

FILE NO.

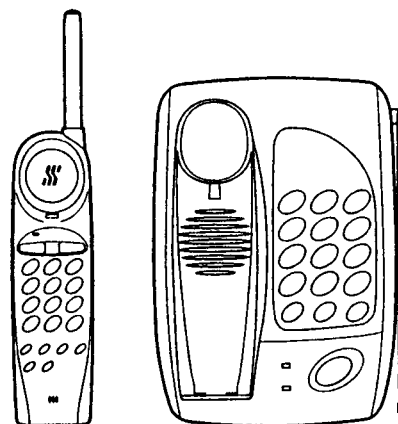
Service manual

Cordless Telephone

CLT-538X (AU)

CLT-538X (NZ)

CLT-538 (RU)



PRODUCT CODE No.
 163 203 96 (CLT-538X/AU)
 163 203 91 (CLT-538X/NZ)
 163 203 95 (CLT-538/RU)

SPECIFICATIONS

Transmitting frequency

Base station: .. 30.075-30.300 MHz

Handset: 39.775-40.000 MHz

Receiving frequency

Base station: .. 39.775-40.000 MHz

Handset: 30.075-30.300 MHz

Noise Reduction Compander IV

Memory Dia l 10-number

Channel Access 10 ch

Security Codes 10 Million(random)

Continuous Standby 14-days

Quick Talk Access yes

Flash yes

Ring control yes

Specifications subject to change without notice.

Hearing-Aid Compatible yes

Redial/Pause yes

Tone/Pulse yes

Antenna Rod/Rubber

Power Source

Base station: AC adaptor
 AC 230-240V, 50Hz(AU/NZ)
 AC 220V, 50Hz(RU)
 DC9V

Handset: Ni-Cd battery: 3.6V, 270 mAh

Dimensions

Base station: 158 (W) x 58 (H) x 232(D) mm

Handset: 55 (W) x 198 (H) x 53 (D) mm
 (Without antenna)

Accessories AC adaptor
 Telephone line cord
 Instruction manual
 Number Memory Index Sheet
 Battery Pack

REFERENCE No. SM900110

ADJUSTMENT

CAUTION : DURING ALIGNMENT, OPEN "ANT" PATTERN MARKED WITH "SHORT" SILK JUST LIKE MENTIONED AT PAGE "PARTS LOCATION", IF RUBBER ANT IS CONNECTED.

1.ALIGNMENT FOR REMOTE UNIT

1-1. Tx/Rx VCO & Tx Freq.

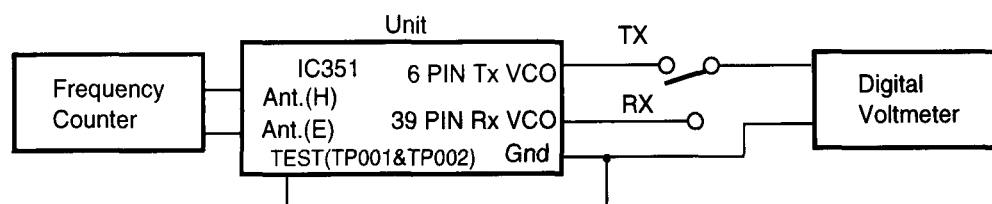
Test Equipment

- Digital Voltmeter
- DC Power Supply (DC 3.8 V)
- Frequency Counter

Unit Condition

- Disconnect Ni-Cd battery which feeds 3.8 V from power supply terminal.
- Set unit to "TEST" mode by shorting test point TP001 and TP002 together.
- Feed 3.8V Ni-Cd battery to power supply terminal.
- Connect frequency counter to ANT test pin. Confirm the current channel is at 10ch.
- Connect digital voltmeter to Tx/Rx VCO terminal points.
- Align T253 (Tx) to obtain $2.2 \pm 0.1V$ DC reading from digital voltmeter respectively.
- Align T153 (Rx) to obtain $1.5 \pm 0.1V$ DC reading from digital voltmeter respectively.
- Tx FREQUENCY ... Confirm the Tx Freq is $40.000MHz \pm 1.2KHz$ (10ch) from Freq. counter.

Adjustment



STEP	CONDITION	CH	ADJUST	ADJUSTED VALUE	SPECIFICATION
1. Tx VCO	Tx VCO side	10	T253	2.20V	$2.20V \pm 0.1V$
2. Rx VCO	Rx VCO side	10	T153	1.50V	$1.50V \pm 0.1V$
3. Tx Freq.	-	10	-	-	$40.000MHz \pm 1.2KHz$

ADJUSTMENT

1-2. TRANSMITTING

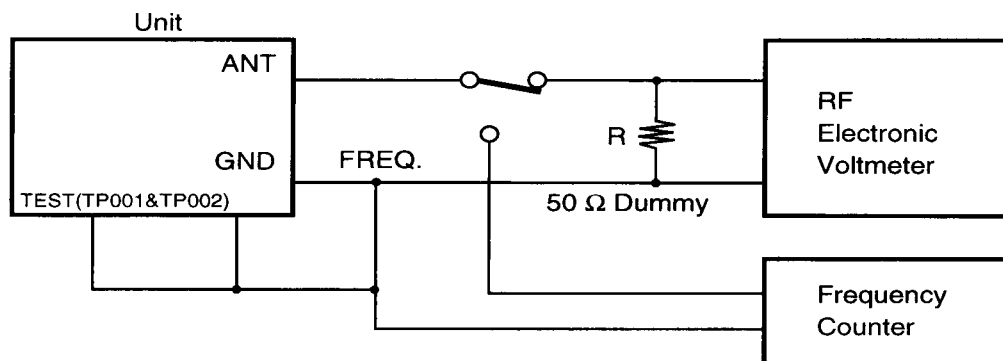
Test Equipment

- RF Electronic Voltmeter
- Linear Detector
- DC Power Supply (DC 3.8 V)
- Frequency Counter
- AF Oscillator
- Dummy Load (50 Ω)

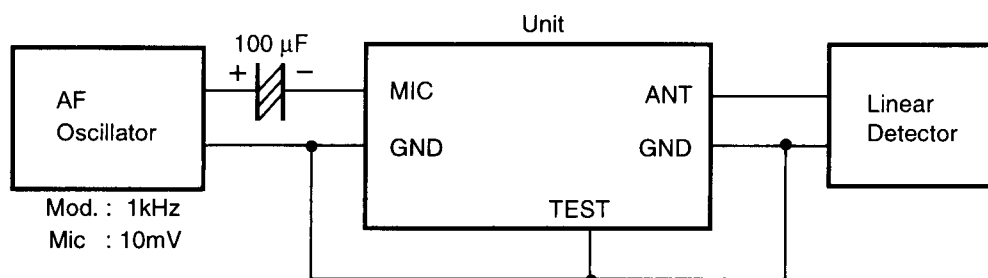
Unit Condition

- Push "FLASH" Key. The CH will turn to 7ch. Then Rx MUTE is ON.
- Tx POWER
 - ... Disconnect Frequency Counter from ANT pin.
 - Connect RF electronic voltmeter to ANT test pin.(50 Ω probe)
 - Confirm that the Tx power level is $6.0 \pm 3\text{dBm}$ at RF voltmeter.
- Tx MODULATION
 - ... Disconnect RF electronic Voltmeter from ANT test pin and connect Linear detector to ANT test pin.
 - ... Inject AF oscillator (1KHz, 10mV) to microphone input.
 - ... Align VR651 to obtain $2.0 \pm 0.1\text{KHz}$ dev. from Linear detector. And Check
 $3\text{kHz} \rightarrow 2.1 \pm 0.5\text{KHz dev}$
 $300\text{Hz} \rightarrow 1.5 \pm 0.3\text{kHz dev}$
- Tx DATA
 - ... After TX Modulation Alignment. Push "Talk" key.
 - ... Check the read of linear detector $3.8 \pm 1.0\text{KHz dev}$.

Adjustment (T-1)



Adjustment (T-2)



STEP	CONDITION	CH	ADJUST	ADJUSTED VALUE	SPECIFICATION
1. Tx LEVEL	CARR side	7	NONE	NONE	$6.0 \pm 3.0\text{dBm}$
2. Tx Mod. (MIC)	OSC output: 1KHz	7	VR651	2.0 KHz dev.	$2.0 \pm 0.1\text{ KHz dev.}$
	300Hz	7	-	-	$1.5 \pm 0.3\text{ KHz dev.}$
	3 KHz	7	-	-	$2.1 \pm 0.5\text{ KHz dev.}$
3. TX DATA		7	-	-	$3.8 \pm 1.0\text{ KHz dev.}$

ADJUSTMENT

1-3. RECEIVING

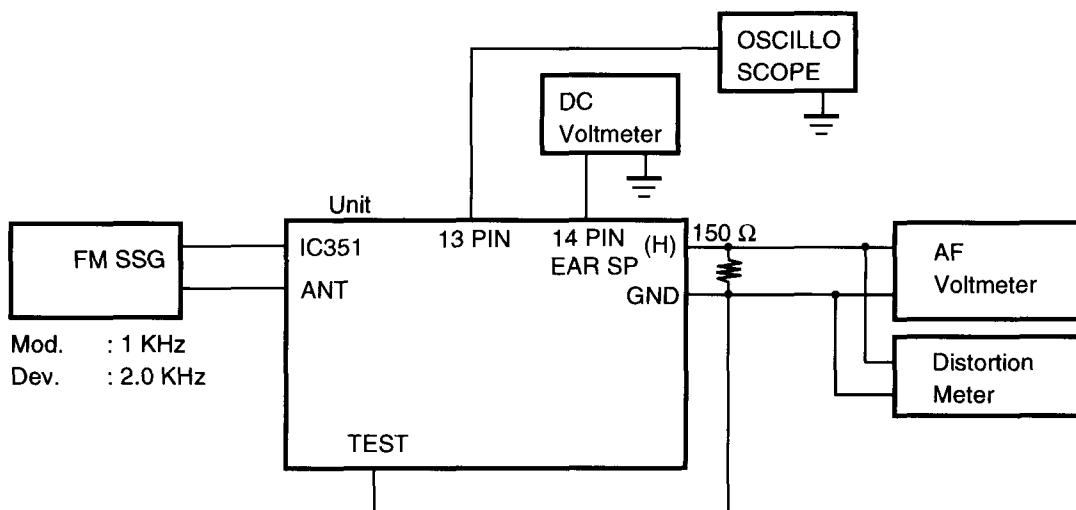
Test Equipment

- FM SSG (50 Ω : OPEN TYPE)
- AC Voltmeter (AFVM)
- DC Power Supply (DC 3.0~3.8 V)
- Distortion Meter
- Digital Voltmeter
- Oscilloscope

Unit Condition

- Push "#" key to select Rx 6ch. The Tx frequency is 39.9000MHz and Rx one is 30.200MHz.
- Disconnect Linear detector from ANT test pin and connect FM SSG (1KHz mod., 2.0KHz dev., 30.200MHz, 46dB μ V) to ANT test pin.
- Connect AFVM and distortion meter in parallel and terminate a 150 Ω dummy load across the SP terminal.
- Rx IF
 - ... Align T351 to obtain maximum deflection and minimum distortion at AFVM and distortion meter respectively. (SP OUT : Max)
- Rx AF Level
 - ... Align VR351 to obtain $44\text{mV} \pm 5\text{mV}$ Speaker output at AFVM at volume Normal.
 - ... Confirm the Speaker output is $50 \sim 95\text{mV}$. (FM SSG:300Hz mod, 46dB μ V.)
 - ... Confirm the Speaker output is $10 \sim 18\text{mV}$. (FM SSG:3KHz mod, 46dB μ V.)
 - ... Push "MEMORY" key to change volume to High.
 - ... Confirm the Speaker output at 1KHz is $50 \sim 95\text{mV}$.
- Rx RF
 - ... Reduce the output level of FM SSG from 46dB μ V $\rightarrow$ +5dB μ V.
 - ... Confirm the distortion is less than 10%(SINAD 20dB) at the distortion meter. (FM SSG : 1KHz mod, 2.0KHz dev, 30.200MHz)
- CD Level Check
 - ... Connect OSCILLOSCOPE to CD OUT (IC351 13pin).
 - ... Push "END" key to off Tx Power. (CAUTION: SP Output is muted.)
 - ... Confirm CD level is High $\rightarrow$ Low when FM SSG is 0 $\rightarrow$ +18dB μ V.
 - ... Confirm CD level is High when FM SSG is 0 $\rightarrow$ +4dB μ V.
- Batt. Low
 - ... Connect DC Voltmeter to Batt. Low detct.
 - ... Confirm the Batt. Low output of 14pin (IC351) is High level when DC Power Supply is 3.5V.
 - ... Confirm the Batt. Low output of 14pin (IC351) is Low level when DC Power Supply is 3.05V.

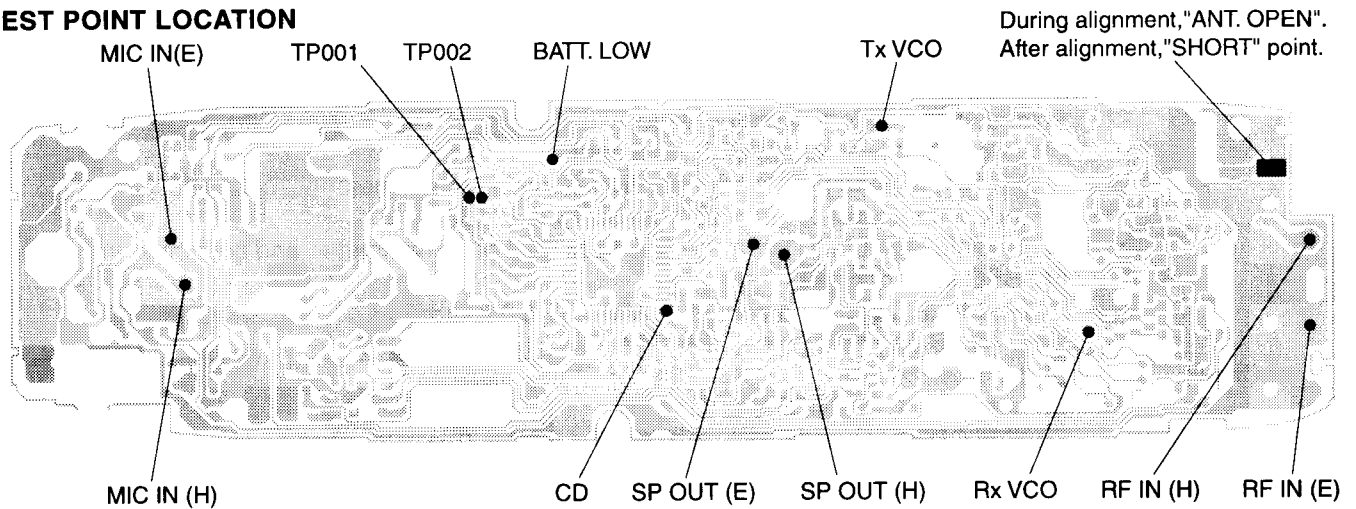
Adjustment (T-3)



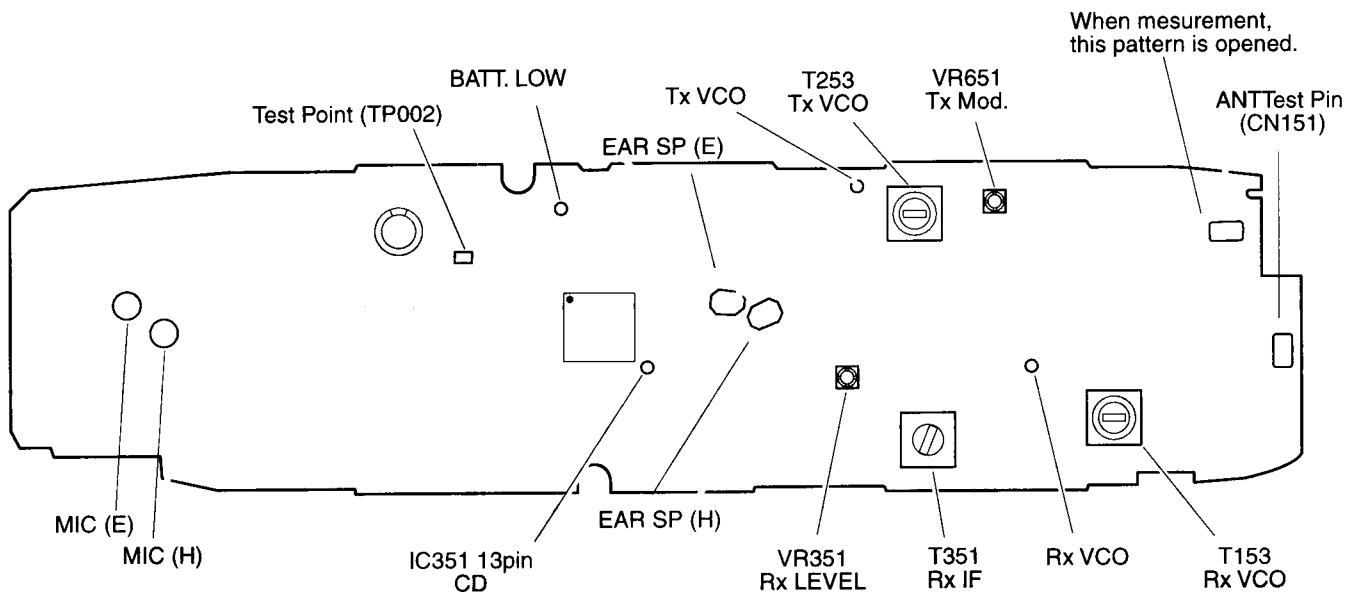
ADJUSTMENT

STEP	CONDITION	CH	ADJUST	ADJUSTED VALUE	SPECIFICATION
1. IF	SSG Output : 46dB μ V	6	T351	Minimum Distortion	
2. RF	SSG Output : +5dB μ V	6	NONE	NONE	Less than 10%
3.AF LEVEL (Vol. normal)	(1KHz)	6	VR351	50mV	44mV $\pm$ 5mV
	(300Hz)	6	NONE	NONE	50~95mV
	(3KHz)	6	NONE	NONE	10~18mV
4. AF LEVEL (Vol. High)	(1KHz)	6	NONE	NONE	50~95mV
5. CD Level check (Tx PO OFF)	0 $\rightarrow$ +18dB μ V	6	NONE	NONE	CD OUT:High $\rightarrow$ Low
	0 $\rightarrow$ +4dB μ V	6	NONE	NONE	CD OUT:High $\rightarrow$ High
6.Batt. Low	DC Level:3.50V	6	NONE	NONE	Batt. Low Out:High
	DC Level:3.05V	6	NONE	NONE	Batt. Low Out:Low

TEST POINT LOCATION



PARTS LOCATION



ADJUSTMENT

1. ALIGNMENT FOR BASE UNIT

NOTE: During alignment, disconnect the antenna wire from the set.

1-1. Tx/Rx VCO & Tx Frequency (see FIG-1, TABLE-1)

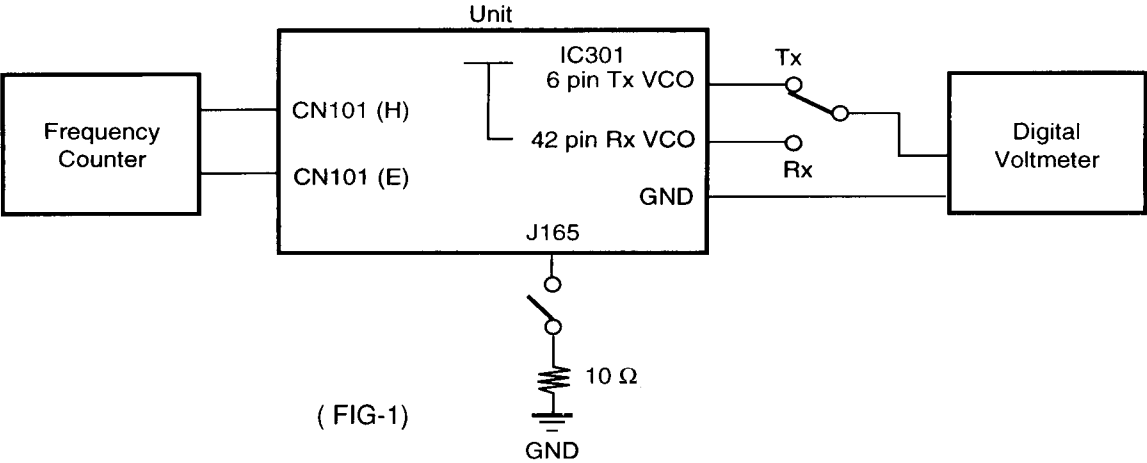
Test Equipment

- Digital Voltmeter
- DC Power Supply (DC 9.0 V ----- CENTER MINUS)
- Frequency Counter

Unit Condition

- a) Discharge J165.
- b) Connect Frequency counter to CN101.
- c) Pushing "SPK" key, connect the AC adaptor and slide S402 from "PULSE" to "TONE". Then slide S402 to "PULSE" again. Tx power will be ON.
(Note : For NZ version dummy switch is necessary to simulate the TONE/PULSE SW).
- d) Confirm the current channel is at 10ch.
- e) Connect digital voltmeter to TX/RX VCO test point.
- f) Align T201 (Tx) to obtain $2.5 \pm 0.1 \text{ V DC}$ from the read of digital voltmeter respectively.
- g) Align T103 (Rx) to obtain $1.5 \pm 0.1 \text{ V DC}$ from the read of digital voltmeter respectively.
- h) Confirm the frequency is $30.300 \text{ MHz} \pm 1.2 \text{ kHz}$. (10ch).

