Diode | 1SS53 |
| D106 | 1710000160 | Diode | 1SS133 |
| D107 | 1710000160 | Diode | 1SS133 |
| F11 | 2010000500 | Filter | 70M15B (FL-64) |
| F12 | 2010000270 | Filter | 9M15A (FL-23) |
| F13 | 2010000320 | Filter | 9M22D2 (FL-30) |
| F14 | 2010000950 | Filter | 9M6A1 (FL-116) |
| X1 | 6050001800 | Crystal | CR-49 |
| L1 | 6140000080 | Coil | LR-20 |
| L2 | 6180002520 | Coil | LAL 02NA R27K |
| L3 | 6180001290 | Coil | LAL 02NA R33K |
| L4 | 6180000860 | Coil | LAL 03NA 5R6K |
| L5 | 6180000960 | Coil | LAL 03NA 102K |
| L6 | 6140002050 | Coil | LR-224 |
| L7 | 6150001770 | Coil | LS-198 |
| L8 | 6110001620 | Coil | LA-245 |
| L9 | 6180000900 | Coil | LAL 03NA 101K |
| L10 | 6110001640 | Coil | LA-247 |
| L11 | 6110001570 | Coil | LA-237 |
| L12 | 6180000710 | Coil | LAL 03NA R33M |
| L13 | 6180000690 | Coil | LAL 03NA R22M |
| L14 | 6150000990 | Coil | LS-114 |
| L16 | 6150002430 | Coil | LS-254 |
| L17 | 6150002430 | Coil | LS-254 |
| L18 | 6140002060 | Coil | LR-225 |
| L19 | 6140002060 | Coil | LR-225 |
| L20 | 6180000900 | Coil | LAL 03NA 101K |
| L21 | 6150001640 | Coil | LS-180B |
| L22 | 6150000700 | Coil | LS-90A |
| L23 | 6150000700 | Coil | LS-90A |
| L24 | 6180000950 | Coil | LAL 03NA 150K |
| L25 | 6150001590 | Coil | LS-175 |
| L26 | 6150001590 | Coil | LS-175 |
| L27 | 6140000640 | Coil | LR-86 |
| L28 | 6140001540 | Coil | LR-169 |
| L29 | 6110001640 | Coil | LA-247 |
| L30 | 6110001570 | Coil | LA-237 |
| L31 | 6140002050 | Coil | LR-224 |
| L32 | 6180000880 | Coil | LAL 03NA 100K |
| L33 | 6150001770 | Coil | LS-198 |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|-----------------|
| L34 | 6150002430 | Coil | LS-254 |
| L35 | 6150002430 | Coil | LS-254 |
| L36 | 6150000990 | Coil | LS-114 |
| L37 | 6150001470 | Coil | LS-163 |
| L38 | 6180000940 | Coil | LAL 03NA 270K |
| L39 | 6180000930 | Coil | LAL 03NA 220K |
| L40 | 6180000900 | Coil | LAL 03NA 101K |
| L41 | 6180000900 | Coil | LAL 03NA 101K |
| L42 | 6180000850 | Coil | LAL 03NA 4R7K |
| L43 | 6180000840 | Coil | LAL 03NA 3R9K |
| L44 | 6180000900 | Coil | LAL 03NA 101K |
| L45 | 6180000870 | Coil | LAL 03NA 6R8K |
| L46 | 6180000850 | Coil | LAL 03NA 4R7K |
| L47 | 6180000900 | Coil | LAL 03NA 101K |
| L48 | 6180000820 | Coil | LAL 03NA 2R7M |
| L49 | 6180000810 | Coil | LAL 03NA 2R2M |
| L50 | 6180000820 | Coil | LAL 03NA 2R7M |
| L51 | 6180000830 | Coil | LAL 03NA 3R3K |
| L52 | 6180000900 | Coil | LAL 03NA 101K |
| L53 | 6180000800 | Coil | LAL 03NA 1R8M |
| L54 | 6180000780 | Coil | LAL 03NA 1R2M |
| L55 | 6180000790 | Coil | LAL 03NA 1R5M |
| L56 | 6180000790 | Coil | LAL 03NA 1R5M |
| L57 | 6180000900 | Coil | LAL 03NA 101K |
| L58 | 6180000780 | Coil | LAL 03NA 1R2M |
| L59 | 6180000770 | Coil | LAL 03NA 1R0M |
| L60 | 6180000760 | Coil | LAL 03NA R82M |
| L61 | 6180000760 | Coil | LAL 03NA R82M |
| L62 | 6180000900 | Coil | LAL 03NA 101K |
| L63 | 6180000760 | Coil | LAL 03NA R82M |
| L64 | 6180000750 | Coil | LAL 03NA R68M |
| L65 | 6180000750 | Coil | LAL 03NA R68M |
| L66 | 6180000740 | Coil | LAL 03NA R56M |
| L67 | 6180000900 | Coil | LAL 03NA 101K |
| L68 | 6180000730 | Coil | LAL 03NA R47M |
| L69 | 6180000730 | Coil | LAL 03NA R47M |
| L70 | 6180000730 | Coil | LAL 03NA R47M |
| L71 | 6180000730 | Coil | LAL 03NA R47M |
| L72 | 6180000900 | Coil | LAL 03NA 101K |
| L73 | 6180000700 | Coil | LAL 03NA R27M |
| L74 | 6180000700 | Coil | LAL 03NA R27M |
| L75 | 6180000710 | Coil | LAL 03NA R33M |
| L76 | 6180001290 | Coil | LAL 02NA R33K |
| L77 | 6150001590 | Coil | LS-175 |
| L78 | 6150001470 | Coil | LS-163 |
| L79 | 6150001590 | Coil | LS-175 |
| L80 | 6170000140 | Coil | LW-15 |
| L81 | 6180000690 | Coil | LAL 03NA R22M |
| L82 | 6150001220 | Coil | LS-134 |
| L83 | 6150001210 | Coil | LS-133A |
| L85 | 6180000900 | Coil | LAL 03NA 101K |
| L86 | 6180000900 | Coil | LAL 03NA 101K |
| L87 | 6180000900 | Coil | LAL 03NA 101K |
| L88 | 6180000880 | Coil | LAL 03NA 100K |
| L89 | 6180000950 | Coil | LAL 03NA 150K |
| L90 | 6180000950 | Coil | LAL 03NA 150K |
| L91 | 6180000900 | Coil | LAL 03NA 101K |
| L92 | 6180000900 | Coil | LAL 03NA 101K |
| L93 | 6910000670 | Coil | BT01RN1-A61-001 |
| L94 | 6180000900 | Coil | LAL 03NA 101K |
| L95 | 6180000900 | Coil | LAL 03NA 101K |
| L96 | 6910000670 | Coil | BT01RN1-A61-001 |
| L97 | 6180000900 | Coil | LAL 03NA 101K |
| L98 | 6910000670 | Coil | BT01RN1-A61-001 |
| L99 | 6180000900 | Coil | LAL 03NA 101K |
| L100 | 6180000900 | Coil | LAL 03NA 101K |
| L101 | 6180000900 | Coil | LAL 03NA 101K |
| L102 | 6910000670 | Coil | BT01RN1-A61-001 |
| L103 | 6180000900 | Coil | LAL 03NA 101K |
| L104 | 6180002460 | Coil | LAL 02KR 150K |
| L111 | 6150001770 | Coil | LS-198 |
| L112 | 6150001770 | Coil | LS-198 |
| L114 | 6170000230 | Coil | LW-25 |
| L115 | 6180000900 | Coil | LAL 03NA 101K |
| L116 | 6180000760 | Coil | LAL 03NA R82M |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|---------------|
| L117 | 6180000760 | Coil | LAL 03NA R82M |
| R1 | 7010004150 | Resistor | R20J 470 Ω |
| R2 | 7010003960 | Resistor | R20J 12 Ω |
| R3 | 7010003360 | Resistor | ELR20J 470 Ω |
| R4 | 7010000950 | Resistor | R25J 22 Ω |
| R5 | 7010004310 | Resistor | R20J 8.2 kΩ |
| R6 | 7010003920 | Resistor | R20J 5.6 Ω |
| R7 | 7010004170 | Resistor | R20J 680 Ω |
| R8 | 7010003250 | Resistor | ELR20J 56 Ω |
| R9 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R10 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R11 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R12 | 7010003240 | Resistor | ELR20J 47 Ω |
| R13 | 7010003160 | Resistor | ELR20J 10 Ω |
| R14 | 7010004170 | Resistor | R20J 680 Ω |
| R15 | 7010003490 | Resistor | ELR20J 5.6 kΩ |
| R16 | 7010003260 | Resistor | ELR20J 68 Ω |
| R17 | 7010004070 | Resistor | R20J 100 Ω |
| R18 | 7010004300 | Resistor | R20J 6.8 kΩ |
| R19 | 7010000790 | Resistor | R25J 1 Ω |
| R20 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R21 | 7010003510 | Resistor | ELR20J 6.8 kΩ |
| R22 | 7010004090 | Resistor | R20J 150 Ω |
| R23 | 7010004270 | Resistor | R20J 4.7 kΩ |
| R24 | 7010003330 | Resistor | ELR20J 270 Ω |
| R25 | 7010003330 | Resistor | ELR20J 270 Ω |
| R26 | 7010003190 | Resistor | ELR20J 18 Ω |
| R27 | 7010003460 | Resistor | ELR20J 3.3 kΩ |
| R28 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R29 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R30 | 7010001190 | Resistor | R25J 2.2 kΩ |
| R31 | 7010003320 | Resistor | ELR20J 220 Ω |
| R32 | 7010000990 | Resistor | R25J 47 Ω |
| R33 | 7010003740 | Resistor | ELR20J 470 kΩ |
| R34 | 7010003580 | Resistor | ELR20J 22 kΩ |
| R35 | 7510000110 | Thermistor | ERT-D2FGL251S |
| R36 | 7010004130 | Resistor | R20J 330 Ω |
| R37 | 7010003280 | Resistor | ELR20J 100 Ω |
| R38 | 7010004450 | Resistor | R20J 100 kΩ |
| R39 | 7010003280 | Resistor | ELR20J 100 Ω |
| R40 | 7010004070 | Resistor | R20J 100 Ω |
| R41 | 7010003950 | Resistor | R20J 10 Ω |
| R42 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R43 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R45 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R46 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R47 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R48 | 7010003510 | Resistor | ELR20J 6.8 kΩ |
| R49 | 7010004130 | Resistor | R20J 330 Ω |
| R50 | 7010003580 | Resistor | ELR20J 22 kΩ |
| R51 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R52 | 7010004320 | Resistor | R20J 10 kΩ |
| R53 | 7010004320 | Resistor | R20J 10 kΩ |
| R54 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R55 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R56 | 7010003460 | Resistor | ELR20J 3.3 kΩ |
| R57 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R58 | 7010004070 | Resistor | R20J 100 Ω |
| R59 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R60 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R61 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R62 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R63 | 7010001030 | Resistor | R25J 100 Ω |
| R64 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R65 | 7010001110 | Resistor | R25J 470 Ω |
| R66 | 7010004110 | Resistor | R20J 220 Ω |
| R67 | 7010003990 | Resistor | R20J 22 Ω |
| R68 | 7010003320 | Resistor | ELR20J 220 Ω |
| R69 | 7010000870 | Resistor | R25J 4.7 Ω |
| R70 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R71 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R72 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R73 | 7010003360 | Resistor | ELR20J 470 Ω |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|----------------|---------------------|
| R74 | 7010003360 | Resistor | ELR20J 470 Ω |
| R75 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R76 | 7010004030 | Resistor | R20J 47 Ω |
| R77 | 7010004090 | Resistor | R20J 150 Ω |
| R78 | 7010001530 | Resistor | R25J 1 MΩ |
| R79 | 7010003990 | Resistor | R20J 22 Ω |
| R80 | 7010004090 | Resistor | R20J 150 Ω |
| R81 | 7010000990 | Resistor | R25J 47 Ω |
| R82 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R83 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R84 | 7010004030 | Resistor | R20J 47 Ω |
| R85 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R86 | 7010004070 | Resistor | R20J 100 Ω |
| R87 | 7010004950 | Resistor | R20J 1.5 MΩ |
| R88 | 7010003360 | Resistor | ELR20J 470 Ω |
| R89 | 7510000100 | Thermistor | ERT-D2FGL601S |
| R90 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R91 | 7010004030 | Resistor | R20J 47 Ω |
| R92 | 7010003340 | Resistor | ELR20J 330 Ω |
| R93 | 7010001110 | Resistor | R25J 470 Ω |
| R94 | 7010000330 | Resistor | ELR25J 470 Ω |
| R95 | 7010004070 | Resistor | R20J 100 Ω |
| R96 | 7010004070 | Resistor | R20J 100 Ω |
| R97 | 7010004070 | Resistor | R20J 100 Ω |
| R98 | 7010004070 | Resistor | R20J 100 Ω |
| R99 | 7010004070 | Resistor | R20J 100 Ω |
| R100 | 7010004070 | Resistor | R20J 100 Ω |
| R101 | 7410000180 | Resistor Array | RMX- 8 103K |
| R102 | 7010003350 | Resistor | ELR20J 390 Ω |
| R103 | 7010004040 | Resistor | R20J 56 Ω |
| R104 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R105 | 7010000870 | Resistor | R25J 4.7 Ω |
| R106 | 7010004270 | Resistor | R20J 4.7 kΩ |
| R107 | 7010003740 | Resistor | ELR20J 470 kΩ |
| R108 | 7010004370 | Resistor | R20J 22 kΩ |
| R109 | 7010004420 | Resistor | R20J 56 kΩ |
| R110 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R111 | 7010004320 | Resistor | R20J 10 kΩ |
| R112 | 7010001030 | Resistor | R25J 100 Ω |
| R113 | 7010003820 | Resistor | ELR20J 3.3 MΩ |
| R114 | 7010004570 | Resistor | R20J 1 MΩ |
| R115 | 7010004370 | Resistor | R20J 22 kΩ |
| R116 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R117 | 7010003580 | Resistor | ELR20J 22 kΩ |
| R118 | 7010005170 | Resistor | R20J 4.7 MΩ |
| R119 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R120 | 7010004070 | Resistor | R20J 100 Ω |
| R121 | 7010004320 | Resistor | R20J 10 kΩ |
| R122 | 7010004250 | Resistor | R20J 3.3 kΩ |
| R123 | 7010003360 | Resistor | ELR20J 470 Ω |
| R124 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R125 | 7010003550 | Resistor | ELR20J 15 kΩ |
| R126 | 7010003510 | Resistor | ELR20J 6.8 kΩ |
| R127 | 7010003640 | Resistor | ELR20J 68 kΩ |
| R128 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R129 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R130 | 7010004150 | Resistor | R20J 470 Ω |
| R131 | 7010003700 | Resistor | ELR20J 220 kΩ |
| R132 | 7010004340 | Resistor | R20J 15 kΩ |
| R133 | 7010004300 | Resistor | R20J 6.8 kΩ |
| R134 | 7010004250 | Resistor | R20J 3.3 kΩ |
| R135 | 7010003240 | Resistor | ELR20J 47 Ω |
| R136 | 7010004030 | Resistor | R20J 47 Ω |
| R137 | 7010004070 | Resistor | R20J 100 Ω |
| R138 | 7310000740 | Trimmer | RH0651CS3J2KA (472) |
| R139 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R140 | 7510000120 | Thermistor | ERT-D2FGL332S |
| R141 | 7010004070 | Resistor | R20J 100 Ω |
| R142 | 7010003300 | Resistor | ELR20J 150 Ω |
| R143 | 7010004150 | Resistor | R20J 470 Ω |
| R144 | 7010004410 | Resistor | R20J 47 kΩ |
| R145 | 7010001030 | Resistor | R25J 100 Ω |
| R146 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R147 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R148 | 7010003530 | Resistor | ELR20J 10 kΩ |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|---------------------|
| R149 | 7010003830 | Resistor | R20J 1 Ω |
| R150 | 7010003300 | Resistor | ELR20J 150 Ω |
| R151 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R152 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R153 | 7010004320 | Resistor | R20J 10 kΩ |
| R154 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R155 | 7010004320 | Resistor | R20J 10 kΩ |
| R156 | 7010004190 | Resistor | R20J 1 kΩ |
| R157 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R158 | 7010001150 | Resistor | R25J 1 kΩ |
| R159 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R160 | 7010004390 | Resistor | R20J 33 kΩ |
| R161 | 7010003990 | Resistor | R20J 22 Ω |
| R162 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R164 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R165 | 7010004070 | Resistor | R20J 100 Ω |
| R166 | 7010004450 | Resistor | R20J 100 kΩ |
| R167 | 7010001400 | Resistor | R25J 100 kΩ |
| R168 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R169 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R170 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R171 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R172 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R173 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R174 | 7010004260 | Resistor | R20J 3.9 kΩ |
| R175 | 7010003420 | Resistor | ELR20J 1.5 kΩ |
| R176 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R177 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R178 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R179 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R180 | 7010004490 | Resistor | R20J 220 kΩ |
| R181 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R182 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R183 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R184 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R185 | 7010003720 | Resistor | ELR20J 330 kΩ |
| R186 | 7310000790 | Trimmer | RH0651C15J1UA (104) |
| R187 | 7010004410 | Resistor | R20J 47 kΩ |
| R188 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R189 | 7010001110 | Resistor | R25J 470 Ω |
| R190 | 7010004190 | Resistor | R20J 1 kΩ |
| R191 | 7010004410 | Resistor | R20J 47 kΩ |
| R192 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R193 | 7010004390 | Resistor | R20J 33 kΩ |
| R194 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R195 | 7010003600 | Resistor | ELR20J 33 kΩ |
| R196 | 7010003780 | Resistor | ELR20J 1 MΩ |
| R197 | 7010004150 | Resistor | R20J 470 Ω |
| R198 | 7010004570 | Resistor | R20J 1 MΩ |
| R199 | 7010005220 | Resistor | ELR20J 10 MΩ |
| R200 | 7010004570 | Resistor | R20J 1 MΩ |
| R201 | 7010004270 | Resistor | R20J 4.7 kΩ |
| R202 | 7010004150 | Resistor | R20J 470 Ω |
| R203 | 7010004430 | Resistor | R20J 68 kΩ |
| R204 | 7010003720 | Resistor | ELR20J 330 kΩ |
| R205 | 7010003360 | Resistor | ELR20J 470 Ω |
| R206 | 7010003650 | Resistor | ELR20J 82 kΩ #03 |
| R206 | 7010003650 | Resistor | ELR20J 82 kΩ #04 |
| R206 | 7010003480 | Resistor | ELR20J 4.7 kΩ #01 |
| R206 | 7010003480 | Resistor | ELR20J 4.7 kΩ #02 |
| R207 | 7010003510 | Resistor | ELR20J 6.8 kΩ |
| R208 | 7310000740 | Trimmer | RH0651CS3J2KA (472) |
| R209 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R210 | 7310000790 | Trimmer | RH0651C15J1UA (104) |
| R211 | 7010004530 | Resistor | R20J 470 kΩ |
| R212 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R213 | 7010003810 | Resistor | ELR20J 2.2 MΩ |
| R214 | 7010003360 | Resistor | ELR20J 470 Ω |
| R215 | 7010001050 | Resistor | R25J 150 Ω |
| R216 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R217 | 7010004450 | Resistor | R20J 100 kΩ |
| R218 | 7010004190 | Resistor | R20J 1 kΩ |
| R220 | 7010003740 | Resistor | ELR20J 470 kΩ |
| R221 | 7010003740 | Resistor | ELR20J 470 kΩ |
| R222 | 7010003530 | Resistor | ELR20J 10 kΩ |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------------|---------------------|
| R223 | 7010004070 | Resistor | R20J 100 Ω |
| R224 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R225 | 7010000090 | Resistor | ELR25J 4.7 Ω |
| R226 | 7010000370 | Resistor | ELR25J 1 kΩ |
| R227 | 7010000090 | Resistor | ELR25J 4.7 Ω |
| R228 | 7010000370 | Resistor | ELR25J 1 kΩ |
| R229 | 7010000090 | Resistor | ELR25J 4.7 Ω |
| R230 | 7010004190 | Resistor | R20J 1 kΩ |
| R231 | 7410000140 | Resistor Array | RMX- 6 472K |
| R232 | 7010004110 | Resistor | R20J 220 Ω |
| R233 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R234 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R235 | 7010003490 | Resistor | ELR20J 5.6 kΩ |
| R236 | 7010004310 | Resistor | R20J 8.2 kΩ |
| R237 | 7010003380 | Resistor | ELR20J 680 Ω |
| R238 | 7310000860 | Trimmer | RH1051D13J0JA (102) |
| R239 | 7010003540 | Resistor | ELR20J 12 kΩ |
| R240 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R241 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R242 | 7010004320 | Resistor | R20J 10 kΩ |
| R243 | 7010001030 | Resistor | R25J 100 Ω |
| R244 | 7210001540 | Variable Resistor | RK09K1110AEFA |
| R245 | 7010004320 | Resistor | R20J 10 kΩ |
| R246 | 7010004190 | Resistor | R20J 1 kΩ |
| R247 | 7010004300 | Resistor | R20J 6.8 kΩ |
| R248 | 7010004570 | Resistor | R20J 1 MΩ |
| R249 | 7010001030 | Resistor | R25J 100 Ω |
| R250 | 7010004030 | Resistor | R20J 47 Ω |
| R251 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R252 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R253 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R254 | 7010001280 | Resistor | R25J 10 kΩ |
| R255 | 7010004190 | Resistor | R20J 1 kΩ |
| R256 | 7010004270 | Resistor | R20J 4.7 kΩ |
| R257 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R258 | 7010001360 | Resistor | R25J 47 kΩ |
| R259 | 7010004270 | Resistor | R20J 4.7 kΩ |
| R260 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R261 | 7010003360 | Resistor | ELR20J 470 Ω |
| R262 | 7010003460 | Resistor | ELR20J 3.3 kΩ |
| R263 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R264 | 7010003580 | Resistor | ELR20J 22 kΩ |
| R265 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R266 | 7010001150 | Resistor | R25J 1 kΩ |
| R267 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R268 | 7010003360 | Resistor | ELR20J 470 Ω |
| R269 | 7010003120 | Resistor | ELR20J 4.7 Ω |
| R270 | 7010004300 | Resistor | R20J 6.8 kΩ |
| R271 | 7010004320 | Resistor | R20J 10 kΩ |
| R272 | 7010003380 | Resistor | ELR20J 680 Ω |
| R273 | 7010004450 | Resistor | R20J 100 kΩ |
| R274 | 7010004320 | Resistor | R20J 10 kΩ |
| R275 | 7010003040 | Resistor | ELR20J 1 Ω |
| R281 | 7010004210 | Resistor | R20J 1.5 kΩ |
| R282 | 7010003360 | Resistor | ELR20J 470 Ω |
| R283 | 7010004210 | Resistor | R20J 1.5 kΩ |
| R284 | 7010004140 | Resistor | R20J 390 Ω |
| R285 | 7010003250 | Resistor | ELR20J 56 Ω |
| R287 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R288 | 7010004190 | Resistor | R20J 1 kΩ |
| R289 | 7010003490 | Resistor | ELR20J 5.6 kΩ |
| R290 | 7010004190 | Resistor | R20J 1 kΩ |
| R291 | 7310000790 | Trimmer | RH0651C15J1UA (104) |
| R292 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R293 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R294 | 7010004270 | Resistor | R20J 4.7 kΩ |
| C1 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C2 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C3 | 4010000410 | Ceramic | DD107 SL 331J 50V |
| C4 | 4010000260 | Ceramic | DD104 SL 470J 50V |
| C5 | 4010000380 | Ceramic | DD107 SL 221J 50V |
| C6 | 4010000150 | Ceramic | DD104 SL 150J 50V |
| C7 | 4010000350 | Ceramic | DD106 SL 151J 50V |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|------------|----------------------------|
| C8 | 4040000110 | Barrier Layer UAT 04X 222K |
| C9 | 4040000260 | Barrier Layer UZE 08X 104M |
| C10 | 4040000130 | Barrier Layer UAT 05X 332K |
| C11 | 4010000050 | Ceramic DD104 SL 030C 50V |
| C12 | 4020000730 | Cylinder UP050 SL 150J |
| C13 | 4010000340 | Ceramic DD105 SL 121J 50V |
| C14 | 4010000520 | Ceramic DD108 B 472K 50V |
| C15 | 4010000520 | Ceramic DD108 B 472K 50V |
| C16 | 4010000020 | Ceramic DD104 SL 010C 50V |
| C17 | 4010000150 | Ceramic DD104 SL 150J 50V |
| C18 | 4010000080 | Ceramic DD104 SL 060D 50V |
| C19 | 4010000010 | Ceramic DD104 SL 0R5C 50V |
| C20 | 4010000500 | Ceramic DD104 B 102K 50V |
| C21 | 4010000330 | Ceramic DD105 SL 101J 50V |
| C23 | 4010000220 | Ceramic DD104 SL 330J 50V |
| C25 | 4010000500 | Ceramic DD104 B 102K 50V |
| C26 | 4010000100 | Ceramic DD104 SL 080D 50V |
| C27 | 4040000150 | Barrier Layer UAT 05X 472K |
| C28 | 4010000520 | Ceramic DD108 B 472K 50V |
| C29 | 4010000500 | Ceramic DD104 B 102K 50V |
| C30 | 4010000520 | Ceramic DD108 B 472K 50V |
| C31 | 4010003320 | Ceramic DD104 UJ 080D 50V |
| C32 | 4010003320 | Ceramic DD104 UJ 080D 50V |
| C33 | 4010000300 | Ceramic DD104 SL 080J 50V |
| C35 | 4010000520 | Ceramic DD108 B 472K 50V |
| C36 | 4010000430 | Ceramic DD109 SL 471J 50V |
| C37 | 4010000340 | Ceramic DD105 SL 121J 50V |
| C38 | 4020000030 | Cylinder UP125 SL 2R2K |
| C39 | 4010000070 | Ceramic DD104 SL 050C 50V |
| C40 | 4040000260 | Barrier Layer UZE 08X 104M |
| C42 | 4040000260 | Barrier Layer UZE 08X 104M |
| C43 | 4010000520 | Ceramic DD108 B 472K 50V |
| C44 | 4010000520 | Ceramic DD108 B 472K 50V |
| C46 | 4010000520 | Ceramic DD108 B 472K 50V |
| C47 | 4010000200 | Ceramic DD104 SL 270J 50V |
| C49 | 4010000520 | Ceramic DD108 B 472K 50V |
| C50 | 4040000150 | Barrier Layer UAT 05X 472K |
| C51 | 4510001100 | Electrolytic 16 MS7 10 µF |
| C52 | 4040000150 | Barrier Layer UAT 05X 472K |
| C53 | 4040000150 | Barrier Layer UAT 05X 472K |
| C54 | 4040000150 | Barrier Layer UAT 05X 472K |
| C55 | 4010000520 | Ceramic DD108 B 472K 50V |
| C56 | 4010000520 | Ceramic DD108 B 472K 50V |
| C58 | 4010000340 | Ceramic DD105 SL 121J 50V |
| C59 | 4010000180 | Ceramic DD104 SL 220J 50V |
| C60 | 4510001100 | Electrolytic 16 MS7 10 µF |
| C61 | 4510002640 | Electrolytic 25 SS 47 µF |
| C62 | 4040000260 | Barrier Layer UZE 08X 104M |
| C64 | 4010000520 | Ceramic DD108 B 472K 50V |
| C65 | 4010000520 | Ceramic DD108 B 472K 50V |
| C66 | 4040000260 | Barrier Layer UZE 08X 104M |
| C67 | 4040000150 | Barrier Layer UAT 05X 472K |
| C68 | 4040000150 | Barrier Layer UAT 05X 472K |
| C69 | 4040000260 | Barrier Layer UZE 08X 104M |
| C70 | 4040000250 | Barrier Layer UAT 08X 473M |
| C71 | 4040000250 | Barrier Layer UAT 08X 473M |
| C72 | 4010000330 | Ceramic DD105 SL 101J 50V |
| C73 | 4040000250 | Barrier Layer UAT 08X 473M |
| C74 | 4040000250 | Barrier Layer UAT 08X 473M |
| C75 | 4040000250 | Barrier Layer UAT 08X 473M |
| C77 | 4010000160 | Ceramic DD104 SL 180J 50V |
| C78 | 4010000340 | Ceramic DD105 SL 121J 50V |
| C79 | 4010000280 | Ceramic DD104 SL 560J 50V |
| C80 | 4010000280 | Ceramic DD104 SL 560J 50V |
| C81 | 4040000260 | Barrier Layer UZE 08X 104M |
| C82 | 4010000120 | Ceramic DD104 SL 100D 50V |
| C83 | 4010004840 | Ceramic DD305 F 104Z 12V |
| C84 | 4010004840 | Ceramic DD305 F 104Z 12V |
| C85 | 4010000500 | Ceramic DD104 B 102K 50V |
| C86 | 4040000260 | Barrier Layer UZE 08X 104M |
| C87 | 4010000070 | Ceramic DD104 SL 050C 50V |
| C89 | 4010000100 | Ceramic DD104 SL 080D 50V |
| C90 | 4010000100 | Ceramic DD104 SL 080D 50V |
| C91 | 4040000260 | Barrier Layer UZE 08X 104M |
| C92 | 4010000520 | Ceramic DD108 B 472K 50V |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|------------|-----------------------------|
| C93 | 4010000080 | Ceramic DD104 SL 060D 50V |
| C94 | 4010000520 | Ceramic DD108 B 472K 50V |
| C95 | 4510001150 | Electrolytic 50 MS7 R47 µF |
| C96 | 4010000520 | Ceramic DD108 B 472K 50V |
| C97 | 4510001180 | Electrolytic 50 MS7 3R3 µF |
| C99 | 4010000520 | Ceramic DD108 B 472K 50V |
| C100 | 4510002640 | Electrolytic 25 SS 47 µF |
| C101 | 4040000260 | Barrier Layer UZE 08X 104M |
| C102 | 4010000500 | Ceramic DD104 B 102K 50V |
| C109 | 4510001100 | Electrolytic 16 MS7 10 µF |
| C110 | 4310000060 | Mylar F2D 50V 223K |
| C112 | 4510001100 | Electrolytic 16 MS7 10 µF |
| C113 | 4510001160 | Electrolytic 50 MS7 1 µF |
| C114 | 4010000520 | Ceramic DD108 B 472K 50V |
| C115 | 4510002640 | Electrolytic 25 SS 47 µF |
| C116 | 4010000330 | Ceramic DD105 SL 101J 50V |
| C117 | 4010000350 | Ceramic DD106 SL 151J 50V |
| C118 | 4010000520 | Ceramic DD108 B 472K 50V |
| C119 | 4010000520 | Ceramic DD108 B 472K 50V |
| C120 | 4040000260 | Barrier Layer UZE 08X 104M |
| C121 | 4010000520 | Ceramic DD108 B 472K 50V |
| C122 | 4010000520 | Ceramic DD108 B 472K 50V |
| C123 | 4010000380 | Ceramic DD107 SL 221J 50V |
| C124 | 4510001140 | Electrolytic 50 MS7 R22 µF |
| C125 | 4040000250 | Barrier Layer UAT 08X 473M |
| C126 | 4010000520 | Ceramic DD108 B 472K 50V |
| C127 | 4010000520 | Ceramic DD108 B 472K 50V |
| C128 | 4010000350 | Ceramic DD106 SL 151J 50V |
| C129 | 4010000180 | Ceramic DD104 SL 220J 50V |
| C130 | 4010000520 | Ceramic DD108 B 472K 50V |
| C132 | 4010000520 | Ceramic DD108 B 472K 50V |
| C133 | 4010000520 | Ceramic DD108 B 472K 50V |
| C135 | 4010000520 | Ceramic DD108 B 472K 50V |
| C136 | 4010000520 | Ceramic DD108 B 472K 50V |
| C137 | 4010000180 | Ceramic DD104 SL 220J 50V |
| C138 | 4010000520 | Ceramic DD108 B 472K 50V |
| C139 | 4010000500 | Ceramic DD104 B 102K 50V |
| C140 | 4010000520 | Ceramic DD108 B 472K 50V |
| C141 | 4010000520 | Ceramic DD108 B 472K 50V |
| C142 | 4010000080 | Ceramic DD104 SL 060D 50V |
| C143 | 4040000080 | Barrier Layer UAT 04X 122K |
| C144 | 4040000170 | Barrier Layer UAT 05X 682K |
| C145 | 4040000460 | Barrier Layer RAU 08SA 821K |
| C146 | 4040000210 | Barrier Layer UAT 06X 153K |
| C147 | 4040000090 | Barrier Layer UAT 04X 152K |
| C148 | 4040000070 | Barrier Layer UAT 04X 102K |
| C149 | 4020000630 | Cylinder UP050 B 101K |
| C150 | 4040000070 | Barrier Layer UAT 04X 102K |
| C151 | 4040000250 | Barrier Layer UAT 08X 473M |
| C152 | 4040000260 | Barrier Layer UZE 08X 104M |
| C153 | 4040000260 | Barrier Layer UZE 08X 104M |
| C154 | 4010000520 | Ceramic DD108 B 472K 50V |
| C155 | 4040000090 | Barrier Layer UAT 04X 152K |
| C156 | 4040000110 | Barrier Layer UAT 04X 222K |
| C157 | 4010000410 | Ceramic DD107 SL 331J 50V |
| C158 | 4010000520 | Ceramic DD108 B 472K 50V |
| C159 | 4040000080 | Barrier Layer UAT 04X 122K |
| C160 | 4010000360 | Ceramic DD106 SL 181J 50V |
| C161 | 4040000080 | Barrier Layer UAT 04X 122K |
| C162 | 4040000110 | Barrier Layer UAT 04X 222K |
| C163 | 4040000210 | Barrier Layer UAT 06X 153K |
| C164 | 4040000080 | Barrier Layer UAT 04X 122K |
| C165 | 4040000250 | Barrier Layer UAT 08X 473M |
| C166 | 4010000520 | Ceramic DD108 B 472K 50V |
| C167 | 4010000440 | Ceramic DD109 SL 511J 50V |
| C168 | 4010000330 | Ceramic DD105 SL 101J 50V |
| C169 | 4010000430 | Ceramic DD109 SL 471J 50V |
| C170 | 4040000080 | Barrier Layer UAT 04X 122K |
| C171 | 4040000160 | Barrier Layer UAT 05X 562K |
| C172 | 4040000460 | Barrier Layer RAU 08SA 821K |
| C173 | 4040000250 | Barrier Layer UAT 08X 473M |
| C174 | 4010000520 | Ceramic DD108 B 472K 50V |
| C175 | 4010000410 | Ceramic DD107 SL 331J 50V |
| C176 | 4010000270 | Ceramic DD104 SL 510J 50V |
| C177 | 4010000410 | Ceramic DD107 SL 331J 50V |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|------------|--|
| C178 | 4010000410 | Ceramic DD107 SL 331J 50V |
| C179 | 4040000320 | Barrier Layer UAT 05V 272K |
| C180 | 4010000410 | Ceramic DD107 SL 331J 50V |
| C181 | 4040000250 | Barrier Layer UAT 08X 473M |
| C182 | 4010000520 | Ceramic DD108 B 472K 50V |
| C183 | 4010000410 | Ceramic DD107 SL 331J 50V |
| C184 | 4010000260 | Ceramic DD104 SL 470J 50V |
| C185 | 4010000380 | Ceramic DD107 SL 221J 50V |
| C186 | 4010000380 | Ceramic DD107 SL 221J 50V |
| C187 | 4040000100 | Barrier Layer UAT 04X 182K |
| C188 | 4010000370 | Ceramic DD106 SL 201J 50V |
| C189 | 4040000250 | Barrier Layer UAT 08X 473M |
| C190 | 4010000520 | Ceramic DD108 B 472K 50V |
| C191 | 4010000380 | Ceramic DD107 SL 221J 50V |
| C192 | 4010000160 | Ceramic DD104 SL 180J 50V |
| C193 | 4010000330 | Ceramic DD105 SL 101J 50V |
| C194 | 4010000380 | Ceramic DD107 SL 221J 50V |
| C195 | 4040000080 | Barrier Layer UAT 04X 122K |
| C196 | 4010000350 | Ceramic DD106 SL 151J 50V |
| C197 | 4040000250 | Barrier Layer UAT 08X 473M |
| C198 | 4010000520 | Ceramic DD108 B 472K 50V |
| C199 | 4010000220 | Ceramic DD104 SL 330J 50V |
| C200 | 4010000340 | Ceramic DD105 SL 121J 50V |
| C201 | 4010000240 | Ceramic DD104 SL 390J 50V |
| C202 | 4010000300 | Ceramic DD104 SL 680J 50V |
| C203 | 4010000340 | Ceramic DD105 SL 121J 50V |
| C204 | 4040000460 | Barrier Layer RAU 08SA 821K |
| C205 | 4010000330 | Ceramic DD105 SL 101J 50V |
| C206 | 4040000250 | Barrier Layer UAT 08X 473M |
| C207 | 4010000520 | Ceramic DD108 B 472K 50V |
| C208 | 4530000350 | Capacitor Array B8ZC0111-32N |
| C209 | 4010000520 | Ceramic DD108 B 472K 50V |
| C210 | 4510002380 | Electrolytic 16 SS 470 µF (10X12.5) |
| C211 | 4040000260 | Barrier Layer UZE 08X 104M |
| C212 | 4510003040 | Electrolytic 16 SS 100 µF |
| C213 | 4510000310 | Electrolytic 16 MS16 1000 µF (12.5X16) |
| C214 | 4510002730 | Electrolytic 10 SS 100 µF |
| C215 | 4510002640 | Electrolytic 25 SS 47 µF |
| C216 | 4040000250 | Barrier Layer UAT 08X 473M |
| C217 | 4510001140 | Electrolytic 50 MS7 R22 µF |
| C218 | 4510002730 | Electrolytic 10 SS 100 µF |
| C219 | 4040000110 | Barrier Layer UAT 04X 222K |
| C220 | 4310000060 | Mylar F2D 50V 223K |
| C221 | 4510001100 | Electrolytic 16 MS7 10 µF |
| C222 | 4510002640 | Electrolytic 25 SS 47 µF |
| C223 | 4510001170 | Electrolytic 50 MS7 2R2 µF |
| C224 | 4040000150 | Barrier Layer UAT 05X 472K |
| C225 | 4510001150 | Electrolytic 50 MS7 R47 µF |
| C226 | 4040000210 | Barrier Layer UAT 06X 153K |
| C227 | 4010000520 | Ceramic DD108 B 472K 50V |
| C228 | 4040000150 | Barrier Layer UAT 05X 472K |
| C229 | 4040000150 | Barrier Layer UAT 05X 472K |
| C230 | 4010000840 | Ceramic DD105 CH 390J 50V |
| C231 | 4010001020 | Ceramic DD111 CH 221J 50V |
| C232 | 4010001020 | Ceramic DD111 CH 221J 50V |
| C233 | 4010000520 | Ceramic DD108 B 472K 50V |
| C234 | 4010000520 | Ceramic DD108 B 472K 50V |
| C235 | 4010000520 | Ceramic DD108 B 472K 50V |
| C236 | 4040000250 | Barrier Layer UAT 08X 473M |
| C237 | 4010000180 | Ceramic DD104 SL 220J 50V |
| C238 | 4010000520 | Ceramic DD108 B 472K 50V |
| C239 | 4010000520 | Ceramic DD108 B 472K 50V |
| C240 | 4010000520 | Ceramic DD108 B 472K 50V |
| C241 | 4010000220 | Ceramic DD104 SL 330J 50V |
| C242 | 4310000060 | Mylar F2D 50V 223K |
| C243 | 4310000060 | Mylar F2D 50V 223K |
| C244 | 4310000060 | Mylar F2D 50V 223K |
| C245 | 4510001100 | Electrolytic 16 MS7 10 µF |
| C246 | 4510002850 | Electrolytic 25 SS 22 µF |
| C247 | 4040000150 | Barrier Layer UAT 05X 472K |
| C248 | 4510002640 | Electrolytic 25 SS 47 µF |
| C249 | 4510001160 | Electrolytic 50 MS7 1 µF |
| C250 | 4510001170 | Electrolytic 50 MS7 2R2 µF |
| C251 | 4510001160 | Electrolytic 50 MS7 1 µF |