Adjustment



STEP	CONDITION	CH	ADJUST	ADJUSTED VALUE	SPECIFICATION
1. Tx VCO	Tx VCO side	10	T201	2.5 V	2.50V ± 0.1 V
2. Rx VCO	Rx VCO side	10	T103	1.5 V	1.50 V ± 0.1 V
3. Tx Freq.	Freq. side	10	NONE	30.300MHz	30.300MHz ±1.2KHz

(TABLE-1)

1-2. TRANSMITTING

Test Equipment

- RF Electronic Voltmeter
- Linear Detector
- AC Adaptor (DC 9.0V ----- CENTER MINUS)
- Frequency Counter
- AF Oscillator
- Dummy Load (50 Ω)

ADJUSTMENT

Unit Condition

* TEL line current 50mA at 48V

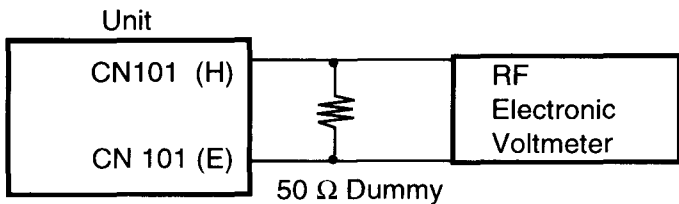
- a) Push " * " key, the ch will turn to 7ch.
- b) Slide S401 to "RINGER ON", Rx MUTE will be ON.
Disconnect frequency counter from CN101, and connect RF voltmeter to CN101 (50Ω probe).
- c) TX Power

1. Align T202 to the maximum power obtainable from the reading of the RF voltmeter.
(+5dBm±3dBm)
- d) TX MODULATION

1. Connect Linear detector to CN101.
2. Connect AF oscillator (1KHz, -20dBm) to TEL line.
3. Align VR601 to obtain $1.7\pm0.10\text{KHz dev.}$ from the read of linear detector.
And confirm at the AF oscillator to TEL line,
300Hz,-20dBm : the read of linear detector $1.3\text{kHz}\pm0.3\text{kHz dev.}$
3 kHz,-20dBm : the read of linear detector $2.6\text{kHz}\pm0.5\text{kHz dev.}$
- e) TX DATA MODULATION

1. After Tx MODULATION Alignment, Push "REDIAL" key (S493).
(While pushing "REDIAL" key, Tx DATA is sent.)
2. Check the read of linear detector is $3.8\pm1.0\text{ kHz dev.}$

Adjustment (T-1)

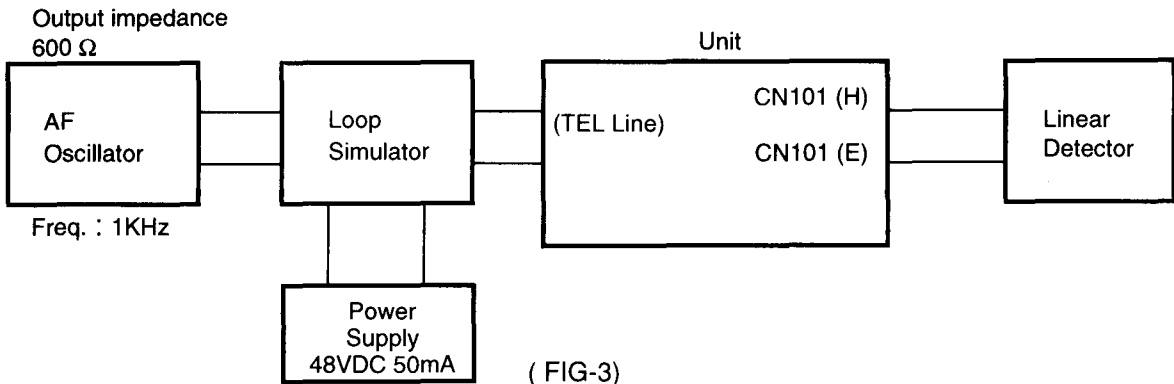


(FIG-2)

STEP	CONDITION	CH	ADJUST	ADJUSTED VALUE	SPECIFICATION
1. Tx LEVEL	CARR side	7	T202	MAXIMUM	+ 5 dBm±3.0dBm

(TABLE-2)

Adjustment (T-2)



(FIG-3)

STEP	CONDITION	CH	ADJUST	ADJUSTED VALUE	SPECIFICATION
1. LINE MOD.	OSC OUTPUT: -20dBm	1 kHz	7	VR601	1.7KHz dev
		300 Hz	7	NONE	NONE
		3 kHz	7	NONE	NONE
2. DATA MOD.		7	NONE	NONE	3.8 ± 1.0 KHz dev.

(TABLE-3)

ADJUSTMENT

1-3. RECEIVING

(see FIG-4, TABLE-4)

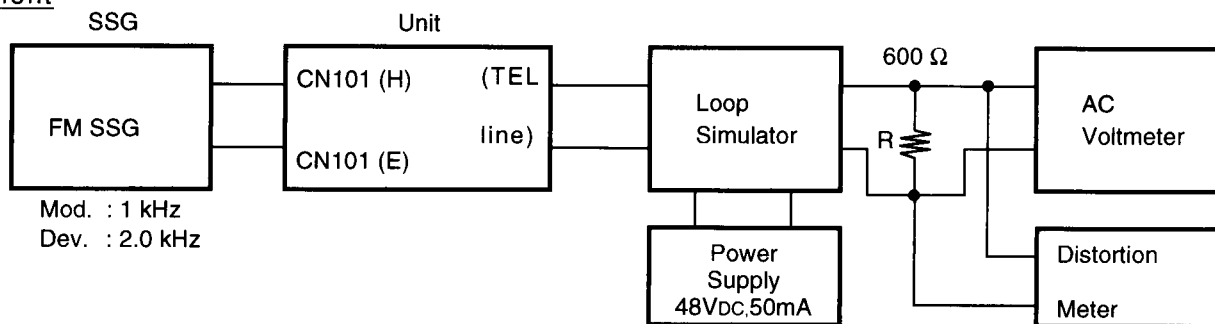
Test Equipment

- FM SSG (50 Ω : OPEN TYPE)
- AC Voltmeter (ACVM)
- AC Adaptor (DC 9.0 V ---- CENTER MINUS)
- Distortion Meter
- Dummy Load (600 Ω)

Unit Condition

- Disconnect AC Adaptor. Discharge J165.
- Disconnect AF oscillator from TEL line, and connect AC voltmeter in parallel with distortion meter, terminated with 600 Ω during load to the TEL line.
- Disconnect Linear detector from CN101 and connect FM SSG (1kHz, 2.0kHz dev., 39.900MHz, 46dB μ V) to CN101.
- Pushing "SPK" key, connect AC Adaptor and slide S402 from "PULSE" to "TONE".
Then push "FLASH" key. The ch will turn to 6ch.
Slide S402 to "PULSE", and S401 to "RINGER OFF".
(Sliding S401 to "RINGER OFF", Rx mute will be OFF.)
(Note: for NZ version dummy switch is necessary to simulate the TONE/PULSE SW.)
- Rx IF
 - Align T301 to obtain maximum deflection and minimum distortion from the read of AC voltmeter and distortion meter respectively.
- Rx RF
 - Change output level of FM SSG from 46dB μ V $\rightarrow$ +5dB μ V.
 - Align T101, to obtain minimum distortion at the distortion meter (less than 10%).
- Rx AF Level
 - Change output level of FM SSG from 5dB μ V $\rightarrow$ 46dB μ V.
 - Align VR301 to obtain -5dBm $\pm$ 0.5dB from read of AC voltmeter, and confirm at the FM SSG input of
300Hz (46dB μ V) : the output of ACVM -6.0dBm $\pm$ 3dB.
3kHz (46dB μ V) : the output of ACVM -14.5dBm $\pm$ 3dB.
- CD Level Check
 - Switch position S402 $\rightarrow$ TONE (TX "OFF").
 - Connect OSCILLOSCOPE to CD OUT.
 - Confirm CD level is High $\rightarrow$ Low when FM SSG is 0 $\rightarrow$ + 20dB μ .
 - Confirm CD level is High when FM SSG is 0 $\rightarrow$ +4dB μ .

Adjustment



(FIG-4)

STEP	CONDITION	CH	ADJUST	ADJUSTED VALUE	SPECIFICATION
1. IF	SSG Output : 46dB μ V	6	T301	Maximum Level	Less than 5 %
2. RF	SSG Output : 5dB μ V	6	T101	Minimum distortion	Less than 10 %
3. AF LEVEL	SSG : 46dB μ V (1KHz)	6	VR301	-5 dBm	-5dBm $\pm$ 0.5 dB
	(300Hz)	6	NONE	NONE	-6dBm $\pm$ 3 dB
	(3KHz)	6	NONE	NONE	-14.5dBm $\pm$ 3 dB
4. CD LEVEL	SSG Output : 0 $\rightarrow$ +20dB μ V	6	NONE	NONE	CD OUT:High $\rightarrow$ Low
	0 $\rightarrow$ + 4dB μ V		NONE	NONE	CD OUT:High $\rightarrow$ High

(TABLE-4)

ADJUSTMENT

10CH Frequency List of Cordless Telephone

BASE UNIT

CH (No.)	Tx Freq.(MHz)	Rx Freq.(MHz)	Rx Local(MHz)
1	30.075	39.775	29.080
2	30.100	39.800	29.105
3	30.125	39.825	29.130
4	30.150	39.850	29.155
5	30.175	39.875	29.180
6	30.200	39.900	29.205
7	30.225	39.925	29.230
8	30.250	39.950	29.255
9	30.275	39.975	29.280
10	30.300	40.000	29.305

REMOTE UNIT

CH (No.)	Tx Freq.(MHz)	Rx Freq.(MHz)	Rx Local(MHz)
1	39.775	30.075	19.380
2	39.800	30.100	19.405
3	39.825	30.125	19.430
4	39.850	30.150	19.455
5	39.875	30.175	19.480
6	39.900	30.200	19.505
7	39.925	30.225	19.530
8	39.950	30.250	19.555
9	39.975	30.275	19.580
10	40.000	30.300	19.605

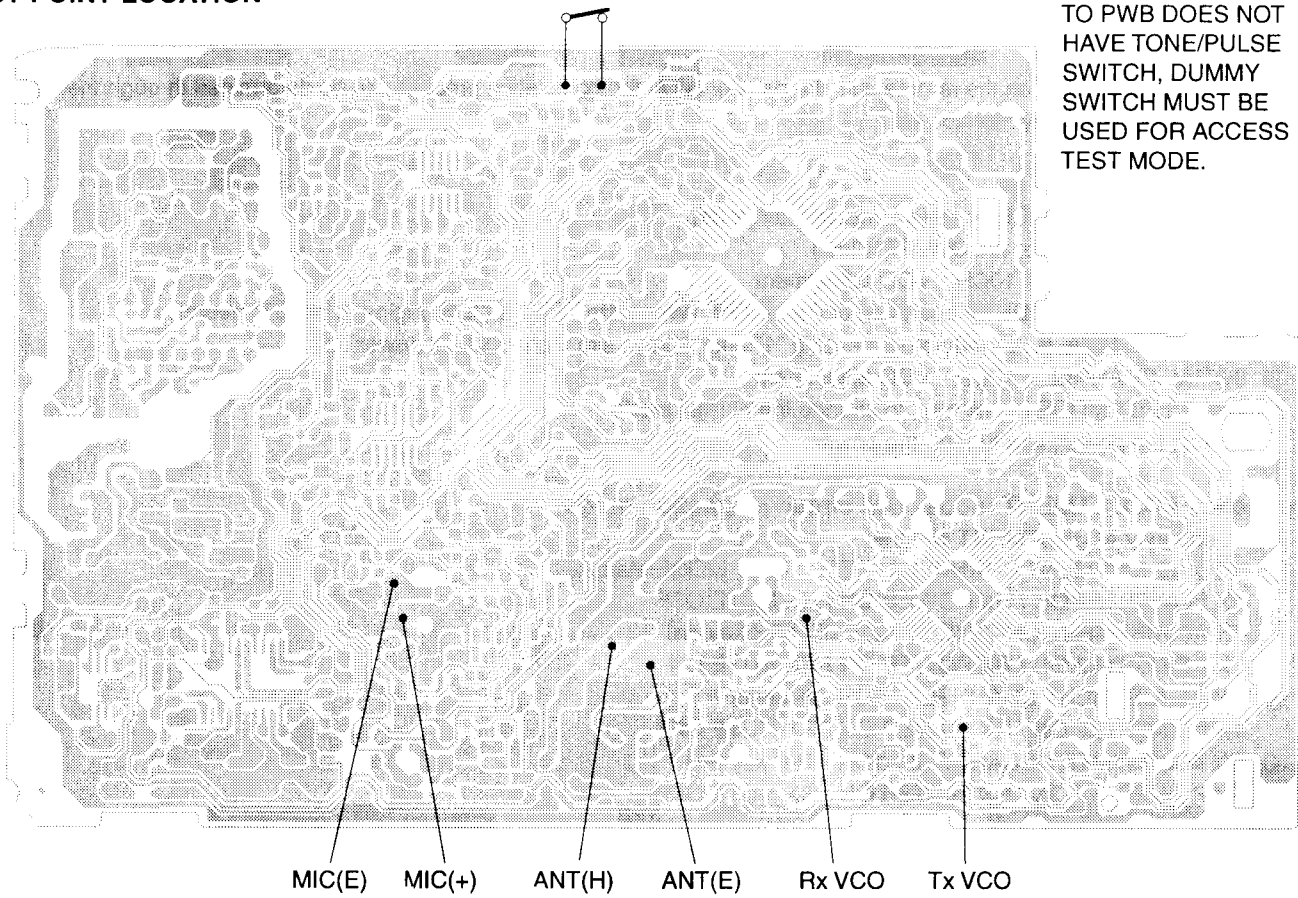
1st IF: 10.695MHz, 2nd IF: 455KHz

ADJUSTMENT

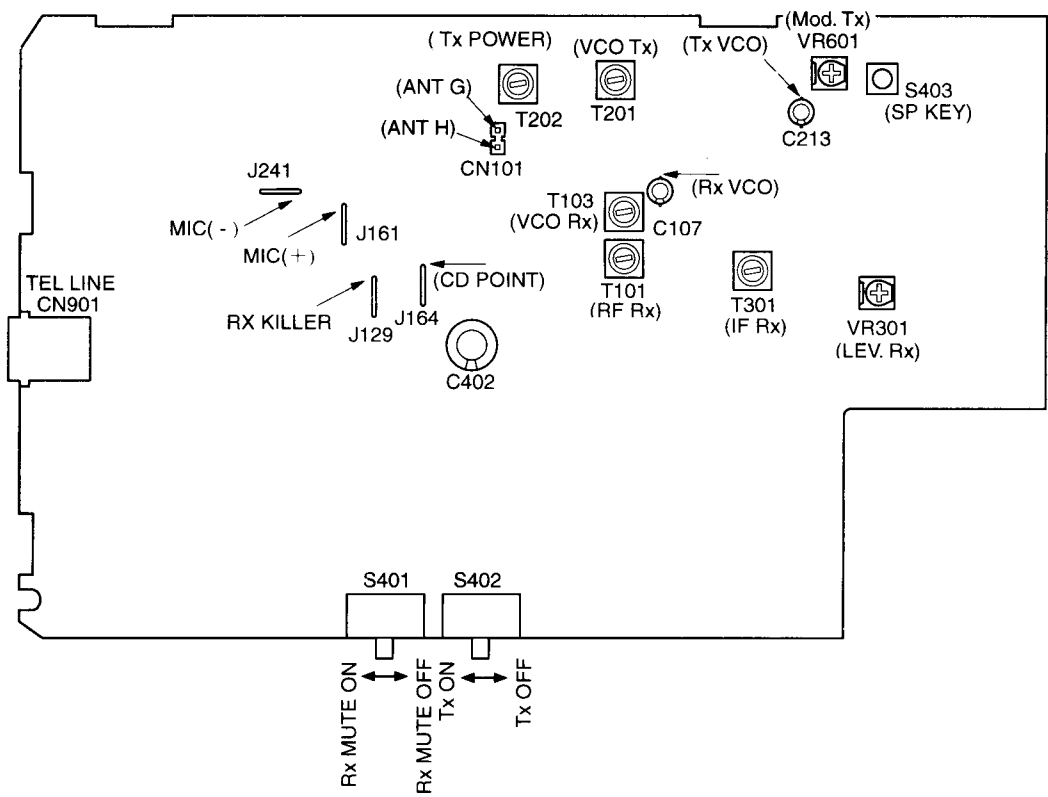
TEST POINT LOCATION

DUMMY SWITCH FOR NZ ONLY.

NOTE: FOR NZ MODEL DUE TO PWB DOES NOT HAVE TONE/PULSE SWITCH, DUMMY SWITCH MUST BE USED FOR ACCESS TEST MODE.



PARTS LOCATION



TEST MODE

HAND SET

1. Overview

By operating the Keyboard SW on the remote unit, the pass or fail of the completion process can be determined through the status of the LEDs, the sound of the key monitor, etc.

2. Startup

- (1) Startup of the TEST MODE by the microcomputer ports.
 - ① Before power ON, set to LOW, P71(2pin).
 - ② INITIAL CHANNEL = 10CH VCO adjustment
- (2) Startup of the TEST MODE by operation of Power ON (When the TEST MODE begins, a beep is heard.)
 - ① The TEST MODE is started up by pressing "1" and "9" keys simultaneously at power on.
 - ② INITIAL CHANNEL = 10CH VCO adjustment
- (3) In case of TEST MODE in this way, to change the normal mode.
 - ① turn off the power, and turn on the power

3. High frequency ADJUSTMENT mode/ Call circuit inspection mode

- (1) High frequency ADJUSTMENT channel
 - ① VCO ADJUSTMENT CHANNEL : 10CH (TEST MODE startup)
TX POWER1&2 ON / RX POWER ON / RX MUTE OFF
 - ② TX ADJUSTMENT CHANNEL : 7CH (FLASH key on)
TX POWER1&2 ON / RX POWER ON / RX MUTE ON
 - ③ RX ADJUSTMENT CHANNEL1 : 6CH (# key on)
TX POWER1&2 ON / RX POWER ON / RX MUTE OFF
 - ④ RX ADJUSTMENT CHANNEL2 : 1CH (R/P key on)
TX POWER1&2 ON / RX POWER ON / RX MUTE OFF
- (2) Setting of PLL channel (1~10ch)
 - ① Press two numeric keys (1~10:channel No.).
For example) TALK MODE 1 channel → 0 and 1key
 - ② After , the following operation setting of TX and RX are the same number of channel .
 - A. * key → TX POWER1&2 ON
 - B. H / F key → HANDS FREE TALK (This item not use)
 - C. TALK key → TX DATA ON, RX MUTE ON
 - D. END key → TX POWER1&2 OFF / TX DATA OFF
- (3) Volume Control
Volume Control "Normal / High" switch over each time the MEMORY key is pressed.
Initial Volume is Normal. (only TX POWER1&2 ON)
- (4) RX MUTE ON/OFF
RX MUTE ON/OFF switch over each time the CHANNEL key is pressed.
(only TX POWER1&2 ON)
- (5) Detection of battery low
TALK/BATT LED is ON
- (6) Key monitor inspection mode
 - ① Each time a key is pressed, the TALK/BATT LED lights and the key monitor sounds.
 - ② Keys are pressed disorderly, and if after all keys have been pressed, the TALK/BATT LED lights for approximately 0.5 sec. and a beep is heard.

TEST MODE

BASE STATION

1. Overview

By operating the Slide SW and Keyboard SW on the BASE UNIT, the pass or fail of the completion process can be determined through the status of the LEDs, the sound of the key monitor, etc.

2. Startup.

(1) Startup of the TEST MODE by operation of the SPEAKER key. (RX POWER ON, CHARGE/IN USE LED ON)

- ① Turns on by pressing the SPEAKER key at power on.
- ② Continue pressing the SPEAKER key and set the TONE/PULSE SW from PULSE to TONE.
- ③ Release SPEAKER key.

INITIAL CHANNEL = 10CH, VCO adjustment channel

When the TEST MODE begins, a beep is heard.

(2) In case of TEST MODE in this way, there are several ways to change the normal mode.

- ① detect charge
- ② turn off the power, and turn on the power

3. VCO ADJUSTMENT mode / TX ADJUSTMENT mode / RX ADJUSTMENT mode

(1) adjustment channel.