[MAIN UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|-------------|------------------------------|
| C252 | 4510001160 | Electrolytic 50 MS7 1 µF |
| C253 | 4010000520 | Ceramic DD108 B 472K 50V |
| C254 | 4010000520 | Ceramic DD108 B 472K 50V |
| C255 | 4010000520 | Ceramic DD108 B 472K 50V |
| C256 | 4010000520 | Ceramic DD108 B 472K 50V |
| C257 | 4010000520 | Ceramic DD108 B 472K 50V |
| C258 | 4010000330 | Ceramic DD105 SL 101J 50V |
| C259 | 4010000520 | Ceramic DD108 B 472K 50V |
| C260 | 4040000260 | Barrier Layer UZE 08X 104M |
| C261 | 4510001100 | Electrolytic 16 MS7 10 µF |
| C262 | 4040000250 | Barrier Layer UAT 08X 473M |
| C263 | 4010000500 | Ceramic DD104 B 102K 50V |
| C264 | 4510001160 | Electrolytic 50 MS7 1 µF |
| C265 | 4040000190 | Barrier Layer UAT 05X 103K |
| C266 | 4040000190 | Barrier Layer UAT 05X 103K |
| C267 | 4510001150 | Electrolytic 50 MS7 R47 µF |
| C268 | 4510001150 | Electrolytic 50 MS7 R47 µF |
| C269 | 4510002810 | Electrolytic 16 SS 47 µF |
| C270 | 4040000260 | Barrier Layer UZE 08X 104M |
| C271 | 4510002810 | Electrolytic 16 SS 47 µF |
| C272 | 4530000350 | Capacitor Array B8ZC0111-32N |
| C273 | 4510001160 | Electrolytic 50 MS7 1 µF |
| C274 | 4010000460 | Ceramic DD104 B 471K 50V |
| C275 | 4010000520 | Ceramic DD108 B 472K 50V |
| C276 | 4510001770 | Electrolytic 16 RBP 10 µF |
| C277 | 4510002740 | Electrolytic 10 SS 220 µF |
| C278 | 4510001120 | Electrolytic 25 MS7 4R7 µF |
| C279 | 4040000150 | Barrier Layer UAT 05X 472K |
| C280 | 4040000150 | Barrier Layer UAT 05X 472K |
| C281 | 4010000240 | Ceramic DD104 SL 390J 50V |
| C282 | 4010000160 | Ceramic DD104 SL 180J 50V |
| C283 | 4510001150 | Electrolytic 50 MS7 R47 µF |
| C284 | 4010000520 | Ceramic DD108 B 472K 50V |
| C285 | 4010000520 | Ceramic DD108 B 472K 50V |
| C286 | 4010000520 | Ceramic DD108 B 472K 50V |
| C287 | 4010000520 | Ceramic DD108 B 472K 50V |
| C288 | 4010000520 | Ceramic DD108 B 472K 50V |
| C289 | 4010000520 | Ceramic DD108 B 472K 50V |
| C290 | 4010000520 | Ceramic DD108 B 472K 50V |
| C291 | 4010000430 | Ceramic DD109 SL 471J 50V |
| C292 | 4010000520 | Ceramic DD108 B 472K 50V |
| C293 | 4510001140 | Electrolytic 50 MS7 R22 µF |
| C294 | 4610001200 | Trimmer CVSS3001 |
| C295 | 4010000500 | Ceramic DD104 B 102K 50V |
| C297 | 4040000250 | Barrier Layer UAT 08X 473M |
| C298 | 4040000260 | Barrier Layer UZE 08X 104M |
| C299 | 4040000260 | Barrier Layer UZE 08X 104M |
| C300 | 4040000250 | Barrier Layer UAT 08X 473M |
| C301 | 4010000520 | Ceramic DD108 B 472K 50V |
| C311 | 4040000250 | Barrier Layer UAT 08X 473M |
| C312 | 4030000910 | Ceramic GRM40 CH 120J 50PT |
| C313 | 4010000600 | Ceramic DD104 CK 010C 50V |
| C314 | 4030000910 | Ceramic GRM40 CH 120J 50PT |
| C315 | 4040000250 | Barrier Layer UAT 08X 473M |
| C316 | 4010004840 | Ceramic DD305 F 104Z 12V |
| C319 | 4010000500 | Ceramic DD104 B 102K 50V |
| C320 | 4610000780 | Trimmer CV38D 2001 |
| C321 | 4020000250 | Cylinder UP125 X 472M |
| C322 | 4310000090 | Mylar F2D 50V 333K |
| RL1 | 6330000800 | Relay G5A-237P DC12V |
| RL2 | 6330000560 | Relay OUC-SH-114D |
| S1 | 2220000360 | Switch ESD-1111212 |
| S2 | 22300000700 | Switch SPPJ31309A [BK IN] |
| SO1 | 6510006640 | Switch 50864-1 |
| EP1 | 0910024033 | P.C. Board B 2297C (MAIN) |

[PLL UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|----------------|
| IC1 | 1130000670 | IC | μPD4071BC |
| IC2 | 1130000970 | IC | μPD4030BC |
| IC3 | 1130003870 | IC | GD4001B |
| IC4 | 1130001270 | IC | μPD4069UBC |
| IC5 | 1130003890 | IC | GD4024B |
| IC6 | 1110000240 | IC | BA222-V |
| IC7 | 1110001680 | IC | S-8054ALB |
| IC8 | 1140001210 | IC | HD63A01Y0RK10P |
| IC9 | 1120000970 | IC | M54562P |
| IC10 | 1180000340 | IC | TA78005AP |
| IC11 | 1130001360 | IC | TC4021BP |
| IC12 | 1130003860 | IC | MB4052M-G |
| IC13 | 1130002960 | IC | TC9181P |
| IC14 | 1120001620 | IC | M74ALS74AP |
| IC15 | 1120001620 | IC | M74ALS74AP |
| IC16 | 1110001320 | IC | μPC1037HA |
| IC17 | 1110001320 | IC | μPC1037HA |
| IC18 | 1790000050 | IC | ND487C1-3R |
| IC19 | 1130000070 | IC | TC4028BP |
| Q1 | 1530000110 | Transistor | 2SC2458-GR |
| Q2 | 1530000110 | Transistor | 2SC2458-GR |
| Q3 | 1530000110 | Transistor | 2SC2458-GR |
| Q4 | 1530000110 | Transistor | 2SC2458-GR |
| Q5 | 1530000110 | Transistor | 2SC2458-GR |
| Q6 | 1530000110 | Transistor | 2SC2458-GR |
| Q7 | 1530000110 | Transistor | 2SC2458-GR |
| Q8 | 1530000110 | Transistor | 2SC2458-GR |
| Q9 | 1530000110 | Transistor | 2SC2458-GR |
| Q10 | 1530000110 | Transistor | 2SC2458-GR |
| Q11 | 1530000110 | Transistor | 2SC2458-GR |
| Q12 | 1530000940 | Transistor | 2SC1571G |
| Q13 | 1530000110 | Transistor | 2SC2458-GR |
| Q14 | 1530000110 | Transistor | 2SC2458-GR |
| Q15 | 1560000090 | FET | 2SK192A-GR |
| Q16 | 1530000110 | Transistor | 2SC2458-GR |
| Q17 | 1560000090 | FET | 2SK192A-GR |
| Q18 | 1530000110 | Transistor | 2SC2458-GR |
| Q19 | 1560000090 | FET | 2SK192A-GR |
| Q20 | 1530000110 | Transistor | 2SC2458-GR |
| Q21 | 1560000090 | FET | 2SK192A-GR |
| Q22 | 1530000110 | Transistor | 2SC2458-GR |
| Q23 | 1530000150 | Transistor | 2SC2668-O |
| Q24 | 1530000150 | Transistor | 2SC2668-O |
| Q25 | 1590000340 | Transistor | RN1202 |
| Q26 | 1530000150 | Transistor | 2SC2668-O |
| Q27 | 1530000150 | Transistor | 2SC2668-O |
| Q29 | 1560000090 | FET | 2SK192A-GR |
| Q30 | 1530000150 | Transistor | 2SC2668-O |
| Q31 | 1590000360 | Transistor | RN2202 |
| Q32 | 1530000100 | Transistor | 2SC2458-Y |
| Q33 | 1530000110 | Transistor | 2SC2458-GR |
| Q34 | 1530000150 | Transistor | 2SC2668-O |
| Q35 | 1590000340 | Transistor | RN1202 |
| Q36 | 1530000150 | Transistor | 2SC2668-O |
| Q37 | 1510000080 | Transistor | 2SA1048-GR |
| Q44 | 1590000340 | Transistor | RN1202 |
| Q45 | 1530000150 | Transistor | 2SC2668-O |
| D1 | 1710000160 | Diode | 1SS133 |
| D3 | 1710000160 | Diode | 1SS133 |
| D4 | 1710000160 | Diode | 1SS133 |
| D5 | 1710000160 | Diode | 1SS133 |
| D8 | 1710000160 | Diode | 1SS133 |
| D9 | 1710000160 | Diode | 1SS133 |
| D10 | 1730000100 | Zener | RD5.1E B2 |
| D11 | 1710000160 | Diode | 1SS133 |
| D12 | 1710000160 | Diode | 1SS133 |
| D13 | 1710000160 | Diode | 1SS133 |
| D14 | 1710000160 | Diode | 1SS133 |
| D15 | 1710000160 | Diode | 1SS133 |
| D16 | 1710000160 | Diode | 1SS133 |
| D17 | 1710000160 | Diode | 1SS133 |