- ① VCO ADJUSTMENT CHANNEL : 10CH (TEST MODE startup)
- ② TX ADJUSTMENT CHANNEL : 7CH (* key on)
- ③ RX ADJUSTMENT CHANNEL : 6CH (FLASH key on)

(2) Setting of PLL channel.

- ① Press two numeric keys (1~10: channel No.).

For example) 1CH → 0 and 1key

- ② Increment of PLL channel. → Press the PAGE key at the TEST MODE
(TX and RX are the same number of channel.)

1 → 2 → 3 → ———→ 2 4 → 2 5 → 1 → 2 → 3 → ———

(This item not use.)

(3) TX POWER control (By operating the TONE/PULSE SW)

TONE/PULSE SW PULSE → TX POWER ON, TONE/PULSE SW TONE → OFF

(4) TX DATA is ON. (Continue pressing the REDIAL/P key)(TX MUTE ON)

NOTE: Only REMOTE TALK MODE and INTERCOM MODE.

(5) RX MUTE control (By operating the RING SW).

RING SW ON → RX MUTE ON, RING SW OFF → RX MUTE OFF

4. Call circuit inspection mode

(1) how to setting (2 way)

- ① # key and 1 ~ 5 key
- ② By pressing the SPEAKER key, the mode is changed.

MODE1: REMOTE TALK MODE REMOTE ↔ LINE (CHARGE/IN USE LED ON)

MODE2: BASE TALK MODE BASE ↔ LINE (SPEAKER LED ON)

MODE3: INTERCOM MODE BASE ↔ REMOTE (CHARGE/IN USE LED & SPEAKER LED ON)

MODE4: REMOTE H/F TALK MODE REMOTE H/F ↔ LINE (SPEAKER LED ON) (This item not use.)

MODE5: CUTOFF MODE (ALL LEDs ON)

5. Detection circuit inspection mode

(1) Detection of ringer signal → CHARGE/IN USE LED is flashes, ringer sound output from speaker at the MODE3&5.

(2) Detection of charge → When the charge is detected, the CHARGE LED lights.

In the case of the TEST MODE by operation of Power ON → When the charge is detected, the mode change to the normal mode from the TEST MODE.

6. DTMF/PULSE send mode

(1) DTMF OUTPUT MODE

- Every time INT key press in MODE2, DTMF DIAL "1,2,3 . . ."output.

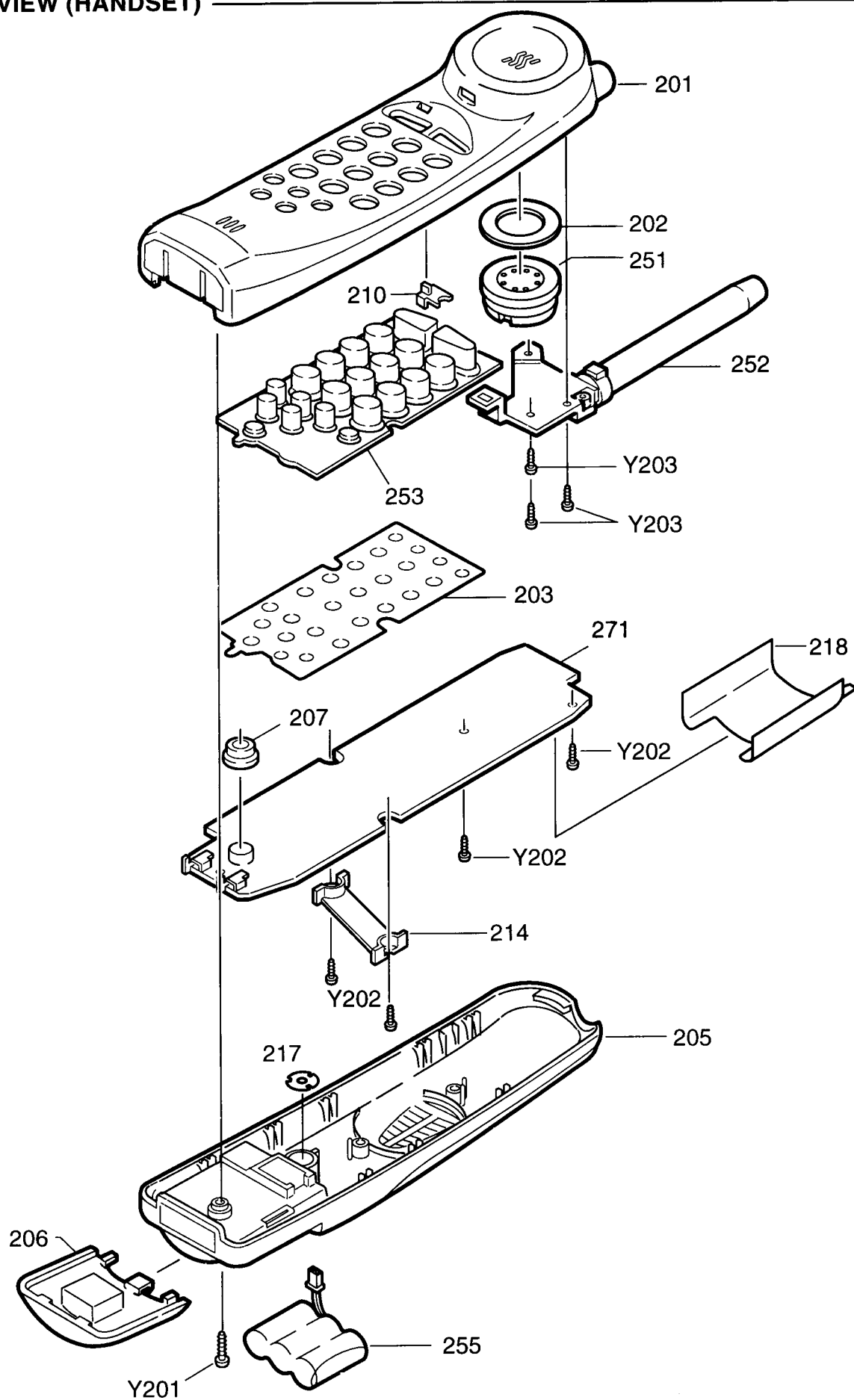
(2) DIAL PULSE OUTPUT MODE

- Every time REDIAL key press in MODE2, PULSE DIAL "1,2,3 . . ."output.

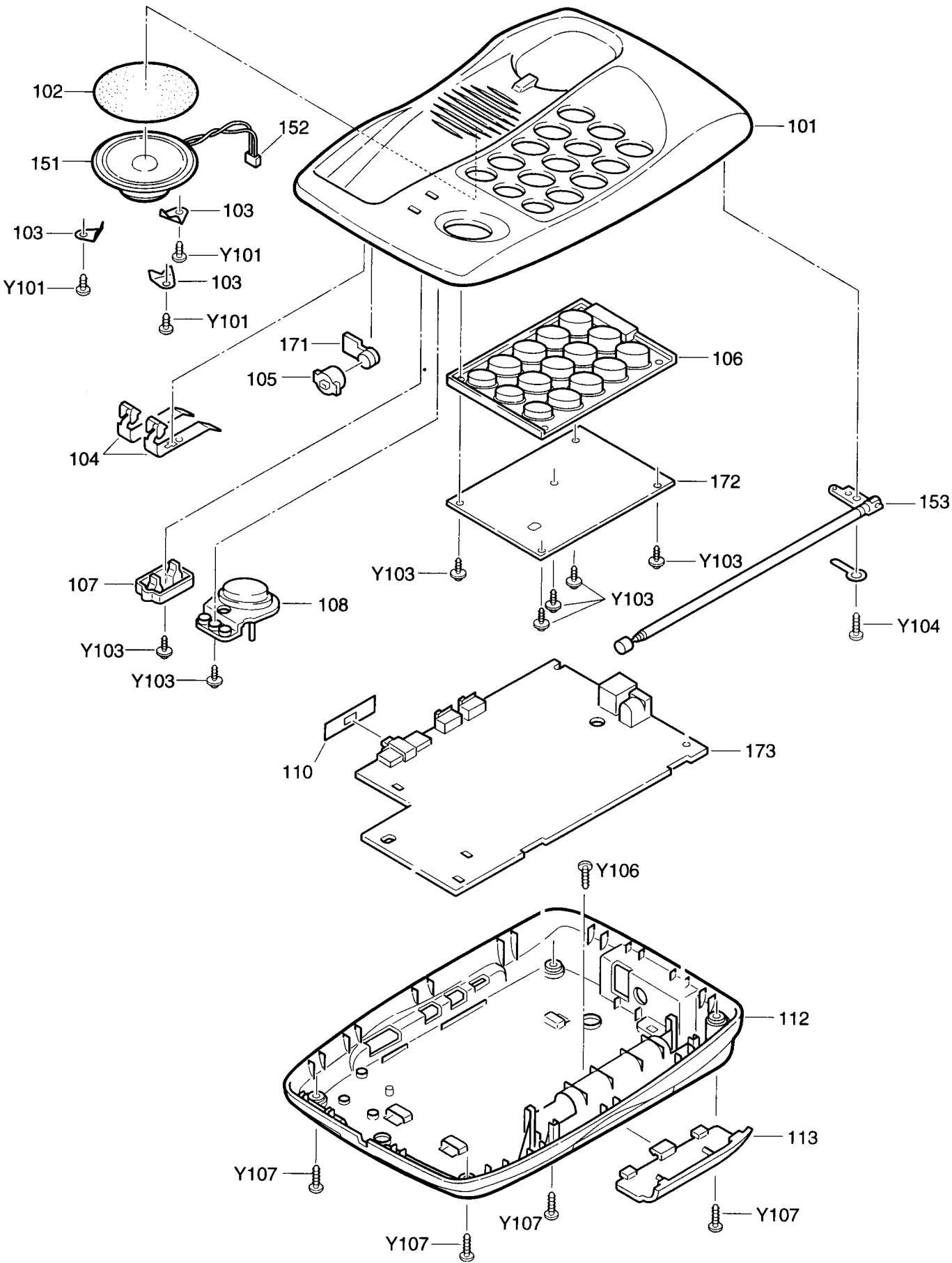
7. Key monitor inspection mode

- Every time the keys press, a buzzer sounds is output.

EXPLODED VIEW (HANDSET)



EXPLODED VIEW (BASE STATION)



PARTS LIST

PRODUCT SAFETY NOTICE

EACH PRECAUTION IN THIS MANUAL SHOULD BE FOLLOWED DURING SERVICING. COMPONENTS IDENTIFIED WITH THE IEC SYMBOL Δ IN THE PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATED COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE. WHEN REPLACING A COMPONENT IDENTIFIED BY Δ , USE ONLY THE REPLACEMENT PARTS DESIGNATED, OR PARTS WITH THE SAME RATINGS OF RESISTANCE, WATTAGE OR VOLTAGE THAT ARE DESIGNATED IN THE PARTS LIST IN THIS MANUAL. LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS MUST BE MADE TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE PRODUCT TO THE CUSTOMER.

The part of resistors(0 ohm) and capacitors (0.01U/0.047U) are not listed. To know those value, refer to the schematic diagram.

PACKING & ACCESSORIES

REF.NO.	PART NO.	DESCRIPTION
255	Δ 614 222 4922	BATTERY,RECHARGE
	Δ 645 029 0930	ADAPTOR,AC-DC(CLT-538X/AU, CLT-538X/NZ)
	Δ 645 031 5411	ADAPTOR,AC-DC(CLT-538/RU)
	Δ 645 004 7190	ASSY,CABLE,LINE,CORD (CLT-538X/AU)
	Δ 614 256 2949	CORD(CLT-538X/NZ)
	645 015 0203	CABLE,MODULAR(CLT-538/RU)
	645 026 1572	CABLE,MODULAR(CLT-538/RU)
	614 301 3839	CARTON CASE,INNER,INNER CARTON(CLT-538X/AU)
	614 301 7615	CARTON CASE,INNER,(CLT-538X/ NZ)
	614 301 7608	CARTON CASE,INNER,INNER CARTON(CLT-538/RU)
	614 300 4257	LABEL,CAUTION,REMOTE (CLT-538X/AU,CLT-538X/NZ)
	614 301 7820	LABEL,CAUTION,REMOTE (CLT-538/RU)
	614 216 0954	SHEET,SPEED DIAL
	614 301 3846	INSTRUCTION MANUAL, SHEET, QUICK GUIDE(CLT-538X/AU)
	614 301 7684	INSTRUCTION MANUAL,SHEET, QUICK GUIDE(CLT-538X/NZ)
	614 301 7677	INSTRUCTION MANUAL,SHEET, QUICK GUIDE(CLT-538/RU)
	614 300 7753	LABEL,CAUTION,CABINET (CLT-538X/AU,CLT-538X/NZ)
	614 301 7806	LABEL,CAUTION,CABINET (CLT-538/RU)
	614 270 4011	HOOK,(ON WALL)
	614 300 5223	CUSHION,PAD,INNER CARTON
	614 296 6990	CARD,WARRANTY,W-CARD (CLT-538X/AU)
	614 265 3661	CARD,WARRANTY,NZ WARRANTY (CLT-538X/NZ)
	614 301 2306	LABEL,POP
	614 301 7851	LABEL,IDENTIFICATION,CABINET BOTTOM(CLT-538X/NZ)

CABINET & CHASSIS

REF.NO.	PART NO.	DESCRIPTION
101	614 301 8094	CABINET
102	614 288 0081	NET
103	614 122 0796	BRACKET SPEAKER
104	614 297 2465	TERMINAL
105	614 241 7928	MOUNT-E,MIC
107	614 297 2731	DEC,WINDOW
108	614 297 4179	BUTTON
110	614 239 4304	COVER,VOL
112	614 301 3747	ASSY,CABINET,BOTTOM (CLT-538X/AU)
or	614 301 7400	ASSY,CABINET,BOTTOM (CLT-538X/NZ)
or	614 301 7394	ASSY,CABINET,BOTTOM (CLT-538/RU)
113	614 297 4858	LID,BATTERY
201	614 297 2274	CABINET
202	614 297 6296	SPACER,CUSHION,SP
205	614 301 3754	ASSY,CABINET,REAR(CLT-538X/AU)

REF.NO.	PART NO.	DESCRIPTION
or	614 301 7424	ASSY,CABINET,REAR(CLT-538X/NZ)
or	614 301 7417	ASSY,CABINET,REAR(CLT-538/RU)
206	614 297 5091	ASSY,LID,BATTERY
207	614 297 5183	SPACER,CUSHION,MIC
210	614 297 9266	DEC,WINDOW,CABINET
214	614 297 5169	HOLDER,PWB,PWB
217	614 297 6838	SPACER,REAR
218	614 299 4719	SPACER,SHEET,PWB
253	614 300 5049	BUTTON,RUBBER,10KEY

FIXING PARTS

REF.NO.	PART NO.	DESCRIPTION
Y101	411 021 4005	SCR S-TPG BIN 3X12,
Y103	411 024 3708	SCR S-TPG PAN+FLG 2X6,
Y104	411 021 4005	SCR S-TPG BIN 3X12,
Y106	411 022 8903	SCR S-TPG PAN 2.3X12,
Y107	411 021 4005	SCR S-TPG BIN 3X12,
Y201	411 022 8903	SCR S-TPG PAN 2.3X12,
Y202	411 022 7807	SCR S-TPG PAN 2X6,
Y203	411 022 7807	SCR S-TPG PAN 2X6,

ELECTRIC-PART

REF.NO.	PART NO.	DESCRIPTION
106	614 300 5025	BUTTON,RUBBER,12KEY
151	645 011 5189	SPEAKER,25
152	614 290 4275	CORD,2P CONNECTOR,FOR SPEAKER
153	Δ 645 012 3290	ANTENNA,ROD
or	Δ 614 228 7118	ANTENNA
203	614 297 5213	TERMINAL,SHEET SWITCH
251	645 027 4312	SPEAKER,150
252	614 300 3984	ASSY,ANTENNA

BASE MAIN PWB ASSY

REF.NO.	PART NO.	DESCRIPTION
173	614 300 8828	ASSY,PWB,BASE MAIN (CLT-538X/AU)
or	614 301 2849	ASSY,PWB,BASE MAIN(CLT-538/RU)
or	614 302 0127	ASSY,PWB,BASE MAIN (CLT-538X/NZ)
C101	403 015 3705	CERAMIC 2P C 50V
C102	403 073 9107	CERAMIC 4700P K 50V
C104	403 007 5809	CERAMIC 1.5P C 50V
C107	403 200 1202	ELECT 2.2U M 50V
C109	403 032 8608	CERAMIC 8P D 50V
C110	403 010 8507	CERAMIC 12P J 50V
C112	403 049 5706	ELECT 10U M 50V
C113	403 161 6704	CERAMIC 9P D 50V
C202	403 200 8201	ELECT 470U M 10V
C205	403 012 6808	CERAMIC 15P J 50V
C206	403 009 5708	CERAMIC 100P J 50V
C207	403 028 4102	CERAMIC 56P J 50V
C208	403 026 3305	CERAMIC 47P J 50V
C209	403 009 6002	CERAMIC 100P J 50V
C210	403 018 0503	CERAMIC 22P J 50V
C211	403 069 1702	CERAMIC 1000P K 50V
C213	403 195 7708	ELECT 10U M 50V
C218	403 027 1706	CERAMIC 5P C 50V
C220	403 011 5000	CERAMIC 120P J 50V
C221	403 073 0005	CERAMIC 3300P K 50V
C222	403 215 1808	CERAMIC 2200P J 50V
C223	403 320 5807	CERAMIC 1U K 10V