[PLL UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|---------------|
| D18 | 1710000160 | Diode | 1SS133 |
| D19 | 1710000160 | Diode | 1SS133 |
| D20 | 1710000160 | Diode | 1SS133 |
| D21 | 1710000160 | Diode | 1SS133 |
| D22 | 1710000160 | Diode | 1SS133 |
| D23 | 1710000160 | Diode | 1SS133 |
| D24 | 1710000160 | Diode | 1SS133 |
| D25 | 1710000160 | Diode | 1SS133 |
| D26 | 1710000160 | Diode | 1SS133 |
| D27 | 1710000160 | Diode | 1SS133 |
| D28 | 1710000160 | Diode | 1SS133 |
| D29 | 1710000050 | Diode | 1SS53 |
| D30 | 1710000050 | Diode | 1SS53 |
| D31 | 1710000050 | Diode | 1SS53 |
| D32 | 1710000050 | Diode | 1SS53 |
| D33 | 1710000050 | Diode | 1SS53 |
| D34 | 1710000050 | Diode | 1SS53 |
| D35 | 1710000160 | Diode | 1SS133 |
| D36 | 1710000160 | Diode | 1SS133 |
| D37 | 1710000160 | Diode | 1SS133 |
| D38 | 1710000160 | Diode | 1SS133 |
| D39 | 1710000160 | Diode | 1SS133 |
| D40 | 1710000160 | Diode | 1SS133 |
| D41 | 1710000160 | Diode | 1SS133 |
| D42 | 1710000160 | Diode | 1SS133 |
| D43 | 1710000040 | Diode | 1S953 |
| D44 | 1710000050 | Diode | 1SS53 |
| D45 | 1710000160 | Diode | 1SS133 |
| D46 | 1710000160 | Diode | 1SS133 |
| D47 | 1710000050 | Diode | 1SS53 |
| D48 | 1720000050 | Varicap | 1SV50E |
| D49 | 1710000050 | Diode | 1SS53 |
| D50 | 1720000050 | Varicap | 1SV50E |
| D51 | 1710000050 | Diode | 1SS53 |
| D52 | 1720000050 | Varicap | 1SV50E |
| D53 | 1710000050 | Diode | 1SS53 |
| D54 | 1720000050 | Varicap | 1SV50E |
| D55 | 1710000050 | Diode | 1SS53 |
| D56 | 1720000050 | Varicap | 1SV50E |
| D60 | 1710000160 | Diode | 1SS133 |
| D61 | 1710000160 | Diode | 1SS133 |
| D62 | 1710000160 | Diode | 1SS133 |
| D64 | 1710000160 | Diode | 1SS133 |
| D65 | 1710000050 | Diode | 1SS53 |
| D79 | 1710000160 | Diode | 1SS133 |
| D80 | 1710000050 | Diode | 1SS53 |
| D81 | 1710000030 | Diode | 1S1555 |
| X1 | 6060000120 | Crystal | CSA4.91MG |
| X2 | 6050001520 | Crystal | CR-21 |
| L1 | 6180000880 | Coil | LAL 03NA 100K |
| L2 | 6140000580 | Coil | LR-79 |
| L3 | 6130000990 | Coil | LB-135 |
| L4 | 6170000180 | Coil | LW-19 |
| L5 | 6140000580 | Coil | LR-79 |
| L6 | 6130000990 | Coil | LB-135 |
| L7 | 6170000180 | Coil | LW-19 |
| L8 | 6140000580 | Coil | LR-79 |
| L9 | 6130000990 | Coil | LB-135 |
| L10 | 6170000180 | Coil | LW-19 |
| L11 | 6140000580 | Coil | LR-79 |
| L12 | 6130000990 | Coil | LB-135 |
| L13 | 6170000180 | Coil | LW-19 |
| L14 | 6180000900 | Coil | LAL 03NA 101K |
| L15 | 6180000900 | Coil | LAL 03NA 101K |
| L16 | 6180000740 | Coil | LAL 03NA R56M |
| L17 | 6110001560 | Coil | LA-236 |
| L18 | 6110001560 | Coil | LA-236 |
| L19 | 6110001550 | Coil | LA-235 |
| L20 | 6180000900 | Coil | LAL 03NA 101K |
| L21 | 6180000880 | Coil | LAL 03NA 100K |
| L22 | 6180000880 | Coil | LAL 03NA 100K |

[PLL UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|-----------------|
| L23 | 6180000720 | Coil | LAL 03NA R39M |
| L24 | 6180000700 | Coil | LAL 03NA R27M |
| L25 | 6180000690 | Coil | LAL 03NA R22M |
| L26 | 6180000960 | Coil | LAL 03NA 102K |
| L27 | 6180000900 | Coil | LAL 03NA 101K |
| L28 | 6180000900 | Coil | LAL 03NA 101K |
| L29 | 6180000900 | Coil | LAL 03NA 101K |
| L30 | 6110001650 | Coil | LA-248 |
| L31 | 6170000180 | Coil | LW-19 |
| L32 | 6180000850 | Coil | LAL 03NA 4R7K |
| L33 | 6910000670 | Coil | BT01RN1-A61-001 |
| L34 | 6170000180 | Coil | LW-19 |
| L35 | 6150000760 | Coil | LS-94 |
| L36 | 6180000900 | Coil | LAL 03NA 101K |
| L37 | 6180000900 | Coil | LAL 03NA 101K |
| L38 | 6150000990 | Coil | LS-114 |
| L39 | 6150000990 | Coil | LS-114 |
| L40 | 6910003570 | Coil | 2943-666663 |
| L41 | 6110001640 | Coil | LA-247 |
| L42 | 6180000880 | Coil | LAL 03NA 100K |
| L43 | 6180000900 | Coil | LAL 03NA 101K |
| L44 | 6910000670 | Coil | BT01RN1-A61-001 |
| L45 | 6180000960 | Coil | LAL 03NA 102K |
| L46 | 6910003570 | Coil | 2943-666663 |
| L47 | 6180000900 | Coil | LAL 03NA 101K |
| L48 | 6180000960 | Coil | LAL 03NA 102K |
| L49 | 6110001560 | Coil | LA-236 |
| L50 | 6180000960 | Coil | LAL 03NA 102K |
| L51 | 6180000960 | Coil | LAL 03NA 102K |
| L52 | 6150001770 | Coil | LS-198 |
| L53 | 6150001770 | Coil | LS-198 |
| L54 | 6150001770 | Coil | LS-198 |
| L55 | 6110001630 | Coil | LA-246 |
| L56 | 6140002050 | Coil | LR-224 |
| L57 | 6140002050 | Coil | LR-224 |
| L58 | 6150002880 | Coil | LS-302 |
| L59 | 6150002880 | Coil | LS-302 |
| L60 | 6150002880 | Coil | LS-302 |
| L61 | 6150002880 | Coil | LS-302 |
| L62 | 6180000880 | Coil | LAL 03NA 100K |
| R1 | 7010003780 | Resistor | ELR20J 1 MΩ |
| R2 | 7010003550 | Resistor | ELR20J 15 kΩ |
| R3 | 7010004320 | Resistor | R20J 10 kΩ |
| R4 | 7010003810 | Resistor | ELR20J 2.2 MΩ |
| R5 | 7010003780 | Resistor | ELR20J 1 MΩ |
| R6 | 7010003550 | Resistor | ELR20J 15 kΩ |
| R7 | 7010001400 | Resistor | R25J 100 kΩ |
| R8 | 7010003700 | Resistor | ELR20J 220 kΩ |
| R9 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R10 | 7010003700 | Resistor | ELR20J 220 kΩ |
| R11 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R12 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R13 | 7010004320 | Resistor | R20J 10 kΩ |
| R14 | 7010001280 | Resistor | R25J 10 kΩ |
| R15 | 7010004210 | Resistor | R20J 1.5 kΩ |
| R16 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R17 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R18 | 7010004450 | Resistor | R20J 100 kΩ |
| R19 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R20 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R21 | 7010004320 | Resistor | R20J 10 kΩ |
| R22 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R23 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R24 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R25 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R26 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R27 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R28 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R29 | 7010001150 | Resistor | R25J 1 kΩ |
| R30 | 7010001150 | Resistor | R25J 1 kΩ |
| R31 | 7010001150 | Resistor | R25J 1 kΩ |
| R32 | 7010001150 | Resistor | R25J 1 kΩ |
| R33 | 7010001150 | Resistor | R25J 1 kΩ |

[PLL UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------------|---------------------|
| R34 | 7010001150 | Resistor | R25J 1 kΩ |
| R35 | 7010005230 | Resistor | ELR20J 750 Ω |
| R36 | 7010003430 | Resistor | ELR20J 1.8 kΩ |
| R37 | 7010003460 | Resistor | ELR20J 3.3 kΩ |
| R38 | 7010003490 | Resistor | ELR20J 5.6 kΩ |
| R39 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R40 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R41 | 7010004190 | Resistor | R20J 1 kΩ |
| R42 | 7010004190 | Resistor | R20J 1 kΩ |
| R43 | 7010001150 | Resistor | R25J 1 kΩ |
| R44 | 7010001150 | Resistor | R25J 1 kΩ |
| R45 | 7010001150 | Resistor | R25J 1 kΩ |
| R46 | 7010001150 | Resistor | R25J 1 kΩ |
| R47 | 7010001150 | Resistor | R25J 1 kΩ |
| R48 | 7010001150 | Resistor | R25J 1 kΩ |
| R49 | 7010004670 | Resistor | R50XJ 22 Ω |
| R50 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R51 | 7010003240 | Resistor | ELR20J 47 Ω |
| R52 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R53 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R54 | 7010004030 | Resistor | R20J 47 Ω |
| R55 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R56 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R57 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R58 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R59 | 7010004410 | Resistor | R20J 47 kΩ |
| R60 | 7010001400 | Resistor | R25J 100 kΩ |
| R61 | 7010004410 | Resistor | R20J 47 kΩ |
| R62 | 7010004410 | Resistor | R20J 47 kΩ |
| R63 | 7010004410 | Resistor | R20J 47 kΩ |
| R64 | 7010004410 | Resistor | R20J 47 kΩ |
| R65 | 7010001360 | Resistor | R25J 47 kΩ |
| R66 | 7410000180 | Resistor Array | RMX-8 103K |
| R67 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R68 | 7010001360 | Resistor | R25J 47 kΩ |
| R69 | 7010003640 | Resistor | ELR20J 68 kΩ |
| R70 | 7210001530 | Variable Resistor | RK09K1110AEGA (RIT) |
| R71 | 7010003460 | Resistor | ELR20J 3.3 kΩ |
| R72 | 7010004070 | Resistor | R20J 100 Ω |
| R73 | 7010004670 | Resistor | R50XJ 22 Ω |
| R74 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R75 | 7010003700 | Resistor | ELR20J 220 kΩ |
| R76 | 7010003440 | Resistor | ELR20J 2.2 kΩ |
| R77 | 7010001150 | Resistor | R25J 1 kΩ |
| R78 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R79 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R80 | 7010001060 | Resistor | R25J 180 Ω |
| R81 | 7010004090 | Resistor | R20J 150 Ω |
| R82 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R83 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R84 | 7010003310 | Resistor | ELR20J 180 Ω |
| R85 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R86 | 7010004450 | Resistor | R20J 100 kΩ |
| R87 | 7010003310 | Resistor | ELR20J 180 Ω |
| R88 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R89 | 7010003660 | Resistor | ELR20J 100 kΩ |
| R90 | 7010003310 | Resistor | ELR20J 180 Ω |
| R91 | 7010004090 | Resistor | R20J 150 Ω |
| R92 | 7010004250 | Resistor | R20J 3.3 kΩ |
| R93 | 7010004090 | Resistor | R20J 150 Ω |
| R94 | 7010004250 | Resistor | R20J 3.3 kΩ |
| R95 | 7010003300 | Resistor | ELR20J 150 Ω |
| R96 | 7010004250 | Resistor | R20J 3.3 kΩ |
| R97 | 7010003300 | Resistor | ELR20J 150 Ω |
| R98 | 7010003460 | Resistor | ELR20J 3.3 kΩ |
| R99 | 7010003780 | Resistor | ELR20J 1 MΩ |
| R100 | 7010003780 | Resistor | ELR20J 1 MΩ |
| R101 | 7010003360 | Resistor | ELR20J 470 Ω |
| R102 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R103 | 7010000990 | Resistor | R25J 47 Ω |
| R104 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R105 | 7010004110 | Resistor | R20J 220 Ω |
| R106 | 7010003340 | Resistor | ELR20J 330 Ω |
| R107 | 7010003990 | Resistor | R20J 22 Ω |
| R108 | 7010003530 | Resistor | ELR20J 10 kΩ |

[PLL UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|------------|------------------------|
| R109 | 7010003580 | Resistor ELR20J 22 kΩ |
| R110 | 7010004070 | Resistor R20J 100 Ω |
| R111 | 7010003200 | Resistor ELR20J 22 Ω |
| R112 | 7010003320 | Resistor ELR20J 220 Ω |
| R113 | 7010003330 | Resistor ELR20J 270 Ω |
| R114 | 7010003980 | Resistor R20J 18 Ω |
| R115 | 7010003330 | Resistor ELR20J 270 Ω |
| R116 | 7010001150 | Resistor R25J 1 kΩ |
| R117 | 7010001150 | Resistor R25J 1 kΩ |
| R118 | 7010004190 | Resistor R20J 1 kΩ |
| R119 | 7010001070 | Resistor R25J 220 Ω |
| R121 | 7010003480 | Resistor ELR20J 4.7 kΩ |
| R123 | 7010003280 | Resistor ELR20J 100 Ω |
| R124 | 7010004150 | Resistor R20J 470 Ω |
| R125 | 7010003620 | Resistor ELR20J 47 kΩ |
| R126 | 7010003420 | Resistor ELR20J 1.5 kΩ |
| R127 | 7010004110 | Resistor R20J 220 Ω |
| R128 | 7010003360 | Resistor ELR20J 470 Ω |
| R129 | 7010004110 | Resistor R20J 220 Ω |
| R130 | 7010004190 | Resistor R20J 1 kΩ |
| R131 | 7010004190 | Resistor R20J 1 kΩ |
| R132 | 7010004190 | Resistor R20J 1 kΩ |
| R133 | 7010001230 | Resistor R25J 4.7 kΩ |
| R134 | 7010003160 | Resistor ELR20J 10 Ω |
| R136 | 7010003580 | Resistor ELR20J 22 kΩ |
| R137 | 7010003660 | Resistor ELR20J 100 kΩ |
| R138 | 7010004090 | Resistor R20J 150 Ω |
| R139 | 7010003440 | Resistor ELR20J 2.2 kΩ |
| R140 | 7010003530 | Resistor ELR20J 10 kΩ |
| R141 | 7010003480 | Resistor ELR20J 4.7 kΩ |
| R142 | 7010003340 | Resistor ELR20J 330 Ω |
| R143 | 7010004110 | Resistor R20J 220 Ω |
| R144 | 7010003280 | Resistor ELR20J 100 Ω |
| R145 | 7010003240 | Resistor ELR20J 47 Ω |
| R146 | 7010003280 | Resistor ELR20J 100 Ω |
| R147 | 7010003530 | Resistor ELR20J 10 kΩ |
| R149 | 7010004070 | Resistor R20J 100 Ω |
| R150 | 7010004190 | Resistor R20J 1 kΩ |
| R151 | 7010003600 | Resistor ELR20J 33 kΩ |
| R152 | 7010003440 | Resistor ELR20J 2.2 kΩ |
| R153 | 7010003280 | Resistor ELR20J 100 Ω |
| R155 | 7010004190 | Resistor R20J 1 kΩ |
| R156 | 7010003480 | Resistor ELR20J 4.7 kΩ |
| R157 | 7010003550 | Resistor ELR20J 15 kΩ |
| R158 | 7010003360 | Resistor ELR20J 470 Ω |
| R159 | 7010003240 | Resistor ELR20J 47 Ω |
| R160 | 7010003320 | Resistor ELR20J 220 Ω |
| R161 | 7010003530 | Resistor ELR20J 10 kΩ |
| R162 | 7010003410 | Resistor ELR20J 1.2 kΩ |
| R163 | 7010003530 | Resistor ELR20J 10 kΩ |
| R164 | 7010004370 | Resistor R20J 22 kΩ |
| R165 | 7010003300 | Resistor ELR20J 150 Ω |
| R166 | 7010001030 | Resistor R25J 100 Ω |
| R167 | 7010003530 | Resistor ELR20J 10 kΩ |
| R168 | 7010003530 | Resistor ELR20J 10 kΩ |
| R169 | 7010003530 | Resistor ELR20J 10 kΩ |
| R170 | 7010003530 | Resistor ELR20J 10 kΩ |
| R171 | 7010003620 | Resistor ELR20J 47 kΩ |
| R172 | 7010004410 | Resistor R20J 47 kΩ |
| R173 | 7010004150 | Resistor R20J 470 Ω |
| R174 | 7010004320 | Resistor R20J 10 kΩ |
| R175 | 7010004190 | Resistor R20J 1 kΩ |
| R176 | 7010003360 | Resistor ELR20J 470 Ω |
| R177 | 7010003360 | Resistor ELR20J 470 Ω |
| R178 | 7010003360 | Resistor ELR20J 470 Ω |
| R179 | 7010003400 | Resistor ELR20J 1 kΩ |
| R180 | 7010003460 | Resistor ELR20J 3.3 kΩ |
| R181 | 7010003760 | Resistor ELR20J 680 kΩ |
| R182 | 7010004320 | Resistor R20J 10 kΩ |
| R190 | 7010004190 | Resistor R20J 1 kΩ |
| R191 | 7010003530 | Resistor ELR20J 10 kΩ |
| R193 | 7010003480 | Resistor ELR20J 4.7 kΩ |
| R194 | 7010003480 | Resistor ELR20J 4.7 kΩ |
| R195 | 7010003480 | Resistor ELR20J 4.7 kΩ |
| R196 | 7010003530 | Resistor ELR20J 10 kΩ |

[PLL UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|------------|------------------------------|
| R197 | 7010003280 | Resistor ELR20J 100 Ω |
| R198 | 7010003580 | Resistor ELR20J 22 kΩ |
| R199 | 7010001030 | Resistor R25J 100 Ω |
| R200 | 7010003280 | Resistor ELR20J 100 Ω |
| R201 | 7010004030 | Resistor R20J 47 Ω |
| R202 | 7010001150 | Resistor R25J 1 kΩ |
| R203 | 7010004340 | Resistor R20J 15 kΩ |
| R204 | 7010001320 | Resistor R25J 22 kΩ |
| C1 | 4010000500 | Ceramic DD104 B 102K 50V |
| C2 | 4010000500 | Ceramic DD104 B 102K 50V |
| C3 | 4510001150 | Electrolytic 50 MS7 R47 μF |
| C4 | 4010000520 | Ceramic DD108 B 472K 50V |
| C5 | 4010000500 | Ceramic DD104 B 102K 50V |
| C6 | 4010000500 | Ceramic DD104 B 102K 50V |
| C8 | 4010000500 | Ceramic DD104 B 102K 50V |
| C9 | 4310000010 | Mylar F2D 50V 102K |
| C10 | 4510001100 | Electrolytic 16 MS7 10 μF |
| C11 | 4510001100 | Electrolytic 16 MS7 10 μF |
| C12 | 4550000350 | Tantalum DN 1V 010M |
| C13 | 4550000400 | Tantalum DN 1C 2R2M |
| C14 | 4040000260 | Barrier Layer UZE 08X 104M |
| C15 | 4010000810 | Ceramic DD105 CH 300J 50V |
| C16 | 4010000810 | Ceramic DD105 CH 300J 50V |
| C17 | 4550000400 | Tantalum DN 1C 2R2M |
| C18 | 4510002640 | Electrolytic 25 SS 47 μF |
| C19 | 4040000260 | Barrier Layer UZE 08X 104M |
| C20 | 4510003040 | Electrolytic 16 SS 100 μF |
| C21 | 4530000150 | Capacitor Array B7ZC0711-32N |
| C22 | 4010000520 | Ceramic DD108 B 472K 50V |
| C23 | 4530000270 | Capacitor Array B8XC0114-32N |
| C24 | 4040000250 | Barrier Layer UAT 08X 473M |
| C25 | 4040000260 | Barrier Layer UZE 08X 104M |
| C26 | 4010000520 | Ceramic DD108 B 472K 50V |
| C27 | 4510003040 | Electrolytic 16 SS 100 μF |
| C28 | 4010000500 | Ceramic DD104 B 102K 50V |
| C29 | 4510001750 | Electrolytic 50 RBP 2.2 μF |
| C31 | 4010003460 | Ceramic DD104 UJ 330J 50V |
| C32 | 4040000250 | Barrier Layer UAT 08X 473M |
| C33 | 4010000940 | Ceramic DD107 CH 101J 50V |
| C34 | 4010000770 | Ceramic DD104 CH 200J 50V |
| C35 | 4610001130 | Trimmer CVSSA1001 |
| C36 | 4010000900 | Ceramic DD107 CH 680J 50V |
| C37 | 4510002640 | Electrolytic 25 SS 47 μF |
| C38 | 4010000720 | Ceramic DD104 CH 120J 50V |
| C39 | 4010000720 | Ceramic DD104 CH 120J 50V |
| C40 | 4010000520 | Ceramic DD108 B 472K 50V |
| C41 | 4010000520 | Ceramic DD108 B 472K 50V |
| C42 | 4010000020 | Ceramic DD104 SL 010C 50V |
| C43 | 4010000500 | Ceramic DD104 B 102K 50V |
| C44 | 4010000900 | Ceramic DD107 CH 680J 50V |
| C45 | 4010000740 | Ceramic DD104 CH 150J 50V |
| C46 | 4610001130 | Trimmer CVSSA1001 |
| C47 | 4010000860 | Ceramic DD106 CH 470J 50V |
| C48 | 4510002640 | Electrolytic 25 SS 47 μF |
| C49 | 4010000720 | Ceramic DD104 CH 120J 50V |
| C50 | 4010000720 | Ceramic DD104 CH 120J 50V |
| C51 | 4010000520 | Ceramic DD108 B 472K 50V |
| C52 | 4010000520 | Ceramic DD108 B 472K 50V |
| C53 | 4010000020 | Ceramic DD104 SL 010C 50V |
| C54 | 4010000260 | Ceramic DD104 SL 470J 50V |
| C55 | 4010000270 | Ceramic DD104 SL 510J 50V |
| C56 | 4010000500 | Ceramic DD104 B 102K 50V |
| C57 | 4010000870 | Ceramic DD106 CH 510J 50V |
| C58 | 4010000700 | Ceramic DD104 CH 100D 50V |
| C59 | 4610001000 | Trimmer CVSSA0701 |
| C60 | 4010000860 | Ceramic DD106 CH 470J 50V |
| C61 | 4510002640 | Electrolytic 25 SS 47 μF |
| C62 | 4010000680 | Ceramic DD104 CH 080D 50V |
| C63 | 4010000720 | Ceramic DD104 CH 120J 50V |
| C64 | 4010000520 | Ceramic DD108 B 472K 50V |
| C65 | 4010000520 | Ceramic DD108 B 472K 50V |
| C66 | 4010000020 | Ceramic DD104 SL 010C 50V |
| C67 | 4010000500 | Ceramic DD104 B 102K 50V |