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
C224	403 071 8102	CERAMIC 2200P K 50V	C741	403 069 1801	CERAMIC 1000P K 50V
C301	403 134 7400	CERAMIC 1U Z 16V	C742	403 070 8806	CERAMIC 1500P K 50V
C302	403 068 0409	CERAMIC 0.1U Z 25V	C746	403 195 7708	ELECT 10U M 50V
C303	403 068 0409	CERAMIC 0.1U Z 25V	C747	403 200 9703	ELECT 47U M 10V
C304	403 068 0409	CERAMIC 0.1U Z 25V	C748	403 192 5905	CERAMIC 0.1U K 25V
C305	403 044 8504	ELECT 10U M 25V	C757	403 073 7301	CERAMIC 470P K 50V
C308	403 070 0909	CERAMIC 0.1U K 50V	C762	403 070 1005	CERAMIC 0.1U K 50V
C402	403 194 4005	ELECT 2200U M 6.3V	C763	403 073 9107	CERAMIC 4700P K 50V
C403	403 068 0409	CERAMIC 0.1U Z 25V	C764	403 073 9107	CERAMIC 4700P K 50V
C405	403 192 5905	CERAMIC 0.1U K 25V	C765	403 074 7706	CERAMIC 5600P K 50V
C406	403 019 2209	CERAMIC 24P J 50V	C770	403 067 9809	CERAMIC 0.1U K 25V
C407	403 019 2209	CERAMIC 24P J 50V	C771	403 192 5905	CERAMIC 0.1U K 25V
C409	403 068 0508	CERAMIC 0.1U Z 25V	C772	403 071 2902	CERAMIC 1800P K 50V
C410	403 201 1508	ELECT 220U M 6.3V	C773	403 026 7600	CERAMIC 470P J 50V
C419	403 073 7400	CERAMIC 470P K 50V	C774	403 200 1103	ELECT 1U M 50V
C420	403 026 7600	CERAMIC 470P J 50V	C775	403 031 2201	CERAMIC 680P J 50V
C421	403 026 7600	CERAMIC 470P J 50V	C776	403 074 7607	CERAMIC 5600P K 50V
C422	403 073 7400	CERAMIC 470P K 50V	C777	403 269 5906	CERAMIC 0.22U K 16V
C600	403 192 5905	CERAMIC 0.1U K 25V	C778	403 009 5807	CERAMIC 100P J 50V
C601	403 033 4500	CERAMIC 82P J 50V	C779	403 130 4106	CERAMIC 0.068U K 25V
C602	403 192 5905	CERAMIC 0.1U K 25V	C782	403 200 8003	ELECT USE 22U M 16V
C603	403 173 5207	CERAMIC 0.47U Z 25V	C783	403 192 5905	CERAMIC 0.1U K 25V
C604	403 192 5905	CERAMIC 0.1U K 25V	C784	403 195 7708	ELECT 10U M 50V
C605	403 073 0005	CERAMIC 3300P K 50V	C785	403 038 7407	ELECT 220U M 6.3V
C606	403 010 1102	CERAMIC 1000P J 50V	C786	403 320 5807	CERAMIC 1U K 10V
C607	403 018 7502	CERAMIC 220P J 50V	C787	403 069 1702	CERAMIC 1000P K 50V
C608	403 207 0505	CERAMIC 0.47U Z 16V	C907	▲ 403 066 2009	MT-POLYEST 0.1U K 250V (CLT-538X/AU,CLT-538X/NZ)
C609	403 134 7400	CERAMIC 1U Z 16V	or	▲ 403 118 3008	MT-POLYEST 0.1U K 250V
C610	403 026 7501	CERAMIC 470P J 50V	or	▲ 403 304 4604	MT-POLYEST 0.1U K 250V
C611	403 192 5905	CERAMIC 0.1U K 25V	C908	403 200 8201	ELECT 470U M 10V
C612	403 207 0307	CERAMIC 1U Z 16V	C911	403 200 1103	ELECT 1U M 50V
C613	403 073 4201	CERAMIC 3900P K 50V	C912	403 068 0409	CERAMIC 0.1U Z 25V
C616	403 138 3903	CERAMIC 0.033U M 50V	C913	403 068 0409	CERAMIC 0.1U Z 25V
C619	403 068 1505	CERAMIC 0.018U K 25V	C919	403 200 6900	ELECT 1000U M 16V
C620	403 009 5708	CERAMIC 100P J 50V	C920	▲ 403 077 2807	CERAMIC 1000P Z 2K
C622	403 071 8102	CERAMIC 2200P K 50V	C921	▲ 403 077 2807	CERAMIC 1000P Z 2K
C626	403 192 5905	CERAMIC 0.1U K 25V	C922	▲ 403 077 2807	CERAMIC 1000P Z 2K
C641	403 009 5708	CERAMIC 100P J 50V	CN101	614 251 0926	PLUG
C642	403 009 5708	CERAMIC 100P J 50V	CN401	614 201 7685	SOCKET
C653	403 200 9901	ELECT 220U M 10V	CN702	614 237 9752	SOCKET
C654	403 072 8507	CERAMIC 330P K 50V	or	614 035 4911	SOCKET,DIP 2P
C657	403 022 8205	CERAMIC 33P J 50V	CN703	645 004 2683	PLUG,2P
C701	403 200 9901	ELECT 220U M 10V	CN901	▲ 614 253 9286	SOCKET
C703	403 192 5905	CERAMIC 0.1U K 25V	CN902	614 035 9091	SOCKET
C708	403 192 5905	CERAMIC 0.1U K 25V	or	614 253 0931	JACK
C709	403 068 2007	CERAMIC 0.022U K 25V	or	645 028 5899	SOCKET,DC
C711	403 192 5905	CERAMIC 0.1U K 25V	CN909	614 051 9785	LUG,FOR_ANT
C712	403 023 4503	CERAMIC 330P J 50V	D120	407 007 9904	DIODE GMA01-BT
C713	403 068 0508	CERAMIC 0.1U Z 25V	or	407 012 4406	DIODE 1SS133-T-77
C714	403 200 9901	ELECT 220U M 10V	D201	407 176 3604	VARACTOR DI HVU350-TRF
C715	403 072 8507	CERAMIC 330P K 50V	D202	407 157 0202	VARACTOR DI HVU202-30-TRF
C718	403 070 1005	CERAMIC 0.1U K 50V	D401	407 012 4406	DIODE 1SS133-T-77
C719	403 192 5905	CERAMIC 0.1U K 25V	D402	407 012 4406	DIODE 1SS133-T-77
C720	403 200 1103	ELECT 1U M 50V	D403	407 099 5303	ZENER DIODE MTZJ-T-775.6B
C721	403 192 5905	CERAMIC 0.1U K 25V	D406	408 036 7206	LED SLZ-136B-25H-AB-T1
C722	403 200 9802	ELECT 100U M 10V	D407	408 036 7206	LED SLZ-136B-25H-AB-T1
C723	403 192 5905	CERAMIC 0.1U K 25V	D412	407 003 3609	DIODE DAN202K-T146
C724	403 207 0307	CERAMIC 1U Z 16V	or	407 008 5400	DIODE MA151WK-TX
C725	403 200 9802	ELECT 100U M 10V	D413	407 008 5400	DIODE MA151WK-TX
C726	403 195 7708	ELECT 10U M 50V	or	407 003 3609	DIODE DAN202K-T146
C727	403 200 9802	ELECT 100U M 10V	D903	▲ 407 078 2002	ZENER DIODE MTZ-T-7739B
C728	403 192 5905	CERAMIC 0.1U K 25V	or	▲ 407 078 2101	ZENER DIODE MTZ-T-7739C
C729	403 200 1103	ELECT 1U M 50V	or	▲ 407 078 1906	ZENER DIODE MTZ-T-7739A
C732	403 200 4807	ELECT 22U M 25V	D904	▲ 407 078 1906	ZENER DIODE MTZ-T-7739A
C733	403 020 5602	CERAMIC 270P J 50V	or	▲ 407 078 2002	ZENER DIODE MTZ-T-7739B
C734	403 192 5905	CERAMIC 0.1U K 25V	or	▲ 407 078 2101	ZENER DIODE MTZ-T-7739C
C737	403 069 1801	CERAMIC 1000P K 50V	D905	407 012 4406	DIODE 1SS133-T-77
C738	403 073 9206	CERAMIC 4700P K 50V	D907	407 063 9108	ZENER DIODE MTZJ6.8B-T-77
C739	403 010 1102	CERAMIC 1000P J 50V	D920	▲ 407 004 9808	DIODE DSK10E-BT
C740	403 070 8806	CERAMIC 1500P K 50V			

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
D921	△ 407 004 9808	DIODE DSK10E-BT	or	405 014 4509	TR 2SC2412K-T96-R
D922	△ 407 004 9808	DIODE DSK10E-BT	or	405 146 2206	TR KTC3875-GR-RTK
D923	△ 407 004 9808	DIODE DSK10E-BT	Q902	405 146 2206	TR KTC3875-GR-RTK
D924	△ 407 099 6904	ZENER DIODE MTZJ15A-T-77	or	405 015 8704	TR 2SC2812-L6-TB
D925	407 063 9108	ZENER DIODE MTZJ6.8B-T-77	or	405 014 4509	TR 2SC2412K-T96-R
IC301	409 416 7205	IC MC13109FB	Q903	405 147 2007	TR KTA1298-Y-RTK
IC302	409 155 2400	IC BA728F-T1	Q908	405 023 5306	TR 2SD400-F-MP
IC401	410 331 2701	IC LC662312A-4K93,MICON	R001	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
IC402	409 281 6204	IC MN1380-P	R028	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
IC701	409 285 8709	IC MC14066BD-R2			(CLT-538X/AU)
or	409 199 4705	IC MC14066BF-R	R036	401 035 4108	MT-GLAZE 0.000 ZA 1/8W
IC703	409 332 4906	IC MC34119D-R2			(CLT-538X/AU)
or	409 203 2802	IC MC34119M-R1	R101	401 038 0602	MT-GLAZE 220 JA 1/10W
or	409 345 1008	IC NJM2113M-TE1	R102	401 038 3504	MT-GLAZE 330 JA 1/10W
IC704	△ 409 114 2700	IC BA6566	R106	401 038 0800	MT-GLAZE 22K JA 1/10W
IC706	409 365 0203	IC MC33219ADW-R2	R107	401 037 7909	MT-GLAZE 1.5K JA 1/10W
IC901	△ 407 121 1204	PHOTO COUPLE PS2505-1	R108	401 038 9209	MT-GLAZE 6.8K JA 1/10W
or	△ 409 204 4607	IC TLP520-GB	R110	401 035 4900	MT-GLAZE 1K JA 1/8W
L101	614 028 3600	FILTER	R111	401 035 4900	MT-GLAZE 1K JA 1/8W
L102	645 001 4581	INDUCTOR,100U K	R112	401 035 4900	MT-GLAZE 1K JA 1/8W
L903	645 004 0382	INDUCTOR,22U K	R125	401 037 0108	MT-GLAZE 5.6K JA 1/8W
L904	645 004 0382	INDUCTOR,22U K	R126	401 037 0108	MT-GLAZE 5.6K JA 1/8W
L905	645 004 0382	INDUCTOR,22U K	R127	401 037 0108	MT-GLAZE 5.6K JA 1/8W
L906	645 004 0382	INDUCTOR,22U K	R199	401 021 0602	CARBON 56 JA 1/4W
L907	△ 645 003 5814	INDUCTOR,100U J	R201	401 037 5103	MT-GLAZE 10 JA 1/10W
L908	△ 645 003 5814	INDUCTOR,100U J	R203	401 038 6505	MT-GLAZE 47K JA 1/10W
Q101	405 045 9108	TR 2SK543-4-TB	R204	401 037 5202	MT-GLAZE 100 JA 1/10W
Q201	405 035 6001	TR 2SC2413K-T96-Q	R205	401 038 3405	MT-GLAZE 33 JA 1/10W
Q202	405 035 6001	TR 2SC2413K-T96-Q	R206	401 037 5400	MT-GLAZE 1K JA 1/10W
Q204	405 146 9700	TR KTA1504-GR-RTH	R207	401 038 9308	MT-GLAZE 68K JA 1/10W
or	405 002 0308	TR 2SA1037K-T96-R	R209	401 038 6505	MT-GLAZE 47K JA 1/10W
or	405 002 6706	TR 2SA1179-M6-TB	R210	401 037 5707	MT-GLAZE 100K JA 1/10W
or	405 005 5508	TR 2SA812-M6-T1B	R211	401 035 7901	MT-GLAZE 1.5K JA 1/8W
Q401	405 146 2206	TR KTC3875-GR-RTK	R212	401 038 6505	MT-GLAZE 47K JA 1/10W
or	405 014 4509	TR 2SC2412K-T96-R	R213	401 037 5608	MT-GLAZE 10K JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R215	401 037 5707	MT-GLAZE 100K JA 1/10W
Q402	405 146 9700	TR KTA1504-GR-RTH	R216	401 037 5608	MT-GLAZE 10K JA 1/10W
or	405 002 0308	TR 2SA1037K-T96-R	R217	401 038 3603	MT-GLAZE 3.3K JA 1/10W
or	405 005 5508	TR 2SA812-M6-T1B	R220	401 038 6505	MT-GLAZE 47K JA 1/10W
or	405 002 6706	TR 2SA1179-M6-TB	R221	401 038 3702	MT-GLAZE 33K JA 1/10W
Q403	405 018 0101	TR 2SC3331-T-AA	R223	401 039 0502	MT-GLAZE 82K JA 1/10W
Q704	405 146 2206	TR KTC3875-GR-RTK	R224	401 037 9309	MT-GLAZE 18K JA 1/10W
or	405 014 4509	TR 2SC2412K-T96-R	R225	401 038 6505	MT-GLAZE 47K JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R226	401 037 5707	MT-GLAZE 100K JA 1/10W
Q708	405 146 2206	TR KTC3875-GR-RTK	R227	401 035 5402	MT-GLAZE 100K JA 1/8W
or	405 014 4509	TR 2SC2412K-T96-R	R228	401 037 5202	MT-GLAZE 100 JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R229	401 038 5102	MT-GLAZE 3.9K JA 1/10W
Q709	405 146 2206	TR KTC3875-GR-RTK	R300	401 038 3504	MT-GLAZE 330 JA 1/10W
or	405 014 4509	TR 2SC2412K-T96-R	R301	401 038 2200	MT-GLAZE 27K JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R302	401 038 3702	MT-GLAZE 33K JA 1/10W
Q710	405 146 2206	TR KTC3875-GR-RTK	R331	401 038 5409	MT-GLAZE 390K JA 1/10W
or	405 014 4509	TR 2SC2412K-T96-R	R332	401 039 0304	MT-GLAZE 820 JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R401	401 038 6406	MT-GLAZE 4.7K JA 1/10W
Q723	405 014 4509	TR 2SC2412K-T96-R	R402	401 038 6406	MT-GLAZE 4.7K JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R404	401 037 5400	MT-GLAZE 1K JA 1/10W
or	405 146 2206	TR KTC3875-GR-RTK	R405	401 036 1908	MT-GLAZE 220K JA 1/8W
Q724	405 146 2206	TR KTC3875-GR-RTK	R408	401 037 5707	MT-GLAZE 100K JA 1/10W
or	405 014 4509	TR 2SC2412K-T96-R	R409	401 038 6505	MT-GLAZE 47K JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R410	401 035 5402	MT-GLAZE 100K JA 1/8W
Q725	405 146 2206	TR KTC3875-GR-RTK	R412	401 035 5204	MT-GLAZE 10K JA 1/8W
or	405 014 4509	TR 2SC2412K-T96-R	R417	401 037 5707	MT-GLAZE 100K JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R418	401 037 5707	MT-GLAZE 100K JA 1/10W
Q726	405 146 2206	TR KTC3875-GR-RTK	R419	401 037 5707	MT-GLAZE 100K JA 1/10W
or	405 014 4509	TR 2SC2412K-T96-R	R420	401 037 5707	MT-GLAZE 100K JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R421	401 037 5707	MT-GLAZE 100K JA 1/10W
Q727	405 146 2206	TR KTC3875-GR-RTK	R423	401 037 5400	MT-GLAZE 1K JA 1/10W
or	405 014 4509	TR 2SC2412K-T96-R	R425	401 037 5400	MT-GLAZE 1K JA 1/10W
or	405 015 8704	TR 2SC2812-L6-TB	R427	401 037 5608	MT-GLAZE 10K JA 1/10W
Q901	405 015 8704	TR 2SC2812-L6-TB	R429	401 036 1908	MT-GLAZE 220K JA 1/8W
			R430	401 037 5707	MT-GLAZE 100K JA 1/10W

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
R431	401 038 6604	MT-GLAZE 470K JA 1/10W	R800	401 036 3100	MT-GLAZE 27K JA 1/8W
R432	401 035 5204	MT-GLAZE 10K JA 1/8W	R801	401 037 5608	MT-GLAZE 10K JA 1/10W
R442	401 035 5204	MT-GLAZE 10K JA 1/8W	R802	401 038 3801	MT-GLAZE 330K JA 1/10W
R445	401 036 8501	MT-GLAZE 47K JA 1/8W	R803	401 038 6604	MT-GLAZE 470K JA 1/10W
R450	401 035 4900	MT-GLAZE 1K JA 1/8W	R804	401 038 3504	MT-GLAZE 330 JA 1/10W
R451	401 035 4900	MT-GLAZE 1K JA 1/8W	R805	401 037 5806	MT-GLAZE 1M JA 1/10W
R452	401 035 4900	MT-GLAZE 1K JA 1/8W	R806	401 038 5102	MT-GLAZE 3.9K JA 1/10W
R453	401 035 4900	MT-GLAZE 1K JA 1/8W	R807	401 037 5202	MT-GLAZE 100 JA 1/10W
R454	401 037 5400	MT-GLAZE 1K JA 1/10W	R808	401 038 0602	MT-GLAZE 220 JA 1/10W
R455	401 012 4404	CARBON 100 JA 1/4W	R906	401 038 0701	MT-GLAZE 2.2K JA 1/10W
R600	401 039 0502	MT-GLAZE 82K JA 1/10W	R907	401 037 5608	MT-GLAZE 10K JA 1/10W
R601	401 038 3801	MT-GLAZE 330K JA 1/10W	R908	401 038 7809	MT-GLAZE 56K JA 1/10W
R602	401 037 6803	MT-GLAZE 12K JA 1/10W	R909	401 037 5608	MT-GLAZE 10K JA 1/10W
R603	401 037 5608	MT-GLAZE 10K JA 1/10W	R910	△ 401 016 4707	CARBON 22K JA 1/4W
R604	401 037 6803	MT-GLAZE 12K JA 1/10W	R911	△ 402 048 2501	RESISTOR 150 J- 1W
R605	401 039 0502	MT-GLAZE 82K JA 1/10W	R912	401 037 5707	MT-GLAZE 100K JA 1/10W
R606	401 037 5400	MT-GLAZE 1K JA 1/10W	R915	401 037 7800	MT-GLAZE 150 JA 1/10W
R607	401 035 5204	MT-GLAZE 10K JA 1/8W	R917	401 037 5707	MT-GLAZE 100K JA 1/10W
R608	401 037 5608	MT-GLAZE 10K JA 1/10W	R929	401 038 3504	MT-GLAZE 330 JA 1/10W
R609	401 037 9309	MT-GLAZE 18K JA 1/10W	R931	401 037 5608	MT-GLAZE 10K JA 1/10W
R610	401 037 5707	MT-GLAZE 100K JA 1/10W	R950	401 038 3603	MT-GLAZE 3.3K JA 1/10W
R611	401 038 9209	MT-GLAZE 6.8K JA 1/10W	R951	401 038 0909	MT-GLAZE 220K JA 1/10W
R616	401 037 5608	MT-GLAZE 10K JA 1/10W	R952	401 037 7909	MT-GLAZE 1.5K JA 1/10W
R617	401 038 0800	MT-GLAZE 22K JA 1/10W	R953	401 039 0403	MT-GLAZE 8.2K JA 1/10W
R619	401 037 5608	MT-GLAZE 10K JA 1/10W	R954	401 039 0403	MT-GLAZE 8.2K JA 1/10W
R620	401 038 0909	MT-GLAZE 220K JA 1/10W	R955	401 037 8104	MT-GLAZE 150K JA 1/10W
R624	401 035 5204	MT-GLAZE 10K JA 1/8W	R956	401 038 7700	MT-GLAZE 5.6K JA 1/10W
R625	401 037 5400	MT-GLAZE 1K JA 1/10W	R957	401 037 7909	MT-GLAZE 1.5K JA 1/10W
R707	401 038 3801	MT-GLAZE 330K JA 1/10W	R958	401 038 9308	MT-GLAZE 68K JA 1/10W
R710	401 037 0702	MT-GLAZE 560K JA 1/8W	R959	401 038 9407	MT-GLAZE 680K JA 1/10W
R711	401 037 2607	MT-GLAZE 680K JA 1/8W	R960	401 038 0701	MT-GLAZE 2.2K JA 1/10W
R718	401 035 8205	MT-GLAZE 150K JA 1/8W	R961	401 037 5400	MT-GLAZE 1K JA 1/10W
R719	401 038 3702	MT-GLAZE 33K JA 1/10W	R962	401 038 3603	MT-GLAZE 3.3K JA 1/10W
R720	401 018 1506	CARBON 33 JA 1/4W	R963	401 037 6803	MT-GLAZE 12K JA 1/10W
R721	401 037 5707	MT-GLAZE 100K JA 1/10W	R964	401 037 6803	MT-GLAZE 12K JA 1/10W
R722	401 037 6902	MT-GLAZE 120K JA 1/10W	R965	401 038 6307	MT-GLAZE 470 JA 1/10W
R724	401 038 2309	MT-GLAZE 270K JA 1/10W	R966	401 038 6208	MT-GLAZE 47 JA 1/10W
R725	401 036 3100	MT-GLAZE 27K JA 1/8W	R967	401 038 9308	MT-GLAZE 68K JA 1/10W
R727	401 035 9806	MR-GLAZE 18K JA 1/8W	R968	401 038 0602	MT-GLAZE 220 JA 1/10W
R730	401 038 6406	MT-GLAZE 4.7K JA 1/10W	R969	401 037 5707	MT-GLAZE 100K JA 1/10W
R731	401 037 5608	MT-GLAZE 10K JA 1/10W	R970	△ 402 048 4901	RESISTOR 47 J- 1W
R732	401 037 5707	MT-GLAZE 100K JA 1/10W	R971	401 038 3603	MT-GLAZE 3.3K JA 1/10W
R733	401 037 8005	MT-GLAZE 15K JA 1/10W	R972	401 038 9001	MT-GLAZE 680 JA 1/10W
R735	401 037 5707	MT-GLAZE 100K JA 1/10W	R973	401 037 7909	MT-GLAZE 1.5K JA 1/10W
R736	401 036 1700	MT-GLAZE 22K JA 1/8W	R974	401 037 9200	MT-GLAZE 1.8K JA 1/10W
R737	401 037 5707	MT-GLAZE 100K JA 1/10W	R975	401 037 5400	MT-GLAZE 1K JA 1/10W
R738	401 037 5400	MT-GLAZE 1K JA 1/10W	RY901	△ 614 252 6750	RELAY
R739	401 035 6607	MT-GLAZE 120 JA 1/8W	S401	614 234 8642	SWITCH,SLIDE
R740	401 037 5400	MT-GLAZE 1K JA 1/10W	or	614 253 0948	SWITCH,SLIDE
R741	401 038 0701	MT-GLAZE 2.2K JA 1/10W	or	645 028 1082	SWITCH,SLIDE
R742	401 038 7700	MT-GLAZE 5.6K JA 1/10W	S402	614 234 8642	SWITCH,SLIDE
R743	401 037 9408	MT-GLAZE 180K JA 1/10W			(CLT-538X/AU,CLT-538/RU)
R745	401 036 6606	MT-GLAZE 39K JA 1/8W	or	614 253 0948	SWITCH,SLIDE
R747	401 038 0701	MT-GLAZE 2.2K JA 1/10W			(CLT-538X/AU,CLT-538/RU)
R748	401 037 6902	MT-GLAZE 120K JA 1/10W	or	645 028 1082	SWITCH,SLIDE
R751	401 037 5608	MT-GLAZE 10K JA 1/10W			(CLT-538X/AU,CLT-538/RU)
R752	401 035 5204	MT-GLAZE 10K JA 1/8W	S403	614 220 5518	SWITCH,TACT
R753	401 038 3801	MT-GLAZE 330K JA 1/10W	or	645 030 0998	SWITCH,PUSH
R754	401 035 5204	MT-GLAZE 10K JA 1/8W	S404	614 234 8642	SWITCH,SLIDE(CLT-538X/AU)
R755	401 038 0909	MT-GLAZE 220K JA 1/10W	or	614 253 0948	SWITCH,SLIDE(CLT-538X/AU)
R758	401 035 5402	MT-GLAZE 100K JA 1/8W	or	645 028 1082	SWITCH,SLIDE(CLT-538X/AU)
R770	401 036 8501	MT-GLAZE 47K JA 1/8W	SG901	△ 645 025 3331	SURGE-ABSORBER
R778	401 037 8104	MT-GLAZE 150K JA 1/10W	SG902	△ 407 190 0603	VARISTOR ERZVA7V201
R779	401 037 5608	MT-GLAZE 10K JA 1/10W			(CLT-538X/AU,CLT-538X/NZ)
R782	401 037 5608	MT-GLAZE 10K JA 1/10W	T101	645 032 9425	TRANS,RF,39.3MHZ
R784	401 039 0403	MT-GLAZE 8.2K JA 1/10W	T103	645 032 9401	TRANS,OSC,29MHZ
R785	401 037 3802	MT-GLAZE 8.2K JA 1/8W	T201	645 032 9418	TRANS,OSC,30MHZ
R786	401 037 5608	MT-GLAZE 10K JA 1/10W	T202	645 032 9432	TRANS,RF,30MHZ
R788	401 038 7908	MT-GLAZE 560K JA 1/10W	T301	645 028 0771	TRANS,IF 455KHZ
R789	401 037 2300	MT-GLAZE 68K JA 1/8W	T701	△ 645 012 6093	TRANS,ISOLATE