[PLL UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|---------------|-------------------|
| C68 | 4010000860 | Ceramic | DD106 CH 470J 50V |
| C69 | 4010000630 | Ceramic | DD104 CJ 030C 50V |
| C70 | 4610001000 | Trimmer | CVSSA0701 |
| C71 | 4010000820 | Ceramic | DD105 CH 330J 50V |
| C72 | 4510002640 | Electrolytic | 25 SS 47 μ F |
| C73 | 4010000660 | Ceramic | DD104 CH 060D 50V |
| C74 | 4010000720 | Ceramic | DD104 CH 120J 50V |
| C75 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C76 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C77 | 4510002730 | Electrolytic | 10 SS 100 μ F |
| C78 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C79 | 4010000020 | Ceramic | DD104 SL 010C 50V |
| C80 | 4010000500 | Ceramic | DD104 B 102K 50V |
| C81 | 4010000260 | Ceramic | DD104 SL 470J 50V |
| C82 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C83 | 4010000460 | Ceramic | DD104 B 471K 50V |
| C84 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C85 | 4010000380 | Ceramic | DD107 SL 221J 50V |
| C86 | 4010000500 | Ceramic | DD104 B 102K 50V |
| C87 | 4010000240 | Ceramic | DD104 SL 390J 50V |
| C88 | 4010000150 | Ceramic | DD104 SL 150J 50V |
| C89 | 4010000240 | Ceramic | DD104 SL 390J 50V |
| C90 | 4010000160 | Ceramic | DD104 SL 180J 50V |
| C91 | 4010000200 | Ceramic | DD104 SL 270J 50V |
| C92 | 4010000230 | Ceramic | DD104 SL 360J 50V |
| C93 | 4010000180 | Ceramic | DD104 SL 220J 50V |
| C94 | 4010000120 | Ceramic | DD104 SL 100D 50V |
| C95 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C96 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C97 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C98 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C99 | 4010000300 | Ceramic | DD104 SL 680J 50V |
| C100 | 4010000080 | Ceramic | DD104 SL 060D 50V |
| C101 | 4010000320 | Ceramic | DD104 SL 820J 50V |
| C102 | 4010000160 | Ceramic | DD104 SL 180J 50V |
| C103 | 4010000310 | Ceramic | DD104 SL 750J 50V |
| C104 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C105 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C106 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C107 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C108 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C109 | 4010000460 | Ceramic | DD104 B 471K 50V |
| C110 | 4010000210 | Ceramic | DD104 SL 300J 50V |
| C111 | 4010000410 | Ceramic | DD107 SL 331J 50V |
| C112 | 4020000260 | Cylinder | TP125 X 103M |
| C113 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C114 | 4550000400 | Tantalum | DN 1C 2R2M |
| C115 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C116 | 4010000740 | Ceramic | DD104 CH 150J 50V |
| C117 | 4010000810 | Ceramic | DD105 CH 300J 50V |
| C118 | 4010000900 | Ceramic | DD107 CH 680J 50V |
| C119 | 4010000720 | Ceramic | DD104 CH 120J 50V |
| C120 | 4010000720 | Ceramic | DD104 CH 120J 50V |
| C121 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C122 | 4510001100 | Electrolytic | 16 MS7 10 μ F |
| C123 | 4010000500 | Ceramic | DD104 B 102K 50V |
| C124 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C125 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C126 | 4010000380 | Ceramic | DD107 SL 221J 50V |
| C127 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C128 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C129 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C130 | 4010000500 | Ceramic | DD104 B 102K 50V |
| C131 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C132 | 4510002640 | Electrolytic | 25 SS 47 μ F |
| C133 | 4010000270 | Ceramic | DD104 SL 510J 50V |
| C134 | 4610001120 | Trimmer | CVSSC2001 |
| C135 | 4010003100 | Ceramic | DD106 TH 820J 50V |
| C136 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C137 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C138 | 4010003100 | Ceramic | DD106 TH 820J 50V |
| C139 | 4550000320 | Tantalum | DN 1V 0R1M |
| C140 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C141 | 4010000500 | Ceramic | DD104 B 102K 50V |
| C142 | 4010000500 | Ceramic | DD104 B 102K 50V |

[PLL UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-----------------|-----------------------------------|
| C143 | 4010000500 | Ceramic | DD104 B 102K 50V |
| C144 | 4010000380 | Ceramic | DD107 SL 221J 50V |
| C145 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C146 | 4010000100 | Ceramic | DD104 SL 080D 50V |
| C147 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C148 | 4010000010 | Ceramic | DD104 SL 0R5C 50V |
| C149 | 4010000100 | Ceramic | DD104 SL 080D 50V |
| C150 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C151 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C152 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C153 | 4510000310 | Electrolytic | 16 MS16 1000 μ F (12.5X16) |
| C154 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C155 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C156 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C157 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C158 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C159 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C160 | 4020000180 | Cylinder | UP125 B 471K |
| C161 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C162 | 4010000210 | Ceramic | DD104 SL 300J 50V |
| C163 | 4010000180 | Ceramic | DD104 SL 220J 50V |
| C164 | 4010000210 | Ceramic | DD104 SL 300J 50V |
| C165 | 4020000260 | Cylinder | TP125 X 103M |
| C166 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C167 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C168 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C171 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C172 | 4010000650 | Ceramic | DD104 CH 050C 50V |
| C173 | 4010000680 | Ceramic | DD104 CH 080D 50V |
| C174 | 4010000620 | Ceramic | DD104 CK 020C 50V |
| C175 | 4010000740 | Ceramic | DD104 CH 150J 50V |
| C176 | 4010000620 | Ceramic | DD104 CK 020C 50V |
| C177 | 4010000700 | Ceramic | DD104 CH 100D 50V |
| C178 | 4010000330 | Ceramic | DD105 SL 101J 50V |
| C179 | 4010000280 | Ceramic | DD104 SL 560J 50V |
| C180 | 4010000330 | Ceramic | DD105 SL 101J 50V |
| C181 | 4010000770 | Ceramic | DD104 CH 200J 50V |
| C182 | 4010000620 | Ceramic | DD104 CK 020C 50V |
| C183 | 4010000760 | Ceramic | DD104 CH 180J 50V |
| C184 | 4010000340 | Ceramic | DD105 SL 121J 50V |
| C185 | 4010000430 | Ceramic | DD109 SL 471J 50V |
| C186 | 4010000760 | Ceramic | DD104 CH 180J 50V |
| C187 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C188 | 4010000620 | Ceramic | DD104 CK 020C 50V |
| C189 | 4010000770 | Ceramic | DD104 CH 200J 50V |
| C193 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C194 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C195 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C196 | 4550000400 | Tantalum | DN 1C 2R2M |
| C197 | 4010000050 | Ceramic | DD104 SL 030C 50V |
| C198 | 4010000520 | Ceramic | DD108 B 472K 50V |
| RL1 | 6330000800 | Relay | G5A-237P DC12V |
| BT1 | 3020000020 | Lithium Battery | BR2032-1T2 |
| EP1 | 6910000600 | Ferrite Bead | FSOH050RN |
| EP2 | 0910024013 | P.C. Board | B 2299C (PLL) |

[DDS UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|----------------|------------------------|
| IC1 | 1140000500 | IC | SC1051 |
| IC2 | 1130002600 | IC | SC1052 |
| IC3 | 1130002610 | IC | SC1053 |
| IC4 | 1130002460 | IC | TC74HCT374F |
| IC5 | 1130002460 | IC | TC74HCT374F |
| X1 | 6050003230 | Crystal | CR-180 |
| L1 | 6200000040 | Coil | LQN 5N 331K |
| L2 | 6200000040 | Coil | LQN 5N 331K |
| L3 | 6200000040 | Coil | LQN 5N 331K |
| R1 | 7030000740 | Resistor | MCR10EZHZ 1 MΩ (105) |
| R2 | 7030000360 | Resistor | MCR10EZHZ 680 Ω (681) |
| R3 | 7030000420 | Resistor | MCR10EZHZ 2.2 kΩ (222) |
| R4 | 7410000320 | Resistor Array | GF 5096 |
| R5 | 7030000500 | Resistor | MCR10EZHZ 10 kΩ (103) |
| R6 | 7030000500 | Resistor | MCR10EZHZ 10 kΩ (103) |
| R7 | 7030000500 | Resistor | MCR10EZHZ 10 kΩ (103) |
| C1 | 4610000520 | Trimmer | TZB04N100BA006 |
| C2 | 4030000950 | Ceramic | GRM40 CH 330J 50PT |
| C3 | 4030001150 | Ceramic | GRM40 F 104Z 25PT |
| C7 | 4030000720 | Ceramic | GRM40 SL 680J 50PT |
| C8 | 4030000560 | Ceramic | GRM40 SL 020C 50PT |
| C9 | 4030000750 | Ceramic | GRM40 SL 121J 50PT |
| C10 | 4030000610 | Ceramic | GRM40 SL 070D 50PT |
| C11 | 4030000750 | Ceramic | GRM40 SL 121J 50PT |
| C12 | 4030000640 | Ceramic | GRM40 SL 120J 50PT |
| C13 | 4030000720 | Ceramic | GRM40 SL 680J 50PT |
| C14 | 4030001150 | Ceramic | GRM40 F 104Z 25PT |
| C15 | 4030001150 | Ceramic | GRM40 F 104Z 25PT |
| C16 | 4030001150 | Ceramic | GRM40 F 104Z 25PT |
| C17 | 4030001150 | Ceramic | GRM40 F 104Z 25PT |
| C18 | 4030002430 | Ceramic | GRM40 TH 220J 50PT |
| C19 | 4030001100 | Ceramic | GRM40 B 102K 50PT |
| C20 | 4030001100 | Ceramic | GRM40 B 102K 50PT |
| EP1 | 0910022511 | P.C. Board | B 2203A (DDS) |

[PA UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|---------------|--------------------------|
| L2 | 6910000670 | Coil | BT01RN1-A61-001 |
| L3 | 6910000670 | Coil | BT01RN1-A61-001 |
| L4 | 6140001300 | Coil | LR-155 |
| L5 | 6140000610 | Coil | LR-83 |
| L6 | 6140001310 | Coil | LR-156 |
| L7 | 6140002030 | Coil | LR-230 (SK-10M-15Y 120) |
| L8 | 6180001230 | Coil | LAL 04NA 8R2K |
| L9 | 6180001570 | Coil | LAL 04NA 4R7K |
| L10 | 6910000670 | Coil | BT01RN1-A61-001 |
| L11 | 6910000670 | Coil | BT01RN1-A61-001 |
| L12 | 6180000880 | Coil | LAL 03NA 100K |
| L13 | 6910000670 | Coil | BT01RN1-A61-001 |
| L14 | 6910000670 | Coil | BT01RN1-A61-001 |
| L15 | 6910000670 | Coil | BT01RN1-A61-001 |
| L16 | 6910000670 | Coil | BT01RN1-A61-001 |
| L17 | 6180000900 | Coil | LAL 03NA 101K |
| L18 | 6180000900 | Coil | LAL 03NA 101K |
| R1 | 7010000310 | Resistor | ELR25J 330 Ω |
| R2 | 7010001050 | Resistor | R25J 150 Ω |
| R3 | 7010000290 | Resistor | ELR25J 220 Ω |
| R4 | 7010000330 | Resistor | ELR25J 470 Ω |
| R5 | 7010004830 | Resistor | R50XJ 4.7 Ω |
| R6 | 7010004120 | Resistor | R20J 270 Ω |
| R7 | 7010004730 | Resistor | R50XJ 120 Ω |
| R8 | 7310000680 | Trimmer | RH0651C12J04A (101) |
| R9 | 7010000990 | Resistor | R25J 47 Ω |
| R10 | 7010000990 | Resistor | R25J 47 Ω |
| R11 | 7010004730 | Resistor | R50XJ 120 Ω |
| R12 | 7010004730 | Resistor | R50XJ 120 Ω |
| R13 | 7010004650 | Resistor | R50XJ 10 Ω |
| R14 | 7080000650 | Resistor | RSS1P 3R3 Ω |
| R15 | 7080000650 | Resistor | RSS1P 3R3 Ω |
| R16 | 7080000650 | Resistor | RSS1P 3R3 Ω |
| R17 | 7080000650 | Resistor | RSS1P 3R3 Ω |
| R18 | 7010004730 | Resistor | R50XJ 120 Ω |
| R19 | 7310000710 | Trimmer | RH0651C13J1YA (102) |
| R20 | 7010004650 | Resistor | R50XJ 120 Ω |
| R21 | 7010004650 | Resistor | R50XJ 10 Ω |
| R22 | 7080000650 | Resistor | RSS1P 3R3 Ω |
| R23 | 7080000650 | Resistor | RSS1P 3R3 Ω |
| R24 | 7070000250 | Resistor | CRH200 R-02J 4.7 Ω (4R7) |
| R25 | 7010000370 | Resistor | ELR25J 1 kΩ |
| R26 | 7100000510 | Resistor | CP-5AJ 0.012 Ω |
| R27 | 7010000370 | Resistor | ELR25J 1 kΩ |
| R28 | 7010001090 | Resistor | R25J 330 Ω |
| R29 | 7010004150 | Resistor | R20J 470 Ω |
| R30 | 7010004190 | Resistor | R20J 1 kΩ |
| R31 | 7010003490 | Resistor | ELR20J 5.6 kΩ |
| R32 | 7510000070 | Thermistor | ERT-D2FHL503S |
| R33 | 7010003610 | Resistor | ELR20J 39 kΩ |
| R34 | 7010004020 | Resistor | R20J 39 Ω |
| C1 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C2 | 4010000510 | Ceramic | DD106 B 222K 50V |
| C3 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C4 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C5 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C6 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C7 | 4310000110 | Mylar | F2D 50V 472K |
| C8 | 4310000110 | Mylar | F2D 50V 472K |
| C9 | 4010000380 | Ceramic | DD107 SL 221J 50V |
| C10 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C11 | 4010000500 | Ceramic | DD104 B 102K 50V |
| C12 | 4030001370 | Ceramic | GR44 CH 682K |
| C13 | 4030001370 | Ceramic | GR44 CH 682K |
| C14 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C15 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C16 | 4510002720 | Electrolytic | 10 SS 47 μF |
| C17 | 4030001340 | Ceramic | GR44 CH 102K |
| C18 | 4010000420 | Ceramic | DD108 SL 391J 50V |
| C19 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C20 | 4320000220 | Dip Mica | DM19C 681J5 |

[PA UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|-----------|
| Q1 | 1530000790 | Transistor | 2SC1971 |
| Q2 | 1530000190 | Transistor | 2SC3133 |
| Q3 | 1530000190 | Transistor | 2SC3133 |
| Q4 | 1540000200 | Transistor | 2SD1406 Y |
| Q5 | 1530000200 | Transistor | 2SC2904 |
| Q6 | 1530000200 | Transistor | 2SC2904 |
| Q7 | 1520000060 | Transistor | 2SB562C |
| Q8 | 1590000340 | Transistor | RN1202 |
| Q9 | 1590000340 | Transistor | RN1202 |
| Q10 | 1590000360 | Transistor | RN2202 |
| D1 | 1790000010 | Diode | MV5 |
| D2 | 1790000010 | Diode | MV5 |
| D3 | 1790000010 | Diode | MV5 |
| D4 | 1710000010 | Diode | 15CD11 |
| D5 | 1710000030 | Diode | 1S1555 |
| D6 | 1710000030 | Diode | 1S1555 |
| L1 | 6140001170 | Coil | LR-142 |

[PA UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|---------------|------------------------------|
| C21 | 4030001340 | Ceramic | GR44 CH 102K |
| C22 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C23 | 4510002640 | Electrolytic | 25 SS 47 µF |
| C24 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C25 | 4510000310 | Electrolytic | 16 MS16 1000 µF (12.5X16) |
| C26 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C27 | 4010000380 | Ceramic | DD107 SL 221J 50V |
| C28 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C29 | 4510000310 | Electrolytic | 16 MS16 1000 µF (12.5X16) |
| C30 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C31 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C32 | 4010000380 | Ceramic | DD107 SL 221J 50V |
| C33 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C34 | 4510002780 | Electrolytic | 16 SS 10 µF |
| C35 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C36 | 4510002440 | Electrolytic | 16 SS 220 µF (8X11) |
| C37 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C38 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C39 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C40 | 4030001340 | Ceramic | GR44 CH 102K |
| C41 | 4510002640 | Electrolytic | 25 SS 47 µF |
| C42 | 4010000520 | Ceramic | DD108 B 472K 50V |
| | | | |
| F1 | 5210000130 | Fuse | FGB 4A |
| F2 | 5220000020 | Holder | S-N5051 |
| F3 | 5220000020 | Holder | S-N5051 |
| | | | |
| S1 | 6910000060 | Thermostat | OHD-3 90M |
| | | | |
| SP1 | 2S10000040 | Speaker | CO65K12I0810 |
| | | | |
| MF1 | 2710000160 | Fan Motor | HMK2605-01-100 |
| | | | |
| EP1 | 6910000600 | Ferrite Bead | FSOH050RN |
| EP2 | 6910000600 | Ferrite Bead | FSOH050RN |
| EP3 | 6910000600 | Ferrite Bead | FSOH050RN |
| EP4 | 6910000600 | Ferrite Bead | FSOH050RN |
| EP5 | 6910000600 | Ferrite Bead | FSOH050RN |
| EP6 | 6910000600 | Ferrite Bead | FSOH050RN |
| EP13 | 0910019444 | P.C. Board | B 1790D (PA) |
| EP15 | 6910000600 | Ferrite Bead | FSOH050RN |
| EP16 | 6910000600 | Ferrite Bead | FSOH050RN |
| EP20 | 6910000630 | Ferrite Bead | FSOH070RN |
| EP21 | 6910000630 | Ferrite Bead | FSOH070RN |

[FILTER UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|--------|
| D1 | 1710000330 | Diode | 1K60 |
| D2 | 1710000330 | Diode | 1K60 |
| D3 | 1710000030 | Diode | 1S1555 |
| D4 | 1710000030 | Diode | 1S1555 |
| D5 | 1710000030 | Diode | 1S1555 |
| D6 | 1710000030 | Diode | 1S1555 |
| D7 | 1710000030 | Diode | 1S1555 |
| D8 | 1710000030 | Diode | 1S1555 |
| D9 | 1710000030 | Diode | 1S1555 |
| | | | |
| L1 | 6140001990 | Coil | LR-226 |
| L2 | 6140002000 | Coil | LR-227 |
| L3 | 6140001780 | Coil | LR-214 |

[FILTER UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|-------------------|
| L4 | 6140001790 | Coil | LR-215 |
| L5 | 6140001800 | Coil | LR-216 |
| L6 | 6140001800 | Coil | LR-216 |
| L7 | 6140001810 | Coil | LR-217 |
| L8 | 6140001820 | Coil | LR-218 |
| L9 | 6140002010 | Coil | LR-228 |
| L10 | 6140002020 | Coil | LR-229 |
| L11 | 6110001490 | Coil | LA-196 |
| L12 | 6110001500 | Coil | LA-197 |
| L13 | 6180000900 | Coil | LAL 03NA 101K |
| L14 | 6180000900 | Coil | LAL 03NA 101K |
| L15 | 6180000900 | Coil | LAL 03NA 101K |
| L16 | 6180000900 | Coil | LAL 03NA 101K |
| L17 | 6180000900 | Coil | LAL 03NA 101K |
| L18 | 6180000900 | Coil | LAL 03NA 101K |
| L19 | 6180000900 | Coil | LAL 03NA 101K |
| L20 | 6180000900 | Coil | LAL 03NA 101K |
| L21 | 6180000880 | Coil | LAL 03NA 100K |
| L22 | 6180000880 | Coil | LAL 03NA 100K |
| L23 | 6180000880 | Coil | LAL 03NA 100K |
| L24 | 6180000880 | Coil | LAL 03NA 100K |
| L25 | 6180000900 | Coil | LAL 03NA 101K |
| L26 | 6140001460 | Coil | LR-170 |
| L27 | 6140001340 | Coil | LR-163 |
| | | | |
| R1 | 7010004010 | Resistor | R20J 33 Ω |
| R2 | 7010004320 | Resistor | R20J 10 kΩ |
| R3 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R4 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R5 | 7010004320 | Resistor | R20J 10 kΩ |
| R6 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R7 | 7010003620 | Resistor | ELR20J 47 kΩ |
| R8 | 7540000010 | Absorber | DSA-301LA |
| R9 | 7010004390 | Resistor | R20J 33 kΩ |
| | | | |
| C1 | 4320000290 | Dip Mica | DM20C 152J5 |
| C2 | 4010004040 | Ceramic | DD10 SL 151K 500V |
| C3 | 4010004100 | Ceramic | DD14 SL 331K 500V |
| C4 | 4320000330 | Dip Mica | DM20C 272J5 |
| C5 | 4010004030 | Ceramic | DD10 SL 121K 500V |
| C6 | 4320000290 | Dip Mica | DM20C 152J5 |
| C7 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C8 | 4010004050 | Ceramic | DD12 SL 181K 500V |
| C9 | 4010004040 | Ceramic | DD10 SL 151K 500V |
| C10 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C11 | 4320000280 | Dip Mica | DM20C 122J5 |
| C12 | 4010003990 | Ceramic | DD09 SL 680K 500V |
| C13 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C14 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C15 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C16 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C17 | 4010004050 | Ceramic | DD12 SL 181K 500V |
| C18 | 4010004010 | Ceramic | DD09 SL 101K 500V |
| C19 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C20 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C21 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C22 | 4010003950 | Ceramic | DD06 SL 330K 500V |
| C23 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C24 | 4010004050 | Ceramic | DD12 SL 181K 500V |
| C25 | 4010004030 | Ceramic | DD10 SL 121K 500V |
| C26 | 4010004020 | Ceramic | DD09 SL 111K 500V |
| C28 | 4010004030 | Ceramic | DD10 SL 121K 500V |
| C29 | 4010004050 | Ceramic | DD12 SL 181K 500V |
| C30 | 4010003960 | Ceramic | DD06 SL 390K 500V |
| C31 | 4010004050 | Ceramic | DD12 SL 181K 500V |
| C32 | 4010004010 | Ceramic | DD09 SL 101K 500V |
| C33 | 4010003870 | Ceramic | DD06 SL 120K 500V |
| C34 | 4010004070 | Ceramic | DD12 SL 221K 500V |
| C35 | 4010003950 | Ceramic | DD06 SL 330K 500V |
| C36 | 4010004010 | Ceramic | DD09 SL 101K 500V |
| C37 | 4010003990 | Ceramic | DD09 SL 680K 500V |
| C38 | 4010003960 | Ceramic | DD06 SL 390K 500V |
| C39 | 4010004040 | Ceramic | DD10 SL 151K 500V |

[FILTER UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|---------------|----------------------|
| C40 | 4010003870 | Ceramic | DD06 SL 120K 500V |
| C41 | 4010003990 | Ceramic | DD09 SL 680K 500V |
| C42 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C43 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C44 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C45 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C46 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C47 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C48 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C49 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C50 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C51 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C52 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C53 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C54 | 4610001120 | Trimmer | CVSSC2001 |
| C55 | 4010000410 | Ceramic | DD107 SL 331J 50V |
| C56 | 4010000410 | Ceramic | DD107 SL 331J 50V |
| C57 | 4010000430 | Ceramic | DD109 SL 471J 50V |
| C58 | 4010000430 | Ceramic | DD109 SL 471J 50V |
| C59 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C60 | 4010000330 | Ceramic | DD105 SL 101J 50V |
| C61 | 4010000120 | Ceramic | DD104 SL 100D 50V |
| C62 | 4010000330 | Ceramic | DD105 SL 101J 50V |
| RL1 | 6330000180 | Relay | MZ-12HG |
| RL2 | 6330000180 | Relay | MZ-12HG |
| RL3 | 6330000180 | Relay | MZ-12HG |
| RL4 | 6330000180 | Relay | MZ-12HG |
| RL5 | 6330000180 | Relay | MZ-12HG |
| RL6 | 6330000180 | Relay | MZ-12HG |
| RL7 | 6330000180 | Relay | MZ-12HG |
| RL8 | 6330000180 | Relay | MZ-12HG |
| RL9 | 6330000180 | Relay | MZ-12HG |
| RL10 | 6330000180 | Relay | MZ-12HG |
| RL11 | 6330000180 | Relay | MZ-12HG |
| RL12 | 6330000180 | Relay | MZ-12HG |
| RL13 | 6330000720 | Relay | DS1-M-DC12V (AG2013) |
| EP1 | 0910022833 | P.C. Board | B 2207C (FILTER) |
| EP2 | 6910000630 | Ferrite Bead | FSOH070RN |