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
T702	△ 645 012 6093	TRANS,ISOLATE
VR301	614 250 7285	POTENTIOMETER
or	645 022 9510	VR,SEMI,100K N
VR601	614 250 7292	POTENTIOMETER
or	645 033 6560	VR,SEMI,200K N
VR701	614 232 4943	VR,SLIDE
X101	645 028 0795	OSC,CRYSTAL 10.24MHZ
X401	614 256 2109	RESONATOR,XTAL
XF101	614 265 3586	FILTER,LC
XF301	614 030 5074	I.F FILTER
or	614 030 5081	I.F FILTER
or	614 030 5098	I.F FILTER
or	614 030 5104	I.F FILTER
XF302	614 261 3771	FILTER

BASE MIC PWB ASSY

REF.NO.	PART NO.	DESCRIPTION
171	614 300 8835	ASSY,PWB,BASE MIC
CN795	614 035 4911	SOCKET,DIP 2P
or	614 237 9752	SOCKET
D795	407 099 6102	ZENER DIODE MTZJ10B-T-77
MIC05	614 245 4275	MICROPHONE

BASE CONT PWB ASSY

REF.NO.	PART NO.	DESCRIPTION
172	614 300 8071	ASSY,PWB,BASE CONT,BASE SWITCH
CN481	614 035 5000	SOCKET,DIP 11P
or	614 231 2766	DIP MATE SOCKET
D481	407 163 7301	LED PY1101W-TR
D482	407 163 7301	LED PY1101W-TR
D483	407 163 7301	LED PY1101W-TR
D484	407 163 7301	LED PY1101W-TR
D485	407 163 7301	LED PY1101W-TR
D486	407 163 7301	LED PY1101W-TR
D487	407 163 7301	LED PY1101W-TR
D488	407 163 7301	LED PY1101W-TR
D489	407 163 7301	LED PY1101W-TR
D490	407 163 7301	LED PY1101W-TR
D491	407 163 7301	LED PY1101W-TR
D492	407 163 7301	LED PY1101W-TR
R481	401 038 1807	MT-GLAZE 27 JA 1/10W
R482	401 038 1807	MT-GLAZE 27 JA 1/10W
R483	401 038 1807	MT-GLAZE 27 JA 1/10W
R484	401 038 1807	MT-GLAZE 27 JA 1/10W

REMOTE MAIN PWB ASSY

REF.NO.	PART NO.	DESCRIPTION
271	614 301 0173	ASSY,PWB REMOTE MAIN
BZ699	614 234 9618	BUZZER
or	645 024 2977	BUZZER
C001	403 207 0505	CERAMIC 0.47U Z 16V
C002	403 201 1706	ELECT 470U M 6.3V
C004	403 207 0505	CERAMIC 0.47U Z 16V
C008	403 192 5905	CERAMIC 0.1U K 25V
C010	403 008 7406	CERAMIC 10P D 50V
C011	403 008 8007	CERAMIC 10P D 50V
C012	403 008 7406	CERAMIC 10P D 50V
C013	403 008 7406	CERAMIC 10P D 50V
C020	403 012 6808	CERAMIC 15P J 50V
C021	403 012 6808	CERAMIC 15P J 50V
C099	403 067 9304	CERAMIC 0.01U K 25V
C150	403 008 7406	CERAMIC 10P D 50V
C155	403 299 1602	CERAMIC 1U K 16V
C156	403 067 9304	CERAMIC 0.01U K 25V
C157	403 034 3601	CERAMIC 9P D 50V
C158	403 012 6808	CERAMIC 15P J 50V

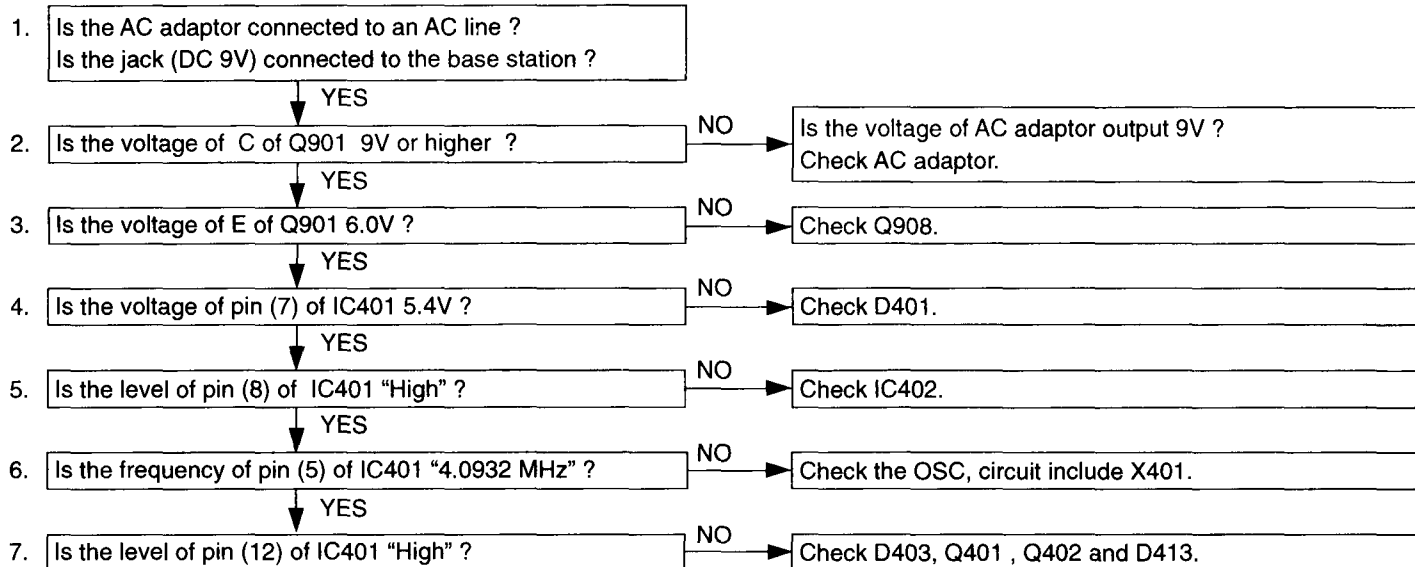
REF.NO.	PART NO.	DESCRIPTION
C160	403 296 8109	TA-SOLID 10U M 10V
C163	403 025 2101	CERAMIC 4P C 50V
C165	403 025 1609	CERAMIC 4P C 50V
C251	403 026 2803	CERAMIC 47P J 50V
C253	403 027 1201	CERAMIC 5P C 50V
C254	403 009 6002	CERAMIC 100P J 50V
C255	403 026 3305	CERAMIC 47P J 50V
C256	403 026 2803	CERAMIC 47P J 50V
C257	403 009 6002	CERAMIC 100P J 50V
C260	403 012 6808	CERAMIC 15P J 50V
C261	403 130 3604	CERAMIC 0.047U K 25V
C262	403 321 9408	TA-SOLID 2.2U M 10V
C351	403 134 7400	CERAMIC 1U Z 16V
C352	403 068 0409	CERAMIC 0.1U Z 25V
C353	403 068 0409	CERAMIC 0.1U Z 25V
C354	403 068 0409	CERAMIC 0.1U Z 25V
C355	403 296 8109	TA-SOLID 10U M 10V
C358	403 192 5905	CERAMIC 0.1U K 25V
C611	403 011 5000	CERAMIC 120P J 50V
C612	403 013 5800	CERAMIC 1500P J 50V
C613	403 134 7400	CERAMIC 1U Z 16V
C614	403 215 1808	CERAMIC 2200P J 50V
C615	403 215 1808	CERAMIC 2200P J 50V
C616	403 207 0307	CERAMIC 1U Z 16V
C650	403 192 5905	CERAMIC 0.1U K 25V
C651	403 020 0409	CERAMIC 27P J 50V
C652	403 207 0307	CERAMIC 1U Z 16V
C653	403 207 0505	CERAMIC 0.47U Z 16V
C654	403 192 5905	CERAMIC 0.1U K 25V
C655	403 075 5305	CERAMIC 8200P K 50V
C656	403 215 1808	CERAMIC 2200P J 50V
C657	403 023 4503	CERAMIC 330P J 50V
C658	403 207 0505	CERAMIC 0.47U Z 16V
C659	403 207 0307	CERAMIC 1U Z 16V
C660	403 018 7502	CERAMIC 220P J 50V
C661	403 192 5905	CERAMIC 0.1U K 25V
C668	403 207 0307	CERAMIC 1U Z 16V
C669	403 192 5905	CERAMIC 0.1U K 25V
C670	403 071 8102	CERAMIC 2200P K 50V
C671	403 276 7603	TA0SOLID 3.3U M 10V
C672	403 073 4201	CERAMIC 3900P K 50V
C674	403 192 5905	CERAMIC 0.1U K 25V
C675	403 009 5807	CERAMIC 100P J 50V
C676	403 192 5905	CERAMIC 0.1U K 25V
C689	403 296 8109	TA-SOLID 10U M 10V
C699	403 207 0505	CERAMIC 0.47U Z 16V
CN001	645 028 5905	PLUG,2P
or	614 214 4305	PLUG
CN151	645 005 6062	PLUG,2P
CN951	614 297 5206	TERMINAL,CHARGE
CN952	614 297 5206	TERMINAL,CHARGE
D005	407 209 9306	LED BR1112H-730-TR
D006	407 209 9405	LED PY1112H-730-TR
D007	407 209 9405	LED PY1112H-730-TR
D008	407 209 9405	LED PY1112H-730-TR
D009	407 209 9405	LED PY1112H-730-TR
D098	407 204 8601	DIODE KDS181-RTK
or	407 003 4507	DIODE DAP202K-T146
D099	407 179 4608	ZENER DIODE UDZ5.6B-TE-17
D251	407 176 3703	VARACTOR DI KV1832C-TR
D660	407 149 0807	DIODE 1SS355 TE-17
D699	407 149 0807	DIODE 1SS355 TE-17
IC001	410 328 9805	IC UPD750008GB-F07-3BS,
IC003	409 353 4206	IC PST9127N-R
IC351	409 375 6608	IC MC13109FTA
IC653	409 155 2400	IC BA728F-T1
L151	614 028 3594	FILTER
L153	614 249 7715	INDUCTOR 0.47UH M
MIC01	614 245 4275	MICROPHONE
Q001	405 080 2409	TR 2SB624-BV5-T1

PARTS LIST

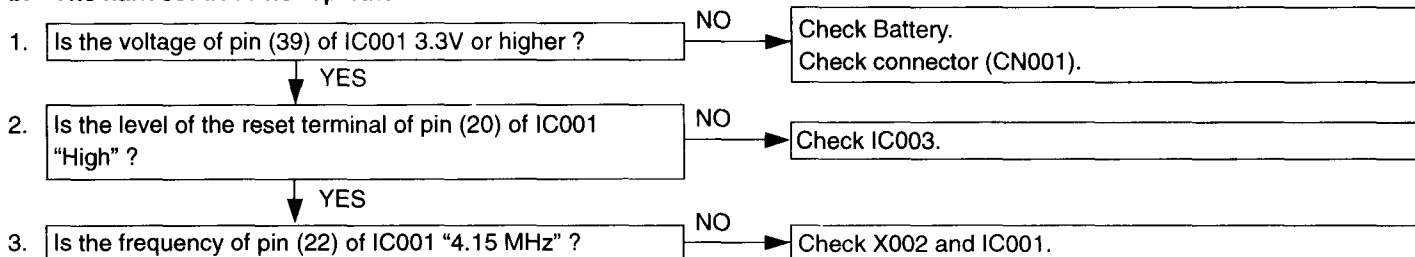
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
or	405 007 7708	TR 2SB624-T1-BV4	R262	401 039 0205	MT-GLAZE 82 JA 1/10W
or	405 147 2007	TR KTA1298-Y-RTK	R263	401 038 3603	MT-GLAZE 3.3K JA 1/10W
or	405 008 7509	TR 2SB815-B6-TB	R264	401 038 7601	MT-GLAZE 560 JA 1/10W
Q002	405 005 5508	TR 2SA812-M6-T1B	R265	401 037 5202	MT-GLAZE 100 JA 1/10W
or	405 002 6706	TR 2SA1179-M6-TB	R350	401 036 4701	MT-GLAZE 330 JA 1/8W
or	405 002 0308	TR 2SA1037K-T96-R	R351	401 038 2200	MT-GLAZE 27K JA 1/10W
or	405 146 9700	TR KTA1504-GR-RTH	R352	401 037 5608	MT-GLAZE 10K JA 1/10W
Q003	405 008 7509	TR 2SB815-B6-TB	R354	401 038 8806	MT-GLAZE 620K JA 1/10W
or	405 080 2409	TR 2SB624-BV5-T1	R611	401 038 6505	MT-GLAZE 47K JA 1/10W
or	405 007 7708	TR 2SB624-T1-BV4	R612	401 038 6505	MT-GLAZE 47K JA 1/10W
or	405 147 2007	TR KTA1298-Y-RTK	R613	401 038 6505	MT-GLAZE 47K JA 1/10W
Q004	405 005 5508	TR 2SA812-M6-T1B	R614	401 038 3702	MT-GLAZE 33K JA 1/10W
or	405 002 6706	TR 2SA1179-M6-TB	R615	401 039 0502	MT-GLAZE 82K JA 1/10W
or	405 146 9700	TR KTA1504-GR-RTH	R616	401 037 9309	MT-GLAZE 18K JA 1/10W
Q251	405 146 7607	TR 2SC4098-Q-T106	R617	401 036 0000	MT-GLAZE 180K JA 1/8W
Q252	405 149 7000	TR 2SC4774-S-T106	R650	401 039 0502	MT-GLAZE 82K JA 1/10W
Q253	405 146 7607	TR 2SC4098-Q-T106	R651	401 039 0601	MT-GLAZE 820K JA 1/10W
Q698	405 008 7509	TR 2SB815-B6-TB	R652	401 037 6803	MT-GLAZE 12K JA 1/10W
or	405 080 2409	TR 2SB624-BV5-T1	R653	401 037 9309	MT-GLAZE 18K JA 1/10W
or	405 007 7708	TR 2SB624-T1-BV4	R654	401 037 6803	MT-GLAZE 12K JA 1/10W
or	405 147 2007	TR KTA1298-Y-RTK	R655	401 039 0502	MT-GLAZE 82K JA 1/10W
Q699	405 015 8704	TR 2SC2812-L6-TB	R656	401 037 8005	MT-GLAZE 15K JA 1/10W
or	405 014 4509	TR 2SC2412K-T96-R	R657	401 038 2200	MT-GLAZE 27K JA 1/10W
or	405 146 2206	TR KTC3875-GR-RTK	R658	401 037 8005	MT-GLAZE 15K JA 1/10W
R010	401 037 5707	MT-GLAZE 100K JA 1/10W	R660	401 037 5707	MT-GLAZE 100K JA 1/10W
R011	401 037 5707	MT-GLAZE 100K JA 1/10W	R661	401 038 0909	MT-GLAZE 220K JA 1/10W
R012	401 037 5707	MT-GLAZE 100K JA 1/10W	R662	401 038 3702	MT-GLAZE 33K JA 1/10W
R013	401 037 5707	MT-GLAZE 100K JA 1/10W	R663	401 037 8104	MT-GLAZE 150K JA 1/10W
R014	401 037 5707	MT-GLAZE 100K JA 1/10W	R666	401 037 5608	MT-GLAZE 10K JA 1/10W
R015	401 036 1700	MT-GLAZE 22K JA 1/8W	R669	401 037 5707	MT-GLAZE 100K JA 1/10W
R017	401 037 5608	MT-GLAZE 10K JA 1/10W	R670	401 037 9408	MT-GLAZE 180K JA 1/10W
R019	401 038 0909	MT-GLAZE 220K JA 1/10W	R672	401 037 5707	MT-GLAZE 100K JA 1/10W
R020	401 038 3603	MT-GLAZE 3.3K JA 1/10W	R673	401 038 9209	MT-GLAZE 6.8K JA 1/10W
R024	401 037 3703	MT-GLAZE 820 JA 1/8W	R674	401 037 5400	MT-GLAZE 1K JA 1/10W
R025	401 038 0701	MT-GLAZE 2.2K JA 1/10W	R675	401 035 4900	MT-GLAZE 1K JA 1/8W
R026	401 037 5202	MT-GLAZE 100 JA 1/10W	R676	401 038 7700	MT-GLAZE 5.6K JA 1/10W
R027	401 037 5202	MT-GLAZE 100 JA 1/10W	R678	401 038 9209	MT-GLAZE 6.8K JA 1/10W
R028	401 037 5202	MT-GLAZE 100 JA 1/10W	R680	401 039 0403	MT-GLAZE 8.2K JA 1/10W
R029	401 037 5202	MT-GLAZE 100 JA 1/10W	R688	401 038 0701	MT-GLAZE 2.2K JA 1/10W
R031	401 037 5707	MT-GLAZE 100K JA 1/10W	R689	401 038 2101	MT-GLAZE 2.7K JA 1/10W
R033	401 037 5707	MT-GLAZE 100K JA 1/10W	R696	401 038 0701	MT-GLAZE 2.2K JA 1/10W
R036	401 037 5707	MT-GLAZE 100K JA 1/10W	R697	401 037 5707	MT-GLAZE 100K JA 1/10W
R037	401 037 2102	MT-GLAZE 6.8K JA 1/8W	R698	401 038 0602	MT-GLAZE 220 JA 1/10W
R038	401 035 4900	MT-GLAZE 1K JA 1/8W	R699	401 038 3405	MT-GLAZE 33 JA 1/10W
R042	401 038 7809	MT-GLAZE 56K JA 1/10W	T153	645 032 9395	TRANS,OSC,19.5MHZ
R045	401 037 5707	MT-GLAZE 100K JA 1/10W	T253	645 032 9388	TRANS,OSC,39.7MHZ
R046	401 037 5707	MT-GLAZE 100K JA 1/10W	T351	645 028 0771	TRANS,IF 455KHZ
R047	401 037 5400	MT-GLAZE 1K JA 1/10W	VR351	645 011 0856	VR,SEMI,100K N
R050	401 037 5707	MT-GLAZE 100K JA 1/10W	VR651	645 011 9828	VR,SEMI,300K N
R052	401 038 3603	MT-GLAZE 3.3K JA 1/10W	X002	614 231 4333	RESONATOR,XTAL 4.15MHZ
R095	401 038 7809	MT-GLAZE 56K JA 1/10W	X151	645 028 0795	OSC,CRYSTAL 10.24MHZ
R099	401 038 6406	MT-GLAZE 4.7K JA 1/10W	XF151	645 032 5441	FILTER,BP
R151	401 038 8905	MT-GLAZE 68 JA 1/10W	XF152	645 032 5458	FILTER,BP
R154	401 037 9309	MT-GLAZE 18K JA 1/10W	XF351	614 030 5104	I.F FILTER
R155	401 037 7909	MT-GLAZE 1.5K JA 1/10W	or	614 030 5098	I.F FILTER
R156	401 038 7700	MT-GLAZE 5.6K JA 1/10W	or	614 030 5081	I.F FILTER
R160	401 035 4900	MT-GLAZE 1K JA 1/8W	or	614 030 5074	I.F FILTER
R161	401 035 4900	MT-GLAZE 1K JA 1/8W	XF352	645 011 1600	CERAMIC FILTER 455KHZ
R162	401 035 4900	MT-GLAZE 1K JA 1/8W	or	614 261 3764	FILTER
R251	401 039 0205	MT-GLAZE 82 JA 1/10W			
R252	401 038 9308	MT-GLAZE 68K JA 1/10W			
R253	401 038 0503	MT-GLAZE 22 JA 1/10W			
R254	401 037 5400	MT-GLAZE 1K JA 1/10W			
R255	401 037 8104	MT-GLAZE 150K JA 1/10W			
R256	401 037 5400	MT-GLAZE 1K JA 1/10W			
R257	401 039 0502	MT-GLAZE 82K JA 1/10W			
R258	401 037 5707	MT-GLAZE 100K JA 1/10W			
R259	401 038 2200	MT-GLAZE 27K JA 1/10W			
R260	401 038 3603	MT-GLAZE 3.3K JA 1/10W			
R261	401 037 7909	MT-GLAZE 1.5K JA 1/10W			

TROUBLE SHOOTING

a. The base station does not operate.

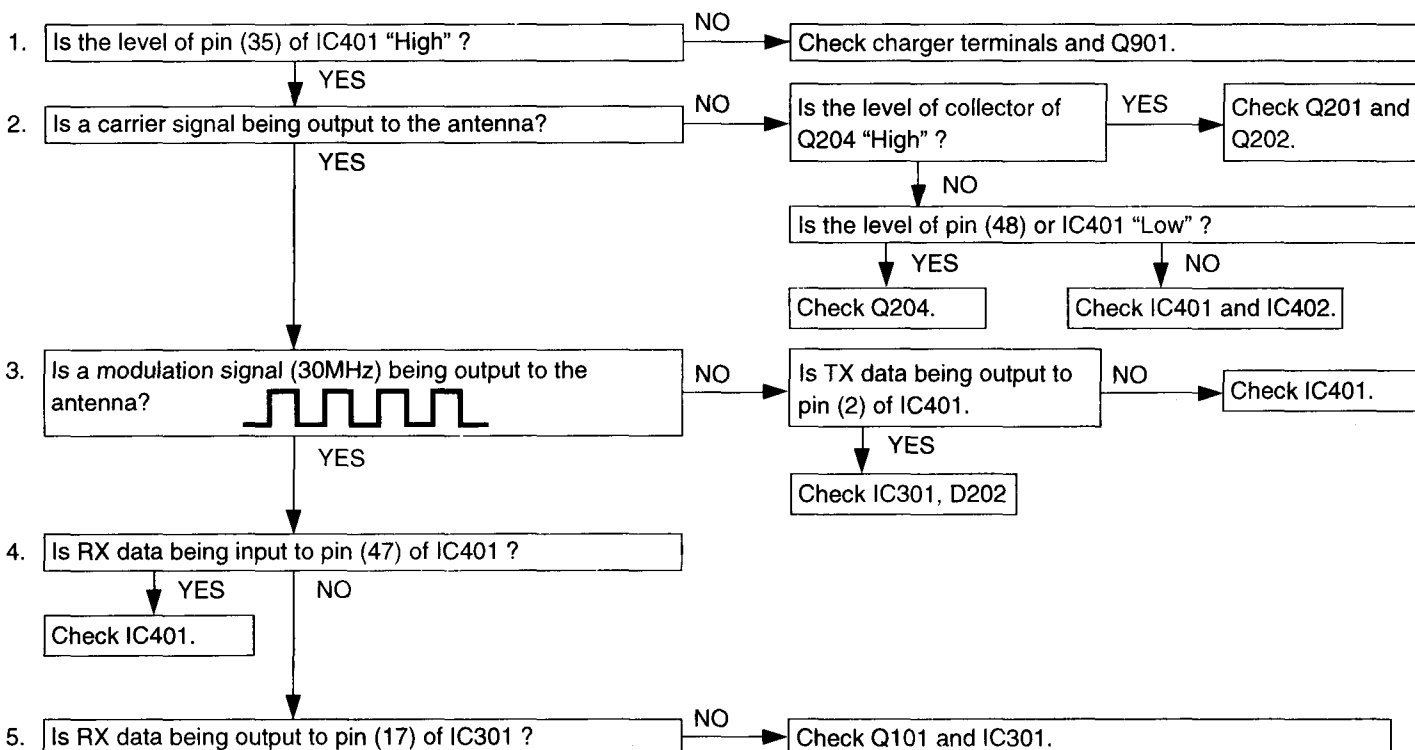


b. The handset does not operate.



c. The security code cannot be registered. (Base station)

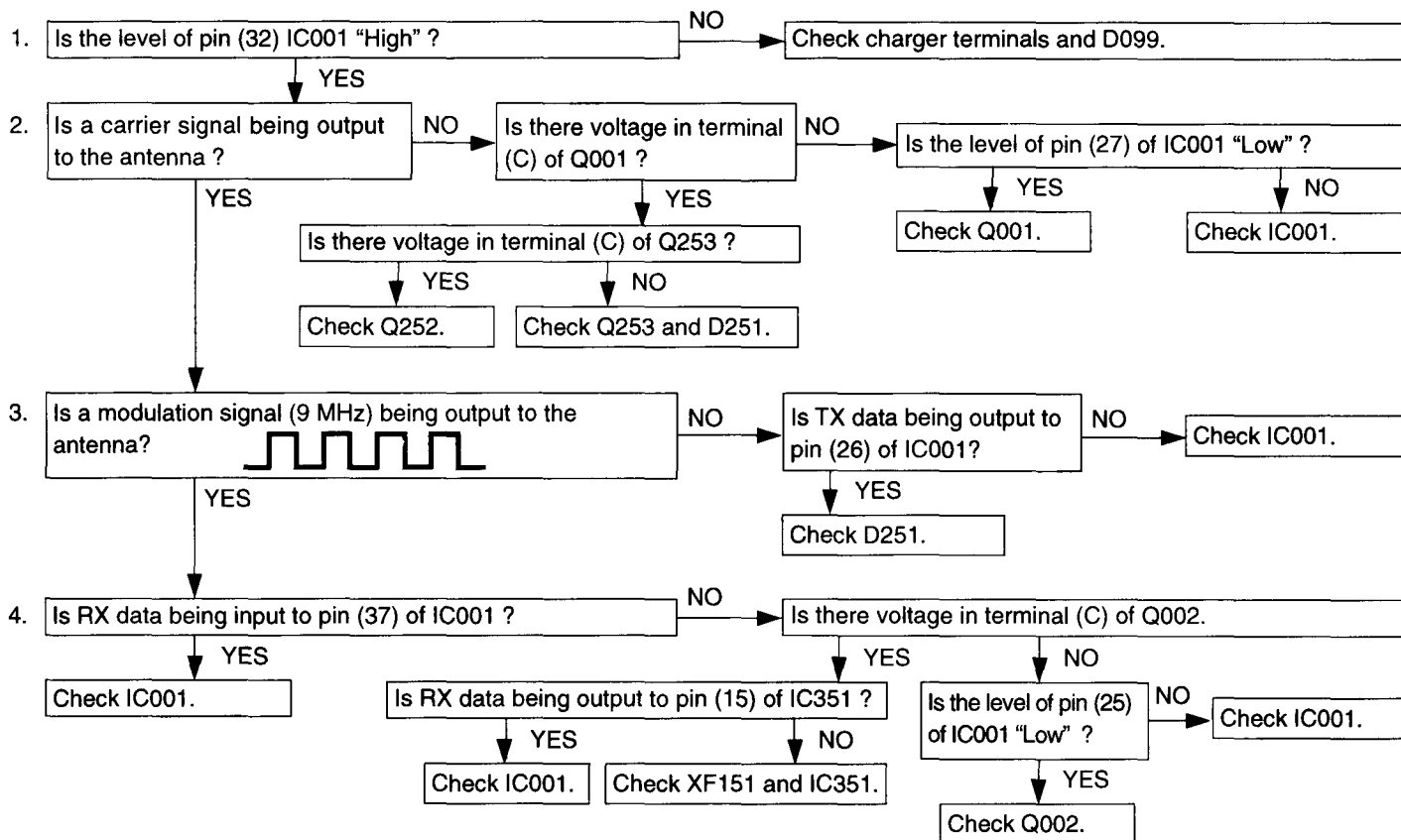
(Voice communication are not possible by pushing by the TALK button. The unit dose not link.)



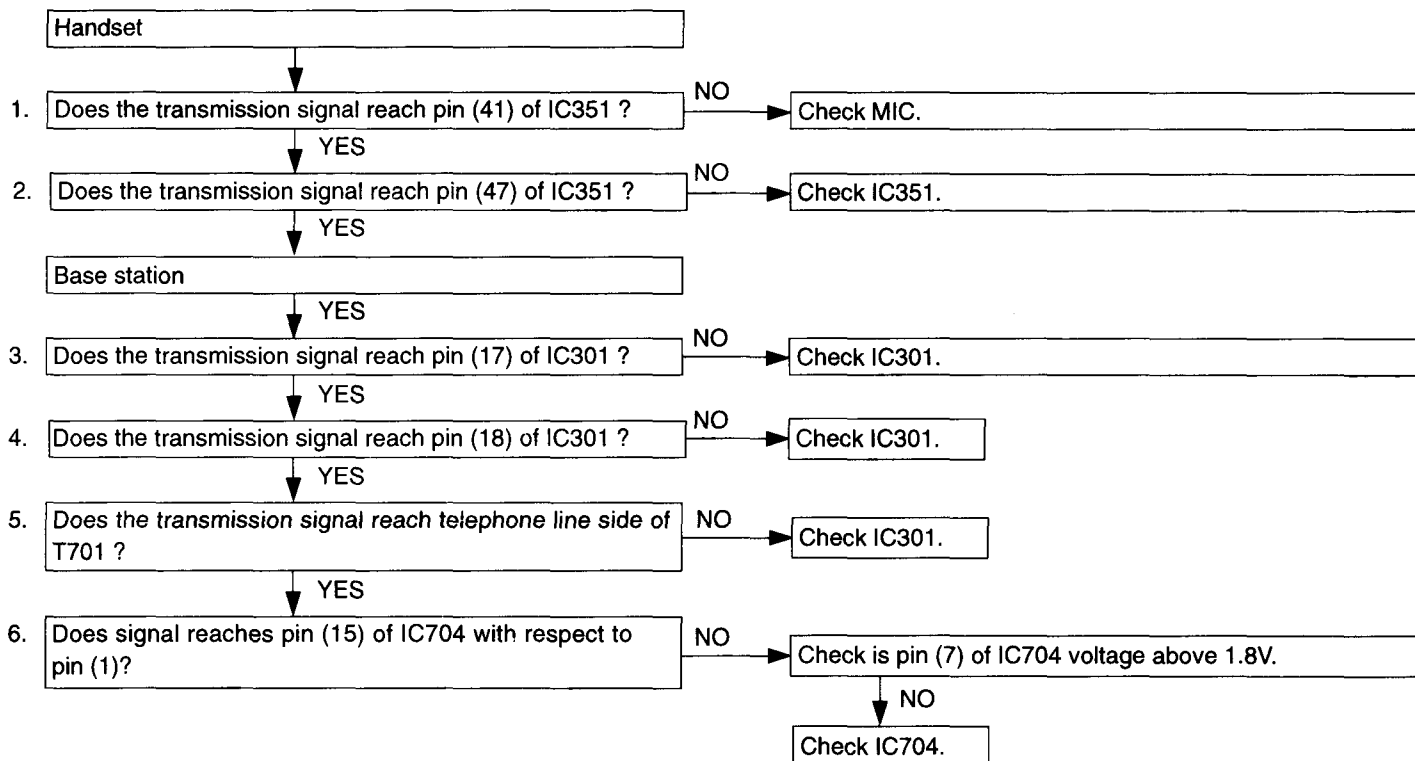
TROUBLE SHOOTING

d. The security code cannot be registered. (Handset)

(Voice communications are not possible by pushing the TALK button. The unit does not link.)

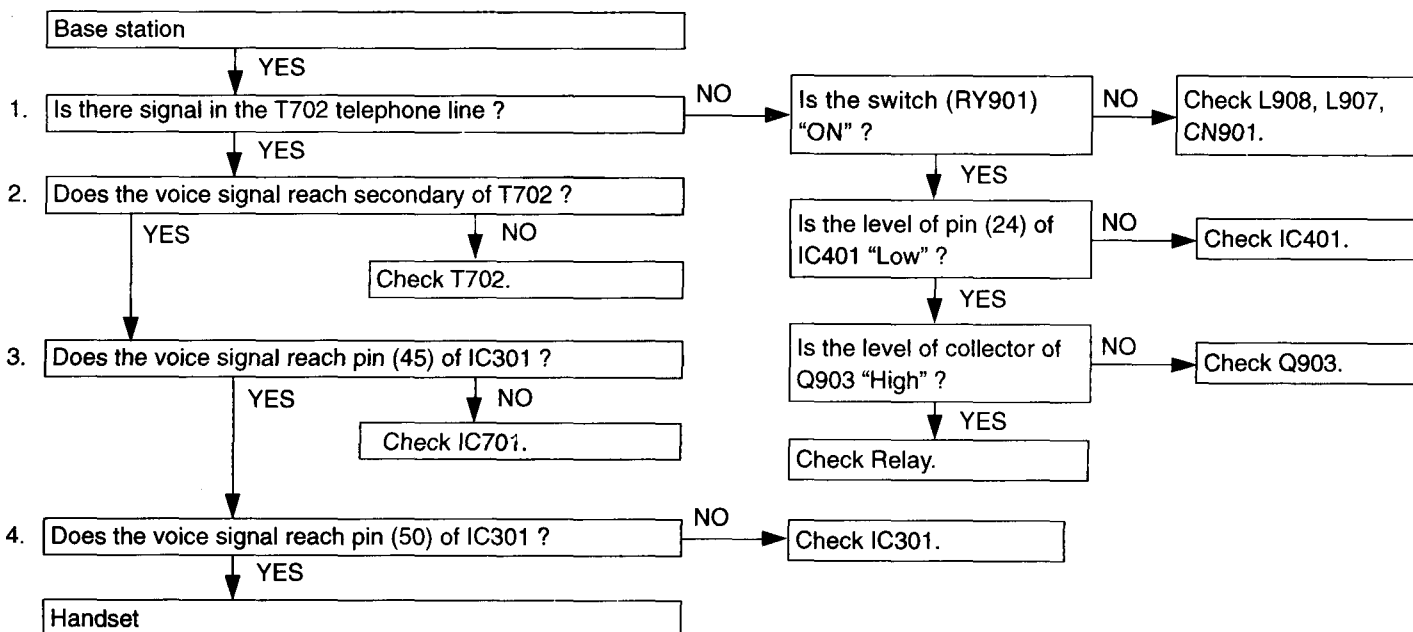


e. Transmission signal.



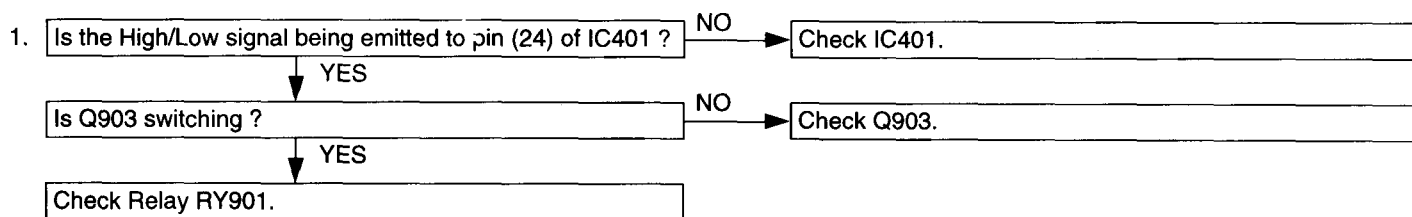
TROUBLE SHOOTING

f. No voice signal is emitted during voice communications of handset ear speaker. (TALK MODE)

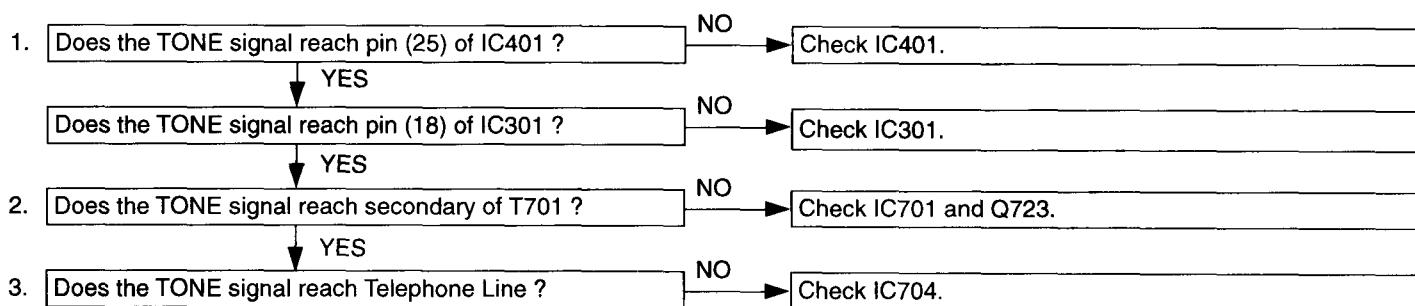


g. The number cannot be dialed.

g-1. PULSE MODE

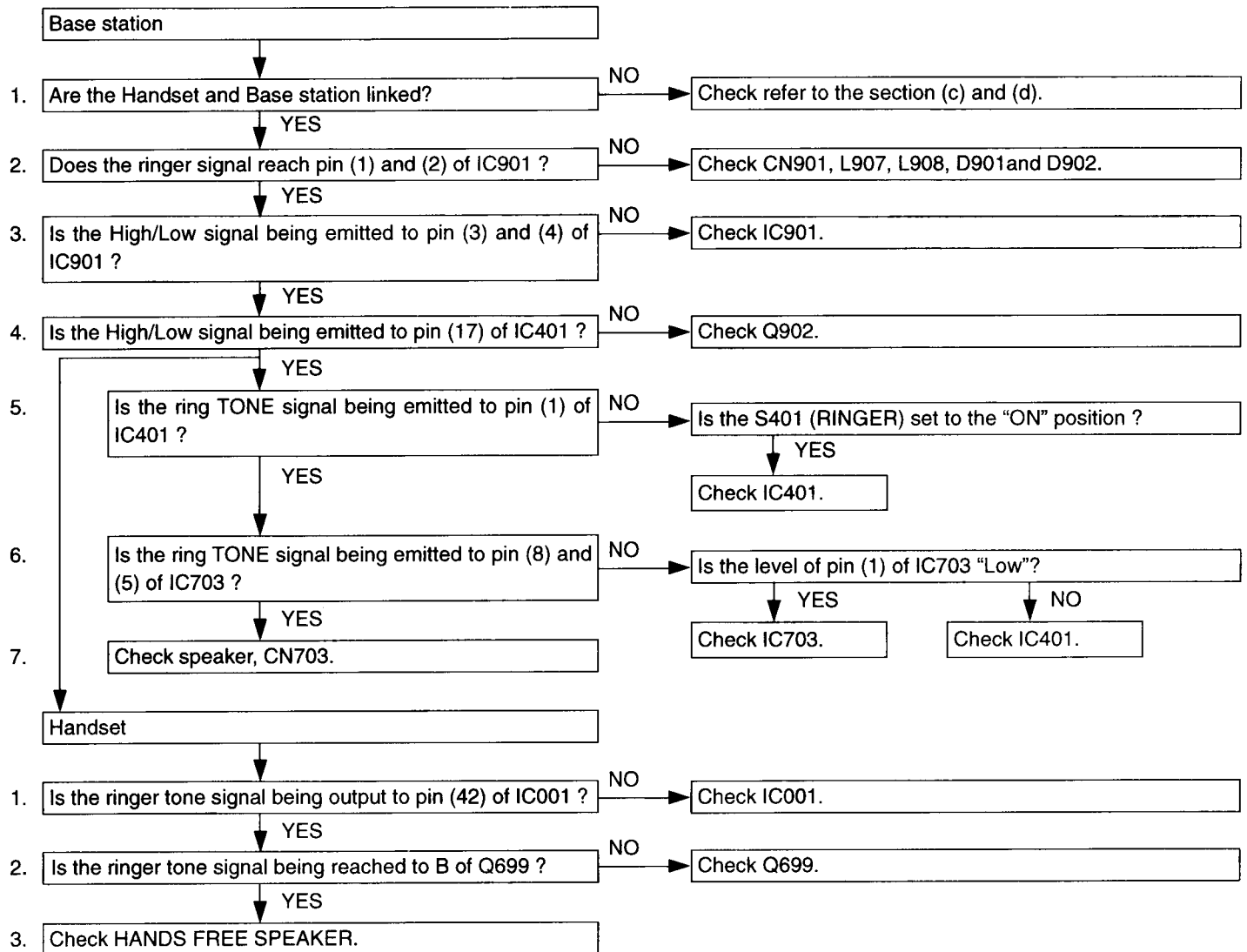


g-2. TONE MODE

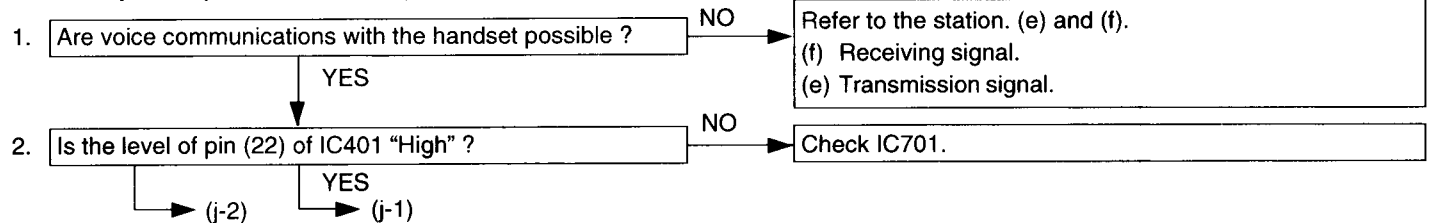


TROUBLE SHOOTING

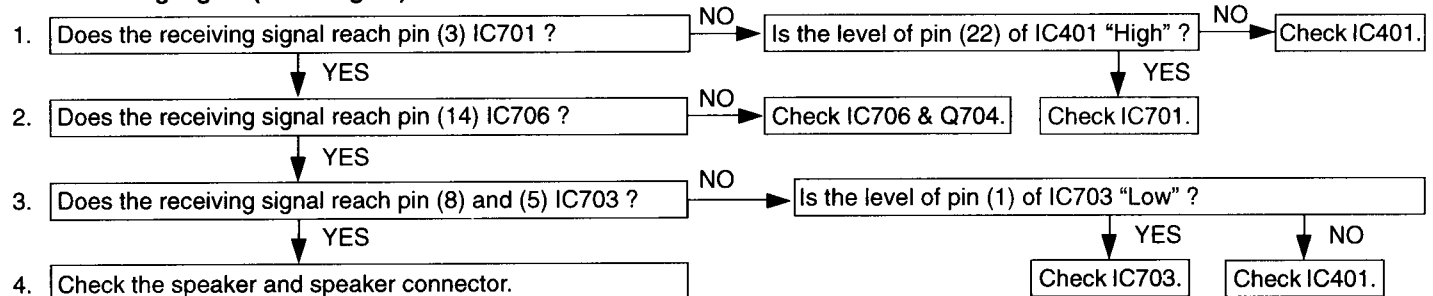
h. The ringer does not ring.



i. The speaker phone does not operate.