[PB UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|---------------|----------------------|
| L2 | 6110001640 | Coil | LA-247 |
| L3 | 6110001650 | Coil | LA-248 |
| L4 | 6140002040 | Coil | LR-231 |
| L5 | 6170000180 | Coil | LW-19 |
| L6 | 6170000180 | Coil | LW-19 |
| L7 | 6110001640 | Coil | LA-247 |
| L8 | 6110001650 | Coil | LA-248 |
| L9 | 6170000180 | Coil | LW-19 |
| L10 | 6110001650 | Coil | LA-248 |
| L12 | 6180000880 | Coil | LAL 03NA 100K |
| L14 | 6180000880 | Coil | LAL 03NA 100K |
| R1 | 7010004240 | Resistor | R20J 2.7 kΩ |
| R2 | 7010003240 | Resistor | ELR20J 47 Ω |
| R3 | 7010003160 | Resistor | ELR20J 10 Ω |
| R5 | 7010003330 | Resistor | ELR20J 270 Ω |
| R6 | 7010000960 | Resistor | R25J 27 Ω |
| R7 | 7010004210 | Resistor | R20J 1.5 kΩ |
| R8 | 7010004100 | Resistor | R20J 180 Ω |
| R9 | 7010004270 | Resistor | R20J 4.7 kΩ |
| R11 | 7010004270 | Resistor | R20J 4.7 kΩ |
| R13 | 7010004120 | Resistor | R20J 270 Ω |
| R14 | 7540000010 | Absorber | DSA-301LA |
| R15 | 7010003120 | Resistor | ELR20J 4.7 Ω |
| R18 | 7010003480 | Resistor | ELR20J 4.7 kΩ |
| R19 | 7010003610 | Resistor | ELR20J 39 kΩ |
| C1 | 4010000260 | Ceramic | DD104 SL 470J 50V |
| C3 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C4 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C5 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C6 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C7 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C8 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C9 | 4010000340 | Ceramic | DD105 SL 121J 50V |
| C10 | 4010000340 | Ceramic | DD105 SL 121J 50V |
| C11 | 4010000340 | Ceramic | DD105 SL 121J 50V |
| C13 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C14 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C15 | 4550000260 | Tantalum | DN 1V 100M |
| C16 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C17 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C18 | 4550000260 | Tantalum | DN 1V 100M |
| C20 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C21 | 4510002020 | Electrolytic | 25 MS7 47 μF |
| C22 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C23 | 4610001120 | Trimmer | CVSSC2001 |
| C24 | 4010000330 | Ceramic | DD105 SL 101J 50V |
| C25 | 4010000350 | Ceramic | DD106 SL 151J 50V |
| C26 | 4010000380 | Ceramic | DD107 SL 221J 50V |
| C27 | 4010000380 | Ceramic | DD107 SL 221J 50V |
| C28 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C29 | 4010003960 | Ceramic | DD06 SL 390K 500V |
| C30 | 4010003900 | Ceramic | DD06 SL 200K 500V |
| C31 | 4010004000 | Ceramic | DD09 SL 820K 500V |
| C32 | 4010003870 | Ceramic | DD06 SL 120K 500V |
| C33 | 4010003970 | Ceramic | DD07 SL 470K 500V |
| C34 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C35 | 4010003970 | Ceramic | DD07 SL 470K 500V |
| C36 | 4010003800 | Ceramic | DD06 SL 030C 500V |
| C37 | 4010003970 | Ceramic | DD07 SL 470K 500V |
| C44 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C45 | 4020000250 | Cylinder | UP125 X 472M |
| C46 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C47 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C48 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C49 | 4010003930 | Ceramic | DD06 SL 270K 500V |
| RL1 | 6330000720 | Relay | DS1-M-DC12V (AG2013) |
| EP1 | 6910000970 | Ferrite Bead | DL 20P 2.6-3-1.2H |

[PB UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|-------------|------------|
| IC1 | 1150000570 | IC | SC1069 |
| Q1 | 1530000640 | Transistor | 2SC2407(A) |
| Q2 | 1510000370 | Transistor | 2SA1359-Y |
| Q3 | 1530000110 | Transistor | 2SC2458-GR |
| Q4 | 1590000360 | Transistor | RN2202 |
| D1 | 1710000050 | Diode | 1SS53 |
| D2 | 1790000070 | Diode | 1SS237 |
| D3 | 1790000070 | Diode | 1SS237 |
| D4 | 1710000300 | Diode | M1402 |
| D5 | 1710000060 | Diode | 1SS55 |
| D6 | 1710000060 | Diode | 1SS55 |
| D7 | 1710000060 | Diode | 1SS55 |
| D8 | 1710000050 | Diode | 1SS53 |
| D9 | 1710000030 | Diode | 1S1555 |
| D10 | 1710000050 | Diode | 1SS53 |
| D11 | 1730000160 | Zener | RD7.5E B2 |
| L1 | 6110001770 | Coil | LA-266 |

[PB UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|------------|--------------------------------|
| EP2 | 6910000970 | Ferrite Bead DL 20P 2.6-3-1.2H |
| EP3 | 6910000970 | Ferrite Bead DL 20P 2.6-3-1.2H |
| EP4 | 0910022883 | P.C. Board B 2206C (PB) |
| EP6 | 6910000630 | Ferrite Bead FSOH070RN |

[BPF UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|------------|----------------------------|
| Q1 | 1560000130 | FET 2SK125 |
| D1 | 1790000070 | Diode 1SS237 |
| L2 | 6180000670 | Coil LAL 02NA R22K |
| L3 | 6180001290 | Coil LAL 02NA R33K |
| L5 | 6180002380 | Coil LAL 02NA 2R2K |
| L6 | 6140002050 | Coil LR-224 |
| L7 | 6110001630 | Coil LA-246 |
| R1 | 7010003990 | Resistor R20J 22 Ω |
| R2 | 7010003910 | Resistor R20J 4.7 Ω |
| R3 | 7010004410 | Resistor R20J 47 kΩ |
| R4 | 7010003040 | Resistor ELR20J 1 Ω |
| R5 | 7010004410 | Resistor R20J 47 kΩ |
| C2 | 4020000870 | Cylinder UP050 SL 510J |
| C3 | 4020000870 | Cylinder UP050 SL 510J |
| C4 | 4020000840 | Cylinder UP050 B 181K |
| C5 | 4020000850 | Cylinder EP050 Y 103M |
| C6 | 4010000250 | Ceramic DD104 SL 430J 50V |
| C7 | 4010000150 | Ceramic DD104 SL 150J 50V |
| C10 | 4020000860 | Cylinder UP050 SL 430J |
| C12 | 4040000150 | Barrier Layer UAT 05X 472K |
| EP1 | 0910023991 | P.C. Board B 2298A (BPF) |

[AM · FM UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|------------|-----------------------|
| IC1 | 1110000630 | IC MC3357P |
| IC2 | 1110001310 | IC μPC577HA |
| IC3 | 1110000250 | IC BA401 |
| IC4 | 1110001320 | IC μPC1037HA |
| IC5 | 1110000330 | IC M5218L |
| Q1 | 1530000591 | Transistor 2SC2785 EL |
| Q2 | 1590000340 | Transistor RN1202 |
| Q3 | 1590000340 | Transistor RN1202 |
| Q4 | 1530000110 | Transistor 2SC2458-GR |
| Q5 | 1590000340 | Transistor RN1202 |
| Q6 | 1590000360 | Transistor RN2202 |
| Q7 | 1590000340 | Transistor RN1202 |
| Q8 | 1590000340 | Transistor RN1202 |
| Q9 | 1590000360 | Transistor RN2202 |
| Q10 | 1590000340 | Transistor RN1202 |
| Q11 | 1530000110 | Transistor 2SC2458-GR |
| Q12 | 1590000360 | Transistor RN2202 |
| Q13 | 1530000110 | Transistor 2SC2458-GR |

[AM · FM UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION |
|----------|------------|-----------------------------|
| Q14 | 1590000340 | Transistor RN1202 |
| D1 | 1710000050 | Diode 1SS53 |
| D2 | 1730000100 | Zener RD5.1E B2 |
| D3 | 1710000040 | Diode 1S953 |
| D4 | 1710000040 | Diode 1S953 |
| D8 | 1720000060 | Varicap 1SV50(1)E |
| D9 | 1710000050 | Diode 1SS53 |
| D10 | 1710000160 | Diode 1SS133 |
| D11 | 1710000160 | Diode 1SS133 |
| D12 | 1710000160 | Diode 1SS133 |
| D13 | 1710000160 | Diode 1SS133 |
| F11 | 2020000120 | Ceramic Filter CFW455E |
| X1 | 6050001340 | Crystal CR- 1 |
| X2 | 6070000010 | Discriminator CDB455C7A |
| X3 | 6050000280 | Crystal HC-12/U 9.0105 |
| L1 | 6180001710 | Coil LAL 03NA 561K |
| L2 | 6180001680 | Coil LAL 03NA 151K |
| L3 | 6150001200 | Coil LS-133 |
| L4 | 6180000950 | Coil LAL 03NA 150K |
| L5 | 6180000880 | Coil LAL 03NA 100K |
| L6 | 6180000880 | Coil LAL 03NA 100K |
| L7 | 6180000900 | Coil LAL 03NA 101K |
| L8 | 6180000900 | Coil LAL 03NA 101K |
| L9 | 6180000960 | Coil LAL 03NA 102K |
| R1 | 7010003400 | Resistor ELR20J 1 kΩ |
| R2 | 7010001030 | Resistor R25J 100 Ω |
| R3 | 7010003550 | Resistor ELR20J 15 kΩ |
| R4 | 7010003420 | Resistor ELR20J 1.5 kΩ |
| R5 | 7010003620 | Resistor ELR20J 47 kΩ |
| R6 | 7010003420 | Resistor ELR20J 1.5 kΩ |
| R7 | 7010003550 | Resistor ELR20J 15 kΩ |
| R8 | 7010003580 | Resistor ELR20J 22 kΩ |
| R9 | 7010003540 | Resistor ELR20J 12 kΩ |
| R10 | 7510000090 | Thermistor ERT-D2FGL202S |
| R11 | 7010003360 | Resistor ELR20J 470 Ω |
| R12 | 7010004230 | Resistor R20J 2.2 kΩ |
| R13 | 7010003400 | Resistor ELR20J 1 kΩ |
| R14 | 7310000760 | Trimmer RH0651CJ4J01A (223) |
| R15 | 7010004230 | Resistor R20J 2.2 kΩ |
| R16 | 7010003280 | Resistor ELR20J 100 Ω |
| R17 | 7510000120 | Thermistor ERT-D2FGL332S |
| R18 | 7010003510 | Resistor ELR20J 6.8 kΩ |
| R19 | 7010003580 | Resistor ELR20J 22 kΩ |
| R20 | 7010003740 | Resistor ELR20J 470 kΩ |
| R21 | 7010003480 | Resistor ELR20J 4.7 kΩ |
| R22 | 7010003510 | Resistor ELR20J 6.8 kΩ |
| R23 | 7010001320 | Resistor R25J 22 kΩ |
| R24 | 7010004370 | Resistor R20J 22 kΩ |
| R25 | 7010003420 | Resistor ELR20J 1.5 kΩ |
| R26 | 7310000710 | Trimmer RH0651C13J1YA (102) |
| R27 | 7010003420 | Resistor ELR20J 1.5 kΩ |
| R28 | 7010004190 | Resistor R20J 1 kΩ |
| R29 | 7010004950 | Resistor R20J 1.5 MΩ |
| R30 | 7010003400 | Resistor ELR20J 1 kΩ |
| R31 | 7010003780 | Resistor ELR20J 1 MΩ |
| R32 | 7010004190 | Resistor R20J 1 kΩ |
| R33 | 7010003410 | Resistor ELR20J 1.2 kΩ |
| R34 | 7010005090 | Resistor ELR20J 910 Ω |
| R35 | 7010003440 | Resistor ELR20J 2.2 kΩ |
| R36 | 7010003530 | Resistor ELR20J 10 kΩ |
| R37 | 7010004430 | Resistor R20J 68 kΩ |
| R38 | 7010004430 | Resistor R20J 68 kΩ |
| R39 | 7010003640 | Resistor ELR20J 68 kΩ |
| R40 | 7010003950 | Resistor R20J 10 Ω |
| R41 | 7310000740 | Trimmer RH0651CS3J2KA (472) |

[AM • FM UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|---------------|---------------------|
| R42 | 7010004230 | Resistor | R20J 2.2 kΩ |
| R43 | 7010004270 | Resistor | R20J 4.7 kΩ |
| R44 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R45 | 7010003530 | Resistor | ELR20J 10 kΩ |
| R46 | 7010003470 | Resistor | ELR20J 3.9 kΩ |
| R47 | 7310000750 | Trimmer | RH0651C14J2WA (103) |
| R48 | 7010004310 | Resistor | R20J 8.2 kΩ |
| R49 | 7010004370 | Resistor | R20J 22 kΩ |
| R50 | 7010003810 | Resistor | ELR20J 2.2 MΩ |
| R51 | 7010003550 | Resistor | ELR20J 15 kΩ |
| R52 | 7010003400 | Resistor | ELR20J 1 kΩ |
| R53 | 7310000740 | Trimmer | RH0651CS3J2KA (472) |
| R54 | 7010003360 | Resistor | ELR20J 470 Ω |
| R55 | 7010003360 | Resistor | ELR20J 470 Ω |
| R56 | 7010003490 | Resistor | ELR20J 5.6 kΩ |
| R57 | 7010004520 | Resistor | R20J 390 kΩ |
| R58 | 7010004270 | Resistor | R20J 4.7 kΩ |
| R59 | 7010004190 | Resistor | R20J 1 kΩ |
| | | | |
| C1 | 4010000260 | Ceramic | DD104 SL 470J 50V |
| C2 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C3 | 4010000810 | Ceramic | DD105 CH 300J 50V |
| C4 | 4010000370 | Ceramic | DD106 SL 201J 50V |
| C5 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C6 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C7 | 4010000320 | Ceramic | DD104 SL 820J 50V |
| C8 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C9 | 4510001120 | Electrolytic | 25 MS7 4R7 μF |
| C10 | 4010000180 | Ceramic | DD104 SL 220J 50V |
| C11 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C12 | 4040000460 | Barrier Layer | RAU 08SA 821K |
| C13 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C14 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C15 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C16 | 4040000190 | Barrier Layer | UAT 05X 103K |
| C17 | 4040000260 | Barrier Layer | UZE 08X 104M |
| C18 | 4510000960 | Electrolytic | 10 MS9 47 μF |
| C19 | 4310000110 | Mylar | F2D 50V 472K |
| C20 | 4310000110 | Mylar | F2D 50V 472K |
| C21 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C22 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C23 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C24 | 4010000140 | Ceramic | DD104 SL 120J 50V |
| C25 | 4010000090 | Ceramic | DD104 SL 070D 50V |
| C26 | 4010000940 | Ceramic | DD107 CH 101J 50V |
| C27 | 4010000940 | Ceramic | DD107 CH 101J 50V |
| C28 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C29 | 4040000150 | Barrier Layer | UAT 05X 472K |
| C30 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C31 | 4010000460 | Ceramic | DD104 B 471K 50V |
| C32 | 4040000250 | Barrier Layer | UAT 08X 473M |
| C33 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C34 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C35 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C36 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C37 | 4510001150 | Electrolytic | 50 MS7 R47 μF |
| C38 | 4310000050 | Mylar | F2D 50V 222K |
| C39 | 4510001100 | Electrolytic | 16 MS7 10 μF |
| C40 | 4510001100 | Electrolytic | 16 MS7 10 μF |
| C41 | 4510001100 | Electrolytic | 16 MS7 10 μF |
| C42 | 4010000500 | Ceramic | DD104 B 102K 50V |
| C43 | 4040000110 | Barrier Layer | UAT 04X 222K |
| C44 | 4010000340 | Ceramic | DD105 SL 121J 50V |
| C45 | 4510001140 | Electrolytic | 50 MS7 R22 μF |
| C46 | 4510001760 | Electrolytic | 25 RBP 4.7 μF |
| C47 | 4510001970 | Electrolytic | 50 MS7 0R1 μF |
| C48 | 4510001160 | Electrolytic | 50 MS7 1 μF |
| C49 | 4010000330 | Ceramic | DD105 SL 101J 50V |
| C50 | 4510001180 | Electrolytic | 50 MS7 3R3 μF |
| C51 | 4510001770 | Electrolytic | 16 RBP 10 μF |
| C52 | 4010000520 | Ceramic | DD108 B 472K 50V |
| C53 | 4020000670 | Cylinder | UP050 SL 470J |
| C54 | 4010000500 | Ceramic | DD104 B 102K 50V |
| C55 | 4040000090 | Barrier Layer | UAT 04X 152K |

[AM • FM UNIT]

| REF. NO. | ORDER NO. | DESCRIPTION | |
|----------|------------|---------------|-------------------|
| C56 | 4010000220 | Ceramic | DD104 SL 330J 50V |
| C57 | 4010004840 | Ceramic | DD305 F 104Z 12V |
| C58 | 4040000190 | Barrier Layer | UAT 05X 103K |
| | | | |
| EP1 | 0910019702 | P.C. Board | B 1880B (AM • FM) |

SECTION 6 ADJUSTMENT PROCEDURES

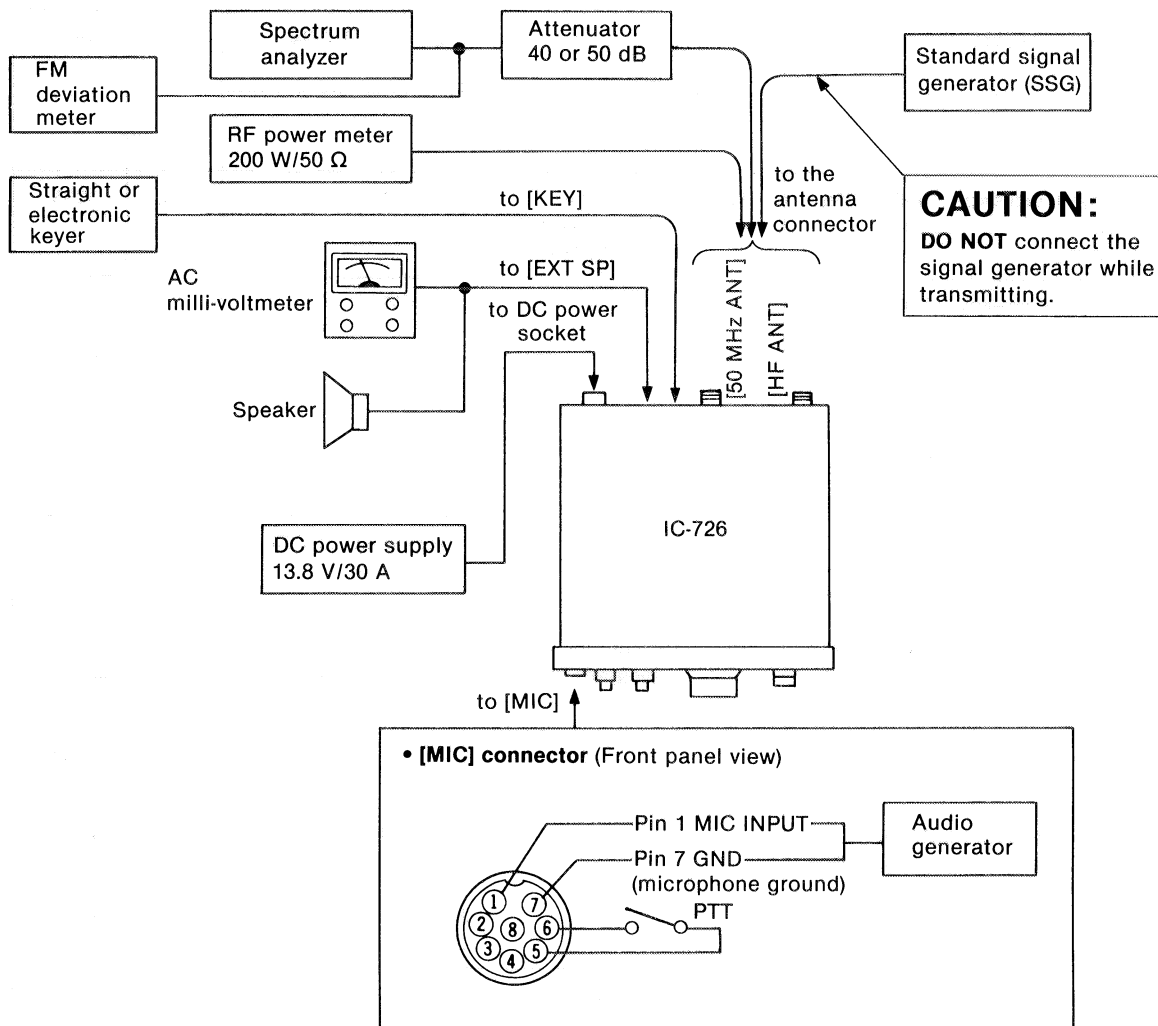
6-1 PREPARATION BEFORE SERVICING

■ REQUIRED TEST EQUIPMENT

| EQUIPMENT | GRADE AND RANGE | EQUIPMENT | GRADE AND RANGE |
|-------------------------------------|---|--------------------|---|
| DC power supply | Output voltage : 13.8 V DC | DC voltmeter | Input impedance : 50 k Ω /DC or better |
| | Current capacity : 30 A or more | | AC milli-voltmeter |
| RF power meter (terminated type) | Measuring range : 10~200 W | External speaker | Impedance : 8 Ω |
| | Frequency range : 1.8~50 MHz | Ammeter | Measurement capability: 1 A and 30 A |
| | Impedance : 50 Ω | Audio generator | Frequency range : 300~3000 Hz Output level : 1~500 mV |
| | SWR : Less than 1.2 : 1 | Attenuator | Power attenuation : 40 or 50 dB Capacity : 150 W or more |
| Frequency counter | Frequency range : 0.1~100 MHz Frequency accuracy : ± 1 ppm or better Sensitivity : 100 mV or better | FM deviation meter | Frequency range : 1.8~50 MHz Measuring range : 0~ ± 10 kHz |
| RF voltmeter | Frequency range : 0.1~100 MHz Measuring range : 0.01~10 V | Spectrum analyzer | Frequency range : At least 90 MHz Spectrum bandwidth : ± 100 kHz or more |
| Oscilloscope | Frequency range : DC~20 MHz Measuring range : 0.01~10 V | | |
| Standard signal generator (SSG) | Frequency range : 0.1~100 MHz Output level : -127~-17 dBm (0.1 μ V~32 mV) | | |