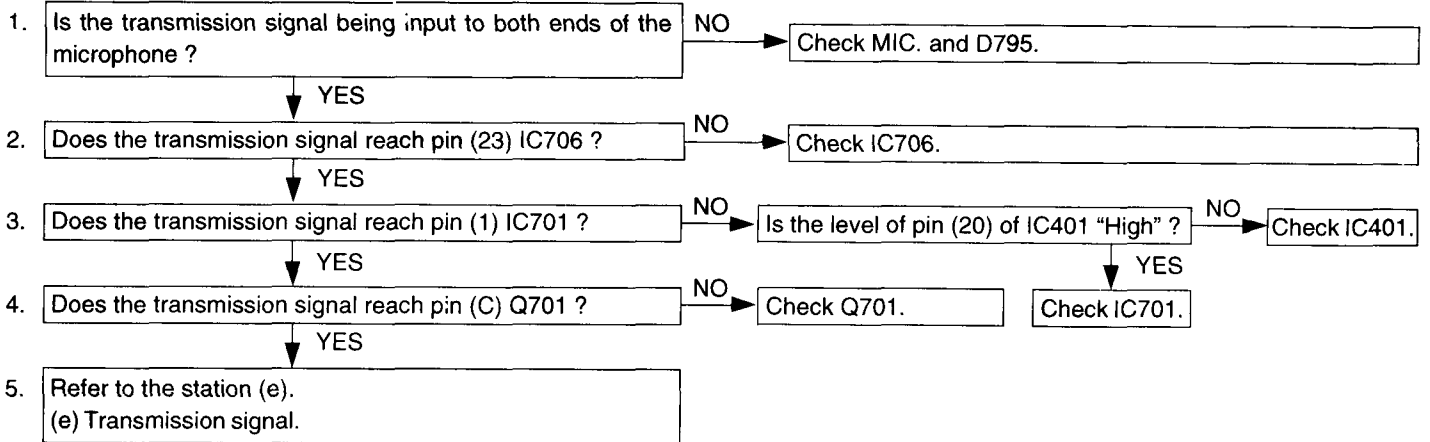


i-1. Receiving signal (Voice signal)

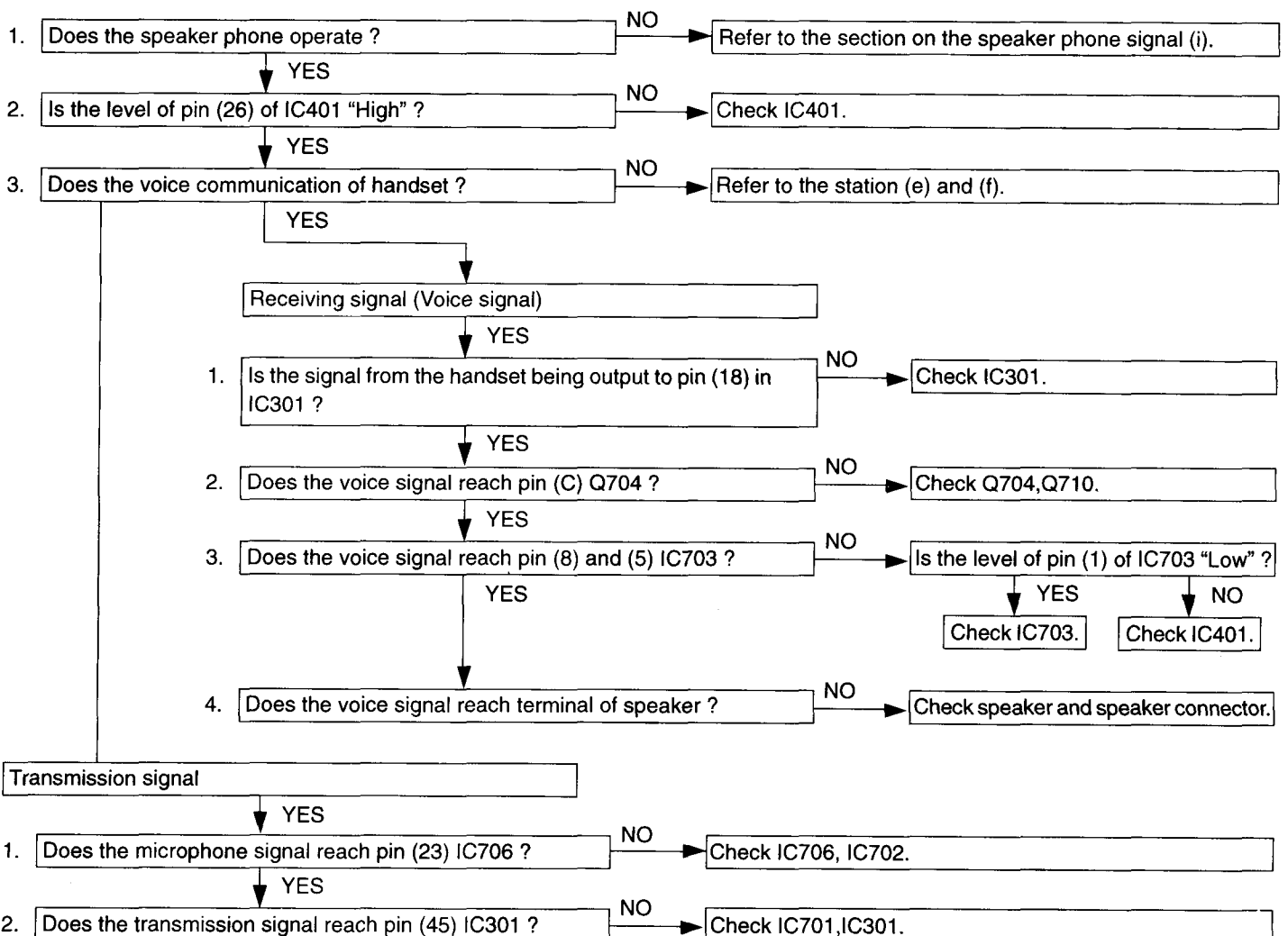


TROUBLE SHOOTING

i-2. Transmission signal

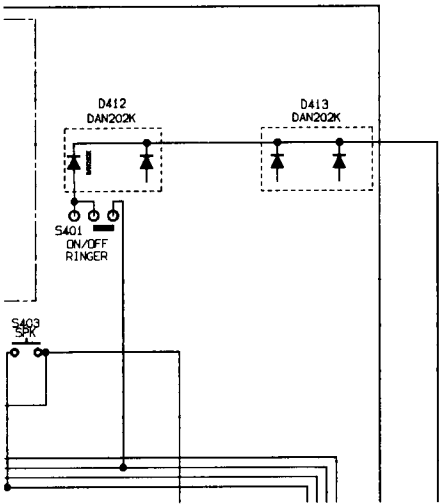


j. The intercom does not operate.

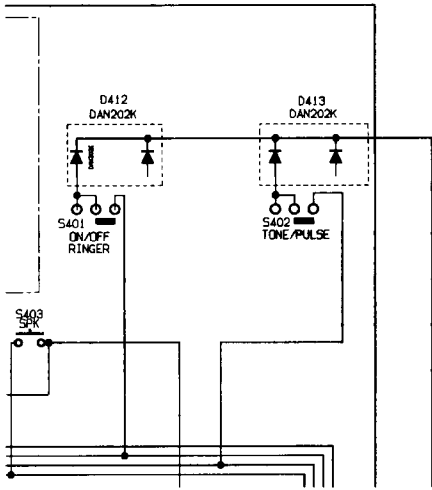


SCHEMATIC DIAGRAM(BASE STATION)

FOR NZ



FOR RU



IC BLOCK DIAGRAM

IC401 LC662312B (MICRO PROCESSOR) PIN NAME FUNCTION (QIP48E)

NO.	PORT	NAME	DESCRIPTION OF FUNCTION	ACTIVE	I/O
1	P31/POUT0	BEEP OUT	BEEP/RINGER SIGNAL OUTPUT		O(I/O)
2	P32/POUT1	TX DATA	TRANSMIT DATA OUTPUT (3-ST)		O(I/O)
3	VSS		POWER SUPPLY (GND)		
4	OSC1		SYSTEM CLOCK IN (4.093MHz)		I(I)
5	OSC2		SYSTEM CLOCK OUT (4.093MHz)		O(O)
6	NC				
7	VDD		POWER SUPPLY (VDD)		
8	RES-B		SYSTEM RESET INPUT	L	I(I)
9	PE0	BAT DET	BATTERY DETECT		I(I)
10	PE1	AC LOW	AC LOW CHECK	L	I(I)
11	TEST		NO USE		I(I)
12	P33/HOLD		AC POWER CHECK	L	I(I)
13	P40	PLL DA	MC13109 DATA		O(I/O)
14	P41	PLL CK	MC13109 DATA CLOCK		O(I/O)
15	P42	PLL CE	MC13109 DATA SET		O(I/O)
16	P43	TEL CNT	TEL-LINE SIGNAL SWITCH	H	O(I/O)
17	P50	RING	RINGER SIGNAL INPUT	L	I(I/O)
18	NC				
19	NC				
20	P51	SP PH	SPEAKER PHONE SIGNAL SWITCH	H	O(I/O)
21	P52	HF2 CNT	HANDSFREE 2 CONTROL /MIC MUTE		O(I/O)
22	P53/INT2	SP AMP	SPEAKER AMP CONTROL	L	O(I/O)
23	P60/ML	HF1 CNT	HANDSFREE 1 CONTROL	H	O(I/O)
24	P61/DP-B	RELAY	TEL-LINE CONTROL	L	O(I/O)
25	P62/DT	DTMF	DTMF OUTPUT		O(I/O)
26	P63/PIN1	INT CNT	INTERCOM SIGNAL CONTROL	H	O(I/O)
27	PC2	BAT CHK	BATTERY CHECK		O(I/O)
28	PC3	DIAL LED	DIAL LED CONTROL	H	O(I/O)
29	PD0	KEY IN	KEY MATRIX INPUT		I(I)
30	NC				
31	PD1	KEY IN	KEY MATRIX INPUT		I(I)
32	PD2	KEY IN	KEY MATRIX INPUT		I(I)
33	PD3	KEY IN	KEY MATRIX INPUT		I(I)
34	P00	STATUS	MC13109 STATUS CHECK		I(I/O)
35	P01	CHARGE	HANDSET CHARGE DETECT	L	I(I/O)

IC BLOCK DIAGRAM

NO.	PORT	NAME	DESCRIPTION OF FUNCTION	ACTIVE	I/O
36	P02	CD	AUTO SCAN SIGNAL LEVEL DETECT	L	I(I/O)
37	P03	KEY OUT	KEY MATRIX STROBE OUT		O(I/O)
38	P10	KEY OUT	KEY MATRIX STROBE OUT		O(I/O)
39	P11	KEY OUT	KEY MATRIX STROBE OUT		O(I/O)
40	P12	KEY OUT	KEY MATRIX STROBE OUT		O(I/O)
41	P13	KEY OUT	KEY MATRIX STROBE OUT		O(I/O)
42	NC				
43	NC				
44	P20/SI0	SP LED	SPEAKER PHONE LED CONTROL	L	O(I/O)
45	P21/SO0	PWR LED/MDL	POWER FAILURE LED/MODEL CHK	L	O(I/O)
46	P22/SCK0-B	INUSE/CHG LED	INUSE & CHARGE LED CONTROL	L	O(I/O)
47	P23/INT0	RX DATA	RX DATA INPUT		I(I/O)
48	P30/INT1-B	TX PWR	TX POWER CONTROL	L	O(I/O)

KEY MATRIX

IN/OUT	PD0	PD1	PD2	PD3
P10	1	4	7	*
P11	2	5	8	0
P12	3	6	9	#
P13	SP,PH	R/P	FLASH	PAGE
P03	M/B	T/P	RING	FL-TIME

Note: Please refer to the service manual, CLT-138X(SM900109) about IC001 UPD750008GB.

VOLTAGE OF IC & TRANSISTOR

* REMOTE

IC001 uPD750008GB-F07

Pin No.	1	2	3*1	3*2	4	5	6	7	8	9	10	11	12	13	14*1	14*2
Voltage	1.42	3.48	3.46	1.98	3.48	3.48	3.48	3.48	0.00	0.00	0.00	0.00	0.00	0.00	2.78	1.32
Pin No.	15	16	17	18*1	18*2	19*1	19*2	20	21	22	23	24	25	26	27	28
Voltage	0.00	3.24	0.00	1.17	1.46	1.90	2.31	3.12	0.82	1.78	3.80	0.00	3.15	1.80	3.80	0.00
Pin No.	29	30	31	32	33	34	35*3	35*4	36	37	38	39	40	41	42	43
Voltage	0.00	3.80	3.80	1.74	1.85	0.00	3.46	0.00	3.36	2.65	3.80	3.80	3.80	0.00	0.00	3.80
Pin No.	44															
Voltage	2.76															

IC003 PST9127N

Pin No.	1	2	3	4	5
Voltage	0.00	0.00	0.00	3.10	3.80

IC351 MC13109FTA

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Voltage	1.64	1.79	3.80	0.85	0.00	2.15	3.72	1.45	3.80	0.00	3.80	0.00	0.00	3.46	3.76	1.92
Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Voltage	1.90	1.90	3.80	3.06	1.90	1.90	1.78	0.90	3.80	3.80	2.96	2.96	2.96	0.00	2.60	3.80
Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Voltage	1.80	3.25	3.80	3.80	0.02	0.01	0.95	0.00	1.48	1.89	1.89	3.70	1.90	1.90	1.90	1.30

Transistor No.	Q001			Q002			Q003			Q004			Q251		
Pin Name	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
Voltage	3.80	3.78	3.15	3.80	3.78	3.13	3.80	0.00	3.28	3.80	3.75	3.05	1.50	3.40	2.12

Transistor No.	Q252			Q253			Q680*1			Q690*1			Q698*2		
Pin Name	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
Voltage	0.00	2.92	0.53	1.50	3.40	1.92	0.00	0.26	0.26	3.80	0.26	3.80	3.80	3.80	3.80

Transistor No.	Q699*2		
Pin Name	E	C	B
Voltage	0.00	3.80	0.00

NOTE: *1 cct. with handsfree feature / *2 cct. without handsfree
*3 cct. with intercom feature / *4 cct. with paging only

* BASE

IC401 LC662312B

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Talk Mode	0.00	2.21	0.00	2.13	2.59	0.00	5.24	5.30	0.00	5.26	0.00	5.25	0.00	0.00	0.00	4.48
Standby Mode	0.00	2.21	0.00	2.12	2.59	0.00	5.24	5.29	0.00	5.24	0.00	5.25	0.00	0.00	0.00	0.00
Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Talk Mode	5.12	0.00	0.00	0.00	3.21	5.29	5.10	0.00	5.30	0.00	0.00	0.00	4.83	0.00	4.83	4.89
Standby Mode	5.12	0.00	0.00	0.00	3.22	5.28	0.00	5.92	0.00	0.00	0.00	0.00	0.00	0.00	4.83	4.89
Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Talk Mode	4.89	0.00	0.00	5.11	4.76	0.00	0.00	0.00	0.00	0.00	0.00	3.80	0.00	0.00	2.40	0.00
Standby Mode	4.88	0.00	4.84	0.00	4.76	0.00	0.00	0.00	0.00	0.00	0.00	3.80	0.00	0.00	2.40	5.29

VOLTAGE OF IC & TRANSISTOR

IC301 MC13109FB

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Talk Mode	2.02	2.25	4.53	1.49	0.00	2.55	4.27	1.74	0.00	0.00	0.00	4.53	0.00	0.00	5.10	0.00
Standby Mode	2.00	2.23	4.52	1.47	0.00	4.48	4.25	1.74	0.00	0.00	0.00	4.49	0.00	0.00	5.10	0.00
Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Talk Mode	2.24	2.28	1.88	2.28	4.53	3.80	2.28	2.27	1.90	0.14	0.00	4.53	4.53	3.67	3.66	3.66
Standby Mode	2.24	2.27	1.84	2.26	4.50	3.76	2.26	2.26	1.88	0.15	0.00	4.49	4.50	3.63	3.63	3.63
Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Talk Mode	0.00	3.28	4.53	2.17	3.40	4.51	4.51	0.43	0.43	1.49	0.00	2.27	2.27	2.21	4.44	2.25
Standby Mode	0.00	3.24	4.50	2.15	3.36	4.48	4.49	0.44	0.43	1.48	0.00	2.26	2.26	2.20	4.40	2.25
Pin No.	49	50	51	52												
Talk Mode	2.27	2.27	0.00	0.00												
Standby Mode	2.25	2.26	0.00	0.00												

IC706 MC33219

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Talk Mode	2.63	2.78	2.44	2.78	2.63	2.78	2.72	0.00	0.00	2.43	2.79	2.63	0.00	2.77	2.50	2.75
Pin No.	17	18	19	20	21	22	23	24								
Talk Mode	2.76	3.21	2.76	2.76	2.76	2.76	2.77	6.01								

IC801 BA6566

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Talk Mode	0.00	1.34	3.84	4.31	2.12	0.05	1.30	1.98	1.82	0.89	0.90	0.89	1.26	0.89	0.89	0.90
Pin No.	17	18														
Talk Mode	0.90	0.38														

IC701 MC14066

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Talk Mode	0.00	0.00	0.46	0.00	0.00	4.46	0.00	3.88	3.88	0.00	3.88	0.00	0.00	5.98

IC703 NJM2113D

Pin No.	1	2	3	4	5	6	7	8
Talk Mode	5.24	5.28	2.30	2.05	1.87	5.96	0.00	1.87

IC402 MN1380P

Pin No.	1	2	3
Talk Mode	0.00	5.29	5.29

IC302 BA728F

Pin No.	1	2	3	4	5	6	7	8
Talk Mode	2.92	2.92	2.48	0.00	2.78	2.92	2.92	5.86

IC901 PS2502

Pin No.	1	2	3	4
Talk Mode	0.00	0.00	0.00	5.98

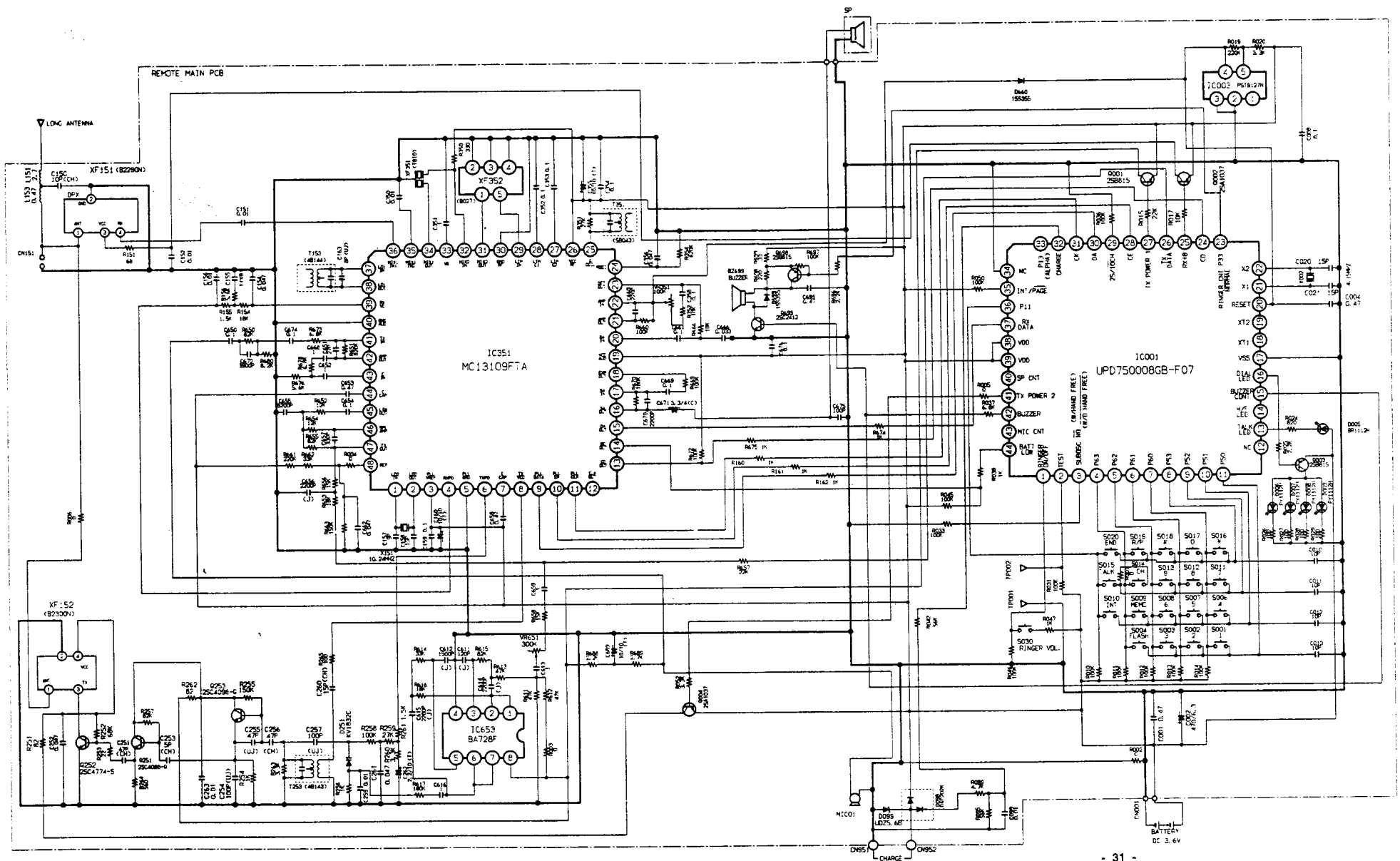
Transistor No.	Q101			Q201			Q202			Q204			Q401		
Pin No.	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
Talk Mode	4.01	0.29	0.00	0.00	5.46	0.70	3.43	5.54	3.84	5.98	5.90	5.22	0.00	0.00	0.67
Standby Mode	4.01	0.30	0.00	0.00	0.40	0.39	0.00	0.39	0.37	6.00	0.00	5.94	0.00	0.00	0.68

Transistor No.	Q402			Q403			Q704			Q708			Q709		
Pin No.	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
Talk Mode	4.70	5.30	5.27	0.00	4.31	0.00	0.18	2.60	0.79	0.00	0.15	0.45	0.00	2.25	0.00
Standby Mode	5.30	5.32	4.72	0.00	4.52	0.00	0.18	2.60	0.80	0.00	0.00	0.00	0.00	2.25	0.00

Transistor No.	Q710			Q723			Q725			Q726			Q727		
Pin No.	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
Talk Mode	0.00	0.00	0.68	4.59	5.72	4.62	0.00	0.00	0.00	0.13	2.96	0.00	4.48	5.60	3.95
Standby Mode	0.00	2.25	0.00	4.60	5.72	4.64	0.00	0.00	0.00	0.13	2.96	0.73	4.51	5.63	3.98

Transistor No.	Q901			Q902			Q903			Q908		
Pin No.	E	C	B	E	C	B	E	C	B	E	C	B
Talk Mode	0.00	4.87	0.00	0.00	5.07	0.00	5.99	5.93	5.24	5.99	8.89	6.65
Standby Mode	0.00	4.90	0.00	0.00	5.09	0.00	6.01	0.00	5.95	6.65	9.12	6.00

SCHEMATIC DIAGRAM(HANDSET)

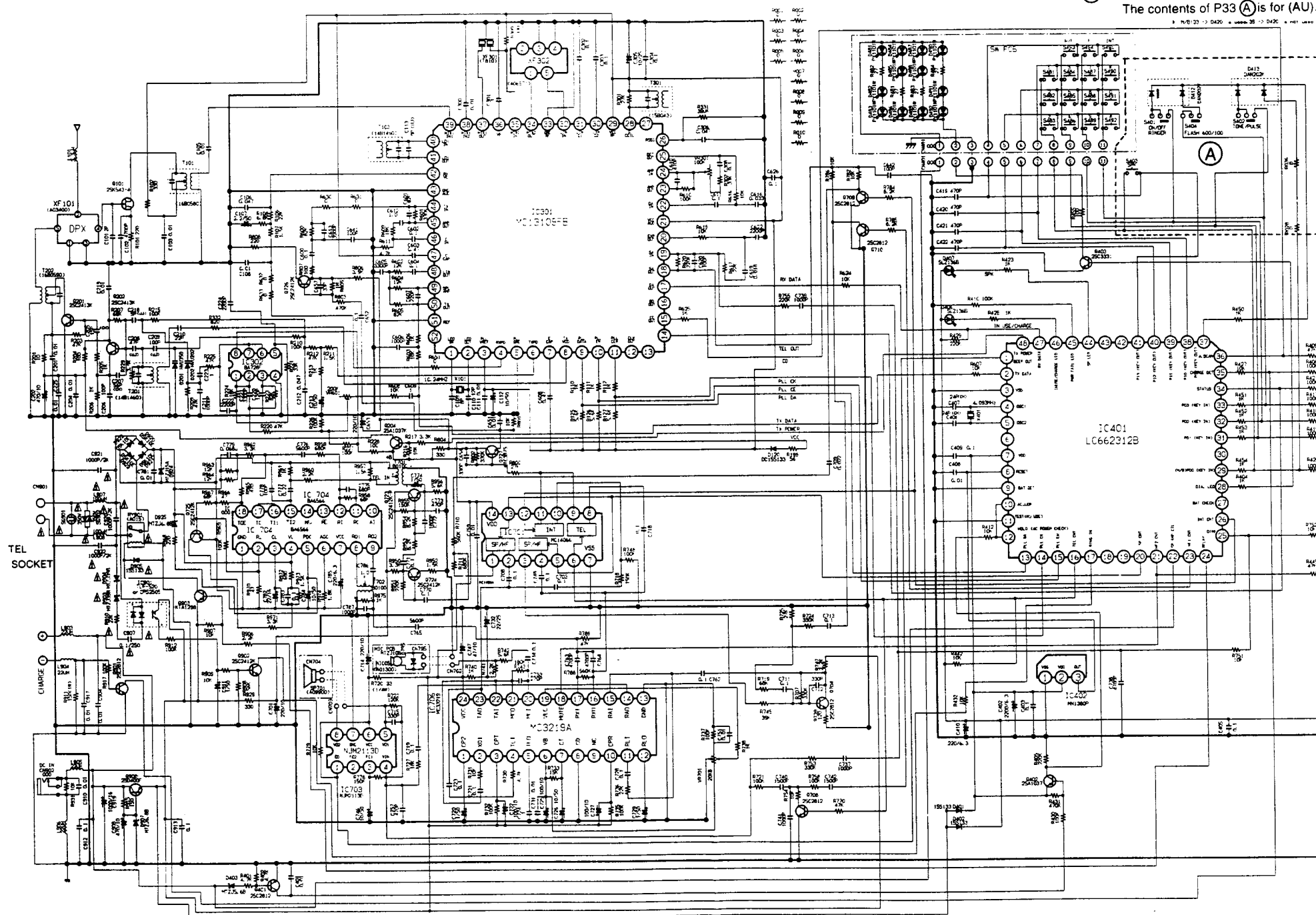


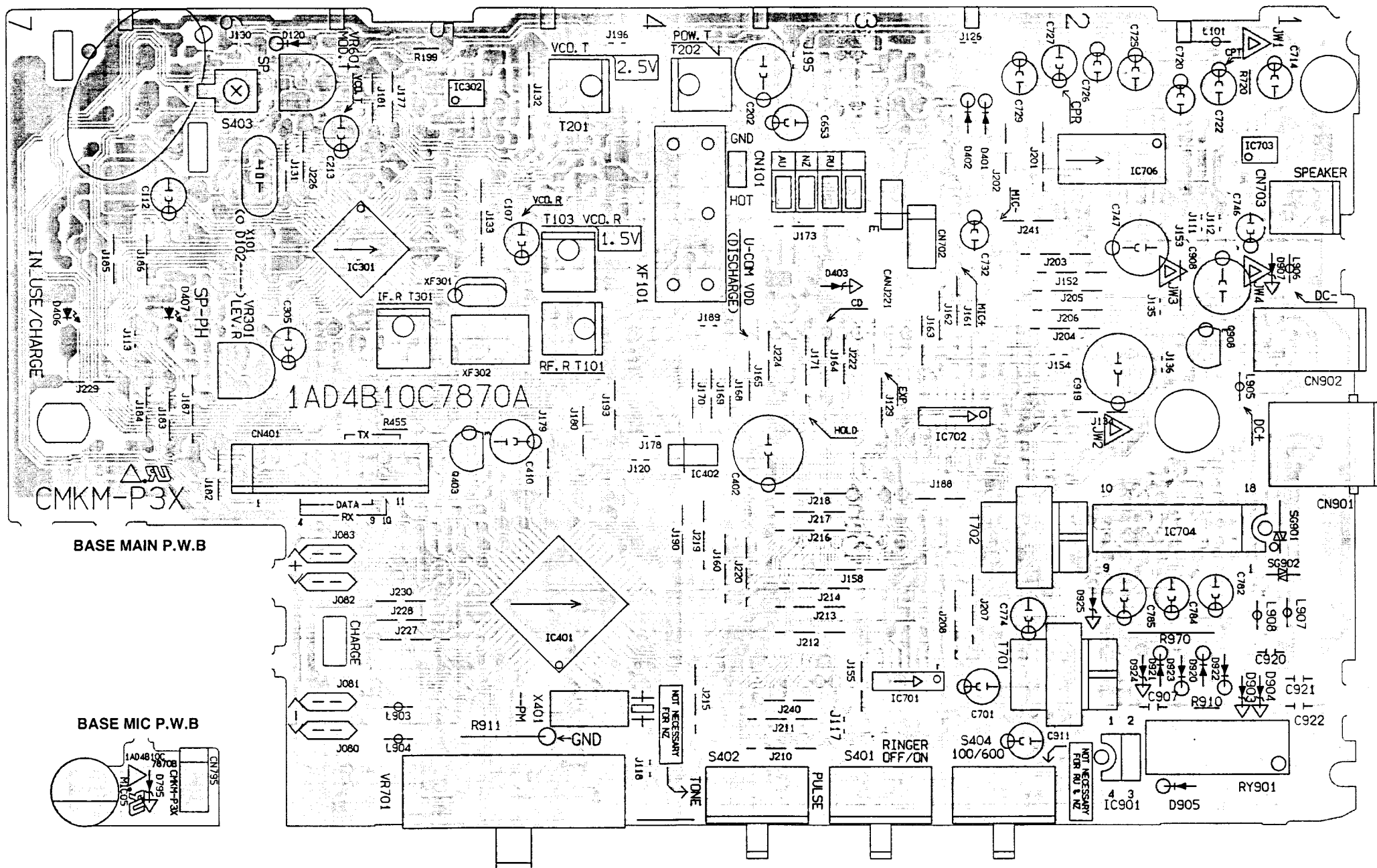
SCHEMATIC DIAGRAM(BASE STATION)

(A) : Please refer to P25 for (NZ) and (RU).

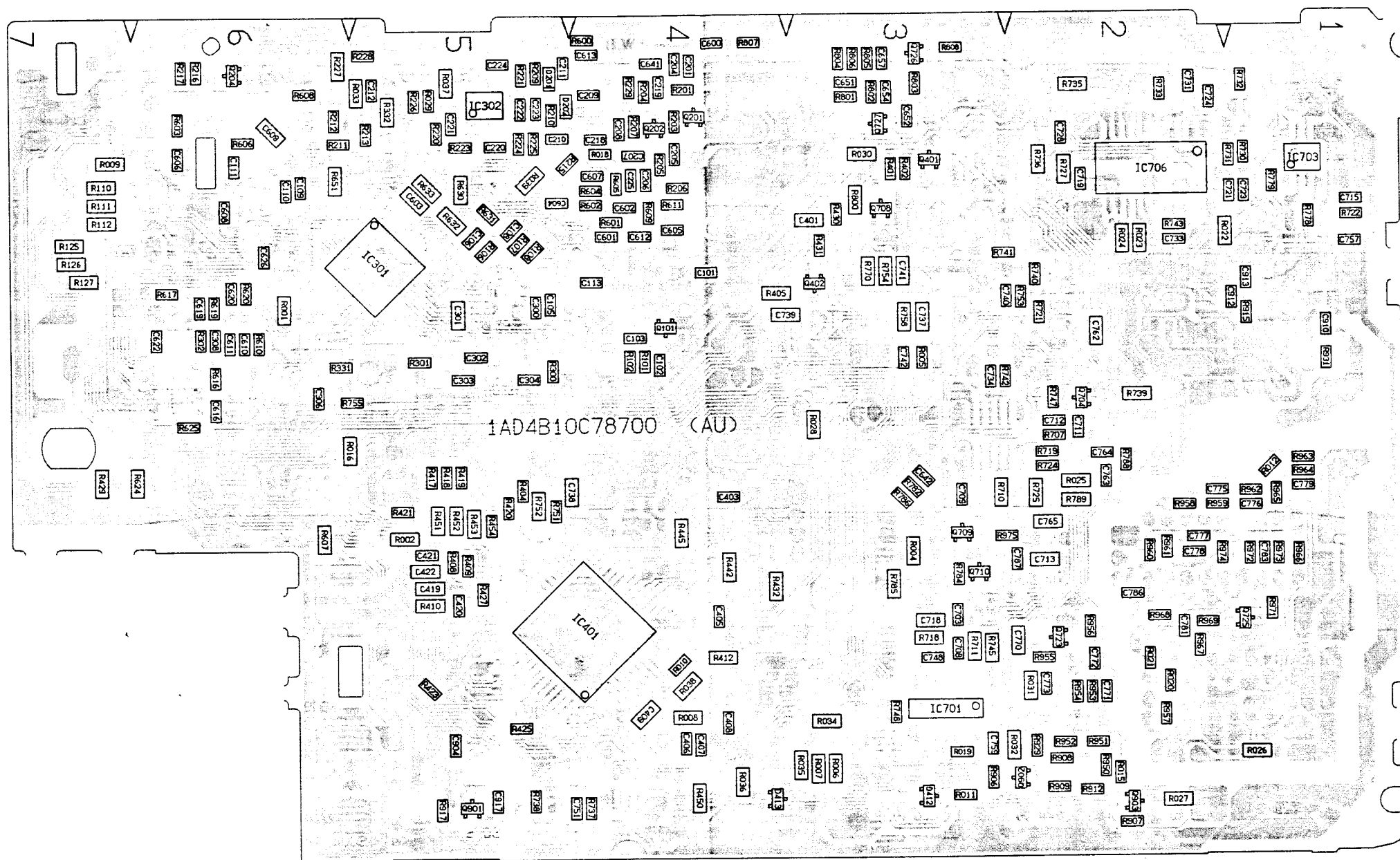
The contents of P33 (A) is for (AU).

1 04/01/33 -> 04/20 2 04/20/35 -> 04/20 3 05/01/35

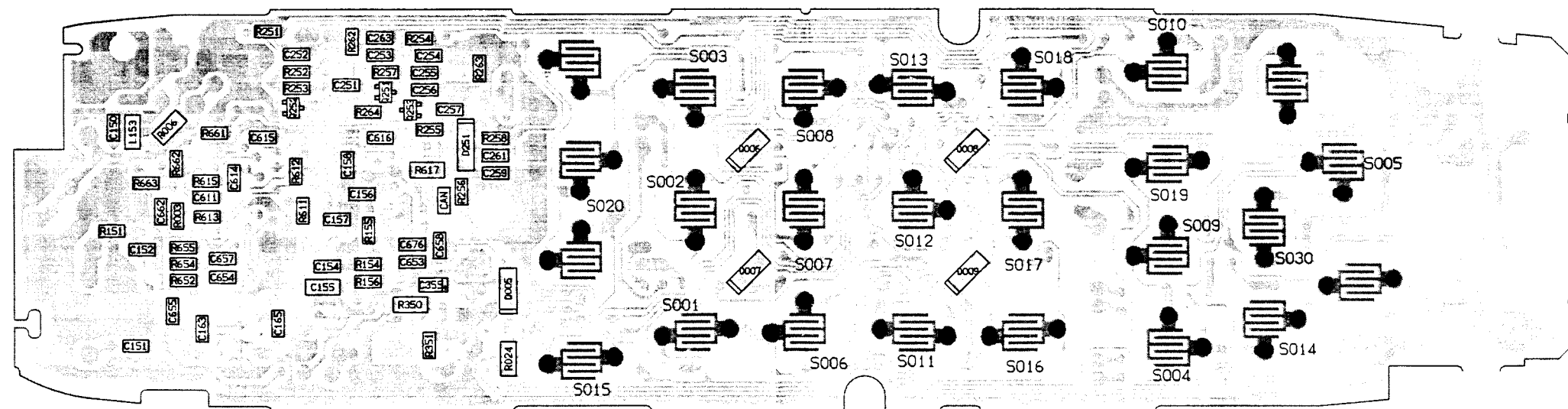
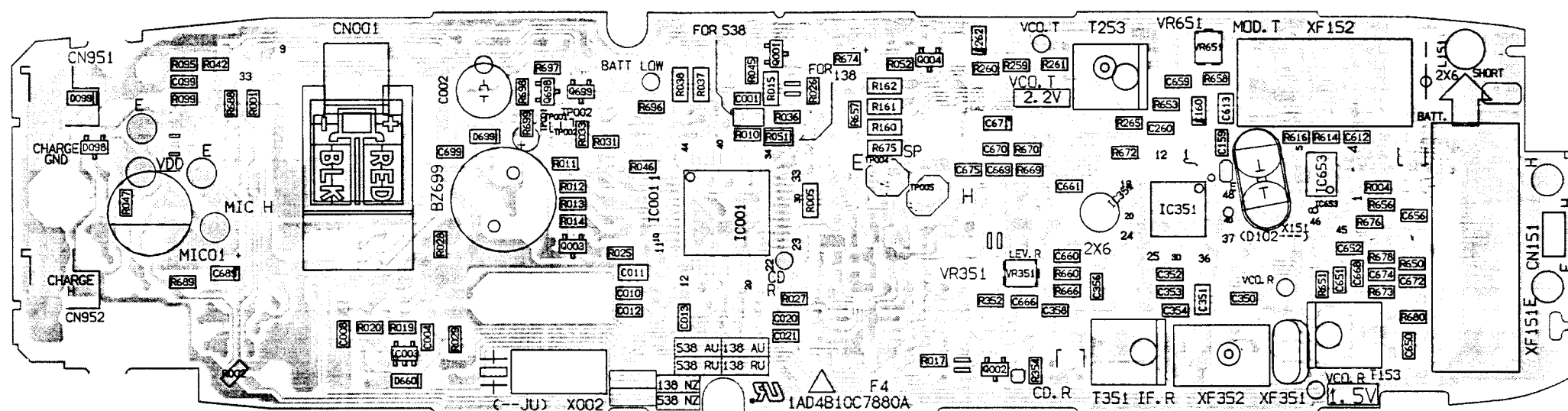




WIRING DIAGRAM (BASE STATION)



REMOTE MAIN P.W.B

**SANYO**

SANYO Electric Co., Ltd.
Osaka, Japan