CW: Clockwise
CCW: Counterclockwise

■ CONNECTION



6-2 PLL ADJUSTMENT

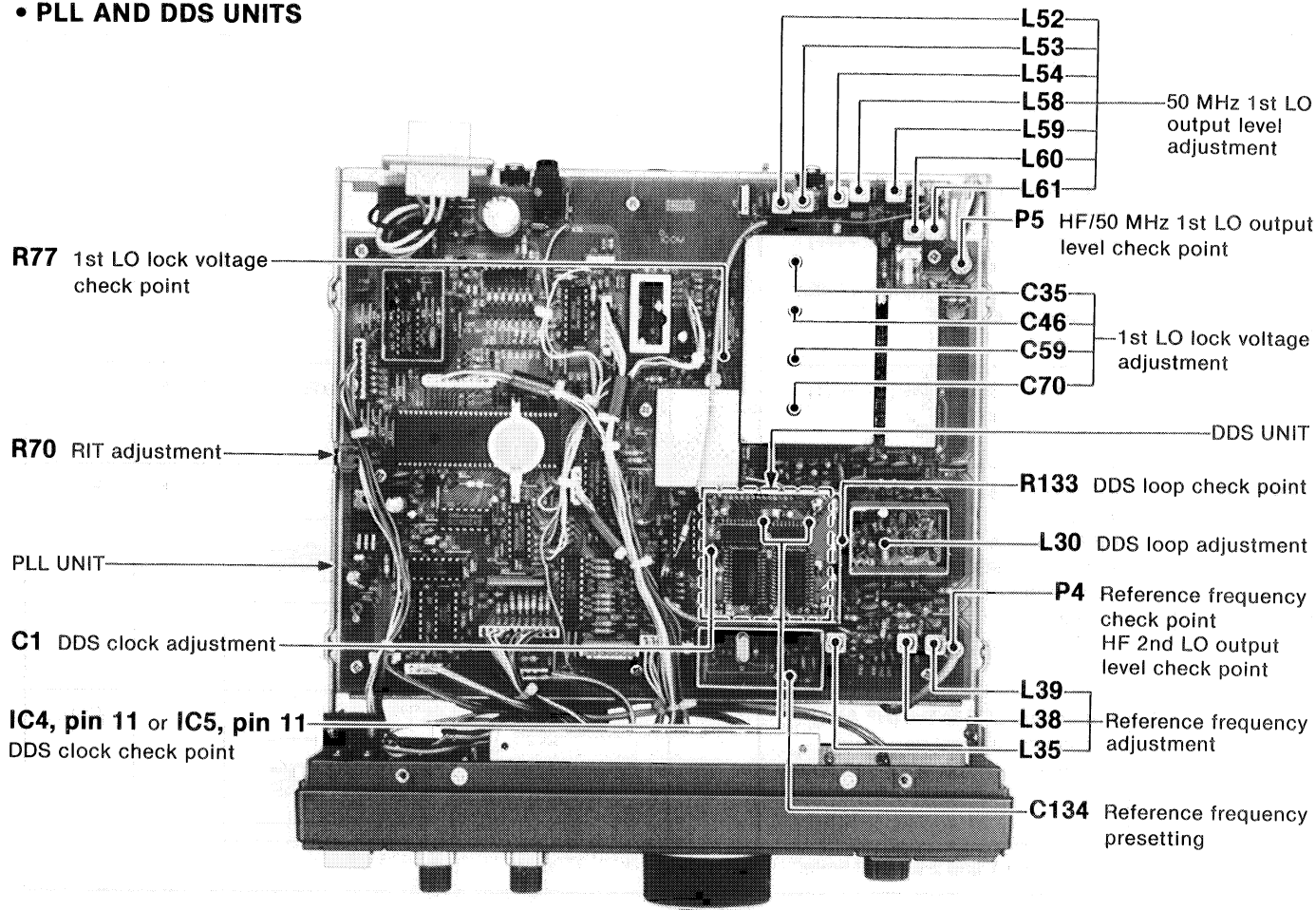
| ADJUSTMENT | | ADJUSTMENT CONDITIONS | MEASUREMENT | | VALUE | ADJUSTMENT POINT | | |
|----------------------------|---|--|-------------|--|--|------------------|--|-------------|
| | | | UNIT | LOCATION | | UNIT | ADJUST | |
| DDS CLOCK | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB Receiving | DDS | Connect the frequency counter to IC4, pin 11 or IC5, pin 11. | 5.24288 MHz | DDS | C1 | |
| REFERENCE FREQUENCY | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB Ground P4 with a 50 Ω resistor. Receiving | PLL | Connect the RF voltmeter to P4. | Preset to center as shown below. | PLL | C134 | |
| | 2 | | | | Maximum level (More than +3 dBm) | | | L38, L39 |
| | 3 | | | | Connect the frequency counter to P4. | | | 61.4400 MHz |
| | 4 | After adjustment, remove the resistor from P4 and re-plug P4. | | | | | | |
| DDS LOOP | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.12650 MHz Mode : AM Receiving | PLL | Connect the oscilloscope to R133 (rear panel side). | 1.0 V DC | PLL | L30 | |
| | 2 | <ul style="list-style-type: none"> Displayed frequency: 14.12649 MHz | | | Approx. 2.0 V DC | | | Verify |
| | 3 | After adjustment, fix the L30 in place with paraffin. | | | | | | |
| HF 1st LO LOCK VOLTAGE | 1 | <ul style="list-style-type: none"> Displayed frequency: 7.99999 MHz Mode : USB Receiving | PLL | Connect the oscilloscope to R77 (shielding case side). | 6.5 V DC | PLL | C35 | |
| | 2 | <ul style="list-style-type: none"> Displayed frequency: 14.99999 MHz | | | 6.5 V DC | | C46 | |
| | 3 | <ul style="list-style-type: none"> Displayed frequency: 21.99999 MHz | | | 6.5 V DC | | C59 | |
| | 4 | <ul style="list-style-type: none"> Displayed frequency: 33.00000 MHz | | | 7.5 V DC | | C70 | |
| | 5 | <ul style="list-style-type: none"> Displayed frequencies: 0.50000 MHz, 8.00000 MHz, 15.00000 MHz and 22.00000 MHz | | | More than 2.0 V DC | | Verify | |
| 50 MHz 1st LO OUTPUT LEVEL | 1 | <ul style="list-style-type: none"> Displayed frequency: 53.00000 MHz Mode : USB Terminate P5 with a 50 Ω resistor. Receiving | PLL | Connect the RF voltmeter to P5. | Maximum level (More than +3 dBm) | PLL | Adjust in sequence L52, L53, L54, L58, L59, L60, L61 | |
| | 2 | <ul style="list-style-type: none"> Shift the frequency between 50.00000 MHz and 54.00000 MHz. | | | Adjust the output level within +2 dBm. | | Adjust in sequence L58, L59, L60, L61 | |
| | 3 | After adjustment, remove the resistor from P5 and re-plug P5. | | | | | | |

PLL ADJUSTMENT (CONTINUED)

| ADJUSTMENT | ADJUSTMENT CONDITIONS | MEASUREMENT | | VALUE | ADJUSTMENT POINT | | |
|------------------------|-----------------------|--|-----------|---------------------------------|-------------------------------------|-------------|---------------|
| | | UNIT | LOCATION | | UNIT | ADJUST | |
| HF 1st LO OUTPUT LEVEL | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB Terminate P5 with a 50 Ω resistor. Receiving | PLL | Connect the RF voltmeter to P5. | More than 0 dBm | PLL | Verify |
| | 2 | After confirmation, remove the resistor from P5 and re-plug P5. | | | | | |
| HF 2nd LO OUTPUT LEVEL | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB Terminate P4 with a 50 Ω resistor. Receiving | PLL | Connect the RF voltmeter to P4. | Maximum level (More than +3 dBm) | PLL | Verify |
| | 2 | After confirmation, remove the resistor from P4 and re-plug P4. | | | | | |
| RIT | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB Attach the SSG to the [HF ANT] connector and set as: | Top Cover | Speaker | Preset to center. | Front panel | [RIT] control |
| | 2 | <ul style="list-style-type: none"> Level : 50 μV* (-73 dBm) Modulation: OFF [RIT] switch : ON and OFF Receiving | | | Same tone pitch on both conditions. | | PLL |

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

• PLL AND DDS UNITS

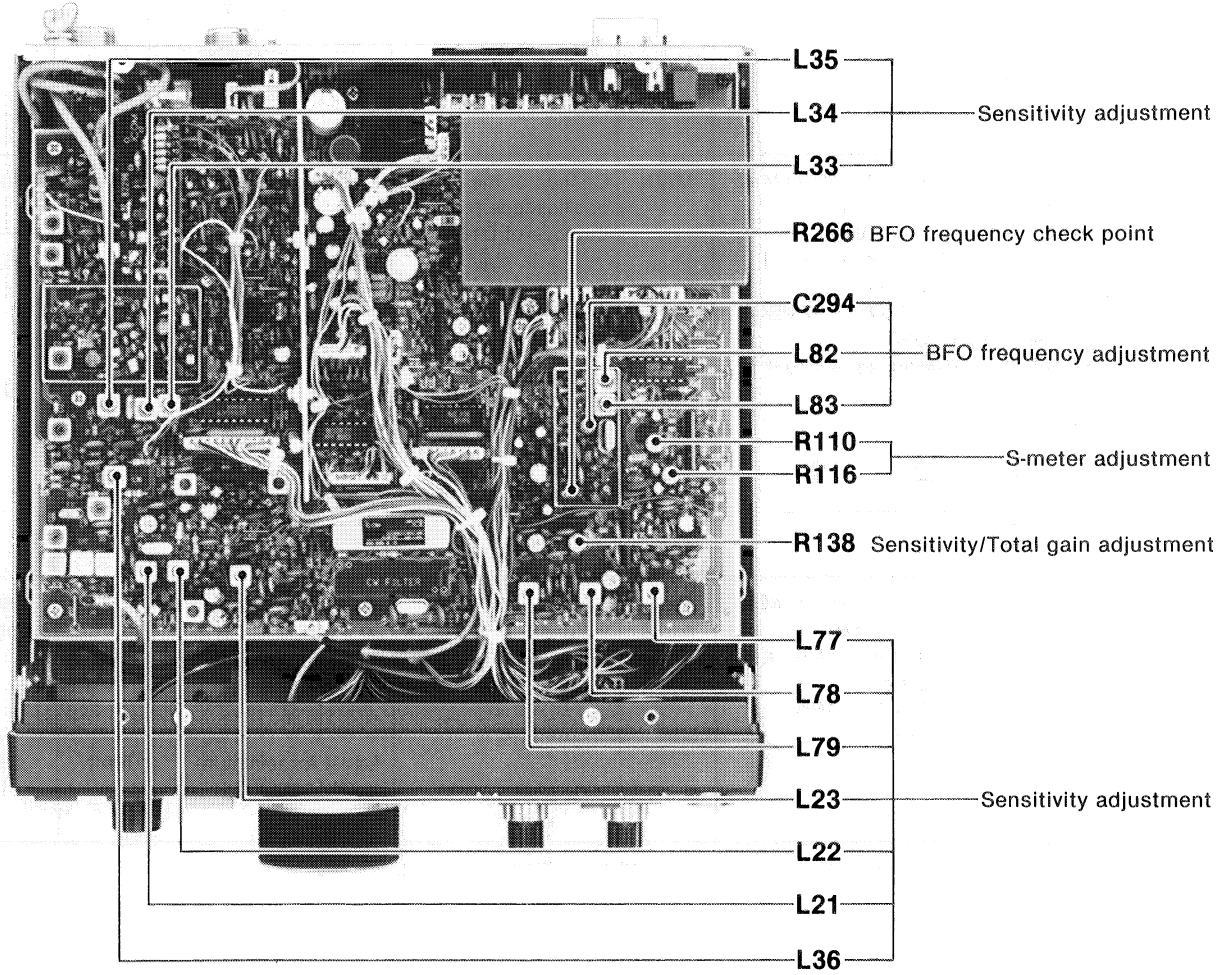


6-3 RECEIVER ADJUSTMENT

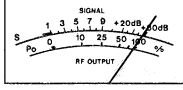
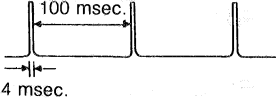
| ADJUSTMENT | ADJUSTMENT CONDITIONS | MEASUREMENT | | VALUE | ADJUSTMENT POINT | | | |
|---------------|-----------------------|--|-------------|---|--|-------------|---|------|
| | | UNIT | LOCATION | | UNIT | ADJUST | | |
| BFO FREQUENCY | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB Receiving | MAIN | Connect the frequency counter to R266. | 9.01300 MHz | MAIN | C294 | |
| | 2 | <ul style="list-style-type: none"> Mode : CW Transmitting Connect a key to the [KEY] jack and key down. | | | | | L83 | |
| | 3 | <ul style="list-style-type: none"> Mode : LSB Receiving | | | | | L82 | |
| | 4 | <ul style="list-style-type: none"> Mode : CW Receiving | | | | | Verify | |
| | 5 | <ul style="list-style-type: none"> Mode : AM Receiving | | | | | No output | |
| SENSITIVITY | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB [RIT] switch : OFF [AGC] switch : FAST [ATT] switch : OFF [NB] switch : OFF [PRE] switch : ON [SQL] control : Max. CCW Attach the SSG to the [HF ANT] connector and set as: Level : 0.16 μV* (-123 dBm) Modulation: OFF Receiving | Rear panel | Connect the AC millivoltmeter to the [EXT SP] jack with an 8 Ω load. | Preset to max. CW. Maximum audio output level | MAIN | R138 | |
| | | | | | | | Adjust in sequence L33, L34, L35, L36, L21, L22, L23, L79, L78, L77 | |
| TOTAL GAIN | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB [RIT] switch : OFF [AGC] switch : FAST [ATT] switch : OFF [NB] switch : OFF [PRE] switch : OFF Attach the SSG to the [HF ANT] connector and set as: Level : 1.0 mV* (-47 dBm) Modulation: OFF Receiving | Rear panel | Connect the AC millivoltmeter to the [EXT SP] jack with an 8 Ω load. | 1.0 V (0 dB) | Front panel | [AF] control | |
| | 2 | <ul style="list-style-type: none"> Attach the SSG to the [HF ANT] connector and set as: Level : OFF | | | | | 30 mV (-30 dB) | MAIN |
| S-METER | 1 | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB [PRE] switch : OFF Attach the SSG to the [HF ANT] connector and set as: Level : 50 μV* (-73 dBm) Modulation: OFF Receiving | Front panel | S-METER | S9 | MAIN | R116 | |
| | 2 | <ul style="list-style-type: none"> Attach the SSG to the [HF ANT] connector and set as: Level : 50 mV* (-13 dBm) | | | | | S9+60 dB | R110 |
| | 3 | Repeat step 1 and 2 several times. | | | | | | |

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

• MAIN UNIT

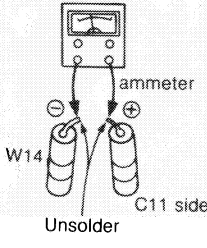
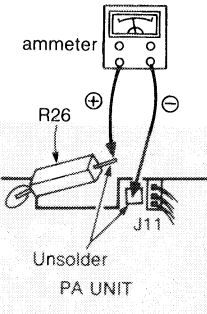


RECEIVER ADJUSTMENT (CONTINUED)

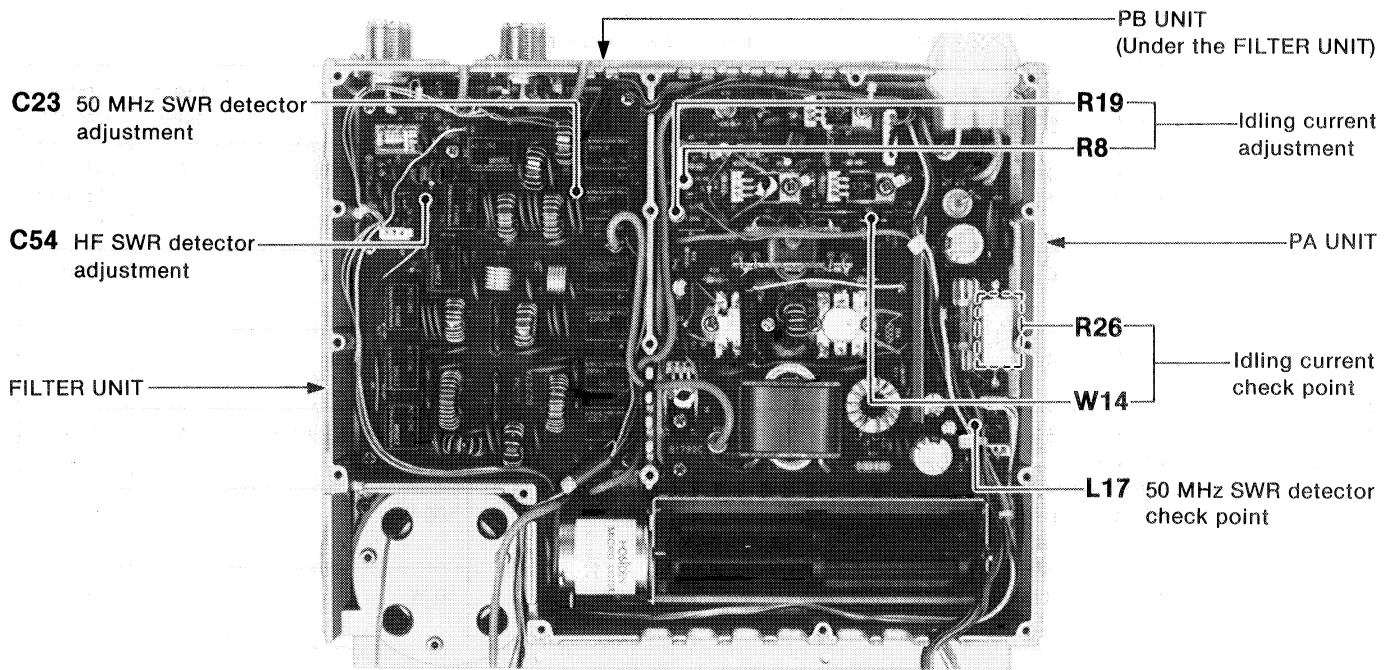
| ADJUSTMENT | ADJUSTMENT CONDITIONS | MEASUREMENT | | VALUE | ADJUSTMENT POINT | |
|------------------|---|-------------|--|--|------------------|--------------|
| | | UNIT | LOCATION | | UNIT | ADJUST |
| FM S-METER | 1 <ul style="list-style-type: none"> • Displayed frequency: 53.00000 MHz • Mode : FM • Attach the SSG to the [50 MHz ANT] connector and set as: Level : 3.2 mV* (−37 dBm) Modulation: 1 kHz Deviation : ±3.5 kHz • Receiving | Front panel | S-METER | S9 +60 dB  | AM • FM | R14 |
| NOISE BLANKER | 1 <ul style="list-style-type: none"> • Displayed frequency: 14.10000 MHz • Mode : USB • [NB] switch : ON | MAIN | Connector the oscilloscope to the cathode of D13. | Preset to max. CW. | MAIN | R293 |
| | 2 <ul style="list-style-type: none"> • Attach the SSG to the [HF ANT] connector and set as: Level : 3.2 μV* (−97 dBm) Modulation: OFF • Apply the following signal into the SSG's output. • Receiving  | | | Adjust for maximum waveform on the oscilloscope. | | L25, L26 |
| IF TRAP | 1 <ul style="list-style-type: none"> • Displayed frequency: 52.90000 MHz • Mode : USB • Attach the SSG to the [50 MHz ANT] connector and set as: Frequency : 70.45150 MHz Modulation: OFF | Rear panel | Connect the AC millivoltmeter to the [EXT SP] jack with a speaker (8 Ω). | Set SSG's output level so that the signal is audible through the speaker. | | SSG's output |
| | | | | Adjust for minimum speaker output. | MAIN | C320 |

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

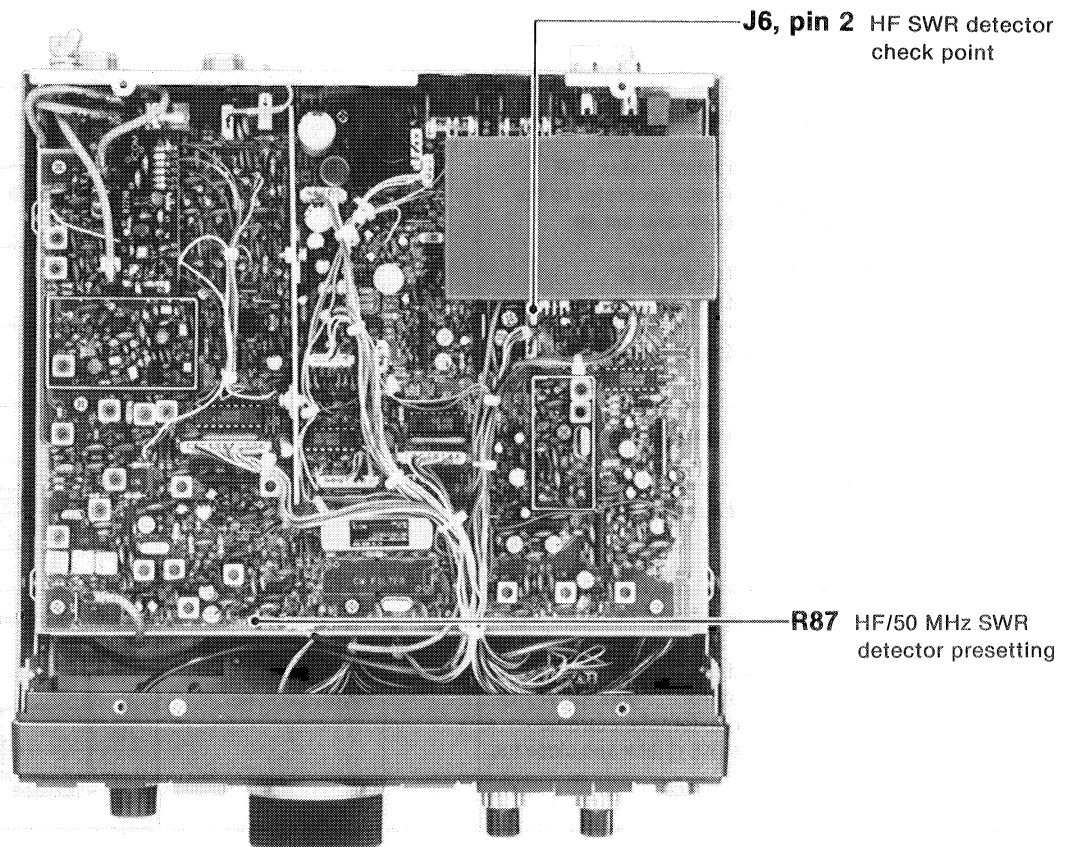
6-4 TRANSMITTER ADJUSTMENT

| 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: 14.10000 MHz • Mode : CW • [TRANSMIT] switch: IN • [KEY] jack : No connection | PA | Unsolder W14 and connect the ammeter to the unsoldering points.  | 50 mA | PA | R8 |
| | Ⓑ For final transistors | | 2 | PA | | Unsolder R26 and connect the ammeter to the unsoldering points.  | 300 mA |
| After adjustment, re-solder W14 and R26. | | | | | | | |
| HF SWR DETECTOR | 1 | <ul style="list-style-type: none"> • Displayed frequency: 14.10000 MHz • Mode : USB • [RF PWR] control : Max. CW • Connect the jumper wire between R87 (front side) and a ground. • Attach the audio generator to the [MIC] connector and set as; <ul style="list-style-type: none"> Level : 10 mV Modulation: 1.5 kHz • Transmitting | Rear panel | Connect the RF power meter to the [HF ANT] connector. | 100 W | Front panel | [MIC] control |
| | 2 | | MAIN | Connect the DC voltmeter to J6, pin 2. | Minimum | FILTER | C54 |
| | 3 | | After adjustment, remove the jumper wire from R87. | | | | |
| 50 MHz SWR DETECTOR | 1 | <ul style="list-style-type: none"> • Displayed frequency: 52.00000 MHz • Mode : USB • [RF PWR] control : Max. CW • Connect the jumper wire between R87 (front side) and a ground. • Attach the audio generator to the [MIC] connector and set as; <ul style="list-style-type: none"> Level : 10 mV Modulation: 1.5 kHz • Transmitting | Rear panel | Connect the RF power meter to the [50 MHz ANT] connector. | 10 W | Front panel | [MIC] control |
| | 2 | | FILTER | Connect the DC voltmeter to L17. | Minimum | PB | C23 |
| | 3 | | After adjustment, remove the jumper wire from R87. | | | | |

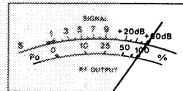
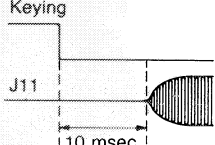
• PA, FILTER AND PB UNITS



• MAIN UNIT



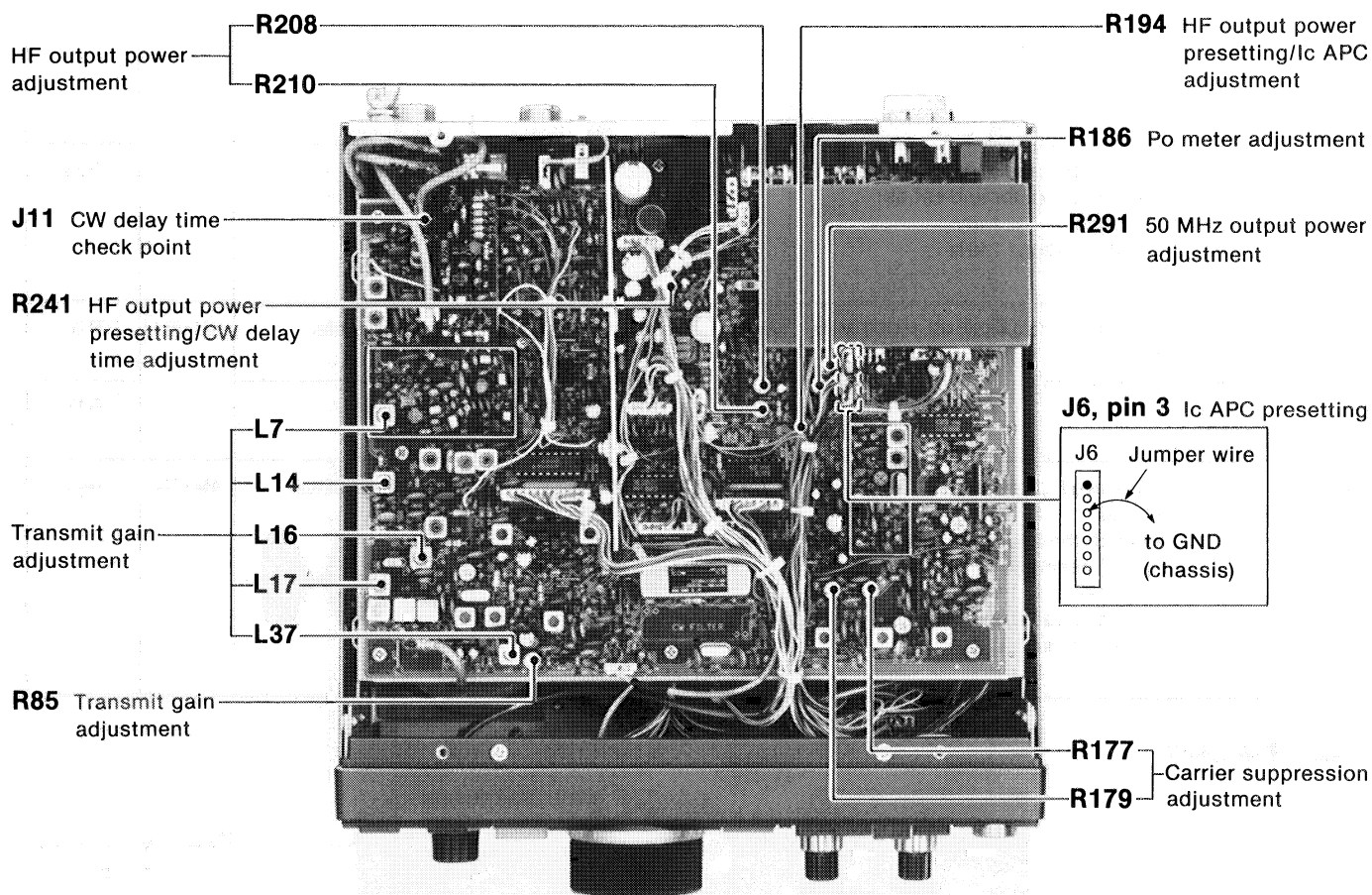
TRANSMITTER ADJUSTMENT (CONTINUED)

| ADJUSTMENT | ADJUSTMENT CONDITIONS | MEASUREMENT | | VALUE | ADJUSTMENT POINT | |
|--|--|---|---|---|------------------|--|
| | | UNIT | LOCATION | | UNIT | ADJUST |
| TRANSMIT GAIN | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : USB [RF PWR] control : Max. CW Attach the audio generator to the [MIC] connector and set as: Level : 1 mV Modulation: 1.5 kHz Transmitting | Rear panel | Connect the RF power meter to the antenna connector. | Preset to max. CW. | MAIN | R85 |
| | | | | 50 W | Front panel | [MIC] control |
| | | | | Maximum level | MAIN | L37, L17, L16, L14, L7 |
| | 2 | <ul style="list-style-type: none"> [MIC] control : Max. CW | | | 50 W | |
| NOTE: Adjust the [MIC] control to keep the output power at 50 W for each adjustment. | | | | | | |
| HF OUTPUT POWER | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : CW [RF PWR] control : Max. CW Connect a key to the [KEY] jack and key down. | Rear panel | Connect the RF power meter to the [HF ANT] connector. | Preset to max. CCW. | MAIN | R194, R241 |
| | | | | 100 W | | R210 |
| | | | | 10 W | | R208 |
| | 4 | Repeat step 2 and 3 several times. | | | | |
| Ic APC | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : CW [RF PWR] control : Max. CW Connect the jumper wire between pin 3 of J6 and a ground. Connect a key to the [KEY] jack and key down. | Rear panel | Connect the ammeter between the DC power supply and IC-726. | 22 A | MAIN | R194 |
| | | | | 2 | | After adjustment, remove the jumper wire from J6, pin 3. |
| 50 MHz OUTPUT POWER | <ul style="list-style-type: none"> Displayed frequency: 50.00000 MHz Mode : USB [RF PWR] control : Max. CW Attach the audio generator to the [MIC] connector and set as: Level : 10 mV Modulation: 1.5 kHz Transmitting | Rear panel | Connect the RF power meter to the [50 MHz ANT] connector. | Preset to max. CCW. | MAIN | R291 |
| | | | | Maximum level | Front panel | [MIC] control |
| | | | | 10 W | MAIN | R291 |
| | 4 | Repeat step 2 and 3 several times. | | | | |
| Po METER | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : CW [RF PWR] control : Max. CW Connect a key to the [KEY] jack and key down. | Front panel | S-METER | 100 % | MAIN | R186 |
| | | | |  | | |
| CW DELAY TIME | <ul style="list-style-type: none"> Displayed frequency: 14.10000 MHz Mode : CW [BK IN] switch : ON [DELAY] control : Max. CCW Connect an external electronic keyer to the [KEY] jack and close the key. | MAIN | Connect the oscilloscope to J11 and the electronic keyer. | Adjust as follows: | MAIN | R241 |
| | | | | <p>Keying</p>  | | |

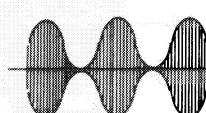
TRANSMITTER ADJUSTMENT (CONTINUED)

| ADJUSTMENT | ADJUSTMENT CONDITIONS | MEASUREMENT | | VALUE | ADJUSTMENT POINT | |
|---------------------|--|-------------|--|--|------------------|-----------------------------------|
| | | UNIT | LOCATION | | UNIT | ADJUST |
| CARRIER SUPPRESSION | 1 <ul style="list-style-type: none"> • Displayed frequency: 14.10000 MHz • Mode : USB and LSB • [MIC] control : Max. CCW • Apply no signal to the [MIC] connector. • Transmitting | Rear panel | Connect the spectrum analyzer to the antenna connector via the attenuator. | Minimum carrier level (Less than -50 dB) | MAIN | R177, R179 (Alternate adjustment) |

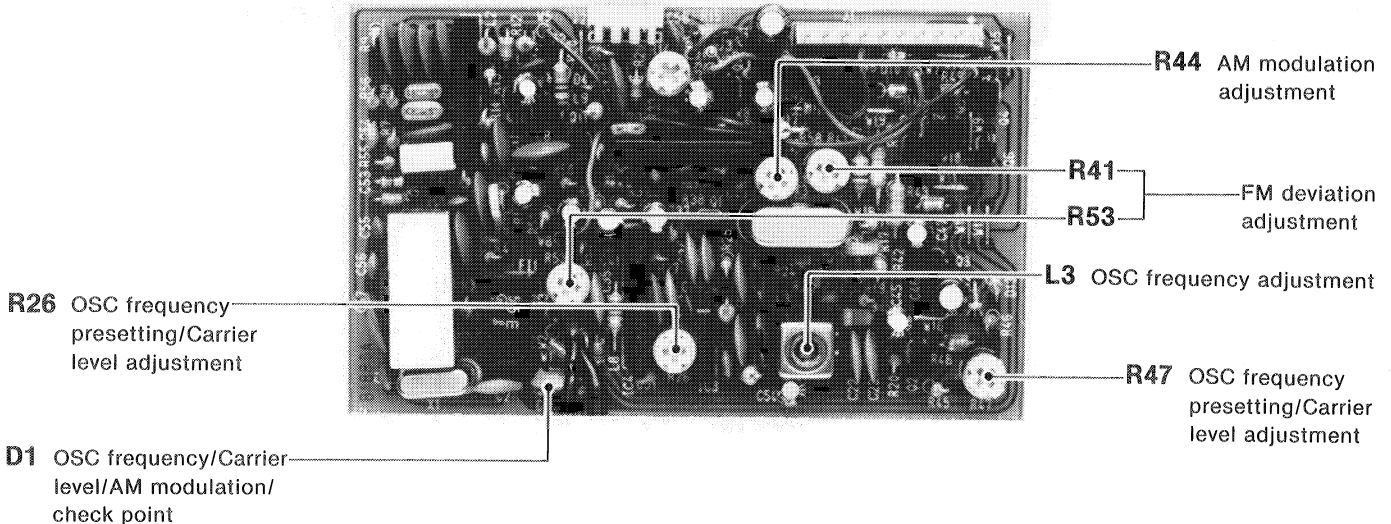
• MAIN UNIT



TRANSMITTER ADJUSTMENT (CONTINUED)

| ADJUSTMENT | ADJUSTMENT CONDITIONS | MEASUREMENT | | VALUE | ADJUSTMENT POINT | | |
|---------------|---|-------------|---|---|------------------|---------------------|-----|
| | | UNIT | LOCATION | | UNIT | ADJUST | |
| OSC FREQUENCY | <ul style="list-style-type: none"> • Displayed frequency: 29.10000 MHz • Mode : FM • Transmitting | AM • FM | Connect the frequency counter to the cathode of D1. | Preset to max. CW. | AM • FM | R26 | |
| | | | | | | Preset to max. CCW. | R47 |
| | | | | | | 9.01000 MHz | L3 |
| FM DEVIATION | <ul style="list-style-type: none"> • Displayed frequency: 29.10000 MHz • Mode : FM • [RF PWR] control : Center • Attach the audio generator to the [MIC] connector and set as: Level : 10 mV Modulation: 1 kHz • Set the FM deviation meter as: HPF : 50 Hz LPF : 20 kHz De-emphasis: OFF Detector : (P-P)/2 • Transmitting | Rear panel | Attach the FM deviation meter to the [50 MHz ANT] connector via the attenuator. | ±4.8 kHz | AM • FM | R41 | |
| | <ul style="list-style-type: none"> • Attach the audio generator to the [MIC] connector and set as: Level : 1 mV Modulation: 1 kHz | | | ±3.5 kHz | | R53 | |
| CARRIER LEVEL | <ul style="list-style-type: none"> • Displayed frequency: 29.10000 MHz • Mode : FM • Transmitting | AM • FM | Connect the oscilloscope to the cathode of D1. | Preset to center. | AM • FM | R26 | |
| | | | | 350 mVp-p | | R47 | |
| AM MODULATION | <ul style="list-style-type: none"> • Displayed frequency: 29.10000 MHz • Mode : AM • Attach the audio generator to the [MIC] connector and set as: Level : 10 mV Modulation: 1 kHz • Transmitting | AM • FM | Connect the oscilloscope to the cathode of D1. | 100 % modulation  | AM • FM | R44 | |

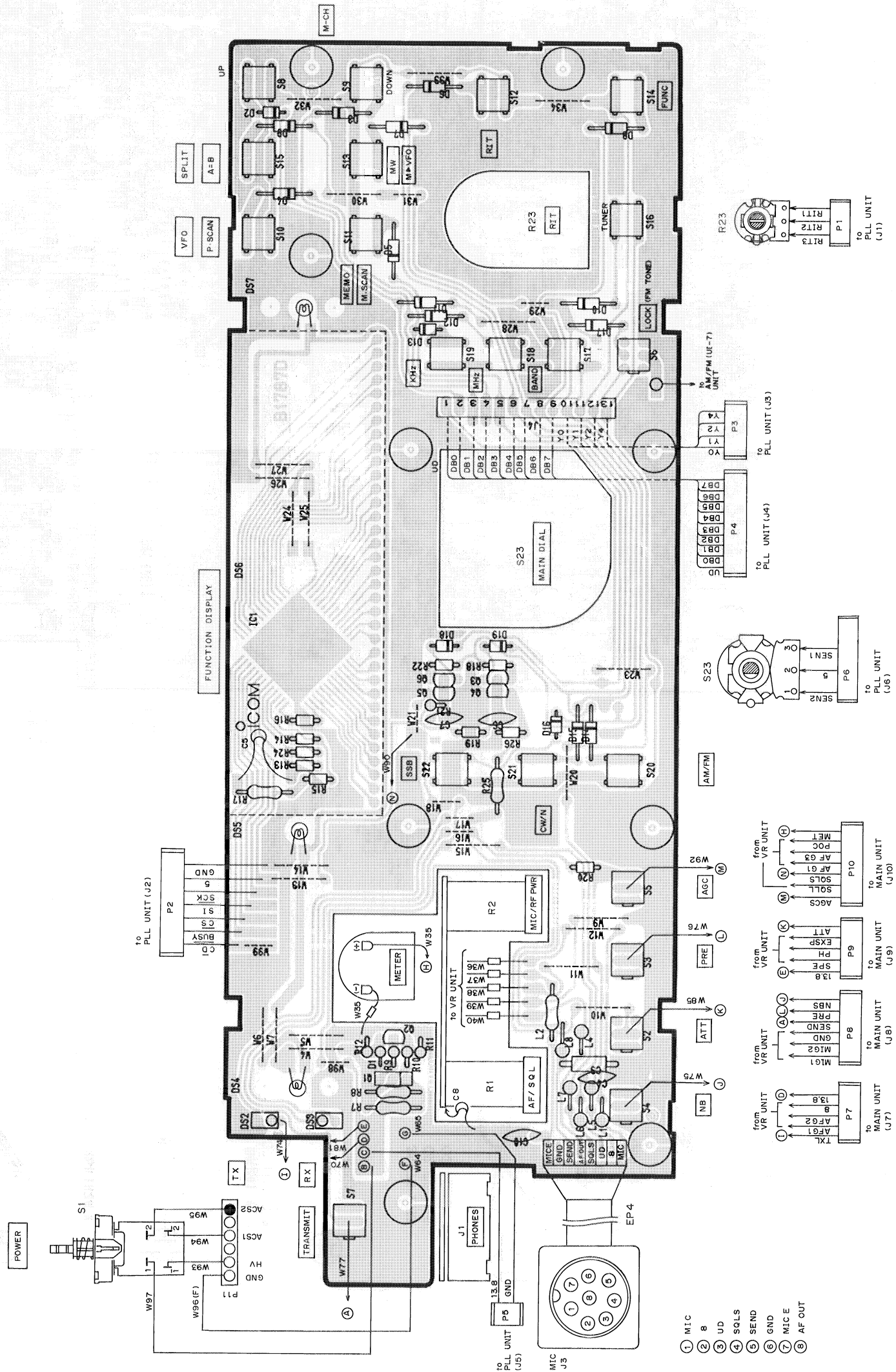
• AM • FM UNIT



SECTION 7 BOARD LAYOUTS

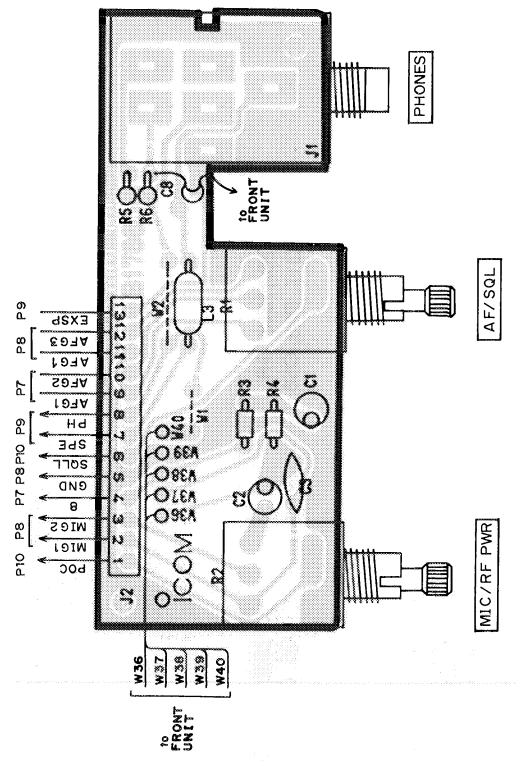
7-1 FRONT UNIT

• SW UNIT

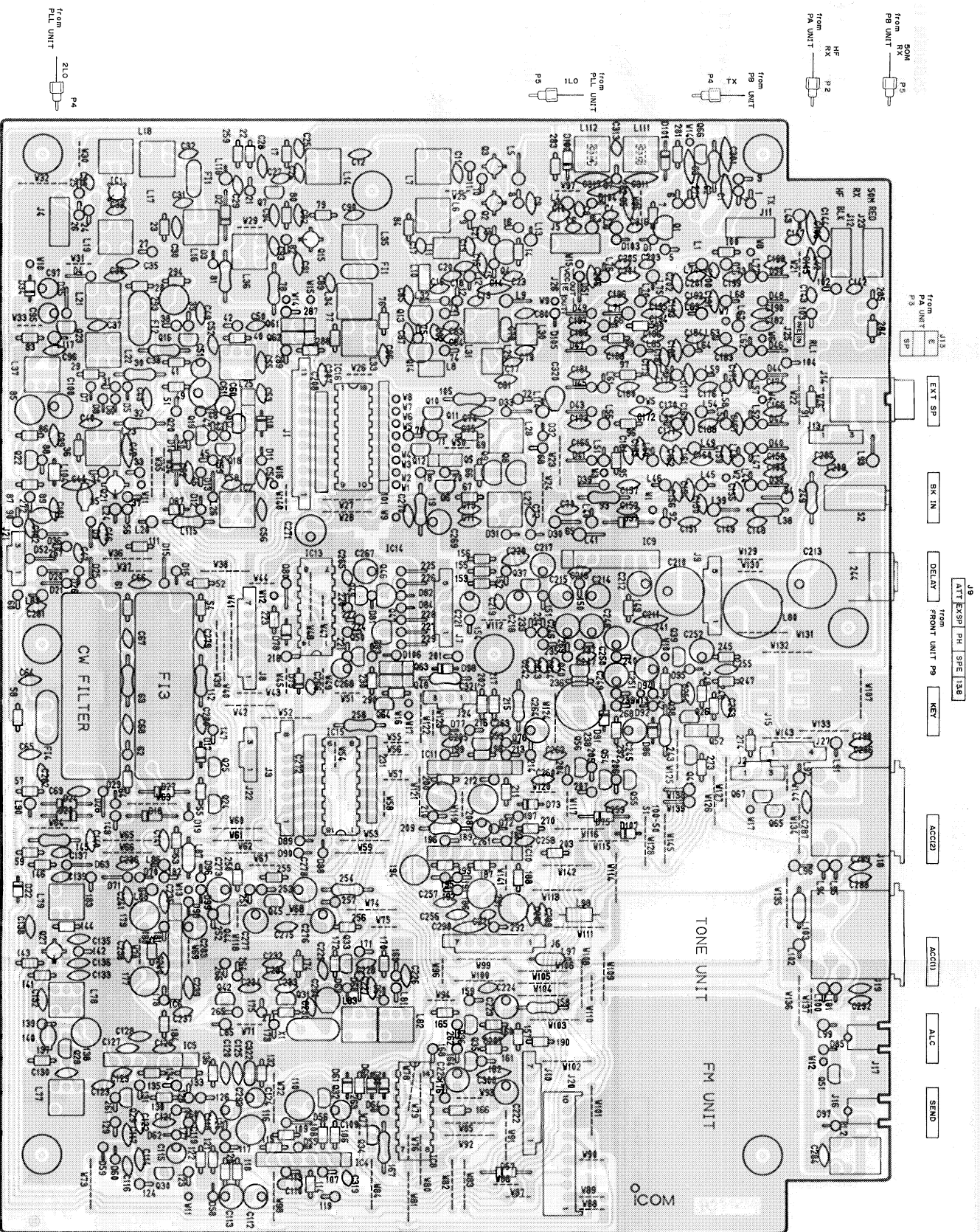


- ① MIC
- ② B
- ③ UD
- ④ SOLS
- ⑤ SEND
- ⑥ GND
- ⑦ MICE
- ⑧ AF OUT

• VR UNIT



7-2 MAIN UNIT



J19
ATT EXP | PW | SFE | 138

J13
EXT SP | BK IN | DELAY | FRONT UNIT P9 | KEY

ACC12 | ACC10 | ALC | SEND

50M P5
From RX PA UNIT

RF P2
From PA UNIT

From PLL UNIT
P4 X
P3

J27
DASH
BV
DOT
KEY

J2
BAND
-3
P2 (U3)

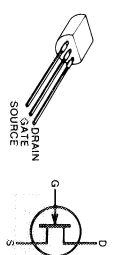
J20
CALC GND AT FSW | TB | AMB | FMB | RB | B

J10
AGC3 | SOL1 | SOL2 | ASQ1 | ASQ2 | POC | MET

J24
P18
P2
B3H

J6
LSB
RF
FOR
GND
ICL
P6
P18

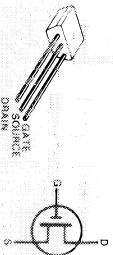
2SK125
Q8, Q9, Q13, Q14



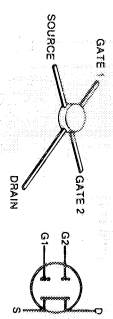
2SK192A-Y
Q16



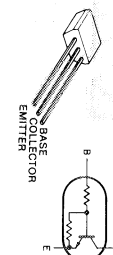
2SK241 Y
Q7, Q22, Q28



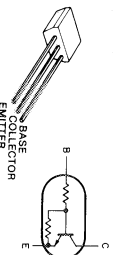
3SK74 K/M
Q2, Q3, Q15,
Q21, Q27



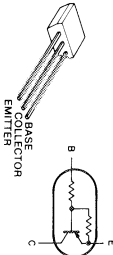
RN1202
Q6, Q12, Q23,
Q32, Q34, Q51,
Q64, Q65, Q66



RN1204
Q33, Q39, Q54,
Q55



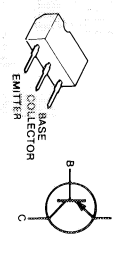
RN2202
Q10, Q20, Q24,
Q25, Q41, Q67



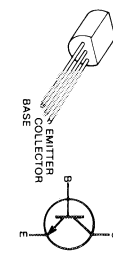
2SA1048 GR
Q17, Q38, Q53



2SB909M Q
Q5, Q62



2SC2053
Q1, Q4



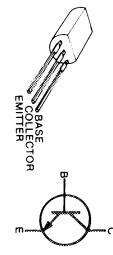
2SC2458 GR
Q11, Q18, Q19, Q26, Q29, Q30,
Q31, Q35, Q36, Q37, Q40, Q42,
Q44, Q45, Q49, Q50, Q56



2SD1225M R
Q48, Q52, Q61,
Q63

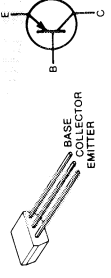


2SD468C
Q46, Q47

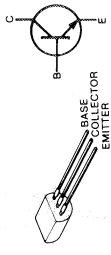


7-3 PLL UNIT

2SA1048 GR
Q37



2SC1571G
Q12



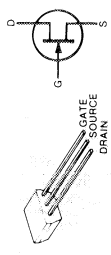
2SC2458 GR1Y
Q1, Q2, Q3,
Q4, Q5, Q6,
Q7, Q8, Q9,
Q10, Q11, Q13,
Q14, Q16, Q18,
Q20, Q22, Q32,
Q33



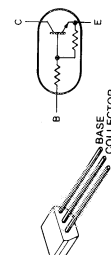
2SC2688 O
Q23, Q24, Q26,
Q27, Q30, Q34,
Q36, Q45



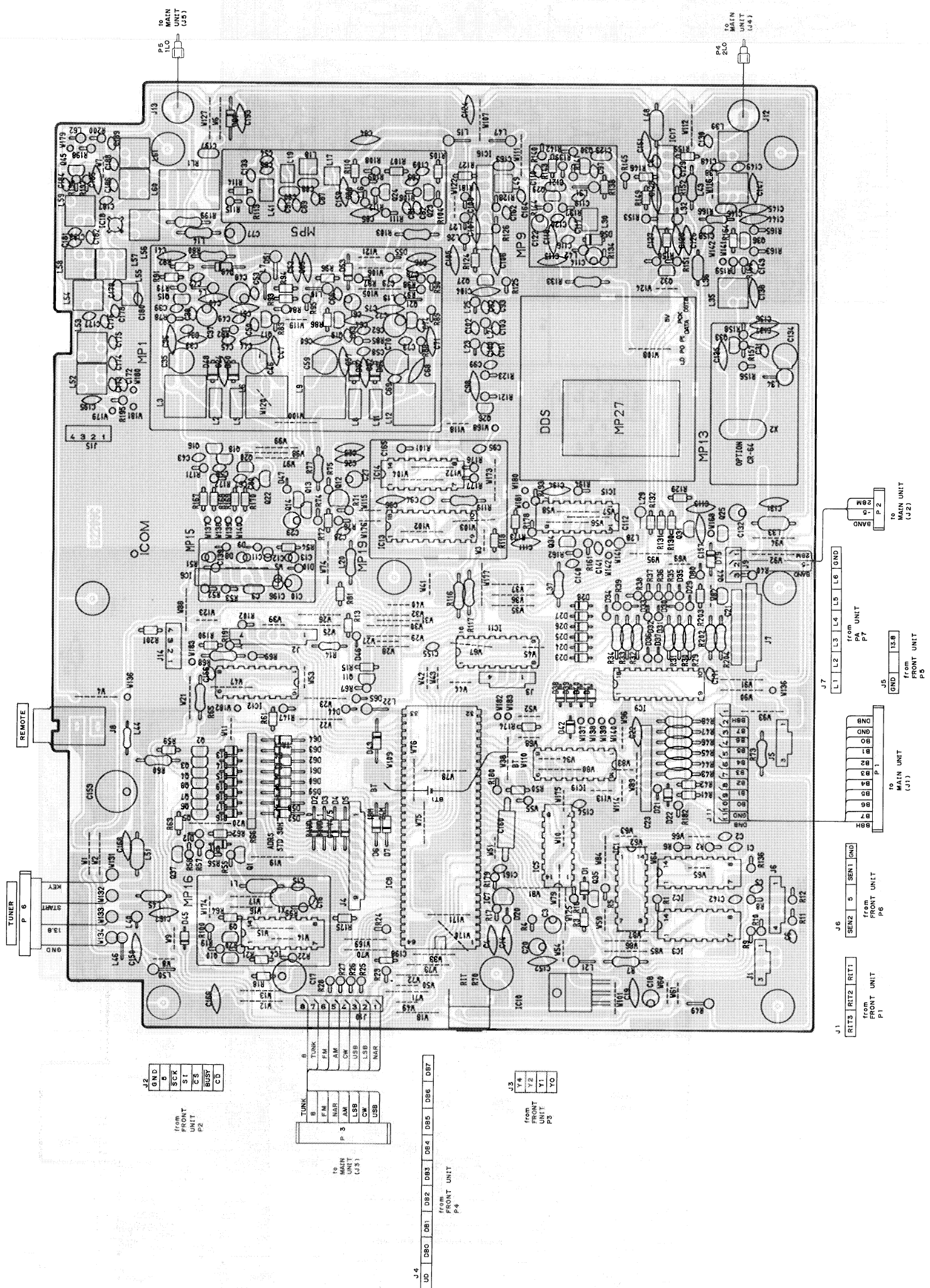
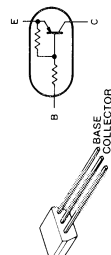
2SK192A GR
Q15, Q17, Q19,
Q21, Q29



RN1202
Q25, Q35, Q44



RN2202
Q31



J2

| | |
|---|------|
| 1 | GN D |
| 2 | SK |
| 3 | FM |
| 4 | AM |
| 5 | LSB |
| 6 | USB |
| 7 | NR |
| 8 | CD |

TUNER

| | |
|---|------|
| 1 | GN D |
| 2 | SK |
| 3 | FM |
| 4 | AM |
| 5 | LSB |
| 6 | USB |
| 7 | NR |
| 8 | CD |

J4

| | |
|---|----|
| 1 | UD |
| 2 | DB |
| 3 | DB |
| 4 | DB |
| 5 | DB |
| 6 | DB |
| 7 | DB |
| 8 | DB |

J3

| | |
|---|----|
| 1 | Y4 |
| 2 | Y2 |
| 3 | Y1 |
| 4 | Y0 |

J1

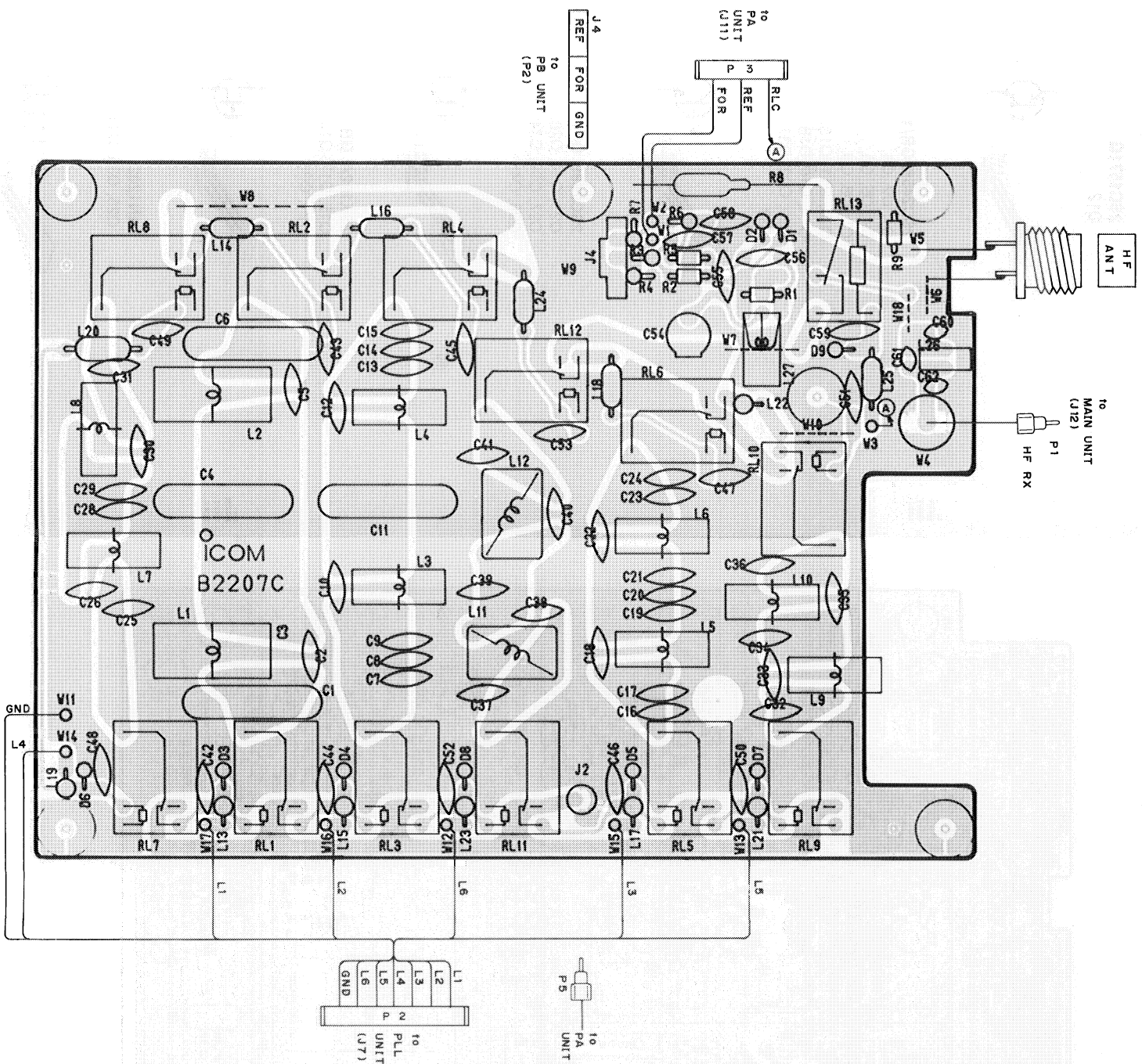
| | |
|---|-----|
| 1 | RT3 |
| 2 | RT2 |
| 3 | RT1 |

J6

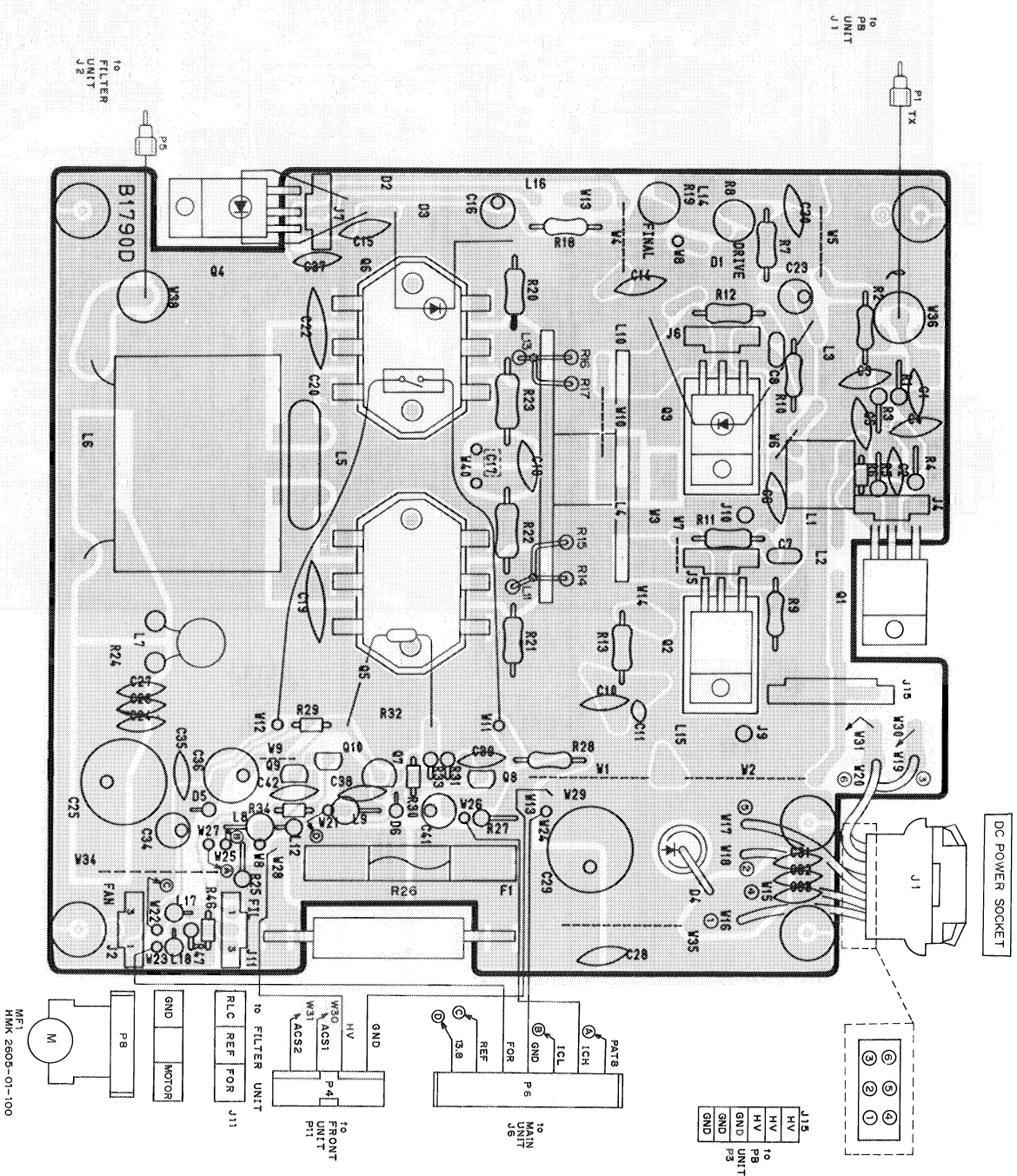
| | |
|---|------|
| 1 | SEN2 |
| 2 | SEN1 |
| 3 | GN D |

7-4 PA UNIT

• FILTER UNIT

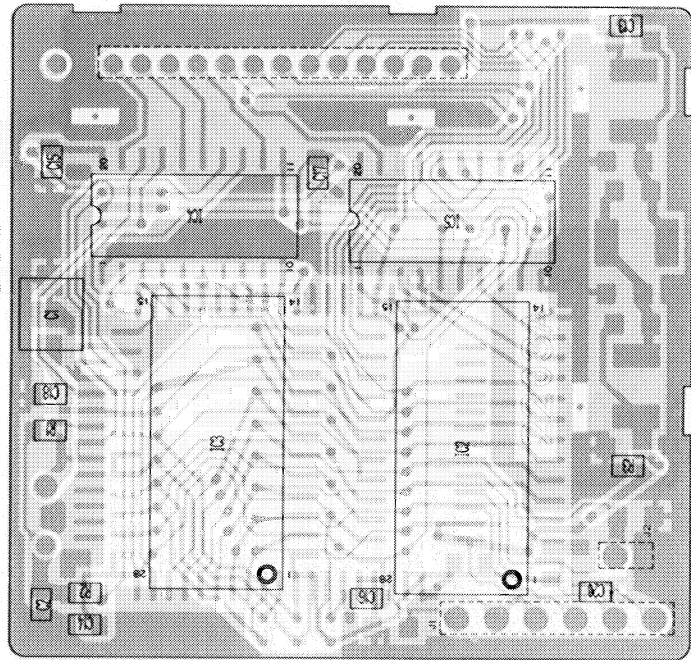


• PA UNIT

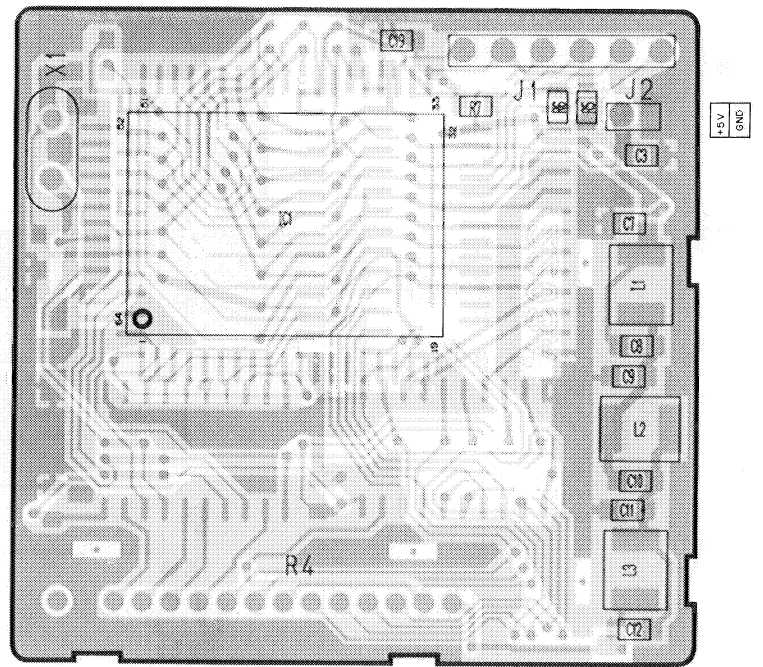


7-5 DDS, AM • FM AND BPF UNITS

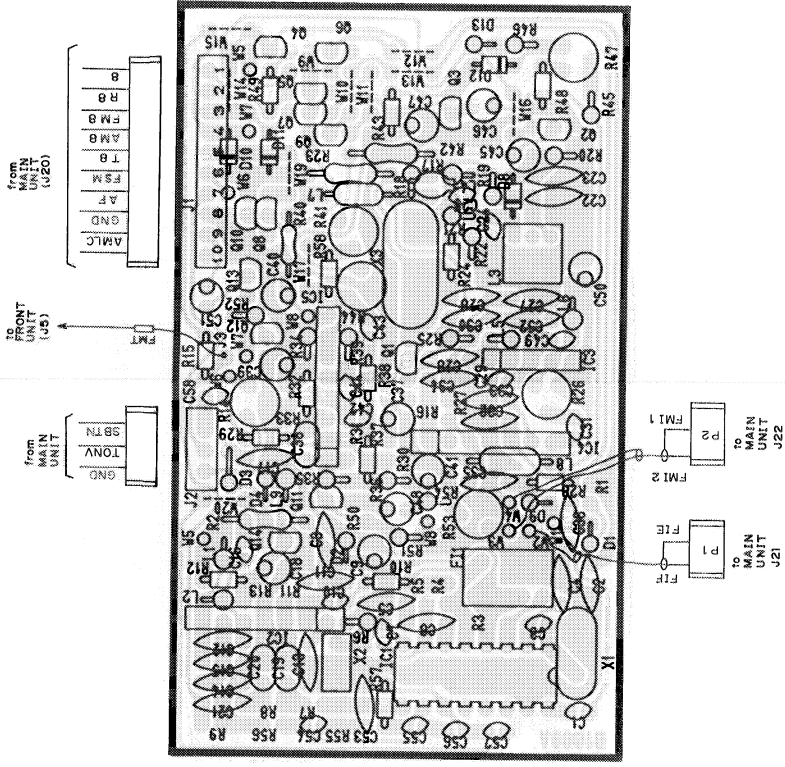
- DDS UNIT
- COMPONENT SIDE



FOIL SIDE



- AM • FM UNIT



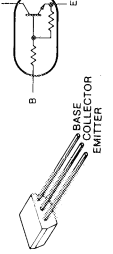
2SC2458 GR
Q4, Q11, Q13



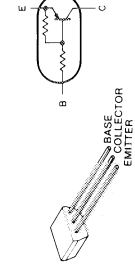
2SC2785 EL
Q1



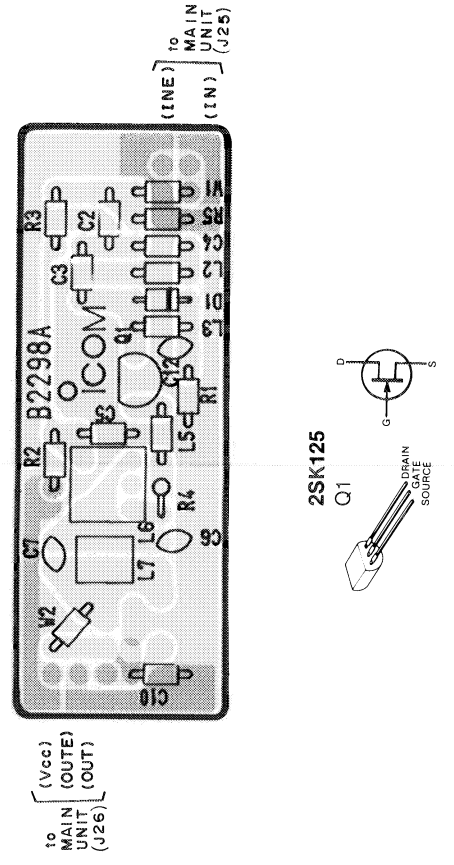
RN1202
Q2, Q3, Q5, Q7,
Q8, Q10, Q14



RN2202
Q6, Q9, Q12



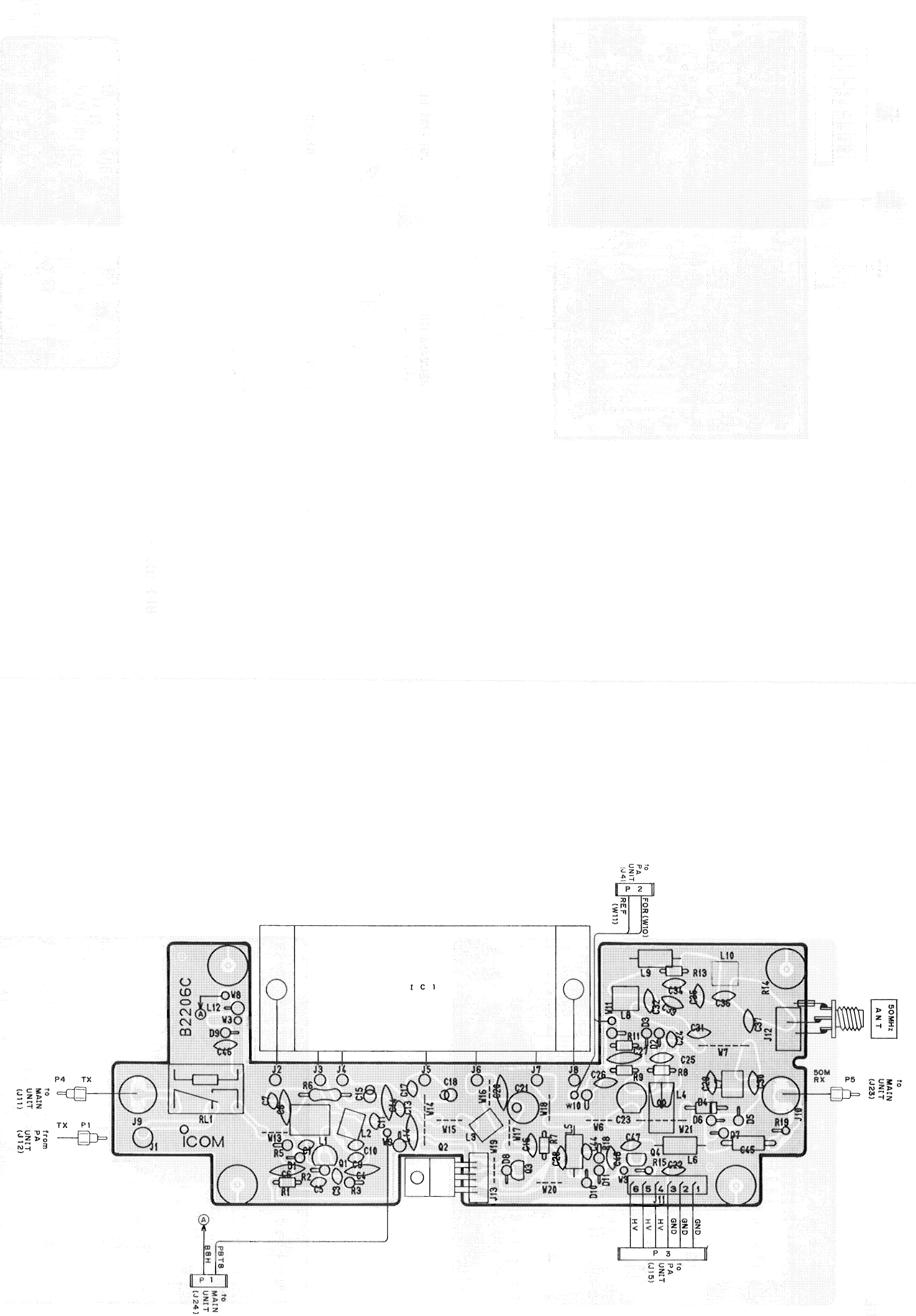
- BPF UNIT



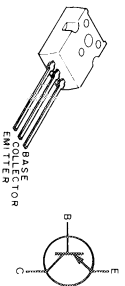
2SK125
Q1



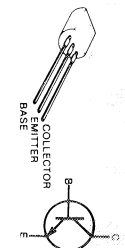
7-6 PB UNIT



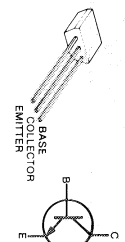
2SA1359 Y
Q2



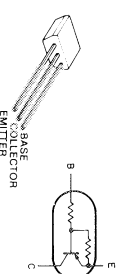
2SC2407(A)
Q1



2SC2458 GR
Q3

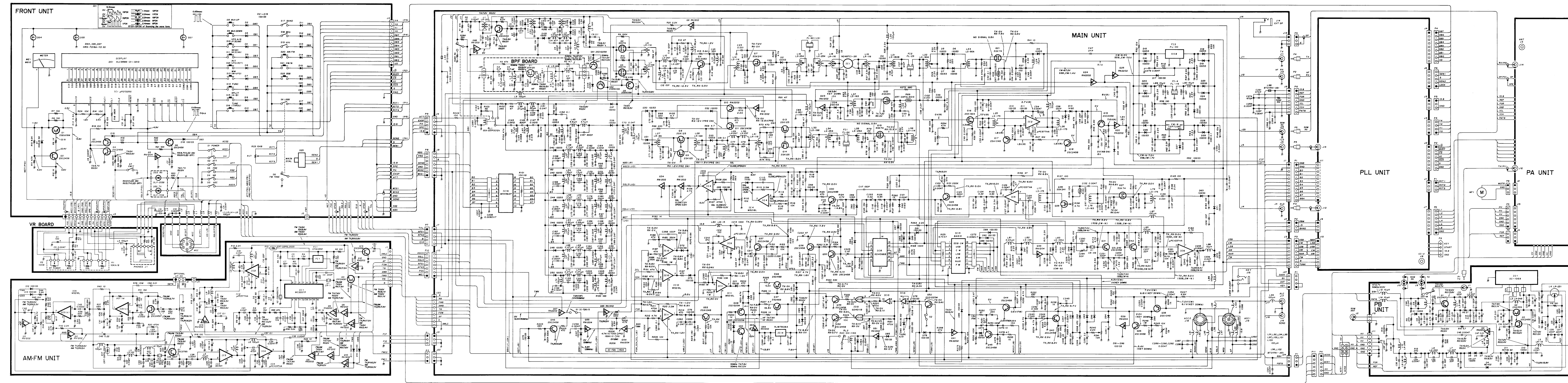


RN2202
Q4



SECTION 8 VOLTAGE DIAGRAMS

8-1 FRONT AND MAIN UNITS



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